堅·持·最·高·品·質·承·諾

ATMATIC 815PD/W

Fully Automatic Automotive Glass Screen Printer (Walking Beam)



東遠精技工業股份有限公司
ATMA CHAMP ENT. CORP.

33383 桃園市華亞科技園區華亞二路58號
No.58, Huaya 2nd Rd., Guishan Dist.,
Taoyuan City 33383, Taiwan (R.O.C.)
TEL:+886-3-3278588 Web:www.atma.com.tw
FAX:+886-3-3278955 Email:atma@atma.com.tw

產品形象銀質獎 | 台灣精品成就獎 | 創新研究獎 | 國家磐石獎 | 國家品質獎 | 通過ISO9001 ISO14001 | 小巨人獎 | 歐洲安全規格認證通過

APPLICATION :

Dedicated to process automatic screen printing automobile triangle lateral window (asymmetrical shape), skylight glass, etc. or any rigid material flat panel with symmetrical or asymmetrical shape.

CHARACTERISTIC :

Machine Framework

⊙ Robust Framework : adopt high strength steel structure welded connecting.

⊙ High Precision : datum plane is machined precisely for assembly connection.

● Optimized Antirust : metal surface skin treatment + electrostatic powder coating or anodized treatment

Inlet / Outlet Structure

⊙ Inlet / Outlet : adopt Aluminum rim + o-ring (NBR) to make transmission inlet and outlet structure.

⊙ Roller Transmission : servo motor + reducer + chain pulley transmission.

● Reflective Inductor : reflective inductor is equipped at machine front / back side to detect inlet , outlet and machine handshaking.

⊙ Inlet/Outlet Detection : inductor is equipped at inlet / outlet conveyor section.

Positioning Structure

● Light Heavy Pressure Distribution : four directional positioning cylinder, outlet side / back side are heavy pressure, inlet side / front side are light pressure, enable to preset pressure for four directional positioning simultaneously, also enable to set front and back sequence of positioning.

⊙ Adjustment Mode : by using numeric + manual adjustment, front back / left right adjusting for positioning.

⊙ Positioning Range : minimum 150x250 mm, maximum 800x150 mm, positioning wide range for convenient setting.

Walking Beam Structure

⊙ Walking Beam Structure : walking beam transportation adopts three-station two-working stage rapid transit and positioning, fast speed serial link each action to raise productivity.

⊙ Air Valve Switch : walking beam air valve switch enables to switch off which is not used vacuum suction to fix glass.

● Prevent Rubbing : when inlet positioning, glass will probably slide onto PEEK material, prevent glass weight and rubbing onto suction cups to extend service lifetime

Elevation Structure

⊙ Stable Up Down : adopts servo motor in coordinate with hollow shaft reducer to operate rapidly and precise positioning.

● Precise Positioning : fast speed up down structure, precise positioning, up down positioning repeatability accuracy within ±0.02mm

Printing Transmission Structure

⊙ Extruded Aluminum Module : composited formation Aluminum structure with high strength and light weight, raise durability and accuracy to support heavy duty.

● Servo motor + hollow reducer : solid printing torque, digitalized control, full stroke full peed motion

⊙ Delay Start : after squeegee / flood coater depress to delay start 0~9.9 seconds (digitalized control), assure printing pressure perfectly presented to start printing.

⊙ Angular Adjustment : brand new design the print head carriage, incorporated with structure for multi-adjusting angle / depth / pressing of squeegee / flood coater.

● Easy Screen Cleaning : the print head pneumatic up down device facilitates to clean residue ink on screen mesh and change stencil / squeehee / flood coater.

Screen Frame Structure

⊙ Screen Frame Air Locking : easy and quick operating screen adjustment, air locking for screen frame, right left holder and master frame carrier.

⊙ Peel-off Function : attached with slow speed cylinder for peel-off, adjustable peel-off speed and height to avoid status of mist and adhesive mesh after printing.

Print Head Carriage Structure

- Guided Rail Cylinder : squeegee / flood coater adopt guide cylinder module, optimal flexibility present perfect printing pressure, manual setting, long service lifetime.

⊙ Precise Adjustment : equipped with adjustment structure for squeegee / flood coater depth (micro meter), skew angle, swivel angle.

Printing Table Structure

⊙ Pressure Inductor : two sets of air pressure inductor for walking beam and table to detect vacuum value, and detect current status of substrate onto walking beam top.

Control System

⊙ HMI Interface : adopts Japanese renowned brand name touch panel 7" display, more facilitate operation.

- Digitalized Control : touch panel display can be shifted into Chinese or English language, digitalized setting printing parameters, error message display function.
- Standardized Management : 100 groups of memory module can be named and numbered individually, quick save and retrieve to facilitate standardized management of each different production process.

⊙ Printing Digital Control Setting : print / flood coating speed digital control setting (100~ 1000 mm/sec).

