

Petrobras Cidade De Marica; and Cidade De Saquarema FPSOs

Project: Petrobras Cidade De Marica (CdM); and Cidade De Saguarema (CdS) FPSOs

Ultimate Client: Petróleo Brasileiro S.A. (Petrobras)

Client: SBM Offshore

Location: Lula oilfield, within BM-S-11 block in the Santos Basin pre-salt area.

Project Type: Offshore

Scopes:

<u>Singapore Yard</u>: Fabrication of 16 topside modules (8 nos. for each FPSO), including Process Units and Manifold Units, with the heaviest weighing about 2,100 tons.

<u>China Yard</u>: Fabrication of 10 topside modules (5 nos. for each FPSO) in Guangzhou, including Power Generation Units, with the heaviest weighing about 1,200 tons.



Cidade De Marica (CdM)

Cidade De Saguarema (CdS)

Highlights:

- Fabrication works were carried out in two yards concurrently and successfully delivered in 2014.
- Total number of 26 modules weighing about 24,000 tons (12,000 tons for each FPSO) completed ahead
 of schedule.
- Common set of execution procedures, processes, controls, tools and systems to ensure successful completion of the project in 2 different locations.
- Well-planned execution strategy with robust execution control procedures and processes.









Petrobras Cidade De Marica; and Cidade De Saquarema FPSOs

Details:

- Located in the highly complex pre-salt cluster units at Santos Basin, 250 km off the coast of Rio de Janeiro, Brazil, with water depth of 2,130 m.
- Cidade de Maricá FPSO is the sister vessel to Cidade de Saquarema FPSO. Both carbon-copies of the mother ship, Cidade de Ilhabela FPSO.
- Designed to handle a daily capacity of 150,000 b/d of oil and 212 MMSCFD of natural gas and a storage capacity of 1,600,000 barrels of oil. Complex gas processing with CO² removal and re-injection.
- Hull conversion in Guangzhou, China and topsides integration carried out in Brazil.

Achievements / Awards:

- Completed in record time and within budget.
- Successful cross-border collaboration in executing large size projects with our overseas Partners,
 Subcontractors, Suppliers and Vendors.
- Highest quality of delivery at multiple execution locations.
- All exotic material duplex welding with near zero defects
- Achieved million construction manhours with no Lost Time Incident (LTI).



CdM CO² Gas Compression Module



CdM Power Generation Module



CdS CO² Gas Compression Module



CdS Main Compression Module





