05 / 2014

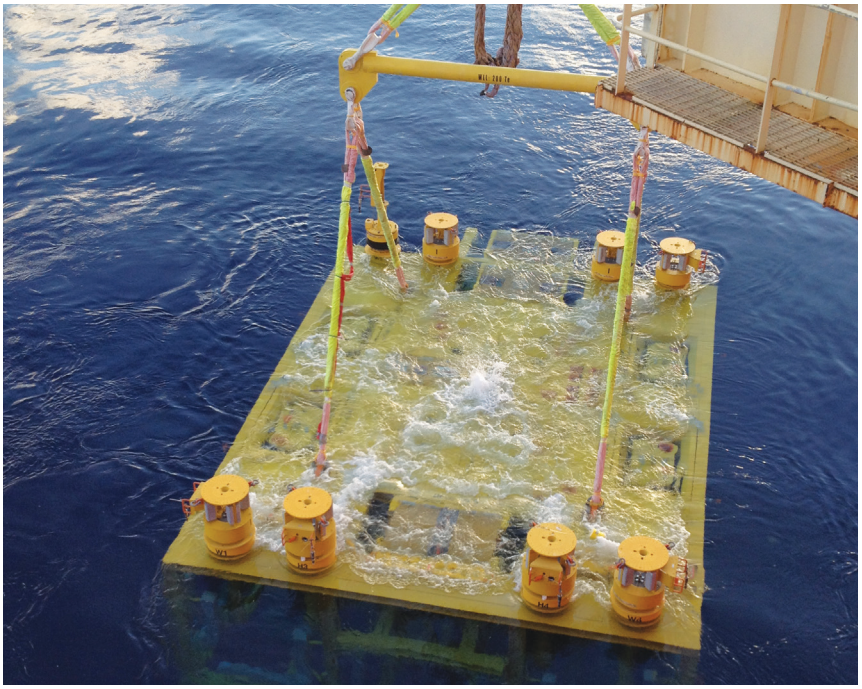
Simplifying Processes, Saving Time

Rig-up, lift from barge, and installation of subsea manifolds was streamlined significantly due to Cortland's synthetic sling solutions

The Challenge
Technip is a world leader in project management, engineering and construction for the energy industry, and operates a fleet of specialized vessels for pipeline installation and subsea construction. When Technip needed the right rigging solution for an installation of subsea manifolds for the Jack & St. Malo Project, located in the Walker Ridge area of the Gulf of Mexico, they contacted Cortland Company.

The Solution
Cortland advised on high capacity, lightweight and neutrally buoyant lifting slings for the installation project. The solution was a unique hybrid of both Plasma® 12x12 rope slings and high performance Selantic® Slings, a combination only available through Cortland. Plasma Slings were recommended for Technip's

continued on side 2



Cortland's load transfer and manifold connection slings

Project
Recommend and create a rigging solution for an installation of subsea manifolds

Location
Walker Ridge, Gulf of Mexico

Technologies used
12x12 Plasma® rope, unique braiding technique, extensive knowledge of HMPE fiber

"This project was very successful; the pre-rigged manifolds were transported offshore via barge and the vessel crane was able to make one simple connection for the installation lift. The manifolds themselves weighed just under 200Te, and use of synthetic slings helped reduce the overall load on the vessel crane. Cortland's after-sales service was also excellent, with continued follow-up even while the team was on the vessel."

Libby Gravatt, Technip's Installation Engineer

Cortland is a global designer, manufacturer, and supplier of technologically advanced ropes, slings, and strength members. Collaborating with customers, our team uses its experience in high performance materials and market knowledge to transform ideas into proven products.
cortlandcompany.com

CORTLAND™
A CORTLAND INTERNATIONAL COMPANY

use above the spreader bar for ease of load transfer; and Selantic® Slings for use below the spreader bar and connected to the structure, due to their precise length tolerances and high capacity.

The Project
Having worked with Cortland for several years, Technip contacted Cortland in November 2012 to try to find the right solution for the installation of subsea manifolds. High performance synthetic fiber slings were chosen for ease and speed of installation, as well as decreased risk of damage to equipment because of their light weight and fiber construction (vs steel).

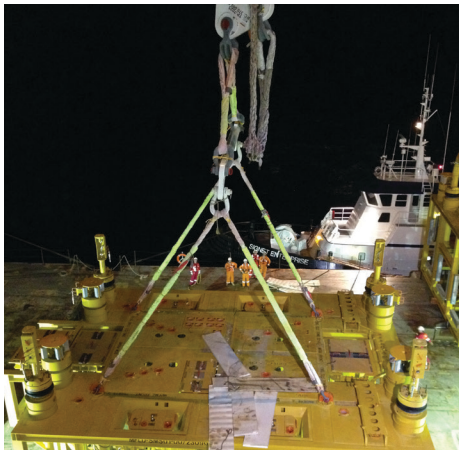
Cortland began the splicing and rigging services in June 2013, and the final solution was completed and delivered to the customer for proof testing by the end of July 2013. Installation took place successfully in October 2013. Speed of installation was cut down dramatically, as Technip was able to pre-rig the manifolds in advance.

One benefit of using high performance soft synthetic rope is that it enables the slings to sit on top of the manifold without adding significant additional weight. Steel cables would have resulted in thousands of pounds sitting on top of the manifold, which was not desired.

Cortland's Plasma® 12x12 is a 12-strand single braided rope in which each of the 12 strands is, in turn, a 12-strand rope. This construction addresses the most critical properties of the fibers, to provide very high strength translation efficiency for larger ropes.

The design allows for long lay lengths, making the rope more flexible for bending applications; rope that is easy to inspect; and rope that can be quickly spliced using standard 12 strand splicing techniques, making it reusable time and time again. Plasma rope, used in Cortland's Selantic Slings (an endless loop construction), enables slings to be fabricated to very tight tolerances with strengths >2000Te.

For more information visit cortlandcompany.com.



CORTLAND™
A CORTLAND INTERNATIONAL COMPANY