

DENSO DIGEST



Site Wrapping Ductile Iron Pipes

In a “supply and apply” contract with North Midland Construction, over 5 Km of ductile iron pipe is being wrapped with Densoclad 70S protective tape at Mansfield Sewage Works. The work is part of an expansion project by Severn Trent Water plc.

Winn & Coales have employed specialist sub-contractors Hi Chem Services of Waltham, Grimsby, to coat the ductile iron pipes using a rolling rig of Hi Chem’s design. Densoclad 70S Tape is based on a polymer modified bitumen adhesive laminated to a robust pvc backing tape, which makes it

particularly suitable for rolling rig applications. Although normally ductile iron pipes are wrapped at the fabricator’s factory, site application of the wrapping tape offers several advantages; the most important of which is that damage to the tape wrapping, associated with transportation, is avoided.



Each pipelength is primed with Demo Primer D and the surface is checked for defects and retouched if necessary before wrapping commences.



Rolling rig application of Densoclad 70S Tape underway.





The majority of the ductile iron pipes being wrapped by Hi Chem are 5.5 metres in length, with some at 8 metres. Diameters range from 100mm up to 1200mm. The tape is being applied with a 25mm overlap. Hi Chem are wrapping bends and tees manually with Densoclad 70 Tape (Note: not

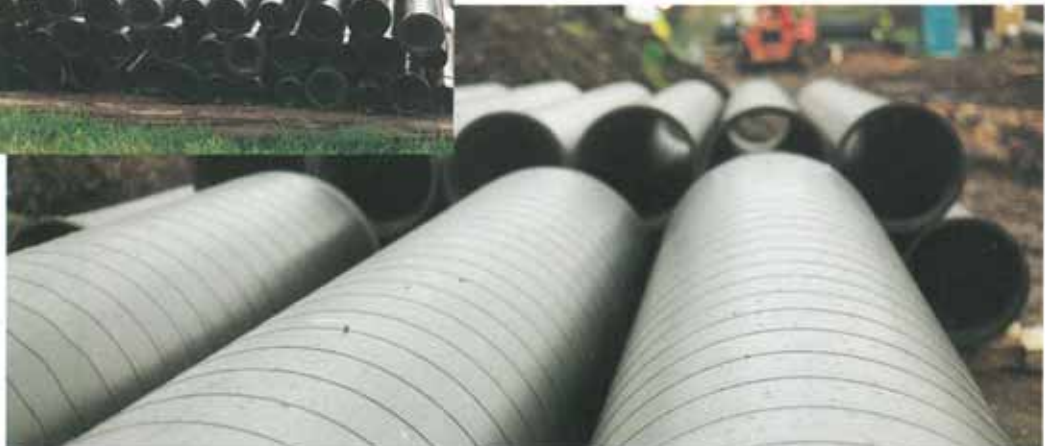
Densoclad 70S Tape).

Main contractors North Midland Construction of Huthwaite are wrapping bolted flanges and VJ couplings to P2 specification of the C.E.S.W.I. 3rd Edition using Denso Primer D, Denso Profiling Mastic, followed by wrapping with Densoclad 40 Tape.

The end product - a tight, tough, uniform tape coating.



Wrapped pipelengths are stockpiled for use later.



Tok Mastic Seals M6 Channel Blocks

A total length of 23 Km of E.C.C. blocks has been laid on each side of the M6 between junctions 20 and 21A to form a combined drainage and channel block. The work is being carried out by main contractors Tarmac Construction for the Department of Transport.

Each E.C.C. block is approximately 1/2 metre in length. Tok Mastic has been chosen to provide the necessary water-tight joint between each block throughout both channel sections.

Applied by trowel or knife straight from the container to the joint face, Tok Mastic is a mastic compound containing inert fillers and hydrocarbon solvents. Its major benefits are that it is supplied ready to use; gives fast, easy application; forms a water-tight seal and no special equipment is required for application. Its sealant properties are retained in service from -20° to 80°C.

Tok Mastic forms a watertight seal between each E.C.C. block.



Winn & Coales' Distribution Division has introduced two new products to the Denso range; Denso Drive Refurbisher which transforms ageing asphalt drives and the Denso Carbon Monoxide Detector, which provides an early and invaluable warning of excess carbon monoxide. After a successful launch earlier this year both products are achieving national distribution via builder's merchants.

Denso Drive Refurbisher "Revives Ageing Drives"

Denso Drive Refurbisher revitalises the appearance and extends the life of asphalt drives, pathways and car parks without expensive and disruptive resurfacing.



Denso Drive Refurbisher is applied by roller.

Safeguard against Carbon Monoxide Poisoning

Stories of death by carbon monoxide poisoning of holiday-makers in caravans, boats, hotels and apartments; students in lodgings; and others in homes and buildings where appliances have been badly installed or maintained, reach television and newspapers on a regular basis.

