

# WORKSHOP CMM AUTOMATIC MEASUREMENT SYSTEM CODE RBT-CMM02

CUSTOM-MADE

GANTRY STRUCTURE

MOVEMENT SPEED: 860mm/s

MOVING ACCELERATION: 5000mm/s<sup>2</sup>

NO GAS SUPPLY REQUIRED

FOUR SIDERS RESERVED  
LOADING OPENINGS



## OPERATION PROCESS

- Step 1: Place the workpiece manually on the positioning block in the loading area and position it on the right side against the edge.
- Step 2: Press the reset button to return the robot and cylinder to the initial position.
- Step 3: Press the start button, the system prompts whether the workpiece is correctly placed and click OK.
- Step 4: The robot grips the workpiece and places it in the CMM fixture.
- Step 5: Workpieces are precisely positioned by three-coordinate fixtures.
- Step 6: The CMM starts the measurement and outputs the results.
- Step 7: The CMM moves to a safe position and the robot removes the part.
- Step 8: The robot places the workpiece in the OK or NG station according to the measurement results.

- 6-axis industrial robot for high speed and precision, IP67, triple protection
- Quick measurement system automatically measures the dimensions of the workpiece and provides real-time feedback to the control system
- Control system Modbus Tcp via bus communication, high speed, high efficiency and easy to extend

### SPECIFICATION

Robot	robot arm spreading	720mm
	Max. working speed	4000mm/s
	Max. weight of workpiece	8kg
	repeat positioning accuracy	±0.02mm
	number of control axis	6
	communication protocols	Ethernet Modbus Tcp
	weight	100kg
CMM*	range	500×600×500mm
	MPEE	±(3.1+L/200)μm
	MPEP	3.2μm
	Max. load	150kg
	overall dimension(L×W×H)	1480×1250×2540mm
	net weight	1500kg
	moving acceleration	5000mm/s <sup>2</sup>
	Power supply	220V, 50Hz
Working environment	temperature: 10°C~40°C relative humidity: 30%~70%	

\*Workshop CMM can select different models according to the workpiece

### STANDARD DELIVERY

Robotic system		robot body
		robot control cabinet
		programming guide
CMM	main unit	1 pc
	probr head	1 pc
	probe body	1 set
	control system	1 set
	calibration sphere	1 pc
	universal sphere seat	1 pc
	computer	1 pc
	touch screen	1 pc
	software	1 set
	dongle	1 pc
automation module	1 set	
Control touch screen		1 pc
Control box		1 pc

### INSIZE DMIS CNC CAD+ SOFTWARE

- The software is designed and developed based on the DMS standard, with excellent compatibility and versatility
- Geometric element measurement, evaluation of shape and position
- Measuring result can be stored automatically
- Optional specialized modules, such as gear module, worm module, pipeline module, blade module, SPC data analysis module, etc.



workshop specific software (included)