

FRISTADS®

Flame Protection 2021



When we design workwear, we focus on you and your body as well as your work environment. Whether you need help to stay warm, keep cool or dry, protection against electricity, molten metal or hazardous chemicals, we always put your safety first. When you wear our clothes, you can feel confident that you have the best protection according to the latest European norms.





Innovation built on experience.

For nearly a century, we have lived and breathed workwear. The styles and materials have evolved over time but our commitment to quality and performance is as strong today as it was when we started. We are passionate about what we do. We want to help our customers succeed and prosper. And we go the extra mile to improve. Always with our users and the planet in focus.

Your safety is our top priority.

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At Fristads we put the worker's safety first. By choosing our flame-resistant garments you can be confident that you have the best possible protection according to the latest European norms. To ensure Fristads' quality we also conduct our own tests, covering everything from tear strength, dimensional change and abrasion resistance to real useability and comfort for the user. Among our broad product range, you can easily find flame-resistant workwear that is optimal for your profession and risk assessment, while at the same time increasing your safety.



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Flamestat multinorm

Broad multinorm collection with inherent flame protection – from T-shirts to winter jackets.



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Flamestat stretch

Multinorm stretch trousers made of extra lightweight and comfortable materials with inherent flame protection.



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Flamestat molten metal

Garments with inherent flame protection for work involving molten iron and aluminium. Also for welders.



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GORE-TEX PYRAD® shell garments

Comfortable and functional multinorm garments with extra high electric arc protection.



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Flame high visibility & Flame high visibility welding

Flame-retardant treated high visibility collection with high cotton comfort.



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Flame shell garments

Water and windproof Flame-retardant treated multinorm garments with breathability.



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Flame & Flame welding

Flame-retardant treated collection with high cotton comfort. Also for welders.



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Flame class 2 welding

Flame-retardant treated welding collection approved for class 2 welding.



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Flame rainwear

Certified Flame-retardant treated high-visibility rainwear with many functions.



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Women

We have a broad range of women's garments in the Flamestat and Flame collections.



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Flamestat underwear

Soft and comfortable underwear with inherent flame protection.



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Accessories & toolbelts

Complement your flame garments with accessories.

Your protection, no compromises.

- All garments are certified according to European norms
- Thoroughly tested materials with certified protection, high durability and comfort
- Complete range of inherently flame-protected as well as flame-retardant treated garments in all three layers
- Carefully designed fit for great comfort
- Function and design developed in close collaboration with users
- Layer-on-layer tested in different combinations for protection against electric arc
- Layer-on-layer tested for welding class 2 and increased heat and flame protection
- High-visibility garments are certified together so you can combine them to attain the highest class – Fristads high-visibility clothing system
- The majority of the garments are leasing-laundry tested according to ISO 15797 and PRO labelled. The garments are certified after 25-50 washes
- Best quality reflective tapes meet high washing requirements and offer considerable durability
- Double-stitched seams on all reflective tapes give even better durability
- Flame-retardant and antistatic CORDURA® reinforcements
- Women's collection with feminine fit in both our Flamestat and Flame collections
- Large range of sizes. Most garments are available from XS
- The majority of the garments are OEKO-TEX® certified



Norms and certifications

Certified Personal Protective Clothing Systems following the Regulation (EU) 2016/425 for Personal Protective Equipment (PPE). Read more about certifications and norms on pages 9-13.



EN ISO 11612
Heat and flame



EN ISO 14116
Limited flame spread



EN ISO 11611
Welding and allied processes



EN 1149-5
Electrostatic properties, design requirements



IEC 61482-2
Electric arc
Box test and Open arc test



EN 13034
Liquid chemicals, limited protection



EN ISO 20471
High visibility warning clothing



ISO 14404
Knee protection



EN 343
Rain



EN 342
Cold



ISO 15797
Industrial laundry

How much protection do you need?

Risk assessment reveals the potential hazards

A risk assessment at a workplace begins with an analysis of all the potential hazards. The findings from this study help in determining suitable garments that offer the correct level of protection and the best comfort. We provide personal protective workwear solutions for almost all occupations, working conditions and – not least – for all your risk assessments. Examples of hazards that are investigated in a risk assessment:

Thermal hazards: High convective heat, high radial heat, flame contact, steam, molten metals and hot surfaces.

Electric hazards: High voltage, electric arc, static charge build-up.

The best clothes according to your needs

In the workplace, there are often various protection needs of protection for different tasks. In our wide product range, we have certified protective clothing in various price categories, made of several materials and with different features. We strive to find the right most comfortable solution with the right security level for your needs.

Be protected from top to toe

All the garments should be worn with other necessary safety equipment such as a safety helmet with protective visor, protective gloves and protective footwear (boots) to ensure the right level of protection. It is important to use several layers of flame-retardant clothes to increase your protection. Wear a baselayer and middle layer made of flame-retardant materials. See pages 14-15.



Download product certificates

You can easily download all Fristads' product certificates at fristads.com.

Search product, click on "Download" and then click on "Certificate."





EN ISO 11612

Heat and flame

Protective clothing that complies with EN ISO 11612 protects the user from contact with heat and flames.

Two-piece protective clothing must be worn together and protect the entire body to achieve the right level of protection. The CE labels inside the garment contains information about the necessary garment combination and which code letters that the garment is certified for.

For whom? Electricians, industrial workers, miners, road and rail workers, welders. Workers in the foundry industry (iron, steel, aluminium), offshore, energy, refinery and maintenance.

A: Limited flame spread

If the garment is exposed to an open flame for 10 seconds, it should go out within 2 seconds and no hole should occur.

A1 - Surface ignition
A2 - Edge ignition

B: Protection against convective heat (heat passage)

Specifies how long the garment can stop the heat passing through the garment when exposed to an open flame.

B1: 4-10 sec B2: 10-20 sec B3: 20 sec or more

C: Protection against radiant heat

Specifies how long the garment can stop the heat passing through the garment when exposed to radiant heat.

C1: 7-20 sec C2: 20-50 sec C3: 50-95 sec C4: 95 sec or more

D: Protection against molten aluminum splash

Specifies how much molten aluminium splash the garment can handle before holes are formed.

D1: 100-200 g D2: 200-350 g D3: 350 g or more

E: Protection against molten iron splash

Specifies how much molten iron splash the garment can handle before holes are formed.

E1: 60-120 g E2: 120-200 g E3: 200 g or more.

F: Protection against contact heat

Specifies how long the garment can block the heat generated by direct contact with hot substances and objects.

F1: 5-10 sec F2: 10-15 sec F3: 15 sec or more



EN ISO 11612 – D,E

Molten iron and aluminium

Protective clothing specially designed to withstand molten metal splashes is certified according to EN ISO 11612 (heat and flame) in categories D and E. Even if the fabric does not burn or crumble upon contact with the molten metal, you may get burns.

For whom? Foundry workers, metalworkers, welders.

In the test, liquid metal is poured over the fabric at a special angle and the rating indicates how much the fabric can handle before a hole is formed. The test is divided into three classes where D3 and E3 respectively indicate the highest value. See the values in the list for EN ISO 11612.

Our specially developed MFA protective garments offer the highest protection against molten iron and aluminium D3 and E3.



EN ISO 14116

Heat and flame, limited flame spread

Protective clothing and materials that meet the requirements of EN ISO 14116 provide the user with limited protection upon contact with heat and flames.

The garments should be used together with garments that meet the requirements of EN ISO 11612, for example underwear, accessories, rainwear and high-vis waistcoats.

The standard is divided into three indices, where index 3 is the highest.

Index 1 – Garments to be worn over other garments approved according to EN ISO 11612, for example rainwear and high-vis waistcoats.

Index 2 and 3 – Garments made of a material approved according to EN ISO 11612, for example underwear, socks and hats.



EN ISO 11611

Welding

Protective clothing for use in welding and allied processes is certified according to EN ISO 11611.

Welding approved garments are always approved according to EN ISO 11612 (heat and flame). Two-piece protective clothing must be worn together and protect the entire body to achieve the right level of protection. The CE labels inside the garment contains information about the necessary garment combination and which code letters that the garment is certified for.

Welding garments have special design requirements to prevent welding sparks from sticking, e.g. no open or loose-hanging pockets. That means the material in a garment may be approved for welding but due to the design, the garment can't be certified.

Arc welding involves a risk of exposing the skin to UV radiation. During usage, the material in the garment will be worn down and the protection impaired. If the user experience sunburn-like symptoms, it means UVB is penetrating. To increase the protection of the user and extend the durability of the garments we recommend supplementing the garments with a welding apron and welding sleeves. Welding garments are usually worn in combination with other PPE such as helmet and gloves.

For whom? Welders, rail workers, miners, foundry workers.

Protects against: Welding sparks (small splashes of molten metal), UV radiation, radiant heat, heat and flame.

The standard is divided into two classes with different levels of protection

The table on page 89 provides guidance on which welding class your clothes need. The material must be able to withstand at least 15 drops of molten metal without exceeding an increase in temperature of 40°C on the reverse side of the material causing skin burns.

Class 1:

Provides protection for less hazardous welding methods and situations, with lower levels of splash and radiant heat. The material must withstand at least 15 drops of molten metal.

Class 2:

Provides protection for riskier welding methods and situations, with higher levels of splash and radiant heat. The material must withstand at least 25 drops of molten metal.

A1: Limited flame spread, surface ignition

A2: Limited flame spread, edge ignition

Upgrade your protection

If you wear our MOF material underwear under our Flamestat and Flame welding garments, they are approved for welding class 2 and have the highest protection against molten iron E3. Read more on page 19.



EN 1149-5

Electrostatic discharge, ATEX environment

Certified and approved garments that protect against electrostatic discharge according to EN 1149-5.

In addition to the fact that the material is antistatic, the standard also contains special design requirements. Garments or accessories in antistatic material that are not approved as individual protective garments are certified according to EN 1149-3 at the material level, for example: high-vis waistcoats and nail pockets.

It is important that the protective garments are worn in combination with other antistatic equipment such as shoes, so that they become part of a grounded system.

For whom? Workers in petrochemistry, energy, refinery, maintenance and offshore sectors, workers moving in ATEX-environments.

Protects against: Static electricity, which can cause sparks. Reduces the risk of sparks in explosive environments or when handling flammable or explosive substances.

ATEX – a potentially explosive environment

The regulations apply where someone at work may be exposed to danger caused by an explosive environment. Applies to environments where there is a risk of explosive atmospheres being formed due to flammable gases and liquids or dust and steam.

Examples of ATEX environments:

- Energy companies with solid fuel, oil fuel and/or natural gas
- Petrochemical industry
- Powder and chemical handling in various forms
- Forest industry
- Petrol stations
- Workplaces handling LPG or other flammable gas/liquid

The ATEX directives with recommendations on how to dress in ATEX environments are common to the entire EU. To ensure that the design is correct and that the garment is suitable for use in an ATEX environment, the following certifications are recommended: EN 1149-5 (electrostatic discharge), EN ISO 11612 (heat and flame) and IEC 61482-2 (electric arc). The garment also needs to be metal-free.



IEC 61482-2

Electric Arc

Protective clothing certified according to IEC 61482-2 should be used in environments where there is a risk of electric arc accidents.

In 2019, IEC 61482-2 was revised and has been updated with a new symbol/pictogram and the new calorific value ELIM.

During an electric arc explosion, the material is exposed to clouds of plasma, flames, radiation and metal that splashes from the electrodes. In that case, the material must insulate effectively enough to prevent second degree burns to the skin. An effective material for electric arc protective garments must protect both against the flame and the metal splash, while also insulating against intense heat. The standard IEC 61482-2 includes two test methods: EN 61482-1-1 (Open Arc) and EN 61482-1-2 (Box Test). Our garments are certified according to both methods.

Two-piece protective clothing must be worn together and protect the entire body to achieve the right level of protection. The CE labels inside the garment contains information about the necessary garment combination and which code letters that the garment is certified for. The protective clothing is usually worn together with other types of PPE such as helmet, gloves and shoes. Wearing additional layers of garments is very important and will increase protection.

For whom? Electricians, when maintaining equipment in non-arc-safe distribution plants or electrical switchboards, or when working on high voltage equipment.

Protects against: Electric arc, metal splashes, heat and flame, radiant heat convective heat, high voltage, electric shock, plasma clouds, radiation.



Open Arc Test IEC/EN 61482-1-1

The test uses an arc that simulates reality by not being "controlled." You shoot the arc against a mannequin wearing one or more layers of garments and then evaluate the protection of the garments. The level of protection of the garment receives a calorific value – cal/cm² – as specified in ATPV or EBT. The higher the value, the better the protection.

ATPV and EBT are measured against a 50% risk of a second-degree burn. Whether it becomes an ATPV value or an EBT value depends on how the fabric reacts to the arc test. If a hole appears first, the value is set as EBT and if high heat passage is first, it will be ATPV. The result of the electric arc tests – the ATPV, EBT and ELIM values – are compared with the Stoll curve, a diagram that shows when you are at risk of a second-degree burn in the event of an electric arc accident. That way you can measure the energy level (calorific value) that the garments protect against.

ATPV (Arc Thermal Performance Value) indicates the energy level required to get a heat passage in the garment with a 50% risk of causing a second-degree burn.

EBT (Energy Breakopen Threshold) indicates the energy level required to create a breakopen in the material with a 50% risk of causing a second-degree burn.

HAF (Heat Attenuation Factor) is the measurement of the percentage of energy that is blocked by the material or material system.



ELIM – New test value for Open Arc Test

In 2019, IEC 61482-2 was revised and the Open Arc Test has been updated with the new calorific value ELIM (Incident Energy Limit). ELIM complements ATPV and EBT.

ELIM indicates the energy level to which the garment may be exposed with a 0% risk of second-degree burn (ATPV and EBT indicate a 50% risk of a burn). The ELIM value therefore has a lower calorific value than ATPV and EBT.

Fristads new flame-protective garments from the autumn 2019 and forward have been tested according to the new version of IEC 61482-2 and received an ELIM value. We are currently updating and recertifying existing flame garments, a process which we aim to complete in 2021. During a transitional period, the labelling of our garments will be updated continuously.



Box Test IEC/EN 61482-1-2

The arc rating – class 1 or 2 – is evaluated in a test with a limited and directional arc. In the test, the electric arc is shot against a box where the material or garment is placed. The result is compared to the Stoll curve, a diagram that shows when you are at risk of a second-degree burn in the event of an electric arc accident.

Test criteria: The material must not melt on the inside, the afterflame must be extinguished in 5 seconds or less and no hole larger than 5 mm in any direction can be created. The result is approved or not approved.

Class 1 = 4 kA (arc energy 168 kJ)
Class 2 = 7 kA (arc energy 320 kJ)

Electric arc-tested garment combinations

By wearing several layers of protective clothing you increase the amount of energy that a garment system can withstand in the event of an electric arc accident. Read more on page 17.

See the table with different certified garment combinations at pages 79-82 or at fristads.com.



EN 13034

Liquid chemicals

Protective clothing tested according to EN 13034 type PB* [6] protects against splashes of chemicals.

The garments provide a limited protective function against chemicals in liquid form. They are suitable for environments where there is a risk of splash exposure to small amounts of chemicals where a complete chemical barrier is not required. The protective clothing have special design requirements to prevent the chemicals from pooling on the garment, for example they don't have any loose-hanging pockets.

For whom? Industrial workers, miners. Workers in petrochemistry, energy, refinery, maintenance and offshore sectors.

Protects against splashes from:

- Sulphuric acid, H₂SO₄, 30%
- Sodium hydroxide, NaOH, 10%
- O-Xylene, undiluted
- Butane-1-ol, undiluted.

Please note: Protection against EN 13034 must be reactivated and adequate treatment must be added to the washing process minimum for every 5th washing cycle, unless otherwise is stated in the garment.

*PB = Partial Body protection.



EN ISO 20471

High visibility

High-visibility garments are certified according to EN ISO 20471 and make the user visible to the environment in daylight, darkness and in bad weather.

For whom? All workers who receive a higher level of protection by being extra visible. Most common in work situations involving vehicles, roads, railroads or large construction sites, or when working during night-time conditions or in bad weather.

Protects against: Accidents in areas often involving vehicles, such as roads and railways.

High-visibility clothing has a fluorescent surface and reflectors that meet requirements according to three different classes depending on how visible they are. Class 3 is the highest safety class. The certified class can be achieved with a single garment or a garment combination. Class 1 or 2 garments can be combined in different ways in order to achieve a higher level of safety classification. See our co-certification table.

Minimum m² to obtain approval according to EN ISO 20471

Material	Class 3	Class 2	Class 1
Fluorescent	0.8	0.5	0.14
Reflective	0.2	0.13	0.1

Co-certification – Fristads' high-visibility clothing system

We have co-certified all our high-visibility garments, so that different garments can be combined in order to achieve a certain safety class. All garments have a special code, based on the type of garment and classification. By checking our quick-reference guide, you can easily see how to attain a certain safety class by combining different garment codes. The code appears as a symbol on the CE label in the garment and in the product information. Read more and see our quick-reference guide on page 20.

Profiling of high-visibility garments

Company logos and transfers must not cover up too great a proportion of the fluorescent area. The table on page 86 helps you decide how large your logotype can be.



EN 14404

Knee protection

Knee protectors for working in a kneeling position are certified according to EN 14404.

All the knee pockets on our flame-retardant trousers, coveralls and bib 'n' braces are certified according to EN 14404 together with Fristads kneepads 9200 KP, order no. 124292.

The kneepads are flame certified according to EN 11612 A1 in combination with Fristads' flame-retardant product range. The certification is only valid when the kneepads are used in Fristads' garments with knee pockets.

The kneepads 124292 are certified according to EN 14404 type 2, performance level 1.

EN 14404 type 2, performance level 1

Knee protectors suitable for use on flat or non-flat floor surfaces and providing protection against penetration at a force of at least 100 ±5 N, i.e. nails, pebbles and small objects.



EN 343

Rain

Certified and approved garments that protect against rain and moisture.

Requirements and test methods for fabrics and seams of protective clothing against the influence of rain, snow, fog and ground humidity. Resistance to water penetration (A) and water vapour resistance (B) is measured.

A: Resistance to water penetration: 1-4, where class 4 provides the best waterproofness

B: Breathability – water vapour resistance: 1-4, where class 4 provides the best breathability

C: Impact from above with high energy droplets (optional)

The EN 343 norm was updated during 2019 with the addition of class 4 (previously class 1-3). Fristads waterproof garments will be recertified continuously with the aim of being finished in 2021. Product information will be updated continuously at fristads.com.

The waterproofness of Fristads flame-retardant shell garments is tested with a water pillar of 10.000 mm, which equals continuous rain for a long time.

Breathability is indicated in the RET value. The lower the RET value, the better the breathability. An RET value of 6-13 is equal to very good or good breathability.



EN 342

Cold

Certified and approved garments protect against cold, e.g. through thermal insulation properties and air permeability.

The norm tests three criteria, but only has requirements for A and B for certification.

A: Effective thermal insulation (Icler).

B: Air permeability

C: Resistance to water penetration (optional)

A cold climate is characterised by a combination of moisture and a temperature below -5°C.

EN 342 indicates the value of the resulting effective thermal insulation for the user in a cold climate. Effective thermal insulation is measured for light and medium duty tasks for a certain period of time. The value (Icler) specifies the protection level of the garment during a certain time in relation to the temperature and wind force.

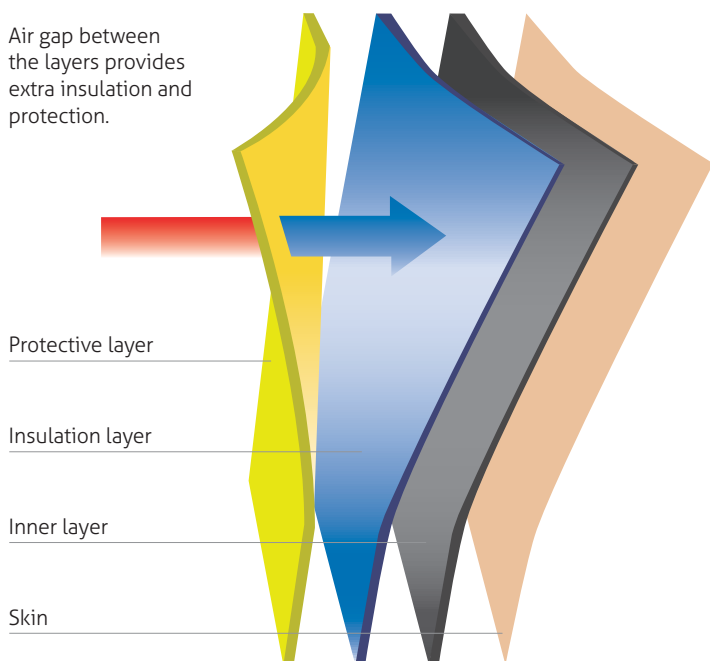
Better comfort and higher protection with Fristads three-layer system.

Flame retardancy prevents flames from spreading. However, heat can spread through the garment, causing the skin to burn. If you wear flame-retardant garments, they will protect against heat for a certain period. The period of time during which you are protected is increased if you also wear flame-retardant underwear and an insulation layer.

The three-layer system with flame protection from inside and out adds to your protection and comfort in all seasons. Dressing in multiple layers is the best way to keep warm and dry at the same time as it significantly boosts your protection.

- Cover your body from top to toe
- Wear multiple layers of garments
- Wear your garments buttoned
- Use other necessary safety equipment – helmet, gloves, footwear
- Always use underwear of flame-retardant materials
- Make sure your garments are not damaged

Air gap between the layers provides extra insulation and protection.



The best way to protect yourself is to have multiple layers of garments.



LAYER 1 – Inner layer

Flame-retardant underwear adds to your protection. It transports body moisture away, keeps you dry and prevents chilling of the skin.

FLAMESTAT BRA 7036 MOF 121643 › Page 68

FLAMESTAT BRIEFS 7022 MOF 122230 › Page 68

FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF
121639 › Page 69

FLAMESTAT LONG JOHNS 7027 MOF 121641 › Page 71

FLAMESTAT SOCKS 980 SFA 100580 › Page 75

LAYER 2 – Insulation layer

An additional, flame-retardant, insulation layer provides heat insulation and additional protection. Select garment thickness based on your working conditions.

FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 3
7097 TFLH 129522 › Page 66

FLAMESTAT LONG JOHNS 7027 MOF 121641 › Page 71

FLAMESTAT SOCKS 980 SFA 100580 › Page 75

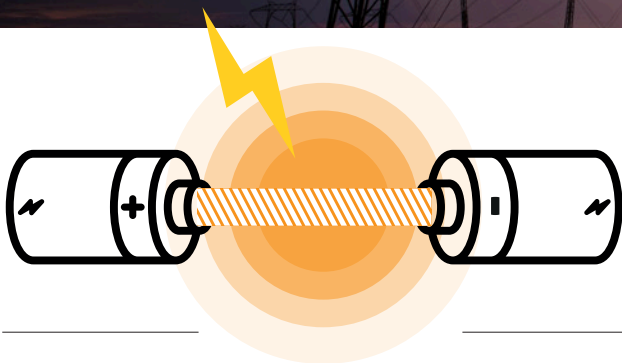
LAYER 3 – Protective layer

The outer layer is the protective shield that secures your safety.

FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS
122195 › Page 64

FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN
CLASS 2 2775 ATHS 122196 › Page 65

What is an electric arc and how do you protect yourself?



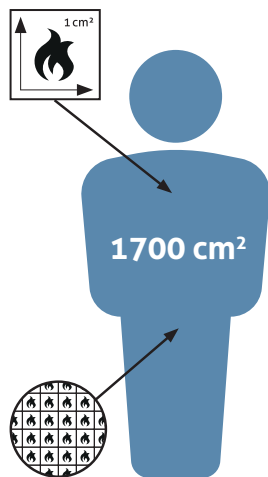
How is an electric arc formed?

An electric arc is formed when a powerful electric charge is transferred in the air between two live conductors. An explosion occurs that can generate temperatures of several thousand degrees and cause severe burns.

Risk of injury

In order to assess the risk of injury in the event of an electric arc accident, the amount of energy generated is calculated. The energy of the electric arc is stated in calories per square centimeter (cal/cm²) and is called calorific value. One calorie equals the amount of heat needed to increase the temperature of 1 gram of water by 1 degree.

An average human body is estimated to consist of 1,700 cm². Multiplying 1 calorie by 1,700 cm² results in large amounts of energy that can cause severe injuries.



How to protect yourself

One way to protect yourself and prevent second-degree burns is to wear flame-resistant garments with effective electric arc protection. The material in the garments must protect both against the flame and the metal splash, while also insulating against the intense heat.

The product information indicates which energy level the garment can withstand. The higher the value, the better the protection.

Read more on page 11.



