CONCRETE PIPES AND MANHOLES

Schlüsselbauer Technology GmbH & Co KG, 4673 Gaspoltshofen, Austria

60 years of success

Mark Küppers, CPi worldwide, Germany

Technology for people - that's the corporate philosophy of Schlüsselbauer Technology, a company that forges partnerships all over the world. Together with its customers, it implements modern systems for strategic drinking water supply as well as for wastewater and rainwater collection and drainage. At the heart of this are cost-effective processes for producing high-quality precast concrete parts for pipeline construction. Back in 1964, when Johann Schlüsselbauer Senior founded the company in the Austrian municipality of Pennewang, he couldn't have imagined the spectacular Schlüsselbauer story that would unfold over the years. In its early days, the company focused on general metalworking and repairing agricultural machinery. But over the years that followed, Schlüsselbauer found its footing as a medium-sized metal processing company before evolving into the high-tech engineering firm that it is today. Now, Schlüsselbauer is one of the pioneers in its industry, on track for a turnover of 80 million euros this year and celebrating its 60th anniversary.

Of course, this success didn't just happen by chance. It is the result of hard work and entrepreneurial risk, paired with smart and innovative ideas. A pivotal moment came for the company in 1979, fifteen years after it was founded. This was when it first truly set its course as a machine and plant manufacturer for the precast concrete parts industry, as it was during this year that Schlüsselbauer built its first handling systems for concrete pipes and manhole risers. The same year also saw the debut of the first fully fledged Magic, a production facility



In 1964, Johann Schlüsselbauer laid the first foundations of Schlüsselbauer Technology, now a company with a global presence.

for manhole components, which was installed at the premises of Wessenthaler in the town of Attnang-Puchheim. With this, the foundation stone had been laid for the company's successful future.

In 1987, Schlüsselbauer moved to its current production site in the municipality of Gaspoltshofen. The company had already begun to construct large moulds at this stage, for a major infrastructure project in the Bosphorus (pipes with an internal diameter of 3,900 mm).



The Schlüsselbauer headquarters in Gaspoltshofen

The new state-ofthe-art building for assembly work, with its production area of approximately 8,000 m²



Johann Schlüsselbauer Junior took over the company reins from his father and set the course for steady growth as a machine and plant manufacturer. He is credited with transforming the company from a ten-man operation into one of the leading medium-sized enterprises in Upper Austria.

Two years later, the first Exact plant was installed in France. This has enjoyed decades of success as a modular, fully automatic production system for pipes and manhole components. With its entry into the Japanese market in 1992, Schlüsselbauer took its first steps on the global stage. Its machines were soon taking sometimes epic journeys to customers on remote continents.

Ecotechnic in the Czech Republic and Austria

In order to make it possible to offer high-quality step rungs compliant with all the applicable standards, the company Ecotechnic CZ s.r.o. was established in 1992 in the Czech Republic. Producing its step rungs in-house, Ecotechnic is now a leading European manufacturer in this sector. It manufactures step rungs to be used as access ladders in underground waterway structures such as manholes, soakaways, and underground reservoirs. The product portfolio contains a variety of models for different usage conditions and markets. All step rungs delivered in Europe comply with European standard EN 13101 and the specifications based on this. In addition to their compliant safety parameters, the step rungs also feature non-slip surface coatings on the steps. The supporting cores of the step rungs are manufactured from carbon steel, aluminum, or acid-resistant stainless steel (V4A) for a range of markets and areas of application.

One year later, another incarnation of Ecotechnic was established in Austria in order to handle the distribution of consumables. Over the years, it has evolved into an important supply and logistics partner for numerous customers of Schlüsselbauer Technology.

Start of exporting to the USA

Schlüsselbauer began exporting to the USA in 1998, with one of its earliest deliveries being an Exact 2500 pipe manufacturing machine. Three years later, the first Exact 2500 plant with automatic mould changing and steel top pallets was installed. Over the years that followed, a variety of Schlüsselbauer plants for concrete pipe production found homes all over the world, in countries such as Algeria, Bulgaria, Canada, Germany, Indonesia, Ireland, Malaysia, New Zealand, Poland – and of course, the USA.

