

LiTROS



Solutions by LiTROS

Service

Strong at the start, steady in performance.

With LiTROS, a brand of the LiSEC group of companies, we see service not just as support — but as a real growth engine for our customers. Our goal is to make it easy for glass processors all over the world to get started in industrial production. We do that with well thought out machine solutions, personal support and a strong network in the background.

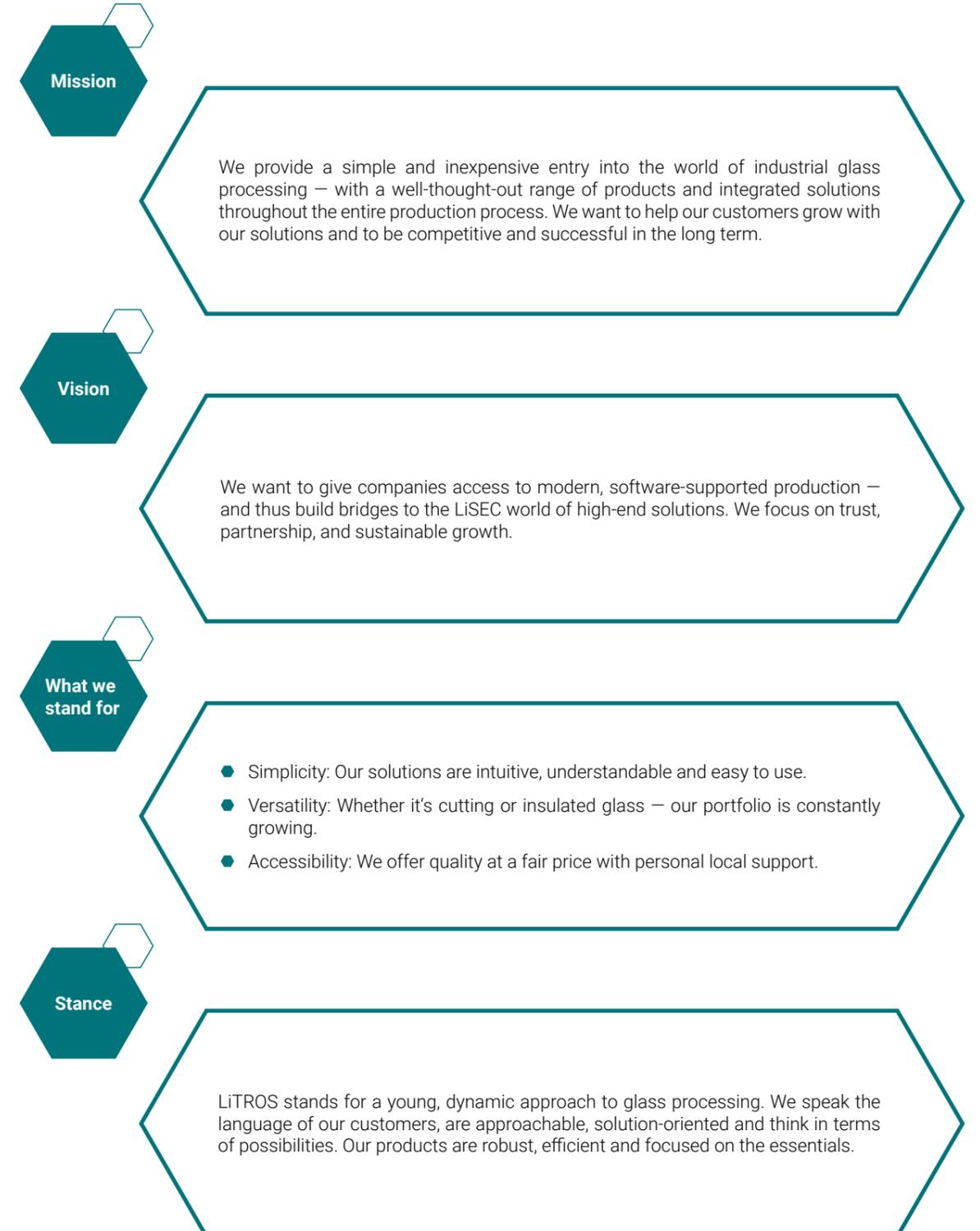
What you can expect from our service:

- **Reliable support right from the start**
Whether you are just taking the first step towards mechanized manufacturing or would like to modernize your existing machinery — we support you with know-how, experience and a clear focus on your needs.
- **Local contacts — globally connected**
Our local service technicians are available to provide you with advice and assistance. At the same time, you benefit from the worldwide knowledge network of the LiSEC group.
- **Maintenance & support — easy and efficient**
Our systems are designed to be easy to maintain. If something doesn't go smoothly, we are there for you — as a partner, solution-oriented and reliable.
- **Consulting that thinks ahead**
We not only help you select the right machines, but also provide you with strategic advice — so that your investment is successful in the long term.



About LiTROS

LiTROS is a brand of the LiSEC group. As part of LiSEC group, we combine decades of mechanical engineering expertise with fresh, practical approach.



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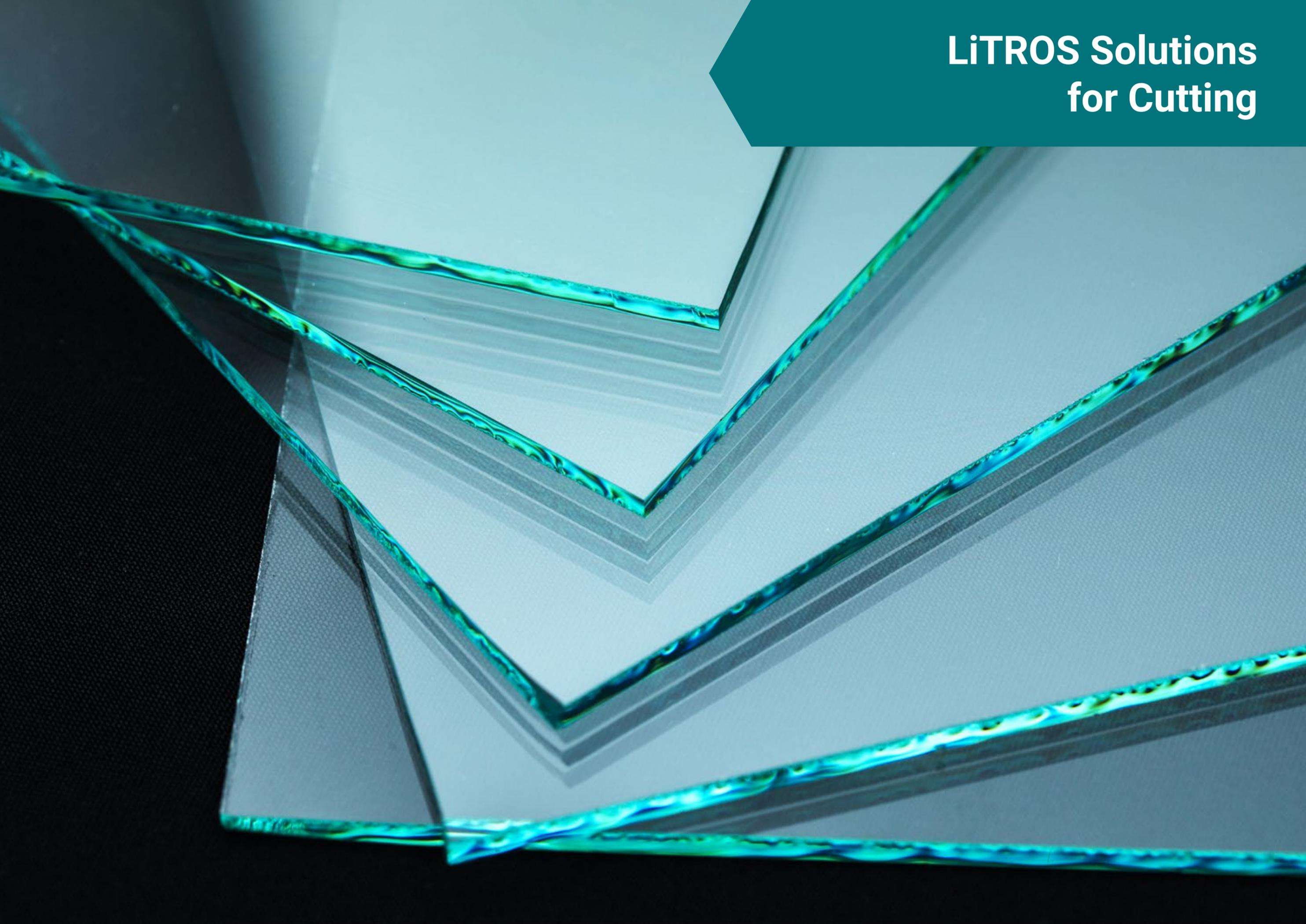
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LiTROS Solutions for Cutting





