

GENERAL CATALOGUE 2024

PROTECTIVE WEAR



DIE SCHUTZ MARKE!



EDITORIAL

HB PROTECTIVE WEAR – DIE SCHUTZMARKE!

Dear Sir or Madam,
Dear business partners and customers,

Desirable safety is our brand essence: For more than 70 years, we have been developing and manufacturing high-quality clothing that protects people from hazards in the workplace. During this time, we have grown continuously and expanded our international market position.

The HB Protective Wear brand owes this success to our consistent focus on protection and quality, the expertise of our employees, and our commitment to sustainability and corporate values that are shaped by medium-sized companies.

Today, we stand for **a unique and highly specialised range of products** and are one of the market leaders in Germany and Europe. We also owe our high profile to our trademark – the sea turtle. With its shell, it has the most personal of all protective equipment and is optimally adapted to different dangerous situations.

In our new catalogue, it plays a special role: HB products that are made with environmentally friendly materials have the addition “Green Turtle” in their names and are marked with a turtle with a green leaf fin.

These sustainable products include our new **Flammgard® KLASSIK** shirts for day shift wear. The polo shirts are made from recycled polyester and the shirts and blouses are made with organic cotton.

Our new ESD coats from the popular **CONDUCTEX®** product range are also made of these materials. They are available for men and women in two versions and offer the same excellent discharge values in their more environmentally friendly alternative.

Furthermore, we are breaking new ground in arc flash protection with the collection **HB-4Energy**: different material structures offer special wearing comfort and, thanks to the combination with warning protection elements, additional safety.

For heat and welding protection, the new **HB-ComFlex®** offers a trend-setting combination of denim and high-tech fabric for exceptional comfort and versatility. And especially for handling liquid metals, we have relaunched our bestseller FluidMetal Pro: It is now called **HB-HeavyMetal Pro** and is available in the trendy anthracite/petrol colour combination, among others.

Last but not least, the new **Flammgard® collection “Bayern”** complements our range in the FIRE & RESCUE SERVICES sector.

And so, in our endeavour to always offer the best possible solution, we pursue every day anew with great passion the goal of making our brand values tangible for our customers: personal, predictable and powerful.

At the A+A 2023 trade fair, our visitors were able to see this claim for themselves and our products.

Committed to the HB Protective Wear brand, we will continue on this path in the future: firmly connected to our location Thalhausen, appreciative in our dealings with employees and business partners, innovative and ready for change, committed to society and the environment, and focused on protecting people at their workplace.

I hope you enjoy browsing through the HB General Catalogue 2024!

Klaus Berthold
CEO
Owner of HB Protective Wear



PHILOSOPHY

HB
PROTECTIVE
WEAR



ARC &
ENERGY



ARC FLASH PROTECTION

HEAT, SPLASHES AND
WELDING PROTECTION

HEAT,
SPLASHES &
WELDING



CHEMICALS



CHEMICAL PROTECTION

HIGH VISIBILITY AND
WEATHER PROTECTION

HIVIS &
WEATHER



COLD
PROTECTION



COLD PROTECTION

TECHNICAL ASSISTANCE,
RESCUE, AREA FIRE FIGHTING
AND DAY SHIFT WEAR

FIRE &
RESCUE
SERVICES



ESD
ELECTRO-
STATIC
DISCHARGE



ESD PRODUCT PROTECTION

CLEANROOM AND
DUST PROTECTION

CLEANROOM
& DUST



▶ CONTENT



HB PROTECTIVE WEAR

THE COMPANY

Die Schutzmarke 06

This is HB Protective Wear 08

Quality, service and responsibility 10

Engaged for employees and society 16

Respect for the environment 18

Multi-risk protection from HB 20

ARC & ENERGY

ARC FLASH PROTECTION 22

HB-SecureAllround® 24

HB-ArcSelect® Shirt, men's coat 26

HB-ArcSelect® Blouson, trousers, bib and brace trousers 28

HB-4arc® 30

HB-PROtection® Jacket, trousers, bib and brace trousers 32

HB-PROtection® Green Turtle Shirt 34

HB-MODarc® Polo shirt, T-shirt, fleece jacket 36

HB-MODarc® Blouson, trousers, bib and brace trousers 38

HB-MODarc® Blouson, trousers, bib and brace trousers
with reflective stripes 40

HB-MODarc&vis® Polo shirt, Vest FR 42

HB-MODarc&vis® Blouson, trousers, bib and brace trousers 44

HB-MODarc&vis® Fleece jacket, Softshell jacket, Sweatshirt 46

HB-MODarc&vis® Fleece jacket, parka with liner 48

HB-MODarc&vis® Parka with direct laminate, brace trousers 50

HB-4Energy 52

HB-MultiPro FR® 54

NOMEX® Viskose 56

NOMEX® Comfort Blouson, jacket, coat 58

NOMEX® Comfort Trousers, bib and brace trousers, coverall 60

INOTEC® Arc & Energy 62

HEAT, SPLASHES & WELDING

HEAT, SPLASHES AND WELDING PROTECTION 64

PROBAN® 380 / 470 66

SECAN® Securo 420 68

HB-Iron Pro 70

HB-4welders® 2.0 72

HB-ComFlex® 74

MARLAN 78

HB-HeavyMetal Pro 80

VINEX® 82

NOMEX® Comfort light 84

Accessories Heat Functional underwear 85

Accessories Heat Cooling garments, knee pads, belt FR 86

TEMPEX®-TREME HEAT Material overview 88

TEMPEX®-TREME HEAT CLASSIC KF-3/Z 90

TEMPEX®-TREME HEAT COMFORT AW-1/Y and CK-12/Z 93

TEMPEX®-TREME HEAT COMFORT Plus AW-1/Y and CK-12/Z 96

TEMPEX®-TREME HEAT Face and head protection 97

TEMPEX®-TREME HEAT Hand protection 102

TEMPEX®-TREME HEAT Foot protection 106

CHEMICALS

CHEMICAL PROTECTION 108

HB-CHEMstandard 110

HB-CHEMcomfort Antistatic 112

HB-CHEM Functional underwear 115

HIVIS & WEATHER

HIGH VISIBILITY AND WEATHER PROTECTION 116

HI-VISION® Basic Polo shirt, T-shirt 118

HI-VISION® Basic Fleece jacket 119

HI-VISION® Basic Parka incl. thermal jacket 120

HB-StormBase® 121

COLD PROTECTION

COLD PROTECTION 122

TEMPEX® CLASSIC 2.0 COLD STORE 124

TEMPEX® CLASSIC CHILLROOM 126

TEMPEX® CLASSIC COLD STORE 128

TEMPEX® CLASSIC COLD STORE PLUS 130

TEMPEX® COMFORT CHILLROOM 131

TEMPEX® COMFORT CHILLROOM and COLD STORE 132

TEMPEX® COMFORT COLD STORE and COLD STORE PLUS 134

TEMPEX® HYGIENE CHILLROOM and COLD STORE 136

TEMPEX® THERMO Fleece 138

TEMPEX® THERMO 140

TEMPEX® THERMO HYGIENE 142

TEMPEX® THERMO Accessories Functional underwear 144

TEMPEX® THERMO Accessories Face- and head protection 146

TEMPEX® THERMO Accessories Hand protection 148

TEMPEX® THERMO Accessories Foot protection 154

FIRE & RESCUE SERVICES

TECHNICAL ASSISTANCE, RESCUE, AREA FIRE FIGHTING AND DAY SHIFT WEAR 156

Flammgard® KLASSIK 158

Flammgard® KLASSIK Green Turtle 162

Flammgard® NORDRHEIN-WESTFALEN 164

Flammgard® BADEN-WÜRTTEMBERG 166

Flammgard® SAARLAND 169

Flammgard® BAYERN 172

HB-TECHNICAL RESCUE 174

HB-TECHNICAL RESCUE LITE 176

HB-WILDFIRE® 2.0 178

ESD ELECTRO-STATIC DISCHARGE

ESD PRODUCT PROTECTION 182

CONDUCTEX® Green Turtle Coat, Ladies coat 184

CONDUCTEX® Coat, Ladies coat 186

CONDUCTEX® Blouson, trousers 188

CONDUCTEX® Cotton Knit T-shirt, polo shirt 190

CONDUCTEX® Cotton Knit Ladies polo shirt, polo shirt 192

CONDUCTEX® Cotton Knit Sweatshirt, sweat jacket 194

CONDUCTEX® Pro Knit Polo shirt 195

CONDUCTEX® Pro Knit Sweat jacket 196

Naptex® 4.0 Blouson, trousers 197

Naptex® 4.0 Coat, Ladies coat 198

HABETEX® ESD Comfort 200

Accessories ESD 203

CLEANROOM & DUST

CLEANROOM AND DUST PROTECTION 204

HABETEX® climatic Pro 206

HABETEX® Micronplus 207

HABETEX® Micronselect 208

Accessories CLEANROOM 210

WORTH KNOWING

Overview product lines 212

Emblems and patches: Your logo on your PPE 216

Our Partners 218

21 TO WEAR® 220

TEMPEX®-TREME HEAT Modular system 222

READY TO WEAR 224

Insulation values Cold protection 225

Standards 226

Sizes and care 228

Legend 230

Customer service 231



HB PROTECTIVE WEAR

DIE SCHUTZMARKE

Desirable safety is our brand essence: for more than 70 years, we have been providing clothing that protects people from hazards in the workplace. During this time, we have grown continuously, strategically expanding our range of PPE and strengthening our international market position.

The consistent focus on protection and quality, the competence of our employees and the constant commitment to sustainability and corporate values shaped by medium-sized companies are the reasons for the continuing success of the HB Protective Wear brand.

Today, HB Protective Wear stands for a unique and highly specialised range of products and is one of the market leaders in Germany and Europe. We owe our high profile not least to our trademark - the turtle. With its shell, it has the most personal of all protective equipment and is optimally adapted to different dangerous situations.

In our endeavour to always offer the best possible solution, we pursue every day anew with great passion the goal of making our brand values tangible for our customers: personal, predictable and powerful.

Committed to the HB Protective Wear brand, we will continue on this path in the future: firmly connected to our site in Thalhausen, appreciative in our dealings with employees and business partners, innovative and ready for change, committed to society and the environment, and focused on protecting people at their workplace.

PROTECTION AND RESPONSIBILITY THROUGH MARKET-LEADING PRODUCTS AND STRONG CORPORATE VALUES.

DIE SCHUTZ MARKE!



HB PROTECTIVE WEAR

BE SAFE. WE CARE.



As the only manufacturer in Germany, we have always focused exclusively on the development of protective clothing. We have PPE in our DNA and know the diverse requirements. We continuously safeguard our standards, material and processing expertise through close cooperation with all important stakeholders and regularly keep our employees up to date.

The result is a versatile range of innovative protective clothing that is convincing not only in its breadth but also in its depth.

We place particular emphasis on flexibility and individuality: that is why we offer our customers protective clothing that naturally fulfils the required standard profile, but can also be tailored to the respective company CI.

This is where our offers such as READY TO WEAR or our modular system for metallised heat protection come in, which make it very easy to adapt to the respective requirements and individual needs.

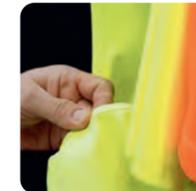
WE EARN THE TRUST OF OUR CUSTOMERS THROUGH OUR CONSISTENT FOCUS ON PPE.





HB PROTECTIVE WEAR

A HIGH LEVEL OF RESPONSIBILITY



Category III PPE items must be monitored as part of a conformity assessment procedure in accordance with the Personal Protective Equipment Regulation VO (EU) 2016/425. HB carries out this monitoring in accordance with the Module D procedure. In an annual audit and certification by a notified body, our entire production and quality assurance process is checked and confirmed. The certification according to Module D underlines the high demands that we, as a manufacturer with a high degree of specialisation in PPE, place on the quality and safety of our products.

Through the significantly extended scope of testing, we increase the safety and quality of our protective clothing and give the customer an even better feeling when deciding on our products. In addition to reducing costs, the conservation of resources is of particular importance. Furthermore, this process gives us increased flexibility and allows us to react more quickly to customer needs.

AS A HIGHLY SPECIALISED MANUFACTURER, WE ALSO PLACE HIGH DEMANDS ON QUALITY ASSURANCE.





HB PROTECTIVE WEAR

CLOSE TO THE CUSTOMER NOT ONLY IN TERMS OF DELIVERY

We are optimally positioned in every respect to live customer proximity. Our production sites are mainly concentrated in the European region. The central hub of all logistical processes are our warehouses of over 4,000 m², which offer space for up to 500,000 products. This enables us to quickly deliver more than 1.5 million garments per year.

If a garment is not available from stock, our high-speed 21 TO WEAR[®] delivery service ensures that the customer does not have to wait longer than 21 days for it. Additional flexibility is offered by our READY TO WEAR service, which supplies smaller customers with individually configurable PPE, or our web shop.

After all, we do not only want to supply our customers quickly, but also to reach the most diverse needs and demands through an unprecedentedly differentiated product range and customised service. That is why we always support our customers with competent advice and personal service.

HIGH CUSTOMER FOCUS THROUGH NEEDS-ORIENTED SOLUTIONS AND LOGISTICAL EFFICIENCY.





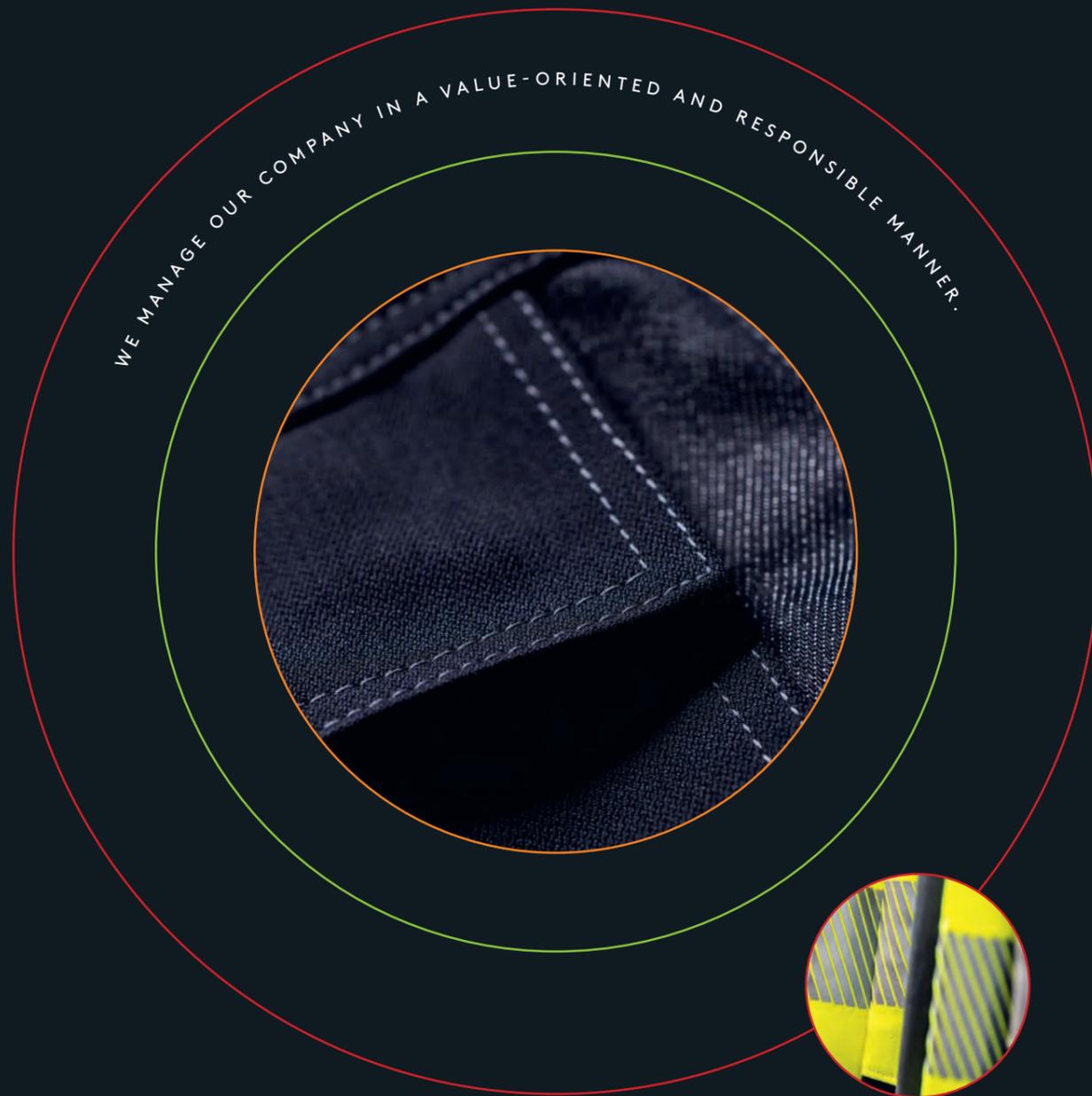
HB PROTECTIVE WEAR

FAIR AND RESPONSIBLE: OUR CORPORATE BEHAVIOUR

Fair dealings with employees and business partners have always been an integral part of our corporate culture.

And commercial virtues such as honesty, partnership-based thinking and a humane tone in business still determine our actions today. We have set out the overriding maxims of conduct that guide us as a company in our own Code of Conduct, which can be viewed on our website.

Our Code of Conduct commits us to conducting our business in harmony with the concerns of society. Through regular social audits, we ensure that it is implemented in all our production facilities. We also expect our suppliers to comply with the standards and principles we have formulated.





HB PROTECTIVE WEAR

COMMITMENT TO EMPLOYEES AND SOCIETY



For us, success can only be sustainable if we let our employees share in it and give something back to society. We can only be good in the long term if the people who work for us are doing well. And we can only last if we see ourselves as part of society and get involved.

This means, for example, that we promote the balance between work and family through flexible working hours and our own day care centre, which is free of charge for our employees. We place special emphasis on our apprenticeships and our training and coaching programmes. And those who want to do something for their health can use our company gym - also free of charge. Long-term employee loyalty shows that people feel good at HB.

We show further commitment by supporting charitable institutions in our region with regular donations. But it is also a tradition for our international production companies to support charitable causes of their choice at their respective locations.

WE SUPPORT OUR EMPLOYEES AND MAKE POSITIVE CONTRIBUTIONS TO SOCIETY.





HB PROTECTIVE WEAR

RESPECTING THE ENVIRONMENT



Nature and environmental protection are already anchored in our brand logo: the green sea turtle is our trademark. We feel a lasting connection to the turtle and, as a long-standing supporter of conservation programmes, we contribute to the preservation of biodiversity.

With regard to the product range, we focus above all on the durability and reparability of the products. The aim is also to use sustainable accessories and fibres such as recycled polyester and organic cotton wherever possible.

With their upcycling project, our apprentices show how to turn waste into treasure. They transform leftover materials and accessories into practical things such as laptop bags, backpacks and key rings. When transporting goods, we also make sure that containers and packaging can be reused several times.

For our commitment to sustainability we even have created our own logo: SustainHBility. HB products that are made with environmentally friendly materials have been added "Green Turtle" in their names and are marked with our turtle with the green leaf fin – a clear commitment not only to our trademark but also to our responsibility towards the environment.

OUR KEY VISUAL AS A SIGN OF ENVIRONMENTAL AWARENESS AND SUSTAINABLE PRODUCTION.





HB PROTECTIVE WEAR

WHAT IS BETTER THAN PROTECTION? THE RIGHT PROTECTION

Our working world is becoming more and more complex, and the variety of tasks in the workplace is increasing. Multi-risk PPE makes sense in many cases because it can protect against multiple risks. However, it should be borne in mind that this also involves compromises. This is because the more standards that are fulfilled in a qualified manner, the more expensive the fabric usually becomes and the more complex the manufacture.

The decisive factor in choosing the right PPE is that it is appropriate for the specific work situation. It is not so much a question of how many standards the protective clothing covers, but rather where exactly it is to be used and how well it protects against the potential hazards at the site of operation.

A precise examination of the areas of use and hazards is therefore also essential for multi-risk clothing. Which protective functions are really needed to decide whether the "specialist" is more in demand or whether many standards make sense, we clarify in the personal consultation together with the customer. The only decisive factor is the best possible protection at the respective workplace.

Our multi-risk products therefore do not form a separate product segment, but are integrated into the individual categories – easily recognisable by the multi-risk logo.

THE RESPECTIVE APPLICATION AREA OF USE IS CRUCIAL FOR CHOOSING THE PPE.



ARC & ENERGY
YOU DON'T FOLLOW A HERD,
YOU LEAD IT

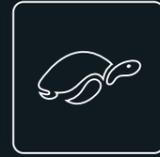
With our extensive Arc & Energy range,
we offer the right clothing for many highly specialised work areas
and fields of application. It reliably protects against arc flash
and the risk of flammability, while impressing with a level of wearing comfort
that feels completely natural, and not just in the workplace.



The proven multifunctional blended fabric covers a wide range of standards and convinces with its pleasant wearing comfort.

The versatile products can also be designed according to your own ideas:

Simply choose your desired combination from 6 different colours.



The equipment with different pockets and reflective stripes is freely selectable. With HB-SecureAllround® and our **READY TO WEAR** system, you can configure your PPE completely individually. And all delivered within 21* days.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | REGULAR SIZES |
|------------|--------|------------|-------------------------------|----------------------|---------------------------------------|-------------------------------|-----------|--------------------|----------------|
| 1, 2, 3, 4 | | 3026 | dark blue/ medium grey/red | IEC 61482-2 APC 1 | EN ISO 11612 A1+A2/B1/C1/ E2/F1 | EN ISO 11611 Class 1 A1+A2 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |



JACKET 4ka

Arc flash class 1
Part number: **01128 10134 020 3026**
Garment weight: approx. 1,240g

Three-coloured • stand-up collar • front with zip fastener with attached closure band and covered snap fasteners • 2 attached breast pockets with flap and covered snap fasteners • 1 inner pocket • side pockets with zip and with flap and covered snap fasteners • snap fasteners for adjusting sleeve width • leasing label • FR standard pictograms on the front.



TROUSERS 4ka

Arc flash class 1
Part number: **01128 20081 050 3026**
Garment weight: approx. 1,060g

Three-coloured • waistband elasticated at the side • waistband fastening with covered patented buttons on both sides • front zip • 2 wingpockets • 1 back pocket with flap and covered snap fasteners • 1 thigh pocket with 1 interior mobile phone/pen pocket and flap with covered snap fasteners.



COVERALL 4ka

Arc flash class 1
Part number: **01128 30014 050 3026**
Garment weight: approx. 1,590g

Three-coloured • turndown collar • front with snap fastening covered on both sides • 2 patched breast pockets with flap and covered snap fasteners • 1 inside breast pocket with hook&loop fastening • 2 side pockets with flaps • sleeve width adjustable with snap fasteners • neck label • 1 back pocket • 1 thigh pocket with 1 interior mobile phone/pen pocket – each with flap and covered snap fasteners • FR standard pictograms on the arms.



BIB AND BRACE TROUSERS 4ka

Arc flash class 1
Part number: **01128 50061 050 3026**
Garment weight: approx. 1,340g

Three-coloured • stretch braces • front zip fastener • interior bib pocket with flap • 2 wing pockets • 2 side accesses with button fastening • 1 back pocket, 1 thigh pocket with 1 interior mobile phone/pen pocket – each with flap and covered snap fasteners • elasticated kidney protection.

*Outside Germany, delivery will take a few days longer. We accept no liability for delivery delays due to force majeure beyond the control of the seller.

1 collection – more than 1,000 possibilities

The product images show one of many versions. Find detailed information in this catalogue (page 224) and at www.hb-ready-to-wear.com

These colours are available:

BLACK

MIDDLE GREY

DARK BLUE

ROYAL

RED

YELLOW

MATERIAL: 75 % COTTON, 24 % POLYESTER, 1 % CARBON // FC-Equipment: fluorocarbon finish ·
ATPV VALUE: 17.3 cal/cm² · 724.3 kJ/m² · **HAF VALUE:** 84.1% · **FABRIC WEIGHT:** approx. 350g/m² ·
FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric industry and installation, public services, electricians



Our HB-ArcSelect® shirt and the completely double-layered coat made of the popular cotton-polyamide blend increase safety at workplaces exposed to arc hazards as an additional layer of clothing. This makes them the perfect addition to many heat, flame and arc flash protection collections. The jacket also covers large areas of the body and provides the best possible 7kA all-round protection.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | | | | | REGULAR SIZES |
|------|-------------|--------|------------|-------------|-------------------|--|--|--|---------------|
| 1 | - | | 41 | royal | IEC 61482-2 APC 1 | | | | 37/38 - 47/48 |
| | | | 45 | navy | | | | | |
| | | | 52 | medium grey | | | | | |
| | | | 22 | orange | | | | | |
| 2 | 7kA (2-PLY) | | 45 | navy | IEC 61482-2 APC 2 | | | | 46/48 - 58/60 |



SHIRT 4kA

Arc flash class 1
Part number: **01227 60026 001 + COLOUR NO.**
Garment weight: approx. 560g

Single-coloured • Comfort Fit • regular turn down collar • front closure with snap fasteners covered on both sides • 1 attached pocket with flap and covered snap fasteners • ergonomic sleeves with protective sleeve vent and adjustable snap fasteners • FR leasing label • standard pictograms as flame retardant direct embroidery on the right cuff.



MEN'S COAT 7kA

Arc flash class 2
Part number: **01004 40030 001 45**
Garment weight: approx. 1,650g

Single-coloured • completely double-layered • high band collar • front with covered 2-way zipper plus hook&loop fastener • 2 vertical side pockets with covered zipper • moving pleat for easy walking on the back • sleeve hem with adjustable hook&loop fastener • FR leasing label • standard pictograms on the left sleeve.

MATERIAL: 87% COTTON, 12% POLYAMIDE, 1% CARBON

1| : ATPV VALUE: 12.3 cal/cm² · 514.63 kJ/m² · **HAF VALUE:** 82.3% · **FABRIC WEIGHT:** approx. 280 g/m²

2| : ATPV VALUE: 40.0 cal/cm² · 1.674.4 kJ/m² · **HAF VALUE:** 91.0% · **FABRIC WEIGHT:** approx. 340 g/m² + approx. 265 g/m²

FIELDS OF APPLICATION: Plant construction, pipeline and line construction, electricians, public services, steel works, switch gear construction, communication, gas and water networks

HB-ArcSelect® is precisely tailored to the needs of arc fault protection in all classes. Due to the high cotton content, the soft fabric is as comfortable as high-quality leisure wear and is up to the demands of PPE in terms of wearing comfort and care: Multifunctional and high-quality protective clothing, suited for several application areas.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | IEC 61482-2 APC 1 | EN ISO 11612 A1/A2/B1/C1/E2/F1 | EN ISO 11611 Class 1 A1+A2 | EN 1149-5 | REGULAR SIZES |
|-----------|-----------------|--------|------------|-----------------------|--------------------|--------------------------------|----------------------------|-----------|----------------|
| 1 | 4kA (1-PLY) | | 2027 | royal/navy | IEC 61482-2 APC 1 | | | | 46-58 & 94-110 |
| 1, 2 , 3 | | | 2381 | medium grey/dark grey | | | | | |
| 2 , 3 | | | 2071 | medium grey/red | | | | | |
| | | | 2041 | navy/royal | | | | | |
| 1 | 7kA/4kA (2-PLY) | | 2382 | dark grey/medium grey | IEC 61482-2 APC 2* | | | | |
| 1, 2 , 3 | | | 2027 | royal/navy | | | | | |
| 2 , 3 | | | 2381 | medium grey/dark grey | | | | | |
| | | | 2071 | medium grey/red | | | | | |
| | | | 2041 | navy/royal | | | | | |
| | | | 2382 | dark grey/medium grey | | | | | |



Front part and sleeve available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4 kA

Reflective elements on front, back and sleeves, suitable for industrial laundry

Side pockets with covered zip fastener



Standard pictograms as flame-retardant direct embroidery

BLOUSON 4kA

Arc flash class 1
Part number 4kA: **01004 10000 001 + COLOUR NO.**
Garment weight: approx. 950g

BLOUSON 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01004 10000 002 + COLOUR NO.**
Garment weight: approx. 1,100g

Two-coloured • stand-up collar • covered front zip with covered snap fastener • 2 attached breast pockets with flaps and covered snap fasteners • side pockets with flaps and covered snap fastener • 1 inner pocket with snap fastener • sleeve width adjustable via snap fasteners • leasing neck label • embroidered FR standard pictograms on the front • reflective elements suitable for industrial laundry on front, back and sleeves • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

Further colour combinations are available through our high-speed delivery service. See page 221. **21 TO WEAR**



2 and 3 | Reflective elements suitable for industrial laundry

2 and 3 | Front trousers available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4 kA

TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01004 20000 001 + COLOUR NO.**
Garment weight: approx. 760g

TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01004 20000 002 + COLOUR NO.**
Garment weight: approx. 870g

Two-coloured • waistband with button and zip-fly • 2 slant pockets • 1 hip pocket with flap and covered snap fastener • 1 ruler pocket on the right with flap and snap fastener • 1 bellow pocket on the right with flap and snap fastener • knee pockets with hook&loop fastener • reflective elements suited for industrial laundry on side pocket, knee pocket and back of knees • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01004 50100 001 + COLOUR NO.**
Garment weight: approx. 960g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01004 50100 002 + COLOUR NO.**
Garment weight: approx. 1,050g

Two-coloured • stretch braces with fixlock buckle • front with zip-fly • bib with outer pocket with flap and covered snap fastener • 2 slant pockets • 1 hip pocket with flap and covered snap fastener • 1 ruler pocket on the right with flap and snap fastener • 1 bellow pocket on the right with flap and snap fastener • knee pockets with hook&loop fastener • reflective elements suited for industrial laundry on bib, side pockets, knee pockets and back of knees • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 87% COTTON, 12% POLYAMIDE, 1% CARBON

4kA: ATPV VALUE: 15.0 cal/cm² · 627.6 kJ/m² · **ELIM:** 13.0 cal/cm² · **FABRIC WEIGHT:** approx. 340g/m²

7kA/4kA: FABRIC WEIGHT: approx. 340g/m² + approx. 280g/m²

FIELDS OF APPLICATION: Electricians and electric industries, public services, plant engineering, pipeline and line construction, steel works, gas and water networks, metal industry, switch gear construction

Our high-end electric arc protection HB-4arc® is suitable for extreme load thanks to its particular high ATPV. It meets the requirements of IEC 61482-2 class 2 (7kA) and additionally offers heat, flame and welder's protection as well as antistatic properties. The material is partly doubled, very stable and tear-resistant. Wearing HB-4arc® provides you with much comfort and safety.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | REGULAR SIZES |
|------|--------|------------|------------------|---|--------------------------------|----------------------------|-----------|----------------|
| 1 | | 2205 | navy/medium grey | IEC 61482-2 APC 2* *Front part and sleeves/ front trousers | EN ISO 11612 A1+A2/B1/C1/E3/F1 | EN ISO 11611 Class 2 A1+A2 | EN 1149-5 | 46-58 & 94-110 |
| 2, 3 | | 458 | navy | | | | | |
| | | 52 | medium grey | | | | | |



1, 2 and 3 | Ergonomic cut for more freedom of movement

BLOUSON 7kA/4kA
Arc flash class 2
Part number: **01237 10125 002 2205**
Garment weight: approx. 1,291g

Two-coloured • front parts and sleeves 2-ply • high-band collar with covered snap fastener • stitching in contrast colour offwhite • 2 side pockets with zip • 2 front pockets (as mobile phone pocket on the right) with flap and covered snap fastener • waistband and adjustable sleeve hems with covered snap fasteners • FR piping suitable for industrial laundry • leasing label • standard pictograms on the front as FR direct embroidery.



TROUSERS 7kA/4kA
Arc flash class 2
Part number: **01237 20060 037 + COLOUR NO.**
Garment weight: approx. 1,152g

Single-coloured • front trousers 2-ply • stitching in contrast colour off-white • added waistband with covered buttoning • zip fly • 2 slant pockets • 1 hip pocket on the right, 1 ruler pocket on the right leg (+ pen pocket) and 1 cargo pocket on the left (+ mobile phone pocket) – each with flap and covered snap fastener • shaped knees • knee pockets with adjustable covered hook&loop fastener.

BIB AND BRACE TROUSERS 7kA/4kA
Arc flash class 2
Part number: **01237 50041 068 + COLOUR NO.**
Garment weight: approx. 1,361g

Single-coloured • front trousers 2-ply • contrast stitching in off-White • fix lock stretch braces • bib with outer pocket and flap • zip-fly • two-side entries with elastic knitted wedge • 2 slant pockets • 1 hip pocket on the right, 1 ruler pocket on the right leg (+ pen pocket) and 1 cargo pocket on left leg – each with flap and covered snap fastener • shaped knees • knee pockets with adjustable covered hook&loop fastener.

MATERIAL: 89 % COTTON, 10 % POLYAMIDE, 1 % CARBON
ATPV VALUE: 20.0 cal/cm² · 836.8 kJ/m² · **ELIM:** 16.0 cal/cm²
FABRIC WEIGHT: approx. 390 g/m² + approx. 250 g/m²
FIELDS OF APPLICATION: Electrical installation, public services, energy suppliers, plant construction, electricians



Modern and comfortable arc fault protection: that is HB-PROtection®. The lightweight material mix convinces in arc flash performance. The extremely soft fabric ensures a good fit and plenty of freedom of movement. The processed cotton creates a pleasant wearing sensation. The 2-layer 7kA/4kA models are double-worked at the front and sleeves.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | IEC 61482-2 APC 1 | EN ISO 11612 A1+A2/B1/C1/F1 | EN ISO 11611 Class 1 A1+A2 | EN 1149-5 | EN 13034 Type 6 | REGULAR SIZES |
|-----------|-----------------|-------------|------------|----------------|---|-----------------------------|----------------------------|-----------|-----------------|----------------|
| 1 2 3 | 4kA (1-PLY) | [Dark Grey] | 2177 | navy/dark grey | IEC 61482-2 APC 1 | | | | | |
| 1 2 3 | 7kA/4kA (2-PLY) | [Dark Grey] | 2177 | navy/dark grey | IEC 61482-2 APC 2* *Front part and sleeves/ front trousers | EN ISO 11612 A1+A2/B1/C1/F1 | EN ISO 11611 Class 1 A1+A2 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |
| 1 2 | 7kA (2-PLY) | [Dark Grey] | 2177 | navy/dark grey | IEC 61482-2 APC 2 | | | | | |
| 2 3 | | [Dark Grey] | 2175 | dark grey/navy | | | | | | |



Sleeve hem with gusset and covered hook&loop fastener



JACKET 4kA
Arc flash class 1
Part number 4kA: **01072 10112 020 2177**
Garment weight: approx. 835 g

JACKET 7kA/4kA
Arc flash class 2
Part number 7kA/4kA: **01072 10112 018 2177**
Garment weight: approx. 910 g

JACKET 7kA
Arc flash class 2
Part number 7kA: **01072 10112 019 2177**
Garment weight: approx. 945 g

Two-coloured • stand-up collar with covered snap fastener • covered zip • 2 breast pockets with covered zip fastener, left pocket with tap to open • 1 inner breast pocket with additional pen pocket and hook&loop fastener • 2 side pockets with zip fastener • sleeve hem with reflective pipes • no Hi-Vis protective clothing acc. to EN ISO 2047 and EN 17353 • back with 2 movement pleats • elongated back as kidney protection • sleeve opening with gusset • sleeve hem with gusset and covered hook&loop fastener • added waistband • FR standard pictograms on the front.

The 7kA version is completely doubled



Knee pockets with reflective pipes

TROUSERS 4kA
Arc flash class 1
Part number 4kA: **01072 20074 017 2175**
Garment weight: approx. 730 g

TROUSERS 7kA/4kA
Arc flash class 2
Part number partially 7kA/4kA: **01072 20074 018 2175**
Garment weight: approx. 795 g

TROUSERS 7kA
Arc flash class 2
Part number 7kA: **01072 20074 035 2175**
Garment weight: approx. 860 g

Two-coloured • waistband with covered button closure • zip fly • ergonomic knees • 2 slant pockets • 2 hip pockets and 2 bellow pockets – each with flap and covered snap fasteners • knee pockets with reflective pipes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON

4kA: ATPV VALUE: 10.4 cal/cm² · 435 kJ/m² · **HAF VALUE:** 80.2 % · **FABRIC WEIGHT:** approx. 275 g/m²

7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m² · **HAF VALUE:** 88.9 % · **FABRIC WEIGHT:** + approx. 175 g/m²

FIELDS OF APPLICATION: Metal industry, public services, electricians, pipeline and line construction, communication, gas and water networks

21 TO WEAR
Jackets and trousers for Ladies available through our high-speed delivery service. See page 220.
www.21towear.de



BIB AND BRACE TROUSERS 4kA
Arc flash class 1
Part number 4kA: **01072 50055 015 2175**
Garment weight: approx. 855 g

BIB AND BRACE TROUSERS 7kA/4kA
Arc flash class 2
Part number partially 7kA/4kA: **01072 50055 016 2175**
Garment weight: approx. 970 g

Two-coloured • stretch braces with fixlock buckle • straight kidney protection • elastic waistband all around • 2 side access with gusset • slit with zip • ergonomic knees • 2 slant pockets • bib pocket with covered snap fastener • 2 hip pockets • 2 bellow pockets – each with flap and covered snap fastener • knee pockets with reflective pipes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

HB-PROtection® Green Turtle

Our HB-PROtection® Green Turtle shirt is made with organic cotton. It offers modern design as well as a comfortable, ergonomically improved "Comfort Fit". The fabric has a very low weight and provides most high wearing comfort – and inherent flame retardancy. Additionally it offers reliable protection against Arc Flash and antistatic properties. Therefore, it is suited for many working areas and the perfect complement for many HB product lines.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | REGULAR SIZES |
|------|--------|------------|-------------|-------------------|-----------------------------|-----------|------------|---------------|
| 1 | | 45 | navy | IEC 61482-2 APC 1 | EN ISO 11612 A1+A2/B1/C1/F1 | EN 1149-5 | EN 13758-2 | 39/40–47/48 |
| | | 52 | medium grey | | | | | |

1| On request the shirt is also available in tight fitting "Body Fit".
Part number: **01251 60025 000 + COLOUR-NO.**
 45 navy 52 middle grey

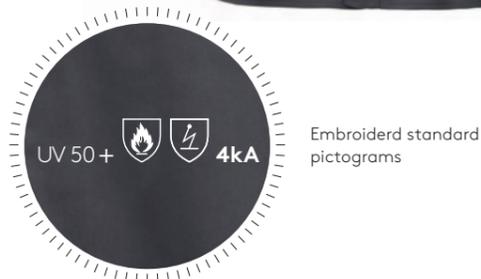
21TO WEAR
Jackets and trousers for Ladies available through our high-speed delivery service. See page 220.

www.21towear.de



SHIRT 4kA
Heat protection
Part number: **01251 60026 000 + COLOUR-NO.**
Garment weight: approx. 440 g

Single-coloured • Comfort Fit • turn-down collar with snap fastener • front zipper with covered snap fastener on both sides • preformed sleeves • chest pocket with flap and sleeve cuff with gusset – each with covered snap fastener • FR Leasing label • standard pictograms as FR embroidery on right sleeve cuff.



What is the Organic Content Standard?
 Organically grown cotton according to OCS 100 has been used in this shirt. Organic Content Standard 100 enables independent assessment, verification and traceability of the exact organic fiber content in the product. The OCS 100 certificate confirms that the organic content of the cotton used is at least 95%.

MATERIAL: 54% MODACRYLIC, 44% COTTON (organic), 2% CARBON ·
ATPV VALUE: 6.9 cal/cm² · 288.7 kJ/m² · **EBT50 VALUE:** 7.1 cal/cm² · **ELIM:** 6.4 cal/cm² ·
FABRIC WEIGHT: approx. 195 g/m² ·
FIELDS OF APPLICATION: Heat and flame exposed workplaces, energy suppliers, public services, plant engineering and construction, electricians



Combined with the jackets of the HB-MODarc® collection, the shirts increase the protective function as an additional clothing layer and thus expand the application possibilities of the PPE. With the intelligent clothing combinations of the comprehensive HB-MODarc® product range, the arc fault protection class 2 can also be fulfilled.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | REGULAR SIZES |
|-------|--------|------------|-----------------------------|------------------|-------------------|-----------------------------|-----------|------------|---------------|
| 1 , 2 | | 45 | navy | | | | | | Unisex S-2XL |
| | | 521 | cement grey | | | | | | |
| 2 | | 228 | orange | | IEC 61482-2 APC 1 | EN ISO 11612 A1+A2/B1/C1/F1 | EN 1149-5 | EN 13758-2 | |
| 3 | | 50 | light grey | | | | | | |
| | | 2193 | black/anthracite reflective | EN 14058 Class 1 | | EN ISO 11612 A1/B1/C2/F1 | | | |



POLO-SHIRT 4ka LONG SLEEVE

Arc flash class 1
Part number: **01244 80011 011 + COLOUR NO.**
Garment weight: approx. 300 g

Single coloured • piqué polo-shirt • collar with board and covered snap fasteners • sleeve cuff with modern covering seam • leasing label • seams in contrast colour • standard pictograms as flame retardant direct embroidery on the right sleeve cuff.



1 and 2| Standards pictograms as flame retardant embroidery



T-SHIRT 4ka LONG SLEEVE

Arc flash class 1
Part number: **01244 80010 007 + COLOUR NO.**
Garment weight: approx. 295 g

Single coloured • piqué T-shirt • round neck • sleeve cuff with modern covering seam • leasing label • seams in contrast colour • standard pictograms as flame retardant direct embroidery on the right sleeve cuff.

Reinforced with HI-VISION®-sparks material



FLEECE JACKET 4ka

Arc flash class 1
Part number: **07015 19082 005 2193**
Garment weight: approx. 975 g

Two-coloured • design with round shapes • high band collar with hook&loop fastener and standard pictograms as direct embroidery • closure bands with covered zip fastener and added buttoning band • 2 side pockets with zip fastener • sleeve with additional inner knitted wristband and windblocker • elongated back • side pockets, elbow and shoulders reinforced with special strong HI-VISION® sparks material with reflective threads.



Elongated back

1|, 2| **MATERIAL:** 54% MODACRYLIC, 44% COTTON, 2% CARBON ·
ATPV VALUE: 6.4 cal/cm² · **HAF VALUE:** 70.1% · **FABRIC WEIGHT:** approx. 215 g/m² ·
3| **MATERIAL:** 48% MODACRYL, 32% COTTON, 18% POLYESTER, 2% CARBON ·
FABRIC WEIGHT: approx. 360 g/m² ·

FIELDS OF APPLICATION: Plant construction, pipeline and line construction, electricians, public services, steel works, switch gear construction, communication, gas and water networks, network engineers



HB-MODarc® is high-quality arc flash PPE in an outdoor design that can be perfectly combined and adapted to different purposes. The soft and lightweight fabric offers a good fit with plenty of freedom of movement and, thanks to the cotton, a high level of wearer comfort. The 2-layer models are double-worked at crucial points.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | REGULAR SIZES |
|--------|--------------------|--------|------------|-------------|-----------------------|------------------------------------|-------------------------------|-----------|--------------------|----------------|
| 1 | 4kA (1-PLY) | | 2251 | grey/black | IEC 61482-2 APC 1 | EN ISO 11612 A1+A2/B1/ C1/FT | EN ISO 11611 Class 1 A1-A2 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |
| 2 , 3 | | | 2188 | black/grey | | | | | | |
| 1 | 7kA/4kA (2-PLY) | | 2251 | grey/black | IEC 61482-2 APC 2* | EN ISO 11612 A1+A2/B1/ C1/FT | EN ISO 11611 Class 1 A1-A2 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |
| 2 , 3 | | | 2188 | black/grey | | | | | | |



BLOUSON 4kA
Arc flash class 1
Part number 4kA: **01072 10107 034 2251**
Garment weight: approx. 835 g

BLOUSON 7kA/4kA
Arc flash class 2
Part number 7kA/4kA: **01072 10107 035 2251**
Garment weight: approx. 910 g

Two-coloured • raw white contrast stitching • stand-up collar with covered snap fastener • covered zip • 2 front pockets (one as an attached pocket) with flap, covered snap fastener and tab to open • 1 inner pocket left with snap fastener • 2 side pockets with zip • sleeve hem adjustable with snap fastener covered on inside • attached waistband with covered snap fastener • leasing label • standard pictograms on front as FR direct stitching.

