Soil Compactor Safety Stats and Facts



FACTS

COMPACTOR RISK AND HAZARDS

1. **ENTANGLEMENT:** Can anyone’s hair clothing, gloves, necktie, jewelry, cleaning brushes, rags and other materials become entangled with moving parts of plant or materials in motion?
2. **CRUSHING:** Can anyone be crushed?
3. **CUTTING:** Can anyone be cut, stabbed, or punctured?
4. **SHEARING:** Can anybody’s body parts be sheared between two parts of the plant or between a part of the plant and work structure?
5. **HIGH TEMPERATURES:** Can anyone be burnt due to contact with moving parts or surfaces of the plant or materials handled by the plant?
6. **HIGH PRESSURE FLUID:** Can anyone come into contact with fluids under high pressure?
7. **ELECTRICAL:** Can anyone be injured by electrical shock or burnt
8. **ERGONOMIC:** Can anyone be injured
9. **SUFFOCATION:** Can anyone be suffocated due to lack of oxygen or atmospheric contamination?

STATS

Case files were compiled for 58 injury events involving compactor overturns.

- More than half – 55% – of the compactors involved in the 58 overturns did not have ROPSs.
- The most serious human factor was a lack of seatbelt use, or an operator’s unbuckling a seatbelt during an overturn and attempting to jump.
- 58 cases was restricted to a 90° overturn, except one. The exception was a model landfill pad-foot compactor with an atypical tricycle design that overturned, crushing the cab, and killing the operator. The compactor overturned twice (720°), with the cab offering little resistance to the overturn, thus making it ineffective as an ROPS.
- Operators and drivers have been killed or seriously injured as a result of a lack of ROPSs and seatbelts on compactors. Compactors with ROPSs were found to restrict overturns to 90°, whereas compactors without ROPSs were found to average more than two revolutions per event.

- In 19 accidents, machines were equipped with a ROPS (Roll-Over Protection Structure), but operators were not wearing seat belts. 14 fatalities resulted—many of which occurred, says the report, when the operator was ejected or jumped from the machine and was pinned under the ROPS. 7 accidents involved machines without a ROPS and run by operators not wearing a seat belt. 7 fatalities. 5 accidents involved machines fitted with a ROPS and operated by workers wearing seatbelts. No fatalities.