

Expro Excellence

Expro runs Spring ARK Anti-Rotation Key, a hands-free solution reducing personnel in the red zone

Well Construction Tubular Products and Services



Objectives and background

- Expro's customer was looking for a solution for an anti-rotation device that was hands-free and did not require technicians in the red zone to install or activate at a reasonable cost
- The customer was long-established to Expro, but they were new to the Tubular Products and Services group in South America
- Our scope of work was to supply our proprietary 36" Xtreme3™ Super Duty Lift Shoulder (SDLS) connectors with the Spring ARK Anti-Rotation key
- There was a requirement in the customer specifications for an anti-rotation key that did not have to be installed in the redzone on the rig floor. They had concerns about the back-out of the connectors and any potential for dropped casing/objects

Expro Excellence

- Expro was chosen by the customer due to our existing business relationship, price, and our advanced hands-free ARK proprietary technology. Our Spring ARK Anti-Rotational Key technology is preinstalled in the Xtreme3™ / XT4™ GT connectors at the point of manufacturing or on the pipe deck prior to running, and the key is self-engaging once the connection is made-up
- Expro supplied a newer technology to a new customer in South America, the dedication of both our corporate and regional teams ensured the delivery of our product successfully

- The successful installation of the connectors with our Spring ARK anti-rotational key was achieved with make-up of an optimum torque of 85,000 ft-lbs with a belt tong. The Spring ARK pin key and box insert were engaged automatically with connection make-up, achieving ~ 50,000 ft-lbs. of additional breakout resistance over any initial breakout

Value to the client

- The 36" Xtreme3™ SDLS with Spring ARK was hung on the auxiliary rotary while the rig was drilling on the Main for 24 hours, in water depths of 6,889 feet (2,100 m). This extended hang-off was a test of the technology, make-up, and running of our connectors with the Spring ARK. Vertical markers were made across the connections after make-up and observed with the ROV while running, without any rotation in the connections. The 36" string was successfully run and installed in the Santos Basin of Brazil
- Expro supplied the Spring ARK, which is a pre-installed hands-free spring activated anti-rotation key saving the customer time, money, and personnel resources
- The time savings during the connection make-up and the key engagement together with elimination of personnel in the red zone, resulted in increased safety and a positive environmental impact for the customer
- This technology also eliminated the risk of any dropped strings or objects in the ocean. Minimizing this possibility vastly reduces the risk of possible injury, rig and equipment costs, delays, and environmental concerns

Safety



Contact

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