



Model: Kai, project management  
Collection: HB-ComFlex®



A sunset over a field of dandelions with two large metal tanks in the foreground. The sun is low on the horizon, casting a warm glow over the scene. The tanks are dark and cylindrical, with a blue-tinted top section. The field is filled with green grass and white dandelion heads. In the background, there are trees and a distant building.

## 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.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME				REGULAR SIZES
1, 2, 3		52	medium grey	EN ISO 11611 Class 2 A1	EN ISO 11612 A1/B1/C1/E3/F1	ISO 15797	46–58 & 94–110

**FIELDS OF APPLICATION:** Steel works, metalworking industry, welding companies, plant construction, foundries



Sleeve hem width adjustable via snap fasteners covered inside

Closure band with snap fasteners covered on both sides

**JACKET**

Welding protection class 2  
 Part number: **01272 10046 000 52**  
 Garment weight: approx. 895 g  
 Fabric weight: approx. 470 g/m<sup>2</sup>

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.

HEAT,  
SPLASHES &  
WELDING



### TROUSERS

Welding protection class 2  
Part number: **01272 20084 003 52**  
Garment weight: approx. 905g  
Fabric weight: approx. 470g/m<sup>2</sup>

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: **01272 50062 001 52**  
Garment weight: approx. 1,105g  
Fabric weight: approx. 470g/m<sup>2</sup>

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. 470g/m<sup>2</sup>





















# HB-WeldersFORCE®

Modern and comfortable PPE in several colour combinations:

With HB-WeldersFORCE®, we are adding two specialised fabrics for welding protection to our range.

Two qualities for flexible use: a 450 g/m<sup>2</sup> version for permanent welding work with larger amounts of sparks and higher radiant heat, and a lighter 350 g/m<sup>2</sup> version for occasional welding work with smaller sparks.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME	MATERIAL WEIGHT					REGULAR SIZES
1		<b>2027</b>	royal/navy	350 g/m <sup>2</sup>					46-58 & 94-110
		<b>2041</b>	navy/royal						
		<b>2043</b>	navy/medium grey						
		<b>2382</b>	anthracite/medium grey						
2		<b>45</b>	navy	350 g/m <sup>2</sup>					46-58 & 94-110
		<b>58</b>	anthracite	450 g/m <sup>2</sup>					

**FIELDS OF APPLICATION:** Steel works, metalworking industry, plant construction



Specially arranged pockets make it easier to reach in with gloves

## BLOUSON 350

Welding protection class 1

Part number: **01144 10000 015 + COLOUR NO.**

Garment weight: 820g

## BLOUSON 450

Welding protection class 2

Part number: **01209 10000 015 + COLOUR NO.**

Garment weight: 1.070g

Two-coloured • stand-up collar • front with snap fasteners, covered on both sides • 2 breast pockets and 2 integrated side pockets, each with flap and covered snap fastener • FR let-in collar • sleeve hem width adjustable with plastic snap fastener • standard pictograms as FR direct embroidery on the front • manufactured in roof tile design.







HEAT,  
SPLASHES &  
WELDING



2 | Attached knee pockets and the free-hanging folding ruler pocket make it easier to work when kneeling



Elastic waistband



2 |



#### TROUSERS 350

Welding protection class 1

Part number: **01144 20000 012 + COLOUR NO.**

Garment weight: 765g

#### TROUSERS 450

Welding protection class. 2

Part number: **01209 20000 012 + COLOUR NO.**

Garment weight: 980g

Single-coloured • attached waistband with elastic band on both sides and button fastening on the outside • fly with covered zipper • 2 wing pockets • 2 back pockets, 1 ruler pocket on the right • each with flap and covered snap fastener • 1 mobile phone pocket on the left with flap and hook&loop fastener • knee pockets with covered hook&loop fastener • manufactured in roof tile design.



















