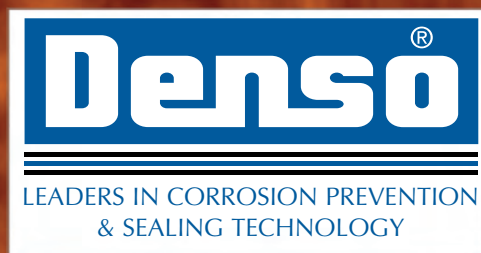




Volume 29 - Number 3

36" Pipeline being lowered into the ground, Denso Protal 7200 used on pipeline in USA. - see story page 7.

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LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Winn & Coales International Ltd Executive Directors, Meet The Queen

On Monday the 19th of July, Executive Directors of Winn and Coales International Ltd; Brian Dunsterville and Chris Winn attended a special reception at Buckingham Palace to meet Her Majesty, The Queen. This special occasion was in honour of the company's latest achievement; winning a prestigious Queen's Awards for Enterprise.



years. This result is a direct reflection of the quality, hardwork and dedication that all the staff at Winn and Coales International Group put into the products and services they offer to their clients.

"I am extremely proud of the consistent innovation that Winn and Coales International Ltd demonstrates. Receiving the Queens Award and meeting Her Majesty The Queen was a privilege and a career highlight." Brian Dunsterville – Executive Director.

Executive Directors Chris Winn (left) and Brian Dunsterville (below) meeting Her Majesty Queen Elizabeth II at Buckingham Palace.

Leading manufacturers of anti-corrosion and sealing products, Winn and Coales International won the award for International Trade. This award recognises the substantial growth in sales across the globe, despite the worst recession for forty



For quick identification of the relevant product type used in each story we have used the following colour codes:

Protective coatings for.....

- BURIED PIPELINES & LPG VESSELS
- EXPOSED STEEL & PIPEWORK
- SUB SEA PIPELINES & JETTY PILES

Protective linings for.....

- STORAGE TANKS, PUMPS ETC

Sealing & waterproofing.....

- SEALING MASTICS
- MEMBRANES & FLASHINGS
- INDUSTRIAL TAPES

Achieving a Queen's Award for Enterprise 2010 - United Kingdom



LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Denso Heatshield Protection for Process Vessel

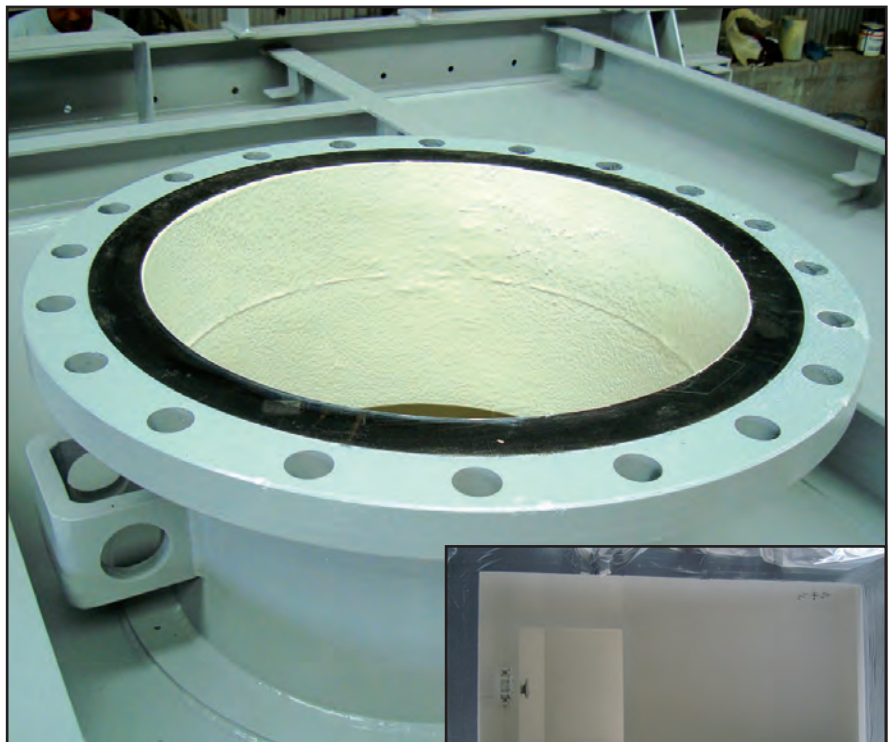
Specialist metal fabricators MMPI Ltd of Stourbridge have recently completed an order for the construction of a large separation tank which will handle oily water at a temperature of 120°C.

