



TODAY FOR TOMORROW

Your worldwide
leading partner for fluid control



AN IMPRESSIVE HISTORY

Milestones of KLINGER Fluid Control

1888

It all started with the patent for a „miracle door“. On November 8, 1888 Richard Klinger applied for a patent for a revolutionary invention: „A single-leaf door that can be opened either from right to left or from left to right, however not from both sides at the same time.“ This patent was the reliable opening and closing of valves which still forms the basis for the global success of the KLINGER brand to this day.



1922

The first milestone of the KLINGER success story – the KLINGER piston valve conquered the world market. In the year 1922 Richard Klinger constructed the first valve with an elastic, exchangeable sealing system for higher temperature ranges. The KLINGER piston valve marked the invention of the classic industrial valve and laid the foundation for the pioneering role in piston valve technology.



1996

Birth of KLINGER Fluid Control. In January 1996 KLINGER Vertriebs GmbH and KLINGER Armaturen GmbH will be merged and transferred to KLINGER Fluid Control GmbH (KFC).



1983

In 1983, the innovative, one-piece, fully welded KLINGER Monoball was launched. The secret of its success: the steel wall around the inner parts of the valve forms a seamless housing made from a single cast. The product, which was originally designed for the pulp and paper industry, was soon used for various media containing solids.



2005

New production line for large ball valves. KLINGER Fluid Control opens a production line for large ball valves. The eight-station palletizing system and the two Waldrich-Coburg machines, each with around 130 tools, form one of the world's most modern production facilities for large valves.



2021

The new Monoball KHO comes onto the market and exceeds all expectations. It has become an indispensable part of the KLINGER family, especially in district heating and for underground applications.



2026

Even more than 140 years later, KLINGER Fluid Control stands for the highest quality standards in the industrial valve sector and supplies KLINGER partners worldwide with fittings and valves for a wide range of industrial sectors such as district heating or steel.



2022

The Ballostar KHA is conquering the international market in 2022 with its modular construction system. This all-rounder is successfully established in a wide variety of applications.



GUMPOLDSKIRCHEN
AUSTRIA

KLINGER FLUID CONTROL

The worldwide leading partner for industrial valves

As a subsidiary of KLINGER Holding, KLINGER Fluid Control has been a market leader in the field of high-quality fittings and valves for over 140 years. Founded as a family business in 1886, KLINGER today leads the global market for premium fittings and valves around the globe.

Service provides security – our focus on continuous improvement, flexibility and service is at the heart of everything we do. We build on sincere, honest and long-lasting partnerships with our customers. The following applies: The interests of our customers come first – and we can only achieve this with a strong team.

At KLINGER, we value the commitment and cooperation of our employees. Together, we work to produce innovative products and offer the highest quality on the international market. We encourage the further development of our employees and value a supportive working environment in which ideas are exchanged and implemented. We live solidarity and team spirit in order to achieve our goals and drive the success of the company.

» Getting together is a start, sticking together
is progress, working together is a success. «
Henry Ford



WHO WE ARE

Together to success

OUR EMPLOYEES ARE OUR GREATEST STRENGTH

The passion that our people bring to their work is one of our key success factors. We actively support a good working environment, in which efforts are acknowledged, ideas are nurtured and the individual rights are respected. We want to create an environment that allows all of us to reach our potential and objectives. This guarantees lifelong learning and is the basis for continuous improvement.



KLINGER QUALITY AROUND THE WORLD

Our quality awareness is at the fore of our company culture. With a consistent and long-term quality policy, we ensure our technology and market leadership and, most of all, customer satisfaction. This allows for the creation of added value for our stakeholders. A long-term market presence is only possible if social factors such as health, employment and product safety are present. The same applies to employment and manufacturing conditions.



BELIEVE IN SOCIAL WELL-BEING

By bringing individuals, cultures and ideas together we create a stronger company. We believe in social well-being, in taking responsibility to sustainably improve conditions for the wider community. We respect and support each other as individuals, and are always aware of the impact of our actions on others. An open form of communication and an appreciative culture are requirements for our success. Long-term relationships, built on mutual respect and trust, are key to our continuous success in the market.