**MATERIAL:** 79 % COTTON, 10 % POLYESTER, 1 % CARBON

**FABRIC WEIGHT:** approx. 350 g/m<sup>2</sup> · approx. 450 g/m<sup>2</sup>



# HB-WeldersFORCE®

Both versions are designed in the same look to ensure that employees are uniformly equipped in line with requirements. The flame-retardant and reinforced cotton ensures good wearing properties and the addition of polyester for greater strength and dimensional stability, so that the jacket, trousers and bib & brace can withstand many industrial washes.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME	MATERIAL WEIGHT					REGULAR SIZES
1		2027	royal/navy	350 g/m <sup>2</sup>					46-58 & 94-110
		2041	navy/royal						
		2043	navy/medium grey						
		2382	anthracite/medium grey						
2  , 3		45	navy	350 g/m <sup>2</sup>					46-58 & 94-110
		58	anthracite	450 g/m <sup>2</sup>					

**FIELDS OF APPLICATION:** Steel works, metalworking industry, plant construction

3 |



Elastic knitted inserts on the dungarees make it easier to put on and take off and to work in uncomfortable positions



### BIB AND BRACE TROUSERS 350

Welding protection class 1  
Part number: **01144 50100 000 + COLOUR NO.**  
Garment weight: 900g

### BIB AND BRACE TROUSERS 450

Welding protection class 2  
Part number: **01209 50100 000 + COLOUR NO.**  
Garment weight: 1.165g

Single-coloured • flame-retardant stretch braces with Fixlock buckles • straight kidney protection • 2 side slits with knitted gusset • 2 side seam pockets • 1 outer bib pocket, 2 back pockets, 1 ruler pocket on the right • each with flap and covered snap fastener • 1 cell phone pocket on the left with flap and hook&loop fastener • slit processing with covered zipper • knee pockets with covered hook&loop fastener • manufactured in roof tile construction.



HEAT,  
SPLASHES &  
WELDING



# POSSIBLE COLOUR COMBINATIONS – AVAILABLE IN TWO DIFFERENT FABRIC WEIGHTS











Thanks to the smooth surface and elaborate roof tile manufacture, beads of sweat and metal splashes do not stick to the clothing, but roll off downwards.

**MATERIAL:** 79 % COTTON, 10 % POLYESTER, 1 % CARBON  
**FABRIC WEIGHT:** approx. 350 g/m<sup>2</sup> · approx. 450 g/m<sup>2</sup>

# 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	dark navy/medium grey						
2  , 3	 	458 52	dark navy medium grey	EN ISO 11611 Class 2 A1+A2	EN ISO 11612 A1+A2/B1/C1/ E3/F1	EN 1149-5	IEC 61482-2 APC 1	ISO 15797	46-58 & 94-110

**FIELDS OF APPLICATION:** Welding companies, steel works, metalworking industry, foundries, plant construction



Pockets have been elaborately designed so that welding spatters can easily roll off



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.





2 and 3 | Ruler pocket with additional pen pocket



2 |

Flame-retardant stretch braces with useful fixlock buckle

Side entry with elastic knit wedge

2 and 3 | Bellow pocket with additional mobile phone pocket inside



3 |

### TROUSERS

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

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) – each with flap and covered snap fastener • knee pockets with adjustable hook&loop fastener.

**21 TO WEAR**  
Also models for ladies available – delivered in just 21 days.  
See page 236.

### BIB AND BRACE TROUSERS

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

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. 390g/m<sup>2</sup>

HB-4welders®



# HB-ComFlex®

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 ,2		397	dark denim	EN ISO 11612 A1+A2/B1/C1/E2	EN ISO 11611 Class 2 A1+A2	ISO 15797	46-58 & 94-110
		2404	dark denim/dark navy				

**FIELDS OF APPLICATION:** Welding companies, metalworking industry, plant construction, ship building



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

Stretched denim for extraordinary freedom of movement



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

## 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.





HEAT,  
SPLASHES &  
WELDING



2 |

The denim gets a very individual used look after washing



Elasticated side

Free hanging  
pocket pouches  
on both pockets

Trim made of high-  
tech fabric

Knee pockets

## TROUSERS

Welding protection class 2

Part number: **01281 20000 007 397** (Denim)

Garment weight: approx. 930g

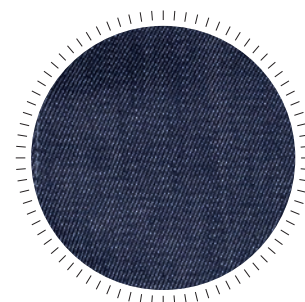
Part number: **01281 20000 006 2404**

(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 wing 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. 425g/m<sup>2</sup> ·

