

Webster Hardness Testers

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

The Webster hardness tester measures the hardness of aluminium and other soft alloys by pressing a pin into the surface with a hand lever and reading the resistance in Webster units, converting to Brinell on the chart. It is the portable workshop hardness check for soft metals.

Key Features

- Hand-held hydraulic operation
- Webster W-20 type for soft alloys
- Direct and converted readings
- Compact field units
- Replacement pins

Typical Uses in the Workshop

- Check aluminium sheet and extrusion hardness
- Verify heat-treatment results
- Compare supplied material grades
- Portable quality checks

Safe Operation

1. Test on a clean flat surface
2. Operate the lever to press the pin
3. Read the scale value
4. Convert using the included chart
5. Compare to the spec

SAFETY NOTES

- Do not test hardened steel with soft-alloy testers
- Keep fingers clear of the pin
- Use the correct instrument for the material
- Store with the pin retracted
- Handle gently - it is precision

Maintenance & Consumables

- Check the calibration with the test block
- Replace worn pins
- Keep the mechanism lubricated
- Protect in its case
- Recertify as needed

Specification & Buying Notes

Buy the tester matched to the alloys used - aluminium needs the soft-metal model. Quality units read repeatably. Include a calibration test block.