

# Applications of Safety in Manufacturing Industry

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## ABSTRACT

The main aim of safety is everyone remains safe at the working time in the manufacturing industry. Safety of workers or employees at the workstation is main goal of any organization. There are many big accidents happen in the manufacturing industry due to lack of safety arrangements at workplace in recent time. These accidents made major causality like death of workers, injury to workers, failure in machines and tools etc. in the manufacturing industry. The safety is must for any industry to reduce the chances of any accident happen with the any employee at workplace. So, Safety is the main part of manufacturing industry at modern time. The organizations have to implement good safety procedures at the workplace to make it safe working place for workers. With the help of implementation good safety procedures and equipment at the workplace, we can minimize the chances of any accident happen at workplace or can minimize the causality if any accident happens. In modern days, Safety is the main part of manufacturing industry.

**Keywords :** Safety, Safe work environment, Safety of workers, Safety procedures, Safety rules, Industrial Safety.

## I. INTRODUCTION

Safety is the method of keeping the workers safe at the workplace. It reduces the chances of any accident happening at the workplace with workers or any other. It gives the confidence to the workers for working without any fear. It helps to provide a safe working environment to workers in the manufacturing industry (Deepak Dhouchak, 2017). Safety is the main part of any workplace for smooth and continues working. So, the good safety procedures are to be followed at the workplace. Lack of safety can affect the working of any manufacturing plant.

Safety main purpose is eliminating hazards and making a safe working atmosphere (Kaushik, P. 2011). The workers must wear the Personal Protective Equipment (PPE) during the working in the industry to be safe. The Personal Protective Equipment (PPE) kit has safety helmet, safety goggles, ear protection, safety shoes, safety hand gloves etc. (Deepak Dhouchak & Naveen Khatak, 2017). Fire extinguisher should be present in every section of the industry and their expiry dates should be checked. They should be replaced if expired as soon as possible.



**Figure 1 :** Installation of Fire Extinguisher in Manufacturing Plant

Every employee or worker of the industry must be given proper information about dangerous materials and process (Deepak Dhouchak & Lalit Kumar Biban,

2017). They should be informed about dangers and health risks. Every manufacturing industry must be ready with safety procedures and emergency plans.

Details of colors of safety helmets:

**White Color:** - This color helmet is used by engineers, managers, supervisors and foremen.

**Green Color:** - This color helmet is used by safety officers.

**Red Color:** - This color helmet is used by fire fighters.

**Blue Color:** - This color helmet is used by electricians, carpenters and other technical operators.

**Gray Color:** - This color helmet is used by site visitors.



**Figure 2 : Safety Helmets**

**Yellow Color:** - This color helmet is used by labor and earth moving operator.

**Brown Color:** - This color helmet is used by welders and workers with high heat application.



**Figure 3 : Safety Jackets**

There are some safety guidelines that should be followed in the manufacturing industry:

- At least one First-Aid kit with necessary medicines should be present per 30 workers at the workplace.
- Everyone must have to wear safety helmet and safety shoes before entering in the workplace.
- Fire extinguishers must be present at the workstation and they shall be maintaining and filling regularly.
- A safety officer is must be appointed in the company and he will regularly give safety guidance to the workers about safety.
- Welders and machine operators must have to wear safety glasses and safety gloves.
- Always make emergency plan for emergency conditions in the manufacturing plant.
- Regularly check the safety procedures and plans in the company.
- Always prepared for facing any accident at workplace.



**Figure 4 :** White Color Safety Helmet

### Steps of implementing safety in industry:

1. Safety department provide personal protective equipment (PPE) to the every worker.
2. Make compulsory to wear all personal protective equipment for every worker at the workplace.
3. Proper and regular maintenance of machines should be done.
4. Regular checking of expiry of fire extinguisher and replace them after expired.
5. Regular checking of expiry of medicines of First-Aid and replace them after expired.
6. Emergency procedures should be present for emergency conditions.
7. Workers should be regular trained about safety guidelines and safety awareness.
8. Safety officer should have check safety procedures and equipment installed at workplace daily.

### Aims of Safety

1. Creating safe workplace.
2. Reduces chances of accidents.
3. Increase workers safety.
4. Always prepared for industrial accident.
5. Always have emergency plans.

### Applications of Safety in Manufacturing Industry

- It increases the workers safety in the plant of manufacturing industry.
- It helps to create a safe work environment in the plant of manufacturing industry.
- It reduces the chances of accident happening in the manufacturing industry.
- It gives the confidence to workers.
- It make prepared for facing any industrial accident in manufacturing industry.

- It aware the workers about their safety at the workplace.
- It creates the safe and better working condition for workers at the workplace.
- First-Aid treatment can be given at the workplace.
- Workers feel more secure at the workplace.
- Emergency plans are always present if any accident occurs at workplace.

## II. CONCLUSION

Safety creates the more familiar condition at workplace for working. Safety improves the safety of workers in the manufacturing industry. It always prepared the workers and workplace for facing any industrial accident in manufacturing industry. After implementing safety, the workplace is more secure for working freely.

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