Perfect manhole base production

The next big step came in 2004 in the form of the Perfect system for manhole base manufacturing. This was unveiled to the public at the bauma trade fair, sending ripples of excitement through the experts in attendance. The system,



Fully automated concrete pipe production with the Exact 2500 and its steel top pallets for precise, leak-tight pipe joints.

CONCRETE PIPES AND MANHOLES



In many plants for the production of manhole components, an automatic crane boosts efficiency.

whose product name 'Perfect' has become synonymous with the Schlüsselbauer brand, made a strong impact on the market and is currently used by international customers at more than 70 locations worldwide. Perfect concrete manhole bases have a monolithic construction and are manufactured by wet casting. More recently, highly automated production facilities have been put into operation under the expanded name of 'Perfect Forming Technology'.

Schlüsselbauer North America

Fast forward two years, and we arrive at the establishment of what is now Schlüsselbauer North America LLC. With its own office and warehouse in Nashville, this subsidiary was able to offer even better support to Schlüsselbauer customers all over North America. Nowadays, the site is staffed by a team of ten, led by Max Cikerle.

But America was not the only place where the company was expanding. At the Hörbach headquarters, space was in ever shorter supply – so work began on constructing a new hall, and in 2008 the entire production area was extended to 15,000 m².

Schlüsselbauer Geomaterials

The years that followed were just as eventful, thanks to the construction and start-up of a company-owned foam glass production facility. The Geomaterials brand was Schlüsselbauer's first foray into the building materials sector. Another plant was constructed in the German town of Knittlingen in 2012.

Schlüsselbauer Geomaterials stands for environmental compatibility

and sustainability. All of the products are made from recycled waste glass. There are three product groups under the Geomaterials brand: Geomaterials foam glass, Geomaterials expanded glass and Geomaterials Red expanded glass. The first of these, Geomaterials foam glass, is particularly noteworthy: This high-quality construction material made from waste glass creates a structurally resilient insulating layer underneath floor slabs. In the production process, the waste glass is ground up, mixed with additives, and sintered at high temperatures. The foaming procedure is carried out at around 900 degrees Celsius (1600 degrees Fahrenheit), creating a kind of "baked" foam glass. Targeted cooling creates stress cracks in the material, causing the large surfaces to break up. The final result is uniform, closed cells.



With the Perfect Forming Technology concept, Schlüsselbauer has taken the manufacturing of mould-hardened products to a new level.



Product diversity - concrete pipes, manhole elements, and special components - with complementing equipment from the Perfect Forming Technology concept.

CONCRETE PIPES AND MANHOLES

Perfect Pipe

Not only was 2010 the year when Ulrich Schlüsselbauer joined the company, it also marked the debut of Perfect Pipes at the bauma trade fair in Munich. With the Perfect brand now coming up to three years old, it was time to expand the product range. In addition to moulds and plants for manhole component construction, the same was now offered for producing high-quality pipes too. The first Perfect Pipe production plant in Germany was put into operation two years later.

The Perfect Pipe system is designed for drainage and sewage systems that handle wastewater, surface water, and water for industrial use. It combines the constant, high static loading capacity of a concrete pipe with the long-lasting corrosion resistance of a plastic inliner. Rigid pipes are generally known to have a high load-bearing capacity that stays consistent over the long term. And with Perfect Pipe, these properties are enhanced even further by combining them with innovative flowable concrete or the geometry of a foot pipe.

Another major milestone was the start-up of the world's largest fully automatic wetcast plant for pipes, manholes, and other components in New Zealand in 2020.



In order to make optimum use of industrial halls, rack systems are ever more frequently being used alongside cranes to provide dedicated hardening zones.



2536 99 39 - 0 | Fax

+49 (0)

D - 48308 Senden | Fon

Cordes Group | Im Südfeld 3 |



Functionality and design - Schlüsselbauer was honored with a prestigious Industrial Design Award in the late 1990s.

The Schlüsselbauer family brand

Following the relocation to the bright and modern office building in June 2021, the various business lines (Technology, Geomaterials, and Ecotechnic) were united under the Schlüsselbauer umbrella brand, with their names and their visual identities being harmonized.

