

The VAUTID logo consists of the word "VAUTID" in a bold, white, sans-serif font, followed by a registered trademark symbol (®). It is positioned within a solid orange square in the top right corner of the image.

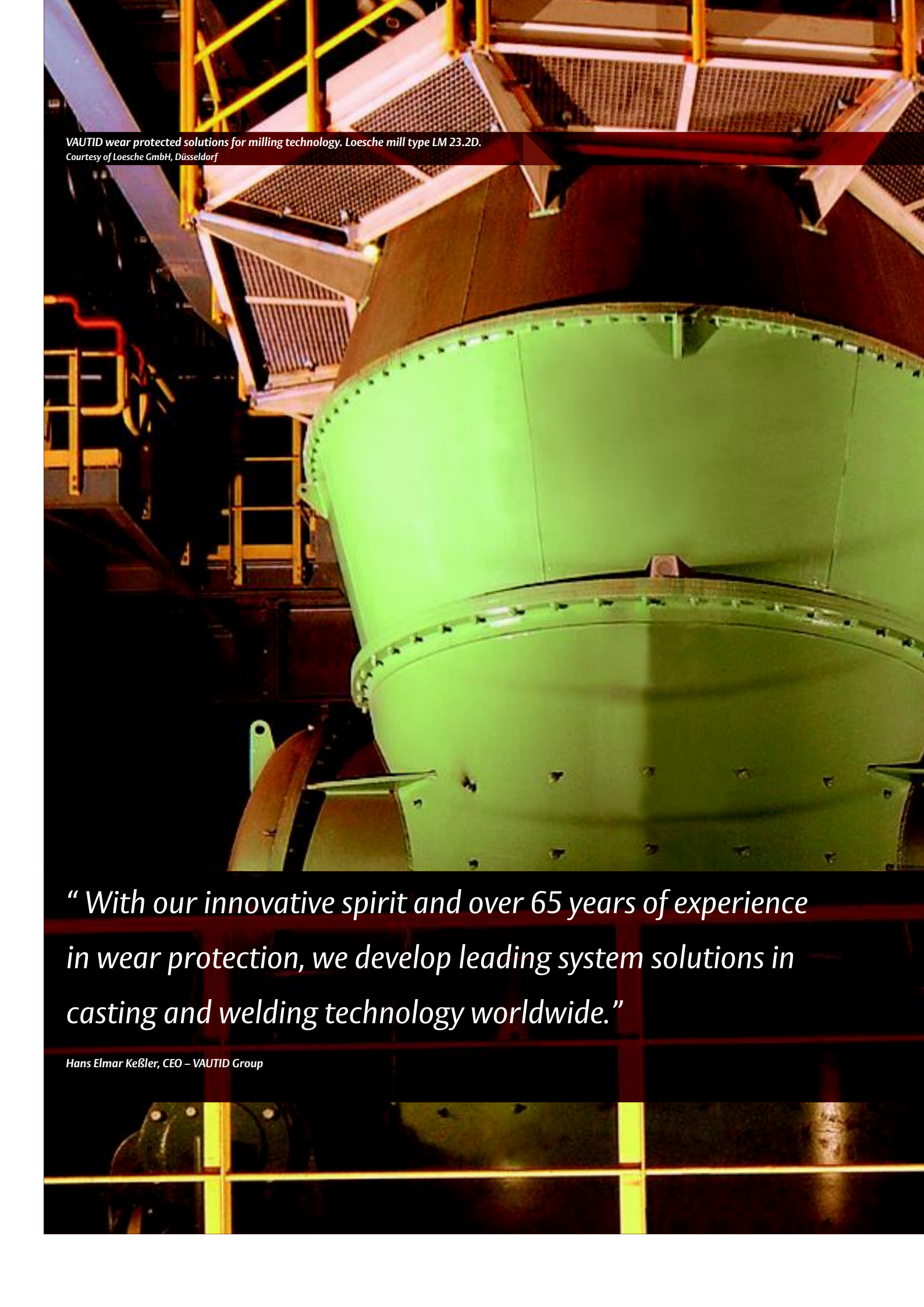
**VAUTID®**

A close-up photograph of a grinding or welding process. A bright, intense white light is at the center of a large, dense spray of orange and red sparks that radiate outwards in all directions. The sparks have a long, thin, needle-like appearance. The background is dark, making the sparks stand out.

