AMAZEMENT IS THE BEGINNING OF KNOWLEDGE.
— PLATO —

Glass unites and separates at the same time. It affords an insight, without allowing us immediate access. We can admire or marvel at what we see on the other side of the glass. It stimulates our curiosity, inspires us to dream and perhaps marks the dawning of a new understanding.

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Dear Readers

No other ancient material is more modern and has a brighter future than glass. From the formation of natural glass in the heat of a volcano through industrial production of large-scale construction glasses to design glass for a modern lifestyle – the history of glass is every bit as fascinating as its properties.

Glass is a timeless material with enormous functionality. It captures sunlight and keeps the cold at bay. It acts as a heat and sound insulator and provides security. Glass enables us to structure our living and working environment according to individual needs and to constantly realise new visions.

The Glas Trösch brand stands for partnership, dependability and continuous development. We think and plan for the long term. By investing our profits in state-of-the-art plants and new jobs, Glas Trösch continues to grow. I am proud to head this family company founded in 1905 and now in its fourth generation.

Welcome to the world of Glas Trösch.

Erich Trösch
Chairman of the Board of Directors and CEO
Glas Trösch Holding AG
The world is constantly changing. The world of glass, too. New technologies and products are opening up new application possibilities all the time. Whether solutions capable of withstanding extremely high speeds, or for high-altitude buildings – Glas Trösch is incessantly searching, researching and inventing with great passion. Not least in order to master challenges in the engineering field and to realise large and prestigious projects from Switzerland to the Middle East in conjunction with competent partners.

COULD THERE SOON BE A CITY MADE OF GLASS?
Glas Trösch enables cutting-edge architectural projects to come to fruition all over the world. From the headquarters of the telecommunications giant Telefónica in Madrid to the Swiss Tower in Dubai and the circular Aldar headquarters building in Abu Dhabi. Even a complete city made of glass is no longer inconceivable.
THE COMPANY

Four generations of entrepreneurial spirit, quality-oriented thinking and readiness to assume risk are the bedrock on which Glas Trösch stands and continues to grow.

FACTS & FIGURES

- Year of foundation: 1905
- Headquarters: Bützberg/Switzerland
- Number of factories: 60
- Countries: CH / DE / FR / PL / UA / MOL
- Employees: > 4,500
WHAT MAKES GLAS TRÖSCH THE PERFECT PARTNER?
The flexibility of a medium-sized company, the established reliability management, broad product range, professional pride of the personnel and their quick response are just a few of the reasons why Glas Trösch has enjoyed the trust of its customers for over a century.

What started out as a small mirror factory and glass grinding works became the Swiss market leader and a leading company for the production and processing of sheet glass in Europe due to its great appetite for innovation. Glas Trösch has a passion for creating quality of life with this fascinating building material, glass.

The Trösch Group currently employs more than 4,500 personnel in circa 60 factories in Switzerland, Germany, France, Poland, Moldavia and the Ukraine. The company’s headquarters are located in Bützberg/Switzerland.

Glas Trösch operates in three business areas. The EXTERIOR division encompasses window, facade and roof glazing, safety and fire protection glass as well as HY-TECH-GLASS. The INTERIOR division offers glass solutions for the home, office, public spaces and the catering trade. The product range in the AUTOMOTIVE division includes car, railway, bus, truck and aircraft glazing.

The company’s value creation chain and quality management begin with the in-house glass production. This ensures first-class quality and enables customer wishes to be taken into consideration to a high degree.
THE FIRST SNOW
When it turns cold and grey outside, the long wait begins. For the moment when the snowflakes finally flutter past the window. When you press your nose right up to the pane, they seem to dance all around it. This magic never fails to lose its fascination for us, year after year.

GLAS TRÖSCH STANDS FOR QUALITY OF LIFE
Glass enables us to watch the wintry goings-on while sitting comfortably indoors in the warm. The finely tuned SILVERSTAR programme offers the right insulation rating for every need.
FLOAT GLASS
EUROFLOAT AND EUROWHITE

HOW MUCH QUARTZ IS THERE IN THE WORLD?
The world’s reserves of quartz sand are virtually unlimited. Quartz sand consists mainly of quartz grains. And quartz is the second most common mineral on Earth. It consists of silicon and oxygen and forms crystals in many different shapes and colours.

Flat glass made with the float glass process is the starter material for Glas Trösch products. In addition to supplying their own glass processing operations, the factories supply an extensive international customer network.

The principal raw materials for float glass are quartz sand, lime and soda. The raw materials are melted with the addition of cullet. The molten mass is then passed over a bath of liquid tin, forming a smooth surface. Flat glass is transparent, chemically resistant, non-combustible as well as resistant to moisture and deformation.

The four float glass plants are operated in partnership with other well-known glass processors and are arguably the most modern glass plants in the world.