⊙ Diverse Printing Mode : instant flood coating, pre flood coating, double squeegee, each cycle stroke can be set multi-print 1 to 5 times to satisfy with demand of different printing ink layer thickness.

⊙ Error Display : when control system failure is occurred, HMI displays error message to guide trouble shooting.

Safety Protection

⊙ When front safety bar descends to get triggered abnormally to stop immediately.

⊙ Inlet section front side and operator section front side are equipped totally 2 sets of E-stop switch.

⊙ Machine front section is equipped one set of safety light barrier, back section right / left lateral side are equipped one set of safety light barrier at each side (option).

⊙ Programmed auto chain locking protection against erroneous operation.

● Equipped with LED three color warning lamp explicitly indicates operation status on site.

SPECIFICATION :

	Items	Descriptions	ATMATIC 815PD/W
Equipment Spec	1	Machine Dimension	6020x1900x1900 mm
	2	Machine Net Weight	3,230 KGS
	3	Productivity (non-stop full stroke full speed)	577 P/H
	4	Substrate Weight	9 KGS
	5	Substrate Thickness	1.6～10mm (for glass 1.6~3.0 mm)
	6	Air Pressure Source	5～7 kg/cm^2
	7	Air Exhaustion	167.46 L/min
	8	Power Source	3 ϕ ,220/380V,50/60Hz
	9	Power Consumption	8.55 kW
Up Down Structure	10	Screen Up Down	SEW gear motor
	11	Screen Stand-by Level	50mm
	12	Screen Cleaning Level	300mm
	13	Screen Up Down Speed	250mm/sec
	14	Up Down Positioning Repeatability Accuracy	±0.02mm
Printing Transmission Structure	15	Max Printing Area	800x1500mm
	16	Min Printing Area	150x250mm
	17	Print Head Transmission	Servo motor + Planet Reducer + Timing Belt
	18	Effective Printing Stroke	0～1500mm
	19	Squeegee Speed	100～1000mm
Screen and frame Holder Structure	20	Max Frame O/D Size	2000Wx1200D mm
	21	Min Frame O/D Size	1000Wx650D mm
	22	Frame Height	25～47mm
	23	Screen Micro Adjustment X/Y/Y	±10/±10/±10
	24	Screen Registration	Manual + Precise Screw Rod +Position Indicator
	25	Frame & Frame Holder Locking	Air cylinder
	26	Driven Peel-off	Slow speed cylinder
	27	Peel-off Height	0～20mm

	Item	Descriptions	ATMATIC 815PD/W
Printing Head Structure	28	Print Head Tilt Angle	±4°
	29	Squeegee Skew Angle	20±10 ˚
	30	Flood Coater Skew Angle	45 ± 5 °
	31	Squeegee Pressure	5～62kg
	32	Flood Coater Pressure	5～62kg
	33	Squeegee / flood coater cylinder stroke	30mm
	34	Adjustable Squeegee Pressing Depth	12mm
Printing Table Structure	35	Table Size	1000x1800mm
	36	Table Height	895 mm
	37	Vacuum Area	256x684 mm
	38	Vacuum Hole Size	ψ3.0mm
	39	Table Vacuum Control	Ring Blower / Exchange Valve
Walking Beam Transport Structure	40	Walking Beam Driven	Servo motor + Linear Guide Rail + Timing Belt
	41	Walking Beam Reciprocating Motion Distance	2100mm
	42	Walking Beam Speed	1800mm/s
	43	Walking Beam Up Down Driven	Guide Cylinder ψ20x60mm
	44	Vacuum Suction Cup Spec	Diameter 15mm /material NBR rubber

Inlet Positioning Structure	45	Inlet Positioning Driven Mode	Servo motor
	46	Inlet Positioning Min Size	150x250mm
	47	Inlet Positioning Max Size	800x1500mm
	48	Positioning Mode	Edge alignment
	49	Registration Pin Adjustment	Numeric + Manual adjustment
	50	Registration Repeatability Accuracy	±0.05mm
Inlet Conveyor Structure	51	Conveyor Roller Height	900+30mm
	52	Roller Transmission Mode	Servo motor +Reducer + Chain + Pulley
	53	Conveyor Roller Outer Diameter	ψ33mm
	54	Roller Material	Aluminum Rim + O-ring (NBR)
	55	Conveyor Speed Range	50～450mm
Outlet Conveyor Structure	56	Conveyor Roller Height	900+30mm
	57	Roller Transmission Mode	Servo motor + Reducer + Chain + Pulley
	58	Conveyor Roller Outer Diameter	ψ33mm
	59	Roller Material	Aluminum Rim + O-ring (NBR)
	60	Conveyor Speed Range	50～450mm
Safety Device	61	Front Safety Bar	1 set
	62	E-stop at operator side	2 sets
	63	Light Barrier	Total three sets (option)
	64	LED three color warning lamp	1 set

Three View Diagram :

