

ANNIVERSARY



KALENBORN



Celebrating 100 years
of courage, innovative drive,
and engineering

Founded in 1921 as Schmelzbasalt AG, Kalenborn is now, one hundred years later, an internationally successful company with some 600 employees, 12 companies and 25 distributors on 5 continents worldwide.



For 100 years now, the company co-founded by Dr Kurt Mauritz and based in Vettelschoss, Germany, has been in the business of wear protection. Every day, Kalenborn's customers move millions of tonnes of material, in all kinds of aggregates and using all kinds of transport. Those raw materials – from rocks to recycled materials – create serious abrasion problems for equipment and supply lines. Kalenborn specialises in making these plant components resistant to abrasion, improving their reliability under stress, and ensuring that the whole plant will operate smoothly for many years to come.

“As a family-run firm with a long tradition, we are rooted in the values of medium-sized German businesses. Customer focus, solution orientation, personal responsibility and sustainability characterise our methodology,” summarises Dr Conrad Mauritz, Managing Director.

“We continuously develop our materials to further extend service life. And along the way, we find new markets that benefit from our experience,” observes Markus Buscher, Managing Director. With its history and long-standing tradition, the company demonstrates the capacity of venerable family-run businesses to adapt to change. With its global operations and local roots, it has become impossi-

ble to imagine Vettelschoss without Kalenborn.

Within the scope of the alliance, Kalenborn offers its customers and partners a particularly attractive offer for the hard compound KALCRET and a free training for a KALCRET installation.

SPEAKING TO KALENBORN ABOUT THIS IMPORTANT MILESTONE

Glass Machinery Plants & Accessories (GMP&A): An anniversary is always an important occasion, but 100 years is extremely special – congratulations! What can you tell me about reaching this milestone?

Kalenborn, Dr. Conrad Mauritz, Managing Director: 100 years of Kalenborn – that means 100 years always on the move. This anniversary fills us at Kalenborn with joy and pride and is an incentive for the future. Kalenborn would not be the successful medium-sized company it is today without its customers and employees. What began in 1921 as Schmelzbasalt AG has become an internationally successful wear protection company a century later. We only achieved this by consistently aligning our products and solutions to the requirements of the market. Today, we offer a complete range of wear-resistant materials, which we produce in our own factories and whose service life we are constantly improving with our technical laboratory. With 12 companies worldwide and 25 representatives on 5 continents, we have managed to be very close to our customers, so that we can also provide



wear-resistant linings for highly demanding components on site.

GMP&A: Let's take a look at the beginning of the company – its roots, products and founders back in the 1920s.

Kalenborn: In the 1920s, cast basalt was developed as a material and processed into the first products, e.g. insulators for the Paris subway system. From 1935 onwards, Kalenborn succeeded in acquiring customers from the coal mining and metallurgical industries with Dr. Kurt Mauritz. Kalenborn cast basalt ABRESIST gains importance as industrial wear protection.

Plant components such as scale chutes, marl funnels or coke bunkers in the iron and steel industry or pipelines, e.g. fly ash pipes in thermal power plants, are reliably protected against abrasive wear. Today, cast basalt ABRESIST is experiencing a renaissance. The natural and regenerable material is used in many areas of energy and environmental technology, for example in pipelines for biosolids recycling plants, and contributes to sustainability. Expertise in the production of cast basalt as a mineral material has been extended to other materials. Metallic and ceramic materials, but also engineering plastics and compounds, now form a wide range of wear-resistant products.



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GMP&A: You work in a series of different sectors. How do your products change for these? And, more important, how and where are they applied in the glass industry?

Kalenborn: On the one hand, we continue to develop our materials based on research and find new markets that benefit from our experience; on the other hand, our materials and applications will be further developed together with customer requirements.

In the cold-end area the use of quartz sand as a raw material in glass production requires good industrial wear protection for the pipelines used to fill the silos and feed the furnaces. The processing and conveying systems used in the recycling of waste glass also need to be protected. In the production of glass wool and insulation materials, we also offer economical solutions to protect production and optimize recycling wear protection.

