

Engineering Alert



Technical Authority

Pre-Use, Tamping Tine, and Rubber Vibration Mount Checks for

ROBEL- ROTAMP Vertical Orbital Tamber Models

Issued to: All Network Rail line managers, safety professionals and accredited contractors

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Location: National

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Discussion Points

Pre-Use Checks for the Robel Vertical Orbital Tamperers

General Visual Inspection

- Check overall machine condition: inspect the frame, guide structure, covers, protective devices and confirm no cracks, loose bolts, deformation, corrosion, or missing components are present before use.
- Ensure all safety labels and identification markings are present and legible.

Functional Safety Checks

- Confirm the emergency stop and activation controls move freely and function correctly.
- Check the test button operation (without load). Any unusual noise, vibration, flashing, or smoke: STOP immediately if present.

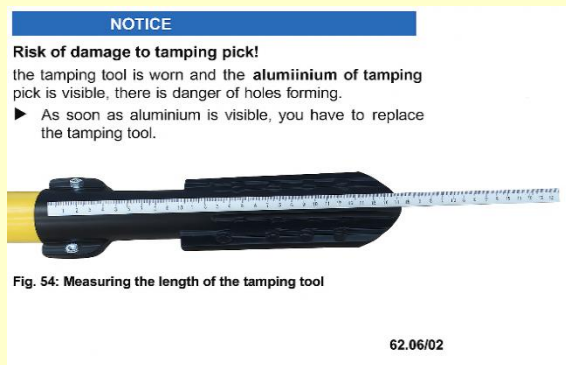
Cleaning

- Cleaning the Vertical Orbital Tamper with solvents, aggressive cleaners, or combustible cleaning agents is **not permitted**, as this may result in damage to the unit.
- Only use a damp cloth to clean the Robel Tamper. If necessary, mild detergent **without chemical additives** can be used.

Tamping Tine Checks

- Inspect tamping tool for cracks, wear, bending, or material loss.
- Ensure no signs of damage from previous ballast penetration.
- Ensure the tine is securely fastened to the eccentric shaft and seated correctly.
- Brief low-power run: confirm smooth movement with no grinding or irregular vibration.
- If the aluminium of the tamping pick is visible, then the tamping tool must be replaced.
- Regular checks must be made prior to each use to see how much material has already worn away.

Note: To reduce the risk of tool failure, or unsafe operation, the tamping tine shall be measured at regular intervals in accordance with the manufacturer's instructions. Measurement must be carried out using a tape measure as shown in the manufacturer's reference image below.



Robel 62.06 / 62.20:

Acceptance Good Tine Length Criteria

Minimum allowable tine length: 360 mm.

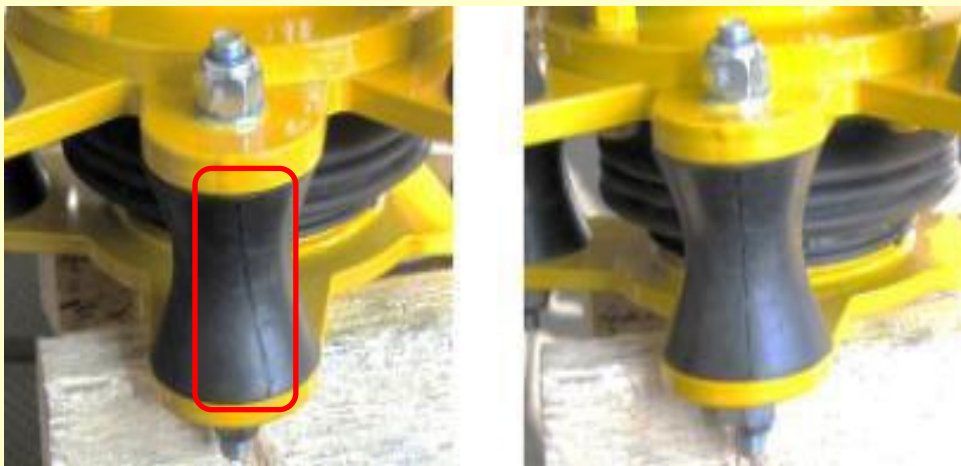
Robel 62.05:

Acceptance Good Tine Length Criteria

Minimum allowable tine length: 370 mm.

Note: Do not operate the equipment if tine length exceeds the specified wear limits. Worn tines must be replaced before use.

Anti-Vibration (HAVS)- Tamper Rubber Buffer-



Avoid Twisted Seams

Correct – Vertical Seam

- Check the rubber buffer mounts fitted between the handle mounting plate are securely fastened to the frame and handle assembly and must not be twisted see above, if any twist is noticed the tamper must be removed from service, quarantined and labelled **DO NOT USE**.
- When the equipment is in use the rubber buffers must be visually checked daily, they must also be checked for signs of cracks, porosity or distortion. If any of these defects are identified, the equipment must be quarantined and the Tamper Rubber Buffers replaced.

Robel 62.20 (Battery Powered Vertical Orbital Tamper)

- Check the Lithium-Ion battery for swelling, smoke marks, deformation, hissing, or unusual smell. If you notice any of these faults. Don't use the battery and quarantine.
- Ensure battery connectors and charger interfaces are clean and undamaged.
- Confirm the battery has been charged **ONLY** using the correct Robel charger recommended in the manufacturer operating manual.
- Ensure the connectors align—do not force the battery into place.
- Do not leave batteries charging unattended overnight.
- After charging allow the battery to rest for several minutes, any hissing, smoke, or rapid heating must be treated as an emergency and evacuate area.

- Inspect to confirm that battery terminal sealing rings are present, correctly seated, and undamaged, as instances have been identified on ROBEL electric vertical tampers (e.g. ROTAMP 62.20L E³) where sealing rings around the battery terminals were found to be missing. - See Images below



Missing Sealing Ring Image



Presence of Sealing Ring Image

Note:

These sealing rings form part of the battery terminal assembly and provide environmental and electrical protection at a live electrical interface. If the sealing rings are missing, the live battery terminals may be exposed to moisture, ballast dust, or debris with increased risk of corrosion, electrical arcing, overheating, or sudden failure.

Vertical Tamper equipment found without the sealing rings should be removed from service, quarantined and labelled **DO NOT USE**.

Robel Battery Capacity Variants

Note: The Robel 62.20 Vertical Orbital Tamper Unit Lithium-Ion battery must be charged using the correct Robel charger, and adaptor.

