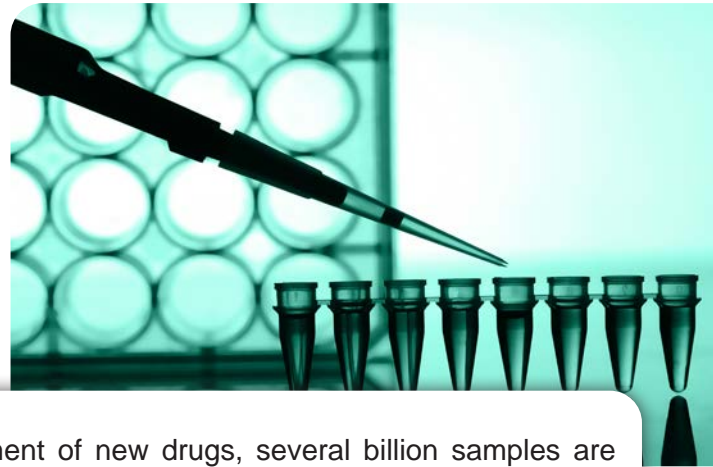


pipette.inspect



In everyday clinical diagnostics and in the development of new drugs, several billion samples are examined in laboratories worldwide every year. Due to the extremely high demands on accuracy and quality, pipette tips must be 100% inspected.

Inspection systems from the **pipette.inspect** series automatically analyze the geometry of each pipette tip – in compliance with EU-GMP and 21 CFR Part 11.

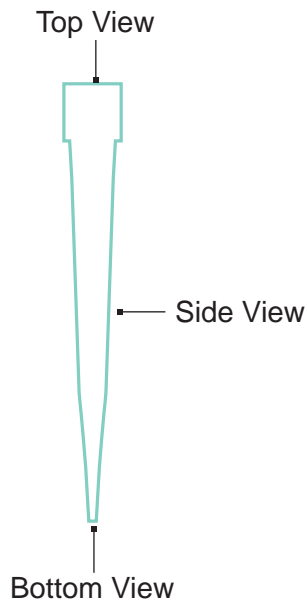
Quality assurance of pipette tips for blood and PCR tests

To ensure manufacturing quality, **pipette.inspect** systems monitor 100% of tips during the process for injection defects, damage, and geometric features. In addition to the inner and outer diameters of the pipette opening, concentricity is also inspected with high precision. In addition, under-injection, burrs, and the presence of the filter are monitored to ensure that defective tips are reliably rejected. **pipette.inspect** systems are suitable for all common formats – both for black and transparent pipette tips.

