

■ Prinzing GmbH, 89143 Blaubeuren, Germany

New production method for manhole bottoms

The Prinzing company presents a new manufacturing method that allows monolithic manhole bottoms with freely programmable channels to be produced fully automatically. Discussions with

customers and users have shown that there is very great interest in this completely new method.

Initially the manufacture of the monolithic manhole bottoms using this method is automated for the most part, either on the Prinzing Mistral, Tornado or Atlas manhole machine using the vibrating press method or on the Zeus pouring plant using self-compacting concrete. However, what is thereby new is that the complete stepping surface exists, but still without channels. The monolithic manhole bottom rests on steel pallets and support cores in an inverted position during manufacture and further transport. After partial hardening of around 1 to 2 hours, the inner support core is removed and the monolith is set down on the processing station. Using program control, any type of channel can be machined into the already existing stepping surface in this position. The partially hardened concrete is removed at high speed with low drive power and an exact channel is created. The residual concrete falls down by gravity and is collected and transported away for recycling. Any type

of channel can be created fully automatically within a period of 3 to 10 minutes in this manner. The freely programmable manufacture of channels is hence a genuine alternative to automatic manhole bottom manufacturing.

The new method exhibits the following advantages:

- the program-controlled manufacture of arbitrary channel types is fully automatic, geometrically optimised and very precise with regard to the form
- the manhole bottoms are cast in one piece (monolithic)
- spigot ends are precisely dimensioned due to setting on the profile rings
- mould expenditure is minimised due to early demoulding



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Monolith following removal of the inner support core



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- the channels can be implemented better and more diversely with regard to flow properties
- the tool costs and drive power of the milling robots are significantly reduced due to the strength of the concrete still being low
- no mould parts and models are required for the channels at all, just a milling robot with the appropriate software
- the method is suitable for manholes in nominal diameters 1000, 1200 and 1500 mm
- the residual concrete is economically recycled
- personnel expenditure and costs can be reduced considerably
- low space requirements ■

Further information:



Prinzing GmbH
Anlagentechnik und Formenbau
Bruckfelsstraße 9
89143 Blaubeuren, GERMANY
T +49 7344 1720
T +49 7344 17280
info@prinzing-gmbh.de
www.prinzing-gmbh.de