MMPI's customer, Peerless Europe Ltd of Braintree, Essex, specified that the internal surfaces should be protected with Denso Heatshield Special, an epoxy resin based coating reinforced with 0.4mm glass flakes. This was applied to all of the carbon steel surfaces and also to some of the stainless steel. In the latter case this was because of the proximity of carbon to stainless steel, which could otherwise set up bi-metallic corrosion.

MMPI first prepared the steel surfaces to the Swedish Standard SA2½ (ISO 8501-1) then applied the Denso Heatshield Special by heated two-component spray equipment to a total dry film thickness of 750 microns minimum. The

cured coating was then tested with a spark detector for freedom from pinholes and "holidays".

Denso also supply a brush applied Heatshield Stripe Coat for use on coating welds, sharp edges, bolts etc before overcoating with the spray applied Heatshield Special.



Above: All internal surfaces were coated with Denso Heatshield Special.

Left: The separation tank.



Project Summary

Product type:
Industrial Linings

Country: United Kingdom

Location: Stourbridge

Object: Separation tank

Problem: Internal protection

Product Denso

solution: Heatshield Special



LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

New SeaShield Pile Cap Completes Pile Protection

With the help of Kaymac Marine a pile was recently fitted with the new Seashield Pile Cap assembly in Pembroke Dock, South Wales.



Before the Seashield 2000FD jackets and Pile Cap is fitted, the pile is wrapped with Denso Marine Piling Tape

The pile cap assembly is designed to offer extra protection over the area of concrete above the pile, an area prone to re-bar corrosion causing the blowing of concrete. After protecting the pile with our Seashield 2000FD system up to the soffit, the concrete above was firstly cleaned to remove loose bits and marine growth and then primed using Denso Epoxy Concrete Grade Primer. All deep pits and cracks were filled using Splash Zone Mastic and once cured a single coat of Denso ST Mastic GF was applied and left to cure overnight.

With the concrete fully treated the next step involved drilling holes into the soffit and using resin fixing bolts pre-aligned with the Pile Cap assembly. Once the bolts were set the assembly was

put together using 316 stainless steel nuts and bolts. The top seal was made using Splash Zone mastic which when compressed down, forms a seal. The bottom



Above: The complete SeaShield system.

Below: Close up of the SeaShield 100 system with new fixing bands which was also installed as part of the same project.



Close up of the seal between the Denso Pile Cap and concrete jetty soffit.

seal was made using a self-adhesive foam strip.

Finally the void in the Pile Cap assembly was filled using a two component expanding foam. The result, a completely protected area, once prone to corrosion.



Project Summary

Product type:
Sub Sea / Splash Zone Coating

Country: United Kingdom
Location: Pembroke Dock
Object: Jetty Piles
Problem: Corrosion prevention
Product solution: SeaShield 2000FD and Pile Cap System



LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Denso Utilizes Hands-On-Training for Waterworks

Denso Petrolatum Systems have always been a large part of Denso North Americas' business. This is no more evident than in Ontario's growing waterworks industry where Denso is considered the benchmark for corrosion prevention. A key reason for this continued growth is our presence in the area of hands-on-training.