WHAT MAKES US SPECIAL

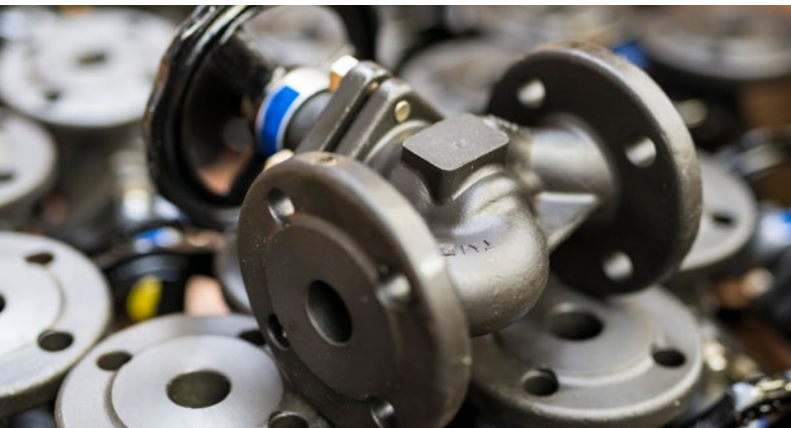
With passion for outstanding quality

CONFIDENCE BOUNDS US FOR OVER 140 YEARS

Decades of experience you can trust. From planning to execution, we provide advice, development and service.

HIGHEST QUALITY IS OUR MISSION

Therefore, design and production always remain our responsibility. International applications for our products made in Austria.



DEMANDING REQUIREMENTS ARE OUR STANDARD

We not only offer standard products, but also master individual requirements. This means we act as problem solvers even for the most challenging applications. Our products are tested for quality, safety and reliability in our in-house test laboratory.

TODAY FOR TOMORROW WITH SUSTAINABILITY

Sustainability and climate protection combined with the needs of our customers and partners are particularly important to us. Our mission is to live together so that our products can continue to be used for future generations in the highest quality and with the highest environmental efficiency.



LIVING SUSTAINABILITY

Because responsibility is our focus

Mission

We offer safe, reliable solutions with our high-quality products. Our focus is on the best possible implementation of all customer needs.

Values

Customer orientation, innovative spirit and sustainability are our top priorities.

Vision

The perfect mix of state-of-the-art technology, innovative thinking and process orientation makes us unique. With flexibility, know-how and pioneering spirit, we will be able to meet all challenges in the future.



SUSTAINABLE

We value sustainable environmental protection.



CUSTOMER-FOCUSED

Customer service with expertise, integrity and passion.



EXCELLENT

Combined technological leadership with excellent service.



INNOVATIVE

Innovative spirit combined with proven technologies.



INDIVIDUAL AND GLOBAL

Customized solutions and global network.



ENTHUSIASTIC

Our team is our greatest strength.

FOCUS INDUSTRIES

Your challenges – our competences



DISTRICT HEATING

Excellent thermal resistance, long service life and high performance efficiency are reflected in all our products and solutions for district heating applications.



PULP & PAPER

Our valves stand for optimized processes and increased production efficiency. We make a significant contribution to reducing downtime, saving energy and avoiding emissions.



GEO THERMAL

Especially for the geothermal sector, KLINGER offers innovative valve solutions for the ecological and economical extraction and use of “green” energy.



STEEL

KLINGER offers unique solutions to complex issues facing the metalworking industry today, such as high pressure and high temperature environments.



HYDROGEN

The use of hydrogen plays an essential role in achieving climate goals. KLINGER masters even complex challenges in this segment with efficient solutions.

Our products are problem solver for many areas of applications.

PRODUCT OVERVIEW

Your project – our solutions



MONOBALL KHO

This fully welded ball valve is used in district heating and cooling, heating and air conditioning technology as well as in general plant construction.



MONOBALL KHO-U

The perfect solution for underground installations in the areas of district heating, district cooling, heating and air conditioning technology as well as in general plant construction.



BALLOSTAR KHA

The modular construction system ensures that the KHA can be successfully established in a wide range of applications.



BALLOSTAR KHI/KHSVI

The application area of this robust ball valve ranges from district heating shafts and underground pipelines to hydroelectric power plants and tunnel boring machines.



BALLOSTAR KHI-F

This powerful ball valve is designed for the toughest and most demanding requirements in a wide range of industries.



