

# UK Safety Alert

## Entanglement With a Pillar Drill Results in Broken Thumb

### Details of the Incident

A Fitter sustained a broken thumb, following an entanglement incident involving a conventional pillar drill. As the Fitter was drilling a metal workpiece, a section of swarf from the drill bit caught and entangled his “glove”, fortunately he was able to activate the emergency stop and deactivate the drive mechanism.



Upon investigation it appears the workpiece was not clamped to the drill table, that the interlocked guard may not have been fully engaged, and that the spindle guard interlock mechanism was faulty. Further and crucially the Fitter was wearing welding gauntlets and placed his hand in close proximity to the unguarded rotating drill bit.

### Learning Points

This type of incident is not uncommon and as such the HSE has issued guidance note **PM83 Drilling Machines: Guarding of Spindles and Attachments**. The guidance contained in PM83 lists the principle control measures necessary to ensure the safety of operators;

- Ensure the effective **safeguarding of moving parts by guarding where practicable**. Do your drilling machines have guards, interlocks and trips fitted? Are they fully operational and form part of **workplace inspections**?
- Have in place suitable arrangements and equipment to **secure the clamping of the workpiece**.
- Have in place **safe systems** to demonstrate that operators (be they employees or third party contractors) are adequately **trained, supervised** and **authorised** to use specialist equipment.
- Appreciate that inappropriate PPE can increase the risk of entanglement. Nearly half of all drilling machine accidents involve the entanglement of inappropriate gloves. A **PPE risk assessment should** ensure that no loose clothing should be worn, and that gloves selected should be less likely to be entangled and tear relatively easily, employers should consult with their PPE supplier where necessary.
- Have in place safe systems of work based on the findings of a **full risk assessment**. Whilst not exhaustive such safe systems would ensure that operators are fully trained, have read the manufacturers instructions, report defective equipment, do not operate equipment with loose clothing, bandages or rings and maintain good housekeeping standards in and around the workshop and drilling equipment.