METRIFOLD / BENCH REFERENCE

Laser rotary troubleshooting decision tree

A printable decision tree separating rotary calibration, taper distortion, slipping and double warping.

1. Is the error repeatable?

No: check seating, slipping, alignment and drive contact before changing calibration. Follow the machine and rotary manufacturer instructions; use a suitable test blank.

2. Are both design directions wrong by the same amount?

Yes: check imported artwork units and overall scale first. Rotary calibration chiefly affects distance around the cup, not distance along its axis.

3. Is a test line wrong at the configured diameter/contact height?

Yes: confirm rotary type, enabled axis and the setting your setup actually uses. Correct one setting, then repeat the same known-length test.

4. Which calibration setting are you correcting?

MM per rotation or steps per mm: new = current x intended / measured. Object or roller diameter: new = current x measured / intended. On a roller setup, Object Diameter may not control output.

5. Does the test pass there, but lower rows become narrower?

Yes: this is taper-dependent distortion. Use the calculator with your measured cup and artwork placement. Use either software taper correction or a pre-warped file, not both.

6. Still inconsistent or unexpectedly distorted?

Return to a simple test at the same location, verify settings and mechanics, and consult the equipment documentation. Do not compensate by repeatedly resizing finished artwork.

Example: intended 50 mm, measured 53.5 mm. A current 100 mm/rotation becomes 93.46; a current 87.6 mm object diameter becomes 93.73. Record the original setting before changing it. Geometry is digitally checked, not a machine-specific setup guarantee.

Reference only - not a cutting or calibration template.