



**Praktiken und Potenziale von Bautechnikgeschichte
Vorträge im Deutschen Technikmuseum, Berlin 2013**

Vorspannung

Donnerstag, 31. Oktober 2013, 17 Uhr 30

Replacement of external post-tensioned cables – case study: The bridge of Clabecq (Belgium)

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The Clabecq bridge is located on the modernized canal from Brussels to Charleroi and was built in 1960 by the company CFE. The span is 60 m and the deck is a two cell box girder. The selected system of post-tensioning was one of the last applications in Belgium of the “Cable Sandwich” developed by Blaton-Magnel.

The cables were external to the concrete and only protected from corrosion by a cement grouting. Maintenance inspections revealed a generalized corrosion of the wires so important that the safety of the bridge could be endangered in a near future. The owners decided to carry out the replacement of all existing 30 cables by 24 new tendons placed in HDPE ducts composed each of 15 Freyssinet T15S greased and plastic-sheathed mono-strands.

Following issues will be addressed: assessment of the existing structure condition, design of the repair project, follow-up during operations on site, discussion about problems encountered, handing over and lessons learned from this exemplary economical intervention on early prestressed post-tensioned concrete structures.

Veranstaltungsort: Deutsches Technikmuseum, Trebbiner Straße 9, 10963 Berlin, Vortragssaal
Verkehrsverbindungen: U-Bahnhof Gleisdreieck, U-Bahnhof Möckernbrücke

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