



Billco Teams
A Distribution & Service Company

Vertical Insulated Glass Production Machines
Spacer Processing & Auxiliary Machines
Sealing Robots & Extruders



Billco Teams Partners

Our partner was founded in 1995 in Istanbul and has become the first major company in Turkey producing flat glass processing equipment and technologies. Today, due to the technology and innovation studies performed in their R&D Center, they have become one of the unique global corporations that is able to build a whole glass processing facility on its own, through 30 main products and over 200 derivatives.

While being a leading domestic company in its own field, our partner has also become a global brand with 80% export rate. They have created solutions for more than 10.000 customers in 127 countries with more than 15.000 machines supplied and have become one of the key vendors leading the global glass processing market.

Our partner has achieved to be listed along with the top global key player companies according to the surveys conducted by international organizations. They are counted among the most reputable manufacturers in the market with both its technical operation departments such as Sales, R&D Center, Production, After Sales Services, and its corporate infrastructure together with 26 years of industrial processing know-how.



 **6 Continents**

 **+125 Countries**

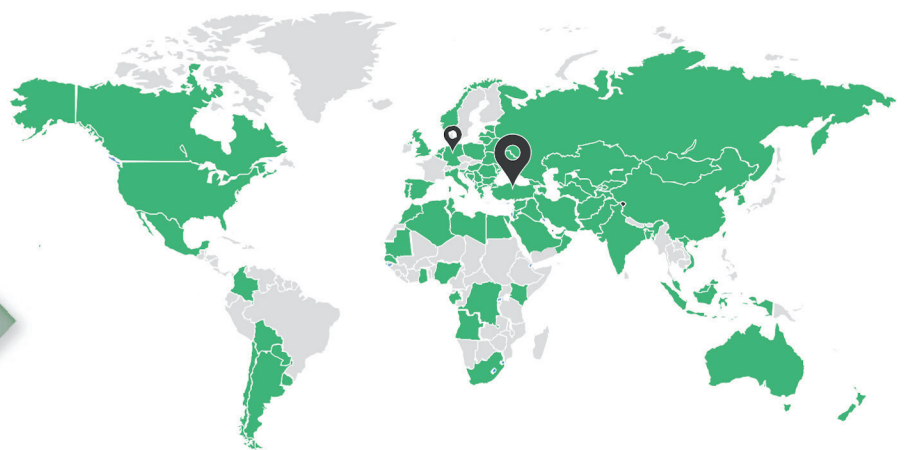
 **+15.000 Machines**

 **+10.000 Customers**

 **80% Export Rate**

 **+30 Main Products**

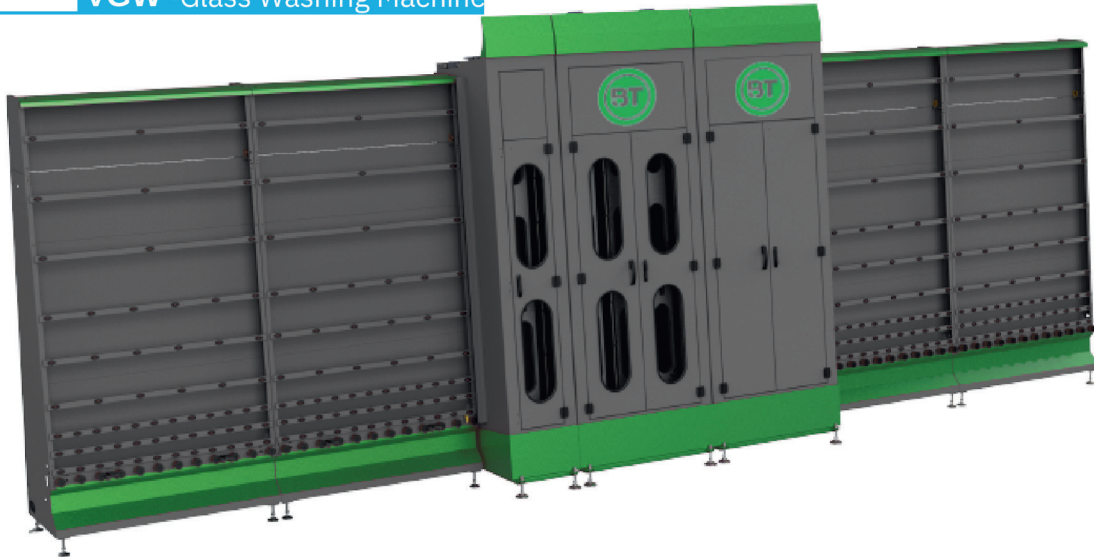
 **+200 Derivatives**



4th Generation Automatic Insulated Glass Line

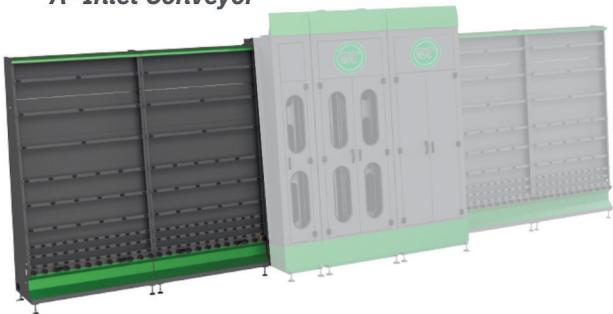
The **IG4.0 series** is designed for automatic high-precision and high-speed washing, drying, assembly and pressing of insulating glass units. The specially developed design allows you to configure the main components of the line according to the needs of your production. The new generation insulating glass line also provides the possibility of increasing its functionality and modernizing technologies during the lifetime of line's operation.

VGW -Glass Washing Machine



- | | | | | | | | |
|--|------------------------------------|--|--|--|--|--|-----------------------------|
| | Low-E Glass Washing | | Line Speed Control | | Blower Control System (Opt.) | | Sand Filter (Opt.) |
| | Right - to - Left Direction (Opt.) | | Pre-Washing (Opt.) | | Stainless Steel Outerbody (Opt.) | | Self-Cleaning Filter (Opt.) |
| | Coatings Detection Sensor (Low-E) | | Insulated Chambers of Brushes Conveyor Lighting (Opt.) | | Washing Outlet Conveyor Speed Control (Opt.) | | Easy - Clean Nozzles (Opt.) |
| | Brush Speed Synchronization (Opt.) | | Measuring Glass Dimensions and Frame Thickness (Opt.) | | Automatic Positioning of Brushes and Air Drying Nozzles (Opt.) | | |

A- Inlet Conveyor



The Inlet Conveyor is a loading zone conveyor that is designed to load glass sheets into the washing line.

- + Easy loading feature on big size glass sheets with loading support legs
- + Step-by-step or continuous feed control
(Standard in 4.20 and 4.30 versions)

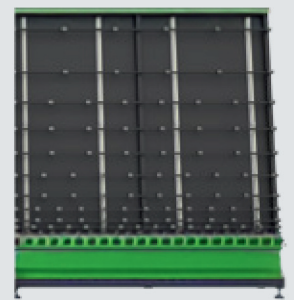
B- Washing/Drying Machine

Washing and Drying Machine has been developed in order to wash the glass sheets with high quality washing brushes at maximum quality and to reliably dry the sheets with specially designed fans.




















C- Outlet Conveyor

The Outlet Conveyor provides the transfer of glass sheets from washing and drying machines to the next process.



PPL - Panel Press



- | | | | |
|---|--|--|---|
|  Double-Glazed IG |  Triple, Quadruple and Stepped IG units |  Tilting table (Opt.) |  Argon Gas Filling in Press (Opt.) |
|  Modular Structure |  Air Cushion Conveyor (Opt.) |  Servo Press (Opt.) |  Double Section Mounting Frame (Opt.) |
|  Adjustable Conveyor Height (Opt.) |  Hydraulic Panel Press |  Additional Side Walls (Opt.) |  Pressing of Various Shapes (According to CMS Shape Library) |
|  Manual or Automatic (Opt.) |  Double Conveyor Belt (Opt.) |  Remote Access (Opt.) |  Jumbo Format Tandem Press (Opt.) |
|  Frame Mounting System | | | |

A- Assembly Conveyor



Assembly conveyor is designed to place spacer frames on the clean glass coming from washing unit.

Two Options Available:

- 1 - Manual frame mounting system
- 2 - Double Section Frame Mounting (Opt.): Increase productivity without increasing line sizes.

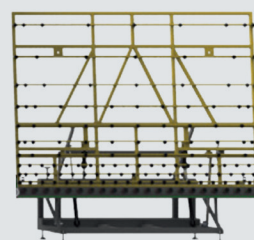
B- Pressing Unit



Pressing unit is a product of technology, experience and industry experts coming together. The system can be configured according to your present and future needs.



C- Press Output

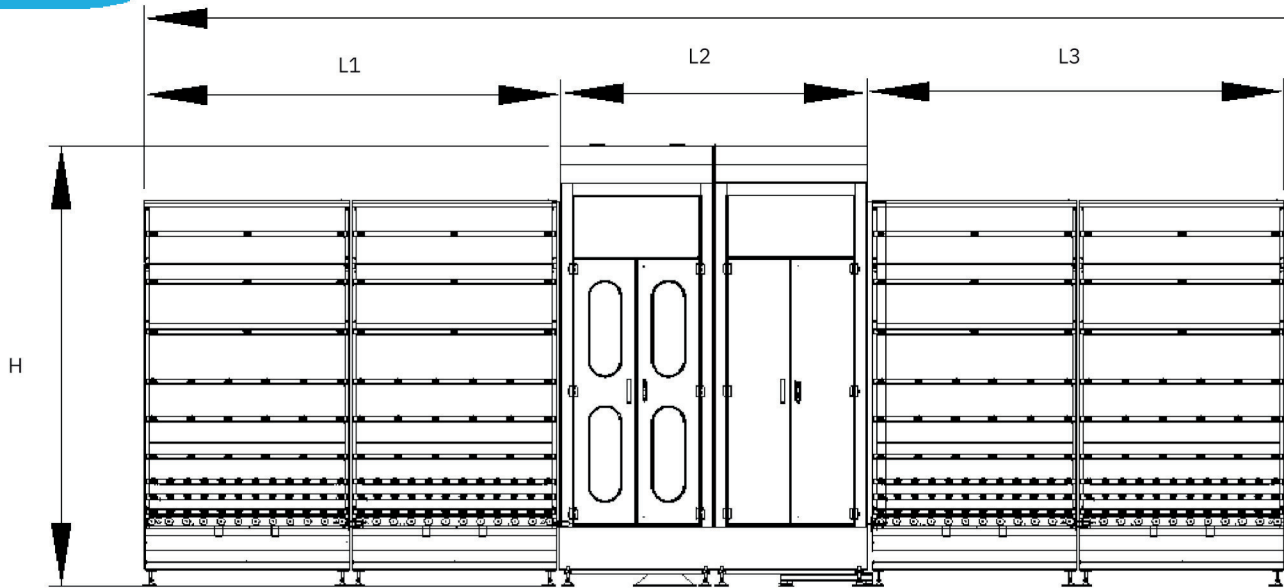
The Press Output is designed to transfer the pressed insulated glass unit for secondary sealing application.



