



## **DLDS-1508 industrial robot application training system**

### Equipment overview

DLDS-1508 industrial robot application training system consist of training platform, spare parts store, four axis Berger Lahr mechanical handling unit, ring assembly inspection mechanism, ABB six joint industrial robot assembly sorting unit, visual detection device, finished product storehouse.

The main task of the device is based on MES management software, order demand, Berger Lahr robot grab the corresponding to red or yellow, blue button cap and other button assembly parts from the spare parts store. And the assembly part is placed in fixed position of ring assembly detecting mechanism. Then assembly structure detection is rotated 180 degrees, reach the assembly inspection station of robot with six degrees of freedom. robot with six degrees of freedom carrying on the button assembly, after the completion of the assembly, the power supply mechanism send electricity to the button. The robot press the button, then through vision cameras to detect and judge the button's color and quality, the six degree of freedom robot according to the data of the vision camera for classification. Thereby it is carried on the finished product store.

### Technical parameter

1 input power: single phase 3-line AC220V±10% 50HZ.

2 Working environment: temperature -10°C—+40°C, relative humidity <85% (25°C), no condensation of water droplets at the altitude <4000m

3 output power:

(1) AC single phase 220V±10% 50HZ ; starting switch control output.

(2) DC regulated voltage power: 24V/5A.

4 Equipment dimension: 1900\*900\*1500 mm(L\*W\*H)

5 Safety protection function: emergency stop button, leakage protection.

6 PLC: Siemens (optional model)

7 ABB six joint robot:

(1) robot model: IRB120-3/0.58.

(2) Maximum grab weight: 3KG.

(3) action semidiameter: 0.58m.

(4) Repeated positioning accuracy: 0.01mm.

8 Bergerlahr manipulator

(1) X axis stroke: 500mm;

(2) Y axis stroke: 500mm;

(3) Z axis stroke: 150mm;

(4) Rotation angle of rotating shaft: 180°.