

Combination Squares

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



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A combination square combines a rule with a sliding head that can act as a try square, mitre square, depth gauge and spirit level. It is the most versatile marking and checking tool in the workshop, used for layout, setting out and verifying angles all day long.

Key Features

- Rule lengths from 150 to 600 mm
- Reversible head for 45 and 90 degree work
- Built-in spirit bubble levels
- Cast iron or aluminium heads
- Scriber and centre-finder on some models

Typical Uses in the Workshop

- Mark and check 90 and 45 degree lines
- Set blade and fence heights against rules
- Measure and transfer depths
- Level and plumb light fixtures and machines

Safe Operation

1. Lock the head firmly before marking
2. Scribe along the rule with the head against the edge
3. Use the bubble to level short surfaces
4. Check internal and external corners with the head
5. Re-check the head squareness regularly

SAFETY NOTES

- The rule can fold - keep fingers off the joint
- Do not drop the tool; the head will shift
- Keep the rule away from cutting tools in the tray
- Check the lock holds before trusting a mark
- Store the square where it will not be knocked

Maintenance & Consumables

- Keep the rule straight and the markings clean
- Check the head against a known square
- Tighten or replace the locking knob when worn
- Wipe handle and rule with an oily cloth
- Verify 45 degrees with a mitre test piece

Specification & Buying Notes

A cast-iron head with a fine rule and positive lock is worth the price. Buy 300 and 150 mm units. Avoid brass-headed cheap squares that lose accuracy after a few knocks.