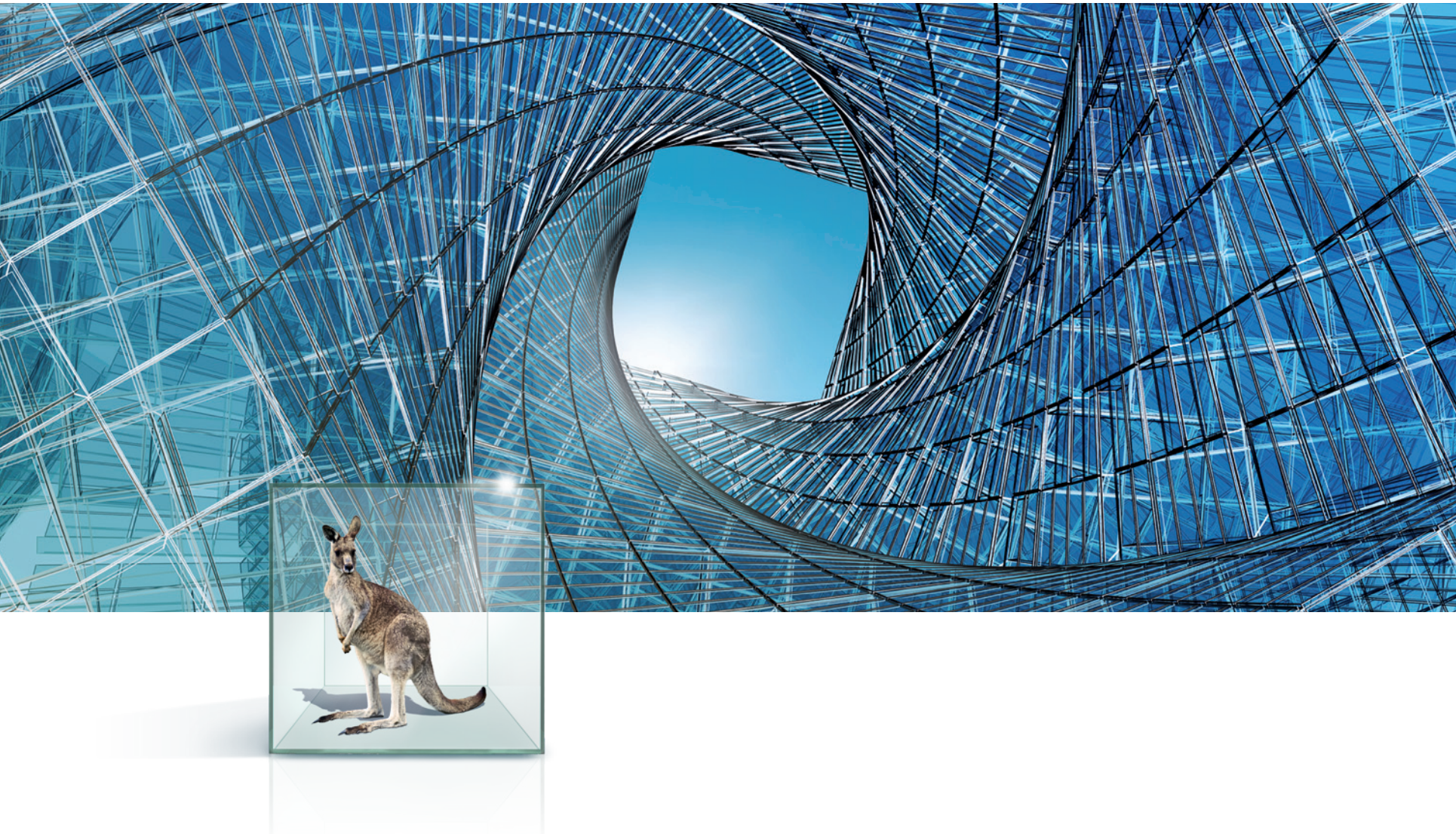


Because we care

ARCHITECTURAL GLASS
REVOLUTIONARY. ALSO OUR TECHNOLOGIES.



TRUSTWORTHY. OUR SYSTEM SOLUTIONS FOR GLASS PROCESSING.

Bystronic glass symbolizes innovation in respect of machinery, systems and services for architectural, automotive and display glass processing that is focussed on tomorrow's market – from basic requirements through to entire, customized installations.

We continually evaluate and improve our products and services to ensure sustainability in glass processing productivity, which gives our customers a competitive advantage. Knowledge, experience and employees, who are proud of their achievements, make all this possible.

New ideas are born by questioning proven ways and searching for unconventional solutions. As a globally active, complete glass processing supplier **Bystronic glass** is always further developing existing solutions and optimizing these with more streamlined production processes and new technologies. We support our customers on-site utilizing our own worldwide sales and service companies.

Bystronic glass is a member of the **Glaston Group** (Finland).

Glaston is the glass processing industry's innovative technology leader and supports the development of emerging technologies integrating intelligence to glass.

ARCHITECTURAL GLASS



AUTOMOTIVE GLASS



DISPLAY GLASS



VERSATILE. OUR PRODUCT RANGE FOR YOU.