**MATERIAL HIGH-TECH FABRIC:** 40% ARAMIDE, 30% MODACRYLIC, 20% LYOCELL, 9% POLYAMIDE, 1% CARBON ·

**FABRIC WEIGHT:** approx. 430g/m<sup>2</sup>

# HB-ComFlex®

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	ISO 15797	46-58 & 94-110
		2404	dark denim/dark navy				
4		458	dark navy				46/48-58/60

**FIELDS OF APPLICATION:** Welding companies, metalworking industry, plant construction, ship building



## BIB AND BRACE TROUSERS

Welding protection class 2

Part number: **01281 50100 008 397** (Denim)

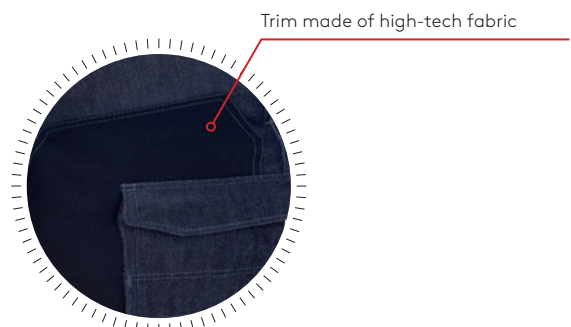
Garment weight: approx. 1,040 g

Part number: **01281 50100 007 2404** (Denim + high-tech fabric)

Garment weight: approx. 1,190 g

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 • 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.







HEAT,  
SPLASHES &  
WELDING



4 |



The vegan welding apron  
for industrial laundry

Back belt adjustable with  
press studs

#### 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. 425g/m<sup>2</sup> ·

**MATERIAL HIGH-TECH FABRIC:** 40% ARAMIDE, 30% MODACRYLIC, 20% LYOCELL, 9% POLYAMIDE, 1% CARBON ·

**FABRIC WEIGHT:** approx. 430g/m<sup>2</sup>

# SECAN® Securo 420

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

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	ISO 15797	46-58 & 94-110
<b>FIELDS OF APPLICATION:</b> Steel works, metalworking industry, welding companies, foundries, plant construction, heat exposed workplaces								



1|

Standard pictograms as direct embroidery



Adjustable sleeve hem

## 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.



HEAT,  
SPLASHES &  
WELDING



2 |



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. 810g

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.

3 |



**BIB AND BRACE TROUSERS**

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









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/m<sup>2</sup>



# HB-Iron Pro

Our bestseller for protection against liquid iron splashes (E3). The SECAN® quality guarantees flame resistance up to 50 industrial washes and the reflective strips increase visibility. The ergonomic fit and modern design are just as impressive as the performance with maximum protection against heat radiation, welding splatters and large quantities of molten iron. NEW: a matching shirt made of lighter fabric, also with roof tile manufacture.

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		IEC 61482-2 APC 1			46-58 & 94-110
4		22 52	pure orange middle grey	EN ISO 11612 A1+A2/B1/C1/ E1/F1	EN ISO 11611 Klasse 1 A1+A2	EN 1149-5	-	EN 17353 Type B2	ISO 15797	39/40-47/48

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



## 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 high-visibility protective clothing according to EN ISO 20471 • FR leasing label • standard pictograms as FR direct embroidery on the front • roof tile manufacture.



## Higher visibility:

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



## 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 protective clothing acc. to EN ISO 20471 • roof tile manufacture.



**21 TO WEAR** Trousers + bib and brace trousers also available with knee pockets in just 21 days. See page 237.



**BIB AND BRACE TROUSERS**

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

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 protective clothing acc. to EN ISO 20471 • roof tile manufacture.

**MATERIAL:** 98% COTTON, 2% CARBON  
**FABRIC WEIGHT:** 1 | to 3 | approx. 420 g/m<sup>2</sup> · 4 | approx. 250 g/m<sup>2</sup>

More sizes available – see size table on page 244

**NEW:** The matching shirt – with reflective striping in accordance with EN 17353 for increased visibility



**SHIRT**

Liquid metal Fe  
Part number: **01116 60026 005 + COLOUR NO.**  
Garment weight: approx. 495g

Single-colored • Comfort fit • turn-down collar with bar and covered snap fastener • collar with additional plastic snap fastener to close the raised collar • closure with snap fasteners covered on both sides • ergonomically shaped sleeves • chest pockets with flaps and sleeve cuffs with gusset, each with covered snap fasteners • FR reflective stripes with yellow backing, suited for industrial laundry • no high-visibility clothing protective acc. to EN ISO 20471 • FR leasing collar • standard pictograms as FR direct embroidery on right cuff • roof tile manufacture.





