

About Us

Since 1979, we produce equipments for;

OCCUPATIONAL HEALTH AND SAFETY FIRST AID & CIVIL DEFENSE FIRE & CBRN & PERSONAL PROTECTION.

Our headquarters and factory are located in Ankara. With our network of distributors spread all over the country and worldwide we distribute our best and high quality service to customers in the shortest time.

Our company has TS EN ISO 9001 Quality Certificate. All our products are certified according to international standards. With the high quality products we manufacture, our export sales increase day by day.

What We Do

We provide variety of special services you may need.

Consultation

IST provides complete information on the design, use, supply and care of industrial heat and flame protective workwear / underwear / balaclavas, electric arc protective clothings, fireman suits, aluminized fire proximity/entry suits, air cooled kiln entry clothings, functional and thermal underwears/t-shirts. Our experienced team will provide you the best economical solution with customized size dimensions, preliminary study and technical drawings.

Quality and Safe Product Selection

Our product range has a wide range of standard and optional designs. We provide special protective clothing solutions suitable for work areas, that do not compromise protection while providing ease of movement.

Special Engineering Solutions

Each garment is designed for different purposes and has different certificates. A protective garment cannot substitute another. The most suitable and most appropriate solution must be determined according to the protection level and area of use. In IST® textile production workshop, fabrics are cut by using licensed cloth spreading software to combine the best designs with the best stitching properties with same pattern in all sizes and to prevent the possibility of encountering an error. IST® is fully equipped to offer and produce standard and special designed garments according to your needs.

Complementary Accessories Selection

Complementary elements of protective clothing are of great importance for full protection. You can easily choose and gather the most suitable complementary materials that can be specially used with the protective clothing you purchased such as; personal protective equipments like head, face, hand, respiratory, foot protectors, from our range. Our expert team will guide you in choosing your protective garment and choosing a complementary accessory with the most appropriate international standards for your working area.



Pre-Sales Support and Modelling

Before production, we design your protective clothing in our advanced technical drawing softwares according to your preferences and submit to your approval. Protective clothings that are purchased because of their high protection levels, but are unsuitable for the working facility may not provide adequate protection and may result in high costs for your company. Appropriate personal protective equipment should be determined as a result of risk analysis by experts. In this regard, our technical team will work in coordination with experts in your facility.



Standards and Certification

All our products are fully tested by notified bodies in Europe according to the relevant European standards and certified according to the relevant EN standards. In selection of protective clothings, labels inside the suit must be examined well, labels must be printed in accordance with European standards. The information on the label must be verified with certificates. In this regard, our expert technical team will provide consultation to you valuable customers.

After-Sales Support

Our company provides the necessary information, training and solutions to its customers on the maintenance, use and periodic controls of purchased products. Our company gives repair services for all standard and/or special design protective clothings that are damaged, or have worn parts. In this sense, it is aimed that the user can use the existing product for a long time instead of buying new product. Our sales representatives can provide training on the use of the products. All of our products are warranted against production and workmanship defects for a period of 24 months.

Please contact our sales department for detailed information about our services.

For such serious equipments, working with an experienced company that values human health and manufactures in accordance with international standards will be the right choice for your facility, your employees and your safety.



Fire fighting involves many risks that affect human health negatively. To get rid of these risks, personal protective clothings must be preferred, which are classified in 89/686/EEC Personal Protective Equipment Directive, which provides high protection.

FYRPRO® series clothings are professional technical clothings that must be used by trained professional personnel. Provides protection by keeping heat stress from high ambient temperature below the limit that human metabolism can tolerate, as protects human body from flames.

To reduce potential risks;

- Before use, an appropriate training should be taken and an exercise should be performed.
- The most suitable personal protective equipment should be selected according to the working conditions.
- Usage limits of EN standards, efficiency and design information should be known.

FYRPRO® series fireman garments are manufactured to reduce the risks of firefighting according to the related standard: "EN 469 Protective clothing for firefighters - Performance requirements for protective clothing for firefighting". For proper selection of garments according to the requirements of different risk groups, alternative layer systems are designed.

TESTS	TEST	PERFORMANCE LEVELS				
IESIS	METHOD		Marking	Level 2	Marking	
Heat transfer (Flame)	EN 367	HTI ₂₄ ≥9sec HTI ₂₄ - HTI ₁₂ ≥3sec	X _f 1	HTI ₂₄ ≥ 13sec HTI ₂₄ - HTI ₁₂ ≥ 4sec	X _f 2	
Heat transfer (Radiant)	EN ISO 6942	$RHTI_{24} \geqslant 10sec$ $RHTI_{24} - RHTI_{12} \geqslant 3sec$	X _r 1	RHTI $_{24} \gg 18 sec$ RHTI $_{24}$ - RHTI $_{12} \gg 4 sec$	X _r 2	
Resistance to water penetration	EN 20811	Level 1<20kPa	Y1	Level 2 ≥ 20kPa	Y2	
Water vapour resistance	EN 31092	30m² Pa/W <level1< 45m² Pa/W</level1< 	Z1	Level 2≪30 m² Pa/W	Z2	

According to these performances, fire fighting suits are divided into two; Level 1 and Level 2. Level 2 suits have higher performances than Level 1 suits. To have Level 2 protection for a suit, all Xf, Xr, Y and Z levels must be submitted as grade 2. If one of them falls as Level 1, suit will be Level 1 totally. As mentioned in 89/686/EEC Personel Protective Equipment Directive, fire fighting suits belong to Category III, due to the complex design intended to protect against mortal danger or against dangers that may seriously and irreversibly harm the health, the immediate effects of which the designer assumes the user cannot identify in sufficient time.