BALLOSTAR KHE

Due to modular selectable system components, this ball valve is ideally suited for universal solutions in a wide range of applications.



AB MANOMETER-COCKS

These robust shut-off valves were developed for the special needs of measurement technology, e.g. in the process industry.



PISTON VALVE KVN

The special valve for the highest sealing requirements. Durable and universally applicable, it has been a guarantee of reliability for over 100 years.



BOROSILICATE GAUGE GLASSES

They are suitable for installation in liquid level indicators of almost all manufactures and are divided into transparent, round and reflective sight glasses.

OPTIMIZED COST EFFICIENCY

The life cycle costs of a ball valve

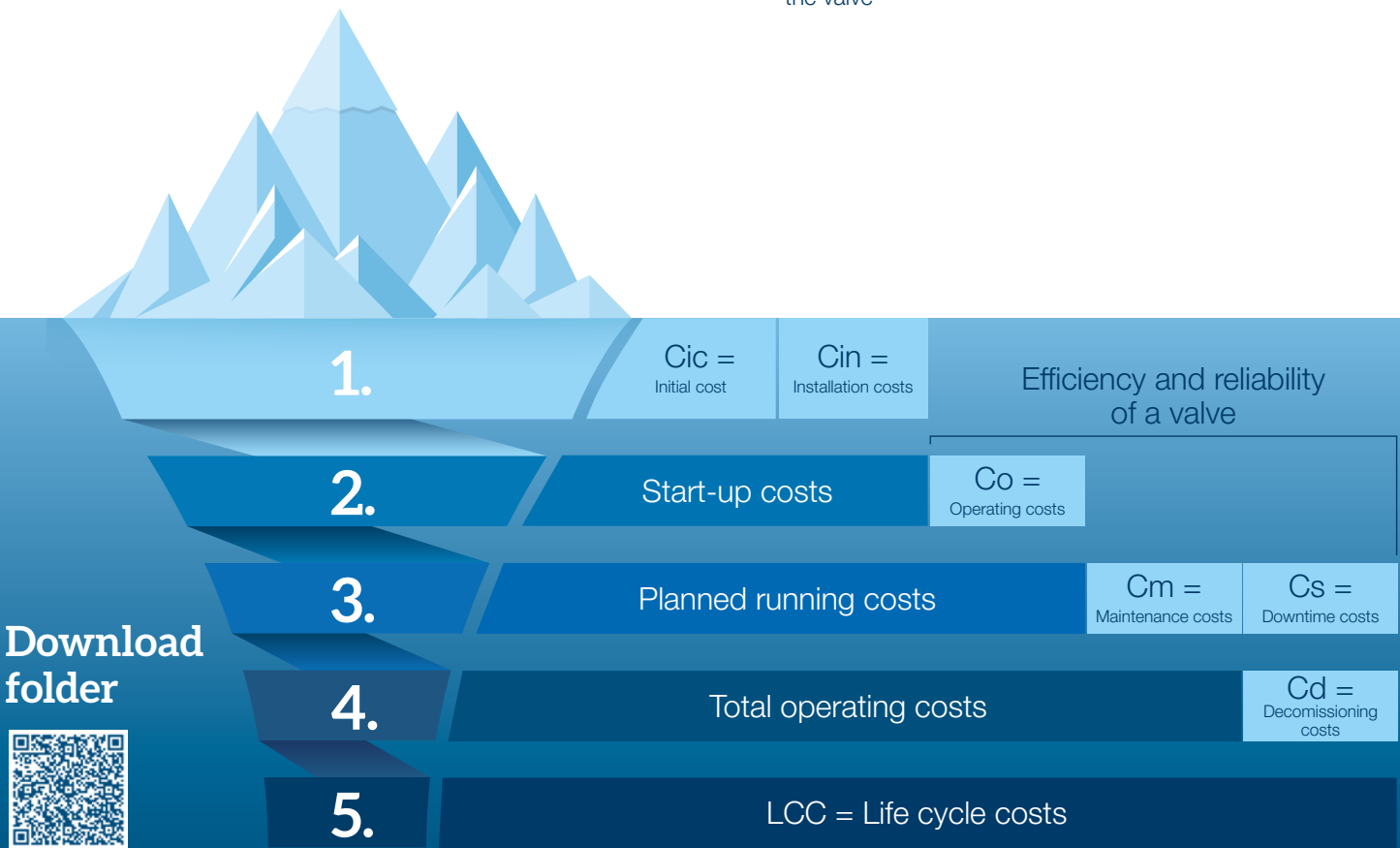
The real cost of a valve is not just the purchase price, but includes the expenses incurred during the entire life of the valve. The costs due to pressure drops, failures, blockages and leaks, which eventually lead to production shutdowns, are often significantly higher than the original purchasing price of the valve.

