Workstation for manual coplanarity measurement

A great deal of production in the electronics industry is still carried out by hand, particularly overseas. As the usual high quality assurance standards apply to hand-made parts, precise and totally reliable final optical inspections are necessary. For this reason Bi-Ber has successfully incorporated the strengths of its coplanarity measuring systems for programming or taping machines into a manual workstation.

From machine to manual workstation

Bi-Ber systems' functions and performance spectrum undergo constant upgrading and development to meet the expanding demands of the market. Our systems measure and evaluate a large variety of features apart from coplanarity, such as pitch, body-standoff or lead dimension, all with extreme accuracy.

Bi-Ber's hard and software has been designed from the beginning with modularisation in mind. This strategy has greatly simplified the creation of the systems shown here, all of which stay true to Bi-Ber's proven "one view – one shot" concept for total carrier measurement.

Complete Workstation

Modularisation

Carriers can differ not only in the number and arrangement of their contacts, but also greatly in size. Bi-Ber's modular concept is perfect for this. Every workstation can be equipped with a variety of measuring heads for different sizes and each measuring head has a set of diffusers and cradles for different carriers. The software can handle any type of carrier and variant.
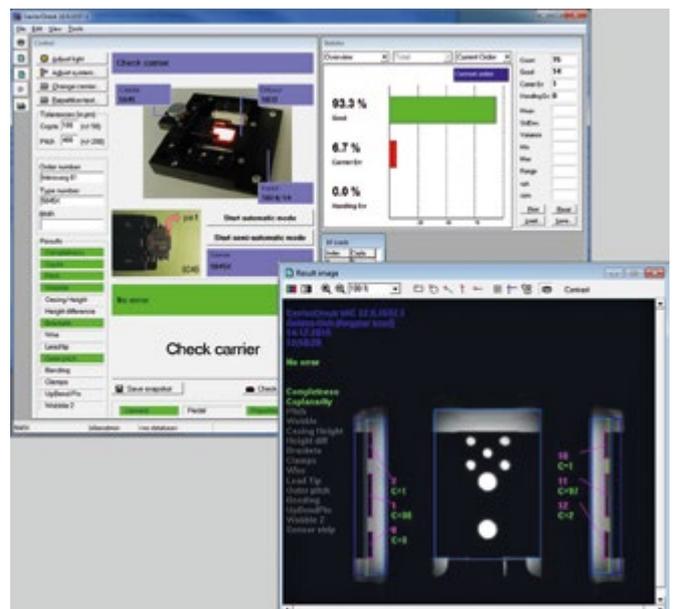
Variation	Specific accessories
Size classes	> Diverse measuring heads
Lead group arrangement	> Illumination
Housing geometry	> Cradle

At present, accessories for more than 50 carriers with more than 80 variants are available. Lead dimension and length can range from 6 to 30 mm.

Standard features

No matter how complex the carrier spectrum is or how demanding the measurements, Bi-Ber systems always stay easy to use with these features:

- Measuring heads, diffusers and cradles can be changed by hand with a few simple twists.
- Measurements triggered by hand, mouse or pedal.
- Measurement time per carrier: 0,5 s (not including handling time)
- "Finger detection" with a clear audio warning when interference with an image occurs.
- Automatic light calibration and serial self-testing after a change in carrier type.
- New variants and carrier types can be entered.
- More complex functions such as entering new carrier types or statistical evaluations are only available to administrators.
- Protocol files with individual and serial values.
- Statistical evaluations and overviews can be printed directly from the program.
- Direct database storage of individual values via integrated ODBC interface.
- Network link for software administration.
- Update installation via remote maintenance.

Clear, simple, operator-friendly: The user interface