FACTS & FIGURES
FLOAT GLASS PLANTS

<table>
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<tr>
<th>Plant</th>
<th>Commissioning date</th>
<th>Daily production</th>
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<tr>
<td>Hombourg (F)</td>
<td>1995</td>
<td>580 t</td>
</tr>
<tr>
<td>Haldensleben (D)</td>
<td>1997</td>
<td>700 t</td>
</tr>
<tr>
<td>Osterweddingen (D)</td>
<td>2006</td>
<td>700 t</td>
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<tr>
<td>Ujazd (PL)</td>
<td>2009</td>
<td>1,000 t</td>
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Strictly speaking, glass is never really cut. A computer-controlled cutting machine first scores the float glass with a carbide tip, after which it is snapped automatically.
LAMINATED SAFETY GLASS
EUROLAMEX

CAN SAFETY BE INVISIBLE?
A highly transparent film lends the glass new safety properties. It protects against injuries in the event of breakage, and keeps unwanted guests out.

Great importance is accorded to safety when it comes to glass applications. This is the reason why laminated safety glass is now the standard both in architecture as well as in vehicle and aircraft construction.

EUROLAMEX laminated safety glass consists of at least two layers of glass and highly tear-resistant films. In the event of mechanical damage, the glass does not shatter into little pieces but remains attached to the film. The risk of injury is reduced thanks to the unbroken surface. Both transparency and protective effect are retained.

Varying safety properties are obtained by combining different film thicknesses and glasses. On request, Glas Trösch is able to supply glass with tints, UV and sound insulation or other special functions.
AT HOME
One morning, everything is finally ready. You open your eyes and glimpse – at first still somewhat indistinctly – a ceiling, four walls, the sun flickering through the window. Barefoot, you grope your way downstairs. And slowly come to the realisation that it is no longer a dream but your very own home.

GLAS TRÖSCH STANDS FOR TRADITION
For four generations, the family company has played its part in helping people to realise their lifetime dreams. Tailor-made interior applications combining the lightness of glass and great durability create an open, harmonious sense of spaciousness.
IT takes only around 4 kWh of energy to coat a square metre of glass. Compared to conventional, uncoated double glazing, this results in a saving of around 15 litres of fuel oil per square metre of window surface and heating period. This corresponds to around 150 kWh.

The realisation of contemporary glass projects calls for an environmentally compatible energy saving concept. Here glass coatings make an important contribution to environmental protection. In 1987, Glas Trösch installed its own magnetron coating plant and offered heat insulation glass for the first time under the name SILVERSTAR. Today, the company supplies a wide range of innovative coatings for the most diverse requirements.

It is no longer solely about energy saving, but also about energy production. Glasses with SILVERSTAR heat insulation coatings are designed in such a way that the maximum proportion of solar energy is allowed to pass through while retaining the thermal heat in the room.

Coating solutions such as SILVERSTAR COMBI combine heat insulation and sun protection while retaining great transparency that allows copious natural light into the room.

The values of SILVERSTAR SUNSTOP T coatings help to achieve low energy consumption for air-conditioning systems, meaning a significant cost reduction. In this way, undesirable interior overheating is effectively avoided, while allowing high light transmission and providing a captivating exterior view.

To give glass facades a special character, accentuation by means of colour reflections is employed as an individual design aid. The colour aesthetics of a building encased in glass self-confidently assert a specific identity.

Natural daylight is a vital factor for life on Earth. It has a positive effect on people and boosts physical and mental health. Natural daylight makes us feel good.
ANTI-CONDENSATION GLASS
SILVERSTAR FREE VISION T

CLEAR VISION WITHOUT EXTERNAL CONDENSATION?
In certain weather conditions, modern insulating glass may experience external condensation. This physical effect is attributable to the improved heat insulation properties of the glass – the higher the insulation value, the more frequently it occurs.

Highly effective thermal insulation coatings have already reduced the heat loss of insulating glass to a minimum, and the use of triple glazing is growing steadily.

As a consequence of this improved insulation, the inner pane warms up almost to room temperature, while the outer pane receives almost nothing of the room warmth and cools down dramatically depending on the weather conditions. If its surface temperature lies below the dew point of the ambient air, condensation will be unavoidable. This is a regular occurrence on well-insulated vertical insulating glass elements.

With SILVERSTAR FREE VISION T, Glas Trösch has developed a coating that effectively prevents external condensation. Unlike hydrophilic coatings that amalgamate condensate droplets into an even water film over the entire glass surface, thereby merely improving vision through the fogged pane, SILVERSTAR FREE VISION T actually prevents condensation formation.

HY-TECH-GLASS from Glas Trösch is provided with optical interference coatings to reduce irritating mirroring and reflections to a minimum. In this way, reflection-free views are assured where clear vision is essential, and unwanted viewers kept at bay by means of mirror-coated surfaces.

HY-TECH-GLASS is available with different anti-reflective and mirrored coatings. For example, LUXAR anti-reflective glass guarantees invisible protection for works of art or valuable products. The glass provides outstanding transparency while remaining invisible to the eye.