Do not determine the purchase price of a valve without considering all relevant costs along the product life cycle.

KLINGER Fluid Control ball valves guarantee a perfect combination between technical performance and economic advantage. Initial costs, service-related costs, explicit and hidden costs that are incurred during the entire operating life of the valve must be considered. This is how plant owners should assess the long-term value of a valve.

The life cycle phases are defined by the following variables.

- 1 **Cic** = Initial cost + **Cin** = Installation costs
- 2 Start-up costs + **Co** (Operating costs (Co) are costs associated with keeping the plant running (more specifically energy costs associated with pressure loss).
- 3 Planned running costs + **Cm** + **Cs**
Cm = Maintenance costs for KLINGER Fluid Control ball valves are very low due to the avoidance of the following: Operating and checking the valve on a regular basis. Dismantling the valve to change the sealing element. Installation of the repaired or a new valve in the line
Cs = Downtime costs can be very high. To empty the pipe, repair the valve as well as refill and test the network section can generate 20 to 30 % additional costs on top of the cost for the downtime
- 4 Total operating Costs + **Cd** (Decommissioning cost, which is the cost incurred by companies in reversing the modifications made to landscape when a fixed asset is used up)
- 5 Life cycle costs, that incurred during the entire operating life of the valve



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CERTIFICATES AND APPROVALS

Highest standards in the international market environment

Manufacturer approvals

e.g. PED 2014/68/EU, ISO 9001, AD-2000 HP0, welding approval EN, ISO 3834-2, etc.

Application approvals

e.g. gas certificate, oxygen certificate

Confirmation of sealing

e.g. DBB (Double Block & Bleed) KHI + KHA acc. to ISO 5208 / ISO 4313

Type approvals

e.g. acc. EN 161 for ball valves KHI + KHA, EN 488-1, EHP 003

Safety approvals

e.g. Fire Safe EN ISO 10497 & API 607, fugitive emissions VDI 2440, ISO 15848-1

Environmental approvals

e.g. ISO 14001, EMAS

TRAINING COURSES

For ball valves and piston valves

PROFESSIONAL AND PRACTICAL

KLINGER Fluid Control is continuously working to improve its service offerings. In this context, we are pleased to introduce our new training program, designed to provide in-depth knowledge and practical experience in handling KLINGER Fluid Control products. The program aims to support sales and marketing professionals, planners, designers, service technicians, maintenance and installation personnel, as well as technical sales representatives and project managers in applying their knowledge efficiently, safely, and sustainably.

In addition to theoretical fundamentals, the training focuses primarily on practical content, real-life application examples, and direct exchange of experience with our experts.

With this initiative, we aim to further strengthen the successful cooperation with our valued partners and their customers, while jointly creating the foundation for long-term success.

The program consists of two training modules:

- » **MODUL A**
provides comprehensive theoretical and technical knowledge about KLINGER Fluid Control products and their application across a wide range of industries
- » **MODUL B**
combines theoretical content with hands-on practical exercises, with a particular focus on valves



THE TRAINING CENTER

Both training modules take place in a specially designed training facility at KLINGER Fluid Control in Gumpoldskirchen, Austria. For the theoretical sessions, a modern training room equipped with a projector is available. In addition, three workbenches have been set up directly within the training center to support practical exercises on our products.



Training

We pass on our expertise.

THE BENEFITS FOR YOU:

- » Improved operational reliability
- » Reduced downtime
- » Extended service life of your equipment
- » Confident handling of technical requirements



YOUR TRAINER:
Gerhard Gruber | Application Engineer
at KLINGER Fluid Control

Book your
training
module now:



Click here for the
registration form!