INSULATING GLASS MANUFACTURING

Page 4



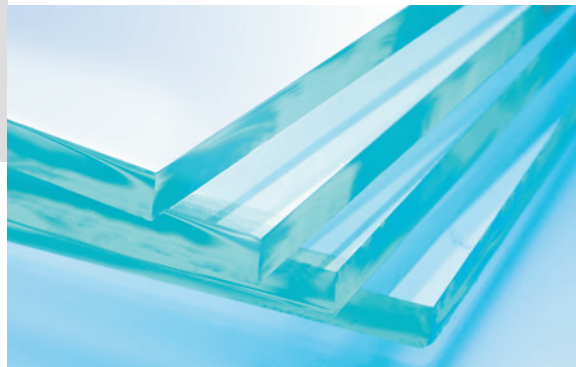
HANDLING EQUIPMENT

Page 16



GLASS CUTTING (in cooperation with HEGLA)

Page 18



SERVICE & SUPPORT

Page 19



COMPLETE. ALL THAT IS NEEDED FOR INSULATING GLASS MANUFACTURING.

The whole world of insulating glass manufacturing at a glance.

Very easily, you will find the right solution for your processing requirements. You just need to find the most suitable insulating glass line in the overview below, using the key data to evaluate your production needs.

Moreover, if you don't find it there then we will endeavour to tailor and adapt it to suit your needs. In this case it is best to get in touch with us and we will show you how we can create your individual solution and put it into practice.

	SPACER SYSTEM			WORKING HEIGHT			
	CONVENTIONAL	FLEX	TPS®	160	230	270	330
B'COMPACT/B'COMFORT Standard solutions	✓					✓	
B'ADVANCE/B'VARIO Individual customer solutions	✓	✓	✓	✓	✓	✓	
B'SPEED High-speed lines	✓	✓	✓	✓	✓		
B'JUMBO/XXL Large-dimensioned lines	✓	✓	✓				✓

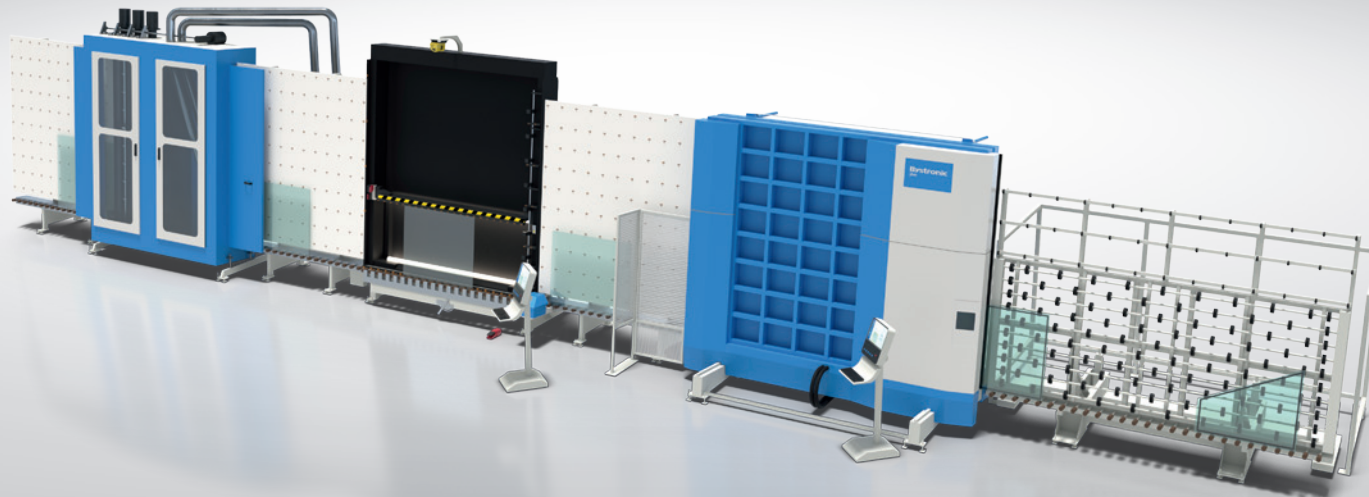
FLEX: Flexibler spacer from the reel
TPS®: Thermo Plastic Spacer TPS®

COMPACT. YOUR ENTRY INTO THE WORLD OF I.G. MANUFACTURING.

The start-up solutions in automated insulating glass production

The Bystronic glass **B'COMPACT** and **B'COMFORT** provide high quality I.G. unit manufacturing with an excellent cost/performance ratio – optional with gas filling by **B'COMFORT**. In addition to the proven quality and reliability, these I.G. lines offer real added value.