ANTI-REFLECTIVE AND MIRRORED GLASS
LUXAR

ARE ANTI-REFLECTIVE COATINGS INFLUENTIAL TO COLOUR PERCEPTION?
LUXAR coating has no effect on colour perception. Depending on the mood and contrast aimed for, float glasses may be coated in the standard colour shades of regular float glass, extra clear, blue, grey, green and bronze.
BUTTERFLIES IN THE STOMACH

You sit and think. Not only about the things you really ought to be thinking about. No sign of concentration. Your thoughts fly out the window and revolve only around this one person. When will we see each other again?

GLAS TRÖSCH FOR FASCINATION

Glass inspires. It allows vistas and dreams to pass through while keeping possible disturbing influences at bay. Tinted glasses and ornamental glasses have the capability to change reality according to their shape and colour.
WHAT DOES GLASS HAVE TO DO WITH SOLAR MODULES?
As a transparent and extremely robust material, glass is a perfect medium to embed solar cells, thereby protecting them from environmental effects for many years.

The solar industry is a growth market. Glas Trösch began to manufacture solar glasses in 2009. Solar glasses are special glasses for the manufacture of solar modules. The more transparent the glass, the more electricity the solar module produces.

Glas Trösch provides custom-made solutions for this purpose. The glasses are adapted in terms of their size, strength and coating so as to meet the needs of the customer and in line with the specific application. Among the possibilities are special coatings which conduct the electricity or achieve greater light penetration by means of a texturised surface.
FIRE PROTECTION GLASS

FIRE PROTECTION GLASS
FIRESWISS FOAM AND FIRESWISS COOL

CAN GLASS BURN?

Fire resistance tests that serve for quality control and internal development and that also form the basis for national and international approval procedures are conducted on a regular basis in the company’s own worldwide accredited fire laboratory.

In addition to protection against smoke, heat and flames, aesthetic functions are increasingly playing an important role in fire safety. Transparent fire protection glass provides natural lighting, thereby offering considerable design freedom.

With FIRESWISS FOAM and FIRESWISS COOL, Glas Trösch supplies highly effective fire protection solutions. In the event of a fire, the glass becomes a rigid foam sheet. It becomes opaque, cutting off the heat radiation. A large proportion of the heat energy is consumed in this way and rendered harmless. A heat shield is formed that allows all occupants a safe passage along the emergency and escape routes.
ONWARDS AND UPWARDS

It has turned into reality. What existed only as a model for many months, now stands in full size in the heart of the city. His first multi-storey building. The many working days and night-shifts are forgotten. The facade is just like the blueprint. Its glass reflects the street, the sky — and immense pleasure.

GLAS TRÖSCH STANDS FOR INNOVATION
The facade is the face of a building. Glass makes it shine. Different glass facade systems provide impressive exterior views and bright interiors.
For more than 20 years, barely perceptible silver coatings have enabled insulating glass to provide outstanding thermal protection and, in turn, the creation of transparent and light-flooded architecture. Extensive areas of glass not only bring light and views inside; in the colder months they also enable us to utilise the free energy that the sun supplies in abundance. And daylight is important for our physical and mental wellbeing – for our quality of life.

SILVERSTAR insulating glass consists of two or three panes, with the triple insulating glass having emerged as the standard. It provides maximum living comfort and remarkable warmth and cosiness, even in close proximity to the window.

WHAT KEEPS THE HEAT IN BETTER THAN A 25 CM THICK WOODEN WALL?

An insulating glass with a thickness of just 44 mm is a better insulator than a 25 cm thick spruce wall thanks to wafer-thin, invisible heat-insulation coatings.
SAFETY GLASS

HOW SAFE ARE YOU ENTITLED TO FEEL BEHIND GLASS?
Laminated safety glass provides protection against injury and can be made intruder-resistant, penetration-resistant, crash-proof or even bullet-proof according to requirement, and all this with total transparency.

SWISSLAMEX laminated safety glass opens up a wealth of opportunities for combining design aspirations in glass architecture with great functionality and safety. Combining different glass thicknesses and film layers and laminating them together enables the most diverse safety characteristics to be guaranteed and the most challenging design requirements to be fulfilled. Laminated safety glass may be clear, translucent, coloured, light-scattering or printed with individual motifs.

SWISSDUREX monolithic safety glass is thermally toughened single glazing. It has a higher bending strength and thermal shock resistance than normal float glass. It can be used for many applications both indoors and outdoors. If damaged, it shatters into small, blunt-edged glass granules. In addition to the safety aspect, monolithic safety glass opens up a wealth of design opportunities. Screenprint or direct digital print can be used to transform the glass into a captivating architectural element. The design possibilities are almost endless – any individual idea can be realised.

AUToclave being loaded with laminated safety glass.
HOW CAN YOU TURN A KITCHEN INTO A FEAST FOR THE EYES?

SWISSCULINARIA offers a wide variety of shapes, an extensive colour palette, numerous ornamental glasses and individualised surfaces. The results are unique and elegant glass solutions for the kitchen – a feast for the eyes as well.

Thanks to its many different processing techniques, glass offers almost unlimited interior design possibilities: in the kitchen, bathroom and private living area, in offices, public buildings and the catering sector.