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.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME				REGULAR SIZES
1 , 2 , 3  4		45	navy	EN ISO 11611 Class 1 A1	EN ISO 11612 A1/B1/C1/D3/ E3/F1	ISO 15797	46-58 & 94-110 46-58
<b>FIELDS OF APPLICATION:</b> Aluminium working industry, foundries, metalworks, heat exposed workplaces							



## 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.

HEAT,  
SPLASHES &  
WELDING



3 |



Size-adjustable  
hip width

4 |



### 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/m<sup>2</sup>



# HB-HeavyMetal Pro®

HB-HeavyMetal Pro®, available in two weight classes, is the answer to the special requirements for PPE for working with high temperatures or molten metal. The material has good moisture management and is also very comfortable to wear thanks to its balanced composition. Just like the reflective stripes, it is suited for industrial laundry.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME	FABRIC WEIGHT							REGULAR SIZES
1 ,2		2080	anthracite grey/ pure orange	approx. 340g/m <sup>2</sup>	EN ISO 11612 A1+A2/ B1/C1/D2/ E2/F1	EN ISO 11611 Class 1 A1+A2					
		2138	anthracite grey/ petrol	approx. 430g/m <sup>2</sup>	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	ISO 15797	46-58 & 94-110
		2204	navy/ anthracite grey								

**FIELDS OF APPLICATION:** Aluminium working industrie, foundries, steelworks, heat-exposed workplaces



Side pockets with covered PVC zip

## JACKET 340

Liquid metal Al + Fe  
Part number: **01221 10000 012 + COLOUR NO.** (340g/m<sup>2</sup>)  
Garment weight: approx. 830g

## JACKET 430

Liquid metal Al + Fe  
Part number: **01218 10000 012 + COLOUR NO.** (430g/m<sup>2</sup>)  
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 high-visibility protective clothing acc. to EN ISO 20471 • leasing neck label • embroidered FR standard pictograms on the front • manufactured with roof tile design.







2 |



1 and 2 |  
Enjoy more freedom of movement thanks to the ergonomic cut

Leg pocket with mobile phone pocket inside

Knee pockets with adjustable hook & loop fastening



Contrast colour details



### TROUSERS 340

Liquid metal Al + Fe

Part number: **01221 20000 009 + COLOUR NO.** (340 g/m<sup>2</sup>)

Garment weight: approx. 730 g

### TROUSERS 430

Liquid metal Al + Fe

Part number: **01218 20000 009 + COLOUR NO.** (430 g/m<sup>2</sup>)

Garment weight: approx. 990 g

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 high-visibility protective clothing acc. to EN ISO 20471 • manufactured with roof tile design.

**MATERIAL: 01221** 50 % COTTON, 39 % MODACRYLIC, 10 % VISCOSE, 1 % CARBON ·












**MATERIAL: 01218** 52 % COTTON, 37 % MODACRYLIC, 10 % VISCOSE, 1 % CARBON ·

**FABRIC WEIGHT:** approx. 340 g/m<sup>2</sup> (**01221**) · approx. 430 g/m<sup>2</sup> (**01218**)



# HB-HeavyMetal Pro®

The dynamic design of HB-HeavyMetal Pro® in trendy colours and ergonomic features stands for modern PPE with a high protection level. The standard profile also includes increased visibility certified according to EN 17353. The flame-retardant reflective strips are segmented and patched for optimum freedom of movement.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME	FABRIC WEIGHT							REGULAR SIZES
1 ,2 ,3		2080	anthracite grey/ pure orange	approx. 340g/m <sup>2</sup>	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 <sup>2</sup>	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	ISO 15797	
		2204	navy/ anthracite grey	approx. 430g/m <sup>2</sup>	EN ISO 11612 A1+A2/ B1/C1/D3/ E3/F1	EN ISO 11611 Class 2 A1+A2	EN 1149-5				
4		45	navy	approx. 250g/m <sup>2</sup>	EN ISO 11612 A1+A2/ B1/C1/D1/ E2/F1	EN ISO 11611 Class 1 A1+A2					39/40-47/48
		58	anthracite grey	approx. 250g/m <sup>2</sup>	EN ISO 11612 A1+A2/ B1/C1/D1/ E2/F1	EN ISO 11611 Class 1 A1+A2					

