NIRMAL TRADERS

A Complete Range of Safety Equipments

Modern Apparels

ALUMINISED FIRE PROXIMITY SUIT

Features

Aluminised Fire Proximity Suits are made up of GENTEX's (USA) proprietary Dual Mirror/Flexir Aluminised Fabrics, which reflects 95% of heat and ensures superior protection and performance in the extreme work environments faced by civilians, emergency service, homeland defense and military personnel.
These suits offer an efficient solution to working in high-temperatures with superior durability.The fabric used offers an exceptionally high level of abrasion resistance - the result of our unique, five-layer fabric structure. This proven system ensures that the suit remains highly reflective even after repeated use and proper care and cleaning. The five-layer fabric structure consist of an outer skin of aluminum, a protective film, a second layer of aluminum, heat-stable adhesive and a base fabric. These individual layers are then combined to form a single fabric.
The complete suit can be manufactured with 1 layer upto 5 layers, depending on the need and demand of customers/application.
Since we are manufacturers, the design of the suit can be completely customised.
All GENTEX fabrics are manufactured to meet stringent ISO 9001 standards, and many are certified for NFPA, NFPA 1971-2007 and various international, European Standard (EN), MIL-C-87076A, MIL-C-24929A and ASTM F955-85 standards.

Applications

These Suits are used for rescue operations in an area of intense heat, fire, steam, hot liquid by fire fighters in industries like Petrochemical plants, foundries, plant, steel, glass, ceramics & Defence. Also used for metal splash protective clothing, radiant heat protective clothing, and proximity fire fighting.
Industries: Petrochemicals, Steel, Foundries, Glass, Ceramics, Defence & Other plants with high temperature work applications.

Test Reports / Certification

Fabrics of these suits are tested and approved by Defence Institute for Fire Research New Delhi & field tests performed by Defence-Indian Navy NBCD School, INS Shivaji. Lonavla Maharashtra.
Certified for EN 531, ISO 11612, NFPA 1971, etc.

AGNI KAVACH WATER GEL BLANKET

Features

AGNI KAVACH brand Indigenous water gel blanket has been developed by us for Indian Navy, under D. O. I. (Department of Indigenisation).
It consists of 100% woolen blanket blanket pre soaked in a scientifically formulated therapeutic gel, capable of withstanding extremely high temperature.

The details of material are as per following.
A) CARRIER BASE FABRIC: Special Fire Retardant Woolen fabric.

B) HYDROGEL: The gel is made from water and natural extract of plants / vegetables, gelling agent. The gel is water soluble, non toxic and bio degradable.

Applications

1) Rescuing the person trapped in fire by wrapping the blanket.
2) Extinguishes fire.
3) Gel on the blanket starts healing the burn wounds of the victim.
4) In case of emergencies, can also be used to handle hot metals.

Industries

Petrochemicals, Steel, Foundries, Glass & Other plants where there are possibilities of fire hazards.

Sterlization

Every Blanket is specially sterilized by Gamma Radiation Processing at Bhabha Atomic Research Centre (BARC) - Govt. Of India, Mumbai.

FIRE & WELDING BLANKET

Features

These blankets are made from asbestos-free material & are substitutes to asbestos blankets. They are very good at fire resistance & insulation.

I) FIBERGLASS BLANKETS:

These blankets are made out of asbestos-free fiberglass fabric.
They come in different thickness depending on the nature of work.
a) 0.4 mm Approx. - Mostly used as Fire blankets
b) 0.8 mm Approx. - Mostly used for Welding purposes
(Can withstand temperature up to 1000 C)

II) ALUMINISED BLANKETS:

These blankets are made out of Aluminised glass fiberglass fabrics used to work against high radiant temperatures. It is made of Imported Dual mirror 'GENTEX' Brand Aluminised Glass fibre fabric which is approved by Centre For Environment and Explosive Safety (CFEES) - Ministry of Defence - Govt. of India - New Delhi formerly known as DIFR, with eyelets on four corners. Temperature withstanding radiant upto 1500 C.