Space for dreams. As an emotional, strikingly shaped and modern material, glass enables the creation of new interior worlds. Glass lives, enlivens and is tangible. It makes a vital contribution to wellbeing and quality of life. Glass invites you on a journey through the world of contemporary architectural language. The combination of the lightness of glass with the permanence of the material captures the essence of our age. Its transparency, openness and visual attractiveness are the stuff of which dreams are made. In the Glas Trösch Interior Centres, interior glass applications become worlds of experiences. Here, dreams become reality.
A TRIP AROUND THE WORLD
The time is right for taking time for yourself. To speed through the landscape together: City, countryside, river. The view on the outside world leads to introspection. The airflow stirs up memories. We have seen so much already! Do you remember...?

GLAS TRÖSCH STANDS FOR TRUST
Glass not only opens up a host of attractive design possibilities, it also offers safety and security. Protected behind safety glass such as SWISSUREX or SWISSLAMEX, you can unwind and relax.
WHO IS THE FASTEST?
The Bugatti Veyron Super Sport holds the current world record for street-legal vehicles at 431 km/h. Glas Trösch is playing its part as the series supplier of the top-quality glazing.

Glas Trösch develops and realises demanding complete glass packages or individual components for all construction stages and prototypes in the automobile industry. It supplies carmakers all over Europe, such as BMW, Bugatti, Daimler, Lamborghini, Porsche and Rolls-Royce, with window glass for short production runs, concept vehicles, show cars and test vehicles. As a partner to the entire mobility industry, it also supplies commercial vehicle manufacturers, cab builders and manufacturers of specialist vehicles.

Custom engineering and development services are rendered at Glas Trösch in close collaboration with customers. Process optimisation for short production runs and the manufacture and testing of new materials and technologies make up other pillars of the long-established development activities.
HOW DO YOU BREAK RECORDS IN CHINA?

The front glazing of the China Railway High-Speed train, for which Glas Trösch supplies the windscreen, is subject to an operating speed in excess of 390 km/h. That is a Chinese railway record.

For more than 30 years, Glas Trösch has been supplying bodyshops, garages and motor vehicle glass installers with products and services associated with automotive glass. In addition to windscreense, rear and side windows in original quality, the product range encompasses every tool for the professional dismantling and fitting of glass, consumables, auto glass sealants and mounting kits.

15 company-operated sales points in Switzerland are supplied daily from the logistics centre in Densingen. Every customer, all over Switzerland, receives the goods “just in time” and in flawless quality thanks to the company-operated vehicle fleet. Regular training ensures that customers always have the latest information on products, processes and trends. If required, they can also obtain on-site fitting assistance.

Working in conjunction with the world’s leading train manufacturers, Glas Trösch develops and makes overhead glazing for rail vehicles. With more than 20 years’ experience, the production facility has acquired a worldwide reputation for curved safety glazing. Its core expertise revolves around bullet-proof, chemically tempered, heated window systems with solar and shatter protection.

Alongside top quality and reliability, product innovation plays a major role. Thanks to its in-house development team, highly motivated employees and state-of-the-art manufacturing facilities, Glas Trösch ranks among the most capable suppliers in the field of overhead glazing for rail vehicles and was designated “Best spare parts supplier” by the Swiss Federal Railways.
HOW DO YOU PROTECT PILOTS?
The risk of bird strikes can never be eliminated. For this reason, Mecaplex develops special acrylic and polycarbonate glazing to provide the best possible protection for pilots.

When choosing cockpit glazing, renowned manufacturers in many areas of aviation such as business jets, trainers, jet fighters, gliders, helicopters, etc. put their trust in the certified quality offered by Glas Trösch. In addition to cockpit glazing, the company produces light and wing covers for the aviation industry. As a system provider, Glas Trösch covers all processes involved in making top-quality high-tech aircraft glazing: from development, design, template construction, manufacture and installation through to repair and maintenance.

Ongoing development of the raw materials and technologies employed for the protection of aircraft occupants and for a better interior ambiance is another of the key developmental focuses in the aviation area.
QUALITY FOR FOUR GENERATIONS

FIRST GENERATION

↓ 1900 – 1910
Joh. Fr. Trösch lays the foundation stone for the company. Following a commercial apprenticeship, he devotes himself to the new discovery of photography and takes pictures with silver-coated glass plates. In 1904, he starts his own business. Joh. Fr. Trösch develops a pioneering process in order to transfer colour photos onto glass and porcelain and sells it throughout Europe. In 1905, together with a partner, he founds the company “Abächerli & Trösch, Photokeramische Anstalt” in Butzberg. The purpose of the company is to make posters and advertising signs in glass and porcelain. From 1906, photos of deceased persons are printed on oval porcelain plates with gold inscriptions. Soon the porcelain is replaced by black glass. The sale of grave crosses – initially in cast iron, later iron wire – is commenced.

↓ 1910 – 1920
Both black glass and crystal glass are purchased in Czechoslovakia and processed. New machines have to be purchased to grind the glass. The company expands its area of business into the production and sale of car windscreens. The First World War (1914–1918) slows down the fledgling company’s development. In 1919 the first factory with glass-grinding workshop, two garages and an office are built alongside the farmhouse on Schlossstrasse in Butzberg.

