Machine Safety Moving Right Along Stats and Facts



FACTS

1. Hazards associated with working near or on machinery vary depending on the exact machine used.
2. A risk assessment should be conducted for each machine or situation, and in some cases, before each use. It may be necessary to involve individuals with specialized or technical expertise (i.e., engineer, safety professional, manufacturer, etc.).
3. People can be struck and injured by moving parts of machinery or ejected material. Parts of the body can also be drawn in or trapped between rollers, belts and pulley drives
4. Sharp edges can cause cuts and severing injuries, sharp-pointed parts can cause stabbing or puncture the skin, and rough surface parts can cause friction or abrasion
5. People can be crushed, both between parts moving together or towards a fixed part of the machine, wall or other object, and two parts moving past one another can cause shearing
6. Parts of the machine, materials and emissions (such as steam or water) can be hot or cold enough to cause burns or scalds and electricity can cause electrical shock and burns
7. Injuries can also occur due to machinery becoming unreliable and developing faults or when machines are used improperly through inexperience or lack of training

STATS

- 22% of fatalities in the industry are as a result of contact with moving machinery often associated with reactive maintenance and a failure to correctly isolate all sources of energy.
- Nearly 50 % of work-related amputations occur in manufacturing plants. (Occupational Safety and Health Administration)
- Six injuries associated with moving machine parts are bruising, lacerations, amputations, crushed or broken bones, burns, and electrical shocks.
- About 20 percent of worker fatalities in the United States are caused by

contact with equipment or entanglement in running machinery. (Bureau of Labor Statistics)

- Three types of dangerous moving parts requiring guarding are points of operation (the point where the machine performs work such as cutting, shaping, or drilling); power transmission components (such as flywheels, pulleys, shafts or chains); and other parts which are in motion when a machine is operating.