

Future-oriented. Our system solutions for glass processing.

New ideas are born by questioning proven ways and searching for unconventional solutions. **Bystronic glass** represents future-oriented machines, units, systems and services in the field of architectural and automotive glass processing.

From basic components through to automated, customer-specific overall units for glass processing, we offer innovative solutions – naturally all to the highest quality.

As a global complete supplier for glass processing, **Bystronic glass** is always further developing the existing solutions and optimising them with more streamlined production processes and new technologies.

Since 1994 **Bystronic glass** has been part of Conzzeta AG, a famous Swiss industrial holding company with over 100 years of tradition. At the same time, it represents innovation, reliability and a long-term perspective.

ARCHITECTURAL GLASS



AUTOMOTIVE GLASS



Versatile. Our product range for you.



Fitting. Cutting solutions for every requirement.

A comprehensive product range of efficient cutting systems

Our **Bystronic** glass lines for insulating glass production and our plants for the production of laminated glass work together perfectly 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

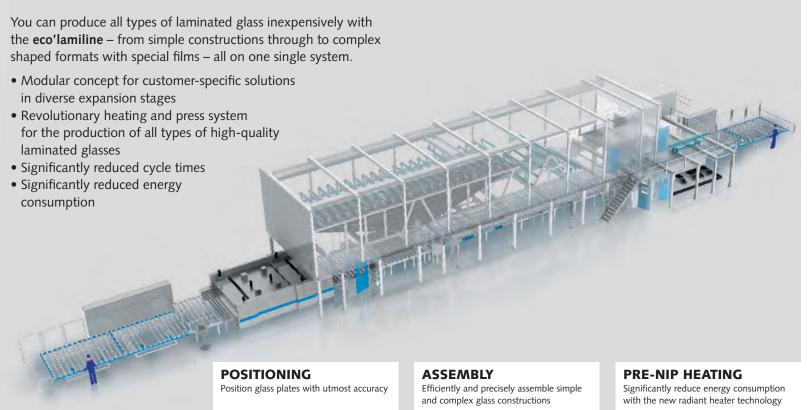


SORTING SYSTEMS



Revolutionary. Top-quality laminated glass manufacturing.

The laminated glass system solution for all requirements



Glass thickness 3 – 19 mm Sandwich thickness 4 – 100 mm (optional 150 mm)

min. 250 × 400 mm max. 2800 × 9000 mm

min. 250 × 600 mm max. 3300 × 9000 mm

Glass size





via the creation of high and equal pressure 0

PRE-NIP PRESSING

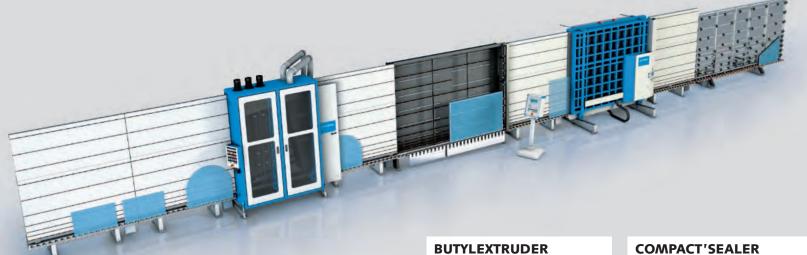
Flawlessly ventilate the glass constructions

Efficient. Your entry into the world of insulating glass manufacturing.

The start-up solutions in the world of automated insulating glass production

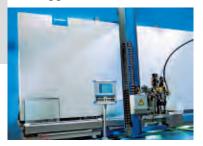
The **compact'line** and **comfort'line** insulating glass lines each consist of a glass plate washing machine, a station for the visual inspection and manual positioning of the spacer frames as well as an assembly press. In addition to the proven Bystronic glass quality and reliability, these machines offer real added value.

- High productivity with up to 800 gas-filled insulating glass units per shift (comfort'line)
- Low investment costs
- A compact line layout
- Individual expansion stages



Glass size min. 190×350 mm single stage pressing: max. 2700 × 3500 mm double stage pressing: max. 2700 × 4500 mm (comfort'line) max. 2700 × 5000 mm (compact'line) Glass thickness 3 – 15 mm Spacer width I.G. thickness 12 - 60 mm

Continuous, automatic sealing of insulating glass units



Double-sided coating of spacer frames with thermoplastic sealants

Precise. Insulating glass manufacturing for the toughest demands.