Formed elbows for more movement freedom

Band collar with covered snap fastener

Completely manufactured in roof-tile design

Pockets with handy tab to open

Front part and sleeve available as 1-ply or 2-ply version. **Electric Arc Flash protection 4 kA or 7kA/4kA**

21 TO WEAR
Further models also for Ladies' available through our high-speed delivery service. See page 220.

www.21towear.de

TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01072 20074 002 + COLOUR NO.**
Garment weight: approx. 730 g

TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01072 20074 003 + COLOUR NO.**
Garment weight: approx. 845 g

Two-coloured • raw white contrast stitching • waistband with covered button closure • zip fly • 2 slant pockets • 1 hip pocket on the right and 1 bellows pocket on the left with additional, attached pocket - each with flap, covered snap fastener and tab to open • 1 ruler pocket on the right (+pen pocket) • 2 knee pockets outside with hook&loop fastener.



2 and 3 | Bellows pocket with additional attached pocket

2 and 3 | Knee pockets with hook&loop fastener

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01072 50055 002 + COLOUR NO.**
Garment weight: approx. 855 g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01072 50055 003 + COLOUR NO.**
Garment weight: approx. 970 g

Two-coloured • raw white contrast stitching • stretch braces with fixlock buckle • bib with outer pocket with flap and covered snap fastener • straight kidney protection • 2 side accesses with stretch gusset • zip fly • 2 slant pockets • hip pocket on the right and bellows pocket on the left with additional, attached pocket, each with flap and covered snap fastener • ruler pocket on the right (+pen pocket) • knee pockets.



2 and 3 | Front trousers available as 1-ply or 2-ply version. **Electric Arc Flash protection 4 kA or 7 kA/4 kA**

MATERIAL: 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON

4kA: ATPV VALUE: 10.4 cal/cm² · 468.9 kJ/m² · **HAF VALUE:** 80.2 % · **FABRIC WEIGHT:** approx. 275 g/m²

7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m²

HAF VALUE: 88.9 % · **FABRIC WEIGHT:** approx. 275 g/m² + approx. 175 g/m²

FIELDS OF APPLICATION: Public services, energy suppliers, plant construction, electrical installation



Due to strong demand, we also offer our popular HB-MODarc® collection with reflective stripes. Again, the 2-layer models of this high-performance and modern arc-fault protective clothing are double-worked at the front, sleeves and front trousers and thus protect against electric arcs up to 7kA.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | REGULAR SIZES |
|--------|--------------------|--------|------------|-------------|-----------------------|------------------------------------|-------------------------------|-----------|--------------------|----------------|
| 1 | 4kA (1-PLY) | | 2251 | grey/black | IEC 61482-2 APC 1 | | | | | 46-58 & 94-110 |
| 2 , 3 | | | 2041 | navy/royal | | | | | | |
| | | | 2188 | black/grey | | | | | | |
| 1 | 7kA/4kA (2-PLY) | | 2251 | grey/black | IEC 61482-2 APC 2* | EN ISO 11612 A1-A2/B1/ C1/F1 | EN ISO 11611 Class 1 A1+A2 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |
| 2 , 3 | | | 2041 | navy/royal | | | | | | |
| | | | 2251 | grey/black | | | | | | |
| 2 | | | 45 | navy | | | | | | |



Completely manufactured in roof-tile design

Reflective stripes, suited for industrial laundry

Front part and sleeve available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA

BLOUSON 4kA REFLECTIVE STRIPES

Arc flash class 1
Part number 4kA: **01072 10107 039 + COLOUR NO.**
Garment weight: approx. 895 g

BLOUSON 7kA/4kA REFLECTIVE STRIPES

Arc flash class 2
Part number 7kA/4kA: **01072 10107 038 + COLOUR NO.**
Garment weight: approx. 970 g

Two-coloured • raw white contrast stitching • stand-up collar with covered snap fastener • covered zip • 2 front pockets (1 as an attached pocket) with flap, covered snap fastener and tab to open • 1 inner pocket left with snap fastener • 2 side pockets with zip • sleeve hem adjustable with snap fastener covered on inside • attached waistband with covered snap fastener • leasing label • standard pictograms on front as FR direct stitching • flame-retardant reflective stripes suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.



Band collar with covered snap fastener



Further colour combinations plus Ladies' versions are available through our high-speed delivery service. See page 220.
www.21towear.de



2 and 3 | Front trousers available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA

TROUSERS 4kA REFLECTIVE STRIPES

Arc flash class 1
Part number 4kA: **01072 20074 009 + COLOUR NO.**
01072 20074 016 45
Garment weight: approx. 765 g

TROUSERS 7kA/4kA REFLECTIVE STRIPES

Arc flash class 2
Part number 7kA/4kA: **01072 20074 008 + COLOUR NO.**
01072 20074 015 45
Garment weight: approx. 880 g

Two-coloured • raw white contrast stitching • waistband with covered button closure • zip fly • 2 slant pockets • 1 hip pocket on the right and 1 bellows pocket on the left with additional attached pocket – each with flap, covered snap fastener and tab to open • 1 ruler pocket on the right (+pen pocket) • knee pockets with hook&loop fastener • flame-retardant reflective stripes suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

2 and 3 | Bellows pocket with additional attached pocket

2 and 3 | Reflective stripes, suited for industrial laundry

BIB AND BRACE TROUSERS 4kA REFLECTIVE STRIPES

Arc flash class 1
Part number 4kA: **01072 50055 009 + COLOUR NO.**
01072 50055 014 45
Garment weight: approx. 890 g

BIB AND BRACE TROUSERS 7kA/4kA REFLECTIVE STRIPES

Arc flash class 2
Part number 7kA/4kA: **01072 50055 008 + COLOUR NO.**
Garment weight: approx. 1,005 g

Two-coloured • raw white contrast stitching • stretch braces with fixlock buckle • bib with outer pocket with flap and covered snap fastener • straight kidney protection • 2 side accesses with stretch gusset • zip fly • 2 slant pockets • hip pocket on the right and bellows pocket on the left with additional attached pocket – each with flap and covered snap fastener • ruler pocket on the right (+pen pocket) • knee pockets • flame-retardant reflective stripes suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 55 % MODARCRYLIC, 43 % COTTON, 2 % CARBON

4kA: ATPV VALUE: 10.4 cal/cm² • 468.9 kJ/m² • **HAF VALUE:** 80.2 %

FABRIC WEIGHT: approx. 275 g/m²

7kA/4kA: EBT50 VALUE: 20.0 cal/cm² • 837.3 kJ/m² • **HAF VALUE:** 88.9 %

FABRIC WEIGHT: approx. 275 g/m² + approx. 175 g/m²

FIELDS OF APPLICATION: Public services, energy suppliers, plant construction, electrical installation



Our most comprehensive product line HB-MODarc&vis®, which we present on the following pages, is a universal talent. The shirts offer multi-risk protection for underneath – and in summer also for outside! They are suitable for work areas that require multiple standards in combination with UV and high visibility. The FR vest with hi-vis protection is the ideal complement for many applications.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | REGULAR SIZES |
|------|--------|------------|-------------------------|----------------------|-------------------|---|--|------------|---------------|
| 1 | | 2397 | fluorescent orange/navy | | | | | | Unisex S-2XL |
| 2 | | 2397 | fluorescent orange/navy | | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1/F1 | | EN 13758-2 | |
| 3 | | 2112 | fluorescent yellow/navy | EN ISO 20471 Class 2 | | EN ISO 11612 A1-A2/B1/C1/F1 | | EN 1149-5 | 1-4 |
| 4 | | 2112 | fluorescent yellow/navy | | | EN ISO 11612 A1-A2/B1/C1/F1 Partial body protection | | | |



Flexible segmented and flame-retardant reflective stripes



Standards pictograms on the sleeve as FR direct embroidery

POLO-SHIRT 4kA LONG SLEEVE

Arc flash class 1
Part number: **01270 80012 003 2397**
Garment weight: approx. 350g
With reflective stripes circumferentially.

POLO-SHIRT 4kA LONG SLEEVE

Arc flash class 1
Part number: **01270 80012 006 2397**
Garment weight: approx. 350g
With reflective stripes like braces.

Two-coloured • long sleeves • collar with polo placket • closure band with flame-retardant snap fasteners • contrast stitching in raw white • flexible segmented and flame-retardant reflective stripes • standard pictograms as direct stitching on the bottom of the right sleeve • leasing label inside on the back.



2

POLO-SHIRT 4kA LONG SLEEVE

Arc flash class 1
Part number: **01244 80012 003 2112**
Garment weight: approx. 300g

Two-coloured • long sleeves • collar with polo placket • closure band with flame-retardant snap fasteners • contrast stitching in raw white • flexible segmented and flame-retardant reflective stripes • standard pictograms as direct stitching on the bottom of the right sleeve • leasing label inside on the back.



3

Reflective stripes, suitable for industrial laundry



4

Hook & loop fastener

VEST HIGH VIS FR

High-Visibility FR
Part number: **01072 10129 001 2112**
Garment weight: approx. 435g

Two-coloured • round design, contrast stitchings in off-white • front closure via hook & loop fastener • HB logo as direct embroidery on back • flame-retardant reflective stripes attached in body language.

1 | 2 | **MATERIAL:** 49% POLYESTER, 30% MODACRYLIC, 20% COTTON, 1% CARBON

FABRIC WEIGHT: approx. 245 g/m²

3 | **MATERIAL:** 54% MODACRYLIC, 44% COTTON, 2% CARBON

ATPV VALUE: 6.4 cal/cm² · 267.78 kJ/m² · **HAF VALUE:** 70.1% · **FABRIC WEIGHT:** approx. 225 g/m²

4 | **MATERIAL:** 55% MODACRYLIC, 43% COTTON, 2% CARBON · **FABRIC WEIGHT:** approx. 275 g/m²

FIELDS OF APPLICATION: Plant construction, pipeline and line construction, electricians, public services, steel works, switch gear construction, communication, gas and water networks



HB-MODarc&vis® stands for modern multifunctional PPE and is suitable for work applications that require several standards in combination with warning and arc flash protection. The combination of blouson and trousers or bib and brace trousers achieves high visibility protection class 3. The two-layer models are doubled at the front, sleeves and front trousers and offer protection against electric arcs up to 7kA/class 2.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | | REGULAR SIZES |
|-----------|-----------------|--------|------------|-------------------------|----------------------|----------------------|-----------------------------|----------------------------|-----------|-----------------|----------------|
| 1 2 3 | 4kA (1-PLY) | | 2112 | fluorescent yellow/navy | EN ISO 20471 Class 2 | IEC 61482-2 APC 1 | | | | | 46-58 & 94-110 |
| 1 2 3 | 7kA/4kA (2-PLY) | | | | EN ISO 20471 Class 1 | EN ISO 20471 Class 2 | EN ISO 11612 A1-A2/B1-C1/F1 | EN ISO 11611 Class 1 A1-A2 | EN 1149-5 | EN 13034 Type 6 | |



21 TO WEAR
Jackets and trousers for Ladies available through our high-speed delivery service. See page 220.
www.21towear.de

1, 2 and 3 | Achieves as suit (blouson combined with trousers or bib and brace trousers) **EN ISO 20471 Class 3**



Pockets with handy tab to open

Reflective stripes, suitable for industrial laundry

BLOUSON 4kA

Arc flash class 1
Part number 4kA: **01072 10107 028 2112**
Garment weight: approx. 940g

BLOUSON 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01072 10107 033 2112**
Garment weight: approx. 1,055g

Two-coloured • parts subject to heavy soiling in blue • raw white contrast stitching • stand-up collar with covered snap fastener • covered 2-way zip • 2 front pockets with flaps, covered snap fasteners and tab to open • 1 inner pocket left with snap fastener • 2 side pockets with zip • sleeve hem adjustable with snap fastener covered on inside • attached waistband with covered snap fastener • standard pictograms on front as FR direct stitching • flame-retardant reflective stripes suitable for industrial laundry.

Front part and sleeve available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA

TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01072 20074 000 2112**
Garment weight: approx. 815g

TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01072 20074 001 2112**
Garment weight: approx. 915g

Two-coloured • parts subject to heavy soiling in blue • raw white contrast stitching • attached waistband with covered button closure • slit with zip-fly • 2 slant pockets • 1 hip pocket on the right and 1 bellows pocket on the left with additional attached pocket - each with flap, covered snap fastener and tab to open • 1 pocket for folding rule on the right (+ pen pocket) with flap • knee pockets with hook&loop fastener • flame-retardant reflective stripes suitable for industrial laundry.



2 and 3 | Front trousers available as 1-ply or 2-ply version
Electric Arc Flash protection 4kA or 7kA/4kA

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number 4kA: **01072 50055 000 2112**
Garment weight: approx. 910g

BIB AND BRACE TROUSERS 7kA/4kA

Arc flash class 2
Part number 7kA/4kA: **01072 50055 001 2112**
Garment weight: approx. 1,040g

Two-coloured • parts subject to heavy soiling in blue • stretch braces with fixlock buckle • straight kidney protection • 2x side access with stretch gusset • slit with zip • 2 slant pockets • bib pocket, hip pocket on the right and bellows pocket on the left with additional attached pocket - each with flap and covered snap fastener • folding rule pocket on the right (+ pen pocket) with flap • knee pockets • flame-retardant reflective stripes suitable for industrial laundry.



2 and 3 | Cargo pocket + attached pocket

2 and 3 | Flame-retardant reflective stripes

MATERIAL: 55% MODACRYLIC, 43% COTTON, 2% CARBON

4kA: ATPV VALUE: 10.4 cal/cm² · 435.4 kJ/m² · **HAF VALUE:** 80.2% · **FABRIC WEIGHT:** approx. 275g/m²

7kA/4kA: EBT50 VALUE: 20.0 cal/cm² · 837.3 kJ/m² · **HAF VALUE:** 88.9%

FABRIC WEIGHT: approx. 275g/m² + approx. 175g/m²

FIELDS OF APPLICATION: Public services, public transport and construction, electricians, energy suppliers



Breathable, windproof and highly functional – these are the softshell and fleece jackets in our versatile HB-MODarc&vis® range. Whether multi-risk protection plus welding protection or flame protection plus protection for cooler days: both jackets can be used flexibly and are thus the ideal clothing for every season, suitable for many different work applications. NEW: our sweatshirt as modern alternative for inside and outside works.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | | | | REGULAR SIZES |
|------|--------|------------|-----------------------------------|----------------------|------------------|-------------------|--------------------------|-------------------------|-----------|---|------------|---------------|
| 1 | | 2007 | fluorescent yellow/dark blue | | EN 14058 Class 1 | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C2/F1 | - | - | - | - | Unisex S-2XL |
| 2 | | 2228 | fluorescent orange-red/black blue | EN ISO 20471 Class 2 | - | IEC 61482-2 APC 2 | EN ISO 11612 A1/B1/C2/F2 | EN ISO 11611 Class 2 A1 | EN 1149-5 | - | - | |
| 3 | | 2112 | fluorescent yellow/black blue | | - | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1 | - | - | - | EN 13758-2 | XS-4XL |

FLEECE JACKET 4kA

Arc flash class 1
Part number: **07015 19080 001 2007**
Garment weight: approx. 1,090g

Two-coloured • standard pictograms on the stand-up collar as flame-retardant direct embroidery • covered two-way zip below snap-fastener closure band • 2 side pockets with zip • sleeves with additional inner knitted wristband and wind-blocker • extended back with drawstring • flame-retardant reflective stripes in body-language for perfect all-around visibility.



SOFTSHELL JACKET 7kA

Arc flash class 2
Part number: **10003 19072 012 + COLOUR NO.**
Garment weight: approx. 1,375g

Two-coloured • raw white contrast stitching • high stand-up collar with hook&loop fastener and standard pictograms as FR direct stitching • covered zip fastener • Napoleon pocket on the left and 2 side pockets – each with zip • sleeves with additional inner knit cuffs • FR reflective stripes in body language.



Comfortable knitted cuffs

SWEATSHIRT 4kA

Arc flash class 1
Part number: **01279 80023 001 2112**
Garment weight: approx. 670g

3-coloured • round neck • sleeve cuff with knitted cuffs • knitted waistband • stretchable and segmented flame retardant reflective stripes • standard pictograms as FR direct embroidery on the lower left sleeve • leasing label.



1 | MATERIAL: 48% MODACRYLIC, 32% COTTON, 18% POLYESTER, 2% CARBON · **FABRIC WT.:** approx. 360g/m² ·
2 | MATERIAL: OUTSIDE: 31% POLYESTER, 28% MODACRYLIC, 20% ARAMIDE, 20% VISCOSE FR, 1% CARBON; INSIDE: 60% MODACRYLIC, 38% COTTON, 2% CARBON, PU-coated · **ATPV VALUE:** 44.8 cal/cm² · 1,874.4 kJ/m² · **HAF VALUE:** 92.3% · **FABRIC WEIGHT:** approx. 540g/m² ·
3 | MATERIAL: 54% MODACRYLIC, 44% COTTON, 2% CARBON · **FABRIC WEIGHT:** approx. 405g/m² · **ATPV VALUE:** 19.0 cal/cm² · 794.96 kJ/m² ·
FIELDS OF APPLICATION: For electricians, mains technicians and plant engineers, network engineers, in particular with public utility companies/energy suppliers

HI-VISION®

The HB-MODarc&vis® parka with liner is suitable for a wide range of applications and thanks to the elaborate roof tile processing also for handling liquid metals. With the zip-in inner fleece made of flame-retardant material, it is unbeatable in cold weather. For optimum protection, the collar is reinforced with aramid fabric on the inside.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | | | | REGULAR SIZES |
|------|--------|------------|-------------------------|--|------------------|------------------|-------------------|--------------------------------|----------------------------|-----------|----------------------|---------------|
| 1 | | 2047 | black/navy | - | EN 14058 Class 1 | - | - | - | - | - | - | Unisex S-2XL |
| 2 | | 2112 | fluorescent yellow/navy | EN ISO 20471 Class 2 | - | EN 343 Class 3/3 | IEC 61482-2 APC 2 | EN ISO 11612 A1-A2/B1/C1/E1/F1 | EN ISO 11611 Class 1 A1+A2 | EN 1149-5 | EN 13034 Type PB (6) | |
| 3 | | 45 | navy | Certification only in combination with parka | | | | | | | | |

2 | Combinable with zippable Inner fleece FR on left page.



FR standard pictograms embroidered on the collar



FLEECE JACKET FR
Outdoor
Part number: **07015 19095 000 2047**
Garment weight: approx. 700 g

Two-coloured • high band collar • closure band with zip fastener for closing or zipping into our HB-MODarc&vis® parkas • various buttons for fixation in parka • elastic wrist-band • material certified acc. to EN ISO 11612 A1/B1/C1/F1.

PARKA 7ka
Arc flash class 2
Part number: **01072 19098 000 2112**
Garment weight: approx. 1,630 g

Two-coloured • flame-retardant upper material with liner • sealed seams • high band collar with covered buttons for hood attachment • hood suitable for wearing with or without helmet • covered 2-way zip fastener plus drip moulding with snap fasteners • 1 front pocket on the left, 1 mobile phone pocket (bellows) on the right, covered with laminated weather protection, and 2 side pockets (bellows) – each with flap and covered snap fastener • flame-retardant reflective stripes, suitable for industrial laundry • wristbands with strap and hook&loop fastener • FR standard pictograms on the collar.



1 | Effective protection against the cold: combine the fleece jacket with our HB-MODarc&vis® parkas page 49 and 50.



HOOD
Arc flash class 2
Part number: **01072 79004 000 45**
Garment weight: approx. 140 g

Single-coloured • flame-retardant upper material with liner • sealed seams • to be attached via buttons, and suitable to be worn with or without helmet • attached visor • field of vision adjustable via cord • height adjustable via cord at back of head • certification only in combination with parka.



1 | **MAT.:** 48% MODACRYLIC, 32% COTTON, 18% POLYESTER, 2% CARBON • **FABRIC WT.:** approx. 360g/m² •
2 | **MATERIAL:** 55% MODACRYLIC, 43% COTTON, 2% CARBON // With liner •
OUTER PLY: **ATPV VALUE:** 10.4 cal/cm² • 435.4 kJ/m² • **HAF VALUE:** 80.2% • **FABRIC WT.:** approx. 275g/m² •
FIELDS OF APPLICATION: Energy suppliers, public services, plant responsible, liquid metal works, steel works, metal construction, electricians, public transport areas



Safety even in problematic weather plus antistatic as well as additional protection against chemicals, heat, flames, welding spatter and electric arcs. This high-visibility and weather protection outfit with direct laminate is lightweight, windproof and 100 % water repellent. It can be perfectly combined with many other models of the HB-MODarc&vis® series.



| ITEM | COLOUR | COLOUR-NO. | COLOUR NAME | | | | | | | | REGULAR SIZES |
|------|--------|------------|-------------------------|--|------------------|-------------------|--------------------------|-------------------------|-----------|-----------------|---------------|
| 1 | | | | EN ISO 20471 Class 3 | EN 343 Class 3/4 | IEC 61482-2 APC 2 | EN ISO 11612 A1/B1/C1/F1 | EN ISO 11611 Class 1 A1 | EN 1149-5 | EN 13034 Type 6 | Unisex S-2XL |
| 2 | | 2112 | fluorescent yellow/navy | EN ISO 20471 Class 1 | | IEC 61482-2 APC 1 | | | | | One size |
| 3 | | | | Certification only in combination with parka | | | | | | | |



PARKA 7ka
Arc flash class 2
Part number: **05019 19071 008 2112**
Garment weight: approx. 1,665g

Two-coloured • flame-retardant upper material as direct laminate • sealed seams • design with round shapes • contrast stitching in off-white • high band collar with zip fastener for hood attachment • covered 2-way zip fastener plus drip moulding • elongated back • 1 inner Napoleon pocket on the left and 2 side pockets and 1 inner pocket on the left – each with zip fastener • waist adjustment via drawstring • wristbands adjustable via hook&loop fastener • flame-retardant reflective stripes • standard pictograms as direct embroidery on the collar • worn together with our inner fleece Jacket it achieves EN ISO 11612 B2 and C2.



BIB TROUSERS 4ka

Arc flash class 1
Part number: **05019 29000 006 2112**
Garment weight: approx. 1,060g

Two-coloured • flame-retardant upper material as direct laminate • sealed seams • parts subject to heavy soiling in navy blue • adjustable elastic braces • high kidney protection with elastic • elasticated side access • 2 slant pockets • 1 hip and 1 bellows leg pocket – each with flap, covered hook&loop fastening and tab to open • adjustable foot width thanks to additional material and zip.



HOOD

Arc flash class 2
Part number: **05019 79006 001 2112**
Garment weight: approx. 200g

Two-coloured • flame-retardant upper material as direct laminate • sealed seams • design with round shapes • separate hood, attachable via zip fastener and suited for wearing with/without helmet, with added peak • hood's field of vision adjustable via cord • hood height adjustable via hook&loop fastener at back of head.



MATERIAL: 55 % MODACRYLIC, 43 % COTTON, 2 % CARBON, POLYURETHAN-MEMBRANE
OUTER PLY: ATPV VALUE: 22.2 cal/cm² · 929.3 kJ/m² · HAF VALUE: 87.8 %
FABRIC WEIGHT: approx. 300 g/m²
FIELDS OF APPLICATION: Work in public places with additional hazards by arcs and flames, energy providers (also Off-shore industry), alternative energie providers, petrol chemistry, steelworks, electricians



Great look, pleasant material and highly functional: HB-4Energy combines lightweight rip-stop fabric with stretchy and abrasion-resistant elements to protect in all the right places. Elastic parts provide exceptionally high wearing comfort with plenty of freedom of movement. This modern multi-risk collection meets the current zeitgeist as it covers many work areas and is a real eye-catcher because of the different material structures.



| ITEM | PLY | COLOUR | COLOUR-NO. | COLOUR NAME | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1/F1 | EN ISO 11611 Class 1 A1 | EN 1149-5 | EN 13034 Type 6 | EN ISO 20471 Class 2 | EN ISO 20471 Class 1 | REGULAR SIZES |
|--------|-----------------|--------|------------|-----------------------------------|--------------------|--------------------------|-------------------------|-----------|-----------------|----------------------|----------------------|----------------|
| 1 | 4kA (1-PLY) | | 4027 | fluorescent yellow/dark blue/navy | IEC 61482-2 APC 1 | | | | | EN ISO 20471 Class 2 | | 46-58 & 94-110 |
| 2 , 3 | | | 4027 | fluorescent yellow/dark blue/navy | | | | | | EN ISO 20471 Class 1 | | |
| 1 | 7kA/4kA (2-PLY) | | 4028 | dark blue/fluorescent yellow/navy | IEC 61482-2 APC 2* | | | | | EN ISO 20471 Class 2 | | 46-58 & 94-110 |
| 2 , 3 | | | 4027 | fluorescent yellow/dark blue/navy | | | | | | EN ISO 20471 Class 2 | | |
| | | | 4028 | dark blue/fluorescent yellow/navy | | | | | | EN ISO 20471 Class 1 | | |



JACKET 4kA
Arc flash class 1
Part number: **01288 10219 000 4027**
Garment weight: approx. 950g

JACKET 7kA/4kA
Arc flash class 2
Part number: **01288 10219 001 4027**
Garment weight: approx. 1,170g

2-coloured • stand-up collar • covered zip with covered snap fasteners • 2 breast pockets with covered snap fasteners and flap • 2 breast pockets with covered snap fasteners and flap • 1 inner breast pocket with snap fastener • 2 side pockets with zip • reflective elements on breast pockets • back extension as additional kidney protection • sleeves with knitted cuffs as wind guard inside and outside with adjustable hook & loop fastener • segmented reflective stripes • standard pictograms as FR direct embroidery on front left.

1, 2 and 3 |
In the models with arc fault protection class 2, the material is doubled at the front sides and on the sleeves as well as on the front legs, and offers 7kA protection there

2 and 3 |
Elastic elements at the sides of the waistband, in the pocket opening, at the back of the trousers and in the crotch provide relief during kneeling activities



TROUSERS 4kA
Arc flash class 1
Part number: **01288 20156 002 4027**
Part number: **01288 20156 000 4028**
Garment weight: approx. 770g

TROUSERS 7kA/4kA
Arc flash class 2
Part number: **01288 20156 003 4027**
Part number: **01288 20156 001 4028**
Garment weight: approx. 950g

2-coloured • waistband raised at the back • reinforced belt loops • slit with zip • 2 wing pockets with trim and reflective elements • 2 back pockets with flap and press studs • 1 ergonomic ruler pocket on the right, 1 leg pocket on the left - both free-hanging and with flap, the leg pocket as bellows pocket with inside mobile phone pocket • knee pocket with Velcro fastening • segmented reflective stripes.



2 and 3 |
Resistant and dirt-repellent material on knee pockets and at the bottom of the inner leg

BIB AND BRACE TROUSERS 4kA
Arc flash class 1
Part number: **01288 50106 002 4027**
Part number: **01288 50106 000 4028**
Garment weight: approx. 920g

BIB AND BRACE TROUSERS 7kA/4kA
Arc flash class 2
Part number: **01288 50106 003 4027**
Part number: **01288 50106 001 4028**
Garment weight: approx. 1,050g

2-coloured • stretch straps with fixlock buckles • bib with bib pocket and flap with snap fastener • high kidney protection • slit with zip • 2 wing pockets with trimming and reflective elements • 2 hip pockets with flap and snap fasteners • 1 ergonomic ruler pocket on the right, 1 leg pocket on the left - both free-hanging and with flap, the leg pocket as bellow pocket with inside mobile phone pocket • knee pocket with hook & loop fastener • segmented reflective stripes.

MATERIAL: 44 % MODACRYLIC, 30 % COTTON, 20 % POLYAMIDE, 5 % ARAMIDE, 1 % CARBON
4kA: ATPV VALUE: 11.0 cal/cm² · 460.24 kJ/m² · **ELIM:** 10.0 cal/cm² · **FABRIC WT.:** approx. 260g/m²
7kA/4kA: ATPV VALUE: 31.0 cal/cm² · 1297.04 kJ/m² · **ELIM:** 18.0 cal/cm²
FABRIC WEIGHT: approx. 260g/m² + approx. 180g/m²
FIELDS OF APPLICATION: Plant construction, electric installation, public services, electricians, pipeline construction, switch gear construction, networks (communication, gas, water), renewable energies



HB-MultiPro FR®

Windproof, water-repellent and breathable: MultiPro FR® is the perfect all-round protection for autumn and winter: We have given our all-rounder a new look and an even more durable fabric. Eight certified standards provide an exceptionally high level of protection for many different work areas and uses. Very well equipped with many comfortable features such as chin protection and moisture barrier.



| ITEM | PLY | COLOUR | COLOUR-NO. | COLOUR NAME | | | | | | | | REGULAR SIZES |
|------|-------------|--------|------------|-----------------------------|---------------------------------------|------------------|---|-------------------|-----------------------------|-------------------------|----------------------|------------------|
| 1 | 4kA (1-PLY) | | 48 | dark blue | - | - | - | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C2/F1 | - | - | EN 14059 Class 1 |
| 1 | 7kA (2-PLY) | | 528 | dark grey | - | - | - | IEC 61482-2 APC 2 | EN ISO 11612 A1/B2/C2/F1 | - | - | Unisex S-2XL |
| 2 | 7kA (2-PLY) | | 2408 | fluoresc. orange/stone grey | EN ISO 20471 Class 3* *from size S | EN 343 Class 3/3 | - | IEC 61482-2 APC 2 | EN ISO 11612 A1/B1/C1/E1/F1 | EN ISO 11611 Class 2 A1 | EN 1149-5 | Unisex S-2XL |
| 3 | - | | 2425 | fluoresc. yellow/stone grey | EN ISO 20471 Class 1 | - | - | - | - | - | EN 13034 Type PB [6] | Unisex S-2XL |
| 4 | - | | 17 | fluoresc. yellow | - | - | - | - | - | - | - | One size |
| | | | 18 | fluoresc. orange | - | - | - | - | - | - | - | One size |

Certification only in combination with parka



FLEECE JACKET 4kA
Arc flash class 1
07015 19019 000 + COLOUR NO.
Garment weight: approx. 845g

FLEECE JACKET 7kA
Arc flash class 2
07015 19019 001 + COLOUR NO.
Garment weight: approx. 1,020g

Single coloured • stand-up collar with fastening loop for hooking into the outer jacket, to wear high necked or open • covered front zipper • 2 side pockets with covered zipper • hem adjustable with drawstring • sleeves bottom with knitted cuffs and 2 fastening loops each for hooking into the outer jacket • standards pictograms as direct embroidery on the front above the waistband.

PARKA 7kA
Arc flash class 2
Part number: 01121 19018 000 + COLOUR NO.
Garment weight: approx. 1,625g

2-coloured • flame retardant outer fabric with liner, welded seams • stand-up collar with concealed push buttons, chin guard and zipper for hood • covered 2-way zip plus drip moulding • 2 chest pockets with flap and covered snap fastener • 2 side pockets with zipper • 1 inside pocket on the left with Velcro closure • extended back • waist and hem width adjustable via cord • inside zipper to hook the fleece jacket • sleeves bottom width adjustable with hook & loop closure • flame retardant, segmented FR reflective stripes • standard pictograms as FR embroidery at the front.

BIB AND BRACE TROUSERS 7kA
Arc flash class 2
Part number: 01121 59006 000 + COLOUR NO.
Garment weight: approx. 1,311g

2-coloured • flame retardant outer fabric with liner, welded seams • adjustable length straps • diamond shaped kidney protection • 1 bib pocket with inside pen pocket with flap and covered snap fasteners • 2 wing pockets • inside back pockets with flap and concealed push buttons • 1 free-hanging folding rule pocket on the right and 1 bellows pocket on the left with inside cell phone pocket – each with flap and covered snap fasteners • entry on both sides with knitted wedge • slit with zipper • hook&loop fastener at the bottom of the trouser leg for easier entry • leg cuff with wetness barrier • flame retardant, segmented FR reflective stripes.



HOOD
Arc flash class 2
Part number: 01121 79006 004 + COLOUR NO.
Garment weight: approx. 182g

Single-coloured • flame-retardant upper material with liner • sealed seams • separate hood, attachable via zipper • field of vision adjustable via cord • hood height adjustable via hook&loop fastener at the back of the head • certification only in combination with parka.



1 | MATERIAL: 48% MODACRYLIC, 32% COTTON, 18% POLYESTER, 2% CARBON · FABRIC WT.: approx. 360g/m² ·
2 |, 3 |, 4 | MATERIAL: 31% POLYESTER, 28% MODACRYLIC, 20% ARAMIDE, 20% VISCOSE, 1% CARBON // With liner ·
ATPV VALUE: 8.8 cal/cm² · 368.19 kJ/m² · ELIM: 8.0 cal/cm² · FABRIC WEIGHT: approx. 320g/m² ·
FIELDS OF APPLICATION: Petrochemistry, catenary construction, energy suppliers



NOMEX® Viskose combines pleasant wearing comfort with reliable protection. Despite its light weight, the fabric offers high durability and good moisture absorption. Suitable for those who frequently change their posture when working. Finished with generous pockets. The outside knee pockets are made of particularly abrasion-resistant aramid.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | REGULAR SIZES |
|---------|--------|------------|-------------|-------------------|--------------------------|-------------------------|-----------|----------------|
| 1, 2, 3 | | 2030 | royal/navy | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1/F1 | EN ISO 11611 Class 1 A1 | EN 1149-5 | 46-58 & 94-110 |



Many reflective pipings

Inner mobile phone pocket with hook&loop fastener

Closure band with covered zip fastener and covered hook&loop fasteners

BLOUSON 4ka

Arc flash class 1
Part number: **01031 10036 005 2030**
Garment weight: approx. 770g

Two-coloured • front part partially with 2 layers • front, back, sleeve and pocket flaps with FR reflective piping, suitable for industrial laundry • high band collar with strap and hook&loop fastener • 2 front and 2 side pockets – each with flap and covered hook&loop fastener • 1 inner mobile phone pocket on the right and 1 inner pocket on the left, each with hook&loop fastener • waistband with elastic band in side parts • wristband with covered snap fasteners • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

Standards pictograms on the front as FR direct embroidery



2 and 3 | Ruler pocket on the right

Bellow pocket with flap and hook&loop fastener

FR reflective stripes, suitable for industrial laundry

Reflective piping at bib and flaps

2 and 3 | Knee pockets made from particularly abrasion-resistant Aramide

TROUSERS 4ka

Arc flash class 1
Part number: **01031 20022 013 2030**
Garment weight: approx. 700g

Two-coloured • waistband with covered button and lateral elastic bands • zip fly • 2 slant pockets • 1 hip pocket and 1 ruler pocket on the right – each with flap • 1 bellow pocket on left leg with flap and hook&loop fastener • knee pockets with hook&loop fastener • FR reflective stripes at legs, suitable for industrial laundry • reflective piping on flaps • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4ka

Arc flash class 1
Part number: **01031 50026 014 2030**
Garment weight: approx. 840g

Two-coloured • stretch braces with fixlock buckle • high-cut kidney protection • bib with outer pocket, ball-pen compartment and flap • zip fly • 2 slant pockets • 1 hip pocket and 1 ruler pocket on the right, 1 bellow pocket on left leg – each with flap and covered hook&loop fastener • side access on the left, adjustable via buttons • knee pockets with hook&loop fastener • FR reflective stripes at legs, and reflective piping on bib and flaps, suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 50 % VISCOSE, 50 % ARAMIDE

ATPV VALUE: 9.9 cal/cm² · 414.4 kJ/m² · **HAF VALUE:** 79.0 % · **FABRIC WEIGHT:** approx. 260 g/m²

FIELDS OF APPLICATION: Energy suppliers, public services, plant engineering and construction, electricians



The NOMEX® Comfort fabric is fibre-inherently flame retardant and thus offers exceptionally high flame protection. With proper care, the protective function is maintained even after many washes. Due to the low material weight, NOMEX® Comfort offers protection and freedom of movement even in very uncomfortable workplaces with a particularly high risk potential.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | REGULAR SIZES |
|--------|--------|------------|-------------|----------------------|-----------------------------|-----------|----------------|
| 1 | | 41 | royal | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1/F1 | EN 1149-5 | 46-58 & 94-110 |
| 2 , 3 | | | | | | | |



Inner front pocket with flap and snap fasteners

Front pocket with flap and covered snap fastener

BLOUSON 4kA

Arc flash class 1
Part number: **01042 10011 001 41**
Garment weight: approx. 545g

Single-coloured • turn-down collar • closure band with covered snap fasteners on both sides • 1 front pocket on the left with flap and covered snap fastener • 1 inner front pocket on the right with flap and snap fasteners • sleeve hem width adjustable via snap fasteners, covered inwards • added waistband • standard pictograms as FR direct embroidery on front • FR leasing label.



JACKET 4kA

Arc flash class 1
Part number: **01042 10003 001 41**
Garment weight: approx. 580g

Single-coloured • turn-down collar • closure band with snap fasteners covered on both sides • 1 front pocket on the left with flap and 2 piped pockets with covered pocket mouths, all with covered snap fasteners • 1 inner front pocket on the right with flap and snap fasteners • sleeve hem width adjustable via snap fasteners, covered inwards • standard pictograms as flame retardant embroidery • FR leasing label.



COAT 4kA

Arc flash class 1
Part number: **01042 40002 002 41**
Garment weight: approx. 720g

Single-coloured • lapel collar • closure band with snap fasteners covered on both sides • 1 front pocket on the left and 2 side pockets, each with flap and covered snap fastener • 1 inner front pocket on the right • sleeve hem width adjustable via covered snap fasteners • FR leasing label.

MATERIAL: 98 % ARAMIDE, 2 % CARBON ·
ATPV VALUE: 9.0 cal/cm² · 376.8 kJ/m² · **HAF VALUE:** 71.6 % · **FABRIC WEIGHT:** approx. 260 g/m² ·
FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric installation, public services, electricians



The NOMEX® Comfort fabric is fibre-inherently flame retardant and thus offers exceptionally high flame protection. With proper care, the protective function is maintained even after many washes. Due to the low material weight, NOMEX® Comfort offers protection and freedom of movement even in very uncomfortable workplaces with a particularly high risk potential.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | REGULAR SIZES |
|---------|--------|------------|-------------|-------------------|--------------------------|-----------|----------------|
| 1, 2, 3 | | 41 | royal | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1/F1 | EN 1149-5 | 46-58 & 94-110 |



TROUSERS 4kA

Arc flash class 1
Part number: **01042 20003 006 41**
Garment weight: approx. 510g

Single-coloured • added waistband with 7 belt loops • 2 side seam pockets • 1 hip pocket on the right with flap and snap fasteners • button fly • 1 ruler pocket on the right.



Outer bib pocket with covered snap fastener

BIB AND BRACE TROUSERS 4kA

Arc flash class 1
Part number: **01042 50002 012 41**
Garment weight: approx. 655g

Single-coloured • stretch braces with clamp-on clips • straightcut kidney protection • 1 outer bib pocket with covered snap fastener • side access on the left with buttoning • button fly • 2 side seam pockets with covered snap fastener • 1 hip pocket on the right with flap and covered snap fastener • 1 ruler pocket on the right.



Elastic waistband all round



1 to 3 | Ruler pocket on the right

COVERALL 4KA

Arc flash class 1
Part number: **01042 30017 001 41**
Garment weight: approx. 990g

Single-coloured • turn-down collar, closure band with snap fasteners covered on both sides • 1 front pocket on the left, 1 side pocket on the left and 1 pocket pass-through on the left – each with covered snap fastener • 1 ruler pocket on the right • elastic waistband all round • sleeve hem width adjustable via snap fastener, covered inwards.

MATERIAL: 98 % ARAMIDE, 2 % CARBON ·
ATPV VALUE: 9.0 cal/cm² · 376.8 kJ/m² · **HAF VALUE:** 71.6 % · **FABRIC WEIGHT:** approx. 260 g/m² ·
FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric installation, public services, electricians



Extraordinary protection and comfort, combined with low weight: INOTEC® Arc & Energy offers fibre-inherent flame protection, excellent arc flash protection, antistatic properties plus retro-reflective stripes. The lightweight material and the clever cut provide wearers with an easy freedom of movement. Available as 1-ply or 2-ply version.



| ITEM | PLY | COLOUR | COLOUR NO. | COLOUR NAME | | | | | REGULAR SIZES |
|-----------|-----------------|--------|------------|-------------|---|--------------------------|-----------|-----------------|----------------|
| 1 2 3 | 4kA (1-PLY) | | 2027 | royal/navy | IEC 61482-2 APC 1 | EN ISO 11612 A1/B1/C1/F1 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |
| 1 2 3 | 4kA/7kA (2-PLY) | | 2027 | royal/navy | IEC 61482-2 APC 2* *Front part and sleeves/ front trousers | EN ISO 11612 A1/B1/C1/F1 | EN 1149-5 | EN 13034 Type 6 | 46-58 & 94-110 |



JACKET 4kA
Arc flash class 1
Part number 4kA: **01043 10000 009 2027**
Garment weight: approx. 780g

JACKET 7kA/4kA
Arc flash class 2
Part number 7kA/4kA: **01043 10000 010 2027**
Garment weight: approx. 940g

Two-coloured • stand-up collar • fastening strip with covered zip • 2 breast and 2 side pockets with flap and snap fasteners • mobile phone pocket with zip on the front • FR reflective piping on front, back and sleeves, suited for industrial laundry • back with FR reflective stripes, suited for industrial laundry - sleeve cuffs adjustable with snap fasteners • standard pictograms on the front as FR direct embroidery • no high-visibility clothing according to EN ISO 20471 and EN 17353.

Front part and sleeve available as 1-ply or 2-ply version **Electric Arc Flash protection 4kA or 7kA/4kA**



Design and cut relaunched:
Now even more comfortable thanks to optimised fit.

Matching bib and brace trousers:
Zip-in membrane as liner trousers for additional moisture protection made of 190 g/m² light-weight material double-layer laminate FR
Part number: **05065 29004 000 519**



TROUSERS 4kA
Arc flash class 1
Part number 4kA: **01043 20000 004 2027**
Garment weight: approx. 650g

TROUSERS 7kA/4kA
Arc flash class 2
Part number 7kA/4kA: **01043 20000 005 2027**
Garment weight: approx. 765g

Two-coloured • attached waistband • 2 slant pockets • fly with covered zip • 2 back pockets with flap and snap fasteners • 1 folding rule pocket on the right • 1 leg pocket on the left with bellows pleat at the back, flap and snap fastener • reflective piping on saddle seam of back trousers • 2 reflective stripes at the bottom of the legs • no high-visibility clothing according to EN ISO 20471 and EN 17353.

BIB AND BRACE TROUSERS 4kA
Arc flash class 1
Part number 4kA: **01043 50100 004 2027**
Garment weight: approx. 800g

BIB AND BRACE TROUSERS 7kA/4kA
Arc flash class 2
Part number 7kA/4kA: **01043 50103 000 2027**
Garment weight: approx. 920g

Two-coloured • stretch straps with fixlock buckles • high-cut kidney protection • outside bib pocket with flap, reflective piping and covered snap fasteners • 1 side entry on the left, adjustable with buttons • fly with zip • 2 wing pockets • 2 seat pockets and 1 bellows leg pocket on the left, each with flap and snap fasteners • 1 reinforced folding rule pocket on the right with flap and snap fasteners • no high-visibility clothing according to EN ISO 20471 and EN 17353.

MATERIAL: 98 % ARAMIDE, 2 % CARBON // FC-Equipment: fluorocarbon finish
4kA: ATPV VALUE: 9.0 cal/cm² · 376.8 kJ/m² · **HAF VALUE:** 71.6% · **FABRIC WEIGHT:** approx. 260g/m²
7kA/4kA: FABRIC WEIGHT: approx. 260g/m² + approx. 180g/m²
FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric installation, public services, electricians





HEAT, SPLASHES & WELDING

WHEN THINGS GET HEATED YOU STAY COOL

There are situations where you have to be able to rely one hundred percent on your protective equipment. Our products in the Heat, Splashes & Welding category offer the highest level of safety whenever things get hot – in direct contact with sparks and splashes of liquid metal as well as in extreme heat exposure.

Not to mention the many other dangers lurking in job and live.

Mainly perfect for classical welding work – and now with additional protection against liquid iron. The PROBAN® cotton is particularly strong and made with a unique FR equipment, offering high wearing comfort and breathability. It provides welders with reliable protection against heat, sparks and welding splatters according to EN ISO 11611. The flame resistance persists even after repeated laundry and cleaning cycles.

