



SERIOUS BURNS INVOLVING DISPOSABLE OVERALLS

INCIDENT

A fitter wore disposable polypropylene overalls to perform a greasy task on a drilling rig. After completing the task he went to assist another worker who was attempting to unscrew the end cap of a hydraulic ram which was lying on the ground. The fitter did not remove the disposable overalls. The oil had been drained from the hydraulic ram and the pipe fittings were open. The fitter heated the end cap with an oxy acetylene torch while the worker attempted to undo the end cap with a "C" spanner.

The end cap started to unscrew and a fine spray of hydraulic oil came out of the thread section and was ignited. The burning spray contacted the left arm of the fitter's overalls and they ignited. The fitter received burns to his face, airway, left lower arm, right wrist and both hands. The majority of the burns were a result of the attempt to remove the overalls and extinguish the fire.

IMMEDIATE CAUSE

While polypropylene does not support combustion it will melt at 150°C and contract from the flame. In this case it was possibly the grease on the overalls which supported combustion.

COMMENTS AND PREVENTATIVE ACTION

The packaging of the particular brand of overalls contains a warning which states:

Overalls are not recommended for use in situations where large amounts of oil are present.

CAUTION

Do not expose garments to intense heat or direct flame.

Disposable overalls are intended for use in light work duties such as in clean rooms, dusty atmospheres and changing car tyres rather than by heavy equipment fitters.

Any type of work clothing issues to employees should be fit for its intended purpose.

Any employer who makes disposable overalls available must ensure that all personnel are aware of the hazards associated with them and that employees are properly trained in their use.

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