

## MiSTAR 555

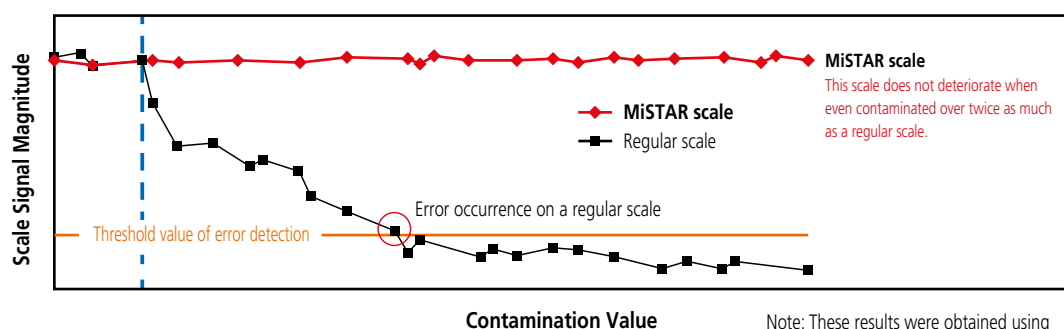
OPERABLE ADJACENT TO A MACHINE TOOL  
ON THE PRODUCTION LINE

COORDINATE  
MEASURING MACHINES



# Highly Environment-resistant Coordinate Measuring Machine, Allowing On-site Inspection Outside the Measuring Room

- Achieves an accuracy guaranteed temperature range of 10 to 40°C thanks to the combination of technologies such as a symmetric structure, uniform material and temperature compensation.
- Attains a contamination resistance over twice as superior as Mitutoyo's conventional machine by adopting a newly developed absolute scale\* that is highly resistant to the challenging production-line environment.
- \* A scale that provides an absolute value for each measurement for each measurement point, eliminating the need the need for an initialisation operation.
- Adopts horizontal-arm structure with CMM controller and PC installed under the measuring table to save installation space. This has reduced the footprint to about 70% compared with that of the conventional moving bridge model.



## User-friendly Design Reduces Operator's Workload

- The adoption of the horizontal-arm structure provides a three-sided open architecture, significantly easing the task of moving workpieces on and off the measuring table.
- Quick Launcher is equipped as standard, enabling simple and intuitive operation.
- The use of clamping tools and pallet receiver enables quick measurement of similar workpieces.

Note: Clamping tools and the pallet receiver are optional accessories.



Quick Launcher



Clamping tools (option)

Pallet receiver (option)

# New Functionality Has the "Smart Factory" in View

- From status control to preventive maintenance. Smart Factory starts with "visualisation".
- MiSTAR 555 is compatible with the following three applications that consolidate data of the manufacturing process through a network.

**Status Monitor:** monitors operational status of measuring instruments remotely

**Condition Monitor**<sup>\*1</sup>: monitors current condition of measuring instruments

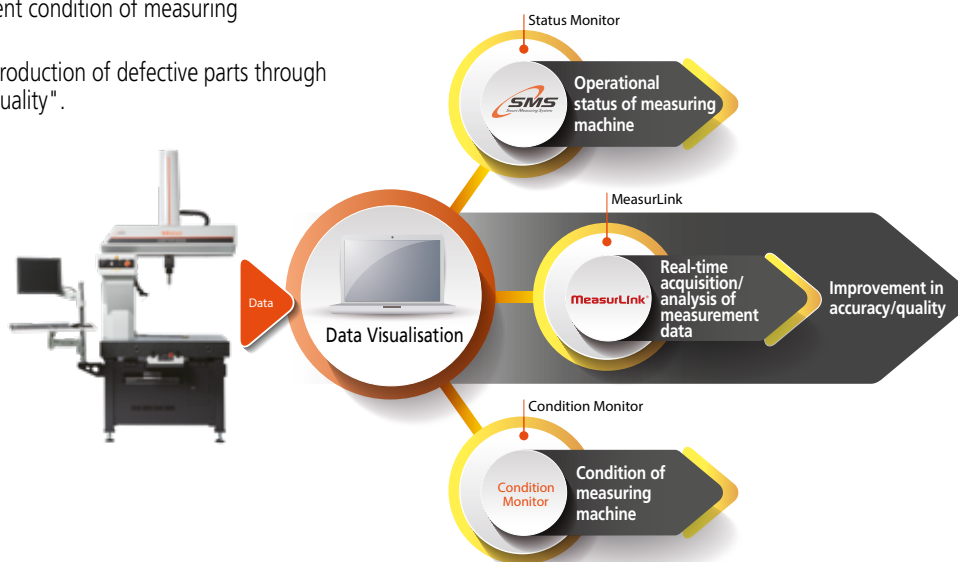
**MeasurLink**<sup>\*1</sup>: Reduces the production of defective parts through "Visualising Quality".

<sup>\*1</sup>: Optional



## SMS (Smart Measuring System)

This system allows on-line monitoring of a measuring machine's operational status, as well as, visualisation of measurement data produced during the manufacturing process, enabling product quality improvement.

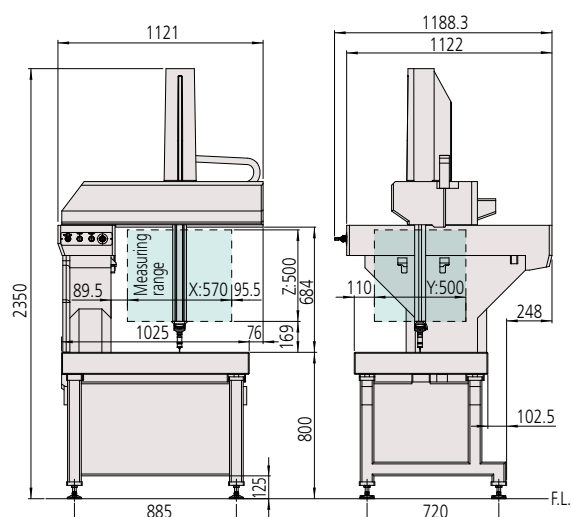


## SPECIFICATIONS

		MiSTAR 555
Measuring range	X	570 mm
	Y	500 mm
	Z	500 mm
Max. Permissible Length Measurement Error (ISO 10360-2: 2009)		(2.2+3L/1000) μm <sup>*2</sup> L: Measured length (unit: mm)
Drive speed		5 - 350 mm/s (max. combined speed 606 mm/s) in CNC MODE
Drive acceleration		1556 mm/s <sup>2</sup> (max. combined acceleration 2695 mm/s <sup>2</sup> )
Measuring table capacity	Maximum workpiece height	660 mm
	Maximum loading	120 kg
Accuracy guaranteed temperature		10 °C - 40 °C
Mass (including the control device and installation platform)		655 kg

<sup>\*2</sup>: Specifications vary by configuration and thermal environment.

## DIMENSIONS (unit: mm)



Equipped with the PH6M probe head



Equipped with the PH10MQ probe head

Coordinate Measuring Machines



Vision Measuring Systems



Form Measurement



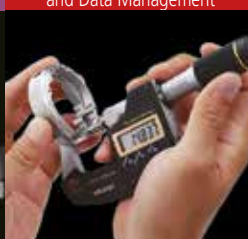
Optical Measuring



Sensor Systems

Test Equipment  
and Seismometers

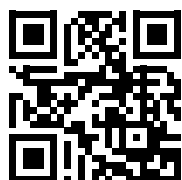
Digital Scale and DRO Systems

Small Tool Instruments  
and Data Management

**Whatever your challenges are,  
Mitutoyo supports you from start to finish.**

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver bespoke measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.



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