LiTROS Cutting Line

Modular complete solution for float glass cutting

The LiTROS Cutting Line is a sophisticated, modular solution for industrial processing of float glass. It consists of three perfectly coordinated stations: LiTROS Load, LiTROS Float Cut and LiTROS Float Break. This line enables a continuous process from loading to cutting to breaking out the glass panes.

Components of the system:

- LiTROS Racks
- LiTROS Load
- LiTROS Cut
- LiTROS Break

Highlights

- **Continuous process from raw glass removal to finished cutting:** The line combines three perfectly coordinated stations – Load, Cut and Break – and thus enables a seamless process from removal of raw glass panes to precise cutting to manual breaking.
- **High flexibility in formats and configurations:** The line processes glass panes up to 6000 x 3300 mm and is available in various versions with up to eight racks. This allows you to adapt the line to different production requirements.
- **Precision and efficiency thanks to modern technology:** Automatic cutting pressure regulation, gantry cutting bridge, air cushion table and edge deletion module ensure the highest cutting quality and gentle glass transport – even with coated glass.
- **Focus on ease of use and safety:** The manual breaking station with a foot pedal, air cushion and breaker bars in the X and Y directions enables safe and ergonomic further processing of the cut glass panes.

Sophisticated stations – perfectly coordinated

1. LiTROS Load – Stock plate loading station

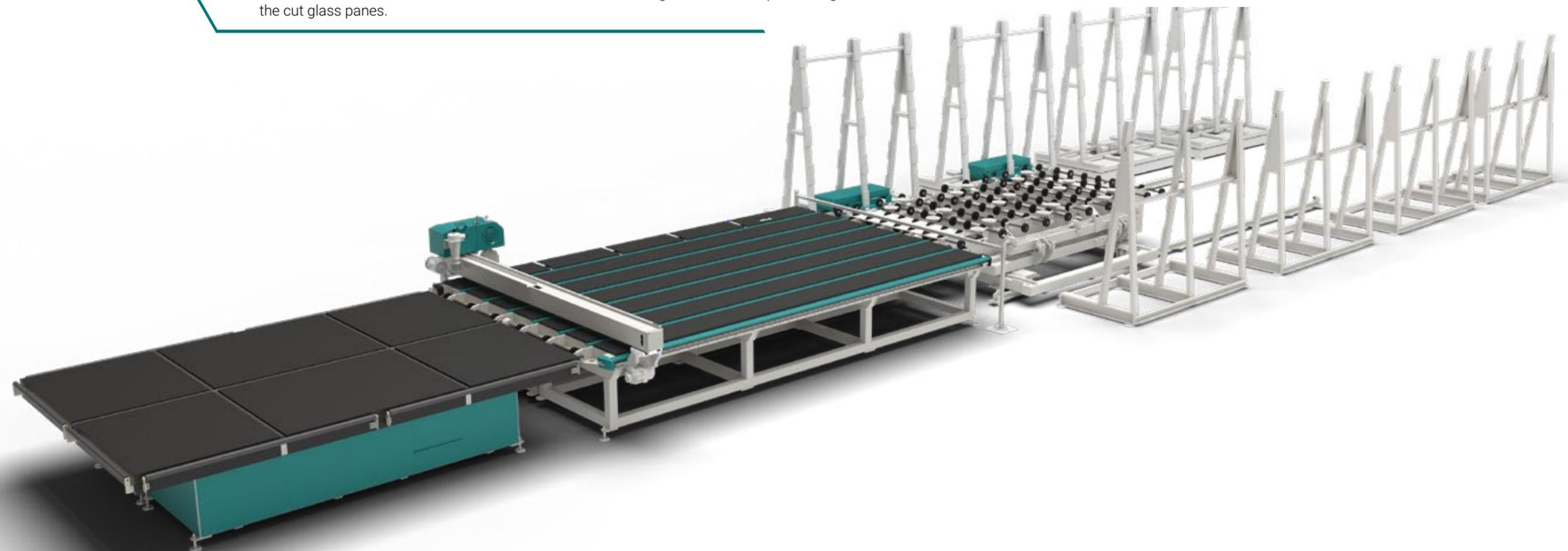
The first step is LiTROS Load. This double-sided, stationary glass loading station was specially developed for removing stock plates from L-racks. Depending on the design, it is able to process glass panes of up to 3700 x 2700 mm or 6000 x 3300 mm and can be equipped with two, four, six or eight racks. The stock plates are removed from L-racks positioned on both sides. The glass panes are loaded evenly and carefully onto the line. A vacuum pump ensures that the glass panes are securely fixed during transport. This structured process enables reliable and efficient handling of raw glass and forms the basis for the subsequent processing steps.

2. LiTROS Float Cut – Glass cutting system for float glass

In the second step, the LiTROS Float Cut takes over the precise cutting of the glass panes. This cutting system was specially developed for cutting and decoating float glass. It processes stock plates in the same maximum dimensions as the loading station and offers automatic cutting pressure regulation that is optimally adapted to the respective requirements. The cutting bridge with gantry drive, together with the air cushion table surface, ensures gentle and precise transport of the panes during cutting. An integrated edge deletion module makes it possible to remove Low-E coatings using a grinding wheel.

3. LiTROS Float Break – Manual breaking of cut glass sheets

The last step consists of manually breaking the cut glass panes with LiTROS Float Break. This station is equipped with breaker bars in the X and Y directions, which enable a precise and controlled separation. The cut panes are manually inserted into the system and positioned. The breaking process is triggered by a foot pedal, causing the Y-breaker bar to rise and break open the cut. Further cuts can then be manually broken open. The separated panes can either be transported further manually or gently transported to the next station using the integrated air cushion. Depending on the model, this station is also designed for glass panes of up to 3700 x 2700 mm or 6000 x 3300 mm and a thickness of 3 to 19 mm.



