

Left-Handed Drill Bits for Screw Extraction

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Drilling & Cutting Tools



Photo: Bushytails at English Wikipedia — CC BY-SA 3.0 — via Wikimedia Commons (Left_hand_drill_bit.jpg)

Left-handed drill bits rotate counter-clockwise and are used with a screw extractor: drilled into a broken screw or bolt, they often grip and unscrew the fastener while drilling, and when not, the hole guides the extractor.

Key Features

- Counter-clockwise cutting
- HSS construction
- Sets 3-13 mm typical
- Flutes clear the swarf
- Compatible with extractor sets

Typical Uses in the Workshop

- Remove broken screws and bolts
- Start extraction holes in studs
- Free seized fasteners by drilling
- Salvage parts with broken screws

Safe Operation

1. Centre-punch the broken fastener
2. Set the drill to reverse rotation
3. Drill slowly into the screw centre
4. Watch for the screw turning out
5. If it holds, use the extractor next

SAFETY NOTES

- Wear eye protection - broken steels are brittle
- Drill with light pressure and control
- Keep fingers clear of the work
- Secure the part in a vice or clamp
- Stop if the bit skates sideways

Maintenance & Consumables

- Clean the bits after use
- Check tips for wear and chips
- Store in the extractor kit
- Replace worn sizes
- Keep the kit with the extractors

Specification & Buying Notes

Left-hand drill sets with the matching extractors cover screw recovery. Quality HSS drills bite; cheap ones skate on hardened steel. Buy as the paired kit with extractors.