

# Formtracer

Hybrid machine with dual-role capability

## FORMTRACER Avant S3000 Series SERIES 178 — Surface Texture Measuring Instruments

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo



FTA-S453000



Large sized base models and high-column models are added to the line-up.



Remote box with user-friendly operability



Detector holder (optional)

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo



Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

An inspection certificate is supplied as standard. Refer to page U-11 for details.

- **FORMTRACER Avant S3000** series are highly functional and user-friendly surface roughness measuring systems with innovative design features.
- Often a special method of workholding, such as a custom jig, is required to measure an inclined workpiece surface but this is not needed if you select from the **FORMTRACER Avant S3000** series since some models have an inclining drive unit to handle this situation. This feature makes approaching the target surface and measurement of a large workpiece much easier.
- The new style remote box has been developed in pursuit of operational usability. An overdrive knob controls the drive speed in real time and is very convenient when fine positioning is required. Another new feature is a part program key that strongly supports creation of measurement part programs, including a move command for manual operation and a measurement start command.
- High throughput is achieved thanks to high drive speed (X axis: Max. 80 mm/s, Z2 axis: Max. 30 mm/s) and acceleration (X axis: 30 mm/s<sup>2</sup>).
- All connecting cables are contained within the measuring instrument to eliminate any inconvenience during measurement.
- Since the Z1-axis detector incorporates an anti-collision safety device, the detector unit will automatically stop if it touches a workpiece or fixture.
- A variety of detector holders (optional) are available.
- A detector for measuring contours can be retrofitted.



Inclined drive unit



Connecting cables are contained within the measuring instrument.

## SPECIFICATIONS

Model No.		FTA-S4S3000	FTA-H4S3000	FTA-W4S3000	FTA-L4S3000	FTA-S8S3000	FTA-H8S3000	FTA-W8S3000	FTA-L8S3000
Measuring range	X axis	100 mm				200 mm			
	Z1 axis	800 μm, 80 μm, 8 μm							
Straightness (when the X axis is horizontal)		(0.05+0.001L) μm L = Measurement Length (mm)				(0.1+0.002L) μm L = Measurement Length (mm)			
X-axis inclination angle		±45° (Only for models with X-axis inclining drive unit)							
Z2-axis (column) travel range		300 mm	500 mm	700 mm	300 mm	500 mm	700 mm		
Base size (W × D)		60 × 450 mm		1000 × 450 mm		600 × 450 mm		1000 × 450 mm	
Base material		Granite							

Note: While the appearance of the natural stone measuring table varies according to the source, the high stability for which this material is known can always be relied upon.