Carbon monoxide is produced by all gas and solid fuel fires, boilers, water heaters etc. and kills three times more people than fire or explosion caused by gas. It is a silent, invisible, odourless, tasteless gas of particular danger to infants, pregnant women, the elderly and pets.

The Denso Carbon Monoxide Detector gives a clear visual

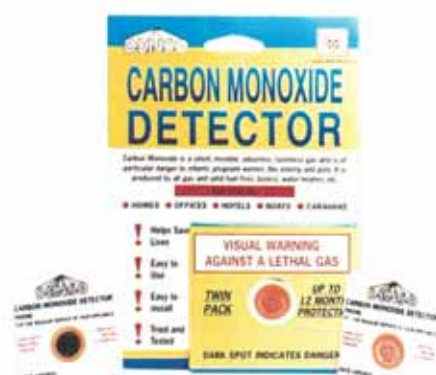
warning of excess carbon monoxide levels providing a simple and effective safeguard against carbon monoxide poisoning. The detector is fitted near the appliance and if there is a dangerous amount of carbon monoxide in the air the sensitized spot on the detector darkens. A pack of two detectors provides up to 12 months protection – no



The penetrative bitumen binder replaces the bitumen broken down by weathering and sunlight while sealing minor cracks and stopping further fretting of the aggregates. It is easily applied by roller, providing 1-2m² coverage per litre, and the finished surface can be ready for traffic in under 12 hours.

An important new addition to the Denso range of weatherproofing and sealing products, Denso Drive Refurbisher masks oil stains, repairs and old line markings and restricts root penetration and the growth of plants and weeds.

Denso Drive Refurbisher instantly transforms a dull stained drive with either a traditional black or burgundy finish, creating a 'new' drive at a fraction of the cost of having one relaid.



batteries or power supply required. For convenient transportation and fitting, each detector measures approx. 55mm x 55mm, weighs approx. 7g and has a self-adhesive fixing strip.

The Denso Carbon Monoxide Detector also acts as a useful reminder to have appliances serviced at least once a year, each detector having a space for the date of installation and service engineer's details to be recorded.

Denso Wrapped Water Pipe Joints to have 150 Year Buried Life

Taylor Woodrow Civil Engineering Ltd is currently carrying out a major project for Thames Water Utilities Ltd, upgrading the Ashford Common Water Treatment Works. The work is being carried out in close liaison with Thames Water to ensure that the quality and supply of water to Thames Water's customers remains high throughout the construction process.

An effective life of 150 years has been specified for all buried pipework, much of which is constructed from resin-fibreglass. However, there are a considerable

number of mechanical couplings, including the new Viking Johnson cast-in wall couplings. These were generally supplied with a Scotchkote 206N fusion bonded

A Viking Johnson cast-in wall coupling is coaxed into position prior to tightening the bolts.



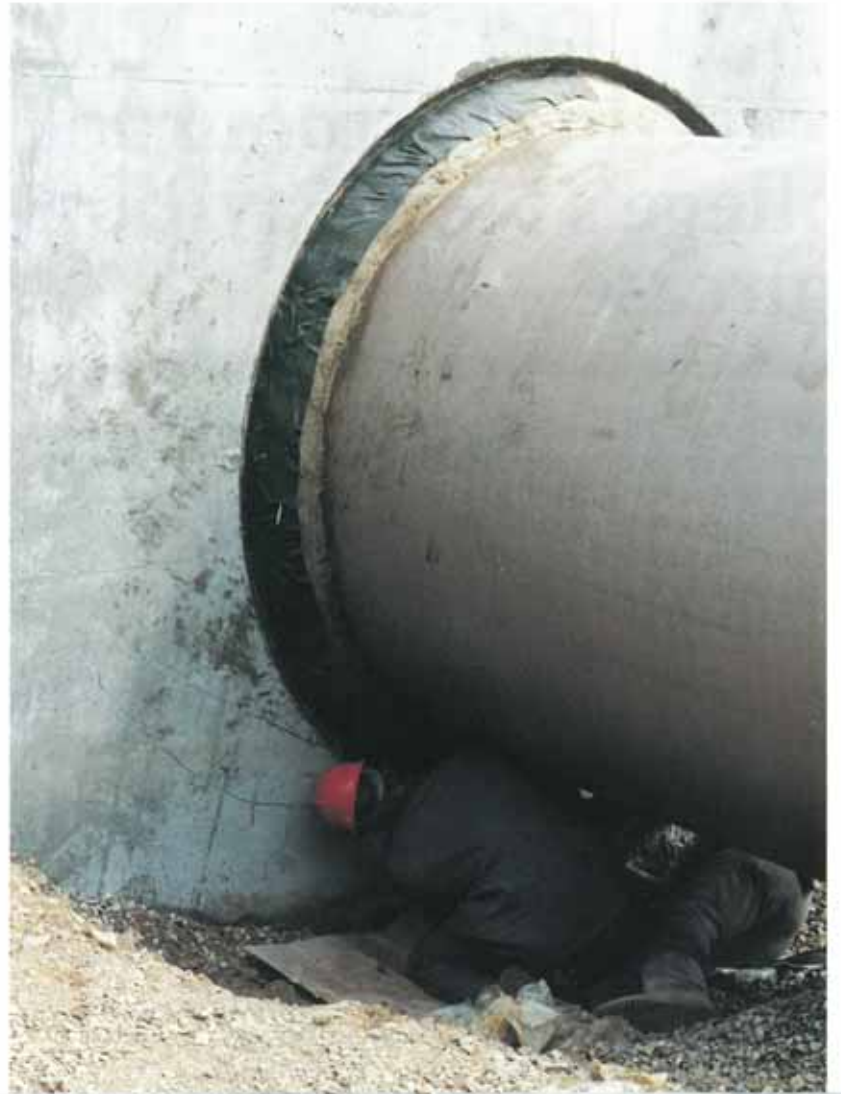
epoxy coating or A Rilsan powder coating. In addition, further protection was provided by the application of Denso Profiling Mastic followed by a wrap of Denso Tape. The Denso system was also applied to all bolted joints and fittings to comply with the Civil Engineering Specification for the Water Industry – 3rd Edition.