**FIELDS OF APPLICATION:** Aluminium working industrie, foundries, steelworks, heat-exposed workplaces



2 and 3|  
Pocket pouch of ruler and  
leg pocket free hanging

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/m<sup>2</sup>)  
Garment weight: approx. 900g

## BIB AND BRACE TROUSERS 430

Liquid metal Al + Fe  
Part number: **01218 50100 009 + COLOUR NO.** (430g/m<sup>2</sup>)  
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 high-visibility protective clothing acc. to EN ISO 20471 • manufactured with roof tile design.

HEAT,  
SPLASHES &  
WELDING



1 to 3 |  
**Better visibility**  
thanks to modern  
patched reflective  
stripes, flame  
retardant and suitable  
for industrial laundry,  
certified acc. to  
EN 17353



2 and 3 |  
Knee pockets  
with adjustable  
hook&loop  
fastening



**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. 340g/m<sup>2</sup> (01221) · approx. 430g/m<sup>2</sup> (01218) · approx. 250g/m<sup>2</sup> (01109)





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.

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	ISO 15797	46-58 & 94-110
4				EN ISO 11612 A1+A2/B1/C1/D1/ E1/F1	-		39/40-47/48

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



High band collar with covered hook & loop fastener

1|



2|



Large inner pocket

Manufactured in roof tile design

### BLOUSON

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

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. 1,005 g

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.

HEAT,  
SPLASHES &  
WELDING



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



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. 1,130 g

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.

### SHIRT, WITH STAND-UP COLLAR

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

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/m<sup>2</sup> · 4 | approx. 285 g/m<sup>2</sup>

**VINEX** **WESTEX**  
A MILLIKEN BRAND

# ▶ 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.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME		SIZES
1   2		45	navy	-	S-2XL
3		58	anthracite grey	-	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

**FIELDS OF APPLICATION:** Heat and flame exposed workplaces, energy suppliers, public services, plant engineering and construction, electricians

**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.



1 and 2 | Antibacterial outer fabric

## 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.



Back centre with flap for cooling the neck area



HEAT,  
SPLASHES &  
WELDING



**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/m<sup>2</sup>

# TEMPEX®-TREME HEAT

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.



PROTECTIVE  
HOOD  
KF-3/Z

JACKET AND TROUSERS:  
COLLECTION TEMPEX®-TREME  
HEAT COMFORT WITH CK-12/Z  
MATERIAL AND C3 RADIANT  
PROTECTION.

FOR COMFORTABLE WORKING  
EVEN WITH EXTREME HEAT.

5-FINGER-  
GLOVES  
AW-1/Y

FOUNDRY BOOTS



## 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
<b>Material number</b>	<b>12014</b>	<b>12008</b>	<b>12003</b>	<b>12015</b>
<b>Collection/Products</b>	TEMPEX®-TREME HEAT COMFORT/COMFORT Plus	TEMPEX®-TREME HEAT COMFORT/COMFORT Plus	TEMPEX®-TREME HEAT CLASSIC	Gaiters and gloves
<b>Material</b>	70% preox, 30% para-aramide	100% aramide (70% recycled meta-aramide, 30% para-aramide)	100% para-aramide	70% preox, 30% para-aramide
<b>Material weight</b>	approx. 360g/m <sup>2</sup>	approx. 420g/m <sup>2</sup>	approx. 475g/m <sup>2</sup>	approx. 690g/m <sup>2</sup>
<b>Carrier material</b>	Twill	Knitted fabric with roughened nap	Herringbone twill	Twill
<b>Aluminisation</b>	Aluminum pigmented transfer film	PES film aluminised on both sides	Aluminum pigmented transfer film	Aluminum pigmented transfer film
<b>Standards</b>	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/F1
<b>Protection properties</b>	<ul style="list-style-type: none"> <li>• High protection against radiant heat</li> <li>• Very good protection from liquid metal splatters</li> <li>• Very lightweight and soft design for high wearing comfort</li> <li>• Good mechanical strength</li> </ul>	<ul style="list-style-type: none"> <li>• Highest protection against radiant heat (C4)</li> <li>• Very high thermal insulation and heat barrier</li> <li>• Very good protection from liquid metal splatters</li> <li>• Lightweight and very soft design for high wearing comfort</li> </ul>	<ul style="list-style-type: none"> <li>• High protection against radiant heat</li> <li>• Very good protection from liquid metal splatters</li> <li>• Very high mechanical strength</li> </ul>	<ul style="list-style-type: none"> <li>• High protection against radiant heat</li> <li>• High protection against contact heat</li> <li>• Very good protection from liquid metal splatters</li> <li>• Very high mechanical strength</li> </ul>
<b>Detailed photo</b>				

