

DEEPWATER

MONITORING SYSTEM INSTALLED ON PIPELINE AND SCA: NORTHWEST COAST OF WESTERN AUSTRALIA

SunStation™, V-String™ and MA-1™ will monitor CP for pipeline and production hardware.

Deepwater Australasia Pty. Ltd. (Deepwater) was contracted by Subsea 7 on behalf of Woodside to supply a SunStation™ CP Monitoring System for monitoring the potential of an attached pipeline using a V-String™ reference electrode and to monitor the output current of a MA-1™ monitored anode on the Spool Connection Assembly (SCA) to be installed as part of WEL's Greater Western Flank Phase 2.

The SunStation™ subsea readout equipment is powered by solar panels and operates at depths of up to 3,000 meters to display numerical data measure from the subsea asset. The SunStation™ works in conjunction with a monitored anode and reference electrode to track the performance of CP anodes. The SunStation™ is designed to provide on-demand cathodic protection (CP) monitoring services through direct visual interrogation by an ROV.

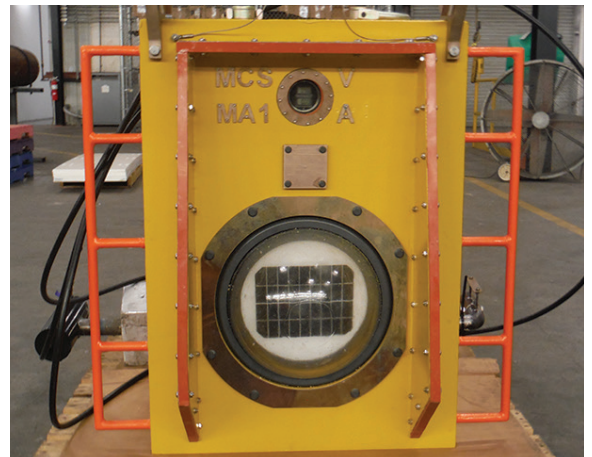
All this equipment was delivered to the manufacturing facility in Vietnam and installed on subsea equipment being manufactured there. A Deepwater field technician traveled to Vietnam to supervise critical aspects of the installation and perform commissioning tests. The SunStation system and the Monitored Anode were installed in accordance to the installation procedure. The SunStation was grounded to the skid and the Monitored Anode shunt and copper cladding were removed after welding. Also, the pre-deployment QA checks that were possible at the time were performed and no anomalies were noted.

The V-String could not be installed by the Deepwater field technician as coating operations were ongoing. After the departure of the Deepwater field technician, the V-String and anode cables were routed and secured using SmartBands based on detailed instructions

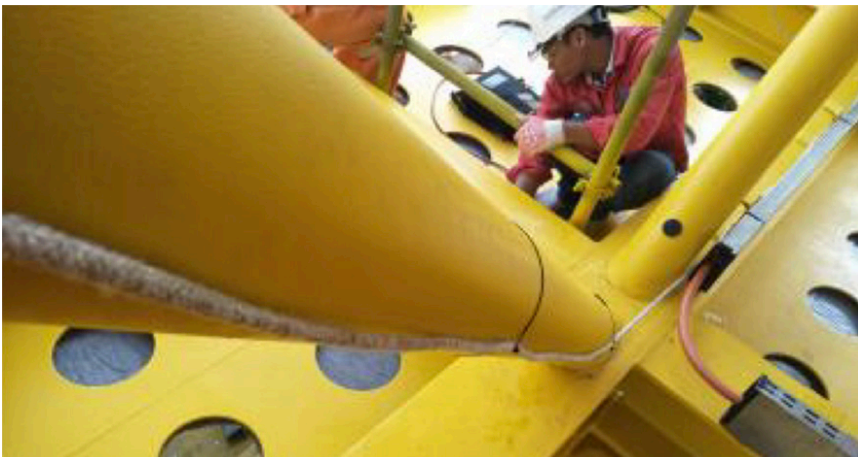
More info at www.stoprust.com



MA-1 MONITORED ANODE ON THE SPOOL CONNECTION ASSEMBLY
The MA-1 will track anode performance and consumption.



THE POLATRAK® SUNSTATION™
The readout is powered by solar panels triggered by an ROV instead of batteries.



V-STRING™ ZINC REFERENCE ELECTRODE WAS INSTALLED AFTER COATING WAS FINISHED
The V-String™, shown here attached with SmartBands, will provide data via an ROV interrogating the SunStation™.



GETTING READY FOR DEPLOYMENT
The SunStation™ shown with a protective cover in the final fabrication area.