MAN to Supply Compression Technology for Offshore Gas Production

Six compressor trains bound for Brazilian FPSO (Floating Production Storage and Offloading) vessel

MAN Energy Solutions has won a gas-compression order from energy solutions provider Yinson, comprising four RB-type centrifugal-compressor trains for gas production and export, as well as two screw-compressor trains, which will be put into operation as vapour-recovery units.

The units will be deployed on the FPSO ‘Anna Nery’, which will be built and operated by Yinson. The FPSO will be located in the Marlim and Voador field of the Campos basin, about 150 kilometers off the coast of Rio de Janeiro, Brazil.

“We are honoured by the opportunity to work for the first time with Yinson on this important offshore-gas-production project in Brazil,” stated Basil Zweifel, VP Sales & Execution, Oil & Gas Upstream and Midstream at MAN Energy Solutions. “Our company has gained extensive experience in providing reliable and efficient technology solutions for FPSO applications. In recent years, MAN Energy Solutions has equipped FPSO ships in China, West Africa, Mexico and Vietnam with its compression systems – and many more are currently in operation around the globe. This order will further strengthen our reach in South America.”

“Deep-water environmental conditions demand high reliability, flexibility and efficiency,” said Christopher Bowles, Head of Sales, Oil & Gas Upstream at MAN Energy Solutions. “Our technology and know-how enables us to meet the increasing demands of the oil and gas market without compromising on safety and availability.”

MAN Energy Solutions’ scope of supply covers four RB-type compressor trains (2 × RB 56-4+4 and 2 × RB 28-7) with hydraulic, variable-speed gearboxes driven by an electric motor, which will be designed, manufactured and tested at MAN’s facility in Zurich, Switzerland. The machines will be used for gas export as well as gas lift to maximise the quantity and efficiency of gas production. The Anna Nery will eventually have a production capacity of up to 70,000 barrels of oil and 6,600 Nm³ of natural gas per day.

The double-screw compressor trains – type CP200/CP128/B85 – driven by fixed-speed electric motors, will be used as vapour-recovery units. Instead of flaring any flash gas into the atmosphere, the screw compressors will instead pressurise it and feed it back into the process leading to increased gas-production efficiency as well as significantly reduced CO₂-emissions. Design, manufacturing and testing of the screw compressors will take place in Oberhausen, Germany. Installation and commissioning of all compressor trains are scheduled for Q2 2021.
MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow’s challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies. Headquartered in Germany, MAN Energy Solutions employs some 14,000 people at over 120 sites globally. Our after-sales brand, MAN PrimeServ, offers a vast network of service centres to our customers all over the world.

A centrifugal compressor train for offshore gas production by MAN Energy Solutions

Two-stage screw compressor unit with noise enclosure as offshore Vapour Recovery Unit (VRU), manufactured by MAN Energy Solutions