

AOI450 UPKTECH- Coating AOI Machine

I. Description

AOI automatic inspection equipment: AOI (Automatic Optic Inspection) is the full name of automatic optical inspection. It is a device based on optical principles to detect common defects encountered in welding production and three-conformal paint coating. It uses high-speed and high-precision visual processing technology to detect the spraying effect of batch glue (with fluorescent agent for inspection) on PCB boards.



II. Technical Parameter

Equipment dimensions L*W*H	L=1060mm, W=1600mm, H=1700mm
Equipment platform	T20mm steel plate ground and chrome plated
Control method	Industrial Control Computers + Motion Integrated Control Boards
Operating software	Self-developed control software + Windows system
Programming method	Manual teaching (mouse, keyboard set)
Number of running programme stores	1000 or more
PCB transmission height	910±20mm
PCB Edge Space	≥5mm
Transport speed	The stepper motor independently controls the chain speed to achieve variable speed control and ensure no collision of the product.
Transmit motor power	DC24V 69W*2 stepper motor
Conveyor rail width	The amplitude modulation range is: 50-450mm
PCB board size	MAX: L450*W450
Detection area	X450 Y450mm (It depends on the actual situation)
Maximum height of components	Conveyor chain top and bottom 120mm

Adjustment method	Intelligent electric adjustment
Adjust drive mode	Stepper motor + double precision screw drive
X.Y.Z Three-axis drive method	Servo motor + precision screw module drive
X.Y.Z Three-axis maximum speed	800mm/s
X.Y.Z Three-axis repeatability	±0.02mm
Gate port	SMEMA Connector
Camera and lens types	1 dedicated CMOS color camera, 5 million pixels, with 16mm lens
Camera light source	2 sets of light sources (blue and ultraviolet)
Detection type	Can detect the boundary of the effect of three-proof spraying, but not the thickness.
Lighting part	Equipment comes with lighting source
Equipment total power	AC220V 50Hz
Total equipment power	1.8KW
Total equipment weight	About 600KG