

FIRE

The image features the word "FIRE" in a bold, sans-serif font. The letters are hollow and filled with a bright, orange and yellow fire that appears to be burning from within. The background is a dark, gradient blue-black, which makes the fire stand out prominently. The entire graphic is centered within a white rounded rectangle.

A train fire is different from a fire in other Places in the manner in which it breaks out, grows and spreads, and in the method of fighting it, as well as the damages it causes. Fire on a running train is more dangerous than a static one, because the fanning effect may spread the fire very quickly to other coaches and in panic the passengers might jump out of running train as it had happened in past train accidents.

The following points summaries the characteristics of a train fire, which need special consideration when deciding upon counter measures

- 1) A train consists of long narrow vehicles with limited exits coupled with each other.
- 2) High traveling speeds prevent quick escape and assist the rapid spread of fire.

3) Wide range of track conditions, including confined sections such as bridges, tunnels, ghats, etc., make it difficult for passengers to get off the vehicle easily in times of emergency.

4) Restriction in movement of passengers and fast spread of fire aggravates the situation.

5) A large number of passengers traveling on trains are attended to by a small team of train crew.

6) Even a delay of few initial seconds due to inadequacy of direct communication with the crew can be devastating.

7) Even smoke emission in a confined place may lead to panic

Principle sources of Major fire Hazards:-

- I. Arson-Principally caused by sabotage.
- II. Electrical equipments-caused by overloading wiring and equipment, insulation failure, obstruction of cooling air flow, short circuit and bad connection, It is also caused by using poor grade material or equipment
- III. Gas cutting & welding fires- caused by arc welding sparks or gas welding/cutting flames while working near inflammable article.

- IV. Children playing with fire-caused due to lack of fire awareness.
- V. Carelessness & Ignorance-Cased due to lack of fire awareness.
- VI. Smoking –caused due to smoking in NO SMOKING area.
- VII. Naked lamps or bulbs-flame of open lamps(candles etc.) or heated electrical lamps may cause fire if not used properly

VII. Burning of Rubbish-Often burns because of lack of attention and consideration to be a no loss affair but is dangerous if transmitted to nearby area.

Safety consciousness-

- It is the ability to recognize unsafe actions.
- It is alertness to hazards.
- It is determination to stay accident free.

Primary causes of accident.

- a) Unsafe Condition
- b) Unsafe Action

The following may be referred to as unsafe condition.

- I. Bad housekeeping
- II. Bad Machineries
- III. Inadequate training
- IV. Improper maintenance of machineries.

The following may be referred to as Unsafe actions.-

- I. Negligence
- II. Carelessness
- III. Not Using PPE
- IV. Using Wrong Hand Tools.

Human factor resulting in unsafe actions

- I. Mental of Physical characteristics.
- II. Violation of safety rules & Procedures
- III. Using Improper tools

IV. Inadequate skill & training

V. Failure in Using PPE

VI. Lack of safety consciousness.