**THE ROAD TO NO WEAR**








*VAUTID wear protected solutions for milling technology. Loesche mill type LM 23.2D.  
Courtesy of Loesche GmbH, Düsseldorf*

*“ With our innovative spirit and over 65 years of experience  
in wear protection, we develop leading system solutions in  
casting and welding technology worldwide.”*

*Hans Elmar Keßler, CEO – VAUTID Group*

The background of the slide is a photograph of an industrial facility at night. A large red crane hook is suspended by a chain, positioned over a yellow metal platform or lift. The scene is illuminated by warm, orange-yellow lights, creating a high-contrast, industrial atmosphere. The text is overlaid on the right side of the image.

# **INNOVATION FROM THE INVENTOR: FOR PROFITABLE OPERATION AND LONG SERVICE LIFE**



The background image is a dark, industrial scene showing the production of wear plates. In the foreground, a bright, intense light from a welding or casting process illuminates a metal surface, creating a strong contrast with the surrounding darkness. The light appears to be coming from a point source, possibly a torch or a molten metal being poured. The background is filled with various industrial components, including pipes, valves, and structural elements, all rendered in deep shadows. The overall atmosphere is one of a busy, high-temperature manufacturing environment.

VAUTID wear plate production.

■ The driving force behind the evolution of wear protection technology was Dr. Hans Wahl, who in 1934 made ground-breaking discoveries regarding wear resistance while developing a coal dust engine. With this knowledge, he founded VAUTID Verschleißtechnik in 1946. Over the course of the next 30 years, the company developed from a modest engineering firm into a consulting and manufacturing company – the world's leading system specialist in wear protection through casting and welding technology.

■ Today, the international VAUTID Group employs around 500 staff members in 10 offices, research laboratories, production sites, and a dense distribution network spanning all continents. The owner-operated group of companies is growing once again. VAUTID provides industry-specific wear protection solutions from a single source – from consulting to design, simulation, research and development, all the way through to the finished product.

# A PIONEER IN WEAR PROTECTION SINCE 1946

**Only machines and industrial systems that operate efficiently can generate profits. Continuous, low-maintenance operations and a long service life ensure sustainable business success. The road to prosperity is made possible through innovative VAUTID wear protection in casting and welding technology.**

**VAUTID for manufacturers and end users.** VAUTID system solutions are designed for original industrial plant equipment and process engineering machinery as well as the subsequent protection and regeneration of elements exposed to wear. VAUTID plans, develops and manufactures comprehensive wear protection solutions. Custom-tailored VAUTID concepts are perfectly aligned in terms of technology and economy and ensure reliable, profitable production.

***VAUTID continues to set the standard: V100 has been the #1 product in the industry in metal-based wear protection for over 65 years.***

#### **Consistent performance and return on investment with VAUTID**


**VAUTID consulting and design.** Our goal is to develop the best solutions for reducing wear in original equipment operation and maintenance of systems and machines. To achieve this goal, VAUTID engineers analyze your requirements, prepare a fail-safe diagnosis and design a custom solution for protecting wear-exposed parts. The right VAUTID materials are selected to ensure optimum protection against wear, corrosion or heat. VAUTID uses its expertise to cut wear costs and maximize the service life of the equipment.



*The founder and pioneer of metal-based wear protection was Dr. Hans Wahl.*



*VAUTID grew out of research. With the development of the coal dust engine, Dr. Wahl also helped further the concept of wear protection.*



VAUTID solutions plus VAUTID technologies: optimized wear protection.

