

TESA IMICRO: The internal micrometer often copied, but never equalled

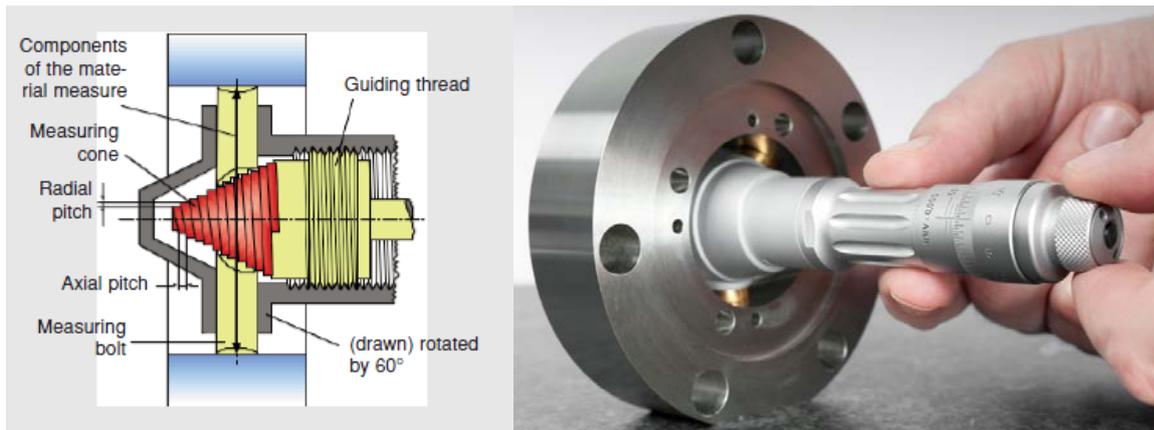
This year, the TESA IMICRO celebrates its 65th birthday and remains the only internal micrometer in the world that respects the Abbe principle. Measuring systems that meet this principle avoid first-order errors during measurement operations.

According to the Abbe principle, “to measure a length and benefit from the precision of the scale, the part to be measured must be placed in the extension of the scale”.

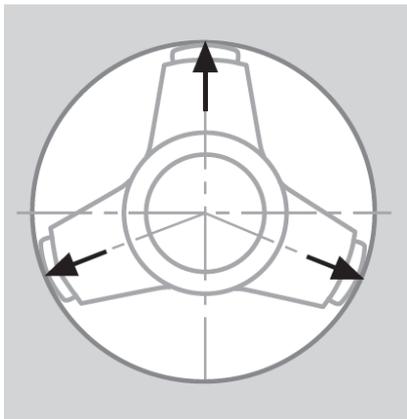


Internal micrometers from the TESA IMICRO range offer a market advantage. Their unique technology offers a precise and quick measurement of cylindrical bores. In fact, the drive of the measuring anvils via the spiral measuring cone allows linear control of the displacement of the instrument. In addition, the ratchet allows a constant measuring force.





The three measuring anvils, spaced 120° apart, provide the optimum self-alignment and self-centring of the instrument, which is perpendicular to the contact surfaces. Measuring at different points on the bore to be checked, the 3-line contact determines run-out errors in a triangular way.



Moreover, the IMICRO is insensitive to thermal expansion, including measurements at different depths, thanks to the key measuring elements being confined within the measuring head.

In fact, the instrument can be easily adapted by simply adding extensions between the measuring head and the display unit, always ensuring precision and accuracy. The thermal expansion of the extension has no influence on the measurement results.



Available in more than 100 models, the wide range of measures covers diameters from 3.5 mm to 300 mm, available in analogue or with digital display.

TESA IMICRO CAPA μ SYSTEM with digital display toggles between absolute and differential mode according to the measurements. The Opto connection allows data to be sent via a single click, for proper management of multiple measurements.

The TESA IMICRO remains an exceptional instrument and its mechanical principle perfectly reflects TESA's expertise.

Find out more on www.TESAttechnology.com