-  C1 - Conveyor (Std.)
-  C2 - Tilting table (Opt.)

4.th Generation Automatic Insulated Glass Line

VGW -Glass Washing Machine



Models & Sizes

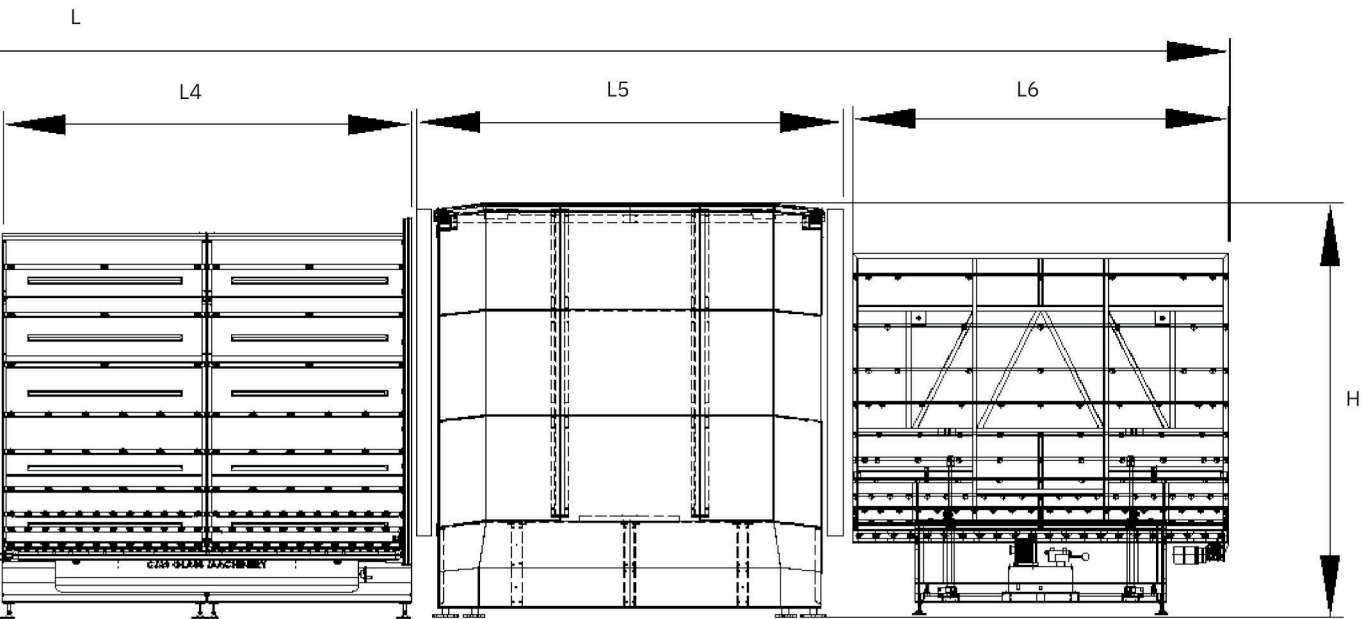
VGW	Glass Width (W) (mm)				Machine Dimensions							
	2000	2500	2800	3300	L1	L2	L3H1					
Glass Length (L)	3000	3020	3025	3028	3033	3260	2450	3260	2000	2500	2800	3300
	4000	4020	4025	4028	4033	4100	2450	4100	3050	3550	3850	4350
	5000	5020	5025	5028	5033	5300	2450	5300				
	Jumbo	XL20	XL25	XL28	XL33	Please contact to your sales representative for different size requests.						

* Units of measurement - mm.

Technical Data

	VGW4.10	VGW4.20	VGW4.30
Glass Thickness	3-12 mm	3-19 mm	3-32 mm Automatic Brush Positioning
Max. Washing Speed	12 m/min		
Number of Brushes	6 pcs.(Opt. 8 pcs.)		
Working Height	520 (+/-50) mm		
Number Of Blowers	1 pcs.		
Number Of Washing Sections	2 pcs.		
Washing Low-E Glass	Applicable		
Min. Glass Size	170x350 mm		

PPL -Panel Press



Models & Sizes

PPL	Glass Width (W) (mm)				Machine Dimensions							
	2000	2500	2800	3300	L4	L5		L6H2				
3000	3020	3025	3028	3033	3300	3200	3300	2000	2500	2800	3300	
4000	4020	4025	4028	4033	4300	4200	4300	2750	3250	3550	4050	
5000	5020	5025	5028	5033	5500	5200	5500					
Jumbo	XL20	XL25	XL28	XL33	Please contact to your sales representative for different size requests.							
	Sizes				* Units of measurement - mm.							

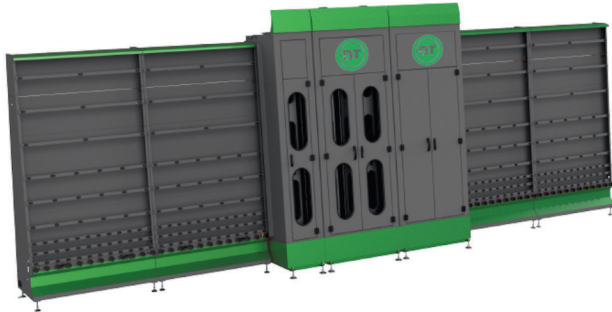
Technical Data

	PPL4.1		PPL4.2		PPL4.3		
Min. Press Glass Size	170x350 mm						
Min. Press Glass Thickness	3 mm						
	Double Glazed Units	Opt 3: Triple Glass	Opt. 4: Quadruple Glass	Opt.S: Step Glass	Panel Press	Max. IG Thickness	Conveyor Type
PPL4.1			-		Hydraulic (Opt. Servo)	60 mm	Roller
PPL4.2			-		Hydraulic (Opt. Servo)	60 mm	Belt
PPL4.3					Servo	60 mm (Opt. 4 for 100 mm)	Belt

Images are representative only

VGW Key Features

The main functions and features included as standard in our machines are structured to respond quickly and effectively to user needs.



- ✓ Integration with sequential processes (*Communication and sync speed*)
- ✓ Automatic start/stop system for brushes and blowers
- ✓ Possibility to increase productivity and upgrade

✓ Low-E Glass Washing

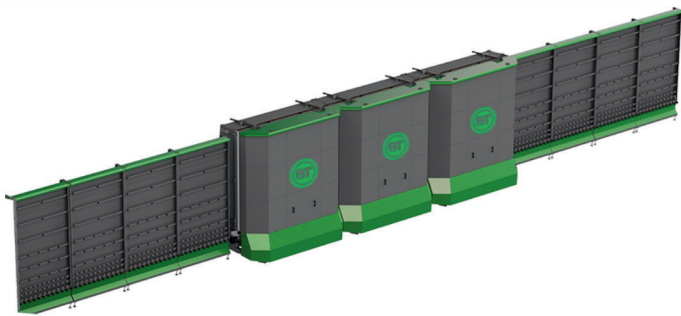
✓ Easy Cleaning of Nozzles

✓ All Surfaces in Contact With Water Are Stainless Steel

✓ Adjustable Washing Speed (Line Speed)
(For models 4.20 and 4.30)

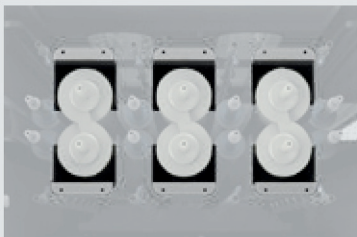
✓ Configurable Structure

✓ Fast and Stainless Washing Performance



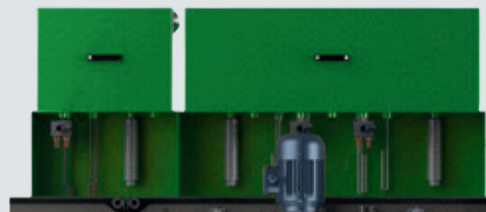
✓ Jumbo & Tandem Glass Pressing Compatibility

Modular design allows required components to be added to the system to provide the ability to wash Jumbo sized glass sheets.



✓ External Brush Cab

External cabs provide safe & clear washing performance and the process can be watched by the help of observation windows.



✓ Water Tank

- + Critical water level control
- + Water temperature control
- + Water distribution system to control the flow of water per brush

✓ Blower

Soundproofed cabinet with adjustable temperature.
Easy to clean and replaceable dust filter.
Resistive heating system.

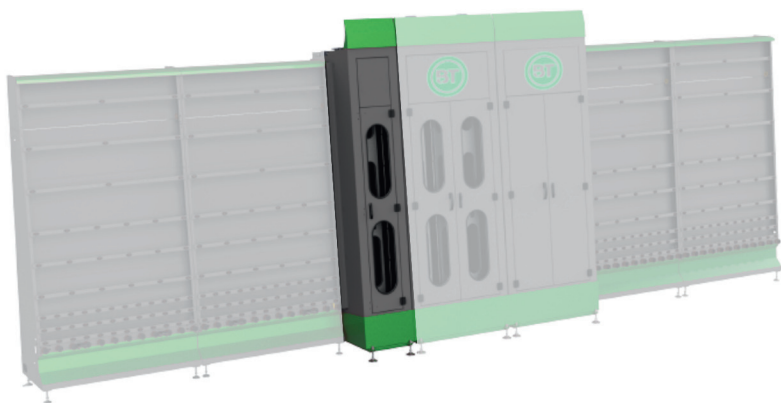
If there is no glass in the drying section, the blower is automatically stopped to save energy.

