



The Cable Duct System HEKAPLAST-S/R

Site Report Katzenberg Tunnel ICE Section Karlsruhe - Basel

- **Section** tunnel project Katzenberg
Bad Bellingen – Efringen-Kirchen
- **Tunnel length** 2 tunnel tubes of 9,385 m each
- **Client** DB Netz, Karlsruhe
- **Project company** DB Projektbau, Karlsruhe
- **Building contractor** Joint Venture Katzenbergtunnel:
Ed. Züblin AG, Stuttgart
Wayss & Freytag Ingenieurbau AG, Stuttgart
Marti Tunnelbau AG, Bern (CH)
Jäger Bau GmbH, Schruns (A)
- **Building period** November 2003 to 2010 (planned)
- **Project** protection of service, control and signal lines
- **Pipe products used** HEKAPLAST-S DN 100: abt. 320,000 m
HEKAPLAST-R DN 110: abt. 5,000 m





Project Katzenberg Tunnel

A new tunnel, called Katzenberg Tunnel, is being built in the course of the construction of the ICE railway connection Karlsruhe – Basel in the section between Bad Bellingen – Efringen-Kirchen. Two separate tunnel tubes of 9,385 m each are broken out of the mountain by means of a special no-dig method. Immediately afterwards, the proper tunnel wall made of precast concrete elements, which form the finished inner shell, is put in place.

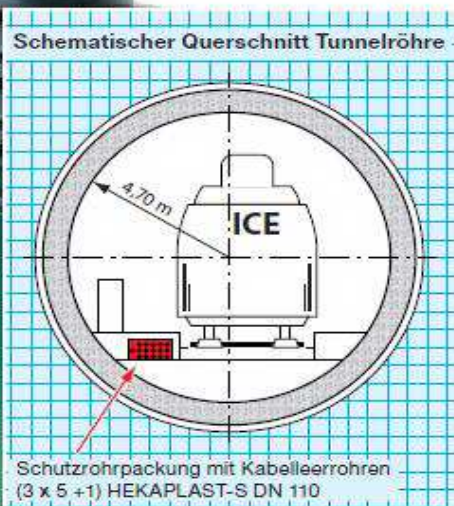
As the setting up of a package of protection pipes (3 x 5 + 1) inside a tunnel is rather complex, the packages are assembled outside of the tunnel area. HEKAPLAST cable ducts are embedded in concrete to form a block of 90 x 48 cm and a length of 5.40 m with the pipe ends protruding by some 30 cm on both sides. One end of the pipe is provided with a socket including seal, the other end is fitted with a seal in red colour for a reliable visual control to ensure an accurate fit when connecting the total of 3,120 pipe blocks with one another.

This way of construction results in a circular tunnel cross section with an inner diameter of 9.4 m.

After laying, the blocks and protective pipes are completely covered by concrete and form the side-strip of the tunnel.

In each tunnel tube, 16 cable protection pipes for service lines are laid in packages parallel to the rails. The product chosen for this purpose for technical and economical reasons was our PE-HD HEKAPLAST-S product DN 110.

HEKAPLAST-S cable ducts of PE-HD have proved most useful not only with regard to the assembly of pipe blocks outside the tunnel area but also the following installation inside the tunnel. According to the site manager, the guaranteed allowed smooth construction sequence.



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Corrugated and Twin Wall Pipes of Plastics

