

# **PROPERTIES**

Highly durable, lightweight, waterproof and breathable

Complete clothing concept

The concept has been tested and developed with Sintef for use in extreme cold, wet and windy working environments

Approved; EN ISO 11612, EN ISO 11611 cl.2, EN 1149-5, IEC 61482-2 cl.2, EN ISO 20471 cl.3, EN 13034 Type 6, EN 343 cl.3.3. Arc rating EBT50: 49,1 cal/cm<sup>2</sup>

# DOUBLES EXPOSURE TIMES IN THE NORTH

# **Pyrad Arctic Protection**

Pyrad Arctic Protection is a brand new type of workwear that allows platform workers in arctic regions to stay outdoors twice as long as today's clothing.

The Norwegian petroleum industry is steadily moving north, and this shift presents a significant challenge, which soon became top priority for our product developers in Måndalen: The combination of low temperatures and strong winds will make safe and efficient working operations even more challenging than in the North Sea.

in the last year, we have together with SINTEF, Staton and Eni Norge, sent test subjects in and out of physiological chambers - where temperatures are lower than -25°C - to investigate what is required to keep platform workers in these northern regions stay warm enough. Evolving prototypes have been tested in actual platform working conditions.

The result of the research project, which was supported by the Research Council of Norway, is a brand new collection.

Pyrad Arctic Protection comprises a jacket, trousers and boots made in a Gore-Tex Pyrad material with 20% higher tear strengths than the previous Pyrad. It remains waterproof and breathable, and is the lightest electric-arc approved shell layer on the market. User tests and laboratory tests at SINTEF, document that those working on platforms in the arctic regions can remain outside twice as long with Pyrad Arctic Protection, compared with today's clothing. The new garments allow you to use less mid-layer clothing giving you greater comfort and more freedom of movement, with a higher lever of protection.

# **ADVANTAGES**

Highly comfortable in all working positions - keeps the user dry and warm throughout the working day

3-ply shell layer, a hood designed for use together with ear protectors and helmet

Keeps you warm and comfortable without reducing freedom of movement.

The wearer can perform work in hazardous areas without changing clothes, focusing on performing the task - safe and comfortably

# **GUIDELINES**

- NORSOK S-002 Working Environment -> ISO 11079
- Recommendations in accordance to recommended exposure time for outdoor work based on wind chill temperature
- Clothing that has been documented to meet requirements / guidelines
- Wind chill temp. (WCT))
  - Apparent Temperature calculated from wind speed and air temperature.
  - Relevant to the risk of frostbite to exposed skin

wct °c	CHANCE OF FROSTBITE	DURATION OF EXPOSURE	PREVENTATIVE MEASURES
10 til -9 COOL	0: Low risk < 5% chance of frostbite	Unlimited	- Dress warmly - Stay dry - Use caution if performing tasks only with the hands
-10 til -24	1: Low risk < 5% chance of frostbite Feels uncomfortable to most	40-120 min	<ul> <li>Warm clothes, where the shell layer is wind and waterproof</li> <li>Headgear, gloves, scarf and insulating waterproof footwear</li> <li>Stay dry, warm and active</li> <li>Use caution if performing tasks only with the hands</li> </ul>
-25 til -34 UNCOM- FORTABLY COLD	2: Moderate risk of frostbite Increased risk of frostbite within 10-30 mins Extremely cold	10-30 min	<ul> <li>Warm clothes, where under layers and shell layer are wind and waterproof</li> <li>Minimise unprotected skin (balaklava and glasses)</li> <li>Headgear, gloves, scarf, face protection, insulated and waterproof footwear</li> <li>Stay dry, warm and active</li> <li>Take breaks with hot drinks</li> <li>Check face, hands and feet for numbness and whitening</li> </ul>
-35 til -59  EXTREME- LY COLD	3: High risk  Extremely cold. Frostbite within 0-10 min	0-10 min	<ul> <li>Warm clothes, where under layers and shell layer are wind and waterproof</li> <li>Protect all areas of skin</li> <li>Headgear, gloves, scarf, face protection, insulated and waterproof footwear</li> <li>Stop work after a short period of time, consider postponing planned activity</li> <li>Stay dry, warm and active.</li> </ul>

WIND FORCE	WIND SPEED		AIR TEMP °C					
BEAUFORT SCALE (m/s)	Km/h	m/s	0	-5	-10	-15	-20	-25
LIGHT DREETE (40 00)	5	1.4	-2	-7	-13	-19	-24	-30
LIGHT BREEZE (1.6-3.3)	10	2.8	-3	-9	-15	-21	-27	-33
GENTLE BREEZE (3.4-5.4)	15	4.2	-4	-11	-17	-23	-29	-35
denile Dreeze (3.4-3.4)	20	5.6	-5	-12	-18	-24	-31	-37
MODERATE BREEZE (5.5-7.9)	25	6.9	-6	-12	-19	-25	-32	-38
WIODENAIL DILLZE (J.J-7.5)	30	8.3	-7	-13	-20	-26	-33	-39
FDECU DDEE7E (0.0.40.7)	35	9.7	-7	-14	-20	-27	-33	-40
FRESH BREEZE (8.0-10.7)	40	11.1	-7	-14	-21	-27	-34	-41
STRONG BREEZ (10.8-13.8)	45	12.5	-8	-15	-21	-28	-35	-42
31NUNU DNEEZ (10.0-13.0)	50	13.9	-8	-15	-22	-29	-35	-42

# **ACTIVE WORK** STATIONARY WORK Light, low-intensity work, Heavy work with moderate to high labor intensity eg. light manual work, inspections Speeds up to 3.5 km/h Pulse rate up to 90 bpm MID LAYER BASE LAYER BASE LAYER MID LAYER SHELL LAYER SHELL LAYER 0-56850-19819 0-26850-19819 0-56850-19819 0-26850-19819 PARKA VEST VEST PARKA 0-100-177 0-251-277 0-251-277 0-100-177 COOL TO COLD: EFFECTIVE TEMP. +10 TO -24°C UNCOMFORTABLY COLD: EFFECTIVE TEMP. -25 TO -34°C EXTREMELY COLD: EFFECTIVE TEMP. -35 TO -59°C

# GORE-TEX JACKET AND TROUSER PYRAD ARCTIC PROTECTION





















### 0-56850-19819 **GORETEX JACKET PYRAD ELECTR. ARC**

Additional reflectors on shoulder. Detachable hood with adjustment cap with room for helmet. Zipper hidden under storm flap in the front. Adjustment in hem. Two breast pockets with hidden zippers and D-ring. Map pocket with zip, mobile phone pocket and pen pocket inside the map pocket. Two front zippered pockets. Flap with velcro. Velcro adjustment in closing the sleeve. Zipper in lining for simplified embroidery and application of logo.