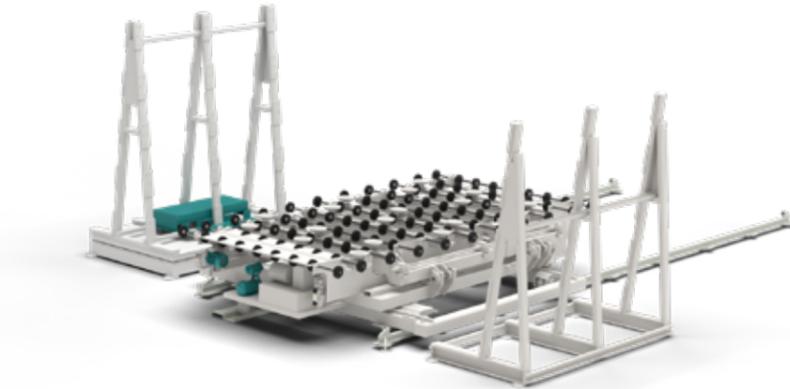
LiTROS Load

Stock plate loading station

The LiTROS Load is a double-sided, stationary glass loading station specially developed for moving loading stock plates. It supports handling glass sheets up to a maximum size of 3700 x 2700 mm/6000 x 3300 mm and offers efficient glass processing. This glass loading station is available with either two, four, six or eight racks.

Components of the system:

- 2 L-Racks
- Hydraulic pump for loading
- Vacuum pump for vacuum generation



Function & process:

As a first step, the system removes the stock plates from the "L" glass storage racks (2 L-racks) positioned on the reference side and opposite the reference side. This ensures that the stock plates can be safely removed from the storage racks.

The next step is loading the system. This process is supported by a hydraulic pump, which ensures smooth and controlled movement of the stock plates. The hydraulic pump plays a crucial role in precisely positioning and transporting the stock plates.

Finally, vacuum generation is ensured by a vacuum pump. This pump creates the necessary vacuum to securely hold and move the stock plates. Vacuum generation is a critical step to ensure that the stock plates remain stable and undamaged throughout the process.

These clearly defined steps ensure a smooth and efficient process that optimizes the handling of stock plates.

Highlights

- **Flexible rack options:** The glass loading station is available with either two, four, six or eight racks and can therefore be flexibly adapted to different requirements.
- **Automated loading and vacuum generation:** Loading is carried out by a hydraulic pump and vacuum is generated by a vacuum pump. This ensures reliable, efficient handling of stock plates.
- **Automated loading process:** Self-regulating suction cups designed to prevent overloading and potential breakage caused by excessive vacuum force. Regulation is implemented through sensors mounted directly on the robotic arms.
- **Double side loader:** Glass removal from both the reference side and the opposite side, enabling greater glass type flexibility.

Specifications	LiTROS Load
Maximum processing sizes	3700 x 2700 mm / 6000 x 3300 mm
Glass thickness	3 - 19 mm
Electrical voltage and frequency	3P 380 ~ 480 V, 50/60 Hz

LiTROS A-Rack Rotating

Rotating loading station

The LiTROS A-Rack Rotating was developed for use at loading stations that supply cutting systems with flat glass. Thanks to its integrated rotation function, it enables flexible glass infeed and increases loading variability. The robust construction is ideal for industrial applications with heavy glass packages.



LiTROS Load 2R



LiTROS Load 4R

Components of the system:

- Rotatable A-frame unit
- Heavy-duty frame construction
- Two glass support surfaces that can be used on both sides
- 180° rotation mechanism



LiTROS Load 6R



LiTROS Load 8R

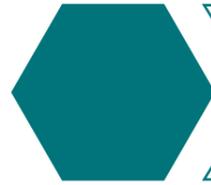
Function & process:

The A-frame is positioned at the loading station and its 180° rotation function allows loading and unloading from two sides. This increases flexibility when changing glass and reduces downtime. The stable frame construction ensures a secure hold even with heavy glass packages. Rotation is manual or optionally motorised, depending on the version.

Highlights

- **180° rotation:** Maximum flexibility when loading and unloading glass.
- **Double-sided use:** Greater variability at the loading station.
- **Robust construction:** Designed for heavy glass packages and continuous industrial use.

Specifications	LiTROS Load
Minimum glass size	1829 x 2438 mm
Maximum glass size	3000 x 3900 mm
Maximum load capacity	24 t
Rotation angle	Up to 180°



LiTROS Float Cut

Glass cutting system for float glass

The LiTROS Float Cut is a glass cutting system specially developed for cutting and decoating float glass. It enables cutting of glass panes up to a maximum size of 3700 x 2700 or 6000 x 3300 mm.

Components of the system:

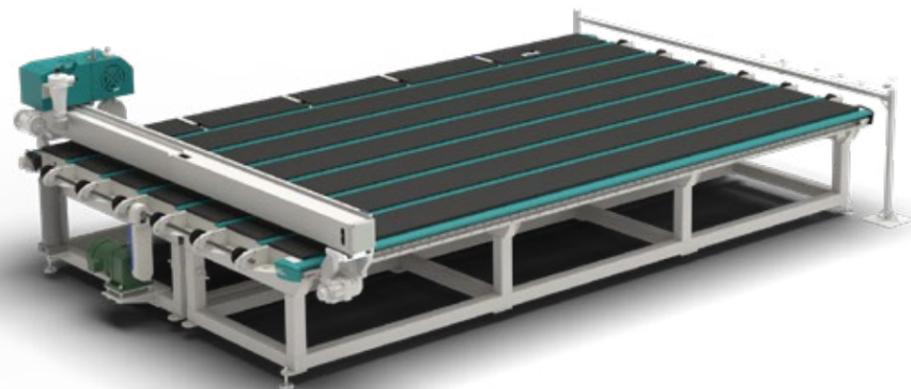
- Edge decoating module
- Automatic cutting pressure control
- Table top with air cushion
- Gantry cutting bridge
- Control panel

Function & process:

- **Transport of glass:** The glass panes are transported on a table surface equipped with transport belts and air cushions. Automatic transport is possible thanks to the transport belts. The air cushion makes it easy to move the glass sheets and protects them from scratches.
- **Edge decoating:** If the glass has a Low-E coating, it is removed at the edges with a grinding wheel. An integrated suction system efficiently removes the resulting dust.
- **Cutting the glass:** The cutting bridge with the cutting head automatically moves over the glass and cuts it according to the specified optimization data. The cutting pressure is adjusted electronically to ensure the best results.



- **Automatic cutting pressure regulation:** Ensures optimal cutting results by automatically adjusting the cutting pressure.
- **Table surface and cutting bridge:** Durable air cushion felt for gentle transport and X-axis gantry drive technology for precise cutting.
- **Edge deletion:** For glass with a Low-E coating, the coating is removed at the edges using a grinding wheel. An integrated suction system efficiently removes the resulting dust. Standard widths for edge deletion are 20 and 24 mm. If this feature is not required, it can be disabled to shorten the cutting table's cycle time.
- **Multiple reference point settings:** Reference points can be set using sensors (standard 3 points, optional 4 points for quicker positioning) or a mechanical stopper, ensuring precise and repeatable alignment.
- **Dual servo motors:** Reliable, durable, and designed to minimize operational errors.
- **LiTROS' proprietary CNC & PC-based operating system:** Fully developed in-house for easy maintenance and fast, manufacturer-direct support.
- **Rack and pinion:** Precision-engineered for minimal maintenance expenses
- **Zero trim cut:** To ensure high accuracy during the cutting process, a zero trim cut is performed prior to the main cutting operation. This zero trim cut is optimized to minimize waste, helping to conserve resources.



