

# Evening Technical Meeting: Subsea Electrical Technologies and Innovations in Pipeline Construction & Materials



Wednesday, 11<sup>th</sup> October 2017 ✦ Parmelia Hilton Hotel (Swan Room), Mill St. Perth

Onsite Registration 5.30 pm; Presentations 6.00 pm – 7.30 pm; Networking over drinks and finger food 7.30 pm – 8.30 pm

To register for the event visit [www.SUTETM11Oct2017.eventbrite.com.au](http://www.SUTETM11Oct2017.eventbrite.com.au)

Chaired by: TBC

## Latest Innovations in Pipeline Construction and Integrity Management

**Mathieu Beaujon, Regional Commercial Manager APAC, SERIMAX**

Last years have seen significant efforts put into new technologies and innovations to optimize costly offshore operations on pipelay vessels. The “firing line” has been scrutinized by the industry to find ways to improve productivity without compromising the integrity and quality of CRA pipelines. Critical path activities such as the fit up of two CRA pipes together is a key area of improvement. Because Linepipe end matching is now mandatory for almost all CRA pipeline projects, laser technology called cleverscan is now used for pipe end laser dimensioning and sorting. By optimizing fit up time and fit up quality, vessel production and pipeline integrity are improved. Serimax also developed a full range of technologies to enhance pipeline integrity such as the “Roxane” gas purging and monitoring system or “Scanvision” tool all integrated onto the ILUC (Internal Line Up Clamp), or “Cleverweld”, a fully automated integrity management solution designed for customizable, fit-for-purpose pipeline production reporting, full traceability for welding, NDT, field joint coating, and data storage from anywhere in the world. The presentation will detail how Serimax think and developed all their latest innovations, their benefits and how they fit in the big picture of a pipeline project, from linepipe manufacture to final offshore installation. A demonstration of the Cleverscan tool will also take place during the ETM.

*ETM programme is subject to change*

## Pre-Qualification Testing of Styrenic-based Wet Insulation System and Castable Field Joint for Offshore Pipelines

**Marcos Mockel, Senior Manager, Global Technical Solutions, Pipeline Performance, Shawcor**

The presentation outlines Thermotite® ULTRA™, a styrenic-alloy insulation system and NEMO 1.1 field joint coating. ULTRA™ provides a lower thermal conductivity and higher strength than conventional blown polypropylene foam systems. Consequently, it provides a thinner solution and suitable for greater water depths. NEMO 1.1 is an epoxy-urethane hybrid system that is suitable as field joint coating system and achieves a high level of bonding to the adjacent styrenic, olefinic and urethane based wet insulation systems. NEMO 1.1 material overcomes the challenges associated with traditional polyurethane (PU) systems and at the same time allows for cycle times similar to PU systems. A pre-qualification test has been carried out using Thermotite® ULTRA™ and NEMO 1.1. The results are shared, including full scale simulated service test, bending and roller box test.

## Application of Composite Technology in Deepwater

**Benoit Lamoureux, Director, DORIS Engineering Australia Pty Ltd**

Thermoplastic composite pipe (TCP) is considered as a promising technology to enable cost effective field development. This presentation will review the current state of the art for TCP application, the technical limits, the selection criteria and the benefit expected for subsea deepwater and ultra-deepwater environments. Comparison between the use of TCP solution and equivalent steel pipe's technology will be provided for typical of field developments.

## Offshore and Subsea Electrical Technologies as Economic Enablers

**Peter Baker, Senior Subsea Engineer, SPEC Consultancy**

New offshore oil and gas developments have to compete even harder for economic viability at current global oil and gas prices. However, offshore technologies have been developed enabling marginal or even currently unviable developments to become more competitive. A number of electrical technologies are now available for use as long as the correct qualification steps are taken to manage the risk of their introduction. Typical technologies include: Active flowline heating (Direct Electrical Heating, Electrical Trace Heating); All electric subsea production systems; Long distance offshore power transmission and distribution; Gas to wire. In the right applications, using one or more of these technologies can change the economics of marginal offshore developments, allowing lower cost developments to go forward in this more competitive environment.

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## REGISTRATION FEES:

Student/Individual/Corp Members \$30\*: Non-Members \$50: (additional \$5 if paying on night)  
5 Ticket Member Pass: \$125, 5 Ticket Non-Member Pass: \$225

CPD = 1.5 hrs

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