Other tests according to the EN 469 standard that the FYRPRO® series fire fighting suits succeed at are given in the next page.

FIRE FIGHTING SUITS





MATRIX

Model	EN	469	MED	Page	
Model	Level 1	Level 2	MED		
FYRPRO® 440		√	✓	3	
FYRPRO® 630	√		√	5	
FYRPRO® 630 C	√		√	5	
FYRPRO® 635	√		√	6	
FYRPRO® 635 C	√		√	6	
FYRPRO® 640		✓		4	
FYRPRO® 640 C		√		4	
FYRPRO® 650		✓	✓	3	

FYRPRO® 440

Size: XS - 4XL (Jacket - Trousers)



(E @ CAT III

NOMEX® Outershell Tough

Outer Layer %75 NOMEX® • %23 KEVLAR® • %2 P140

FR Knitted Fabric • PU Membrane Moisture Barrier

% 100 Aramid Felt **Heat Barrier**

% 50 Aramid • % 50 Viscose FR Inner Liner



Color Options







FYRPRO® 650

Size: XS - 4XL (Jacket - Trousers)





CAT III



Outer Layer %93 Metaaramid • %5 Paraaramid • %2 Antistatic Fiber

Moisture Barrier Aramid Felt • PU Membrane

Heat Barrier % 100 Aramid Felt

% 50 Aramid • % 50 Viscose FR Inner Liner







Model 1

Model 2

YSL

FYRPRO® 640

Size: XS - 4XL (Jacket - Trousers)



(€ CAT III

Outer Layer

%93 Metaaramid • %5 Paraaramid • %2 Antistatic Fiber

Moisture Barrier

Nonwoven Aramid / Melamine • PU Membrane

Heat Barrier

% 100 Aramid Felt

Inner Liner

% 50 Aramid • % 50 Viscose FR









Size: XS - 4XL (Coverall)



FYRPRO® 640 C

(€ CAT III

EN 469

Outer Layer

%93 Metaaramid • %5 Paraaramid • %2 Antistatic Fiber

Moisture Barrier

Nonwoven Aramid / Melamine • PU Membrane

Heat Barrier

% 100 Aramid Felt

Inner Liner

% 50 Aramid • % 50 Viscose FR



Color Options







FYRPRO® 630

Size: XS - 4XL (Jacket - Trousers)



(€ @ CAT III



Outer Layer

%93 Metaaramid • %5 Paraaramid • %2 Antistatic Fiber

Heat Barrier

% 100 Aramid Felt

Inner Liner

% 50 Aramid • % 50 Viscose FR





Color Options





FYRPRO® 630 C

Size: XS - 4XL (Coverall)





Heat Barrier % 100 Aramid Felt

Inner Liner

% 50 Aramid • % 50 Viscose FR









FYRPRO® 635

Size: XS - 4XL

(Jacket - Trousers w/o reflective tapes)



(€ @ CAT III



Heat Barrier % 100 Aramid Felt

% 50 Aramid • % 50 Viscose FR Inner Liner

Color Options



FYRPRO® 635 C

Size: XS - 4XL

(Coverall w/o reflective tapes)





