

VISUAL DRAWING DIE INSPECTION

Task

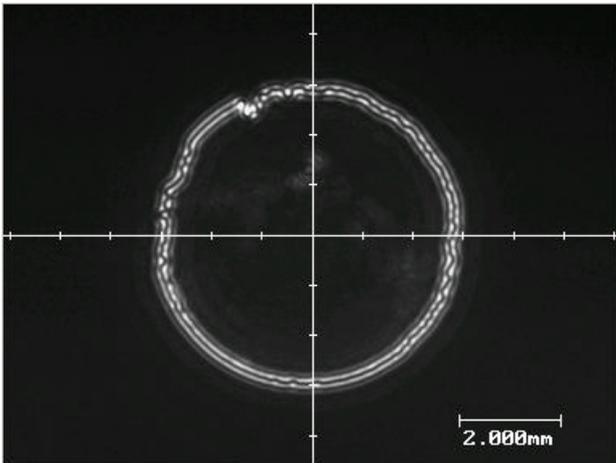
To measure drawing dies accurately using Conoptica's Drawing Die Measurement System, it's very important that the inner die is clean. Measuring a dirty drawing die might result in unreliable or missing measurement data. If using automatic die feeder and sorter, dirty dies will often be put into the 'cannot measure'-tray.

Solution

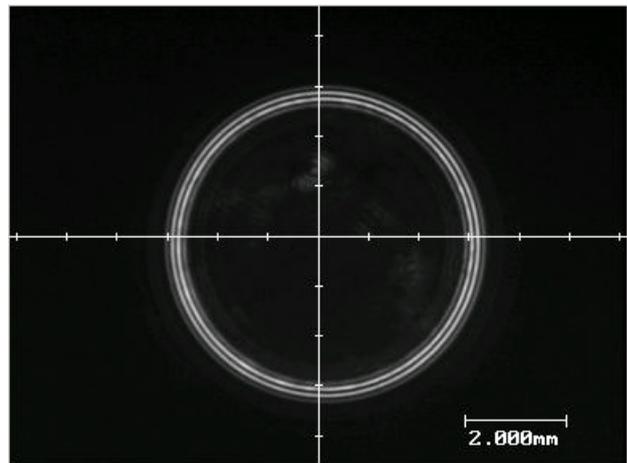
Dirt can be observed using the video panel in any of the drawing die supervisors. As an added bonus, it's also possible to observe other irregularities such as larger cracks or fall-outs. If your electro-optical frame supports tilting the die, a more thorough inspection of the reduction and exit cones can be done.

Benefit

Discovering and cleaning a dirty die before measurement will give more reliable results. The chances for the die being incorrectly assigned for wire drawing or reworking is thus reduced. If the inspection reveals cracks or fall-outs, the die can immediately be scheduled for closer investigation and/or recutting. Multiple users can also look at the drawing die image at the same time and quickly agree about the quality of the drawing die.



Drawing Die with obvious irregularities.



Clean drawing die

Step by Step

- Place the die on the measurement table.
- If necessary, center and focus the die to get a good view.
- A die without irregularities should have two continuous, unbroken and bright lines.
- If your electro-optical frame supports tilting the die:
 - Tilt the die with the A-axis. Observe the edges horizontally along the cross-hair.
 - Tilt the die with the B-axis. Observe the edges vertically along the cross-hair.
- If the lines along the edge are broken, but no irregularity can be observed, you may be looking at small spots of dirt, or large cracks. You should clean the die, and inspect it again. If the lines are still broken, schedule the die for closer investigation.
 - Irregularities pointing toward the center of the die is most probably dirt. The die should be scheduled for cleaning.
 - Irregularities pointing away from the center may be cracks or fallouts. The die should be scheduled for closer investigation.