best in glass processing
For increased performance and profitability: LiSEC

**Facts and figures:**
- Founding year: 1961
- 1 strong brand
- 1,200 employees
- 230 million Euros turnover (2016)

Reliable processes, good quality, solid profit: LiSEC solutions provide flat glass processors around the world with security and drive in a challenging environment.

For the last 50 years, we have been working hard to enable you to sustainably boost the efficiency, the system availability and the quality output of your flat glass production process. Thanks to forward-looking thinking, continuously striving to find the best solution and a great deal of personal commitment from our employees, we have grown from a one-man company to a technology leader.

Our advanced solutions generate a great cost-to-benefit ratio throughout the entire lifecycle of your machines and systems.

Customers around the world can benefit from this: be they experienced manufacturers or newcomers to the industry; from family businesses to industrial glass processors.

Three main factors are essential for long-term success:

1. **Complete System Provider**
   - Only LiSEC can offer you all solutions required for flat glass processing from a single source. Our well-established team of specialists for engineering, automation, machine construction and service develops tailor-made solutions to ensure your competitive edge.

2. **Operational know-how**
   - As the only solution provider in the flat glass processing business with more than 50 years of operational know-how, we know from first-hand experience how to handle glass. We can communicate eye to eye because we are familiar with the challenges you face.

3. **Service**
   - In order to help our customers quickly on site, we have developed the worldwide largest service network in the flat glass industry. High service availability, start-up support and consulting are the added value of our services.

The benefits:
- Over 50 years of partnership, pioneering spirit and stability
- Investment security due to the size of our company
- Leading technology with a high resale value
- Great cost-to-benefit ratio throughout the entire system lifecycle

---

**For increased performance and profitability: LiSEC**

7 - 8% of turnover for R&D
60 R&D specialists
500 software installations worldwide
3,500 gas filling presses worldwide

20 sites
90% export rate
35% equity ratio
more than 250 patents

---

**Facts and figures:**
- Founding year: 1961
- 1 strong brand
- 1,200 employees
- 230 million Euros turnover (2016)

For the last 50 years, we have been working hard to enable you to sustainably boost the efficiency, the system availability and the quality output of your flat glass production process. Thanks to forward-looking thinking, continuously striving to find the best solution and a great deal of personal commitment from our employees, we have grown from a one-man company to a technology leader.

Our advanced solutions generate a great cost-to-benefit ratio throughout the entire lifecycle of your machines and systems.

Customers around the world can benefit from this: be they experienced manufacturers or newcomers to the industry; from family businesses to industrial glass processors.

Three main factors are essential for long-term success:

1. **Complete System Provider**
   - Only LiSEC can offer you all solutions required for flat glass processing from a single source. Our well-established team of specialists for engineering, automation, machine construction and service develops tailor-made solutions to ensure your competitive edge.

2. **Operational know-how**
   - As the only solution provider in the flat glass processing business with more than 50 years of operational know-how, we know from first-hand experience how to handle glass. We can communicate eye to eye because we are familiar with the challenges you face.

3. **Service**
   - In order to help our customers quickly on site, we have developed the worldwide largest service network in the flat glass industry. High service availability, start-up support and consulting are the added value of our services.

The benefits:
- Over 50 years of partnership, pioneering spirit and stability
- Investment security due to the size of our company
- Leading technology with a high resale value
- Great cost-to-benefit ratio throughout the entire system lifecycle
LiSEC machines and systems are often in use for more than 20 years. Robustness and long service life are trademarks of our technology. Thanks to tailor-made service packages and regular technology updates, the systems always remain state-of-the-art ensuring that you will keep up with the market’s increasing quality demands.

Thanks to their modular design, LiSEC systems can be expanded flexibly for the required production capacities and grow to meet your demands. Due to leading technology and a high resale value, our machines and systems are a safe investment in the future of your flat glass production process. Wherever you see LiSEC, you can be assured of a partner with the right system solutions for your entire production lifecycle.

