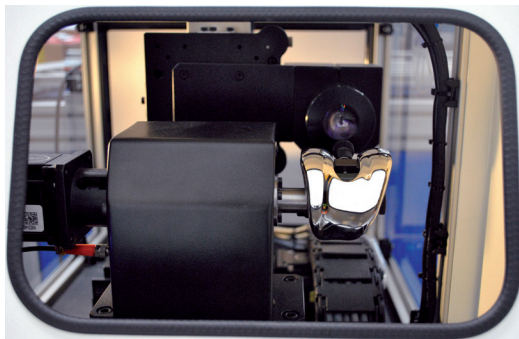


A543 Non-Contact Femoral Knee Surface Profile Inspection Gauge



The Torus surface profiler measurement system utilizes state of the art Confocal technology for rapid non-contact inspection of surface profiles on orthopedic femoral knees, eliminating the need for handheld and subjective profile gauges and comparators.

The system is designed for operational use on the shop-floor therefore giving the machine tool operator a quick and repeatable measurement without having to go in to the inspection lab.

Measurement Principle

Polychromatic white light is focused onto the target surface by a multi-lens optical system. The lenses are arranged so that the white light is dispersed into monochromatic light by controlled chromatic aberration. A specific distance to the target is assigned to each wavelength by a factory calibration. Only the wavelength which is exactly focused on the target is used for measurement.

This unique measuring principle enables displacements and distances to be measured with high precision and extreme spatial resolution. Cast, finished and highly polished surfaces can be measured without the requirement for surface preparation or machine adjustment.

Since the emitter and receiver are arranged in a single axis, shadowing is avoided, in contrast to conventional triangulation sensors.

The 4-axis motion control system is driven by high accuracy micro-stepping motors giving positional feedback, providing high resolution and high speed with stability and reliability.

ELECTRICITY
110-240 Volts / 50-60 Hz

COMPRESSED AIR
5 bar / 73 PSI

WEIGHT
72kg

DIMENSIONS
(W) 790mm x (H) 790mm
(D) 650mm

Measurement Features:

Feature	System Resolution	Accuracy
Sectional Surface Profiles	< = 0.0025 mm / 0.0001"	Form : +\ - 0.025 mm Geometric: +\ - 0.010 mm

Technical Specification:

Capabilities	Typical Range
Component Range	Customer Specific

Additional features can be tailored to suit metrology requirements

Benefits to your business

- > Non-contact confocal measurement
- > Scanning of specular and diffuse surfaces to CAD
- > Powerful measurement and statistical software
- > Rapid data collection and processing
- > Graphical / Numerical display
- > Shop-floor hardened where climate control is operational
- > Typical cycle time for 5 sectional profiles = 40 sec

Click [here](#) to view the video

