

# NEWS

## DUCTILE IRON PIPE SYSTEM

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



### Editorial

Dear readers,  
In this December/November 2010 issue of the Newsletter, I shall be telling you about a number of installation operations which have to do with the replacement, repair and rehabilitation of drinking water pipelines. In all of these projects, ductile iron pipes with restrained push-in joints of either the positive locking or friction locking type were installed. Positive locking push-in joints are laid down for trenchless installation techniques. Another article reports on the replacement of a sewer using ductile iron pipes. Have an enjoyable and stimulating read.  
Sincerely yours,

Raimund Moisa



### Replacement of the "Keilberg" trunk main

## Crossing below the A 3 autobahn

The water supply utility "Zweckverband zur Wasserversorgung der Aschaffalgemeinden" has its headquarters in Goldbach near Aschaffenburg and supplies a total of six municipalities in the surrounding area with drinking water. Early this year, the "Keilberg" trunk main had to be replaced in the course of the work being done to widen the A 3 autobahn to six lanes.

◆ A section of the old DN 300 asbestos cement pipeline which was situated under a bridge structure was replaced with a ductile iron pipeline. Ductile iron pipes were also used to lay the pipeline in the area where the A 3 autobahn was crossed, to ensure a reliable supply of drinking water for the municipality of Bessenbach, they were also used for the pipeline taking water to the toilet facilities on the parking area on the southern side of the A 3 autobahn. In the area where it crosses the A 3, the new DN 300 ductile iron pipeline with BLS® push-in joints had to be pulled in on sliding skids in a DN 800 steel casing tube together with two cable-protecting tubes and the control cables they carried. The laying work to install the new ductile iron water pipeline was completed on time in May 2010.

## A secure drinking water supply to the south of Berlin

◆ The water supply utility Märkische Abwasser- und Wasserzweckverband (MAWV) of Königs Wusterhausen supplies around 100,000 inhabitants of the area to the south-east of Berlin. Like all of the affluent suburbs around Berlin, this area is seeing a continuous rise in its population and is becoming home to an increasing number of commercial and industrial companies. The need to supply Berlin-Brandenburg international airport (BBI) also means that the area is bucking the general trend and is subject to an increase in the demand for water. A contract was therefore placed with a consortium for the laying of a 1,400 m long DN 600 drinking water pipeline to supplement the existing

network. The complicated laying operation in the built-up area has to allow for the old trees already growing there. Nuisance to the population also has to be kept to the lowest possible level. The pipes being used are ductile iron pipes to DIN EN 545 of wall-thickness class K 9 with BRS® push-in joints. The installation technique laid down was step-by-step advance from the front end only of a trench in shoring "cassettes" and the 6 m long ductile iron pipes and the easily assembled BRS® restrained joint system are ideal for this. In spite of some bad weather, the companies doing the work are keeping to the installation schedule.



## A sewer replaced using ductile iron pipes

The town of Nidderau has around 20,000 inhabitants and is situated in the south of the Wetterau region in the German state of Hesse on the river Nidder from which it takes its name.

◆ For hydraulic and structural reasons, the existing sewer running along the Glockenstraße needed to be replaced. The sewer pipes, which were more than 50 years old, had only a shallow height of cover and contained cracks and

the socket joints were leaking. The high water table in the old town, the static constraints, the fact that the foundations of some of the half-timbered houses did not extend to basement level, and the existing connections to the sewer were important reasons for selecting DN 300

and DN 500 ductile iron pipes for the replacement. They also had to be laid with, again, only a shallow height of cover. The installation of the sewer took place in spring and summer 2010. The entire operation, which cost around 800,000 Euros, was completed at the end of 2010.

## A drinking water pipeline repaired by pipe relining

Damage was found in the course of the routine annual inspection of a DN 700 steel drinking water pipeline in the area of the "Höchster Farbenstrasse" in Sindlingen in Frankfurt am Main.

◆ The road traffic authority refused to allow repair by the open trench technique because a long diversion would have been needed to take traffic round the site. The water supply company, Netzdienste Rhein-Main

GmbH, decided to use the pipe relining technique for part of the work. The nominal size of DN 700 was reduced to DN 400. A new pipeline of DN 400 ductile iron pipes with BLS® push-in joints was pulled into the damaged section of pipeline over a length of about 80 m. To protect the joints and reduce the resistance from friction during the pulling-in, sheet-metal cones were fastened

in place in the region of the joints once shrink-on sleeves had been fitted. The connecting-up and pulling-in of the DN 400 pipeline began in the morning on 18.08.2010 and was completed the same day. The new DN 400 ductile iron pipeline was connected to the existing DN 700 steel pipeline the next day. After disinfection and flushing the water pipeline went straight back into service.

### DATES FOR YOUR DIARY

**24/25 November 2010**

2010 DWA Federal Conference, Bonn

**20 January 2011**

2nd Herrenberger Tiefbautag, Herrenberg

**10/11 February 2011**

25th Oldenburger Rohrleitungssymposium, Oldenburg

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## Replacement of a drinking water pipeline

◆ The water supply utility Wasserbeschaffungsverband (WBV) Taunus of Bad Homburg in the German state of Hesse is currently replacing a section about 1000 m long of a transporting pipeline between "Lange Meile" and the "Rehköpfe" high-level service reservoir. This section is situated within the city limits of the town of Bad Homburg. DN 400 TYTON SIT PLUS® ductile iron drinking water pipes with an external zinc coat and an epoxy top coating are being laid in this section. The new section is being installed together with other supply lines to follow a modified route. The future operating pressure will be an average of 10 bars and the pipeline has been designed for PN 16. The operation as a whole is in three sections. Ductile iron pipes are being installed in sections one (800 m) and two (200 m). The connections to the existing pipeline will be made in section three. This capital investment will enable WBV Taunus to guarantee a reliable supply of drinking water for the towns of Friedrichsdorf and Bad Homburg. The installation of the pipes is due to be completed by 15.12.2010 and work on the third section will begin in spring 2011.