Optional Features

- ✓ **Opt.DFT**
Additional Dust
Filter & Water Tank

- ✓ **Opt.SCF**
Automatic Water
Filter (*Self Cleaning*)

- ✓ **Opt.SSB**
Stainless Steel
Outer Body



✓ **Opt. BSS Brush Speed Synchronization**

Sensitive glass washing results can be achieved in Low-E coated plates with the adjustable washing brush speed.

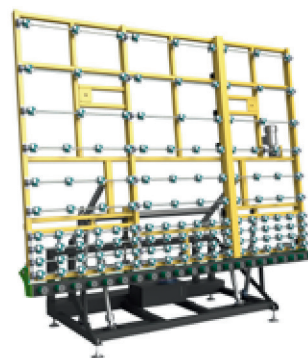
Valid for 4.20 and 4.30 versions

✓ **Air flow control**

Air distribution according to glass dimensions.

✓ **Opt. GPW- Pre- Washing**

Optimum cleaning can be achieved thanks to the pre-washing system developed to obtain fast and perfect results in the washing process.



✓ **Opt. Tilting Table**

Transfers glass sheets from vertical processes to horizontal processes



✓ **Opt.RAF - Remote Access**

Remote access feature provides advanced online assistance and troubleshooting

+ *Standard for models GWL4.20 and GWL4.30 in line with PPL press.*

✓ **Opt. 8 Glass Conveying Height 650 Mm (± 50)**

PPL Key Features

The main functions and features included as standard in our machines are structured to respond quickly and effectively to user needs.

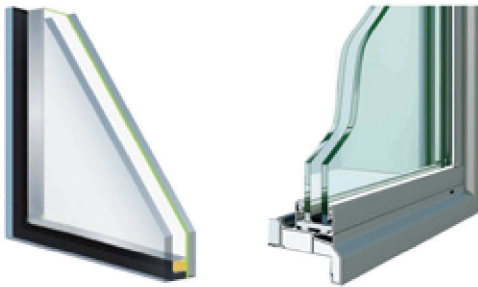


- ✓ Configurable structure according to your preferences and needs
- ✓ Possibility of increasing functionality by adding options during operation
- ✓ Opening the front panel for service by 38 cm

✓ Low-E Glass Pressing

✓ Modular Structure

✓ Sensitive 4 Points Pressing



✓ Straight and Shaped Glass Pressing

Straight and shaped glass pressing from CMS Shape Library can be performed optimally.

✓ Recipe Management

Save your datas and settings
 +Work order saving for servo machines and processing the same work order in the future.



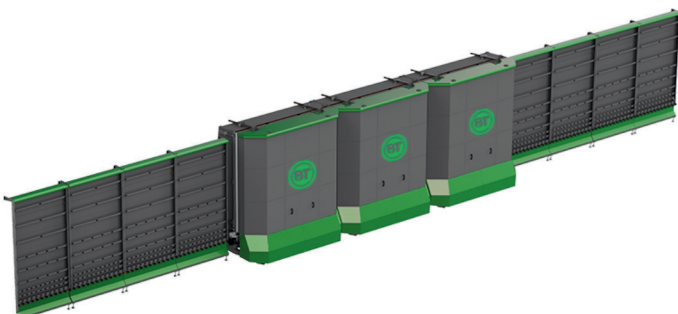
✓ Operator Panel

Take control under favor of user friendly operator panel



✓ Remote Access

Remote access feature provides advanced online assistance and troubleshooting



✓ Jumbo / Tandem Line Compatibility

Compatible to be integrated with multiple pressing units to press jumbo sized insulated glass units in single operation. This compatibility allows you to upgrade your machine to tandem/jumbo pressing line any time with low costs.

(Servo Pressing Option is Required for compatibility)

Optional Features

✓ Opt. - Press Inlet

Easiest way to prevent operator related delays and increase efficiency

✓ Opt. - Tilting Table

Suitable to transfer insulated glass unit to sealing process. Vertical unit tilted down to horizontal position and can be moved without an effort.

✓ Opt. - Automatic Adjustment of Frame Mounting for Stepped IG Units

Standard for PPL 4.3

✓ Opt. Spp – Servo Press Front Panel

Servo front panel drive system provides precise pressing by applying different pressure to glasses of different thickness and size.

- Automatic Pressing Pressure Setting
- Automatic Pressing Time Setting

Available as standard in PPL4.3 version



✓ Opt. G - Gas Filling System

The system is equipped with software infrastructure (mathematical model) and equipment that provides the best gas filling performance at high speed. It provides minimum gas consumption with gas filling application from the bottom edge.

Smart Functions

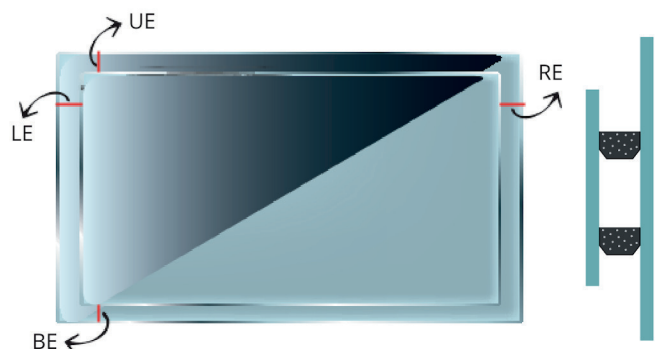
- + Mathematical Flow Control Model
- + Glass Height Measurement
- + Glass Length Measurement
- + Narrowing the Press Area
- + Spacer And Glass Thickness Measurement
- + Ops.SPP servo front panel drive comes together.

- + Gas filling of all IG, except stepped IG, for version 4.2.
- + Gas filling of all IG and stepped IG, for version 4.3.

✓ Opt. S Step Glass (Structural Glass) Function

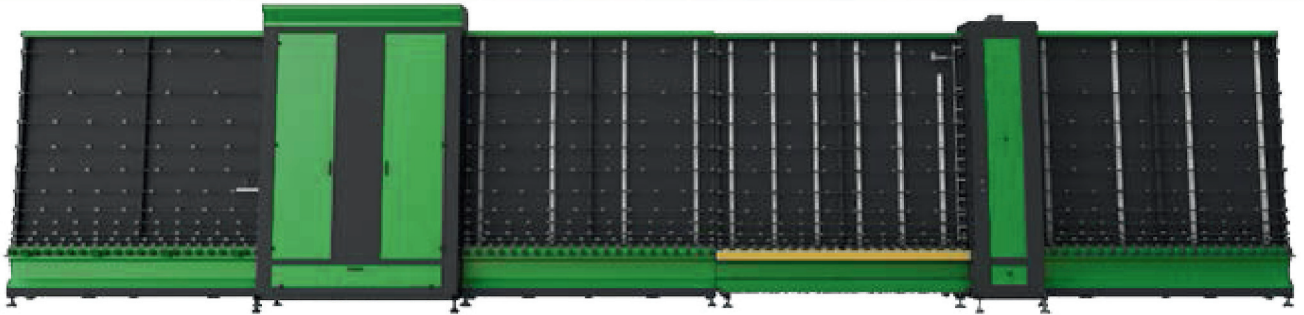
Developed using precisely positionable mechanisms for safe and stable pressing of facade glass

- + Precise Positioning
- + Strong Mechanical Structure
- + BE, LE, RE, UE: Max: 150 mm



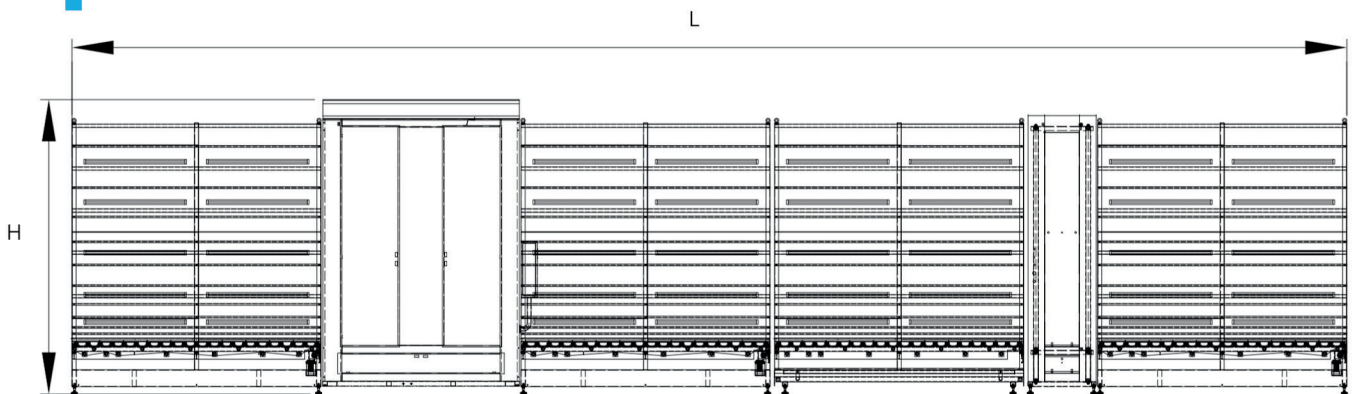
Glass Washing and Combining Line

Glass washing and combining line with roller press is designed for quick assembly of double glazed IG units.



-  Double-Glazed IG
-  Tilting Table (Opt.)
-  Low-E Glass Washing
-  Low-E Glass Detection (Opt.)
-  Stainless Steel Outer Body (Opt.)
-  Right to Left Working Direction (Opt.)
-  Sand Filter (Opt.)

Models & Sizes



DPYM	L	H
1700	15000 mm	2750 mm
2000	15000 mm	3050 mm
2500	15000 mm	3550 mm
2800	15000 mm	4050 mm


Technical Data

	DPYM1700	DPYM2000	DPYM2500	DPYM2800
Glass Thickness	2-10 mm			
Min. Glass Size	170x350 mm			
Washing Speed	6 m/min			
Max. Glass Size	1700x3000 mm	2000x3000 mm	2500x3000 mm	2800x3000 mm
Number Of Brushes	4	6	6	6


Vertical Washing Machine

The vertical washing machine is designed for glass automatic washing and drying.