**COLOR** 3205 Yellow fluorescent/Navy

SIZE

**STANDARD** EN 1149-5: 2008, EN ISO 20471:2013 XS-S klasse 2 og

M-> klasse 3, EN ISO 11612:2015 A1+A2 B1 C1 D3 E1 F1, IEC 61482-2:2009, Etb50 49,1 cal/cm2, HAF:94,8, klasse 2 (7 KA), EN ISO 11611:2015 klasse 2 A1+A2, EN 343:2003+A1:2007

klasse 3.3 EN 13034:2005+A1:2009 Type PB(6)

**MATERIAL** Outer fabric / contrast, Gore Ebro 2L: 99.4% polyester,

0.6% Carbon with Gore Pyrad Fabric tecnology Bicomponent membrane based on ePTFE, 215 g / m<sup>2</sup>: 100% PKM, 160 g / m<sup>2</sup>

Mesh: 100% Meta Aramid, 105 g/m





















Detachable and elastic braces with adjustment. Flap over zip fly that closes with Velcro. Two zippered thigh pockets. D-ring under flap. Tools pocket. Two-way zipper in the trouser legs hidden under flap that closes with Velcro. Adjustment hem. Knee pad pocket. Zipper in lining for simplified embroidery and application of logo.

3205 Yellow fluorescent/Navy **COLOR** 

SIZE S-XXXI

**STANDARD** EN 1149-5: 2008, EN ISO 20471:2013 XS-S klasse 2, Bukse +

jakke klasse 3, EN ISO 11612:2015 A1+A2 B1 C1 D3 E1 F1, IEC 61482-2:2009, Etb50 49,1 cal/cm2, HAF:94,8, klasse 2 (7 KA), EN ISO 11611:2015 klasse 2 A1+A2, EN 343:2003+A1:2007

klasse 3.3 EN 13034:2005+A1:2009 Type PB(6)

**MATERIAL** Outer fabric / contrast, Gore Ebro 2L: 99.4% polyester,

0.6% Carbon with Gore Pyrad Fabric tecnology Bicomponent membrane based on ePTFE, 215 g / m<sup>2</sup>: 100% PKM, 160 g / m<sup>2</sup>

WXO20

























### **GORE-TEX JACKET ARTIC PROTECTION** 0-56830-19819

Additional reflectors on shoulder. Detachable hood with adjustment cap with room for helmet. Zipper hidden under storm flap in the front. Adjustment in hem. Fixture for radio on chest and waist. Two breast pockets with hidden zippers and D-ring. Map pocket with zip, mobile phone pocket and pen pocket inside the map pocket. Two front zippered pockets. Flap with velcro. Velcro adjustment in closing the sleeve. Zipper in lining for simplified embroidery and application of logo.

COLOR 3205 Yellow fluorescent/Navy

SI7F S-XXXI

STANDARD EN 1149-5: 2008, EN ISO 20471:2013 XS-S klasse 2 og

M-> klasse 3, EN ISO 11612:2015 A1+A2 B1 C1 D3 E1 F1, IEC 61482-2:2009, Etb50 49,1 cal/cm2, HAF:94,8, klasse 2 (7 KA), EN ISO 11611:2015 klasse 2 A1+A2, EN 343:2003+A1:2007

klasse 3.3 EN 13034:2005+A1:2009 Type PB(6)

**MATERIAL** Outer fabric / contrast, Gore Ebro 2L: 99.4% polyester,

0.6% Carbon with Gore Pyrad Fabric tecnology Bicomponent membrane based on ePTFE, 215 g /  $m^2$ : 100% PKM, 160 g /  $m^2$ 

Mesh: 100% Meta Aramid, 105 g/m























# **PYRAD** - ARCTIC PROTECTION

### 0-80930-19819 **GORE-TEX COVERALL ARCTIC PROTECTION**

Additional reflectors on shoulder. Hood with adjustment cap with room for helmet. Zipper hidden under storm flap in the front. Fixture for radio at the breast, and gas meter. Two breast pockets with hidden zippers and D-ring. Map pocket with zip. Inside pocket. Flap with velcro. Two zippered thigh pockets. Tools pocket. Velcro adjustment in closing the sleeve. Loops for removable suspenders. Two-way zipper in the trouser legs hidden under flap that closes with Velcro. Adjustment hem. Knee pad. Zipper in lining for simplified embroidery and application of logo.

COLOR 3205 Yellow fluorescent/Navy

SIZE S-XXXL

EN 1149-5: 2008, EN ISO 20471:2013 XS-S klasse 2 og M-> klasse 3, EN **STANDARD** 

ISO 11612:2015 A1+A2 B1 C1 D3 E1 F1, IEC 61482-2:2009, Etb50 49,1 cal/ cm², HAF:94,8, klasse 2 (7 KA), EN ISO 11611:2015 klasse 2 A1+A2, EN 343:2003+A1:2007 klasse 3.3 EN 13034:2005+A1:2009 Type PB(6)

Outer fabric / contrast, Gore Ebro 2L: 99.4% polyester, 0.6% Carbon with **MATERIAL** 

Gore Pyrad Fabric tecnology Bicomponent membrane based on ePTFE,

 $215\,g\,/\,m^2$ : 100% PKM, 160 g $/\,m^2$  Mesh: 100% Meta Aramid , 105 g $/\,m$ 