CAT III

EN 469

%93 Metaaramid • %5 Paraaramid • %2 Antistatic Fiber **Outer Layer**

Heat Barrier % 100 Aramid Felt

Inner Liner % 50 Aramid • % 50 Viscose FR

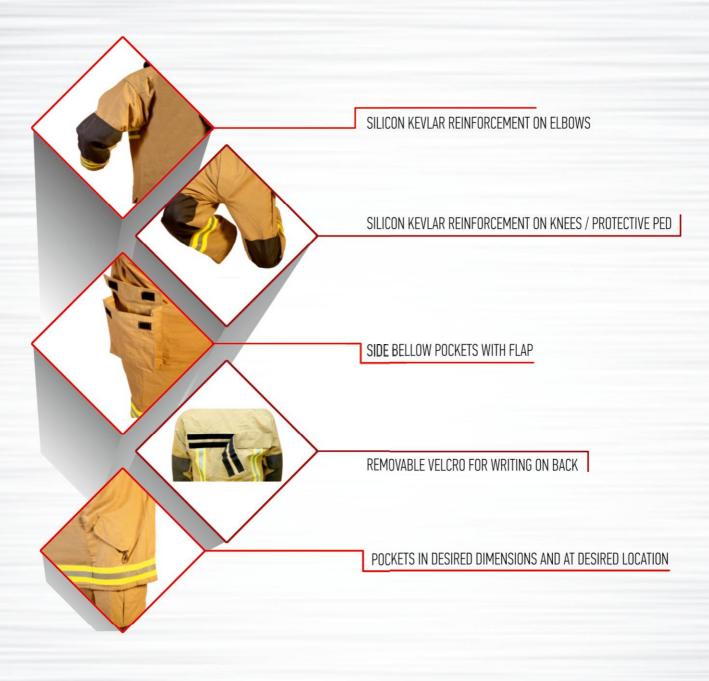
Color Options







OPTIONAL FEATURES



REINFORCEMENT ON SHOULDERS

EYELETS ON POCKETS

SILVER REFLECTIVE WRITING ON BACK

ARAMID FELT REINFORCEMENTS

ANTIWICKING BARRIERS AT LEG ENDS AND CUFFS

HIGH - WAISTED TROUSERS

STANDARD FEATURES

PROTECTIVE NECK BAND AND PANIC TYPE ZIPPER FOR EMERGENCY SITUATIONS

VELCRO FOR NAME TAGS

METAL HOOK FOR HANGING GLOVES

SPECIAL BELLOW RADIO POCKET

RADIO / FLASHLIGHT BAND

ARAMID, SPECIAL SEWING, KNITTED THUMBHOLE WRIST

ELASTIC WAIST BAND ON TROUSERS

ELASTIC / ADJUSTABLE SUSPENDERS OF TROUSERS

ZIPPERS ON LEG ENDS

ADJUSTABLE CUFFS

UNDER ARM GUSSETS FOR FREEDOM OF MOVEMENT

PRE-BENT KNEES AND ELBOWS FOR FREEDOM OF MOVEMENT

SIZE CHART

Size (cm)		Person's Height	Person's Chest	Person's Waist
S	46/48	164 - 170	88 - 96	84 - 92
М	50/52	170 - 176	96 - 104	92 - 100
L	54/56	176 - 182	104 - 112	100 - 108
XL	58/60	182 - 188	112 - 120	108 - 116
XXL	62/64	182 - 188	120 - 128	116 - 124

TOLERANCE ± % 2 Prepared according to EN 340/EN 13688 standards.





Fireman Helmets

Fireman Gloves

Fireman Boots

Self Contained Breathing Apparatus

Escape Masks

Fireman Raincoat and Other Complementary Equipments

Knitted Fireman Products

FIREMAN EQUIPMENTS



FIREMAN HELMETS

PAB FIRE HT-04 / PAB FIRE COMPACT

pab FIRE HT-04

FIRE HT-04



Heat and flame resistant composite outer shell

Heat resistant anti-fog anti-scratch visor

Aluminised carbon fiber neck protector

Weight: 1500 gr

FIRE COMPACT

Heat resistant anti-fog anti-scratch visor

Aluminised carbon fiber

neck protector

Weight: 1250 gr



Heat and flame resistant composite outer shell

Heat resistant anti-fog anti-scratch visor Aluminised carbon fiber neck protector

Weight: 1500 gr



ATEX certified.



P/N: 14020920





P/N: 14020930



ATEX certified.



Heat and flame resistant thermoplastic outer shell Heat resistant anti-fog anti-scratch visor Aluminised carbon fiber neck protector

Weight: 1250 gr



ATEX certified.

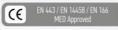


P/N: 14020940

EN 443 / EN 14458 / EN 166

ATEX certified.





SEIZ / CHIBA / ROSTAING FIREMAN GLOVES



P/N: 14040902





FIREMAN BOOTS

ETCHE / NOVESTA / LONGSTONE

ETCHE FIREMAN F3A

Radiant heat, flame and chemical resistant Made of anti-static rubber material

Steel toe cap resistant to 200 j Mid-sole resistant to 1100 N Shock absorbent heel

Suitable to use with chemical suits that are tested according to EN 943-5

Cottong lining, anti-slip sole

Resistant to fuel, oil, acid and solvents



P/N: 14030139 (39-46)





NOVESTA FIREMAN F2A

NOVESTA® NEWS FROM THE WORLD WORLD

Radiant heat, flame and chemical resistant Made of anti-static rubber material

Resistant to fuel, oil, acid and solvents

Pull-ups for easy wearing

Ankle protection Steel toe-cep, Steel mid-sole

Cotton Lining

Resistant to electric shock Anti-slip sole

P/N: 14033039 (39-46)





LONGSTONE F2A

Radiant heat, flame and chemical resistant Made of anti-static leather material

Pull-ups for easy wearing

Steel toe-cep, Steel mid-sole

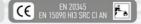
Resistant to fuel, oil, acid and solvents.

Sympatex® Puretex® membrane

Vibram nitrile rubber anti-slip sole



P/N: 14033140 (40-47)



SELF CONTAINED BREATHING APPARATUS

SCOTT SIGMA II



Heat resistant, antistatic class 2 harness

Scott Vision 3 class 3 heat resistant positive pressure full face mask

Cylinder valve

Adjustable cylinder band

2 stage pressure regulator

Demand valve Early warning system

Analogue manometer

Antistatic air hose









6.8 lt 300 bar Carbon Composite

P/N: 05051009

C€ EN 12245

6.0 lt 300 bar Steel









Promask Class 3 (Heat resistant)

P/N: 01010800 C€ EN 136



Vision 3 Class 3 (Heat Resistant)

ADVANCED LEVEL OPTIONAL ACCESSORIES



Scott Sabrecom Communication Kit



Voice Amplificator





Scott TECB Telemetry Entry Control Board



DPG Digital Pressure Manometer



ADSU Disstress Unit

SCOTT ELSA 15 B / FLITE / SORBENT ZEVS-U



High visible cubicle hood

Automatic air flow when unsealed

Elastromeric leakproof neck seal

Audible early warning system

Designed as emergency life support equipment for 15 minutes, independent from the environment.





P/N: 04010750





FLITE

Mini breathing apparatus enables user to work in confined spaces for short time periods.

Can be used for escape in dangerous situations.

Can be used as emergency life support equipment for 15 minutes.

Suitable to use with positive pressure full face masks.



P/N: 05057200



C€ EN 402 EN 139



ZEVS - U

200 C heat resistant for 1 minute.

Carbon monoxide protection for 15 minutes.

