

Bystronic: becoming global - locally

2004 marks the 40th anniversary for Bystronic machinery. The company, in fact, started up in 1964, at Bützberg, Switzerland, and is still located there. Glass-Technology International was invited to visit Bystronic to find out how things have changed since the beginning, how the company is dealing with the present market situation, and its decisions for the future.

Martin Heim* - Peter Nischwitz**

BYSTRONIC GLASS



40TH ANNIVERSARY - FROM THE 60S ON

Bystronic machine tools and business is celebrating its 40th anniversary this year - the company, in fact, was set up in 1964. Plans for celebrations at the November edition of the *glasstec* exhibition are already prepared.

In the 60s, Bystronic introduced its first manual cutting machine for normal, small pieces of glass. With the introduction of float glass, in the 70s, the cutting of glass changed from manual to industrial processing. And, so, in the mid-70s there was the introduction of the first CNC cutting machine.

Bystronic Maschinen AG, Bützberg, Switzerland

Industrialization

In conjunction with the industrialization of glass processing and the introduction of float glass, Bystronic was the first company in that period to offer cutting optimization software. This first software was produced by a Finnish company specialized for optimization of wood board cutting.

At the end of the 70s, the company introduced x-y-z cutting, which is still the basis of today's machines. Moreover, there are still Bystronic machines of this type up and running. In particular, the 78 model, which was basically for straight-line cutting without any models and shapes.

At the beginning of the 80s, the first machines for shape cutting were created. In order to simplify the programming of such multi-purpose machines, Bystronic introduced the shape catalogue, which became a standard method in glass processing. The technology has been permanently further developed, leading to highly dynamic shape cutting machines for automotive glass. During the 80s, cutting machines were placed on the market, followed by CN-controlled grinding machines. In the 90s, drilling technology completed the range of equipment. Today, Bystronic is the world market leader for pre-processing machinery for automotive glass - from loading, cutting, breaking to grinding.

Change in ownership

In 1994 there was a change in ownership. Right since the beginning, Swiss *Glas Trösch AG*, had been a 50 per cent shareholder of Bystronic, and, in fact, was one of the founders of the company. When *Glas Trösch* started to manufacture float glass, Bystronic started to look for a new partner to ensure its independence via its key accounts. Bystronic

is now part of Swiss-based Conzeta Holding.

In 1990, *Lenhardt* joined the Bystronic glass division, creating synergies between the two companies in glass manufacturing processes - Bystronic with cutting and *Lenhardt* with IG unit manufacturing. Since 2003, German-based *Armaterc Vierhaus GmbH* also belongs to the Bystronic glass division.

Laser technology

At the beginning of the 80s, Bystronic started to develop laser cutting machines, mainly applied to sheet metal. Bystronic rapidly gained experience and was also the inventor of the so-called "*Flying Optics*" for industrial applications. This means that there is a stationary laser generator and stationary work piece, with the lasers linked to the cutting head by mirrors. This business unit grew very fast and, consequently, in 1986, Bystronic decided to create a separate company for this kind of equipment.

In 2002, there was a reorganization of Bystronic's major business activities into two business units: Bystronic sheet metal division and Bystronic glass division. Both divisions started with a new corporate identity concept, using the same type of brand but with two different colours to distinguish the two different sectors: blue for glass and red for sheet metal. This new corporate identity was first introduced to the market at the last glasstec exhibition in 2002.

The champ' compact production line: cutting, breaking, grinding and drilling of automotive glass

DEDICATED TO ITS CLIENTS

Bystronic does not just want to provide machinery, but complete systems to its customers, by providing them with complete, ideal solutions and acting as a partner for them. This also includes individual solutions and adapting machinery to each customer's requirements. This



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kind of work starts with planning customer tailored solutions, analysing running costs and profitability, and the benefits from Bystronic technology and its inherent long-term quality.

Most people say that the initial investment for Bystronic equipment is high but, considering operating and maintenance costs, as well as the lifetime of the machinery makes it a profitable investment - a completely different view!

"This is something that we discuss thoroughly with our clients," said Martin Heim, Group Sales Director for Architectural Glass, "advising them how to get these results. This is our intention, not to leave the customer alone once he has acquired the machinery. Bystronic is a partner - continuously present with advice on how to obtain the best results and long working life for the machines."

"Research and development is continuously ongoing to satisfy customer requests and needs in the best way possible, taking into account all the solutions we can provide."