Advantages:
- Increased efficiency throughout the entire system lifecycle
- Long service life and robustness
- Flexible expansion thanks to modular design
- Safe investment

LiSEC helps you to efficiently manage your production throughout the entire system lifecycle.
When we started processing flat glass, machines for doing so were rare. So we developed them ourselves. Since then, we have driven progress continuously.

60 research employees work in our integrated research and development department and in development partnerships with research facilities, universities and institutes on new technologies and search continuously for solutions to the varying requirements of the industry.

We invest approximately eight percent of our annual turnover in research and development. The result so far: more than 250 patents, better and better glass production processes and a decisive head start for our customers.

I am Innovation.
Because we have driven development in flat glass processing since the very beginning.

Our achievements:
- More than 250 patents
- 60 research employees
- Integrated research and development department
- Innovation from application

Our achievements:
Machines and systems for flat glass processing are in use for many years, sometimes even for decades. Ongoing maintenance and optimization are essential to keep performance, efficiency and availability at a consistently high level and to ensure high-quality glass products.

Wherever you are located, LiSEC offers spare parts and extensive support thanks to the largest service network in the flat glass industry. Our specialists are here to help you and provide solutions on site during installation and start-up of the equipment. Training of your personnel on technology as well as operator and maintenance training is provided either at the LiSEC facilities or on site. With online support as well as phone service we are here for you whenever help is needed.

Advantages:
- Minimal downtime thanks to rapid support
- Guaranteed availability of spare parts or equivalents - for at least ten years
- Worldwide supply with spare parts
- Operator training directly on site or at a local training centre
- Added value throughout the entire lifecycle of your systems

I am Service.
Because we support our customers with the largest service network worldwide.

Installation
Training
Maintenance
Online support
Long life
Spare parts
Repairs
Hotline
Nowadays, glass is a highly functional product which has to meet demands far beyond shape and design. With more than 50 years of operational know-how and an own glass processing plant, the Glass Forum, we know the flat glass producer’s requirements like no other system provider.

This knowledge sets us apart in the market. The continual findings from the flat glass production process feed directly into research and development for new generations of systems. From the cooperation with our customers result real-life solutions with several steps of technology lead start.

**Advantages:**
- The only complete systems provider with more than 50 years of experience
- Machines and systems are tested in operation
- Education and training for your operators
- Be ahead through practice-oriented solutions

I am Experience.
Because with 50 years of operational know-how we understand our customers’ needs.
I am Competence.
Because we develop reliable solutions for our customers as the only complete systems provider to the industry.

Advantages:
- Engineering, systems, automation and service from one source
- Minimal interfaces - reduced risk
- Optimized process sequences
- Increased quality of end products
- One competent contact person for all questions

Continual development of new glass types, increasing quality requirements, cost pressure: We can help you all the way to ensure that you achieve your objectives reliably.

As the only complete systems provider worldwide, LISEC is your one stop shop whether you are looking for fully integrated plant-wide solutions or stand-alone machines, software or service. Our experts will advise you competently and accompany you through the entire project.

From small, simple machines to complex complete systems: Allow us to show you how we can help you to increase your performance, system availability and efficiency by utilizing our wide level of competence.

LISEC
For best results: 
use our solutions

The quality of our technology can be judged in operation.
And on the output.

Glass is one of the most versatile materials and is developing at a high speed. LiSEC supports you with cutting-edge machines for the entire production process: from compact and robust to fully automatic, high-end production lines.

Advantages:
- High-precision machines – improved glass quality
- Secure glass handling – avoid injuries, broken glass or loss of quality
- Secure process – high system availability and stable production flow
- Minimise production costs – fewer rejections
- Prepared for the future thanks to modular machine construction

Quality is our technology’s distinguishing trait. It begins at the supplier selection. We only work with specialists that meet our high quality requirements. And thanks to its modular design, your LiSEC system enables you to meet the ever-changing needs of the industry now and in the future.
Flat glass processing
LiSEC processing machines provide quality and efficiency.
- Glass processing
- Glass edge processing
- Surface processing

Tempering
Thermal tempering of glass is possible from 1.6 to 10 millimeters.

