

Diamonds and plastic pipes are forever!

Madrid. AseTUB, the Spanish Plastic Pipes & Fittings Association recently celebrated its diamond anniversary appropriately in Madrid, in a famous old water station belonging to one of the most well known water companies in Spain, Canal de Isabel II.

Founded in 1978 to defend the interests of the plastic pipe industry and promote its products, the association has witnessed some impressive milestones during its thirty years guardianship. Blanca de Arteché, General Director of AseTUB and vice president of TEPPFA explains: "For thirty years, innovation and quality in plastic pipe systems have occupied a central focus for our members. Our membership comprises 20 manufacturers of all kinds of pipes and fittings used for a wide variety of applications."

"We are actively involved with promoting a number of key issues in Spain. Major examples include sustainability and saving resources, irrigation improvements, government water planning in the field of cleaning and purification, promotion within the building and construction sector, innovation in water networks, quality of products and facilities."

"We work closely with various quality institutes, university and training bodies and professional trade organizations to galvanize the industry's customer base. Over the last five years, the rate of plastics conversion in Spain has increased significantly. This trend has been all the more pronounced in the building sector where durability and cost performance is all the more appreciated."

"We are proud to celebrate thirty years of promoting a product that we confidently predict will endure for at least another 100 years after which time it will perhaps be recycled many times to almost complete the current millennium!"

More Olympic records in the pipeline

London. London's Olympic village and stadium will embrace a network of plastic pipes for a multitude of applications.

Even before the stadium foundations were laid, 800,000 tons of soil were removed from the site to the base of the Olympic village. This biological remediation was made possible through a network of plastic pipes used to treat the soil. Various concrete and steel structures are now being assembled and will house a labyrinth of 130 mm diameter plastic conduit to protect the complex network of fibre-optic communications.

Foundations for the Olympic Village at the northwest corner of the Olympic Green are also being laid. Constructed in two phases, it will eventually accommodate over 17,200 athletes and officials. An architect close to the first phase has told this news service that plastic pipe systems will be an obvious inclusion for the EUR 2.15 billion development that will result in 4,200 dwellings after the Games.

Many thousands of kilometres were installed to deliver energy, water and communications for the last Olympic Games in China. One interesting order for those

Games was the supply of 2,000 meters of a PL-X fuel pipe system for the Olympic Qingdao International Sailing Centre. It provides an underground pipe system that links a filling station with three dispensers at Qingdao city harbour. Environmental concerns from the corrosion of steel pipes and the associated risk of pollution were clearly arguments for the winning tender.

No more leaks from Whitehall

London. Thames Water is investing significantly in plastic pipes to upgrade London's Victorian water pipe network and thereby save millions of water every day. A recent section for improvement has involved Horse Guards Parade in Whitehall.

According to a BBC London news report, the company "is working hard to fix 200 faulty pipes daily and had replaced 136 miles of the capital's Victorian mains. Efforts to upgrade the capital's Victorian pipe network are reducing the number of leaks and saving millions of litres of water every day."

A spokesman for the firm noted that the rate of replacement would continue to increase and that by 2010, a total of 1,600 km (1,000 miles) of new mains would be installed.

London's aging pipe network has long been a source of concern. Half of the UK capital city's pipes are well over 100 years and a third date from beyond 150 years. Trenchless techniques are assisting the city to undertake this immense project with minimum disruption. Lining the old networks with new PE pipes is proving quick, economical and effective. Flow properties of PE pipes are superior to those of non plastic pipes. And once relined, these defective pipes will now perform perfectly for many years.

Closer inspection for plastics conversion

Trondheim. Non plastic water and sewer pipes are prone to corrosion, ingress and leaks. Engineers typically detect such impediments via robots but these devices are limited to how they physically move around underground labyrinths. However, scientists at SINTEF, the largest Scandinavian research organization in Norway believe they have developed a robot that can penetrate the most convoluted pipe networks.

The robot in question is able to twist and climb vertically up pipe walls, its dexterity having been acquired by studying snake robots. Its wheels and design enable it to twist and turn to navigate intersections and intelligent sensors relay its exact position in the pipeline. Cybernetic and optical measurement scientists are planning to build a train made up of various modules with different functions. Whereas the eventual realization of the train will be sometime in the making, scientists are convinced of its very practical and intelligent future.

One major aspect of that future will clearly involve pipe rehabilitation – with the use of plastic pipes.

No better time to invest in pipe networks

Washington. According to one famous water expert, there may be no better time than now to invest in certain pipe networks. "Water and water infrastructure are getting hotter by the day," he reports.

Thomas Rooney has been a leading exponent of fixing the world's ailing state of piped water supply for many years. Formerly CEO of Insituform Technologies, he has gone on record to berate the adverse effects of broken and corroded pipes. "Corroding sewer pipes, not oil pipes are the real danger. Oil pipes received a lot of attention. But remember this: No one died. No one got sick. No pristine land was despoiled. It will cost us some money. But only a few people are talking about the broken pipes that really hurt our environment, get people sick, cause people to die, and cost even more money than oil pipeline shutdowns."

"Most of our world's infrastructure was built between the years of 1945-1965, the economic boom years after World War II. In the earliest years after the War, you couldn't get steel and some of the most common building materials. So new fangled building materials came about - reinforced concrete pipes and so forth."

"In fact, 15-45% of all drinking water is lost to leaks. That's a pretty wide spectrum, and it may actually be wider than that. New Delhi in India loses between 60-80% of its water through its pipes. Hong Kong loses roughly a third of the water that passes through its pipes... Sydney 35%... Philadelphia 30-35%. Places throughout the state of California lose 10-25%."

"People are starting to understand that water and energy are linked. The reference is to the water-energy nexus. It takes a tremendous amount of water to create energy and it takes a tremendous amount of energy to create water. So as we see energy fly out of control, water is flying with it and constraining it."