- 

Stainless steel
outerbody (Opt.)
- 

Tilting table (Opt.)
- 

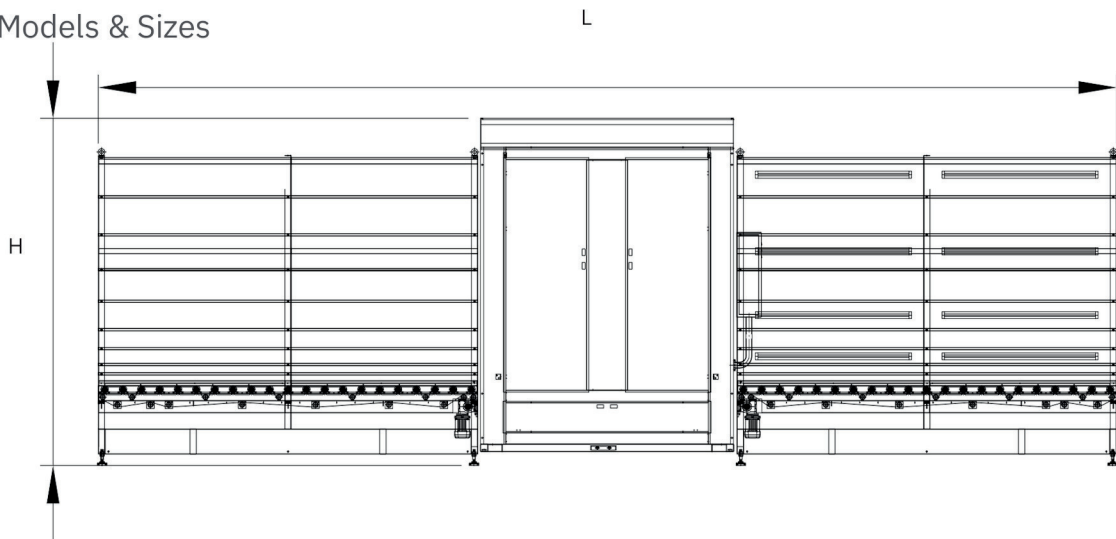
Right - to -
Left Direction
(Opt.)
- 

Sand filter (Opt.)
- 

Washing
Low-E glass
- 

Low-E Glass
Detection (Opt.)

Models & Sizes



CYM
1700

L
8000 mm

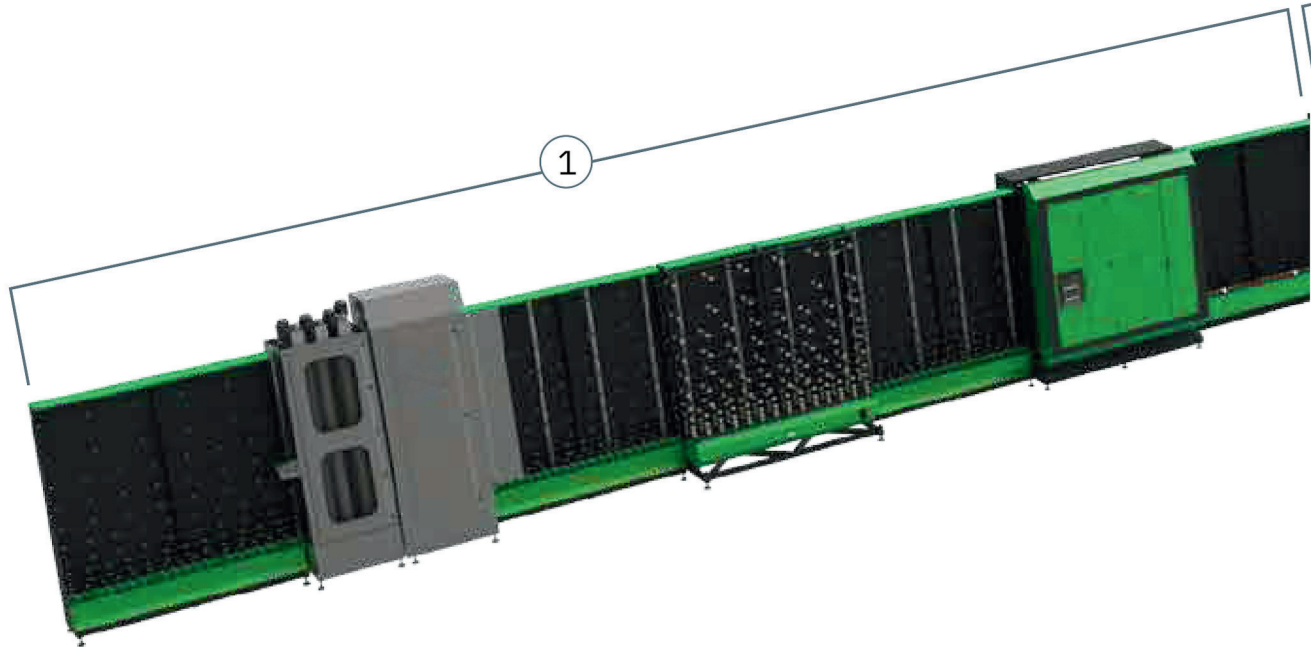
H
2750 mm

Technical Data

	CYM1700/4	CYM1700/6
Glass Thickness	2-10 mm	
Min. Glass Size	170x350 mm	
Washing Speed	6 m/min	
Max. Glass Size	1700x3000 mm	
Number of Brushes	4	6

Automatic Insulating Glass / Structural Glass Production Line and Structural Glass & Aluminium Frame Assembling and Bonding Line

The line is connected with automatic insulating glass production line and it is designed to combine structural glass and pre-fabricated aluminium frame, to apply silicone bonding around the frame and to store finished products in the shelf stock system.



1 4.th Generation Automatic Insulated Glass Line

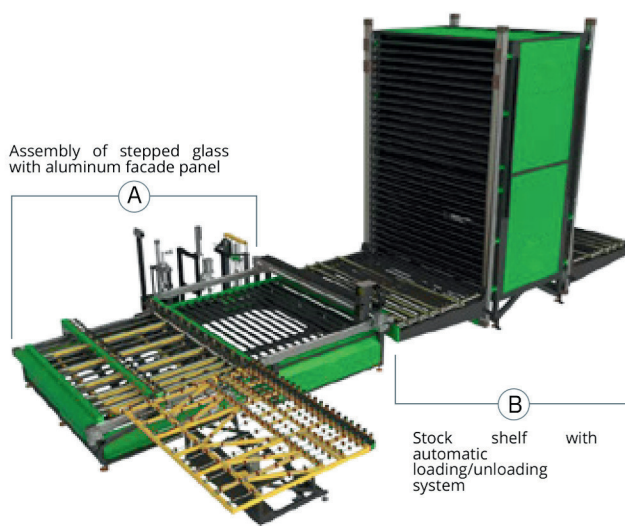
The **IG4.0 series** is designed for automatic high-precision and high-speed washing, drying, assembly and pressing of insulating glass units. The specially developed design allows you to configure the main components of the line according to the needs of your production. The new generation insulating glass line also provides the possibility of increasing its functionality and modernizing technologies during the lifetime of line's operation.













2 OTM - Servo Motor Automatic Glass Sealing Robot

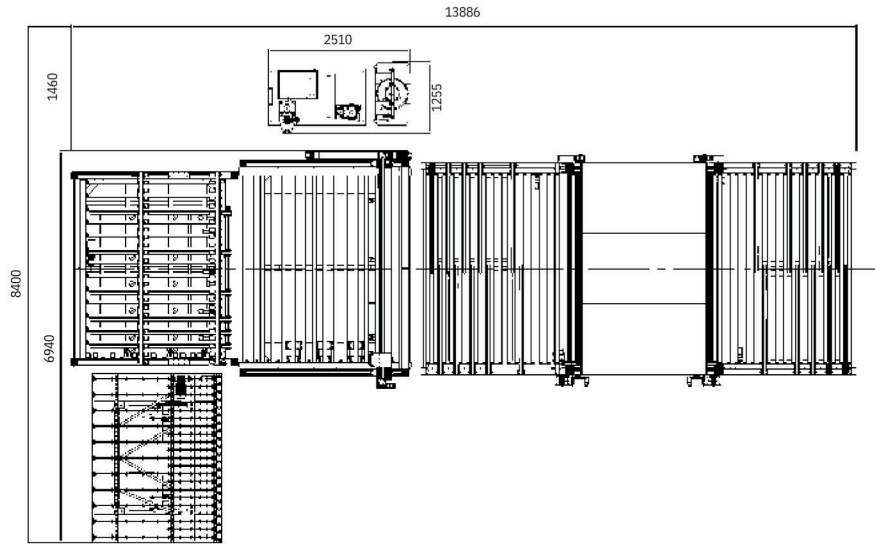
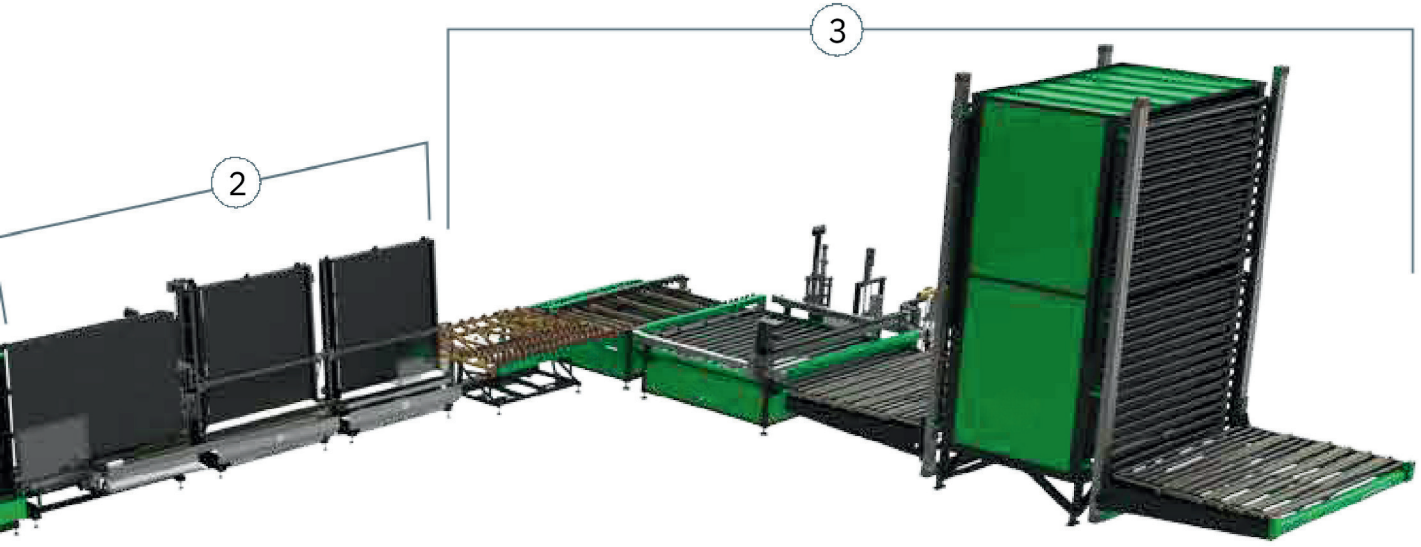
Servo motor driven automatic glass sealing robot is designed to apply secondary sealing of insulated glass production process. Sealing application is performed flawlessly with high speed by servo motor controlled stable structure

For further more details, please see pages 3-10 for IG and pages 15-18 for OTM.