Specifications	LiTROS Float Cut
Maximum processing sizes	3700 x 2700 mm / 6000 x 3300 mm
Automatic cutting	Float glass in X, Y, Z, W and special shapes
Cutting pressure control	Electronic
Cutting speed	160 m/min
X-axis acceleration	6 m/sec ²
Cutting tolerance	+/- 0,3 mm
Glass thickness	3 - 19 mm
Edge decoating module	Using a grinding wheel and suction using a vacuum cleaner



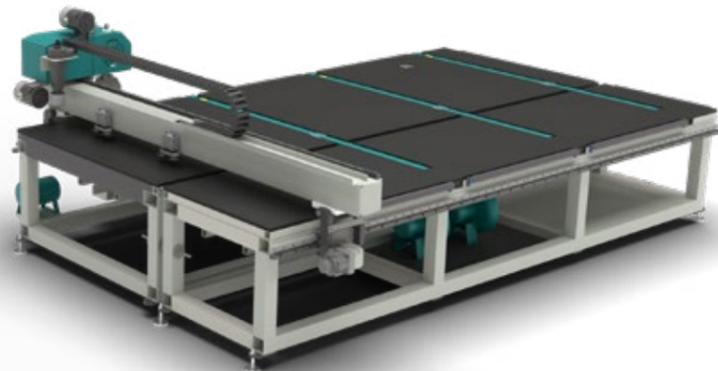
LiTROS Float Cut-Tilt

Glass cutting system with tilting units

The LiTROS Float Cut-Tilt is a glass cutting system with tilting units specially developed for cutting and coating float glass. It enables cutting glass panes up to a size of max. 3700 x 2700 mm and offers precision and efficiency in glass processing.

Components of the system:

- Tilt function
- Edge decoating module
- Cutting pressure control
- Table surface
- Cutting bridge
- Control panel



Function & process:

- **Tilting feature for cutting table sections:** Enables manual loading and unloading of glass panes using a vacuum lifter
- **Edge decoating function:** Specially developed for decoating the edges of Low-E coated glass panes
- **Automatic cutting pressure control:** Ensures optimal cutting results
- **Table surface:** Equipped with durable air cushion felt for gentle transport of the glass panes
- **Cutting bridge:** With X-axis gantry drive technology for precise and efficient processing
- **Operating interface:** A simple and intuitive interface including a 65-inch monitor makes it easy to use the system

Highlights

- **Precise and efficient cutting glass:** LiTROS Float Cut-Tilt supports cutting float glass up to 3700 x 2700 mm – with automatic cutting pressure regulation, a cutting speed of 160 m/min and a tolerance of only ± 0.3 mm.
- **Integrated tilting and decoating functions:** Thanks to tilting sections for easy loading and unloading and an edge deletion module for Low-E glass, the system offers maximum flexibility and efficiency in glass processing.
- **Intuitive, modern operation:** A 65 cm control panel, electronic control and X-axis gantry drive ensure user-friendly operation and maximum process reliability.
- **Secure breakout positioning:** The suction cup, integrated with a bridge mechanism, securely grips the glass immediately after cutting and accurately transfers it to the breakout position.

Specifications	LiTROS Float Cut-Tilt
Maximum processing sizes	3700 x 2700 mm
Automatic cutting	Float glass in X, Y, Z, W and special shapes
Cutting pressure regulation	Automatically controlled electronically
Cutting speed	160 m/min
X-axis acceleration	6 m/sec ²
Cutting tolerance	+/- 0.3 mm
Glass thickness	3 - 19 mm



LiTROS Float Break

Breakout of float glass cuts

The LiTROS Float Break is a system for manually breaking up float glass cuts.

Components of the system:

- Breaker bars
- Air cushion

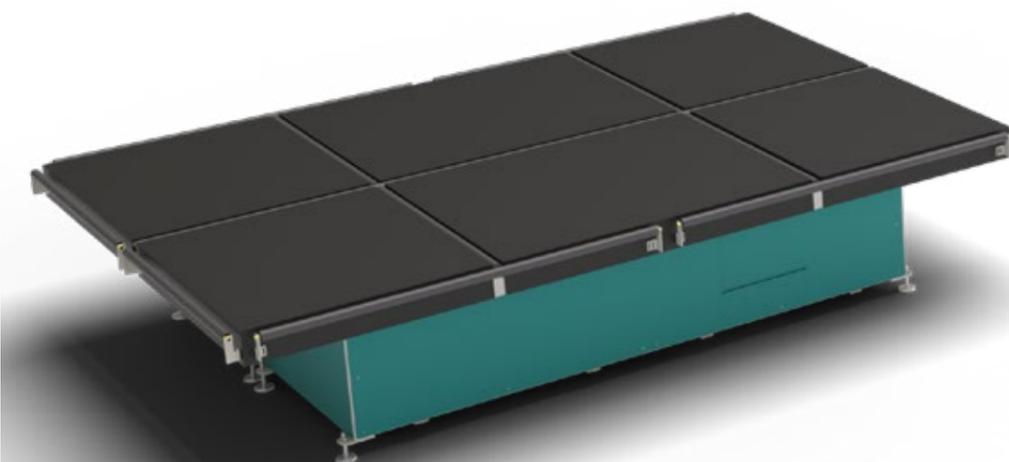
Function & process:

- **Manual transport:** The pre-cut glass pane is manually transported into the system.
- **Positioning and breakout:** The glass panel is positioned manually. When the foot pedal is pressed, the Y-bar rises to separate the glass at the cut.
- **Further processing:** After the cut has been broken, further cuts can be manually broken open. The separated subplates can be transported to a subsequent station manually or via the air cushion.

Highlights

- **Breaker bars:** The breaker bars in both X and Y direction ensure that the glass panes are broken precisely and efficiently.
- **Air cushion:** Equipped with an air cushion and felt for a gentle transport of the glass panes
- **Operating via foot pedal:** A foot-operated pedal controls the both the X and Y breaker bar, enabling the operator to precisely time the breaking process while keeping their hands free for handling the glass. The system includes two pedales for the X-axis breaking and one pedal for the Y-axis breaking.

Specifications	LiTROS Float Break
Maximum processing sizes	3700 x 2700 mm / 6000 x 3300 mm
Glass thickness	3 - 19 mm



LiTROS Solutions for Washing





LiTROS Horizontal Washer

Washing and drying system for cleaning flat glass

The LiTROS Horizontal Washer is a glass washing and drying system specially developed for the efficient cleaning of flat glass. It offers reliable glass cleaning and is available in two versions for processing different maximum dimensions:

- Up to 3600 mm x 2400 mm
- Up to 5000 mm x 3000 mm

Components of the system:

- Transport station infeed
- Glass washing & drying system with three pairs of cylindrical brushes
- Digital display of brush distance and glass thickness, manual adjustment via motor
- Drive rollers
- Washing water
- Drying of the glass with two high-pressure air knives

Function & process:

- **Infeed transport:** The glass panel is transported into the washing machine via solid rubber-coated drive rollers. The automatic feed starts as soon as the transport rollers of the downstream washing machine touch the glass pane.
- **Washing process:** The glass pane is placed between the pairs of brushes via opposing, fully rubber-coated drive rollers acting from above and below. Six nylon brushes (2 x 3 pairs of brushes) ensure thorough cleaning, even with low-E coatings.
- **Drying:** At the end of the washing zone, the glass pane is transported into the dry zone, where it is dried efficiently during transportation.
- **Outfeed transport:** The dry glass pane is transported to the outlet by solid rubber-coated drive rollers.



- **Efficient cleaning and drying:** Three pairs of cylindrical brushes ensure thorough cleaning, even with Low-E coatings. Two high-pressure air knives ensure that the glass panes are dry.
- **Easy adjustment and control:** The digital display of the glass thickness and manual adjustment of the brush distances allow adjustment to different glass thicknesses.
- **Stable and safe transport:** The infeed transport station and solid rubber-coated drive rollers ensure safe and smooth transportation of the glass panes.
- **Efficient drying and integrated handling:** Two high-pressure air knives with noise-reduction covers ensure streak-free drying, while solid rubber-coated rollers and retractable caster wheels enable smooth, automated glass transport and ergonomic loading.
- **Integrated transport and pre-wash system (optional):** Solid rubber-coated rollers and retractable caster wheels enable smooth glass handling. A pre-washer unit removes dust before the main wash cycle, enhancing the overall cleaning performance.
- **Operation:** Glass thickness can be conveniently adjusted via a touchscreen panel that controls precise drives, supporting flexible responses to changing requirements.

