



CORROCOAT NEWS

ANOTHER NORTH SEA PIPE COATING CONTRACT COMPLETED



Over the past three years Corrocoat Corrosioneering has carried out many pipe lining projects for the BP Magnus Platform in the North Sea. In the last few months we completed a contract for the latest of these – the internal and external corrosion protection of a 36" diameter caisson and its associated pipework weighing approx 27 tonnes and measuring 30 meters in length.



The caisson was fully grit blasted and then coated internally with Corroglass 600 using our own in-house pipe spraying equipment, before Plasmet Zip E was applied to the externals.

We have a proven track record of providing long term corrosion protection over a wide range of pipe applications and it is our proud boast that many of the pipes, manifolds and caissons coated 25 years ago remain in service today.

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In this issue

Page 2



Cooperation Provides Effective Solution On Pile Casing Contract
Kazakhstan Operation Now Up and Running

Page 3



Corrocoat USA Provide Cost-Effective Solution
Corrocoat Japan And Philippines Cooperate On Reactor And Tank Contracts

Page 4



Desalter Vessel Refurbished And Protected At Oil Refinery
Indian Power Plant Issues KCPL With A Performance Certificate

Page 5



Case File:
Pipe Lining And Field joint Repair

Page 6



On-Going Acid Tank Contracts For Corrocoat Indonesia
KCPL wins major contracts for internal coating of pipes for handling seawater

Page 7



Large Bore 132" (3.35m) Butterfly Valves
Corrocoat Achieves NORSOK Approval
2014 Year Planners Available Now

Page 8

New Appointments At Corrocoat USA
Exhibitions
New Licensees

Cooperation provides effective solution on pile casing contract



By pooling the substantial expertise and resources of its Johannesburg and Cape Town operations, Corrocoat SA Pty has recently completed a contract to coat 150 pile casings on site at a pipe fabricator in Johannesburg. The contract was completed using a heated plural feed spray rig and the fabricator's own installed wheelabrator blast machine and pipe rollers.

The casings are each 1.4m diameter x 13m long, they were grit blasted then welded together on site in Cape Town to form the piles. Corrocoat's team then repaired the field weld joints, as well as carrying out damage repairs. They then coated the mild steel anode bracelets which fit around the casings, as well as the back face of the zinc-alume anodes.

The piles are not sacrificial, as is normally the case. Although they were filled with reinforced concrete, the design is based on the casing remaining intact and providing strength to the pile. Therefore the corrosion protection must protect the steel casing against degradation for the life of the pile.

High production rates were achieved – a minimum of 10 casings per shift were blasted and coated, ensuring the project was finished ahead of the specified time frame.

Kazakhstan operation now up and running

Corrocoat Caspian, our new joint venture in Almaty, Kazakhstan is now fully operational.

Said Sales & Business Development Director, Rob Cole: "Corrocoat has operated successfully in Central Asia for many years now and the opening of this new JV facility will allow us to expand the range of opportunities for our technology in Kazakhstan."

"With Corrocoat trained management and applicators, a comprehensive range of products in stock, a fully equipped workshop and technical support from our international network, we will be able to deliver an exceptional service. Almaty is the perfect location for our base – It is the largest city in Kazakhstan, a major commercial centre and ideally placed to service the needs of the growing oil, gas and minerals sectors."

Kashagen oilfield, Kazakhstan



CORROCOAT NEWS

CORROCOAT USA PROVIDE COST-EFFECTIVE SOLUTION

Corrocoat USA has just recoated a kaolin clay pulverizer tank for one of the world's leading chemical companies. The tank and its associated grinder, separate and reduce kaolin clay from coagulated chunks to fine raw kaolin. The tank is 4'9" diameter x 9'6" tall and the agitator shaft includes eight four-pronged blades.

