

Because we care

B'CHAMP AUTOMOTIVE 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 DISPLAY GLASS Image: Contract of the second secon

VERSATILE. OUR PRODUCT RANGE FOR YOU.

Bystronic glass is a world market leader in automotive glass pre-processing. For more than 50 years **Bystronic glass** has designed, developed and manufactured system solutions for automatic cutting, breaking, grinding and drilling of automotive glass, home appliance glass, display glass and solar glass at the Buetzberg location in Switzerland.

The label "Made in Switzerland" stands for the highest quality and precision ensuring machine reliability and availability are maximized.





OPTIMIZED. OUR SOLUTIONS FOR WINDSHIELDS.

Product-specific design for maximum precision and productivity

The **B'CHAMP WS** is a product-specific line for highly efficient and precise cutting, breaking and grinding of windshields. The standardized design offers not only a process-optimized line layout, but also various expansion options using upgrade kits.

- Thanks to two grinding wheels per grinding head and the corresponding program management the inner and outer glass are alternately and fully automatically produced
- Short cycle times thanks to the simultaneous use of up to two tools on the same glass
- High repetition accuracy with precise cutting- / breaking tool
- High degree of automation with short changeover times
- Also suitable for solar glass, home appliance glass and display glass

1.4 – 8.0 mm (optional from 0.5 mm)

min. 350 x 350 mm

max. 1600 x 2250 mm

min. 300 mm max. 2500 mm

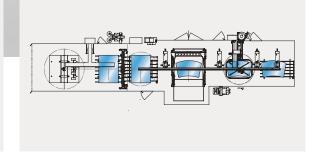
B'CHAMP WS

Grinding diameter

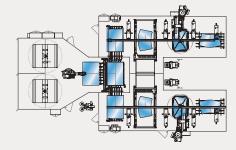
Glass thickness

Glass size

r The 2in1 system offers maximum flexibility in breaking. It can be broken either with or without a template.





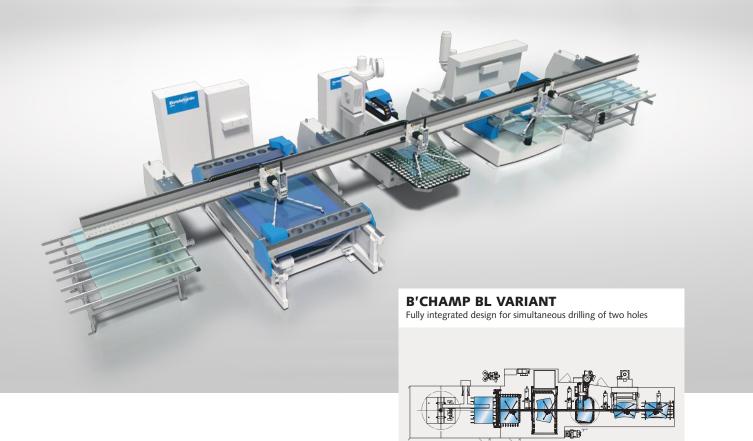


CLEVER. OUR SOLUTIONS FOR BACKLITES.

Product-specific design for maximum precision and productivity

The **B'CHAMP BL** is a product-specific line for highly efficient and precise cutting, breaking, grinding and drilling of backlites. The standardized design offers not only a process-optimized line layout, but also various expansion options using upgrade kits.

- High repetition accuracy with precise cutting- / breaking and drilling tool
- High degree of automation with short changeover times
- Also suitable for solar glass, home appliance glass and display glass



B'CHAMP BL

Grinding diameter



min. 300 mm (optional 200 mm or 100 mm) max. 2500 mm

Glass size



min. 350 x 350 mm max. 1600 x 2250 mm

Glass thickness



1.4 – 8.0 mm (optional from 0.5 mm without drilling)

Drilling diameter



4 – 40 mm (optional up to 80 mm)

REFINED. OUR SOLUTIONS FOR SIDELITES.

Product-specific design for maximum precision and productivity

The **B'CHAMP SL** is a product-specific line for highly efficient and precise diagonal cutting, shape cutting, breaking, grinding and drilling of complex sidelites. The standardized design offers not only a process-optimized line layout, but also various expansion options using upgrade kits.