# GROUND-BREAKING IDEAS AND SUPERIOR TECHNOLOGIES

## VAUTID products for manufacturers and end users.

Optimal wear protection for mechanical processes such as crushing, mixing, conveyance, extraction, storage, agglomeration, and separation in a wide variety of industries:

- mining
- metallurgy
- concrete and cement
- asphalt
- brick manufacturing
- construction
- coal-fired power plants
- waste incineration
- quarries, building materials, sand, gravel, crushed stone
- recycling
- steel and iron
- pharmaceuticals and chemicals



**With its international focus on all major markets, innovative spirit and “Made in Germany” attention to detail, VAUTID guarantees each customer top-of-the-line system solutions and materials that are not just ahead of their time but that ensure perfect quality on the spot.**

**VAUTID research and development.** To ensure maximum wear protection, VAUTID focuses all of its strengths on developing leading, innovative, metallurgic and constructive solutions to wear problems. In the VAUTID wear laboratory, a wide variety of structural tests, strength tests, and analyses (such as FEM) are conducted. By using 3D-CAD designs, model building, and simulated solidification, VAUTID innovations are prepared for market faster and more reliably. By cooperating with universities and institutions and participating in government-backed research projects, VAUTID can incorporate cutting-edge knowledge to ensure a long service life and profitable operation.

*VAUTID training sessions, seminars, conferences, and scientific lectures are a perfect complement to the VAUTID catalog of innovative products and solutions. Customers benefit from the latest wear expertise, which they can implement right away into their daily routines.*