₩ & O = 0









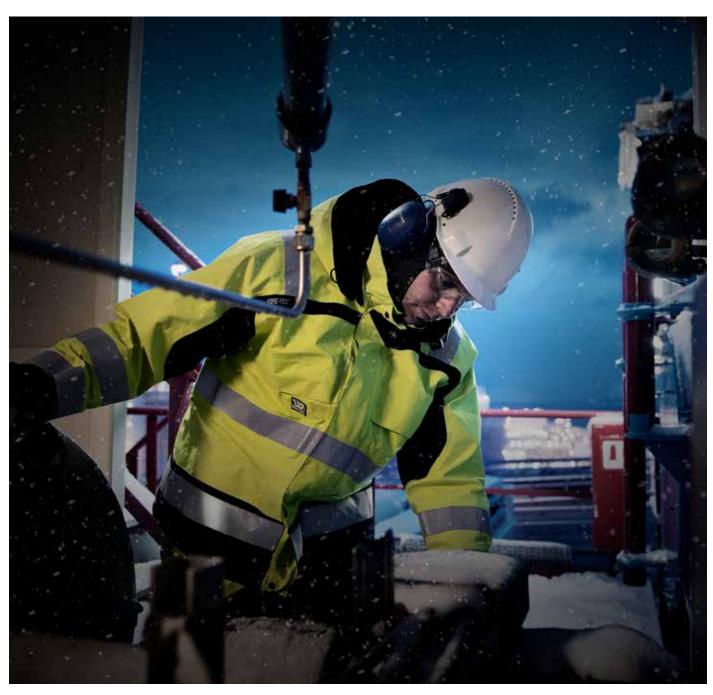












### 0-35172-7000 **MULTINORM T-SHIRT, LONG SLEEVE**

Reflective tape on the shoulder. Ribbed elasticated neck, hem and around sleeves. 5 cm wide opening between the reflectors on the sides for extra comfort and freedom of movement.

COLOR 3205 Yellow fluorescent/Navy

SIZE

EN ISO 11612 A1 B1 C1, EN 1149-5, IEC 61482-2, EN ISO 20471 **STANDARD** 

cl. 2 (size XS-S) cl. 3 (size M-3XL)

**MATERIAL** 60% modacrylic, 37% cotton, 3% antistatic fiber, 230 g/m<sup>2</sup>

W & O Z 0











### SWEATSHIRT MULTINORM 0-35272-7100

Reflective tape on the shoulder. Ribbed elasticated neck, hem and around sleeves. 5 cm wide opening between the reflectors on the sides for extra comfort and freedom of movement

COLOR 3205 Yellow fluorescent/Navy

SIZE XS-XXXL

**STANDARD** EN ISO 11612 A1 B1 C1, EN 1149-5, IEC 61482-2 ATPV 21,

EN ISO 20471 cl.2 (XS-S) cl.3 (M-3XL)

MATERIAL 60% Modacrylic, 37% Cotton, 3% antistatic fibers, 400 g/m<sup>2</sup>

₩ & O Z 0















### 0-35572-7200 **FLEECE JACKET MULTINORM**

The garment has Extra reflex on shoulder. Hidden zipper under the front flap. Adjustment at the bottom. one chest pocket. Two front pockets with zipper. Thumb Grip at the end of the sleeve.

3205 Yellow fluorescent/Navy COLOR

SIZE L-XXXL

**STANDARD** EN ISO 11612 A1, B1, C1, F1EN ISO 20471 kl.3,

ICE 61482-2 EBT50 6,9 Cal/cm class 1 (4 KA) EN 1149-5

**MATERIAL** Main fabric: 50% Modakryl, 30% bomull, 18% polyester, 2% antistatic, 370 g/m2

Contrast 1: 45% Modakryl, 35% bomull, 18% polyester, 2% antistatic, 300 g/cm2. Contrast 2: 54% PPAN, 44% bomul, 2%

antistatic, 240 g/cm2

w & O Z 0















# **PYRAD** - ARCTIC PROTECTION

# 0-25049-44501 MULTINORM TROUSER 0-25149-44501 MULTINORM TROUSER

Adjustable waist with elastic band. Two double tool pockets - one with tool pocket, two front pockets, two back pockets - one with flap, ruler pocket with pen pocket and knife seath. Leg pocket with flap, cell phone pocket and knee pockets.

EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 cl. 1, EN 1149-5, EN **STANDARD** 

0-25049-44501 61482-1-2 cl.1, EN 13034 TYPE 6, EN471 cl 1.2.

EN ISO 11612 A1 B1 C1, EN 1149-5, EN 61482-1-2 kl. 1, **STANDARD** 

0-25149-44501 EN 471 kl. 1.2

COLOR 532 Navy/Fluorescent Yellow

SIZE 46-64

**MATERIAL** 54% Modacrylic, 44% Cotton, 2% antistatic fiber. 280 g/m<sup>2</sup>.

₩ & O = 0



















### 0-43849-44501 **MULTINORM JACKET**

Extra reflective tape on shoulder. Concealed zipper under storm flap in front. Action back, extended back piece. Adjustable hem and sleeve end. Zippered chest pockets, interior pocket on left side, front pocket with side opening, sleeve pocket.

COLOR 532 Navy/Fluorescent Yellow

SIZE XS-XXL

**STANDARD** EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 cl. 1, EN 1149-5,

EN 61482-1-2 cl.1, EN 13034 TYPE 6, EN471 cl. 2.2

**MATERIAL** 54% Modacrylic, 44% Cotton, 2% Antistatic fiber. 280 g/m<sup>2</sup>.

₩ & O = 0

















### 0-83849-44501 **MULTINORM COVERALL**

Concealed two-way front zipper. Two chest pockets with flaps. ID-card pocket. Two back pockets with flap. Two swing pockets with flap allowing access to undergarments, ruler pocket. Two leg pockets with flap, Two knee pockets. Action back with full elastication waist. Leg press studs adjustment at wrists. Concealed zipper on leg. FR reflective tape.

**COLOR** 532 Navy/Fluorescent Yellow

SIZE

**STANDARD** EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 kl. 1, EN 1149-5, EN

61482-1-2 kl.1, EN13034 TYPE 6, EN471 kl. 3.2.