3 Structural Glass & Aluminium Frame Assembling and Bonding Line



-  Remote Access
-  Assembly of Glass Aluminum Facade Panels
-  Automatic Loading Into a Shelf Rack
-  Automatic Product Return
-  Tilting Transfer Table
-  Automatic Positioning Barcode
-  Touch Screen CNC
-  Tracking Servo
-  Control PLC
-  Drive System Add. Shelf
-  Controller Automatic Bonding
-  Rack (Opt.)



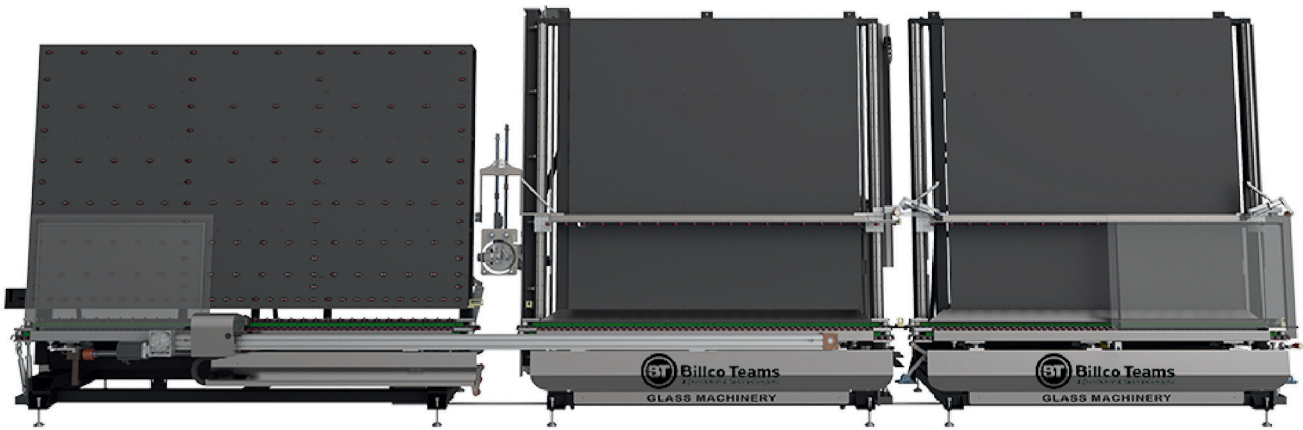
	W	L	H
PLX-	850 mm	650 mm	1150
1	1225	1225	mm 926
RSS	mm	mm	mm


Teknik Özellikler


	PLX-1	RSS
Max. Frame Size	2000 x 3000	
Min. Frame Size	mm 400 x 600	
Max. Frame And Glass Weight	mm	
Silicone Pump	300 kg	
Number of Shelves of The Rack	1 Unit (A+B)	28 Floors
Max. Number Of Frames in The Rack		112 Pieces (Each Floor)
Number of Frames Per Shelf		1, 2 or 4 Frames

Servo Motor Driven Automatic Glass Sealing Robot


Servo motor driven automatic glass sealing robot is designed to apply secondary sealing of insulated glass production process. Sealing application is performed flawlessly with high speed by servo motor controlled stable structure



 Double and Tripple (Opt.) Glass Sealing

 Double Pump System (Opt.)

 Stock Conveyor (Opt.)

 Cleaning System (Opt.)

 Stepped Glass Sealing (Opt.)

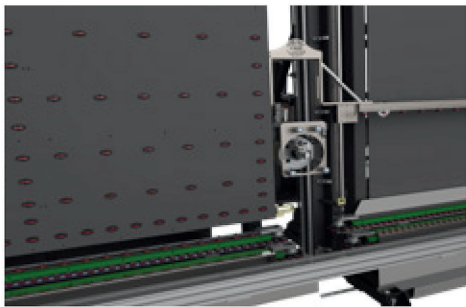
 Corner Correction

 Schüco Profile Sealing

 Remote Access

 Servo-Driven System for Pressure Control, Flow Rate and Precise Positioning

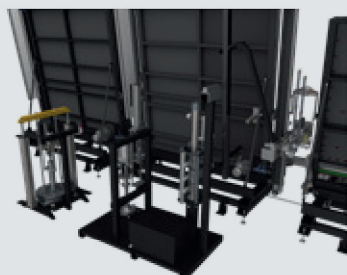
A- Sealing Unit



Developed by our expert staff in robotic automation engineering with multiple servo axis interpolation and CNC infrastructure, the sealing robot perfectly forms shaped and rectangular insulated glass units. For maximum quality and efficiency, speed, spacer depth and flow synchronization are performed precisely in continuous flow.

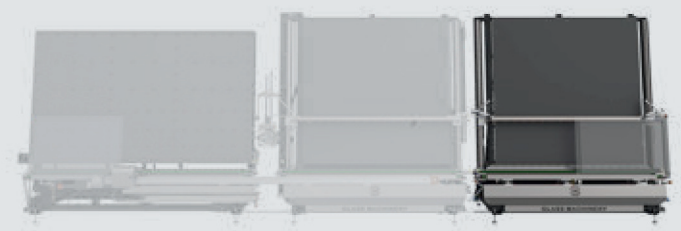
B- Servo Motor Controlled Hydraulic Pump System

With the pump system controlled by the servo hydraulic system, we can change the material flow rate and adjust the dosage unit automatically. With this feature, we always offer a stable and accurate automatic glass sealing machine for your production.

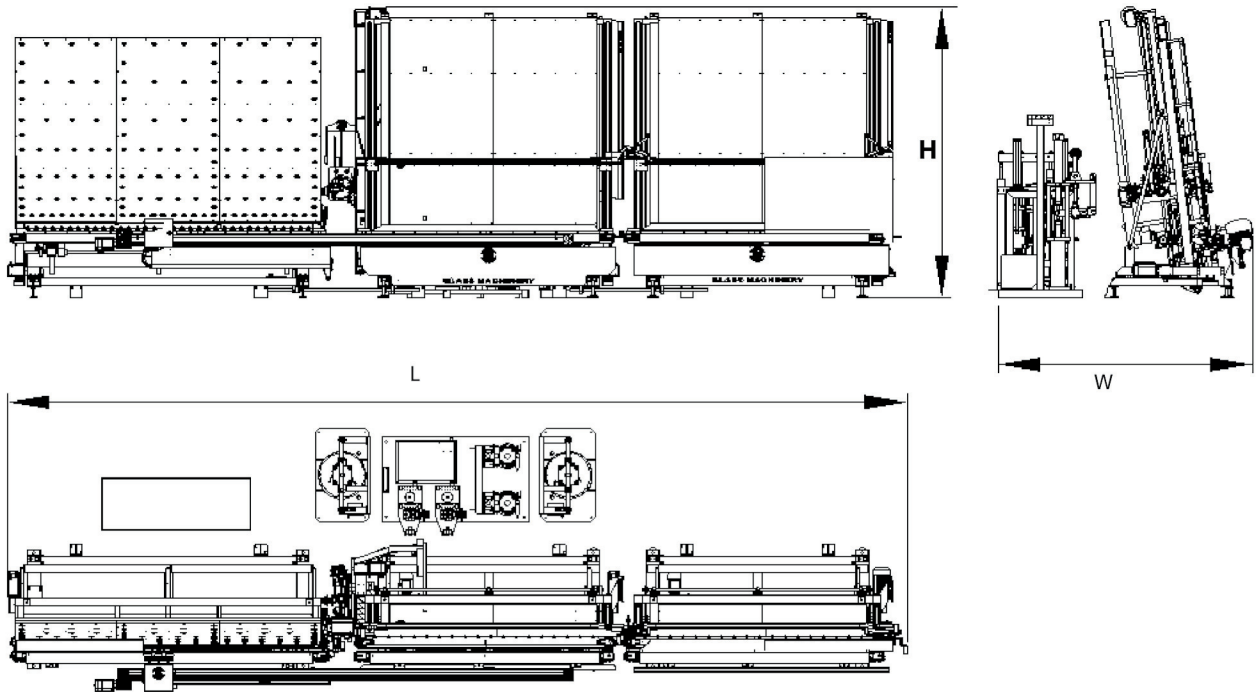


C- Outlet Conveyor

The extra conveyor we have added, creates a stock area for your finished products. Thanks to this extra conveyor, we increase your production capacity even more.



Models & Sizes



OTM2500

L

10500 mm

W

3000 mm

H

3450 mm

Please contact to your sales representative for different size requests.

Technical Data

	OTM
Component type	Polysulphide, Polyurethane, Silicone for Aluminium Frame Units
Min. glass dimensions	500x290 mm
Max. glass dimensions	3000x2500 mm
Frame thickness	6-40 mm
Filling depth	≤15 mm
Processing speed	6-40 mm
Number of pumps	1 unit (2 pcs. Opt.)

Key Features

The main functions and features included as standard in our machines are structured to respond quickly and effectively to user needs.

✔ Smart Sealing System

✔ Serial Glass Sealing

✔ Automatic Corner Correction



✔ Automatic Glass Measuring System

With the laser sensor system, we automatically measure the height, thickness and spacer depth of the glasses and use the appropriate amount of compound. In this way, we reduce material costs, save time and increase your production capacity.

