



TEPPFA INTERNATIONAL NEWS

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PLASTIC SEWER PIPES FOR SOUND ECONOMIC GROWTH

Bonn. The German Plastic Pipe industry led by the Kunststoffrohrverband (KRV) has teamed up with six associated bodies to press Peer Steinbrück, Finance Minister and other Ministerial colleagues on the urgent need for public investment in the nation's ailing sewer networks.

According to the coalition, EUR 58 billion are required to foot the public bill for modernizing German sewer and drains before 2020 and a further EUR 50 billion are needed to ensure improvement in private sector drainage. Their argument for public investment for improving Germany's sewer networks is based on sound economic growth.

Predictably, response from the Ministry has been that management companies and municipal authorities of German sewer works are solely responsible for investment derived from the sales of their services. However, according to the KRV, this position leaves the way open for the coalition to urge regional authorities to appreciate the value of investing in local infrastructure.

Representing 170,000 employees, the coalition comprises the following organisations: KRV, DWA, FGR, FVST, FBS, FIGAWA and RBV. It is also interesting to note that the KRV recently celebrated fifty years of solid and effective service to the plastic pipe industry and its stakeholders.

PE MANHOLE LAUNCHED

Greven. Plastics offer lightweight solutions for installing durable sewer networks. Egeplast recently introduced a monolithic wastewater manhole made from PE material at the 23rd Oldenburg Pipeline Forum.

The new SL[®] 1000 Manhole System has been designed to connect with the firm's existing SL sewer system for non-pressurised wastewater disposal. A fully welded wastewater system, the manhole offers high service life, reliable operation and extremely low installation, operating and maintenance costs.

"Towns such as Göttingen have been using the SL[®] sewer system for over ten years," explains a product release. "The new manhole can be easily connected to other pipe materials and may be equipped with an optional safety entry system."

Its telescopic device can be easily adjusted. The load distribution frames provide safe support for the manhole cover and prevent subsequent subsidence of the manhole cover. Axel Piper, the firm's Head of Disposal, is very satisfied with the new manhole: "This takes us a big step further with the SL Sewer System".

EUROPEAN NO-DIG RECORD FOR PLASTIC PIPELINE

Szczecin. Horizontal Directional Drilling (HDD) is a no dig solution that frequently relies on plastic pipe technology. Details have now been released for a European record set in Poland for the length of a large diameter plastic pipeline introduced into a HDD bore.

The record in question was achieved as part of one of the largest pro-ecological projects in Central and Eastern Europe, namely the improvement of water quality program in Szczecin. Valued at EUR 288 million, the program aims to upgrade an outdated water and sewer treatment system for the city's 40,000 inhabitants.

Central to the program was a delivery network via four pumping stations and a new wastewater treatment plant. The record-length horizontal directional drilling (HDD) was achieved beneath the Oder as part of the installation of delivery pipelines to the Grabów and Dolny Brzeg pumping stations.

Three different technologies for installing the pipelines were employed: open trench technology, micro-tunnelling and horizontal directional drilling (HDD). The latter was used to construct the six longest trenchless crossings with a total length of 3 kilometres.

For these crossings and following discussions with KWH Pipe's technical department and experts in directional drilling, a decision was made to use customized WehoPipe (DN/OD 1033.2 x 75.9 SDR 13.6 MOP 12.5). Wall thickness was increased towards the outside, leaving the inner diameter identical to that of a standard pipe (881.4mm).

The greater wall thickness translated into increased tensile strength for the pipe, which is of vital importance during this kind of installation with important consequences for the pressure of the transported medium. The construction of the HDD tunnels was exceptionally challenging due to difficult geological conditions. Even during pilot drillings, the installation team encountered numerous obstacles, such as brick and concrete blocks near the outlet of one of the bores and steel objects under the Oder riverbed. The pipes were manufactured and delivered to the installation site in custom-length, 15-metre sections in order to minimize the number of pipe joints.

Installation of 620 and 626 m long pipes during nine and eleven hours respectively in the vicinity of Wyspa Pucka set a new European record for the length of large-diameter pipeline introduced into a HDD bore. The former record, also set in Poland, belonged to a 516 m pipe laid under the Dead Vistula in Gdańsk in 2000.