↓ 1920 – 1930
In 1923, the company is entered in the commercial register and operates under the name “J. Friedrich Trösch, Glas schleiferei, Schilderfabrik, Grabschmuck” [glass-grinding workshop, sign factory, grave decoration]. In 1927, the company begins to manufacture mirrors. A mirror coater is recruited, who brings his own method with him. The business activities increasingly shift towards the processing of glass. The company letterhead shows its areas: glass-grinding workshop, mirror factory, crystal glass faceted in every form, shop-window fittings, car windows, advertising and company signs, sand-blasting workshop, grave marker boards in black glass, porcelain and electroplate, grave monuments in iron and stone. At the end of the 1930s, the company sign “J. Friedrich Trösch, Glas- und Spiegelmanufaktur, Butzberg” appears (illustrated above).

SECOND GENERATION

↓ 1930 – 1940
In 1923 Rud. Fr. Trösch joins the company at the age of 16. He completes a commercial apprenticeship. He learns how to carry out all the practical work in the business. In 1927, Rud. Fr. Trösch learns the trade of glass specialist in the Gerrer SA company in Mulhausen. On his return, he sets about the rapid expansion of the business. Furniture factories and carpentry workshops are visited with the aim of building up a broader clientele for mirrors, ground-glass tops and the trade in glass. A large natural stone mill from Bohemia is installed. Flat and steep facets become the fashion.

↓ 1940 – 1950
In 1939, a new building of 500 m² is added, and a hand-operated crane is installed. Further extension – two storage sheds – takes place in 1947. During the war years, from 1939 until 1945, the business is only kept going with great difficulty. Rud. Fr. Trösch and the employees are away for months on military duty. Obtaining glass proves difficult because Switzerland is surrounded by the Axis Powers. From 1945, Rud. Fr. Trösch is the sole shareholder and owner of the company. Ice-patterned glass is introduced, being mainly used for kitchen construction.

↓ 1950 – 1960
After the war, an economic boom begins and the Trösch company is among the beneficiaries. The sale of window glass and cast glass is expanded. The first representatives are appointed. The sales area is expanded as far as Bern and into the Aargau region. The glass-grinding workshop and mirror fabrication are modernised and expanded. An Opel semi-trailer and a Bedford truck are bought. In 1955, the company is admitted into the glass cartel “Vertglas”. In 1956, the large domed hall is built with three Isler domes and put into operation with an electric crane as well as modern warehouse and cutting facilities. The large domed hall represents an important step for the future.

↓ 1960 – 1970
In 1936, a Ford delivery truck is fitted with a vertical-lift shop-window frame in line with an idea by Rud. Fr. Trösch. In 1938 the company Fr. Trösch AG, Butzberg is founded.
In 1951, Heinz Trösch joins the company and completes a commercial apprenticeship. He spends most of the first two years working in the factory where he gets to know all the practical work. In 1955, he undertakes the first trials in the manufacture of glued insulating glass. In 1956, production of insulating glass begins under the Heglas brand. Heinz Trösch produces the first insulating glasses by hand in his spare time – in a room of the old farmhouse. Later, production is transferred to the cellar of the domed hall and the first employees are recruited. Heinz Trösch has machines made to his own design for the manufacture of insulating glass. Heglas AG is founded in 1958. The same year, his brother Erwin Trösch joins the company. In 1962, the 1,000 m² Heglas Hall is built out of wood. 1964 sees the founding of Bystronic, which makes insulating glass and cutting machines for the European market. In 1965 the new Kulmerglas factory is built in Oberkulm for the manufacture of soldered insulating glass. The “Heglas” and “Kulmerglas” products are marketed under licence all over Europe, and the company thereby becomes known throughout Switzerland and the neighbouring countries.

Within 40 years of work the two brothers set about building up the company from 20 to around 3,000 employees, helped by a healthy economic climate and loyal staff.

1970 – 1980
A large factory is erected in Bützberg with 7,200 m² floor space, as well as a two-storey office building with cellar, for the rapidly expanding companies Heglas AG and Fr. Trösch AG. The triple Glas Trösch logo is introduced. The new building with state-of-the-art equipment takes the company a giant step forward. In the subsequent years, a number of other companies are founded or acquired in Switzerland: in 1973, Heglas AG in Bulla; in 1974, Glasmatec AG in Niederönz; in 1975, the subsidiaries in Muttenz and Bern plus Grambach AG in Zurich and St. Gallen; and in 1976, Isolerglas AG in St. Gallen. In 1978, the manufacture of SWISSLAMEX is started in Blützberg.

