

Table Saws with Riving Knives

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Woodworking Machines



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A table saw is a circular saw mounted under a table with an adjustable rip fence and mitre gauge, used for accurate ripping, crosscutting and grooving of sheet and solid timber. A riving knife sits behind the blade to prevent kickback and is a legal, vital safety feature.

Key Features

- Blade sizes from 250 to 315 mm typical
- Riving knife that moves with the blade height
- Rip fence with micro-adjust and scale
- Mitre gauge slots for crosscuts
- Blade guard and anti-kickback pawls fitted

Typical Uses in the Workshop

- Rip boards and sheet material to width
- Crosscut and mitre with the mitre gauge
- Cut grooves, dados and tenons with stacked blades
- Cut sheet goods down to manageable panels

Safe Operation

1. Adjust blade height to just above the work
2. Set the fence and check the riving knife alignment
3. Feed work smoothly against the fence, not the blade
4. Use push sticks for narrow or short offcuts
5. Switch off and wait for the blade to stop before reaching in

SAFETY NOTES

- Never remove the riving knife or guard
- Stand out of the line of the blade in case of kickback
- Use push sticks, featherboards and a splitter for ripping
- Never reach over or behind the running blade
- Wear eye and hearing protection at all times

Maintenance & Consumables

- Keep the table top waxed and clean
- Check the riving knife, guard and pawls each day
- Change the blade when teeth dull or burn marks appear
- Clean the motor vents of sawdust
- Verify the fence is parallel to the blade regularly

Specification & Buying Notes

Buy a saw with a proper riving knife, a good fence system and a dust port. The fence makes or breaks accuracy - test it before buying. A 2-3 kW motor suits classroom amounts of ripping.