• High repetition accuracy with precise cutting- / breaking and drilling tool

- High degree of automation with short changeover times
- Line with two cutting- and breaking machines for the processing of highly complex sidelites
- Integrated diagonal cutting for the feeding of up to two cells
- Compact and space-saving footprint



Grinding diameter



min. 300 mm (optional min. 200 mm or min. 100 mm) max. 1600 mm

Glass size diagonal cutting



 min. 350 x 700 mm (optional min. 240 x 480mm or min.150 x 400 mm) max. 900 x 2000 mm or 1300 x 1800 mm

Glass size cell



min. 350 x 350 mm (optional min. 240 x 240 mm or 150 x 200 mm) max. 900 x 1500 mm

Glass thickness



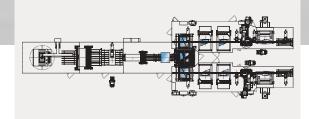
1.4 – 8.0 mm (optional from 0.5 mm without drilling)

Drilling diameter



4 – 40 mm (optional up to 80 mm)

B'CHAMP SL VARIANT Increased capacity with two cells and fully integrated pre-cutting



SPACE-SAVING FOOTPRINT. OUR SOLUTIONS FOR QUARTERLITES.

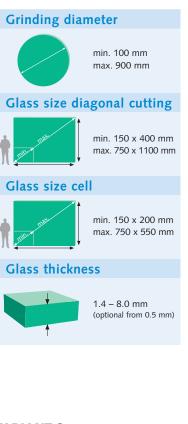
Product-specific design for maximum precision and productivity

The **B'CHAMP QL** is a product-specific line for highly efficient and precise diagonal cutting, shape cutting, breaking and grinding of quarterlites. The standardized design offers not only a processoptimized line layout, but also various expansion options using upgrade kits.

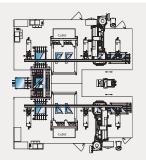
- High repetition accuracy with precise cutting- / breaking tool
- High degree of automation with short changeover times

- Line with two double cutting- and breaking machines for highest efficiency on smallest footprint
- Integrated double diagonal cutting for the feeding of up to two cells
- Integrated down holding device for stable and high-precision grinding of smallest glasses

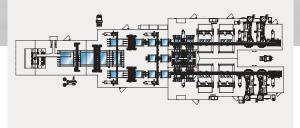
B'CHAMP QL



B'CHAMP QL VARIANT 2 Separate processing cells for reduced footprint



B'CHAMP QL VARIANT 1 Increased capacity with two cells and fully integrated pre-cutting



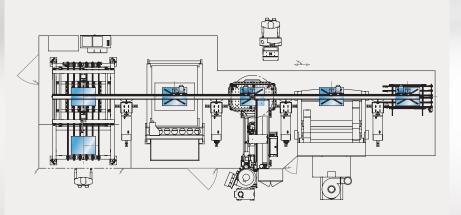
INDIVIDUAL. YOU DETERMINE THE LAYOUT OF YOUR PLANT.

Tailor-made lines, individualized to your specific needs

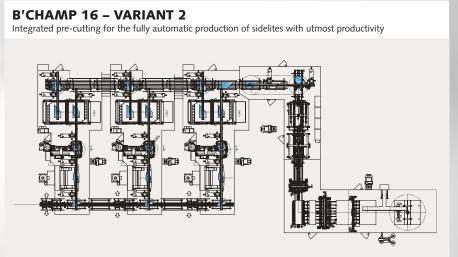
Thanks to the modular design, we can tailor your line precisely to meet your individual requirements.

B'CHAMP 16 – VARIANT 1

Individual, highly flexible solution for the processing of different, or already pre-cut shapes

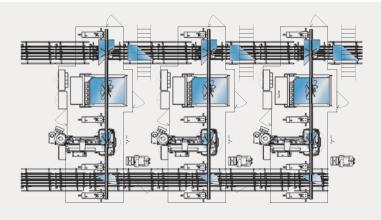


In addition, our various upgrade kits offer numerous expansion possibilities and extension options for your line.



B'CHAMP 16 – VARIANT 3

Tailor-made solution for the processing of most demanding sunroofs



LONG-TERM PROVEN. THE DIFFERENCE LIES IN THE DETAIL.

Benefit from over 50 years experience in glass processing

Our proven **Bystronic glass** components are the ideal supplements for the optimization of your automotive glass production.

Proven components

GLASS CUTTING AND BREAKING Precise cutting and particularly gentle glass breaking with and without a template **GLASS EDGE GRINDING** Fast glass edge grinding and alternating production in highest quality **TOOL HOLDER** Two grinding wheels for the automated production of inner and outer glass, or rough and fine grinding in two passes



DYNAMIC LINEAR DRIVE

Fast and smooth running linear drives for high operating comfort and low maintenance costs







RELIABLE. IDEAL SUPPLEMENTS FOR YOUR PRODUCTION.

Make your daily work easier

We offer you a variety of additional equipment for the entire **B'CHAMP** machine generation.