Insulating glass production
Machines for the entire production, ranging from compact and robust to fully automated, high-end complete systems.
- Edge deletion
- Washing
- Processing frames
- Applying flexible spacer bars
- Applying thermoplastic spacer bars
- Assembling press
- Sealing

Glass transport and logistics
Efficient solutions for the handling of glass sheets throughout the entire production process.
- Glass handling
- Glass transport
- Glass processing
- Glass sorting

Laminated glass production
Profitable high-quality solutions for the complete laminated glass production.
- Interlayer handling and cutting
- Laminating process
LiSEC Industry 4.1

Strategy

Advantages:
- Integration with your customer
- Cost reduction
- Transparent processes in real time
- Production without surprises
- Consistent quality

Integration with your customers:
Strategic partnerships with e.g. Klaes, a leading software company for window, facade and conservatory construction, as well as other partners for transport organisation, product configuration.

Cost reduction:
- Graphical capacity planning supports additional resource optimisation
- Innovative, quick and easy order entry
- Continuous optimisation reduces material and process costs

Transparent workflows accessible in real time:
allowing you to e.g. check the status of your production anywhere and anytime, even from your smartphone.

No surprises:
- Intelligent machines / lines as „smart factory“ are self-monitoring and warn about upcoming maintenance requirements and wear parts needing to be replaced
- Online services and offices worldwide offer local support

Consistent quality:
- No manual glass handling
- Production information traceability incl. relevant production parameters

through:
- many proven strategies for improvement
- many intelligent innovations
- best practice solutions
- a successful cooperation with us, your single-source supplier

18 19
The new LiSEC Competence center for research, production and training in the field of flat glass processing was opened in Hausmening at the end of 2015. It aligns completely with the LiSEC claim “best in glass processing”. The Competence center “Glass Forum” makes LiSEC the only machine manufacturer on the market who profitably processes flat glass.

This operator know-how allows LiSEC to share and therefore fully understand their customers’ problems and challenges.

The “Glass Forum”, a LiSEC investment of approximately five million Euros, accommodates the latest LiSEC technologies for each step of glass processing – from cutting and edge processing to a sophisticated sheet logistics system to the production of insulating glass units and laminated safety glass including tempering.

In the Glass Forum, flat glass is processed under real life production conditions. The state-of-the-art plants and software applications are also used for research, testing and training.

Facts and figures:
- Opened October 2015
- Latest LiSEC technologies
- 70 employees
- Investment: 5 million €
- Turnover: approx. 15 million € per year
- Approx. 100 customer visits per year

Glass storage with 96 rack positions
3 insulating glass lines
3 cutting lines for float, laminated and special glass
Automatic sorting/shuttle logistics
Planned-ahead maintenance schedule
Automatic production planning and machine addressing
Bidirectional office - machine communication in real-time

LiSEC Glass Forum
Competence center for research, production and training in the field of flat glass processing.
Handle with AIR!
Increased profitability with the air cushion tempering technology by the inventor.

Advantages:
- COST EFFECTIVENESS by LiSEC
- TECHNOLOGY by LiSEC
- QUALITY by LiSEC
- FUTURE-PROOFNESS by LiSEC

As the specialists in the field of the processing and refining of flat glass, we set the objective to always go one step further. 20 years ago we revolutionized the tempering of flat glass and since then, we have continuously developed this technology. World-wide, there are already numerous furnaces by means of which flat glass is tempered in an industrial production environment with LiSEC technology.

Trust in the inventor.

High-quality products deserve the best treatment. This is why we only allow trustful heads - and air - to get in touch with glass. With the patented AEROFLAT air-cushion system, the surfaces of the glass sheets are not touched during the tempering process. The result of the innovative technology: top-quality flat glass - economic and future-proof.