

IGis Quotation and Specification

Customer : Clayton Glass Blackburn

Clayton Glass Blackburn Ltd

21st November 2022

Sales Order & Acknowledgement

IGIS Hotmelt Sealing Robot 2450mm x 3300mm

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1. Hotmelt sealing robot & additional conveyor

1-1. Gas Press Output conveyor

1-2. Hotmelt Automatic Sealing Robot

1. Hotmelt Automatic Sealing Robot & Additional Conveyor

1.1 Gas Press Output conveyor

(Required if tilt unload conveyor is moved)



1.2 Hotmelt Automatic Sealing Robot



Characteristic	Specification	Standard	Option
Working Direction	Left to Right	√	
Max. Glass Size	2450mm x 3300mm	√	
Min. Glass Size	200 x 400mm	√	
Thickness of IG Unit	14~60mm	√	
Spacer Width	8~20mm	√	
Sealing Depth	3~20mm	√	
Type of IG units	Rectangular units Double units Triple Units	√ √	□
Electronic tension & frequency	3P 415V, 50Hz, 15kw	√	
General Conveying Speed	10~43M / min	√	
General Sealing Speed	15~35M / min	√	
Hotmelt	Hopper Type (Advance UK)	√	

AUTOMATIC SEALING ROBOT

- Constant and precise sealing
 - Precise sealant dosing control
 - Automatic spacer depth detection system
 - Automatic spacer assembly & glass cutting error calibration
 - Precise mixing ratio control
 - Corner finish with scrapper method
- Supporting varying formats
 - Optional automatic stepped IGU sealing
 - Optional automatic double sealing for triple IGU

PRODUCT	AMOUNT
Sealing robot 2450mm x 3300mm	Included
Option for 2 times sealing (Triple Glazed)	Included
Option for additional conveyer after Gas Press	Included

3.8 Exclusions

Suitable crane / FLT for offload and positioning

All connections for air / power / water

Glass & operators for testing / commissioning / training

IGis Quotation and Specification

Quotation No. : IGIS-QT-211220.02

Mr D Cox

Clayton Glass Blackburn Ltd

8th April 2022

Sales Order & Acknowledgement

IGIS Line 2450mm x 3300mm

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1. Automatic Insulating Glass Production Line

- 1-1. Input glass loading conveyor
- 1-2. Washing and drying machine
- 1-3 Output conveyor
- 1-4 Tilt air float conveyor (SuperSpacer application area)
- 1-5 Station conveyor (Air float)
- 1-6 Press (gas filling press - shapes)
- 1-7 Tilting output conveyor

2. Quotation

□ COMPRISING

Parts	Standard	Option
1. Infeed glass loading conveyor	√	
2. Washing and drying machine	√	
3. Output conveyor	√	
4. Air Floating and Tilting conveyor	√	
5. Press Station conveyor	√	
6. Gas Press	√	
7. Tilting Outfeed conveyor	√	

I. Vertical Washer



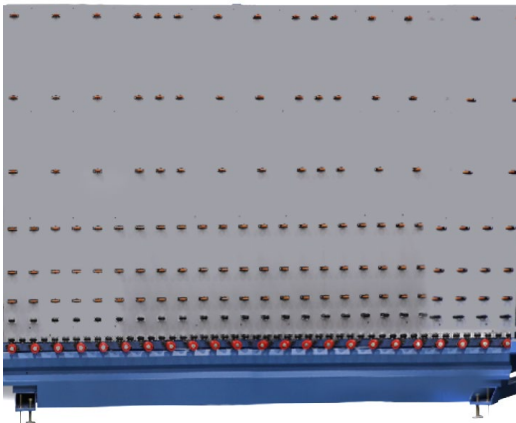
□ Specification

Characteristic	Specification	Standard	Option
Working Direction	Left to Right or Right to Left	√	
Max. Glass Size	2450mm × 3300mm	√	
Min. Glass Size	200 × 400mm	√	
Thickness of glass panes	3~30mm	√	
Thickness of IG Unit	12~60mm		√
Electronic tension & frequency	3P 415V, 60Hz, 60kw	√	
General conveying speed	43M / min	√	
Speed of washing machine	2~12M / min	√	

Characteristic	Requirements
Air supply pressure	7 Bar

Technical Data of Individual Components

1. Input conveyor



- Constructed from painted heavy gauge steel frame at 84-degree angle.
- Glass loading and transport conveyor including washing machine speed synchronization.
- Automatic glass Low E coating detection system.
- Glass loading / transport height 550mm $\pm$ 50 mm
- Rollers driven by chain and sprocket drive system

2. Washing and drying machine



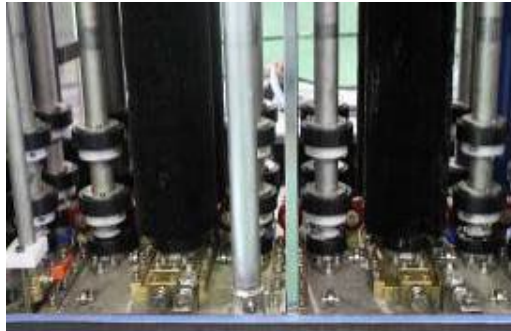
Characteristic	Specification	Standard	Option
Number of Brushes	6 brushes (3pairs)	√	

- Constructed from heavy gauge stainless steel and aluminum materials.
- Front and rear doors with windows to check inside of washer and dryer for easy access and visual inspection of the water spray nozzles.

