

Chyžbet SK starts up a new manhole base production facility – a big step toward completing its high-quality range of prefabricated products

■ Christian Weinberger, Schlüsselbauer Technology GmbH & Co KG, Austria

The Turany site in Slovakia's Turiec Basin is a key location for the production of manhole components for the Slovakian market. As a result, continuous investment has been made in expanding and improving the production infrastructure over the last decade. The expansion of concrete manhole base production in spring 2025 undoubtedly represents a highlight of this growth strategy. The start-up of the Perfect channel production facility for monolithic concrete manhole bases marks a significant advancement for the product range in terms of both quantity and quality. Before making this landmark investment decision, Adam Łyś, co-owner of Chyžbet SK, personally consulted manufacturers in Europe who have been producing Perfect man-

hole bases very successfully for many years. When it came to working with Schlüsselbauer, he was not just interested in short-term benefits in terms of product strategy and the manufacturing process, but also in establishing a sustainably beneficial supply chain and forging a partnership that would help his company to further develop its own range of services.

For several years now, the Perfect manhole system has been the focus of strategic development at the family-owned company, particularly at the Turany site. Beginning in 2009, Adam Łyś established a production facility for paving stones, manhole components, and precast concrete parts in sev-



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Since the property was acquired in 2009, the site has been continuously developed.



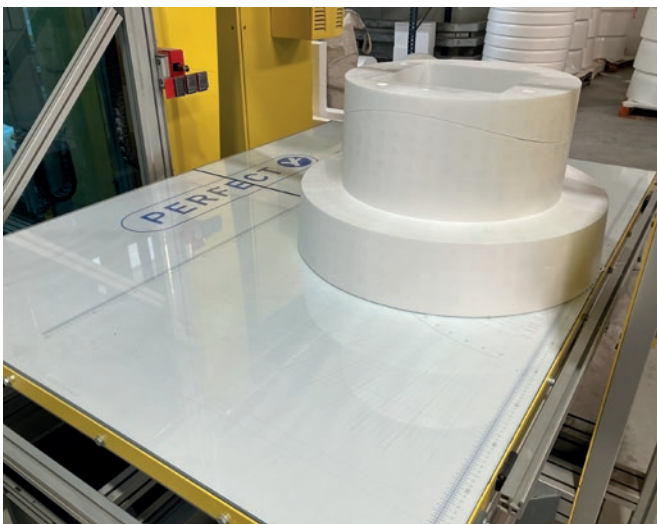
The plant for manufacturing the channel negative moulds consists of five hot wire saws.



The moulded part is set up in just a few steps.



The machine starts the required cutting at the push of a button.



Moulded bodies for pipe connections cut to size



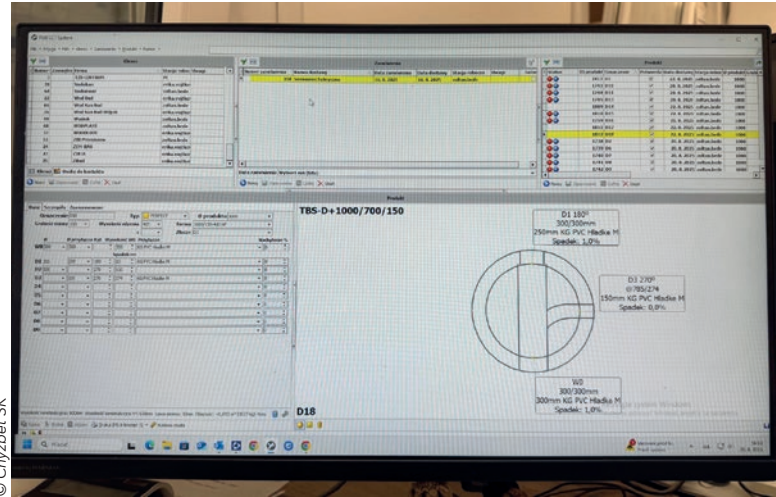
Assembling moulded bodies with an integrated gasket

eral stages – and it was only a few years before rapid growth would follow. The old factory buildings were replaced or extensively renovated. Almost every year, he has invested in new and used machinery as well as new land to increase the production volume. For example, two paving stone production plants are currently in operation, with the option to run it in two or three shifts, in order to offer a wide range of stone products. However, in the area of manhole production, a production line installed around 10 years ago had started to reach its capacity limits. In addition, the requirements for the execution of manhole-pipe connections are constantly changing in both the Slovakian and Polish markets. For Adam Łyś, it was the perfect time to invest in the Perfect production system.

