

# Form Talysurf S5 Series 1

## DATA SHEET

- ✓ Form and Surface Texture
- ✓ Radius and Aspherics
- ✓ Programmable Measurement
- ✓ 120 mm High Accuracy Datum
- ✓ 6mm Gage Range



Specification	
Traverse Length	120mm (4.72 in)
Straightness of Traverse	Contained within 2 parallel lines spaced 0.5 $\mu\text{m}$ (20 $\mu\text{in}$ ) over 120 mm (4.72 in) traverse, and 0.25 $\mu\text{m}$ (10 $\mu\text{in}$ ) over any 60 mm (2.36in) traverse.
Traverse Speeds	
Run-up distance required:	0.3 mm max.
Measurement speed	1.0 and 0.5 mm/sec
Reverse speed	5mm/sec max
Set-up speed	0.5, 1.0, 2.5, 5.0, 10 mm/sec
Traverse End Stops	Fixed optical switches
Pick-up Details	
Laser Interferometric Transducer	Helium/neon Laser 632.8 nm
Gauge Range	6mm (0.039in)
Gauge Resolution	10nm with 6mm range
Skid force	70-100 mgf
Analysis	
Form Removal	None, Datum, LS Line, MZ Line, LS Arc
Form Parameters	Slope (LS Line, MZ Line) Radius (LS Arc)
Motorized Column & Epoxy Granite Base	
Carriage traverse speeds	0.5, 1.0, 2.5, 5.0, 10 mm/sec
Angular rotation of carriage	15, 25, 40 min/sec

The Form Talysurf Series S5 has long been regarded as the pinnacle of surface and form texture measurement instruments. The Form Talysurf Series S5 allows surface texture to be measured over a wide gaging range and at the same time allows the measurement of form deviations from simple radius and angular relationships to complex mathematical forms such as aspherics. The wide measuring range/resolution allows a variety of measurements to be made with minimal set-up. Furthermore, the ability to program all measurement functions, including axes motions, enables operators to run automatic component measurement and analysis programs. The Form Talysurf Series provides the user with a wide range of software options to suit particular measurement needs which include, surface texture analysis, form analysis, aspheric and conic section, dual profile, gothic arch analysis, and power spectrum. To compliment the system further, a wide range of standard stylus options allow for measurement of virtually any surface. The standard range of the instrument can also be increased with longer effective lengths of styli and custom stylus options are available upon request. Contact us today!

EMI Gage also provides the following services:

- ✓ Full Installation and Service
- ✓ Calibration to ISO/IEC 17025
- ✓ Operator Training
- ✓ Preventative Maintenance
- ✓ Computer Upgrades
- ✓ Stylus Manufacturing and Repair

**INCLUDES: PC, MONITOR, COLUMN AND STAND, CPO WARRANTY!**

