

SAFETY MANUAL

Factories Act, 1948 is a Central Legislation which is enforced by State Government through Inspectorate of Factories. There are number of safety provisions contained in the said act which are required to be ensured by occupiers of various factories. All safety measures may not be applicable in all factories across the board. Safety measures applicable to a particular factory would depend upon the nature of manufacturing process being carried on in the factory. In order to sensitize the industries about safety provisions, this safety manual containing broad guidelines about safety measures contained in various sections of Factories Act, 1948 has been prepared. However in order to have legal interpretations/clarifications, Factories Act, 1948 is required to be referred. The silent features of various safety provisions in brief is as under:-

Section-7A(1) General Duties of Occupier

Every occupier shall ensure, so far as is reasonably practicable, the health, safety and welfare of all workers while they are at work in the factory.

Section-21 Fencing of Machinery

In every factory the machines shown in Section-21(1) are required to be fenced properly.

Section-22 Work on or near machinery in motion

If it become necessary to examine any part of machinery referred in Section-21, while the machinery is in motion, such examination is required to be done by a specially trained adult male worker wearing tight fitting clothing(which shall be supplied by occupier).

Section-23 Employment of young person on dangerous machines

No young person shall be required or allowed to work at any machine to which this section applies, unless he has been fully instructed as to the dangers arising in connection with the machines and precautions to be observed and-

- (a) has received sufficient training in work at machine, or
- (b) is under adequate supervision by a person who has thorough knowledge and experience of machine.

Section- 24 Striking gears and devices for cutting off power

In every factory suitable devices for cutting of power in emergencies from running machinery shall be provided and maintained. Further,

when a device which can inadvertently shift from “off to on” position, is provided in a factory to cut off power, arrangements shall be provided for locking the device in safe position to prevent accidental starting of machine.

Section- 25 Self Acting machines

Outward or inward transverse distance of self acting machines from fixed structure shall not be more than 45 cm.

Section- 26 Casing of new machinery

In case of machinery driven by power, every set screw, bolt or key on revolving shaft, spindle, wheel or pinion shall be properly guarded.

Section-27 Prohibition of employment of women and children near cotton openers

No women or child should be employed in any part of factory for pressing cotton in which cotton opener is at work.

Section- 28 Hoists and Lifts

In every factory, every lift and hoist shall be properly maintained and shall be thoroughly examined by Competent Person at least

once in every period of 6 months. Maximum safe working load shall be displayed on lift and hoists.

Section-29 Lifting machines, Chains, Ropes and lifting Tackles

Lifting machines, Chains, Ropes and lifting Tackles shall be properly maintained and thoroughly examined by Competent Person at least once in every period of 12 months. Safe working load shall be displayed on such equipments

Section-30 Revolving Machinery

Safe working peripheral speed of grinding stone or abrasive wheel, speed of shaft or spindle up on which wheel is mounted, and diameter of pulley upon such shaft or spindle necessary to secure such speed shall be displayed near such machine where grinding operation is carried on.

Section- 31 Pressure Plants

Pressure vessel shall be thoroughly examined by competent person externally once in a period of 6 months and internally once in a period of 12 months and the same shall be maintained in good condition.

Section- 32 Floor, Stairs and Means of Access

All floors, steps, stairs, passages etc. shall be of sound construction, properly maintained and shall be kept free from obstructions. Stair cases shall be provided with handrails.

Section- 33 Pits, Sumps, Opening in floors etc.

Tank, pits etc, or opening in ground or in floor shall be securely covered or fenced.

Section- 34 Excessive weights

No person in the factory should be allowed to lift, carry or move any load so heavy as is likely to cause him injury.

Section- 35 Protection of Eyes

Suitable goggles shall have to be provided to the workers where they are exposed to excessive light or risk of injury to the eyes from particles thrown of in the course of such process.

Section- 36 Precautions Against Dangerous Fumes, Gases etc.

No person shall be allowed to enter in the chamber, tank, pit in which any gas, fume, vapor or dust is likely to be present unless it is provided with man hole of adequate size and unless a certificate

from competent person is issued to the effect that space is reasonably free from gases etc.

Section-36A Precautions regarding the use of Portable electric light

No portable electric light or any other electrical appliances of voltage exceeding 24 volts shall be permitted for use inside any chamber unless adequate safety devices are provided and if any inflammable gas, fume or dust is likely to be present in the chamber, only flame proof light is permitted inside such chamber.

Section-37 Explosive or inflammable dust, gas etc.

If any dust, gas, fumes, or vapors are produced in the manufacturing process, all practicable measures shall be taken to remove dust, gas, fumes etc. by way of installing exhaust appliances.

Section-38 Precautions in case of fire

In every factory, all practicable measures shall be taken to prevent outbreak of fire and to provide and maintain-

- a) Safe means of escape for all persons in the event of fire.
- b) Necessary equipments and facilities for extinguishing fire.

c) Worker should be familiar with means of escape in case of fire and should be adequately trained in the routine to be followed in such cases. Bigger factories are required to provide fire hydrants.

Section-40-B Safety Officers

If in a factory, 1000 or more workers are ordinarily employed, the occupier is required to appoint safety officer.

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