- High productivity with up to 800 gas filled insulating glass units per shift
- Low investment costs
- A compact line layout
- Diverse options



BUTYLEXTRUDER

Double-sided spacer frame coating with thermoplastic sealants



EDGEDELETER

Coated glass plate edge deletion



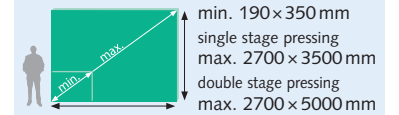
SEALER

Entry solution for automated insulating glass unit sealing

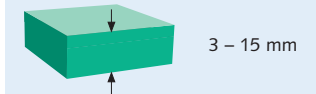


B'COMPACT B'COMFORT

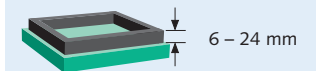
Glass size



Glass thickness



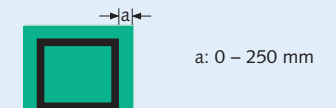
Spacer width



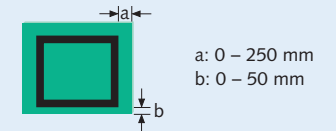
I.G. thickness



3-sided steps (B'COMFORT)



4-sided steps (B'COMPACT)

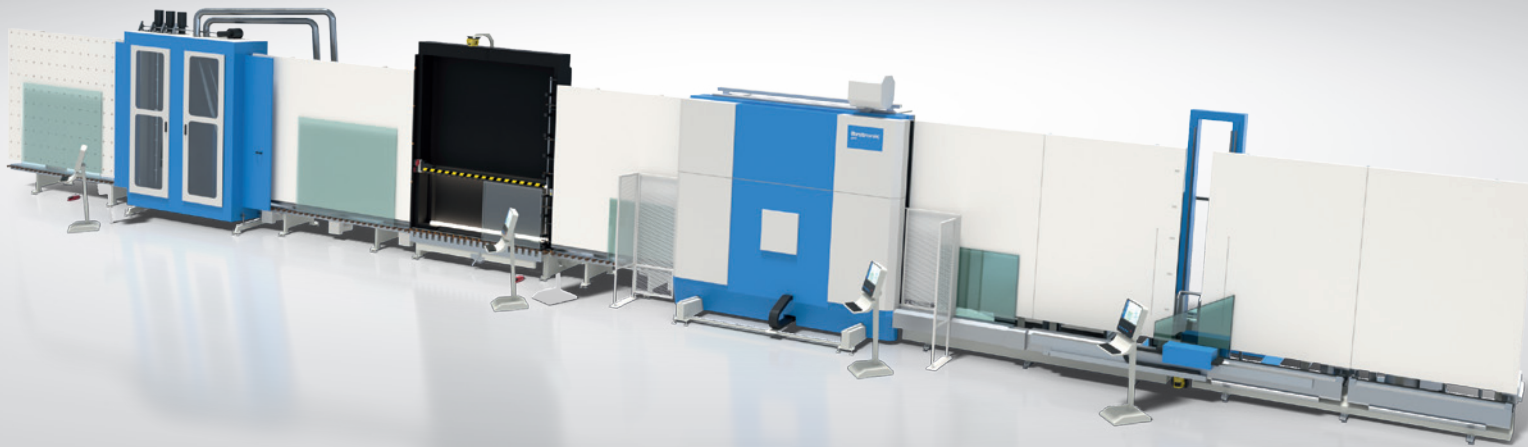


EFFICIENT. FULLY EQUIPPED I.G. MANUFACTURING.

B'ADVANCE

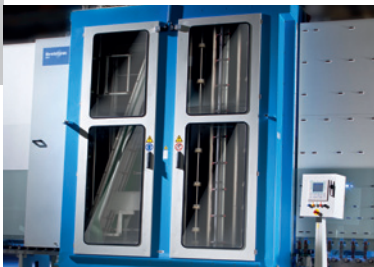
The Bystronic glass **B'ADVANCE** offers high quality, gas filled I.G. unit manufacturing of rectangular and shaped formats. This I.G. line offers numerous components as standard e.g.

- Air cushion conveyors
- Server based control system
- Production of 3-sided stepped I.G. units



CLEANER

Continuous washing and drying of diverse glass plates



INSPECTOR

Visual glass inspection and manual positioning of spacer frames



ASSEMBLER

Automatic assembling, gas filling and pressing of I.G. units

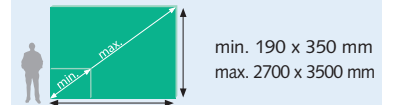


SEALER

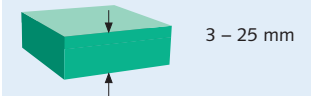
Continuous sealing of I.G. units of different formats and dimensions



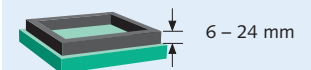
Glass size



Glass thickness



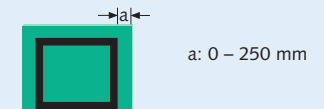
Spacer width



I.G. thickness



3-sided steps



PRECISE. INSULATING GLASS MANUFACTURING FOR THE TOUGHEST DEMANDS.

The system solution for insulating glass using aluminum, stainless steel or plastic spacers

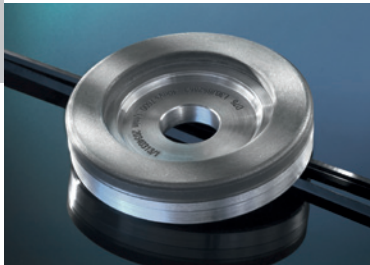
The insulating glass line **B'VARIO** is an individually configurable production line for insulating glass unit manufacturing using conventional spacers.

