

AUTOMATIC HARDNESS TEST SYSTEM CODE RBT-HDT01

CUSTOMIZED ACCORDING TO THE
CUSTOMER'S WORKPIECE



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 HDT position.
- Step 6: The HDT 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.

- 6-axis industrial robot for high speed and precision, IP67, triple protection
- 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

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
Rockwell hardness tester	hardness scale	HRA, HRB, HRC, HRD, HRF, HRG, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T
	test force accuracy	±1%
	resolution	0.05HR
	load dwell time	0~99 second
	Max. workpiece height	200mm
	Max. testing width	200mm
	X-Y stage size	350×250mm
	X-Y stage travel range	140×90mm
	dimension (L×W×H)	555×400×1250mm
	output	bluetooth printer, RS232
Power supply	220V, 50Hz, 3000W	
Net weight	300kg	

STANDARD DELIVERY

Robotic system	robot body	1 pc
	robot control cabinet	1 pc
	programming guide	1 pc
	main unit	1 pc
Rockwell hardness tester	diamond indenter	1 pc
	Ø1.5875mm carbide ball indenter	1 pc
	camera	1 pc
	X-Y automatic stage	1 pc
	Ø58mm flat anvil	1 pc
	V-type anvil	1 pc
	hardness test block HRC20~30	1 pc
	hardness test block HRC60~70	1 pc
	hardness test block HRBW80~100	1 pc
	hardness test block HR30N60~85	1 pc
	hardness test block HR30TW70~85	1 pc
	bluetooth printer	1 pc
	computer	1 pc
Control touch screen	1 pc	
Control box	1 pc	