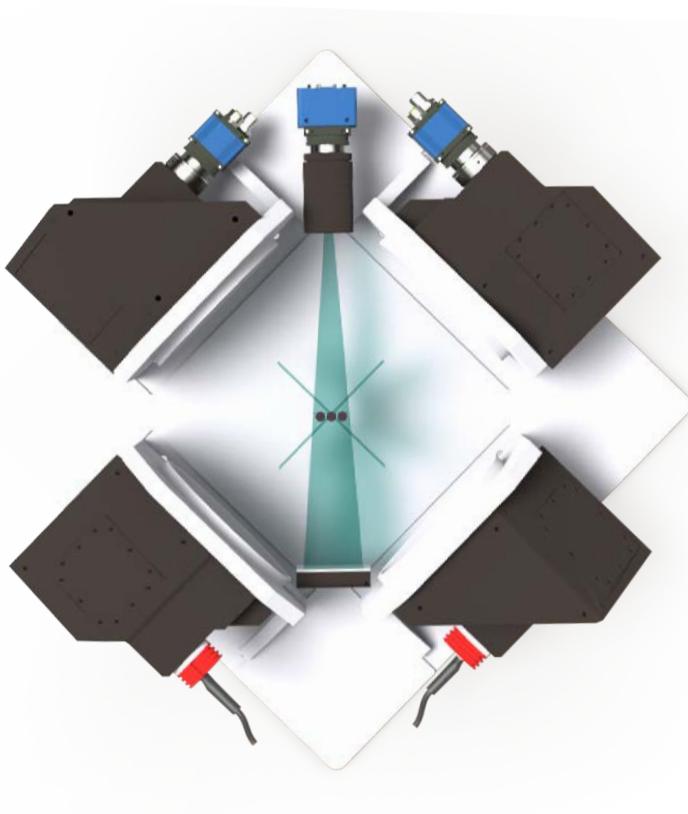
*also suitable for random sampling



Qualitätssicherung von **Pipettenspitzen** für Blut- und PCR-Tests



- ✓ All common tray and tip formats
- ✓ Black and transparent tips
- ✓ Measuring capability
- ✓ User management and audit trails
- ✓ 21 CFR Part 11 and EU-GMP compliant
- ✓ Connection to business intelligence
- ✓ Different automation concepts



With **pipette.inspect**, pipette tips are captured and analyzed from up to three perspectives. The systems were specially developed for use in production environments and are compatible with various automation concepts. The test results are clearly visualized in the CV_Inspect software – in addition, a connection to the most common business intelligence solutions is possible.

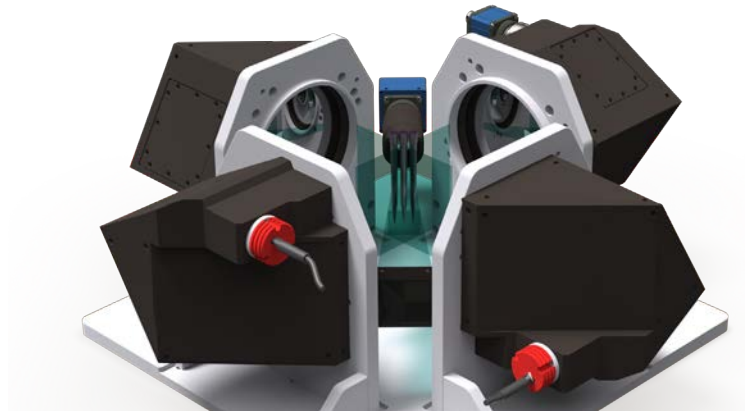
Side View: Pipette tip

Test characteristics

- ✓ Concentricity
- ✓ Axialer ridge

Error margins

- from 0,5 mm concentricity
- from 0,05 x 0,05 mm ridge



Bottom View: Pipette opening

Test characteristics

- ✓ Diameter
- ✓ Injections
- ✓ Radial degree
- ✓ Presence filler

Error margins

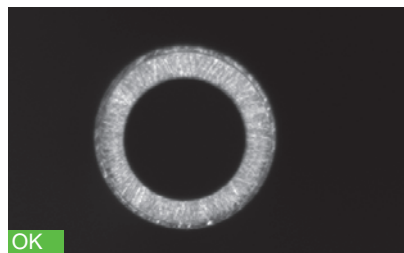
- from $\pm 0,025$ mm diameter
- from 0,5 x 0,5 mm ridge



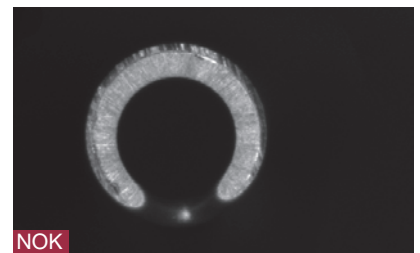
Pipette tip OK



Pipette tip with ridge



Pipette tip OK



Pipette tip with injections

Top View: Pipette collar

Test characteristics

- ✓ Diameter
- ✓ Roundness
- ✓ Presence filler
- ✓ Particles

Error margins

- from $\pm 0,05$ mm diameter
- from $\pm 0,05$ mm roundness





Since 1996 OCTUM GmbH has been developing and distributing system solutions for the optical quality control of products and manufacturing processes worldwide. The company produces image processing solutions for the detection and inspection of a wide variety of parts for the pharmaceutical and medical technology, packaging technology, automotive, and other target industries.

OCTUM develops and implements customized image processing solutions based on globally available and proven technologies. A competent, flexible, and dedicated team innovatively translates customer requirements into reliable solutions.

OCTUM is a reliable partner whose expertise you too can benefit from. Depending on customer requirements, we supply image processing solutions or complete solutions in collaboration with our partner companies. With more than 6,000 production-reliable, installed system solutions, OCTUM is one of the most successful providers in the industry.



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