

Mitutoyo Quality

## Shop-floor Type CNC Coordinate Measuring Machine MISTAR 555





### Mitutoyo

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

- Has achieved 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.
- Has achieved a contamination resistance more than 2 times better than Mitutoyo's conventional machine by adopting a newly developed absolute scale\* that is highly resistant to the challenging production-line environment.
  - \* A scale scale that provides an absolute value for each measurement point. This eliminates the need for an initialization operation.
- Adopts the horizontal-arm structure and installs the CMM controller and PC 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.
- Equipped as standard with Quick Launcher that enables 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)

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### New Functionality has the "Smart Factory" in View

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



#### **SPECIFICATIONS**

|                                                               |                          | MiSTAR 555                                                                  |
|---------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------|
| Measuring range                                               | Х                        | 570 mm                                                                      |
|                                                               | Y                        | 500 mm                                                                      |
|                                                               | Z                        | 500 mm                                                                      |
| Max. Permissible Length Measurement Error (ISO 10360-2: 2009) |                          | (2.2+3L/1000) µm*2 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                                                                      |
|                                                               |                          |                                                                             |

\*2: Specifications vary by configuration and thermal environment.

#### DIMENSIONS (unit: mm)





Equipped with the PH6M probe head





### 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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