



CASE STUDY

ENFIELD RISER WINCH LINE

Samson custom-tapered synthetic ropes replace wire to eliminate internal damage to the riser tubes and keep project on time

*Technip Enfield riser column installation,
Exmouth, Australia*



SAMSON
THE STRONGEST NAME IN ROPE

PROJECT OVERVIEW

Installation of the riser column at the Technip Enfield oil-field development site off the coast of Exmouth, Australia, provides an excellent example of the use of Samson's synthetic ropes to replace wire in the offshore oil industry. The Enfield riser column is the largest in the world installed to date, weighing in at 1,525 metric tons and over 92 meters long. JumboShip's largest vessel was delivered in time to provide transport for this riser column to the oil field.

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THE SITUATION

The design of the riser column uses a special angled flow pipe that allows for a shorter catenary for the riser tubes. Wire rope was originally specified for the riser winch lines on other risers using this design, but due to the angled design of the flow tubes, the wire caused damage at the bend in the tube.

THE SOLUTION

Jeremy White, project engineer for Technip contacted Samson for a solution that would allow the installation to stay on schedule. Samson designed and delivered a set of tapered, jacketed lines with master links spliced into the ends for connection to the riser hoses. In-house testing was performed to confirm the acceptability of the smaller than recommended D/d ratio.

The winch lines used a tapered 12-strand braid of Dyneema® fiber with a braided polyester jacket. Technip reported that the lines performed well and met all design requirements. After riser installation was complete, the ropes showed only slight wear in isolated patches in the cover along the length of the rope.

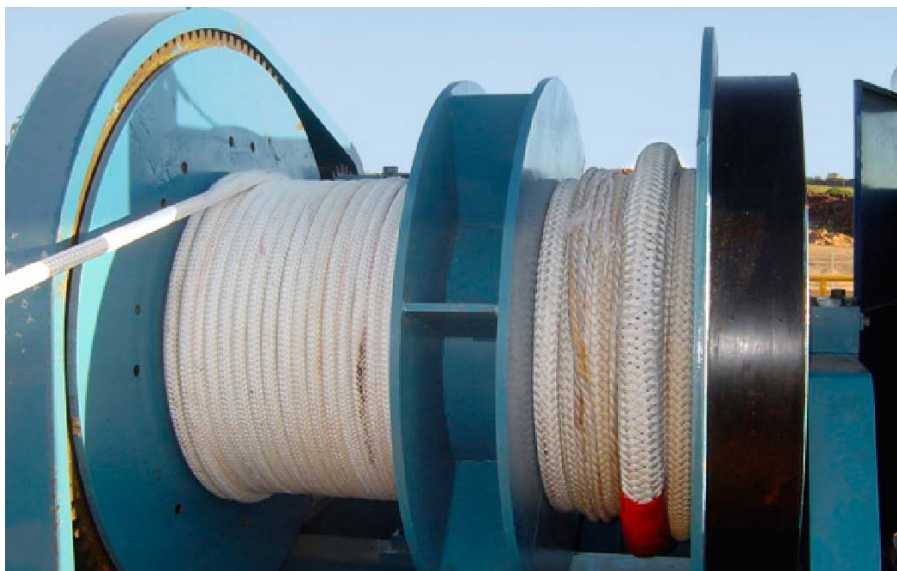
FOR ADDITIONAL INFORMATION: SamsonRope.com

We've put all our information here for easy downloading for anyone with access to the web. We think it is the best resource for information on high-performance synthetic ropes available anywhere.

- > Rope specifications
- > Product breakdowns by application and industry
- > Technical bulletins
- > Case studies
- > Splicing instructions



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