Hands-on-training allows Denso the opportunity to directly show a wide variety of industry people how to utilize and properly apply our petrolatum

systems. These live application demonstrations not only give waterworks operators first hand knowledge and training hours that are required to maintain their operator licenses, but it also allows engineers and inspectors the chance to ask questions about our products and see how they would best use Denso materials for their specific projects.

Waterworks training centres throughout the province operate with this same hands-on approach putting all the relevant industry people into a classroom format that promotes this type of training. Over the past several years Denso has emphasized that hands-on-training become part of the municipal specifications. This assures the engineer that the Denso system that has been specified is going to be correctly installed before work begins and this also helps the contractor to properly understand first hand, what they should be doing in the field.



This hands-on-training approach is just one more reason why Denso continues to be the leader in Waterworks corrosion prevention.

Project Summary

Product type:
Buried Steel Coating

Country: Canada
Location: Ontario
Subject: Denso product training
Product solution: Denso Tapes and Mastics



LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Crude Oil Pipeline Protected with Protal 7200

Upon completion, the TransCanada Keystone Pipeline will be over 2,100 miles stretching from Hardisty, Alberta Canada to Houston, Texas. The massive 36" crude oil pipeline is one of the world's largest pipeline projects which began 3 years ago and will continue for over the next 2 years

The project is being constructed in Spreads (approx. 100 miles each) with most contractors selecting Protal 7200 as the girth weld coating. Protal 7200 has outstanding physical properties and fast cure ability, which allows the contractors to use the same coating for the protection of all

weld joints including girth welds, tie-ins and bore joints, as well as "holiday" repairs.

Protal 7200 is a two-part, 100% solids epoxy coating that can be applied in one coat up to 50 mils. Additionally, it has high impact and abrasion resistance for directional drill applications. Furthermore, the extremely fast cure makes it ideal for tie-ins and "holiday" repairs. Using Denso's "Accelerated Cure Specifications



Map of Keystone Pipeline

for Repairs", the contractors were able to achieve a 5 minute cure with the Protal 7200 when repairing "holidays" in the FBE during the pipeline "lowering-in" process.

Unlike FBE, which requires expensive and heavy equipment, Protal 7200 only requires a brush or roller to apply. The contractors were able to coat up to 150 weld joints per day without the costly risk of downtime due to equipment failure. Due to these cost savings, Protal 7200 is ideal for a variety of field applications including girth welds, tie-ins, HDD applications, station piping, fittings and repairs to FBE.

Project Summary

Product type:
Buried Steel Coating

Country: USA and Canada
Location: Central USA
Object: Crude oil pipeline
Problem: Corrosion prevention
Product solution: Denso Protal 7200



Repairing "holidays" with Protal 7200 Repair.



Above: Protal 7200 exhibits outstanding "self-leveling" characteristics.

Left: Mainline crew brush applying Protal 7200 at 20 to 35 mils on girth welds.



LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Solomon Island Navigation Piles Protected with Denso SeaShield 80 System

Nawae Construction was the successful contractor for the Solomon Island Navaid's rehabilitation project, funded by the EU. The project involved protecting 42 x 18 metre long, 813 mm diameter marine piles in the splash zone area of each pile.

Project Summary

Product type:
Sub Sea / Splash Zone Coating

Country: The Solomon Islands

Location: Not specified

Object: Navigation Piles

Problem: Corrosion prevention

Product

solution: SeaShield 80



Because the piles are not load-bearing, the driven length and surface levels were calculated (splash-zone) allowing the Denso SeaShield 80 System to be applied before driving.

The Denso SeaShield 80 System has a proven 40 year track record for splash-zone protection.





LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Denso's S43 & R23 Butyl System Protects Afrox Oxygen Line

Cycad Pipelines were contracted by Afrox in Witbank (Mpumalanga) to install a new 2km x 150mm diameter oxygen pipeline.

The consultants, Corrosion & Technology, specified our Denso S43 / R23 Butyl Tape System to be machine applied with a 55% overlap. Denso supplied the tape which was applied by Densoman wrapping machines.