The system solution for insulating glass with aluminium, stainless steel or plastic spacers

The **first'line** is an individually configurable production line for the manufacturing of insulating glass with conventional warm edge spacers.

- High flexibility and excellent productivity
- Premium component quality
- Long service life



Glass thickness

Working heights



- 1,60 m

- 2,70 m

- 3,20 m

Spacer width



available on request

I.G. thickness



up to 60 mm further sizes available on request

DESICCANTFILLER

Top-quality, fully-automatic desiccant filling



BUTYLER

Precise coating of spacer frames with butyl



FRAMEPOSITIONER

Automatic, exact positioning of rectangular spacer frames



SPACERBENDER

The frame bending robot especially for conventional warm edge spacers



Flexible. Automated warm edge insulating glass manufacturing.

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

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

- Synchronisation of the frame production with the insulating glass manufacturing process
- Production sequence of rectangular or shaped formats as desired
- Direct application of the flexible spacer on to the vertically positioned glass plate



TWINAPPLICATOR

Twin applicator for the interruption-free production of insulating glass units with different spacer widths



T-SPACER

Processing of flexible spacers with the application of polyisobutylenes on the edge of the spacer on both sides



CORNERSEALER

Secure sealing of corners via fixing with tape strips and additional butyl sealing



Working heights



- 1,60 m - 2,70 m

- 3,20 m

Glass thickness



2 – 15 mm further sizes available on request

Spacer width



8,0 - 20,6 mm further sizes available on request

I.G. thickness



up to 60 mm further sizes available on request

Adjustable spacer setback



3 – 20 mm (for cornersealer)

Versatile. Insulating glass manufacturing with integrated frame production.

The system solution for insulating glass with a thermoplastic spacer TPS®

The **tps'line** offers an individual production solution with unique versatility for all types of orders.

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



DIRECT APPLICATION

Direct application of the thermoplastic spacer onto the glass plate, the width of the spacer can be changed during operation without any loss of time



PERMANENT OPERATION

Dual-drum pump system enables a completely interruption-free operation as the material drum change takes place during production.



EXACT PRODUCTION

Automatic equalisation of the glass tolerances for production of the TPS® insulating glass units in exactly the required batch strength



Working heights



- 1,60 m - 2,70 m - 3,20 m

Glass thickness



2 – 15 mm further sizes available on request

Spacer width



1 – 18 mm further sizes available on request

I.G. thickness



up to 60 mm further sizes available on request

Quick. Insulating glass manufacturing with the fastest cycle time.

The new benchmark in the field of triple insulating glass manufacturing

The **speed'line** is a quick line for the manufacturing of insulating glass that produces triple units in the fastest possible cycle times. It consists of two **tps'applicator** components arranged one after the other, the **speed'assembler** insulating glass press as well as the quick **speed'sealer** sealing robot.



TPS'APPLICATOR

Two components arranged one after the other for the quick application of the thermoplastic spacers TPS[®]



SPEED'ASSEMBLER

Quick, synchronised gas-filling of both spaces between the lites of triple insulating glass units



SPEED'SEALER

Dynamic quality sealing at the maximum flow rate and highest application speed



Working heights - 1,60 m - 2,70 m - 3,30 m

Glass thickness



2 – 15 mm further sizes available on request

Spacer width



1 – 18 mm further sizes available on request

I.G. thickness



up to 100 mm

Individual. Components for insulating glass manufacturing.

Production additions in accordance with your requirements

Our **Bystronic glass** components are the ideal additions to optimise your insulating glass production. Working together with you, we assemble the machines in accordance with your individual requirements.