MATERIAL 54% Modacrylic, 44% Cotton, 2% antistatic fiber. 280 g/m<sup>2</sup>

₩ & O = 0





















### **MULTINORM WINTER JACKET** 0-51549-44502

Extra reflex on shoulder. Coated lining, hidden zipper under the front flap. Extended backrest, lower end adjustment, Velcro adjustment rear. Two breast pockets with flap, mobile pocket, ID card pocket and pencil pocket, inner pocket, card pocket. Two front pockets with hidden zipper, pocket with flap on sleeve. Rib at the end of the sleeve.

COLOR 532 Navy/Fluorescent Yellow

SIZE

**STANDARD** EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 cl. 1,EN 1149-5, EN

61482-1-2 cl. 2, EN 13034 type 6, EN 471 cl. 2.2, EN 342 cl. 3.2,

EN 343 cl. 3.1

**MATERIAL** 50% modacrylic, 41% cotton, 2% antistatic fiber, 7% PU, 240 g/

















### **MULTINORM WINTER PARKA** 0-98349-44502

FR reflective tape. Waterproof. Detachable fleece lining. Two-way zipper covered by double storm flap Adjustable waist and cuff adjusters on sleeve. Detachable hood that can be stored in collar. Two chest pockets with flap, cell phone pocket, ID-card pocket, two front pockets with flap, interior pocket, pocket with flap on sleeve. Arm cuff.

**COLOR** 532 Navy/Fluorescent Yellow

SIZE

**STANDARD** EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 cl. 1,EN 1149-5, EN

61482-1-2 cl. 2, EN 13034 type 6, EN 471 cl. 3.2, EN 342 cl. 3.2,

**MATERIAL** 54% modacrylic, 44% cotton, 2% antistatic fiber.

Vattert for: 100% Bomull, 100% polyester, 290 g/m<sup>2</sup>

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### **MULTINORM PRO-TEX WINTER TROUSER** 0-23549-44502

Padded/quilted lining. Elastic waist and removable braces, adjustments in waist, elevated in the back, invisible zipper on leg. Two front pockets with flap, two back pockets with flap. Knee pad pockets.

**COLOR** 532 Navy/Fluorescent Yellow

SIZE

EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 cl.1, EN 1149-5, EN **STANDARD** 

61482-1-2 cl.2, EN 13034 type 6, EN 471 cl.1.2, EN 342 cl.3.2, EN

343 cl.3.1

**MATERIAL** 54% modacrylic, 44% cotton, 2% antistatic fiber.

240 g/m<sup>2</sup>



























# **PYRAD** - ARCTIC PROTECTION

### 0-81549-44502 **MULTINORM WINTER COVERALL**

Extra reflective tape on shoulder. Padded lining. Waterproof. Two-way zipper covered by double storm flap. Detachable hood that can be stored in collar. Adjustable waist. Two chest pockets with flap, cell phone pocket, ID-card pocket, two front pockets with concealed zipper, interior pocket, pocket with flap on sleeve. Back pockets with flap. Knee pad pockets. Action back. Concealed zipper in legs. Sleeve cuffs.

COLOR 532 Navy/Fluorescent Yellow

SIZE S-XXI

EN ISO 11612 A1 B1 C1, EN ISO 11611 A1 cl. 1, EN 1149-5, EN **STANDARD** 

61482-1-2 cl. 2, EN 13034 type 6, EN 471 cl. 3.2, EN 342 cl. 3.2,

EN 343 cl. 3.1.

**MATERIAL** 54% modacrylic, 44% cotton, 2% antistatic fiber. 260 g/m<sup>2</sup>.

₩ & O ≥ 0

















### **MULTINORM TROUSER WITH TOOL POCKETS** 3-17716-761

Zipper in fly. Hidden button in waist. Two side pockets. Cargo Pocket, Cell phone pocket with hidden ID card pocket. Two back pockets. Tool pockets, Knee pad pockets.

**COLOR** 3205 Yellow fluorescent/Navy

SIZE

EN ISO 11612 A1 A2 B1 C1 E1 F1, EN 1149-5, EN 61482-1-2 cl.1, **STANDARD** 

EN ISO 20471 cl.2

**MATERIAL** 74% Cotton, 25% Polyester, 1% antistatic fibers, 300 g/m<sup>2</sup>

₩ & O = 0

















### **MULTINORM TROUSER** 3-17416-761

Zipper in fly. Hidden button in waist. Two side pockets. Cargo Pocket, Cell phone pocket with hidden ID card pocket. Two back pockets. Knee pad pockets.

COLOR 3205 Yellow fluorescent/Navy

SIZE 46-64

EN ISO 11612 A1 A2 B1 C1 E1 F1, EN ISO 11611 cl.1 A1 + A2, **STANDARD** 

EN 1149-5, EN 61482-1-2, EN ISO 20471 cl.2

**MATERIAL** 74% Cotton, 25% Polyester, 1% Antistatic fibers, 300 g/m<sup>2</sup>























### 3-27416-761 **MULTINORM JACKET**

Action back. Hidden zipper in front. Hidden snap fasteners in neck and on sleeve. Two chest pockets with zipper. ID card pocket. Cell phone pocket. Sleeve pocket. Two side pockets.

COLOR 3205 Yellow fluorescent/Navy

SIZE

EN ISO 11612 A1 A2 B1 C1 E1 F1, EN ISO 11611 cl.1 A1 A2, EN **STANDARD** 

1149-5, EN 61482-1-2 cl.1, EN ISO 20471 cl.3 (L-3XL), cl.2 (S-M)

**MATERIAL** 74% Cotton, 25% Polyester, 1% antistatic fiber, 300 g/m<sup>2</sup>

W & O = 0

9 A 8 6 M A









### **MULTINORM JACKET** 0-43859-1024

Zipper concealed below storm flap in front. Action back, extended back piece. Two chest pockets with flap, of which right one is two-partite, ID-card pockets, intenior cell phone pocket, two front pockets. Adjustable sleeve end with Velcro.

COLOR 3204 Yellow Fluorescent/Navy

SIZE

EN ISO 11612 A1 B1 C1, IEC 61482-2 cl.1 ATPV 12 cal/cm<sup>2</sup>, **STANDARD** 

EN ISO 20471 cl.2

**MATERIAL** 75% Cotton, 25% Polyester. 290 g/m<sup>2</sup>

₩ & O = 0















### 0-54159-1024 **MULTINORM VEST**

Multinorm collection with excellent flame retardant properties and high user comfort. The protective quality will endure the whole life cycle of the product. Extra FR reflective tape on shoulders. Hidden zipper in front. Two chest pockets with flap – one with ID card pocket. Interior cell phone pocket on left side, two double hanging tool pockets in front, two hanging tool pockets in back. Tool holders with Velcro.