#### **Proven a million times over and continuously developed**

**VAUTID production.** As a specialist in comprehensive wear protection, VAUTID produces all of its materials in accordance with high VAUTID quality standards in its own production facilities. Here, special raw materials, careful attention to detail, and cutting-edge process engineering are combined with the expertise and commitment of our staff to produce VAUTID premium products. With the ongoing expansion of further production sites, VAUTID will be able to deliver even more highly customized solutions faster than ever before.

### **VAUTID quality assurance**

VAUTID has been ISO 9002 certified since 1993 and ISO 9001 certified since 1996. All VAUTID deposition welding materials, composite wear plates, and casting products are developed, tested and produced in accordance with these strict quality requirements. This guarantees a consistently high standard for all VAUTID premium products.



VAUTID wear research laboratory with oven for heat treatment examinations.

VAUTID wear solutions for mining: Bucket-wheel excavator for lignite.  
Courtesy of ThyssenKrupp AG, Essen



## VAUTID products for comprehensive, targeted surface protection

- Deposition welding materials
- Composite wear plates
- Casting products



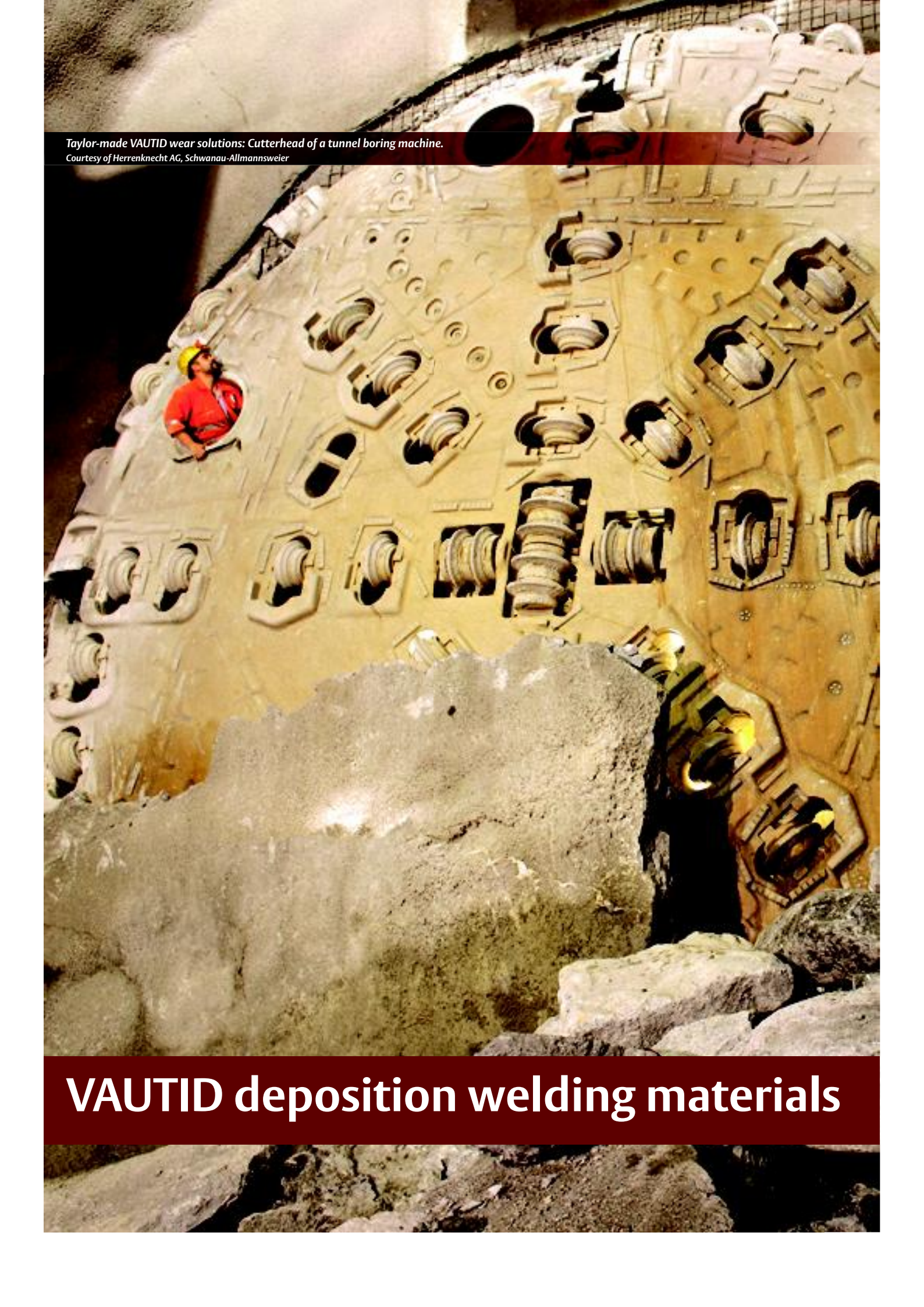
A large construction crane is the central focus, its long boom extending diagonally across the frame. The crane is silhouetted against a vibrant sunset sky with soft, pinkish-orange clouds. In the background, other industrial structures and a body of water are visible, creating a sense of a busy port or construction site. The overall mood is one of industrial strength and enduring utility.