Protection against organic and inorganic gases and vapours via its combined filter.





C€ EN 403 TYPE S













COMPLEMENTARY EQUIPMENTS

OTHER FIREMAN EQUIPMENTS



Flame retardant- Antistatic PVC / Cotton Plavitex Multi

530 gr / m² Size (S-4XL)

P/N: 14050601









COOLING VESTS

Can be worn inside fireman clothes. chemical protective clothes. smelter clothes etc. to reduce heat stress and it provides comfort.

HEAT AND FLAME PROTECTIVE WILDLAND GOGGLES



Anti Scratch

Frame, foam and harness are 600 °C heat resistant

P/N: 07051600



€ EN 166:2001 / EN 170 (2C 1,2)

FIRE BLANKETS

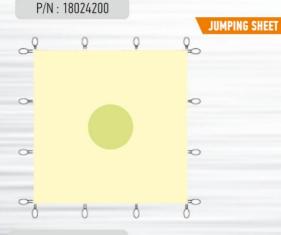


90 x 120 cm / 100 x 140 cm / 120 x 160 cm / 160 x 180 cm Plain weave glass fiber

P/N: 14010520

HEAT AND FLAME PROTECTIVE WILDLAND FIRE HELMET

Glass fiber reinforced polyester shell resistant up to 500 °C



P/N: 14060400

Size: 4 m x 4 m 16 handles



P/N: 40002015



KNITTED FIREMAN PRODUCTS

HEAT AND FLAME RETARDANT T-SHIRT / HOOD

FYRTEX® FH 50

FYRTEX® FH 50 knitted fireman hood protects head, neck and shoulders from heat and flame.

Suitable to use with helmet and face mask.



FYRTEX® FH 100

FYRTEX® FH 100 knitted fireman hood protects head, neck and shoulders from heat and flame.

Suitable to use with helmet and face mask.

%99 Aramid - %1 Antistatic Complete Double Layered

P/N: 18018500







%50 Aramid - % 49 Viscose FR - %1 Antistatic Complete Double Layered

P/N: 18018550







FYRTEX® UW 100

FYRTEX® UW 100 is designed as underwear to reduce negative effects of heat and flame that the user may be exposed to. Long sleeves.



is designed as underwear to reduce negative

FYRTEX® UW 50

FYRTEX® UW 50

effects of heat and flame that the user may be exposed to. Long sleeves.

Polo Neck / Crew Neck

%50 Aramid - %49 Viscose FR - %1 Antistatic

P/N: 18518811



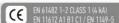


Polo Neck / Crew Neck

%99 Aramid - %1 Antistatic

P/N: 18518411









FVB FILE BOXIMIT

Fire fighting involves many risks that affect human health negatively. To get rid of these risks, personal protective clothings must be preferred, which are classified in 89/686/EEC Personal Protective Equipment Directive, which provides high protection.

FYRAL® series clothings are professional technical clothings that must be used by trained professional personnel. Provides protection by keeping heat stress from high ambient temperature below the limit that human metabolism can tolerate, as protects human body from flames.

To reduce potential risks;

- Before use, an appropriate training should be taken and an exercise should be performed.
- The most suitable personal protective equipment should be selected according to the working conditions
- Usage limits of EN standards, efficiency and design information should be known.

The FYRAL® series aluminized fire proximity suits are manufactured in accordance with EN 1486 (Protective aluminized clothings, For fire fighters, Properties and test methods for professional fire fighting suits) standard to minimize the risks of fire fighting and intervention. Various protective clothings which consist of different layer systems have been developed to provide the user with more choice of the most appropriate clothing according to the risk groups to be used.

SIZE CHART

Ş	Size (cm)	Person's Height	Chest	Person's Waist
S	46/48	164 - 170	88 - 96	84 - 92
М	50/52	170 - 176	96 - 104	92 - 100
L	54/56	176 - 182	104 - 112	100 - 108
X	58/60	182 - 188	112 - 120	108 - 116
X	KL 62/64	182 - 188	120 - 128	116 - 124

TOLERANCE ± % 2

Prepared according to EN 340/EN 13688 standards.



Clothings for fire fighting are referred as Category III products according to the 89/686/EEC Personal Protective Equipment Directive, as they are designed to protect human against life-threatening, irreversible risks.

FYRAL® fire proximity suits are supplied as a complete set with complementary accessories such as hoods, gloves, and gaiters, as it is necessary to protect the entire body according to EN 1486 standard.

FYRAL® fire proximity suits complementary equipments which must be used with the suit/coverall;

- Fireman helmet in the protective hood in accordance with either of EN 397 / EN 443 / EN 14052 standards
- Fireman boots in gaiters in accordance with both EN 20345 / EN 15090 standards,
- Self contained breathing apparatus (SCBA) in accordance with EN 137 Class-2 standard which backplate and fittings are made of aramid which are not affected by flame can be safely used with fire proximity suits.