NEW MARKETS

Brazil

The recent addition to Bystronic branches around the world is *Bystronic Glass do Brasil Ltda.* At the 2004 edition of *Glass South America*, Bystronic had a stand together with the Brazilian company *Agmaq*, where it had a rather ingenious way of making people know that the machines on show were produced locally - a small Brazilian flag on the cutting bridge which went backwards and forwards with the movement of the machine. This local presence and production is enabling Bystronic to reach sales of about two tables per month from this branch, which are no longer affected by the very high import costs, that can reach up to about 50 per cent of the total



SMF Dynamic
Shape cutting
of flat glass

machine costs. "At the moment," said Peter Nischwitz, Corporate Communication Manager, "we are the only company to produce cutting tables locally with European quality - since the beginning of 2004."

This new production unit covers the entire central and South American area. Sales Manager of this new unit, Robert Blank, travels around and is continuously in contact with the sales representatives in the separate countries in that continent. Right now, in the unit there are about seven people, four of which are technicians for Bystronic machinery.

The first machine to be produced there was a cutting table, but, obviously, more product types will follow, and, consequently, the number of people employed there will also increase.

"The most important fact that we would like to underline here," said Heim, "is the commitment that this new production unit will have true Bystronic quality - following Bystronic quality standards."

Russia, China, United States and the United Kingdom

Russia, at the moment is an extraordinary vast and rapidly growing market. All existing buildings, for example, have single glass windows, so there is an enormous opportunity for the installation of double and special glazing.

Bystronic's presence in Russia is about to be strengthened in the very near future. In fact, the paperwork - as far as documents and certifications, permits, etc. are concerned - is already underway.

Bystronic already has *Bystronic Asia Ltd.* (Singapore) and *Bystronic Shanghai Ltd.* for the Asian markets, as well as *Bystronic Inc.* (Hauppauge, New York) for the United States, and *Bystronic glass UK Ltd.* (Telford) for the UK markets.

New emerging markets

Bystronic glass covers almost all regions by its sales organization or linked agents. Following the developments of the markets, Bystronic glass establishes its local presence to be closer to its customers and partners.

PRODUCTION

Different solution concepts

Bystronic divides its product range into four different solution concepts with the "b'smart",

BYSTRONIC CHRONICLE

1964 Bystronic is founded by Messrs. Byland, Schneider and Trösch with the specific purpose to develop, build and sell flat glass processing equipment of significantly higher standards of quality, performance and durability than available at the time

1965 Mr. Ernst Zumstein enters the company as partner

1970 Bystronic introduces the first of its dual-bridge cutting machines, Model XY-70, which quickly became popular and widely accepted

**The first
Bystronic factory**



1974 Bystronic launches the first CNC glass cutting machine, Model XY-74, a high-speed machine suitable for float lines or high-volume off-line applications

1975 Bystronic introduces the first multi-head CNC glass cutting machine for glass fabricators, Model XYZ-75VA

1978 Bystronic develops the first single head CNC cutting machine, Model XYZ-78

1978 Bystronic Inc., in the state of New York, is founded as a US subsidiary

1981 Bystronic introduces the CNC shape cutting machine for automotive glass, Model KSM

1986 Bystronic Laser, a new division, is founded with the purpose to design and build industrial laser cutting machinery incorporating Bystronic's own resonator

1987 Bystronic introduces the high precision CNC shape grinding machine for automotive glass, Model PSM

1988 Bystronic launches the CNC waterjet cutting machine, permitting cutting of virtually all materials-hard, soft, laminated, corrugated, etc.

1990 Bystronic acquires majority ownership of Lenhardt Maschinenbau GmbH (Germany), a leading manufacturer of insulating glass production equipment

1994 Part of the share capital transferred to ZZ Holding (Zürcher Ziegeleien). All of Bystronic's ownership is now in neutral, non-glass manufacturing related hands

1994 Bystronic Maschinen AG and Bystronic Laser AG receive ISO 9001 certification

1995 Lenhardt Maschinenbau GmbH receives ISO 9001 certification and introduces the revolutionary TPS thermoplastic "warm edge" spacer, a fully automatic and versatile I.G. manufacturing process

1996 Bystronic launches a two-spindle CNC drill for automotive applications, Model PBM

**Model XY-71
cutting machine**



"b'first" and "b'fast" architectural glass solutions and with b'champ automotive glass solutions. b'smart stands for standard-setting solutions aimed at individual entry levels. The production lines can be individually adapted and successively extended with a wide range of additional components.

b'first is for high flexibility and excellent functionality, based on high technologies. Individual project planning of b'first systems assures an optimal layout and requirement-specific functionality, while guaranteeing performance values. This permits reliable calculation of the cost of the finished product.

b'fast offers dynamic process solutions for efficient high volume fabrication - complete from glass cutting to manufacturing of insulating glass of up to 1,700 units per shift.

