

Optical Center Finders

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Measuring & Inspection



Photo: Gustavo Romero — Public domain — via Wikimedia Commons (2-7_Attacks_Range_400_Image_1_of_10_6554435_210305-M-YI614-1088.jpg)

An optical centre finder locates the centre of scribed lines, holes and features on the mill visually: crosshairs in the eyepiece align with the mark, and the spindle is centred over it without touching the work.

Key Features

- Crosshair optics in a body
- No contact with the workpiece
- Spindle-mounted fit
- Illuminate : 3D hole viewing
- Accurate on fine layout lines

Typical Uses in the Workshop

- Centre over scribed intersection points
- Align spindle to holes and features
- Set zero from layout marks
- Non-contact fixturing

Safe Operation

1. Fit the finder in the collet
2. Bring the eyepiece to focus on the mark
3. Align the crosshairs over the line
4. Lock the axes and set the zero
5. Remove before machining

SAFETY NOTES

- Keep the spindle stopped - the finder is optical
- Do not crash the body into work
- Store with the lens protected
- Clean the optics with a brush
- Handle the eyepiece carefully

Maintenance & Consumables

- Protect the lens with the cap
- Clean optics with a soft brush
- Check the body runs true
- Store in its case
- Replace damaged eyepieces

Specification & Buying Notes

A quality optical centre finder with crisp crosshairs speeds manual mill centring. Buy with a protective case. Cheap mouldings cloud the view.