FRAME PRODUCTION

Bending, filling, coating and positioning of the spacers



EDGE PROCESSING

Top-quality economic glass arrissing



EDGE DELETION

Edge deletion of rectangular and shaped formats



INSPECTION

Automatic, visual in-line inspection of glass plates



TURNING STATION

Automatic turning of coated glass plates within an insulating glass line



GLASS PLATE WASHING MACHINE

Continuous washing and drying of diverse glass plates



ASSEMBLY ROBOT

Automatic assembly and pressing of insulating glass units, with optional gas-filling



SPACER PAD APPLICATOR

Application of pre-punched spacer pads on insulating glass units



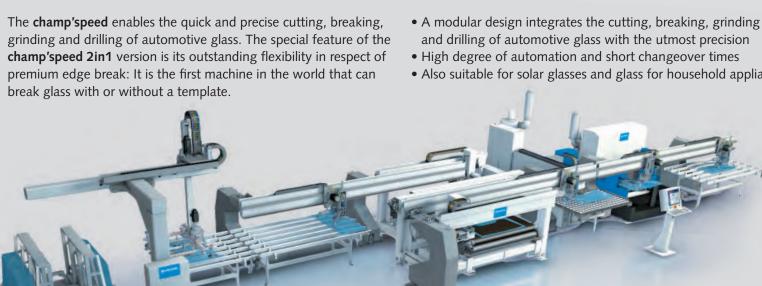
SEALING ROBOT

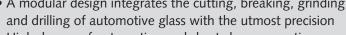
Continuous sealing of insulating glass units of different rectangular formats and dimensions



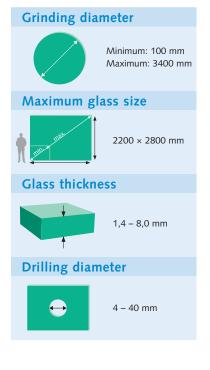
Unique. Automotive glass pre-processing with and without a template.

Individually-developed turnkey system solutions for the efficient pre-processing of automotive glass





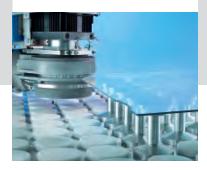
- High degree of automation and short changeover times
- Also suitable for solar glasses and glass for household appliances



GLASS CUTTING AND BREAKING Precise cutting and material-saving breaking with and without a template



GLASS EDGE GRINDING Quick and premium grinding of edges



GLASS PLATE DRILLING Versatile drilling process for multiple drill holes with slanted edges



Simple. Protective transport of flat glass and plates.

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

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

ONE-COLUMN LIFTS

The Easy-Lift simplifies glass handling thanks to its low dead weight and



TWO-COLUMN LIFTS

The Iso-Lift lifts, tilts, inclines and turns glass plates weighing up to 1000 kilograms.



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



SPECIAL APPLICATIONS

The integration of special glass handling into the daily routine is child's play with our handling equipment for special applications.



CRANEWAYS / SLEWING CRANES

We construct our X-Y lightweight craneways according to your production needs – with or without slewing crane and Easy-Lift.



Visionary. Our machines for solar modules and windows.

Transfer of proven technologies from the field of insulating glass manufacturing

SOLAR TECHNOLOGY

A large part of photovoltaic module manufacture involves the handling and processing of glass. With its extensive experience in the glass sector, **Bystronic glass** is also the right contact partner for the solar industry.

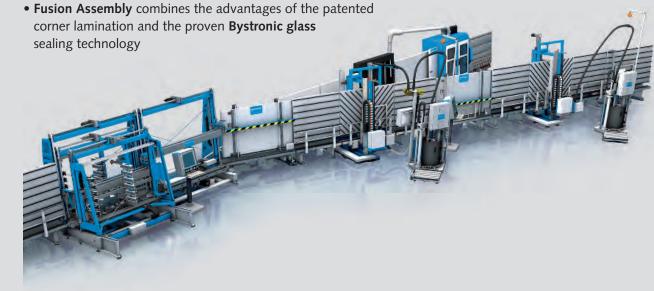


- Technology for a film-free, wafer-based **TPedge** module
- Encapsulation of thin-film modules (see photo)
- Multilayer encapsulation of solar modules
- Washing and drying of glass

WINDOW PRODUCTION

Latest technologies and low-cost solutions for the efficient production of plastic windows:

- sash'line integrates the manufacture of insulating glass units into the production process of window sashes (see photo)
- Friction Corner Welding "welds" the corners of the plastic window frames with the help of frictional heat



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.

PLANNING & CONSULTANCY

Comprehensive, personal consultancy and customer assistance



HOTLINE

spare part orders and more

TRAINING

Tailor-made programmes for the best success possible in training



MANUALS

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



SPARE PART CATALOGUE

Order spare parts quickly and easily via the online catalogue



MAINTENANCE CONTRACTS

Preventative service for a long service life of your machines





Support in the event of technical queries,