Specifications	LiTROS Horizontal Washer
Processing direction	Left to right or right to left
Maximum glass length	3600 mm, 5000 mm
Maximum glass width	2400 mm, 3000 mm
Minimum glass length	500 mm
Minimum glass width	300 mm
Glass thickness	3 – 20 mm
Transport speed	2 – 8 m/min

LiTROS Horizontal Washer 36/24



LiTROS Horizontal Washer 50/30





LiTROS Solutions for Insulating Glass Production



LiTROS IG Line Rigid

Production of insulated glass units with rigid spacer frames

The vertical LiTROS IG Line Rigid offers a good solution for the efficient production of insulated glass units with rigid spacer frames. It combines solid technology with a well thought out and robust design. Reliability and ease of use are guaranteed. The line is available in three different versions, which relate to the maximum processing size:

- 2400 mm x 1800 mm
- 3600 mm x 2400 mm
- 6000 mm x 3000 mm

Components of the insulated glass line:

- Transport station with wheels
- Washing machine
- Transport station with air cushion
- Inspection and manual frame positioning station
- Transport station with air cushion
- Assembly press
- Transport station with wheels
- Automatic tilting station

Well thought out stations – perfectly coordinated

1. Transport station with glass transport rollers

A sturdy, painted steel frame and an automatic system for detecting Low-E coatings ensure a smooth start. The chain-driven transport rollers are synchronized with the downstream washing and drying system. This ensures a smooth production process without interruptions.

2. Glass washing and drying plant

Three pairs of powerful nylon brushes, two removable water collection tanks and a separately heated heating tank with a circulation pump guarantee thorough and gentle cleaning. The cleaning process is visible through inspection doors with viewing windows. The system achieves speeds of up to 12 m/min

3. Air cushion transport station

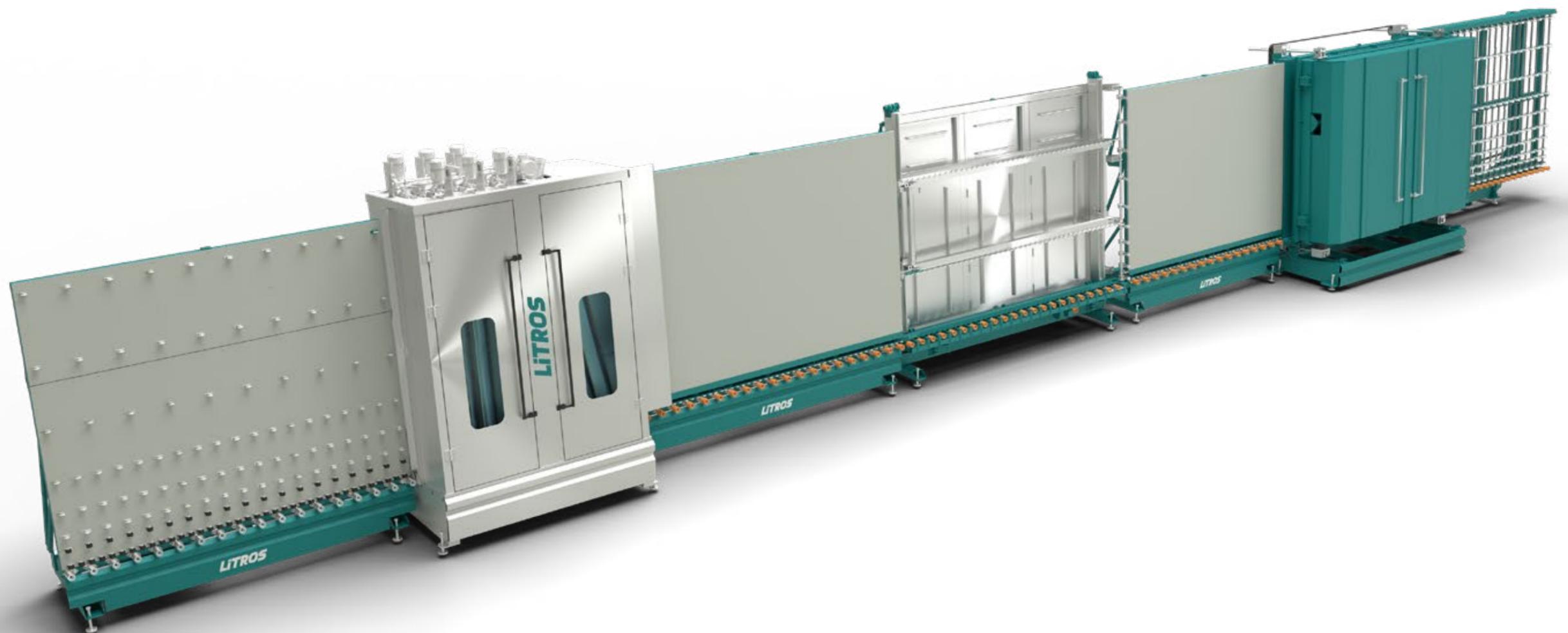
The perfect combination of chain-driven roller transport and air cushion technology allows the glass panes to be moved effortlessly. An integrated fan protects sensitive surfaces and makes the transition to the next station easier.

4. Inspection and frame positioning station

The bright, non-reflective lighting in the rear area is used for visual inspection. Rear access doors allow easy cleaning and maintenance – for high quality with every pane.

5. Assembly press

Thanks to the sturdy steel frame and servo technology, the press automatically adapts to different unit sizes. To simplify service and inspection, the front panel can be opened 500 mm wide. A ball screw system ensures consistent pressure and a good end result.