Project Summary

Product type:
Buried Steel Coating

Country: South Africa

Location: Witbank (Mpumalanga)

Object: Oxygen Pipeline

Problem: Corrosion prevention & mechanical protection

Product solution: Butyl S43 / R23 System





LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Tokstrip Sealant Chosen for Walsall Flooding Control System

In order to improve storm water retention and flooding alleviation, Severn Trent Water installed a Gravity Return Storage (GRS) system based on two sites alongside the River Tame at Walsall and centred on the use of Hanson precast concrete box culvert sections.

The construction work was carried out by G.F. Tomlinson & Sons Ltd of Worcester and sub-contractors D.A.B Civil Engineering and MAY Contractors Ltd.

An essential requirement was the provision of a flexible, watertight seal between all box culvert sections. This was provided by the use of some 5,000 metres of Tokstrip sealing strip.

At the James Bridge GRS site in Walsall, G.F. Tomlinson and sub-contractor D.A.B. Civil Engineering installed 3200 tons of Hanson precast concrete culverts to an invert depth of 7 metres. Interlocking sheet piles were driven down 9m in an area 70m x 24m. This was then excavated and framed up using a heavy duty shoring system.

The box culvert sections, each

weighing between 14 to 24 tonnes with cast on end walls, were delivered to site with the joints pre-primed with Tokstrip Primer at Hanson's works to help speed up site installation.

Some 3,400m³ of water capacity is accommodated within the 350 linear metres total length., installed in six lanes. It was built with 210 box culverts, 3m wide x 3.6m high x 1.5m and 2.0m lengths and incorporates a dry weather flow channel. 3,300m of Tokstrip plus primer was used here.

The Bescot Road site is within



Above: The jointed culverts in position.
Below: Tokstrip being applied to a culvert joint face

one mile of James Bridge. Here, 1600m³ of water capacity is accommodated. The contractors installed 5 lanes of culverts in 40m lengths in a similar depth sheet piled excavation. Again incorporating a dry weather flow channel, 105 Hanson box culverts 3m x 3m x 1.8m and 2.0m were installed using 1700m of Tokstrip with primer.

Project Summary

Product type:
Sealing Mastic

Country: United Kingdom
Location: Walsall
Object: Box culverts units
Problem: Sealing culvert units
Product solution: Tokstrip





LEADERS IN CORROSION PREVENTION & SEALING TECHNOLOGY

Denso Protal Protection for U.A.E. Pipeline

The current business and population growth in Dubai, U.A.E. requires the expansion of it's power generating facilities, consequently leading to increase in gas demand.

To facilitate this expansion in power generation, it has been implemented that approximately 200km of new 30" and 48" diameter pipelines are to be constructed over the next 3-4 years. So far approximately 10,000 Litres of Denso Protal 7200 have been successfully utilised for the protection of the pipe girth welds and the 48" diameter pipe bends that you can see in the photos.

Our approved applicator A.P.S. - Anticorrosion Protective Systems L.L.C. Successfully applied the Denso Protal 7200 System with a Denso trained team by Heated Plural Spray machine and manually with the Denso Protal Applicator Pads and brushes.

During the application process, test panels coated with Denso

Protal 7200 were sent to an independent laboratory for thorough testing to ensure that the system completely complied with the project specification. The Denso Protal 7200 system passed with flying colours.

Project Summary

Product type:
Buried Steel Coating

Country: United Arab Emirates

Location: Dubai

Object: Pipeline

Problem: Corrosion prevention

Product

solution: Denso Protal 7200



Above and Below: Pipe lengths coated with Denso Protal 7200 prior to installation on site.





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Most Denso products are covered by patents and the words "DENSO", "DENSYL", "ARCHCO-RIGIDON", "DENSOPOL", "DENSOCLAD", "TOKSTRIP", "CORROCLAD", "SYLGLAS", and "PROTAL" are registered trade names in the UK and many other countries.



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