

# Safety for welders: hard hats for construction



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BUSTER**

Safety section's main objective is to prevent accidents but never-the less accidents do happen.

Accidents occurring within the factory premises should be reported to safety section immediately. Accidents which cause a worker to be absent from work for more than 48 hours are called reportable accidents and have to be reported to the Inspector of Factories. The frequency rate of accidents is given by the index  $\text{No. of reportable accidents} \times 106 / \text{No. of hours worked}$  and the severity rate of accidents by the index  $\text{days lost due to reportable accidents} \times 106 / \text{No. of hours worked}$ . Safety sections investigate and analyze not only accidents causing personal injury but also accidents causing damage to property. The causes whether due to carelessness.

The Bhopal accident in Dec. 1984 at the union carbide insecticide plant is a tragic example of what could happen if safety engineering is neglected.

Safety engineering is generally placed under plant maintenance department.

The different aspects of safety engineering are outlined below: (a) Personal safety (b) Goggles for welders (c) Safe environment.

**(a) Personal safety:**

Protection of the worker from moving and rotating parts of the machinery, flying chips, splashing oil/coolant by means of guards. This section also ensures that personal safety appliances as listed below are issued to the workers and used by them.

**(b) Goggles for welders:**

Hard hats for construction workers, asbestos gloves for furnace operatives, asbestos shoes for foundry workers; tested rubber gloves for electricians working on live lines.

**(c) Safe environment:**

The following measures ensure a safe environment. Industrial exhaust to capture at source abrasive dust particles, toxic fumes, smoke etc., isolating stores containing explosives, gases etc. treatment of acid, alkali and cyanide effluents, automatic fire alarms and fire quenching systems for fire hazardous places; explosion proof electrical wiring and fittings in spray paint booths.

On the part of the worker, defective equipment, lacuna in the working method and procedure, non-compliance of safety regulations by the worker/supervisor and identified and corrective action taken. Safety section assists personnel and welfare department in interpreting the provisions of the workman's compensation act and recommends the entitlement of monetary compensation on the job and off the job training programs are planned for the employees. Safety inspector should periodically inspect the factory for unsafe conditions such as lack of guards, inadequate ventilation and improper lighting etc.

and arranges to: i. Remove the hazards. ii. Shield the hazards by enclosures and guarding devices. iii. Place warning boards.

iv. Recommended to higher authorities the appropriate action to eliminate unsafe conditions. v. Follow up on the recommendations. Factories act 1948 vide clause 40-B stipulated the appointment of a safety inspector and the duties and responsibilities of the safety engineering department.