Special refractories required to the hot-end area of the primarily glass manufacturers we are developing and producing at Kalenborn Hungary (Refmon Monolithics Co.Ltd.), subsidiary of Kalenborn Group. These special spareparts called expendable-refractories as well as further precast-shapes mainly applied at hot-end gob-forming areas like orifice rings, tubes, plungers, rotor-tubes, spouts, etc. as well as plenty of special shape andalusite, mullite, zircon-mullite and corundum grades of refractories are applied at melting tank superstructure, working-end and forehearth system either. Thanks to the well-set up technology and premium grade raw materials and binding system our glass contact materials have excellent thermal shock-resistance and perfect performance against glass corrosion.

GMP&A: The glass industry – like many other sectors – is going through important changes



with regards to fuel, and decarbonisation in particular. Do these changes in fuel have any effects on your products?

Kalenborn: We do not see a greater need for wear protection. Producing special refractories there is no any heavy impact by now, thanks to our technology requires optimized fuel demand with the existing sintering furnaces and energy regeneration. Also considering our expendables production that differs from mass-refractory producers running e.g. tunnel furnaces having impacts due to the flue gas possibly.

GMP&A: What are your most important products for the glass industry and which are the benefits from their use?

Kalenborn: In the cold-end area of the glass industry KALOCER and KALCOR pipes

and elbows for pneumatic conveying lines are some important products. The ceramic materials are very resistant to abrasive wear and have a thin wall thickness to allow a high throughput. They are also white in colour and avoid dark abrasion. One of our customers, a leading international manufacturer of special glass and glass ceramics, operates its own glass batch house in its factory. Here, the individual raw materials are brought together from raw material silos via weighing containers and dosing equipment to form a homogeneous mixture. Proportionate amounts of the company's own cullet are added to this mixture. Pneumatic conveying lines transport the mixture to the various melting tanks. In the past, the high proportion of quartz sand and the inherent cullet caused high wear in the pipes, pipe bends and deflec-

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For 100 years, the company set up by Dr. Kurt Mauritz and based in Vettelschoss has been concerned with protection against wear. Every day, Kalenborn's customers move millions of tons of material in a wide variety of qualities and via a wide variety of conveying routes. These raw materials, from raw rock to recycled material, mean enormous wear in the loaded plant components and pipelines. Making these resistant, increasing their load-bearing capacity and ensuring trouble-free operation of the entire plant in the long term is Kalenborn's core competence.



tion pots. We lined the pipes and pipe bends with the oxide ceramic KALOCER and the zircon corundum KALCOR, and the deflection pots completely with KALOCER.

GMP&A: How do you advertise and market your products? Do glassmakers need any special training in their use?

Kalenborn: We promote and market our products by directly approaching customers through our sales department, through our ACADEMY workshops, by sending newsletters as well as through the classic print and online media with website, blogs, LinkedIn & Co. The installation of our linings, sometimes at great heights and in confined

spaces, requires highly trained fitters who understand the plant components and are proficient in the materials.

GMP&A: How is the ongoing health emergency affecting your work?

Kalenborn: We have prepared well for the pandemic. Within our own group of companies, we introduced mandatory masks, contact restrictions and tests at a very early stage and were spared any drastic cases of corona. Since we manufacture at various locations worldwide and have an international sales organization, we can advise customers on site in compliance with the Corona protection measures. The installations are carried out

by our local assembly teams, which are controlled by globally operating assembly managers. Furthermore, we use Microsoft Teams, a platform within the company network that enables us to hold contactless chats and meetings. However, like everyone else, we long for a return to normal everyday life, with seeing, shaking hands and speaking without a mask.

GMP&A: How do you see the future – the next 100 years – for Kalenborn?

Kalenborn: We will hopefully also be able to face the changing times in the following 100 years. We want to continue to focus on new products, new markets and new customers while acting sustainably along the entire value chain. We recycle our materials and use special processes in lining pipes and bends so that our customers can reuse the products. Our wear protection extends the operating life of the equipment and conserves our customers' resources. We want to continue to invest in the qualifications of our employees and give them a high degree of self-determination in their work. They are the basis of our success. ■

100
YEARS

**KALENBORN
KALPROTECT**

Asbacher Strasse 50
D-53560 Vettelschoss - Germany
Tel.: +49-2645-180
Fax: +49-2645-18112
E-mail: kalenborn@kalenborn.de
www.kalenborn.de