- High flexibility and excellent productivity
- Premium component quality
- Long service life
- Multiple line expansion options



MULTI'ARRISSER

Quick and economical high quality glass arissing



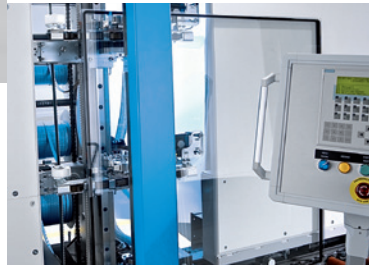
TURNER

Automatic turning of coated glass plates within an I.G. line



PADAPPLICATOR

Application of pre-punched spacer pads on I.G. units



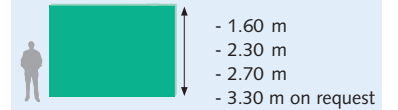
ASSEMBLER (SYNCHRO)

Automatic assembling, gas filling and pressing, especially for triple I.G. units



B'VARIO

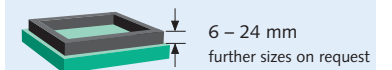
Working heights



Glass thickness



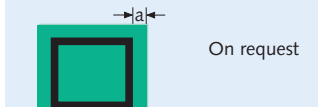
Spacer width



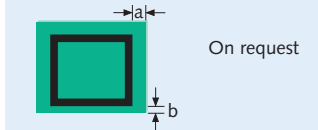
I.G. thickness



3-sided steps



4-sided steps



VERSATILE. I.G. MANUFACTURING WITH INTEGRATED FRAME PRODUCTION.

The system solution for insulating glass with Thermo Plastic Spacer TPS®

The insulating glass line **B'VARIO TPS®** offers a unique versatile and individual production solution for all types of orders. It differs from the conventional production systems by the direct application of the Thermo Plastic Spacer **TPS®** onto the glass plate.



DIRECT APPLICATION

Direct application of the Thermo Plastic Spacer onto the glass plate. The spacer width can be changed as desired during operation without any loss of time.



PERMANENT OPERATION

The dual-drum pump system enables a completely interruption-free operation. The material drum change takes place during production.

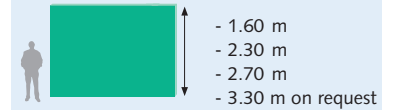


AESTHETIC UPGRADING

If desired, the finisher makes the patented TPS® bevel joint invisible.



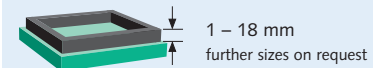
Working heights



Glass thickness



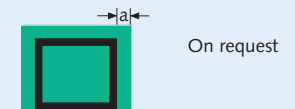
Spacer width



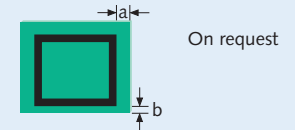
I.G. thickness



3-sided steps



4-sided steps

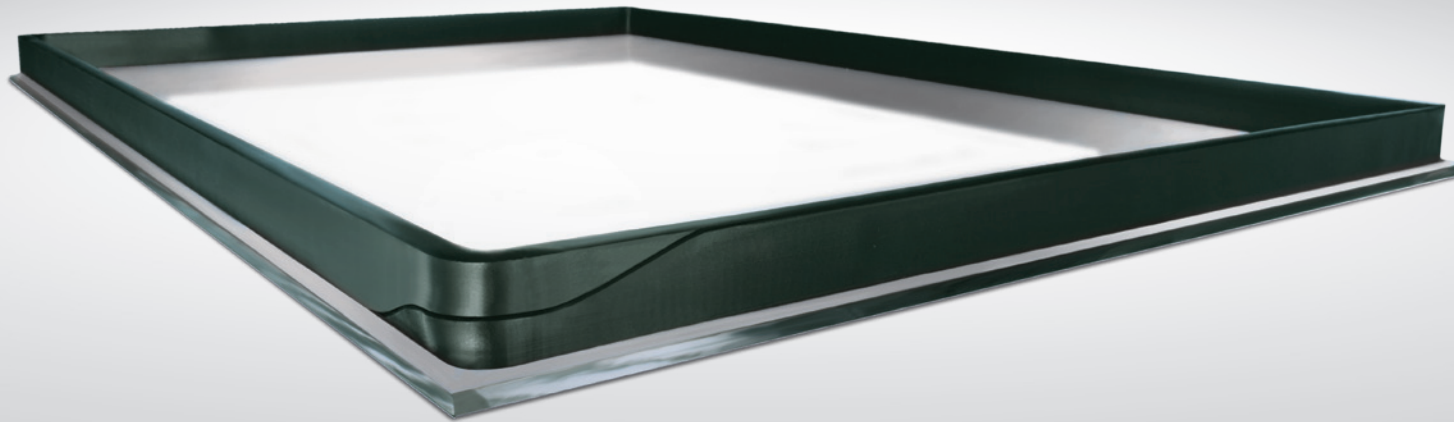


TPS® – THE ORIGINAL FROM THE INVENTOR.

B'VARIO TPS®

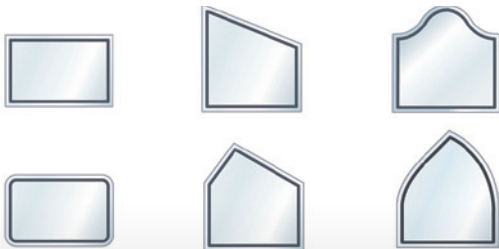
Separate production processes are no longer needed for sawing, bending, connecting, desiccant filling and butyl coating. The logistics are minimized and the internal organization is simplified.