Open Arc Test

In order to measure the electric arc protection of a garment, an Open Arc Test is conducted. The test measures the energy level, i.e. calorific value in cal/cm², that the garment or garment combination can withstand. The value may be stated using three different test values.

ELIM is the new way of indicating the protective energy level of the garment and complements ATPV and EBT. We are continuously updating our product range with the ELIM value. Read more on page 11.

Box Test

Electric arc protection is also tested with a so-called Box Test. See page 11.



ELIM

Indicates the energy level that the garment protects against, while maintaining a **0% risk** of sustaining second-degree burns.



ATPV

Indicates the energy level that the garment protects against, while maintaining a **50% risk** of a heat transfer that may cause second-degree burns.



EBT

Indicates the energy level that the garment protects against, while maintaining a **50% risk** of sustaining a hole in the material that may cause second-degree burns.

Maximise your electric arc protection.

By wearing several layers of protective garments you increase the amount of energy that a garment system can withstand in the event of an electric arc accident. We have conducted electric arc tests with different clothing combinations to ensure correct values and provide as much protection as possible.

To achieve correct test values, the entire combination of clothes (layer 1-3) must be tested together. It is not possible to calculate a correct test value simply by adding up the values of each individual garment.



See the exact values for different garment combinations on pages 79-82 or at fristads.com.



See our film about the electric arc test of layer-on-layer garment combinations at fristads.com.

Electric arc certified combination



+



+



=

LAYER 1
FLAMESTAT LONG SLEEVE
T-SHIRT 7026 MOF
Art no 121639

LAYER 2
FLAMESTAT HIGH VIS SHIRT
CLASS 3 7050 ATS
Art no. 124178

LAYER 3
FLAMESTAT HIGH VIS AIRTECH®
WINTER PARKA CLASS 3 4086 ATHR
Art no 109423

The three garments are Arc-tested together to get the exact value



Open arc result
EN 61482-1-1
ATPV 67.3 cal/cm²
HAF: 95.4%

Box test approved:
EN 61482-1-2 CLASS 2, 7 kA



Increase your welding protection.

Attain the highest welding certification – class 2

Increase your protection against radiant heat, contact heat and molten iron splashes

Fristads' layer-on-layer tests show how to attain an increased level of protection by combining different garments. This applies to welding (EN ISO 11611) and protection against heat and flame (EN ISO 11612).

The key to achieving this higher level of protection is to use our underwear in MOF fabric underneath your ordinary welding protective clothing.

You can easily see how much your protection increases by checking our layer-on-layer table on page 83 or at fristads.com.

Certified garment combinations are approved for:

Increased protection for welding – EN ISO 11611



Welding class 2

Applies to welding garments in our Flamestat and Flame collections in combination with MOF long underwear. Fristads also has a welding collection approved for welding class 2, see pages 60-61.

Increased protection against heat and flame – EN ISO 11612



Radiant heat: C2
Molten iron splash: E3
Contact heat: F2

Applies to welding garments from our Flame and Flamestat collections in combination with our MOF underwear. Garments that are not approved for welding will get increased protection against radiant heat C2 and contact heat F2. However, they will not be certified for molten iron splash E3 since the design features loose-hanging pockets.

Read more about the norms on pages 9-10. See the result for different garment combinations at fristads.com.

Layer 1

FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF

Art no 121639

FLAMESTAT LONG JOHNS 7027 MOF

Art no 121641

Layer 2

FLAME HIGH VIS JACKET CLASS 3 4584 FLAM
Art no 125938

FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM
Art no 125940



Co-certification

Fristads' high-visibility clothing system.

High-visibility clothes have a fluorescent area and reflective details that meet requirements according to three different safety classes, depending on how visible they are. Class 3 is the highest safety class. Garments in class 1 or 2 can be combined in different ways to attain a higher safety class.

Since we have co-certified all our high-visibility garments, it is possible to see how different garments can be combined to reach the safety class needed.

All Fristads garments have a special code based on the type of garment and classification. By checking our quick-reference guide, you can easily see which safety class is obtained when different garment codes are combined. The code appears as a symbol on the CE label in the garment and in the product information.

See the film about our quick-reference guide at fristads.com.

CLASS 2 (U3)
EN ISO 20471
FLAMESTAT HIGH VIS JACKET
CLASS 2 4176 ATHS
Art no 120929



CLASS 2 (T4)
EN ISO 20471
FLAMESTAT HIGH VIS CRAFTSMAN
TROUSERS CLASS 2 2075 ATHS
Art no 109420

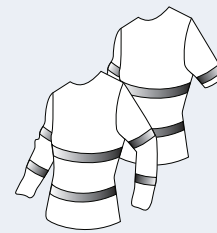


U3 + **T4** =

 **CLASS 3**
EN ISO 20471

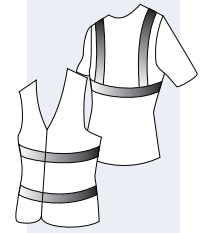
Our quick-reference guide shows how to combine your garments to reach a higher safety class.

Example: A high visibility shirt in class 1 (labelled U3) can be combined with a pair of craftsman trousers in class 2 (labelled T4) to obtain class 3 certification for the whole set.



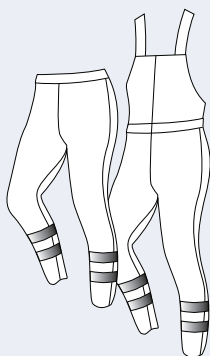
Upper body (U)

Short or long sleeved garments with reflective tape on sleeves



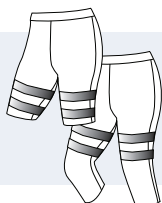
Waist-coat (W)

Waistcoats/ Short sleeved tops without reflective tapes on sleeves



Trousers* (T)

Trousers with long legs/Bib'n'Braces with reflective tape



Shorts (S)

Shorts/Pirate trousers with reflective tape

	U1	U2	U3	U4	U5	U6	W1	W2
T1	1	1	2	2	2	3	2	3
T2	1	1	2	2	3	3	2	3
T3	2	2	2	3	3	3	3	3
T4	2	2	3	3	3	3	3	3
T5	2	3	3	3	3	3	3	3
T6	3	3	3	3	3	3	3	3
S1	1	1	2	2	2	3	2	2
S2	2	2	2	3	3	3	2	2

* Upper body (U) and Waistcoat (W) must be worn over the Bib'n'Brace to obtain class 2 or 3. If they are worn under, the Bib'n'brace itself determines the class.



PRO

Tested for industrial laundry and PRO labelled.

We certify our garments after 25-50 washes.

The majority of our flame-retardant garments are PRO labelled. The PRO label means that the product is approved for industrial laundry according to EN ISO 15797. EN ISO 15797 is not a standard to which a garment can be certified. It is a specially developed test method that states the laundry procedure. Our garments are also tested in some of Europe's largest laundries in cooperation with our customers.

The majority of our flame-retardant clothes are certified after having been washed 25-50 times. This way we can ensure that our garments retain their high quality and comply with the certifications also after many washes. This is stated in the product information and in the garment.



Choose inherent or flame-retardant treated.

To protect your skin, all our flame-retardant garments feature textile technology that inhibits the combustion process. This creates a protective barrier between the heat source/flames and the skin to prevent second degree burns in the event of an accident. Our range of flame-retardant garments is divided into two categories: Flamestat and Flame.

All our garments in both our Flamestat- and Flame collections are OEKO-TEX® certified, meaning that all components of the garment are free from harmful substances and do not pose a risk to your health.

Flamestat

Materials with inherent flame protection

The garments in our Flamestat collections are made of materials with inherent flame protection – i.e. it is integrated in the material fibres. They have a permanent flame protection that lasts the entire lifespan of the garments. Materials with inherent flame protection are soft and comfortable. Our GORE TEX material GXE has inherent flame protection in the laminate. Read more about materials with inherent flame protection on page 88.

Flame

Materials that are flame-retardant treated

The garments in our Flame collections are made of flame-retardant treated materials. The treatment interacts with the cotton in the material and gives a permanent protection that lasts the entire lifespan of the garment. Cotton and polyester fabrics are examples of materials that have been treated with the flame-retardant additive Proban. Read more about flame-retardant treated materials on page 88.

Flamestat

Materials with inherent flame protection



Flamestat Underwear

- Soft comfortable materials
- Electric arc tested
- Antistatic
- See pages 70-74

FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF

Art no 121639 › Page 71

FLAMESTAT LONG JOHNS 7027 MOF

Art no 121641 › Page 71

Flamestat Multinorm

- Multinorm
- Wide collection – from T-shirts to winter jackets
- Also women's models
- See pages 24-43 and 64-67

FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS

Art no 122195 › Page 64

FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHSM

Art no 122196 › Page 65

Flamestat Molten Metal

- Protection against molten metal
- Approved for welding
- Electric arc tested
- See pages 36-37

FLAMESTAT JACKET 4965 MFA

Art no 122286 › Page 37

FLAMESTAT TROUSERS 2165 MFA

Art no 122287 › Page 37

Flamestat GORE-TEX Garments

- Lightweight and flexible
- Multinorm, extra high arc rating
- Waterproof, windproof, breathable
- See pages 40-41

FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL

JACKET CLASS 3 4095 GXE

Art no 125617 › Page 41

FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL TROUSERS CLASS 2 2095 GXE

Art no 125618 › Page 41

Flame

Materials that are flame-retardant treated



Flame High-Visibility

- High cotton comfort
- Most garments approved for welding
- Also women's models
- See pages 46-55, 69

FLAME HIGH VIS JACKET CLASS 3 4584 FLAM

Art no 125938 > Page 50

FLAME HIGH VIS CRAFTSMAN TROUSERS

CLASS 2 2584 FLAM Art no 125939 > Page 48

Flame

- High cotton comfort
- Most garments approved for welding
- Also women's trousers
- See pages 56-59, 69

FLAME JACKET 4030 FLAM

Art no 100333 > Page 56

FLAME CRAFTSMAN TROUSERS

2030 FLAM

Art no 100329 > Page 56

Flame Welding

- Approved for welding class 2
- High molten iron protection
- Durable
- See pages 60-61

FLAMESTAT SHIRT 7200 ATS

Art no 114095 > Page 59

FLAME WELDING BIB'N'BRACE 1029 WEL

Art no 131165 > Page 61

Flame Shell Garments

- Waterproof, windproof, breathable
- High cotton comfort
- Multinorm, high arc rating
- See page 52-53

FLAME HIGH VIS AIRTECH® SHELL JACKET CLASS 3

4022 FLR Art no 129869 > Page 53

FLAME HIGH VIS AIRTECH® SHELL TROUSERS

CLASS 2 2152 FLR Art no 129870 > Page 53

Fristads Flamestat Multinorm

Superior protection, function, comfort and durability

Our high-performance Flamestat Multinorm collection is certified according to several European norms to protect workers in many different professions and to meet most risk assessments. All Flamestat garments have inherent flame protection, which means that the material fibres are inherent and offer permanent flame protection.

- Inherent flamskydd
- Inherent flame protection
- Great comfort and freedom of movement
- Comfortable and durable
- Broad target group
- Garments for all seasons
- Large size range
- Women's collection
- Electric arc protection tested to both Box Test and Open Arc Test
- Tested for electric arc layer-on-layer protection
- Heat and flame protection. Tested layer-on-layer for increased protection
- Welding garments tested for layer-on-layer protection for class 2 welding
- Antistatic – electrostatic discharge protection
- Chemical splash protection
- The majority are certified high-visibility garments
- Metal free
- Knee pockets are certified together with our kneepads 124292
- Flame retardant and antistatic CORDURA® reinforcements
- All garments in ATHF, ATHR and ATHS materials are dirt, oil and water repellent
- The majority of the garments are leasing-laundry tested according to ISO 15797 and PRO labelled. Certified after 25-50 washes
- OEKO-TEX® certified



Heat and flame



Welding and allied processes



Electrostatic properties, design requirements



Electric arc Box test and Open arc test



Liquid chemicals, limited protection



High visibility warning clothing



Knee protection



Rain



Cold

High-Performance Flamestat Multinorm Garments.



Two loops for gas meter, radio, transponder etc.

Front placket opening with zip to top of collar and concealed snap fastening

Roomy chest pocket with inside D-ring, pen strap and concealed snap fastening

Roomy chest pocket with opening for radio-antenna at top and pocket with vertical zip

Inside phone pocket with velcro fastening and loop for mobile phone earpiece

Clear labels showing all the garment certifications

2 front pockets with zip concealed snap fastening

Inside pocket with button

Adjustable cuffs and waist

Extended back

Loose-hanging, CORDURA®-reinforced pocket with three smaller pockets and tool loops

Loose-hanging, CORDURA®-reinforced pocket with extra pocket

Reinforced crotch seam

Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening, D-ring and plastic ID-card pocket

CORDURA®-reinforced folding rule pocket with tool pocket, button and loop for sheath knife

Reinforced thigh panels

CORDURA®-reinforced knee pockets with inside opening for height-adjustable knee pads

Pre-shaped knees

Double-stitched seams on all reflective tapes give better durability

CORDURA® reinforced leg ends

FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS 120929 › Page 28

FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS 109420 › Page 29

FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS 122196 › Page 65

Flamestat Multinorm stretch

Trousers made of extra
lightweight and comfortable
stretch material.

- Comfortable stretch material
- Maximum comfort and freedom of movement
- Lightweight and soft material – only 265 g/m²
- Inherent flame protection
- Multinorm
- Electric arc protection tested to both Box Test and Open Arc Test
- Tested for electric arc layer-on-layer protection
- Heat and flame protection
- Electrostatic discharge protection
- Metal free
- Liquid chemical protection
- Certified high-vis garments
- Service trousers are approved for welding
- Tested in layers for class 2 welding
- Knee pockets certified together with knee pads 124292
- Flame retardant and antistatic CORDURA® reinforcements
- Dirt, oil and water repellent
- Tested for industrial laundry according to ISO 15797 and PRO labelled
- Certified after 50 washes in 60°
- OEKO-TEX® certified
- Also available in women's model

ATHF material

ATHF fabric is a lightweight stretch material that makes the garments incredibly comfortable to wear and allows for outstanding freedom of movement. The ATHF fabric has the same advantages as our ATHS material but is more lightweight and contains elastane, which adds a comfortable stretch effect to the garments.

The material has inherent flame protection and is made from modacrylic, cotton, polyamide, elastane and antistatic fibres. The fabric is dirt, oil and water repellent and the inside has a soft surface providing a comfortable feeling closest to the body. It is quick drying and has excellent moisture management properties. We have added polyamide to the fabric to achieve higher resistance to wear and tear.

The ATHF material has multinorm protection and protects against electric arc, welding and liquid chemicals, and is antistatic. The material is PRO labelled and tested for industrial laundry according to ISO 15797. The garments are certified after 50 washes at 60°. The ATHF material is OEKO-TEX® certified.

WEIGHT: 265 g/m² **LOI:** 35%
EBT: 10.3 cal/cm² **HAF:** 80%



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CORE



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PRO T1

FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 1 2162 ATHF

Article no 129518

Stretch fabric / Dirt, oil and water repellent / 2 front pockets / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / Double crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening, button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring under flap / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Reinforced 2 needle stitching on reflective tape / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 Class 1, EN 61482-1-1 EBT: 10,3 cal/cm2 HAF: 80% (see Electric arc table for certified garments combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 13034 Type PB [6] and EN ISO 20471 Class 1 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 34% cotton, 17% polyamide, 2% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 265 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, C146-C156, D84-D116.



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PRO T3

FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 2 2161 ATHF

Article no 129517

Stretch fabric / Dirt, oil and water repellent / 2 front pockets / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / Double crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening, button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring under flap / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Reinforced 2 needle stitching on reflective tape / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 Class 1, EN 61482-1-1 EBT: 10,3 cal/cm2 HAF: 80% (see Electric arc table for certified garments combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 11611 A1 Class 1 (see Flame and welding table for certified garment combinations), EN 13034 Type PB [6], EN ISO 20471 class 2 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 34% cotton, 17% polyamide, 2% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 265 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, C146-C156, D84-D116.



CORE



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PRO T1

FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 1 2163 ATHF

Article no 129519

Stretch fabric / Dirt, oil and water repellent / 2 front pockets / 2 CORDURA® reinforced loose-hanging pockets, 1 with 3 small pockets and tool loops and 1 with extra pocket / 2 CORDURA® reinforced back pockets, one with with flap and concealed snap fastening / Double crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with pen holder and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring under flap / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Reinforced 2 needle stitching on reflective tape / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 Class 1, EN 61482-1-1 EBT: 10,3 cal/cm2 HAF: 80% (see Electric arc table for certified garments combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 1 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 34% cotton, 17% polyamide, 2% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 265 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, C146-C156, D84-D116.



CORE



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PRO T3

FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 2 2167 ATHF

Article no 129520

Stretch fabric / Dirt, oil and water repellent / 2 front pockets / 2 CORDURA® reinforced loose-hanging pockets, 1 with 3 small pockets and tool loops and 1 with extra pocket / 2 CORDURA® reinforced back pockets, one with with flap and concealed snap fastening / Double crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with pen holder and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring under flap / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Reinforced 2 needle stitching on reflective tape / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 Class 1, EN 61482-1-1 EBT: 10,3 cal/cm2 HAF: 80% (see Electric arc table for certified garments combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 2 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 34% cotton, 17% polyamide, 2% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 265 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, C146-C156, D84-D116.





CORE



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FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS

Article no 120929

Dirt, oil and water repellent / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, one with inside D-ring and pen strap and one with opening for radio-antenna at top / Microphone holder / Chest pocket with zip / 2 front pockets with zip / Inside pocket with button / Inside phone pocket with velcro fastening and loop for mobile phone earpiece / Adjustable waist and cuffs / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN 13034 Type PB [6] and EN ISO 20471 class 1 sizes XS-S, class 2 sizes M-3XL / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



ATHS material

ATHS is a lightweight and durable material that makes the garments comfortable to wear and allows for better freedom of movement. ATHS is inherently flame retardant and is made of modacrylic, cotton, polyamide and antistatic fibres.

The outside of the fabric is dirt, oil and water repellent and the reverse side has a soft surface, providing a comfortable feeling next to the body. It is quick drying and has excellent moisture management properties. We have added polyamide to the material for stronger resistance to wear and tear.

The ATHS material has multinorm protection and protects against electric arc, welding and chemical splashes, and is antistatic. The material is leasing-laundry tested according to ISO 15797 and PRO labelled. The garments are certified after 50 washes at 75°. The ATHS material is OEKO-TEX® certified.

WEIGHT: 300 g/m² **LOI:** 35%
EBT: 12.8 cal/cm² **HAF:** 84.2%

APPROVED FOR WELDING



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APPROVED FOR WELDING

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FLAMESTAT JACKET 4174 ATHS

Article no 119921

Dirt, oil and water-repellent / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Bellowed chest pocket with concealed snap fastening, inside D-ring and pen strap / Chest pocket with zip / Concealed buttons and loops for sheath knife / Microphone holder / 2 front pockets with zip / Inside pocket with button / Inside mobile phone pocket with velcro fastening and loop for mobile phone earpiece / Adjustable cuffs with snap fastening / Adjustable drawstring at hem / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 13034 Type PB [6] / Leasing laundry-tested according to ISO 15797 / Approved after 50 washes / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 300 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS

Article no 119922

Dirt, oil and water-repellent / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Bellowed chest pocket with concealed snap fastening, inside D-ring and pen strap / Chest pocket with zip / Concealed buttons and loops for sheath knife / Microphone holder / 2 front pockets with zip / Inside pocket with button / Inside mobile phone pocket with velcro fastening and loop for mobile phone earpiece / Adjustable cuffs with snap fastening / Adjustable drawstring at hem / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6] and EN ISO 20471 class 2 – size XS and class 3 – sizes S-3XL / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



CORE



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FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2074 ATHS

Article no 109417

Dirt, oil and water repellent / 2 tuckable, CORDURA® reinforced, loose-hanging front pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / 2 front pockets / D-ring at waistband / 2 CORDURA®-reinforced back pockets one with flap / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening and D-ring / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 1 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, C146-C156, D84-D116.



FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS

Article no 109420

Dirt, oil and water repellent / 2 tuckable, CORDURA® reinforced, loose-hanging front pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / 2 front pockets / D-ring at waistband / 2 CORDURA®-reinforced back pockets one with flap / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening, D-ring / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / Reinforced thigh panels in contrast colour / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 2 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, C146-C156, D84-D116.



APPROVED FOR WELDING

CORE



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FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS

Article no 121355

Dirt, oil and water-repellent / 2 front pockets / D-ring at waistband / 2 CORDURA® reinforced back pockets with flaps / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / 2-needle stitching on reflective tape / Adjustable leg length with 5 cm hem allowance / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2 % (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6] and EN ISO 20471 class 1 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement: 79% cotton, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62, D84-D116.



CAN EASILY BE ATTACHED TO ANY TROUSERS

Combine with belt 117320. See page 75.



FLAME NAIL POCKETS 9179 ATHS

Article no 131925

2 CORDURA® reinforced loose hanging pockets, one with 3 smaller pockets and tool loops, one with extra pocket / Attached with velcro fastening / Fits with trousers 121355, 122197, 121354, 125038, 109424, 125940, 125942, 125943, 125945, 125949, 125951, 126510, 100330, 130666 and belt 117320 / Fabric is approved according to EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1, EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 12 cal/cm² ELIM: 9 cal/cm², EN 13034 and EN 1149-3 / Leasing laundry-tested according to EN ISO 15797 / OEKO-TEX®-certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 540 Dark Navy. **SIZE** One size.



APPROVED FOR WELDING



540



FLAMESTAT TROUSERS 2148 ATHS

Article no 125038

Dirt, oil and water repellent / 2 front pockets / D-ring at waistband / 2 back pockets with flap and velcro fastening / Leg pocket with flap and snap fastening / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring / Adjustable leg length with 5 cm hem allowance / Metal free garment / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2 % (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 13034 Type PB [6] / Approved after 50 washes / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 300 g/m². **COLOUR** 540 Dark Navy. **SIZE** C44-C62, D84-D116.



APPROVED FOR WELDING



540



FLAMESTAT TROUSERS 2144 ATHS

Article no 121354

Dirt, oil and water repellent / 2 front pockets / 2 back pockets with flap / D-ring at waistband / Double reinforced crotch seam / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring / Leg pocket with flap / Folding rule pocket / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Adjustable leg length with 5 cm hem allowance / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2 % (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 13034 Type PB [6] / Approved after 50 washes / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 540 Dark Navy. **SIZE** C44-C62, D84-D116.



APPROVED FOR WELDING



171



FLAMESTAT HIGH VIS COVERALL CLASS 3 8175 ATHS

Article no 125893

Dirt, oil and water repellent / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / 2 bellowed chest pocket with flap and concealed snap fastening, one with inside D-ring and pen strap / Chest pocket with zip / 2 front pockets / 2 bellowed back pockets with flap and velcro fastening / Hammer loop / Folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with zip, flap and concealed snap fastening, 1 phone pocket with flap and velcro fastening / CORDURA® reinforced knee pocket with inside opening / Height adjustment for knee pads in knee pocket / Adjustable waist and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN 13034 Type PB [6], EN 14404 together with kneepads 124292 and EN ISO 20471 class 3 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



APPROVED FOR WELDING



171



FLAMESTAT HIGH VIS COVERALL CL 1 8174 ATHS

Article no 130666

Dirt, oil and water repellent / Front placket opening with zip to top of collar and concealed snap fastening / 2 bellowed chest pocket with flap and concealed snap fastening, one with inside D-ring and pen strap / Chest pocket with zip / 2 front pockets / Hammer loop / 2 bellowed back pockets with flap and velcro fastening / Folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with zip, flap and concealed snap fastening, 1 phone pocket with flap and velcro fastening / CORDURA® reinforced knee pocket with inside opening / Height adjustment for knee pads in knee pocket / Adjustable waist and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN 13034 Type PB [6], EN 14404 together with kneepads 124292 and EN ISO 20471 class 1 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement: 79% cotton FR, 20% polyamide, 1% antistatic fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



171



FLAMESTAT HIGH VIS BIB'N'BRACE CLASS 2 1075 ATHS

Article no 109419

Dirt, oil and water repellent / Front placket opening with two-way, full-length front zip and concealed snap fastening / 2 chest pockets with concealed snap fastening / Elasticated braces / 2 tuckable, CORDURA®-reinforced, loose-hanging pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / D-ring at waist / Double reinforced crotch seam / 2 CORDURA®-reinforced back pockets, one with flap / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening, D-ring / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / Reinforced thigh panels in contrast colour / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 2 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement in 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C62.





