Grinders Stats and Facts

FACTS

1. **Contact with wheel.** Angle grinders can cut through stone, concrete, metal and other strong materials, so they have no trouble cutting through human flesh and bones.
2. **Wheel breakage.** The risk of breakage is inherent in every abrasive wheel. This risk must be kept low by checking discs, correctly mounting, and safely using angle grinders.
3. **Contact with projectiles.** Projectiles can be caused by the wheel bursting (covered in point 2 above) but also by the material being cut or ground.
4. **Kickback.** Kickbacks can cause the user to lose control of the tool, and it can hit the worker or be dropped causing foot and leg injuries. Always wear PPE including eye, head, foot and hand protection, and suitable clothing.
5. **Entanglement.** Wearing the right clothing is important to protect you but wearing the wrong clothing can also cause an angle grinder accident. As with any rotating disc, there is a risk of entanglement.
6. **Fire.** When using an angle grinder, you are likely to produce a large number of sparks. You may not be able to stop this, but you do need to make sure you are in a safe environment for the use of an angle grinder.
7. **Electric shock.** Many angle grinders are electric, and you should consider accidents caused by portable electrical equipment.

STATS

- Nearly 25,000 were injured nationwide while using angle grinders (U.S. Consumer Product Safety Commission). The majority of these injuries occur from an abrasive blade shattering, diamond-blade segment loss, or the angle grinder kicking back.

- Occupational Safety and Hazards Administration (OSHA) statistics show a 20% fatality rate for injuries resulting from grinder or saw kickbacks. The other 80% of injuries were serious enough to require hospitalization.
- The Royal Society for the Prevention of Accidents' Accident Surveillance Systems data ranked angle grinders as the third most dangerous tools, with 5400 injuries recorded annually. The vast majority of these injuries are caused by a shattering of the abrasive wheel. Several case studies available in the literature suggest a propensity towards head or eye injuries, however upper limb injuries are also common.
- WorkSafe has released new guidance on the use of workplace angle grinders after 31 serious workplace injuries with them over the past 12 months.