The classic method for reducing the wear caused to the tank walls and the blades is by lining each with 3/4" thick rubber. Using this method, the client had a preventative maintenance schedule of nine months for the blades and 24 months for the tanks. To complete this, the tank and blade had to be taken out of service, disassembled, sent to a rubber lining contractor who would remove the old rubber before re-lining. The process was extremely expensive and typically took 2-3 months to complete.

In order to test our technology in this extremely abrasive environment, Corrocoat USA first performed a rubber repair at the tips of one of the blades. The existing rubber was removed; the steel blade blasted and primed using Plasmatec ECP. The blade and the rubber interface were coated with two coats of Plasmatec HTE. Using a former Plasmatec HTE was poured to create a 3/4" thick Plasmatec HTE composite blade tip.

After six months of service without problems, the client felt comfortable enough to use our technology to coat all the blades, using Plasmatec HTE at 120 microns, and the respective tanks, using Polyglass VEF + Polyglass VEF WR at 80 mils system dft.

The client now prefers to use Corrocoat coatings instead of rubber for this application as we are more cost effective on the initial application, offer a superior life cycle and a more cost effective repair procedure. To date we have relined four of the 39 pulverizer tanks at the plant and four sets of blades.



CORROCOAT JAPAN AND PHILIPPINES COOPERATE ON REACTOR AND TANK CONTRACTS



Following the success of the previous work at the Coral Bay HPAL facility in the Philippines, Corrocoat Japan, working with subsidiary Corrocoat Philippines, successfully carried out the anti-corrosive coating of four MS Reactors and three large tanks for the Nickel Asia Corporation's Taganito High Pressure Acid Leach.

The hydrometallurgical nickel processing plant uses the high-pressure acid leach (HPAL) process where the great qualities of Corrothane XT i.e. good chemical and high temperature resistance, have been proven to meet the specification for the production process. The HPAL project required more than 9,000 litres of Corrothane XT which was applied to the internals of seven tanks, nozzles and attachments.

Construction work on this new plant is on schedule for commissioning in late 2013. The project represents the single largest investment in the Philippines minerals sector to-date.



DESALTER VESSEL REFURBISHED AND PROTECTED AT OIL REFINERY

Corrocoat Egypt has just completed a complex refurbishment and corrosion protection contract on a desalter vessel for the Suez Oil Company at its SUCO Gabal Zait plant in Egypt. The desalter, which is used to remove salt from crude oil, has been in use for some time but as part of an ongoing maintenance programme in this aggressive environment, inspection and corrosion protection is vital to ensure it continues to operate efficiently.

The Corrocoat team first grit blasted the internal surfaces to ISO 8501-1, Sa2 ½ - all the abrasive and dust being removed by hand and vacuum cleaning. Corrosion inspection revealed deep pitting corrosion in certain areas so after coating with POLYGLASS PPA primer, CORROFILL VE was applied to the deep pitted areas. POLYGLASS VE HA was then used to build thickness on flanges and covers, followed by two coats of POLYGLASS VEF to achieve a minimum of 1200 microns.

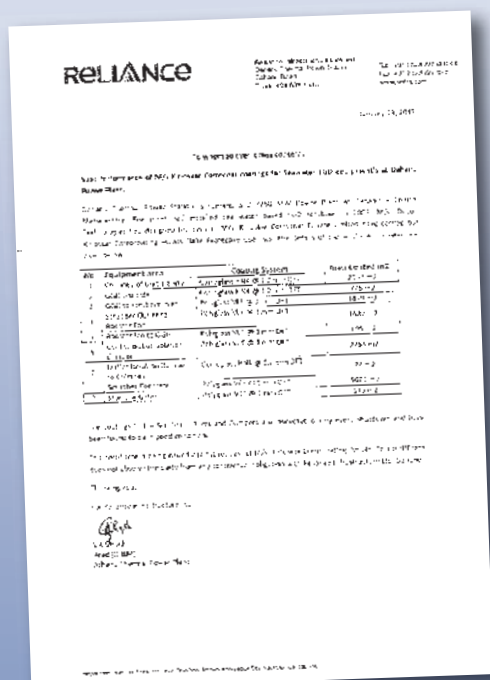
The contract was completed in 10 days and Corrocoat Egypt had no hesitation in providing the customer with a five year guarantee.