COLOR 3204 Yellow Fluorescent/Navy

SIZE

**STANDARD** EN 11612 A1 B1 C1, IEC 61482-2 cl.1 ATPV 12 cal/cm2 (only in

combination with other garment that is certified EN 61482 and that

covers the arms), EN ISO 20471 cl.2

**MATERIAL** 75% cotton, 25% polyester, 290 g/m<sup>2</sup>

₩ & O = 0

















# **PYRAD** - ARCTIC PROTECTION

### 0-74358-1024 **MULTINORM TROUSER**

Elasticated waistband. Tool pocket with Velcro. Two front pockets, two double tool pockets in front, two back pockets - one with flap, tool pocket on right thigh, ID-card pocket, pen pocket, double pocket on left thigh. Knee pad pocket.

COLOR 3204 Yellow Fluorescent/Navy

SIZE

**STANDARD** EN ISO 11612 A1 B1 C1, IEC 61482-2 cl.1 ATPV 12 cal/cm2, EN ISO

20471 cl.1

MATERIAL 75% Cotton, 25% Polyester. 290 g/m<sup>2</sup>

₩ & O A 0















### **MULTINORM TROUSER WITH TOOL POCKETS** 0-74359-1024

Elasticated waistband. Tool pocket with Velcro. Two front pockets, two double tool pockets in front, two back pockets - one with flap, tool pocket on right thigh, ID-card pocket, pen pocket, double pocket on left thigh. Knee pad pocket.

**COLOR** 3204 Yellow Fluorescent/Navy

SIZE 46-64

**STANDARD** EN ISO 11612 A1 B1 C1, EN 61482-1-2 cl.1, EN ISO 20471 cl.2

**MATERIAL** 75% Cotton, 25% Polyester, 290 g/m<sup>2</sup>

₩ & O = 0















### **MULTINORM COVERALL** 0-81558-1024

Two-way zipper concealed below storm flap in front, waist adjustment in back, action back. Velcro adjustment in sleeve hem. Two chest pockets with flap, duplex right pocket, ID-card pocket, pen pocket, two front pockets with integrated access to under garments. Double tool pocket on right thigh, hammer holder. Knee pad pocket.

**COLOR** 3204 Yellow Fluorescent/Navy

SIZE

EN ISO 11612 A1 B1 C1, EN 61482-1-2 cl.1, EN 471 cl.3.2 **STANDARD** 

**MATERIAL** 75% Cotton, 25% Polyester, 290 g/m<sup>2</sup>





















### 0-51559-1924 **MULTINORM WINTER JACKET**

Concealed zipper under storm flap in front. Extended back, adjustable hem and sleeve end. Two chest pockets with flap, ID-card pocket, map pocket, interior cell phone pocket. Two double chest pockets with flap and side opening. Concealed rib in sleeve end.

**COLOR** 3204 Yellow Fluorescent/Navy

SIZE XS-XXXL

STANDARD EN ISO 11612 A1 B1 C1, EN 61482-1-2 cl.1, EN 471 cl.2.2

MATERIAL 75% Cotton, 25% Polyester, 290 g/m<sup>2</sup>

₩ & O = 0













### **MULTINORM WINTER TROUSER** 0-23558-1924

Detachable, elastic, and adjustable braces, elastic waist band, extended backpiece, invisible two-way zipper in leg, Velcro adjustment on leg hem. Two front pockets with flap, two back pockets with flap. Knee pad pocket.

**COLOR** 3204 Yellow Fluorescent/Navy

SIZE

**STANDARD** EN ISO 11612 A1 B1 C1, EN 61482-1-2 cl.1, EN 471 cl.1.2,

EN 342 cl.3.1

**MATERIAL** 75% Cotton, 25% Polyester, 290 g/m<sup>2</sup>

₩ & O = 0

















### **MULTINORM WINTER PARKA** 0-96458-1924

Padded/quilted lining. Double zipper concealed under storm flap in front, extended back piece, adjustable hem. Two chest pockets with flap, ID-card pocket on right side. Zipped interior pocket for map, interior cell phone pocket, two double front pockets with flap. Concealed rib in wristband.

COLOR 3204 Yellow Fluorescent/Navy

SIZE

**STANDARD** EN ISO 11612 A1 B1 C1, EN 61482-1-2 cl.1, EN 471 cl. 3.2,

EN 342 cl.3.1

MATERIAL 75% Cotton, 25% Polyester, 290 g/m<sup>2</sup>

**₩** <u>&</u> 0 *a* 0





















# CHOOSE THE RIGHT LAYERS

The right base and mid-layer clothing increase comfort and can be decisive in preventing fire-related injuries.

Working environment, activity level and climate determine which base and mid-layers you require. We offer a range adapted to all working situations, whether it's for road construction in mid-summer or platform work in an Arctic winter storm.

For proper high-risk protection, we offer flame-retardant base and mid-layer protection manufactured by Devold® Protection, for use with our flame retardant workwear. Like Wenaas, Devold® actively works with research, testing and trials. It has taken us to North Carolina State University in the United States for a so-called Mannequin Burn Test. A mannequin with 150 heat sensors was dressed in our offshore Collection together with Devold® Protection underwear, and then exposed to a blaze for four seconds.

The heat sensors measured the penetration of heat towards the skin and indicate whether there has

been 2nd or 3rd degree burns. The results give an indication of the proportion of the body that has been burned, with 50% posing a great threat of loss of life.

The clothes were first tested in combination with cotton underwear, and then with Devold® Spirit flame-retardant underwear. The results show that the use of flame-retardant underwear reduces the risk of 2nd and 3rd degree burns significantly compared with the use of regular cotton underwear.

