

AUTOMATIC BRINELL HARDNESS TEST SYSTEM CODE RBT-FB01

CUSTOM-MADE



- 6-axis industrial robot for high speed and precision, IP67, triple protection
- Brinell hardness test system automatically tests the hardness 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

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 in the transplanting station
- Step 5: The transplanting station moves to the stage position
- Step 6: The hardness tester starts the test and outputs the results
- Step 7: The transplanting station moves to the outer handling station and the robot removes the workpiece
- Step 8: The robot places the workpiece in the OK or NG station according to the test results

SPECIFICATION

Robot	robot arm spreading	1650mm
	max. weight of workpiece	20kg
	repeat path accuracy	±0.13mm
	repeat positioning accuracy	±0.04mm
	number of control axis	6
	communication protocols	Ethernet Modbus Tcp
Ultrasonic hardness tester	test force	612.9N (62.5kgf), 980.7N (100kgf), 1226N (125kgf), 1839N (187.5kgf), 2452N (250kgf), 4903N (500kgf), 7355N (750kgf), 9807N (1000kgf), 14710N (1500kgf), 29420N (3000kgf)
	range	3.18~653HBW
	load dwell time	0~999 seconds
	camera pixel	3M
	max. workpiece height	160mm
	max. testing width	150mm
	dimension of X-Y stage	320×210mm
	travel range of X-Y stage	170×110mm
	dimension (L×W×H)	690×360×1000mm
Power supply		USB ×3, VGA ×1, network port ×1
Net weight		482kg

STANDARD DELIVERY

Robotic system	robot body	1 pc
	robot control cabinet	1 pc
	programming guide	1 pc
Brinell hardness tester	main unit	1 pc
	1X, 2X objective	1 pc of each
	Ø2.5mm ball indenter	1 pc
	Ø5mm ball indenter	1 pc
	Ø10mm ball indenter	1 pc
	Ø73mm flat anvil	1 pc
	Ø200mm flat anvil	1 pc
	V-type anvil	1 pc
	Hardness test block 150~250HBW5/750	1 pc
	Hardness test block 150~250HBW10/3000	1 pc
	Anti-dust cover	1 pc
Control touch screen		1 pc
Control box		1 pc