Indian power plant issues KCPL with a performance certificate

Kirolskar Corrocoat Private Ltd (KCPL) – Corrocoat's joint venture in India was so successful when it coated the chimneys, scrubbers, ducts and dampers at Dahanu Thermal Power Station, its owners and operators - Reliance Infrastructure have issued a performance certificate.

Key areas of equipment are inspected during every shutdown at the power station and even after five years continuous service, the performance of the Corroglass HN4 and Polyglass VEF is still excellent. This certificate is testimony to the effectiveness of our products and the skill of KCPL's engineers.



CASE FILE

PIPE LINING AND FIELDJOINT REPAIR

SEAWATER DESALINATION INTAKE AND BRINE DISCHARGE PIPES

CLIENT

Uramin (now Areva) Trekkoppie Uranium Mine in Namibia as owner
WSP-Africa as design and consulting engineers
Murray and Roberts as installation contractors

APPLICATION DATE

Mainline coating – 2008, Field Joints – 2009

SCOPE OF WORK

Line and Coat circa 3km of 1200NB x 18.25m length mild steel pipes at pipe fabricator's factory in Johannesburg, South Africa.

Line field-weld joints on site in Namibia after pipes were welded together in strings, and again when the strings were welded together during pull-out to sea phase.

The pipes were first welded together in 152m length strings, concrete weight-coated and the weld joints coated. Once all strings were completed the strings were welded together and the coating repaired under very demanding time frame, as the pipes were pulled out to sea.

COATING SYSTEM

- External: Zip-E at 1.2mm dft
- Intakes – first 100m: VEF @ 1.2mm + Biofoul
- Internal – remainder: Zip-E @ 1.2mm dft

CORROCOAT CREDENTIALS

The design life of 30 years called for the best in corrosion protection for these submerged seawater intake and brine discharge pipelines.

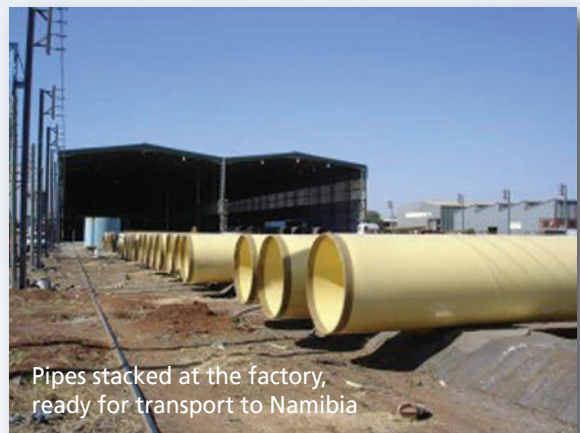
Zip-E was specified by the corrosion consultants as the only material possessing the required long-term diffusion resistance, cathodic disbondment resistance, flexibility and life-expectancy for this application.

A second consideration was the ability to repair the field joints on site to the same quality standards as the factory applied mainline coating, and under the tight time frames necessitated by the welding schedule on site.

A third consideration was the availability of a single source guarantee by having the coating applied by the coating manufacturer's dedicated contracting division.



