

SLIT COAT - Bonding Machine

A machine for mass production performing a series of processes: slit coating, UV irradiation and vacuum lamination. Available for Optical Bonding for automotive.



Features and Intended Use

Model	SC11
Use application	Mass Production

An example of specifications

Items	Specifications
Dimensions	6,900 mm×3,800 mm×2,300 mm Excluding incidental equipments
Applicable workpiece size	MAX. 14inch
Loading method of workpiece	Manual loading by the operator to the loader station
Applicaion method	Slit Coating, Fluid material feeding by mechanical pump
UV irradiation	LED surface light source
Lamination method	Upper stage (flip-turn type) Vacuum lamination
Positioning method	Positioning Criteria: Workpiece outline when loading, Camera alignment when laminating
Transfer system inside machine	Articulated Robot
Switching types	By changing fixtures
Material supply method	Pressurized tank (20L x 2unit) Degassing by agitation, remaining amount detection is attached
Tact time	40sec (depending on process conditions)
Other accessory functions	Type identification sensor, detection sensor of workpiece thickness

Detailed spec

Item	Item spec	Basic specification
Processing Work	Size	Pattern A Upper Work (TFT): 259mm x 108.84mm x 7.1t(10.25Inch8:3) Lower Work (Glass): 272.3mm x 130.1mm x 1.1t
	Thickness	Upper Work (TFT): Max. 10mm (excluding protrusions such as positioning pins) Positioning pin height: Max 10mm Lower Work (Glass): Max 3mm
Processing time	Tact	Target: Average 40 seconds (Calculated using 10.25-inch Pattern A; subject to variation based on process conditions) ※The resin used is assumed to be Wacker 245GEL (1K)
Utilities	Power Source	3-phase AC 220V 50/60Hz LD12 (Loader) : 60A SC16 (Slit Coater): 80A UVR08 (UV irradiation): 60A DR03 (Transport Robot): 10A × 2 units ST03 (Stocker): 20A VFM11 (Vacuum Laminating): 140A × 2 units (including chillers) TN04 (Tank Unit) : 20A
	CDA	0.5 MPa or higher 2,220 NL/min
	Exhaust	Ozone Exhaust: 20m ³ /min UV irradiation: 20 m ³ /min Vacuum pump exhaust 25 m ³ /min × 2

Installation Environment	Temperature	23°C±2°C ※recommended
	Humidity	40~60%RH(no condensation) ※recommended
	Cleanliness	Class6 (ISO)
	Ceiling height	****mm (TBD)
	Floor specification	**** (TBD)
	Floor load capacity	Minimum 500kgper 600mm x 600mm area
Design criteria	Common specification	Compliant with our design standards
	Design specification	Compliant with our design standards
	Safety specifications	Complies with your company's safety specifications
Control	Driving operation	Touch panel (KEYENCE)
	Operation display language	Japanese・ English The local language has a language switch frame
	Control method	PLC (KEYENCE)
	Signal tower	LR5-302WJBW-RYG (PATLITE) ※The color arrangement is red, yellow, and green from the top
	Top report	TBD.
Material surface treatment	Stainless	None
	Aluminum	Alumite
	Ferrous material	Electroless nickel plating, anti-corrosion coating (paint color: 5Y8(1))
Enclosure	Main Unit Structure	Fabrication Welding + Bake Painting
	Bottom height	FL+125mm (Clearance height between floor surface and bottom of enclosure)
	Side cover	SUS sheet metal (screws are hex socket button bolts with pins)
	Forklift guide	As needed
Clean Booth	Frame material	Aluminum material + White anodized finish
	Cover	Anti-static UV-blocking PVC (Yellow) 5mm