**FLAMESTAT HIGH VIS SHIRT CLASS 1
7051 ATS**
Art no 124309 › Page 33

**FLAMESTAT HIGHVIS STRETCH TROUSERS
CLASS 1 2162 ATHF**
Art no 129518 › Page 27



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FLAMESTAT HIGH VIS WAISTCOAT CLASS 2 5075 ATHS

Article no 110642

Dirt, oil and water repellent / Reflective detailing on shoulders / Front placket opening with zip and concealed snap fastening / 2 loose-hanging chest pockets with snap fastening, one with flap and D-ring with concealed snap fastening / 2 front pockets / 2 CORDURA® reinforced loose-hanging, tuckable front pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / 2 CORDURA® reinforced loose-hanging back pockets, both with extra tool pocket / 2 hammer loops / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2%, EN ISO 11612 A1 B1 C1 F1, EN 1149-5 all certifications together with long sleeve garments with at least the same certifications, EN ISO 20471 class 2 and fabric approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. Reinforcement in 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 130 Hi-Vis Yellow. **SIZE** XS-2XL.



540



FLAMESTAT COAT 3074 ATHS

Article no 121115

Dirt, oil and water repellent / Reflective detailing on shoulders / Front placket opening with concealed snap fastening / 1 chest pocket with pen pocket, flap with concealed snap fastening and outside pen straps / 2 front pockets with concealed snap fastening and flap / Cuffs with concealed snap fastening / Reflective tape around body / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2%, EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN 13034 Type PB [6] / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 300 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-3XL.





171



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FLAMESTAT HIGH VIS SHIRT CLASS 1 7051 ATS

Article no 124309

Reflective detailing on shoulders / Concealed snap fastening under front placket / 2 chest pockets with flap and concealed snap fastenings, 1 with pen loops / Cuffs with concealed snap fastening / Extended back / Side slits / Metalfree garment / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 9,9 cal/cm² HAF: 78,0% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5, EN ISO 20471 class 1, EN 13034 Type PB [6] / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



FLAMESTAT HIGH VIS SHIRT CLASS 3 7050 ATS

Article no 124178

Reflective detailing on shoulders / Concealed snap fastening under front placket / 2 chest pockets with flap and concealed snap fastenings, 1 with pen loops / Cuffs with concealed snap fastening / Extended back / Side slits / Metalfree garment / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 9,9 cal/cm² HAF: 78,0% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5, EN ISO 20471 class 3, EN 13034 Type PB [6] / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



APPROVED FOR WELDING

CORE



540

CORE



SEE PAGE 66



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FLAMESTAT SHIRT 7200 ATS

Article no 114095

Front placket opening with concealed snap fastening / Cuffs with concealed snap fastenings / Extended back / 2 chest pockets with flap and concealed snap fastenings / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 9,9 cal/cm² HAF: 78,0% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN ISO 11611 A1 A2 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 13034 type PB [6] / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



FLAMESTAT SHIRT 7074 ATS

Article no 109425

Reflective detailing on shoulders / Concealed snap fastening under front placket / Cuffs with concealed snap fastening / Extended back / 2 chest pockets with flap and concealed snap fastenings, 1 with pen loops / Metalfree garment / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 9,9 cal/cm² HAF: 78,0% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5, EN 13034 Type PB [6] / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



CORE



Navy sweatshirt
see page 57.



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FLAMESTAT HIGH VIS SWEATSHIRT CLASS 3 7076 SFLH

Article no 109428

Reflective detailing on shoulders / Rib-knit neck, cuffs and hem / 5 cm gusset in side with gap in the reflective tape for comfort and freedom of movement / Approved in accordance with EN 61482-1-2 class 1, EN 61482-1-1 EBT: 18,9 cal/cm² HAF: 90,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1, EN 1149-5 and EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 60% modacrylic, 37% cotton, 3% anti-static fibre. Inherent flame protection. **WEIGHT** 400 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



CORE



SEE PAGE 66



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FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 3 7077 TFLH

Article no 125041

Reflective detailing on shoulders / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 5,9 cal/cm² HAF: 78,9% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1, EN 1149-5 and EN 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 60% modacrylic, 37% cotton, 3% anti-static fibre. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



CORE



540



FLAMESTAT T-SHIRT 7073 TFL

Article no 110736

Reflective detail on shoulders / Rib-knit neck / Worn together with EN ISO 11612 garments / Approved according to EN ISO 14116 Index 3 and EN 1149-5 / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 60% modacrylic, 37% cotton, 3% anti-static fibre. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



CORE



SEE PAGE 66



Long-sleeved polo shirt
see page 57.



540



FLAMESTAT LONG SLEEVE T-SHIRT 7072 TFL

Article no 111842

Reflective detailing on shoulders / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 5,9 cal/cm² HAF: 78,9% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 and EN 1149-5 / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 60% modacrylic, 37% cotton, 3% anti-static fibre. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



Flamestat Knitted tops.

- Soft and comfortable materials
- Inherent flame protection
- Protection against electric arc – Open Arc Test and Box Test
- Protection against electrostatic discharge
- V-neck T-shirts in TFL material have higher protection against electric arc
- Tested for industrial laundry according to ISO 15797 and PRO labelled
- OEKO-TEX® certified
- Also available in women's models

TFL / TFLH / SFLH materials

Our T-shirts and sweatshirts are made of soft materials consisting of modacrylic, cotton and antistatic fibres. The materials feature inherent (built-in) flame protection, are antistatic and also protect against electric arc. The difference between TFL and TFLH is that TFL has higher protection against electric arc and protection against contact heat.

NEW

ELECTRIC ARC
ELIM 9,5 CAL/CM²



SEE PAGE 67



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FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 1 7107 TFL

Article no 133268

V-neck / Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 9,5 cal/cm² EBT: 11,5 cal/cm², EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 1 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. **WEIGHT** 270 g/m².
COLOUR 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



ELECTRIC ARC
ELIM 9,5 CAL/CM²



SEE PAGE 67



ELECTRIC ARC
ELIM 9,5 CAL/CM²



SEE PAGE 67



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FLAMESTAT LONG SLEEVE T-SHIRT 7360 TFL

Article no 131149

V-neck / Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 9,5 cal/cm² EBT: 11,5 cal/cm², EN ISO 11612 A1 A2 B1 C1 F1 and EN 1149-5 / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 270 g/m².
COLOUR 556 Navy/Hi-Vis Yellow. **SIZE** XS-4XL.



FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 3 7359 TFL

Article no 131147

V-neck / Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM 9,5 cal/cm² EBT: 11,5 cal/cm², EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-4XL / Approved after 25 washes / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 270 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



Flamestat Protection for working with molten iron and aluminium.

- Developed specially for work in foundries and work with molten iron and aluminium
- Soft and comfortable material that provides great freedom of movement
- Reinforced in exposed areas
- Special seams prevent metal splashes from sticking to the garments
- Inherent flame protection
- Highest protection against molten aluminium - D3
- Highest protection against molten iron - E3
- Approved for welding. Tested in layer-on-layer for class 2 welding
- Heat and flame protection
- Electric arc protection – tested to both Box Test and Open Arc Test
- Metal free
- Certified after 50 washes at 60°
- OEKO-TEX® certified

MFA material

Despite its high protection against molten metal, our MFA material is a soft and comfortable material that provides great freedom of movement. The material is inherently flame retardant and is made of flame retardant viscose, wool, lyocell and polyamide. We have added polyamide to the material for stronger resistance to wear

and tear. The MFA material has the highest degree of protection according to EN ISO 11612 – D3 for protection against splashes from molten aluminium and E3 for splashes of molten iron. It also has protection for electric arc and welding. The MFA material is certified after 50 washes at 60° och OEKO-TEX® certified.



556



FLAMESTAT JACKET 4965 MFA

Article no 122286

Front placket opening with zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring and pen strap, 1 with opening for radio-antenna at top / 2 front pockets with zip / Adjustable waist with drawstring / Inside mobile phone pocket / Inside pocket with button / Adjustable cuffs with snap fastening / Extended back / Visibility detailing at shoulders / Metal free / Reinforcement at front and back yoke and sleeve ends / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 8,0 cal/cm² HAF: 78,2%. EN ISO 11612 A1 A2 B1 C1 D3 E3 F1 / EN ISO 11611 A1 A2 class 1 (see Flame and welding table for certified garment combinations) / Approved after 50 washes / OEKO-TEX® certified.

MATERIAL 60% viscose FR, 20% wool, 10% lyocell, 10% polyamide. Reinforcement 55% viscose FR, 40% wool, 5% polyamide. Inherent flame protection. **WEIGHT** 350 g/m², reinforcement 465 g/m².

COLOUR 556 Navy/Hi-Vis Yellow. **SIZE** XS-3XL.



556



FLAMESTAT TROUSERS 2165 MFA

Article no 122287

2 front pockets / 2 reinforced back pockets with flap and velcro fastening / Double reinforced crotch seam / Reinforced bellowed folding rule pocket with flap and concealed snap fastening, button and loop for sheath knife, pen pocket / Leg pocket with flap and concealed snap fastening / Knee pockets with inside opening for height-adjustable knee pads / Visibility details on sides of knees / Adjustable leg length with 5 cm hem allowance / Metal free / Reinforcement on front leg and leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 8,0 cal/cm² HAF 78,2%. EN ISO 11612 A1 A2 B1 C1 D3 E3 F1, EN ISO 11611 A1 A2 class 1 (see Flame and welding table for certified garment combinations) and EN 14404 together with kneepads 124292 / Approved after 50 washes / OEKO-TEX® certified.

MATERIAL 60% viscose FR, 20% wool, 10% lyocell, 10% polyamide. Reinforcement 55% viscose FR, 40% wool, 5% polyamide. Inherent flame protection. **WEIGHT** 350 g/m², reinforcement 465 g/m².

COLOUR 556 Navy/Hi-Vis Yellow. **SIZE** C44-C62, D84-D120.



Flamestat functional jacket.

- Windproof and water resistant
- Light and soft stretch material with soft cotton feel
- Multi-seasonal
- Inherent flame protection
- Multinorm
- High protection against electric arc – Open Arc Test and Box Test
- Tested for electric arc layer-on-layer protection
- Approved for class 2 welding
- Electrostatic discharge protection
- Liquid chemical protection
- Metal free
- OEKO-TEX® certified
- Also available in women's model



FSS material

FSS is a soft and smooth softshell material with 2-way stretch. A functional material that is windproof and water resistant and has a cotton feel. The material has inherent flame protection and is made of modacrylic, cotton, polyurethane and polyamide, with additions of antistatic fibre and elastane. The FSS material has multinorm protection and protects against electric arc, welding and liquid chemicals and is antistatic. The material is OEKO-TEX® certified.

WEIGHT: 365 g/m² **LOI:** 35%
ATPV: 28 cal/cm² **HAF:** 92,4%

WINDPROOF
WATER-
REPELLENT
HOOD CAN BE
ATTACHED

CORE



SEE PAGE 64



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FLAMESTAT SOFTSHELL JACKET CLASS 3 4016 FSS Article no 127669

Windproof and water-repellent / Stretch quality / Front placket opening with zip to top of collar and concealed snap fastening / Collar with concealed snap fastening for attachable hood 130239 / 1 chest pockets with zip / Microphone holder on left front side / 2 front pockets with zip / Elasticated ribbon at sleeve end / Adjustable hem with drawstring / Metal free / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 28 cal/cm² HAF: 92,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 11611 A1 Class 2, EN 13034 Type PB [6], EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL / OEKO-TEX® certified.

MATERIAL 47% modacryl, 37% cotton, 12% polyurethane, 2% polyamide, 1% anti-static fibre, 1% elastane. Inherent flame protection. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



HOOD FOR
SOFTSHELL
JACKETS 127669
AND 130238



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FLAMESTAT SOFTSHELL HOOD 4077 FSS Article no 130239

Hood for use with 130238 or 127669 / Reflective detailing at top / Adjustable with drawstring / Metal free / Can be used over helmet / Certification only valid when worn together with soft shell jackets 130238 or 127669 / OEKO-TEX® certified.

MATERIAL 45% Modacrylic, 35% Cotton, 18% Polyamide, 2% Antistatic. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.





ATF and MFR materials

Soft fleece materials that can be used both in outer garments and middle layers. The materials have inherent flame protection, are antistatic and protect against electric arc. The ATF material is made of modacrylic, cotton, polyester and antistatic fibres. The black MFR material of modacrylic, cotton and elastane has a smooth outside and brushed inside, and is also used as long underwear. Both materials are OEKO-TEX® certified.



540



FLAMESTAT FLEECE JACKET 4073 ATF

Article no 109430

Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Chest pocket with concealed zip and D-ring / 2 front pockets / Drawstring at hem / Reflective tape on sleeves / Thumb grip / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 6,9 cal/cm² HAF: 86,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 50% modacryl, 30% cotton, 18% polyester, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 370 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



PERFECT AS AN
OUTER GARMENT
OR MIDDLE
LAYER

CORE



940



171



FLAMESTAT FLEECE JACKET 7044 MFR

Article no 121649

Front placket opening with zip to top of collar / Extended back / Thumb grips / Brushed inside / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 5,1 cal/m² HAF: 80% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C2 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 57% modacrylic, 38% cotton, 5% elastane. Inherent flame protection. **WEIGHT** 400 g/m². **COLOUR** 940 Black. **SIZE** S-3XL.



FLAMESTAT HIGH VIS FLEECE JACKET CLASS 3 4063 ATF

Article no 122233

Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / D-ring / Chest pocket with concealed zip / 2 front pockets / Drawstring at hem / Thumb grip / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 6,9 cal/cm² HAF: 86,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 20471 class 2 – size XS and class 3 – sizes S-3XL / OEKO-TEX® certified.

MATERIAL 50% modacrylic, 30% cotton, 18% polyester, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 370 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



Flamestat GORE-TEX PYRAD® shell garments with outstanding protection and comfort

- Lightweight and flexible
- Perfect for layering in different types of weather, year-round
- Very high level of protection – Multinorm
- Extra high electric arc protection
Open Arc Test EBT: 49.1 cal/cm²
Box Test class 2 = 7 kA
- Electric arc tested in layers for higher protection
- Heat and flame protection
- Electrostatic discharge protection
- Metal free
- Approved for class 2 welding
- Molten metal protection
- Liquid chemicals protection
- Certified high-vis garments
- Certified rain garments
- Inherent flame protection
- Dirt and oil repellent
- Certified after 30 washes at 60°
- OEKO-TEX® certified
- Also available as women's model

GXE /GORE-TEX PYRAD® material

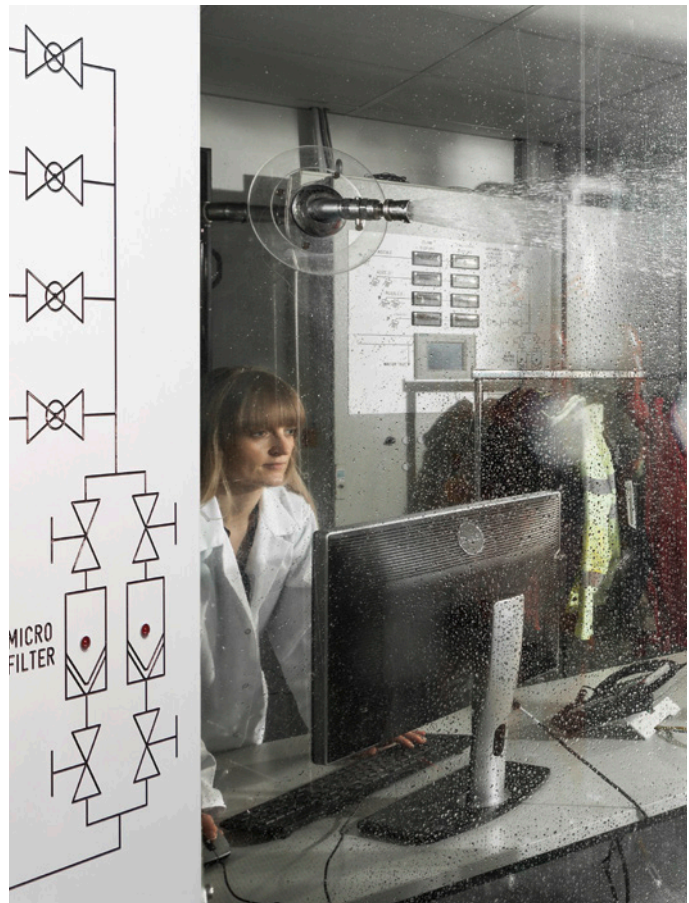
GXE is a lightweight GORE-TEX 2-layer material providing greater freedom of movement for the wearer. It is waterproof and windproof as well as breathable, and the fabric remains light and flexible even in wet conditions. The material is also dirt and oil repellent.

The GXE fabric is made of polyester and antistatic fibres with a flame-retardant and electric arc protective laminate. The material has inherent flame protection in the sense that the flame-protective performance is included in the laminate. No flame-retardant treatment of the outer textile is added. The protective performance of the fabric remains the same even after many years of usage.

The high-visibility GXE fabric provides outstanding Multinorm protection and is certified for a wide range of hazards. It has extra high protection against electric arc, is approved for class 2 welding, protects against molten metal splashes, is antistatic and protects against liquid chemicals. The material is PRO labelled and tested for industrial laundry according to ISO 15797. The garments are approved after 30 washes in 60°. The GXE material is OEKO-TEX® certified.

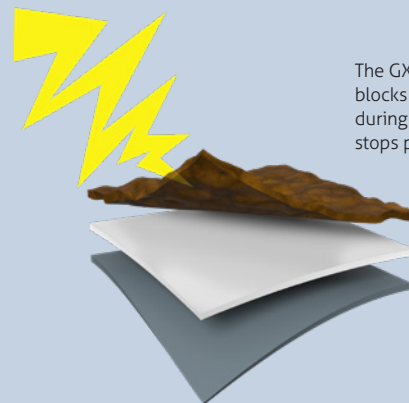
WEIGHT: 220 g/m²
EBT: 49.1 cal/cm²

CLASS 2: 7kA
HAF: 94.8%



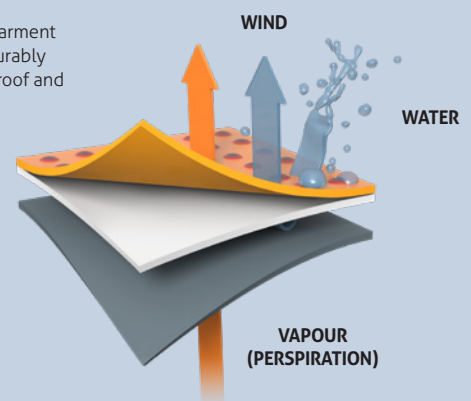
Tested in rain room

Gore Rain Tower prototype testing. This sophisticated testing facility is designed to simulate demanding, life-like rain conditions. Garment constructions and styles are tested for one hour in heavy rain to ensure waterproofness.



The GXE fabric technology blocks convective heat flow during arc exposure and stops propagation.

The material and garment construction are durably waterproof, windproof and highly breathable.



GORE-TEX, PYRAD®, GORE® and designs are registered trademarks of W. L. Gore & Associates



CORE



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FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET CLASS 3 4095 GXE

Article no 125617

2-layer GORE-TEX PYRAD® material, wind and waterproof but breathable / Dirt and oil repellent / Fully lined / Reflective detail on shoulders / Detachable lined hood with adjustable strap and drawstring / Storm flap with zip to top of collar and velcro fastening / 2 chest pockets with flap with velcro fastening and zip, 1 with D-ring / 2 front pockets with flap with velcro fastening and zip / 2 inside pockets, 1 with button and 1 with zip / Adjustable sleeve end / Elastic inner cuffs / Adjustable hem with drawstring / Zip in lining to make embroidery and transfer easier / Metal free garment / Waterpillar > 10.000mm / ePTFE membrane / Breathability RET 8,33 / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 EBT: 49,1 cal/cm² HAF: 94,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B2 C1 D3 E1 F1, EN ISO 11611 A1 A2 class 2, EN 1149-5, EN 13034 type PB [6], EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL and EN 343 class 3/3 / Approved after 30 washes / OEKO-TEX® certified.

MATERIAL 99,4% polyester, 0,6% carbon, 2-layer GORE-TEX PYRAD® material, wind and waterproof but breathable. Lining: 50% meta-aramide, 50% viscose FR. Inherent flame protection. **WEIGHT** 220 g/m², lining 130 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



ELASTIC DETACHABLE BRACES

CORE



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FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL TROUSERS CLASS 2 2095 GXE

Article no 125618

2-layer GORE-TEX PYRAD® material, wind and waterproof but breathable / Dirt and oil repellent / Fully lined / Elastic detachable braces / 2 front pockets with flap and zip / 2 back pockets with flap and concealed snap fastening / Hammer loop / 2 leg pocket with flap and concealed snap fastening, 1 with phone pocket with flap and velcro fastening, D-ring and ID-card pocket / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Concealed zip up to knee / Snow gaiter / Adjustable leg end / Metal free garment / Waterpillar > 10.000 mm / ePTFE membrane / Breathability RET 8,33 / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 EBT: 49,1 cal/cm² HAF: 94,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B2 C1 D3 E1 F1, EN ISO 11611 A1 A2 class 2, EN 1149-5, EN 13034 type PB [6], EN ISO 20471 class 2, EN 343 class 3/3 and EN 14404 together with kneepads 124292 / Approved after 30 washes.

MATERIAL 99,4% polyester, 0,6% carbon, 2-layer GORE-TEX PYRAD® material, wind and waterproof but breathable. Lining: 50% meta-aramide, 50% viscose FR. Inherent flame protection. **WEIGHT** 220 g/m², lining 130 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



Flamestat Winter

- ATHS material – high comfort and durability
- Dirt, oil and water repellent. The parka is water and windproof as well.
- The inside and pockets are lined with ATF fleece. Sleeves and legs are lined with silky smooth quilted lining for extra high comfort
- Inherent flame protection
- Multinorm
- Tested for industrial laundry according to ISO 15797 and PRO labelled. Approved after 25 washes at 60°
- OEKO-TEX® certified

HOOD
125064 CAN
BE ATTACHED

CORE



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FLAMESTAT HIGH VIS WINTER JACKET CLASS 3 4185 ATHS

Article no 119923

Dirt, oil and water-repellent / Fully lined with fleece in body and silky and soft quilted lining in sleeve / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Fleece-lined collar with snap fastening for attachable hood, 125064 / Bellowed chest pocket with concealed snap fastening, inside D-ring and pen strap / Chest pocket with zip / Concealed buttons and loops for sheath knife / Microphone holder / Map pocket with zip and inside mobile phone pocket accessible from outside / 2 fleece-lined front pockets with zip / Inside pocket with button / Inside mobile phone pocket with earpiece loop / Elastic cuffs inside sleeves / Extended back / Adjustable drawstring at hem / Zip in lining for easy embroidery and transfer / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 main fabric EBT: 26,4 cal/cm² HAF: 93,2% (see Electric arc table for certified garment combinations for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6], EN ISO 20471 class 2 – size XS and class 3 – sizes S-3XL and EN 342 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre, dirt, oil and water repellent. Fleece lining 50% modacryl, 30% cotton, 18% polyester, 2% anti-static fibre. Silky quilted lining 40% modacrylic, 37% viscose FR, 22% viscose, 1% anti-static fibre. Inherent flame protection. **WEIGHT** Outer fabric 300 g/m², fleece lining 370 g/m², silky quilted lining 260 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



LINED HOOD
FOR WINTER
JACKET



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Also suitable for women's
jacket 129548. See page 64.



FLAMESTAT WINTER HOOD 9185 ATHS

Article no 125064

Lined hood for use with 119923 and 129548 / Reflective detailing at top / Adjustable with drawstring / Metal free / Can be used over helmet / Certification only valid when worn together with winter jacket 119923 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre, dirt, oil and water repellent. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



Electric arc certified combination



Open Arc result

EN 61482-1-1
ATPV 67.3 cal/cm²
HAF: 95.4%

Box Test approved:
EN 61482-1-2 CLASS 2, 7kA

Read more and see the exact values
for different garment combinations on
pages 16-17, 79-82 and at fristads.com

The three garments are
arc-tested together to
get the exact value.