III) HIGH INSULATION WELDING BLANKETS:

These blankets are made out of specially blended non-woven fabrics which is a very effective solution to heat blocking and acts as a fantastic fire barrier material & has very high temperature resistance during welding, and has High resistance to chemicals & solvents.
Can withstand temperatures up to 1500 C & in excess at times.

Fire Blankets are generally used by welders for covering the area used while welding and in case of emergencies for extinguishing fire.
Also used in households to extinguish small kitchen fires.

Industries

Welding, Households, Petrochemicals, Steel, Foundries, Glass, Ceramics & Other plants with high temperature work applications.

FLAME RETARDANT APPARELS

Features

Every year 9,600 workers - just like yours - suffer electrical shock and burn injuries. And most of them are preventable. So how can you prevent your workers from becoming part of those statistics?

With BLAZE AEGIS fire resistant clothing and workwear from Modern Apparels, we offer flame retardant clothing, to ensure your workers are properly protected. We offer variety of flame retardant garments depending on the need, requirement and budgets of our customers.

INHERENT FR APPARELS

I) APPARELS MADE FROM DUPONT NOMEX FIBERS:

Nomex IIIA aramid is a permanently, inherently flame resistant and anti-static fiber blend with a unique molecular structure consisting of 93% Nomex, 5% Kevlar and 2% static dissipative fiber. Weighing only 4.5 oz per square yard for lightweight comfort, garments made of NOMEX IIIA will not burn in air, melt, drip or break open and act as a protective barrier when exposed to intense heat, flash fires or electric arcs.
As Nomex IIIA dissipates electrical charges from fabric to fabric and fabric to surface rubbing, it provides an extra level of comfort against nuisance static, however the only way to protect against other likely sources of sparking is by grounding. Nomex IIIA fiber blends have good resistance to many chemicals such as organics, acids and bases, but are not designed to protect the wearer against molten chemicals or in critical static control operations.

TEST REPORTS: EN ISO 11612, EN 533.

II) KEVNOX APPARELS:

KEVNOX is a Inherently flame retardant fiber. Garments made out of KEVNOX have very good durability due to its fantastic strength & abrasion resistance which the fiber possesses. These garments have a very peculiar property of absorbing moisture more than 13% (As per Handbook 11 : 1974), unlike other flame retardant fibers which are substantially lower to this. This is very good solution for tropical climates where the workers perspire a lot.

Additional Properties;

- It withstands to diluted inorganic acids and alkalis at temperature up to 100 C
- It not burn while in contact with metal particles at 600-700 C
- High Chemical Stability / resistivity.
- Excellent electro-insulation properties.

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FYR<INGEST FIRE ENTRY SUITS

Features

FYR<INGEST brand Fire Entry Suits are made up of 8 layers for maximum protection.

I) OUTER LAYER : Made up of Specially High texturized Aluminised Glass Fibre fabric
II) MIDDLE LAYER : 6 layers of sandwiched insulation.
III) INNER LAYER : The Inner lining is made up of KEVNOX Inherently Flame Retardant fabric capable of absorbing moisture more than 13% (Ref : Handbook 11 : 1974).
FYR<INGEST Fire Entry Suit is a highly insulated suit designed for entry into extreme fires where contact temperatures can reach up to 2000 F (1093 C). protects against high radiant heat up to 3000 F (1650 C). It is fabricated out of special high temperature fabric for maximum protection in total flame entry.

This suit is engineered for maximum personal fire protection. They can be worn in preparation for possible fire eruption or for stand-by operations should a rescue or evasive action require passage through a fire zone. The suit is highly engineered to support the most extreme conditions with 8 layers and fully insulated hood, mitts, boots, and soles.

Applications

INDUSTRIES: Oil & Gas, Steel, Foundries, Glass, Ceramics, Defence.
Also in Stand-By Operations in Oil Tankers, Offshore Drilling Wells & Platforms, Petrochemical & Refining, Military & Homeland Security, Ships, Power Generation, Steel, Lab & Testing Facilities.

Test Reports / Certification

Made from fabrics, which meets European EN 407, EN ISO 11612.

