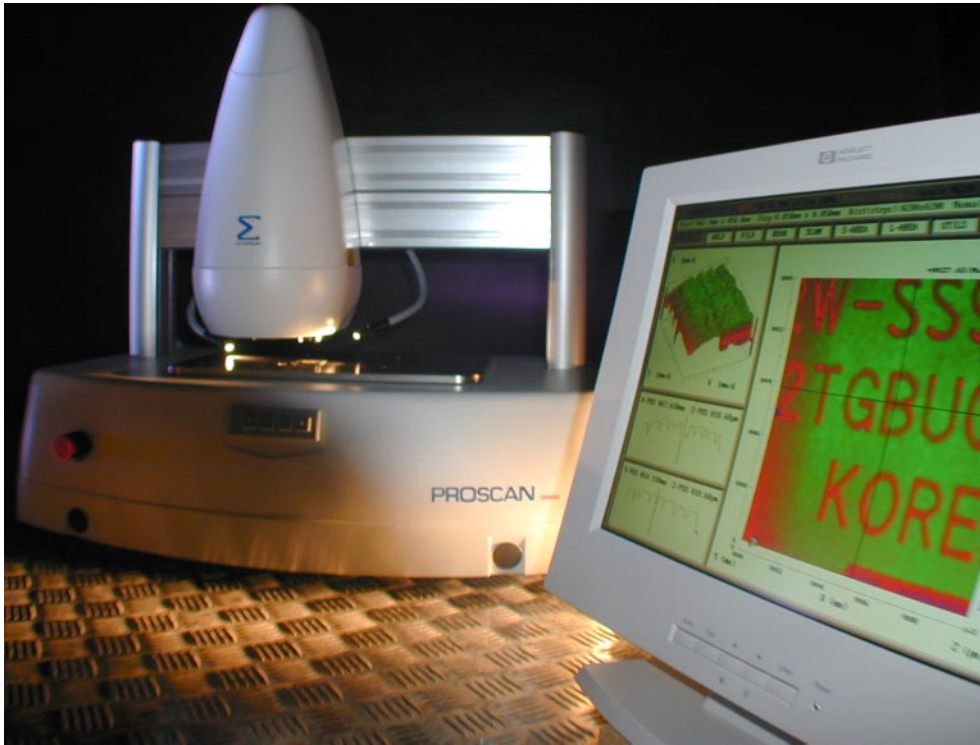


Accurate Electronic Component Inspection



The Proscan electronic component inspection system incorporates the very latest non-contact sensor technology for accurate control of dimensional parameters on electronic components. Emphasis is placed in combining speed and accuracy to produce true surface profiles of components, making it possible to produce greater reliability and reduce product failure.

PROSCAN 2000

- **100% inspection of BGA (including fine pitch) and Flipchip packages with automatic analysis of coplanarity, ball height, ball position and package warpage**
- **Wirebond analysis of loop height and bond profile**
- **Laser etch measurement to sub-micron resolution reported as true 3D mean, max and min depths**
- **Fast, accurate warpage measurement offering reliable information of the product reliability**
- **Qualified results for assessment of adhesive qualities on contacts using contact surface roughness**
- **Lead coplanarity inspection checks for product performance when placed on PCB or QFP**
- **Thick and thin film measurement on printed and sputtered materials including prints on flexible and transparent substrates**
- **Totally non invasive technique free from risk of damaging your product**
- **Capable of measuring soft and wet materials**
- **Automatic programming language to allow for single button operation**
- **Ergonomically designed with easy load access and fast product change-over**
- **3D isometric, plan and cross section views with numeric reporting facilities including statistical analysis**

Key Features & Benefits

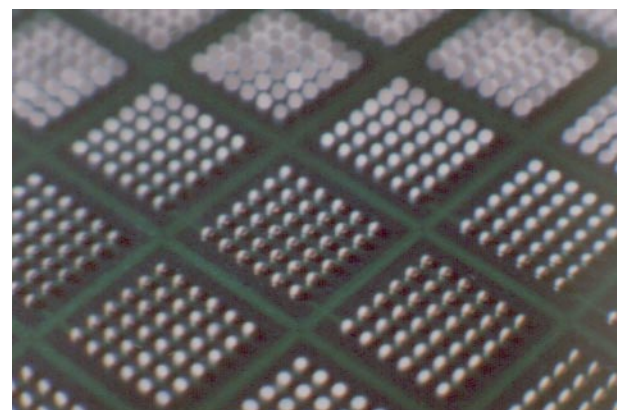
- Unique measurement technology capable of measuring to almost any surface regardless of reflectivity and transparency including metals, silicon wafer, polymer, organic and inorganic materials
- High resolutions to 3 nanometers allow even the smallest feature to be captured
- Wide measuring range from 80µm to 10mm
- Extremely small spot sizes down to 2 microns diameter
- Large measuring area of 150mm x 100mm allows large products to be scanned or multiple components in same measurement session.
- Fast measurement sampling capable of scanning at up to 2,000 points per second