LAYER 1
FLAMESTAT LONG
SLEEVE T-SHIRT
7026 MOF
Art no 121639

LAYER 2
FLAMESTAT HIGH
VIS SHIRT CLASS 1
7051 ATS
Art no 124309

LAYER 3
FLAMESTAT HIGH
VIS AIRTECH®
WINTER PARKA
CLASS 3 4086 ATHR
Art no 109423

WATER- AND
WINDPROOF,
BREATHABLE

CORE



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FLAMESTAT HIGH VIS AIRTECH® WINTER PARKA CLASS 3 4086 ATHR

Article no 109423

Breathable, wind and waterproof / Fleece-lined in body and silky and soft lining in sleeve / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Fleece-lined collar / Detachable lined hood with drawstring / Microphone holder / Concealed buttons and loop for sheath knife / 2 chest pockets with flaps and concealed snap fastening, 1 with D-ring and 1 with tool loops / 2 front pockets with pocket flaps with concealed snap fastening, both with fleece-lined hand-warmer pocket with side opening / Map pocket with inside mobile phone pocket / 2 inside pockets, 1 with button and 1 mobile phone pocket with velcro fastening and earpiece loop / Elastic inner cuff / Adjustable waist with drawstring / Zip in lining for easy embroidery and transfer / Waterpillar 10.000 mm / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 main fabric ATPV: 34 cal/cm² HAF: 92 % (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5, EN 13034 Type PB [6], EN ISO 20471 class 3, EN 342 and EN 343 class 3/1. Shell fabric meets class 3 for water vapour permeability; EN 343 class 3/3. / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL Airtech® breathable, wind and waterproof material. Outer fabric 50% modacrylic, 41% cotton, 7% PU, 2% anti-static fibre 2-layer laminate. Taped seams. Fleece lining 50% modacryl, 30% cotton, 18% polyester, 2% anti-static fibre. Silky quilted lining: 40% modacrylic, 37% viscose FR, 22% viscose, 1% anti-static fibre. Inherent flame protection. **WEIGHT** Outer fabric 260 g/m², fleece lining 370 g/m², silky quilted lining 260 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** 2XS-4XL.



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FLAMESTAT HIGH VIS WINTER TROUSERS CLASS 2 2085 ATHS

Article no 109424

Dirt, oil and water-repellent / Fully lined with silky and soft quilted lining / Elastic detachable braces / Belt loops / D-ring / 2 front pockets with concealed zips / 2 back pockets / Hammer loop / Double reinforced crotch seam / CORDURA® reinforced folding rule pocket with tool pocket / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening and D-ring / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced thigh panel in contrast colour / Thigh pocket with flap and concealed snap fastening / Concealed zip up to knees / Snow gaiters / Adjustable, CORDURA® reinforced leg ends / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 2, EN 61482-1-1 main fabric EBT: 26,4 cal/cm² HAF: 93,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6], EN ISO 20471 class 2 and EN 342 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL Outer fabric 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre, dirt, oil and water repellent. Reinforcement 79% FR cotton, 20% polyamide, 1% anti-static fibre. Silky quilted lining 40% modacrylic, 37% viscose FR, 22% viscose, 1% anti-static fibre. Inherent flame protection. **WEIGHT** Outer fabric 300 g/m², silky quilted lining 260 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.







Fristads Flame

Welding, industry and flame collections with high comfort.

Our Flame collection can offer a complete range of garments in flame-retardant treated material. The garments are certified according to European norms to fit a broad target group and many professions with different safety requirements. All garments are OEKO-TEX® certified at garment level, which means that the entire garment is free from harmful chemicals and does not pose a health risk.

- High cotton comfort
- Multinorm
- Comfortable and durable
- Broad target group
- Garments for all seasons
- Large size range
- Women's collection
- Electric arc protection tested to both Box Test and Open Arc Test
- Tested for electric arc layer-on-layer protection
- Heat and flame protection. Tested layer-on-layer for increased protection
- Most garments are approved for welding
- Tested layer-on-layer for class 2 welding
- Antistatic – electrostatic discharge protection
- Knee pockets are certified together with our kneepads 124292
- Most garments have reinforcements and knee pockets in CORDURA® or aramide
- Leasing-laundry approved according to ISO 15797 and PRO labelled
- The garments are certified after 25-50 washes
- OEKO-TEX® certified



Heat and flame



Welding and allied processes



Electrostatic properties, design requirements



Electric arc Box test and Open arc test



Liquid chemicals, limited protection



High visibility warning clothing



Knee protection



Rain



Cold

Front placket opening with zip to top of collar and concealed snap fastening

Strap for gas measurement tools, radios, transponders etc

2 chest pockets, one with inside D-ring

Inside pocket and mobile pocket

Adjustable cuffs

Front pockets

Extended back. Adjustable waist

CORDURA®-reinforced, loose-hanging front pockets with extra pockets

Double reinforced crotch seam

CORDURA®-reinforced folding rule pocket with pen pocket. Button and loop for sheath knife

Leg pocket with flap with phone pocket D-ring and ID-card pocket

CORDURA®-reinforced knee pockets

CORDURA®-reinforced leg ends

Front placket opening with zip to top of collar and concealed snap fastening

2 chest pockets. "Napoleon" pocket under right chest pocket. Concealed button and loop for sheath knife

Inside pocket with zip accessible from outside

Adjustable cuffs

Front pockets

Extended back. Adjustable waist

Loose-hanging front pockets with extra pockets

Folding rule pocket with tool pocket. Button and loop for sheath knife

Leg pocket with extra pocket and phone pocket

Knee pockets





CORE



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FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2586 FLAM

Article no 125941

2 CORDURA® reinforced, loose-hanging front pockets, 1 with 3 pockets and tool loops and 1 with extra pocket / 2 front pockets / 2 CORDURA® reinforced back pockets, 1 with flap and concealed snap fastening / Double reinforced crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with pen pocket and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 20471 class 1 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C64, C146-C158, D84-D120.



CORE



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FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2584 FLAM

Article no 125939

2 CORDURA® reinforced, loose-hanging front pockets, 1 with 3 pockets and tool loops and 1 with extra pocket / 2 front pockets / 2 CORDURA® reinforced back pockets, 1 with flap and concealed snap fastening / Double reinforced crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with pen pocket and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 20471 class 2 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C64, C146-C158, D84-D120.



Flam material

Our Flam fabric is a comfortable and durable material made of 75% cotton and 25% polyester. The high proportion of cotton provides easy comfort next to the body and the polyester makes the garments very durable. The material is flame-retardant treated and antistatic, and protects against electric arc and welding. Flam material is leasing-laundry tested according to ISO 15797 and PRO labelled. The garments are certified after 50 washes at 75°. The Flam material is OEKO-TEX® certified.

WEIGHT: 365 g/m² **LOI:** 28%
ATPV: 10.6 cal/cm² **HAF:** 80.4%

Flame High-Visibility Welding

Fristads Flame welding collection was created to meet the high demands of welders, rail-workers, miners and foundry workers. The design prevents sparks and metal splashes from getting stuck in the garment and the aramide reinforcements offer extra protection.

Increase your protection

- Attain the highest class 2 welding protection
- Increase the protection against radiant heat, contact heat and molten iron splashes

All these garments have been part of Fristads layer-on-layer test for welding (EN ISO 11611) and heat and flame (EN ISO 11612).

The key to achieving a higher level of protection is to use our underwear in MOF fabric underneath your ordinary welding protective clothing.

Read more on page 19. See our table with certified garment combinations on pages 83-84.

Certified combination

Read more at page 19 and see the increased values for different garment combinations on page 83 and at fristads.com

Heavy welding
EN ISO 11611 CLASS 2

Heat and flame
EN ISO 11612
A1, B1, C2, E3, F2

The garments are tested together to get the exact value.



LAYER 1
FLAMESTAT
LONG JOHNS
7027 MOF
Art no 121641

+



LAYER 2
FLAME HIGH VIS
TROUSERS CLASS 2
2585 FLAM
Art no 125940





High protective collar

Comfortable fit gives large freedom of movement

Aramide reinforced front and sleeves

SPECIALLY DESIGNED FOR WELDING



540



FLAME WELDING COAT 3587 FLAM

Article no 125953

Velcro fastening at back neck / Ribbon fastening at back / Aramide reinforced front and sleeves / Elasticated sleeve end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV 10,6 cal/cm² HAF 80,4%, EN ISO 11612 A1 B1 C1 E2, F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2) and EN 1149-5 (Should be worn together with garments with the same certifications) / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 74% cotton, 25% para-aramid, 1% anti-static fibre. **WEIGHT** 365 g/m², reinforcement 340 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



CORE



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CORE



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FLAME HIGH VIS JACKET CLASS 3 4584 FLAM

Article no 125938

Front placket opening with zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring / 2 front pockets with concealed snap fastening / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with button / Adjustable cuffs with snap fastening / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV 10,6 cal/cm² HAF 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM

Article no 125940

2 front pockets / 2 CORDURA®-reinforced back pockets with flap and concealed snap fastening / Double reinforced crotch seam / Hammer loop / CORDURA®-reinforced folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / Aramide-reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Aramide-reinforced thigh panels / CORDURA®-reinforced leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN ISO 20471 class 2 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 74% cotton, 25% para-aramid, 1% anti-static fibre. CORDURA® reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m². Reinforcement 340 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C64, C146-C158, D84-D120.



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**FLAME HIGH VIS BIB'N'BRACE CLASS 2 1584 FLAM**

Article no 126510

Front placket opening with two-way, full-length front zip and concealed snap fastening / 2 CORDURA® reinforced chest pockets with flap and concealed snap fastening, 1 with D-ring / 2 front pockets / Double reinforced crotch seam / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / Hammer loop / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening, pen pocket and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening / Aramide-reinforced thigh panels / Aramide-reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA®-reinforced leg ends / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN ISO 20471 class 2 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 74% cotton, 25% para-aramid, 1% anti-static fibre. CORDURA® reinforcement: 79% cotton FR, 20% polyamide, 1% antistatic fibre. **WEIGHT** 365 g/m². Reinforcement 340 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C64, C146-C158, D84-D120.

**CORE**

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**FLAME HIGH VIS TROUSERS CLASS 1 2587 FLAM**

Article no 125942

2 front pockets / 2 CORDURA®-reinforced back pockets with flap and concealed snap fastening / Double reinforced crotch seam / Hammer loop / CORDURA®-reinforced folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / Aramide-reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Aramide-reinforced thigh panels / CORDURA®-reinforced leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN ISO 20471 class 1 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 74% cotton, 25% para-aramid, 1% anti-static fibre. CORDURA® reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m². Reinforcement 340 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C64, C146-C158, D84-D120.

**CORE**

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**FLAME HIGH VIS BIB'N'BRACE CLASS 2 1585 FLAM**

Article no 125943

Elasticated braces / Bib pocket with flap and concealed snap fastening / Inside bib pocket with zip / 2 front pockets / Adjustable waist with buttons / Zip fly / Double reinforced crotch seam / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / Hammer loop / Aramide-reinforced thigh panels / Aramide-reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA®-reinforced leg ends / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN ISO 20471 class 2 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 74% cotton, 25% para-aramid, 1% anti-static fibre. CORDURA® reinforcement: 79% cotton FR, 20% polyamide, 1% antistatic fibre. **WEIGHT** 365 g/m². Reinforcement 340 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C44-C64, C146-C158, D84-D120.

**CORE**

171

**FLAME HIGH VIS COVERALL CLASS 3 8084 FLAM**

Article no 125949

Front placket opening with 2-way zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with elasticated band and button / Adjustable cuffs with snap fastening / Double reinforced crotch seam / 2 front pockets / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / Hammer loop / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA®-reinforced leg ends / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN ISO 20471 class 3 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** S-XL.



Flame Shell garments

Functional garments with
multinorm protection for
all types of weather.

- Water and windproof with breathability
- Perfect for dressing in layers for different types of weather, all year round
- Comfortable material with cotton feel
- Multinorm
- High protection against electric arc – Open Arc Test ELIM: 27 cal/cm² and Box Test class 2: 7 kA
- Tested for electric arc layer-on-layer protection
- Heat and flame protection
- Electrostatic discharge protection
- Liquid chemical protection
- Metal free
- Certified high-visibility garments
- Certified rain garments
- Knee pockets co-certified with kneepads 124292
- Flame protected and antistatic CORDURA® reinforcements
- Flame-retardant treated
- Approved after 20 washes at 60°
- OEKO-TEX® certified

FLR material

FLR is a comfortable and durable functional material with high cotton content. The material is equipped with a membrane and is water and windproof while letting out excess heat.

FLR is a flame-retardant treated material made of cotton, polyester, polyurethane and antistatic fibre. The high cotton content makes the garments soft and comfortable to wear and the polyester provides high durability.

The FLR material offers broad multinorm protection and protects against electric arc as well as liquid chemicals and is antistatic. The garments are approved after 20 washes at 60°. The FLR material is OEKO-TEX® certified.

WEIGHT: 275 g/m² **LOI:** 28%
ELIM: 27 cal/cm² **KLASS 2:** 7 kA





WATER- AND WINDPROOF, BREATHABLE
CLASS 2 ARC PROTECTION



171



FLAME HIGH VIS AIRTECH® SHELL JACKET CLASS 3 4022 FLR

Article no 129869

Breathable windproof and waterproof / Fleece lined collar / Detachable hood with drawstring / Front placket opening with 2- way zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring and ID-card holder / Microphone holder on left front side / Inside map pocket with zip and mobile phone pocket with velcro fastening / 2 front pockets with snap fastening and fleece lining / Adjustable cuffs with velcro fastening / Zip in lining to make embroidery and transfer easier / Adjustable bottom with drawstring / Extended back / Metal free / Waterpillar 10.000 mm / Breathability RET 7,6 / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ELIM: 27 cal/cm² ATPV: 37 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN 343 class 3/2, EN 13034 Type PB (6) and EN ISO 20471 class 2 – sizes XS-5 and class 3 – sizes M-4XL / OEKO-TEX® certified.

MATERIAL 50% cotton, 45% polyester, 4% polyurethane, 1% antistatic fibre. Lining 100% cotton.
WEIGHT Outer fabric 275 g/m², lining 185 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



WATER- AND WINDPROOF, BREATHABLE
CLASS 2 ARC PROTECTION



171



FLAME HIGH VIS AIRTECH® SHELL TROUSERS CLASS 2 2152 FLR

Article no 129870

Breathable, windproof and waterproof / Elastic detachable braces / Belt loops / 2 front pockets with flap, snap fastening and zip / Double reinforced crotch seam / 2 CORDURA® reinforced back pockets with flap and snap fastening / Hammer loop / 1 CORDURA® reinforced folding rule pocket with flap and snap fastening, button and loop for sheath knife / 1 leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Concealed zip up to knees / Snow gaiters / Adjustable, CORDURA® reinforced leg ends / Metal free / Waterpillar 10.000 mm / Breathability RET 7,6 / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 2, EN 61482-1-1 ELIM: 27 cal/cm² ATPV: 37 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN 343 class 3/2, EN 13034 Type PB (6) and EN ISO 20471 class 2 / OEKO-TEX® certified.

MATERIAL 50% cotton, 45% polyester, 4% polyurethane, 1% antistatic fibre. Lining 100% cotton.
WEIGHT Outer fabric 275 g/m², lining 185 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



Flame High-Visibility Winter Welding

- FLAM material – comfortable and durable
- Quilted liner
- Approved for welding
Tested layer-on-layer for class 2 welding
- High protection against electric arc –
Open Arc Test ATPV: 56 cal/cm², Box Test class 2 = 7 kA.
Tested for electric arc layer-on-layer protection
- Electrostatic discharge protection
- Knee pockets co-certified with kneepads 124292
- Certified winter garments
- Flame-retardant treated
- Tested for industrial laundry according to ISO 15797 and PRO labelled
- Approved after 25 washes at 60°
- OEKO-TEX® certified

HOOD CAN BE ATTACHED

CORE



171



FLAME HIGH VIS WINTER JACKET CLASS 3 4588 FLAM

Article no 125944

Fully lined / Front placket opening with zip to top of collar and concealed snap fastening / Concealed buttons in collar for attachment of hood 125946 / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring / 2 front pockets with concealed snap fastening / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with button / Adjustable sleeve end with snap fastening / Rib-knitted cuff / Extended back / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 56 cal/cm² HAF: 93,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN ISO 20471 class 2 – sizes XS-5 and class 3 – sizes M-3XL and EN 342 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Lining 100% polyester.
WEIGHT Outer fabric 365 g/m², lining 315 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL.



LINED HOOD FOR JACKET, PARKA AND COVERALL



171



FLAME WINTER HOOD 9588 FLAM

Article no 125946

Lined hood for use with 125944, 125947 and 125948 / Reflective detailing at top / Adjustable with strap and drawstring / Can be used over helmet / Certification only valid when worn together with 125944, 125947 and 125948 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Lining 100% polyester.
WEIGHT Outer fabric 365 g/m², lining 252 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



DETACHABLE BRACES



171



FLAME HIGH VIS WINTER TROUSERS CLASS 2 2588 FLAM

Article no 125945

Fully lined / Elastic detachable braces / Belt loops / 2 front pockets with flap, snap fastening and zip / 2 CORDURA® reinforced back pockets with flap and snap fastening / Hammer loop / Double reinforced crotch seam / CORDURA® reinforced folding rule pocket with flap and snap fastening, button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced thigh panel in contrast colour / Concealed zip up to knees / Snow gaiters / Adjustable, CORDURA® reinforced leg ends / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 56 cal/cm² HAF: 93,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN ISO 20471 class 2, EN 342 and EN14404 together with kneepads 124292 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Lining 100% polyester. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** Outer fabric 365 g/m², lining 315 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



HOOD CAN BE ATTACHED



171



FLAME HIGH VIS WINTER PARKA CLASS 3 4589 FLAM

Article no 125947

Fully lined / Front placket opening with zip to top of collar and concealed snap fastening / Concealed buttons in collar for attachment of hood 125946 / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring / Microphone holder on left front side / 2 front pockets with concealed snap fastening / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with drawstring / Adjustable sleeve end with snap fastening / Rib-knitted cuff / Extended back / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 56 cal/cm² HAF: 93,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations for EN 11612 C2, E3, F2 and EN 11611 A1 class 2), EN 1149-5, EN ISO 20471 class 3 and EN 342 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Lining 100% polyester.
WEIGHT Outer fabric 365 g/m², lining 315 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-4XL



HOOD CAN BE ATTACHED



171



FLAME HIGH VIS WINTER COVERALL CLASS 3 8088 FLAM

Article no 125948

Fully lined / Front placket opening with 2-way zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, one with inside D-ring / Microphone holder on left front side / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with drawstring / Adjustable sleeve end with snap fastening / Rib-knitted cuff / Front pockets with flap, snap fastening and zip / 2 CORDURA® reinforced back pockets with flap and snap fastening / Hammer loop / Double reinforced crotch seam / CORDURA® reinforced folding rule pocket with flap and snap fastening, button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Concealed zip up to knees / Snow gaiters / Adjustable, CORDURA® reinforced leg ends / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 56 cal/cm² HAF: 93,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN ISO 20471 class 3, EN 342 and EN14404 together with kneepads 124292 / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Lining 100% polyester.
WEIGHT Outer fabric 365 g/m², lining 315 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** S-3XL



Flame

A comfortable collection with enhanced visibility and a high level of protection. Made of Flame material, a durable, flame-retardant treated material with high cotton comfort. The collection includes garments approved for welding as well as winter garments.

- Flame material – comfortable and durable
- High cotton comfort
- Yellow details for increased visibility
- Welding garments – see next spread
- Winter jackets – see next spread
- Electric arc protection tested to both Box Test and Open Arc Test
- Tested for electric arc layer-on-layer protection
- Heat and flame protection. Tested layer-on-layer for increased protection
- Antistatic – electrostatic discharge protection
- Knee pockets are certified together with our kneepads 124292
- Flame-retardant treated
- ATS shirt and knitted tops with inherent flame protection
- Leasing-laundry tested according to ISO 15797 and PRO labelled. Certified after 50 washes at 85°
- OEKO-TEX® certified

CORE



FLAME JACKET 4030 FLAM

Article no 100333

Front placket opening with zip to top of collar and concealed snap fastening / 2 chest pockets, 1 with flap and concealed snap fastening and 1 with extra pocket and pen pocket / Napoleon pocket under right chest pocket / Inside pocket with zip accessible from outside / Concealed button and loop for sheath knife / 2 front pockets / Inside phone pocket with velcro fastening and loop for earpiece / Adjustable cuffs with velcro fastener / Adjustable waist with buttons / Extended back / Approved according to EN 61482-1-2 class 1, 61482-1-1 ATPV: 10,6 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 (see Flame and welding table for certified garment combinations), and EN 1149-5 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton FR, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



CORE



SEE PAGE 69



FLAME CRAFTSMAN TROUSERS 2030 FLAM

Article no 100329

2 reinforced, loose-hanging front pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / 2 front pockets / 2 reinforced back pockets / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening, loop for ID card holder / Hammer loop / Reinforced folding rule pocket with pen pocket and button and loop for sheath knife / Pre-shaped knees / Knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, 61482-1-1 ATPV: 10,6 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton FR, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** C44-C62, C146-C156, D92-D116.



FLAME BIB'N'BRACE 0030 FLAM

Article no 100328

Front placket opening with two-way, full-length front zip and concealed snap fastening / 2 loose-hanging chest pockets with snap fastening, 1 with flap and concealed snap fastening and 1 with extra pocket and pen pocket / Concealed button and loop for sheath knife / Elasticated braces / 2 tuckable, reinforced, loose-hanging pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / 2 front pockets / 2 reinforced back pockets / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening, loop for ID card holder / Hammer loop / Reinforced folding rule pocket with pen pocket and button and loop for sheath knife / Pre-shaped knees / Knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, 61482-1-1 ATPV: 10,6 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton FR, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** C46-C62.



CORE



540



FLAMESTAT SWEATSHIRT 984 SFLA

Article no 100581

Elasticated band at neck, wrists and hem / Chest pocket with flap / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 13 cal/cm² ELIM: 12 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C2 and EN 1149-5 / Leasing-laundry tested according to ISO 15797.

MATERIAL 60% modacrylic, 38% cotton, 2% anti-static fibre. Inherent flame protection. WEIGHT 390 g/m². COLOUR 540 Dark Navy. SIZE XS-4XL.



CORE



540



FLAMESTAT LONG SLEEVE POLO SHIRT 784 PFLA

Article no 100472

3-button placket / Chest pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 4,4 cal/cm² EBT: 6,2 cal/cm², (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 and EN 1149-5 / Leasing laundry-tested according to ISO 15797.

MATERIAL 60% modacrylic, 38% cotton, 2% anti-static fibre. Inherent flame protection. WEIGHT 255 g/m². COLOUR 540 Dark Navy. SIZE XS-4XL.



Flame welding

Specially designed to provide optimum protection and comfort for welders.

- Flame material – comfortable and durable
- High cotton comfort
- Yellow details for increased visibility
- Approved for welding
- Tested layer-on-layer for class 2 welding
- Electric arc protection tested to both Box Test and Open Arc Test
- Tested for electric arc layer-on-layer protection
- Heat and flame protection
- Antistatic – electrostatic discharge protection
- Knee pockets are certified together with our kneepads 124292
- Flame-retardant treated
- Leasing-laundry tested according to ISO 15797 and PRO labelled. Certified after 50 washes at 85°C. Winter garments certified after 25 washes at 60°
- OEKO-TEX® certified



LEATHER APRON 9330 LTHR
Article no 100867

With bib / Nylon waist and neck straps / Length 87 cm, waist width 56 cm.

MATERIAL 100% heavy duty split leather.
COLOUR 240 Brown. **SIZE** One size.

CORE



540



FLAME WELDING JACKET 4031 FLAM

Article no 100334

Front placket opening with zip to top of collar and concealed snap fastening / 2 chest pockets with flaps and concealed snap fastening / Inside pocket with button and mobile pocket with velcro fastening and loop for earpiece / 2 front pockets with flap and concealed snap fastening / Adjustable cuffs with velcro fastener / Adjustable waist with buttons / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations) and EN 1149-5 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified

MATERIAL 75% cotton FR, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



CORE



540



FLAME WELDING TROUSERS 2031 FLAM

Article no 100330

2 front pockets / 2 reinforced back pockets with flaps and concealed snap fastening / Hammer loop / Leg pocket with flap and and concealed snap fastening, phone pocket with flap and velcro fastening, loop for ID card holder / Reinforced folding rule pocket with flap and concealed snap fastening, pen pocket and button and loop for sheath knife / Pre-shaped knees / Knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton FR, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** C44-C62, C146-C156, D92-D116.



DIRT, OIL
AND WATER-
REPELLENT



540



FLAME WINTER JACKET 4032 FLI

Article no 100342

Dirt, oil and water-repellent / Fully lined / Front placket opening with zip to top of collar and concealed snap fastening / 2 chest pockets with flaps and concealed snap fastening / 2 inside pockets with button, right with mobile pocket with velcro fastening and loop for earpiece / 2 front pockets with flap and concealed snap fastening / Elasticated inner cuff / Adjustable waist with buttons / Extended back / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 56 cal/cm² (see Electric arc table for certified garment combinations for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1 and EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 342 / OEKO-TEX® certified.