HEAT,
SPASHES &
WELDING



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | FABRIC WEIGHT | FABRIC NO. | EN ISO 11611 Class 2 A1 | EN ISO 11612 A1/B1/C1/E2/F1 EN ISO 11612 A1/B1/C1/E3/F1 | REGULAR SIZES |
|---------|--------|------------|-------------|------------------------------|------------|----------------------------|--|----------------|
| 1, 2, 3 | Blue | 41 | royal | approx. 380 g/m ² | 01096 | | | 46-58 & 94-110 |
| 1, 2, 3 | Grey | 52 | medium grey | approx. 470 g/m ² | 01272 | | | |



Closure band with snap fasteners covered on both sides

Sleeve hem width adjustable via snap fasteners covered inside

JACKET
Welding protection class 2
Part number: **01096 10046 000 41**
Garment weight: approx. 790 g
Fabric weight: approx. 380 g/m²

JACKET
Welding protection class 2
Part number: **01272 10046 000 52**
Garment weight: approx. 895 g
Fabric weight: approx. 470 g/m²

Single-coloured • turn-down collar • closure band with snap fasteners on both sides • 1 chest pocket on the left and 2 side pockets, each reinforced and with flap and covered snap fastener • 1 inner front pocket on the right • sleeve hem width adjustable via covered inner snap fasteners • embroidered flame-retardant standard pictograms on the front.

TROUSERS
Welding protection class 2
Part number: **01096 20084 003 41**
Garment weight: approx. 770 g
Fabric weight: approx. 380 g/m²

TROUSERS
Welding protection class 2
Part number: **01272 20084 003 52**
Garment weight: approx. 905 g
Fabric weight: approx. 470 g/m²

Single-coloured • added waistband with covered buttoning • covered button fly • 2 slant pockets • 1 hip pocket on the right with flap and covered snap fastener and 1 ruler pocket on the right, each reinforced.



BIB AND BRACE TROUSERS
Welding protection class 2
Part number: **01096 50062 001 41**
Garment weight: approx. 960 g
Fabric weight: approx. 380 g/m²

BIB AND BRACE TROUSERS
Welding protection class 2
Part number: **01272 50062 001 52**
Garment weight: approx. 1,105 g
Fabric weight: approx. 470 g/m²

Single-coloured • stretch braces with clamp-on clips • straight kidney protection • 1 bib pocket and 1 reinforced hip pocket on the right, each with flap and covered snap fastener • covered button fly • 2 side seam pockets and 1 ruler pocket on the right, each reinforced.



MATERIAL: 100 % COTTON
FABRIC WEIGHT: approx. 380 g/m² · approx. 470 g/m²
FIELDS OF APPLICATION: Steel works, metalworking industry, welding companies, plant construction, foundries

This medium-weight SECAN® collection offers reliable protection against liquid iron splashes (E3). The robust material with antistatic properties is also ideal for heavy welding work.

HEAT,
SPLASHES &
WELDING



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | REGULAR SIZES |
|---------|--------|------------|-------------|-------------------------------|---------------------------------------|-----------|----------------|
| 1, 2, 3 | ■ | 52 | medium grey | EN ISO 11611 Class 2 A1+A2 | EN ISO 11612 A1+A2/B1/C1/ E3/F1 | EN 1149-5 | 46-58 & 94-110 |



Adjustable sleeve hem



Standard pictograms as direct embroidery

JACKET

Liquid metal Fe
Part number: **01248 10048 001 52**
Garment weight: approx. 870 g

Single-coloured • turn-down collar • closure band with snap fasteners covered on both sides • 1 inner front pocket on the right • 1 front pocket on the left and 2 side pockets – each with flap and covered snap fasteners • sleeve hem width adjustable via inside covered snap fastener • standard pictograms as direct embroidery on the front • FR leasing label.



2 and 3 | Hip pocket and ruler pocket – each with flap and covered snap fastener

TROUSERS

Liquid metal Fe
Part number: **01248 20003 026 52**
Garment weight: approx. 810 g

Single-coloured • added waistband with covered buttoning • covered button fly • 2 side seam pockets • 1 hip pocket on the right and 1 ruler pocket on the right – each with flap and covered snap fastener.



BIB AND BRACE TROUSERS

Liquid metal Fe
Part number: **01248 50002 049 52**
Garment weight: approx. 950 g

Single-coloured • stretch braces with clamp-on clips • straight kidney protection • 1 outer bib pocket with flap and covered snap fastener • side access on the left and fly, each with buttoning • 2 side seam pockets with covered snap fastener • 1 hip pocket on the right and 1 ruler pocket on the right – each with flap and covered hook&loop fastener.

MATERIAL: 98 % COTTON, 2 % CARBON

FABRIC WEIGHT: approx. 420 g/m²

FIELDS OF APPLICATION: Steel works, metalworking industry, welding companies, foundries, plant construction, heat exposed workplaces



HB-Iron Pro

Relaunch of our bestseller for protection against liquid iron splashes (E3). Dynamic design and ergonomic fit are just as convincing as the performance: with only 420 g fabric weight, it offers the highest protection against heat radiation, welding splatters and large amounts of liquid iron. The SECAN quality guarantees flame resistance even after up to 50 industrial washes. Reflective stripes and fluorescent elements increase visibility, certified acc. to EN 17353.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | | REGULAR SIZES |
|---------|--------|------------|---|---------------------------------------|-------------------------------|-----------|----------------------|---------------------|----------------|
| 1, 2, 3 | | 3011 | medium grey/orange/ fluorescent yellow | EN ISO 11612 A1+A2/B1/C1/ E3/F1 | EN ISO 11611 Class 2 A1+A2 | EN 1149-5 | IEC 61482-2 APC 1 | EN 17353 Type B2 | 46-58 & 94-110 |



Ergonomically shaped sleeves



Higher visibility:
Patched flame-retardant reflective stripes with fluorescent backing, suited for industrial laundry, certified acc. to EN 17353



2 practical set-in side pockets

JACKET

Liquid metal Fe
Part number: **01248 10000 011 3011**
Garment weight: approx. 1,070 g

Three-coloured • stand-up collar with plastic snap fastener • fastening strip with snap fasteners, covered on both sides • 2 breast pockets with flap and covered snap fasteners • 2 set-in side pockets with plastic zipper • ergonomically shaped sleeves • sleeve hem width adjustable via plastic snap fasteners • flame-retardant reflective stripes with fluorescent yellow backing, suited for industrial laundry • no warning clothing according to EN ISO 20471 • FR leasing label • standard pictograms as FR direct embroidery on the front • roof tile manufacture.

Trousers + bib and brace trousers are also available with knee pockets, via our highspeed service, see page 221. **21 TO WEAR**



TROUSERS

Liquid metal Fe
Part number: **01248 20000 000 3011**
Garment weight: approx. 840 g

Three-coloured • fitted waistband with covered button fastening • fly with zip • 2 side seam pockets • 1 back pocket on the right, 1 folding rule pocket on the right and one leg pocket on the left • each with flap and covered snap fastener • shaped knees due to darts • flame-retardant reflective stripes on the leg with fluorescent yellow backing, suited for industrial laundry • no high-visibility clothing acc. to EN ISO 20471 • roof tile manufacture.

MATERIAL: 98 % COTTON, 2 % CARBON

FABRIC WEIGHT: approx. 420 g/m²

FIELDS OF APPLICATION: Steel works, metalworking industry, welding companies, foundries, plant construction, heat exposed workplaces



Flame-retardant stretch braces

High-cut kidney protection



Elastic knitted wedge for perfect fit and comfort

1, 2 and 3 | Flame-retardant reflective stripes on the leg with yellow backing, suited for industrial laundry

BIB AND BRACE TROUSERS

Liquid metal Fe
Part number: **01248 50100 005 3011**
Garment weight: approx. 1,100 g

Three-coloured • flame-retardant stretch braces with fixlock buckle • high-cut kidney protection • 2 side entrances with elastic knitted wedge • slit with zip • 2 side seam pockets • 1 bib pocket with flap and covered snap fastener • 1 hip pocket on the right, 1 ruler pocket on the right and one leg pocket on the left • each with flap and covered snap fastener • shaped knees due to darts • flame-retardant reflective stripes on the leg with fluorescent yellow backing, suited for industrial laundry • no high-visibility clothing acc. to EN ISO 20471 • roof tile manufacture.



HB-4welders® 2.0

Feel safe when welding: HB-4welders® 2.0 provides high-quality PPE for welders working under extreme conditions. It is perfectly suited for heavy duty welding work. SECAN® quality textiles have been tried and tested for many years, including extensively in the industrial laundry sector. Protection against molten metal splashes, sparks, welding beads and radiant heat.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | | | REGULAR SIZES |
|------|--------|------------|------------------|----------------------------|--------------------------------|-----------|-------------------|----------------|
| 1 | | 2205 | navy/medium grey | | | | | 46-58 & 94-110 |
| 2, 3 | | 458 | navy | EN ISO 11611 Class 2 A1+A2 | EN ISO 11612 A1+A2/B1/C1/E3/F1 | EN 1149-5 | IEC 61482-2 APC 1 | |
| | | 52 | medium grey | | | | | |



1, 2 and 3
Ergonomic cut for more freedom of movement

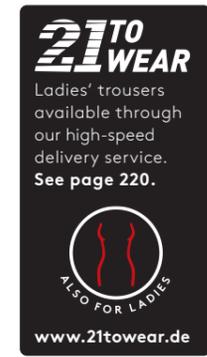
BLOUSON
Welding protection class 2
Part number: **01237 10125 001 2205**
Garment weight: approx. 1,175 g

Two-coloured • seamed with contrast colour off-white • band collar with covered snap fastener • closure band with covered PVC zip and covered snap fastener • 2 front pockets (+ mobile phone pocket on the right) with flap and covered snap fasteners • additional border on the lower arms • sleeve hems with adjustable covered snap fasteners • standard pictograms as direct FR embroidery on the front.



TROUSERS
Welding protection class 2
Part number: **01237 20060 034 + COLOUR NO.**
Garment weight: approx. 970 g

Single-coloured • seamed with contrast colour off-white • added waistband with covered buttoning • fly with zip • 2 slant pockets • 1 hip pocket and 1 ruler pocket on the right (+ pen pocket) • 1 bellow pocket on the left (+ mobile phone pocket inside) – each with flap and covered snap fastener • knee pockets with adjustable hook&loop fastener.



BIB AND BRACE TROUSERS
Welding protection class 2
Part number: **01237 50041 065 + COLOUR NO.**
Garment weight: approx. 1,130 g

Two-coloured • seamed with contrast colour off-white • stretch braces with fixlock buckle • straight kidney protection • two-side access • PVC zip fly • 2 slant pockets • bib with outer pocket, flap and covered snap fastener • 1 hip pocket, 1 ruler pocket (+ pen pocket) and 1 bellows pocket (+ mobile phone pocket) – each with flap and covered snap fastener • knee pad pockets with adjustable covered hook&loop fastener.

MATERIAL: 89 % COTTON, 10 % POLYAMIDE, 1 % CARBON
FABRIC WEIGHT: approx. 390 g/m²
FIELDS OF APPLICATION: Welding companies, steel works, metalworking industry, foundries, plant construction



Comfortable, resilient and flexible: HB-ComFlex® combines elastic denim with resistant high-tech fabric in particularly exposed areas, for permanent intensive welding and heavy flex works as well as risky work situations such as overhead welding. The elastic denim provides the necessary freedom of movement and high wearing comfort. Worn solo, the denim is suitable for less exposed areas and medium to heavy welding work.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|------|--------|------------|----------------------|-----------------------------|----------------------------|----------------|
| 1 | | 397 | dark denim | EN ISO 11612 A1+A2/B1/C1/E2 | EN ISO 11611 Class 2 A1+A2 | 46-58 & 94-110 |
| 2 | | 2404 | dark denim/dark navy | | | |



The high-tech fabric protects particularly vulnerable areas from sharp metal edges and constant flying sparks during continuous welding and flexing work



Collar, front and lower arms made of high-tech fabric

Stretched denim for extraordinary freedom of movement



JACKET

Welding protection class 2
Part number: **01281 10000 003 397** (Denim)
Garment weight: approx. 960g

Part number: **01281 10000 004 2404** (Denim+high-tech fabric)

Garment weight: approx. 1,040g
With additional zip at the front and abrasion areas made of high-tech fabric.

Single-coloured/two-coloured • stand-up collar with snap fastener • fastening strip with snap fasteners covered on both sides • 2 breast pockets with flap and covered snap fasteners • 2 set-in side pockets with zip • sleeve hem width adjustable with snap fastener • FR leasing label • standard pictograms as FR direct embroidery on the front • roof tile manufacture.



Elasticated side

The denim gets a very individual used look after washing

Trim made of high-tech fabric

Free hanging pocket pouches on both pockets

Knee pockets

TROUSERS

Welding protection class 2
Part number: **01281 20000 007 397** (Denim)
Garment weight: approx. 930g

Part number: **01281 20000 006 2404** (Denim+high-tech fabric)
Garment weight: approx. 940g
Trim of high-tech fabric on front trousers • knee pocket with adjustable hook & loop fastener • pocket pouch of folding rule • leg pocket hanging free.

Single-coloured/two-coloured • set-in waistband with side elastic band and patent button to the outside • slit with zip • 2 hip pockets • 2 hip pockets, 1 folding rule pocket on the right and one leg pocket on the left, each with flap and covered snap fastener • mobile phone pocket in left leg pocket • ergonomically shaped knees due to darts • roof tile manufacture.



Elastic denim allows comfortable working with every movement

MATERIAL DENIM: 94% COTTON, 4% POLYESTER, 2% ELASTANE · **FABRIC WEIGHT:** approx. 425 g/m² ·
MATERIAL HIGH-TECH FABRIC: 40% ARAMIDE, 30% MODACRYLIC, 20% LYOCCELL, 9% POLYAMIDE, 1% CARBON ·
FABRIC WEIGHT: approx. 430 g/m² ·
FIELDS OF APPLICATION: Welding companies, steel works, metalworking industry, foundries, plant construction, ship building

HB-ComFlex® is a modern industrial washable mix&match PPE that can be adapted to different areas of use and workplaces. All jacket, trouser and bib&brace garments can be combined with each other. The collection is complemented by a vegan welding apron that meets the requirements of the leasing industry to a particularly high degree.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  |  | REGULAR SIZES |
|------|---|------------|----------------------|---|---|----------------|
| 3 |  | 397 | dark denim | EN ISO 11612 A1+A2/B1/C1/E2 | EN ISO 11611 Class 2 A1+A2 | 46-58 & 94-110 |
| |  | 2404 | dark denim/dark navy | | | 46/48-58/60 |
| 4 |  | 458 | dark navy | | | |



BIB AND BRACE TROUSERS

Welding protection class 2
Part number: **01281 50100 008 397** (Denim)
Garment weight: approx. 1,040g

Part number: **01281 50100 007 2404** (Denim+high-tech fabric)
Garment weight: approx. 1,190g
Trim of high-tech fabric on front trousers • knee pocket with adjustable hook & loop fastener • pocket pouch of folding ruler • leg pocket hanging free.

Single-coloured/two-coloured • flame-retardant stretch straps with Fixlock buckle • high-cut kidney protection • 2 comfortable side entrances made of knitted material • 2 wing pockets • 2 back pockets, one reinforced ruler pocket on the right and one reinforced leg pocket on the left – each with flap and covered snap fastener • mobile phone pocket in left leg pocket • shaped knees due to darts • roof tile manufacture.



The vegan welding apron for industrial laundry

APRON WITH SLEEVES

Welding protection class 2
Part number: **01285 70069 000 458** (High-tech fabric)
Garment weight: approx. 1,020g

Single-coloured • stand-up collar with concealed press stud • polo closure with concealed press studs • sack yoke • FR leasing collar • back belt adjustable with press studs • sleeve hem width adjustable with inside press stud • standards pictograms as FR direct embroidery • roof tile manufacture.

MATERIAL DENIM: 94% COTTON, 4% POLYESTER, 2% ELASTANE · **FABRIC WEIGHT:** approx. 425 g/m² ·
MATERIAL HIGH-TECH FABRIC: 40% ARAMIDE, 30% MODACRYLIC, 20% LYOCCELL, 9% POLYAMIDE, 1% CARBON ·
FABRIC WEIGHT: approx. 430 g/m² ·
FIELDS OF APPLICATION: Welding companies, steel works, metalworking industry, foundries, plant construction, ship building

Fans of natural fibres should try out this work clothing with low flammability: Marlan contains 30 % wool and 50 % viscose. This fibre combination offers efficient protection against liquid aluminium and iron as metal splashes easily drip off. The polyamide part of the fabric improves the mechanical resistance.

HEAT,
SPLASHES &
WELDING



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|---------|--------|------------|-------------|----------------------------|---------------------------------------|----------------|
| 1, 2, 3 | | 45 | navy | EN ISO 11611 Class 1 A1 | EN ISO 11612 A1/B1/C1/D3/ E3/F1 | 46-58 & 94-110 |
| 4 | | | | | | 46-58 |



JACKET

Liquid metal Al + Fe
Part number: **01180 10214 000 45**
Garment weight: approx. 838 g

Single-coloured • turn-down collar • contrast stitching on shoulders and on the sides • set-in sleeve with pivot spacing • 1 breast pocket on left with flap • front pocket on right with flap • front closure with snap fasteners • manufactured in roof tile design.



TROUSERS

Liquid metal Al + Fe
Part number: **01180 20148 000 45**
Garment weight: approx. 791 g

Single-coloured • 2 slant pockets • covered front closure with snap fasteners • right-side ruler pocket • right-side back pocket.



BIB AND BRACE TROUSERS

Liquid metal Al + Fe
Part number: **01180 50101 000 45**
Garment weight: approx. 963 g

Single-coloured • adjustable braces • bib pocket • size-adjustable hip width • side pockets • covered front closure with snap fasteners • right-side ruler pocket • right-side back pocket • manufactured in roof tile design.



SHIRT

Liquid metal Al + Fe
Part number: **01180 60028 000 45**
Garment weight: approx. 647 g

Single-coloured • mandarin collar • set-in sleeve with pivot spacing • covered front closure with hook&loop fastener FR • manufactured in roof tile design.

MATERIAL: 50 % VISCOSE FR · 30 % WOOL · 20 % POLYAMIDE ·
FABRIC WEIGHT: approx. 365 g/m² ·
FIELDS OF APPLICATION: Aluminium working industry, foundries, metalworks, heat exposed workplaces



HB-HeavyMetal Pro

HB-HeavyMetal Pro, available in two weight classes, is the answer to the special requirements for PPE for work involving high temperatures or molten metal. The material has good moisture management and is comfortable to wear thanks to the balanced material mix and segmented reflective stripes. The dynamic design in trendy colours and ergonomic features stand for modern PPE with a high protective function at the same time.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | FABRIC WEIGHT | | | | | | REGULAR SIZES |
|---------|--------|------------|---------------------------------|-----------------------------|--|----------------------------------|-----------|----------------------|---------------------|----------------|
| 1, 2, 3 | | 2080 | anthracite grey/ pure orange | approx. 340g/m ² | EN ISO 11612 A1+A2/ B1/C1/D2/ E2/F1 | EN ISO 11611 Class 1 A1+A2 | | | | 46-58 & 94-110 |
| | | 2138 | anthracite grey/ petrol | approx. 430g/m ² | EN ISO 11612 A1+A2/ B1/C1/D3/ E3/F1 | EN ISO 11611 Class 2 A1+A2 | EN 1149-5 | IEC 61482-2 APC 1 | EN 17353 Type B2 | |
| | | 2204 | navy/ anthracite grey | | | | | | | |
| 4 | | 45 | navy | approx. 250g/m ² | EN ISO 11612 A1+A2/ B1/C1/D1/ E2/F1 | EN ISO 11611 Class 1 A1+A2 | | | | 39/40-47/48 |
| | | 58 | anthracite grey | | | | | | | |



JACKET 340
Liquid metal Al + Fe
Part number: **01221 10000 012 + COLOUR NO.** (340g/m²)
Garment weight: approx. 830g

JACKET 430
Liquid metal Al + Fe
Part number: **01218 10000 012 + COLOUR NO.** (430g/m²)
Garment weight: approx. 1,050g

Two-coloured • stand-up collar with covered snap fastener • covered front closure with snap fasteners • 2 attached breast pockets with flaps and covered snap fasteners • 2 side pockets with covered PVC zip • ergonomically formed sleeves • sleeve width adjustable via snap fasteners • segmented FR reflective stripes, suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 • leasing neck label • embroidered FR standard pictograms on the front • manufactured with roof tile design.

TROUSERS 340
Liquid metal Al + Fe
Part number: **01221 20000 009 + COLOUR NO.** (340g/m²)
Garment weight: approx. 730g

TROUSERS 430
Liquid metal Al + Fe
Part number: **01218 20000 009 + COLOUR NO.** (430g/m²)
Garment weight: approx. 990g

Two-coloured • added waistband with buttoning • covered zip fly • 2 side seam pockets • 2 back pockets, 1 ruler pocket on the right and 1 leg pocket on the left – each with flap and covered snap fastener • free hanging pocket pouch of ruler and leg pocket (+ mobile phone pocket inside) • knee pockets with adjustable hook&loop fastener • segmented FR reflective stripes, suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 • manufactured with roof tile design.

1 to 4 | Enjoy more freedom of movement thanks to the ergonomic cut



BIB AND BRACE TROUSERS 340
Liquid metal Al + Fe
Part number: **01221 50100 009 + COLOUR NO.** (340g/m²)
Garment weight: approx. 900g

BIB AND BRACE TROUSERS 430
Liquid metal Al + Fe
Part number: **01218 50100 009 + COLOUR NO.** (430g/m²)
Garment weight: approx. 1,170g

Two-coloured • fix-lock stretch braces • breast bib pocket • high-cut kidney protection • one-side access • covered zip fly • 2 side seam pockets • 2 back pockets, 1 ruler pocket on the right and 1 leg pocket on the left – each with flap and covered snap fastener • free hanging pocket pouch of ruler and leg pocket (+ mobile phone pocket inside) • knee pockets with adjustable hook&loop fastener • segmented FR reflective stripes, suitable for industrial laundry • no Hi-Vis protective clothing acc. to EN ISO 20471 • manufactured with roof tile design.

SHIRT
Liquid metal Al + Fe
Part number: **01109 60026 003 + COLOUR NO.**
Garment weight: approx. 490g

Single-coloured • Comfort Fit • turn-down collar with snap fastener • collar additionally with a plastic snap fastener to close when the collar is turned up • front zipper with covered snap fastener on both sides • preformed sleeves • chest pocket with flap and sleeve cuff with gusset – each with covered snap fastener • FR Leasing label • standard pictograms as FR embroidery on right sleeve cuff • manufactured with roof tile design.

MATERIAL: 01221 and 01109 50 % COTTON, 39 % MODACRYLIC, 10 % VISCOSE, 1 % CARBON
MATERIAL: 01218 52 % COTTON, 37 % MODACRYLIC, 10 % VISCOSE, 1 % CARBON
FABRIC WEIGHT: approx. 340 g/m² (01221) · approx. 430 g/m² (01218) · approx. 250 g/m² (01109)
FIELDS OF APPLICATION: Aluminium working industrie, foundries, steelworks, heat-exposed workplaces



Prime selection with liquid aluminium and iron: VINEX® impresses by its extraordinary and highly efficient protective properties while working with liquid metals and being exposed to metal splashes. The inherent flame-retardant fabric offers with D3 / EN 11612 the most high certified protection against aluminium splashes. In addition the fabric is very soft and offers high wearing comfort. Now also with Electric Arc Flash protection.

HEAT,
SPLASHES &
WELDING



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|---------|--------|------------|-------------|--|----------------------|----------------|
| 1, 2, 3 | | 48 | dark blue | EN ISO 11612 A1+A2/B1/C1/D3/ E3/F1 | IEC 61482-2 APC 1 | 46-58 & 94-110 |
| 4 | | | | EN ISO 11612 A1+A2/B1/C1/D1/ E1/F1 | - | 39/40-47/48 |



High band collar with covered hook&loop fastener

1 |



Large inner pocket

Manufactured in roof tile design



2 |



BLOUSON

Liquid metal Al + Fe
Part number: **01058 10015 005 48**
Garment weight: approx. 960g

Single-coloured • high band collar with covered hook&loop fastener • closure band with snap fasteners covered on both sides • 1 front pocket on the left and 2 side pockets – each with flap and covered snap fasteners • 1 inner pouch pocket on the right with snap fastener • FR leasing label • sleeve hem width adjustable via inwards covered snap fasteners.

TROUSERS

Liquid metal Al + Fe
Part number: **01058 20013 003 48**
Garment weight: approx. 1,005g

Single-coloured • added waistband with 7 belt loops and covered buttoning • covered snap fastener fly • 2 side seam pockets • 1 hip pocket and 1 ruler pocket on the right with flap and covered snap fastener • trouser leg manufactured in roof tile design.



3 |



2 and 3 | Roof tile design makes liquid metal splashes easily drip off

BIB AND BRACE TROUSERS

Liquid metal Al + Fe
Part number: **01058 50012 003 48**
Garment weight: approx. 1,130g

Single-coloured • stretch braces with clamp-on clips • 1 inner bib pocket with snap fastener • 2 side seam pockets with covered snap fasteners, 1 hip pocket on the right and 1 ruler pocket on the right – each with flap and covered snap fastener • 1 side access on the left and button fly • trouser leg manufactured in roof tile design.



Stand-up collar with flap and covered hook&loop fastener

4 |



SHIRT, WITH STAND-UP COLLAR

Liquid metal Al + Fe
Part number: **01057 60002 004 48**
Garment weight: approx. 540g

Single-coloured • stand up collar with hook&loop fastening • front zipper with snap fasteners covered on both sides • left hand side chest pocket with flap and covered snap fasteners • sleeves with adjustable wristbands via covered snap fastener.

MATERIAL: 85 % VINYLAL, 15 % MODAL

FABRIC WEIGHT: 1 | to 3 | approx. 390 g/m² · 4 | approx. 285 g/m²

FIELDS OF APPLICATION: Aluminium industry, steel and metal works, foundries, heat exposed workplaces



NOMEX® Comfort light

The NOMEX® Comfort fabric shirt and NOMEX III underwear are fibre-inherent flame retardant and provide permanent flame protection. Combined with heat protective outerwear, they provide the best possible protection against the effects of heat and flame. The low material weight and comfortable interlock knit fabric offer freedom of movement even in very uncomfortable workplaces. Supplement your heat protection PPE additionally with cooling accessories.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|------|--------|------------|-------------|--------------------------|-----------|---------------|
| 1 | | 41 | royal | EN ISO 11612 A1/B1/C1/F1 | EN 1149-5 | 39/40-47/48 |
| 2 ,3 | | 11 | off white | - | - | 5-8 |

CLASSIC SHIRT

Heat Protection
Part number: **01046 60000 008 41**
Garment weight: approx. 365g

Single-coloured • turn-down collar with added collar band • closure band with buttons • 1 front pocket on the left • wristband with buttoning • hydrophil equipment for optimised humidity transport.



Optimised humidity transport thanks to Hydrophil equipment

UNDERSHIRT

Accessories
Part number: **01205 7Z015 003 11**

Single-coloured • round neckline • long-sleeve.



UNDERTROUSERS

Accessories
Part number: **01205 7Z016 003 11**

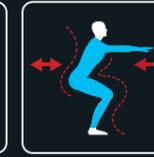
Single-coloured • long • flyless.



MATERIAL: 1| 98% ARAMIDE, 2% CARBON · 2| and 3| 100% ARAMIDE ·
FABRIC WEIGHT: 1| approx. 185 g/m² · 2| and 3| approx. 180 g/m² ·
FIELDS OF APPLICATION: Plant engineering and construction, energy suppliers, electric installation, public services, electricians

DuPont™
NOMEX®

ACCESSORIES HEAT



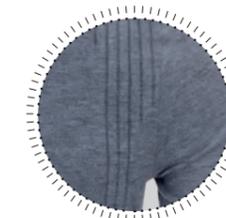
With our new functional underwear, you won't sweat so quickly even in the hottest weather: The very soft, light and elastic material does not restrict any movement.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | SIZES |
|------|--------|------------|--------------|-----------------------|-----------|-------|
| 1 ,2 | | 57 | grey melange | EN ISO 11612 A1/B1/C1 | EN 1149-5 | S-2XL |

FUNCTIONAL UNDERSHIRT FR

Accessories
Part number: **01289 76030 000 57**
Garment weight: approx. 165g

Single-coloured • seamless and close-to-body functional underwear • round neck • knitted flex-zones at arms, shoulders and on the sides • knitted transpiration zones under the arms and on the sides for maximum moisture transport.



Body-Mapping:

Knitted transpiration zones. Moisture is transported away by transpiration zones in the right places in the form of evaporative cooling and thus ensures a pleasant climate under your outerwear.

FUNCTIONAL UNDERTROUSER FR

Accessories
Part number: **01289 76031 000 57**
Garment weight: approx. 138g

Single-coloured • seamless and close-to-body functional underwear • integrated and highly elastic waistband • knitted flex-zones along the legs and on the back side • knitted transpiration zones for maximum humidity transport.



Body-Mapping: Flex-zones provide a perfect fit and much freedom of movement



High breathability due to the fast drying material

Pure functionality: Elastic and soft material producing an extreme comfortable feeling on the skin

MATERIAL: 52% MODACRYLIC, 26% COTTON, 19% POLYAMIDE, 2% CARBON, 1% ELASTANE, ·
FABRIC WEIGHT: approx. 165 g/m² ·
FIELDS OF APPLICATION: Heat and flame exposed workplaces, energy suppliers, public services, plant engineering and construction, electricians

ACCESSORIES HEAT

Health protection for PPE wearers on hot days:

Our cooling garments reduce heat stress in extreme temperatures. The cooling effect, which lasts for several hours, is activated simply under the tap. The surface is dry again in a few seconds and the product is immediately ready for use.

HEAT,
SPLASHES &
WELDING



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  | SIZES |
|-------|---|------------|-------------|---|--|
| 1 2 |  | 45 | navy | - | S-2XL |
| 3 |  | 58 | anthracite | - | approx. 240 x 165 x 18 mm |
| 4 |  | 46 | black | EN ISO 11612-A1 Material | Length: 90 cm/110 cm/130 cm; Width: 38 mm |

3-D COOL® Technology:
Fast and long-lasting cooling in the right places and for several hours. The material stores the water and provides a clear cooling effect for several hours via evaporative cooling.

COOLING VEST

Accessories
Part number: **90026 16021 000 45**
Garment weight: approx. 260 g

Single-coloured • V-neck • covered hook&loop fastener for variable width adjustment • body in short shape for health protection: the kidney area remains free of cooling • in a few seconds the product is evenly activated with water and the surface is dry again and the vest is ready for use • does not drip and there is no condensation • lowers the body temperature to a normal physiological level • 3D-high-tech microfiber fleece • outer fabric antibacterial thanks to natural silver ions • pleasantly light and sweat-absorbing • can be worn under any clothing • machine washable in the household laundry.



COOLING BANDANA

Accessories
Part number: **90026 76026 000 45**
Garment weight: approx. 90 g

Single-coloured • with ties in the back area • back with tab for cooling the neck area • in a few seconds the product is evenly activated with water and the surface is dry again and the bandana is ready for use • does not drip and does not release condensation • 3D-high-tech microfiber fleece • outer fabric antibacterial thanks to natural silver ions • pleasantly light and sweat-absorbing • can be worn under any helmet or hood • machine washable in the household laundry.



KNEE PADS

Accessories
Part number: **04033 76013 000 58**
Garment weight: approx. 70 g

The lightweight and sturdy knee pads protect the knees and increase comfort during activities that require kneeling. Suitable for all HB trousers equipped with knee pockets. Even withstands several domestic washings if it remains in the knee pockets (Note: no industrial laundry).

Sale unit: 1 pair



BELT FR

Accessories
Part number: **01113 76012 000 46**
Garment weight: approx. 80 g

Stretch belt made of flame-retardant knitted material with plastic buckle, suited for heat protection clothing. The certified material meets the requirements regarding combustion behaviour and heat resistance and shrinkage with industrial laundry according to EN ISO 11612-A1.



MATERIAL: 1 | and 2 | Outer material: 100% POLYESTER, inner material: 100% COOLINE® POLYESTER
FABRIC WEIGHT: 1 | and 2 | approx. 580 g/m²
FIELDS OF APPLICATION: Heat and flame exposed workplaces, energy suppliers, public services, plant engineering and construction, electricians

For works in high-temperature environments, we offer aluminised heat protection clothing from head to toe in four different materials, including two lightweight and very high-performance qualities. They complete our product range, including CLASSIC, COMFORT and COMFORT-Plus versions with numerous feature options. For example, the foundry coat is available in 84 and the heat protection jacket in 42 variants.



JACKET
CK-12/Z

5-FINGER-
GLOVES
AW-1/Y

PROTECTIVE
HOOD
KF-3/Z

TROUSERS
CK-12/Z

GAITERS
CK-4/Z

TEMPEX®-TREME HEAT MATERIAL OVERVIEW

The materials differ in terms of the composition and construction of the carrier material, the type of aluminisation, the weight and the specific protective properties against the various forms of heat load. Wearing comfort and mechanical strength also vary.

| Material name | CK-12/Z | AW-1/Y | KF-3/Z | CK-4/Z |
|-----------------------|--|---|--|--|
| Part number | 12014 | 12008 | 12003 | 12015 |
| Collection/Products | TEMPEX®-TREME HEAT COMFORT/COMFORT Plus | TEMPEX®-TREME HEAT COMFORT/COMFORT Plus | TEMPEX®-TREME HEAT CLASSIC | Gaiters and gloves |
| Material | 70% preox, 30% para-aramide | 100% aramide (70% recycled meta-aramide, 30% para-aramide) | 100% para-aramide | 70% preox, 30% para-aramide |
| Material weight | approx. 360 g/m ² | approx. 420 g/m ² | approx. 475 g/m ² | approx. 690 g/m ² |
| Carrier material | Twill | Knitted fabric with roughened nap | Herringbone twill | Twill |
| Aluminisation | Aluminum pigmented transfer film | PES film aluminised on both sides | Aluminum pigmented transfer film | Aluminum pigmented transfer film |
| Standards | EN ISO 11612 A1/B1/C3/D3/E3/F1 | EN ISO 11612 A1/B1/C4/D3/E3/F2 | EN ISO 11612 A1/B1/C3/D3/E3/F1 | EN ISO 11612 A1/B1/C3/D3/E3/F2 |
| Protection properties | <ul style="list-style-type: none"> • High protection against radiant heat • Very good protection from liquid metal spatters • Very lightweight and soft design for high wearing comfort • Good mechanical strength | <ul style="list-style-type: none"> • Highest protection against radiant heat (C4) • Very high thermal insulation and heat barrier • Very good protection from liquid metal spatters • Lightweight and very soft design for high wearing comfort | <ul style="list-style-type: none"> • High protection against radiant heat • Very good protection from liquid metal spatters • Very high mechanical strength | <ul style="list-style-type: none"> • High protection against radiant heat • High protection against contact heat • Very good protection from liquid metal spatters • Very high mechanical strength |
| Detailed photo | | | | |

FIELDS OF APPLICATION:

Steelworks, aluminium-processing industry, foundries, heat-exposed workplaces, metal processing industry

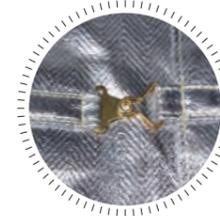
TEMPEX®-TREME HEAT CLASSIC

We offer jacket, trousers, foundry coat and sleeve apron in the resistant material KF-3/Z in various designs. Choose between hook&loop- and Ruck-Zuck-fastening as well as different coat and jacket lengths (see model overview on page 222).



| MAT. NO. | MATERIAL | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|----------|----------|--------|------------|-------------|---------------|
| 12003 | KF-3/Z | | 15 | silver | 46/48-58/60 |

EN ISO 11612 A1/B1/C3/D3/E3/F1



JACKET

Metalized heatprotection (C3)
Part number: **12003 11080 000 15 (KF-3/Z)**
Garment weight: approx. 1,025 g

Inner collar with flame-retardant cotton lining • front with covered hook&loop fastener FR • FR seams • length: approx. 80 cm.
Further available lengths: 90 cm/100 cm.

TROUSERS

Metalized heatprotection (C3)
Part number: **12003 2H003 000 15 (KF-3/Z)**
Garment weight: approx. 1,131 g

Sewn-in adjustable suspenders • covered zip fly with snap fastener closure • FR seams.

21 TO WEAR
All other versions are available via our 21 TO WEAR® high-speed delivery service. For more information see the model overview on page 222/223.

FOUNDRY COAT

Metalized heatprotection (C3)
Part number: **12003 41030 000 15 (KF-3/Z)**
Garment weight: approx. 1,520 g

Inner collar with flame-retardant cotton lining • front with covered hook&loop fastener FR • FR seams • length: approx. 130 cm.
Further available length: 140 cm.

APRON WITH SLEEVES

Metalized heatprotection (C3)
Part number: **12003 71130 000 15 (KF-3/Z)**
Garment weight: approx. 1,125 g

Neckline with FR molleton • opening with covered hook&loop fastener • hook & loop fastener on the back • back protection with hook & loop fastener • ergonomic sleeves • sleeve width adjustable via snap fastener inside • all seams with FR thread • length: approx. 130 cm.

TEMPEX®-TREME HEAT CLASSIC

Our bib and half apron are also available in the robust KF-3/Z material and are now equipped with an adjustable hook & loop fastener for faster donning and doffing.

21 TO WEAR

| MAT. NO. | MATERIAL | COLOUR | COLOUR NO. | COLOUR NAME |  | SIZES |
|----------|----------|---|------------|-------------|---|----------|
| 12003 | KF-3/Z |  | 15 | silver | EN ISO 11612 A1/B1/C3/D3/E3/F1 | One size |

21 TO WEAR

All other versions are available via our 21 TO WEAR® high-speed delivery service. For more information see the **model overview** on page 222/223.



Hook & loop fastener for closing



Tie straps for closing

BIB APRON

Metalized heatprotection (C3)
Part number: **12003 71131 000 15 (KF-3/Z)**
Garment weight: approx. 642g

Neck strap • hook & loop fastener for closing • all seams with FR thread • length: approx. 130 cm.

HALF APRON

Metalized heatprotection (C3)
Part number: **12003 71100 000 15 (KF-3/Z)**
Garment weight: approx. 511g

Hook & loop fastening • all seams with FR thread • length: approx. 100 cm.

TEMPEX®-TREME HEAT COMFORT

In the COMFORT program we offer all models in the materials CK-12/Z and AW-1/Y for high wearing comfort and protection. The jacket has hook & loop or snap fastener, ergonomic and width-adjustable sleeves as well as different lengths, the trousers have a comfort waistband and a hem-length hook & loop fastener.

21 TO WEAR

HEAT, SPLASHES & WELDING



| MAT. NO. | MATERIAL | COLOUR | COLOUR NO. | COLOUR NAME |  | REGULAR SIZES |
|----------|----------|---|------------|-------------|---|---------------|
| 12014 | CK-12/Z |  | 15 | silver | EN ISO 11612 A1/B1/C3/D3/E3/F1 | 46/48–58/60 |
| 12008 | AW-1/Y |  | 15 | silver | EN ISO 11612 A1/B1/C4/D3/E3/F2 | |



Lined stand-up collar with flame-retardant cotton lining

Inner hook & loop fastener, or alternatively covered snap fastening

Sleeve width adjustable via snap fastener inside



Side hook & loop fastener from crotch to seam

All seams with FR thread

JACKET

Metalized heatprotection (C3)
Part number: **12008 11180 000 15 (AW-1/Y)**
Garment weight: approx. 805g

Ergonomic sleeves, width adjustable via snap fastener inside • inner collar with flame-retardant cotton lining • front with covered hook & loop fastener FR • FR seams • length: approx. 80 cm. Further available lengths: 90 cm/100 cm.

TROUSERS

Metalized heatprotection (C3)
Part number: **12014 21000 001 15 (CK-12/Z)**
Garment weight: approx. 780g

TROUSERS

Metalized heatprotection (C3)
Part number: **12008 21000 001 15 (AW-1/Y)**
Garment weight: approx. 920g

Sewn-in adjustable braces • covered zip fly with snap fastener • covered zip fly with hook & loop fastener • comfort waistband with side elastic band • inner waistband with FR molleton • quick access thanks to hook & loop fasteners at both sides of the legs • all seams with FR thread.

TEMPEX®-TREME HEAT COMFORT

Foundry coat, sleeve apron and bib apron are also offered in the two lightweight and soft materials with excellent protection against larger iron and aluminum splashes (D3 and E3) and the highest level of protection against radiant heat C4 (AW-1/Y). The COMFORT design here also includes ergonomically shaped sleeves, walking slit on the coat, several length and closure options, among others.



| MAT. NO. | MATERIAL | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|----------|----------|--------|------------|-------------|------------------------------------|
| 12014 | CK-12/Z | | 15 | silver | 46/48-58/60 Bib apron: One size |
| 12008 | AW-1/Y | | | | |



EN ISO 11612
A1/B1/C3/D3/E3/F1
EN ISO 11612
A1/B1/C4/D3/
E3/F2



Inner hook&loop fastener, or alternatively covered snap fastening

Ergonomic shaped sleeves for more freedom of movement

Walking slit at the back for greater freedom of movement



Neckline with FR molleton

Ergonomic sleeves for more freedom of movement



Hook&loop fastener for closing

FOUNDRY COAT

Metalized heatprotection (C3)
Part number: **12014 41130 001 15 (CK-12/Z)**
Garment weight: approx. 1,150 g

FOUNDRY COAT

Metalized heatprotection (C4)
Part number: **12008 41130 001 15 (AW-1/Y)**
Garment weight: approx. 1,310 g

Ergonomic sleeves, width adjustable via snap fastener inside • inner collar with flame-retardant cotton lining • front with covered hook&loop fastener FR • walking slit • FR seams • length: approx. 130 cm. Further available lengths: 110 cm/120 cm/140 cm.



All other versions are available via our 21 TO WEAR® high-speed delivery service. For more information see the model overview on page 222/223.

APRON WITH SLEEVES

Metalized heatprotection (C4)
Part number: **12008 71130 000 15 (AW-1/Y)**
Garment weight: approx. 1,005 g

Neckline with FR molleton • opening with covered hook&loop fastener • hook&loop fastener on the back • back protection with hook&loop fastener • ergonomic sleeves • sleeve width adjustable via snap fastener inside • all seams with FR thread • length: approx. 130 cm. Further available length: 110 cm.

BIB APRON

Metalized heatprotection (C4)
Part number: **12008 71131 000 15 (AW-1/Y)**
Garment weight: approx. 520 g

Neck strap • hook&loop fastener for closing • all seams with FR thread • length: approx. 130 cm. Further available length: 110 cm.

TEMPEX®-TREME HEAT COMFORT Plus

21 TO WEAR

The COMFORT Plus program comprises the most comfortable equipment: the COMFORT versions are supplemented by additional features. In addition to the standard underarm ventilation, we offer optional additional back ventilation and, in the case of the caster coat, also the choice between a walking slit and the more comfortable concealed walking pleat for the best possible freedom of movement with optimum protection even when walking.

| MAT. NO. | MATERIAL | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|----------|----------|--------|------------|-------------|---------------|
| 12014 | CK-12/Z | | 15 | silver | 46/48-58/60 |
| 12008 | AW-1/Y | | 15 | silver | 46/48-58/60 |

21 TO WEAR

All other versions are available via our 21 TO WEAR® high-speed delivery service. For more information see the model overview on page 222/223.

1 and 2 | Underarm ventilation for high wearing comfort

1 and 2 | Lined stand-up collar with flame-retardant cotton lining
Ventilation option for maximum wearing comfort
Ergonomic shaped sleeves for more freedom of movement
Sleeve width adjustable via snap fastener inside

2 |

1 and 2 | Inner hook & loop fastener

Covered pleat or alternatively: Walking slit at the back for greater walking comfort

FOUNDRY COAT

Metalized heatprotection (C3)
Part number: **12014 41130 021 15 (CK-12/Z)**
Garment weight: approx. 1,180g

FOUNDRY COAT

Metalized heatprotection (C4)
Part number: **12008 41130 021 15 (AW-1/Y)**
Garment weight: approx. 1,330g

Ergonomic sleeves, width adjustable via snap fastener inside • inner collar with flame-retardant cotton lining • front with covered hook&loop fastener FR • with underarm and back ventilation • FR seams • walking slit • length: approx. 130 cm. Further available lengths: 110 cm/120 cm/140 cm.

JACKET

Metalized heatprotection (C3)
Part number: **12014 11180 020 15 (CK-12/Z)**
Garment weight: approx. 710g

Ergonomic sleeves, width adjustable via snap fastener inside • inner collar with flame-retardant cotton lining • front with covered hook&loop fastener FR • with underarm and back ventilation • FR seams • length: approx. 80 cm. Further available lengths: 90 cm/100 cm.

