

# EN531

## Protective clothing against industrial heat

**Reference Number:** EN 531

**Status:** European Standard - Product specification (industrial heat and flames)

**Scope:** This standard specifies the requirements for protective clothing against heat and flames.

Hoods and leg protectors are covered by the standard, whereas head, hand and foot protection are not.

Comments: This standard covers also protective clothing worn by welders or firemen, unless specified otherwise in product standards.

### General Requirements (see also EN340)

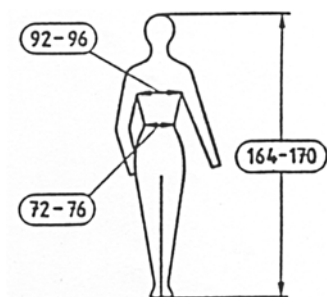
- Shrinkage: not exceed 3 % after 5 cleaning cycles;
- Sufficiently overlap between jacket and trousers;
- The trouser legs long enough to cover the upper part of the shoes and no turn ups;
- Pocket-covers are mandatory and at least 20 mm larger than the opening of the pocket;
- Metallic closures covered or treated to prevent sticking of molten metal;
- The outer seams directed downwards
- "Quick release" closures to allow taking off the garment in case of emergency
- Specially reinforced in area's which are especially at risk, e.g. between the legs, at neck and shoulders

## Performance Criteria

General	The garment shall comply with the flame spread criterion (code A) and obtain at least level 1 for at least one of the other criteria (code B to E)
Flame Spread	- Does not continue to burn  - Forms no hole  - Does not melt or drip  - After-flame time $\leq 2$ s  - After-glow time $\leq 2$ s
Convective Heat (EN367)	- 5 performance levels (B1-B5)
Radiant Heat (EN366 method B)	- 4 performance levels (C1-C5)
Molten Aluminium Splash	- 3 performance levels (D1-D3)
Molten Iron Splash	- 3 performance levels (E1-E3)

## Size Designation

- A Pictogram I used



## **Marking**

- On a clearly visible and legible label resisting to the foreseeable number of cleaning cycles
- Contents
- The CE marking (as appropriate for PPE category III)
- Cleaning and maintenance symbols
- Name or logo of the manufacturer
- Type of the garment (manufacturer's reference)
- Size designation (pictogram)
- Reference to EN 531
- Pictogram "flame"
- Reference to the availability of product information (pictogram "booklet")
- Performance levels (for code A and for at least one of the codes B to E).

## **Information for the user**

- To be provided by the manufacturer in at least the official language(s) of the country of use; precise and understandable for the user
  - Contents
  - Name and address of manufacturer or his authorized representative
  - Name and reference of the product
  - Reference to the relevant product standard
  - Explanation of pictograms, other markings and of the performance levels obtained
  - Instructions for use, e.g. safety checks before use, putting on and off the clothing, specific area of use and limitations of use, storage and maintenance instructions, instructions for cleaning and disinfection, spare parts, etc.
  - A warning: "soiled clothing protects less"
  - Packaging instructions for transport

## Pictogram



EN 531

A B C D E

X X X X