MATERIAL 75% cotton FR, 24% polyester dirt, oil and water-repellent, 1% anti-static fibre. Quilted lining: 50% cotton FR, 50% polyester FR. **WEIGHT** Outer fabric 320 g/m², lining 315 g/m². **COLOUR** 540 Dark Navy. **SIZE** 2XS-4XL.



DIRT, OIL
AND WATER-
REPELLENT



540



FLAME WINTER PARKA 4033 FLI

Article no 100343

Dirt, oil and water-repellent / Fully lined / Detachable lined hood with drawstring / Front placket opening with zip to top of collar and concealed snap fastening / 2 chest pockets with flaps and concealed snap fastening, left with tool loops / 2 inside pockets with button, right with mobile pocket with velcro fastening and loop for earpiece / 2 front pockets with flap and concealed snap fastening / Elasticated inner cuff / Adjustable waist with inside drawstring / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 56 cal/cm², EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11612 A1 B1 C1 and EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 342 / OEKO-TEX® certified.

MATERIAL 75 % cotton FR, 24% polyester dirt, oil and water-repellent, 1% anti-static fibre. Quilted lining: 50% cotton FR, 50% polyester FR. **WEIGHT** Outer fabric 320 g/m², Lining 315 g/m². **COLOUR** 540 Dark Navy. **SIZE** S-4XL.



CORE



540



FLAME WELDING COVERALL 8030 FLAM

Article no 100338

Front placket opening with two-way, full-length front zip and concealed snap fastening / 2 chest pockets with flap and concealed snap fastening, left with tool loops / Inside pocket with button and mobile pocket with velcro fastening and loop for earpiece / Covered side opening to inside / Adjustable cuffs with velcro fastener / Adjustable waist / 2 reinforced back pockets with flap and concealed snap fastening / Hammer loop / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening, loop for ID card holder / Reinforced folding rule pocket with flap and concealed snap fastening, pen pocket and button and loop for sheath knife / Pre-shaped knees / Knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton FR, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** Regular: S-2XL.



CORE



540



FLAMESTAT SHIRT 7200 ATS

Article no 114095

Front placket opening with concealed snap fastening / Cuffs with concealed snap fastenings / Extended back / 2 chest pockets with flap and concealed snap fastenings / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 9,9 cal/cm² HAF: 78,0% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN ISO 11611 A1 A2 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN 13034 type PB [6] / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 540 Dark Navy. **SIZE** XS-4XL.



Flame Class 2 Welding

- Optimal comfort during exposure to welding, heat and molten iron
- Extreme tear-, tensile- and abrasion strength for heavy duties
- Perfect for welders, foundry workers and workers within maintenance and mining
- High cotton comfort
- Multinorm
- Yellow details for increased visibility
- Approved for welding class 2
- Heat and flame protection.
- Electric arc protection – tested to both Box Test and Open Arc Test.
- Antistatic – Electrostatic discharge protection
- Chemical splash protection
- Knee pockets are certified together with our kneepads 124292
- Flame retardant and antistatic CORDURA® reinforcements
- Aramide-reinforced knee pockets
- Flame-retardant treated
- Leasing-laundry tested according to ISO 15797 and PRO labelled. Certified after 50 washes at 75°
- OEKO-TEX® certified

WEL material

Our fabric WEL provides outstanding molten metal and spark protection. Due to a smooth surface, molten metal splashes and sparks run right off. The fabric is flame-retardant treated and made of cotton, polyester and antistatic fibre, a satin weave which feels very soft and comfortable thanks to the high amount of cotton. The tear and tensile strength and abrasion resistance have very good performance and the material retains its strength even after extensive industrial laundering.

The WEL material has multinorm protection and protects against electric arc, welding and chemical splashes, and it is antistatic. The material is tested for industrial laundry according to ISO 15797 and is PRO labelled. The garments are certified after 50 washes at 75°. The WEL material is OEKO-TEX® certified.

WEIGHT: 450 g/m²

ATPV: 19.6 cal/cm² **ELIM:** 13.6 cal/cm²



FLAME WELDING JACKET 4077 WEL

Article no 131168

Front placket opening with zip to top of collar and concealed snap fastening / 2 chest pockets with flaps and concealed snap fastening, 1 with inside D-ring / Inside pocket with button and mobile pocket with velcro fastening / 2 front pockets with flap and concealed snap fastening / Adjustable cuffs with snap fastening / Adjustable waist with buttons / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 13 cal/cm² ATPV: 19 cal/cm², EN ISO 11612 A1 A2 B1 C1 E3 F1, EN ISO 11611 A1, A2 class 2, EN 1149-5, EN 13034 Type PB (6) / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 79% cotton, 20% polyester, 1% anti-static fibre. **WEIGHT** 450 g/m². **COLOUR** 556 Navy/Hi-Vis Yellow. **SIZE** XS-4XL.



FLAME WELDING TROUSERS 2656 WEL

Article no 131167

2 front pockets / Double reinforced crotch seam / Hammer loop / 2 CORDURA® reinforced bel-
lowed back pockets with flap and concealed snap fastening / CORDURA® reinforced folding rule
pocket with flap and snap fastening, pen pocket and button and loop for sheath knife / Leg pocket
with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening /
Aramid reinforced knee pockets with outside opening with velcro fastening / Height adjustment
for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1
ELIM: 13 cal/cm² ATPV: 19 cal/cm², EN ISO 11612 A1 A2 B1 C1 E3 F1, EN ISO 11611 A1, A2 class 2,
EN 1149-5, EN 13034 Type PB (6), EN 14404 together with kneepads 124292 / Approved after
50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 79% cotton, 20% polyester, 1% anti-static fibre. Reinforcement: 98% aramid fibre, 2% anti-
static fibre. **WEIGHT** 450 g/m², reinforcement 545 g/m². **COLOUR** 556 Navy/Hi-Vis Yellow. **SIZE** C44-C66.





556



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FLAME WELDING BIB'N'BRACE 1029 WEL

Article no 131165

Front placket opening with two-way, full-length front zip and concealed snap fastening / 2 CORDURA® reinforced chest pockets with flap and concealed snap fastening, 1 with D-ring / 2 front pockets / Double reinforced crotch seam / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / Hammer loop / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening, pen pocket and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening / Aramide reinforced knee pockets with outside opening with velcro fastening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 13 cal/cm² ATPV: 19 cal/cm², EN ISO 11612 A1 A2 B1 C1 E3 F1, EN ISO 11611 A1, A2 class 2, EN 1149-5, EN 13034 Type PB (6), EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 79% cotton, 20% polyester, 1% anti-static fibre. Reinforcement: 98% aramid fibre, 2% anti-static fibre. **WEIGHT** 450 g/m², reinforcement 545 g/m². **COLOUR** 556 Navy/Hi-Vis Yellow. **SIZE** C44-C66.



FLAME WELDING SLEEVE COVER 9207 KEVS

Article no 131169

Flame retardant / Adjustable strap for fastening around arm / Elasticated cuffs / Approved according to EN ISO 11612 A1 B1 C1 E3 F1, EN ISO 11611 Class 1 A1 and EN 1149-5.

MATERIAL 79% cotton, 20% polyester, 1% anti-static fibre. Reinforcement 98% aramid fibre, 2% anti-static fibre. **WEIGHT** 450 g/m², reinforcement 545 g/m². **COLOUR** 940 Black. **SIZE** One size.



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FLAME WELDING COVERALL 8044 WEL

Article no 131166

Front placket opening with two-way zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with elasticated band and button / Adjustable cuffs with snap fastening / Double reinforced crotch seam / 2 front pockets / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D-ring / Hammer loop / Aramide reinforced knee pockets with outside opening with velcro fastening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 13 cal/cm² ATPV: 19 cal/cm², EN ISO 11612 A1 A2 B1 C1 E3 F1, EN ISO 11611 A1, A2 class 2, EN 1149-5, EN 13034 Type PB (6), EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 79% cotton, 20% polyester, 1% anti-static fibre. Reinforcement: 98% aramid fibre, 2% anti-static fibre. **WEIGHT** 450 g/m², reinforcement 545 g/m². **COLOUR** 556 Navy/Hi-Vis Yellow. **SIZE** XS-4XL.



Rainwear and waistcoat with flame protection.

Our rainwear and waistcoat are made of flame-retardant treated materials and should be worn over protective garments certified according to EN 11612.

The waistcoat fabric is approved for electrostatic discharge EN 1149-5, but because of the short sleeves it must be worn over garments with similar certification.



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FLAME HIGH VIS RAIN JACKET CLASS 3 4845 RSHF

Article no 101038

Detachable drawstring hood / Buttons and zip / Pocket for communication radio / 2 front pockets, 1 with inside mobile phone pocket / Ventilation at back yoke / Adjustable cuffs / Reflective tape over shoulder / Worn over EN ISO 11612 garments / Approved according to EN ISO 14116 Index 1, EN 1149-5, EN ISO 20471 class 3 and EN 343 class 3/1.

MATERIAL 100% polyester FR PU-coated. **WEIGHT** 170 g/m². **COLOUR** 130 Hi-Vis Yellow. **SIZE** XS-4XL.



FABRIC APPROVED FOR ELECTROSTATIC DISCHARGE



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FLAME HIGH VIS WAISTCOAT CLASS 3 5023 FHA

Article no 124295

Front zip / Chest pocket with velcro fastening / Worn over EN ISO 11612 garments / Approved according to EN ISO 14116 Index 1 and EN 20471 class 3, fabric is approved according to EN 1149-3 / OEKO-TEX® certified.

MATERIAL 98% polyester FR, 2% anti-static fibre. **WEIGHT** 120 g/m². **COLOUR** 130 Hi-Vis Yellow. **SIZE** 2XS/XS-2XL/3XL.



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FLAME HIGH VIS RAIN TROUSERS CLASS 2 2047 RSHF

Article no 101056

Adjustable waist / Adjustable legs / Adjustable elasticated braces / Worn over EN ISO 11612 garments / Approved according to EN ISO 14116 Index 1, EN 1149-5, EN ISO 20471 class 2 and EN 343 class 3/1.

MATERIAL 100% polyester FR PU-coated **WEIGHT** 170 g/m². **COLOUR** 130 Hi-Vis Yellow. **SIZE** XS-4XL.



Women



**FLAMESTAT HIGH VIS JACKET
WOMAN CLASS 3 4275 ATHS**
Art no 122195 > Page 64

**FLAMESTAT HIGH VIS CRAFTSMAN
TROUSERS WOMAN CLASS 2 2775 ATHS**
Art no 122196 > Page 65



**FLAMESTAT HIGH VIS GORE-TEX
PYRAD® SHELL JACKET WOMAN
CLASS 3 4195 GXE**
Art no 129742 > Page 64

**FLAMESTAT HIGH VIS GORE-TEX PYRAD®
SHELL TROUSERS CLASS 2 2095 GXE**
Art no 125618 > Page 41



**FLAMESTAT LONG SLEEVE T-SHIRT
WOMAN 7098 TFLH**
Art no 129523 > Page 66

**FLAMESTAT HIGHVIS STRETCH CRAFTSMAN
TROUSERS WOMAN CLASS 1 2171 ATHF**
Art no 129521 > Page 65

Flamestat Women

Read more about our Flamestat collection on page 24.

APPROVED FOR WELDING



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APPROVED FOR WELDING

Hood 125064 can be attached. See page 42.



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FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS

Article no 122195

Dirt, oil and water-repellent / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Bellowed chest pocket with concealed snap fastening, inside D-ring and pen strap / Chest pocket with zip / Concealed buttons and loops for sheath knife / Microphone holder / 2 front pockets with zip / Inside pocket with button / Inside mobile phone pocket with velcro fastening and loop for mobile phone earpiece / Adjustable cuffs with snap fastening / Adjustable drawstring at hem / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6] and EN ISO 20471 class 2 – sizes XS-M and class 3 – sizes L-3XL / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



FLAMESTAT HIGH VIS WINTER JACKET WOMAN CLASS 3 4285 ATHS

Article no 129548

Dirt, oil and water-repellent / Fully lined with fleece in body and silky and soft quilted lining in sleeve / Reflective detailing on shoulders / Front placket opening with zip to top of collar and concealed snap fastening / Fleece-lined collar with snap fastening for attachable hood, 125064 / Bellowed chest pocket with concealed snap fastening, inside D-ring and pen strap / Chest pocket with zip / Concealed buttons and loop for sheath knife / Microphone holder / Map pocket with zip and inside mobile phone pocket accessible from outside / 2 fleece-lined front pockets with zip / Inside pocket with button / Inside mobile phone pocket with earpiece loop / Elastic cuffs inside sleeves / Extended back / Adjustable drawstring at hem / Zip in lining for easy embroidery and transfer / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 main fabric EBT: 26,4 cal/cm² HAF: 93,2% (see Electric arc table for certified garment combinations for open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6], EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL and EN 342 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre, dirt, oil and water repellent. Fleece lining 50% modacryl, 30% cotton, 18% polyester, 2% anti-static fibre. Silky quilted lining 40% modacrylic, 37% viscose FR, 22% viscose, 1% anti-static fibre. **WEIGHT** Outer fabric 300 g/m², fleece lining 370 g/m², silky quilted lining 260 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



WINDPROOF, WATER REPELLENT, STRETCH MATERIAL APPROVED FOR WELDING

Hood 130239 can be attached. See page 38.



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WATER- AND WINDPROOF, BREATHABLE MULTINORM



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FLAMESTAT HIGH VIS SOFTSHELL JACKET WOMAN CLASS 3 4076 FSS

Article no 130238

Windproof and water-repellent / Stretch quality / Front placket opening with zip to top of collar and concealed snap fastening / Concealed buttons in collar for attachment of hood 130239 / 1 chest pockets with zip / Microphone holder on left front side / 2 front pockets with zip / Elasticated ribbon at sleeve end / Adjustable hem with drawstring / Metal free / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 ATPV: 28 cal/cm² HAF: 92,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 11611 A1 Class 2, EN 13034 Type PB [6], EN ISO 20471 class 2 – sizes XS-M and class 3 – sizes L-3XL / OEKO-TEX® certified.

MATERIAL 47% modacryl, 37% cotton, 12% polyurethane, 2% polyamide, 1% anti-static fibre, 1% elastane. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET WOMAN CLASS 3 4195 GXE

Article no 129742

2-layer GORE-TEX PYRAD® material, wind and waterproof but breathable / Dirt and oil repellent / Fully lined / Reflective detail on shoulders / Detachable lined hood with adjustable strap and drawstring / Storm flap with zip to top of collar and velcro fastening / 2 chest pockets with flap with velcro fastening and zip, 1 with D-ring / 2 front pockets with flap with velcro fastening and zip / 2 inside pockets, 1 with button and 1 with zip / Adjustable sleeve end / Elastic inner cuffs / Adjustable hem with drawstring / Zip in lining to make embroidery and transfer easier / Metal free garment / Waterpillar > 10.000mm / ePTFE membrane / Breathability RET 8,33 / Approved according to EN 61482-1-2 class 2, EN 61482-1-1 EBT: 49,1 cal/cm² HAF: 94,8% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B2 C1 D3 E1 F1, EN ISO 11611 A1 A2 class 2, EN 1149-5, EN 13034 type PB [6], EN ISO 20471 class 2 – sizes XS-S and class 3 – sizes M-3XL and EN 343 class 3/3 / Approved after 30 washes / OEKO-TEX® certified.

MATERIAL 99,4% polyester, 0,6% carbon, 2-layer GORE-TEX PYRAD® material, wind and waterproof but breathable. Lining: 50% meta-aramide, 50% viscose FR. **WEIGHT** 220 g/m², lining 130 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.





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APPROVED FOR WELDING



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FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 1 2777 ATHS

Article no 126518

Dirt, oil and water-repellent / 2 tuckable, CORDURA® reinforced loose-hanging pockets, 1 with 3 small pockets and tool loops and 1 with extra pocket / 2 front pockets / D-ring at waistband / 2 CORDURA® reinforced back pockets with flaps and velcro fastening / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / 2-needle stitching on reflective tape / Adjustable leg length with 5 cm hem allowance / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 1 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Reinforcement: 79% cotton, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m², reinforcement 280 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C34-C50.



FLAMESTAT HIGH VIS TROUSERS WOMAN CLASS 1 2776 ATHS

Article no 122197

Dirt, oil and water-repellent / 2 front pockets / D-ring at waistband / 2 CORDURA® reinforced back pockets with flaps / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / 2-needle stitching on reflective tape / Adjustable leg length with 5 cm hem allowance / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN 13034 Type PB [6] and EN ISO 20471 cl 1 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C34-C50.



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STRETCH MATERIAL LIGHTWEIGHT



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FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS

Article no 122196

Dirt, oil and water repellent / 2 tuckable, CORDURA® reinforced, loose-hanging front pockets, left pocket with extra pocket and right pocket with 3 pockets and tool loops / 2 front pockets / D-ring at waistband / 2 CORDURA®-reinforced back pockets one with flap / Leg pocket with flap and concealed snap fastening, phone pocket with flap and velcro fastening and D-ring / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, button and loop for sheath knife / Reinforced thigh panels in contrast colour / Pre-shaped knees / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 class 1, EN 61482-1-1 EBT: 12,8 cal/cm² HAF: 84,2% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 2 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C34-C50.



FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS WOMAN CLASS 1 2171 ATHF

Article no 129521

Stretch fabric / Dirt, oil and water repellent / 2 front pockets / 2 CORDURA® reinforced loose-hanging pockets, 1 with 3 small pockets and tool loops and 1 with extra pocket / 2 CORDURA® reinforced back pockets, one with with flap and concealed snap fastening / Double crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with pen holder and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening, D ring under flap / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA® reinforced leg ends / Reinforced 2 needle stitching on reflective tape / Approved according to EN 14404 together with kneepads 124292, EN 61482-1-2 Class 1, EN 61482-1-1 EBT: 10,3 cal/cm² HAF: 80% (see Electric arc table for certified garments combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 1 / Fabric is approved according to EN 13034 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 34% cotton, 17% polyamide, 2% elastane, 2% anti-static fibre. **WEIGHT** 265 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C34-C50.





540



FLAMESTAT LONG SLEEVE T-SHIRT WOMAN 7098 TFLH

Article no 129523

Reflective detailing on shoulders / Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 5,9cal/cm² HAF: 78,9% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 and EN 1149-5 / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 60% modacryl, 37% cotton, 3% anti-static fibre. **WEIGHT** 230 g/m². **COLOUR** 540 Dark Navy. **SIZE** S-3XL.



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FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 3 7097 TFLH

Article no 129522

Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 5,9 cal/cm² HAF: 78,9% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1, EN 1149-5 and EN ISO 20471 class 2 – sizes S-L and class 3 – sizes XL-3XL / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 60% modacrylic, 37% cotton, 3% anti-static fibre. **WEIGHT** 230 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** S-3XL.



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FLAMESTAT SHIRT WOMAN 7099 ATS

Article no 129524

Reflective detailing on shoulders / Concealed snap fastening under front placket / Cuffs with concealed snap fastening / 2 chest pockets with flap and concealed snap fastenings, 1 with pen loops / Extended back / Metalfree garment / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 9,9 cal/cm² HAF: 78,0% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5 and EN 13034 Type PB [6] / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. **WEIGHT** 230 g/m². **COLOUR** 540 Dark Navy. **SIZE** S-3XL.



EXTRA HIGH PROTECTION AGAINST ELECTRIC ARC ELIM 9,5 CAL/CM²



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FLAMESTAT LONG SLEEVE T-SHIRT WOMAN 7358 TFL

Article no 131148

V-neck / Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 9,5 cal/cm² EBT: 11,5 cal/cm², EN ISO 11612 A1 A2 B1 C1 F1 and EN 1149-5 / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. **WEIGHT** 270 g/m². **COLOUR** 556 Navy/Hi-Vis Yellow. **SIZE** S-4XL.



EXTRA HIGH PROTECTION AGAINST ELECTRIC ARC ELIM 9,5 CAL/CM²



FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 3 7357 TFL

Article no 131146

V-neck / Raglan sleeves / Rib-knit neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 9,5 cal/cm² EBT: 11,5 cal/cm², EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 2 – sizes S-L and class 3 – sizes XL-4XL / Approved after 25 washes / Leasing-laundry tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. **WEIGHT** 270 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** S-4XL.



NEW

EXTRA HIGH PROTECTION AGAINST ELECTRIC ARC ELIM 9,5 CAL/CM²



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FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 1 7108 TFL

Article no 133269

V-neck / Raglan sleeves / Rib-knitted neck and cuffs / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ELIM: 9,5 cal/cm² EBT: 11,5 cal/cm², EN ISO 11612 A1 A2 B1 C1 F1, EN 1149-5 and EN ISO 20471 class 1 / Approved after 25 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. **WEIGHT** 270 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** S-4XL.



Soft T-shirts with high protection against electric arc



Flamestat Underwear women

Go to pages 70-73 to see all our flame-retardant underwear and baselayers. The MOF series is unisex and is a good fit for women.

NEW



940



FLAMESTAT BRA 7105 MOF

Article no 131145

Adjustable straps / Double layer of fabric at front / Padded / Hook and eye closure / Elastic rib at hem / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** 75 A-C, 80 A-C, 85 B-D, 90 C-D, 95 C-D.



940



FLAMESTAT BRA 7036 MOF

Article no 121643

Racer back / Double layer of fabric at front / Elastic rib at bottom / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** S-2XL.



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FLAMESTAT BRIEFS 7022 MOF

Article no 122230

Elasticated waist / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** S-XL.



FLAMESTAT DEVOLD® LONG JOHNS WOMAN 7432 UL

Article no 109843

2-layer / Elasticated waist / Approved according to EN 61482-1-2 class 1 and EN ISO 11612 A1 A2 B1 C1 / OEKO-TEX® certified.

MATERIAL 50% viscose FR, 50% merino wool. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 940 Black. **SIZE** XS-XL.



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FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF 121639 > Page 71
 FLAMESTAT LONG JOHNS 7027 MOF 121641 > Page 71
 FLAMESTAT SOCKS 980 SFA 100580 > Page 75

Flame Women

Read more about our Flame collection on pages 46-55.



APPROVED FOR WELDING

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FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM

Article no 125952

Front placket opening with zip to top of collar and concealed snap fastening / 2 bellowed chest pockets with flap and concealed snap fastening, 1 with inside D-ring / 2 front pockets with concealed snap fastening / Inside pocket with button fastening and mobile phone pocket with flap and velcro fastening / Adjustable waist with button / Adjustable cuffs with snap fastening / Extended back / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5 and EN ISO 20471 class 2 – sizes XS-M and class 3 – sizes L-3XL / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** XS-3XL.



APPROVED FOR WELDING

171



FLAME HIGH VIS TROUSERS WOMAN CLASS 1 2591 FLAM

Article no 125951

2 front pockets / 2 CORDURA® reinforced back pockets with flap and concealed snap fastening / Double reinforced crotch seam / Hammer loop / CORDURA® reinforced folding rule pocket with flap and concealed snap fastening and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / Aramide-reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Aramide-reinforced thigh panels / CORDURA® reinforced leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1 (see Flame and welding table for certified garment combinations), EN 1149-5, EN ISO 20471 class 1 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 74% cotton, 25% para-aramid, 1% anti-static fibre. CORDURA® reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m², reinforcement 340 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C34-C50.



171



FLAME HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2589 FLAM

Article no 125950

2 CORDURA®-reinforced, loose-hanging front pockets, one with 3 pockets and tool loops and the other with extra pocket / 2 front pockets / 2 CORDURA®-reinforced back pockets, one with flap and concealed snap fastening / Double reinforced crotch seam / Hammer loop / CORDURA®-reinforced folding rule pocket with pen pocket and button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening and D-ring / CORDURA®-reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / CORDURA®-reinforced leg end / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5, EN ISO 20471 class 2 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 171 Hi-Vis Yellow/Navy. **SIZE** C34-C50.



540



FLAME CRAFTSMAN TROUSERS WOMAN 2730 FLAM

Article no 125954

2 CORDURA® reinforced, loose-hanging front pockets, 1 with 3 pockets and tool loops and 1 with extra pocket / 2 front pockets / 2 CORDURA® reinforced back pockets / Hammer loop / CORDURA® reinforced folding rule pocket with tool pocket, concealed button and loop for sheath knife / Leg pocket with flap and concealed snap fastening, mobile phone pocket with flap and velcro fastening / CORDURA® reinforced knee pockets with inside opening / Height adjustment for knee pads in knee pocket / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 10,6 cal/cm² HAF: 80,4% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1, EN 1149-5 and EN 14404 together with kneepads 124292 / Approved after 50 washes / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 75% cotton, 24% polyester, 1% anti-static fibre. Reinforcement: 79% cotton FR, 20% polyamide, 1% anti-static fibre. **WEIGHT** 365 g/m². **COLOUR** 540 Dark Navy. **SIZE** C34-C50.



Increase the safety – dress layer on layer.