### FIELDS OF APPLICATION:

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



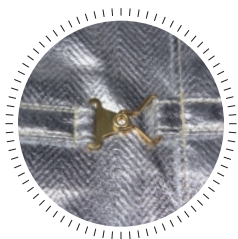
# TEMPEX®-TREME HEAT CLASSIC

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 240).

ITEM	MAT. NO.	MATERIAL	COLOUR	COLOUR NO.	COLOUR NAME		REGULAR SIZES
1   to 4	12003	KF-3/Z		15	silver	EN ISO 11612 A1/B1/C3/D3/E3/F1	46/48-58/60



1 and 3 | Inner hook&loop fastener, alternatively quick release fastener



Neckline with FR molleton



## 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 • ergonomic sleeves • sleeve width adjustable via snap fastener inside • all seams with FR thread • length: approx. 130 cm.



**1 and 3 |**  
Lined stand-up collar  
with flame-retardant  
cotton lining

**3 |**



All seams with FR thread

**4 |**



**More lengths and variants  
available in just 21 days.  
See page 238.**

**JACKET**

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

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. 1,131g

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

# TEMPEX®-TREME HEAT CLASSIC

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

ITEM	MAT. NO.	MATERIAL	COLOUR	COLOUR NO.	COLOUR NAME		SIZES
5   6	12003	KF-3/Z		15	silver	EN ISO 11612 A1/B1/C3/D3/E3/F1	One size



## 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



Our COMFORT program stands for particularly high protection and optimised wearing comfort. All variants are available from stock in the very light material CK-12/Z and via our high-speed delivery service 21 TO WEAR® in the soft and highly insulating AW-1/Y. The aprons are available in several lengths.

ITEM	MAT. NO.	MATERIAL	COLOUR	COLOUR NO.	COLOUR NAME		REGULAR SIZES
1   2	12014	CK-12/Z		15	silver	EN ISO 11612 A1/B1/C3/D3/E3/F1	46/48-58/60 Bib apron: One size



## APRON WITH SLEEVES

Metalized heatprotection (C3)  
Part number: **12014 71130 000 15 (CK-12/Z)**  
Garment weight: approx. 960g

Neckline with FR molleton • opening with covered hook&loop fastener • hook&loop fastener on the back • 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 (C3)  
Part number: **12014 71131 000 15 (CK-12/Z)**  
Garment weight: approx. 470g

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

**21 TO WEAR** More lengths as well as variants in material AW-1/Y available within just 21 days. See page 238.

# ▶ TEMPEX®-TREME HEAT COMFORT

The COMFORT range includes jacket and foundry coat with ergonomically shaped sleeves (width-adjustable for the jacket), walking slit for the coat and several lengths and fastening options for both. The trousers have a comfort waistband and a hem-length fastener. All models offer excellent protection against larger iron and aluminium splashes (D3 and E3) and the AW-1/Y material offers maximum protection against radiant heat (C4).

ITEM	MAT. NO.	MATERIAL	COLOUR	COLOUR NO.	COLOUR NAME		REGULAR SIZES
3   4   5	12014	CK-12/Z		15	silver	EN ISO 11612 A1/B1/C3/D3/E3/F1	46/48-58/60



3 and 4 |  
Inner hook&loop  
fastener, or alternatively  
covered snap fastening

3 and 4 |  
Ergonomic shaped sleeves  
for more freedom of  
movement

Walking slit at the back for  
greater freedom of movement

## FOUNDRY COAT

Metalized heatprotection (C3)  
Part number: **12014 41130 001 15 (CK-12/Z)**  
Garment weight: approx. 1,110g

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.