Denso Profiling Mastic is an easy-to-use lightweight mastic, which is more economical than conventional materials previously used for building up a profile prior to application of protective tapes, such as Denso Tape.

Demo Paste is applied to the coupling.

The final Demo Tape application.

Demo Profiling Mastic is used to build up the profile of the coupling prior to wrapping with Demo Tape.



Protecting Eastbourne College's New Pavilion Staircase

The R G Howell Memorial Pavilion at Eastbourne College was recently opened by Sir Colin Cowdrey; Dudley Wood, Secretary of the RFU; Mrs Diana Howell; and Mr David Winn, Chairman of the Old Eastbournian Association and also Chairman of Winn & Coales (Denso) Ltd. The new pavilion, which is a memorial to the late Ronald Howell, replaces the old sports pavilion on the College field.

Ronald Howell was first a pupil of Eastbourne College, then returned with a Cambridge blue in rugby and a first class honours degree as a member of staff from 1925 until retiring from the College in 1967. He was Treasurer of the Old Eastbournian Association from 1936 to 1968 and President from 1967 to 1992.

Importantly, hence the presence of Sir Colin Cowdrey and Dudley Wood, the R G Howell Memorial Pavilion is for considerable community use other than that precisely associated with the College.

Architects for the new pavilion were Stuart Calf Architectural Services of Cooksbridge, Sussex and the contractors were Bexley Construction of East Peckham, Tonbridge.

The contractors ran into an early problem when applying a protective coating to the steelwork of the staircase and the balcony, which runs along the full frontage of the pavilion, with cold and damp conditions pertaining, it was found that rust streaking was coming through the protective coating originally chosen shortly after application.

An answer to the problem came from Mr David Winn, who suggested to Bexley Construction that they should use Winn & Coales' Denso Protal Coatings. These provide effective anti-corrosion protection by forming a firmly bound corrosion inhibiting film on the metal surface and by covering the surface with a thick effective physical barrier against air and moisture.

The steelwork constructors first wire brushed and primed the metal staircase and balcony. This was then followed by two brush coats of Denso Protal 59AC to 150 microns minimum wet film thickness, followed by one coat of Protal 3080 white finish to 65 microns minimum wet film thickness. Full protection, with no signs of rusting, has now been obtained.

In the past, Eastbourne College has used their pavilion facilities to host many overseas rugby touring teams, including the New Zealand All Blacks (twice) and club teams from Romania, Zimbabwe, as well as New Zealand. Every September it is used as a pre-season training camp for Sussex county U16 and is also a coaching forum for all local schools with Dick Best, England rugby coach.

It has also hosted visiting cricket sides, including MCC, Sussex Martlets, Free Foresters. Other cricket matches recently held include Sussex 11 vs Essex 11 and Sussex U19's vs South African Schools 1993. Overseas cricket teams from Australia, France, Jersey, Holland, Denmark and New Zealand have also been hosted in recent years.

The R.G.Howell Memorial Pavilion with Protal coated staircase and balcony.