REFERENCES

KLINGER ball valves internationally used



AUSTRIA

An underground supply line in the tunnel system for firefighting operations required a safe and maintenance-free solution for the implementation of suitable shut-off valves. The KLINGER Ballostar was able to successfully establish itself here with its significant product advantages, as its robustness combined with its unique sealing system meets the highest quality standards.

Ballostar KHA-FL. DN 125, carbon steel
Operating media: Water for fire fighting

POLAND

The end user searched for a valve solution, where a "smooth" opening and closing should be possible to avoid pressure hammers which can destroy the pipeline, other devices and the valve itself. The KLINGER solution was a KHSVI ball valve with electric actuator from AUMA with a drain/test cock (double block & bleed) for maximum safety. Also a bypass pipe with an installed piston valve ensured the smooth opening/closing function.

Ballostar KHI and KVN. DN 250-600, carbon steel
Operating media: Water



NETHERLANDS

A ball valve for liquid CO₂ and oxygen at -196 °C with leakage rate A was required for a supply line. KLINGER supplied a special Ballostar KHA design with PTFE seals, an extended spindle, a pressure relief bore, and an oil- and grease-free stainless steel body. The bore ensures pressure equalization in case of ice formation, while special low-temperature lubricants and PTFE sealing materials guarantee reliable operation at extremely low temperatures.

Ballostar KHA cryogenic version. DN 65, stainless steel
Operating media: Oxygen, CO₂

AUSTRIA

The plant, where the operator decided to use KLINGER Fluid Control Ballostar KHI, is used to reduce the carbon content from approx. 4,5% to 0,03-0,04% using the Linz Donawitz process. This process requires blowing pure oxygen at a pressure of 12 bars on the raw iron for about 15 minutes to finish that process. The KHI ball valves are fulfilling up to 10.000 opening cycles (with a maximum closing time of 3 sec.) per year. For 30 years, the operator did not have a malfunction occurrence or any other problem related to the installed valves.

Ballostar KHI DN 200, stainless steel | Operating media: Oxygen



GERMANY

Geothermal water has the negative side effect of causing deposits to form when pressure fluctuates in the system at operating temperatures above 70°C. The geothermal plant in Germany was affected by this "scaling effect" and replaced the existing butterfly valves with KHI ball valves with metal sealing elements and additional flushing/drain connections to significantly reduce turbulence in the system and thus the effects of calcification. Since then, the operator no longer has to shut down the valve cleaning process, and in addition to cost savings, plant availability has also increased.

Ballostar KHI. DN 150 & DN 300, carbon steel & stainless steel
Operating media: Geothermal water

THE NETHERLANDS

KLINGER Ballostar KHI ball valves in line size DN 200 were installed in transportation lines on top of a cement tank to carry cement powder. In this application the particular media is compressed air and cement powder. Hence the challenge for the valves is to handle media with abrasive solids. The end user required both an absolute tight shut off mechanism and a maintenance free operation for this application. Despite an abrasive solid containing media, KLINGER Ballostar KHI ball valves with soft sealing elements KFC (leakage rate A) were used and are working perfectly in this case.

Ballostar KHI flanged. DN 200, carbon steel
Operating media: Cement powder



FRANCE

As part of the construction of the Grand Paris Express, Idex La Défense is upgrading its heating and cooling networks by replacing pipes with larger diameters to enhance system efficiency and meet increased demand. To meet these new requirements, KLINGER Fluid Control supplied several units of the KHSVI ball valves that have been successfully tested to ensure they meet stringent specifications for safety, reliability and durability.

Ballostar KHSVI VVS with DBB function. DN 400 and DN 800, carbon steel
Operating media: Hot and cold water

GERMANY

In Germany, a gigantic heat storage facility was equipped with 25 KLINGER Ballostar ball valves, some of which are also used in the pumping station. This major project is part of the energy transition and protects the city's district heating network from short-term outages. Like an oversized thermos flask, the 55-meter-tall giant stores enough thermal energy to supply district heating customers with hot water for heating and household use for up to a weekend. In addition to reliability and availability, a long-term, effective maintenance strategy was also a decisive argument for the use of KLINGER valves.

