DUCTILE IRON PIPE SYSTEM

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



Editorial

Dear readers. in DUCTILE IRON PIPE SYSTEMS NEWS for Feb. 2010, I would, as usual, like to present to you various pipeline projects involving ductile iron pipe systems. The focus of attention in the selected contributions is mainly on pressure pipelines, which are either drinking water pipelines or, in one contribution, a fire-extinguishing pipeline. Ductile iron pipe systems will meet any demands, whether these arise from project-related constraints or from the installation techniques which have to be used. Sustainability is now a political demand and they will always do their bit to help achieve it. Enjoy your read and look out for all the useful hints.

Reinung Men

Sincerely yours, Raimund Moisa





Ductile filling and gravity output pipelines

To increase the security of supply of its supply of drinking water and fire-extinguishing water, the municipality of Wöllstein in Rhineland-Palatinate in Germany is planning to build the "Streitberg" high-level service reservoir for drinking water together with its associated filling and gravity output pipelines.

◆ The installation of the pipelines which have to be connected, has been going on since early November 2009. 800 m of DN 200 ductile iron pipes are being used for the filling pipeline and DN 250 ductile iron pipes for the 1,600 m long gravity output pipeline. The pressure classes are PN 10 and PN 16. The ductile iron pipes have been given a cement mortar lining and a cement mortar coating. With external protection of the latter kind, a large part of the excavated material can be used as backfilling in the area occupied by the pipelines and the working space. All the connections between pipes are being made with the friction-locked TYTON SIT PLUS[®] push-in joint. In areas where there are no working strips available, the pipe installation has to be done by installation from the trench with no lateral access. Ductile iron pipes are particularly well suited to this installation technique.

Rehabilitation by replacement in Haibach

◆ The municipality of Haibach near Aschaffenburg in north-west Bavaria in Germany is rehabilitating its drinking water pipelines. As part of this work, some 1,000 m of water pipelines are being completely replaced. The old pipelines are being replaced by ductile iron pipes of nominal sizes of DN 80 to DN 150 and pressure class PN 10. The outsides of the ductile iron pipes are protected by a coat of zinc and an epoxy-based top coating. Restrained joints are being used along the entire length of the pipline, the joint which is actually being used being the positive locking restrained BLS[®] push in joint. Completion of this replacement project is planned for May 2010.

Re-equipment for fire-extinguishing water in the Ditschhardt Tunnel



• In the event of a fire, fire-extinguishing water needs to be available in the tunnel at a flow rate of 1,200 L/min and a minimum pressure of 6 bars for an extinguishing period of The Ditschhardt tunnel in Germany's Rhineland-Palatinate is 565 m long and is part of federal highway B 257. The tunnel needed to be re-equipped for fire-extinguishing water under the 2006 version of the German "Guidelines for the Equipment and Operation of Road Tunnels (RABT)".

an hour. To supply the tunnel with fire-extinguishing water, a DN 125 ductile cast iron pressure pipeline of pressure class PN 16 using the BLS[®]/ BRS[®] socket system has been installed in the structure of the road itself both inside and outside the Ditschhardt tunnel. Nine supply points for the take-off of water have been set up along the fire-extinguishing pipeline and two have been installed outside the tunnel. Inside the tunnel the interval between hydrants is 75 m. The hydrants are connected to the main pipeline by DN 80 ductile iron pipes of pressure class PN 16.

The ductile iron pipes had been installed in the tunnel by the end of 2009 while the flow of traffic was maintained with temporary traffic lights. The project as a whole will be completed in 2010.

Sustainability with ductile iron pipe systems

Hessenwasser GmbH & Co. KG, the drinking water supplier in Germany's Rhine-Main region, is installing a new connecting pipeline from its Biblis waterworks to the Jägersburg waterworks belonging to the Wasserbeschaffungsverband Riedgruppe Ost.

◆ Für The distance involved is 2.66 km and being used for it are DN 400, K 9, ductile iron drinking water

DATES FOR YOUR DIARY

23/24 March 2010 brbv Informative Event "Installation of pipelines", Reutlingen 23/24 March 2010 25th FDBR Conference on Pipeline Technology, Neuss 18/20 April 2010 FIHR/FGR Conference for College & University Teachers, Großräschen

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Most of the new drinking water pipeline runs through a class III water protection zone. However, in the first short section to the east of the Biblis waterworks it crosses a class II water protection zone. A crossing 12 m long is being made below the L 3111 secondary road using the drilling technique and a DN 700 protective steel casing tube. The ductile iron water-carrying pipe is drawn into the casing tube on transporting clamps. Sustainability means acting in such a way that future generations too will have



adequate quantities of water of good quality available to them. With their long working life, ductile iron pipe systems make a major contribution to sustainability in the field of water distribution.

They give a guaranteed economic benefit.