### TOTAL BURNS AND SHARE 2ND AND 3RD DEGREE BURNS

	NORMAL UNDERWEAR	FLAME-RETARDANT UNDERWEAR		
2ND DEGREE BURNS	44%	16%		
3RD DEGREE BURNS	8%	7%		
TOTAL BURNS	52%	23%		

SOURCE: DEVOLD® PROTECTION

In addition to burns, moisture can also cause scald injuries. It is therefore essential to use a flame-retardant underlayer that has good moisture-transporting properties.

# **ADVANTAGES**

Reduces the risk of 2nd and 3rd degree burns

The skin stays dry and comfortable

The body stays warm

Lenzing viscose fiber increases comfort and eliminates "itchiness" that some experience with wool

# **BASE & MID-LAYER - ARCTIC PROTECTION**



### **DEVOLD SAFE LONG JOHNS LADY**

0-110-269

Longs Lady FR Devold Safe. Safe is knitted with Lenzing and merino wool. Nega-Stat is implicated for antistatic protection. Safe is a light, rib knitted flame retardant underwear. It keeps your body dry even during high activity.

**COLOR** 10 Black SIZE XS-XL

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 1149-5,

EN 61482-1-2 cl. 1

**MATERIAL** 50% FR Lenzing®, 40% merinoull, 8% polyamid,

2% NEGA-STAT

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# **DEVOLD SAFE T-SHIRT**

0-210-269

Flame retardant. Fitted, round neck, short sleeved. Lenzing FR® and merino wool with polyamide reinforcement. Contrasting colour on seams.

**COLOR** 10 Black SIZE XS-XXL

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 1149-5,

EN 61482-1-2 cl. 1

50% Lenzing FR, 40% Merino wool, 8% polyamide, **MATERIAL** 

2% NEGA-STAT, 230 g/m<sup>2</sup>











### **DEVOLD SAFE LONG JOHNS**

0-124-269

Flame retardant. Fitted. Wide elastic in the waist. FR Lenzing® and merino wool with enforced polyamide. Contrast stitching.

COLOR 10 Black SIZE S-XXXL

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 1149-5,

EN 61482-1-2

50% FR Lenzing®, 40% Merino wool, 8%MATERIAL

polyamide, 2% NEGA-STAT











### **DEVOLD SPIRIT SHIRT ZIP NECK**

0-1240-120

Flame resistant. Tight, zip neck, long sleeve. Double knitted in merino wool on outside and comfortable Lenzing FR® on inside. Grey contrasting colour in side.

**COLOR** 10 Black SIZE XS-5XL

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2 cl.1

**MATERIAL** 50% Lenzing FR, 50% Merino wool, 230 g/m<sup>2</sup>.









# **BASE & MID-LAYER - ARCTIC PROTECTION**



### **DEVOLD SPIRIT T-SHIRT**

0-1219-120

Antiflame, Fitted, rounded neck, short sleeves. Double knitted in merino wool on outside and comfortable Lenzing FR® on inside. Grey contrasting colour in sides.

10 Black **COLOR** SIZE S-XXXL

EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2 cl.1 **STANDARD MATERIAL** 50% Lenzing FR, 50% Merino wool. 230 g/m<sup>2</sup>.









### **DEVOLD SPIRIT LONG JOHNS**

0-1100-120

Flame resistant. Tight. Wide elastic band in waist. Double knitted in merino wool on outside and comfortable Lenzing FR® on inside. Contrasting colour in seams.

**COLOR** 10 Black SIZE S-5XL

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2 cl.2 MATERIAL 50% Lenzing FR, 50% Merino wool, 230 g/m<sup>2</sup>









# **DEVOLD SPIRIT SHIRT**

0-1228-120

Flame retardant. Fitted, rounded neck, long sleeve. Double knitted in merino wool on outside and comfortable Lenzing FR® close to the skin. Grey contrasting colour in sides.

COLOR 10 Black SIZE S-5XI

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2 cl.1 **MATERIAL** 50% Lenzing FR, 50% Merino wool. 230 g/m<sup>2</sup>.











### **DEVOLD THERMAL LONG JOHNS**

0-100-177

Elastic waist, ribbed lower leg. Provides good protection against cold, radiant

heating, flames, and metal splash. Exterior is smooth to provide optimum protection. Inside is brushed for maximum insulation.

**COLOR** 10 Black

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2 cl.1

MATERIAL 100% Pure New Wool, 470 g/m<sup>2</sup>









# **BASE & MID-LAYER - ARCTIC PROTECTION**



**DEVOLD THERMAL JACKET ANTISTATIC** 

Zipper in front - up to collar, side panels, thumb grip. Protects against radiant heat, cold temperatures, metal splash and flames. Exterior is smooh to provide optimum protection. Brushed inside for optimum insulation.

**COLOR** 10 Black SIZE XS-XXXL

EN ISO 11612 A1 A2 B1 C1, EN 1149-5, **STANDARD** 

EN61482-1-2 KL.1

98% Pure New Wool, 2% NEGA-STAT, 470 g/m<sup>2</sup> **MATERIAL** 

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### **DEVOLD SPIRIT HEADOVER**

0-840-120

Flame resistant. Can be folded and used as a scarf. Double knitted in merino wool on outside and comfortable Lenzing FR® on inside.

**COLOR** 10 Black SIZE

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2.

MATERIAL 50% Lenzing FR, 50% Merino wool, 230 g/m<sup>2</sup>.

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## **DEVOLD SPIRIT BALACLAVA**

0-1818-120

Flame retardant. Covers head and neck. Double knitted with merino wool on outside and comfortable Lenzing FR® garment on inside. Grey contrast colour in front.

**COLOR** 10 Black SIZE 1size

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 61482-1-2.

**MATERIAL** 50% Lenzing FR, 50% Merino wool, 230 g/m<sup>2</sup>.

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### **DEVOLD SAFE BRA**

0-200-116

Antiflame. Sports Bra model, broad elastic band in hem. Knitted from Lenzing FR® and merino wool, with reinforcement in polyamide. Highly elastic - will follow body movements.

COLOR 10 Black SIZE S-XXL

**STANDARD** EN ISO 11612 A1 A2 B1 C1, EN 1149-5, EN 61482-

50% Lenzing FR, 40% Merino wool, 8% Polyamide, 1% Elastan, 1% NEGA-STAT, 230 g/m² **MATERIAL** 













# **DEVOLD SAFE BOXERSHORTS**

# 0-1146-269

Flame retardant. Fitted. Wide elastic in the waist. Lenzing FR $\circledR$  and merino wool with enforced polyamide. Contrastive stitching.

