September 2011 issue • Vol. 5

## **DUCTILE IRON PIPE SYSTEM**

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



#### **Editorial**

Dear readers.

In this September 2011 issue of the Newsletter, you can read my report on the partial rehabilitation of a sewage pressure pipeline by using dismantling pipes, fittings and valves of the restrained type.

I also report on the installation of a trunk main for water, a connecting pipeline for drinking water and the supply of drinking water for the development of an industrial park. Ductile iron pipe systems were used on all these projects.

Have an enjoyable and stimulating read.

Sincerely yours,

Raimund Moisa





## **Complicated replacement of a gate valve**

A gate valve needed to be replaced in a DN 800 sewage pressure pipeline in the town of Brandenburg an der Havel.

 A glance into the installation trench showed that the existing steel pipeline had not been installed as laid down in the plans. The gate valve was situated at a low level and had to be connected to the old pipeline, which was situated at a 1.60 m higher level, in a similar way to a culvert pipeline, meaning that a number of angled changes of direction and adjustments on site needed to be made on three different axes. This was only possible if the pressure sewage pipeline was withdrawn from service for several hours. The pieces of the old pipeline having been cut and recovered, the two bends with BLS® push-in joints were connected to the prepared BLS® dismantling pieces (carrying welded beads) and the "culvert" section was inserted. The ends of the "culvert" section were then connected to the old pipeline by means of a BLS® flanged socket and a BLS® flanged spigot. Despite the complicated conditions, the connecting of the restrained BLS® joints, using the BLS® segments, was found to be a safe and perfectly practicable process. Those involved in the installation work said how convinced they were that the ease of connection of the BLS® system is unrivalled, particularly at large nominal sizes.

### A water pipeline for the "Graben" industrial park

The municipality of Graben in the Augsburg district in Bavaria is an ideal site for the distribution of all types of products. By the end of 2011, a large internet retailer and two well-known discount food store chains will be based in logistics centres in the "Graben" industrial park.

◆ A 900 m long supply pipeline for drinking water was needed to develop the park. The drinking water is taken from the existing DN 200 local supply pipeline and is fed into the industrial park in a northerly and a southerly direction in two 450 m long sections of the pipeline. New DN 150 ductile iron pipes with restrained BLS® push-in joints were also installed. The easy and quick connection of the BLS® push-in joints won over the supply utility Wasserzweckverband Lechfeld.

The pressure testing went off without any problems and the installation operation was completed on schedule in April 2011.

#### Fair play between two valleys

There is a considerable disparity between the Ayas and Valtournenche valleys in the autonomous region of the Aosta Valley of Italy. One of them has what the other urgently needs – water!

♦ The hydrological conditions give the Ayas Valley a wealth of water, making it a favourite holiday region in the west of the Italian Alps in both summer and winter. The neighbouring Valtournenche Valley on the other hand is not so lucky. Under a water agreement, the communes in the two valleys have therefore decided on a neighbourly interlinking of their drinking water supply systems.

The invitation to tender envisaged steel pipes being used, but a subsidiary tender put in by the Tour Ronde and Cometto e Tercinod installing companies won the contract for ductile iron pipes. With the combination of the ideal technology used for connecting them and their 5 metre length, the ductile iron pipes with BLS®-/VRS®-T push-in

joints made the installation quick and easy. The installation work for this project was divided into sections, the first of which, from the village of Massouguin to Pra Charbon in the Ayas Valley, got underway in July 2010. The date originally planned for completion was July 2011. However, the installing companies were able to announce the successful completion of this first section of the work well before this deadline, namely October 2010. And this was

possible even though the topographical conditions – steep slopes and rocky terrain – were a real challenge for the installing crews. Both the client, the commune of Ayas, and the consulting engineers doing the planning and the installing companies were enthusiastic about the impressive speed of installation of the BLS®-/VRS®-T pipes.

4,306 m of DN 250 pressure pipes and 1,375 m of DN 125 ones were laid. The second section of the installation work, the connection into the thirsty Valtournenche Valley is now under way.

# Replacement of a DN 150 trunk main near Lengefeld

◆ In 2010, the supply utility Wasserleitungsverband "Ost-Obereichsfeld" Helmsdorf (in the federal state of Thuringia) drew up plans for the replacement of a 1,380 m length of the trunk main running from the service reservoir on the B 247 federal highway to the village of Lengefeld (in the municipality of Anrode). The work was put out to tender in spring 2011. Starting in May 2011, ductile iron pressure pipes of DN 150 nominal size with TYTON® push-in joints and a zinc coating and epoxy finishing layer were installed. The minimum wall-thickness of these ductile iron pipes is 4.7 mm.

There was a stream that had to be crossed, and a special feature of the pipeline installation operation for this, was that the pipes were installed by the trenchless horizontal directional drilling (HDD) technique for a length of 54 m. To do this, the complete string of 6 m long DN 150 pipes with BLS® push-in joints and a cement mortar coating was pre-connected and then pulled in. The connection and pulling-in took only two working days. The completed project was handed over to the client, Wasserleitungsverband "Ost-Obereichsfeld" Helmsdorf, on schedule in July 2011.



#### DATES FOR YOUR DIARY

#### 22-24 September 2011

26<sup>th</sup> Federal Congress of the BWK (Association of Water Management, Waste Management and Land Improvement Engineers), Wernigerode, Harz district

#### 26-27 September 2011

DWA (German Association for Water, Wastewater and Waste) 2011 Federal Conference, Berlin

#### 17-18 October 2011

rbv/FGR®/EADIPS® 2011 Ductile Iron Pipes Seminar, Berlin

#### **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: 16 August 2011 Production: schneidermedia.de