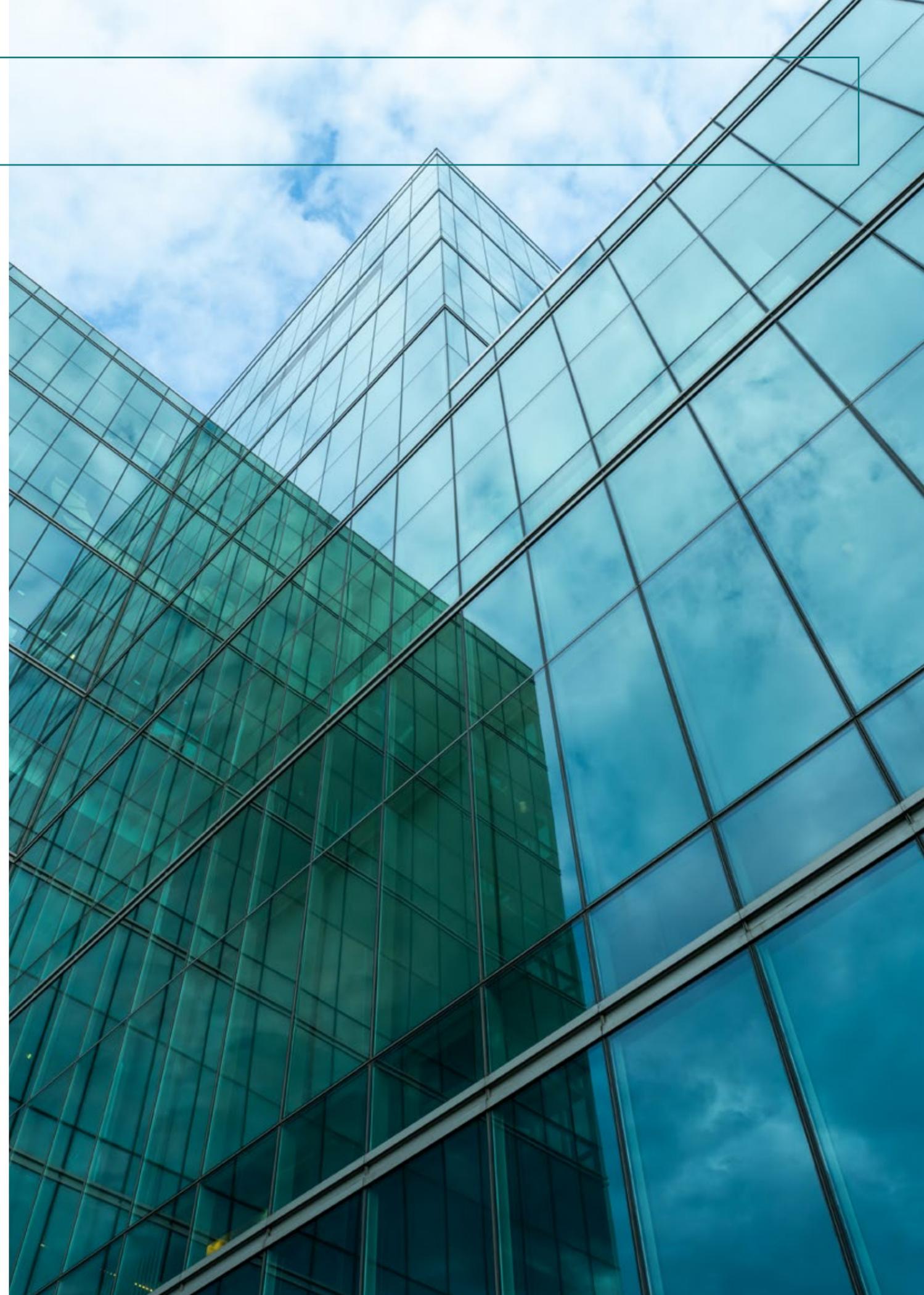
LiTROS IG Line Rigid

Production of insulated glass units with rigid spacer frames



- **Washing machine:** The washing machine is made of robust, water-resistant stainless steel and aluminium. These materials ensure optimum durability and corrosion resistance of the machine. Even in continuous use, it can withstand humid environments. Three individually controlled brush pairs, each with its own drive, ensure gentle and energy-efficient cleaning with Clear Mode and Low-E Mode. The air knife technology in combination with an air suspension belt guarantees scratch-free drying – without particle contamination or contact with the glass.
- **Frame setting station with viewing window:** An automatically controlled support bar detects the top edge of the glass and adjusts itself using sensors. It is combined with an intelligent wheel system that guides the glass into position. The robust steel frame at an angle of 84° and the chain-driven conveyor unit guarantee maximum stability, durability and low-maintenance operation in continuous use. An easily accessible door allows cleaning from the rear to keep the view clear and the process free of contamination. An upper and lower guide roller mechanism protects the glass from damage and contamination – even with sensitive coatings.
- **Assembly press:** Pressure control via spindle drives with servo motors ensures uniform force transmission. The generously opening front panel with 500 mm clearance allows quick and convenient access to all important components – for efficient maintenance and minimal production downtimes. The stable construction of the torsion-resistant steel frame prevents any deformation of the press plates, while a high-strength, torsion-resistant steel frame reliably prevents deformation of the press. This ensures consistent process quality and a long service life. The pressing force for different insulating glass sizes can be easily adjusted via the touchscreen interface – intuitively, precisely and completely repeatably. Two split digital servo motors at the infeed station support fast product cycle times.

Specifications	LiTROS IG Line Rigid
Working direction	Left to right or right to left
Minimum glass size	400 mm x 200 mm
Glass thickness	3 - 12 mm / 3 - 30 mm (optional)
Unit thickness	12 - 60 mm
Unit types	rectangles dual units 3-step (optional) 4-step (optional)
Electrical voltage and frequency	3P 380 - 480 V, 50-60 Hz, 60 kW
General transport speeds	43 m/min
Washer speed	2 - 12 m/min
Gas filling	optional
Shapes	optional





LiTROS IG Line Rigid-Seal

Production of insulated glass units with rigid spacer frames with sealing

The vertical LiTROS IG Line Rigid-Seal offers a good solution for the efficient production of insulated glass units with rigid spacer frames. This reliable line combines modern technology with robust design. It is available in three versions for processing different maximum dimensions:

- 2400 mm x 1800 mm
- 3600 mm x 2400 mm
- 6000 mm x 3000 mm

Components of the insulated glass line:

- Transport station with wheels
- Washing machine
- Transport station with air cushion
- Manual inspection and frame positioning station
- Transport station with air cushion
- Assembly press
- Transport station with wheels
- Automatic sealing system

Well thought out stations – perfectly coordinated

1. Transport station with glass transport rollers

A sturdy, painted steel frame and an automatic system for detecting Low-E coatings ensure a smooth start. The chain-driven transport rollers are synchronized with the downstream washing and drying system. This ensures a smooth, uninterrupted production process.

2. Glass washing and drying plant

Three pairs of powerful nylon brushes, two removable water collection tanks and a separately heated tank with a circulation pump clean gently and thoroughly. The cleaning process is visible through inspection doors with viewing windows. The system achieves speeds of up to 12 m/min.

3. Air cushion transport station

The combination of chain-driven roller transport and air cushion technology enables the glass panes to be moved effortlessly. An integrated fan protects sensitive surfaces and makes the transition to the next station easier.

4. Inspection and frame positioning station

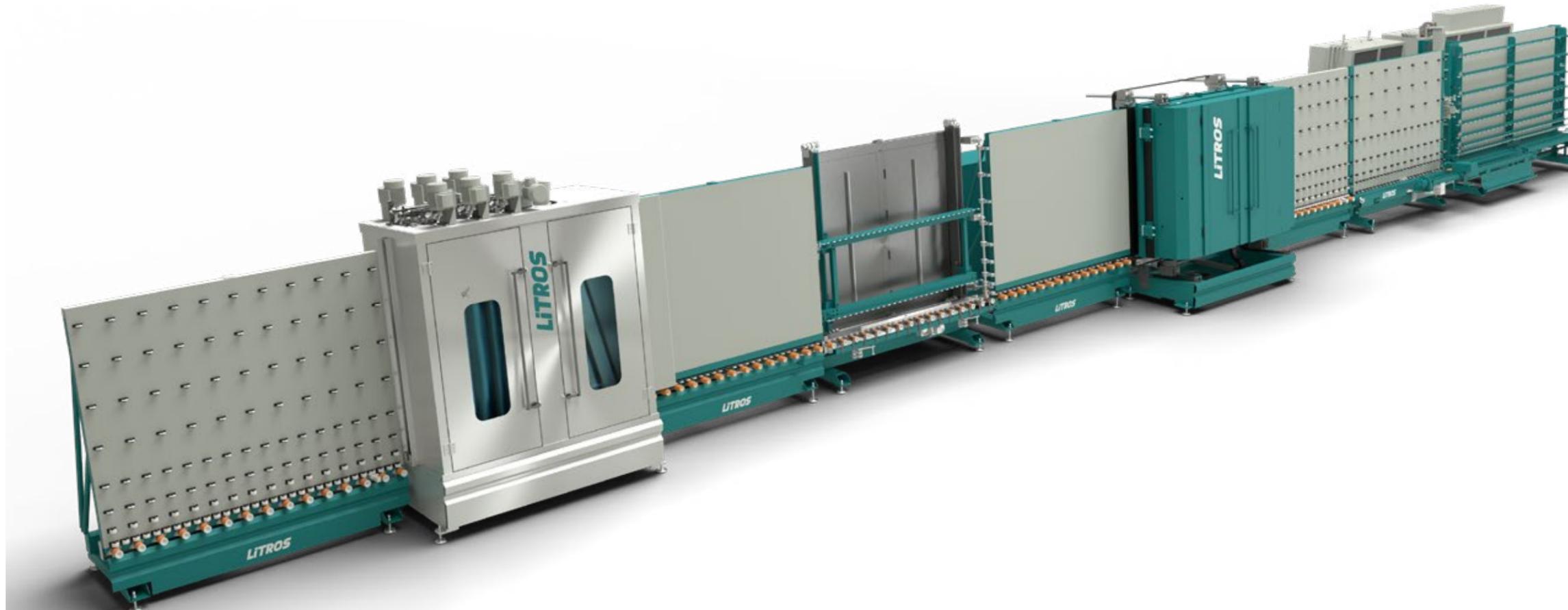
The bright, non-reflective lighting in the rear area is used for visual inspection. Cleaning and maintenance are carried out via rear access doors.

