AS SEEN IN MAY 2019 E&P

2019 MERITORIOUS AWARDS FOR ENGINEERING INNOVATION

An expert panel of judges has selected the top 18 industry projects that open new and better avenues to the complicated process of finding and producing hydrocarbons around the world.

The *E&P* editors and staff proudly present the winners of the 2019 Special Meritorious Awards for Engineering Innovation, which recognize service and operating companies for excellence and achievement in every segment of the upstream petroleum industry. The pages that follow highlight 18 winners, picked by an independent team of judges.

The winning technologies represent a broad range of disciplines and address a number of challenges that pose roadblocks to efficient operations. Winners of each category are products that provided monumental changes in their sectors and represented techniques and technologies that are most likely to improve artificial lift, drillbits, drilling fluids/stimulation, drilling systems, exploration/geoscience, formation evaluation, HSE, hydraulic fracturing/pressure pumping, intelligent systems and components, IOR/EOR/remediation, marine construction and decommissioning, nonfracturing completions, onshore rigs, subsea systems and water management.

This year some of the brightest minds in the industry from service and operating companies entered exceptionally innovative products and technologies that have now been measured against the world's best to be distinguished as the most groundbreaking in concept, design and application.

The awards program recognizes new products and technologies designed by companies and people who understand the need for newer, better and constantly changing technological innovation to appease the energy-hungry world.

The panel of judges comprised experts in business, engineering and the sciences representing operating and consulting companies worldwide. Each judge was assigned a category that best utilized his or her area of expertise. Judges whose companies have a business interest were excluded from participation.

E&P would like to thank these distinguished judges for their efforts in selecting the winners in this year's competition.

As in past years, *E&P* will present the 2019 awards at the Offshore Technology Conference in Houston.

An entry form for the 2020 Special Meritorious Awards for Engineering Innovation competition is available at *HartEnergy.com/mea*. The deadline for entries is Jan. 31, 2020. E&P

2019 MEA JUDGES

Ben Bloys
Chevron

Mike Forrest
Consultant

Richard "Dick" Ghiselin, P.E.
Qittitut Consulting LLC

David Johnston
Differential Seismic LLC

Peter Lovie
Peter M. Lovie, P.E. LLC

Richard Mason
Hart Energy

Nelson Oliveros
Integrated Energy Services, Petrofac

Bill Pike
KeyLogic

Eve Sprunt
Consultant

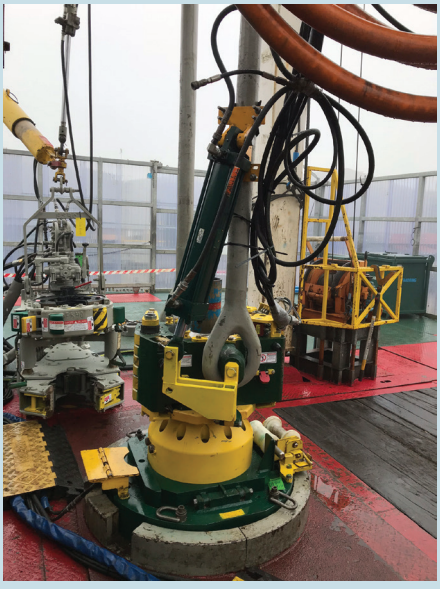
John Thorogood
Drilling GC

Scott Weeden
Consultant

ONSHORE RIGS WINNER

FRANK'S INTERNATIONAL | COLLAR LOAD SUPPORT SYSTEM FOR STANDS (CLS-S)

The Collar Load Support System for Stands (CLS-S) of tubing is a nonmarking tubular handling system that accommodates a wide range of pipe sizes. Unlike typical slip-type elevators and spiders, the CLS-S system allows the running of threaded and coupled stands of tubulars as well as single joints without causing damaging die penetration marks. In doing so, it eliminates the potential for corrosion cracking due to stress concentrations induced by conventional handling equipment. The risk of slip crush and iron transfer is minimized as the CLS-S system enables the tubular to be supported by the load face and not by penetration, avoiding the slippage issues prevalent on certain alloys with conventional inserts. Die and insert impressions, with or without iron transfer, may adversely affect the corrosion resistance and mechanical integrity of corrosion-resistant alloy (CRA) tubulars in conducive well environments. Although levels of susceptibility may vary, all CRA materials are susceptible to downhole corrosion mechanisms. Nonmarking technologies like the new CLS-S system are the preferred method in a safe and cost-effective approach to running stands of CRA tubulars. ■



The CLS-S System is the next step in Frank's CLS technology by removing the requirement of heavy load transfer sleeves to be manipulated around the rig floor. The smallest version of the system is set up for 27.5-in. rotaries that are typically found in the onshore market. (Source: Frank's International)