

PERSONAL PROTECTIVE EQUIPMENT

The garments should be of good quality leather, solidly constructed, and provided with fastenings to prevent gaping during body movement. Fastenings should be so designed that the wearer can rapidly and easily remove the garment. There should be no turned-up cuffs or other projections to catch and hold hot metal. Pockets should have flaps which can be fastened shut.

For ordinary protection against hot metal, radiant heat, or flame hazards of somewhat more intensity than those represented by welding operations, asbestos and wool, as well as leather clothing is used. Specially treated asbestos clothing has been developed which is impervious to metal splash up to 3,000 F.

Requirements for asbestos and wool garments are in general the same as those for leather, except that metal fastenings should be covered with flaps to keep them from becoming dangerously hot.

The most common types of asbestos clothing are the leggings and aprons usually worn by foundrymen working with molten metal. Such leggings should completely encircle the leg from knee to ankle, with a flare at the bottom to cover the instep. The design of the leggings should permit rapid removal in emergencies.

The front part of the legging may be reinforced to provide impact protection when it is required. The most common material for this reinforcement is fiber board.

Aluminized clothing. Where men must work in extremely high temperature up to 2,000 F, such as furnace and oven repair, colong, slagging, fire fighting and fire rescue work, aluminized fabrics are essential. The aluminized coating reflects as much as 90 per cent of the radiant heat and the underlying material insulates against the remainder. Some of these suits consist of separate units of trousers, coats, gloves, boots, and hoods. Others are one-piece from head to foot. Some suits used in industrial operations are air-fed to reduce heat and increase comfort.

Aluminized heat resistant clothing generally falls into two classes:

1. *Fire entry suits* (Figs. 36-28 and -29) are used where the temperatures may exceed 1,000 F, as in a kiln or furnace, or where men must move through burning



Fig 36-30. Fire proximity suit made of reflective coated material for use in fighting fires without entering the burning area.

areas for fire fighting or rescue operations. These suits usually are of one piece design, constructed of aluminized asbestos or glass fiber, with layers of quilted glass fibers and a wool lining on the inside.

2. *Fire proximity suits* (Fig 36-30) are

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