✔ Recipe Management

Save your datas and settings



✔ Operator Panel

Take control under favor of user friendly operator panel.



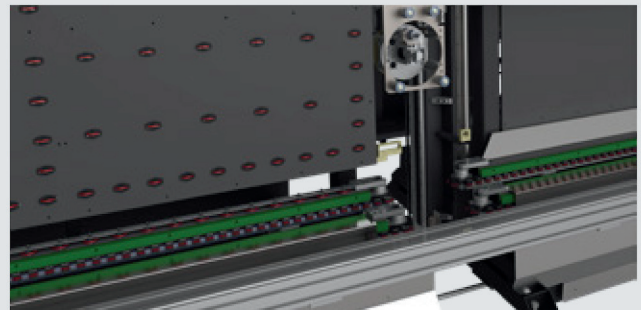
✔ Remote Access

Remote access feature provides advanced online assistance and troubleshooting



✔ Always Clean with Chain Conveyor System

With the integrated chain system, vacuum glass holder and servo motor drive technology that controls the whole system, we prevent compound to spread by positioning the glass smoothly and correctly. Thus, we ensure that the system always works clean.



- ✔ Full automatic glass sealing with servo motor technology
- ✔ Easy integration with all insulating glass production lines
- ✔ “A component” hose heater (for cold regions)

Optional Features

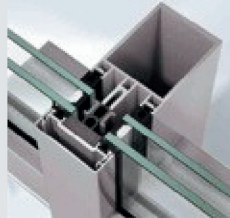
Opt. APS - Additional Pump System

Adding an extra pump to the system allows to use different type of compound when required. Second pump system can also be used as a ready-to-use replacement pump. Preventing interruption of production during barrel replacement also provides a separate advantage.



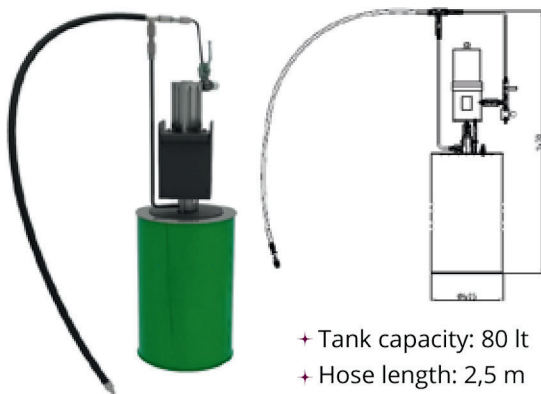
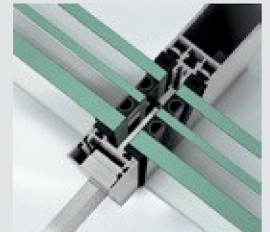
Opt. SPS Schüco Spacer Sealing

With the system and software support we have designed, you can easily make sealing to Schüco spacers.



Opt. TGS Triple Glass Sealing

Apply triple glass sealing fast, economical and with maximum quality.



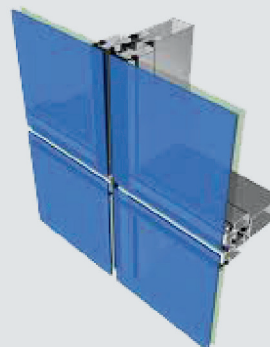
Opt. SC200 - Cleaning Pump

Silicone cleaning pump is designed to clean the mixer system of glass sealing extruders using high pressure solvent.

- + High pressure solvent cleaning system
- + High quality cleaning with close circuit
- + system Working with air in case of power cuts

Opt. SGS - Structural Glass Sealing

Take the glass sealing procedure to the next level. You can save time and make a higher quality production with this feature. It is designed to seal the section where the aluminum cassette and glass meet in the production of facade glass.



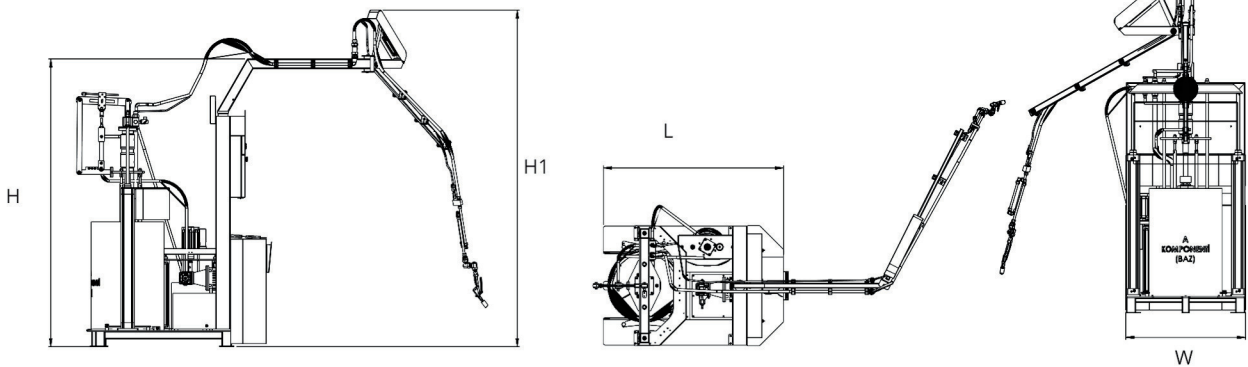
Sealing Extruder (Silicone – Polysulphide- Polyurethane)

Sealing extruder is used for final sealing of the gap and edges between spacer and glass in insulated or structural glass production.



-  Hose Heating System
-  Adjustable Mixing Ratio
-  Adjustable Hydraulic Working Pressure
-  Sealant Level Warning System
-  Remote Access (Opt.)
-  Convenient Sealant Delivery System
-  Telescopic Suspension
-  Application Gun and Freezer Working Height Control
-  High Pressure Warning System
-  Sealant Hardening Prevention System

Models & Sizes



		W	L	L1	H1	H1
SET1.0 - T	Polysulphide / Thiocol	975 mm	1500 mm	4200 mm	2350 mm	2750 mm
SET1.0 - S	Silicone					
SET1.0 - Pu	Polyurethane (Paste)					
SET1.0 - LPu	Polyurethane (Liquid)					

Technical Data

	SET1.0
Mixing Ratio	1:5 - 1:15 0-3
Output Volume	lt/min
Large Tank Capacity	200 lt/min
Small Tank Capacity	20 lt/min

Key & Optional Features

Key Features

✓ Compact Design

✓ Adjustable Mixing Rate

✓ Adjustable Hydraulic Working Pressure



✓ **Easy Drum Handling**

Drum handling system with holes for pallet truck in machine's body provides easy and fast way to change and center new drum.

✓ **Low-level Sensor System**

Low-level material sound warning system allows operators to accurately monitor material levels during the process.

✓ **Freezing Warning System**

Sound alarm system alerts the operator in case ready to use material was unintentionally forgotten in the mixer part of the machine.

✓ **High Pressure Safety System**

High pressure protection system as a safety instrument to prevent accidental pressure rise will shut off the source of the high pressure before the design pressure of the system is exceeded.

✓ **Application Gun and Freezer Working Height Control**

Instead of going to the machine's body first that one may insert sealant gun into the freezer the possibility to insert the gun into the freezer directly where the job was ended.

Optional Features



✓ **Opt.TAA - Telescopic Arm**

Convenient sealing of double-glazed IG with a telescopic arm.

✓ **Opt. HHF
Hose Heating System**

✓ **Opt. THL
Drum Carring Unit**

✓ **Opt. RAF
Remote Access**

Rotary Table

The most suitable and ergonomic solution for your manual insulating glass sealing operations



DTM



RTB



Support for Large IG Units



Heavy Glass Handling



Direction Control



Support Setting



2 Working Modes

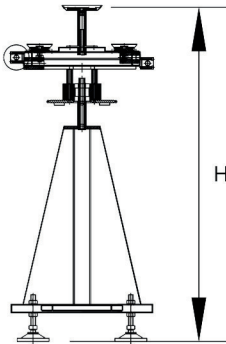


4 Working Modes

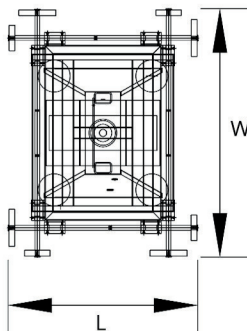
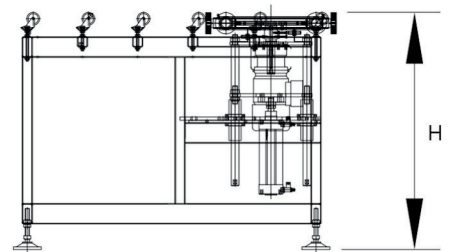


Rotation Speed Control

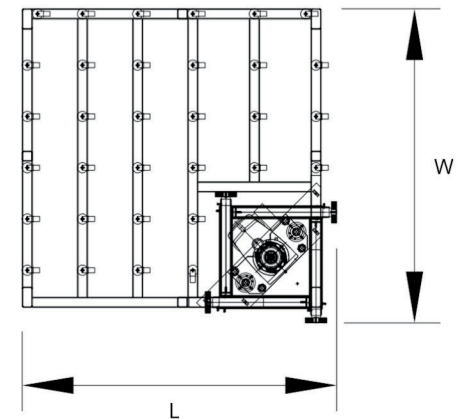
Models & Sizes



DTM	
W	850 mm
L	650 mm
H	1150 mm



RTB	
W	1225 mm
L	1225 mm
H	925 mm



Technical Data

	DTM	RTB
Min. Glass Size	150 x 150 mm	200 x 200 mm
Max. Glass Size	1500 x 1500 mm	2000 x 2000 mm

Key Features

✔ Compact Design



✔ Small Size Glass Sealing

We offer an easy-to-disassemble auxiliary suction cup attachment to easily sealing of small sized insulated glass units

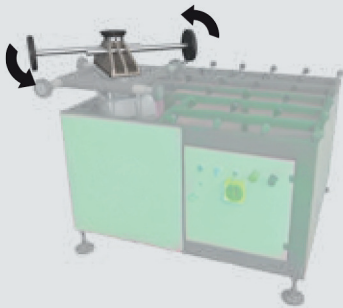
✔ High Pneumatic Suction Force

✔ Easy Usage With Foot Pedal



✔ Sealing Large Size Insulated Glass

We facilitate your work with supporting arms to easily seal large sized insulated glasses.