The pipes being coated in the factory



Pipes stacked at the factory, ready for transport to Namibia



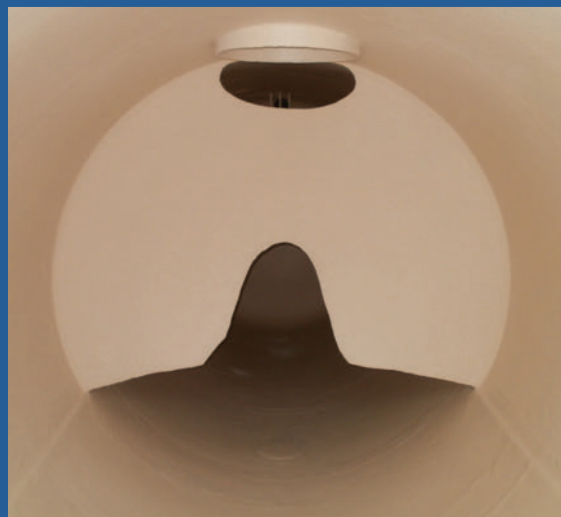
Pipes being welded together and concrete weight-coated on site

ON-GOING ACID TANK CONTRACTS FOR CORROCOAT INDONESIA

For many years Corrocoat Indonesia has been internally coating the tanks used to hold the acids which stimulate oil flow at the refineries of three US service majors.

In the last few months alone, they have completed contracts to coat a small mixing tank for BJ Services, a 6000 gallon tank for Halliburton and four 160 barrel tanks for Dowell Anadrill Schumberger. In addition the E & P division of the State Oil Company awarded them contracts for coating two mixing tanks and a road tanker.

The acids used in these tanks are a mixture of chemicals - predominately hydrogen chloride. By coating them with a laminate layer, VEF and VE Veilcoat to 2500 microns an excellent service life is being achieved - Many tanks have been in regular use for over 10 years with zero failures reported.



KCPL wins major pipe coating contracts



India has a large coastline and sea water is increasingly becoming the only choice for plant cooling water purposes in large petrochemical & power plants. The Indian power industry is increasing capacity with several new coastal projects which have resulted in large contracts for Kirloskar Corrocoat Private Limited (KCPL).

KCPL has an impressive track record in the internal coating of pipes for sea water. In 2012 they coated over 90,000 m² of pipe at four power plants and have recently secured contracts for a further 90,000 m² at two new projects. Polyglass 100 is the preferred material for pipes carrying cooling sea water. The orders were won despite stiff competition from contractors offering cheaper

alternatives but the impressive low life cycle cost of Polyglass 100, combined with KCPL's proven track record for completing large projects to tight schedules won the orders for them.

KCPL has also been awarded a US\$3.2m contract – thought to be the largest single order ever won by a Corrocoat operation, by Reliance Industries for external pipe coating at its massive Jamnagar petroleum refinery and petrochemical complex on India's North West coast. The contract involves coating the externals of some 170,000m² (approx 150km) of pipe, using Poly 100 and VEF.

CORROCOAT NEWS

... and from the archives – Large Bore 132" Butterfly Valves



Corrocoat News was first published in January 1986 as a bi-monthly newsletter, originally intended to keep everyone in the Corrocoat organisation informed of new contracts, new products and personnel, and technical developments.

One area of engineering expertise reported on regularly in early editions was the refurbishment and repair of large bore butterfly valves – an area we specialise in. Not only do we refurbish this type of valve, we also re-design and modify some of their component parts which result in an extended service life. This work has resulted in customers commissioning us to design, manufacture and corrosion protect new large bore butterfly valves.

The March 1986 edition of Corrocoat News showed the first ever 132" butterfly valve being refurbished for Longannet Power Station. We are delighted to report that since then we have worked on all such valves for this power station in addition to 1,000s more for customers world-wide.

CORROCOAT ACHIEVES NORSOK APPROVAL

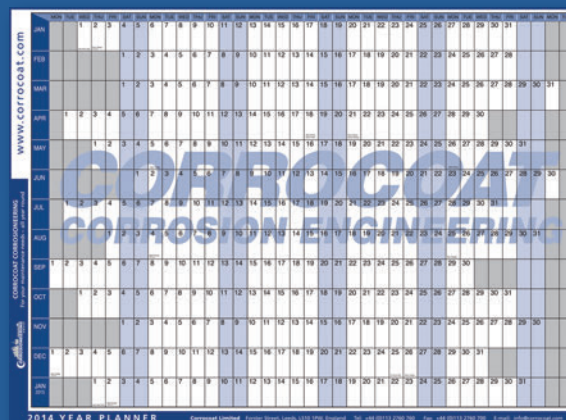
Corrocoat has now achieved NORSOK Approval for Corrothane XT, Polyglass VEF, Zipcoat and EcoFlake.

