DUCTILE IRON PIPE SYSTEM

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



Editorial

Dear readers,

May I wish you every success and the best of health for 2012. In this January 2012 issue of the Newsletter you can read my report on the installation of pipelines for drinking water, non-drinking water and fire-extinguishing water at Frankfurt am Main Airport. In my other reports I tell you about the installation of a water transporting pipeline and a turbine pipeline.

Sustainably superior – ductile iron pipe systems.

Reinand Meser

Have an enjoyable and stimulating read,

Sincerely yours, Raimund Moisa



• Fraport AG placed a contract with the Max Bögl GmbH & Co. KG company to implement a public works approval decision and install the infrastructure for the expansion of the operations area in the south-west of the airport. This has included the install-



Frankfurt am Main Airport

Securing the supply of drinking and fire-extinguishing water

To ensure a secure supply of drinking and fire-extinguishing water to the northern part of Frankfurt am Main Airport, Fraport AG, the airport operator, is replacing the existing drinking water pipelines running from the Hinkelstein waterworks to the transfer stations of Fraport AG with 1,660 m of new DN 400 ductile iron drinking water pipelines.

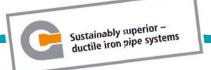
♦ Some of the old drinking water pipelines consisted of buried DN 350 grey cast iron pipes well over 40 years old. Notable parts of the replacement work are the sections of pipeline which are installed in protective casing tubes below federal highway B 43, the Frankfurt-Cologne Intercity Express railway line and the A 3 federal autobahn. At these points, some 130 m of ductile iron pipes with restrained push-in joints have been pulled into concrete protective casing tubes running below the roads and railway mentioned above, on skids for sliding or rollers (trenchless installation). The remaining parts of the pipelines have been installed in open trenches.

Frankfurt am Main Airport

Development in the south-west, 2nd phase of construction

ation of 1,680 m of DN 300, class K 9, ductile iron pipes to EN 545 for non-drinking water with a PFA of 16 bars and TYTON SIT PLUS® restrained joints. The external protection for these pipes is a zinc coating with a green finishing layer. The client uses this green external protection as an identifying sign. Another 185 m of DN 150 ductile iron pipes

has been installed to run to the hydrants. As well as the green pipes for non-drinking water, 1,050 m of drinking water pipelines consisting of DN 200, PFA = 16, K9 ductile iron pipes with restrained BRS® push-in joints has been installed. These pipes are coloured blue on the outside.





◆ The water supply utility Wasserverbund Großes Moos is laying a new transporting pipeline to connect its two water distribution networks. vonRollecopur DN 300 fully protected pipes with push-in joints have been used for this pipeline. The pipes, of wall-thickness class K 9, have a reinforced coating to EN 545, a PFA of 16 bars, and integral polyurethane internal and

A new water transporting pipeline from Müntschemier to Kerzers

external coatings. This marked the start of the renovation work by the municipality of Müntschemier on its distribution network.

The first canalised waterway which had to be crossed was in the first section running towards Kerzers. This was done by the horizontal directional drilling technique (L = 62 m). The pipeline then runs along a railway embankment belonging to the BLS AG railway company in the direction of Kerzers. Installation here was mainly by a trench milling machine with associated sliding trench bracing. The second bore by directio-

nal drilling, at the main Erligraben canalised waterway, was 140 m long. The principal features of the ground in this region are constantly varying soil conditions and a high water table. At times, there was up to 40 cm of groundwater in the trench and it had to be pumped out by dewatering through the floor of the trench. The overall length of the drinking water pipeline, which is extremely well protected by polyurethane (a PUR coating to EN 15189) for these corrosive soil conditions, is some 5.5 km, of which 1.3 km is below asphalted roads and the rest below meadows and cultivated land.

Lombardy in Italy

Installation of a turbine pipeline using ductile iron pipes

When the contract was being placed for the pressure pipes for the turbine pipeline of a small hydroelectric power station in the municipality of Monno in Lombardy, ductile iron pipes came out on top in competition with steel pipes. In contrast to elsewhere in the Alps, steel pipes are generally used for penstock pipelines in this region.

Dates for your diary

25-26 January 2012

7. HTI Hortmann-Fachausstellung [7th HTI Hortmann Trade Exhibition], Siegen

26 January 2012

Tiefbau Forum 2012 [2012 Underground Construction Forum], Neu-Ulm

9-10 February 2012

26. Oldenburger Rohrleitungsforum 2012 [26th Oldenburg Pipeline Forum], Oldenburg

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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: 20 January 2012 Production: schneidermedia.de ◆ Backed by good references provided by a leading power station operator in South Tyrol, it was possible to show the client how well ductile iron pipe systems perform when used for turbine pipelines. The client was convinced of the advantages of the ductile iron pipe system.

connection The of steel pipes by welding is a very time-consuming process. This cost completely disappears with easily assembled BLS® system push-in joints between ductile iron pipes. This is a crucial consideration particularly when the laying is in difficult terrain, because the pipe layer often has only a short timeframe to lay the pipes. For the diffi-



cult sections of terrain along the route,1,500 m of DN 800, PFA = 25 bar, ductile iron pipes and fittings with restrained BLS® push-in joints were supplied and installed. In spite of the difficult terrain, with its steep slopes, rocky ground and lack of space along the route, the installation of the pipeline went off without a hitch.