You can extend the period during which you are protected if you wear flame-retardant underwear underneath your regular flame-retardant clothes. Fristads has conducted different layer-on-layer tests and then certified a large number of clothing combinations that include our MOF underwear. By wearing this underwear under your regular flame-retardant clothes you can achieve the following:

- Increased electric arc protection
- The highest welding class 2 protection
- Increased protection against radiant heat, contact heat and molten iron splashes

Read more about our layer-on-layer tests on pages 14-19 and see the tables of certified garment combinations on pages 79-84.



940



FLAMESTAT BRA 7036 MOF

Article no 121643

Racer back / Double layer of fabric at front / Elastic rib at bottom / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** S-2XL.



940



FLAMESTAT BRA 7105 MOF

Article no 131145

Adjustable straps / Double layer of fabric at front / Padded / Hook and eye closure / Elastic rib at hem / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** 75 A-C, 80 A-C, 85 B-D, 90 C-D, 95 C-D.



940



FLAMESTAT BRIEFS 7022 MOF

Article no 122230

Elasticated waist / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** S-XL.



CORE



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FLAMESTAT BOXERS 7031 MOF

Article no 121642

Elasticated waist / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** S-3XL.



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FLAMESTAT BRIEFS 7466 MOF

Article no 131150

Elasticated waist / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** XS-3XL.



CORE



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FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF
Article no 121639

Round neck / Long-sleeved / Approved according to EN 61482-1-2 class 1 (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** XS-4XL.



CORE



FLAMESTAT HALF ZIP 7029 MOF
Article no 121640

High collar with short zip / Long-sleeved / Approved according to EN 61482-1-2 class 1 (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** XS-4XL.



CORE



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FLAMESTAT LONG JOHNS 7027 MOF
Article no 121641

Elastic waist / Approved according to EN 61482-1-2 class 1 (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C1 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection.
WEIGHT 240 g/m². **COLOUR** 940 Black. **SIZE** XS-4XL.



MOF material

MOF is a soft and smooth fabric in elastic jersey quality with very high comfort. The MOF material has inherent flame protection and is made of modacrylic, cotton, elastane and beltron. The material has electric arc protection and is antistatic. MOF material can be machine washed at 60° and is OEKO-TEX® certified.

CORE



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FLAMESTAT DEVOLD® LONG SLEEVE T-SHIRT 7436 UD

Article no 109848

Very elastic / Lightweight / Approved according to EN 61482-1-2 class 1, EN ISO 11612 A1A2 B1 C1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 50% viscose FR®, 40% merino wool, 8% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 940 Black. **SIZE** XS-2XL.



940



FLAMESTAT DEVOLD® T-SHIRT 7431 UD

Article no 109842

Very elastic / Lightweight / Approved according to EN ISO 14116, Index 3 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 50% viscose FR®, 40% merino wool, 8% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 940 Black. **SIZE** XS-2XL.



940



FLAMESTAT DEVOLD® LONG JOHNS WOMAN 7432 UL

Article no 109843

2-layer / Elasticated waist / Approved according to EN 61482-1-2 class 1 and EN ISO 11612 A1 A2 B1 C1 / OEKO-TEX® certified.

MATERIAL 50% viscose FR, 50% merino wool. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 940 Black. **SIZE** XS-XL.



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FLAMESTAT DEVOLD® LONG JOHNS 7437 UD

Article no 109849

Very elastic / Lightweight / With fly / Approved according to EN 61482-1-2 class 1, EN ISO 11612 A1 A2 B1 C1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 50% viscose FR®, 40% merino wool, 8% polyamide, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 230 g/m². **COLOUR** 940 Black. **SIZE** S-2XL.



DEVOLD® UD material

Devold® UD is an elastic rib-knitted material of viscose, Merino wool, antistatic fibres and durable polyamide with inherent flame protection. The material has electric arc protection and is antistatic. The UD material can be machine washed at 60°.

DEVOLD® UL material

Devold® UL is an inherently flam-retardant 2-layer material made of viscose and Merino wool. The viscose is on the reverse, which provides a soft and smooth feeling against the skin – perfect for people who are sensitive to wool. The material has electric arc protection. The UL fabric can be machine washed at 40° and is OEKO-TEX® certified.

CORE



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FLAMESTAT FLEECE JACKET 7044 MFR

Article no 121649

Front placket opening with zip to top of collar / Extended back / Thumb grips / Brushed inside / Approved according to EN 61482-1-2 class 1, EN 61482-1-1 EBT: 5,1 cal/m² HAF: 80% (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN ISO 11612 A1 B1 C2 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 57% modacrylic, 38% cotton, 5% elastane. Inherent flame protection. **WEIGHT** 400 g/m². **COLOUR** 940 Black. **SIZE** S-3XL.



940



FLAMESTAT FLEECE LONG JOHNS 7045 MFR

Article no 121650

Elasticated waist / Brushed inside / Approved according to EN 61482-1-2 class 1 (see Electric arc table for certified garment combinations for EN 61482-1-2 class 2 and open arc according to EN 61482-1-1), EN 61482-1-1 EBT: 5,1 cal/m² HAF: 80%, EN ISO 11612 A1 B1 C2 F1 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 57% modacrylic, 38% cotton, 5% elastane. Inherent flame protection. **WEIGHT** 400 g/m². **COLOUR** 940 Black. **SIZE** S-3XL.



MFR material

MFR is a flexible, thermally insulating fleece with smooth outside and soft, brushed reverse. The material is inherently flame-retardant made of modacrylic, cotton and elastane. MFR protects against electric arc and is antistatic. The material can be machine washed at 60° and is OEKO-TEX® certified.

FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF
Art no 121639 › Page 71

FLAMESTAT LONG JOHNS 7027 MOF
Art no 121641 › Page 71

FLAMESTAT FLEECE JACKET 7044 MFR
Art no 121649 › Page 73

FLAMESTAT SOCKS 9194 FSOL
Art no 127673 › Page 75

Accessories



CORE



FLAMESTAT BEANIE 9195 MOF

Article no 127674

Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** One size.



FLAMESTAT SNOOD / BANDANA 9192 MOF

Article no 127671

Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** One size.



FLAMESTAT COLLAR 7038 MOF

Article no 121648

Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane and 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** One size.



FLAMESTAT BALACLAVA 7028 MOF

Article no 121644

Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 B1 C1 F1 and EN 61482-1-2 class 1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 58% modacrylic, 37% cotton, 3% elastane and 2% anti-static fibre. Inherent flame protection. **WEIGHT** 240 g/m². **COLOUR** 940 Black. **SIZE** One size.



FLAMESTAT WINTER HAT 9171 ATHR

Article no 132033

Water-repellent / Fleece lining / Elastic at the back / Approved according to EN ISO 14116 Index 3 (fabric is approved according to EN ISO 11612 A1 A2 B1 C1 F1 and open arc according to EN 61482-1-1) and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 50% modacrylic, 41% cotton, 7% polyurethane, 2% anti-static fibre. Inherent flame protection. **WEIGHT** 260 g/m². **COLOUR** 540 Dark Navy. **SIZE** S/M, L/XL.



FLAMESTAT DEVOLD® BEANIE 9109 FR

Article no 117247

Flame retardent beanie / Knitted / Approved according to EN 61482-1-2 class 1, EN ISO 11612 A1 A2 B1 C1 and EN 1149-5.

MATERIAL 50% viscose FR®, 40% merino wool, 8% polyamide, 2% anti-static fibre. Inherent flame protection. **COLOUR** 940 Black. **SIZE** One size.



MOF material

We have developed comfortable accessories in the same materials as our collection of undergarments on pages 70-71.

MOF is a soft and smooth material in elastic jersey quality with very high comfort. The MOF material has inherent flame protection and is made of modacrylic, cotton, elastane and beltron. The material has electric arc protection and is antistatic. MOF material can be machine washed at 60° and is OEKO-TEX® certified.



940



FLAME ID-CARD POCKET 9174 PSTF

Article no 124315
Attached with snap fastening / Metal free / Approved according to EN 14116 Index 3 (fabric is approved according to EN ISO 11612 A1) / Sold in pack of 5 pcs / OEKO-TEX® certified.

MATERIAL 80% cotton, 19% polyester, 1% anti-static fibre.
WEIGHT 250 g/m². **COLOUR** 940 Black. **SIZE** One size.



540



FLAMESTAT SOCKS 980 SFA

Article no 100580
Rib-knitted leg / Terry-knitted sole / Approved to EN ISO 14116 Index 3 and EN 1149-5.

MATERIAL 40% modacrylic, 27% cotton, 20% polyamide, 6% elastane, 7% anti-static fibre. Inherent flame protection. **COLOUR** 540 Dark Navy. **SIZE** 37-39, 40-42, 43-45, 46-48.



540



FLAMESTAT SOCKS 9194 FSOL

Article no 127673
Rib-knitted shaft / Terry-knitted heel and toe / Approved according to EN ISO 14116 Index 3 and EN 1149-5.

MATERIAL 54% modacrylic, 44% cotton, 2% anti-static fibre. Inherent flame protection. **COLOUR** 540 Dark Navy. **SIZE** 37-39, 40-42, 43-45, 46-48.



CORE



940



PRO

FLAMESTAT BELT 9999 FR

Flame retardant / Webbing / Buckle of polyamide 6.6 with Fristads logo engraved / Adjustable length / Length 130 cm / Width 38 mm / Approved according to EN ISO 14116 Index 3 / Leasing laundry-tested according to ISO 15797 / OEKO-TEX® certified.

MATERIAL 58% polyester, 23% modacrylic, 19% cotton. Inherent flame protection. Buckle of polyamide 6.6. **COLOUR** 940 Black. **SIZE** One size.



942



Woolpower



FLAMESTAT SOCKS 9193 FSOH

Article no 130207
Wool insulation / Terry-knitted feet and shafts / Approved according to EN ISO 14116 Index 3 and 1149-5 / OEKO-TEX® certified.

MATERIAL 60% merino wool, 25% aramide, 11% polyamide, 2% anti-static fibre, 2% elastane. Inherent flame protection. **COLOUR** 942 Anthracite Grey. **SIZE** 36-39, 40-44, 45-48.



942



Woolpower



FLAMESTAT KNEE-HIGH SOCKS 9198 FSOH

Article no 130208
Wool insulation / Terry-knitted feet and shafts / Approved according to EN ISO 14116 Index 3 and EN 1149-5 / OEKO-TEX® certified.

MATERIAL 60% merino wool, 25% aramide, 11% polyamide, 2% anti-static fiber, 2% elastane. Inherent flame protection. **COLOUR** 942 Anthracite Grey. **SIZE** 36-39, 40-44, 45-48.



CORE



Combine with belt 117320. See page 75.



Flame certification only valid when combined with Fristads Flamestat and Flame garments.



940



FLAME NAIL POCKETS 9179 ATHS

Article no 131925
2 CORDURA® reinforced loose hanging pockets, one with 3 smaller pockets and tool loops, one with extra pocket / Attached with velcro fastening / Fits with trousers 121355, 122197, 121354, 125038, 109424, 125940, 125942, 125943, 125945, 125949, 125951, 126510, 100330, 130666 and belt 117320 / Fabric is approved according to EN ISO 11612 A1 B1 C1 E2 F1, EN ISO 11611 A1 class 1, EN 61482-1-2 class 1, EN 61482-1-1 ATPV: 12 cal/cm² ELIM: 9 cal/cm², EN 13034 and EN 1149-3 / Leasing laundry-tested according to EN ISO 15797 / OEKO-TEX® certified.

MATERIAL 45% modacrylic, 35% cotton, 18% polyamide, 2% anti-static fibre. **WEIGHT** 300 g/m². **COLOUR** 540 Dark Navy. **SIZE** One size.



FLAME WELDING SLEEVE COVER 9207 KEVS

Article no 131169
Flame retardant / Adjustable strap for fastening around arm / Elasticated cuffs / Approved according to EN ISO 11612 A1 B1 C1 E3 F1, EN ISO 11611 Class 1 A1 and EN 1149-5.

MATERIAL 79% cotton, 20% polyester, 1% anti-static fibre. Reinforcement 98% aramid fibre, 2% anti-static fibre. **WEIGHT** 450 g/m², reinforcement 545 g/m². **COLOUR** 940 Black. **SIZE** One size.



KNEE PROTECTION 9200 KP

Article no 124292
Front shield protects from penetration / Lightweight / Very flexible / Thickness 20 mm / Width 160 mm / Length 245 mm / Approved according to EN 14404 type 2 level 1 and EN 11612 A1 in combination with Fristads flame protective assortment / Sold in pairs.

MATERIAL Front 100% LDPE. Back 100% Ethylene Vinyl Acetate 50. **COLOUR** 896 Grey/Black. **SIZE** One size.

Snikki Toolbelts

Keep your important tools close at hand.

We have pockets specially developed for electricians.

- More than 50 years of experience with manufacturing and developing toolbelts
- High quality, functionality and durability
- Ergonomic design – saves your back, shoulders and neck, and allows for a more even distribution of weight
- Tools and materials are easily accessible
- Easy to put on and take off. All material pockets and holders can be easily replaced when needed

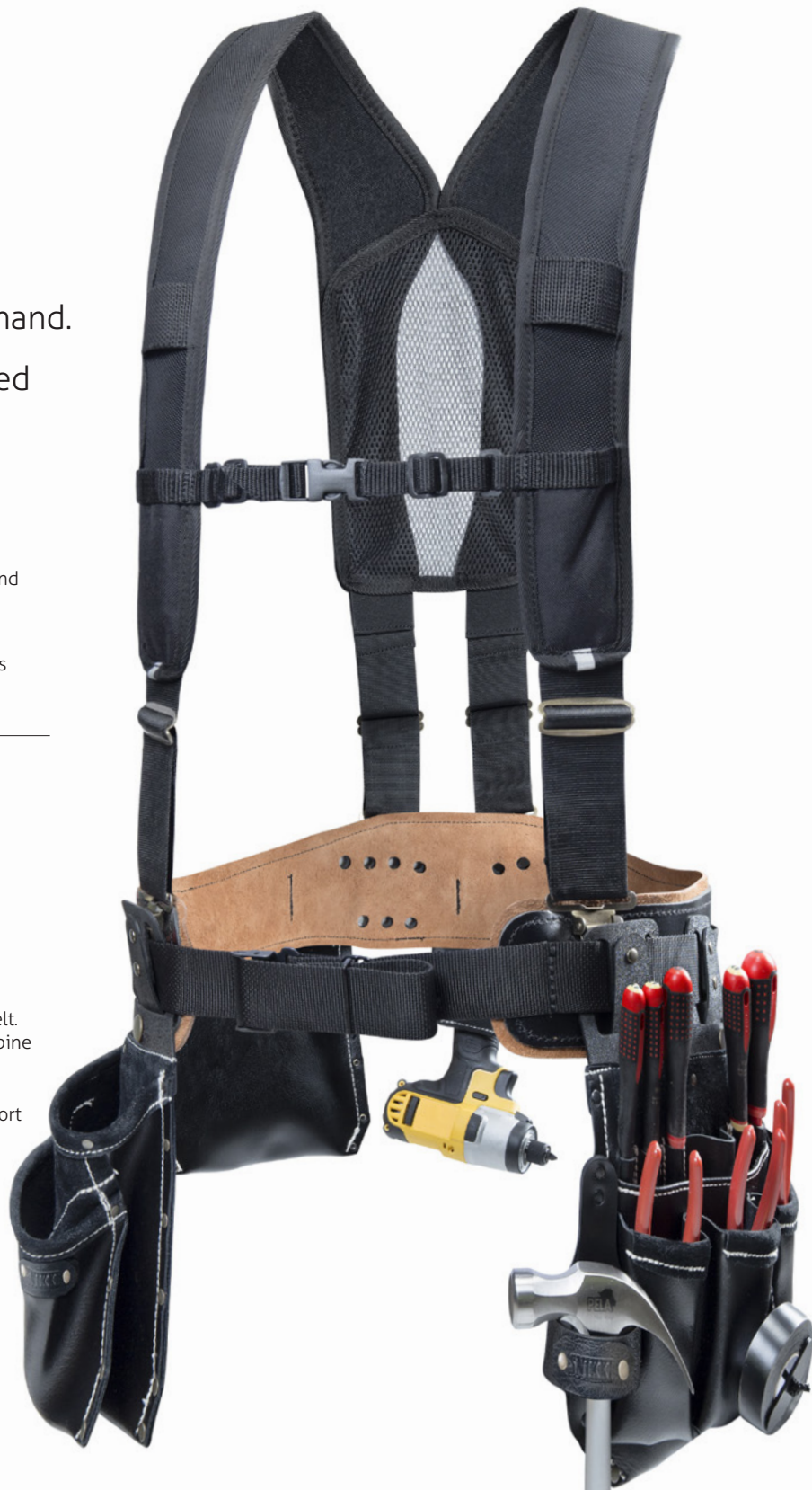
Snikki Ergo System

Make your own toolbelt:

1. Choose an Ergo belt, soft padded belt or a regular leather belt. For extra relief for your shoulders and greater comfort, combine with our tool braces.
2. Choose the pouches and tool holders you require. The comfort system is flexible and you can easily replace pouches and holders.



We also have an Ergo system in lightweight material. See fristads.com



We also have ready-made tool belts and many more pockets and holders.

You will find our entire range and Snikki guide at fristads.com



Quick-grip – this is how you attach our pockets and holders

Place the part with snap fastenings over your belt. Push and then attach on the backside.





940

SNIKKI ERGO BRACES 9332 PPL

Article no 100897

For use with Ergo belt 100045 or other toolbelts / Ventilating back panel / Straps partly elasticated at back and front / 2 pen pockets / 2 Quick-snap pocket holders / Heavy-duty clips / Front adjustable straps, S-M: 11,5-19 cm, L-XL: 15-28 cm / Back adjustable straps, S-M: 12-19 cm, L-XL: 17-28 cm.

MATERIAL Polyester/polyamide laminate. **COLOUR** 940 Black.

SIZE S-M, L-XL.



940

SNIKKI BELT 9370 POLY

Article no 100912

70 mm padded polyester tube / 40 mm nylon strap with metal buckle / Heat reflective padding / For Quick-grip and Quick-snap pouches, holders and holsters / Belt length 115 cm.

MATERIAL Polyester/polyeten foam. **COLOUR** 940 Black.

SIZE Length 115 cm.

SNIKKI BELT 9369 POLY

Article no 100911 **SIZE** Length 125 cm.

SNIKKI BELT 9343 POLY

Article no 100910 **SIZE** Length 135 cm.



940

SNIKKI ERGO BELT 9319 LTHR

Article no 100045

Base of the Ergo carrying system to relieve hips and waist / Prepared for attachment of suspenders or Ergo braces / Inside of soft, vegetable-tanned split leather / No hard edges that irritate or chafe the body / Outside of heavy duty leather / Pouches and holders with Quick-grip and Quick-snap are easily attached to the nylon strap / Metal buckle / S - Length 83-87 cm, M - Length 88-93 cm, L - Length 94-103 cm, XL - Length > 104 cm / Made in Sweden.

MATERIAL Heavy duty leather, split leather, polypropylen.

COLOUR 940 Black. **SIZE** S (83-87 cm), M (88-93 cm), L (94-103 cm), XL (>104 cm).



940

SNIKKI TOOL POUCH 9304 LTHR

Article no 100015

2 pockets for screws, nails etc / Big pocket H 200 x W 160 x D 80 mm / Small pocket H 130 x W 140 x D 45 mm / Sheath knife holder / Rivet reinforced / Quick-grip / Water-repellent / Made in Sweden.

MATERIAL Heavy-duty leather. **COLOUR** 940 Black. **SIZE** One size.



940

SNIKKI ELECTRICIAN TOOL HOLDER 9142 LTHR

Article no 114156

For electricians, sheet metal workers, fitters etc / 10 pockets for screw drivers, pliers, cutters, nippers etc / Big pocket H 140 mm x W 170 mm x D 70 mm / Small pocket H 100 mm / Holder for sheath knife / Tape holder / Rivet reinforced / Quick-grip / Water-repellent / Made in Sweden.

MATERIAL Heavy-duty leather. **COLOUR** 940 Black. **SIZE** One size.



940

SNIKKI ELECTRICIAN TOOL HOLDER 9141 LTHR

Article no 114155

For electricians / 10 pockets for screwdrivers, pliers, cutters, nippers or small cordless screwdriver / 3 pockets for insulated pliers, etc / Marking string holder / Large pocket H 150 x W 180 x D 30 mm / Small pockets H 100 mm / Hammer loop / Sheath knife holder / Rivet reinforced / Quick-grip / Water-repellent / Made in Sweden.

MATERIAL Heavy-duty leather. **COLOUR** 940 Black. **SIZE** One size.



240

SNIKKI TOOL POUCH 9303 LTHR

Article no 100014

2 pockets for screws, nails etc / Big pocket H 200 x W 160 x D 80 mm / Small pocket H 130 x W 140 x D 45 mm / Sheath knife holder / Rivet reinforced / Quick-grip.

MATERIAL Heavy-duty split leather. **COLOUR** 240 Brown.

SIZE One size.



240

SNIKKI ELECTRICIAN TOOL HOLDER 9305 LTHR

Article no 100016

For electricians, sheet metal workers, fitters etc / 10 pockets for screw drivers, pliers, cutters, nippers etc / Big pocket H 140 mm x W 170 mm x D 70 mm / Small pocket H 100 mm / Holder for sheath knife / Tape holder / Rivet reinforced / Quick-grip.

MATERIAL Heavy-duty split leather. **COLOUR** 240 Brown.

SIZE One size.



240

SNIKKI ELECTRICIAN TOOL HOLDER 9306 LTHR

Article no 100017

For electricians / 10 pockets for screwdrivers, pliers, cutters, nippers or small cordless screwdriver / 3 pockets for insulated pliers, etc / Marking string holder / Large pocket H 150 x W 180 x D 30 mm / Small pockets H 100 mm / Hammer loop / Sheath knife holder / Rivet reinforced / Quick-grip.

MATERIAL Heavy-duty split leather. **COLOUR** 240 Brown.

SIZE One size.

Practical information

General

- Cover your body from top to toe.
- The garments should be worn closed.
- Wear multiple layers of flame-retardant garments to increase your safety. Protection is impaired if the garment is worn in combination with non-flame-retardant garments.
- Always use underwear and middle layer of flame-retardant materials.
- Use other necessary safety equipment – helmet, gloves, footwear. We recommend that welders use a leather welding apron and sleeve covers to increase the protection and prolong the lifetime of the welding garments.
- Before putting on your garment, check that it is not damaged. As a wearer, you should also make sure you know how to take the garment off quickly in the event of an accident.
- Garments that are dirty provide less flame protection.
- After a flame-retardant garment is exposed to flames, it may be ruined. Even if the damage is not visible, the fabric could be weakened and holes may form when it is washed.
- When repairing protective clothing, use the same fabric, thread and trims as the garment is made of. Alternatively, use fabric, thread and trims with the same or higher certification requirements as the garments.
- The reflective tape on our flame-retardant garments is flame retardant and approved according to EN ISO 14116, EN 469 and EN ISO 20471.
- Our products are manufactured in accordance with the latest EU-harmonised chemical legislation, including REACH. The garments are also OEKO-TEX® certified on garment level.
- Workers in different occupations have different needs and levels of risk. Always perform a risk analysis to identify actual needs before purchasing flame-retardant clothing.

Washing instructions

- We recommend industrial laundry for flame-retardant garments to ensure that full protection is maintained. If there is no industrial laundry available, flame-retardant garments must always be washed according to the washing instructions on the garment.
- Flame-retardant garments must not be washed with soap detergents or fabric softeners and must not be chlorine bleached. Only synthetic detergents may be used to retain the protective properties.
- Garments with reflective details should be washed inside out.
- Read about industrial laundry on page 90.

Profiling

How large may logotypes on high-visibility garments be?

- When profiling flame-retardant high-visibility garments, logotypes and names may not cover too great a proportion of the fluorescent area.
- The total area of fluorescent and reflective areas must be compliant with the classes in EN ISO 20471.
- In some cases, logotypes may only be placed on a dark contrasting colour in order for the garment to be compliant with the high-visibility classification.
- In some cases, the size of the logotype is limited even if the garment is not high-visibility certified.
- Use our tables on page 86 to find out how large your logotype may be.

Transfers and embroidery must be approved

- Profiling of flame-retardant Fristads garments must be in accordance with approved transfers and embroidery thread available from Fristads.
- Fristads only uses transfers and embroidery thread that are approved together with our flame-retardant garments.

Modifications

- The leg length of high-visibility certified trousers, bibs 'n' braces and coveralls may not be shortened due to the requirements specified in the standard EN ISO 20471.
- Modification of flame-retardant garments must always be approved by Fristads. Due to the certifications and protection norms, possibilities are limited. If you have questions, contact us!