FYRAL® 5100

Size: XS - 4XL

(Jacket - Trousers - Hood - Gloves - Gaiters)



C€ CAT III

FN 1486

Outer Layer Aluminized Glass Fiber

Heat Barrier Aramid / Melamine Nonwoven (3 Layer)

NOMEX® III A



FYRAL® 5300

Size : XS - 4XL

(Coverall - Hood - Gloves - Gaiters)



C€ CAT III

EN 1486

Outer Layer Aluminized Glass Fiber

Heat Barrier Aramid / Melamine Nonwoven (3 Layer)

NOMEX® III A



FYRAL® 6100

Size: XS - 4XL

(Jacket - Trousers - Hood - Gloves - Gaiters)



 ϵ CAT III

Outer Layer

Aluminized Paraaramid

Moisture Barrier PU Coated Moisture Barrier

Heat Barrier

Aramid / Melamine Nonwoven (2 Layers)

Inner Liner

%93 NOMEX® • %5 KEVLAR® • %2 Antistatic Fiber

NOMEX® III A





FYRAL® 6300

Size: XS - 4XL

(Coverall - Hood - Gloves - Gaiters)





EN 1486

Outer Layer Aluminized Paraaramid

Moisture Barrier PU Coated Moisture Barrier

Aramid / Melamine Nonwoven (2 Layers) **Heat Barrier**

%93 NOMEX® • %5 KEVLAR® • %2 Antistatic Fiber Inner Liner

NOMEX® III A



FYRAL® 9000

Size : XS - 4XL

(Jacket - Trousers - Hood - Gloves - Gaiters)



C€ CAT III

EN 1486

Outer Layer Alur

Aluminized Glass Fiber

Heat Barrier

Aramid Nonwoven

Inner Liner

FR Fabric







FVB PP B IN INTERPRETATION OF THE PROPERTY OF

Industrial works involving heat and flame contains many risks that affect human health negatively. In order to remove these risks, clothing with special design, which provides high protection and falls under the 89/686 EEC Personal Protective Equipment category, should be preferred.

To reduce potential risks;

- Appropriate personal protective equipment must be selected according to the working conditions.
- Usage limits of EN standards, efficiency and design features should be known.

Protective clothings which certified according to EN ISO 11611 standard provides the wearer protection againsts plashes of molten metal, brief contact with flame and radiant heat. The clothings certified to this standard are suitable to use in welding and allied processes. The clothings are categorized according to the protection level against different levels of welding;

Class I - Protects against less hazardous welding techniques and situations, causing lower spatter and radiant heat. Tested with 15 molten metal drops.

Class II - Protects against more risky welding techniques and situations, which causes higher levels of spatter and radiant heat. Tested with 25 molten metal drops. This protection level covers both Class I and Class II. Also procedure A1 or A2 must be tested according to ISO 15025 for flame spread.

Protective clothings which certified according to EN ISO 11612 standard provides the wearer protection against brief contact with heat and flame. The heat can be convective, radiant, molten material or a combination of them. The clothings are categorized according to the following parameters:



A: EN ISO 15025 - Limited flame spread (from 1 to 2)

B: ISO 9151 - Convective heat (from 1 to 3)

C: EN ISO 6942 - Radiant heat (from 1 to 4)

D: ISO 9185 - Molten Aluminium splash (from 1 to 3)

E: ISO 9185 - Molten Iron splash (from 1 to 3)

F: ISO 12127 - Contact heat (from 1 to 3)



Protective clothing ullet Clothing to protect against heat and flame for industrial purposes Minimum performance requirements



Protective clothing for use in welding and allied processes

Test Standard	Marking	Classification
EN ISO 15025 / Limited flame spread	A1	According to Procedure A
EN 150-15025 / Cillineu Italiie Spreau	A2	According to Procedure B
	B1	4.0 sec < HTI ₂₄ < 10.0 sec
ISO 9151 / Convective heat	B2	10.0 sec < HTI ₂₄ < 20.0 sec
	В3	20.0 sec < HTI ₂₄
	C1	7.0 sec < RHTI ₂₄ < 20.0
EN ISO 6942 / Radiant heat	C2	20.0 sec < RHTI ₂₄ < 50.0sec
EN 150 6742 / Radiant neat	C3	50.0 sec < RHTI ₂₄ < 95.0sec
	C4	95.0 sec < RHTI ₂₄
	D1	100g < D1 < 200g
ISO 9185 / Molten aluminium splash	D2	200g < D2 < 350g
	D3	350g < D3
	E1	60g < E1 < 120g
ISO 9185 / Molten iron splash	E2	120g < E2 < 200g
	E3	200g < E3
	F1	5.0 sec < T (sec) threshold value time < 10.0 sec
ISO 12127/ Contact heat	F2	10.0 sec < T (sec) threshold value time < 15.0 sec
	F3	15.0 sec < T (sec) threshold value time



SIZE CHART

Size (cm)	Person's Height	Chest	Person's Waist	
S 46/48	164 - 170	88 - 96	84 - 92	
M 50/52	170 - 176	96 - 104	92 - 100	
L 54/56	176 - 182	104 - 112	100 - 108	
XL 58/60	182 - 188	112 - 120	108 - 116	
XXL 62/64	182 - 188	120 - 128	116 - 124	

TOLERANCE ± % 2 Prepared according to EN 340/EN 13688 standards.

AIR COOLED CLOTHINGS FOR EXTREME HOT ENVIRONMENTS





FYRAL® HEATPRO V4L VORTEX

Size : XS - 4XL (Coverall)



C€ CAT III

EN 150 11612

Outer Layer Aluminized Viscose FR

Heat Barrier %100 Aramid Felt





Provides long-term operation for repair and maintenance in furnaces and ovens where radiant heat is high. A vortex cooling tube has been added into the coverall. The cooling tube works with 5-6 bar compressed air. The cool air, circulating in the channels/tubes between the layers of the clothing, provides the user coolness and comfort.