TEMPEX®-TREME HEAT

HEAT, SPLASHES & WELDING



The aluminized heat protection clothing is complemented by compatible face and head protection, individually combinable. These include head protection hoods in various designs – also with ventilation openings – as well as the matching visors and heat protection glasses.

| MAT. NO. | MATERIAL | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|----------|----------|--------|------------|-------------|---------------|
| 12003 | KF-3/Z | | 15 | silver | One size |
| 12008 | AW-1/Y | | 15 | silver | One size |

PROTECTIVE HOOD, CHEST PROTECTION

Accessories
Part number: **12003 7H007 000 15 (KF-3/Z)**
Garment weight: approx. 508g

Shaped shoulder and chest area • elastic band in back • protective glass frame made of aluminum • storage loop • FR seams • approx. 600 mm long from the edge of the helmet (front and back side) • fits with helmets Phenol (item 90021 7Z006 011 68) and Poly (item 90022 7Z006 012 10) • fits with heat protection glass • sized 100 x 220 mm.

PROTECTIVE HOOD

Accessories
Part number: **12003 7H007 001 15 (KF-3/Z)**
Garment weight: approx. 297g

Elastic band in back • protective glass frame made of aluminum • storage loop • FR seams • approx. 150 mm long (back side) • fits with helmets Phenol (item 90021 7Z006 011 68) and Poly (item 90022 7Z006 012 10) • fits with heat protection glass • sized 100 x 220 mm.

PROTECTIVE HOOD, CHEST PROTECTION

Accessories
Part number: **12008 71001 002 15 (AW-1/Y)**
Garment weight: approx. 415g

Shaped shoulder and chest area • with two covered ventilation openings at the sides • elastic band in back • protective glass frame made from aluminium • storage loop • all seams with FR thread • side height approx. 50 cm from storage loop across shoulder • compatible with Phenol (item 90021 7Z006 011 68) and Poly helmet (item 90022 7Z006 012 10) • compatible with heat protection glass in size 100 x 220 mm.

1 |

2 |

3 |

Ventilation openings at the sides, covered

Our aluminised heat protective clothing is complemented by compatible face and head protection as well as additional protection for the arms. Helmet cover, face shield and sleeve cuff can be combined individually – as well as the matching visors and heat protection glasses.



HELMET COVER

Accessories
Part number: **12003 7H009 000 15 (KF-3/Z)**
Garment weight: approx. 184g

Shaped neck protection • side snap fasteners for attaching a face shield • FR seams • fits with helmets Phenol (item 90021 7Z006 011 68) and Poly (item 90022 7Z006 012 10) • fits with face guard (item 12008 71010 000 15).

One size
■ silver



FACE GUARD

Accessories
Part number: **12008 71010 000 15 (KF-4/Z)**
Garment weight: approx. 283g

Protective glass frame made of aluminum • bendable wire for adjusting to head shape • side snap fasteners for attaching neck protection • FR seams • fits with helmet cover (item 12003 7H009 000 15) • fits with heat protection glass sized 100 x 220 mm.

One size
■ silver



CUFFS

Accessories
Part number: **12003 7H003 000 15 (KF-3/Z)**
Cuff made of aluminised Aramide • elastic band on both ends • length approx. 430 mm.

One size
■ silver



21 TO WEAR
All other versions are available via our 21 TO WEAR® high-speed delivery service. For more information see the model overview on page 222/223.



Elastic band on both ends

PROTECTIVE HELMET PHENOL

Accessories
Part number: **90021 7Z006 011 68**

Straight shell • manufactured from phenolic resin fabric • 6-point webbed harness with genuine leather sweatband, foam cushion band and lock ratchet • anti-static, for use in hot zones (metal splashing), temperatures from -30 °C up to +150 °C • fits with all head protection hoods • fits with Flip-Up Mounting (item 90002 7Z019 004 15).

One size (51-64 cm)
■ gold

PROTECTIVE HELMET POLY

Accessories
Part number: **90022 7Z006 012 + COLOUR NO.**

Straight shell with rain gutter • manufactured from fibreglass-reinforced polycarbonate • 6-point webbed harness with genuine leather sweatband, foam cushion band and lock ratchet • for use in hot zones and electrical insulation (1000 V), temperatures from -30 °C up to +150 °C • fits with all head protection hoods • fits with Flip-Up Mounting (item 90002 7Z019 004 15).

One size (51-64 cm)
■ 10 white
■ 25 red

FLIP-UP MOUNTING

Accessories
Part number: **90002 7Z019 004 15**

For fastening face guard to protective helmet • with 2 flap closures and a plastic-coated suspension spring • fits with helmets Phenol (90021 7Z006 011 68) and Poly (90022 7Z006 012 10) • fits with all all-around visors sized 500 x 250 mm.

One size
■ silver

BOCHUM GOGGLES

Accessories
Part number: **90001 7Z024 000 15**

Aluminum edging • blackened wire mesh inside • protective glass holder • fits with Flip-Up Mounting (item 90002 7Z019 004 15) • fits with heat protection glass sized 120 x 60 mm.

■ silver

BOCHUM GOGGLES WITHOUT GLASS HOLDER

Accessories
Part number: **90001 7Z024 001 15**

Aluminum edging • blackened wire mesh inside • fits with Flip-Up Mounting (item 90002 7Z019 004 15).

■ silver

Standards:



Standards:



Standards:



The aluminized heat protection clothing is complemented by compatible face and head protection, individually combinable. These include head protection hoods in various designs – also with ventilation openings – as well as the matching visors and heat protection glasses.



PROTECTIVE WIRE SCREEN

Accessories
Part number: **90001 7Z025 001 15**

Crimped edge • blackened wire mesh inside • fits with Flip-Up Mounting (item 90002 7Z019 004 15) • shape: 500 x 300 mm.

■ silver



FURNACE VIEWING GLASS, CURVED

Accessories
Part number: **90005 7Z023 004 48**

Curved laminated safety glass • special blue-coloured filter • colour-correcting • protection from radiant heat • protection from short wave IR radiation • protection level 4-7 A-DIN • fits with head protection hoods (item 12003 7H007 000 15 or 12003 7H007 001 15) • fits with Face Guard (item 12008 71010 000 15) • shape: 100 x 220 mm.

■ dark blue



LAMINATED SAFETY GLASS, GOLD

Accessories
Part number: **90006 7Z023 000 68**

Curved laminated safety glass • gold-plated • protection from radiant heat • fits with head protection hoods (item 12003 7H007 000 15 or 12003 7H007 001 15) • fits with Face Guard (item 12008 71010 000 15) • shape: 100 x 220 mm.

■ gold
Standards:



EN 166 EN 171



POLYCARBONATE SCREEN GREEN, GOLD

Accessories
Part number: **90018 7Z023 002 68**

Curved laminated safety screen • gold-plated • protection from radiant heat • fits with head protection hoods (item 12003 7H007 000 15 or 12003 7H007 001 15) • fits with Face Guard (item 12008 71010 000 15) • shape: 100 x 220 mm.

■ gold
Standards:



EN 166 EN 171



ALL-AROUND VISOR CLEAR

Accessories
Part number: **90004 7Z010 002 00**

Clear, flexible polycarbonate plate • rounded shape: 500 x 250 x 1 mm • fits with Flip-Up Mounting (item 90002 7Z019 004 15).

□ neutral
Standards:



EN 166



ALL-AROUND VISOR CLEAR, GOLD

Accessories
Part number: **90004 7Z010 000 68**

Clear, flexible polycarbonate plate • gold-plated • protection from radiant heat (protection level 4-4) • rounded shape: 500 x 250 x 1 mm • fits with Flip-Up Mounting (item 90002 7Z019 004 15).

■ gold
Standards:



EN 166

EN 171



ALL-AROUND VISOR GREEN, GOLD

Accessories
Part number: **90004 7Z010 001 33**

Green-tinted, flexible polycarbonate plate • gold-plated • protection from radiant heat (Protection level 4-5) • rounded shape: 500 x 250 x 1 mm • fits with Flip-Up Mounting (item 90002 7Z019 004 15).

■ green
Standards:



EN 166

EN 171



FURNACE VIEWING GLASS WITH COLOURED FILTER

Accessories
Part number: **90005 7Z023 001 48**

Composite safety glass • special blue-coloured filter • colour-correcting • protection from radiant heat • protection from blinding light • protection from short-term IR radiation • protection level 4-7 A-DIN • fits with Bochum Goggles (item 90001 7Z024 000 15) • shape: 120 x 60 mm.

■ dark blue

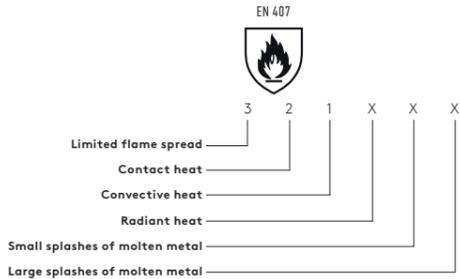


Our new heat protection gloves are available in different variants, lengths and sizes and offer protection against thermal risks according to EN 407 as well as mechanical hazards according to EN 388 thanks to selected material combinations and insulation layers.



Protective gloves against thermal risks EN 407:2020

Protective gloves tested according to this standard protect against heat and/or fire. The actual protective performance depends on the test performed during certification and the level of performance achieved, with 1 being the lowest and 4 the highest. "X" means not tested.



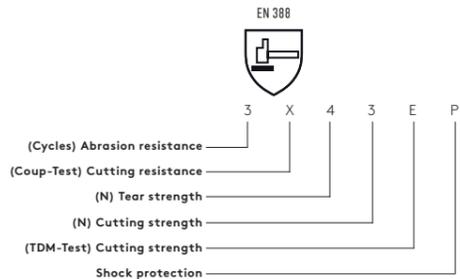
| Test | Performance Level | | | |
|---------------------------------------|-------------------|-------|------|------|
| | 1 | 2 | 3 | 4 |
| Combustion behavior | | | | |
| Afterflame time (in sec.) | < 20 | < 10 | < 3 | < 2 |
| Afterglow time (in sec.) | n.r. | < 120 | < 25 | < 5 |
| Contact heat | | | | |
| Contact temperature Tc (in °C) | 100 | 250 | 350 | 500 |
| Threshold t1 (in sec.) | > 15 | > 15 | > 15 | > 15 |
| Convective Heat | | | | |
| Heat Transfer Index HTI (in sec.) | > 4 | > 7 | > 10 | > 18 |
| Radiant heat | | | | |
| Radiant heat transfer t24 (in sec.) | > 7 | > 20 | > 50 | > 95 |
| Small splashes of molten metal | | | | |
| Number of splashes | > 10 | > 15 | > 25 | > 35 |
| Large splashes of molten metal | | | | |
| Liquid iron splashes (in g) | 30 | 60 | 120 | 200 |

4 means the highest and 1 means the lowest performance level. n.r. means "no requirement". X means "not tested". 0 means "below the minimum requirements".

For higher durability in contact heat, we rely on selected materials and different insulation layers, especially in the palm area, so that protection against heat up to 500 °C can be reached there. High resistance to radiant heat and splashes of molten metal is achieved primarily through the use of aluminised materials.

Protective gloves against mechanical risks EN 388:2016

This standard specifies the test methods and performance requirements of protective gloves against mechanical risks. The specific protective performance depends on which test is carried out during certification and which performance level is achieved, 1 being the lowest and 5 the highest performance level. "X" means not tested.



| Test | Performance Level | | | | |
|--|-------------------|-----|------|------|----|
| | 1 | 2 | 3 | 4 | 5 |
| Abrasion resistance (Number of cycles) | 100 | 500 | 2000 | 8000 | |
| Cutting resistance (Factor) | 1,2 | 2,5 | 5,0 | 10,0 | 20 |
| Tear strength (in newton) | 10 | 25 | 50 | 75 | |
| Cutting strength (in newton) | 20 | 60 | 100 | 150 | |

5 means the highest and 1 means the lowest performance level. X means "not tested". 0 means "below the minimum requirements".

The choice of materials in the palm has a decisive influence on the mechanical properties and wear. The abrasion resistance and tear resistance are the focus of our requirements.

METALLISED HEAT PROTECTION GLOVES UP TO 500 °C CONTACT HEAT

| ITEM | EN 407 | EN 388 | MATERIAL LAYER CONSTRUCTION | | | LENGTH | SIZES |
|------|-----------------------|---------------------|---|--------------------------------------|--|----------------|-------|
| | | | UPPER | ISOLATION | LINING | | |
| 1 | | | Polyacrylnitril (Preox), Aramide, chrome split leather | Half wool non-woven | Flame retardant impreg- nated molleton | approx. 410 mm | |
| 2 | EN 407 4 1 3 3 4 4 | EN 388 2 X 4 X X | Polyacrylnitril (Preox), Aramide, Para-Aramide | Half wool non-woven Preox-Felt | | approx. 450 mm | 11 |
| 3 | | | Polyacrylnitril (Preox), Aramide, Para-Aramide | Half wool non-woven Preox-Felt | | approx. 440 mm | |



3-FINGER GLOVES 410 + LEATHER
Accessories
Part number: 12015 71005 000 2271

Two-coloured • 3-layer construction of the glove inside • good thermal insulation of the palm • very good protection against radiant heat • high abrasion resistance of the palm.

3-FINGER GLOVES 450 + ARAMIDE
Accessories
Part number: 12015 71003 001 2269

Two-coloured • 4-layer construction of thumb and palm • very good thermal insulation of the palm • very good protection against radiant heat • good abrasion resistance of the palm.

MITTENS 440 + ARAMIDE
Accessories
Part number: 12015 71004 002 2269

Two-coloured • 4-layer construction of thumb and palm • very good thermal insulation of the palm • very good protection against radiant heat • good abrasion resistance of the palm.

Our new heat protection gloves are available in different variants, lengths and sizes and offer protection against thermal risks according to EN 407 as well as mechanical hazards according to EN 388 thanks to selected material combinations and insulation layers.



METALLISED HEAT PROTECTION GLOVES UP TO 250 °C CONTACT HEAT

| ITEM | EN 407 | EN 388 | MATERIAL LAYER CONSTRUCTION | | | LENGTH | SIZES |
|------|-------------|-----------|-----------------------------|-----------|--|----------------------------------|----------|
| | | | UPPER | ISOLATION | LINING | | |
| 1 | 4 1 3 2 4 4 | 1 X 2 X X | Aramide, Sebatan leather | - | Flame retardant impreg- nated molleton | approx. 365 mm approx. 385 mm | 11 12 |
| 2 | | | Aramid, Sebatan leather | - | | approx. 435 mm approx. 455 mm | 11 12 |
| 3 | 4 2 3 2 4 4 | 1 X 2 X X | Aramide, Para-Aramide | - | Flame retardant impreg- nated molleton | approx. 380 mm approx. 400 mm | 11 12 |
| 4 | | | Aramide, Para-Aramide | - | | approx. 465 mm approx. 485 mm | 11 12 |

1 | and 2 |



Contact heat
**up to
100 °C**
Palm of one's hands

5-FINGER GLOVES 370 + LEATHER

Accessories
Part number: **12008 71011 002 2268**

5-FINGER GLOVES 440 + LEATHER

Accessories
Part number: **12008 71011 001 2268**

Two-coloured • leather sebatan pulse reinforcement • very good protection against radiant heat • high abrasion resistance and tear resistance of the palm • very good dexterity and high wearing comfort.

3 | and 4 |



Contact heat
**up to
250 °C**
Palm of one's hands

5-FINGER GLOVES 390 + ARAMIDE

Accessories
Part number: **12008 71012 003 2269**

5-FINGER GLOVES 470 + ARAMIDE

Accessories
Part number: **12008 71012 002 2269**

Two-coloured • leather sebatan pulse reinforcement • good heat insulation of the palm • very good protection against radiant heat • high tear resistance of the palm • very good dexterity and high wearing comfort.

HEAT PROTECTION GLOVES UP TO 500 °C CONTACT HEAT

| ITEM | EN 407 | EN 388 | MATERIAL LAYER CONSTRUCTION | | | LENGTH | SIZES |
|------|-------------|-----------|------------------------------------|--------------------------------------|--|----------------------------------|----------|
| | | | UPPER | ISOLATION | LINING | | |
| 1 | 4 2 3 2 X X | 2 X 4 X X | Para-Aramide | Half wool non-woven | Flame retardant impreg- nated molleton | approx. 375 mm approx. 395 mm | 11 12 |
| 2 | | | Para-Aramide | Half wool non-woven | | approx. 460 mm approx. 480 mm | 11 12 |
| 3 | 4 3 3 2 X X | 2 X 4 X X | Para-Aramide | Half wool non-woven | Flame retardant impreg- nated molleton | approx. 390 mm | 11 |
| 4 | | | Glass/Aramide/PBI, Para-Aramide | Half wool non-woven Preox-Felt | | approx. 390 mm | 11 |

1 | and 2 |



Contact heat
**up to
350 °C**
Palm of one's hands

5-FINGER GLOVES 370, ARAMIDE

Accessories
Part number: **01267 71012 001 20**

5-FINGER GLOVES 470, ARAMIDE

Accessories
Part number: **01267 71012 000 20**

Single-coloured • finger and palm 3-ply • good thermal insulation of the palm • very high mechanical load capacity • good abrasion resistance • very good dexterity.

3 |



Contact heat
**up to
350 °C**
All around

MITTENS GLOVE 390, ARAMIDE

Accessories
Part number: **01267 71007 000 20**

Single-coloured • 3-layer construction • thumb inserted on the side • can be worn on both sides • good thermal insulation all around • very high mechanical load capacity • good abrasion resistance.

4 |



Contact heat
**up to
500 °C**
Hand and thumb

MITTENS 390 PBI/ARAMIDE

Accessories
Part number: **01191 71013 000 20**

Two-coloured • 4-layer construction of hand and thumb • thumb inserted on the side • can be worn on both sides • good thermal insulation in the hands area • very high mechanical load capacity.

The heat protection equipment is rounded out by matching footwear with various aluminized gaiter models and a foundry boot certified to the EN ISO 20349-1:2017 foundry standard for molten iron and aluminum.

HEAT,
SPLASHES &
WELDING



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | MATERIAL | REGULAR SIZES |
|------|--------|------------|-------------|---------------|---|
| 1,2 | | | | | One size |
| 3 | ■ | 15 | silver | preox/Aramide | 1 (= up to size 43) 2 (= from size 44) |

GAITERS, HOOK & LOOP FASTENING

Accessories
Part number: **12015 71008 000 15**

Flame-inhibiting hook&loop fastener • adjustable width • approx. 38 cm high.

Sale unit: 1 pair



GAITERS, SNAP FASTENING

Accessories
Part number: **12015 71008 001 15**

Snap fasteners closures • adjustable width • approx. 38 cm high.

Sale unit: 1 pair



SPRING GAITERS

Accessories
Part number: **12015 71009 001 15**

2 covered, vertical springs in the legs • vamp with instep spring • approx. 35 cm high.

Sale unit: 1 pair



Nitrile rubber soles with heat-insulated substructure



4

Double snap fasteners closure



FOUNDRY BOOTS

Accessories
Part number: **14003 76025 000 2276**

Aluminised upper leather (the metallic surface reflects heat radiation) • full calf leather • bootleg constructed like roof tiles • holding rivets • Kevlar® stitching thread • quick fastener • steel cap • aluminised inlay sole • nitrile bearing sole type MÜNCHEN ROT, approx. 300 °C contact heat resistant • approx. 28 cm high.

Sizes: 39–48 • Sale unit: 1 pair

■ white/grey

Standards:



EN ISO 20349-1

CHEMICALS

THESE MATERIALS STRENGTHEN YOUR DEFENCE SYSTEM

The tricky thing about chemicals is that the dangers they pose are sometimes barely noticeable. That's why we use fabrics that ensure that nothing can penetrate to the skin. Suitable underwear included. How good that despite all protection we never lose sight of important aspects such as pleasant material properties and above all: freedom of movement.



Comfortable in dangerous environments: HB-CHEMstandard combines reliable chemical protection in accordance with EN 13034: type 6 and extraordinary wearing properties that even have the benefit of being slightly warming due to the characteristics of the material.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  | REGULAR SIZES |
|------------|---|------------|-------------|---|-------------------------------|
| 1, 2, 4, 5 |  | 56 | iron grey | EN 13034 Type 6 | 46-58 & 94-110 39/40-47/48 |
| 3 | | | | | |

JACKET

Chemical protection type 6
Part number: **02001 10136 001 56**
Garment weight: approx. 535g

Single-coloured • turn-down collar • closure band with covered snap fasteners on both sides • 1 front pocket on the left and 2 side pockets with flaps and covered snap fasteners • 1 inner front pocket on the right • sleeve hem width adjustable via inner covered snap fasteners.



Side pockets with flaps and covered snap fasteners



COAT

Chemical protection type 6
Part number: **02001 40032 001 56**
Garment weight: approx. 690g

Single-coloured • lapel collar, also worn tightly closed • closure band with covered snap fasteners on both sides • 1 front pocket on the left and 2 side pockets – each with flaps and covered snap fasteners • 1 inner front pocket on the right • sleeve hem width adjustable via inner covered snap fasteners.



SHIRT

Chemical protection type 6
Part number: **02001 60000 004 56**
Garment weight: approx. 490g

Single-coloured • turn-down collar • closure band with buttons • 1 front pocket on the left with flap and buttoning • wristband with buttoning.



TROUSERS

Chemical protection type 6
Part number: **02001 20085 001 56**
Garment weight: approx. 535g

Single-coloured • added waistband with 7 belt loops • 2 slant pockets, 1 hip pocket on the right with flap and covered hook&loop fastener • 1 ruler pocket on the right with flap • covered button fly.



Ruler pocket

BIB AND BRACE TROUSERS

Chemical protection type 6
Part number: **02001 50063 001 56**
Garment weight: approx. 665g

Single-coloured • stretch braces with clamp-on clips • 1 outer bib pocket and 1 hip pocket on the right – each with flap and covered hook&loop fastener • 2 side seam pockets • 1 ruler pocket on the right with flap • covered button fly • 2 side accesses adjustable via buttons.



Stretch braces with clamp-on clips

MATERIAL: 100% POLYACRYLIC, FC-EQUIPMENT · **FABRIC WEIGHT:** approx. 270 g/m² ·
REPELLENCY AND PENETRATION INDEXES: Repellency index A (%): Sulphuric acid 30%: 99.8, Sodium hydroxide solution 10%: 99.5, o-Xylene: 96.2, Butan-1-ol: 96.3, hydrochloric acid 36%: 99.0, Nitric acid 65%: 97.7; Penetration index P (%): Sulphuric acid 30%: 0.0, Sodium hydroxide solution 10%: 0.0, o-Xylene: 0.6, Butan-1-ol: 0.5, hydrochloric acid 36%: 0.4, Nitric acid 65%: 0.0 ·
FIELDS OF APPLICATION: Chemical and petrochemical industry, steel industry, automotive industry, battery factories, laboratories and electroplating



HB-CHEMcomfort Antistatic

This light-weight fabric combines chemical protection and permanent antistatic properties – a perfect solution for many specialised manufacturing processes.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  |  | REGULAR SIZES |
|---------|---|------------|----------------------|---|---|----------------|
| 1 |  | 2082 | anthracite/dark blue |  |  | 46-58 & 94-110 |
| 1, 3, 4 |  | 41 | royal | | | |
| 2 |  | 58 | anthracite | | | |



Inner front pocket

JACKET
Chemical protection type 6
Part number: **02006 10003 006 + COLOUR NO.**
Garment weight: approx. 510g

JACKET
Chemical protection type 6
Part number: **02006 10053 000 2082**
Garment weight: approx. 510g

Single-coloured or two-coloured • turn-down collar • closure band with covered snap fasteners on both sides • 1 front pocket on the left and 2 side pockets – each with flaps and covered snap fasteners • 1 inner front pocket on the right • sleeve hem width adjustable via inner covered snap fasteners.



SHIRT
Chemical protection type 6
Part number: **02006 60002 005 + COLOUR NO.**
Garment weight: approx. 470g

Single-coloured • turn-down collar with added band • closure band with covered snap fasteners on both sides • 1 front pocket on the left with flap • wristband with let-in piece and adjustable snap fasteners.



3 and 4 | Ruler pocket

TROUSERS
Chemical protection type 6
Part number: **02006 20003 028 + COLOUR NO.**
Garment weight: approx. 500g

Single-coloured • added waistband with 7 belt loops • 2 side seam pockets, 1 hip pocket on the right – each with flap and covered snap fastener • 1 ruler pocket on the right • covered button fly.



BIB AND BRACE TROUSERS
Chemical protection type 6
Part number: **02006 50002 054 + COLOUR NO.**
Garment weight: approx. 595g

Single-coloured • stretch braces with clamp-on clips • 1 outer bib pocket and 1 hip pocket on the right – each with flap and covered snap fastener • 2 side seam pockets • 1 ruler pocket on the right • covered button fly • 1 side access on the left, with buttons.

MATERIAL: 99% POLYESTER, 1% CARBON, FC-EQUIPMENT
FABRIC WEIGHT: approx. 240g/m²
REPELLENCY AND PENETRATION INDEXES: Repellency index A (%): Sulphuric acid 30%: 99.8, Sodium hydroxide solution 10%: 99.6, o-Xylene: 90.9, Butan-1-ol: 94.2; Penetration index P (%): Sulphuric acid 30%: 0.0, Sodium hydroxide solution 10%: 0.0, o-Xylene: 5.7, Butan-1-ol: 2.9
FIELDS OF APPLICATION: Chemical industry, steel industry, automotive industry, battery factories, laboratories, electroplating



HB-CHEMcomfort Antistatic

Also the light-weight coats for ladies and men combine chemical protection and permanent antistatic properties. They are the perfect solution for many specialised manufacturing processes. Available in white, royal blue and anthracite.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  |  | REGULAR SIZES |
|------|---|------------|-------------|---|---|----------------|
| 1 |  | 10 | white | | | 36/38-44/46 |
| 2 |  | 10 | white | EN 13034 Type 6 | EN 1149-5 | 46-58 & 94-110 |
| |  | 41 | royal | | | |
| |  | 58 | anthracite | | | |



All pockets with flap and covered snap fasteners

LADIES COAT

Chemical protection type 6
Part number: **02006 40018 000 10**
Garment weight: approx. 580g

Single-coloured • lapel collar, also worn tightly closed • closure band with covered snap fasteners on both sides • 1 front pocket on the left and 2 side pockets – each with flaps and covered snap fasteners • sleeve hem width adjustable via inwards covered snap fasteners.



MEN'S COAT

Chemical protection type 6
Part number: **02006 40002 004 10**
Garment weight: approx. 640g

Chemical protection type 6
Part number: **02006 40002 000 + COLOUR NO.**
Garment weight: approx. 640g

Single-coloured • lapel collar, also worn tightly closed • closure band with covered snap fasteners on both sides • 1 front pocket on the left and 2 side pockets – each with flaps and covered snap fasteners • 1 inner front pocket on the right • sleeve hem width adjustable via inwards covered snap fasteners.

MATERIAL: 99% POLYESTER, 1% CARBON, FC-EQUIPMENT

FABRIC WEIGHT: approx. 240 g/m²

REPELLENCY AND PENETRATION INDEXES: Repellency index A (%): Sulphuric acid 30%: 99.8, Sodium hydroxide solution 10%: 99.6, o-Xylene: 90.9, Butan-1-ol: 94.2; Penetration index P (%): Sulphuric acid 30%: 0.0, Sodium hydroxide solution 10%: 0.0, o-Xylene: 5.7, Butan-1-ol: 2.9

FIELDS OF APPLICATION: Chemical industry, steel industry, automotive industry, battery factories, laboratories, electroplating

HB-CHEM

HB-CHEM FUNCTIONAL UNDERWEAR

CHEMICALS



Underwear is an important supplement to ensure comprehensive chemical protection. The low humidity absorption and the slight warming effect allow for optimal wearing comfort – an important component of an optimal protection system.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | SIZES |
|------|---|------------|-------------|-------|
| 1, 2 |  | 11 | off-white | 6-8 |

UNDERSHIRT LONG-SLEEVED

Chemical protection type 6
Part number: **02008 76008 000 11**
Garment weight: approx. 200g

Edged neckline • short-sleeved opening with stretchy double-stitched seam • hem with stretchy double-stitched seam.



Hem with stretchy double-stitched seam

UNDERSHIRT SHORT-SLEEVED

Chemical protection type 6
Part number: **02008 76009 000 11**
Garment weight: approx. 170g

Edged neckline • short-sleeved opening with stretchy double-stitched seam • hem with stretchy double-stitched seam.



Hem with stretchy double-stitched seam

UNDERPANTS LONG

Chemical protection type 6
Part number: **02008 76010 000 11**
Garment weight: approx. 200g

Elastic waistband • double-sided fly • leg opening with knitted cuffs.



Leg opening with knitted cuffs

MATERIAL: 100% POLYACRYLIC

FABRIC WEIGHT: approx. 170 g/m² • **CHARACTERISTICS:** Rib knit, modern and form-fitting design

FIELDS OF APPLICATION: Underwear for: chemical industry, steel industry, automotive industry, battery factories, laboratories, electroplating

HB-CHEM



HIVIS & WEATHER
WELCOME TO YOUR
PERSONAL COMFORT ZONE!

The best thing about our HiVis & Weather collections:
comfortable fit and modern design give you a great feeling in your outfit and make you look really good.
And not just in good weather, but especially in wet, cold, foggy, drizzly and dark conditions.
With bright colours and cleverly placed reflective stripes, our high visibility and weather protection clothing
sends out strong signals that can't be missed.

HI-VISION® Basic

The shirts with segmented reflective stripes combine effective high-visibility protection with UV protection, design and wearing comfort. Polyester on the outside and cotton on the inside ensure optimal moisture transport. UV protection 50+ is the highest protection according to the European classification and better than the standard requires: the fabric lets only 2% of UV rays through.

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  |  | REGULAR SIZES |
|------|---|------------|------------------------------------|---|---|---------------|
| 1 ,2 |  | 2161 | fluorescent orange-red/hydron blue | EN ISO 20471 Class 2 | EN 13758-2 tested upon UV50+ | Unisex S-2XL |
| |  | 2162 | fluorescent yellow/hydron blue | | | |

POLO-SHIRT SHORT SLEEVE

High-Visibility
Part number: **04025 80009 002 + COLOUR NO.**
Garment weight: approx. 330g

Two-coloured • round design and cut with contrast stitching in off-white • polo opening with zip fastener with encased zipper • reflective film in body language, attached as patch, stretchy (segmented) • HB logo as direct embroidery on back • standard pictograms as direct embroidery on right sleeve hem.

1 and 2|
Segmented reflective stripes, suited for industrial laundry



1 and 2|
HB Logo as direct embroidery on the back



T-SHIRT

High-Visibility
Part number: **04025 80008 003 + COLOUR NO.**
Garment weight: approx. 310g

Two-coloured • round design and cut with contrast stitching in off-white • round neck opening • reflective film in body language, attached as patch, stretchy (segmented) • HB logo as direct embroidery on back • standard pictograms as direct embroidery on right sleeve hem.

MATERIAL: 55% COTTON, 45% POLYESTER

FABRIC WEIGHT: approx. 185 g/m²

PROPERTIES: Offers UV protection 50+ and is therefore better than the EN standard requires. It only lets pass 2% of the UV rays. That means "very high protection" according to the European Classification.

FIELDS OF APPLICATION: All summer work in factory and public places; suitable for public utility companies, supply and disposal contractors

HI-VISION®

HI-VISION® Basic

Our high-quality fleece jacket from the HI-VISION® Basic program is perfect for wearing it as an additional warming layer, for example under a parka. Worn solo, it alternatively offers protection on cool days in the transitional period from summer to fall or winter to spring.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|---|------------|-----------------------------|---------------|
| 1 |  | 3360 | anthracite/stone grey/black | 46/48-58/60 |



FLEECE JACKET

Outdoor
Part number: **07025 1M094 000 3360**
Garment weight: approx. 570g

Two-coloured • stand-up collar with fastening tab for attaching inside outer jacket • can be worn closed up to the top or open • front with zip • 1 chest pocket on left and 2 side pockets with zips • sleeve with elasticated knitted cuffs.

MATERIAL: 100% POLYESTER

FABRIC WEIGHT: approx. 260 g/m²

FIELDS OF APPLICATION: Technical retailers, suppliers, disposers, works in the factory or public traffic area, car wash, logistic centres • offers protection against slight cold during transitional seasons

HI-VISION® Basic

The HI-VISION® Basic Parka with removable thermal jacket is the right solution for bad weather conditions as well as for dark working environments and at dusk and dawn. In addition to hi-visibility and weather protection, it also offers protection against moisture thanks to welded seams and a high stand-up collar with integrated hood.

| ITEM | COLOUR | COLOUR-NO. | COLOUR NAME |  |  |  | REGULAR SIZES |
|------|---|------------|-----------------------------|---|---|---|---------------|
| 1 |  | 2112 | fluorescent yellow/navy | EN ISO 20471 Class 2* *from size 42/44 | EN 343 Class 3/3 | EN 1149-5 | 46/48-58/60 |
| |  | 2165 | fluorescent orange-red/navy | | | | |



PARKA INCL. THERMAL JACKET

High-Visibility & Weather Protection
Part number: **05028 19001 002 + COLOUR NO.**
Garment weight: approx. 1,445g

Two-coloured • outer material as direct laminate • with welded seams • with removable thermal jacket • high stand-up collar with built-in hood • fastener strip with concealed 2-way zip • chest pocket on left with built-in pen compartment • chest pocket on right with built-in mobile phone compartment • 2 side pockets with flaps and press stud closures • inside pocket on left with hook&loop fastener • hem can be adjusted with drawstring • sleeve width can be adjusted with press stud • with reflective stripes.

MATERIAL: 99% POLYESTER, 1% CARBON, Fluorcarbon Finish

FABRIC WEIGHT: approx. 150 g/m²

FIELDS OF APPLICATION: Technical retailers, suppliers, disposers, works in the factory or public traffic area, car wash, logistic centres

HI-VISION®

HB-StormBase®

This flexible weather protection collection doesn't leave you out in the rain. Thanks to welded seams and reflective stripes, it offers reliable protection in wind and weather and poor visibility. Certified according to EN 343 class 3/3 – the highest protection class against precipitation and ground moisture. With removable thermal underwear.



| ITEM | COLOUR | COLOUR-NO. | COLOUR NAME |  |  | REGULAR SIZES |
|------|---|------------|-------------|---|---|---------------|
| 1 |  | 2041 | navy/royal | EN 343 Class 3/3 | EN 1149-5 | 46/48-58/60 |
| 2 |  | 45 | navy | | | |



PARKA INCL. QUILTED JACKET

Weather Protection
Part number: **05028 19001 001 2041**
Garment weight: approx. 1,440g

Two-coloured • outer material as direct laminate • with welded seams • with removable thermal jacket • high stand-up collar with built-in hood • fastener strip with concealed 2-way zip • chest pocket on left with built-in pen compartment • chest pocket on right with built-in mobile phone compartment • 2 side pockets with flaps and press stud closures • inside pocket on left with hook&loop fastener • hem can be adjusted with drawstring • sleeve width can be adjusted with press stud • with reflective stripes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 99% POLYESTER, 1% CARBON, Fluorcarbon Finish

MATERIAL WEIGHT: approx. 150 g/m²

FIELDS OF APPLICATION: Technical retailers, suppliers, disposers, works in the factory or public traffic area, car wash, logistic centres

COLD PROTECTION
EVEN 49 DEGREES BELOW ZERO
CAN'T FRIGHTEN YOU

Does your job sometimes feel as if you have been transported to snow-covered expanses?

Then you will find the right outfit in our cold protection range.

The collections have been specially developed for extreme temperatures in cold stores and designed

so that the individual products

complement each other and can be combined individually.

From head to toe, from the inside out.

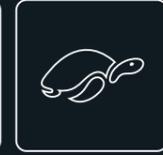


TEMPEX® CLASSIC 2.0

COLD STORE

PPE for movement-intensive work at temperatures up to -49°C, like order-picker work.

INTENSITY OF MOVEMENT: intensive to normal



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | EN 342 Y: 0.428 (B) m² K/W AP: Class 2 | REGULAR SIZES |
|------|--------|------------|-------------|--|---|
| 1, 2 | | 45 | navy | | Men: 46/48-58/60 Ladies: 36/38-44/46 |



Ladies



Adjustable faux fur collar



Men

Preformed sleeves

Reflective tape

Covered knitted cuffs

JACKET ORDER PICKER

Cold Store (-49°C)
Part number: **01174 1K014 000 45**
Garment weight: approx. 1,660g

LADIES JACKET ORDER PICKER

Cold Store (-49°C)
Part number: **01174 1K037 000 45**
Garment weight: approx. 1,330g

Single-coloured • ErgoPlus ergonomically tailored • adjustable faux fur collar • chest pocket with zipper • 2 front pockets with zipper • 4 pen holders • chin flap • front zipper extends to edge of collar • covered front zipper with snap fasteners • covered knitted cuffs • optimized length • reflective tape • external collar loop • inside pocket for pick-by-voice computer • preformed sleeves • elastic waistband in the back.



Ladies



Zip-through leg zippers with inner cover



Men

Preformed legs

TROUSERS ORDER PICKER

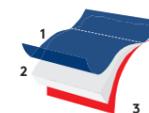
Cold Store (-49°C)
Part number: **01174 2K012 000 45**
Garment weight: approx. 1,400g

LADIES TROUSERS ORDER PICKER

Cold Store (-49°C)
Part number: **01174 2K017 000 45**
Garment weight: approx. 1,200g
Without front zip • entry via zip-flies on both sides.

Single-coloured • ErgoPlus ergonomically tailored • adjustable length suspenders • elastic waistband in the back • roomy side pockets • embroidered logo on the back • preformed legs • zip-through leg zippers covered inwards • covered front zipper with inner flap • raised waistband at the back with hanging loop.

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 3) INNER LINING: 100 % POLYESTER ·
FABRIC WEIGHT: approx. 515 g/m² ·
FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Logistics centres, Pharmaceutical industry



CHILLROOM

PPE for work in moderately cold conditions at temperatures between 0°C and 10°C.

INTENSITY OF MOVEMENT: normal



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|--------|------------|-------------|---|
| 1, 3 | | 2040 | navy/red | Men: 46/48-58/60 Ladies: 36/38-44/46 |
| 2 | | | | 46/48-58/60 |



JACKET

Chillroom (0-10°C)
Part number: **09044 1K048 000 2040**
Garment weight: approx. 1,300g

LADIES JACKET

Chillroom (0-10°C)
Part number: **09044 1K049 000 2040**
Garment weight: approx. 1,205g

Two-coloured • tight-fitting collar of faux fur with a hook&loop fastener • left-side chest pocket with zipper • 2 front pockets • covered front zipper • knitted cuffs • elastic waistband in the back • circumferential reflective stripes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • lighter non-woven insulation.



BODY WARMER

Chillroom (0-10°C)
Part number: **09044 1K050 000 2040**
Garment weight: approx. 560g

Two-coloured • knitted smooth collar • left-side chest pocket with pencil pocket • 2 front pockets • front zipper • reflective stripes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • waist width regulation by elastic waistband.



TROUSERS

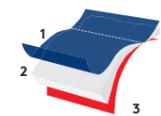
Chillroom (0-10°C)
Part number: **09044 2K024 000 2040**
Garment weight: approx. 1,290g

LADIES TROUSERS

Chillroom (0-10°C)
Part number: **09044 2K001 002 2040**
Garment weight: approx. 1,150g

Two-coloured • adjustable suspenders • raised back • front zipper • full-length leg zippers covered inwards • side pockets • reinforced hem made of the outer fabric • circumferential reflective stripes on the legs • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • lighter non-woven insulation.

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 3) INNER LINING: 100 % POLYESTER ·
FABRIC WEIGHT: approx. 415g/m² ·
FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Logistics centres, Pharmaceutical industry



COLD STORE

PPE for movement-intensive work at temperatures up to -49°C, like order-picker work.

INTENSITY OF MOVEMENT: intensive to normal



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|-------|--------|------------|-------------|---|
| 1 , 2 | | 2040 | navy/red | Men: 46/48-58/60 Ladies: 36/38-44/46 |
| 3 | | | | 46/48-58/60 |
| 4 | | | | |



EN 342
Y: 0,448 (B) m² K/W
Y: 0,344 (B) m² K/W (Acrylic fur)
AP: Class 2

EN 342
Y: 0,292 (R) m² K/W
AP: Class 2

EN 342
Y: 0,411 (B) m² K/W
AP: Class 2



Full-length leg zippers covered inwards



JACKET ORDER PICKER

Cold Store (-49°C)
Part number: **09045 1K000 000 2040**
Garment weight: approx. 1,680g

LADIES JACKET ORDER PICKER

Cold Store (-49°C)
Part number: **09045 1K001 000 2040**
Garment weight: approx. 1,380g

JACKET ORDER PICKER WITH ACRYLIC FUR LINING

Cold Store (-49°C)
Part number: **09028 1K009 000 2040**
Garment weight: approx. 1,740g
Completely with acrylic fur lining.

Two-coloured • tight-fitting collar of faux fur with a hook&loop fastener • left side chest pockets with zipper • 2 front pockets • covered front zipper • knitted cuffs • elastic waistband in the back • circumferential reflective stripes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

TROUSERS ORDER PICKER

Cold Store (-49°C)
Part number: **09045 2K000 000 2040**
Garment weight: approx. 1,520g

LADIES TROUSERS ORDER PICKER

Cold Store (-49°C)
Part number: **09045 2K001 000 2040**
Garment weight: approx. 1,355g

TROUSERS ORDER PICKER WITH ACRYLIC FUR LINING

Cold Store (-49°C)
Part number: **09028 2K006 000 2040**
Garment weight: approx. 1,600g
Completely with acrylic fur lining.

Two-coloured • adjustable suspenders • raised back • front zipper • full-length leg zippers covered inwards • side pockets • reinforced hem made of the outer fabric • circumferential reflective stripes on the legs • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

COAT VISITOR

Cold Store (-49°C)
Part number: **09045 4K000 000 2040**
Garment weight: approx. 1,885g

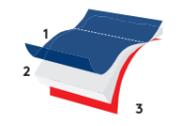
Two-coloured • hood with faux fur lining and tight-fitting knit collar • left-side chest pocket with zipper • 2 front pockets • covered 2-way front zipper • knitted cuffs • elastic waistband in the back • circumferential reflective stripes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

COVERALL ORDER PICKER

Cold Store (-49°C)
Part number: **09045 3K000 000 2040**
Garment weight: approx. 2,410g

Two-coloured • tight-fitting collar of faux fur with a hook&loop fastener • 2 chest pockets • 2 front pockets • covered 2-way front zipper • knitted cuffs • elastic waistband in the back • adjustable hip size • leg zippers covered inwards • knee insulation made of acrylic fur lining • reinforced hem made of the outer fabric • circumferential reflective stripes on chest and legs • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 3) INNER LINING: 100 % POLYESTER ·
FABRIC WEIGHT: approx. 520 g/m² · approx. 560 g/m² (with acrylic fur lining) ·
FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Logistics centres, Pharmaceutical industry



COLD STORE PLUS

PPE for low-movement work at temperatures up to -49°C, like forklift driver.

INTENSITY OF MOVEMENT: intensive to normal // low

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|-------|---|------------|-------------|---------------|
| 1 2 |  | 2040 | navy/red | 46/48-58/60 |

EN 342
Y: 0.404 (B) m² K/W
Y: 0.398 (R) m² K/W
(Plus)
AP: Class 2



JACKET FORKLIFT DRIVER

Cold Store Plus (-49°C)
Part number: **09046 1K012 001 2040**
Garment weight: approx. 1,840g

JACKET FORKLIFT DRIVER PLUS

Cold Store Plus (-49°C)
Part number: **09046 1K012 000 2040**
Garment weight: approx. 2,095g
Additional acrylic fur lining on the back.

Two-coloured • tight-fitting collar of faux fur with a hook&loop fastener • left side chest pockets with zipper • 2 front pockets • covered front zipper • knitted cuffs • elastic waistband in the back • circumferential reflective stripes • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • extra-strong non-woven insulation.



TROUSERS FORKLIFT DRIVER

Cold Store Plus (-49°C)
Part number: **09046 2K007 001 2040**
Garment weight: approx. 1,650g

TROUSERS FORKLIFT DRIVER PLUS

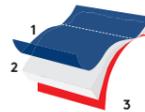
Cold Store Plus (-49°C)
Part number: **09046 2K007 000 2040**
Garment weight: approx. 1,845g
Knee pockets including additional knee insulation.

