
Press release

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MAN Energy Solutions lands major compressor order for FPSO vessel

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

Offshore Frontier Solutions Pte. Ltd., a MODEC Group company, has commissioned MAN Energy Solutions with the delivery of eleven RB-type compressor trains. The order's substantial value marks it as the largest single order ever received at MAN Energy Solutions Switzerland.

The compressor trains will be installed on an FPSO vessel for the Raia project, in the Campos Basin, approximately 200 kilometers off the coast of Rio de Janeiro. Equinor, in partnership with Repsol Sinopec Brasil and Petrobras, will operate the FPSO, which is expected to produce up to 126,000 barrels of crude oil per day, and produce and export up to 16 million cubic meters of gas per day. The reservoir, located at a depth of around 2,900 meters, is estimated to contain more than one billion barrels of oil equivalent.

The MAN compression systems, once operational, will help maintain field pressure, thereby maximizing the quantity and efficiency of gas production. First production is expected in 2028.

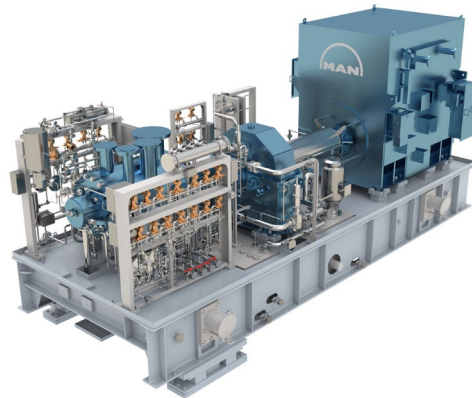
"We are proud to support the further development of Brazil's energy industry with this important, large-scale project. With MODEC, we share a solid history of successful FPSO projects around the globe, and we look forward to continuing this excellent collaboration," stated Basil Zweifel, Head of Sales & Project Management, Up- & Midstream at MAN Energy Solutions. "Meeting the stringent CO₂ reduction goals for this project in the challenging deep-water environmental conditions requires a high degree of flexibility and efficiency. Our comprehensive, technical expertise and the unrivaled reliability of our compressor systems play a decisive role in reaching these targets."

MAN Energy Solutions' scope of supply for the FPSO's gas lift, injection and export application includes eleven electrically-driven centrifugal-compression trains, deployed as follows:

- two trains with type RB 28-6+3 compressors as overhead units
- two trains with type RB 45-4+5 compressors as low-pressure units
- five trains with type RB 28-5 compressors as medium- and high-pressure units
- two trains with type RB 28-8 compressors as gas injection units

The overhead and gas injection compressor units will be driven by fixed-speed electrical motors, whereas the high- and low-pressure units will be equipped with variable frequency drives. Additionally, the two medium-pressure compressor units will feature a special switch control system, enabling operators to choose between fixed speed and VFD operation according to their requirements. The delivery of the

compressor trains is scheduled for the fourth quarter of 2024 and the first quarter of 2025.



Radial compressor train for offshore gas production by MAN Energy Solutions



The FPSO Raia by MODEC (picture courtesy by MODEC)

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.