# UNIQUE PRODUCT PALETTE IN QUALITY AND VARIETY

*“65 years of progress and the strictest requirements flow into each and every VAUTID product: for more than 1,000 hours of extended equipment life.”*

*Dietmar Tremmer, CEO of Technology – VAUTID Group*





Taylor-made VAUTID wear solutions: Cutterhead of a tunnel boring machine.  
Courtesy of Herrenknecht AG, Schwanau-Allmannsweiler

**VAUTID deposition welding materials**



**The unique VAUTID product portfolio ranges from wear-proof deposition welding materials to composite wear plates to casting products – all offering first-rate protection for wear-susceptible parts in continuous abrasive operations.**

**Advantages.** VAUTID deposition welding materials can be applied quickly and are an especially efficient solution to a variety of wear problems on site. In order to meet every requirement in every field of application perfectly, VAUTID deposition welding materials are available in a variety of material types, alloys and qualities, including hardfacing welding materials, rust-free auxiliary welding materials, auxiliary repair welding materials and special materials. These materials are available as stick electrodes or cored wire electrodes.

*VAUTID deposition welding materials can be applied universally and in a short amount of time. They provide long-lasting, cost-efficient protection for high wear-and-tear parts.*

**VAUTID deposition welding materials offer cost-efficient, lasting protection**

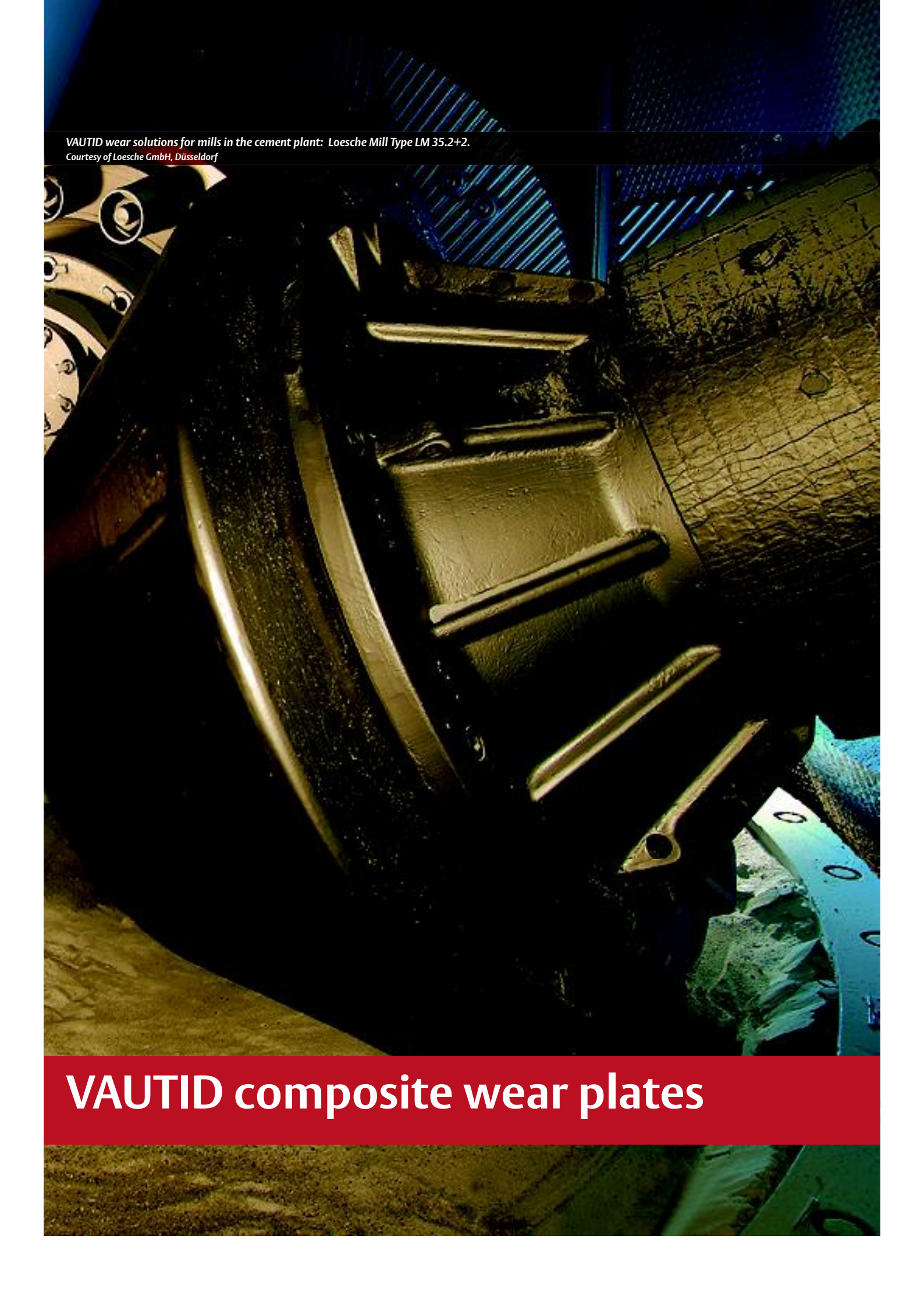
**Fields of application.** Typical applications for VAUTID deposition welding materials include coating of mixing tools, hardfacing of excavator teeth, powder deposition welding of fan blades, hardfacing of bucket chain excavators and sinter crushers.



VAUTID stick electrodes.



VAUTID flux-cored wire.

A close-up photograph of a large, dark, curved industrial component, likely a mill liner, showing several rectangular VAUTID composite wear plates bolted onto its surface. The plates are a lighter, metallic color and appear to be made of a composite material. The background shows a blue, ribbed structure, possibly a conveyor or another part of the mill.

VAUTID wear solutions for mills in the cement plant: Loesche Mill Type LM 35.2+2.  
Courtesy of Loesche GmbH, Düsseldorf

**VAUTID composite wear plates**



**VAUTID products employ efficient technologies to help extend the service life of system and machine parts subject to heavy loads. Universal composite wear plates provide robust wear protection and ensure low wear costs over the long term.**

**Advantages.** VAUTID composite wear plates are wear-proof and long-lasting. The hard-surface layer can be made to suit the specific application. The plates are also easily installed through back-side welding or bolting. Composite plates are available in a variety of dimensions and qualities. Plates can be cut to size to conform to drawings and heated or cooled to attain the desired shape – for extremely cost-effective and fast wear solutions in a wide variety of applications and industries.