- Storage of different spacer profiles and connectors is eliminated
- Suitable spacer is always available, no offcut
- Flexible manufacturing of the entire production mix on a single line
- Splitting orders into standards and specials is eliminated



PRODUCT VARIETY

With TPS® you can create a variety of products during operation without loss of time. The different rectangular or shaped formats are produced in succession in ongoing operation.



PERFECT PRIMARY SEAL

The patented bevel joint ensures a perfect primary sealing of Thermo Plastic Spacer, even on the joint.



EXACT PRODUCTION

Automatic equalization of glass tolerances for TPS® insulating glass unit production in exactly the required package strength.



FLEXIBLE. AUTOMATED WARM EDGE INSULATING GLASS MANUFACTURING.

The system solution for insulating glass with flexible spacers from the reel

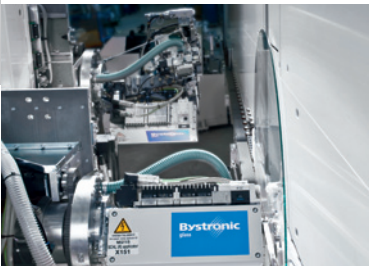
The insulating glass line **B'VARIO FLEX** offers a solution for the automatic production of gas-filled and sealed insulating glass units incorporating flexible warm edge spacers.

- Synchronized spacer application with the insulating glass manufacturing process
- Production sequence of rectangular and shaped formats as desired
- Direct flexible spacer application onto the vertically positioned glass plate



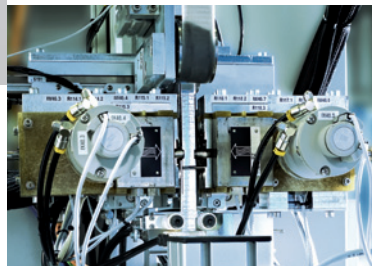
TWINAPPLICATOR

Twin-head applicator for interruption-free insulating glass unit production with different spacer widths



T-SPACER BUTYLER

Processing of flexible spacers with double-sided polyisobutylenes application



CORNERSEALER

Secure corner sealing fixed using tape strips and additional butyl sealant



B'VARIO FLEX

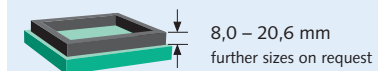
Working heights



Glass thickness



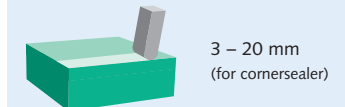
Spacer width



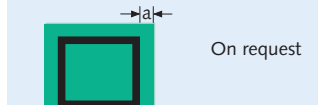
I.G. thickness



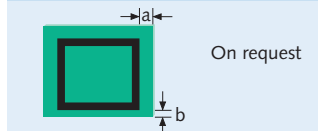
Adjustable spacer setback



3-sided steps



4-sided steps

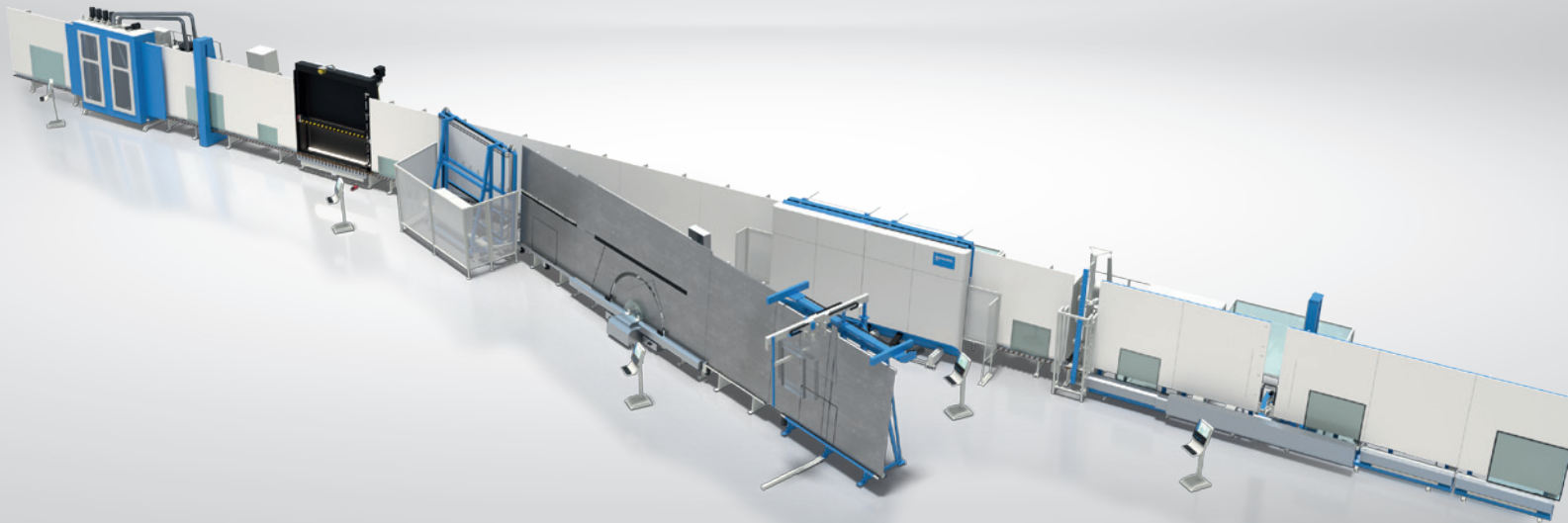


QUICK. INSULATING GLASS MANUFACTURING WITH FASTEST CYCLE TIME.

