



VAM® EPIC FOR CRITICAL DEEP OFFSHORE APPLICATIONS

SUCCESS STORY VALLOUREC

Overview

In February 2021, VAM® EPIC, a new Enhanced Premium Integral Connection for upset pipes in deepwater wells, was installed for the first time. Vallourec supplied over 5,000 ft (1,500 m) of upset pipe with 7 5/8" VAM® EPIC for a trial run in the Gulf of Mexico.

Challenge - More complex wells and tighter regulations

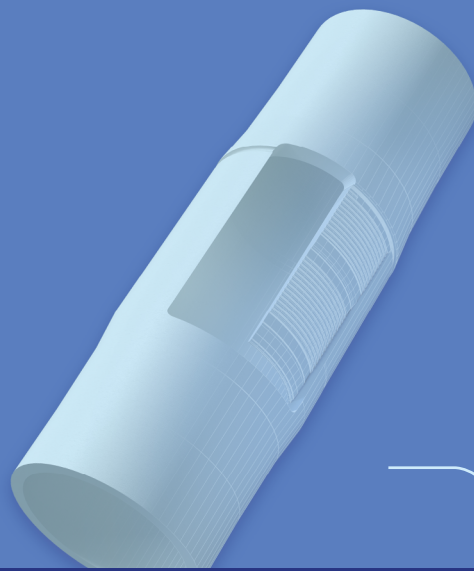
As a pipe is run down-hole, it passes through different geological layers, and conditions like mud type and density, pressure and temperature change. To successfully reach the bottom of a well, operators need many casing sizes, which often means favoring clearance over performance. As American oil and gas companies face increasingly complicated well design and tightening environmental regulations

surrounding deepwater wells, operators require high-quality, reliable equipment. Such was the case with this project, whose operator was looking for a reliable connection that could offer both high clearance and performance all while reducing the overall weight of the string.

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Solution - Enter VAM® EPIC, a flexible, high-performing connection

To meet these challenges, Vallourec supplied its latest upset casing connection VAM® EPIC, which is produced using a special upset forging press for large outer diameters. This technology offers flexibility from the design phase, adjusting the wall thickness to favor either performance or clearance, or find a balance between the two, depending on customer needs.

VAM® EPIC is made from the highest quality steel and tested against the most rigorous industry standards, including API RP 5C5:2017 CAL-IV, and can reach a 100% structural and sealability performance rate throughout project life. Available from 7 5/8" to 18" (on demand design approach), it presents a smooth OD and has a two-step thread design which prevents cross-threading and improves stabbing for overall better performance. As a final precaution, the solution was also tested using Worst Case Discharge (WCD) scenarios and exceeded expectations for the mitigation of potential well critical incidents and environmental damage.

Vallourec delivered 167 VAM® EPIC joints to the Gulf of Mexico for production liners in size 7 5/8" 39# VM125 UCYHC (0.500" wall). Compared to the standard approach, 7 5/8" 47.10 lb/ft (0.625" wall), VAM® EPIC presented strong make-up graphs despite extreme weather conditions. Of the 167 pipes that were successfully run, there were only two back-out operations, both due to mud flowback.

Benefits/ Results - Excellent results

- Tension: 100% PBYS
- Compression: 100% PBYS
- Burst: 16,215 (100% pipe VME)
- Collapse: 14,190 psi (HC rating)
- High robustness
- Faster design job for further projects
- Possibility to standardize the whole string
- Compaction resistance
- Well integrity
- No leaks
- Improved clearance

OTHER SUCCESS STORIES

To find out more about VAM® EPIC, visit the [dedicated page](#) on our website.