In the same year, the first wet-cast plant for manhole components with top pallet technology and a high-bay storage area for hardening was put into operation. In order to make optimum use of industrial halls, rack systems are ever more frequently being used alongside cranes to provide dedicated hardening zones. This minimizes the space needed for large numbers of casting moulds, while also making even better use of the heat that is released from the concrete during hardening.

Investing in the future

To meet the challenge of assembling the ever larger Schlüsselbauer Technology production plants in their entirety before delivery and to create more space in general, an impressive hall with external dimensions of approx. 55 x 110 m was built within a year, complete with innovative technologies such as gantry cranes from 5 to 25 metric tons, wall-mounted traveling cranes, and a goods lift with a capacity of 6 metric tons. A particular highlight is the narrower hall bay, which, rising to a height of more than 8.5 meters, offers a space flooded with daylight for the intricate assembly of electrical and hydraulic components.

A new, state-of-the-art building for assembly work covers an area of some 8,000 m², bringing Schlüsselbauer Technology's total production area to more than 22,000 m².

With this investment of 40 million euros, the family-owned and globally successful company Schlüsselbauer has set itself up to thrive for many years to come, just in time for its 60th anniversary.

The people behind the success

Since the very beginning, it is the employees who have been committed to developing reliable and functional products that meet the needs of partners and customers. This is the only way to embrace the new challenges that arise every day as an opportunity to drive continuous improvement.

From a team of ten in the 1980s, the company has now grown into a leading international full-service provider in the field of special machine construction with 300 employees worldwide. The majority of these can be found at the headquarters in Gaspoltshofen, with its workforce of 220 staff. At the site, more than 40 engineers work hard every day to plan the Perfect solutions for customer requirements, often involving a high degree of automation, and to make them a reality.

The key to success

A stand-out attribute of Schlüsselbauer is its high level of vertical integration, which is evident in all areas. Virtually all parts and components of the plants and machines are produced in the company's own production halls. "It's important to have the capability to manufacture everything we want to offer our customers, right down to the smallest detail," explains Ulrich Schlüsselbauer about the company's own goals for autonomous production. In this way, dependencies on suppliers can



The results of advanced production methods are demonstrated at numerous international trade fairs.



Johann and Ulrich Schlüsselbauer are the second and third generations of this family to run the company.



The company's 60th anniversary was celebrated in style by all employees at the Gaspoltshofen site in September 2024.

be minimized, allowing for much more flexibility across the board and making it possible to respond directly to inquiries.

And there's no risk of the company resting on its laurels – it keeps a constant focus on the future. The Schlüsselbauer philosophy of always looking ahead is reflected in the company's plants and machines, in everything from product design to production technology. The company's exciting developments, its global activities, and its satisfied customers have been documented in numerous technical articles, which have been published in the journal CPi Concrete Plant International since 2004. With plenty of new successes sure to come in the future, Schlüsselbauer is a company worth watching. Read all about it in CPi!

"A lot can happen in 60 years. The risk of failing might have been there sometimes, but failure is not in our company's DNA. With our sights firmly set on the future and our team of highly motivated employees, we always found a way to drive the company forward. And in that respect, nothing has changed to this day. There is a high demand for our quality and our detail-oriented work. This is why we are so valued by our customers. Many of them have grown with us and have remained loyal over generations. Anyone who embodies and appreciates these values throughout their life can be proud of their work too – but pride should never be confused with arrogance. In our company, nobody is afraid of hard work. All of us are ready and willing to learn about and implement new innovations. We foster cohesion through human values. Integrity is very important to us. We stand by each other, and are confident and excited about what the future holds. This mindset is something worth celebrating – and it brings a special significance to our 60th anniversary." Johann Schlüsselbauer



Schlüsselbauer sponsored the free down possibility of the pdf of this article for all readers of CPI. Please check the website www.cpi-worldwide.com/en/channels/ schluesselbauer or scan the QR code with your smartphone to get direct access to this website.





Schlüsselbauer Technology GmbH & Co KG Hörbach 4, 4673 Gaspoltshofen, Austria T +43 7735 71440 sbm@sbm.at www.sbm.at



Schlüsselbauer Ecotechnic www.ecotechnic.at



Schlüsselbauer Geomaterials www.geomaterials.eu