Adam Łyś explains, “Chyžbet SK, based in Turany, Slovakia, was founded in 2009. The early days were full of challenges – a new country, a different language, different rules. But with hard work, determination, and a commitment to growing the business, the company gradually began to take shape. In the first few years of our business, we focused on the manufacture of paving stones and landscaping products. In 2017, we made an important decision to expand our range to include wastewater systems and road infrastructure. This move contributed significantly to our continued growth, and the consistent expansion of our field of activity became part of our daily practice. Every year, we raise the bar by setting ourselves increasingly ambitious goals. Today, our team consists of over a hundred people – individuals with passion, com-



Complete EPS negative channel ready for assembly in wetcast moulds



Daily production planning is always kept in view

mitment, and determination who work together every day to achieve shared success. In 2020, we opened our division for precast concrete parts. The products we manufacture here include system retaining walls, precast bridge parts, and other elements for transport infrastructure construction. It is thanks to the hard work of the entire team that Chyžbet SK has been able to grow and evolve so successfully. Years of searching have enabled us to put together an exceptional team that could be the subject of an article in its own right. I thank them for the dedication and loyalty that they show every day, for their tireless commitment, and in many cases also for their friendship – because they have become part of my life.”

With the Perfect production system from Austrian supplier Schlüsselbauer Technology, Chyžbet SK is closing a gap in its product strategy, which is geared toward maximum quality in all segments. The individual nature of the channel runs and

pipe connection positions is of great importance in the market served by Chyžbet SK. The complexity of these channels is high by European standards. Junctions for connecting pipes are required at different heights directly in the channel and also above it. In both cases, a reliably leak-tight pipe connection is essential. It has to be easy to adapt the channel runs to different inlet and outlet levels in the concrete plant.

The Perfect system supports employees at Chyžbet SK in all of its work sequences. As early as the manhole base planning stage, all the details of the design can be imported with just a few clicks or entered separately. The system supports daily production planning as well as helping workers to manufacture the individual channel moulds. Once the required moulded parts have been selected, cutting can be started at the touch of a button.



All the relevant product details are clearly legible on the product



The made-to-order monolithic manhole bases at the warehouse

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The Perfect channel production team at Chyžbet SK

The EPS parts are cut using hot wire saws, and the individual elements are joined together to form a complete channel using hot adhesive. The user-friendly production system guides operators through the simple work steps, while laser projections provide integrated quality assurance. The final step in the channel production process is to adjust the pipe connections. Depending on the pipe type, the connections are produced either with EPS moulded parts with gaskets already mounted on them, or with manhole liners. In a clean working environment with simple work steps, up to ten neg-

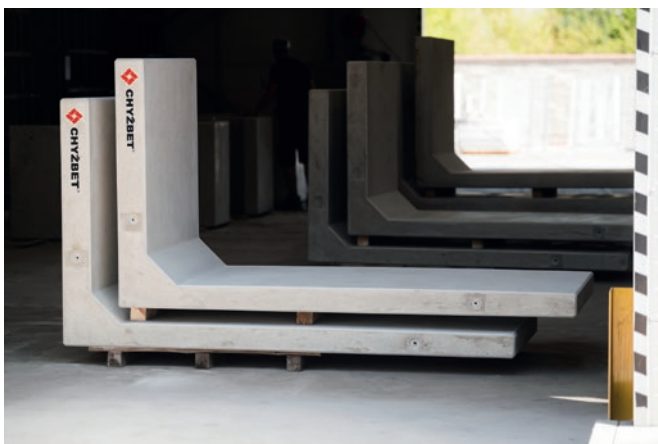
ative channel moulds can be produced per hour. Due to their low net weight, they can be transported to the concrete manhole production facility using a portable cage trolley.

The steel moulds are equipped with the negative channel configurations, filled with self-compacting concrete, and demoulded the following day. The range of manholes produced by Chyžbet SK includes components with internal diameters of DN 800, DN 1000, DN 1200, and DN 1500. The largest components are up to 2000 mm high, with wall thicknesses varying from 90 mm for DN 800 to 330 mm for DN 1200 and DN 1500. Very thick walls in particular are also provided with recesses for weight optimization. Ball head anchors are installed for handling the components on the construction site. All product details relevant to installation are shown on a label affixed to the outside of the manhole. Having spent several years introducing individual monolithic manhole bases to the market, Chyžbet SK is delighted to be taking the next step in ramping up its quality and quantity with the Perfect production process – a move which is enabling the company to strengthen its market position in both Poland and Slovakia.