Additional equipment

GLASS PLATE DRILLING Versatile drilling process for simultaneous drilling **BRUSHING MACHINE** Gentle removal of separation powder **PRIMITIVE CUTTING** Precise cutting and breaking of primitives **DIAGONAL CUTTING** For optimal glass use without waste









INTELLIGENT. HOW TO INCREASE YOUR PRODUCTIVITY.

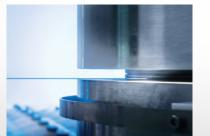
These upgrade kits take you further

Intelligent upgrade kits are available for the entire **B'CHAMP** machine generation, e.g. in the form of extended automation or equipment for future-oriented applications.

Upgrade-Kits

2D SCANNER Automatic measurement of grinding wheel diameter and positioning of groove THIN GLASS Efficient processing of thin glass for diverse applications





THE FUTURE BEGINS TODAY.

Operation made easy

The new ACS3 control system of the **B'CHAMP** machine generation already supports you in your daily production with its intuitive and user-friendly operation. The modularly configured control system consists of a basic program and optional apps with numerous additional functions.

The new user interface gives you an overview of all important product, process and machine parameters. Various apps support your daily work.

LOG FILE ANALYZER APP

Systematic search for

and troubleshooting for

efficient use of the cell

ADVANCED PARAMETER MAPPING APP

Individually assignable

parameter storage for

production optimization

customer-specific

production analysis

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JOB REPORT APP



Compact overview of the production data for saving the optimum job settings

ADVANCED USER SETTINGS APP

AUTOMATIC GRIND-IN APP



Individually adjustable user rights to each parameter for efficient use of the cell

rights ent

OPC-UA SERVER



Automatic adjustment of the grinding machine for short changeover times and extended grinding wheel service life



Reading of machine data for data transfer to a higher-level control system

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.



PERSONAL. ON-SITE SERVICE AND SUPPORT.

Wherever you need us, we are there

Right from the very first minute, we will 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



MANUALS Download manuals for your machines in many languages, complete with information and assistance **HOTLINE** Support in the event of technical queries, spare part orders and more



SPARE PART CATALOG Order spare parts quickly and easily via the online catalog



Preventative service for a long service life of your machine







TECHNICAL DATA B'CHAMP

| | B'CHAMP WS | B'CHAMP BL | B'CHAMP SL | B'CHAMP QL |
|-------------------------------------|---|---|--|---|
| Max. grinding diameter | Ø 2500 mm | Ø 2500 mm | Ø 1600 mm | Ø 900 mm |
| Min. grinding diameter | Ø 300 mm | Ø 300 mm | Ø 300 mm | Ø 100 mm |
| | | (optional Ø 200 mm or Ø 100 mm) | (optional Ø 200 mm or Ø 100 mm) | |
| Glass size (input) diagonal cutting | - | - | min. 350 x 700 mm (optional 240 x 480 mm or 150 x 400 mm) max. 900 x 2000 mm or 1300 x 1800 mm | min. 150 x 400 mm max. 750 x 1100 mm |
| Glass size (input) cell | min. 350 x 350 mm max. 1600 x 2250 mm | min. 350 x 350 mm max. 1600 x 2250 mm | min. 350 x 350 mm (optional min. 240 x 240 mm or 150 x 200 mm) max. 900 x 1500 mm | min. 150 x 200 mm max. 750 x 550 mm |
| Glass thickness | 1.4 – 8.0 mm (optional from min. 0.5 mm) | 1.4 – 8.0 mm (optional from min. 0.5 mm) | 1.4 – 8.0 mm (optional from min. 0.5 mm) | 1.4 – 8.0 mm (optional from min. 0.5 mm) |
| Grinding accuracy [cm-value] | \geq 1.67 \pm 0.10 mm | \geq 1.67 \pm 0.10 mm | \geq 1.67 \pm 0.10 mm | \geq 1.67 \pm 0.10 mm |
| Drilling hole to hole [cm-value] | - | \geq 1.67 \pm 0.10 mm | \geq 1.67 \pm 0.10 mm | - |
| Drilling edge to hole [cm-value] | - | \geq 1.33 ± 0.25 mm | \geq 1.33 ± 0.25 mm | - |
| Internal radius min. | 30 mm | 30 mm | 30 mm | 30 mm |
| External radius min. | 0.0 mm | 0.0 mm | 0.0 mm | 0.0 mm |
| Drilling diameter | - | 4 – 40 mm (optional up to 80 mm) | 4 – 40 mm (optional up to 80 mm) | - |



Because we care



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



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