**21 TO WEAR**

More lengths and variants, as well in AW-1/Y material, available within just 21 days.  
See page 238.



**JACKET**

Metalized heatprotection (C3)  
Part number: **12014 11180 000 15 (CK-12/Z)**  
Garment weight: approx. 800g

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. 890g

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 Plus

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 in action.

ITEM	MAT. NO.	MATERIAL	COLOUR	COLOUR NO.	COLOUR NAME		REGULAR SIZES
1   2   3	12008	AW-1/Y		15	silver	EN ISO 11612 A1/B1/C4/D3/ E3/F2	46/48-58/60



1 and 2 | Inner hook & loop fastener, optionally with covered snap fastener

The coat is optionally available with open walking slit

Closed walking pleat

## FOUNDRY COAT

Metalized heatprotection (C4)  
Part number: **12008 41130 022 15 (AW-1/Y)**  
Garment weight: approx. 1,470 g

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.

**21 TO WEAR**

More lengths and variants, as well in CK-12/Z material, available within just 21 days.  
See page 238.



1 and 2 |  
Underarm and back ventilation  
for high wearing comfort



Side hook &  
loop  
fastener  
from crotch  
to seam

All seams with FR thread

### JACKET

Metalized heatprotection (C4)  
Part number: **12008 11180 020 15 (AW-1/Y)**  
Garment weight: approx. 945 g

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.


### TROUSERS

Metalized heatprotection (C4)  
Part number: **12008 21000 001 15 (AW-1/Y)**  
Garment weight: approx. 995 g

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

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.

ITEM	MAT. NO.	MATERIAL	COLOUR	COLOUR NO.	COLOUR NAME		REGULAR SIZES
1   2   4   6	12003	KF-3/Z		15	silver	EN ISO 11612 A1/B1/C3/D3/E3/F1	One size
3   5	12008	AW-1/Y				EN ISO 11612 A1/B1/C4/D3/E3/F2	

## PROTECTIVE HOOD, CHEST PROTECTION

Accessories

Part number: **12003 7H007 000 15 (KF-3/Z)**

Garment weight: approx. 508 g

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. 297 g

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. 415 g

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.





**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).

21  
WEAR

More variants  
available within  
just 21 days.  
See page 239.

4 |

**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.

5 |

**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.

6 |



Elastic band on both ends

# ▶ TEMPEX®-TREME HEAT

The aluminized heat protection clothing is complemented by compatible face and head protection which can be individually combined. This includes safety helmets, Bochum goggles and matching visors and heat protection glasses.

## 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 • antistatic, 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

Standards:



EN 397



Fits with all head protection hoods

## 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

Standards:



EN 397

EN 50365



Rain gutter

Adjustable head circumference with practical twist lock

HEAT,  
SPLASHES &  
WELDING



### 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

Standards:



EN 166



### 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



# TEMPEX®-TREME HEAT

The aluminized heat protection clothing is complemented by compatible face and head protection which can be individually combined. This includes safety helmets, Bochum goggles and 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 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





HEAT,  
SPLASHES &  
WELDING



### ALL-AROUND VISOR CLEAR

Accessories

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

Clear, flexible polycarbonate plate • rounded shape: 500 x 250 x 1mm • 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 1mm • 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

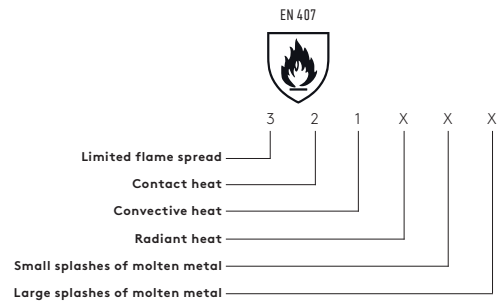


# TEMPEX®-TREME HEAT

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.



