

Overview

In 2001 Subsea Mooring Connectors (SMCs) were deployed to establish the first full polyester mooring system in the Gulf of Mexico.

The top entry tool, which allows a quick and reliable connection, has since been used worldwide in permanent subsea mooring, tie-back and drilling applications.

Spar Mooring (Gunnison, Red Hawk, Mad Dog, Constitution, Kikeh, Tahiti, Perdido)
Typical MBL: 12,000 to 19,000kN on 6-, 9- or 12-off mooring points with 25-year design life. Installed up to depths of 2,440m (8,000').

FPSO Mooring (Dalia, AKPO, Ettrick, Vincent)
Typical MBL required from 10,000 to 14,000 kN on 9- or 12-off mooring points with 10- to 25-year design life. Installed up to depths of 2,100m (6,890').

Buoy Mooring (Dalia, AKPO)
Typical MBL requirement: 5,000 to 6,500kN MBL on 6- or 9-off mooring points with 20-year design life. Installed up to depths of 2,160m (7,086').

PLET Tie-Back (Thunder Horse)
MBL required: 7,120 kN MBL with 25-year design life. Installed up to depths of 1,844m (6,050').

Drilling Mooring (Ocean Confidence, Kizomba, Ehra, Kikeh)
MBL required: 4,900 to 8,770kN MBL with 5- to 25-year design life. Installed up to depths of 1,300m (4,265').

Benefits

- ▶ Quick make-up without ROV intervention
- ▶ Full vertical access
- ▶ Heave tolerant, no motion compensator required
- ▶ Simple ROV-operated release system
- ▶ Simple mechanical design, no hydraulics or electronics involved
- ▶ High strength: up to 2500mT MBL
- ▶ Custom design for special installation requirements
- ▶ High quality forge materials
- ▶ Approved by DNV, ABS, BV and Lloyd's

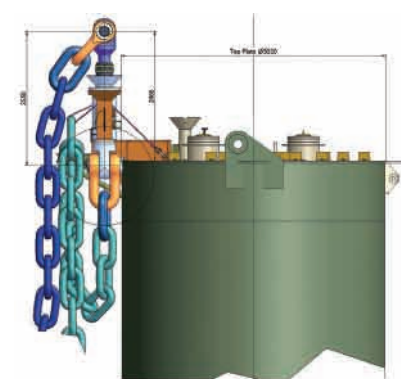
Images



Subsea mooring connection



Ballgrab fitted on a mudmat



Ballgrab fitted on a suction pile docking porch

200+

Over 200 connectors worldwide



Gunnison (Kerr-McGee)
SPAR



Red Hawk (Kerr-McGee)
SPAR



Perdido (Shell)
SPAR



Ettrick (Nexen)
FSPO



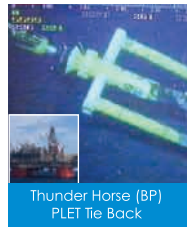
Constitution (Kerr-McGee)
SPAR



Mad Dog (BP)
SPAR



Ocean Confidence (BP)
MODU



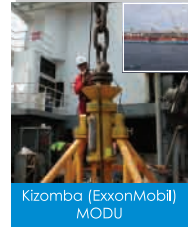
Thunder Horse (BP)
PLET Tie Back



Tahiti (Chevron)
SPAR



Dalia (Total)
FPSO & Buoy



Kizomba (ExxonMobil)
MODU



Ehra (ExxonMobil)
MODU



AKPO (Total)
FSPO & Buoy



Kikeh (Murphy)
SPAR & TAD



Vincent (Woodside)
FSPO