INFERNO GUARD TURNOUT GEAR

Features

Turnout Gear (fire suits) are designed to have three layers. These fire suits are EN 469 certified and CE marked. It is provided with a full sleeved jacket having a front zipper with flap closing. The trousers have suspenders for adjusting the height as per the user. When in bulk quantities, these suspenders for adjusting the height as per the user. When in bulk quantities, these suits can also be customized as per the specifications provided by the clients.

Multiple layers of Jackets and pants with suspender are as follows;

I) OUTSHELL : 6.0oz Nomexiiia fabric

II) MOISTURE BARRIER : Aramid / Kevlar Non Woven laminated with PTFE membrane for maximum breathability and hydrostatic head (waterproof) performance
(EN 343 protection against foul weather)

III) THERMAL BARRIER : Constructed using non-woven ARAMIDE KEVLAR fibres laminated with Nomex / Viscose innermost lining fabric for maximum protection;

Reflective tape : 2" width yellow-silver-yellow reflective trims installed at arm and legs, front, back and bottom on the jacket and pants to enhance high visibility of workers;

Applications

INDUSTRIES : These suits are used by Firefighters in fire brigades, Petrochemicals, Steel, Foundries, Glass & Other plants where there are possibilities of fire hazards.

Certification

CE Certified EN 469.

HEAT RESISTANT GLOVES-I

I) *KEVLAR GLOVES*

Safety Gloves made from Kevlar fabric to provide superior abrasion resistance, cut resistance, and heat resistance with support for temperatures to 300 C. Protective gloves made with DuPont Kevlar brand fiber delivers the power of performance to workers exposed to a variety of cut, abrasion and high heat hazards. Gloves made with Kevlar performance technology meets the specific performance and protection requirements of a diverse group of industries. This enables workers to perform to their fullest potential safely and comfortably in some of the most demanding environments.

I) Full Kevlar : These gloves are completely made of Kevlar fabric. It has a woolen lining & are stitched with Kevlar threads.

II) Leather Kevlar : The palm of the glove is made up of Kevlar and the rest with leather. It has a woolen lining.

TEST REPORTS: EN 388, EN 407.

II) ALUMINISED GLOVES

These are gloves used where the radiant temperature is as high as upto 750 C

I) Aluminised Glass fiber gloves : Outer layer made up of 'GENTEX' brandAluminised glass fibre fabric (Imported from USA) which reflects 90% heat and the second layer is made up of good quality woolen fabric.

II) Aluminised Kevlar gloves : The palm of this gloves has Kevlar fabric while the rest of it is made up of GENTEX' brand Aluminised glass fibre fabric (Imported from USA) which reflects 90% heat and the second layer is made up of good quality woolen fabric.

HEAT RESISTANT GLOVES-II

Features

IV) Fire Fighting Gloves

These are gloves made up of multiple layers of fabric. Generally, outer fabric is aramid blended fabric and the other layers are moisture barrier & thermal liners. These are used by firefighters during Fire Fighting.

TEST REPORTS : CE Certified, EN 659.

V) EXTREME TEMPERATURE GLOVES (1000 C GLOVES)

Multiple layers glove. Made out of Specialty High Temperature resistance fabrics to deal with temperatures exceeding 800-1000 C.

Composition:
i) Outer Layer : Outer Layer of vermiculite coated texturised fiber glass fabric.
ii) Middle Layer : Multiple layers of blended with non-woven carbon fabric insulations.
iii) Inner lining : Inner lining of KEVNOX brand Inherently Flame Retardant fabric capable of withstanding more than 13% moisture as per (Ref : Handbook 11 : 1974).

Application

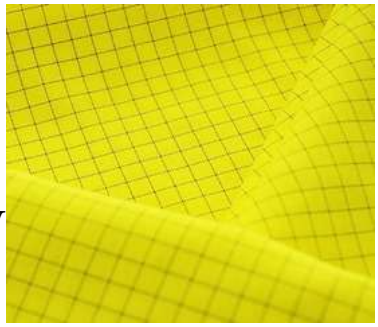
Foundries & Casting Operations, Welding & Hot Works Operations, Glass & Ceramic Plants Production, Power Generation, Petrochemical & Refining, Laboratory & Testing Facilities. It is used in the industries like steel, electrical, oil & gas, construction, glass, fire fighting and all other applications where handling sharp objects and high temperature is involved.