*With its extensive product portfolio designed for a wide variety of individual wear issues, VAUTID is the world's leading specialist in comprehensive wear protection.*

**VAUTID composite wear plates can be individually installed and are extremely long-lasting**

**Fields of application.** VAUTID composite wear plates are used where wear protection is desired as a self-supporting structure on large surface areas with no supporting substructure. They guarantee maximum operational reliability, even under high mechanical load. Sample applications include strainers, hopper linings, vibration conveyors, fan impellers, casings, mixers, cyclone separators, and sifters.



*Production of VAUTID wear plates.*



*Taylor-made VAUTID wear plate.*



*Cyclon, made of VAUTID wear plates for the cement industry.*



*Ready-to-install VAUTID fabrication.*



*VAUTID technology in coal-fired power plants: Reduced wear is active environmental protection.*

**VAUTID casting products**



**VAUTID offers a custom-tailored and cost-efficient solution for every requirement. Casting products are manufactured in accordance with customer needs using a wide variety of materials and casting methods. Optimized geometry coupled with additional wear protection is a valuable asset in many applications.**

**Advantages.** VAUTID casting components represent the most cost-efficient method of wear prevention for mass production. Casting products can range in weight from 2 to 10,000 kg depending on the field of application and the type of material. Applications include sand casting, ceramic or Croning molds or lost foam casting. Models, computer simulations and extensive analyses ensure the optimal quality of each component. VAUTID casting products can also be machined directly in the plant to the desired level of precision.

***Highly wear-resistant VAUTID components offer the most advanced wear protection for both original and replacement equipment from an innovation leader.***

**VAUTID casting provides cost-efficient wear protection for series parts**

**Fields of application.** VAUTID hard casting offers highly streamlined production and high-quality wear protection through strict VAUTID quality controls and is ideal for use in a wide variety of industries that employ mechanical processes like crushing, mixing, conveyance, storage, agglomeration, and separation.

## VAUTID foundries

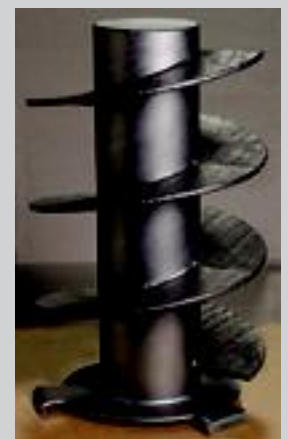
VAUTID is an experienced partner in component manufacturing for high carbon and stainless steel casting. At three European and two overseas locations, VAUTID casting products are manufactured and processed in accordance with customer specifications.



VAUTID wear resisting casting for the concrete industry.



Highly wear resistant S-tube.



VAUTID transport screw for material handling.

# VAUTID Group. Maintaining a local presence worldwide.



VAUTID GmbH Ostfildern-Ruit (Germany)  
VAUTID Austria GmbH Marchtrenk (Austria)  
VAUTID-BELGIUM PGmbH Raeren-Eynatten (Belgium)  
CRUZ MARTINS & WAHL Lda. Famalicão (Portugal)  
VAUTID NORTH AMERICA Inc. Pittsburgh (USA)  
VAUTIDAMERICAS S.A. Guayaquil (Ecuador)  
VAUTID-SHAH HARDFACE Mumbai (India)  
VAUTID (Shanghai) Wear Resistent Material Trading Co. Ltd. Shanghai (P.R. China)  
VAUTID & HUIFENG (Wuhu) Ltd. Wear Resistent Material Co Ltd. , Wuhu (P.R. China)  
VAUTID-ARABIA Coating and Treatment of Metals LLC Ras Al Khaimah (U.A.E.)

*Reliability through strong partnership.* The VAUTID Group is represented by subsidiaries and agencies in over 40 countries. VAUTID employees and distribution specialists worldwide are committed to employing the highest standards in pursuing a common goal: developing custom system solutions for excellent wear protection.

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**VAUTID®**