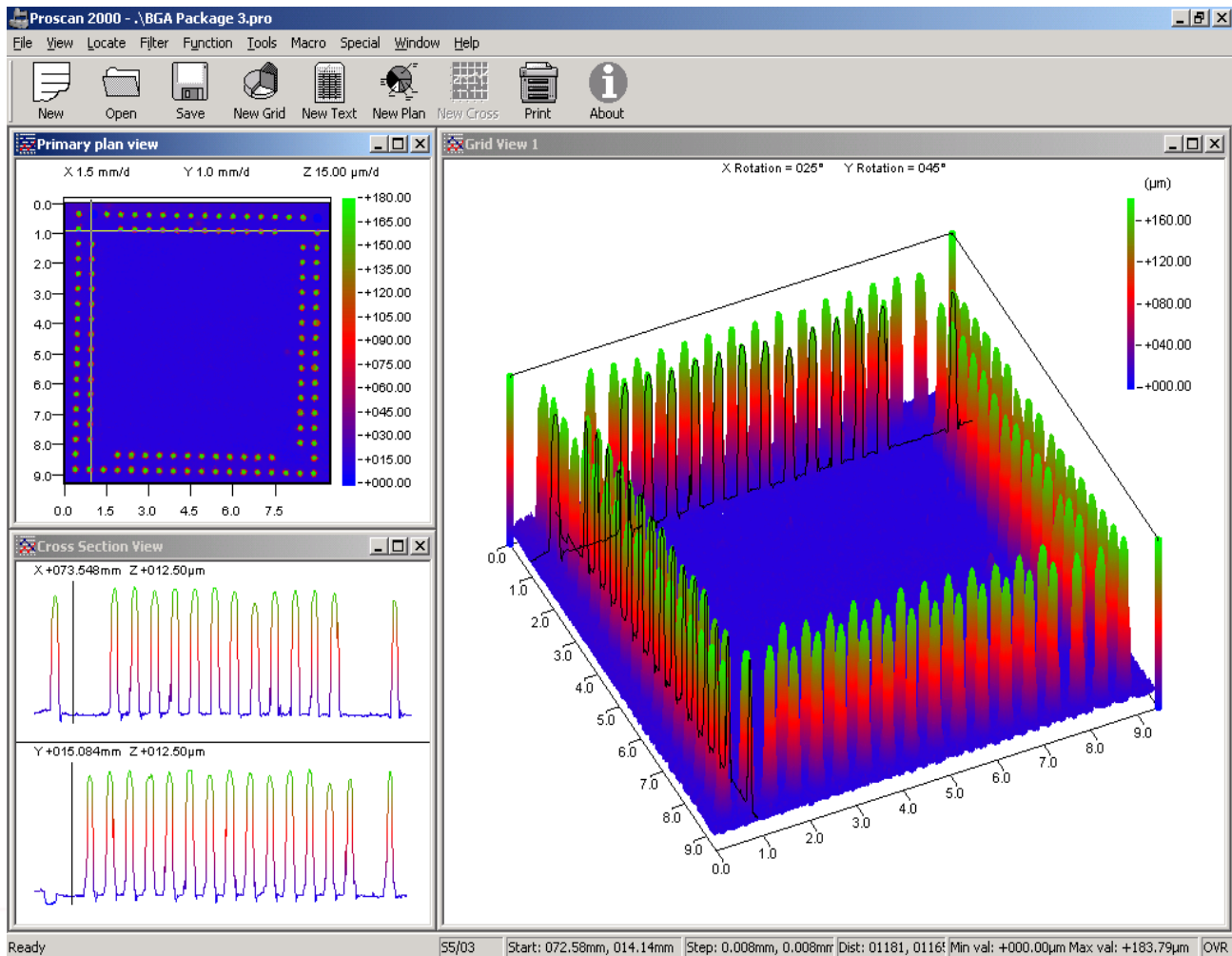
Options

- Camera for feature location offering magnification up to 30 times
- Fixtures for parts holding
- Verification procedure for system measurement traceability

Unique High Resolution Sensing Technology

The S type sensors used on the Proscan electronic component inspection system has a unique patented measurement technique with unmatched measuring performance. Utilising the natural frequency range





of transmitted light, this completely safe technique offers resolutions of only 3 nanometers and measurement ranges of 80μm to 10mm.

By transmitting white light through a lens with abundant chromatic aberration built in to it, it is possible to focus each colour frequency at a slightly different distance through the range of the sensor. As a part is placed in the measurement field a particular colour frequency is reflected back and analysed by a spectrometer. As the part is moved under the sensor, changes in surface shape are recorded as the colour frequencies change. Precise 3D images are generated by combining displacement to the sample surface with the accurate location of an X/Y linear positioning stage.

Proscan electronic component inspection software

- Inspection software presenting measurement results as 3D graphic and/or numeric reports with selectable scaling, cutoff filters, levelling and zoom facility, as well as 2D front screen for roughness analysis
- BGA (including fine pitch) and flipchip software for automatic scanning and calculation of package features
- On-line help activated from any location offering step by step procedures and advice
- Dedicated high level software language enables end user to write automatic measurement routines

PROSCAN 2000

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