

Heavy-Duty Drafting Compasses

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Design & Documentation

A heavy-duty drafting compass draws precise circles and arcs with adjustable radii, interchangeable pen and pencil points, and a centre wheel for fine adjustment. It is a core instrument for technical drawings, geometry and design work.

Key Features

- Adjustable leg lengths and radii
- Pencil, pen and divider points
- Centre adjustment wheels
- Heavy-duty metal construction
- Lengths 120-200 mm

Typical Uses in the Workshop

- Draw circles and arcs in technical drawings
- Divide lines with dividers
- Transfer measurements
- Construct geometric layouts

Safe Operation

1. Set the radius on the rule scale
2. Anchor the point and swing the pencil leg
3. Keep the pressure light and even
4. Use the centre wheel for fine settings
5. Check the circle closes on itself

SAFETY NOTES

- The anchor point is sharp - handle with care
- Do not press so hard the paper tears
- Keep the instrument in its box
- Do not use as a scribing tool on metal
- Store with the points protected

Maintenance & Consumables

- Keep the pivot joints firm
- Replace the pencil lead
- Sharpen or replace the anchor point
- Clean the adjustment gears
- Store in the case

Specification & Buying Notes

A heavy-duty compass with interchangeable points covers school geometry and technical drawing. Quality pivots hold the radius; cheap compasses slip mid-circle.