The NORSOK standards were developed by the Norwegian petroleum industry to ensure adequate safety, added-value and cost effectiveness for petroleum developments and operations. Furthermore NORSOK standards are as far as possible, intended to replace individual oil company specifications and serve as references in the Authorities regulations.

This certification will further enhance Corrocoat's position as a leading supplier to the oil and gas industry.

2014 year planners available now

The 2014 version of our highly popular
Year Planner is available now..



Giving a clear overview for project planning and order control, our wall planner gives the users a full 13 months at a glance with plenty of writing space for each day of the year. A must for every site office wall, if you would like your own free wall planner(s) please e-mail us now and we will get them off to you in the post.

CORROCOAT NEWS

Exhibitions in focus

With the support of our partners we are showcasing Corrocoat products and services at the following exhibitions:

KORMARINE 2013
International Marine, Shipbuilding & Offshore Exhibition

Kormarine 2013

Busan, South Korea, October 22-25th 2013

As we go to press, Corrocoat is exhibiting at Komarine – One of the leading marine and shipbuilding trade shows in Asia if not the World. Many important events and forums are taking place alongside the show to allow attendees to share information on the global maritime industry.

**EUROPEAN
OFFSHORE
& ENERGY 2014**

European Offshore & Energy 2014

NEC Birmingham, UK, April 8-10th 2014

The inaugural European Offshore & Energy exhibition and conference will bring the upstream energy market under one roof, providing visitors with an ideal opportunity to learn about the industry's latest product innovations, solutions and services.

NEW APPOINTMENTS AT CORROCOAT USA

Shalene B. Estes

- Marketing Manager

Shalene is a seasoned marketing professional with over 14 years of experience in all areas of marketing communications. She holds a BA in Environmental Studies and Planning from Rollins College, Florida, a graduate certificate in Urban and Regional Planning from the University of Central Florida and a Masters of Business Administration (MBA) from Marylhurst University in Portland Oregon. We wish her every success in her quest to help us continue to grow our business in the USA.



ZIPCOAT AND POLYGLASS VEF RECEIVE APPROVAL IN FLORIDA

Following a review by The US Bureau of Petroleum Storage Systems, the Florida Department of Environmental Protection has approved Zipcoat and Polyglass VEF for Petroleum Secondary Containment and AR3 coating of concrete and metallic above and under-ground storage tanks. This type of work is an important part of Corrocoat USA's business and this approval will help us to exploit all opportunities.

NEW LICENSEES

We are delighted to welcome two new licensees who will allow us greater reach in Ireland and The Czech Republic:

Rathmacullig West, Farmers Cross,
Ballygarvan, Co.Cork, Ireland
Tel: (353) 21 4312002
Email ocg@eircom.net

Topolová 1456/434 01 Most
The Czech Republic
Tel: (420) 724 204 576
Email Tomas.Rucky@abstain.cz

Corrocoat – Leading the field

Established in 1975, Corrocoat is one of the world's leading names in anti-corrosion technology, with over thirty years of experience in the development, manufacture and application of high performance corrosion-resistant coatings.

Based in the UK, Corrocoat operates across five continents from more than thirty locations worldwide. In addition, the company exports its coatings to users across the globe, offering long term solutions to corrosion problems.

Corrocoat's propriety high technology coating systems are backed up by advanced levels of technical expertise and proven performance attainments. Sustained investment in R&D and the design and testing of new methods and materials keeps Corrocoat at the leading edge, and gives the company the necessary flexibility of approach to combat the many different corrosion problems faced by modern industry.

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