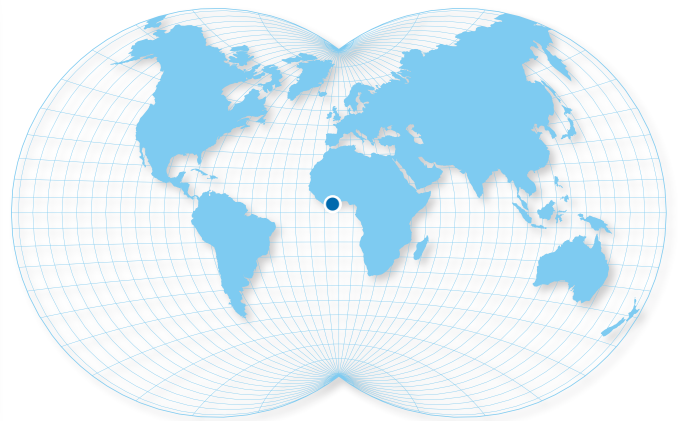


JUBILEE FIELD, GHANA:

FPSO Kwame Nkrumah MV21 External Turret



Scope of Work

SOFEC designed, constructed, fabricated and delivered an external turret mooring system for a 272,000 dwt MODEC-converted FPSO. This is the first FPSO installed on the Jubilee Field, one of the largest oil fields discovered in West Africa in the past decade. This is one of the largest external turrets on an FPSO application.

The FPSO Kwame Nkrumah is installed in 1,320m water depth. The FPSO is capable of processing more than 120,000 barrels of oil per day and 160 MMscfd of produced gas and injecting 232,000 barrels of water.

The FPSO is designed to remain on the field for up to 20 years.

The SOFEC external turret mooring system is ABS classed.

General Description

Client Name:	Tullow Ghana Ltd.
Contract Award:	September 2008
Installation Date:	November 2010
First Oil:	December 2010

Vessel Size:	272,000 dwt
Storage Capacity:	1,600,000 bbls
Water Depth:	1,320m (4,330ft)
Supply / Fabrication:	Turret - Malaysia Vessel - Singapore

Design Environmental Criteria (100-year storm)

	Max. Swell:	Max. Squall:
Sig. Wave Height:	4.0m (13.1ft)	1.8m (5.9ft)
Wind Velocity:	6.5m/s (12.6 kts)	36.5m/s (71.0 kts)
Current:	0.5m/s (1.0 kts)	0.5m/s (1.0 kts)

Riser System

- 8 x 10-in. ID production risers
- 1 x 10-in. ID gas export
- 2 x 8-in. ID gas injection
- 3 x 10-in. ID water injection
- 3 x 8-in. OD umbilicals