OEKO-TEX® certification

- The majority of our garments are OEKO-TEX® certified, which means that all parts of the garment are free of harmful chemicals and do not pose a health risk.
- OEKO-TEX® standard 100 is a world-renowned label for textile products that are tested for harmful substances.
- Fristads' products are OEKO-TEX® certified at the garment level, which means that all the components of the garment, not just the material, are guaranteed to meet the requirements of OEKO-TEX® standard 100 product class II.



Electric arc tested and certified garment combinations.

By wearing several layers of protective clothing, you increase the amount of energy that the garment system can withstand in the event of an electric arc accident. We have performed unique electric arc tests with a large number of garment combinations to secure exact test values. Read more on pages 16-17. The tables are also available at fristads.com



	LAYER 1	LAYER 2	LAYER 3	RESULT
MOF+ATHS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922	Open arc test EN 61482-1-1 EBT 26,7cal/cm ² HAF 91,5% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929	
			FLAMESTAT JACKET 4174 ATHS Art no 119921	
			FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195	
			FLAMESTAT COAT 3074 ATHS Art no 121115	
			FLAMESTAT HIGH VIS COVERALL CLASS 3 8175 ATHS Art no 125893	
			FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS Art no 109420	
			FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2074 ATHS Art no 109417	
			FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121355	
			FLAMESTAT TROUSERS 2144 ATHS Art no 121354	
		FLAMESTAT HIGH VIS BIB'N'BRACE CLASS 2 1075 ATHS Art no 109419		
		FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS Art no 122196		
		FLAMESTAT HIGH VIS TROUSERS WOMAN CLASS 1 2776 ATHS Art no 122197		
		FLAMESTAT TROUSERS 2148 ATHS Art no 125038		
		FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 1 2777 ATHS Art no 126518		
MOF+ATF	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639	+	FLAMESTAT HIGH VIS FLEECE JACKET CLASS 3 4063 ATF Art no 122253	Open arc test EN 61482-1-1 EBT 28,1cal/cm ² HAF 93% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT FLEECE JACKET 4073 ATF Art no 109430	
MOF+ATS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT SHIRT 7074 ATS Art no 109425	Open arc test EN 61482-1-1 EBT 23,7cal/cm ² HAF 91% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 1
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT HIGH VIS SHIRT CLASS 3 7050 ATS Art no 124178	
		+	FLAMESTAT HIGH VIS SHIRT CLASS 1 7051 ATS Art no 124309	
			FLAMESTAT SHIRT 7200 ATS Art no 114095	
			FLAMESTAT SHIRT WOMAN 7099 ATS Art no 129524	
MOF+TFLH+ATHS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT LONG SLEEVE T-SHIRT 7072 TFLH Art no 111842	Open arc test EN 61482-1-1 ATPV 41,2cal/cm ² HAF 94,1% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 3 7077 TFLH Art no 125041	
		+	FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 3 7097 TFLH Art no 129522	
			FLAMESTAT LONG SLEEVE T-SHIRT WOMAN 7098 TFLH Art no 129523	
MOF+MFR+ATHS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT FLEECE JACKET 7044 MFR Art no 121649	Open arc test EN 61482-1-1 EBT 66,8cal/cm ² HAF 93,9% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640	+		
	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641		FLAMESTAT FLEECE LONG JOHNS 7045 MFR Art no 121650	
MOF+ATS+ATHR	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT SHIRT 7074 ATS Art no 109425	Open arc test EN 61482-1-1 ATPV 67,3cal/cm ² HAF 95,4% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT HIGH VIS SHIRT CLASS 3 7050 ATS Art no 124178	
		+	FLAMESTAT HIGH VIS SHIRT CLASS 1 7051 ATS Art no 124309	
			FLAMESTAT SHIRT 7200 ATS Art no 114095	
			FLAMESTAT HIGH VIS AIRTECH® WINTER PARKA CLASS 3 4086 ATHR Art no 109423	

	LAYER 1	LAYER 2	LAYER 3	RESULT
TFLH+ATHS		FLAMESTAT LONG SLEEVE T-SHIRT 7072 TFLH Art no 111842	FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922	Open arc test EN 61482-1-1 EBT 26 cal/cm ² HAF 91,5% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
		FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 3 7077 TFLH Art no 125041	FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929	
		FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 3 7097 TFLH Art no 129522	FLAMESTAT JACKET 4174 ATHS Art no 119921	
		FLAMESTAT LONG SLEEVE T-SHIRT WOMAN 7098 TFLH Art no 129523	FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195	
			FLAMESTAT COAT 3074 ATHS Art no 121115	
MOF+SFLH	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS SWEATSHIRT CLASS 3 7076 SFLH Art no 109428		Open arc test EN 61482-1-1 EBT 36 cal/cm ² HAF 92,6% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MOF+SFLA+ATHS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT SWEATSHIRT 984 SFLA Art no 100581	FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922 FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929 FLAMESTAT JACKET 4174 ATHS Art no 119921 FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195 FLAMESTAT COAT 3074 ATHS Art no 121115	Open arc test EN 61482-1-1 EBT 50,3 cal/cm ² HAF 94,8% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MOF+GXE	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640 FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET CLASS 3 4095 GXE Art no 125617 FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET WOMAN CLASS 3 4195 GXE Art no 129742 FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL TROUSERS CLASS 2 2095 GXE Art no 125618	Open arc test EN 61482-1-1 EBT 71,9 cal/cm ² HAF 96,6% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MFR+GXE		FLAMESTAT FLEECE JACKET 7044 MFR Art no 121649 FLAMESTAT FLEECE LONG JOHNS 7045 MFR Art no 121650	FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET CLASS 3 4095 GXE Art no 125617 FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET WOMAN CLASS 3 4195 GXE Art no 129742 FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL TROUSERS CLASS 2 2095 GXE Art no 125618	Open arc test EN 61482-1-1 EBT 85,7 cal/cm ² HAF 97,6% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
ATS+GXE		FLAMESTAT HIGH VIS SHIRT CLASS 3 7050 ATS Art no 124178 FLAMESTAT SHIRT 7074 ATS Art no 109425 FLAMESTAT HIGH VIS SHIRT CLASS 1 7051 ATS Art no 124309 FLAMESTAT SHIRT 7200 ATS Art no 114095	FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET CLASS 3 4095 GXE Art no 125617	Open arc test EN 61482-1-1 EBT 84,3 cal/cm ² HAF 96,8% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
ATF+GXE		FLAMESTAT FLEECE JACKET 4073 ATF Art no 109430 FLAMESTAT HIGH VIS FLEECE JACKET CLASS 3 4063 ATF Art no 122233	FLAMESTAT HIGH VIS GORE-TEX PYRAD® SHELL JACKET CLASS 3 4095 GXE Art no 125617	Open arc test EN 61482-1-1 EBT 78 cal/cm ² HAF 96,5% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MFR+ATHS		FLAMESTAT FLEECE JACKET 7044 MFR Art no 121649 FLAMESTAT FLEECE LONG JOHNS 7045 MFR Art no 121650 FLAMESTAT FLEECE LONG JOHNS 7045 MFR Art no 121650	FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922 FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929 FLAMESTAT JACKET 4174 ATHS Art no 119921 FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195 FLAMESTAT COAT 3074 ATHS Art no 121115 FLAMESTAT HIGH VIS COVERALL CLASS 3 8175 ATHS Art no 125893 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS Art no 109420 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2074 ATHS Art no 109417 FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121355 FLAMESTAT TROUSERS 2144 ATHS Art no 121354 FLAMESTAT HIGH VIS BIB'N'BRACE CLASS 2 1075 ATHS Art no 109419 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS Art no 122196 FLAMESTAT HIGH VIS TROUSERS WOMAN CLASS 1 2776 ATHS Art no 122197 FLAMESTAT TROUSERS 2148 ATHS Art no 125038 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 1 2777 ATHS Art no 126518	Open arc test EN 61482-1-1 EBT 40,4 cal/cm ² HAF 93,9% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MOF+TFLH	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 3 7077 TFLH Art no 125041 FLAMESTAT LONG SLEEVE T-SHIRT 7072 TFLH Art no 111842		Open arc test EN 61482-1-1 EBT 18,7 cal/cm ² HAF 90% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 1
MOF+SFLA	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT SWEATSHIRT 984 SFLA Art no 100581		Open arc test EN 61482-1-1 EBT 32,8 cal/cm ² HAF 94% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MOF+PFLA	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT LONG SLEEVE POLO SHIRT 784 PFLA Art no 100472		Open arc test EN 61482-1-1 EBT 20,7 cal/cm ² HAF 91,5% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
MOF+FRS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAME SHIRT 7207 FRS Art no 122194		Open arc test EN 61482-1-1 EBT 28,1 cal/cm ² HAF 92,2% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 1
MOF+FLAM	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640 FLAMESTAT LONG JOHNS 7027 MOF Art no 121641		FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938 FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2584 FLAM Art no 125939 FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM Art no 125940 FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2586 FLAM Art no 125941 FLAME HIGH VIS TROUSERS CLASS 1 2587 FLAM Art no 125942	Open arc test EN 61482-1-1 EBT 28,5 cal/cm ² HAF 90,9% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2

	LAYER 1	LAYER 2	LAYER 3	RESULT
MOF+FLAM			FLAME HIGH VIS BIB'N'BRACE CLASS 2 1585 FLAM Art no 125943	
			FLAME HIGH VIS COVERALL CLASS 3 8084 FLAM Art no 125949	
			FLAME HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2589 FLAM Art no 125950	
			FLAME HIGH VIS TROUSERS WOMAN CLASS 1 2591 FLAM Art no 125951	
			FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM Art no 125952	
			FLAME HIGH VIS BIB'N'BRACE CLASS 2 1584 FLAM Art no 126510	
MFR+FLAM		FLAMESTAT FLEECE JACKET 7044 MFR Art no 121649	FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938	Open arc test EN 61482-1-1 EBT 61,1 cal/cm ² HAF 95,7% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
		FLAMESTAT FLEECE LONG JOHNS 7045 MFR Art no 121650	FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2584 FLAM Art no 125939	
			FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM Art no 125940	
			FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2586 FLAM Art no 125941	
			FLAME HIGH VIS TROUSERS CLASS 1 2587 FLAM Art no 125942	
			FLAME HIGH VIS BIB'N'BRACE CLASS 2 1585 FLAM Art no 125943	
			FLAME HIGH VIS COVERALL CLASS 3 8084 FLAM Art no 125949	
			FLAME HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2589 FLAM Art no 125950	
			FLAME HIGH VIS TROUSERS WOMAN CLASS 1 2591 FLAM Art no 125951	
			FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM Art no 125952	
SFLA+FLAM		FLAMESTAT SWEATSHIRT 984 SFLA Art no 100581	FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938	Open arc test EN 61482-1-1 EBT 60,7 cal/cm ² HAF 95,1% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
			FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM Art no 125952	
PFLA+FLAM		FLAMESTAT LONG SLEEVE POLO SHIRT 784 PFLA Art no 100472	FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938	Open arc test EN 61482-1-1 ATPV 54,1 cal/cm ² HAF 94,6% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
FRS+FLAM		FLAME SHIRT 7207 FRS Art no 122194	FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938	Open arc test EN 61482-1-1 ATPV 29,8 cal/cm ² HAF 91,7% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
ATS+FSS		FLAMESTAT SHIRT 7200 ATS Art no 114095	FLAMESTAT SOFTSHELL JACKET CLASS 3 4016 FSS Art no 127669	Open arc test EN 61482-1-1 ATPV 41,5 cal/cm ² HAF 93,4% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
		FLAMESTAT SHIRT 7074 ATS Art no 109425		
		FLAMESTAT HIGH VIS SHIRT CLASS 3 7050 ATS Art no 124178		
		FLAMESTAT HIGH VIS SHIRT CLASS 1 7051 ATS Art no 124309		
		FLAMESTAT SHIRT WOMAN 7099 ATS Art no 129524		
MOF+FLAM WINTER	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAME HIGH VIS WINTER JACKET CLASS 3 4588 FLAM Art no 125944	Open arc test EN 61482-1-1 ATPV 60,4 cal/cm ² HAF 95,4% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAME HIGH VIS WINTER PARKA CLASS 3 4589 FLAM Art no 125947	
	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641		FLAME HIGH VIS WINTER TROUSERS CLASS 2 2588 FLAM Art no 125945	
MOF+FSS	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT SOFTSHELL JACKET CLASS 3 4016 FSS Art no 127669	Open arc test EN 61482-1-1 EBT 42,8 cal/cm ² HAF 92,4% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640			
TFLH+FSS		FLAMESTAT LONG SLEEVE T-SHIRT 7072 TFLH Art no 111842	FLAMESTAT SOFTSHELL JACKET CLASS 3 4016 FSS Art no 127669	Open arc test EN 61482-1-1 ATPV 40,5 cal/cm ² HAF 93,3% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
		FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT CLASS 3 7077 TFLH Art no 125041		
		FLAMESTAT HIGH VIS LONG SLEEVE T-SHIRT WOMAN CLASS 3 7097 TFLH Art no 129522		
MFR + ATHF	FLAMESTAT FLEECE LONG JOHNS 7045 MFR Art no 121650		FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 2 2161 ATHF Art no 129517	Open arc test EN 61482-1-1 EBT 29 cal/cm ² HAF 92,7% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
			FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 1 2162 ATHF Art no 129518	
			FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 1 2163 ATHF Art no 129519	
			FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 2 2167 ATHF Art no 129520	
MOF + ATHF	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641		FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS WOMAN CLASS 1 2171 ATHF Art no 129521	Open arc test EN 61482-1-1 EBT 18 cal/cm ² HAF 90,1% Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
			FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 2 2161 ATHF Art no 129517	
			FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 1 2162 ATHF Art no 129518	
			FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 1 2163 ATHF Art no 129519	
MOF + FLR	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639		FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 2 2167 ATHF Art no 129520	Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2
	FLAMESTAT HALF ZIP 7029 MOF Art no 121640		FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS WOMAN CLASS 1 2171 ATHF Art no 129521	
	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641		FLAME HIGH VIS AIRTECH [®] SHELL JACKET CLASS 3 4022 FLR Art no 129869	
		FLAME HIGH VIS AIRTECH [®] SHELL TROUSERS CLASS 2 2152 FLR Art no 129870		

LAYER 1	LAYER 2	LAYER 3	RESULT				
FLAM + FLR	FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938 FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2584 FLAM Art no 125939 FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM Art no 125940 FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2586 FLAM Art no 125941 FLAME HIGH VIS TROUSERS CLASS 1 2587 FLAM Art no 125942 FLAME HIGH VIS BIB'N'BRACE CLASS 2 1585 FLAM Art no 125943 FLAME HIGH VIS COVERALL CLASS 3 8084 FLAM Art no 125949 FLAME HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2589 FLAM Art no 125950 FLAME HIGH VIS TROUSERS WOMAN CLASS 1 2591 FLAM Art no 125951 FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM Art no 125952 FLAME CRAFTSMAN TROUSERS WOMAN 2730 FLAM Art no 125954 FLAME HIGH VIS BIB'N'BRACE CLASS 2 1584 FLAM Art no 126510	+	FLAME HIGH VIS AIRTECH® SHELL JACKET CLASS 3 4022 FLR Art no 129869 FLAME HIGH VIS AIRTECH® SHELL TROUSERS CLASS 2 2152 FLR Art no 129870	Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2			
	ATHS + FLR		+		FLAMESTAT HIGH VIS AIRTECH® SHELL JACKET CLASS 3 4022 FLR Art no 129869 FLAME HIGH VIS AIRTECH® SHELL TROUSERS CLASS 2 2152 FLR Art no 129870	Box test approved: <input checked="" type="checkbox"/> EN 61482-1-2 CLASS 2	
							FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2074 ATHS Art no 109417 FLAMESTAT HIGH VIS BIB'N'BRACE CLASS 2 1075 ATHS Art no 109419 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS Art no 109420 FLAMESTAT JACKET 4174 ATHS Art no 119921 FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922 FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929 FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121355 FLAMESTAT TROUSERS 2144 ATHS Art no 121354 FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121355 FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS Art no 122196 FLAMESTAT HIGH VIS TROUSERS WOMAN CLASS 1 2776 ATHS Art no 122197 FLAMESTAT TROUSERS 2148 ATHS Art no 125038 FLAMESTAT HIGH VIS COVERALL CLASS 3 8175 ATHS Art no 125893 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 1 2777 ATHS Art no 126518



Certified garment combinations for welding as well as heat and flame.

Wearing several layers of garments increases your protection during welding (EN ISO 11611) and increases your protection against radiant heat, contact heat and molten iron splashes (EN ISO 11612). The table below includes all certified garment combinations. Garments that are not approved for welding have an increased protection against radiant heat C2 and contact heat F2. However, they are not certified for molten iron splashes E3 due to their design, e.g. they have loose-hanging pockets. Read more on page 19. The table is also available at fristads.com.

Certified garment combinations are approved for:



HEAT AND FLAME
EN ISO 11612
A1, B1, C2, E3, F2



WELDING CLASS 2
EN ISO 11611 CLASS 2



	TEST	LAYER 1	LAYER 2	LAYER 3	RESULT
MOF+FLAM	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAME WELDING COAT 3587 FLAM [®] Art no 125953		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM Art no 125952		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS TROUSERS WOMAN CLASS 1 2591 FLAM Art no 125951		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2589 FLAM Art no 125950		APPROVED A1, B1, C2, F2
	EN ISO 11611 EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640 FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS COVERALL CLASS 3 8084 FLAM Art no 125949		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME CRAFTSMAN TROUSERS WOMAN 2730 FLAM Art no 125954		APPROVED A1, B1, C2, F2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS BIB'N'BRACE CLASS 2 1585 FLAM Art no 125943		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS BIB'N'BRACE CLASS 2 1584 FLAM Art no 126510		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS TROUSERS CLASS 1 2587 FLAM Art no 125942		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2586 FLAM Art no 125941		APPROVED A1, B1, C2, F2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM Art no 125940		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2584 FLAM Art no 125939		APPROVED A1, B1, C2, F2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 2 2161 ATHF Art no 129517		APPROVED A1, B1, C2, F2 APPROVED EN 11611 A1 KLASS 2
MOF+ATHF	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGHVIS STRETCH TROUSERS CLASS 1 2162 ATHF Art no 129518		APPROVED A1, B1, C2, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 1 2163 ATHF Art no 129519		APPROVED A1, B1, C2, F2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS CLASS 2 2167 ATHF Art no 129520		APPROVED A1, B1, C2, F2
	EN ISO 11612	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGHVIS STRETCH CRAFTSMAN TROUSERS WOMAN CLASS 1 2171 ATHF Art no 129521		APPROVED A1, B1, C2, F2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT TROUSERS 2148 ATHS Art no 125038		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
MOF+ATHS	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640 FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGH VIS COVERALL CLASS 3 8175 ATHS Art no 125893		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGH VIS WINTER TROUSERS CLASS 2 2085 ATHS Art no 109424		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT TROUSERS 2144 ATHS Art no 121354		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121555		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG JOHNS 7027 MOF Art no 121641	FLAMESTAT HIGH VIS TROUSERS WOMAN CLASS 1 2776 ATHS Art no 122197		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT JACKET 4174 ATHS Art no 119921		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS WINTER JACKET CLASS 3 4185 ATHS Art no 119923		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KLASS 2

	TEST	LAYER 1	LAYER 2	LAYER 3	RESULT
MOF+ATHS	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KCLASS 2
	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS WINTER JACKET WOMAN CLASS 3 4285 ATHS Art no 129548		APPROVED A1, B1, C2, E3, F2 APPROVED EN 11611 A1 KCLASS 2
	EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639	FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2074 ATHS Art no 109417		APPROVED A1, B1, C2, F2
	EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121641	FLAMESTAT HIGH VIS BIB'N'BRACE CLASS 2 1075 ATHS Art no 109419		APPROVED A1, B1, C2, F2
	EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121641	FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS Art no 109420		APPROVED A1, B1, C2, F2
	EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121641	FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS Art no 122196		APPROVED A1, B1, C2, F2
	EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640	FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 1 2777 ATHS Art no 126518		APPROVED A1, B1, C2, F2
MOF+MFA	EN ISO 11612 EN ISO 11611	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640 FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121641	FLAMESTAT JACKET 4965 MFA Art no 122286 FLAMESTAT TROUSERS 2165 MFA Art no 122287		APPROVED A1, A2, B1, C1, D3, E3, F1 APPROVED EN 11611 A1 A2 KCLASS 2
	EN ISO 11612	FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121639 FLAMESTAT HALF ZIP 7029 MOF Art no 121640 FLAMESTAT LONG SLEEVE T-SHIRT 7026 MOF Art no 121641		FLAME HIGH VIS AIRTECH® SHELL JACKET CLASS 3 4022 FLR Art no 129869 FLAME HIGH VIS AIRTECH® SHELL TROUSERS CLASS 2 2152 FLR Art no 129870	APPROVED A1, B2, C2, F2
FLAM + FLR	EN ISO 11612		FLAME HIGH VIS JACKET CLASS 3 4584 FLAM Art no 125938 FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2584 FLAM Art no 125939 FLAME HIGH VIS TROUSERS CLASS 2 2585 FLAM Art no 125940 FLAME HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2586 FLAM Art no 125941 FLAME HIGH VIS TROUSERS CLASS 1 2587 FLAM Art no 125942 FLAME HIGH VIS BIB'N'BRACE CLASS 2 1585 FLAM Art no 125943 FLAME HIGH VIS COVERALL CLASS 3 8084 FLAM Art no 125949 FLAME HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2589 FLAM Art no 125950 FLAME HIGH VIS TROUSERS WOMAN CLASS 1 2591 FLAM Art no 125951 FLAME HIGH VIS JACKET WOMAN CLASS 3 4590 FLAM Art no 125952 FLAME CRAFTSMAN TROUSERS WOMAN 2730 FLAM Art no 125954 FLAME HIGH VIS BIB'N'BRACE CLASS 2 1584 FLAM Art no 126510	FLAME HIGH VIS AIRTECH® SHELL JACKET CLASS 3 4022 FLR Art no 129869 FLAME HIGH VIS AIRTECH® SHELL TROUSERS CLASS 2 2152 FLR Art no 129870	APPROVED A1, B2, C2, F2
ATHS + FLR	EN ISO 11612		FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 1 2074 ATHS Art no 109417 FLAMESTAT HIGH VIS BIB'N'BRACE CLASS 2 1075 ATHS Art no 109419 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS CLASS 2 2075 ATHS Art no 109420 FLAMESTAT JACKET 4174 ATHS Art no 119921 FLAMESTAT HIGH VIS JACKET CLASS 3 4175 ATHS Art no 119922 FLAMESTAT HIGH VIS JACKET CLASS 2 4176 ATHS Art no 120929 FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121355 FLAMESTAT TROUSERS 2144 ATHS Art no 121354 FLAMESTAT HIGH VIS TROUSERS CLASS 1 2176 ATHS Art no 121355 FLAMESTAT HIGH VIS JACKET WOMAN CLASS 3 4275 ATHS Art no 122195 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 2 2775 ATHS Art no 122196 FLAMESTAT HIGH VIS TROUSERS WOMAN CLASS 1 2776 ATHS Art no 122197 FLAMESTAT TROUSERS 2148 ATHS Art no 125038 FLAMESTAT HIGH VIS COVERALL CLASS 3 8175 ATHS Art no 125893 FLAMESTAT HIGH VIS CRAFTSMAN TROUSERS WOMAN CLASS 1 2777 ATHS Art no 126518	FLAME HIGH VIS AIRTECH® SHELL JACKET CLASS 3 4022 FLR Art no 129869 FLAME HIGH VIS AIRTECH® SHELL TROUSERS CLASS 2 2152 FLR Art no 129870	APPROVED A1, B2, C2, F2



How large can logotypes be on high-visibility garments?

Fluorescent and reflective areas on the garments.

High-visibility garments that are certified according to class 3 can be combined with any other garment, as long as these do not cover the high-visibility garment's fluorescent or reflective areas.

On garments personalised with company logos, it is important to ensure that the logo does not obscure too great a proportion of the fluorescent area. This table will help you determine how large your logo can be. The total fluorescent area must be at least 0.8 m² to conform with class 3.

Please note! Products marked with * may only have logotypes on areas with contrasting colour, not on fluorescent areas.

Minimum area in m² to obtain approval according to EN ISO 20471

MATERIAL	CLASS 3	CLASS 2	CLASS 1
Fluorescent	0.8	0.5	0.14
Reflective	0.2	0.13	0.1



EN ISO 20471

EN ISO 20471 is a standard for high visibility garments.

