

# AUTOMATIC VISION MEASURING SYSTEM CODE RBT-ISD01

CUSTOM-MADE



## 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 fixture.
- Step 5: Workpieces are precisely positioned by fixtures.
- Step 6: The vision measuring system starts the measurement and outputs the results.
- Step 7: The vision measuring system 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
- Vision measuring system automatically measures the dimensions of the workpiece and provides real-time feedback to the control system
- Control system Tcp/IP 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 Tcp/IP
	net weight	100kg
Vision measuring system	measurement range	300×200×200mm
	measurement accuracy	≤(2.5+L/200)μm (L is the measuring length in mm)
	repeatability	2μm
	Max. weight of workpiece	35kg
	dimension (L×W×H)	620×780×1750mm
	net weight	350kg
	supply pressure	0.6~0.8MPa
Environmental requirement	temperature: 20°C±5°C, relative humidity: 30%~80%	
Power supply	220V, 50Hz	

### STANDARD DELIVERY

Robotic system		robot body
		robot control cabinet
		programming guide
Vision measuring system	main unit	1 pc
	dongle	1 pc
	software	1 pc
	lens with coaxial light	1 pc
	controller	1 pc
	computer	1 pc
	calibration glass chart	1 pc
	desk	1 pc
	clay	1 pc
	anti-dust cover	1 pc
automation module	1 pc	
Control touch screen	1 pc	
Control box	1 pc	

\* Different models can be selected according to the workpiece

### VISION MEASURING SYSTEM SOFTWARE (INCLUDED)

The screenshot shows the software interface with several key areas labeled:

- real-time image:** Points to the central camera feed showing a square workpiece with a crosshair.
- operation tools:** Points to the top toolbar containing various measurement and navigation icons.
- X/Y/Z axis:** Points to the coordinate system display on the right side of the interface.
- measuring objects:** Points to the 'Program' tree on the right, which lists 'Main', 'Output1', and 'OutputExc...'.
- light controller:** Points to the 'LightControl' panel at the bottom left.
- movement controller:** Points to the 'MotionControl' panel at the bottom left.
- measuring results:** Points to the 'Feature Details' table at the bottom right, which lists items, IDs, types, and various measurement parameters.