

Vibration Meters for Machine Maintenance

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

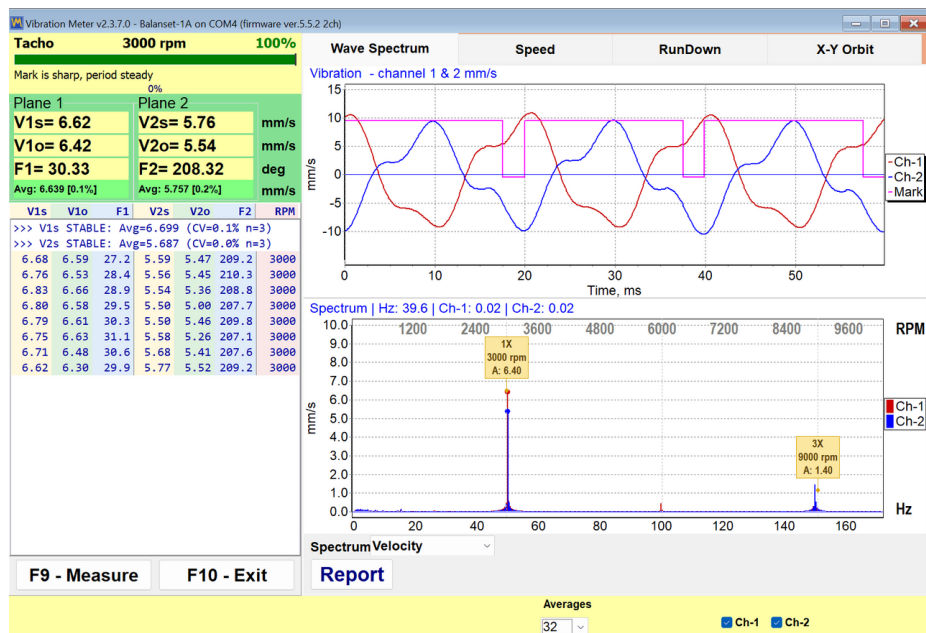


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A vibration meter measures the vibration levels of motors, pumps and machines, spotting imbalance, bearing wear and misalignment before they cause breakdowns. Readings in mm/s or g flag when a machine needs service.

Key Features

- Accelerometer sensors
- Velocity, acceleration and displacement
- RMS, peak and frequency readings
- ISO severity bands
- Data hold and storage

Typical Uses in the Workshop

- Condition-monitor motors and pumps
- Spot bearing and alignment faults
- Compare machines across the shop
- Teach predictive maintenance

Safe Operation

1. Place the sensor on the machine firmly
2. Point perpendicular to the bearing
3. Take readings at the bearing points
4. Compare with the ISO baseline
5. Record the trend over time

SAFETY NOTES

- Keep the sensor cable clear of moving parts
- Stand clear of rotating equipment
- Hold the meter securely
- Do not place sensors on hot surfaces long
- Store the meter in its case

Maintenance & Consumables

- Check the sensor and cable
- Verify calibration yearly
- Clean the contact point
- Charge the batteries
- Keep the baseline records

Specification & Buying Notes

An entry RMS vibration meter with ISO severity bands suits school maintenance checks. Quality accelerometers read steady; cheap ones drift with temperature.