# Ultrasonic Thickness Gauges

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

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An ultrasonic thickness gauge measures material thickness from one side by timing ultrasonic echoes, checking pipe walls, plates, tanks and sheet for thinning, corrosion and defects without cutting access.

## Key Features

- Measurement ranges 0.5-300 mm steel
- Ultrasonic transducer probes
- Velocity adjustment per material
- Backlit displays
- Calibration blocks

## Typical Uses in the Workshop

- Check pipe and tank wall thickness
- Inspect sheet and plate corrosion
- Verify machined part thickness
- Detect hidden thinning and defects

## Safe Operation

1. Clean the surface and apply couplant
2. Calibrate on the reference block
3. Press the probe firmly and read
4. Move across the area for a map
5. Record the minimum thickness

SAFETY NOTES

- Do not use on hot surfaces without the rated probe
- Keep the probe and couplant clean
- Take care on ladders and platforms
- Do not interpret corrosion safety without training
- Store the probe in its holder

## Maintenance & Consumables

- Clean the probe face
- Replace the couplant bottle
- Check the calibration regularly
- Store the gauge in its case
- Service the probe cable

## Specification & Buying Notes

An entry ultrasonic gauge with calibration blocks and couplant suits school metalwork inspection. Match the probe frequency to the material thickness range.