The benchmark in triple and quadruple insulating glass manufacturing

The insulating glass line **B'SPEED** is a quick insulating glass manufacturing line that produces triple and quadruple units in the fastest possible cycle times. It is available in the following variants:

- **B'SPEED** for conventional spacers
- **B'SPEED FLEX** for flexible spacers
- **B'SPEED TPS®** for Thermo Plastic Spacer TPS®



SPEED'ASSEMBLER

Quick, synchronized gas filling of both spaces between triple insulating glass unit lites



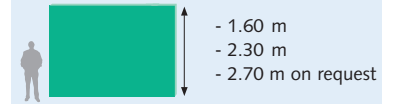
SPEED'SEALER

Dynamic quality sealing at maximum flow rate and highest speed application



B'SPEED

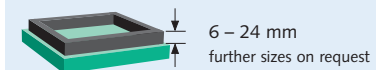
Working heights



Glass thickness



Spacer width



I.G. thickness



IMPRESSIVE. INSULATING GLASS MANUFACTURING IN MAXIMUM SIZE.

The system solution for maximum requirements

The insulating glass lines **B'JUMBO** and **B'JUMBO XXL** are individual production solutions that are specially designed for manufacturing large sized insulating glass units and façade elements up to 18 m in length.

- Up to 600 kg per running meter heavy units are possible
- Optimized energy efficiency of the I.G. line

EDGEDELETER

Edge deletion of Jumbo units in rectangular and shaped formats



FRAMEPOSITIONER

Automatic positioning and pressing of upper frame edge



TURNER

Automatic turning of coated glass plates up to 12m in length



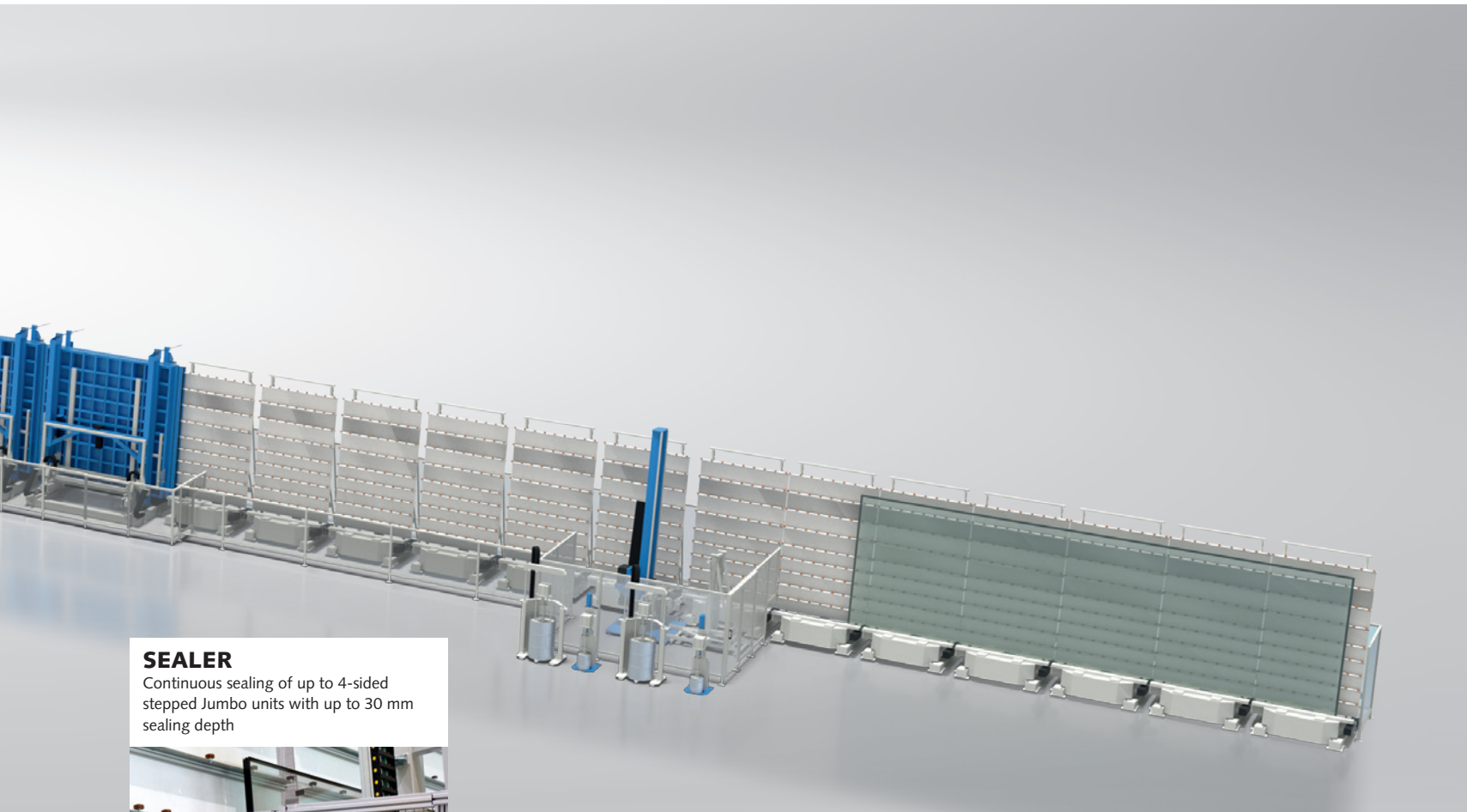
ASSEMBLER

Automatic assembling, gas filling and pressing of up to 4-sided stepped Jumbo units



