

Special sewer rehabilitation in Ghent

A construction site against a historical backdrop was the challenge for the team from Kumpen NV and Brandenburger Liner GmbH & Co. KG in the Belgian city of Ghent. At the “Korenmarkt”, the historical centre of Belgium's third-largest city, two liners needed to be installed. The challenge: the not very “classical” form of the sewer which required a special solution. And then there was the location: The pipes to be rehabilitated underpass the tram line next to a church.

The Belgian city of Ghent has 250,000 inhabitants. The “Korenmarkt”, the historical centre of the city, is a meeting point for the locals, students and tourists. The Gothic St. Michael's church, dating back to 1440, is also located in this quarter. The employees from Kumpen NV and the Brandenburger Liner company were tasked with the rehabilitation of a sewer right next to it; underneath a tram line. This rehabilitation became necessary because the old pipe had lost wall thickness massively due to sulphuric acid corrosion. The pipe featured a box profile with the dimensions 400 millimetres x 1200 millimetres.

Due to this rather unusual width of 1200 millimetres, no single liner could be drawn in by itself, because this would have a negative effect on the UV radiation: The radiation would cure the liner only at the apex and base; that is at the top and bottom. The side walls would thus not receive sufficient UV light and would remain “soft”. The goal of the rehabilitation would not be achieved. Even a slower “retraction” of the light chain would have been problematic, for instance because the inner foil would melt in this case and remain adhered to the surface of the liner.



Special circumstances require special measures

To achieve an optimal rehabilitation result, a special solution needed to be found: Not one, but two liners with the dimension DN 550 (8.4 millimetres with a length of 25 metres) were to be drawn in next to each other.

Thus work started at the construction site at 7 in the morning. The pipe liners were drawn into the box profile after and next to each other. For both, the installation team first put in the packers which seal the liner ends. Simultaneously the tubes were slowly calibrated with two condensers to achieve an accurately fitting result.

While the one liner was still pressurised, the other one was already being cured. The curing of the second one followed after that. Construction was nearly completed around 3 pm by the removal of the packers and the extraction of the inner foil. Only the hollow spaces needed to be filled finally so that the old pipe floor system in combination with the liner could durably fulfil the static conditions.



The special features of the Brandenburger Liner

Liners made by Brandenburger have a high dimensional strength thanks to the patented wrapping technology and yet remain especially soft and pliable. The specially matched components developed for the company allow for an easy manoeuvrability of the liner as it is drawn into the sewer.

Additionally they feature a certain rigidity as soon as the liner is pressurised.

This makes it possible to insert the UV light chain easily into the liner without it collapsing.

These were the reasons why the box profile could be rehabilitated so successfully with two liners in Ghent.



Your contact person:

Philipp Bergmann, BBA
Certified sewer rehabilitation
consultant

Sales worldwide

Phone: +49 6341 5104 364

Mobile: +49 174/3093603

E-Mail: p.bergmann@brandenburger.de