The cooling tube removes the overwhelming heating called 'heat stress' on the worker and makes air conditioning in the clothing. Produced in accordance with EN ISO 11612 standard.

Advantages

- Increases worker productivity in extreme hot environments
- No moving parts
- · Does not contain any plastic parts
- · User friendly
- Lightweight
- Adjustable cooling level

Areas of use

- Foundries
- · Boiler rooms
- · Iron and Steel Smelting
- Glass and Ceramic Production
- Cement Production
- Iron Forging
- Welding
- Sandblasting

- · Paint Drying Ovens
- · Metal Powder Coating
- Rolling Mills
- Mines
- Hot Furnaces

FYRAL® 800 V

Aluminized Viscose FR - Single Layered

Size: XS - 4XL (Jacket - Trousers)



((CAT III

Protective against

- Molten metal splashes
- Radiant heat
- · Heat and flame

FYRAL® 810 Apron



FYRAL® 820 Hood



FYRAL® 840 Sleeves



FYRAL® 850 Open Back Cape



FYRAL® 830 Gaiters





FYRAL® 900 DF



Size : XS - 4XL (Jacket - Trousers)



EN 1149-3/5

Front

A1 B1 C3 D2 E3 EN ISO 11612

Rear

A1
B1
C1
D3
E3
EN ISO 11612
F1

C€ CAT III

EN ISO 1161

Front Layer

Aluminized Viscose FR

Rear Layer

%54 Viscose FR • %20 Wool • %20 Polyamide • %5 Paraaramid • %1 Antistatic Fiber

Protective against

- Molten metal splashes
- Radiant heat
- · Heat and flame





ECTRIC ARC FLASH PROTECTIVE CLOTHINGS

An electric arc explosion is the energy discharge in the form of heat and light that flows through the air between two non-tangential conductors. For this reason, arc studies contain many risks that affect human health negatively. To remove these risks, special protective clothings manufactured according to the 89/686 / EEC Personal Protective Equipment should be preferred, which provide high level of protection.

<code>ELECTPRO®</code> electric arc flash protective garments are in category III, according to Personal Protective Equipment Directive 89/686 / EEC and manufactured according to EN Standards performance requirements.

To reduce potential risks;

- Usage limits of EN standards, efficiency and design information should be known.
- The most suitable personal protective equipment should be selected according to working conditions.
- Complementary accessories should be used to protect whole body against electric arc.

Model	EN 6148 Level 1	2 - 1 - 2 Level 2	EN 1149-3/5	ATPV (cal/cm²)	Page
ELECTPRO® S1L ALX 145	√		√		33
ELECTPRO® G1L ALX 250	√		√		33
ELECTPRO® G2L CVC 275		√	√		34
ELECTPRO® G2L ARC/A		√	√		34
ELECTPRO® G2L ULTRASOFT 900		√	√	63	35
ELECTPRO® G2L ULTRASOFT 900 HOOD		GS-ET-29	✓	51	35
FYRTEX® UW 50	√		√		41



Protective clothing against the thermal hazards of an electric arc • Part 1–1: Test methods Method 1: Determination of the arc rating (ATPV or EBT50) of flame resistant materials for clothing Protective clothing against the thermal hazards of an electric arc • Part 1–2: Test methods Method 2: Determination of arc protection class of material and clothing by using a constrained and directed arc (box test)

Protective clothing against the thermal hazards of an electric arc • Part 2: Requirements



Protective clothing • Clothing to protect against heat and flame for industrial purposes Minimum performance requirements



Protective clothing • Electrostatic properties • Material performance and design requirements



ET 29 Supplementary requirements for the testing and certification of face shields / hoods for electrical works



Protective clothings against electric arc are certified according to IEC 61482-2 standard. According to IEC / EN 61482-1-2 standard, there are two levels of protection, Level 1 (4 kA) and Level 2 (7 kA). Level 2 is the highest level that can be reached for protection against electric arc. Also according to IEC / EN 61482-1-1 standard ATPV (cal / cm2) value is determined. ATPV value is needed in high voltage lines.

The EN ISO 11612 standard is a certification standard such as the IEC 61482-2 standard and covers joint performance tests. However, according to the IEC / EN 61482-1-2 test standard, the arc protection class also needs to be determined additionally. The EN 1149-3 / 5 standard is used to reduce the risk of accidents that may occur due to discharging the load in the environment where explosive gas may be present, while antistatic fibers in the fabric content are used to minimize the risk of accidents.

ELECTPRO® electric arc protective garments; protect the upper and lower body including the neck, arms up to the wrists and legs to the ankles according to the standards. Industrial work and electrical arc work involve variety of risks, so the rest of the body must be protected.

Complementary equipments that can be used together with ELECTPRO® garments;

- Flame retardant underwear manufactured according to EN 11612 standard,
- Arc flash protective helmet,
- Arc flash protective hood / visor,
- Arc flash protective gloves,
- Dielectric boots.