1980 – 1990
In the following ten years, the car windscreen division is built up and various other companies are acquired, such as Belmo Landquart in 1981, today Glas Trösch Malans. In 1981, Glas Trösch Holding AG is founded in Bern and in 1982, Glas Trösch Autoglas AG in Ursenbach for the manufacture of automotive glass. The same year sees Swissdurex commencing production in Bützberg. With the 1984 acquisition of Sanco & Co AG in Nördlingen, Glas Trösch makes its first foray into Germany. With Sanco & Co AG, Glas Trösch also gains 20 franchisees for SANCO insulating glass. In 1985, Glas Trösch acquires Faglas AG in Thun. The same year, Glas Trösch establishes the Glas Trösch advisory service and glaströschdesign for the production of glass furniture. In 1988, a major investment of CHF 40 million is made in the construction and commissioning of the large production hall for the first magnetron coating plant and SILVERSTAR coated glass, representing a decisive step towards the future.

1990 – 2000
In Germany, too, companies are acquired: Krebs GmbH in Bad Krozingen in 1990, and the Kaufmann and Laminex companies in Alttshausen in 1993. Foreign sales markets are opened for the three SILVERSTAR coating plants. In Burnau in Alsace, a new production hall is built for the second and third magnetron coating plants (1991 and 1993).

Heinz Trösch manages the company as CEO for 30 years until 1989, followed by his brother Erwin Trösch for three years, then Hans Baumberger for nine years until Erich Trösch takes over in 2002.

After handing over the management to his brother in 1989, Heinz Trösch devotes himself principally to the task of establishing appropriate technical, financial and political conditions for setting up the company’s own float glass factory. The intention is to ensure a supply of glass that is not dependent on the oligopolic groups. After years of preparation, a definitive construction decision is taken on 32 May 1993. Fortunately, at a critical stage of the project, the fourth generation – Erich Trösch – is willing to accept
responsibility for the construction of the first float glass works and successfully accomplishes this mammoth task.

In 1995 and 1997, the two float glass plants in Hombourg, Alsace/France and in Haldensleben, Sachsen-Anhalt/Germany are constructed and put into operation. With the acquisition of the two companies Ocli/MMG in Goslar and Kappeler in Zofingen (1998/99), the company adds another mainstay in the field of technical glass. These companies with around 300 employees are transferred to Europ Tec AG, Oftringen in 1999 by A. Lauterburg-Trösch, son-in-law of Heinz Trösch.

FOURTH GENERATION

2000 – PRESENT DAY

In 1991, Erich Trösch represents the fourth generation to join the company. During his studies at the Federal Institute of Technology (ETH) Zurich, he completes various internships in the glass-cutting department, scheduling office, laminated safety glass and monolithic safety glass production, in the assembly departments and the Bulle and St. Gallen works. He graduates in 1991, obtaining the title “dipl. Masch. Ing. ETH” (graduate machine engineer ETH).

After his military service, Erich Trösch spends several weeks of training at Cardinal Glass, the largest American manufacturer of insulating glass, run by Roger D. O’Shaughnessy. In 1993, he assumes project responsibility for the company’s first float glass plant. With the support of Hans Baumberger, Hans Lüdi and a team of engineers, the plant in Hombourg, Alsace/France is built and put into operation in the record time of 14 months. In 1996, accompanied by Armin Struit, he assumes project responsibility for the second float glass factory agreed by the Board of Directors, to be constructed in Haldensleben, Sachsen-Anhalt/Germany. This factory, too, is successfully put into operation together with laminated safety glass production and a magnetron plant. In 1999, Erich Trösch graduates from the renowned IMD Business School in Lausanne.

On 1 January 2002, Erich Trösch takes over from Hans Baumberger as Chairman of the Group Management and on 20 February 2002, he succeeds his father Heinz Trösch as Chairman of the Board of Directors. With these arrangements a majority of the shares are passed to Erich Trösch.

In 2000, the important Svabian Glass Group with 7 factories and 680 employees in the south of Germany is acquired and the Swissdouche division established. By now the group has grown to include 43 factories.

In 2001, a factory is built in Buochs (Canton of Nidwalden) for the manufacture of the fire-resistant glass developed within the company. The same year sees the acquisition of Pilkington Automotive Switzerland and the expansion of the magnetron plant in Bützberg to 35 cathodes. In 2006, the third float glass works is built and put into operation in Osterweddingen, Sachsen-Anhalt/Germany, with a capacity of 700 tonnes/day. In Haldensleben, a highly complex magnetron plant is constructed for the manufacture of solar glass. In 2007, the new large hall for SWISSLAMEX in Bützberg comes into use, allowing laminated safety glass of up to 900x330 cm to be manufactured.

In 2009, the fourth float glass works with a capacity of 1,000 tonnes/day is constructed and put into operation in Ujazd near Lodz/Poland. In 2010, EVROGLASS is acquired, the largest insulating glass manufacturer in the Ukraine with 9 decentralised processing factories. This makes Glas Trösch the No. 1 in the Ukrainian insulating glass market. The same year, an insulating glass factory in Moldavia and a glass processor in Germany are acquired.

The group now has 60 production facilities with around 6,000 employees.
GLASS ART

Glass is a highly aesthetic material – transparent and timeless.

WHERE DOES EVERYTHING REVOLVE AROUND ART?

The “most beautiful roundabout in Switzerland” is situated in Blütberg. The 7 metre sculpture by the Athens artist Costas Varotsos is made of glass, steel and a concrete foundation. A total of 1,500 glass triangles with different breaklines reflect the sunlight in ever different ways, without dazzling road users at any time.

