Thread Pitch Gauges

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

Photo: CEphoto, Uwe Aranas — CC BY-SA 3.0 — via Wikimedia Commons (Thread-pitch-gauge-whitworth-and-metric-01.jpg)

A thread pitch gauge identifies the thread pitch of bolts, screws and taps by matching a toothed blade against the thread. Metric and imperial sets cover the common pitches, letting students name and replace fasteners correctly before they use taps and dies.

Key Features

- Metric sets cover 0.4 to 2.5 mm pitch
- Imperial sets cover 4 to 28 TPI
- Folding blades into a handle
- Blades stamped with the pitch
- Blade pairs for checking worn threads

Typical Uses in the Workshop

- Identify threads on bolts, screws and studs
- Choose the right tap or die for a thread
- Verify threads cut in projects
- Sort mixed fastener bins

Safe Operation

1. Rest the blade teeth against the thread flanks
2. Rock lightly until the teeth sit clean in the groove
3. Read the stamped pitch from the blade
4. Check along the fastener in two places
5. Record the thread details on the job

SAFETY NOTES

- Teeth are sharp - handle the gauge closed
- Do not drag blades across machined surfaces
- Keep the gauge dry and lightly oiled
- Do not use it to clean or pick threads
- Store with precision tools

Maintenance & Consumables

- Wipe blades clean after checking greasy bolts
- Check blades for bent teeth
- Keep the set together in its case
- Replace missing blades to keep the set complete
- Verify against a known thread regularly

Specification & Buying Notes

A combined metric and imperial set with clear stampings is essential in any metalwork room. Buy a good quality set; the stamped pitch must be accurate to identify threads correctly.