✔ Adjustable Rotation Speed

We offer your operator the option to adjust the rotation speed so that they can work at the desired speed.

+ This feature is only available for the RTB model.

✔ Different Rotation Options

We provide convenience to your operator with our different turning options, 90, 180, 360 or circular, for easy and fast use.



90 and 360 degrees
Direction of rotation (Left)



90, 180, 270 and 360 degrees
Direction of rotation (Left and Right)

Cleaning Pump / Freezer

Cleaning pump is designed to clean the mixer system of glass sealing extruders using high pressure solvent.

SC



 Working With Air
in Case Of Power Cuts

Models & Sizes

	Ø	H
SC	3030 mm	1500 mm

Technical Data

	SC
Tank Size	400 x 675 mm
Tank Capacity	80 lt
Hose Length	2,5 m

TF



 Stainless Steel

 Adjustable Working Temperature

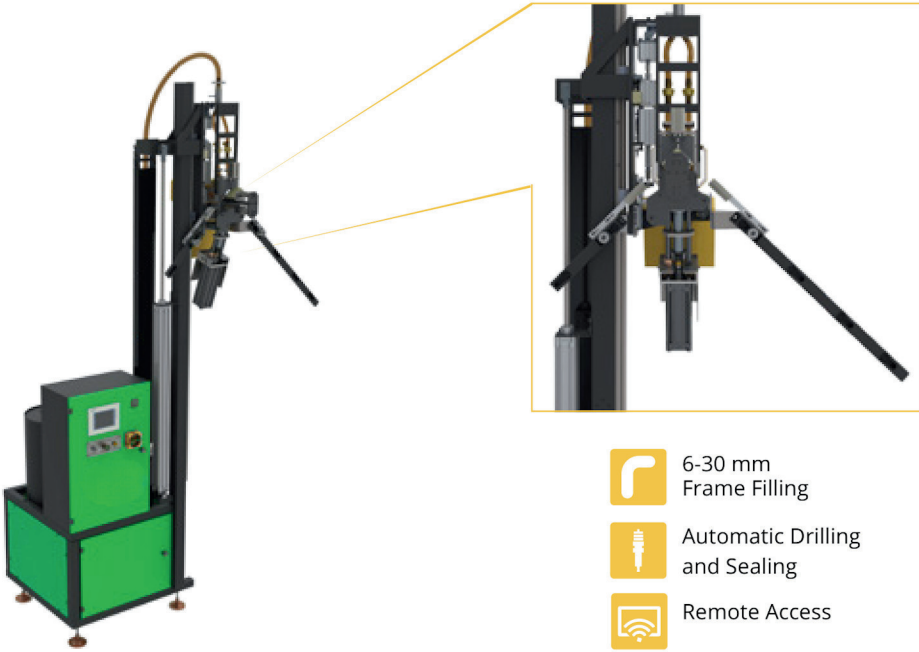
Models & Sizes











	W	L	H
TF	700 mm	700 mm	1100 mm

Technical Data

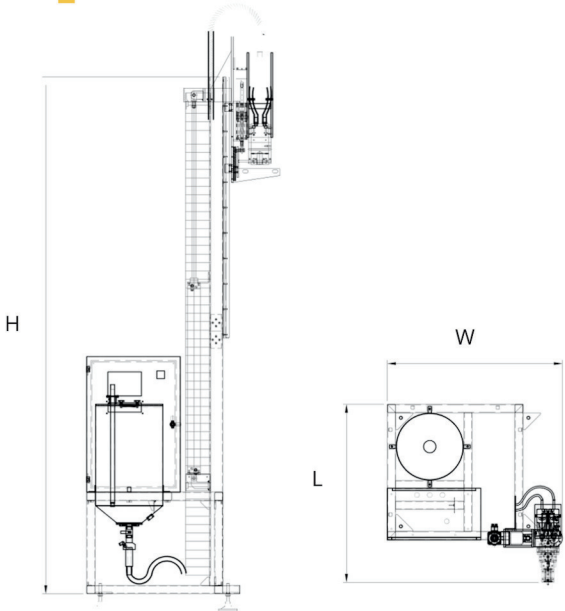
	TF
Work Temperature	-35 °C / +50 °C

Automatic Desiccant Filling Machine



-  Filled Volume Control
-  Working Height Adjustment
-  Fully Automatic Filling Desiccant Tank
-  Filling Control
-  Filling Control
-  6-30 mm Frame Filling
-  Automatic Drilling and Sealing
-  Remote Access
-  Butyl Tank
-  PLC Controller

Models & Sizes



	W	L	H
ADF	1100 mm	1110 mm	3500 mm

Please contact to your sales representative for different size requests.

Technical Data

	ADF
Min. Frame Size	250 x 250 mm
Max. Frame Size	2000 x 2000 mm
Frame Thickness	6 - 24 mm
Silica Gel Diameter	0,5 - 0,8 mm

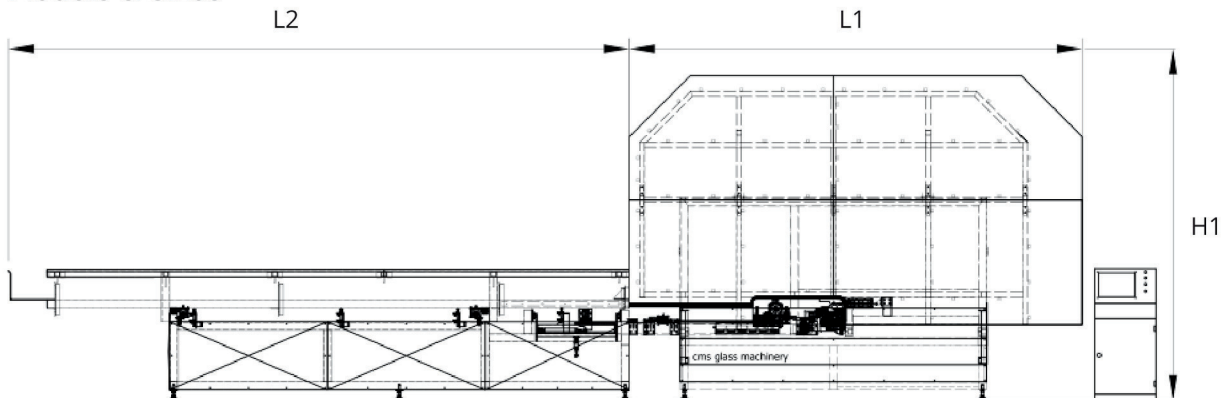
Automatic Spacer Bending Machine

Automatic spacer bending machine is designed for fully automatic bending of bendable type aluminum spacers with different thicknesses used in the production of insulated glass. Optimization software provides minimum waste.



-  Automatic Spacer Adding
-  Remote Control
-  Communication with Glass Cutting Table
-  Thick Spacer Bending for 6-30mm (Opt.)
-  Multifunctional Bending Head
-  Servo Motor Driven Movement System
-  Gas Filling Hole
-  Shape Bending (Opt.)

Models & Sizes



	T - Spacer	L - Spacer	W - Spacer	L1	L2	H1
APB	6-24 mm	2000 mm	2500 mm	4400 mm	6080 mm	2600 mm
<i>Please contact to your sales representative for different size requests.</i>						

Technical Data

	APB
Min. Frame Size	250 x 250 mm
Max. Frame Size	2000 x 2000 mm
Frame Thickness	6 - 24 mm
Min. Frame Wall Thickness	0,3 mm
Min. Bending Diameter	200 mm
Cutting Length	250 - 4000 mm
Frame Storage Shelves	4
Bending Allowance	+/- 0,3 mm

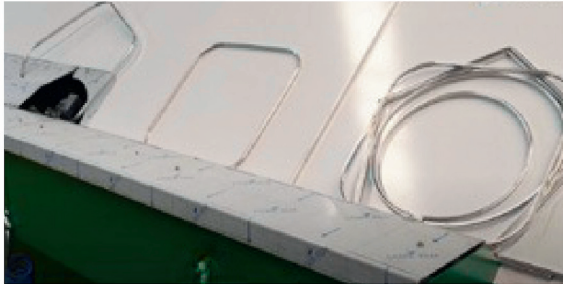
Key & Optional Features

Key Features

✓ Rectangular and Shaped Spacer Bending

✓ Serial Production

✓ Bending Optimization



✓ **Fully Automatic Spacer Bending with Servo Motor Technology**

You can automatically bend your spacers in desired sizes with our servo motor technology solutions.

✓ **Recipe Management**

Save your datas and settings

✓ **Operator Panel**

Take control under favor of user friendly operator panel

✓ **Remote Access**

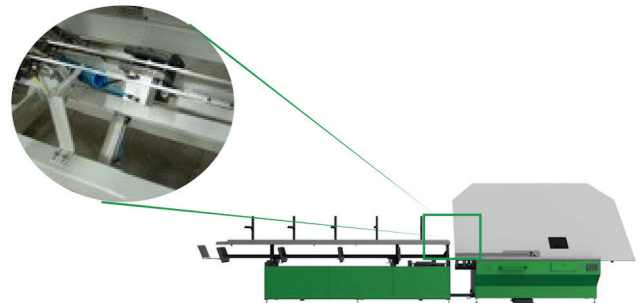
Remote access feature provides advanced online assistance and troubleshooting

✓ **Stock Magazine for Different Types of Spacers**

Thanks to spacer magazines, different spacer types and thicknesses can be stored. Magazine changes can be made at any time according to the type of spacer to be bent.

✓ **Unlimited Spacer Bending with Automatic Spacer Insertion System**

This feature allows the bending process is always fed with spacer and minimum spacer wastage is provided.



Optional Features



✓ **Opt.GFH Automatic Argon Gas Hole Drilling**

Automatic argon gas hole drilling feature can be implemented to the machine.

✓ **Opt.VTR - Data Transfer from Glass Cutting Machines or ERP Software**

This infrastructure allows us to transfer spacer details from either CMS or different brand cutting machine to the bending machine. Data transfer can also be done through your ERP system. For our solutions, please consult to your sales representative.

✓ **Opt.SSB - Shaped Spacer Bending**

Shaped spacer bending according to CMS Shape Library.

