

CUTTING DISC FAILURE

Details of Incident

An employee was very fortunate not to have been more seriously injured whilst cutting some steel, when a 230mm cutting disc being used in a hand held grinder broke away from its centre hub. The disc struck the employee's cheek at high speed, causing cuts and grazes to his face.

Key Findings

- The disc was not purchased by the site, it had been obtained via a contractor. It was only 1.9mm thick and had exceeded the manufacturers warranty expiry date
- The employee was wearing safety goggles, but not a full face visor
- He had received training in the use of abrasive wheels and the work piece was securely clamped

How Could This Incident Have Been Avoided?

- Arrange for the steel to be pre cut off site
- Use an alternative / better method of cutting
- Ensure discs are in good order, know how they have been used / stored and their expiration date
- Check discs thoroughly for defects before use
- Ensure the rpm rating of the disc is not exceeded
- Avoid the use of 1.9mm thickness discs
- Use cutting discs with great care; the force applied should be minimal and from directly above the cut being made
- Wear a full face visor and goggles

Key Review Points

- Ensure Safe Systems of Work are in place for the use of hand held grinders
- Limit their use to authorised / competent personnel
- Purchase the right discs for the task and store them correctly
- Use the necessary PPE for the task, in this case goggles and a visor



Task being undertaken

Look after yourself and each other

Don't let anyone act unsafely, always stop unsafe practices.

Personal Protective Equipment

Always wear the correct PPE.

Tools and Equipment

Use the right, well maintained, tools/equipment for the job. Never make do.

Safe Systems

Follow safe systems of work, site rules, signage and traffic signals.