

Schlüsselbauer Technology GmbH & Co KG, 4673 Gaspoltshofen, Austria

## New pipe system is being established in channel construction

In a 17 acre, newly developing industrial area in Endingen am Kaiserstuhl, Germany, a separate sewage system with a pipe length of approximately 5,000 feet is being constructed. While plastic pipes are being used to drain the surface water, Schlüsselbauer's new Perfect Pipe system is being used to drain the wastewater. As a result, the area's future occupants will be prepared for a wide range of wastewater scenarios. In addition to better static characteristics of the concrete base pipe, the managing engineer's office is primarily convinced by the solid connection of the concrete pipe to its HDPE lining. Thanks to the HDPE inliner, the highly durable pipe is guaranteed, even with aggressive media ranging from pH-1 to pH-14. While the construction company is impressed by the simple and safe installation of the pipe, the end-customer – representatives of the community of Endingen – is accordingly thrilled with the rapid installation progress and, of course, the durable resilience of the system.



Pipe and manhole material are ready for installation.

The industrial area in Endingen is the third project within a short time in which Schlüsselbauer's new Perfect Pipe is being used. The statically and highly resistant pipe, both with and without inliners, have already been installed in Baden-Württemberg. The civil engineering and road construction company, Joos, located in Hartheim, is using Perfect Pipe for the second time, and the foreman has described the experience as extremely positive. In addition to preparation of a simple gravel bed for the centrally grooved base pipe – additional excavation is no longer required as with bell-shaped pipe joints – the backfilling of the trench is

now more work-friendly and quicker. Once the pipe zone is backfilled with gravel and tamped, the trench is then filled with excavated material and compacted with a small single steel wheel compactor. Daily installation progress amounts to approximately 130 to 165 feet, with a trench depth of approximately 10 to 12 feet. In addition to supplying Perfect Pipe, the pipe manufacturer, Betonwerk Müller, also provides the appropriate manhole material.

Confidence in using Perfect Pipe for the project had already been confirmed on a number of occasions by Becker & Partner's engineers in Oberkirch, in western Baden-Württemberg. During the project planning, Lothar Becker was confronted with reliably draining wastewater with a gradient of only 0.5 %. The use of Schlüsselbauer's new concrete-HDPE composite pipe was particularly convincing due to the inliner's increased corrosion protection and the capacity for longer retention time of the medium in the pipe. As a result, the pipe does not get damaged by chemical attacks, even at low flow speeds. Furthermore, the pipe's geometry at the base guarantees a safe and uniform support and constant gradient. Using Perfect Pipe, Lothar Becker prevented possible bends and deformities, which can occur from improper installation of flexible pipe and which is not immediately recognizable in a camera inspection, and a structurally secure solution could be implemented for wastewater drainage.

The working week at Müller's concrete pipe plant, headquartered in Achern, Germany, near Baden-Baden, and further sites in Gundlingen and Kirchhardt was even extended by an additional production day (Saturday) for a short time due to the successful launch of Perfect Pipe in the Spring of 2013. Managing director and owner Joachim Strack describes the decision to launch the production of Perfect Pipe manufacture as follows:

"Being in the construction industry and being involved in numerous channel constructions and renovations over many years, we have observed typical damage patterns, particularly installation errors and their consequences, time and again. With rigid pipe, these patterns include crack formations or damage before installation, and with flexible pipes, we've experienced numerous deformations and dislocations. Our objective using Perfect Pipe was to offer a highly durable pipe, in which installation errors were already minimized by the design of the product itself, in addition to having more reliable joint connections. Also using Perfect Pipe, the bedding of the pipe is easily prepared as well as the compaction of the pipe zone; a length expansion caused by plastic materials and to be compensated for in the manhole connection should be prevented. Schlüsselbauer's new Perfect Pipe system has completely fulfilled our expectations."



Adaptor pipes are supplied on a project-specific basis with construction lengths of approximately 4 to 8 feet.



Engineers and contractors are delighted with the installation process, while end-customers are delighted with the progress and the durability of the system.



Relevant product data for supply and installation are marked clearly.

## CONCRETE PIPES AND MANHOLES

Together with Schlüsselbauer, our technology partner, we have set-up a highly automated production process that is fundamentally different from conventional concrete pipe producers. We are confident that the quality and functionality of Perfect Pipe will allow us to be highly competitive in the wastewater and sewage industry.” ■

### FURTHER INFORMATION

**SCHLÜSSELBAUER**

Schlüsselbauer Technology GmbH & Co KG

Hörbach 4

4673 Gaspoltshofen, Austria

T +43 7735 7144 0, F +43 7735 7144 56

[sbm@sbm.at](mailto:sbm@sbm.at)

[www.sbm.at](http://www.sbm.at)

[www.perfectsystem.eu](http://www.perfectsystem.eu)

**BETON** **MÜLLER**

Bernhard Müller GmbH

Gewerbegebiet Heid

Ambros-Nehren-Straße 7

77855 Achern, Germany

T +49 7841 2040, F +49 7841 2701

[info@mueler-schachttechnik.de](mailto:info@mueler-schachttechnik.de)

[www.mueler-schachttechnik.de](http://www.mueler-schachttechnik.de)