ELECTPRO®

ELECTPRO® ARC PROTECTOR ARAMID G1L ALX 250

%65 Lenzing® FR • %22 Aramid • %12 PA • %1 Antistatic Fiber 250 g/m²

(Jacket / Short Jacket - Trousers)





A1 B1 C1 E1



((CAT III

EN ISO 11612

EN 1149-3/5



IEC 61482 - 2 IEC / EN 61482 - 1 - 2 Class 1:4 kA



YSL Infactive Material







ELECTPRO® ARC PROTECTOR ARAMID S1L ALX 145

 $\%64\ Lenzing^{\circledR}\ FR$ • $\%30\ Conex^{\circledR}$ • $\%5\ Twaron^{\circledR}$ • $\%1\ Antistatic\ Fiber$ 145 g/m²

(Shirt) Size: XS - 4XL









EN ISO 11612

EN 1149-3/5



IEC 61482 - 2 IEC / EN 61482 - 1 - 2 Class 1:4 kA



YSL



ELECTPRO®

· New **ELECTPRO® ARC PROTECTOR COTTON G2L CVC 275**

%75 Cotton FR • % 23 PES • % 2 PA (Double layered) 275 g/m² Proban® Treated

(Jacket / Short Jacket - Trousers)



B1 C2



((CAT III

Size: XS - 4XL

EN ISO 11612

EN 1149-3/5



IEC / EN 61482 - 1 - 2 IEC 61482 - 2 Level 2:7 kA





New

%65 Lenzing® FR • % 22 Aramid • % 12 PA • %1 Antistatic Fiber

250 g/m²

%64 Lenzing® FR • % 30 Conex® • % 5 Twaron® • %1 Antistatic Fiber 145 g/m²

ELECTPRO® ARC PROTECTOR ARAMID G2L ARC/A

(Jacket / Short Jacket - Trousers) Size: XS - 4XL



A2 B1 CI





EN ISO 11612

EN 1149-3/5



IEC / EN 61482 - 1 - 2 IEC 61482 - 2 Level 2:7 kA



ELECTPRO®

ELECTPRO® ARC PROTECTOR G2L ULTRASOFT 900

(Jacket - Trousers) Size: XS - 4XL





((CAT III

EN ISO 11612

EN 1149-3/5



IEC 61482 - 2 IEC / EN 61482 - 1 - 2 Level 2:7kA



WESTEX Ultrasoft

Westex Indura®



%88 Cotton FR • %12 PA

%88 Cotton FR • %12 PA

%100 Cotton FR Denim

 440 g/m^2

475 g/m²

 440 g/m^2

%100 Cotton FR Denim

475 g/m²

ELECTPRO® ARC PROTECTOR G2L ULTRASOFT 900 HOOD

(Visor + Hood)



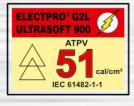
EN ISO 11612



((CAT III

EN 1149-3/5

Class 2 **GS ET 29** DIN EN 166 **DIN EN 170**



« WESTEX Ultrasoft

Westex Indura®





TOLERANCE ± % 2

Prepared according to EN 340/EN 13688 Standard.

Arc Flash Visors Arc Flash Gloves Arc Flash Goggles

Dielectric Boots



ELECTRIC ARC PROTECTORS

ARC FLASH VISORS / GLOVES / GOGGLES / DIELECTRIC BOOTS



TAND FLAME PROTECTIVE CLOTHINGS

Industrial works involving heat and flame contains many risks that affect human health negatively. In order to remove these risks, clothing with special design, which provides high protection and falls under the 89/686 EEC Personal Protective Equipment category, should be preferred.

FYRTEX® industrial heat and flame protective workwear are designed to meet the performance of various EN standards and are in the category II, which constitutes a risk in accordance with the 86/686/EEC Personal Protective Equipment Directive.

To reduce potential risks;

- Appropriate personal protective equipment must be selected according to the working conditions.
- Usage limits of EN standards, efficiency and design features should be known.

Test Standard	Marking	Classification		
EN ISO 15025 / Limited flame spread	A1	According to Procedure A		
	A2	According to Procedure B		
	B1	4.0 sec < HTI ₂₄ < 10.0 sec		
ISO 9151 / Convective heat	B2	10.0 sec < HTI ₂₄ < 20.0 sec		
	В3	20.0 sec < HTI ₂₄		
EN ISO 6942 / Radiant heat	C1	7.0 sec < RHTI ₂₄ < 20.0		
	C2	20.0 sec < RHTI ₂₄ < 50.0sec		
	C3	50.0 sec < RHTI ₂₄ < 95.0sec		
	C4	95.0 sec < RHTI ₂₄		
	D1	100g < D1 < 200g		
ISO 9185 / Molten aluminium splash	D2	200g < D2 < 350g		
	D3	350g < D3		
ISO 9185 / Molten iron splash	E1	60g < E1 < 120g		
	E2	120g < E2 < 200g		
	E3	200g < E3		
ISO 12127/ Contact heat	F1	5.0 sec < T (sec) threshold value time < 10.0 sec		
	F2	10.0 sec < T (sec) threshold value time < 15.0 sec		
	F3	15.0 sec < T (sec) threshold value time		



Protective clothing • Clothing to protect against heat and flame for industrial purposes Minimum performance requirements



Protective clothing for fire fighters . Laboratory test methods and performance requirements for wildland clothing



Protective clothing for fire fighters • Requirements and test methods for fire hoods for fire fighters



Protective clothing for use in welding and allied processes



Protective clothing • Electrostatic properties • Material performance and design requirements



Protective clothing against the thermal hazards of an electric arc • Part 1-1: Test methods Method 1: Determination of the arc rating (ATPV or EBT50) of flame resistant materials for clothing Protective clothing against the thermal hazards of an electric arc • Part 1-2: Test methods IEC / EN 61482 -1-1 Method 2: Determination of and directed arc (box test) Method 2: Determination of arc protection class of material and clothing by using a constrained

Protective clothing against the thermal hazards of an electric arc . Part 2: Requirements