Two-coloured • adjustable suspenders • raised back • full-length leg zippers covered inwards • front zipper • side pockets • reinforced hem made of the outer fabric • circumferential reflective stripes on the legs • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • extra-strong non woven insulation.

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 3) INNER LINING: 100 % POLYESTER ·

FABRIC WEIGHT: approx. 630g/m² ·

FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Logistics centres, Pharmaceutical industry



CHILLROOM

PPE for work in moderately cold conditions at temperatures between 0°C and 10°C.

INTENSITY OF MOVEMENT: normal



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|---|------------|-------------|---|
| 1 |  | 2040 | navy/red | Men: 46/48-58/60 Ladies: 36/38-44/46 |

EN 342
Y: 0.391 (B) m² K/W
AP: Class 2



JACKET

Chillroom (0-10°C)
Part number: **01183 1K007 002 2040**
Garment weight: approx. 1,395g

LADIES JACKET

Chillroom (0-10°C)
Part number: **01183 1K008 001 2040**
Garment weight: approx. 1,365g

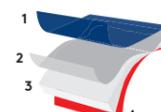
Two-coloured • tight fitting collar of faux fur with hook&loop fastener • inside pocket for a pick-by-voice computer • lift-side chest pocket with pencil pocket and logo flap • 2 side pockets • left-side inside chest pocket with zipper • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the chest, arm and pocket areas • outer-layer hard-wearing • lighter non-woven insulation.



CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) CHARMEUSE · 3) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 4) INNER LINING: 100 % POLYESTER ·

FABRIC WEIGHT: approx. 445g/m² ·

FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Logistics centres, Pharmaceutical industry



CHILLROOM // COLD STORE

PPE for work in moderately cold conditions at temperatures between 0°C and 10°C. //

PPE for movement-intensive work at temperatures up to -49°C, like order-picker work.

INTENSITY OF MOVEMENT: normal // intensive to normal



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | REGULAR SIZES |
|------|--------|------------|-------------|--|---|
| 1 | | 2040 | navy/red | - | 46/48-58/60 |
| 2 | | 45 | navy | EN 342 Y: 0,391 (B) m² K/W AP: Class 2 | Men: 46/48-58/60 Ladies: 36/38-44/46 |
| 3 | | 2040 | navy/red | EN 342 Y: 0,435 (B) m² K/W AP: Class 2 | |
| 4 | | 45 | navy | | |



1 | Front zipper with chin protection

BODY WARMER

Chillroom (0-10°C)

Part number: **01183 1K033 001 2040**

Garment weight: approx. 640g

Two-coloured • stand-up fleece collar • left-side chest pocket with pencil pocket • 2 front pockets • front zipper with chin protection • right-side reflective patch • reflective piping in the chest area • outer-layer hard-wearing • lighter non-woven insulation.



2 | Side pockets

Covered front zipper (only men's version)

Full-length 2-way leg zippers covered inwards

TROUSERS

Chillroom (0-10°C)

Part number: **01183 2K008 006 45**

Garment weight: approx. 1,485g

LADIES TROUSERS

Chillroom (0-10°C)

Part number: **01183 2K003 003 45**

Garment weight: approx. 1,300g

Single-coloured • adjustable suspenders • raised back waistband • covered front zipper (only for the men's model) • full-length 2-way leg zippers covered inwards • side pockets • knee pockets • reinforced hem made of the outer material • reflective patch on the straps • outer-layer hard-wearing • lighter non-woven insulation.



3 and 4 | Reflective piping in the chest, arm and pocket areas

JACKET ORDER PICKER

Cold Store (-49°C)

Part number: **01183 1K005 000 2040**

Garment weight: approx. 1,730g

LADIES JACKET ORDER PICKER

Cold Store (-49°C)

Part number: **01183 1K006 000 2040**

Garment weight: approx. 1,535g

Two-coloured • tight-fitting collar of faux fur with hook&loop fastener • left-side chest pocket with pencil pocket and logo flap • 2 side pockets • left-side inside chest pocket with zipper • inside pocket for a pick-by-voice computer • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the chest, arm and pocket areas • outer-layer hard-wearing.



4 | Adjustable suspenders

Raised back

Side pockets

Additional knee insulation made of acrylic fur lining

TROUSERS ORDER PICKER

Cold Store (-49°C)

Part number: **01183 2K002 000 45**

Garment weight: approx. 1,665g

LADIES TROUSERS ORDER PICKER

Cold Store (-49°C)

Part number: **01183 2K003 000 45**

Garment weight: approx. 1,550g

Single-coloured • adjustable suspenders • covered front zipper (only for the men's model) • full-length 2-way leg zippers covered inwards • side pockets • knee pockets including additional knee insulation made of acrylic fur lining • reinforced hem made of the outer fabric • reflective patches on the straps • outer-layer hard-wearing.

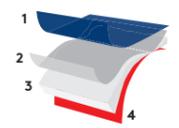
CONSTRUCTION: 1) UPPER MATERIAL: 100% POLYAMIDE · 2) CHARMEUSE · 3) PADDING:

TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 4) INNER LINING: 100% POLYESTER ·

FABRIC WEIGHT: CHILLROOM approx. 445 g/m² · COLD STORE approx. 545 g/m² ·

FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants,

Cool chain logistics, Logistics centres, Pharmaceutical industry



COLD STORE // COLD STORE PLUS

PPE for movement-intensive work at temperatures up to -49°C, like order-picker work. //

PPE for low-movement work at temperatures up to -49°C, like forklift driver.

INTENSITY OF MOVEMENT: intensive to normal // low

COLD PROTECTION



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|--------|------------|-------------|--|
| 1 | | 2040 | navy/red | EN 342 Y: 0.274 (R) m² K/W |
| 2 | | | | EN 342 Y: 0.443 (B) m² K/W |
| 3 | | | | EN 342 Y: 0.508 (B) m² K/W Y: 0.511 (B) m² K/W (Plus) AP: Class 2 |
| 4 | | | | EN 342 Y: 0.508 (B) m² K/W |
| | | 45 | navy | Men: 46/48-58/60 Ladies: 36/38-44/46 |



1, 2 and 3 | Tight-fitting collar of faux fur

1, 2 and 3 | Reflective piping in the chest, arm and pocket areas



Additional knee insulation made of acrylic fur lining



1, 2, 3 and 4 | Reflective piping in the chest, arm and pocket areas



Raised back

Additional knee insulation made of acrylic fur lining

COAT VISITOR

Cold Store (-49°C)
Part number: **01183 4K001 000 2040**
Garment weight: approx. 1,720g

Two-coloured • tight-fitting collar of faux fur with hook&loop fastener • left-side chest pocket with pencil pocket and logo flap • left-side inside chest pocket with zipper • 2 side pockets • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the chest, arm and pocket areas • outer-layer hard-wearing.

ORDER PICKER COVERALL

Cold Store (-49°C)
Part number: **01183 3K001 000 2040**
Garment weight: approx. 2,600g

Two-coloured • tight-fitting collar of faux fur with hook&loop fastener • left-side chest pocket with pencil pocket and logo flap • left-side inside chest pocket with zipper • 2 side pockets • 2-way front zipper covered inwards • knitted cuffs • elastic leg zippers covered inwards • knee pockets including additional knee insulation made of acrylic fur lining • reinforced hem made of the outer fabric • right-side reflective patch • reflective piping in the chest, arm and pocket areas • outer-layer hard-wearing.

JACKET FORKLIFT DRIVER

Cold Store Plus (-49°C)
Part number: **01183 1K013 000 2040**
Garment weight: approx. 1,840g

JACKET FORKLIFT DRIVER PLUS

Cold Store Plus (-49°C)
Part number: **01183 1K018 000 2040**
Garment weight: approx. 2,090g
Additional acrylic fur lining on the back.

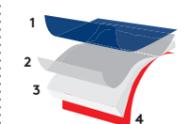
Two-coloured • tight-fitting collar of faux fur with hook&loop fastener • left-side chest pocket with pencil pocket and logo flap • 2 side pockets • left-side inside chest pocket with zipper • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the chest, arm and pocket areas • outer-layer hard-wearing • extra-strong non woven insulation.

TROUSERS FORKLIFT DRIVER

Cold Store Plus (-49°C)
Part number: **01183 2K010 000 45**
Garment weight: approx. 1,810g

Single-coloured • adjustable suspenders • covered front zipper • full-length 2-way leg zippers covered inwards • side pockets • knee pockets including additional knee insulation made of acrylic fur lining • reinforced hem made of the outer fabric • reflective patches on the straps • outer-layer hard-wearing • extra-strong non woven insulation.

CONSTRUCTION: 1) UPPER MATERIAL: 100% POLYAMIDE · 2) CHARMEUSE · 3) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 4) INNER LINING: 100% POLYESTER ·
FABRIC WEIGHT: COLD STORE approx. 545g/m² · COLD STORE PLUS approx. 645g/m² ·
FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Logistics centres, Pharmaceutical industry



CHILLROOM // COLD STORE

PPE for work in moderately cold conditions at temperatures between 0°C and 10°C. //

PPE for movement-intensive work at temperatures up to -49°C, like order-picker work.

INTENSITY OF MOVEMENT: normal // intensive to normal



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | EN 342 Y: 0,371 (B) m² K/W AP: Class 2 | REGULAR SIZES |
|------|--------|------------|--|--|---------------|
| 1 | | 3116 | white/silver grey/ fluorescent yellow | EN 342 Y: 0,371 (B) m² K/W AP: Class 2 | 46/48-58/60 |
| 2 | | 2237 | white/silver grey | EN 342 Y: 0,417 (B) m² K/W AP: Class 2 | |
| 3 | | 2237 | white/silver grey | EN 342 Y: 0,267 (R) m² K/W AP: Class 2 | |
| 4 | | 3116 | white/silver grey/ fluorescent yellow | EN 342 Y: 0,417 (B) m² K/W AP: Class 2 | |
| 5 | | 3116 | white/silver grey/ fluorescent yellow | EN 342 Y: 0,417 (B) m² K/W AP: Class 2 | |
| 6 | | 2237 | white/silver grey | EN 342 Y: 0,417 (B) m² K/W AP: Class 2 | |



JACKET

Chillroom (0-10°C)
Part number: **01174 1K007 001 3116**
Garment weight: approx. 1,180g

Three-coloured • tight-fitting collar made of fleece with hook&loop fastener • 2 inside chest pockets with zipper • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the chest and arm areas • lighter non-woven insulation.

BODY WARMER

Chillroom (0-10°C)
Part number: **01174 1K024 000 3116**
Garment weight: approx. 590g

Three-coloured • tight-fitting collar made of fleece • 2 inside chest pockets with zipper • 2-way front zipper • right-side reflective patch • reflective piping in the chest area • lighter non-woven insulation.

TROUSERS

Chillroom (0-10°C)
Part number: **01174 2K008 005 2237**
Garment weight: approx. 1,200g

Three-coloured • adjustable suspenders • raised back • covered front zipper • full-length 2-way leg zippers covered inwards • reinforced hem made of the outer fabric • reflective patch on the straps • lighter non-woven insulation.



JACKET ORDER PICKER

Cold Store (-49°C)
Part number: **01174 1K005 001 3116**
Garment weight: approx. 1,205g

Three-coloured • tight-fitting collar made of fleece with hook&loop fastener • 2 inside chest pockets with zipper • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the arm- and chest area.

COAT VISITOR

Cold Store (-49°C)
Part number: **01174 4K001 001 3116**
Garment weight: approx. 1,565g

Three-coloured • tight-fitting collar made of fleece with hook&loop fastener • 2 inside chest pockets with zipper • large inside pocket • 2-way front zipper covered inwards • knitted cuffs • elastic waistband in the back • right-side reflective patch • reflective piping in the chest and arm area.

TROUSERS

Cold Store (-49°C)
Part number: **01174 2K008 003 2237**
Garment weight: approx. 1,365g

Three-coloured • adjustable suspenders • raised back • covered front zipper • full-length 2-way leg zippers covered inwards • knee pockets • reinforced hem made of the outer fabric • reflective patch on the straps.

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) CHARMEUSE · 3) PADDING: TEMPEX® HIGH-BULK, INSULATING NON-WOVEN · 4) INNER LINING: 100 % POLYESTER ·

FABRIC WEIGHT: CHILLROOM approx. 415 g/m² · COLD STORE approx. 515 g/m² ·

FIELDS OF APPLICATION: Food industry



TEMPEX® thermal fleece clothing offers additional protection against the cold and can be used to supplement your personal protective equipment for work in chill rooms and cold environments. Useful features include the slit pockets with zip fastener, abrasion protection on the forearms and the slightly tailored cut of the ladies' jacket.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|---------|--------|------------|-------------|---|
| 1 ,2 ,4 | | 45 | navy | Men: 46/48-58/60 Ladies: 36/38-44/46 |
| 3 | | | | 46/48-58/60 |



1, 2 and 3|
Waistband with draw-string

FLEECE JACKET

Intermediate clothing
Part number: **07024 1K003 000 45**
Garment weight: approx. 535g

LADIES FLEECE JACKET

Intermediate clothing
Part number: **07024 1K004 000 45**
Garment weight: approx. 430g

Single-coloured • high collar • front zipper with chin protector • 2 side pockets with zipper • waistband with draw-string • extra forearm abrasion protection • extra soft.



BODY WARMER

Intermediate clothing
Part number: **07024 1K029 000 45**
Garment weight: approx. 360g

LADIES FLEECE BODY WARMER

Intermediate clothing
Part number: **07024 1K030 000 45**
Garment weight: approx. 375g

Single-coloured • high collar • front zipper with chin protector • 2 side pockets with zipper • elastic arm holes • waistband with draw-string • extra soft.



FLEECE SHIRT

Intermediate clothing
Part number: **07021 8K000 000 45**
Garment weight: approx. 290g

Single-coloured • turtleneck • front zipper • 2 side pockets with zipper • waistband with draw-string • extra soft.



FLEECE TROUSERS

Intermediate clothing
Part number: **07024 2K004 000 45**
Garment weight: approx. 410g

LADIES FLEECE TROUSERS

Intermediate clothing
Part number: **07024 2K005 000 45**
Garment weight: approx. 365g

Single-coloured • elastic stretch waistband • elastic hem • extra soft.

3 and 4|
This TEMPEX® fleecewear is referred to as reference clothing in the EN 342 standard, and it is used for the tests by certification institutes.

MATERIAL: FLEECE: 100 % POLYESTER - TRIM MATERIAL: 100 % POLYESTER -
FABRIC WEIGHT: 1|,2|,4| approx. 265 g/m² - 3| approx. 155 g/m²

Clothing that adapts to your movement: The ergonomic cut of the TEMPEX® THERMO ERGOPLUS provides excellent freedom of movement for the wearer. The jackets have pre-formed sleeves with optimised pivot spacing and an extended "drop-tail" back, the body warmers have a close-fitting cut and the trousers have pre-formed legs. Both product lines can be combined with our cold store and chill room clothing. The ladies' versions have a slightly fitted cut.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|-----------------------|--------|------------|-------------|---|
| 1 , 2 , 3 , 4 , 5 , 6 | | 45 | navy | Men: 46/48-58/60 Ladies: 36/38-44/46 |

JACKET ERGOPLUS

Intermediate clothing
Part number: **09020 1K021 001 45**
Garment weight: approx. 435 g

LADIES JACKET ERGOPLUS

Intermediate clothing
Part number: **09020 1K022 000 45**
Garment weight: approx. 445 g

Single-coloured • a maximum of movement freedom in any position by pre-formed sleeves with optimised length and drop-tail • high fleece collar • front zipper with chin protection • pencil pocket on the left side of the chest.



BODY WARMER ERGOPLUS

Intermediate clothing
Part number: **09020 1K034 001 45**
Garment weight: approx. 305 g

LADIES BODY WARMER ERGOPLUS

Intermediate clothing
Part number: **09020 1K035 000 45**
Garment weight: approx. 315 g

Single-coloured • a maximum of movement freedom in any position by ergonomically tailored fit • high fleece collar • front zipper with chin protection • pencil pocket on the left side of the chest.



TROUSERS ERGOPLUS

Intermediate clothing
Part number: **09020 2K015 000 45**
Garment weight: approx. 370 g

LADIES TROUSERS ERGOPLUS

Intermediate clothing
Part number: **09020 2K016 000 45**
Garment weight: approx. 400 g

Single-coloured • elastic waistband • front zipper • a maximum of movement freedom in any position by pre-formed legs • legs with fleece at the bottom.

JACKET

Intermediate clothing
Part number: **09020 1K002 000 45**
Garment weight: approx. 450 g

LADIES JACKET

Intermediate clothing
Part number: **09020 1K010 001 45**
Garment weight: approx. 435 g

Single-coloured • high collar made of fleece • front zipper • left-side inside chest pocket with pencil pocket • knitted cuffs.



BODY WARMER

Intermediate clothing
Part number: **09020 1K023 001 45**
Garment weight: approx. 285 g

LADIES BODY WARMER

Intermediate clothing
Part number: **09020 1K025 000 45**
Garment weight: approx. 295 g

Single-coloured • high collar made of fleece • front zipper • left-side inside chest pocket with pencil pocket.



TROUSERS

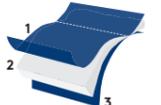
Intermediate clothing
Part number: **09020 2K009 000 45**
Garment weight: approx. 400 g

LADIES TROUSERS

Intermediate clothing
Part number: **09020 2K011 000 45**
Garment weight: approx. 350 g

Single-coloured • elastic waistband • front zipper • leg end with knitted cuffs.

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) PADDING: DIAMOND NON-WOVEN INSULATION · 3) INNER LINING: 100 % POLYESTER ·
FABRIC WEIGHT: approx. 245 g/m²



Clothing that adapts to your movement: The ergonomic cut of the TEMPEX® THERMO ERGOPLUS provides excellent freedom of movement for the wearer. The jackets have pre-formed sleeves with optimised pivot spacing and an extended "drop-tail" back, the body warmers have a close-fitting cut and the trousers have pre-formed legs. Both product lines can be combined with our cold store and chill room clothing. The ladies' versions have a slightly fitted cut.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|-----------------------|--------|------------|-------------|---|
| 1 , 2 , 3 , 4 , 5 , 6 | | 10 | white | Men: 46/48-58/60 Ladies: 36/38-44/46 |

JACKET ERGOPLUS

Intermediate clothing
Part number: **09020 1K021 000 10**
Garment weight: approx. 435 g

LADIES JACKET ERGOPLUS

Intermediate clothing
Part number: **09020 1K042 000 10**
Garment weight: approx. 445 g

Single-coloured • a maximum of movement freedom in any position by pre-formed sleeves with optimised length and drop-tail • high fleece collar • front zipper with chin protection • pencil pocket on the left side of the chest.



Men

JACKET

Intermediate clothing
Part number: **09020 1K002 001 10**
Garment weight: approx. 450 g

LADIES JACKET

Intermediate clothing
Part number: **09020 1K010 000 10**
Garment weight: approx. 435 g

Single-coloured • high collar made of fleece • front zipper • left-side inside chest pocket with pencil pocket • knitted cuffs.



Ladies

BODY WARMER ERGOPLUS

Intermediate clothing
Part number: **09020 1K034 000 10**
Garment weight: approx. 305 g

LADIES BODY WARMER ERGOPLUS

Intermediate clothing
Part number: **09020 1K035 001 10**
Garment weight: approx. 315 g

Single-coloured • a maximum of movement freedom in any position by ergonomically tailored fit • high fleece collar • front zipper with chin protection • pencil pocket on the left side of the chest.



Men

BODY WARMER

Intermediate clothing
Part number: **09020 1K023 000 10**
Garment weight: approx. 285 g

LADIES BODY WARMER

Intermediate clothing
Part number: **09020 1K025 001 10**
Garment weight: approx. 295 g

Single-coloured • high collar made of fleece • front zipper • left-side inside chest pocket with pencil pocket.



Ladies

TROUSERS ERGOPLUS

Intermediate clothing
Part number: **09020 2K015 000 10**
Garment weight: approx. 370 g

LADIES TROUSERS ERGOPLUS

Intermediate clothing
Part number: **09020 2K016 000 10**
Garment weight: approx. 400 g

Single-coloured • elastic waistband • front zipper • a maximum of movement freedom in any position by pre-formed legs • legs with fleece at the bottom.



Men

TROUSERS

Intermediate clothing
Part number: **09020 2K009 000 10**
Garment weight: approx. 400 g

LADIES TROUSERS

Intermediate clothing
Part number: **09020 2K001 001 10**
Garment weight: approx. 350 g

Single-coloured • elastic waistband • front zipper • leg end with knitted cuffs.



Ladies

CONSTRUCTION: 1) UPPER MATERIAL: 100 % POLYAMIDE · 2) DIAMOND NON-WOVEN INSULATION · 3) 100 % POLYESTER INNER LINING ·
FABRIC WEIGHT: approx. 245 g/m²





In a multi-layered clothing system the underwear plays an important role. It protects the wearer from cooling down due to the close-to-skin fit providing insulating and moisture-regulating properties. Our underwear offers high wearing comfort and allows a climate regulation for high active working thanks to its material composition.

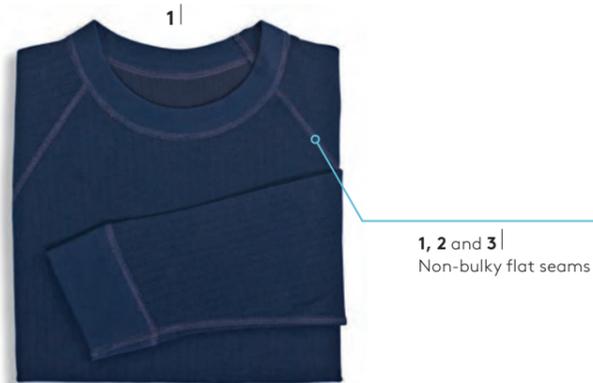
The face and head are more sensitive to differences in temperature than other parts of the body. We offer reliable accessories for the cold weather. Our range includes hoods, hats, caps, insulated helmets, neck warmers and fleece mouth protectors.

UNDERSHIRT LONG-SLEEVE

Accessories
Part number: **04036 7Z015 000 45**
Garment weight: approx. 215 g

Single-coloured • double-layered • comfortable raglan sleeve • close-fitting cuff • extra-long back • non-bulky flat seams • breathable • suitable for movement-intensive activities.

Material: 55 % Polyester, 45 % Cotton
Sizes: 6-8
■ navy



UNDERSHIRT TROYER LONG-SLEEVE

Accessories
Part number: **04036 7Z015 002 45**
Garment weight: approx. 230 g

Single-coloured • double-layered • collar with short front zipper • comfortable raglan sleeve • close-fitting cuff • extra-long back • non-bulky flat seams • breathable • suitable for movement-intensive activities.

Material: 55 % Polyester, 45 % Cotton
Sizes: 6-8
■ navy



UNDERPANTS LONG

Accessories
Part number: **04036 7Z016 000 45**
Garment weight: approx. 205 g

Single-coloured • double-layered • elastic waistband • leg end with cuff • non-bulky flat seams • breathable • suitable for movement-intensive activities.

Material: 55 % Polyester, 45 % Cotton
Sizes: 6-8
■ navy



KIDNEY BELT

Accessories
Part number: **07024 7K003 000 45**

Single-coloured • hook&loop fastener for adjusting waist circumference • extra soft.

Material: 100 % Polyester
Sizes: S-2XL
■ navy

ALASKA HOOD

Accessories
Part number: **04046 7Z005 000 45**

Single-coloured • faux fur lining • made of 65 % Polyester and 35 % Cotton • forehead protection • neck protection • ear protection • hook&loop strap for securing the ear protection in place.

Sizes: 1/56-5/64
Sale unit: 1 piece
■ navy

This TEMPEX® hood is referred to as reference clothing in the EN 342 standard, and it is used for the tests by certification institutes.



HOOD CLASSIC

Accessories
Part number: **01174 7K001 001 45**

Single-coloured • tight-fitting knitted neck border • chin area with adjustable snap fastener • field of vision adjustable via drawstring and stopper • faux fur lining • made of 100 % Polyamide • 2 button holes for possible attachment • matching the TEMPEX® CLASSIC collection.

One size
Sale unit: 1 piece
■ navy



HOOD COMFORT

Accessories
Part number: **01183 7K001 000 45**

Single-coloured • tight-fitting knitted neck border • chin area with adjustable hook&loop fastener • field of vision adjustable via drawstring and stopper • faux fur lining • made of 100 % Polyamide • 2 button holes for possible attachment • outer-layer hard-wearing • matching the TEMPEX® COMFORT collection.

One size
Sale unit: 1 piece
■ navy



HOOD HYGIENE

Accessories
Part number: **01174 7K001 002 10**

Single-coloured • tight-fitting knitted neck border • chin area with adjustable hook&loop fastener • field of vision adjustable via drawstring and stopper • faux fur lining • made of 100 % Polyamide • 2 button holes for possible attachment • matching the TEMPEX® HYGIENE collection.

One size
Sale unit: 1 piece
□ white



The face and head are more sensitive to differences in temperature than other parts of the body. We offer reliable accessories for the cold weather. Our range includes hoods, hats, caps, insulated helmets, and neck warmers.



KNITTED CAP

Accessories
Part number: **04045 7Z009 000 + COLOUR NO.**

Single-coloured • double knitted • scotchgard treatment • thinsulate lining • made of 100% Polyacrylic.

One size
Sale unit: 1 piece
■ **46** black
■ **10** white



BALACLAVA

Accessories
Part number: **04044 7Z014 000 46**

Single-coloured • face opening with elastic strap for flexible and secure fit • made of 100% Polyacrylic.

One size
Sale unit: 1 piece
■ black



BALACLAVA DOUBLE-LAYERED

Accessories
Part number: **04036 7Z014 001 45**

Single-coloured • fine functional fabric • face opening with elastic strap for flexible and secure fit • made of 55% Polyester and 45% Cotton.

One size
Sale unit: 1 piece
■ navy



PROTECTIVE HELMET POLY WITH INSULATING INSERT

Accessories
Part number: **90022 75001 000 25**

Single-coloured • storage pocket for hearing protection • removable, washable insulated inside part • insulation insert made of 100% Polyester • with button holes to fix with helmet • tested down to -20 °C.

One size (51-64 cm)
Sale unit: 1 piece
■ red

Standards:



PROTECTIVE HELMET POLY

Accessories
Part number: **90022 7Z006 012 25**

One size (51-64 cm)
Sale unit: 1 piece
■ red

Standards:



INSULATING INSERT

Accessories
Part number: **01158 7K000 000 48**

One size
Sale unit: 1 piece
■ dark blue



Removable, washable insulated insert

FLEECE NECK WARMER

Accessories
Part number: **07034 75000 000 46**

Single-coloured • soft fleece material • made of 100% recycled Polyethylene Terephthalate • suited for industrial laundry.

One size
Sale unit: 1 piece
■ black



GRS – Global Recycled Standard



This product is developed from recycled PET bottles which have been collected in Europe and is GRS certified. The production of the rPET yarn requires 60% less energy and avoids 2.4 kg of waste per kg of yarn. GRS is an international, voluntary and full product standard and defines requirements for the certification of recycled materials in terms of chain of custody, social and environmental practices and chemical restrictions.



Soft lap seam on the back

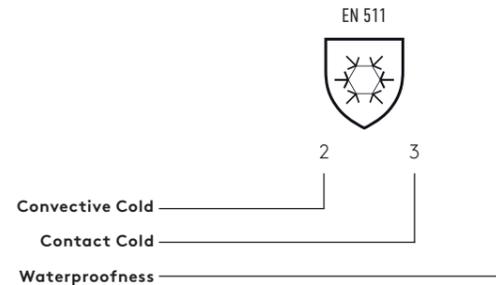
With us, you will find the right cold protection gloves for your work in the deep-freeze or cold room area – suitable for a wide range of applications in trade as well as in industry, logistics and research.

Besides our new cold protection gloves with certified protection against cold and mechanical risks, which are particularly suitable for order pickers, we also offer fleece and underlay gloves.



Protective gloves against cold EN 511:2006

This standard specifies the test methods and performance requirements of protective gloves against cold. The insulating capacity of the material on contact, the resistance to progressively penetrating cold and the thermal resistance to direct contact with a cold object are measured. The three-digit code next to the standard pictogram indicates the performance levels, with 0 corresponding to the weakest and 4 to the highest performance. Water resistance is defined with two performance levels: 0 = Water penetration after 30 min, 1 = No water penetration after 30 min.



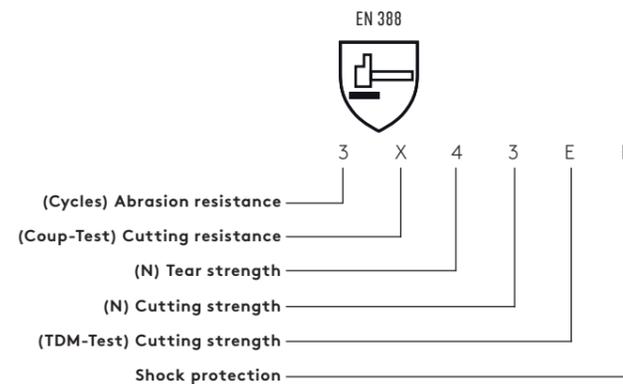
Performance levels for protective gloves against cold according to EN 511

| Test | Performance Level | | | |
|--|---------------------------|---------------------------|---------------------------|--------------------|
| | 1 | 2 | 3 | 4 |
| Convective Cold Thermal Insulation/ I_{TR} (in m ² K/W) (Insulation value) | $0,10 \leq I_{TR} < 0,15$ | $0,15 \leq I_{TR} < 0,22$ | $0,22 \leq I_{TR} < 0,30$ | $0,30 \leq I_{TR}$ |
| Contact Cold Thermische Isolation/ R_{TR} (in m ² K/W) (Widerstandswerte) | $0,025 \leq R < 0,050$ | $0,050 \leq R < 0,100$ | $0,100 \leq R < 0,150$ | $0,150 \leq R$ |
| Waterproofness | No water penetration | | | |

4 means the highest and 1 means the lowest performance level. X means "not tested". 0 means "below the minimum requirements".

Protective gloves against mechanical risks EN 388:2016

This standard specifies the test methods and performance requirements of protective gloves against mechanical risks. The specific protective performance depends on which test is carried out during certification and which performance level is achieved, 1 being the lowest and 5 the highest performance level. "X" means not tested.



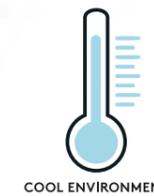
| Test | Performance Level | | | | |
|--|-------------------|-----|------|------|----|
| | 1 | 2 | 3 | 4 | 5 |
| Abrasion resistance (Number of cycles) | 100 | 500 | 2000 | 8000 | |
| Cutting resistance (Factor) | 1,2 | 2,5 | 5,0 | 10,0 | 20 |
| Tear strength (in newton) | 10 | 25 | 50 | 75 | |
| Cutting strength (in newton) | 20 | 60 | 100 | 150 | |

5 means the highest and 1 means the lowest performance level. X means "not tested". 0 means "below the minimum requirements".

FIELDS OF APPLICATION: Retail and Wholesale, Research, Catering and Restaurants, Cool chain logistics, Food Industry, Logistics centres, Pharmaceutical industry

| ITEM | EN 511 111 | EN 388 2 X 2 2 C | MATERIAL LAYER CONSTRUCTION | | | SIZES |
|------|------------|------------------|-----------------------------|--|-------------------------|-------|
| | | | BACK OF HAND | LINING | PALM OF HAND | |
| 1 | | | Polyester | HPPE, polyester and steel fiber thread | Synthetic leather | 6-12 |
| 2 | | EN 388 2 11 1 X | Spandex | Thinsulate™ 40g | Full grain goat leather | 7-12 |

1 |



GLOVES TOUCH & CUT 4

Accessories
Part number: **04103 76027 004 2128**

Two-coloured • forefinger reinforcement • reinforced fingertips • waterproof • cut protection A4 • velcro fastener • chromium-free • suitable for cool environments • suitable for order pickers • suitable for Touchscreens.

grey/black

2 |



GLOVES TOUCH & HI-VIS

Accessories
Part number: **14016 76027 005 2171**

Two-coloured • forefinger reinforcement • reinforced fingertips • waterproof • cut protection A4 • velcro fastener • chromium-free • suitable for cool environments • suitable for order pickers • suitable for Touchscreens.

fluorescent yellow/black

TEMPEX® THERMO ACCESSORIES

Our cold protection gloves for order picking work offer certified protection that you can rely on for your work in the deep-freeze area down to -49°C, as well as in the fresh and cold storage area between 0°C and 10°C. All models are made of high-quality materials and are elaborately finished.



| ITEM | MATERIAL LAYER CONSTRUCTION | | BACK OF HAND | LINING | PALM OF HAND | SIZES |
|------|-----------------------------|------------------|--------------|--------------------------|-----------------------------|-------|
| | EN 511 | EN 388 | | | | |
| 1 | EN 511 1 2 X | EN 388 2 1 4 1 X | Neoprene | Fleece | MACROTHAN® (Nylon and PU) | 7-11 |
| 2 | EN 511 2 2 1 | EN 388 2 1 2 1 X | Polyester | Thinsulate™ 100g, Fleece | MICROTHAN® + (Nylon and PU) | 7-13 |
| 3 | EN 511 2 2 0 | EN 388 2 2 3 2 X | Leather | Knitted pile | Leather | 8-10 |

| ITEM | MATERIAL LAYER CONSTRUCTION | | BACK OF HAND | LINING | PALM OF HAND | SIZES |
|------|-----------------------------|------------------|-----------------------------------|------------------|----------------------------|-------|
| | EN 511 | EN 388 | | | | |
| 1 | EN 511 2 2 1 | EN 388 2 2 2 2 X | Neoprene, full grain goat leather | Thinsulate™ 120g | Full grain goat leather | 7-12 |
| 2 | EN 511 2 3 1 | EN 388 2 1 2 2 X | Neoprene, Polyester | Thinsulate™ 150g | Full grain cowhide leather | |
| 3 | | | | | | |



GLOVES TK PRO
Accessories
Part number: **04039 7Z000 010 2049**

Two-coloured • ergonomically designed fingers and thumb • finger and thumb reinforcement reinforced fingertips • moisture-resistant and windproof back of the hand • robust inside hand protection • 360° cuff • with reflective elements • chromium-free • suitable for cold environments • suitable for order pickers.

■ black/middle grey

GLOVES AQUA PRO
Accessories
Part number: **04102 76027 001 3395**

Three-coloured • ergonomically designed fingers and thumb • reinforced fingertips • waterproof, windproof and moisture-resistant • especially robust • 360° cuff • with reflective elements • chromium-free • suitable for cold environments • suitable for order pickers.

■ middle grey/black/yellow

GLOVES 2 2 0 PLUS, KNIT
Accessories
Part number: **14004 7Z000 006 2099**

Two-coloured • backs of hand made of split leather • palms made of full grain leather • knitted cuffs • foam insulation up to the start of the cuff • hard-wearing • suitable for order pickers.

■ middle grey/black



GLOVES LEATHER PRO
Accessories
Part number: **14013 76027 000 46**

Single-coloured • ergonomically designed fingers • forefinger and thumb reinforcement • reinforced fingertips • waterproof • moisture-resistant • especially robust • velcro fastener • with reflective elements • suitable for very cold environments • suitable for order pickers.

■ black

GLOVES ALLROUND
Accessories
Part number: **14014 76027 002 2415**

Two-coloured • ergonomically designed fingers • finger and thumb reinforcement • waterproof • moisture-resistant and windproof back of the hand • robust inside hand protection • 360° cuff • long model • suitable for very cold environments • suitable for order pickers.

■ black/white

GLOVES ALLROUND HI-VIS
Accessories
Part number: **14015 76027 003 3396**

Three-coloured • signal colour • ergonomically designed fingers • finger and thumb reinforcement • waterproof • moisture-resistant and windproof back of the hand • robust inside hand protection • 360° cuff • long model • suitable for very cold environments • suitable for order pickers.

■ fluorescent green/white/black

In addition to our certified range of cold protection gloves, we also offer fleece, knitted and underlay gloves in various designs.



| ITEM | LINING | MATERIAL | SIZES |
|------|------------------|-----------|-------|
| 1 | Thinsulate™ 100g | Polyester | 8, 10 |
| 2 | | | 8-11 |
| 3 | | | |



These gloves are referred to as reference clothing in the EN 342 standard, and it is used for the tests by certification institutes.

FLEECE GLOVES, GRIP

Accessories
Part number: **07029 7Z000 002 46**

Single-coloured • palms and 4 fingers covered with leather for grip safety • elastic band at the wrist • extra soft.

■ black

FLEECE GLOVES, KNIT & GRIP

Accessories
Part number: **07029 7Z000 003 46**

Single-coloured • palms and 4 fingers covered with leather for grip safety • knitted cuffs • extra soft.

■ black

FLEECE GLOVES, RUBBER GRIP

Accessories
Part number: **07029 7Z000 000 46**

Single-coloured • palms covered with tough rubber nubs for grip safety • elastic band at the wrist • extra soft.

■ black

| ITEM | EN 388 | MATERIAL | SIZES |
|------|--------------|-------------------|----------|
| 1 | EN 388 214XX | Cotton, Polyamide | 8-10 |
| 2 | - | Polypropylene | One size |



Additional insulation underneath cold protection gloves

KNITTED GLOVES, GRIP

Accessories
Part number: **04037 7Z000 005 45**

Single-coloured • palms covered with rubber nubs or grip safety • knitted cuffs.

■ navy

UNDERGLOVES

Accessories
Part number: **04038 7Z000 004 45**

Single-coloured • wearable as additional insulation underneath cold protection gloves • elastic material • processed without a seam • can be combined with all TEMPEX® cold protection gloves.

■ navy

TEMPEX® THERMO ACCESSORIES

Our thermal safety boots are made of grained, water-resistant cow leather and have a non-slip, cold-resistant and insulated sole. Insulated steel toecaps ensure additional safety. Easy to put on and featuring a genuine lambswool lining, a high level of comfort is guaranteed.



S2 INSULATED SAFETY BOOTS

Accessories
Part number: **14003 7Z011 000 2001**

Two-coloured • made of grained, water-resistant cow leather • nonslip, cold-resistant and cold-insulated outsole • completely lined with real lambskin • aluminized insole • easy to put on thanks to slanted zipper • insulated steel toecap.

Sizes: 37-50
white/yellow



EN 20345

Easy-to-put-on-zipper



Insulated steel toecap



Non-slip and cold-resistant outsole

Real lambskin



S2 LACED SAFETY BOOTS

Accessories
Part number: **14003 7Z011 001 46**

Single-coloured • made of grained, water-resistant cow leather • nonslip, cold-resistant and cold-insulated outsole • completely lined with real lambskin • aluminized insole • insulated steel toecap • good fit by lacing.

Sizes: 36-50
black



EN 20345

S3 INSULATED SAFETY BOOTS

Accessories
Part number: **14017 76033 000 66**

Single-coloured • nubuk leather, waxed • nonslip, cold-resistant and cold insulated outsole • Loden lining combined with Primaloft • aluminium layer in the sole • toe cap out of fibreglass • quick lacing system for easy and fast slip on an off.

Sizes: 39-47
brown



EN 20345

Quick lacing system for easy and fast slip on an off



UNIVERSAL SOCKS

Accessories
Part number: **04041 7Z013 001 528**

Single-coloured • made of a virgin wool blend • felted wool sole.

One size
Sale unit: 1 piece
dark grey



ALASKA SOCKS

Accessories
Part number: **04042 7Z013 000 52**

Single-coloured • made of a virgin wool blend • extremely effective insulation for long-term exposure.

Sizes: 37-38 to 47-48
Sale unit: 1 pair
middle grey



LINER SOCKS

Accessories
Part number: **03018 7Z003 000 52**

Single-coloured • made of tricot • flannel lining.

Sizes: 38-47
Sale unit: 1 piece
middle grey

FIRE & RESCUE SERVICES

GO ALL OUT FOR YOUR MISSION

In addition to high-quality day shift wear for fire brigades, we also offer modern protective clothing for technical assistance and area fire fighting.

They meet the highest functional demands and also impress with a great look, useful features and outstanding wearing comfort. So much in fact, that you'll be happy to keep them on even after you've gone off duty.



Like all Flammgard® products, this day service clothing is made of a hard-wearing and high-quality fabric. Firefighters wear it when they are not on fire duty – e.g. for equipment maintenance, training courses or fire safety watches. It is comfortable like leisure wear, looks presentable and also protects in case of fire.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  | REGULAR SIZES |
|------|---|------------|-------------|---|--|
| 1, 2 |  | 48 | dark blue |  | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |



Adapters available for any kind of shoulder tunnel



Men



Female cut

Ladies

BLOUSON

Dayshift firefighters
Part number: **01041 10160 000 48**
Garment weight: approx. 1,100 g

LADIES BLOUSON

Dayshift firefighters
Part number: **01041 10168 005 48**
Garment weight: approx. 1,040 g

Single-coloured • shoulder tunnel for rank badge • collar with flap and hook&loop fastening • closure strip with zip and covered snap fasteners on both sides • 2 breast pockets with flaps with zip • right-hand flap with hook&loop tape for name badge • left-hand pocket with loop and metal half ring • 2 side pockets as piped pockets with zips • 2 inside pockets • adjustable cuff width thanks to concealed zip • hem band elasticated on the side • back with side folds for freedom of movement.

JACKET

Dayshift firefighters
Part number: **01041 10162 000 48**
Garment weight: approx. 1,150 g

LADIES JACKET

Dayshift firefighters
Part number: **01041 10174 000 48**
Garment weight: approx. 1,100 g

Single-coloured • shoulder tunnel for rank badge • collar with flap and hook&loop fastening • front zipper with snap fasteners covered on both sides • breast pockets with flaps and hook&loop fastening • right-hand flap with hook&loop tape for name badge • left-hand pocket with loop and metal half ring • 2 inside pockets • wristbands adjustable via hook&loop • reinforced elbows • hem with drawstring and safety catch • back with yoke partition.



Men



Female cut

Ladies

MATERIAL: 49 % ARAMIDE, 50 % VISCOSE FR, 1 % CARBON
FABRIC WEIGHT: approx. 300 g/m²
FIELDS OF APPLICATION: Day shift wear for firemen



As a basic collection, Flammgard® Klassik also includes women's models, different trouser variants, optionally with elastic waistband or yellow-silver-yellow reflective stripes, as well as a fleece jacket and a softshell jacket in addition. All Flammgard models convince with many details such as elbow reinforcement or a hook&look tape for name tags.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | REGULAR SIZES |
|------|--------|------------|------------------|--------------------------|--|
| 3 | | 48 | dark blue | EN ISO 11612 A1-A2/B1/C1 | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |
| 4 | | 2051 | dark blue/yellow | EN ISO 13688 HuPF 2 | 46-58, 23-29, 94-110 |
| 5 | | 46 | black | - | S-2XL |
| | | 45 | navy | - | |

TROUSERS

Dayshift firefighters
Part number: **01041 20086 000 48**
Garment weight: approx. 730 g

LADIES TROUSERS

Dayshift firefighters
Part number: **01041 20117 000 48**
Garment weight: approx. 700 g

TROUSERS, ELASTIC WAISTBAND

Dayshift firefighters
Part number: **01041 20109 000 48**
Garment weight: approx. 730 g

TROUSERS WITH REFLECTIVE TAPE

Dayshift firefighters
Part number: **01041 20086 008 48**
Garment weight: approx. 770 g
Reflective stripes parallel to the seam • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

LADIES TROUSERS WITH REFLECTIVE TAPE

Dayshift firefighters
Part number: **01041 20117 003 2051**
Garment weight: approx. 740 g
Reflective stripes parallel to the seam • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

Single-coloured • waistband with hook&loop fastening • 2 pleats at the front, 4 darts at the back • covered zip fastener • 2 slant pockets • 1 back pocket with flap and zip • 2 bellow pockets on the side seam with flaps and zips • adjustable hem with elastic • front of trousers and crotch with flame-retardant cotton lining • seat seam designed to be easy to modify.



ACCESSORIES

Accessories

Adapter for rank badge

Flap with hook&loop fastening.

Name badges

Black-stitched border • first and last name individually embroidered in red, silver or gold.



SOFTSHELLJACKET

Dayshift firefighters
Part number: **11001 10161 014 46**
Garment weight: approx. 1,070 g

Single-coloured • shoulder tunnel for rank badge • collar with flap and hook&loop fastening • front zipper with covered snap fastener • 2 breast pockets with flap and snap fastener • right-hand pocket with pen compartment and hook&loop tape for name badge on the flap • loop with metal half ring in the pocket • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 1 closable inside mobile phone pocket • wristbands adjustable via covered snap fastener • with black mesh lining.

