DUCTILE IRON PIPE SYSTEM

Information from the European Association for Ductile Iron Pipe Systems · EADIPS®



Editorial

Dear readers,

I would first of all like to thank all those who visited our exhibition stand at IFAT ENTSORGA 2012 and who had informative talks with us there.

In this May 2012 issue of the Newsletter, I describe three pipeline installation projects on which ductile iron pipes for the supply of drinking water have been installed. On two of these projects the pipes were installed by the horizontal directional drilling (HDD) technique. A further report is concerned with the use of ductile iron pipes on a large development project.

Have an enjoyable and stimulating read,

Sincerely yours,

Raimund Moisa



The HDD technique used for a crossing below the Erligraben canal using ductile iron pipes

In the Großes Moos or Great Marsh in Swiss Seeland, in the area which borders the cantons of Freiburg and Berne, there are man-made irrigation canals which are essential for the successful growing of vegetables. One of the irrigation canals is called the Erligraben canal and a new DN 300 pipeline for transporting drinking water needed to cross below it.

◆ The plans envisaged the trenchless installation of vonRollecopur ductile iron pipes by the HDD (horizontal directional drilling) technique. The total length of the crossing below the canal was 140 m and to make it, it was necessary to follow a curve in three dimensions with a vertical radius of 800 m and a horizontal radius of 120 m, to allow the route of the pipeline to be offset laterally in translation by 85 m. Under Table A.7 of DVGW-Arbeitsblatt GW 321, the smallest allowable radius for the DN 300 nominal size is 115 m. The vonRollecopur fully protected ductile iron pipe of wall-thickness class K 9, with a reinforced coating to EN 545, with integral internal and external coatings of polyurethane and with the tried and tested vonRollhydrotight push-in joint met the requirements imposed without any problems. With these pipes, the new DN 300 water-transporting pipeline which was laid went into operation on schedule to the complete satisfaction of everyone involved.

Zweckverband Bodensee-Wasserversorgung relies on ductile iron

◆ In the autumn of 2011, the Zweckverband Bodensee-Wasserversorgung group of supply utilities installed a connecting pipeline some 2.5 km long with a maximum operating pressure of 25 bars between Markgröningen and Unterriexingen for the Zweckverband Besigheimer

Wasserversorgungsgruppe. The decision was made to use DN 150 ductile iron pipes of wall thickness class K 10 with a cement mortar coating. The installation of the pipeline began at the Bracke water tower in the Markgröningen district. The route runs for 1.6 km along the L 1141

secondary road, parallel to a farm road and cycle track. A crossing was made below the secondary road by a jacked bore. From that point the pipeline runs through open country in the Markgröningen district to the Hohberg service reservoir.



A horizontal directional drilling project using ductile iron pipes at Dornbirn in Vorarlberg in Austria

• In March 2012, ductile iron pipes were used to make a crossing below the A14 Rheintal autobahn by the horizontal directional drilling (HDD) technique at Dornbirn in Vorarlberg. The client was the water utility Trinkwasserverband Rheintal, which needed to provide a secure supply of drinking water for the 20,000 inhabitants of the market town of Lustenau. The drinking water pipeline concerned

was 1,300 m long and part of it was the 135 m long crossing below the autobahn, which was installed at a depth of some 4.6 m below the surface of the road. The pipes used here were DN 300 ductile iron pipes with BLS®/VRS®-T restrained. flexible push-in joints and a cement mortar coating. Except in this trenchless section, the pipes installed were ductile iron pipes with PUR-TOP external protection laid in open trenches. To the south of the autobahn there was also an existing watercourse which had to be crossed. Here, a preassembled culvert pipeline of ductile iron pipes was lifted into the trench while suspended from a spreader beam. The final section closing the ring to the main supply pipeline was installed in late March 2012.





Dates for your diary

23-24 May 2012

122th Annual Conference of the ÖVGW (Austrian Association for Gas and Water), Innsbruck

24-25 September 2012

66th wat 2012, Dresden

26–27 September 2012

DWA (German Association for Water, Wastewater and Waste) 2012 Federal Conference, Magdeburg

Imprint

Issued by/Copyright:
Fachgemeinschaft Guss-Rohrsysteme (FGR®) e.V. · European Association for Ductile Iron Pipe Systems · EADIPS® Im Leuschnerpark 4
64347 Griesheim, Germany
Tel.: +49 (0)61 55/60 52 25
Fax: +49 (0)61 55/60 52 26
E-mail: info@eadips.org
www.eadips.org

Press date: 21 May 2012 Production: schneidermedia.de

Ductile iron sewer pipes for the "Kinzigbogen" project in Hanau in the German state of Hesse

◆ In Hanau's Lamboy district there is a former railway-track building yard covering an area of 20 hectares. By the autumn of 2012 a large shopping centre, including 70 residential units and additional leisure facilities, will have beenbuilt on it as part of the "Kinzigbogen" project at



a cost of 90 million Euros. The plans envisage a total sales area of 29,000 m² plus a further 6,000 m² devoted to the leisure and fitness facilities. There will also be 1000 parking spaces. Some 900 m of DN 300 and DN 400 ductile iron pipes to EN 598 with the tried and tested TYTON® push-in joint are being laid along the road built for the development of the former industrial area. Another 850 m of ductile iron pipes are intended for the residential area. The material of the pipes was decided on in close consultation with the civic authorities of the town of Hanau, which would later be responsible for the road building. Their planning and design standards give preference to using ductile iron pipes of sizes up to and including DN 400 for the installation of drainage sewers, a preference con-

firmed by the particular constraints of the project.