Butyl Extruder

Butyl extruder can process different thickness spacer bars. The feeding nozzles can be positioned to deliver uniform sealing



On / Off Timer



Logo Controller

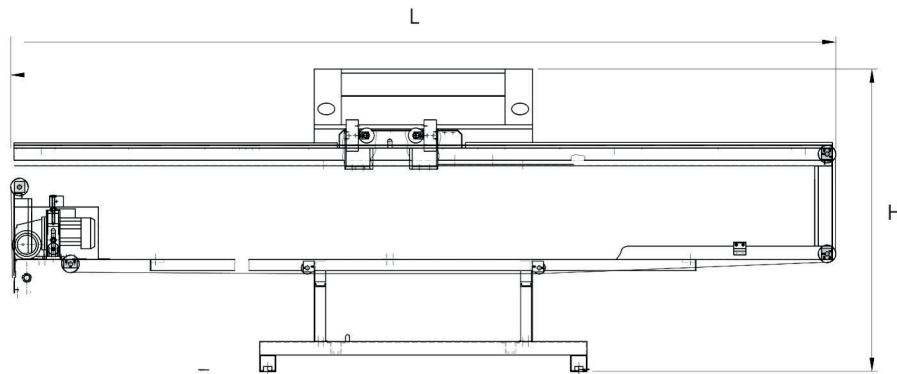


Automatic Temperature Control



Fixing the Frame

Models & Sizes



	L	H	Z
BM7	3030 mm	1110 mm	800 mm
<i>Please contact to your sales representative for different capacity requests.</i>			

Technical Data

	BM
Tank Capacity	7 kg
Belt Speed	22 m/min
Min. Frame Thickness	6 mm
Max. Frame Thickness	24 mm

Key & Optional Features

✔ Heat Insulated Butyl Tank

✔ High Pressure Safety

✔ Adjustable Material Flow Rate And Pressure

Control Panel



✔ Operator Panel

With our state-of-the-art, innovative and ergonomic control panel, all your butyl drawing processes take place automatically under your control. With our software designed with a user-friendly interface, we minimize operator intervention and shorten the entire butyl application process and offer you the fastest solution.

✔ Opt. 1 Always Ready to Work

With the timer system, determine which days and times your machine will heat automatically and at what hours it will turn off. Thanks to this feature, when you come to your workplace, your machine will be ready for butyl application, and will automatically switch to cooling off at the end of working hours and shut itself down.



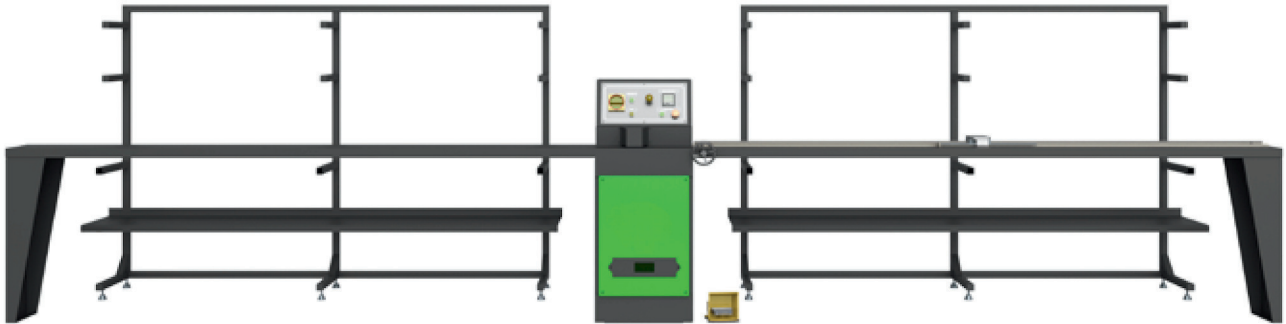
✔ Precise Temperature Control

Proportional-Integral-Differential (PID) controller for maintaining the preset temperature of the material.

✔ Automatic and Manual Operation

Spacer Cutting Machine

Spacer cutting machine is designed for cutting aluminum spacers in desired dimensions to be used in insulated glass production.



Digital Controller



Adjustable Distance Between Frames

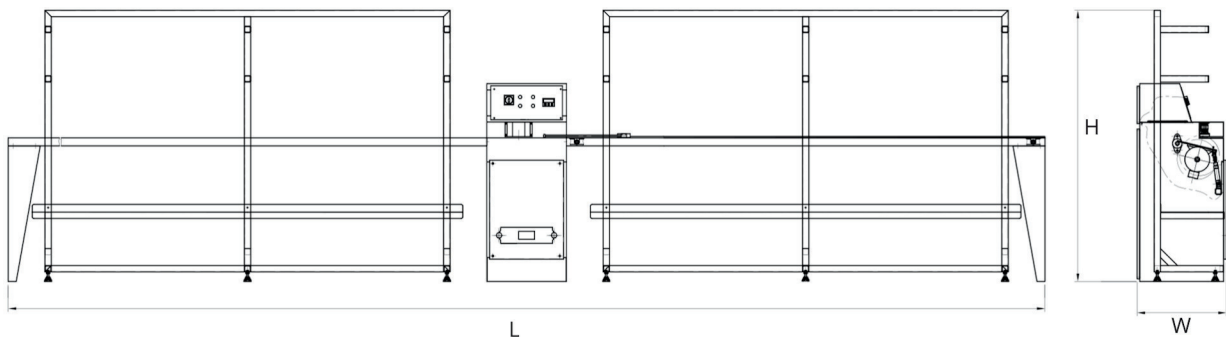


Shelf Rack



Simultaneous Cutting of Several Frames

Models & Sizes



	W	L	H
PKM	560 mm	6500 mm	1700 mm

Technical Data

	PKM
Min. Frame Length	100 mm
Max. Frame Length	2800 mm

Key & Optional Features

✓ Adjusting the distance between frames

✓ Foot pedal

✓ Easy Operation

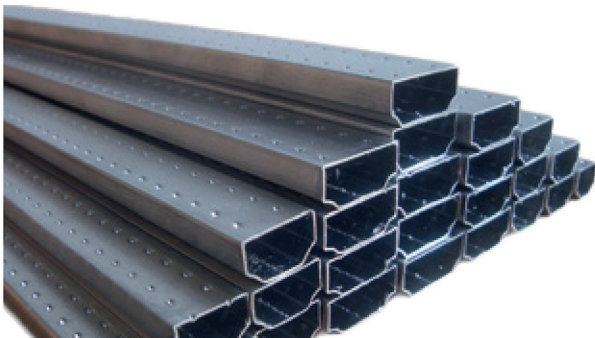
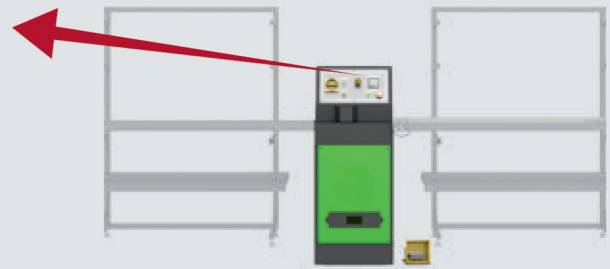


✓ **Multiple Spacer Cutting**

Simultaneous cutting of several frames of a given size.

✓ **Digital Measurement Indicator**

You can track the size of the spacer to be cut from the digital measurement indicator.



✓ **Burr-free Spacer Cutting**

We ensure you to achieve perfect results with a special circular saw for quality and burr-free spacer cutting.

✓ **Comfortable Cut with Spacer Fixing**

We keep your spacers fixed with our pneumatic controlled system so that you can always cut your spacers with the same quality.



Hotmelt Extruder / Spacer Frame Carrying Unit

Hotmelt sealant extruder is designed for secondary sealing of insulating glass units. The spacer frame conveyor is designed for automatic transfer of frames, which have undergone primary sealing with butyl, to the spacer montage section of the panel press.

HM



 Temperature Control System

Models & Sizes

	W	L	H
HM	750 mm	900 mm	1650 mm

Technical Data

	HM
Tank Capacity	50 kg

PTU



 Photocell Motion Sensor

Models & Sizes

	W	L	H
PTU	3450 mm	3000 mm	2750 mm







Technical Data

	PTU
Frame capacity	120 pcs.

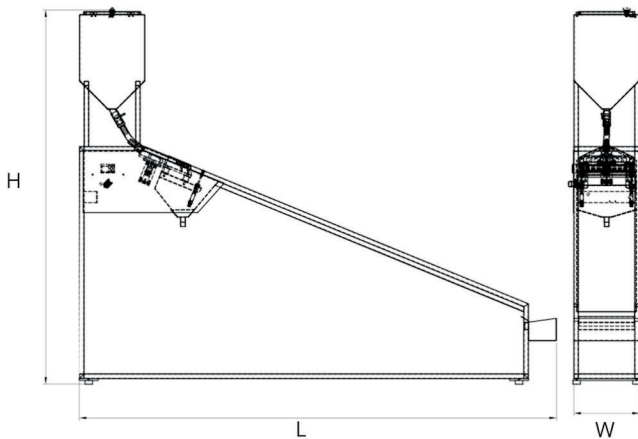
Desiccant Filling Machine

Desiccant filling machine is used for filling silica material, which is an anti-moisture material, in aluminum spacer used in the production of insulated glass.



-  Pneumatic Vibration
-  Simultaneous Filling of Several Frames
-  Electric Heating
-  Storage Tank
-  Main Tank
-  Filling Control

Models & Sizes



	W	L	H
SM	400 mm	2550 mm	2000 mm

Technical Data

	SM
Main Tank Capacity	25 kg

Technical Service

Our After Sales Service department has the same objective as you: to achieve high and reliable performance throughout the entire life cycle of your equipment. Our global service team provides support with services and customised service products to guarantee and improve the performance of the machine. CMS Glass Machinery's service philosophy is to ensure close cooperation, efficient communication and high flexibility.



Maximum reliability and a long-term operational capability

Whether you need prompt assistance over the telephone, e-mail, remote support request, replacement of a particular component, an inspection or maintenance, our service team acts quickly and provide you with first-class support, round the clock, at any location and over the whole life-cycle of your installation. We always explore options to keep your total cost of ownership as low as possible.

✔ Personal Contact

✔ Revision

✔ Maintenance

✔ Spare Parts

✔ Remote Support

✔ Repair

✔ Field Service

✔ Training

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