Monika Łyś adds, “Turany has become our second home. And now the business and its equipment are literally perfect.”

Chyžbet SK had already made thorough preparations in advance of the new production technology going into operation. A team led by Karolina Łyś, Adam and Monika’s daughter, visited a long-standing and highly successful manufacturer of Perfect manholes to spend a few days observing real-life operations. This enabled the team to minimize the start-up phase at their own plant. Professional project planning and implementation, as well as gender-neutral allocation of responsibilities, are characteristic features of Chyžbet SK. In addition to having overall responsibility for the production site, women are also responsible for the manhole production division and most of the work involved in Perfect channel production.

High quality standards are evident in all areas of production at Chyžbet SK’s Turany site. Whether paving stones, land-

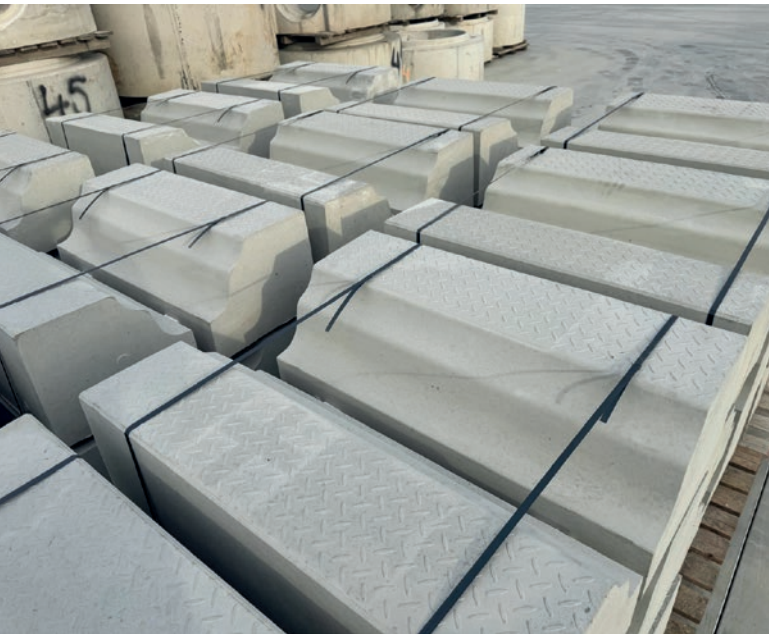


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Visible concrete quality in slabs and supports



© Chyžbet SK

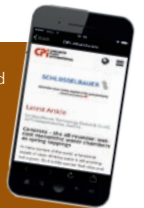
Bus stop element with safe boarding area*Adam Łyś, owner; Karolina Łyś, head of precast part production; Agnieszka Spychalska, CPi Poland; Milos Salaga, plant manager at Chyžbet SK Turany*

scaping products, bridge components, or large-format precast concrete parts – the pursuit of perfection can be seen in every segment. As a logical consequence, operational workflows are also geared toward this goal. In addition to cleanliness in the production and storage facilities, it is above all the handling of the materials that makes these high-quality products possible. Examples of this include gravel and sand processing and the associated purification of process water. The company's commitment to quality, growth, and environmental protection is also reflected in the continuous expansion of its production facilities. In addition to the renovation of the last few buildings and open spaces on the site, new construction is already underway. A modern production hall dedicated to precast parts for building production is set to be extended by a further 100 m this summer, so that normal operations can commence in just a few months, including in the extension.

For Schlüsselbauer Technology, the Perfect production process represents a success story that now spans two decades. Following its launch in 2004, three manufacturers in Europe began operations the very next year. The Perfect manhole base has since become synonymous worldwide with high-quality, custom-made concrete manholes. Standardized component inner diameters from 600 to 2100 mm can be produced, and different manhole bases in round or rectangular designs can of course be manufactured on a project-specific basis. Moulded parts are available with channel diameters ranging from 100 to 1000 mm. A wide range of moulded bodies for pipe connections completes the production system. ■



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