In the automotive glass sector, b'champ offers complete, individually developed turnkey system solutions for the efficient pre-processing of automotive glass.

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- 1996** Bystronic introduces a new generation of ultra fast, high precision CNC equipment. Process machinery for every flat glass application is equipped with all AC direct drives and features an open CNC concept with Windows 95 operator interface
- 1999** Renaming of the ZZ Holding (Züricher Ziegeleien) into Conzzeta Holding
- 2000** Ernst Zumstein retires as a partner. His successor as General Manager is Rolf Honegger, today's President of Bystronic glass division
- 2000** Bystronic launches the laminated glass cutting machine LAMICUT at glasstec 2000
- 2002** Reorganization of Bystronic's major business activities into two business units:
 a) Bystronic sheet metal division: economical processing of sheet metal by cutting and bending
 b) Bystronic glass division: system solutions for the manufacture of architectural and automotive glass
- 2003** Acquisition of Armatec Vierhaus GmbH (Germany), a leading manufacturer of laminated glass production lines and handling equipment for flat glass processing.
- 2003** Bystronic launches a new, innovative vertical shape cutting concept for architectural glass at VITRUM 2003 in Milan
- Today** Bystronic is the global supplier of total solutions for the economical, application-engineered manufacture of architectural and automotive glass. The brand stands for lasting customer benefit, reliability and the best products on the market.

SALES AND AFTER SALES

Bystronic's services also offer maintenance contracts and an extended hot line - out of office hours. Service departments are present in all branches abroad too - such as for example, in the United States, United Kingdom, China, Brazil, or others - this is the local aspect of Bystronic.



LAMICUT, for effective and precise cutting and separating of laminated glass

Smart'verticut for shape cutting subplate by subplate



Another important part of after sales is the decentralized customer care system - which means that clients are contacted regularly even if they have not reported any problems. The client is not charged unless any problems arise or unless assistance is needed.

This service was started up at the end of 2003, more so in European countries, but is expected to expand to cover the rest of the world soon.

CELEBRATIONS AT GLASSTEC

Bystronic will be present at this year's glasstec with a 1,085 square metre stand, in the same place in hall 14! There will be a special event to celebrate, where the focus will be on the 40th anniversary of Bystronic.

There will be a "Happy Hour" every day from five to six, and some special situations that are presently under preparation, but will basically be called "Join the Swiss Hour". And, of course, during this Swiss Hour, there will be some Swiss specialities. A special logo has also been created for this celebration.

A GLOBAL PARTNER

Differently from its competitors, Bystronic's main aim is to be a "local global" partner. This means to be present, either physically or by other means, with a dedicated sales and service network, on all territories of the world where its clients are based. After 40 years, Bystronic is becoming more and more global! ■

**Group Sales Director Architectural Glass
**Corporate Communication*
BYSTRONIC GLASS

PRODUCTS ON SHOW AT GLASSTEC

smart'verticut	<i>Innovative vertical shape cutting machine for float and low-E glass by cutting subplate by subplate. Modularly designed with automatic X-breaking and manual Y- and Z-breaking</i>
feeder	<i>Automatic subplate feeder for vertical glass cutting machines. Integrated as supplementary module in smart'verticut</i>
smart'lamicut	<i>Entry-level solution for cutting of laminated glass</i>
first'arris	<i>Automatic vertical arrissing machine for rectangles and shapes with straight edges by cup wheel technology. Integrated component in the first'tps I.G. production line</i>
first'tps	<i>Insulating glass production line for thermoplastic "warm edge" spacer TPS® with following components:</i> <ul style="list-style-type: none"> - loader - first'arris - visionmaster - turner - applicator - assembler - desiccant filter: automatic desiccant filling station - handling equipment: rational handling devices for flat glass processing
spacerbender	<i>Fast spacer bending machine for unfilled aluminium profile</i>

Information Service no. 101

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