MATRIX

Model		EN ISO 11612	EN ISO 11611 Level 1 Level 2		EN 1149	EN 15614	EN 61482 Level 1 Level 2		Page
101000000			Level I	Level Z			Level	Level Z	
FYRTEX® G1L	PRO 250	√	√		\sim	$\sqrt{}$	\checkmark		42
FYRTEX® C1L I	PRO 250	√	√		√	√			42
FYRTEX® S1L I	PRO 145	√			√		✓		41
FYRTEX® G1L	CVC 275	√	√		√				43
FYRTEX® C1L (CVC 275	√	√		√				43
FYRTEX® G1L H	3T 200	√			√				45
FYRTEX® C1L H:	3T 200	√			√				45
Metal SplashGua	ord 375 G1L	√		√	√				44
FYRTEX® UW 50		√			√		√		46
FYRTEX® UW 10	00	√			√				46

FYRTEX® S1L PRO 145

 $\%64\ Lenzing^{\circledast}FR$ • $\ \%30\ Conex^{\circledast}\bullet$ %5 Twaron $^{\circledast}\bullet$ %1 Antistatic Fiber

145 g/m²

Size: XS - 4XL (Shirt)







EN 1149-3/5

- · Protective against heat and flame
- · Antistatic clothing





FYRTEX® UW 50

 $\%50 \text{ Kermel}^{\otimes}$ • $\%49 \text{ Lenzing}^{\otimes} \text{ FR}$ • %1 Antistatic Fiber

220 g/m²

(Knitted T-shirt) Size: XS - 4XL





 ϵ CAT III

EN ISO 11612



EN 61482-1-2 Level 1: 4kA

- Designed as single layered
- Protective against heat and flame
- · Protective against arc flash
- Antistatic clothing



FYRTEX® G1L PRO 250

%65 Lenzing FR • %22 Aramid • %12 PA • %1 Antistatic Fiber

250 g/m²

(Jacket / Short Jacket / Trousers) Size: XS - 4XL











EN ISO 11611 CLASS 1

- Wildland suit
- Welding suit
- · Protective against heat and flame
- Antistatic clothing









FYRTEX® C1L PRO 250

 $\%65 \ Lenzing^{\circledR} \ FR$ • $\%22 \ Aramid$ • $\%12 \ PA$ • $\%1 \ Antistatic \ Fiber$

250 g/m²

(Coverall) Size: XS - 4XL













EN 1149-3/5

- · Wildland suit
- Welding suit
- · Protective against heat and flame
- Antistatic clothing











FYRTEX® G1L CVC 275

%75 Cotton FR • %24 Polyester • %1 Antistatic Fiber

275 g/m²

(Jacket / Short Jacket / Trousers)

Size: XS - 4XL

Color Options

Proban® Treated



((

CAT II





CLASS 1

EN 1149-3/5

- Protective against heat and flame
- Welding suit
- Antistatic clothing











FYRTEX® C1L CVC 275

Size: XS - 4XL (Coverall)



((CAT II



EN ISO 11611 CLASS 1



EN 1149-3/5

- · Protective against heat and flame
- · Welding suit
- Antistatic clothing











%75 Cotton FR • %24 Polyester • %1 Antistatic Fiber

Proban® Treated



 275 g/m^2

METAL SPLASHGUARD 375 G1L

%54 Viscose FR • %20 Wool • %20 PA • %5 Paraaramid • %1 Antistatic Fiber $375~g/m^2$

(Jacket / Short Jacket /Trousers) (Hood - Sleeves - Gaiters - Apron - Neck Protector) Size : XS - 4 XL



C€ CAT III

EN ISO 11612 F





EN ISO 11611 CLASS 2

EN 1149-3/5

- · Protective against heat and flame
- Welding suit
- Protective against molten metal splash
- · Antistatic clothing





FYRTEX® G1L & C1L H3T 200

%93 Metaaramid • %5 Paraaramid • %2 Antistatic Fiber

200 g/m²

(Jacket / Short Jacket - Trousers - Coverall) Size: XS - 4XL







- Protective against heat and flame
- · Antistatic clothing









FYRTEX® FH 100 FH 50

%99 Kermel® • %1 Antistatic Fiber

220 g/m²

%50 Kermel® • %49 Lenzing® FR • %1 Antistatic Fiber

220 g/m²

Size: Standard







- Designed as complete double layered
- Protective against heat and flame
- · Antistatic clothing





FYRTEX® G - DWA C - DWA

%50 Aramid • %50 Viscose FR

 130 g/m^2

%100 Aramid

 100 g/m^2

%50 Aramid • %50 Viscose FR

130 g/m²

(Jacket / Trousers - Coverall) Size: XS - 4XL





EN ISO 11612

EN 1149-3/5

- · Designed as triple layered
- · Protective against heat and flame
- Antistatic clothing
- Detachable
- · Protective against cold
- · Heat and flame retardant inner layer





Inner layer can be adapted to all our FYRTEX® clothings.

By this way, all our single layered garments can be made suitable for winter, by having CE certificate.

FYRTEX® UW 100 UW 50

 $\%99 \text{ Kermel}^{\tiny{\circledR}}$ • %1 Antistatic Fiber

 220 g/m^2

%50 Kermel® • %49 Lenzing® FR • %1 Antistatic Fiber

220 g/m²

(Knitted underwear)

Size: XS - 4XL







· Designed as single layered

- · Protective against heat and flame
- Antistatic clothing







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