B'JUMBO

B'JUMBO XXL



SEALER

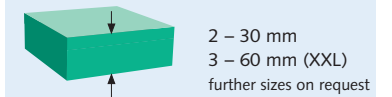
Continuous sealing of up to 4-sided stepped Jumbo units with up to 30 mm sealing depth



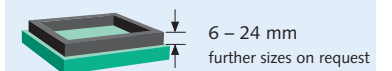
Working height



Glass thickness



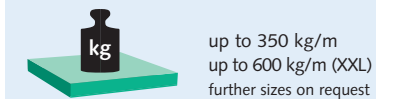
Spacer width



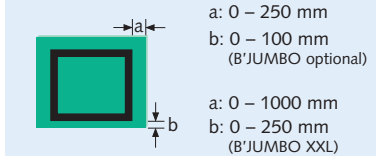
I.G. thickness



Weight



4-sided steps



ECONOMICAL. SPACER FRAME PRODUCTION ON A HIGH LEVEL.

The system solutions for the bending and butyling of spacer frames

With the new **spacerbender** generation you can bend all common spacer profiles in different materials (metal, plastic, hybrid) with an exceptionally high dimensional accuracy.

The product range around frame production is completed by additional components for desiccant filling and butyling of spacer frames - either manually or automatically.



SPACERBENDER

Excellent bending quality and high dimensional accuracy of all common profile types



DESICCANTFILLER

Manual or automatic desiccant filling in shortest cycle times



BUTYLEXTRUDER

Double-sided spacer frame coating with thermoplastic sealants



BUTYLER

Precise, automatic spacer frame butyl coating



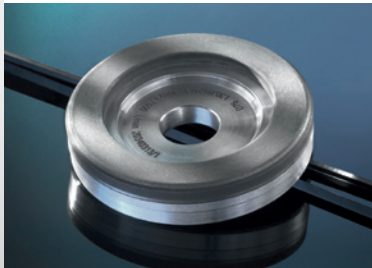
INDIVIDUAL. COMPONENTS FOR INSULATING GLASS MANUFACTURING.

Production additions in accordance with your requirements

Our **Bystronic glass** components make the ideal addition to optimize your insulating glass production needs. Working together with you, we assemble the machines according to your individual requirements.

EDGE PROCESSING

Quick and economical high quality glass arrissing



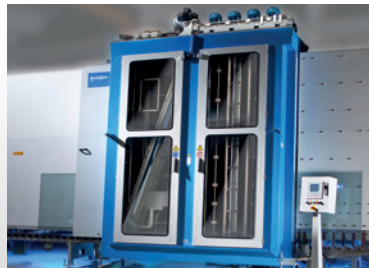
EDGE DELETION

Edge deletion of rectangular and shaped formats



GLASS PLATE WASHING MACHINE

Continuous washing and drying of diverse glass plates



INSPECTION AND FRAME POSITIONING

Visual glass inspection and manual positioning of spacer frames



TURNING STATION

Automatic turning of coated glass plates within an insulating glass line



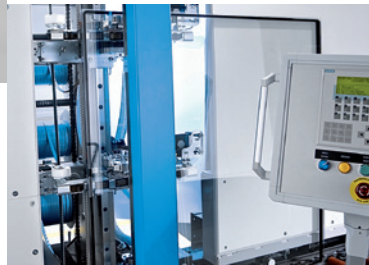
ASSEMBLY ROBOT

Automatic assembling and pressing of I.G. units, optional with gas filling



SPACER PAD APPLICATOR

Application of pre-punched spacer pads on insulating glass units



SEALING ROBOT

Continuous sealing of insulating glass units of different formats and dimensions



SIMPLE. PROTECTIVE TRANSPORT OF FLAT GLASS AND PLATES.

Take It Easy – Glass handling with minimum physical effort for the operator

Handling systems from **Bystronic glass** allow flexible use in all areas of flat glass and plate processing. The fully-developed innovative technology is characterized by high quality and reliability.

RIGID LIFTS

The Easy-Lift simplifies glass handling thanks to its low dead weight and rigid load guidance – available in many versions



MANIPULATORS

Vacuum hoists that can be used flexibly are particularly suitable for use in chain hoists, cable hoists or hall cranes



(BATTERY-POWERED) SUCTION FRAMES

The glass suction devices are ideal for the vertical handling of glass and are also available in a battery-powered version for mobile use



SLEWING CRANES AND CRANEWAYS

Our X-Y lightweight crane ways and slewing cranes are the optimal addition to your glass manufacturing. Due to the modular construction system we can provide on-site response regarding your individual space requirements.



