

FLAME RETARDANT WORKWEAR



Long association with oil and gas drilling operations ensures that Zeroflame Retardant garments are designed for use in the most demanding conditions.



Conforms to EN 470-1, EN 531 and EN533 specification for workers exposed to heat.

The Zeroflame production facility offers world class manufacturing capabilities due to its long track record, expertise and ISO 9001 accredited process controls.

Our commitment to superior quality and world class manufacturing practices has been recognized across local, international and industry standards and accreditations. Our specialized workwear has been tested for conformity by leading accreditation bodies throughout the world and accordingly boasts European, American and Canadian approvals, amongst others.

GENERAL:

The Zeroflame garments are designed to protect industrial workers against brief contact with flame, convective heat and radiant heat. Accordingly they will protect the wearer in a flash fire situation and against small drops of molten metal from welding or cutting, but not against large splashes of molten metal in foundry operations. The garments will provide protection from ultraviolet radiation.

GARMENT CARE - WASH INSTRUCTIONS

Wash at 60°C. Do not boil, Do not use detergents containing soap or chlorine, Do not use acids when rinsing, Avoid over drying, Low temperature - residual moisture in tumble dryer 10-15%, Warm Iron. If you have a Zeroflame Acid Resistant garment please note that the washing procedure must include a thorough rinsing to remove any wetting agents followed by hot ironing to regenerate the finish effect.

INTENDED USE

EN531: This garment has been designed to give a specified level of protection against accidental contact with flame, and against certain forms of heat transfer.

The garment conforms with EN 531:1995 "Protective clothing for industrial workers exposed to heat". It meets the following requirements:

- Code Letter A - Limited Flame Spread
- Code Letter B - Convective Heat (to Level B1)
- Code Letter C - Radiant Heat (to Level C1)

It is not designed to protect against molten aluminium and iron splash (Code Letters D and E)

**NOTE:
DIRTY CLOTHING
MAY LEAD
TO REDUCED
PROTECTION**

EN470-1: This garment has been designed to give a specified level of protection primarily for use in welding and cutting operations. The garment conforms to EN 470-1:1995 "Protective clothing for use in welding and similar activities". Industrial workers protective clothing produced to this standard does not spread flame when accidentally contacted with an igniting flame. It protects the wearer against small drops of molten metal from welding or cutting, but not necessarily against large splashes of molten metal in foundry operations.

IMPROPER USE

EN470-1:

- The limited flame spread properties of the clothing will be reduced if the Industrial workers protective clothing is contaminated with flammable materials.
- The Industrial workers protective clothing itself does not provide protection against electric shock. During arc welding it is essential for safety that suitable insulating layers should be provided to prevent the welder contacting electric conductive parts of his equipment.
- The electrical insulating effect of the Industrial workers protective clothing will be reduced by wetness, humidity or sweat.

An increase in the oxygen content of the air will reduce the protection of the industrial workers protective clothing against flame. Care should be taken when welding in confined spaces if it is possible that the atmosphere may become enriched with oxygen.

GARMENT LIFE CYCLE

- Replace when worn in certain areas
- Replace if torn or damaged

STORAGE

Garments to be stored in a cool and dry place, out of direct sunlight

ZEROFLAME ACIDRESISTANT

The acid resist finish is a water resistant finish that is not destroyed by the action of acids or other chemicals. It doesn't allow the cloth to be wetted by the acids and is therefore "acid resist". This finish is intended for cases where risk has been assessed as low and a full liquid permeation barrier is not necessary, i.e when wearers are able to take timely adequate action when their clothing is contaminated. (N.B. Forms the lowest level of chemical protection is intended to protect from a potential exposure to small quantities of spray or accidental low volume splashes).

The finish performs to the German DIN test 4846 where drops of concentrated acids (diluted 1 to 1 with water) - Hydrochloric, Sulphuric and Nitric are placed on the cloth and there is no absorption of these drops after 3 hours of Hydrochloric and Sulphuric and 1 hour for Nitric. The finish also performs in its "Resistance to Penetration of fabrics to Chemical Substances" using the Test Method under the guideline of DIN 32763. In this test Acids or Alkaline solutions are poured into a cone of fabric and there should be no penetration of the fabric within 10 minutes. The Chemicals used in this test are 24% Sulphuric Acid; 65% Nitric Acid; 32% Hydrochloric Acid and 40% Caustic Soda.

If the W4 applied to fabric is wetted with the acid and the garment is allowed to dry or stand in its wetted state for a long period, the cotton in it is destroyed and holes will become visible and after each wash the holes will fray wider. (Therefore cognisance must be taken of this fact, and if acids wet the garment it should be washed and neutralised as soon as possible).