Shoulder tunnel for rank badge



FLEECE JACKET

Dayshift firefighters
Part number: **07001 10151 000 45**
Garment weight: approx. 700 g

Single-coloured • stand-up collar with zip fastening • front zipper • breast pocket with flap and hook&loop fastening • flap with pen opening • side pockets as welt pockets • sleeves with inner knit cuffs and underarm reinforcement • hem with ribbed structure.



MATERIAL: 3 | 49% ARAMIDE, 50% VISCOSE FR, 1% CARBON • 4 | 94% POLYESTER, 6% ELASTANE •

5 | 100% POLYESTER •

FABRIC WEIGHT: 3 |, 4 | and 5 | approx. 300 g/m² •

FIELDS OF APPLICATION: Day shift wear for firemen



As a useful addition to the equipment of firefighters on day shift duty, we now also offer matching shirts, blouses and polo shirts. Thanks to the exceptionally light and highly functional materials such as Coolmax® Piqué and organic cotton, as well as a modern and comfortable cut, they are very comfortable to wear. An outfit that is a pleasure to wear even after work.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|--------|------------|-------------|-----------------------------------|
| 1 | | 488 | black blue | Men: S-2XL Ladies: XS-L |
| 2, 3 | | 10 | white | Men: 39/40-47/48 Ladies: 36-46 |
| | | 471 | pastel blue | |



POLOSHIRT
Dayshift firefighters
Part number: **90027 86045 000 488**
Garment weight: approx. 220g

LADIES POLOSHIRT
Dayshift firefighters
Part number: **90027 86046 000 488**
Garment weight: approx. 190g

Single-coloured • polo placket with buttoning • chest pocket on the left incl. pen compartement and button • sleeve hem with cuffs • stylish shirt length, with short slits • slightly extended back • incl. Coolmax® and ecofresh (fast drying and breathable) • UPF40 • with silver ions to reduce bacterial activity by 99%.
Ladies' shirt with feminine cut.



Adapter for rank badge
Flap with hook&loop fastening.
03028 70044 001 + COLOUR NO.

BLOUSE SHORT-SLEEVE
Dayshift firefighters
Part number: **03028 60031 001 + COLOUR NO.**
Garment weight: approx. 190g

BLOUSE LONG-SLEEVE
Dayshift firefighters
Part number: **03028 60031 000 + COLOUR NO.**
Garment weight: approx. 240g
Sleeve ends with cuff, slit and button closure.

Single-coloured • turn-down collar • front closure with buttons • shoulder with tunnel for badge • darts at chest height and at the back • chest pocket with flap.



SHIRT SHORT-SLEEVE
Dayshift firefighters
Part number: **03028 60030 001 + COLOUR NO.**
Garment weight: approx. 210g

SHIRT LONG-SLEEVE
Dayshift firefighters
Part number: **03028 60030 000 + COLOUR NO.**
Garment weight: approx. 260g
Sleeve ends with cuff, slit and button closure.

Single-coloured • turn-down collar • front closure with buttons • shoulder with tunnel for badge • chest pocket with flap.



MATERIAL: 1 | 100% RECYCLED POLYESTER · 2 | and 3 | 100% COTTON (ORGANIC) ·
FABRIC WEIGHT: 1 | approx. 160g/m² · 2 | and 3 | approx. 120g/m² ·
FIELDS OF APPLICATION: Day shift wear for firemen



Our Flammgard® collection North Rhine-Westphalia is made of a high-quality aramid-viscose blend and is used by the fire brigade in North Rhine-Westphalia. In addition to the blouson, various trouser models with and without leg pockets are available in ladies' and men's versions.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|------|--------|------------|-------------|--------------------------|-----------|--|
| 1 | | 488 | black blue | EN ISO 11612 A1-A2/B1/C1 | EN 1149-5 | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |
| 2 | | | | | | EN ISO 13688 HuPF 2* *only signed men's trousers |



Hook&loop tape for name badge

Men



Flap with embroidery

Ladies

Covered hook&loop fastener to regulate the sleeve hem width

BLOUSON

Dayshift firefighters
Part number: **01056 10149 018 488**
Garment weight: approx. 1,125 g

LADIES BLOUSON

Dayshift firefighters
Part number: **01056 10168 006 488**
Garment weight: approx. 1,060 g

Single-coloured • shoulder tunnel for rank badge • collar with flap and hook&loop fastening • closure strip with zip and covered snap fasteners on both sides • 2 breast pockets with flaps and zips • righthand flap with hook&loop tape for name badge • left-hand pocket with loop and metal half ring • flap with "Feuerwehr" embroidery • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 2 inside pockets • adjustable cuff width with covered zip; right sleeve pocket with zip and 2 pen pockets • waistband elasticated on the side • back with side folds for freedom of movement • flame-retardant cotton lining.

TROUSERS (HuPF PART 2)

Dayshift firefighters
Part number: **01056 20106 007 488**
Garment weight: approx. 770 g

LADIES TROUSERS

Dayshift firefighters
Part number: **01056 20117 004 488**
Garment weight: approx. 740 g

TROUSERS WITHOUT CARGO POCKET

Dayshift firefighters
Part number: **01056 20106 008 488**
Garment weight: approx. 740 g

LADIES TROUSERS WITHOUT CARGO POCKET

Dayshift firefighters
Part number: **01056 20117 005 488**
Garment weight: approx. 710 g

Single-coloured • waistband with hook fastening and side elastic band • 2 pleats at the front, 4 darts at the back • covered zip fastener • 2 wing pockets • 1 back pocket with flap and zip • 2 bellow pockets on the side seam with flaps and zips • adjustable elasticated hem • seat seam designed to be easy to modify.



ACCESSORIES

Accessories

Also available for North Rhine-Westphalia blouson:

Adapter for rank badge

Flap with hook&loop fastening.

Name badges

Black-stitched border • first and last name individually embroidered in red, silver or gold.



MATERIAL: 59% ARAMIDE, 40% VISCOSE FR, 1% CARBON

FABRIC WEIGHT: approx. 260 g/m²

FIELDS OF APPLICATION: Day shift wear for firemen North Rhine-Westphalia



Flammgard® Baden-Württemberg is used by the fire brigade in Baden-Württemberg and impresses with many details such as the opening in the upper left pocket flap of the jacket for the antenna of the radio; above it is a loop for an antenna microphone. The embroidery with the Staufer lion is also a must in this collection.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | EN ISO 11612 A1-A2/B1/C1 | EN ISO 13688 HuPF 2 | REGULAR SIZES |
|------|--------|------------|----------------|--------------------------|---------------------|--|
| 1, 2 | | 2240 | black blue/red | | | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |
| 3 | | | | | | |

BLOUSON

Dayshift firefighters
Part number: **01056 10150 028 2240**
Garment weight: approx. 1,040 g

LADIES BLOUSON

Dayshift firefighters
Part number: **01056 10163 024 2240**
Garment weight: approx. 1,000 g

Two-coloured • decorative red piping on front and back • shoulder tunnel for rank badge • loop for aerial microphone • collar with flap and button • front zipper with covered snap fasteners • 2 breast pockets with flaps and snap fastening • right-hand pocket with pen compartment and flap with hook&loop tape for name badge • left-hand flap with opening for radio antenna and "Staufer Löwe + Feuerwehr" embroidery • loop with metal half ring in the pocket • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 5 inside pockets in various designs • cuffs with gusset, adjustable cuff width thanks to covered snap fastener • hem band elasticated on the side • back with "FEUERWEHR" patch • flame-retardant cotton lining.



JACKET

Dayshift firefighters
Part number: **01056 10159 012 2240**
Garment weight: approx. 1,060 g

LADIES JACKET

Dayshift firefighters
Part number: **01056 10169 008 2240**
Garment weight: approx. 1,020 g

Two-coloured • decorative red piping on front and back • shoulder tunnel for rank badge • loop for aerial microphone • collar with flap and button • front zipper with snap fasteners covered on both sides • 2 breast pockets with flaps and snap fastening • right-hand pocket with pen compartment and hook&loop tape for name badge on the flap • left-hand flap with opening for radio antenna and "Staufer Löwe + Feuerwehr" embroidery • loop with metal half ring in the pocket • 2 side pockets as welt pockets with zip • 1 Napoleon pocket • 5 inside pockets in various designs • cuffs with gusset, adjustable via covered snap fastener • hem with drawstring • back with "FEUERWEHR" patch • flame-retardant lining.



TROUSERS

Dayshift firefighters
Part number: **01056 20103 018 2240**
Garment weight: approx. 690 g

LADIES TROUSERS

Dayshift firefighters
Part number: **01056 20111 005 2240**
Garment weight: approx. 670 g

Two-coloured • waistband with hook&loop fastening and elasticated on the sides • 2 pleats on the front of the trousers • covered zip fastener • 2 wing pockets • 2 back pockets and 2 bellow pockets on the side seam – each with flaps and snap fasteners, red piping and "Staufer Löwe + Feuerwehr" embroidery • right-hand flap with opening for pen • crotch with flame-retardant cotton lining • seat seam designed to be easy to modify.



ACCESSORIES

Accessories

Also available for Baden-Württemberg blouson, jacket, softshell and fleece:

Adapter for rank badge

Flap with hook&loop fastening.

Name badges

Black-stitched border • first and last name individually embroidered in red, silver or gold.



MATERIAL: 59 % ARAMIDE, 40 % VISCOSE FR, 1 % CARBON

FABRIC WEIGHT: approx. 260 g/m²

FIELDS OF APPLICATION: Day shift wear for firemen Baden-Württemberg



Flammgard® BADEN-WÜRTTEMBERG

For Baden-Württemberg, there are an additional softshell jacket with black or red lining as well as a fleece jacket for colder days.

Both jackets are also suitable for use as day-shift wear.

| ITEM | COLOUR | COLOUR NO. | COLOUR NO. | REGULAR SIZES |
|------|--------|------------|------------|----------------------|
| 4 | | 2046 | black/red | 46-58, 23-29, 94-110 |
| 5 | | 2040 | navy/red | S-2XL |

SOFTSHELLJACKET

Dayshift firefighters
Part number: **11001 10161 010 2046**
Garment weight: approx. 1,070 g

Two-coloured • decorative piping on front and back • shoulder tunnel for rank badge • collar with flap and hook&loop fastener • front zipper with covered snap fasteners • 2 breast pockets with flaps and snap fasteners • right-hand pocket with pen compartment and flap with hook&loop tape for name badge – left-hand flap with “Staufer Löwe + Feuerwehr” embroidery • loop with metal half ring in the pocket • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 1 closable inside mobile phone pocket • adjustable cuff width thanks to covered snap fastener • back with “FEUERWEHR” patch.



Jacket also available with red mesh lining (Part number: **11001 10161 012 2046**)



FLEECE JACKET

Dayshift firefighters
Part number: **07001 10152 000 2040**
Garment weight: approx. 700 g

Two-coloured • decorative red piping on front and back • shoulder tunnel for rank badge • stand-up collar • fastener strip with zip and covered snap fasteners on both sides • 2 breast pockets with flaps and zips • right-hand flap with hook&loop tape for name badge • left-hand flap with “Staufer Löwe + Feuerwehr” embroidery • 2 side pockets as welt pockets • sleeves with inner knit cuffs and underarm reinforcement • hem with ribbed structure.



MATERIAL: 4 | 94% POLYESTER, 6% ELASTANE · 5 | 100% POLYESTER ·
FABRIC WEIGHT: 4 | approx. 300 g/m² · 5 | approx. 260 g/m² ·
FIELDS OF APPLICATION: Day shift wear for firemen Baden-Württemberg



Flammgard® SAARLAND

All Flammgard® Saarland products are made of the proven aramid viscose fabric weighing only 260 g/m² and are equipped with practical hook&loop fasteners. The collection is characterised by product diversity: In addition to women’s models, a fleece and a softshell jacket are also available.



| ITEM | COLOUR | COLOUR NO. | COLOUR NO. | REGULAR SIZES |
|--------|--------|------------|----------------|--|
| 1 , 2 | | 2240 | black blue/red | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |

BLOUSON

Dayshift firefighters
Part number: **01056 10150 026 2240**
Garment weight: approx. 1,040 g

LADIES BLOUSON

Dayshift firefighters
Part number: **01056 10163 022 2240**
Garment weight: approx. 1,000 g

Two-coloured • piping on front and back • shoulder tunnel for rank badge • loop for aerial microphone • collar with flap and hook&loop fastening • front zipper with snap fasteners covered on both sides • 2 breast pockets with flaps with hook&loop fastening • right-hand pocket with pen compartment and hook&loop tape for name badge on the flap • left-hand flap with opening for radio antenna and underlined “Feuerwehr” embroidery • loop with metal half ring in the pocket • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 5 inside pockets in various designs • cuffs with gusset, adjustable via covered snap fastener • hem elasticated on the side • back with “Feuerwehr” patch • flame-retardant lining.



JACKET

Dayshift firefighters
Part number: **01056 10198 002 2240**
Garment weight: approx. 1,060 g

LADIES JACKET

Dayshift firefighters
Part number: **01056 10169 006 2240**
Garment weight: approx. 1,020 g

Two-coloured • piping on front and back • shoulder tunnel for rank badge • loop for aerial microphone • collar with flap and hook&loop fastening • front zipper with snap fasteners covered on both sides • 2 breast pockets with flaps with hook&loop fastening • right-hand pocket with pen compartment and hook&loop tape for name badge on the flap • left-hand flap with opening for radio antenna and underlined “Feuerwehr” embroidery, loop with metal half ring in the pocket • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 5 inside pockets in various designs • cuffs with gusset, adjustable via covered snap fastener • hem with drawstring • back with “Feuerwehr” patch • flame-retardant lining.



MATERIAL: 59% ARAMIDE, 40% VISCOSE FR, 1% CARBON ·
FABRIC WEIGHT: approx. 260 g/m² ·
FIELDS OF APPLICATION: Day shift wear for firemen Saarland



The Flammgard® Saarland collection is characterised by a high product diversity and also includes, among other things, men's trousers according to VWV as well as women's models, fleece and softshell jackets. The trousers are made with high-quality fabrics and yarns from NOMEX® and Lenzing.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | REGULAR SIZES |
|------|--------|------------|----------------|---|--|
| 3 | | 2240 | black blue/red | EN ISO 11612 A1-A2/B1/C1 | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |
| 4 | | 2046 | black/red | EN ISO 13688 HuPF 2* *only signed men's trousers | 46-58, 23-29, 94-110 |
| 5 | | 2040 | navy/red | - | S-2XL |

TROUSERS

Dayshift firefighters
Part number: **01056 20103 016 2240**
Garment weight: approx. 690g

LADIES TROUSERS

Dayshift firefighters
Part number: **01056 20137 001 2240**
Garment weight: approx. 670g

TROUSERS ACC. TO VWV (HuPF PART 2)

Dayshift firefighters
Part number: **01056 20110 002 2240**
Garment weight: approx. 710g

Two-coloured • waistband with hook fastening and elasticated on both sides • 2 pleats at the front of the trousers • covered zip • 2 side pockets • 2 recessed back pockets with flap and hook&loop fastening • 2 bellow pockets on the side seam with flaps and hook&loop fastening, flaps with red trim and underlined "FEUERWEHR" embroidery • right-hand flap with opening for pen • lined crotch • seat seam designed to be easy to modify.



Also available with two side welt pockets with covered zips acc. to VWV



ACCESSORIES

Accessories

Also available for Saarland blouson, jacket, softshell and fleece:

Adapter for rank badge

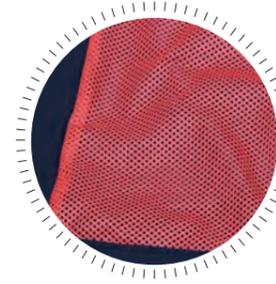
Flap with hook&loop fastening.

Name badges

Black-stitched border • first and last name individually embroidered in red, silver or gold.



Jacket also available with red mesh lining (Part number: **11001 10161 013 2046**)



SOFTSHELL JACKET

Dayshift firefighters
Part number: **11001 10161 011 2046**
Garment weight: approx. 1,070g

Two-coloured • decorative red piping on front and back • shoulder tunnel for rank badge • collar with flap and hook&loop fastening • front zipper with covered snap fastener • 2 breast pockets with flap and snap fastener • right-hand pocket with pen compartment and hook&loop tape for name badge on the flap • left-hand flap with "FEUERWEHR" underlined embroidery • loop with metal half ring in the pocket • 2 side pockets as welt pockets with zips • 1 Napoleon pocket • 1 closable inside mobile phone pocket • sleeves with adjustable wristbands via covered snap fastener • back with "FEUERWEHR" patch.

Decorative piping on front and back

Hook&loop tape for name badge



FLEECE JACKET

Dayshift firefighters
Part number: **07001 10152 001 2040**
Garment weight: approx. 700g

Two-coloured • decorative red piping on front and back • shoulder tunnel for rank badge • stand-up collar with zip fastening • front zipper with snap fastener covered on both sides • 2 breast pockets with flaps and hook&loop fastening • right-hand flap with hook&loop tape for name badge • left-hand flap with underlined "FEUERWEHR" embroidery • 2 side pockets as welt pockets • sleeves with inner knit cuffs and underarm reinforcement • hem with ribbed structure.

Hem with ribbed structure



MATERIAL: 3 | 59% ARAMIDE, 40% VISCOSE FR, 1% CARBON · 4 | 94% POLYESTER, 6% ELASTANE · 5 | 100% POLYESTER ·
FABRIC WEIGHT: 3 | approx. 260 g/m² · 4 | approx. 300 g/m² · 5 | approx. 260 g/m² ·
FIELDS OF APPLICATION: Day shift wear for firemen Saarland



Day shift duty made easy: The material of our Flammgard® Bayern collection is particularly light and soft and can be worn very comfortably even over longer periods of use. Movement-friendly parts such as elastic knit inserts and shaped knees provide physical relief. Red details add visual accents and make the Bayern collection a real eye-catcher.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|--------|------------|---------------|--|
| 1 | | 2120 | dark navy/red | Men: 46-58, 23-29, 94-110 Ladies: 36-46, 18-23, 72-92 |
| 2 | | 458 | dark navy | |



Darts at chest height

Sleeves with cuffs and elastic knitted insert

Adapters available for any kind of shoulder tunnel

Hook & loop fastener for name badge



BLOUSON

Dayshift firefighters
Part number: **04104 10218 000 2120**
Garment weight: approx. 790 g

LADIES BLOUSON

Dayshift firefighters
Part number: **04104 10217 000 2120**
Garment weight: approx. 770 g

Two-coloured • shoulder tunnel for rank badge • loop fastener for name badges on the right front • undercollar and inner collar band in contrasting colour red • front closure with zipper • 2 breast pockets with flaps and hook&loop fastening • left pocket with pen compartment • ladies model with darts at chest height • 2 side pockets as welt pockets with zip • 2 inner pockets with zip and red pipe • mobile phone pocket inside on the right • cuffs with elastic knit insert • hem cuff with elastic knit • completely lined • label inside on the back for barcode or name patches.



Saddle made of elastic fabric

2|

TROUSERS

Dayshift firefighters
Part number: **04104 20155 000 458**
Garment weight: approx. 620 g

LADIES TROUSERS

Dayshift firefighters
Part number: **04104 20154 000 458**
Garment weight: approx. 610 g

Two-colored • waistband with patent button closure and elastic band on both sides • covered zip-fly • saddle made of elastic fabric • 2 wing pockets • 2 back pockets • 2 integrated leg pockets, each with a piped pocket and zipper • ergonomic knee section.



Elastic waistband for more freedom of movement

Ladies' zip

Ergonomic knee section



2 integrated leg pockets, each with a piped pocket and zipper

MATERIAL: 63 % POLYESTER, 33 % COTTON, 4 % ELASTANE

FABRIC WEIGHT: approx. 245 g/m²

FIELDS OF APPLICATION: Day shift wear for firemen Bayern



The all-rounder for technical assistance: The light and robust fabric protects against heat and flames and fulfils the high-visibility vest exemption according to DGUV. The parka additionally is virus- and bacteria-proof, protects against rain and keeps you warm on colder days with the zip-in fleece jacket. All pockets have practical hook&loop fastenings and the elbows and knees have additional reinforcements.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|------|--------|------------|--------------------------------------|--------------------------|--|----------------------|
| 1 | | 3271 | dark blue/ fluorescent yellow/ black | EN ISO 11612 A1+A2/B1/C1 | EN 343 4 4 X (excl. Fleecejacket) EN 343 4 3 X (incl. Fleecejacket) | 46-58, 23-29, 94-110 |
| 2 | | 2395 | black blue/black | - | - | - |
| 3 | | 2047 | black/navy | - | - | S-2XL |



Virus and bacteria-proof due to laminate according to ISO 16603 and ISO 16604

Torch holder with deflection flap for stable hold

Ergonomically formed sleeves with elbow reinforcement



PARKA

Technical assistance FR
Part number: **01280 19005 001 3271**
Garment weight: approx. 1,300 g

Single-coloured • segmented reflective stripes • stand-up collar with flap and hook&loop fastening • covered front zipper with covered hook&loop fastening • hook&loop tape on the front and on the back to attach the additional collar • 2 added breast pockets for radio devices with covered hook&loop fastening • opening for the antenna on the right with two radio attachment hooks • 1 inside pocket on the right • 2 sidepockets with flap and covered hook&loop fastening • 2 movement pleats on the back • ergonomically formed sleeves with elbow reinforcement • sleeve hem with strap for adjustment with hook&loop fastening • sleeve hem with cuff and thumb loop • jacket and trouser in combination fulfill DGUV 205-20 Information • virus and bacteria-proof due to laminate according to ISO 16603 and ISO 16604 • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • zippers to zip in a fleece jacket.

TROUSERS

Technical assistance FR
Part number: **01056 20147 000 2395**
Garment weight: approx. 810 g

Single-coloured • segmented reflective stripes • detachable braces • waistband with hook fastening • covered zip fly • elasticated waist in the side • 2 slant pockets, 1 hip pockets, 2 below pockets on side seam – each with flap and hook&loop fastening • 2 inside knee pockets • reinforcement material on knee and hem • hem with elastic • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.



Elasticated waist in the side

Reinforcement material on knee and hem

FLEECE JACKET

Technical assistance FR
Part number: **07015 19006 000 2047**
Garment weight: approx. 700 g

Two-coloured • high stand-up collar • inner collar made of Nomex® • zip for closing as well as for zipping into our HB-Technical Rescue Parka • loops at the sleeve hem for fixing in the jacket • sleeve cuffs with elastic band • material certified according to EN ISO 11612 A1/B1/C2/F1.



MATERIAL: 1 | 98% ARAMIDE, 2% CARBON · 2 | 59% ARAMIDE, 40% VISCOSE FR, 1% CARBON · 3 | 48% MODACRYLIC, 32% COTTON, 18% POLYESTER, 2% CARBON ·
FABRIC WEIGHT: 1 | approx. 195 g/m² · 2 | approx. 260 g/m² · 3 | approx. 260 g/m² ·
FIELDS OF APPLICATION: Technical assistance

HB-TECHNICAL RESCUE LITE

A real classic in the field of technical assistance: our suit made of hard-wearing and flame-retardant fabric with DGUV-compliant reflective striping in combination of jacket and trousers. Back labels can be attached to wide fleece strips on the upper back.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | REGULAR SIZES |
|------|--------|------------|-------------|---|----------------------|
| 1 | | 48 | dark blue | | 46-58, 23-29, 94-110 |
| 2 | | | | EN ISO 11612 A1+A2/B1/C1 EN ISO 13688 HuPF 2 | |



JACKET

Dayshift firefighters
Part number: **01041 10162 001 48**
Garment weight: approx. 1,100g

Single-coloured • with reflective stripes • yoke partition on front and back • collar with flap and hook&loop fastening • front zipper with snap fastener covered on both sides • 2 breast pockets with flaps and hook&loop fastening • right-hand pocket flap with hook&loop tape for name badge • left-hand flap with additional pocket opening under the flap • loop with metal half ring in the pocket • 2 side patch pockets with flaps • 2 inside pockets in various designs • cuffs with gusset, adjustable via covered hook&loop fastening • hem with drawstring • back with hook&loop tape for badge • sleeves with reinforced elbows • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353 • flame-retardant lining.



TROUSERS

Dayshift firefighters
Part number: **01041 20086 006 48**
Garment weight: approx. 740g

Single-coloured • with reflective stripes • waistband with hook&loop fastening • 2 pleats on the front of the trousers, 4 darts on the back • with front and crotch lining • zip covered on one side • 2 side pockets • 1 back pocket with flap and hook&loop fastening • 2 bellow pockets on the side seam with flaps and hook&loop fastening • adjustable elasticated hem • seat seam designed to be easy to modify • no Hi-Vis protective clothing acc. to EN ISO 20471 and EN 17353.

MATERIAL: 49 % ARAMIDE, 50 % VISCOSE FR, 1 % CARBON
FABRIC WEIGHT: approx. 300 g/m²
FIELDS OF APPLICATION: Certified day shift wear DGUV for Technical Assistance

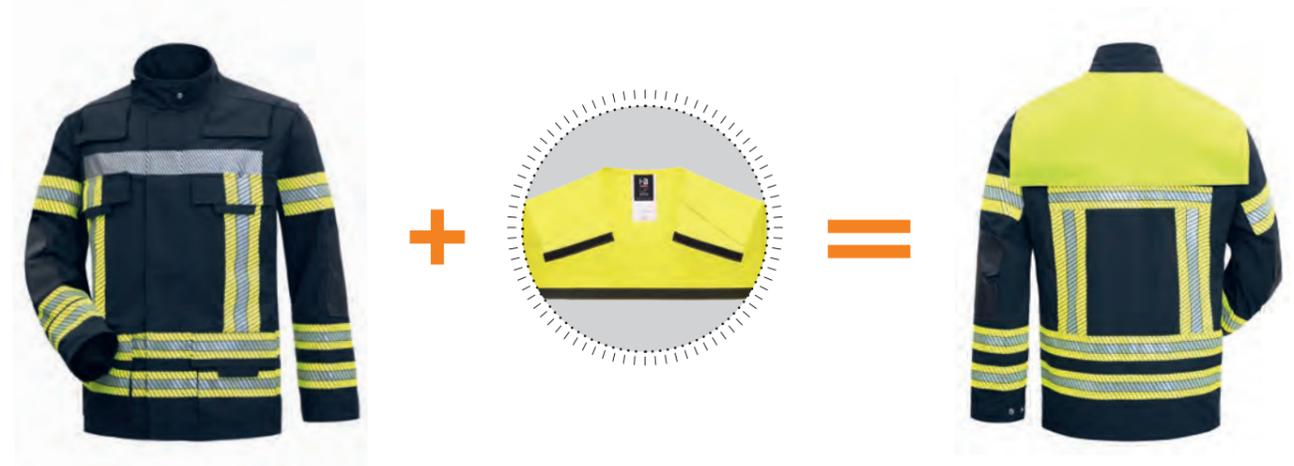
HB-WILDFIRE® 2.0

HB-WILDFIRE® 2.0 was developed together with a German fire brigade especially for the increasing demands on the emergency services. A safe and comfortable outfit that protects against flames and relieves physical strain, e.g. thanks to inner lining with hydrophilic equipment as well as light and durable outer material that withstands many washes.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | | | REGULAR SIZES |
|------|--------|------------|---------------------------|------------------------------------|----------|----------------------|
| 1 | | 3390 | red/dark blue/black | EN ISO 11612 A1+A2/B1/ C1/F1 | EN 15384 | 46-58, 23-29, 94-110 |
| | | 3393 | dark blue/dark blue/black | | | |
| | | 3394 | gold/gold/black | | | |

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | THREE REGULAR SIZES |
|------|--------|------------|-------------|--|
| 2 | | 10 | white | 44: for jackets sz. 40-48; 86-98; 20-24 54: for jackets sz. 50-58; 102-118; 25-29 64: for jackets sz. 60-70; 122-142; 30-35 |
| | | 17 | yellow | |
| | | 25 | red | |
| | | 41 | royal | |



IDENTIFICATION COLLAR

Wildland firefighting
Part number: **01036 70049 000 + COLOUR NO.**

Optional label collar complementing the jacket in order to indicate the function • available in several colours for different functions • attached via hook&loop tape on the front and on the back of the jacket.



MATERIAL: 49.5 % VISCOSE FR, 49.5 % ARAMID, 1 % CARBON
FABRIC WEIGHT: approx. 230 g/m²
FIELDS OF APPLICATION: Fire fighting in wide areas, Technical Assistance

MATERIAL: 54 % MODACRYLIC, 45 % COTTON, 1 % CARBON
FABRIC WEIGHT: approx. 320 g/m²
FIELDS OF APPLICATION: Fire fighting in wide areas, Technical Assistance

HB-WILDFIRE® 2.0

HB-WILDFIRE® 2.0 was developed together with a German fire brigade especially for the increasing demands on the emergency services. A safe and comfortable outfit that protects against flames and relieves physical strain, e.g. thanks to inner lining with hydrophilic equipment as well as light and durable outer material that withstands many washes.



| ITEM | COLOUR | COLOUR NO. | COLOUR NAME |  |  | REGULAR SIZES |
|------|---|------------|------------------|---|---|----------------------|
| 3 |  | 2197 | red/black | EN ISO 11612 A1+A2/B1/C1 | EN 15384 | 46-58, 23-29, 94-110 |
| |  | 2395 | black blue/black | | | |
| |  | 2414 | gold/black | | | |

| ITEM | COLOUR | COLOUR NO. | COLOUR NAME | REGULAR SIZES |
|------|---|------------|-------------|---------------|
| 4 |  | 25 | red | One size |
| |  | 488 | black blue | |
| |  | 68 | gold | |



TROUSERS

Wildland firefighting
Part number: **01284 20152 000 + COLOUR NO.**
Garment weight: approx. 870 g

Two-coloured • with segmented yellow/silver/yellow reflective stripes • no warning clothing according to EN ISO 20471 and EN 17353 • buttons in the waistband for attaching braces • waist adjustment by elastic band on the sides • covered zip • 2 wing pockets • silicone coated knee reinforcement and hem protection • inner leg reinforcement • 1 hip pocket • 2 bellow pockets on side seam each with flap and hook&loop • 2 outside knee pockets • hem with adjustable snap fastener flap.



Knee reinforcement with silicone-coated trim



With the braces the trousers can be turned into bib and brace trousers in no time at all



BRACES

Wildland firefighting
Part number: **01284 70064 001 + COLOUR NO.**

Single-coloured • adjustable buckles to adjust length • elasticated back • buttonholes to attach to trousers.



MATERIAL: 49.5% MODACRYLIC, 49.5% COTTON, 1% CARBON

FABRIC WEIGHT: approx. 230 g/m²

FIELDS OF APPLICATION: Fire fighting in wide areas, Technical Assistance

MATERIAL: 49.5% MODACRYLIC, 49.5% COTTON, 1% CARBON

FABRIC WEIGHT: approx. 230 g/m²

FIELDS OF APPLICATION: Fire fighting in wide areas, Technical Assistance



ESD ELECTROSTATIC DISCHARGE
NO MATTER WHAT ELECTRIFIES YOU:
YOUR OUTFIT REMAINS UNAFFECTED

Not everyone has
the ability to let environmental voltages roll off them.
Our high-quality ESD clothing does: it offers reliable conductivity and prevents
sensitive product parts in electronics production from being damaged
by electrostatic discharge. Very reassuring: each of our products
has to pass extensive tests
to become part of our unrivalled ESD range.

Bestseller for environmental protection: our successful CONDUCTEX® coats without side seams are now also available in recycled and organically grown material. The tried and tested fabric blend now also scores with sustainability – and remains as light, comfortable and high-functional as usual. All closing seams are double-bound. Fabric with “breathability” quality label from the Hohenstein testing institute.



Attached side pockets with slanted opening



Sleeve hem adjustable via snap fasteners

Front with one-sided covered snap fasteners

LADIES COAT, LONG SLEEVE
ESD
Part number: **08100 48019 000 10**
Garment weight: approx. 320 g
Regular sizes: XS–L

COAT, LONG SLEEVE
ESD
Part number: **08100 48011 000 10**
Garment weight: approx. 330 g
Regular sizes: S–2XL

Single-coloured • cut without side seams • lapel collar • front with one-sided covered snap fasteners • 1 attached front pocket on the left • 2 attached side pockets with slanted openings • 2 front tucks on ladies' coat • sleeve hem adjustable via snap fasteners • embroidered EPA emblem on right upper arm.

white
Standards:



EN 61340-5-1

GRS – Global Recycled Standard



The polyester content of these coats is developed from recycled PET bottles which have been collected in Europe and is GRS certified. The production of the rPET yarn requires 60 % less energy and avoids 2.4 kg of waste per kg of yarn.

GRS is an international, voluntary and full product standard and defines requirements for the certification of recycled materials in terms of chain of custody, social and environmental practices and chemical restrictions.

Organic Blended Content Standard



The cotton of these products is proportionally used from organically grown cotton according to OCS Blended. Organic Blended Content Standard enables independent assessment, verification and traceability of the exact organic fibre content in the product.



LADIES COAT, SHORT SLEEVE
ESD
Part number: **08100 48019 005 10**
Garment weight: approx. 275 g
Regular sizes: XS–L

COAT, SHORT SLEEVE
ESD
Part number: **08100 48011 011 10**
Garment weight: approx. 285 g
Regular sizes: S–2XL

Single-coloured • cut without side seams • lapel collar • front with one-sided covered snap fasteners • 1 attached front pocket on the left • 2 attached side pockets with slanted openings • 2 front tucks on ladies' coat • hemmed short-sleeve • embroidered EPA emblem on right upper arm.

white
Standards:



EN 61340-5-1



Attached front pocket

Attached side pockets with slanted openings

MATERIAL: 75 % POLYESTER, 23 % COTTON, 2 % CARBON; rec. PES/ Bio CO
FABRIC WEIGHT: approx. 130 g/m²
SURFACE RESISTIVITY: 10⁴ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)
FIELDS OF APPLICATION: Electronics manufacturing



CONDUCTEX® is one of the lightest and most comfortable materials for protection of products against electrostatic discharge. Furthermore, the blended fabric offers a good functionality and high wearing comfort. The closure seams are additionally edged. Fabric with the quality label "breathability" of the Hohenstein certification institute.



LADIES COAT, SHORT SLEEVE

ESD
Part number: **08005 48027 000 10**
Garment weight: approx. 335g

Single-coloured • female cut • lapel collar • front with one-sided covered snap fasteners • 2 side pockets with slanted openings • embroidered EPA emblem on right upper arm.

Regular sizes: XS-L
 white
Standards:



LADIES COAT, LONG SLEEVE

ESD
Part number: **08005 48028 000 10**
Garment weight: approx. 360g

Single-coloured • female cut • lapel collar • front with one-sided covered snap fasteners • 2 side pockets with slanted openings • sleeve hem adjustable via snap fasteners • embroidered EPA emblem on right upper arm.

Regular sizes: XS-L
 white
Standards:



COAT, WITH KNITTED CUFFS

ESD
Part number: **08005 48011 040 10**
Garment weight: approx. 350g

Single-coloured • cut without side seams • lapel collar • fastener strip with covered snap fasteners • 1 breast pocket attached on left • 2 side pockets with slanted openings • sleeves with stretchable knitted cuffs • embroidered EPA emblem on right upper arm.

Regular sizes: S-2XL
 white
Standards:



LADIES COAT, SHORT SLEEVE

ESD
Part number: **08005 48019 005 10**
Garment weight: approx. 275g
Regular sizes: XS-L

COAT, SHORT SLEEVE

ESD
Part number: **08005 48011 011 10**
Garment weight: approx. 285g
Regular sizes: S-2XL

Single-coloured • cut without side seams • lapel collar • front with one-sided covered snap fasteners • 1 attached front pocket on the left • 2 attached side pockets with slanted openings • 2 front tucks on ladies' coat • hemmed short-sleeve • embroidered EPA emblem on right upper arm.

white
Standards:



LADIES COAT, LONG SLEEVE

ESD
Part number: **08005 48019 000 + COLOUR NO.**
Garment weight: approx. 320g
Regular sizes: XS-L

COAT, LONG SLEEVE

ESD
Part number: **08005 48011 000 + COLOUR NO.**
Garment weight: approx. 330g
Regular sizes: S-2XL

Single-coloured • cut without side seams • lapel collar • front with one-sided covered snap fasteners • 1 attached front pocket on the left • 2 attached side pockets with slanted openings • 2 front tucks on ladies' coat • sleeve hem adjustable via snap fasteners • embroidered EPA emblem on right upper arm.

- | | | | |
|-----------------------------|-------|------------------------------|-------------|
| <input type="checkbox"/> 10 | white | <input type="checkbox"/> 50 | silver grey |
| <input type="checkbox"/> 41 | royal | <input type="checkbox"/> 471 | pastel blue |
| <input type="checkbox"/> 45 | navy | <input type="checkbox"/> 58 | anthracite |
| <input type="checkbox"/> 46 | black | | |

Standards:



MATERIAL: 75 % POLYESTER, 23 % COTTON, 2 % CARBON
FABRIC WEIGHT: approx. 130 g/m²
SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)
FIELDS OF APPLICATION: Electronics manufacturing



CONDUCTEX® is one of the lightest and most comfortable materials for protection of products against electrostatic discharge. Furthermore, the blended fabric offers a good functionality and high wearing comfort. The closure seams are additionally edged. Fabric with the quality label "breathability" of the Hohenstein certification institute.



BLOUSON
ESD
Part number: **08005 18006 000 + COLOUR NO.**
Garment weight: approx. 380g

Single-coloured • stand-up collar with slanted corner and covered snap fastener • front with covered snap fastening • 1 straight cut pocket on the left front • 2 side pockets with zipper • ergonomic sleeves • sleeve hem adjustable via snap fastener • leasing label on the inside in the back • embroidered EPA emblem.

Regular sizes: 46–58, 94–110
■ **41** royal
■ **45** navy



EN 61340-5-1



Adjustable waistband



TROUSERS
ESD
Part number: **08005 28007 000 + COLOUR NO.**
Garment weight: approx. 290g

Single-coloured • attached waistband with covered button fastening • slit detail with plastic fastening • adjustable elastic band in the back with button • 2 wing pockets • 2 back pockets without flap and fastening • 1 thigh pocket on the right with flap and covered snap fastening • embroidered EPA emblem.

Regular sizes: 46–58, 94–110
■ **41** royal
■ **45** navy



EN 61340-5-1

MATERIAL: 75 % POLYESTER, 23 % COTTON, 2 % CARBON ·
FABRIC WEIGHT: approx. 130 g/m² ·
SURFACE RESISTIVITY: 10⁶ bis 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity) ·
FIELDS OF APPLICATION: Warehouse works within the electronic manufacture



High Functionality – High Comfort: T-Shirts and Polo shirts made of CONDUCTEX® Cotton Knit offer high wearing comfort as they are knitted, not woven. This design allows for very high mobility. Furthermore, the materials are characterised by very good functionality thanks to its carbon file. Available in numerous colours and womens' shirts with female cut.



1, 2 and 3 | EPA emblem on right upper arm

T-SHIRT, SHORT SLEEVE

ESD
Part number:
08010 86002 000 + COLOUR NO.
Garment weight: approx. 180g

Single-coloured • comfortable neck width • stylish shirt length, suitable for wearing on top • embroidered EPA emblem on right upper arm.

- Regular sizes: S–2XL
- 41 royal
 - 45 navy
 - 46 black
 - 50 silver grey
- Standards:



EN 61340-5-1

POLO SHIRT, SHORT-SLEEVE

ESD
Part number:
08011 86004 002 + COLOUR NO.
Garment weight: approx. 210g

Single-coloured • conductive polo collar • polo placket with buttoning • front pocket on the left with button • double-stitched sleeve opening • stylish shirt length, suitable for wearing on top • embroidered EPA emblem on right upper arm.

- Regular sizes: S–2XL
- 10 white
 - 50 silver grey
 - 45 navy
 - 46 black
- More colours available on request.



EN 61340-5-1

POLO SHIRT, SHORT-SLEEVE

ESD
Part number:
08011 86004 000 + COLOUR NO.
Garment weight: approx. 220g

Two-coloured • conductive polo collar • polo placket with buttoning • front pocket on the left with button • double-stitched sleeve opening • stylish shirt length, suitable for wearing on top • embroidered EPA emblem on right upper arm.

- Regular sizes: S–2XL
- 2031 royal/silver grey
 - 2042 navy/silver grey
 - 2186 black/silver grey
 - 2061 silver grey/red
 - 2064 silver grey/navy
- More colours available on request.

Standards:



EN 61340-5-1



1, 2 and 3 | EPA emblem on right upper arm



3 |

MATERIAL: 95 % COTTON, 5 % CARBON
FABRIC WEIGHT: approx. 160 g/m²
SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)
FIELDS OF APPLICATION: Electronics manufacturing



▶ CONDUCTEX® Cotton Knit

High Functionality – High Comfort: Polo shirts made of CONDUCTEX® Cotton Knit offer high wearing comfort as they are knitted, not woven. This design allows for very high mobility. Furthermore, the materials are characterised by very good functionality thanks to its carbon file. Available in numerous colours and womens' shirts with female cut.



1 | Now available in black



LADIES POLO SHIRT, SHORT-SLEEVE

ESD
Part number: **08011 86013 001 + COLOUR NO.**
Garment weight: approx. 175 g

Single-coloured • female cut • conductive polo collar • polo placket with buttoning • front pocket on the left with button • double-stitched sleeve opening • stylish shirt length, suitable for wearing on top • embroidered EPA emblem on right upper arm.

Regular sizes: XS–L

- 10 white
- 50 silver grey
- 45 navy
- 46 black

More colours available on request.

Standards:



EN 61340-5-1



2 | Women's shirts with fitted waist

LADIES POLO SHIRT, SHORT-SLEEVE

ESD
Part number: **08011 86013 000 + COLOUR NO.**
Garment weight: approx. 180 g

Two-coloured • female cut • conductive polo collar • polo placket with buttoning • front pocket on the left with button • double-stitched sleeve opening • stylish shirt length, suitable for wearing on top • embroidered EPA emblem on right upper arm.

Regular sizes: XS–L

- 2031 royal/silver grey
- 2186 black/silver grey

More colours available on request.

Standards:



EN 61340-5-1



POLO SHIRT, LONG-SLEEVE

ESD
Part number: **08011 86008 000 + COLOUR NO.**
Garment weight: approx. 255 g

Two-coloured • conductive polo collar in contrast colour • polo placket with buttoning • front pocket on the left with button • sleeve opening in contrast colour • stylish shirt length, suitable for wearing on top • embroidered EPA emblem on right upper arm.

Regular sizes: S–2XL

- 2031 royal/silver grey
- 2042 navy/silver grey
- 2064 silver grey/navy

Standards:



EN 61340-5-1

2 and 3 | Collar and sleeve opening manufactured in contrast colour



MATERIAL: 95 % COTTON, 5 % CARBON
FABRIC WEIGHT: approx. 160 g/m²
SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)
FIELDS OF APPLICATION: Electronics manufacturing

CONDUCTEX

▶ CONDUCTEX® Cotton Knit

Sweatshirt and sweat jacket offer excellent wearing comfort, high-end manufacture and very good ESD functionality. The material is soft and smooth. As it is knitted, not woven, it fits very well and leaves you much freedom of movement.

SWEATSHIRT

ESD
Part number: **08014 86019 000 + COLOUR NO.**
Garment weight: approx. 440g

Single-coloured • comfortable round neck with conductive collar • comfortable sleeve hems • embroidered EPA emblem on right upper arm.

Regular sizes: Unisex S-2XL

- 50 silver grey
- 10 white
- 46 black

Standards:



EN 61340-5-1



SWEAT JACKET

ESD
Part number: **08014 86012 001 + COLOUR NO.**
Garment weight: approx. 520g

- 50 silver grey
- 46 black

Part number: **08014 86012 000 2064**

Garment weight: approx. 520g

■ silver grey/navy

More colours available on request.

Collar, sleeve hems and waistband in contrast colour.

Single-coloured or two-coloured • very smooth and comfortable conductive sweat collar • front with zip fastener • 2 laterally attached pockets • stylish length • comfortable sleeve hems • embroidered EPA emblem on right upper arm.

Regular sizes: Unisex S-2XL

Standards:



EN 61340-5-1



MATERIAL: 95 % COTTON, 5 % CARBON

FABRIC WEIGHT: approx. 300 g/m²

SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)

FIELDS OF APPLICATION: Electronics manufacturing

CONDUCTEX

▶ CONDUCTEX® Pro Knit

This cotton blend fabric is exceptionally soft with a maximum of wearing comfort. The knit (not woven) material provides optimum fit. It offers a high level of functionality and excellent conductivity levels. Thanks to the polyester amount it is very colorfast.