Waldemar Musiolik, the firm's Pipe representative for the project, confirms that pipes used in directional drilling must meet exceptional demands: "Pipes are pulled through underground tunnels over considerable distances. Therefore, they must withstand the associated loads."

One major challenge that arose during welding operations was flooding by rising waters of the Oder - pushed back inland by a strong wind from the Baltic Sea. Despite complications, noted by Mr Musiolik are "not uncommon in adverse installation conditions", the experience and expertise of the contractor and his close

cooperation with the firm's Pipe service staff allowed for successful completion of the task.

(Source: Pipe World)

25% OF TIME COMPARED TO METAL...

Bedford. Plastic pipes are infinitely faster to install than metal pipes. A recent heating and plumbing project at Anjulita Court, Bedford was installed in 25 percent of the time compared to traditional metal pipes.

The new 62-bedroomed two-storey care home is being built in the Brickhills area of Bedford. Contemporary styled, this low energy building features curved walls, Dutch styled gable arches and a concrete floor pad between the ground and first floor which posed significant challenges for the design and specification of the M&E system.

In the ground floor atrium area which has dual storey ceiling height, an underfloor heating system has been specified but, in the rest of the building and particularly in the en-suite bedrooms, radiators were the client's preferred option which meant that pipework had to be installed around curved walls and through the concrete floor slab.

M&E contractors Allied Mechanical specified the firm's universal cross-linked polyethylene pipework for the project because it could meet the performance specification and, thanks to its flexibility, could be installed in around 25% of the time required for the copper alternative.

There were specific areas within the building where the biggest time savings were made – for example in the installation of 400m of 32mm pipe around the oval hydrotherapy room and in feeding pipework through the floor slab where the pipe sleeve system made the process very straightforward.

Allied Mechanical was keen to minimise the amount of pipework installed in the building's loft space in order to reduce the requirement for statutory ventilation and it achieved this by installing much of the pipework in carrier trays in the ceiling spaces on both the ground and first floor.

A key benefit in using the pipework was a compression sleeve jointing system which provides a permanent, leak free joint with full warranty for ten years. This enabled Allied Mechanical to connect steel radiator tails quickly and easily as well as providing a secure means of jointing in the ceiling void.

Main contractors for Anjulita Court were SDC Construction working on behalf of the clients The Ibbett Trust and MHA (Methodist Home for the Aged). The building is scheduled for completion in October 2009.

EU SURVEY IDENTIFIES CONCERN FOR WATER SHORTAGES

Brussels. Europe's leaky non plastic pipes clearly have an influence on water shortages. According to a special survey published by the European Commission, almost two thirds of Europeans consider that the quality of water in their country is a serious problem.

More Europeans (37%) feel the quality of water in their country has deteriorated over the last 5 years against 30% who think it has stayed the same and 27% who say it has improved. Water shortages are most definitely seen as a great threat to water resources in southern European Member States (73% in Cyprus). Flooding is seen as a greater threat in Member States in northern Europe (75% in the United Kingdom).

The survey reports that a large number of Europeans say they are taking steps to reduce water-related problems. Some 84% of them have reduced their water consumption, with 97% of Cypriots saying they have done so over the past 2 years while 56% of Romanians have.

Plastic pipe experts are convinced that public investment in their technology offers an interesting return on investment. They argue that the porosity of Europe's water delivery services should first be addressed before harvesting new sources of water. However, public money is not forthcoming in Old Europe to fix what is viewed as a private sector problem. The view is different in Eastern and Central Europe where many water bodies are actively replacing antiquated water distribution systems with plastic pipes.

TEPPFA INTERNATIONAL NEWS is published by The European Plastic Pipes & Fittings Association based in Brussels. TEPPFA is a European partnership of manufacturers of quality plastic pipe systems, used in building, infrastructure and civil projects, that strongly promotes and defends its industry. TEPPFA member's products are made from innovative engineering materials which are sustainable and contribute significantly to giving quality to life. Editorial email: russell_chr@yahoo.com