CLEVER. GLASS HANDLING MADE CONVENIENT.

B'VACOOM – the new generation of handling equipment

This newly developed **B'VACOOM** handling generation represents a successful combination of traditional equipment manufacturing processes and digital transformation – let's call it Bystronic glass 4.0 in practical use.

- Proven, rigid guidance
- Integrated load and process control
- Visualized vacuum control of the suction cups
- Sensors for predictive maintenance of the components for vacuum generation
- Ergonomic design
- Increased safety standards, among others by password protection against unauthorized use



B'VACOOM

FITTING. CUTTING SOLUTIONS FOR EVERY REQUIREMENT.

A comprehensive product range of efficient cutting systems

Our **Bystronic glass** lines for insulating glass production work perfectly together with the solutions for flat glass cutting from our cooperation partner, **HEGLA**.

The advantage to you: You have one single contact partner and receive everything from one source!

LOADING SYSTEMS



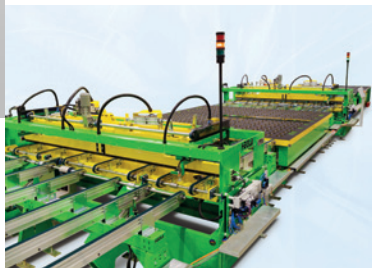
CUTTING SYSTEMS for float glass



CUTTING SYSTEMS for laminated glass



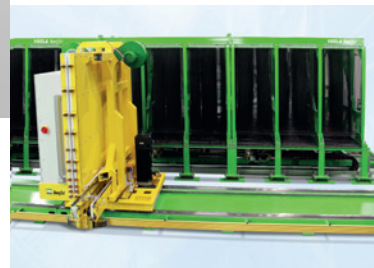
BREAKOUT SYSTEMS



STORAGE SYSTEMS



SORTING SYSTEMS



PERSONAL. ON-SITE SERVICE AND SUPPORT.

Wherever you need us, we are there

Right from the very first minute, we support you during the planning of your plant. Our customer service is then on-hand all over the world for the delivery of spare parts and other support services. Individual training sessions and plenty of information in PDF format round off the range of services on offer.

CONSULTANCY & OPTIMIZATION

Comprehensive, personal consultancy and plant optimization by individual process simulation



TRAINING

Tailor-made programs for the best possible training success



HOTLINE

Support in the event of technical queries, spare part orders and more



MAINTENANCE CONTRACTS

Preventative service for a long service life of your machine



MANUALS

Download manuals for your machines in many languages, complete with information and assistance

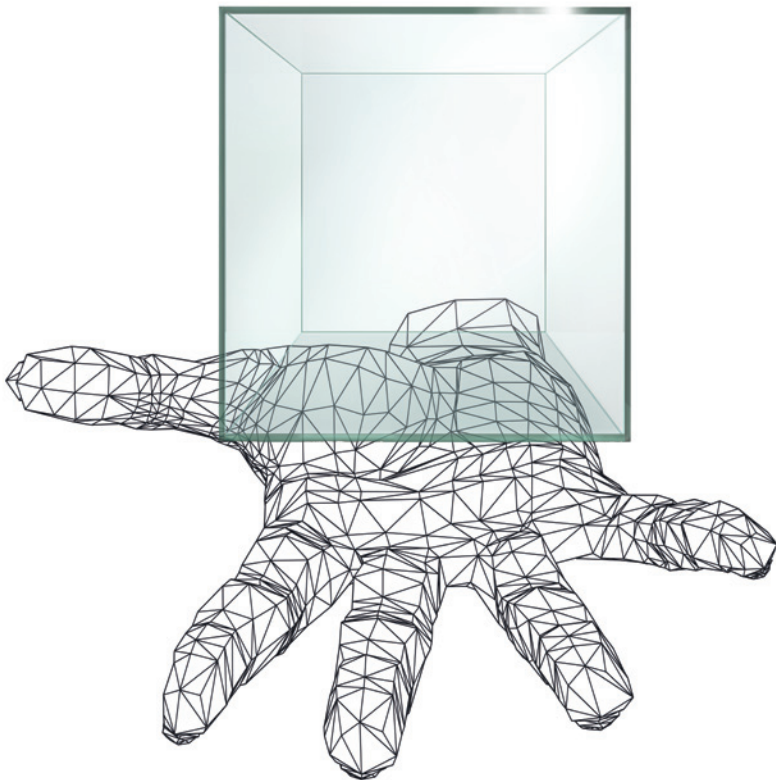


SPARE PART CATALOG

Order spare parts quickly and easily via the online catalog



Because we care



IMAGINE YOUR MACHINES THINK FOR THEMSELVES!

In the future everything will be more closely connected: machines, data, processes and applications. We are working intensively on this. Bystronic glass connects all of these modules within the process chain by means of integrated data management – therefore providing customers with considerable competitive advantages. All of the measures, services, products and business models are aimed at securing quality in the final products, increasing the availability of the plants, and shortening process times, which ultimately result in reduced costs and increased revenues.

We call it **Bystronic glass 4.0**.

The future begins today! We will show you what is possible with integrated data management!



www.bystronic-glass.com
sales@bystronic-glass.com

glaston

Bystronic glass is a member of Glaston Group
www.glaston.net