COLOR 10 Black SIZE S-XXXL

EN ISO 11612 A1 A2 B1 C1, EN 1149-5, **STANDARD** 

EN 61482-1-2 cl.1

50% Lenzing FR, 40% Merino wool, 8% Poyamid, 2% NEGA-STAT, 230 g/  $m^2$ **MATERIAL** 











# **ELECTRICAL INSULATION**



ASTM (F2412-05) provides electrical insulation up to 14.000 V. This means the footwear does not conduct electricity. If an accident happens, the shoes insulate the body from the ground, preventing the flow of electricity through the body and into the ground. The footwear is suitable for use when working with live wires. "Electrically insulating" is the opposite of "ESD" and "anti-static", making its use unsuitable in places where there is a danger of a static electric charge igniting flammable gases or liquids.

## 0-75-235 SHOE MULTINORM SB

Upper in full grained leather and antiflame fabric Composit toe cap, 3M<sup>™</sup> Thinsulate<sup>™</sup> lining. Heat resistant two-layer rubber /PU sole (Active Grip). Sole insulates up to 14 000V. CCS shock absorption with moisture absorbing removable insole. Soft penetration sole.

COLOR 10 Black SIZE 38-48

**STANDARD** EN ISO 20345:2011, SB E P CI HRO WRU FO SRC ASTM

F2412-05:2005

MATERIAL Upper: Full-grain leather, textile. Lining: Thinsulate 3M+.

Outsole: PU/ rubber. Safety toecap: Composite.

Penetration protection: Ballistic.





# 0-75-335 ANCLE BOOT MULTINORM SB

Upper in full grained leather and antiflame fabric Composit toe cap, 3M<sup>™</sup> Thinsulate<sup>™</sup> lining. Heat resistant two-layer rubber /PU sole (Active Grip). Sole insulates up to 14 000V. CCS shock absorption with moisture absorbing removable insole. MFS for good stability and comfort. Soft penetration sole.

COLOR 10 Black SIZE 38-48

**STANDARD** EN ISO 20345 SB E AN P CI HRO SRC WRU FO ASTM F2412-

05:205

MATERIAL Upper: Full-grain leather, textile. Lining: Thinsulate 3M+.

Outsole: PU/ rubber. Safety toecap: Composite.

Penetration protection: Ballistic.





### 0-75-435 **LACE BOOT MULTINORM SB**

Safety boots with composite toe cap, non-metallic midsole protection and Active Grip outsole. Lace up boots in full grain leather and antiflame textile with carbon details. Lined with two-layer, climate adapted 3M™ Thinsulate ™. Heat resistant sole with small rubber studs for increased slip resistance (active-grip). Non-metallic midsole protection and composite toe cap. Introducing the new CCS (Complete Cushion System) designed to give the ultimate in shock absorption and strain reduction, and MFS/Poron® XRD ankle protection. The protection system consists of a pressure balanced, protective foam and shock absorbing material PoronXRD Dielectic Footwear Insulation (ASTM F2413-05 DI) has been designed and produced to provide additional insulation in case of accidental contact with energized electrical conductors, devices or circuits. Dielectic Insulation sole insulates up to 14,000 volts.

**COLOR** 10 Black SIZE 38-48

**STANDARD** EN ISO 20345:2011, SB E P AN CI HRO WRU FO SRC ASTM

F2412-05:2005

**MATERIAL** Upper: Full-grain leather, textile. Lining: Thinsulate 3M+.

Outsole: PU/ rubber. Safety toecap: Composite.

Penetration protection: Ballistic.





# **SOCK DEVOLD THIN ANTIFLAME**

0-1000-801

Thin, durable sock. Protective against flame and melted metal.

COLOR 60 Grey SIZE M-XL

STANDARD EN 531 A1 B1 C1

**MATERIAL** 48% Wool, 48% Lenzing FR, 4% Elastan

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### **SOCKS FR SIZE 39-42**

Wool socks, extra thick, durable and comfortable.

COLOR 60 Grey

SIZE 39-42 0-33700-5 SIZE 43-46 0-33700-0 SIZE 47-48 0-33700-10 **STANDARD** EN ISO 11612 A1 B3 C2 D3.

MATERIAL 80% wool, 18% polyamide, 2% elastane.

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# **GLOVES - ELECTRIC ARC**

### 0-6-80813 **GLOVE POWERFLEX**

First glove to combine outstanding flame resistance, high cut protection and ergonomic design. Materials used in the glove are inherently flame resistant, even after washing. Arc Flash Hazard/Risk Category 2\*: helps protect workers against arc flash hazards. Exclusive composite yarn provides exceptional cut resistance for safe handling of sharp objects and materials. Soft foam coating to ensure great flexibility and a secure grip in a variety of environments. Ergonomic design for superior comfort and reduced hand fatigue.

Minimum: 1 bundle of 12 pairs. Carton: 12 bundles

**COLOR** 98 Assorted

SIZE

**STANDARD** EN 420, EN 388, EN 407, EN 1149, ASTM F1959-05

**MATERIAL** Lining: Modacrylic glass fiber Kevlar

Coating: Foam neoprene















Electrical over gloves provide workers with additional protection for their latex electrical gloves. When worn with the corresponding electrical glove, the over glove provides mechanical protection from cuts and tears, improving and ensuring complete protection. Velcro adjustment strap on the back provides the glove with good support. 1 pair. Carton: 50 pair.

COLOR 98 Assorted

SIZE

**STANDARD** EN 420:2003, EN 388:2003

MATERIAL Cowhide









### **GLOVE ISO ARC** 0-209-2002

For electrical work with a maximum voltage of 1000 volts. Designed to be used in Arc Flach environement. ATPV 21,6/cal. ATPV 21,6 cal/cm<sup>2</sup>. Arc flash rating performed by a third party lab: box test 4KA/30cm. Its dielectric natural latex composition on chlorinated interior base makes it very comfortable. The outer orange elastomer layer provides excellent mechanical resistance and the glove can also be used without over glove. Its anatomical shape makes flexing easier while ensuring a high level of protection. Product appreciated for its long life and precision. Its patterned finish gives it a highly appreciated grip in damp conditions. Minimum order quantity: 1 pair. Carton: 50 pairs.

