

SUT YES! UWA O-Tube Site Visit

Report on YES! Event

University of Western Australia O-Tube, Shenton Park, Thursday 1st September 2016

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On the 1st of September, a group of almost 30 young engineers visited the Large O Tube facility, located in Shenton Park. The O-Tube is a world-first facility capable of circulating 60 tonnes of water, allowing for ground-breaking research on the effects of tropical cyclone conditions on subsea infrastructure. The site visit was led by Terry Griffiths (Director, Aurora Offshore Engineering) and David White (Professor, Centre for Offshore Foundation Systems).

The site visit comprised a vast range of interactive exhibits, which attendees were free to explore at their own leisure. Key features of the visit included;

- The large O-Tube, with artificial seaweed frond mattresses; an emerging technology which has been used as an effective form of scour protection and erosion control of seabed structures.
- A presentation by David White on the STABLEpipe Joint Industry Project; a collaborative initiative between UWA and industry to improve the reliability and reduced the stabilisation costs for operators of pipelines, flexibles and umbilicals under extreme loading conditions.
- An interactive mini O-Tube exhibit where attendees were encouraged to guess at what current velocity scour and erosion would occur along a pipeline cross-section.
- A section of the 134 km first trunkline which carries gas and condensate from the North West Shelf platforms to the onshore gas plant in Karratha, WA (which attendees could sit inside!).
- Additional instruments and measurement devices used for research including; model concrete mattresses, model subsea foundation structures, and an exhibit of final year thesis project used to model of the roughness effects of different seabed materials on flexible pipelines.

Technical staff were available to answer any and all questions regarding each of the exhibits presented, and an afternoon tea was provided by UWA. A big thanks to UWA for sponsoring the event and further thanks to Terry Griffiths and David White, for showing the YES! community some of the great research that is being conducted between academia and industry.

Looking forward to seeing you all at the YES! quiz night scheduled in November!