5. Assembly press

Thanks to the sturdy steel frame and servo technology, the press automatically adapts to different element sizes. To simplify service and inspection, the front panel can be opened 500 mm wide. A ball screw system ensures consistent pressure and a good end result.

6. Automated sealing system

The precise control of the sealant dosage and automatic adjustment to the spacer depth ensure consistently good sealing quality. The integrated climate chamber always keeps the materials at an optimal processing temperature. This means process reliability and good sealing.





LiTROS IG Line Rigid-Seal

Production of insulated glass units with rigid spacer frames with sealing



- **Washing machine:** The washing machine is made of robust, water-resistant stainless steel and aluminium. These materials ensure optimum durability and corrosion resistance of the machine. Even in continuous use, it can withstand humid environments. Three individually controlled brush pairs, each with its own drive, ensure gentle and energy-efficient cleaning with Clear Mode and Low-E Mode. The air knife technology in combination with an air suspension belt guarantees scratch-free drying – without particle contamination or contact with the glass.
- **Frame setting station with viewing window:** An automatically controlled support bar detects the top edge of the glass and adjusts itself using sensors. It is combined with an intelligent wheel system that guides the glass into position. The robust steel frame at an angle of 84° and the chain-driven conveyor unit guarantee maximum stability, durability and low-maintenance operation in continuous use. An easily accessible door allows cleaning from the rear to keep the view clear and the process free of contamination. An upper and lower guide roller mechanism protects the glass from damage and contamination – even with sensitive coatings.
- **Sealing system:** Thanks to an automatic detection system for the spacer depth, the sealing process adapts to each element. Accurate control of the sealant quantity and mixing ratio is supported by a thermally controlled mixing chamber to ensure optimal material properties of the second component. Automatic spacer depth detection and calibration of glass cutting errors produce perfect alignment and sealing accuracy – even for complex IG formats. The line supports automatic sealing of double and triple IG units and is compatible with various sealant materials for flexible production. Corners are shaped with high accuracy using a spatula, ensuring clean edges and optimal sealing performance. Patented V shaped belt for minimizing contamination on belt surfaces. Double dosing option is available. Two split motors on infeed station to support better product cycle time

Specifications	LiTROS IG Line Rigid-Seal
Working direction	Left to right, or right to left
Minimum glass size	400 mm x 200 mm
Glass thickness	3 - 12 mm / 3 - 30 mm (optional)
Element thickness	12 - 60 mm
Element types	rectangles dual units 3-step (included) 4-step (optional)
Electrical voltage and frequency	3P 380 - 480 V, 50-60 Hz, 60 kW
General transport speeds	43 m/min
Washer speed	2 - 12 m/min
Gas filling	optional
Shapes	included





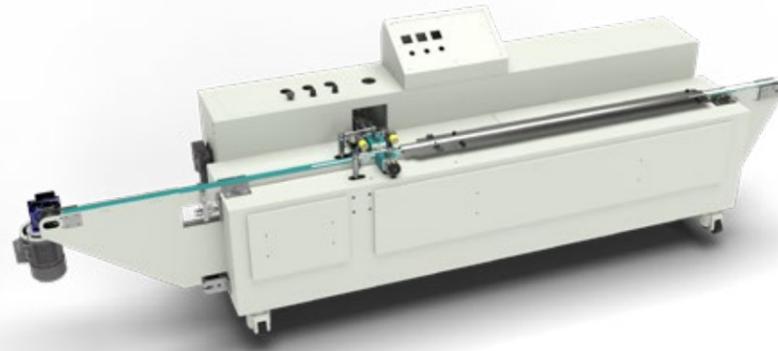
LiTROS IG Butyl Semi Automatic

Semi-automatic coating extruder for butyl hot melt adhesive

The LiTROS IG Butyl Semi Automatic provides an efficient solution for coating spacers with butyl hot melt adhesive. This easy-to-use station combines robust technology with well thought out design.

Components of the system:

- Butyl storage
- Application nozzle
- Pressure rollers
- Transport belts



Function & process:

The spacer is manually pressed against a transport belt and transported to the application nozzle. During the application process, the spacer frame is guided by stabilization rollers to ensure precise coating. The nozzles automatically adjust to the thickness of the spacer, which ensures uniform application. It is operated via a touchscreen. For companies looking for a reliable and efficient way to coat spacers with butyl hot melt adhesive, the LiTROS IG Butyl Semi Automatic is a great choice.

Highlights

- **Precise guidance:** Stabilization rollers ensure accurate application.
- **Automatic nozzle adjustment:** The nozzles automatically adjust to the thickness of the spacer.
- **Touch screen operation:** Easy and intuitive operation via a touchscreen.
- **High-Speed Precision:** 30 m/min conveying speed with automatic nozzle adjustment ensures fast, accurate butyl application across all spacer sizes.
- **Smart Operation:** Touchscreen control and easy butyl reload simplify handling and reduce downtime for efficient, user-friendly operation.

Specifications	LiTROS IG Butyl Semi Automatic
Conveyor speed	30 m/min
Voltage and frequency	3P 380 ~ 480 V, 50 oder 60 Hz, 3,2 kW
Compressed air	6 kg/cm ²
Machine height	800 mm
Machine length	3100 mm
Machine depth	800 mm
Working height	600 mm
Operating language	English



LiTROS IG Desiccant Manual

System for manually filling rigid spacers with desiccant

The LiTROS IG Desiccant Manual offers a practical solution for manually filling rigid spacers with desiccant. This user-friendly station combines sophisticated design with easy handling to ensure reliable filling.

The LiTROS IG Desiccant Manual is the ideal solution for companies looking for a manual yet efficient way to fill spacer frames. With its user-friendly design and simple control, it ensures that spacer frame filling is smooth and reliable.

Components of the system:

- Spacer insertion device
- Dehumidifier storage container
- Waste desiccant collection container
- Dosing lever to regulate the desiccant supply

Function & process:

The process starts with manually hooking and positioning the spacer frame in the filling device. Opening the desiccant container with the dosing lever starts the filling process. The desiccant flows from top to bottom and fills the spacer frame. Excess drying agent is collected in a drip pan below. After filling is complete, the desiccant container is closed again and the completely filled spacer frame can be removed.

Highlights

- **Spacer insertion device:** Enables easy and precise positioning of the frames.
- **Dehumidifier storage container:** Ensures a continuous and reliable supply of desiccant.
- **Collection container:** Collects excess desiccant and prevents waste.
- **Dosing lever:** Enables precise regulation of the desiccant supply and ensures uniform filling.





