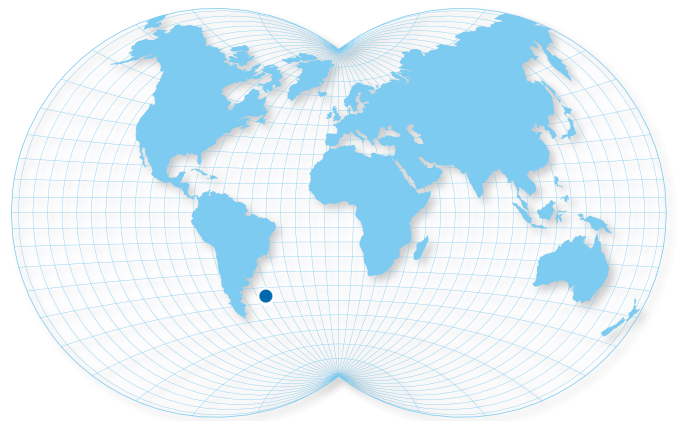


BUZIOS FIELD, CAMPOS BASIN, BRAZIL:

FPSO Almirante Barroso – MV32 Spread Mooring System

Under
Construction



Scope of Work

SOFEC is responsible for the design and procurement of a spread mooring system for the FPSO Almirante Barroso – MV32 which will be deployed at the Buzios Field of the Santos Basin, offshore Brazil.

The FPSO will be capable of processing 150,000 barrels of crude oil per day, 212 million standard cubic feet of gas per day, 240,000 barrels of water injection per day and has a storage capacity of 1,400,000 barrels of crude oil.

The FPSO will be able to accommodate a total of 48 flexible risers and umbilicals. The FPSO is also able to accommodate 18 steel risers instead of the 18 flexible pipes serving the production / gas injection wells.

The SOFEC spread mooring system will be ABS classed.

General Description

Client Name:	Petróleo Brasileiro S.A. (Petrobras)
Contract Award:	September 2019
Installation Date:	Planned for 2022
First Oil:	Planned for 2022
Vessel Size:	282,000 dwt

Storage Capacity:	1,400,000 bbls
Water Depth:	1,900 m (6,232 ft)

Design Environmental Criteria (100-year storm)

Sig. Wave Height:	11.6 m (38.06 ft)
Wind Velocity:	34.51 m/s (67.08 kts)
Current:	1.81 m/s (3.52 kts)

Mooring System

4 x 6 mooring system consisting of chain and polyester rope.
Torpedo piles and pile chains are supplied by Petrobras.

Riser System

- 4 Oil Production Risers
- 7 Oil Production / Water Injection Risers
- 4 Service Risers
- 2 Water Injection Risers
- 7 Gas Injection/ Service Risers
- 6 Water / Gas Injection Risers
- 1 Gas Import / Export Riser
- 16 Control Umbilical
- 1 Fiber Optic Cable