- 3 pairs of nylon bristle wash brushes.
- Each brush is driven independently from above.
- Adjustable wash brush distance as required.
- Front alignment support rollers spring loaded for automatic glass thickness adjustment as required
- Perfect glass drying using an air -knife and high-pressure blower system ensuring no drying marks.
- Glass thickness 3 to 12mm
 - Optional glass thickness controls up to 30mm available



■ Washing Part



■ Drying part

● **Pure water circuit plant for glass plate washing machine**

Characteristic	Specification
Amount of water in all tanks	200 ℓ

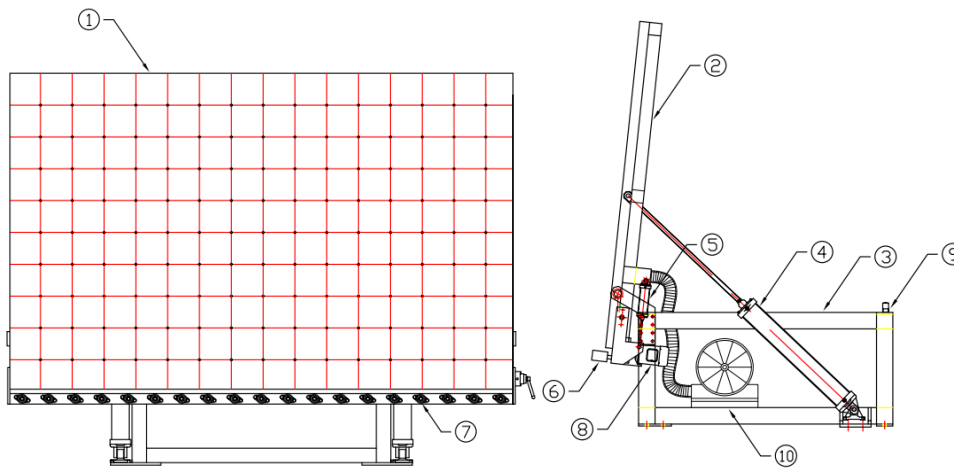
- Two removable water collection tanks and one heating tank under the washing machine, each has its own recirculation pump.

3. Output conveyor



- Constructed from painted heavy gauge steel frame at 84-degree angle.
- Glass carrying wheels driven by chain and sprocket drive system.
- Glass supported by a cushion of air blowing vertically on the back of the frame
- Avoiding contact contamination of the clean glass and providing fast smooth transportation

4. Air Floating Tilting Conveyor



Characteristic	Specification	Standard	Option
Working Direction	Left to Right or Right to Left	√	
Max. Glass Size	2450 x 3300mm	√	
Min. Glass Size	200 x 400mm	√	
Electronic tension & frequency	3P 415V, 60Hz, 60kw	√	

5. Station conveyor (Air floating)



- Constructed from painted heavy gauge steel frame at 84-degree angle.
- Conveyor wheels driven by chain and sprocket drive system.
- Glass supported by a cushion of air blowing vertically on the back of the frame avoiding contact contamination of the clean glass and providing fast smooth transportation.

6. Gas Press



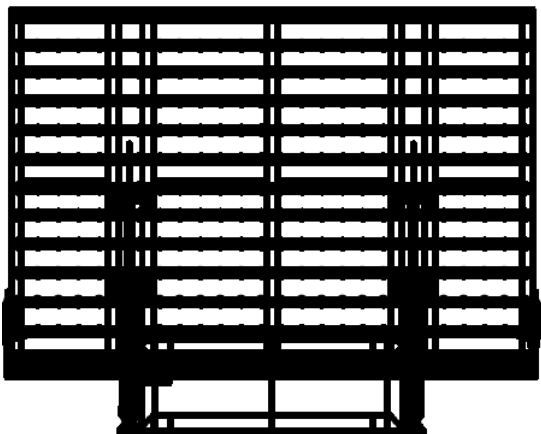
Characteristic	Specification	Standard	Option
Max. Glass size	2450 x 3300mm (3600mm double press not gas filled)	√	
Min. Glass size	200 x 400mm	√	
Type of gas	Argon or Krypton gas filling Argon & Krypton Mixture gas filling	√	□

- Anti-torsion steel frame processed machining center to avoid press panel deformation.
- The front panel of the press opens out by 500mm for easy maintenance & inspection.
- Precise gravity control using a ball screw system with digital servo motor.
- Pressure control for various IG sizes is controlled on the touch screen.
- Double pressing of the glass once the unit is over 3,300mm long.
- Glass suction by suction cup system
- Triple pane assembly available.

6a) Gas filling technical description:

- With glass in position the press seals closed, with a gap between the glass & spacer bar, and injects the gas from the datum side close to the unit edge. Once injected the press closes and ejects the unit.
- Gas filling: over 90% filled for varying unit sizes within the max unit size of the line.

7. Tilting outfeed conveyor



2. Quotation

PRODUCT
Discounted Line 2450mm x 3300mm (Washer / Tilting Assembly Station / Gas Press / Tilt Unload)
Option for motorized Press Outfeed Tilting Unload Conveyor
Overall cost delivered & installed

IGis CO.,LTD
Innovative Solution