**COLOR** 98 Assorted SIZE 7-11

**STANDARD** IEC EN 61482-1-2, IEC EN 60903:2003

**MATERIAL** Latex and polychloroprene







### 0-697-8579 **GLOVE DEHNCARE APG**

Calfskin glove with silicone, 100% Kevlar® interlock knit, has an excellent fit due to the special glove design. Good sensitivity with breathable material maximizes user comfort.

**COLOR** 30 Yellow SIZE 8-12

**STANDARD** EN 61482, EN 388, EN 407 **MATERIAL** Calf leather with silicone, 100% Kevlar® interlock knit









### **HEAD LAMP PIXA 3 PEE78CHB** 0 - 3 - 78

Head lamp Pixa 3 PEE78CHB. The PIXA 3 headlamp is rugged and versatile. The multi-beam adapts to all situations: close-range work, movement, and long-range vision. CONSTANT LIGHTING technology: brightness does not decrease gradually as the batteries are drained. Depending on the need, it may be worn on the head, mounted on the helmet, or placed on the ground.

**COLOR** 98 Assorted SIZE STK

CE, ATEX: Zone 2/22, ANSI/NEMA FL1 **STANDARD** 



### V-GARD 950 80A00GG WITH EAR FLAPS 0-950-31000

Unventilated 1000 volt electrician helmet, with ear protection and silver reflective, with protection against arc flash. 6-point suspension, integrated visor, brim and rain channel. Protect against lateral crush (LD). 30 mm slot for attachment of accessories. Size 52-63 cm.

**COLOR** 40 White STK SIZE

**STANDARD** EN 397, EN 50365, EN 166, EN 13463-1, GS-ET-29 class 1 (4kA)

**MATERIAL** ABS





# **PROTECTIVE EQUIPMENT - ARCTIC PROTECTION**

# 0-1008-7422 MSA EARMUFFS HIGH HELMET ATTACHMENT

Passive earmuff with helmet attachment (14). Fluorecent yellow color. Designed for difference between left and right ear. Suitable for working environment with high noise level. Suitable for MSA-helmets. Carton: 20 pcs.

COLOR 98 Assorted SIZE STK

STANDARD EN 352-3Attenuation: SNR=31dB H=32dB M=28dB L=21dB

MSA



# 0-1008-7399 MSA EARMUFFS HIGH W/HEADBAND

Passive earmuff with headband. Fluorescent yellow colour. Designed for difference between left and right ear. Suitable for working environment with high noise level. Carton: 20 pcs.

COLOR 98 Assorted SIZE STK

STANDARD EN 352-1Attenuation: SNR=33dB H=33dB M=31dB L=23dB

MSA



# 0-919-29000 MSA PREMIUM KIT ELECTRICAL

V-Gard Arc Flash visor is made of a patented injection molded mixture of dyes and nanoparticles with polycarbonate. They absorb the arc. The visor is light green for maximum visual light transmission in GS-ET-29 [VLT Class 0]. With adjustable and retractable chin guard protected the neck of the user and ensures that the arc does not come under the visor and injuries the face. The helmet fits primarily to power plants and other risk areas where arcing can occur.

COLOR 40 White SIZE STK

STANDARD EN166 & GS-ET-29 class 2 (7 kA)

MSA



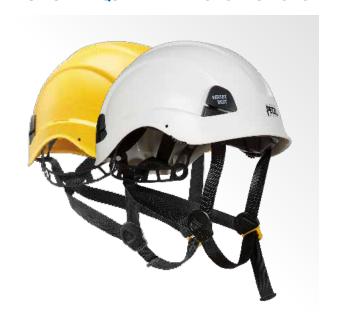
# 0-6-43000 HELMET PETZL VERTEX BEST

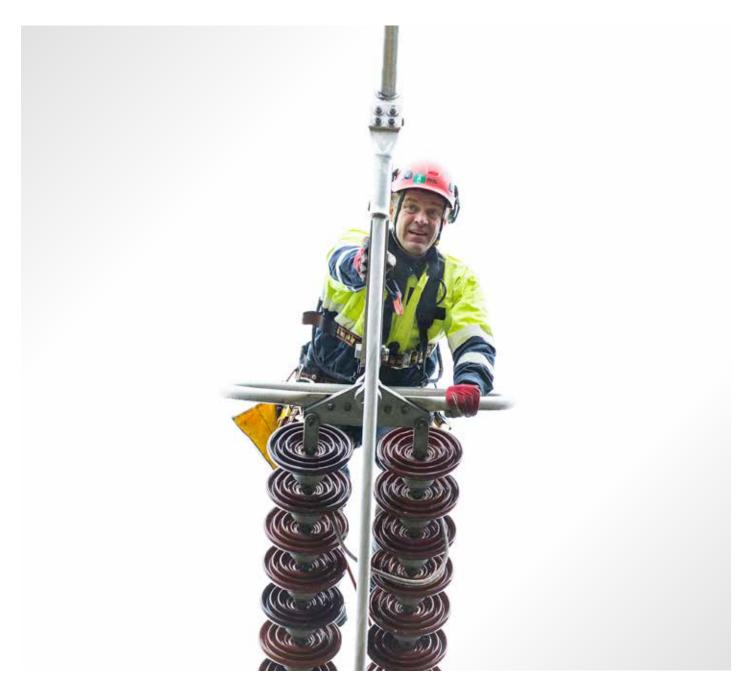
Comfortable helmet for work at height and rescue. With its strong chinstrap, the VERTEX BEST helmet sets the standard in head protection for workers at height. Its unventilated shell protects against electrical hazards and molten metal splash. Its six-point textile suspension ensures maximum comfort, and its CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head. The VERTEX BEST is designed for optimal attachment of a PIXA headlamp, a protective shield, and hearing protection.

COLOR 30 Yellow, 40 White

SIZE STK

STANDARD EN 397EN 12492





### **Wenaas Workwear AS**

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