



### Editorial

Dear readers,

In this November and December 2013 issue of the Newsletter I am reporting on the renewal of pipelines for two water supply companies. There is also a report on the replacement of a sewage pipeline and the construction of snow-making systems with ductile iron pipes using the restrained joint technique.

Have an enjoyable and stimulating read.

Sincerely yours,



Raimund Moisa



## Renewal of the Katzenbuckel pipeline – 3rd construction stage

**With a delivery of around 125 million m<sup>3</sup> of water per year, the Bodensee water supply association is the largest in Germany. There are hundreds of kilometres of pipelines in the area supplied by the Bodensee, or Lake Constance, which, with constant attention, sustainably secure the supply of drinking water.**

◆ In the period from June to October 2013, an old grey cast iron pipeline was replaced with a new pipeline in ductile iron in the Katzenbuckel area (the highest point in the Odenwald). In this construction project the Bodensee water supply company used ductile iron pipes with the tried and tested cement mortar coating to EN 15542. This meant that

- soil replacement was not necessary,
- construction costs were reduced and
- the working life of the pipeline was increased.

Ductile iron pipes with a DN 200 nominal size were installed over a distance of 4.050 m between Rittersbach and Scheringen. The topographical conditions of this low mountain range region required pressure stages from PN 25 to PN 40.

## Snow pipes for North Germany's biggest skiing area – Wurmberg im Harz equips itself for a future of guaranteed snow

◆ With an investment volume of more than 8 million euros a contemporary tourism infrastructure has appeared on the highest mountain in Lower Saxony. Wurmberg is going to have guaranteed snow; within 72 hours skiing can take place on 5.4 km of slopes. With a new 1.2 km long piste on the eastern slope of the Wurmberg, the skiing facilities on offer will be considerably

upgraded, and a powerful new four-seater chair lift will appreciably cut waiting times. A total of 4.7 km of ductile iron pipes in DN 80 to DN 300 with BLS®/VRS®-T push-in joints have been installed for the snow-making equipment. The operating pressure varies between PFA 40 and PFA 100 and 111 hydrants are connected to the snow pipes. The water comes from a 5.000 m<sup>2</sup>

large storage reservoir. This iron pipe system meets the requirements of modern snow-making systems outstandingly well. As from next season skiing fans will be able to have fun 971 m up at Wurmberg bei Braunlage even if natural snow should be lacking.



## Directional drilling with ductile iron pipes at the Sanssouci Park in Potsdam

◆ In Geschwister-Scholl-Straße, on the southern edge of the Sanssouci Park in Potsdam, an old drinking water pipeline of nominal size DN 250 was replaced this spring. Because of the numerous utilities present and because of the need to keep street traffic running as much as possible, and also to minimise the level of road works, Energie und Wasser Potsdam GmbH decided to replace around 700 m of the old line in stages by the trenchless technique using the HDD process.

Ductile iron pipes with BLS® push-in joints and robust cement mortar coating to EN 15542 were installed. To

save space, the pipes were assembled individually in installation pits; the BLS® thrust resistance system was able to show just how quick and positive it is to assemble. For the transmission of the longitudinal forces, after assembling the joints locks are inserted into an opening in the socket and distributed over the circumference. In addition, a protective rubber sleeve is drawn over the pipe joint, which contains a sheet-metal cone for mechanical protection. After a few minutes, the pipe pulling continues, meaning that a high daily output can be achieved with secure results.

## Renewal of a sewage pipeline in a busy main street

◆ In the district of Seon lying to the South of the regional centre of Lenzburg in the Aargauer Seetal, an existing

DN 400 sewage pipeline had to be replaced with a new DN 500 sewage pipeline. For a length of 16 m it crosses the busy Oberdorfstraße diagonally. Insufficient hydraulic power and mechanical damage caused by high traffic loads on the old concrete pipeline made replacement absolutely essential.

Because of their low wall thickness and outstanding strength properties, full protection vonRollecopur ductile iron pipes to EN 598 were the only alternative for this difficult installation situation in order to be able to widen the cross-section without involving expensive construction measures. This meant that the new iron pipe channel could be constructed with a minimum covering of approximately 35 cm and without a concrete envelope. The necessary static evidence of load-bearing capacity and fitness for purpose according to Swiss standard SIA 190



was able to be supplied for the use of vonRollecopur pipes in wall thickness class K 9. The hydraulically smooth polyurethane (PUR) lining to EN 15655, which is suitable for all pH ranges 1–14, ensures sufficient drag force even with the shallowest inclines.

Thanks to the flexible and rapidly assembled Hydrotight push-in joints the installation work in the area of the busy road was able to be completed efficiently and traffic hold-ups kept within reasonable limits.

### Dates for your diary

**27 November 2013**

rbv-GSTT-EADIPS®/FGR® - Information event, trenchless technologies, Stockdorf

**06–07 February 2014**

28<sup>th</sup> Oldenburg pipeline forum, Oldenburg

**27–29 April 2014**

EADIPS®/FGR®-FIHB Conference for College and University Teachers 2014, Vienna

### Imprint

Issued by Copyright:

European Association for Ductile Iron Pipe Systems · EADIPS®/ Fachgemeinschaft Guss-Rohrsysteme (FGR®) e.V.

Im Leuschnerpark 4

64347 Griesheim, Germany

Phone: +49 (0)61 55/60 52 25

Telefax: +49 (0)61 55/60 52 26

E-mail: [info@eadips.org](mailto:info@eadips.org)

[www.eadips.org](http://www.eadips.org)

Press date: 19 November 2013

Production: schneidermedia.de

