

## Drill SOP

### Basic operating procedure

- Secure the material that needs to be drilled. Insert the drill bit into the chuck and tighten it. If you're using a chuck key, make sure you take the key out before starting the drill.
- Push the drill bit into the surface of the material. If the material is metal, it's best to centre-punch a small indentation into the surface first, so that the tip of the drill bit doesn't skid off the mark when it starts to turn.
- Start up the drill and push down firmly. In general, use slower speeds for hard materials.
- While you're drilling, pull the drill back periodically to clear the waste material from the hole and drill bit. This will help to stop the drill bit from jamming or overheating.
- On larger drills use both hands to hold the drill, with one hand on the side handle, to avoid the problem of the drill suddenly flicking back in the opposite direction if the bit gets jammed.
- On deep holes, pay constant attention to the angle you're holding the drill at, so you don't start to change the direction of the hole while you're drilling. Keep the drill bit turning until you withdraw it from the hole.