ART. NO	SIZE	EN ISO 20471 HAVIS CLASS	REFLECTIVE AREA/M ²	FLOUR-ESCENT AREA/M ²	HAVIS CO-CERTIFICATION	MAXIMUM CM ² FOR TRANSFERS	MAXIMUM CM ² FOR EMBROIDERY
101038	≥XS	3	0.2	0.99	U6	N/A	N/A
101056	≥XS	2	0.13	1.17	T6	N/A	N/A
109417*	≥C44	1	0.1	0.14	T1	435 cm ^{2*}	40 cm ^{2*}
109419	≥C44	2	0.13	0.7	T4	435 cm ²	40 cm ²
109420	≥C44	2	0.13	0.69	T4	435 cm ²	40 cm ²
109423	≥XS	3	0.2	0.81	U6	100 cm ²	40 cm ²
109424	≥XS	2	0.14	0.65	T4	435 cm ²	40 cm ²
109428	XS	2	0.19	0.69	U6	435 cm ²	40 cm ²
109428	S	2	0.21	0.75	U6	435 cm ²	40 cm ²
109428	≥M	3	0.22	0.85	U6	435 cm ²	40 cm ²
110642	≥XS	2	0.13	0.53	W1	300 cm ²	40 cm ²
111619*	≥C44	1	0.1	0.14	T1	435 cm ^{2*}	40 cm ^{2*}
119922	XS	2	0.18	0.77	U6	435 cm ²	40 cm ²
119922	≥S	3	0.2	0.86	U6	435 cm ²	40 cm ²
119923	XS	2	0.19	0.78	U6	435 cm ²	40 cm ²
119923	≥S	3	0.2	0.85	U6	435 cm ²	40 cm ²
120929	XS-S	1	0.18	0.43	U3	435 cm ²	40 cm ²
120929	≥M	2	0.2	0.55	U3	435 cm ²	40 cm ²
121355*	≥C44	1	0.1	0.14	T1	435 cm ^{2*}	40 cm ^{2*}
122195	XS-M	2	0.17	0.74	U6	435 cm ²	40 cm ²
122195	≥L	3	0.21	0.84	U6	400 cm ²	40 cm ²
122196	≥C34	2	0.13	0.54	T3	400 cm ²	40 cm ²
122197	≥C34	1	0.1	0.21	T2	435 cm ²	40 cm ²
122233	XS	2	0.17	0.79	U6	435 cm ²	40 cm ²
122233	≥S	3	0.22	0.88	U6	435 cm ²	40 cm ²
124178	≥XS	3	0.2	0.86	U6	435 cm ²	40 cm ²
124295	≥XXS/XS	3	0.22	0.8	U6	N/A	N/A
124309	≥XS	1	0.2	0.42	U3	435 cm ²	40 cm ²
125041	XS	2	0.19	0.67	U6	250 cm ²	40 cm ²
125041	S	2	0.2	0.74	U6	250 cm ²	40 cm ²
125041	≥M	3	0.21	0.8	U6	N/A	N/A
125617	XS	2	0.21	0.73	U6	448 cm ²	N/A
125617	S	2	0.22	0.79	U6	448 cm ²	N/A
125617	≥M	3	0.21	0.86	U6	448 cm ²	N/A
125618	≥XS	2	0.13	0.58	T3	448 cm ²	N/A
125893*	≥XS	3	0.28	0.8	-	435 cm ^{2*}	40 cm ^{2*}
125938	XS	2	0.18	0.66	U6	250 cm ²	40 cm ²
125938	S	2	0.2	0.75	U6	250 cm ²	40 cm ²
125938	≥M	3	0.21	0.83	U6	250 cm ²	40 cm ²
125939	≥C44	2	0.13	0.57	T3	250 cm ²	40 cm ²
125940	≥C44	2	0.13	0.54	T3	250 cm ²	40 cm ²
125941	≥C44	1	0.11	0.17	T1	250 cm ²	40 cm ²
125942	≥C44	1	0.11	0.17	T1	250 cm ²	40 cm ²
125943	≥C44	2	0.13	0.54	T3	250 cm ²	40 cm ²
125944	XS-S	2	0.19	0.74	U6	250 cm ²	40 cm ²
125944*	≥M	3	0.2	0.88	U6	250 cm ^{2*}	40 cm ^{2*}

ART. NO	SIZE	EN ISO 20471 HAVIS CLASS	REFLECTIVE AREA/M ²	FLOUR-ESCENT AREA/M ²	HAVIS CO-CERTIFICATION	MAXIMUM CM ² FOR TRANSFERS	MAXIMUM CM ² FOR EMBROIDERY
125945	≥XS	2	0.14	0.58	T3	250 cm ²	40 cm ²
125947*	≥XS	3	0.21	0.8	U6	250 cm ^{2*}	40 cm ^{2*}
125948	≥S	3	0.3	0.86	-	250 cm ²	40 cm ²
125949	≥S	3	0.28	0.83	-	250 cm ²	40 cm ²
125950	≥C34	2	0.13	0.52	T3	200 cm ²	40 cm ²
125951	≥C34	1	0.1	0.15	T1	100 cm ²	40 cm ²
125952	XS-M	2	0.16	0.63	U5	250 cm ²	40 cm ²
125952*	≥L	3	0.21	0.8	U5	250 cm ^{2*}	40 cm ^{2*}
126510	≥C44	2	0.13	0.57	T3	250 cm ²	40 cm ²
126518	≥C34	1	0.1	0.21	T2	435 cm ²	40 cm ²
127669	XS-S	2	0.15	0.65	U5	435 cm ²	40 cm ²
127669	≥M	3	0.21	0.81	U5	100 cm ²	40 cm ²
129517	≥C44	2	0.13	0.55	T3	435 cm ²	40 cm ²
129518	≥C44	1	0.1	0.15	T1	100 cm ²	40 cm ²
129519	≥C44	1	0.11	0.15	T1	100 cm ²	40 cm ²
129520	≥C44	2	0.13	0.54	T3	435 cm ²	40 cm ²
129521	≥C34	1	0.1	0.15	T1	100 cm ²	40 cm ²
129522	S	2	0.18	0.63	U5	250 cm ²	40 cm ²
129522	M	2	0.19	0.71	U5	250 cm ²	40 cm ²
129522	L	2	0.21	0.79	U5	250 cm ²	40 cm ²
129522	≥XL	3	0.22	0.88	U5	250 cm ²	40 cm ²
129548	XS	2	0.18	0.74	U6	435 cm ²	40 cm ²
129548	S	2	0.19	0.79	U6	435 cm ²	40 cm ²
129548	M	3	0.2	0.86	U6	435 cm ²	40 cm ²
129548	≥L	3	0.22	0.93	U6	435 cm ²	40 cm ²
129742	XS	2	0.17	0.72	U6	448 cm ²	N/A
129742	S	2	0.18	0.76	U6	448 cm ²	N/A
129742	≥M	3	0.20	0.82	U6	200 cm ²	N/A
129869	XS-S	2	0.18	0.75	U6	340 cm ²	40 cm ²
129869	≥M	3	0.21	0.88	U6	340 cm ²	40 cm ²
129870	≥XS	2	0.13	0.58	T3	340 cm ²	40 cm ²
130666	≥XS	1	0.23	0.29	n/a	435 cm ²	40 cm ²
131146	S-L	2	0.17	0.67	U6	340 cm ²	40 cm ²
131146	≥XL	3	0.21	0.83	U6	300 cm ²	40 cm ²
131147	XS-S	2	0.18	0.7	U6	340 cm ²	40 cm ²
131147	≥M	3	0.2	0.84	U6	340 cm ²	40 cm ²
133268	≥XS	1	0.14	0.3	U2	340 cm ²	40 cm ²
133269	≥S	1	0.14	0.31	U2	340 cm ²	40 cm ²

* Logo placement only possible on contrast colour area, not on fluorescent area.

Approved transfers and embroidery

Profiling of flame-resistant Fristads garments must be done using approved transfers and embroidery thread from Fristads.

Fristads only uses transfers and embroidery that are approved together with our flame-resistant garments.

Maximum size for embroidery and transfer on garments that are not high-visibility certified.

In some cases, the size of the logotype is restricted even if the garments are not high-visibility certified.

ART. NO	MAXIMUM CM² FOR TRANSFERS	MAXIMUM CM² FOR EMBROIDERY
100328	250 cm²	40 cm²
100329	250 cm²	40 cm²
100330	250 cm²	40 cm²
100333	250 cm²	40 cm²
100334	250 cm²	40 cm²
100336	250 cm²	40 cm²
100338	250 cm²	40 cm²
100342	250 cm²	40 cm²
100343	250 cm²	40 cm²
100581	250 cm²	40 cm²
109425	435 cm²	40 cm²
109430	435 cm²	40 cm²
110736	250 cm²	40 cm²
111842	250 cm²	40 cm²
114095	435 cm²	40 cm²
119911	435 cm²	40 cm²
119921	435 cm²	40 cm²
121115	435 cm²	40 cm²
121354	435 cm²	40 cm²
122194	435 cm²	40 cm²
122286	435 cm²	40 cm²
122287	435 cm²	40 cm²
125038	435 cm²	40 cm²
125953	250 cm²	40 cm²
125954	250 cm²	40 cm²
129523	250 cm²	40 cm²
129524	435 cm²	40 cm²
131165	10 cm²	40 cm²
131166	10 cm²	40 cm²
131167	10 cm²	40 cm²
131168	10 cm²	40 cm²



Materials

Flame-retardant fabrics are used to make garments harder to ignite and to impede flame spread. If a fabric is described as flame retardant, this does not mean, however, that the fabric is not flammable. The purpose of flame retardancy is to halt the combustion process in various ways. Most synthetic fibres ignite easily and then melt. Cotton, on the other hand, is harder to ignite but burns for longer and more fully. In principle, wool is not flammable, in tests, it can withstand contact with a glowing cigarette without starting to burn. Due to the properties of these different materials, we have developed different collections of garments to meet different purposes. We have developed collections in inherently flame-retardant fabrics and in flame-retardant treated fabrics. We also make inherently flame-retardant underwear.

LOI value

Limited Oxygen Index (LOI) measures the lowest oxygen content at which the material burns by itself after being ignited. Air contains approximately 21% oxygen. Easily flammable materials have a LOI value of about 20% or lower. One example is cotton, which has an LOI of 16 – 18%. The lowest limit for fabrics that are difficult to ignite is about 25%, which is roughly the case for wool.

Wool	25%
Flame-retardant treated cotton	28%
Flame-retardant treated wool	30-32%
Meta-aramid	30%
Modacrylic	33%
Modacrylic/cotton mix	35%

Inherently flame-retardant fabrics – modacrylic or aramides

The unique molecular structure of the yarn fibres in these fabrics makes them naturally flame retardant without chemical treatment. The fibre contains antimony salts for highest FR performance which stops the spread and continuation of burning. Inherently flame-retardant fibres minimise burn injuries by creating a protective barrier between the heat source and the wearer's skin. The flame protection is not applied as a coating but is an integral part of the fibre structure. The protective properties are permanent and retained throughout the lifetime of the garment. No further treatments or re-treatments are required. Inherently flame-retardant fabrics are suitable for either domestic or industrial laundering.

Modacrylic – protex and protal fibre mixes

Our Flamestat collection is made from a light and flexible high-performance inherently flame-retardant fabric. This fabric is made from a blend of modified acrylic fibres, long-fibre cotton, strong polyamide

fibres and antistatic fibres. This unique mix is both soft and comfortable against the skin and at the same time strong and durable for workwear, providing effective, long-term protection. Modacrylic fabrics shed metal electrode splashes extremely effectively. This prevents heat transmission burns since no hot metal pieces remain on the fabric in event of an arc accident. The fabric is cotton-like in appearance and is inherently flame retardant. It provides excellent heat insulation and prevents second-degree burns. It is also quick-drying and has excellent moisture management properties. When flames come into contact with the fabric, the modacrylic fibres release a small amount of protective gas, displacing the oxygen and extinguishing the flame. The fabric does not melt or drip onto the skin as it creates a strong protective char barrier. Superior quality, comfort, strength and protection in one great package. Our Flamestat collection is tested and approved for industrial laundry according to ISO 15797 and is also OEKO-TEX® certified. The difference between our GORE-TEX (GXE) fabric and other inherently flame-retardant fabrics is that GXE has an antistatic membrane, while the rest have antistatic fibres in the weave. GORE-TEX fabrics is also wind and waterproof as well as breathable.

Flame retardant treated fabrics – Proban®

These include cotton and polyester fabrics and cotton fabrics treated with flame-retardant chemicals that inhibit or suppress the combustion process. Flame-retardant treated fabrics are treated with a flame-retardant chemical that forms a permanent bond at the molecular level with the cellulose in the cotton fibres. Our Flame collections are made from flame-retardant treated fabrics. When flame comes into contact with the fabric, the fabric releases a small amount of gas, displacing the oxygen and extinguishing the flame. The fabric does not melt or drip onto the skin, as it creates a protective char barrier. These fabrics are durable provided that they are washed in accordance with our instructions. Flame retardant treated fabrics can be domestically or industrially laundered.

Underwear

Our underwear sets in the materials MOF and MFR, are made from a blend of modacrylic, cotton and elastane. Modacrylic fibres have an inherent anti-flame protection. Combined with cotton, it provides a soft, strong material with good thermal insulation properties. The underwear from Devold® is made from a blend of Merino wool and Lenzing FR® viscose. Merino wool and the viscose fibre is inherently flame retardant. The combination is a material that both keeps you warm and is very comfortable to wear. All our materials are preshrunk and can be machine washed.

Leather products

We also have welding aprons in split leather, which can naturally withstand welding sparks and can prolong the lifetime of your welding clothes.

Occupations

Electricians

This group needs garments certified and approved according to EN ISO 11612 and electric arc tested according to IEC 61482-2. Garments that comply with EN ISO 11612 protect the user upon contact with heat and flames. Protective clothing tested according to IEC 61482-2 protects against the thermal hazards that may occur in electric arc accidents. The test does not assess the effects of other factors, such as noise, light, increased pressure, hot oil, electric shocks, the consequences of physical or mental shocks, or toxic substances. An ATPV/EBT value of at least 8 cal/cm² is the general guideline for electricians. No guidelines for the ELIM value is yet established. If the risk is higher, we recommend that the end user wears several layers of protective clothing, i.e. flame-retardant underwear under the electric arc certified garments or garments in a fabric with a higher arc rating (higher ATPV or EBT). In either case, the garments solution should be worn with other safety equipment i.e. safety helmet with protective visor, protective gloves and protective footwear (boots) to ensure the right level of protection. When underwear is used, it must be made of flame-retardant materials. Garments that are made of synthetic fibres such as polyamide, polyester and acrylic melt in the heat caused by electric arcs and damage the skin. Even if the outer garments are certified to IEC 61482-2, the undergarment or middle layer must be made of flame-protective material. The outer layer of an electrician's protective clothing must therefore be made from arc tested fabrics (IEC 61482-2), and the remaining layers must be approved in accordance with EN ISO 11612 or EN ISO 14116 Index 3.

Welders

This group needs garments that are certified and approved according to EN ISO 11611. Garments that comply with this standard protect the wearer during welding or similar work. The protective clothing is intended to protect the wearer from small drops of molten metal, brief contact with flames and UV radiation. Welding garments have special design requirements to prevent welding sparks from sticking, for example they have no open or loose-hanging pockets. Welding clothes are often used in conjunction with other PPE, e.g. welding apron, welding sleeves, helmet and gloves. Read more about the welding norm EN ISO 11611 on page 10.

Oil industrial workers

As they often work in an ATEX environment, this group (refinery workers, offshore workers, tanker drivers) must wear garments certified and approved in accordance with EN ISO 11612, EN 1149-5 and IEC 61482-2. Garments approved in accordance with EN ISO 11612 protect the user in the event of contact with heat and flames. Garments that comply with EN 1149-5 protect the user against sudden discharges of electrostatic energy and are worn where there is a risk that static sparks may ignite flammable substances, such as gas and oil. It is recommended that these garments are metal-free, but if garments with metal zippers and metal buttons are used, they must be concealed. In addition to certification according to EN ISO 11612 and EN 1149-5, standards EN 343 (rain and humidity) and EN ISO 20471 (high vis) are also important for this group.

Rail workers

This group needs garments certified and approved in accordance with EN ISO 11612 and EN ISO 20471. Garments approved in accordance with EN ISO 11612 protect the user in the event of contact with heat and flames. Garments approved in accordance with EN ISO 20471 make the wearer visible to their surroundings in daylight, at night and in poor weather conditions. Some workers in this group also need garments certified for welding in accordance with EN ISO 11611. Read more in the section about Welders.

Guidance for the selection of the class of welders' clothing:

	SELECTION CRITERIA RELATING TO THE PROCESS:	SELECTION CRITERIA RELATING TO THE ENVIRONMENTAL CONDITIONS:
CLASS 1 TIG MIG	Manual welding techniques, light formation of spatters and drops, e.g.: <ul style="list-style-type: none"> • Gas welding • Tig welding • Mig welding • Micro plasma welding • Brazing • Spot welding • MMA welding (with rutile-covered electrode) 	Operation of machines, e.g. of: <ul style="list-style-type: none"> • Oxygen cutting machines • Plasma cutting machines • Resistance welding machines • Machines for thermal spraying • Bench welding
	Manual welding techniques, heavy formation of spatters and drops, e.g.: <ul style="list-style-type: none"> • MMA welding (with basic or cellulosecovered electrode) • Mag welding (with CO² or mixed gases) • MIG welding (with high current) • Self-shielded flux cored arc welding (FCAW) • Plasma cutting • Gouging • Oxygen cutting • Thermal spraying 	Operation of machines, e.g. of: <ul style="list-style-type: none"> • In confined spaces • At overhead welding/cutting or in comparable constrained positions

Laundry instructions

We recommend industrial laundry for flame-retardant garments to ensure permanent and complete protection. If industrial laundry is not an option, flame-retardant garments must always be washed according to the washing instructions on the garments.

Flame-retardant garments should not be washed with soap detergents or fabric softeners and must not be chlorine bleached. Only use synthetic laundry detergent without optical whiteners to retain the protective qualities.

Garments with reflective details should be washed inside out.



Washing, normal process, with specified temperature.



Washing, mild process, with specified temperature.



Washing, very mild process, with specified temperature.



Do not bleach.



Any bleach allowed.



Tumble drying at max 80° C, normal temperature.



Tumble drying at max 60° C, low temperature.



Do not tumble dry.



Iron at maximum sole-plate temperature of 200°C.



Iron at maximum sole-plate temperature of 150°C.



Iron at maximum sole-plate temperature of 110° C without steam.



Do not iron.



Professional dry cleaning in tetrachloroethene and all solvents listed for the symbol F, normal process.



Do not dry clean.



Fristads quality – even after several washes

As a given Fristads quality statement the industrial workwear range is PRO-labelled. PRO-labelling states that the product is proofed for industrial laundry procedures according to EN ISO 15797. In addition our garments are tested in some of Europe's largest laundries in cooperation with our customers.

EN ISO 15797 is not a standard to which a garment can be certified. It's an industrial test method for industrial laundries where the PRO-labelling states the laundry procedure. Look for the PRO sign next to the article to see if the garment is PRO-labelled.

Example of CE labelling in our flame-resistant garments

CE 0598
Art: 131147

EN ISO 20471:2013 SIZES XS-S

+ = EN ISO 20471:2013 SIZES M

131147 U6 T1 T2 T3 T4 T5 T6 S1 S2 EN ISO 20471:2013 SIZES XS

54% Modacrylic
44% Cotton
2% Antistatic

Tested and approved according to EN ISO 15797.
Max 25 X

IEC 61482-2:2018 ELIM=9,5 cal/cm² APC=1 EN 1149-5:2018 EN ISO 11612:2015 A1+A2 B1 C1 F1

Fristads Kansas Group Box 1102 501 11 Borås, Sweden fristadskansasgroup.com Notified Body No 0598: SGS Fimko Ltd. Takomotie 8 FIN-00380 Helsinki, Finland

= ² ³

131147 EN ISO 20471:2013 SIZES XS-S EN ISO 20471:2013 SIZES M

+ = ³

131147 U6 T1 T2 T3 T4 T5 T6 S1 S2 EN ISO 20471:2013 SIZES XS

54% Modacrylic
44% Cotton
2% Antistatic

Tested and approved according to EN ISO 15797.
Max 25 X

Size guide

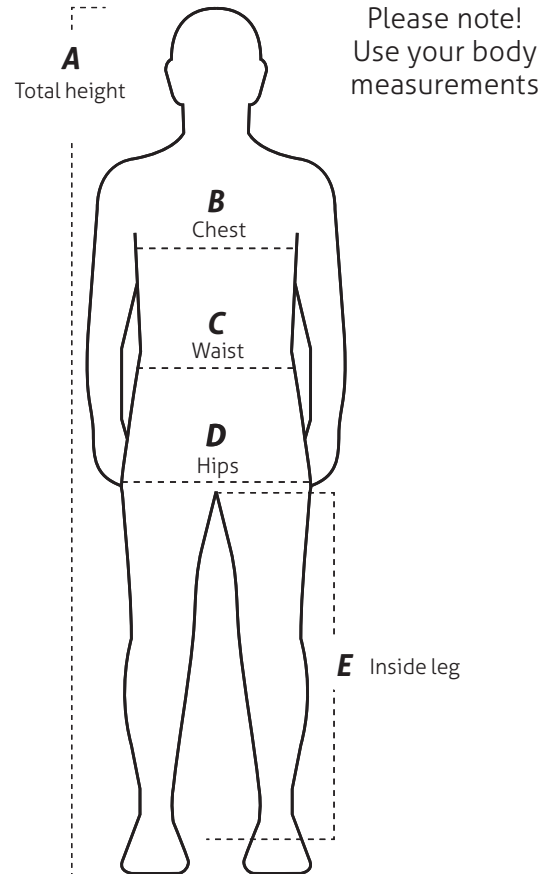
Use your own body measurements and compare with the tables to find the right size. Choose the table matching your height (A).

The tables for women's garments only apply to garments for women, otherwise, the tables for men apply.

When buying trousers, measure A, C, D, E and for jackets, measure B (sizes XS-5XL). For coveralls, measure A, B, D, E.

Please note!

All measurements included in the tables are body measurements, except for the inside leg, which is equivalent to the garment measurement.



Please note!
Use your body measurements

Jackets, trousers and coveralls

Men sizes	XS		S		M		L		XL		2XL		3XL		4XL		5XL		
A. Regular (normal waist)** 176-184 cm	C40	C42	C44	C46	C48	C50	C52	C54	C56	C58	C60	C62	C64	C66					
A. Tall (normal waist)** 184-192 cm			C144	C146	C148	C150	C152	C154	C156	C158	C160	C162	C164	C166	C168				
B. Chest cm	80	84	88	92	96	100	104	108	112	116	120	124	128	132	136	140	144	148	152
C. Waist cm	68	72	76	80	84	88	92	97	102	108	114	120	126	132	138	144	150	156	162
D. Hips cm	88	91	94	98	102	106	110	114	118	122	126	130	134	138	142	146	150	154	158
E. Regular inside leg cm	80	80	80	80	82	82	82	82	84	84	84	84	84	84	84	84	84	84	84
E. Tall inside leg cm			85	85	87	87	87	87	89	89	89	89	89	89	89	89	89	89	89

A. Short (large waist)*** 168-176 cm	D84	D88	D92	D96	D100	D104	D108	D112	D116	D120	D124	D128	D132	D136
B. Chest cm	84	88	92	96	100	104	108	112	116	120	124	128	132	136
C. Waist cm	78	82	86	90	94	98	103	108	114	120	126	132	138	144
D. Hips cm	93	96	100	104	108	112	116	120	124	128	132	136	140	144
E. Inside leg cm	76	76	76	78	78	78	78	80	80	80	80	80	80	80

Women sizes	XS	S		M		L		XL		2XL		3XL		4XL	
A. Regular (normal waist) 164-172 cm		C34	C36	C38	C40	C42	C44	C46	C48	C50	C52				
B. Chest cm	76	80	84	88	92	96	100	104	110	116	122	128	134	140	146
C. Waist cm	63	66	69	72	76	80	84	88	93	99	105	111	117	123	129
D. Hips cm	87	90	93	96	99	102	106	110	115	120	125	130	135	140	145
E. Inside leg cm	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80

Inches conversions table

Waist																													
Waist inch-size	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Waist cm	66	69	71	74	76	79	81	84	86	89	91	94	96	99	102	104	107	109	112	114	117	119	122	124	127	129	132	134	137

Length			
Inside leg inches	30	32	34
Inside leg cm	76	81	86

A close-up, high-contrast photograph of industrial metal components. The image shows several dark, textured metal parts, possibly cast iron or steel, with a rough, pebbled surface. One prominent part in the upper left has a circular hole. The lighting is dramatic, highlighting the textures and creating deep shadows. The overall tone is industrial and rugged.

FRISTADS®

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