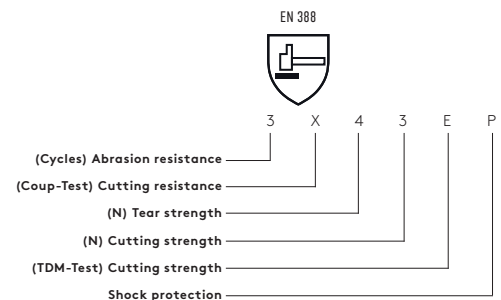
Test	Performance Level			
	1	2	3	4
<b>Combustion behavior</b>				
Afterflame time (in sec.)	< 20	< 10	< 3	< 2
Afterglow time (in sec.)	n.r.	< 120	< 25	< 5
<b>Contact heat</b>				
Contact temperature T <sub>c</sub> (in °C)	100	250	350	500
Threshold t <sub>1</sub> (in sec.)	> 15	> 15	> 15	> 15
<b>Convective Heat</b>				
Heat Transfer Index HTI (in sec.)	> 4	> 7	> 10	> 18
<b>Radiant heat</b>				
Radiant heat transfer t <sub>24</sub> (in sec.)	> 7	> 20	> 50	> 95
<b>Small splashes of molten metal</b>				
Number of splashes	> 10	> 15	> 25	> 35
<b>Large splashes of molten metal</b>				
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			MATERIAL LAYER CONSTRUCTION			LENGTH	SIZES
			UPPER	ISOLATION	LINING		
1			Polyacrylnitril (Preox), Aramide, chrome split leather	1-ply		approx. 410 mm	
2	EN 407 4 1 3 3 4 4	EN 388 2 X 4 X X	Polyacrylnitril (Preox), Aramide, Para-Aramide	2-ply	Cotton FR	approx. 450 mm	11
3			Polyacrylnitril (Preox), Aramide, Para-Aramide			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.

■ silver/stone grey



**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.

■ silver/yellow



**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.

■ silver/yellow

# TEMPEX®-TREME HEAT

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	-	Cotton FR	approx. 365 mm	11
			Aramide, Sebatan leather	-		approx. 385 mm	12
2	4 2 3 2 4 4		Aramide, Para-Aramide	-		approx. 435 mm	11
			Aramide, Para-Aramide	-		approx. 455 mm	12
3	4 2 3 2 4 4	Aramide, Para-Aramide	-	approx. 380 mm	11		
		Aramide, Para-Aramide	-	approx. 400 mm	12		
4	4 2 3 2 4 4	Aramide, Para-Aramide	-	approx. 465 mm	11		
		Aramide, Para-Aramide	-	approx. 485 mm	12		

1 | and 2 |



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

3 | and 4 |



Contact heat  
**up to  
250 °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.

■ silver/brown

### 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.

■ silver/yellow





**HEAT PROTECTION GLOVES UP TO 500 °C CONTACT HEAT**

ITEM			MATERIAL LAYER CONSTRUCTION			LENGTH	SIZES
			UPPER	ISOLATION	LINING		
1	EN 407 4 2 3 2 X X	EN 388 2 X 4 X X	Para-Aramide	1-ply	Cotton FR	approx. 375 mm	11
2			Para-Aramide			approx. 395 mm	12
3	EN 407 4 3 3 2 X X	EN 388 2 X 4 X X	Para-Aramide	2-ply	Cotton FR	approx. 460 mm	11
4	EN 407 4 2 3 2 X X	EN 388 1 X 4 X X	Glass/Aramide/PBI, Para-Aramide			approx. 480 mm	12
						approx. 390 mm	11

1 | and 2 |



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

3 |



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

4 |



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

**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.

yellow

**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.

yellow

**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.

yellow/light brown

# TEMPEX®-TREME HEAT

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.

ITEM	COLOUR	COLOUR NO.	COLOUR NAME	MATERIAL			REGULAR SIZES
1, 2		15	silver	preox/Aramide	EN ISO 11612 A1/B1/C3/D3/E3/F1 (Partial body protection)	-	One size 1 (= up to size 43) 2 (= from size 44)
4		2276	white/grey	full calf leather	-	EN ISO 20349-1	39-48

## 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



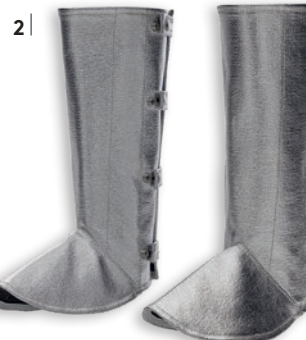
## GAITERS, SNAP FASTENING

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



HEAT,  
SPLASHES &  
WELDING



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.