Industries

Petrochemicals, Steel, Foundries, Glass & Other plants where there are possibilities of fire hazards.

ESD CLOTHING-I

What is ESD Clothing ?



The same static discharge that makes a balloon attract hair or gives you a shock after walking on a certain surface can cause real issues in other settings. An electrostatic discharge can ignite flammable mixtures and damage electronic components. This damage isn't always immediately obvious, but can eventually cause products to fail. Static electricity can also attract contaminants in clean environments and cause products to stick together.

The cost of repairing and replacing products damaged by static can be significant. Way back in 1984, researchers estimated losses in the electronics industry directly attributed to ESD amounted to $18 billion. Today's figure is likely to be significantly higher. Static is caused by a large number of materials. This can make it virtually impossible to prevent static build up, even in tightly controlled conditions.

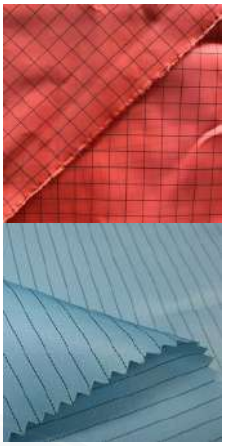
Materials that cause static include:

- Human skin
- Human hair
- Nylon
- Wool
- Fur
- Silk
- Paper
- Cotton
- Wood
- Rubber
- Silicon

And there are many more.,

ESD CLOTHING-II

ESD Fabric



ESD Fabric is specifically designed to prevent static charges passing from a person, or their clothing, into the surrounding environment. They are worn whenever static damage is a concern and are common practice in a number of industries. Some of the most common types of ESD clothing you'll find are boots, coveralls, lab coats, uniforms etc.

ESD Shoe / Sole

ESD (or ElectroStatic Discharge) safety shoes/sole, have lower electrical resistance between 0.1 and 100 (MΩ). The use of ESD safety shoes prevents a build-up of static electrical charges in the human body by sending these charges to the ground in a very safe and controlled manner. They guarantee to prevent the sudden flow of electricity between electrically charged objects caused by contact.ESD and antistatic safety shoes are used in different type of industries to protect sensitive equipment or components from electrostatic discharges, such as aerospace, industrial equipment manufacturing, semiconductor manufacturing, electrical engineers, telecommunications equipment manufacturing, battery manufacturing, computer equipment manufacturing, medical industry, hospitals and many more.

ESD Garments

ESD garments, offer protection from electrostatic fields generated by clothing on the user's body. ESD garments are worn where ever static damage is a concern. ESD garments are designed to be antistatic and low tribocharging because they constructed out of polyester or cotton (or a blend of both) impregnated with a grid of woven conductive fibers. The grid creates a "Faraday Cage" effect around the body of the operator that shields charges generated from the operators clothing from damaging ESD sensitive devices.

Lint Free Mops & Wipes

Effective cleaning & full contamination control are keys to profitable and hygienic production of pharmaceuticals and delicate microelectronics, insufficient or careless cleaning of critical surfaces, precission instruments and machinery is definitely business critical.

COLD STORAGE SUIT FOR LOW TEMPERATURE

Cryogenic / Cold Storage Suit for low temperature
Made out of 4 layers

I. Outer Layer - Water Proof Fabric
II. Inner Two Layers - Special Insulation Material
III. Inner most layer of fleece fabric

Suit consists of Jacket, Trouser, Hood & Gloves

Suitable for temperature upto - 60 degree Centigrade

Designed for comfort & protection for cold storage workers. Wind and tear resistant as well as water repellent.

Application

To Walk in Coolers, dairy & frozen food processing and where ever cold weather protective insulated thermal clothing is needed.

Certifications

Testing done from IRMRA (NABL Accredited Laboratory).

Tested in an environment of (-60 degree C) for a period of 3 hrs. When a person wearing our suit is at 29 degree C which is normal atmosphere temperature in India.