Norway Thinks Deeply

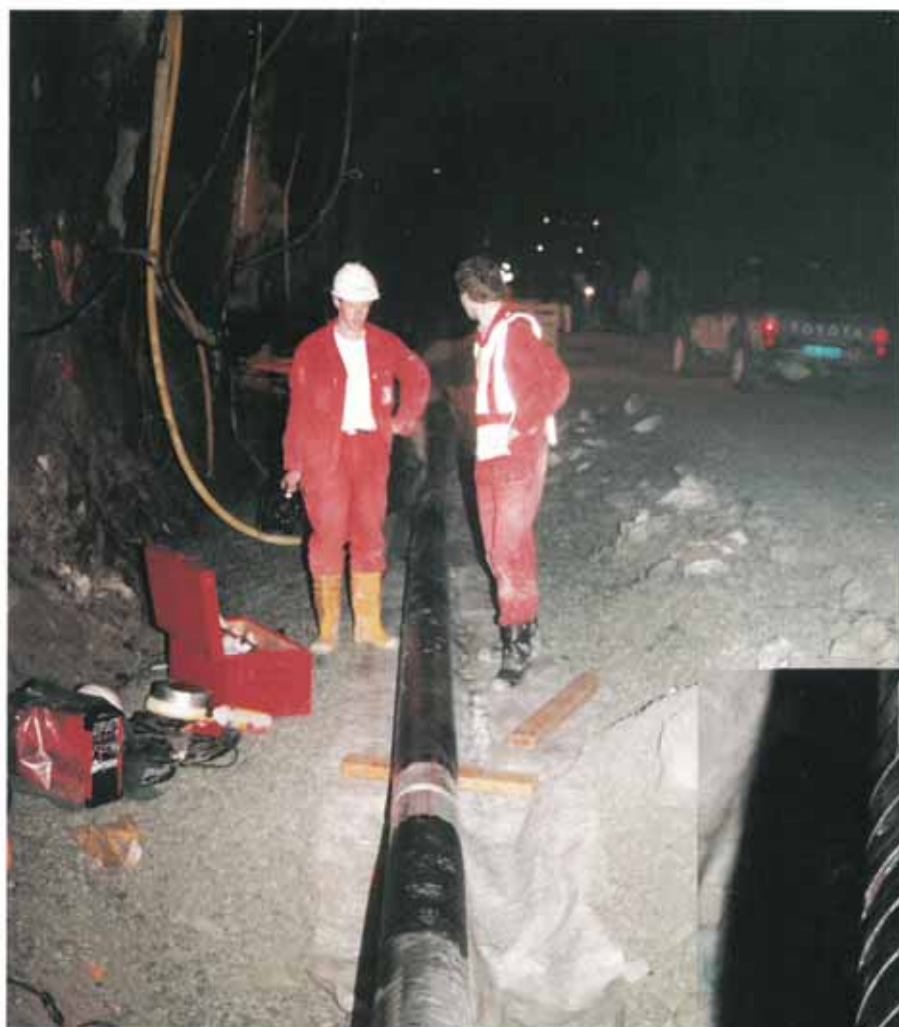
A Denso anti-corrosion system is being used in the world's longest and deepest road tunnel, of its type, the Hitra Tunnel, in Norway

The Hitra Tunnel, currently under construction will carry road traffic from the island of Hitra to the Norwegian Mainland and falls with a 10% gradient to a massive 264 metres below sea level before rising up again over a distance of only 5.6km.

The main contractor Selmer AS and the Norwegian Road Administration decided for safety reasons to use a Denso system comprising Denso Primer D with a double wrap of Densoclad 50 Tape to protect the stainless steel main water drainage pipe that collects seepage water from the tunnel.

The drainage water is then pumped up through the roof of the tunnel and emptied from a small island into the fjord above.

Densoclad 50 Tape protection.



The main water drainage pipe.



Pipe Wrapping Machine Saves Two Weeks for British Gas Southern

British Gas Southern's Gas Supplies in Reading, Berkshire, have recently undertaken a project to remove the existing coal tar epoxy (CTE) coating from three pipelines and re-coat using Densoclad 70 wrapping tape.

The three pipelines, a 150mm MP, a 400mm I/P and a 600mm HP, are shortly to be buried beneath a reinforced concrete protection pad and a traffic island which will form the access to a new shopping complex.

With the decision taken to remove 70 metres of existing CTE from each pipeline and replace with a double layer of Densoclad 70, the time estimated to complete the work was six weeks, including excavation. Using the Densoman Wrapping Machine, the project was completed in four weeks – including excavation, a saving of 33%.

According to the Transmission Operations Engineer at Reading, Colin Crosby, the use of the

Densoman Wrapping Machine proved invaluable, not only in terms of savings on time and material but in ease of use for the operators compared to applying the tape manually over a large area.



The pipeline is primed with Densu Primer D before wrapping.



The use of two Demosem Wrapping Machines in tandem speeded up the application of the Demoseal 70 Tape.



The Demosem Wrapping Machine gives a tight, uniform tape application.



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Cover: Densoclad 705 Tape rolling rig wrapped pipelengths for Mansfield Sewage Works. See page 2



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