ESD
ELECTRO-
STATIC
DISCHARGE



POLO SHIRT, SHORT-SLEEVE

ESD
Part number: **08012 86004 002 + COLOUR NO.**
Garment weight: approx. 235g

Single-coloured • conductive polo collar • polo placket with buttoning • front pocket on the left with buttoning • stylish shirt length, suitable for wearing on top • EPA emblem on right upper arm.

Regular sizes: S-2XL

- 45 navy
- 46 black
- 50 silver grey

More colours available on request.

Standards:



EN 61340-5-1



POLO SHIRT, SHORT-SLEEVE

ESD
Part number: **08012 86004 000 + COLOUR NO.**
Garment weight: approx. 235g

Two-coloured • conductive polo collar in contrast colour • polo placket with buttoning • front pocket on the left with button • double-stitched sleeve opening in contrast colour • stylish shirt length, suitable for wearing on top • EPA emblem on right upper arm.

Regular sizes: S-2XL

- 2031 royal/silver grey
- 2064 silver grey/navy

More colours available on request.

Standards:



EN 61340-5-1



MATERIAL: 48 % COTTON, 48 % POLYESTER, 4 % CARBON

FABRIC WEIGHT: approx. 170 g/m²

SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)

FIELDS OF APPLICATION: Electronics manufacturing

CONDUCTEX

▶ CONDUCTEX® Pro Knit

This cotton blend fabric is exceptionally soft with a maximum of wearing comfort. The knit (not woven) material provides optimum fit. It offers a high level of functionality and excellent conductivity levels. Thanks to the polyester amount it is very colorfast. Complete your outfit with our new gloves.

▶ Naptex® 4.0

Naptex® 4.0 offers reliable protection for electronic components when high surface resistance is required. The material developed by HB is suitable for industrial washing and certified with the Pro Label, withstands many washes and has a very long service life. With Hohenstein breathability label.



EPA emblem on right upper arm

For best possible protection while manufacturing electronic parts, CONDUCTEX® thread is entwined of two high quality carbon fibres.



SWEAT JACKET

ESD
Part number: **08016 86012 005 + COLOUR NO.**
Garment weight: approx. 550g

Single-coloured • very smooth and comfortable conductive sweat collar • front with zip fastener • 2 laterally attached pockets • stylish length • comfortable sleeve hems • EPA emblem on right upper arm.

Regular sizes: Unisex S-2XL

■ **46** black

■ **45** navy

Standards:



EN 61340-5-1

MATERIAL: 60 % POLYESTER, 33 % COTTON, 7 % CARBON
FABRIC WEIGHT: approx. 305 g/m²
SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)
FIELDS OF APPLICATION: Electronics manufacturing



BLOUSON

ESD
Part number: **08022 18006 001 41**
Garment weight: approx. 425 g

1-coloured • stand-up collar with bevelled collar corner and covered snap fastening • front with covered snap fastening placket • 1 modern spade pocket on left side of chest • 2 side pockets with zip • ergonomically shaped sleeves with dividing seam • sleeves at hem with adjustable covered snap fastening • leasing label at back of collar • EPA badge on the hem.

Regular sizes: 46-58, 94-110

■ royal

Standards:



EN 61340-5-1



Sleeve hem with adjustable snap fastener



TROUSERS

ESD
Part number: **08022 28010 000 41**
Garment weight: approx. 325 g

1-coloured • cut waistband with button closure • slit with zip • perforated elastic with button adjustable in the back • 2 wing pockets • 1 back pocket on the right with flap and covered snap fastener • 1 leg pocket on the right with flap and covered snap fastener, with cell phone pocket inside • embroidered EPA emblem.

Regular sizes: 46-58

■ royal

Standards:



EN 61340-5-1



Stand-up collar with slanted collar corner



Side pockets with zip fastener

Ergonomically shaped arms with divided seams

Adjustable elastic band with button in the back



Leg pocket with mobile phone pocket inside

Embroidered EPA emblem

* Due to the low contact resistance, there is no minimum contact protection against current-carrying elements

MATERIAL: 65 % POLYESTER, 33 % COTTON, 2 % METAL
FABRIC WEIGHT: approx. 165 g/m²
SURFACE RESISTIVITY: 10⁵ to 10⁶ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)
FIELDS OF APPLICATION: Warehouse work within electronics production*

Naptex® 4.0 offers reliable protection for electronic components when high surface resistance is required. The clothing is suitable for industrial washing and certified with the Pro Label. It withstands many washes and has a very long service life. The material has been developed by HB and is especially breathable and certified with the Hohenstein breathability label.



LADIES COAT, LONG-SLEEVE

ESD
Part number: **08022 48005 018 + COLOUR NO.**
Garment weight: approx. 370 g
Regular sizes: XS-L

COAT, LONG-SLEEVE

ESD
Part number: **08022 48000 026 + COLOUR NO.**
Garment weight: approx. 380 g
Regular sizes: S-2XL

Single-coloured • cut without side seams • lapel collar • snap fastener closure covered on one side • 1 modern spade pocket on left chest • 2 attached side pockets with slanted openings • hemmed long sleeves • 2 darts on the women's coat • leasing label on the back of the collar • embroidered EPA emblem on the right upper arm.

10 white
 41 royal

Standards:



EN 61340-5-1



LADIES COAT, SHORT-SLEEVE

ESD
Part number: **08022 48005 019 + COLOUR NO.**
Garment weight: approx. 335 g
Regular sizes: XS-L

COAT, SHORT-SLEEVE

ESD
Part number: **08022 48000 027 + COLOUR NO.**
Garment weight: approx. 340 g
Regular sizes: S-2XL

Single-coloured • cut without side seams • lapel collar • snap fastener closure covered on one side • 1 modern spade pocket on left chest • 2 attached side pockets with slanted openings • hemmed long sleeves • 2 darts on the women's coat • leasing label on the back of the collar • embroidered EPA emblem on the right upper arm.

10 white
 41 royal

Standards:



EN 61340-5-1



LADIES COAT, LONG-SLEEVE

ESD
Part number: **08022 48005 020 10**
Garment weight: approx. 400 g
Regular sizes: XS-L

COAT, LONG-SLEEVE

ESD
Part number: **08022 48000 029 10**
Garment weight: approx. 410 g
Regular sizes: S-2XL

Single-coloured • cut without side seams • lapel collar • snap fastener closure covered on one side • 1 modern spade pocket on the left breast side • 2 attached side pockets with slanted openings • cuffs with slit and hidden snap fasteners for adjustment • 2 darts on the women's coat • leasing label on the back in the collar • embroidered EPA emblem on the right upper arm.

white

Standards:



EN 61340-5-1



COAT, WITH KNITTED CUFFS

ESD
Part number: **08022 48000 028 10**
Garment weight: approx. 400 g

Single-coloured • cut without side seams • lapel collar • snap fastener closure covered on one side • 1 modern spade pocket on left chest • 2 attached side pockets with slanting openings • cuffs with knitted cuffs • leasing label in the back of the collar • embroidered EPA emblem on the right upper arm.

Regular sizes: S-2XL

white

Standards:



EN 61340-5-1



* Due to the low contact resistance, there is no low minimum contact protection against current-carrying elements

MATERIAL: 65 % POLYESTER, 33 % COTTON, 2 % METAL

FABRIC WEIGHT: approx. 165 g/m²

SURFACE RESISTIVITY: 10⁵ to 10⁶ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)

FIELDS OF APPLICATION: Electronics production*

HABETEX® ESD Comfort is the perfect solution for prevention of both electric charging and high particle release. The fabric combines ESD and cleanroom features. So this is multifunctional clothing for working areas needing both ESD and cleanroom protective properties. Fabric with quality label "breathability" from Hohenstein certification institute.



Ventilation on the back



Stand-up collar with slanted collar corner and covered snap fastener

Ergonomic sleeves with stretchy knitted cuffs

COVERALL, WITH KNITTED CUFFS

ESD/Cleanroom
Part number: **08020 38002 001 10**
Garment weight: approx. 385 g

Single-coloured • stand-up collar with slanted collar corner and covered snap fastener • front with covered 2-way zip fastener • ergonomic sleeves with stretchy knitted cuffs • ventilation on the back • leasing label on the inside in the back • embroidered EPA emblem on right upper arm.

Regular sizes: Unisex S-2XL

white

Standards:



EN 61340-5-1



EPA emblem



Comfortable stretchy knitted cuffs

LADIES COAT, WITH KNITTED CUFFS

ESD/Cleanroom
Part number: **08020 48043 000 10**
Garment weight: approx. 290 g

Single-coloured • stand-up collar with slanted collar corner and covered snap fastener • front with covered snap fastening and darts • 1 straight cutted pocket on the front • 2 slant pockets on the sides with slanted corner • ergonomic sleeves with stretchy knitted cuffs • leasing label on the inside in the back • embroidered EPA emblem on right upper arm.

Regular sizes: XS-L

white

Standards:



EN 61340-5-1

Very good cleanroom values and exceptionally high discharge values which are in a low 10⁶ field even after 60 washings.

MATERIAL: 98 % POLYESTER, 2 % CARBON

FABRIC WEIGHT: approx. 125 g/m² • **CHARACTERISTICS:** low weight, breathable

SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)

FIELDS OF APPLICATION: ESD and Cleanroom production, like wafer production

HABETEX® ESD Comfort & ACCESSORIES ESD

HABETEX® ESD Comfort is the perfect solution for prevention of both electric charging and high particle release. The fabric combines ESD and cleanroom features. So this is multifunctional clothing for working areas needing both ESD and cleanroom protective properties. Fabric with quality label "breathability" from Hohenstein certification institute.

ESD
ELECTRO-
STATIC
DISCHARGE



3 | Stand-up collar with slanted corner

COAT, WITH KNITTED CUFFS

ESD/Cleanroom
Part number: **08020 48042 000 10**
Garment weight: approx. 295g

Single-coloured • stand-up collar with slanted collar corner and covered snap fastener • front with covered snap fastening and darts • 1 straight cut pocket on the front • 2 slant pockets on the sides with slanted corner • ergonomic sleeves with stretchy knitted cuffs • leasing label on the inside in the back • embroidered EPA emblem on right upper arm.

Regular sizes: S-2XL

white

Standards:



EN 61340-5-1



4 | Face field with elastic

HEAD COVER

Accessories
Part number: **08020 77004 002 10**
Garment weight: approx. 20g

Single-coloured • round head part • face field with elastic • shoulder part in front closable with zip.

Sizes: 1/56 to 5/64

white

Very good cleanroom values and exceptionally high discharge values which are in a low 10⁶ field even after 60 washings.

MATERIAL: 98 % POLYESTER, 2 % CARBON

FABRIC WEIGHT: approx. 125 g/m² · **CHARACTERISTICS:** low weight, breathable

SURFACE RESISTIVITY: 10⁶ to 10⁷ Ω (used test climate: 23 (±1) °C room temperature, 25 (±5) % air humidity)

FIELDS OF APPLICATION: ESD and Cleanroom production, like wafer production

CLEANROOM & DUST

OUR PURITY LAW DOES NOT APPLY TO YOUR BEER. BUT IT DOES FOR YOUR COVERALL.

Not a grain of dust, not a lint – this is the ideal of a cleanroom.

What is not intended in nature is indispensable in paint shops, for example. In the cleanroom, it is the hour of fabrics that secrete as little as possible and also function as filters for particles emitted by the body.

A lot of experience and skills are needed to manufacture from these our first-class products.



This tried and tested cleanroom fabric offers the perfect combination of particularly high wearing comfort, optimised stability and a very low weight. The manufacture of our fabric HABETEX® climatic Pro is specially adapted to suit the specific requirements of cleanrooms.

COAT

Cleanroom
Part number: **06015 47010 000 + COLOUR NO.**
Garment weight: approx. 290g

Single-coloured • band collar • front edge with covered 2-way PVC zip fastener • 1 attached front pocket on the left • 1 inner front pocket on the right • 2 attached side pockets • visually appealing raglan sleeve with PVC snap fasteners for adjustment.

Regular sizes: 46/48–58/60

- 47 light blue
- 48 dark blue
- 53 grey



Covered 2-way zip fastener

Plastic snap fasteners for adjustment

COVERALL

Cleanroom
Part number: **06015 37008 000 + COLOUR NO.**
Garment weight: approx. 430g
■ 47 light blue
■ 53 grey

Part number: **06015 37007 000 48**
Garment weight: approx. 430g
■ dark blue

Single-coloured • band collar • front with covered 2-way PVC zip fastener • 1 front pocket with aps and PVC snap fastener • 1 hip pocket on the right with flap, no fastener • 1 trowel pocket on the right • waist adjustment via integrated elastic band with drawstring and stoppers • ventilation via cape collar on back • wristband made of bi-elastic material • elastic leg opening.

Regular sizes: 46/48–58/60



Wristband made of bi-elastic material

CLEANROOM & DUST



A high particle retention and very comfortable material for being a polyester fabric characterise HABETEX® Micronplus, as well as good breathability. Also the manufacture of the coveralls has been specially adapted to suit very high cleanroom requirements.

COVERALL

Cleanroom
Part number: **06008 37001 000 + COLOUR NO.**
Garment weight: approx. 640g

Two-coloured • band collar • covered 2-way PVC zip fastener • 1 inner front pocket on the left • 2 attached front pockets, 1 hip pocket on the right and 1 leg pocket on the left as bellows on side seam with flap and covered hook&loop fastener • 2 side seam pockets • 1 ruler pocket on the right • outer pockets reinforced with drawstring and stoppers • ventilation via cape collar on back and mesh inserts in armpit area • wristbands with vent and hook&loop fastener • leg opening adjustable via PVC snap fasteners.

Regular sizes: 46/48–58/60

- 2033 royal/bugatti blue
- 2083 anthracite/silver grey



Front edge with covered 2-way zip fastener

Leg pocket

COVERALL

Cleanroom
Part number: **06008 37012 001 + COLOUR NO.**
Garment weight: approx. 640g

Single-coloured • turn-down collar • covered 2-way PVC zip fastener • 2 attached front pockets and 1 hip pocket, each with flaps and covered hook&loop fastener • 1 inner front pocket on the left • 1 ruler pocket on the right • 2 attached thigh pockets with bellows • 1 leg pocket on the left as bellows on side seam with flap and covered hook&loop fastener • waist adjustment via integrated elastic band with drawstring and stoppers • ventilation via mesh inserts in armpit area • wristbands with vent and hook&loop fastener • leg opening with vent and adjustable via hook&loop fastener.

Regular sizes: 46/48–58/60

- 10 white
- 53 grey



2 attached thigh pockets

Leg pocket on the left as bellows on side seam with flap and covered hook&loop fastener

MATERIAL: 72 % VISCOSE, 28 % POLYESTER · **FABRIC WEIGHT:** approx. 105 g/m² ·

CHARACTERISTICS: particularly high wearing comfort, very low garment weight ·

FIELDS OF APPLICATION: Automotive industry, paint shop

HABETEX®

MATERIAL: 98 % POLYESTER, 2 % CARBON · **FABRIC WEIGHT:** approx. 150 g/m² ·

CHARACTERISTICS: fuzz resistant, suited for cleanroom areas with high requirements ·

HIGH PARTICLE RETENTION: nearly 100 % for particles > 5 µm ·

FIELDS OF APPLICATION: Automotive industry, paint shop

HABETEX®

Despite its very high density, this cleanroom fabric has a low fabric weight. Thus, HABETEX® Micronselect is very comfortable and offers high water vapour permeability. The manufacture of our fabric HABETEX® Micronselect is specially adapted to suit the specific requirements of cleanrooms.



COVERALL WITH HOOD

Cleanroom
Part number: **06006 37024 001 41**
Garment weight: approx. 455 g

Single-coloured • attached hood, adjustable in chin area via hook&loop fastener • field of vision and neck with adjustment via elastic band • covered 2-way PVC zip fastener • 2 attached front pockets with flaps and covered hook&loop fastener • 1 hip pocket on the right with hook&loop fastener • waist adjustment with integrated elastic lateral waistband • ventilation via cape collar on back • wristband with let-in piece and hook&loop fastener • leg opening with vent and covered hook&loop fastener.

Regular sizes: 46/48–58/60
■ royal

COVERALL WITH HEAD COVER

Cleanroom
Part number: **06006 37032 000 + COLOUR NO.**
Garment weight: approx. 480 g

Single-coloured • integrated cap, adjustable chin area and head width via PVC snap fasteners • field of vision adjustable via elastic band • closure band with covered 2-way PVC zip fastener • 2 inner front pockets with PVC zip fastener • back ventilation via cape collar • raglan sleeves with thumb loop • leg hem with overshoe cap.

Regular sizes: 46/48–58/60
■ 58 anthracite
□ 10 white
■ 41 royal



Leg hem with overshoe cap

COAT

Cleanroom
Part number: **06006 47010 000 10**
Garment weight: approx. 335 g

Single-coloured • standing board • closure band with covered 2-way PVC zip fastener • 1 front pocket on the left • 1 inner front pocket on the right • 2 side pockets • raglan sleeves with PVC snap fasteners for adjustment.

Regular sizes: 46/48–58/60
□ white



Raglan sleeves

MATERIAL: 98 % POLYESTER, 2 % CARBON · **FABRIC WEIGHT:** approx. 115 g/m² ·

CHARACTERISTICS: very low fabric weight ·

FIELDS OF APPLICATION: Automotive industry, paint shop



To complete your cleanroom outfit, we offer functional head protection and gloves. Both are central elements when working in areas that need to be free of dust and fluff.



HEAD COVER, ELASTIC BAND

Accessories
Part number: **06015 77000 000 47**
Garment weight: approx. 40g

Single-coloured • round upper head part • field of vision with elastic band all round • shoulder part lockable via hook&loop fastener at front.

Material: 72 % Viscose, 28 % Polyester
Grammage: approx. 105g/m²
Sizes: 1/56-5/64
 light blue



VISOR CAP

Accessories
Part number: **06008 77002 000 53**
Garment weight: approx. 35g

Single-coloured • visor made of reinforced PVC material • 2 lateral separation seams • elastic band centrally on the back • hem reinforced by PES rep ribbon.

Material: 98 % Polyester, 2 % Carbon
Grammage: approx. 150g/m²
Sizes: 1/54-56 to 3/60-63
 grey



VISOR CAP

Accessories
Part number: **06015 77002 000 53**
Garment weight: approx. 30g

Single-coloured • visor made of reinforced PVC material • 2 lateral separation seams • elastic band centrally on the back • hem reinforced by PES rep ribbon.

Material: 72 % Viscose, 28 % Polyester
Grammage: approx. 105g/m²
Sizes: 1/54-56 to 3/60-63
 grey



GLOVES

Accessories
Part number: **08009 76004 000 10**
Garment weight: approx. 20g

Uncoated, with knitted cuffs • Packaging unit: 10 pairs.

Material: Nylon for gloves 100 % Polyamide
Sizes: S-XL
 white



GLOVES

Accessories
Part number: **08009 76007 000 10**
Garment weight: approx. 25g

Jersey gloves • Packaging unit: 12 pairs/bag.

Material: 100% Cotton
Sizes: 8-11
 white



OVERVIEW PRODUCT LINES

HB
PROTECTIVE
WEAR



| Product Line | Fabric Composition Upper material | Fabric weight (approx. ... g/m²) | Retro Reflective | Attachment of emblems & patches | | ISO 15797 | IEC 61482-2 | IEC 61482-2 | EN ISO 11611 | EN ISO 11612 | EN 1149-5 | EN 13034 | EN ISO 20471 | EN 17353 | EN 343 | EN 13758-2 | EN 14058 | EN 342 | EN 61340-5-1 | EN 15384 | MULTI-RISK | 21 TO WEAR® |
|------------------------------------|--|--|------------------|---------------------------------|--------|-----------|-------------|-------------|--------------|--------------|-----------|-------------|--------------|-----------------------|---------|------------|----------|--------|--------------|----------|------------|-------------|
| | | | | Patch | Stitch | | | | | | | | | | | | | | | | | |
| ARC & ENERGY | HB-SecureAllround® | 75% CO, 24% PES, 1% Carbon, FC-Equipment | 350 | ✓ | 1) | ✓ | Dryer | APC 1 | | | | Type 6 | | | | | | | | | ✓ | ✓ |
| | HB-ArcSelect® | 87% CO, 12% PA, 1% Carbon | 280 | | ✓ | ✓ | | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | | | 340 + 265 | | ✓ | ✓ | | APC 2 | | | | | | | | | | | | | ✓ | ✓ |
| | | | 340 + 280 | ✓ | ✓ | ✓ | | APC 1/2 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-4arc® | 89% CO, 10% PA, 1% Carbon | 390 + 250 | | ✓ | ✓ | Dryer | APC 2 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-PROtection® | 55% MAC, 43% CO, 2% Carbon | 275 + 175 | ✓ | ✓ | ✓ | | APC 1/2 | | | | Type 6 | | | | | | | | | ✓ | ✓ |
| | HB-PROtection® Green Turtle | 54% MAC, 44% CO, 2% Carbon | 195 | | ✓ | ✓ | | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-MODarc® | 54% MAC, 44% CO, 2% Carbon | 215 | | ✓ | ✓ | | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | | 48% PES, 32% MAC, 18% CO, 2% Carbon | 360 | ✓ | ✓ | ✓ | | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | | 55% MAC, 43% CO, 2% Carbon | 275 + 175 | | ✓ | ✓ | | APC 1/2 | | | | Type 6 | | | | | | | | | ✓ | ✓ |
| | HB-MODarc® Reflective Stripes | 55% MAC, 43% CO, 2% Carbon | 275 + 175 | ✓ | ✓ | ✓ | | APC 1/2 | | | | Type 6 | | | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Polo-Shirt 2397 | 49% PES, 30% MAC, 20% CO, 1% Carbon | 245 | | | | | APC 1 | | | | | | Class 2 | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Polo-Shirt 2112 | 54% MAC, 44% CO, 2% Carbon | 215 | | | | | APC 1 | | | | | | Class 2 | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Vest FR | 55% MAC, 43% CO, 2% Carbon | 275 | | | | | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-MODarc & vis® | 55% MAC, 43% CO, 2% Carbon | 275 + 175 | ✓ | ✓ | ✓ | | APC 1/2 | | | | Type 6 | | Class 3 ²⁾ | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Fleece jacket 4kA | 48% MAC, 32% CO, 18% PES, 2% Carbon | 360 | | | | | APC 1 | | | | | | Class 2 | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Softshelljacket 7kA | 31% PES, 28% MAC, 20% AR, 20% CV FR, 1% Carbon | 540 | | | | | APC 2 | | | | | | Class 2 | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Sweatshirt | 54% MAC, 44% CO, 2% Carbon | 405 | | | | | APC 1 | | | | | | Class 2 | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Fleece jacket | 48% MAC, 32% CO, 18% PES, 2% Carbon | 360 | | | | | APC 1 | | | | | | Class 2 | | | | | | | ✓ | ✓ |
| | HB-MODarc&vis® Parka with liner 7kA | 55% MAC, 43% CO, 2% Carbon, FC-Equipment | 275 | | | | | APC 2 | | | | Type PB [6] | | Class 2 | | Cl. 3/3 | | | | | ✓ | ✓ |
| HB-MODarc&vis® Parka 7kA | 55% MAC, 43% CO, 2% Carbon, PU-Membrane | 300 | | | | | APC 2 | | | | Type 6 | | Class 2 | | Cl. 3/4 | | | | | ✓ | ✓ | |
| HB-MODarc&vis® Bib trousers 4kA | 55% MAC, 43% CO, 2% Carbon, PU-Membrane | 300 | | | | | APC 1 | | | | Type 6 | | Class 1 | | Cl. 3/4 | | | | | ✓ | ✓ | |
| HB-4Energy | 44% MAC, 30% CO, 20% PA, 5% AR, 1% Carbon | 260 + 180 | | | | | APC 1/2 | | | | Type 6 | | | | | | | | | ✓ | ✓ | |
| HB-MultiPro FR® Fleece jacket 4kA | 48% MAC, 32% CO, 18% PES, 2% Carbon | 360 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| HB-MultiPro FR® Fleece jacket 7kA | 31% PES, 28% MAC, 20% AR, 20% CV, 1% Carbon | 320 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| HB-MultiPro FR® Parka 7kA | 31% PES, 28% MAC, 20% AR, 20% CV, 1% Carbon | 320 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| HB-MultiPro FR® Brace trousers 7kA | 31% PES, 28% MAC, 20% AR, 20% CV, 1% Carbon | 320 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| NOMEX® Viscose | 50% CV, 49% AR, 1% Carbon | 260 | ✓ | | ✓ | | APC 1 | | | | | | | | | | | | | ✓ | ✓ | |
| NOMEX® Comfort | 98% AR, 2% Carbon | 260 | | ✓ | ✓ | | APC 1 | | | | | | | | | | | | | ✓ | ✓ | |
| INOTEC® Arc & Energy | 98% AR, 2% Carbon, FC-Equipment | 260 + 180 | ✓ | ✓ | ✓ | Dryer | | | | | Type 6 | | | | | | | | | ✓ | | |
| HEAT, SPLASHES & WELDING | PROBAN® | 100% CO | 470 | | | ✓ | Dryer | | | | | | | | | | | | | | | |
| | | | 380 | | | | | | | | | | | | | | | | | | | |
| | SECAN® Securo 420 | 98% CO, 2% Carbon | 420 | | ✓ | ✓ | Dryer | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-Iron Pro | 98% CO, 2% Carbon | 420 | ✓ | ✓ | ✓ | Dryer | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-4welders® 2.0 | 89% CO, 10% PA, 1% Carbon | 390 | | ✓ | ✓ | Dryer | APC 1 | | | | | | | | | | | | | ✓ | ✓ |
| | HB-ComFlex® | 94% CO, 4% PES, 2% Elasthane | 425 | | | | Dryer | | | | | | | | | | | | | | | |
| | | 40% AR, 30% MAC, 20% CLY, 9% PA, 1% Carbon | 430 | | | | Dryer | | | | | | | | | | | | | | | |
| | MARLAN | 50% CV FR, 30% WO, 20% PA | 365 | | ✓ | ✓ | Dryer+ | | | | | | | | | | | | | | | |
| | | | | | | | Finisher | | | | | | | | | | | | | | | |
| | HB-HeavyMetal Pro Jacket + Trouser | 50% CO, 39% MAC, 10% CV, 1% Carbon | 340 | ✓ | ✓ | ✓ | Dryer+ | | | | | | | | | | | | | | ✓ | |
| | | | | | | | Finisher | | | | | | | | | | | | | | | |
| | HB-HeavyMetal Pro Jacket + Trouser | 52% CO, 37% MAC, 10% CV, 1% Carbon | 430 | ✓ | ✓ | ✓ | Dryer+ | | | | | | | | | | | | | | ✓ | |
| | | | | | | | Finisher | | | | | | | | | | | | | | | |
| | HB-HeavyMetal Pro Shirt | 50% CO, 39% MAC, 10% CV, 1% Carbon | 250 | | ✓ | ✓ | Dryer+ | | | | | | | | | | | | | | | |
| | | | | | | | Finisher | | | | | | | | | | | | | | | |
| | VINEX® | 85% Vinylal, 15% Modal | 390 | | ✓ | ✓ | | APC 1 | | | | | | | | | | | | | | |
| | | | 285 | | ✓ | ✓ | | | | | | | | | | | | | | | | |
| Functional Underwear | 52% MAC, 26% CO, 19% PA, 2% Carbon, 1% Elasthane | 165 | | | | | | | | | | | | | | | | | | | | |
| TEMPEX®-TREME HEAT | | | | | | | | | | | | | | | | | | | | | | |
| CK-12/Z | 70% Preox, 30% AR | 360 | | | | | | | | | | | | | | | | | | | | |
| AW-1/Y | 100% AR | 420 | | | | | | | | | | | | | | | | | | | | |
| KF-3/Z | 100% AR | 475 | | | | | | | | | | | | | | | | | | | | |
| CK-4/Z | 70% Preox, 30% AR | 690 | | | | | | | | | | | | | | | | | | | | |
| NOMEX® Comfort light | 98% AR, 2% Carbon | 185 | | ✓ | ✓ | | | | | | | | | | | | | | | | | |

1) A=A1+A2 ✓=Flame retardent 2) Blouson and trousers or bib and brace trousers worn together. 3) Reflective application, no Hi-Vis protection. 4) Does not apply to blouson and trousers. 5) Applies to two-coloured coverall. * Does not apply to the shirt.

OVERVIEW PRODUCT LINES



| Product Line | Fabric Composition Upper material | Fabric weight (approx. ...g/m²) | Retro Reflective | Attachment of emblems & patches | | ISO 15797 | IEC 61482-2 | IEC 61482-2 | EN ISO 11611 | EN ISO 11612 | EN 1149-5 | EN 13034 | EN ISO 20471 | EN 17353 | EN 343 | EN 13758-2 | EN 14058 | EN 342 | EN 61340-5-1 | EN 15384 | MULTI-RISK | 21 TO WEAR® | |
|----------------------------|--------------------------------------|---|------------------|---------------------------------|--------|-----------------|-----------------|-------------|--------------|--------------|-----------|----------|--------------|----------|---------|------------|----------|--------|--------------|----------|------------|-----------------|--|
| | | | | Patch | Stitch | | | | | | | | | | | | | | | | | | |
| CHEMICALS | HB-CHEMstandard | 100% PAC, FC-Equipment | | ✓ | ✓ | | | | | | | Type 6 | | | | | | | | | | | |
| | HB-CHEMcomfort antistatic | 99% PES, 1% Carbon, FC-Equipment | 240 | | ✓ | ✓ | Dryer+ Finisher | | | | ✓ | Type 6 | | | | | | | | | | ✓ | |
| HIVIS & WEATHER | HI-VISION® Basic Reflective Shirts | 55% CO, 45% PES | 185 | ✓ | ✓ | ✓ | | | | | | | Class 2 | | | ✓ | | | | | | | |
| | HI-VISION® Basic Fleece | 100% PES | 260 | | ✓ | ✓ | | | | | | | | | | | | | | | | | |
| | HI-VISION® Basic Parka Antistatic | 99% PES, 1% Carbon | 150 | ✓ | ✓ | ✓ | | | | | ✓ | | Class 2 | | Cl. 3/3 | | | | | | | | |
| | HB-StormBase® Parka+Brace trousers | 99% PES, 1% Carbon | 150 | ✓ | | | | | | | ✓ | | | | Cl. 3/3 | | | | | | | | |
| COLD PROTECTION | TEMPEX® CLASSIC 2.0 | 100% PA | 515 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | ✓ | | | | | |
| | TEMPEX® CLASSIC | 100% PA | 415 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | ✓ | | | | | |
| | | | 520 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | ✓ | | | | | |
| | | | 560 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | | ✓ | | | | |
| | | | 630 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | | ✓ | | | | |
| | | | 645 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | | ✓ | | | | |
| | TEMPEX® COMFORT | 100% PA | 445/545/645 | ✓ ³⁾ | | ✓ | | | | | | | | | | | | | ✓ | | | | |
| TEMPEX® HYGIENE | 100% PA | 415/515 | | | ✓ | | | | | | | | | | | | | ✓ | | | | | |
| TEMPEX® THERMO | 100% PA | 265/155/245 | | | ✓ | | | | | | | | | | | | | ✓ | | | | | |
| TEMPEX® THERMO HYGIENE | 100% PA | 245 | | | ✓ | | | | | | | | | | | | | ✓ | | | | | |
| FIRE & RESCUE SERVICES | Flammgard® Klassik | 49% AR, 50% CV FR, 1% Carbon | 300 | | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Flammgard® Green Turtle Poloshirt | 100% RECYCLED PES | 160 | | | | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Flammgard® Green Turtle Shirt/Blouse | 100% CO (ORGANIC) | 120 | | | | | | | A/B1/C1 | ✓ | | | | | | | | | | | | |
| | Flammgard® Nordrhein-Westfalen | 59% AR, 40% CV FR, 1% Carbon | 260 | | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Flammgard® Baden-Württemberg | 59% AR, 40% CV FR, 1% Carbon | 260 | | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Flammgard® Saarland | 59% AR, 40% CV FR, 1% Carbon | 260 | | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Flammgard® Bayern | 63% PES, 33% CO, 4% Elasthane | 245 | | | | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Softshell | 94% PES, 6% Elasthane | 300 | | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | |
| | Fleece | 100% PES | 300/260 | | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | |
| | HB-Technical Rescue Parka | 98% AR, 2% Carbon | 195 | | | | | | | A/B1/C1 | | | | | | | | | | | | | |
| | HB-Technical Rescue Trousers | 59% AR, 40% CV FR, 1% Carbon | 260 | | | | | | | A/B1/C1 | | | | | | | | | | | | | |
| HB-Technical Rescue Fleece | 48% MAC, 32% CO, 18% PES, 2% Carbon | 360 | | | | | | | A/B1/C1 | | | | | | | | | | | | | | |
| HB-Technical Rescue lite | 49% AR, 50% CV FR, 1% Carbon | 300 | ✓ | ✓ | ✓ | | | | A/B1/C1 | | | | | | | | | | | | | | |
| HB-Wildfire® 2.0 | 49.5% CV FR, 49.5% AR, 2% Carbon | 230 | ✓ | ✓ | ✓ | | | | A/B1/C1/F1 | | | | | | | | | | | ✓ | | | |
| ESD | CONDUCTEX® Green Turtle | 75% RECYCLED PES, 23% CO (ORGANIC), 2% Carbon | 130 | | | | | | | | | | | | | | | | ✓ | | | | |
| | CONDUCTEX® | 75% PES, 23% CO, 2% Carbon | 130 | | ✓ | ✓ | | | | | | | | | | | | | ✓ | | | ✓ ⁴⁾ | |
| | CONDUCTEX® Cotton Knit | 95% CO, 5% Carbon | 160 | | ✓ | ✓ | | | | | | | | | | | | | ✓ | | | | |
| | | | 300 | | ✓ | ✓ | | | | | | | | | | | | | ✓ | | | | |
| | CONDUCTEX® Pro Knit | 48% CO, 48% PES, 4% Carbon | 170 | | ✓ | ✓ | | | | | | | | | | | | | ✓ | | | | |
| | | 60% PES, 33% CO, 7% Carbon | 305 | | ✓ | ✓ | | | | | | | | | | | | | ✓ | | | | |
| Naptex® 4.0 | 65% PES, 33% CO, 2% Metall | 165 | | ✓ | ✓ | Dryer+ Finisher | | | | | | | | | | | | ✓ | | | | | |
| HABETEX® ESD Comfort | 98% PES, 2% Carbon | 125 | | ✓ | ✓ | | | | | | | | | | | | | ✓ | | | | | |
| CLEANROOM | HABETEX® climatic Pro | 72% CV, 28% PES | 105 | | ✓ | | | | | | | | | | | | | | | | | | |
| | HABETEX® Micronplus | 98% PES, 2% Carbon | 150 | | ✓ | | | | | | | | | | | | | | | | | ✓ ⁵⁾ | |
| | HABETEX® Micronselect | 98% PES, 2% Carbon | 115 | | ✓ | | | | | | | | | | | | | | | | | | |

1) A=A1+A2 ✓=Flame retardant 2) Blouson and trousers or bib and brace trousers worn together. 3) Reflective application, no Hi-Vis protection. 4) Does not apply to blouson and trousers. 5) Applies to two-coloured coverall. * Does not apply to the shirt.

EMBLEMS AND PATCHES

HB
PROTECTIVE
WEAR



HOW YOUR PPE BECOMES YOUR CORPORATE IDENTITY

Your employees' protective clothing is now just as much a part of your company's image as your website or vehicles – it is your company's business card as it conveys expertise and is immediately perceived by your customers. Equipped with company emblems and name badges, it also supports employees' identification with the company and is an important distinguishing feature.

However, to ensure that safety doesn't get left behind and conformity with standards doesn't suffer, a few important points must be noted.

The PPE Regulation, which has been in force since 2018, clearly stipulates that any subsequent changes to PPE that are not in accordance with the respective Type examination certificate will result in the certification becoming null and void. This means that anyone who makes a change of this kind becomes the manufacturer of a new item of PPE, which must undergo recertification.

At HB Protective Wear, we have certified our product lines in such a way that they can be equipped with different emblem variants. Embroidered emblems,

direct embroidery, patched or woven emblems are available in different sizes depending on the product.

We only use materials that have successfully undergone certification so that the certified protective properties of the garments are still guaranteed after finishing. To see which emblem variants are available for your collection, please refer to the overview starting on page 212.

If you would like to attach emblems to your HB Protective Wear garments or those of your customers yourself, please contact us. We will be happy to provide information on what to consider concerning material, size and attachment position when customising your HB collection. This is because only materials and emblem sizes that have been tested in the course of certification may be used, so as not to put the certification and safety of your protective clothing at risk.



IMPORTANT INFORMATION FOR ATTACHING EMBLEMS AND BADGES:

The implementation of certification-relevant changes to protective clothing – such as the subsequent affixing of emblems – by third parties, which are not carried out in conformity with the manufacturer's specifications, means that the products concerned are no longer covered by the respective Type examination certificate and the certification becomes null and void. Subsequent attachment of any emblems to our protective garments is only possible if they have been certified as part of a Type examination. Therefore we would advise that the finishing of our protective clothing products is carried out by HB as the manufacturer.

| STANDARDS | EN 1149-5 Antistatic protection | EN 11611 Welding protection | EN 11612 Heat and flame protection | EN 61482-2 Arc Flash protection | EN 20471 High visibility reflective properties | EN 13034 Type 6 Chemical protection | EN 342 Cold protection |
|----------------------------|---|--|---|------------------------------------|--|--|--|
| EMBROIDERED EMBLEMS | Emblems (made from antistatic fabric), accessories and other features with no conductive properties, have to be firmly attached without being able to become detached; it is not allowed to fix them via hook & loop fastening or via snap fasteners. | Manufacture: Background and embroidery yarn is only to be used in certified FR version. If a background material and/or embroidery yarn not tested by the manufacturer is used, the embroidery emblem must be tested individually. The stitching of the embroidery emblems must be done with FR yarn | | | In order to comply with the determined high-visibility protection classes, the manufacturer's instructions regarding the maximum available space for the emblem application must be considered when selecting the emblem sizes.* At least 5 cm distance to reflective stripes are to be kept. | Free-standing embroidery badges are to be tested on the garment. In addition, same fabric or a comparable material with the same or higher performance class is to be used as background material. Small embroidery badges that can be attached touching the edges are allowed. | Embroidered emblems can be applied without affecting the thermal insulation specified by the manufacturer.* |
| DIRECT EMBROIDERIES | If a background material and/or embroidery yarn not tested by the manufacturer is used, the embroidered emblem must be explicitly tested on the desired materials if the size exceeds 100 cm²! | | Manufacture: For the EN standard code E and D 1-3, manufacture in the roof tile effect is always necessary to do. | | | | |
| PATCHED EMBLEMS | | Manufacture: The direct embroidery absolutely must be underlaid with a FR material towards the body. The embroidery yarn is only to be used in certified FR version. If another embroidery thread is used, the direct embroidery must be tested individually. | | | In order to comply with the determined high-visibility protection classes, the manufacturer's instructions regarding the maximum available space for the emblem application must be considered when selecting the emblem sizes.* At least 5 cm distance to reflective stripes are to be kept. | The direct embroidery must be underlaid with outer fabric towards the body. Direct embroideries larger than 20 qcm must be explicitly tested on the garment. Large direct embroideries are generally not recommended. | Direct embroideries are only allowed to be attached for the following product lines: Comfort, Hygiene, Contour and Fleece; they need to be tested depending on the embroidery's size.* |
| WOVEN EMBLEMS | If a patch emblem not tested by the manufacturer is used, the patch emblem must be explicitly tested on the desired materials if the size exceeds 100 cm²! | Manufacture: Material qualities not shown in our catalogue (see pages 214–217), and marked as certified, must be tested individually in the largest possible size in accordance with EN 15025, ISO 17493 and EN 1149-5 and, if necessary, in accordance with the standard specification code D + E. | | | In order to comply with the determined high-visibility protection classes, the manufacturer's instructions regarding the maximum available space for the emblem application must be considered when selecting the emblem sizes.* At least 5 cm distance to reflective stripes are to be kept. | Patch badges up to a size of 320 x 120 mm are tested and approved by the manufacturer. | Not allowed. |
| | Web emblems that are not conductive must be firmly attached without being able to become detached. | | For woven emblems larger than 10 cm² has to be available a recent test report according to EN 15025. | | In order to comply with the determined high-visibility protection classes, the manufacturer's instructions regarding the maximum available space for the emblem application must be considered when selecting the emblem sizes.* At least 5 cm distance to reflective stripes are to be kept. | Woven badges larger than 20 qcm must be explicitly checked. | Woven emblems can be applied without affecting the thermal insulation specified by the manufacturer.* |

* The details of the maximum available space for the emblem application are shown on our product data sheets for each sales item. Please contact our sales representatives for more information (see page 231).

▶ OUR PARTNERS



WE SUCCESSFULLY COOPERATE WITH THE FOLLOWING COMPANIES IN THE FIELD OF ACCESSORIES:



JOINTLY STRONG

Fair and cooperative collaboration with all our partners has always been very important to us.

In order to be able to offer our customers the best possible quality, we also rely on long-term cooperation with renowned manufacturers for our accessories, so that we can continue to meet the highest standards for both.



The following versions will be supplied within our high-speed delivery service 21 TO WEAR®. First order starting with 1 piece and delivery time approx. 21 days. No stock-keeping for these products. Requirements of more than 30 pieces will normally be produced separately, the production time then will be approx. 6-8 weeks from receipt of order.