Ballostar KHSVI. DN 800, carbon steel
Operating media: Hot water



REFERENCES

KLINGER ball valves internationally used



AUSTRIA

A chemical plant using the KLINGER KVN piston valve in a condensate collector produces phthalic anhydride. This process requires an immense amount of steam. In order to shut-off or by-pass the existing steam traps for maintenance the operator was looking for a safe and cost effective solution over the complete life cycle of the used shut-off valve. The KLINGER KVN piston valve with its guided piston construction is insensitive against pressure surges and is therefore the ideal solution for such applications. It ensures reliable tightness for decades, easy maintenance and prevents from financial losses caused by leaking steam.

Piston valve KVN, DN 15-32, carbon steel | Operating media: Steam

FRANCE

The requirements from the district heating company on a valve were to get a valve with a long service life, extended shaft, maintenance free, fulfillment of EN 488, operable with a T-wrench and easy to install. The unit was installed in an underground concrete channel with operation possible from ground level. KLINGER offered the Monoball KHO fully welded, tested acc. EN 488 with an extended shaft with a square end and stop on top. Maintenance is not necessary because of the reliable construction of ball stem and sealing system. Several KHO ball valves were installed.

Monoball KHO. Different sizes, carbon steel | Operating media: Water



ITALY

Our recommendation for one of the largest district heating providers in Italy to use a pre-insulated fully welded ball valve with a mechanical gearbox and an underground extension telescope won over the client.

**Ballostar KHSVI VVS. DN 200-300, carbon steel
Operating media: Hot water**

FINLAND/LATVIA

At this ammonia base, a reliable solution for this challenging medium had to be found. With the piston valve KVN, KLINGER offered a tried and tested product that has now been used successfully by this customer for many years.

**Piston valve KVN. DN 25, DN 65, DN 80, carbon steel
Operating media: Ammonia**



GERMANY

The customer intended to use two existing DN 1400 pipelines to include them in the new plant section. It has been shown that it is technically better to install a DN 1000 ball valve with extension cones (DN 1000 to DN 1400) instead of butterfly valves of the same size. A KHI DN 1000 has a significantly higher KV value than a butterfly valve DN 1400. This fact prevents from hydraulic problems in the future and saves costs during operation. Besides time and cost savings, the Double Block & Bleed function was the key convincing factor for the choice of the KLINGER Ballostar.

**Ballostar KHI. DN 150-DN 1000, carbon steel
Operating media: Hot water**

SOUTH KOREA

The biggest district heating provider in South Korea decided to extend their distribution network to improve heat transfer from the production facilities to commercial and public locations. As the distances between the main shut-off valves are quite long, it was of highest priority to install maintenance-free valves which ensure reliable operation for decades. Finally, the district heating provider was absolutely convinced that there is only one choice - KLINGER ball valves. In the end, the valve package included 16 pieces DN 600 fully welded ball valves type KLINGER Ballostar KHSVI VVS acc. to EN 488 standard.

**Ballostar KHSVI VVS. DN 600, carbon steel
Operating media: Hot water**



POLAND

The customer has been using KLINGER ball valves for 25 years. Because the Toruń city will open a new geothermal power plant and a new underground piping network, the decision was to modernize two of their chambers. To make the piping system fit for future expansions, modifications in the chambers were necessary. Since the customer is aware of the outstanding quality and long lifetime of KLINGER products, it was clear for them to select KLINGER Ballostar KHSVI VVS and KHA-SL ball valves.

**Ballostar KHSVI (VVS), KHA-SL. DN 80-350, carbon steel
Operating media: Hot water**

CZECH REPUBLIC

A valve was required for installation on a rail tank car for loading and unloading liquid ammonia. Due to temperature changes, the expansive behavior of ammonia can cause damage when using a valve. The ammonia version of the KLINGER Ballostar KHA was equipped with a special stuffing box featuring ammonia-resistant O-rings and an upstream sealing element with a pressure relief bore. This bore provides additional pressure equalization for the valve cavity to prevent excessive expansion of the medium inside the valve.

Ballostar KHA. DN 80-100, carbon steel | Operating media: Ammonia



KLINGER SALES PARTNER

Represented worldwide – personally on site

KLINGER products can be found in many different markets and sectors worldwide. We develop industry- and region-specific solutions that help make our customers successful today and in the future. Our leading-edge products, the know-how of our specialists and the proximity to our customers are the connecting elements of our market approach.



More information
about our KLINGER
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