LiTROS IG Desiccant Automatic

System for automatically filling rigid spacers with desiccant

The LiTROS IG Desiccant Automatic offers a smart solution for filling rigid spacers with desiccant. This reliable station combines modern technology with a robust design.

The LiTROS IG Desiccant Automatic station is therefore a good solution for companies looking for an efficient method of filling and sealing spacer frames. With its solid technology and robust design, it ensures smooth production processes.

Components of the system:

- Height-adjustable filling heads
- Two filling heads for shorter cycle times
- Two foot pedals to control the filling heads

Function & process:

The spacer frames are manually hooked into the filling device. The optimal working height can then be set using a pneumatic lifter. The spacer frame is automatically drilled on the back of the short and long side of the frame. The granulate is automatically conveyed from a 50 kg drum to the filling apparatus and both sides of the spacer frame are filled with granulate at the same time. Finally, the holes are securely sealed with butyl.



- **Height-adjustable filling heads:** Allow flexible adjustment to different frame heights.
- **Double filling heads:** Reduce cycle time by filling both sides at the same time.
- **Two foot pedals:** Provide easy control of filling heads.
- **Sturdy steel construction:** Ensures durability and stability
- **Pneumatic lifting device:** Enables optimal adjustment of the working height.
- **Automatic granulate conveying:** Ensures a continuous supply to the filling heads.
- **Butyl closure:** For reliable sealing of holes.
- **High-speed dual-head filling:** With a cycle time of just 5 sec per spacer (e.g. 1,000 x 1,000 mm, 12 mm width), the dual-head system achieves up to 800 frames in 8 hours – ideal for high-volume desiccant filling.
- **Automated Precision & Flexibility:** Features like automatic desiccant supply, adjustable spacer height, and touchscreen control enable precise, user-friendly operation across a wide range of spacer sizes (5–24 mm thickness, up to 3,600 mm length). No need to change the drill tip thanks to using a unique type of endmill that supports different spacer materials (aluminium and warm edge).



Specifications	LiTROS IG Desiccant Automatic
Max. spacer size	3600 mm side length
Min. spacer size	300 x 300 mm
Spacer width	5 – 24 mm
Filling speed	5 – 1000 sec x 1000 x 12 sec (spacer width)
Desiccant grain size	0,5 ~ 0,9 mm (manual: 1,0 ~ 1,5)
Desiccant container/ barrel	50 kg
Maximum capacity	(2-head machine) 600 ~ 800 frames: 1,000 x 1,000 mm in 8 hours
Voltage and frequency	2P 380 ~ 480 V, 50 oder 60 Hz, 1,5 kW
Air pressure	8 kg/cm ²



LiTROS IG Seal Manual

Pumping and dosing system for manual application of secondary sealants in insulating glass production

The LiTROS IG Seal Manual provides an efficient solution for the manual application of secondary sealants in insulating glass production. This system combines modern technology with a robust design to ensure reliable use.

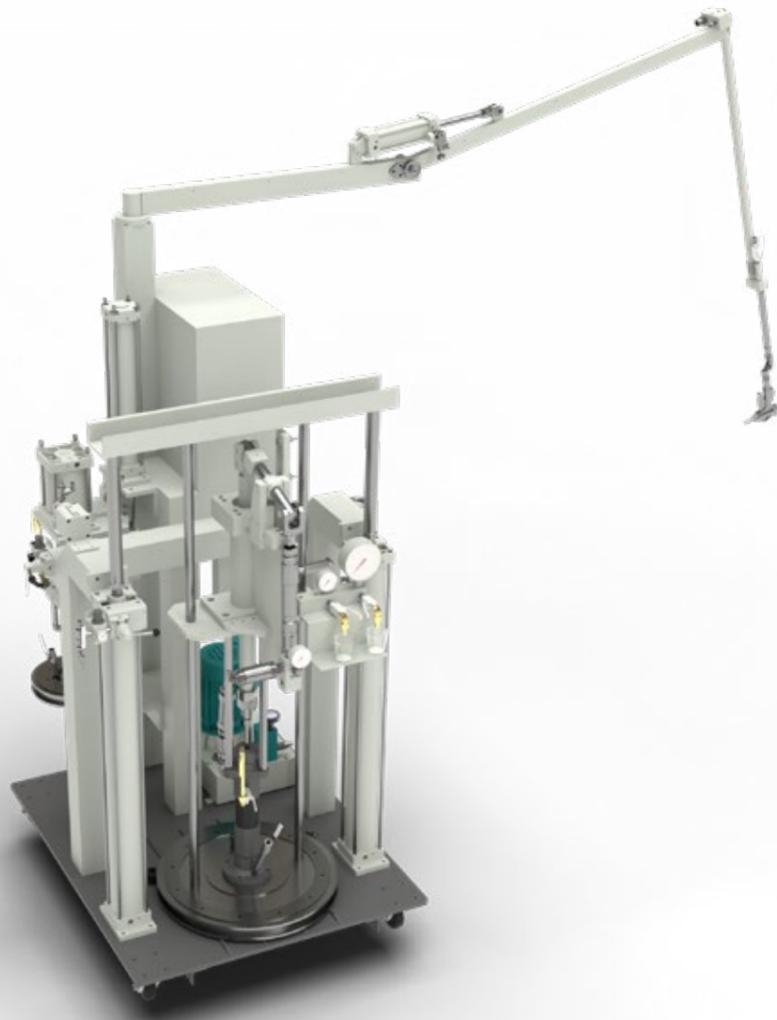
The LiTROS IG Seal Manual is a good solution for companies looking for a cost-effective and reliable method for the manual application of secondary sealants. With its robust technology and design, it ensures that the production processes run smoothly and efficiently.

Components of the system:

- Hardener pump
- Base pump
- Extension arm including material guide
- Dosing gun for exact application of the sealant

Function & process:

With the LiTROS IG Seal Manual, secondary sealants can be applied according to a well-thought-out principle. Separate hardener and base pumps ensure precise dosing of the required materials. A special dosing pump enables a uniform flow of material without pressure fluctuations, which results in a constant and clean application of the sealant. The hose mixing system is equipped with an easy-to-change plastic mixer, which is cost-effective and easy to maintain. A hydraulic pumping system ensures a high flow rate and powerful material application. In order to increase operational safety, an integrated high-pressure safety check valve automatically initiates recirculation in the event of overpressure.



- **Precise dosing:** The system enables precise dosing of the required materials, which results in a uniform and high-quality application.
- **Cost efficiency and easy maintenance:** Thanks to the easy-to-change plastic mixer and robust construction, the system is both cost-effective and easy to maintain.
- **High flow rate:** The hydraulic pumping system ensures a high flow rate and powerful material application.
- **Safety check valve:** An integrated high-pressure safety check valve protects the system and increases operational safety.
- **Consistent High-Pressure Dosing:** Equipped with a metering pump and hydraulic discharge system, the unit ensures stable, surge-free sealant flow at up to 250 kg/cm² – ideal for precise manual application.
- **Efficient & Low-Maintenance Mixing:** The hose mixing system with a plastic mixer offers high processing efficiency and low replacement costs, making it both effective and economical for daily use.

Specifications	LiTROS IG Seal Manual
Mixing ratio	8:1 ~ 12:1
Voltage and frequency	3P 380 ~ 480 V, 50 oder 60 Hz, 3,2 kW
Maximum pressure	250 kg/cm ²
Drum capacity	part A (base): 200 liters part B (hardener): 20 liters

A photograph showing a large stack of glass panels, likely in a factory or warehouse. The panels are stacked horizontally and recede into the distance, creating a strong sense of depth. The lighting is bright, and the glass has a slight greenish tint. In the top right corner, there is a teal-colored graphic element containing white text.

LiTROS Solutions for Glass Processing

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