21 TO WEAR® FOR LADIES

| Item number | Designation | Material | Colour | Weight | Standards | |
|------------------------------------|--|---|------------------------|---------------------------------------|---|--|
| HB-PROtection® | | | | | | |
| 01072 10206 006 2177 | Ladies jacket 1-ply 4kA | 55% Modacrylic, 43% Cotton, 2% Carbon | navy/dark grey | approx. 275 g/m² | IEC 61482-2 APC 1 EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 | |
| 01072 20144 010 2175 | Ladies trousers 1-ply 4kA | | dark grey/navy | | IEC 61482-2 APC 2 (front parts and sleeves) EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 | |
| 01072 10206 008 2177 | Ladies jacket 2-ply 7kA/4kA | | navy/dark grey | approx. 275 g/m² +approx. 175 g/m² | IEC 61482-2 APC 2 EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 | |
| 01072 10206 007 2177 | Ladies jacket 2-ply 7kA | | | | | |
| HB-PROtection® Green Turtle | | | | | | |
| 01251 60029 000 45 | Ladies shirt 1-ply 4kA | 54% Modacrylic, 44% Cotton (organic), 2% Carbon | navy | approx. 195 g/m² | IEC 61482-2 APC 1 EN ISO 11612 A1+A2/B1/C1/F1 EN 1149-5 EN 13758-2 | |
| 01251 60029 000 52 | Ladies shirt 1-ply 4kA | | middle grey | | | |
| HB-MODarc® | | | | | | |
| 01072 10206 002 2251 | Ladies blouson 1-ply 4kA | 55% Cotton, 43% Modacrylic, 2% Carbon | grey/black | approx. 275 g/m² | IEC 61482-2 APC 1 EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 | |
| 01072 20144 006 2188 | Ladies trousers 1-ply 4kA | | black/grey | | | |
| 01072 20144 006 2251 | Ladies trousers 1-ply 4kA | | grey/black | | | |
| 01072 10206 000 2041 | Ladies blouson Reflective Stripes 1-ply 4kA | | navy/royal | | | |
| 01072 10206 000 2251 | Ladies blouson Reflective Stripes 1-ply 4kA | grey/black | | | | |
| 01072 20144 000 2188 | Ladies trousers Reflective Stripes 1-ply 4kA | black/grey | | | | |
| 01072 20144 002 45 | Ladies trousers Reflective Stripes 1-ply 4kA | navy | | | | |
| 01072 10206 001 2041 | Ladies blouson Reflective Stripes 2-ply 7kA/4kA | navy/royal | | approx. 275 g/m² +approx. 175 g/m² | IEC 61482-2 APC 2 (front parts and sleeves/front of trouser legs) EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 | |
| 01072 10206 001 2251 | Ladies blouson Reflective Stripes 2-ply 7kA/4kA | grey/black | | | | |
| 01072 20144 001 2188 | Ladies trousers Reflective Stripes 2-ply 7kA/4kA | black/grey | | | | |
| 01072 20144 003 45 | Ladies trousers Reflective Stripes 2-ply 7kA/4kA | navy | | | | |
| HB-MODarc&vis® | | | | | | |
| 01072 10206 004 2112 | Ladies blouson 1-ply 4kA | 55% Modacrylic, 43% Cotton, 2% Carbon | | approx. 275 g/m² | EN ISO 20471 Class 1+2* IEC 61482-2 APC 1 EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 | |
| 01072 20144 008 2112 | Ladies trousers 1-ply 4kA | | | | | |
| 01072 10206 005 2112 | Ladies blouson 2-ply 7kA/4kA | | fluorescentyellow/navy | | approx. 275 g/m² +approx. 175 g/m² | EN ISO 20471 Class 1+2* IEC 61482-2 APC 2 (front parts and sleeves/front of trouser legs) EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 EN 13034 Type 6 |
| 01072 20144 009 2112 | Ladies trousers 2-ply 7kA/4kA | | | | | |

* Blouson combined with trousers or bib and brace trousers as suit = Class 3



- For all those who require PPE urgently
- Rapid response to immediate requirements
- Get your employees started straight away
- 100% HB quality
- Reduces your stock

Please find more information at www.21towear.de

21 TO WEAR® FOR MEN

| Item number | Designation | Material | Colour | Weight | Standards |
|-------------------------|---|---------------------------------------|---------------------------------------|---------------------------------------|--|
| HB-4welders® 2.0 | | | | | |
| 01237 20144 011 458 | Ladies trousers 2-ply 7kA | 89% Cotton, 10% Polyamide, 1% Carbon | navy | approx. 390 g/m² | EN ISO 11611 Class 2 A1+A2 EN ISO 11612 A1+A2/B1/C1/E3/F1 EN 1149-5 IEC 61482-2 APC 1 |
| 01237 20144 011 52 | Ladies trousers 2-ply 7kA | | medium grey | | |
| HB-ArcSelect® | | | | | |
| 01004 10000 001 2382 | Jacket 1-ply 4kA | 87% Cotton, 12% Polyamide, 1% Carbon | anthracite grey/medium grey | approx. 340 g/m² | IEC 61482-2 APC 1 (2-ply: IEC 61482-2 APC 2 (front parts and sleeves/front of trouser legs)) EN ISO 11612 A1+A2/B1/C1/E1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 |
| 01004 20000 001 2381 | Trousers 1-ply 4kA | | medium grey/anthracite grey | | |
| 01004 50100 001 2381 | Bib and brace trousers 1-ply 4kA | | | | |
| 01004 10000 002 2382 | Jacket 2-ply 7kA/4kA | | anthracite grey/medium grey | | |
| 01004 20000 002 2381 | Trousers 2-ply 7kA/4kA | medium grey/anthracite grey | | approx. 340 g/m² +approx. 280 g/m² | |
| 01004 50100 002 2381 | Bib and brace trousers 2-ply 7kA/4kA | | | | |
| HB-MODarc® | | | | | |
| 01072 10107 034 2188 | Blouson 1-ply 4kA | 55% Cotton, 43% Modacrylic, 2% Carbon | | approx. 275 g/m² | IEC 61482-2 APC 1 (2-ply: IEC 61482-2 Class 2 (front parts and sleeves)) EN ISO 11612 A1+A2/B1/C1/F1 EN ISO 11611 Class 1 A1+A2 EN 1149-5 |
| 01072 10107 035 2188 | Blouson 2-ply 7kA/4kA | | | approx. 275 g/m² +approx. 175 g/m² | |
| 01072 10107 039 2188 | Blouson Reflective Stripes 1-ply 4kA | | black/grey | approx. 275 g/m² | |
| 01072 10107 038 2188 | Blouson Reflective Stripes 2-ply 7kA/4kA | | | | |
| 01072 50055 013 45 | Bib and brace trousers Reflective Stripes 2-ply 7kA/4kA | | navy | approx. 275 g/m² +approx. 175 g/m² | |
| HB-Iron Pro | | | | | |
| 01248 20000 008 3011 | Trousers with knee pocket | 98% Cotton, 2% Carbon | | approx. 420 g/m² | EN ISO 11612 A1+A2/B1/C1/E3/F1 EN ISO 11611 Class 2 A1+A2 EN 1149-5 IEC 61482-2 Class 1 EN 17353 Type B2 |
| 01248 50100 006 3011 | Bib and brace trousers with knee pocket | | middle grey/orange/fluorescent yellow | | |

PRODUCT VARIANTS OF OUR MODULAR HEAT PROTECTION SYSTEM

Here you will find all relevant tables and information concerning our TEMPEX®-TREME HEAT modular system. Choose between many different features and product variants. This modular clothing system enables you to put together your own personal heat protection equipment according to your individual requirements at the work place.

The following products will be, in case they are not available on stock, supplied within our high-speed delivery service 21 TO WEAR®. First order starting with 1 piece and delivery time approx. 21 days*. Requirements of more than 30 pieces will normally be produced separately, the production time then will be approx. 6-8 weeks from receipt of order.

MATERIAL VARIANTS OF THE MODULAR HEAT PROTECTION SYSTEM

The following table shows the different materials and indicates the material name, the material composition, the material weight and the certified fabric's standards.

| Part number | Material name | Material | Material weight | Standards |
|----------------------|----------------|--------------------------|-----------------|-----------------------------------|
| 120xx = 12014 | CK-12/Z | 70 % Preox, 30 % Aramide | approx. 360 g | EN ISO 11612 A1/B1/C3/D3/E3/F1 |
| 120xx = 12008 | AW-1/Y | 100 % Aramide | approx. 420 g | EN ISO 11612 A1/B1/C4/D3/E3/F2 |
| 12003 | KF-3/Z | 100 % para-aramide | approx. 475 g | EN ISO 11612 A1/B1/C3/D3/E3/F1 |

FOUNDRY COAT (see pages 91, 94 and 96)

| Product line | Part number | Closure | Ergonomic sleeves | Ventilation | Walking comfort | On stock |
|--|---------------------------|----------------|-------------------|----------------|-----------------|-------------|
| 1 CLASSIC KF-3/Z | 12003 41030 000 15 | Hook&loop | - | - | - | ✓ |
| | 12003 41040 000 15 | Hook&loop | - | - | - | 21 TO WEAR® |
| | 12003 41030 200 15 | Quick release | - | - | - | 21 TO WEAR® |
| | 12003 41040 200 15 | Quick release | - | - | - | 21 TO WEAR® |
| 2 COMFORT CK-12/Z AW-1/Y | 12014 41130 001 15 | Hook&loop | ✓ | - | Slit | ✓ |
| | 12008 41130 001 15 | Hook&loop | ✓ | - | Slit | ✓ |
| | 120xx 41yyy 001 15 | Hook&loop | ✓ | - | Slit | 21 TO WEAR® |
| | 120xx 41yyy 101 15 | Snap fastening | ✓ | - | Slit | 21 TO WEAR® |
| 3 COMFORT Plus CK-12/Z AW-1/Y | 120xx 41yyy 011 15 | Hook&loop | ✓ | Sleeves | Slit | 21 TO WEAR® |
| | 120xx 41yyy 012 15 | Hook&loop | ✓ | Sleeves | Pleat | 21 TO WEAR® |
| | 120xx 41yyy 111 15 | Snap fastening | ✓ | Sleeves | Slit | 21 TO WEAR® |
| | 120xx 41yyy 112 15 | Snap fastening | ✓ | Sleeves | Pleat | 21 TO WEAR® |
| | 12014 41130 021 15 | Hook&loop | ✓ | Sleeves + Back | Slit | ✓ |
| | 12008 41130 021 15 | Hook&loop | ✓ | Sleeves + Back | Slit | ✓ |
| | 120xx 41yyy 021 15 | Hook&loop | ✓ | Sleeves + Back | Slit | 21 TO WEAR® |
| | 120xx 41yyy 022 15 | Hook&loop | ✓ | Sleeves + Back | Pleat | 21 TO WEAR® |
| 120xx 41yyy 121 15 | Snap fastening | ✓ | Sleeves + Back | Slit | 21 TO WEAR® | |
| 120xx 41yyy 122 15 | Snap fastening | ✓ | Sleeves + Back | Pleat | 21 TO WEAR® | |

Order example:

If you like to order the COMFORT Plus foundry coat 70 % Preox, 30 % Aramide, length 130 cm, covered snap fastening, arm and back ventilation and walking pleat, the result will be the following part number:
12014 41130 122 15

Length variants 1 | CLASSIC

| Part number | Length of the back |
|--------------|--------------------|
| 41030 | 130 cm |
| 41040 | 140 cm |

Length variants 2 | COMFORT + 3 | COMFORT Plus

| Part number | Length of the back |
|----------------------|--------------------|
| 41yyy = 41110 | 110 cm |
| 41yyy = 41120 | 120 cm |
| 41yyy = 41130 | 130 cm |
| 41yyy = 41140 | 140 cm |

JACKET (see pages 90, 93 and 96)

| Product line | Part number | Closure | Ergonomic sleeves | Ventilation | On stock |
|--|---------------------------|----------------|-------------------|----------------|-------------|
| 1 CLASSIC KF-3/Z | 12003 11080 000 15 | Hook&loop | - | - | ✓ |
| | 12003 110yy 000 15 | Hook&loop | - | - | 21 TO WEAR® |
| | 12003 110yy 200 15 | Quick release | - | - | 21 TO WEAR® |
| 2 COMFORT CK-12/Z AW-1/Y | 12008 11180 000 15 | Hook&loop | ✓ | - | ✓ |
| | 120xx 111yy 000 15 | Hook&loop | ✓ | - | 21 TO WEAR® |
| | 120xx 111yy 100 15 | Snap fastening | ✓ | - | 21 TO WEAR® |
| 3 COMFORT Plus CK-12/Z AW-1/Y | 120xx 111yy 010 15 | Hook&loop | ✓ | Sleeves | 21 TO WEAR® |
| | 120xx 111yy 110 15 | Snap fastening | ✓ | Sleeves | 21 TO WEAR® |
| | 12014 11180 020 15 | Hook&loop | ✓ | Sleeves + Back | ✓ |
| | 120xx 111yy 020 15 | Hook&loop | ✓ | Sleeves + Back | 21 TO WEAR® |
| | 120xx 111yy 120 15 | Snap fastening | ✓ | Sleeves + Back | 21 TO WEAR® |

Length variants 1 | CLASSIC

| Part number | Length of the back |
|----------------------|--------------------|
| 110yy = 11080 | 80 cm |
| 110yy = 11090 | 90 cm |
| 110yy = 11000 | 100 cm |

Length variants 2 | COMFORT + 3 | COMFORT Plus

| Part number | Length of the back |
|----------------------|--------------------|
| 111yy = 11180 | 80 cm |
| 111yy = 11190 | 90 cm |
| 111yy = 11100 | 100 cm |

Order example:

If you like to order the COMFORT Plus heat protection jacket 100 % Aramide, 90 cm length, with hook&loop fastener and ventilations under the arms and on the back, the result will be the following part number: **12008 11190 020 15**

APRON WITH SLEEVES (see pages 91 and 95)

| Product line | Part number | Length | Closure | On stock |
|---|---------------------------|--------|-----------|-------------|
| 1 CLASSIC KF-3/Z | 12003 71130 000 15 | 130 cm | Hook&loop | ✓ |
| | 12008 71110 000 15 | 110 cm | Hook&loop | 21 TO WEAR® |
| 2 COMFORT CK-12/Z AW-1/Y | 12008 71130 000 15 | 130 cm | Hook&loop | ✓ |
| | 12014 71110 000 15 | 110 cm | Hook&loop | 21 TO WEAR® |
| | 12014 71130 000 15 | 130 cm | Hook&loop | 21 TO WEAR® |

BIB APRON (see pages 92 and 95)

| Product line | Part number | Length | Closure | On stock |
|---|---------------------------|--------|-----------|-------------|
| 1 CLASSIC KF-3/Z | 12003 71131 000 15 | 130 cm | Tie trap | ✓ |
| | 12008 71111 000 15 | 110 cm | Hook&loop | 21 TO WEAR® |
| 2 COMFORT CK-12/Z AW-1/Y | 12008 71131 000 15 | 130 cm | Hook&loop | ✓ |
| | 12014 71111 000 15 | 110 cm | Hook&loop | 21 TO WEAR® |
| | 12014 71131 000 15 | 130 cm | Hook&loop | 21 TO WEAR® |

HALF APRON (see page 92)

| Product line | Part number | Length | Closure | On stock |
|---|---------------------------|--------|-----------|-------------|
| 1 CLASSIC KF-3/Z | 12003 71100 000 15 | 100 cm | Tie trap | ✓ |
| | 12008 71080 000 15 | 80 cm | Hook&loop | 21 TO WEAR® |
| 2 COMFORT CK-12/Z AW-1/Y | 12008 71100 000 15 | 100 cm | Hook&loop | 21 TO WEAR® |
| | 12014 71080 000 15 | 80 cm | Hook&loop | 21 TO WEAR® |
| | 12014 71100 000 15 | 100 cm | Hook&loop | 21 TO WEAR® |

HEAD PROTECTION (see pages 97 and 98)

| Product line | Part number | Designation | Ventilation | On stock |
|--|---------------------------|--|-------------|-------------|
| 1 CLASSIC KF-3/Z | 12003 7H007 000 15 | Protective hood with shoulder and chest protection | - | ✓ |
| | 12003 7H007 001 15 | Protective hood | - | ✓ |
| | 12003 7H009 000 15 | Helmet cover | - | ✓ |
| 2 COMFORT CK-12/Z AW-1/Y | 12008 71001 000 15 | Protective hood with shoulder and chest protection | - | 21 TO WEAR® |
| | 12014 71001 000 15 | Protective hood with shoulder and chest protection | - | 21 TO WEAR® |
| | 12008 71001 001 15 | Protective hood | - | 21 TO WEAR® |
| | 12014 71001 001 15 | Protective hood | - | 21 TO WEAR® |
| | 12008 71002 000 15 | Helmet cover | - | 21 TO WEAR® |
| | 12014 71002 000 15 | Helmet cover | - | 21 TO WEAR® |
| 3 COMFORT Plus CK-12/Z AW-1/Y | 12008 71001 002 15 | Protective hood with shoulder and chest protection | ✓ | ✓ |
| | 12014 71001 002 15 | Protective hood with shoulder and chest protection | ✓ | 21 TO WEAR® |

* Outside Germany, delivery will take a few days longer.

▶ READY TO WEAR



ONE SYSTEM, MORE THAN 1,000 POSSIBILITIES.

Below you find a matrix that shows you the different possible equipment variants. With READY TO WEAR, you have the choice: a second combat leg pocket, additional knee pockets and reflective stripes; coverall or suit (jacket + trousers); choose between six colours depending on the colour

that corresponds to your corporate company colours.

Enjoy maximum flexibility combined with minimum delivery time of only 21 days.* Choose from 4 products, 216 colour combinations, 12 equipment versions and 28 sizes. Available if you order 15 or more units of any one item. **

| | THREE OPTIONS | | | | PART | COLOURS | | | | | | |
|------------------------|--------------------------|--------------------------|--------------------------|-----------------------------|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| | REFLEC-TIVE STRIPES | KNEE POCKETS | 2ND COMBAT POCKET | OR 1 RULER POCKET | | BLACK | MEDIUM GREY | DARK BLUE | ROYAL NAVY | RED | YELLOW | |
| JACKET | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | OR <input type="checkbox"/> | YOKE | <input type="checkbox"/> | |
| | | | | | TORSO/ ARMS | <input type="checkbox"/> | |
| | | | | | PIPES | <input type="checkbox"/> | |
| TROUSERS | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | OR <input type="checkbox"/> | LEGS | <input type="checkbox"/> | |
| | | | | | POCKET PLEAT | <input type="checkbox"/> | |
| | | | | | PIPES | <input type="checkbox"/> | |
| BIB AND BRACE TROUSERS | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | OR <input type="checkbox"/> | LEGS | <input type="checkbox"/> | |
| | | | | | POCKET PLEAT | <input type="checkbox"/> | |
| | | | | | PIPES | <input type="checkbox"/> | |
| COVERALL | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | OR <input type="checkbox"/> | TORSO/ ARMS/ LEGS | <input type="checkbox"/> | |
| | | | | | YOKE + POCKET PLEAT | <input type="checkbox"/> | |
| | | | | | PIPES | <input type="checkbox"/> | |

* Outside Germany, delivery will take a few days longer.
** Up to a maximum of 60 units. Delivery times for larger quantities are available on request.



Optional: Reflective stripes



Optional: Second combat pocket

USE OUR READY TO WEAR CONFIGURATOR TO DESIGN YOUR OWN PROTECTIVE CLOTHING!

Come and try online for yourself at:
www.hb-ready-to-wear.com



▶ INSULATION VALUES



INSULATION VALUES COLD PROTECTION

This table shows the performance levels of our TEMPEX® cold protective wear. It shows the duration of use for the relevant clothing in relation to temperature and physical strain. The performance levels are light duty (more static works) and medium duty (works where you move more). The specified values are achieved only if jacket and trousers of the same material construction are worn.



| Part Number | Part | Insulation value / _{cler} m²·K/W R-value | Standing activity 75 W/m² | | | | Activity with low movement 115 W/m² | | | | Activity with regular movement 170 W/m² | | | | | | |
|-----------------|-------------------------------|---|---------------------------|-----|--------|------|-------------------------------------|------|-------|-------|---|------|-------|-------|-------|-------|-------|
| | | | Air speeds | | | | Air speeds | | | | Air speeds | | | | | | |
| | | | 0,4 m/s | | 3 m/s | | 0,4 m/s | | 3 m/s | | 0,4 m/s | | 3 m/s | | | | |
| 8 h | | 1 h | | 8 h | | 1 h | | 8 h | | 1 h | | 8 h | | 1 h | | | |
| CLASSIC 2.0 | 01174 1K014 000 | Jacket order picker | 0,428 | (B) | AP 2 x | 3°C | -16°C | 10°C | -6°C | -13°C | 33°C | -3°C | -20°C | -34°C | -49°C | -20°C | -38°C |
| | 01174 2K012 000 | Trousers order picker | | | | | | | | | | | | | | | |
| | 01174 1K037 000 | Ladies' jacket order picker | 0,428 | (B) | AP 2 x | 3°C | -16°C | 10°C | -6°C | -13°C | 33°C | -3°C | -20°C | -34°C | -49°C | -20°C | -38°C |
| CLASSIC | 09044 1K048 000 | Jacket | 0,339 | (B) | AP 2 x | 8°C | -10°C | 16°C | 1°C | -5°C | -22°C | 4°C | -11°C | -22°C | -41°C | -10° | -26°C |
| | 09044 2K024 000 | Trousers | | | | | | | | | | | | | | | |
| | 09044 1K049 000 | Ladies' jacket | 0,339 | (B) | AP 2 x | 8°C | -10°C | 16°C | 1°C | -5°C | -22°C | 4°C | -11°C | -22°C | -41°C | -10° | -26°C |
| | 09044 2K001 002 | Ladies' trousers | | | | | | | | | | | | | | | |
| | 09028 1K009 000 | Jacket order picker with acrylic fur lining | 0,344 | (B) | AP 2 x | 8°C | -7°C | 15°C | 1°C | -5°C | -22°C | 3°C | -11°C | -23°C | -42°C | -11°C | -27°C |
| | 09028 2K006 000 | Trousers order picker with acrylic fur lining | | | | | | | | | | | | | | | |
| | 09045 1K000 000 | Jacket order picker | 0,448 | (B) | AP 2 x | 1°C | -18°C | 9°C | -7°C | -15°C | -35°C | -4°C | -22°C | -37°C | -49°C | -22°C | -40°C |
| | 09045 2K000 000 | Trousers order picker | | | | | | | | | | | | | | | |
| | 09045 1K001 000 | Ladies' jacket order picker | 0,448 | (B) | AP 2 x | 1°C | -18°C | 9°C | -7°C | -15°C | -35°C | -4°C | -22°C | -37°C | -49°C | -22°C | -40°C |
| | 09045 2K001 000 | Ladies' trousers order picker | | | | | | | | | | | | | | | |
| | 09045 3K000 000 | Coverall order picker | 0,411 | (B) | AP 2 x | 4°C | -14°C | 11°C | -5°C | -11°C | -31°C | -2°C | -18°C | -32°C | -49°C | -18°C | -36°C |
| | 09045 4K000 000 | Coat visitor | 0,292 | (R) | AP 2 x | 11°C | -2°C | 18°C | 5°C | 0°C | -16°C | 7°C | -6°C | -16°C | -33°C | -5°C | -20°C |
| | 09046 1K012 001 | Jacket forklift driver | 0,404 | (B) | AP 2 x | 5°C | -12°C | 13°C | -3°C | -9°C | -28°C | 0°C | -16°C | -29°C | -49°C | -16°C | -33°C |
| | 09046 2K007 001 | Trousers forklift driver | | | | | | | | | | | | | | | |
| | 09046 1K012 000 | Jacket forklift driver Plus | 0,398 | (B) | AP 2 x | 5°C | -12°C | 13°C | -3°C | -9°C | -28°C | 0°C | -16°C | -29°C | -49°C | -16°C | -33°C |
| 09046 2K007 000 | Trousers forklift driver Plus | | | | | | | | | | | | | | | | |
| COMFORT | 01183 1K007 002 | Jacket | 0,391 | (B) | AP 2 x | 5°C | -12°C | 13°C | -3°C | -9°C | -28°C | 0°C | -16°C | -29°C | -49°C | -16°C | -33°C |
| | 01183 2K008 006 | Trousers | | | | | | | | | | | | | | | |
| | 01183 1K008 001 | Ladies' jacket | 0,391 | (B) | AP 2 x | 5°C | -12°C | 13°C | -3°C | -9°C | -28°C | 0°C | -16°C | -29°C | -49°C | -16°C | -33°C |
| | 01183 2K003 003 | Ladies' trousers | | | | | | | | | | | | | | | |
| | 01183 1K005 000 | Jacket order picker | 0,435 | (B) | AP 2 x | 2°C | -16°C | 10°C | -6°C | -14°C | -34°C | -3°C | -21°C | -35°C | -49°C | -21°C | -39°C |
| | 01183 2K002 000 | Trousers order picker | | | | | | | | | | | | | | | |
| | 01183 1K006 000 | Ladies' jacket order picker | 0,435 | (B) | AP 2 x | 2°C | -16°C | 10°C | -6°C | -14°C | -34°C | -3°C | -21°C | -35°C | -49°C | -21°C | -39°C |
| | 01183 2K003 000 | Ladies' trousers order picker | | | | | | | | | | | | | | | |
| | 01183 3K001 000 | Coverall order picker | 0,443 | (B) | AP 2 x | 2°C | -17°C | 9°C | -7°C | -14°C | -35°C | -4°C | -21°C | -36°C | -49°C | -21°C | -40°C |
| | 01183 4K001 000 | Coat visitor | 0,274 | (B) | AP 2 x | 12°C | -1°C | 19°C | 6°C | 2°C | -13°C | 8°C | -4°C | -13°C | -30°C | -3°C | -17°C |
| HYGIENE | 01174 1K007 001 | Jacket | 0,371 | (B) | AP 2 x | 6°C | -10°C | 14°C | -2°C | -7°C | -26°C | 1°C | -14°C | -26°C | -46°C | -14°C | -30°C |
| | 01174 2K008 005 | Trousers | | | | | | | | | | | | | | | |
| | 01174 1K005 001 | Jacket order picker | 0,417 | (B) | AP 2 x | 3°C | -15°C | 11°C | -5°C | -12°C | -31°C | -2°C | -19°C | -33°C | -49°C | -19°C | -36°C |
| | 01174 2K008 003 | Trousers order picker | | | | | | | | | | | | | | | |
| | 01174 4K001 001 | Coat visitor | 0,267 | (R) | AP 2 x | 13°C | 0°C | 19°C | 7°C | 3°C | -12°C | 9°C | -3°C | -12°C | -28°C | -2°C | -16°C |

If a cold protection suit is selected from this table for a specific workplace, it must be ensured that the hand and foot coverings also has sufficiently high heat insulation for the ambient temperature that is present and that the face and head are properly protected. The specified values are achieved only if a jacket and trousers of the same construction are worn. The heat insulation may be converted into clo: 1 clo=0,155 m²K/W.
IMPORTANT! TEMPEX® Cold Store garments are classified acc. to DIN EN 342 Category II. Therefor it is not allowed to wear them at temperatures below -49°C.



IEC 61482-2
IEC 61482-2:2009 (preceding standards:
EN 61482-1-2 and ENV 50354)

Protective clothing against the thermal hazards of an electric arc
This Type of protective clothing is intended to protect the wearer against thermal effects of a defined electric fault arc according to the tested protection level e.g. protection class.

The Standard defines general requirements and requires an electric arc flash test. The material and garments tests are carried out either according to IEC 61482-1-1 (determination of the ATPV value) or IEC 6148-1-2 ("Box-Text"; preceding standard EN 61481-2). The tested protective clothing does not replace electrically insulating protective clothing such as clothing in accordance with EN 50286:1999, "Electrically insulating protective clothing for work on low-voltage installations". Complete personal protection also requires suitable protective equipment such as safety helmet/visor, protective gloves etc.



EN ISO 11611
(preceding standard: EN 470-1)
Protective clothing for use in welding and related processes

This Type of protective clothing is intended to protect the wearer against weld spatter (small splashes of molten metal), short-term contact with flames as well as radiant heat from the electric arc. Under normal welding conditions, it offers limited electrical insulation against electric conductors of up to 100 V DC. This standard sets out two classes with specific performance requirements (class 1 is for lower requirements, class 2 for higher requirements).



EN ISO 11612
(preceding standard: EN 531)
Clothing to protect against heat and flame

This international standard specifies the minimum requirements for clothing protecting against heat and/or flames. In a wide variety of fields of application, the wearer can also be exposed to convective, radiant or contact heat, as well as splashes of molten metal. Within the standard, letters A-F define the performance levels relating to the protective properties listed above.



EN 1149-5
(preceding standard: EN 1149-5)
Electrostatic properties - Material performance and design requirements

This standard specifies the requirements to be met by the materials used in and the design of electrostatically conductive protective clothing forming part of a fully earthed system to avoid ignitable discharge. The antistatic function is defined as minimising the risk of flammable discharge (explosion). The requirements may not be sufficient in a combustible atmosphere

enriched with oxygen. Protective clothing certified by this standard is not considered protection against mains voltage.



EN 61340
Protection of electronic devices from electrostatic phenomena

Protective clothing with this standard is suitable for the manufacture of products, which are sensitive to discharges of 100V or more. Persons with ESD protective clothing are therefore protecting products during the manufacturing process from electrical discharges, which can happen with clothing that is not suitable for ESD, e.g. through friction or electrostatic induction (magnetic field, field effects) and/or material separations, and are therefore preventing damage to the component.



EN 13034 Type 6
Protective clothing against liquid chemicals - Performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals

This standard specifies the minimum requirements to be met by protective clothing against chemicals offering limited protective effect, including reusable protective clothing. Protective clothing against chemicals offering limited protective effect is for use where there is a possibility of exposure to minor chemical spraying, liquid aerosols or low-pressure spattering.



EN ISO 20471
(preceding standard: EN 471)
Warning clothing - Test methods and requirements

EN 20471 sets out the requirements to be met by protective clothing which visually highlights wearers. This is done to make them clearly visible in dangerous situations under all light conditions during the daytime and when vehicle headlights are shone at them in the darkness. This standard specifies performance requirements to be met by the protective clothing in terms of colour and retro-reflection, along with minimum surface dimensions and requirements to be met by materials used in the smallest possible garment size.



EN 17353
Protective Wear - Equipment for enhanced visibility in medium risk situations

This standard specifies the requirements for enhanced visibility equipment for clothing and products capable of visually signalling the presence of the wearer. Enhanced visibility equipment is intended to provide conspicuity to the wearer's presence in medium risk situations in all daylight conditions and/or when illuminated by vehicle headlights or searchlights in the dark. Performance requirements are included for colour

and retroreflectivity, as well as for the minimum area and arrangement of materials in the protective equipment.



EN 343
Protective clothing - Protection against rain

Specifies requirements and test methods for materials and seams used in clothing to protect against precipitation (e.g. rain, snow-flakes), fog and ground humidity. Waterproofness and resistance to water vapour are the properties that must be tested and indicated on the label. The various classes for resistance to water vapour provide an indication for the recommended wearing time in different ambient temperatures.



EN 13758-2
Solar UV protective properties; EN 13758 Part 1: Method of test for apparel fabrics; EN 13758 Part 2: Classification and marking of apparel

The European standard 13758-1 defines the method for determination of permeability of ultraviolet solar radiation for textiles; EN 13758-2 sets out the classification and identification of the clothing. As solar radiation causes skin diseases, only covered surface areas are protected of Type UV-A and UV-B radiation.



EN 14058
Protective clothing - Garments for protection against cool environments

This European standard specifies the requirements and test methods for wear behaviour of garments for protection against cool environments. Use of tested garments in environments with an air temperature of -5 °C and higher. Identification should include classification of overall heat transfer resistance.



EN 342
Protective clothing - Ensembles and garments for protection against cold.

This standard defines the test methods and performance requirements for protective clothing against cold of -5 °C or lower. It tests the thermal insulation and air permeability of the clothing. The test result states how long the wearer of the protective clothing can remain at certain temperatures when stationary or when performing tasks involving small or moderate amounts of movement. Insulation values TEMPEX® Cold Protection: Please note our insulation values table for our TEMPEX® cold protective clothing on page 225. It shows the duration of use of the relevant garments in relation to physical performance and temperature.



EN 511
Gloves as protection in cold environments

This standard defines the test methods and performance requirements for gloves used as protection in cold environments. It measures the insulation performance of the material in the event of contact with a cold object, resistance to the gradual permeation of cold, and thermal resistance in the event of direct contact with a cold object. The 3-digit code next to the standard pictogram indicates the performance levels, where 0 is the weakest and 4 is the best performance. The water resistance is defined with two performance levels: 0 = water permeation after 30 minutes, 1 = no water permeation after 30 minutes.



EN 15384
Protective clothing for the fire brigade for wildland firefighting

This European Standard specifies methods of test and minimum performance requirements for protective clothing, designed to protect the wearer's body, except the head, hands and feet, to be worn in wildland firefighting and associated activities. This clothing is not intended to provide protection during fire entrapment.



EN 407
Gloves as protection against thermal risks

Gloves tested in accordance with this standard provide protection against heat and/or flames. The standard provides six testing options: combustion behaviour, contact heat, convective heat, radiant heat, small splashes of molten metal and larger quantities of molten metal. The actual level of protection depends on which test is carried out during certification and which performance level is achieved, where 1 is the lowest and 4 is the highest. "X" means not tested, "0" means below the minimum requirement.



EN 388
Gloves as protection against mechanical risks

This standard defines the test methods and performance requirements for gloves used as protection against mechanical risks. It provides four testing options: abrasion resistance, cut resistance, tear propagation force and penetration force. The actual level of protection depends on which test is carried out during certification and which performance level is achieved, where 1 is the lowest and 4 (resp. 5) is the highest. "X" means not tested, "0" means below the minimum requirement.



EN ISO 20345
Personal protective equipment - safety footwear

This standard defines basic requirements and voluntary additional requirements for safety footwear for general purposes such as mechanical risks, slip resistance, thermal risks and ergonomic features. The letters SB and S1 to S5 indicate the requirements that have been met.



EN 166
Personal eye protection

This standard defines functional requirements for different Types of personal eye protection equipment and includes basic requirements for all eye protection equipment such as the size of the minimum field of view, flammability, UV resistance or protection against dust, splashes of molten metal and electric arcs. This standard applies to all Types of personal eye protection equipment for protection against a range of hazards encountered in industry or in laboratories.

EN 171

Personal eye protection/infrared protective filter

This standard defines protection levels and transmission requirements for infrared protective filters. The filters defined in this standard are not suitable for the (in)direct observation of electric arcs.



EN 397
Industrial hard hats

Industrial hard hats are primarily intended to protect the wearer against falling objects and their consequences, such as brain injuries and skull fractures. This European standard defines general requirements, test methods and test conditions as well as requirements pertaining to the protective function (e.g. shock absorption and penetration resistance) of industrial hard hats.

EN 50365

Electrically insulating helmets for use on low voltage installations

This standard defines the requirements for electrically insulating helmets for protection when working on or near parts under alternating voltage of up to 1000 V (AC) or direct voltage up to 1500 V (DC). If it is used in combination with other electrically insulating PPE, the helmet should prevent dangerous electric current passing through the head as well as electric shocks. All helmets must also meet the requirements according to EN 397.

Hupf 2

Manufacturing and testing description for universal protective clothing for firemen (Part 2 - Firemen's trousers)

Hupf 2 specifies the minimum requirements to achieve sufficient basic protection for all firemen to protect them against general risks of firefighting service. It applies to the firemen's protective clothing described therein and contains a revision of safety requirements based on the current EN ISO 11612:2015 with regard to materials, sizes, design and marking, as well as adapted test methods.

The firemen trousers shall comply with the applicable EN ISO 11612 "Protective clothing - Clothing for protection against heat and flame", the applicable EN ISO 13688 "Protective clothing, General requirements" and this "Manufacturing and testing description for a universal protective clothing for firemen (HuPF)". The protective clothing for firemen is intended to protect the wearer from the hazards of firefighting activities together with the other personal protective equipment required in each case.

All products pictured in this catalogue are certified according to the product specified standards.

Products with reflective stripes can provide better visibility. They are not automatically certified according to

 EN ISO 20471

or

 EN 17353

but only if the product is labelled accordingly.

SIZES AND CARE

HB
PROTECTIVE
WEAR



MEN

| Unisex | 3XS, 2XS, XS | | S | | M | | L | | XL | | 2 XL | | 3 XL | | 4 XL | | |
|---------------|--------------|----|-------|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-----------------|-----|-------|
| Regular sizes | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | |
| Long | 86 | 88 | 90 | 94 | 98 | 102 | 106 | 110 | 114 | 118 | 122 | 126 | 130 | 134 | 138 | 142 | |
| Short | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | |
| Double sizes | 38/40 | | 42/44 | | 46/48 | | 50/52 | | 54/56 | | 58/60 | | 62/64 | | 66/68 | | 70/72 |
| Collar sizes | 35/36 | | 37/38 | | 39/40 | | 41/42 | | 43/44 | | 45/46 | | 47/48 | | 49/50 bis 59/60 | | |

WOMEN

| Unisex | 3XS | 2XS | XS | | S | | M | | L | | XL | 2XL | | 3XL | 4XL | |
|--------------|-------|-----|-------|----|-------|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|----|
| Single sizes | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 |
| Long | 72 | 76 | 80 | 84 | 88 | 92 | 96 | 100 | 104 | 108 | | | | | | |
| Short | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | | | | | | |
| Double sizes | 28/30 | | 32/34 | | 36/38 | | 40/42 | | 44/46 | | 48/50 | | 52/54 | | 56/58 | |

VEST

| | | | | | | | | | | | | | | | | |
|------|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|
| Vest | | 1 | 2 | 3 | 4 | | | | | | | | | | | |
|------|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|

UNDERWEAR

| | | | | | | | | | | | | | | | | |
|-------------------------|---|-----|---|------|---|---------|----|--|--|--|--|--|--|--|--|--|
| Underwear Regular sizes | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | | | |
| Underwear Double sizes | | S-M | | L-XL | | 2XL-3XL | | | | | | | | | | |

HEADGEAR

| | | | | | | | | | | | | | | | | |
|----------------------|---------|------|---------|------|---------|------|------|------|------|--|--|--|--|--|--|--|
| Head cover Cleanroom | 0/54 | 1/56 | 2/58 | 3/60 | 4/62 | 5/64 | 6/66 | 7/68 | 8/70 | | | | | | | |
| Visor cap Cleanroom | 1/54-56 | | 2/57-59 | | 3/60-63 | | | | | | | | | | | |

BELTS

| | | | | | | | | | | | | | | | | |
|-------------|----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|--|--|--|
| Belt length | 90 | 100 | 110 | 120 | 130 | 140 | 150 | | | | | | | | | |
|-------------|----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|--|--|--|

GLOVES

| | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|----|----|----|--|--|--|--|--|--|--|--|--|
| Gloves Cold Protection | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | | | | | | |
| Gloves Heat Protection | | | | | | 11 | 12 | | | | | | | | | |

SOCKS, SHOES & BOOTS

| | | | | | | | | | | | | | | | | |
|---------------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|----|----|--|
| Socks | | 37/38 | | 39/40 | | 41/42 | | 43/44 | | 45/46 | | 47/48 | | | | |
| Shoes/Gaiters | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | |

Note: Sizes of older models may correspondingly deviate from these values.

- Sizes available from stock.
- Sizes produced after receipt of order; usually not on stock. Please contact our sales staff for more information.



The 21 TO WEAR® icon indicates products which are available via our high-speed delivery service 21 TO WEAR® within 21 days. Please find more information at www.21towear.com

CUSTOMISED SIZES

HB Protective Wear offers a comprehensive selection of sizes for its collections. However, if you or your staff members require a customised size not included in the stated sizes, we will be pleased to manufacture such garment to your stated body dimensions.

WASHING

The numbers stated in the wash tub correspond to the maximum washing temperatures and must not be exceeded. The single bar below the wash tub requires mild treatment with reduced washing amount and low speed during spin-drying. The double bar means very mild treatment with reduced mechanical load (e.g. wool).



BLEACHING



TUMBLE DRYING

The points state the drying level in the tumble dryer.



IRONING

The points state the temperature ranges of adjustable irons.



PROFESSIONAL DRY CLEANING

The letters are intended for the textile care person. They state the applicable solvents. The bar below the circle requires limitation of mechanical load, moisture addition and/or temperature when cleaning.



PROFESSIONAL WET CLEANING

This symbol identifies articles that can be treated by wet cleaning procedures. It is stated in the second line below the symbol for dry cleaning. The bars below the circle require limitation of mechanical load during wet cleaning. The double bar identifies an even milder procedure.



NOTE ON FLEECE MATERIAL

Fleece material may produce lint initially, depending on the design. This will stop after a few washes.

NOTE ON FLUORESCENT COLOURS

Fluorescent colours which are constantly exposed to UV radiation will fade more quickly. High-visibility clothing should therefore not be stored in direct sunlight.

NOTE ON TEMPEX® COLD PROTECTION GARMENTS

In order for you to be able to take advantage of your high-quality protective equipment for as long as possible, it is important to keep the following instructions in mind.

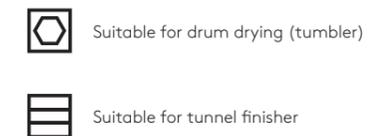


- Please hang up the clothing after each use and dry it in a sufficiently heated and well-ventilated room.
- Avoid pressing the garments during storage - e.g. in narrow lockers.
- Never hang or lay the clothing onto hot heat sources.
- The garments should never be exposed to temperatures above +50 °C.
- We absolutely recommend regular professional cleaning or washing according to the instructions on the label of the garment.

THE PRO LABEL: GARMENTS SUITED FOR INDUSTRIAL LAUNDRY

HB products with this label are suitable for industrial laundry and meet the requirements of ISO 15797 for washing and drying processes in industrial laundry. Only textiles that are resistant to the conditions of these care procedures can be labelled with a care symbol for industrial laundry.

Drying symbols:



Washing symbol:



LEGEND



MULTI-RISK PROTECTION
Collections and items marked with "Multi-Risk" are certified according to minimum 4 EN standards. Therefore these are suited for work areas with multiple application fields.



FEMALE CUT
Tailored with fitted waist and especially made for women.



HIGH-SPEED DELIVERY SERVICE

These products are available in 21 days (Germany). Our PPE service for urgent needs. Abroad delivery takes few days more.



LIGHT-WEIGHT FABRIC
If you see this icon the product line is manufactured with extraordinarily light-weight fabrics.



GARMENT WEIGHT

The garment weight tells you how much exactly weighs the item, based on a medium size (M or 52).



DEEP FREEZING COLD STORE PLUS

Clothing for low-movement tasks at temperatures down to -49 °C



DEEP FREEZING COLD STORE

Clothing for high-movement tasks at temperatures down to -49 °C



COOLING CHILLROOM

Clothing for work in moderately cold conditions



READY TO WEAR

This collection can be configured individually (216 colour combinations, 12 equipment versions) and will be with you within 21 days.



SUSTAINABILITY

Products with this icon are made of sustainable eco-friendly materials like organic cotton or recycled PET bottles.



ERGONOMIC DESIGN

Product line with ergonomically optimised cut for more freedom of movement.



BREATHABILITY

This product offers a pleasant wearing and climate comfort thanks to its fast drying material and a quick moisture transport.



BODY MAPPING

This product takes into account the different requirements of the individual areas of the body, with flex and transpiration zones allowing greater freedom of movement and reliable moisture transport.

ATPV = Arc Thermal Performance Value:

Thermal characteristic value for the impact energy on a textile material at which there is a 50 % possibility of second-degree burns.

EBT50 = Energy Breakopen Threshold:

Energy threshold at which there is a 50 % chance that the textile material will break open.

ELIM = Incident Energy Limit

Impact energy limit: Mean value of three determined values that lie below the Stoll curve (basis is the ATPV) and are additionally not broken up (basis is the EBT50). Protects the wearer 100 % compared to ATPV and EBT50.

All values – ATPV and EBT50 – are specified in cal/cm² or kJ/m² = amount of heat per unit area and show the load limits of the material or the material layer structures. The higher the value, the better the protection.

HAF = Heat Attenuation Factor:

In addition to EBT and ATPV, the heat attenuation factor, the HAF value, is determined. It indicates the percentage of heat that can be kept out when it strikes a flame-retardant material. Specified in %.

4kA – 7kA/4kA – 7kA

Our arc fault protective clothing is embroidered on the outside with these kilo-ampere (kA) specifications, so that the wearer can directly identify which protection the garment provides.

- 4kA: the garment has class 1 arc fault protection all round.
- 7kA/4kA: the garment has class 2 arc fault protection in the 2-layer areas (jacket front, sleeves and trouser front).
- 7kA: the garment has arc fault protection class 2 all around.

Reflective stripes

Products with reflective stripes are not automatically certified according to EN ISO 20471 or EN 17353, but only if they are marked accordingly in the label.

EN ISO 20471 EN 17353

CUSTOMER SERVICE

END USER D-A-CH & INTERNATIONAL

CUSTOMER SERVICE

Ulrich Becker

Automotive, Energy, Metal, Steel & Petroleum Industry
Phone +49 2639 8309-62
eMail ubecker@hb-online.com

Marina Eckert

Cold Protection, Fire & Rescue, General Industries
Phone +49 2639 8309-75
eMail meckert@hb-online.com

Gisela Ragnit

International
Phone +49 2639 8309-620
eMail gragnit@hb-online.com

SALES SUPPORT

Lea Janzen

Phone +49 2639 8309-77
eMail ljanzen@hb-online.com

DISTRIBUTION D-A-CH & INTERNATIONAL

CUSTOMER SERVICE

Nico Schäfer

Southern Germany & CH
Phone +49 2639 8309-68
eMail nschaefer@hb-online.com

Florian Hörnig

Central Germany
Phone +49 2639 8309-618
eMail fhoernig@hb-online.com

Elisa Kern

Northern Germany
Phone +49 2639 8309-79
eMail ekern@hb-online.com

Margit Michel

A & International
Phone +49 2639 8309-61
eMail mmichel@hb-online.com

Gabi Ehlscheid

Phone +49 2639 8309-617
eMail gehlscheid@hb-online.com

SALES SUPPORT

Susanne Krämer

Phone +49 2639 8309-76
eMail skraemer@hb-online.com

ADDRESS

HB Protective Wear GmbH & Co. KG
Maiseider Straße 19
D-56584 Thalhausen

Phone +49 2639 8309-0
Fax +49 2639 8309-99

eMail info@hb-online.com

www.hb-online.com

TEXTILE SERVICES & LAUNDRIES

CUSTOMER SERVICE

Christiane Muscheid

Phone +49 2639 8309-622
eMail cmuscheid@hb-online.com

Ivonne Pick

Phone +49 2639 8309-60
eMail ipick@hb-online.com

Karin Pützfeld

Phone +49 2639 8309-74
eMail kpuetzfeld@hb-online.com

Max Zimmermann

Phone +49 2639 8309-619
eMail mzimmermann@hb-online.com

be safe. we care.

HB Protective Wear GmbH & Co. KG

Maischeider Straße 19 · D-56584 Thalhausen

Phone +49 2639 8309-0 · Fax +49 2639 8309-99

info@hb-online.com · www.hb-online.com