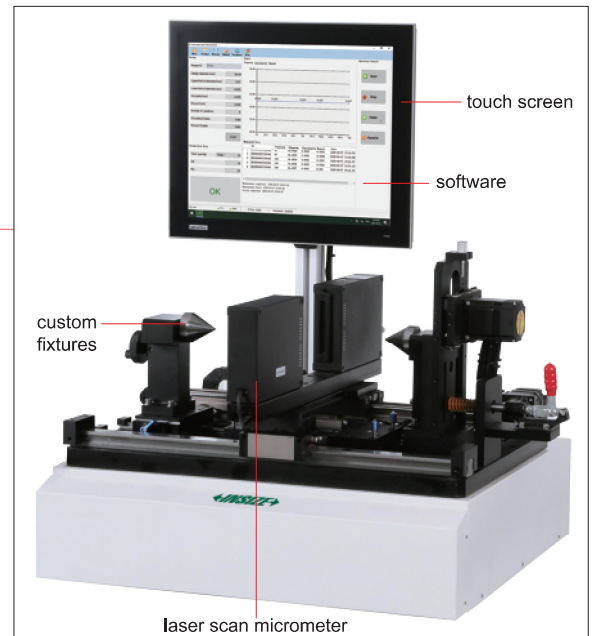


# AUTOMATIC LASER DIAMETER MEASURING SYSTEM CODE RBT-LDM01

CUSTOM-MADE



automatic laser scan micrometer LDM-AT01



- 6-axis industrial robot for high speed and precision, IP67, triple protection
- Auto-measure the outer diameter, roundness and runout of workpieces at multiple sections and provides real-time feedback to the control system
- Control system Modbus Tcp via bus communication, high speed, high efficiency and easy to extend

## 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 grabs the workpiece and places it onto the custom fixture.
- Step 5: Automatic laser scan micrometer start measurement and output results.
- Step 6: The robot removes the workpiece and places the workpiece in the OK or NG station according to the measurement results.

## SPECIFICATION

Robot *	robot arm spreading	727mm
	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
Automatic laser scan micrometer *	diameter of workpiece	10~60mm
	length of workpiece	10~230mm
	accuracy at 25°C	±(0.5+10%D)μm, D is measuring diameter in mm
	repeatability at 25°C	(0.3+5%D)μm, D is measuring diameter in mm
	runout accuracy at 25°C	≤5μm
Power supply	220V, 50/60Hz	
Supply pressure	0.5~0.6MPa	
Operation environment	0~50°C, 35~85% (non-condensing)	
Net weight	100kg	

\* can be customised according to workpieces

## STANDARD DELIVERY

Robotic system	robot body
	robot control cabinet
	programming guide
Automatic laser scan micrometer	touch screen
	laser scan micrometer
	custom fixtures
	software
Contol touch screen	1 pc
Contol box	1 pc

### Automatic laser scan micrometer software (included)

- Measure the outer diameter, roundness and runout of workpieces automatically, then the data, trend graphs and judgement results can be displayed in real time
- Auto-saving measurement data, query and export to EXCEL at any time
- Switch to manual mode to commission each mechanism's parameters

