

Steel Rules and Digital Calipers

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

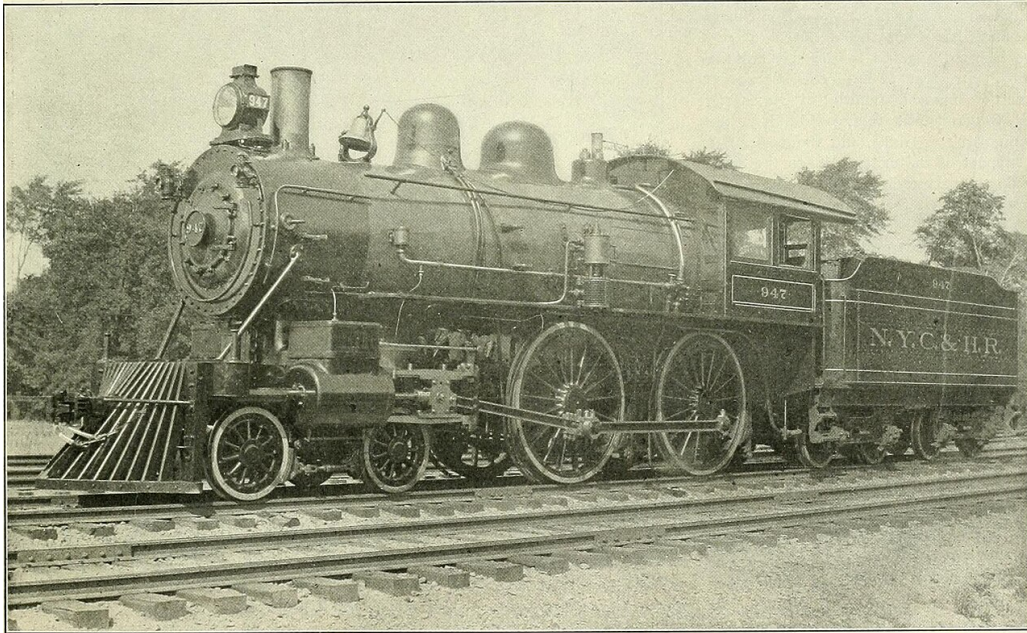


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(Locomotive_engineering_-_a_practical_journal_of_railway_motive_power_and_rolling_stock_(1900)_(14573327720).jpg)

Steel rules give quick, accurate linear measurements, while digital calipers measure inside, outside and depth dimensions down to hundredths of a millimetre. Together they are the everyday measuring pair in both wood and metal workshops.

Key Features

- Steel rules from 150 mm to 1000 mm lengths
- Metric and imperial graduations on rules
- Digital calipers with 0.01 mm resolution
- Jaws for outside, inside, depth and step measurements
- LCD display with zero at any point

Typical Uses in the Workshop

- Measure and mark out stock to size
- Check part dimensions against drawings
- Compare inside, outside and depth dimensions
- Zero the caliper to measure relative differences

Safe Operation

1. Read the rule from directly above to avoid parallax
2. Close the caliper jaws gently on the part
3. Read the display or use the vernier scale
4. Zero the caliper at the measuring point needed
5. Record measurements and mark with a sharp pencil

SAFETY NOTES

- Keep calipers off metal lathes where swarf jams jaws
- Never use rules as scrapers or pry bars
- Protect caliper jaws from falls and impacts
- Keep away from magnetic fields that affect electronics
- Wipe oil off before use that could cause slips

Maintenance & Consumables

- Wipe calipers clean and lightly oil the beam
- Replace the battery when the display fades
- Check zero and calibration periodically
- Store calipers in their case
- Keep rules in a rack that protects the ends

Specification & Buying Notes

Buy 300 mm steel rules at every bench and quality digital calipers with good repeatability, ideally with a spare battery. Verifying calipers against a standard gauge monthly prevents drift from teaching wrong measurements.