Glass is unique: unlike works of art in other materials, glass objects also have an inner life. You can look into them and also through them. Those who work with glass are enthused by this transparency and translucency. The play of light brings glass objects to life. Sheen and reflection account for constantly changing views as the angle of light incidence varies.

Glass exerts a fascination on account of its paradoxes: It is hard and yet fragile, both transparent and opaque. It is made through heat and cold. The basic material is flat glass, which is used to create glass objects and glass sculptures.

RESEARCH & DEVELOPMENT

Product quality is constantly improved through new materials, innovative product concepts and optimised production processes.

It all begins with research and development. Interdisciplinary teams, composed of members from the fields of physics, chemistry, materials science, production engineering, coating process technology, mechanical engineering and machine building, work in close collaboration. New materials and innovative product concepts are developed and production processes analysed and refined in the company’s own development laboratories. In this way, customer wishes can be fulfilled under realistic production conditions. Constant dialogue with universities of applied science and institutes of technology enable the latest research findings to be incorporated in the production environment without delay.

WHAT’S IN STORE FOR US IN THE FUTURE?

Glass is the material of the future. As a natural material, it utilises solar energy, is long-lasting, provides protection, is easy to clean and non-toxic. Glass will continue to make an important contribution to human comfort and wellbeing, as well as health.
**IS CATHEDRAL GLASS USED TO BUILD CHURCHES?**
Cathedral glass or stained glass is a cast flat glass with a hammered surface and an ornamental pattern rolled into it. It is frequently employed for church and bathroom windows or as a door panel. You can find further technical terms in the Glass ABC at www.glastroesch.ch

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**Glass is an indispensable material for modern architecture.** Glass Trösch attaches great importance to the optimum use of glass. The Glas Trösch advisory service facilitates access to the use of glass and its immense diversity, highlights possibilities and finds appropriate products and solutions for every need. Glas Trösch employs both architects and interior designers, all of them specialists for glass applications and glass architecture. They are the people to contact for answers to challenging questions in connection with the use of glass in building construction.

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**WHAT DOES QUALITY MEAN TO US?**
Quality is paramount. This means that our reliability management does not shy away from addressing any complaints that may arise. Should there be anything that gives cause for concern, Glas Trösch guarantees its customers that it will deal with the matter promptly and correctly.

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**Glas Trösch stands for superior quality.**
SUSTAINABILITY

All processes are designed with conservation of resources and environmental protection in mind.

No other ancient material is more modern and has a brighter future than glass. Glass stands equally for fascination as well as for effective sustainability. The raw materials for glass manufacture occur in abundance in nature and are sufficient for many generations to come. Moreover, glass is one of the few raw materials that is almost 100% recyclable. Through its processing and finishing, glass becomes a quality product with an energy balance that remains unsurpassed.

The principles of sustainability are systematically implemented within the company. Float glass manufacture is a good example of this. The float glass factory built by Glas Trösch back in 1995 was the first in the world to be equipped with an exhaust gas purification system. Constant investment in production facilities and plants enables our factories to keep pace with challenging environmental and energy requirements.

LOGISTICS

An optimum, need-based material flow from the manufacturing facility to the building site is ensured.

The Glas Trösch logistics system embraces efficient handling and optimum protection of the freight by all means of transport. With this in mind, the Glas Trösch Group works with trusted partners, but also employs its own, environment-friendly delivery fleet for daily deliveries throughout Europe.

The organisation is continuously optimised in order to fulfil customer needs as efficiently as possible. Among other things, the custom reusable racks play a decisive role in the internal and external logistics. Delivery punctuality is constantly monitored as a part of reliability management.

HOW GOOD IS GLASS AS AN INSULATOR?

An approx. 40 mm thick insulating glass achieves the same heat insulation figures as a 30 cm thick cavity wall with 10 cm of insulation. Moreover, in terms of sound insulation, the same glass also stands comparison with a 120 mm thick wall made of lime-sand bricks.

WHAT DOES SOMETHING THAT LOOKS SO LIGHT WEIGH?

A 4 mm thick sheet of glass measuring 3.21x6 m weighs around 200 kg. 10 such sheets make up a stack less than 5 cm high and weighing 2 tonnes.
LOCATIONS

The Glas Trösch Group based in Bützberg/Switzerland includes around 60 factories in Switzerland, Germany, France, Poland, Moldavia and the Ukraine.

LEGEND

- Float glass
- Coating
- Solar glass
- Fire protection glass
- Processing
- Automotive

FLOAT GLASS
- EUROGLAS FLOAT GLASS FACTORIES
  - Hombourg, Haldensleben, Osterwodden, Ujazd, Haldensleben
- EUROGLAS SOLAR GLASS FACTORY
  - Haldensleben, Osterwodden
- EUROGLAS LAMINATED SAFETY GLASS FACTORY
  - Haldensleben, Aachen
- EUROGLAS SALES

COATING
- COATING FACTORIES
  - SILVERSTAR Bützberg, SILVERSTAR Burnhaupt, SILVERSTAR Haldensleben, SILVERSTAR Ujazd, HY-TECH GLASS Bützberg

SOLAR GLASS
- EUROGLAS Haldensleben

FIRE PROTECTION GLASS
- FIRESWISS Buochs

PROCESSING
- SWITZERLAND
  - INSULATING GLASS:
    - Bützberg, Beiligen, Pratteln, Oberkulm, St. Gallen-Winkeln, Malans, Volketswil, Bulle, Stoffsburg
  - LAMINATED SAFETY GLASS:
    - Bützberg, St. Gallen-Winkeln, Bulle
    - Bützberg, St. Gallen-Winkeln, Volketswil, Stoffsburg
  - INTERIOR:
    - Bützberg, St. Gallen-Winkeln, Bolligen, Pratteln, Oberkulm, St. Gallen-Winkeln

- GERMANY
  - INSULATING GLASS:
    - Aalen, Altshausen, Bad Krozingen, Memmingen, Nörldingen, Wertingen
  - LAMINATED SAFETY GLASS:
    - Altshausen, Bad Krozingen, Memmingen, Nörldingen, Ulm
    - Aalen, Freiburg, Kempten, Ulm, Memmingen
  - MONOLITHIC SAFETY GLASS:
    - Altshausen, Bad Krozingen, Memmingen, Nörldingen, Ulm
    - Aalen, Freiburg, Kempten, Ulm, Memmingen
  - INTERIOR:
    - Artjomovsk, Kharkov, Kherson, Dnepropetrovsk, Kiev, Lviv, Odessa, Poltava, Simferopol

- UKRAINE
  - INSULATING GLASS:
    - Chisinau

- MOLDAVIA
  - INSULATING GLASS:
    - Chisinau

- AUTOMOTIVE
  - Grenchen, Dünsingen, Trimbach, Ursenbach

- PROCESSING
  - SWITZERLAND
    - INSULATING GLASS:
      - Bützberg, Beiligen, Pratteln, Oberkulm, St. Gallen-Winkeln, Malans, Volketswil, Bulle, Stoffsburg
    - LAMINATED SAFETY GLASS:
      - Bützberg, St. Gallen-Winkeln, Bulle
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GLAS TRÖSCH
GROUP

GLAS TRÖSCH HOLDING AG
Industriestrasse 29, CH-4922 Bützberg
Tel.: +41 (0)62 958 52 52, Fax: +41 (0)62 958 52 55
www.glastroesch.ch

FLOAT GLASS
EUROGLAS FLOAT GLASS FACTORIES
Hombourg (F) , Haldensleben (D) , Osterweddingen (D) , Ujazd (PL)

EUROGLAS SOLAR GLASS FACTORY
Haldensleben (D)

EUROGLAS LAMINATED SAFETY GLASS FACTORY
Haldensleben (D) , Osterweddingen (D)

EUROGLAS SALES
Aachen (D)

COATING
COATING FACTORIES
SILVERSTAR  Bützberg (CH) , SILVERSTAR  Burnhaupt (F ) , SILVERSTAR Haldensleben (D) , SILVERSTAR  Ujazd (PL ) , HY-TECH-GLASS Bützberg (CH)

SOLAR GLASS
EUROGLAS H aldensleben  (D)

FIRE PROTECTION GLASS
FIRESWISS  Buochs (CH)

PROCESSING
SWITZERLAND
INSULATING GLASS: Bützberg, Bolligen, Pratteln, Oberkulm, St. Gallen-Winkeln, Malans, Volketswil, Bulle, Steffi sburg
LAMINATED SAFETY GLASS: Bützberg, St. Gallen-Winkeln
MONOLITHIC SAFETY GLASS: Bützberg, St. Gallen-Winkeln, Bulle
INTERIOR:  Bützberg, St. Gallen-Winkeln, Volketswil, Steffi sburg

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INTERIOR:  Aalen, Freiburg, Kempten, Ulm, Memmingen

UKRAINE
INSULATING GLASS: Artjomovsk, Kharkov, Kherson, Dnepropetrovsk, Kiev, Lviv, Odessa, Poltava, Simferopol

MOLDAVIA
INSULATING GLASS:  Chisinau

AUTOMOTIVE
Grenchen, Oensingen, Trimbach, Ursenbach
COMPANY PORTRAIT

GLAS TRÖSCH GROUP

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Industriestrasse 29, CH-4922 Bützberg
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Haldensleben (D), Osterweddingen (D)

EUROGLAS SALES
Aachen (D)

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COATING FACTORIES
SILVERSTAR Bützberg (CH), SILVERSTAR Burnhaupt (F), SILVERSTAR Haldensleben (D), SILVERSTAR Ujazd (PL), HY-TECH-GLASS Bützberg (CH)

SOLAR GLASS
EUROGLAS Haldensleben (D)

FIRE PROTECTION GLASS
FIRESWISS Buochs (CH)

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INSULATING GLASS: Chisinau

AUTOMOTIVE
Grenchen, Oensingen, Trimbach, Ursenbach