



FPSO

# Maersk Curlew

Maersk Curlew is moored in the Curlew field located in the Central North Sea, 220 kilometers east of Aberdeen, UK. It is 236 meters long and operates at a water depth of 92 meters. Maersk Curlew has a daily production capacity of 45,000 barrels of oil and holds a storage capacity of 560,000 barrels.

Former product oil tanker Maersk Dorset, Dead Weight 99,000 tons, built in 1983 and converted to an FPSO in 1997.

<b>Water depth:</b>	92 metres
<b>Storage capacity:</b>	560,000 bbls
<b>Oil Production:</b>	45,000 bbls/day
<b>Gas Export:</b>	110 MMscf/day

# Main Particulars

## DIMENSIONS

<b>Length overall</b>	236.05 m
<b>Length BP</b>	226.50 m
<b>Breadth moulded</b>	39.90 m
<b>Depth moulded</b>	20.50 m
<b>Draught</b>	15.34 m
<b>Dead-weight</b>	99,800 dwt

## CAPACITIES

### Oil production

45,000 bop/d, BS&W 0.5 % TVP 0.834 bara @ 26.7 °C, one 100 % train.

### Gas production

116 MMscf/d of dried gas 42 ppmv, through a single TEG system, for fuel gas and gas export.

### Gas export

110 MMscf/d @ 172 barg, one 100 % three-stage LM 1600 gas turbine driven compression train.

### Produced water

38,000 bwp/d @ 20 ppm or below, through HP, MP and test hydrocyclones and de-gassing vessel.

### Flare system

116 MMscf/d through HP and LP flare headers and drums to a 65 m high flare tower.

### Power generation

Main 2 x 4.9 MW dual fuel turbine driven, auxiliary 2 x 900 kw and emergency 1 x 425 kw diesel driven.

### Fire Water

Two 100 % fully enclosed diesel driven fire water pumps delivering 1,720 m<sup>3</sup>/hr @ 10 bar each.

## CAPACITIES, TANKS @ 100% CAP.

<b>Crude storage</b>	89,158 m <sup>3</sup>
<b>Ballast water</b>	32,098 m <sup>3</sup>
<b>Slops</b>	4,395 m <sup>3</sup>
<b>Fresh water</b>	293 m <sup>3</sup>
<b>Liquid fuel</b>	996 m <sup>3</sup>

## MOORING

- The FPSO is moored utilising a forward mounted internal turret with a mooring spread of three times three anchors connected to the chain table.
- The well fluids and the exported gas are transferred through a swivel stack in the turret, enabling the FPSO to freely weathervane around the geo stationary part of the turret under all conditions.
- The swivel stack include two 8" production, one 8" gas export, one 8" water injection, one electrical and one hydraulic swivel.

## TOPSIDE

- The crude oil is stabilised and de-watered in four stages.
- The first, second and third stage separators are three-phase separators, the fourth stage is a coalescer.
- The third stage separator operates at pressures ensuring that the crude is stabilised to the specified true vapour pressure.

- From the third stage separator the crude is pumped through the coalescer where the crude is de-watered to the specified BS&W and then into the temporary storage before export to shore by shuttle tanker.

- The produced gas is compressed through a three-stage compression train, driven by a single gas turbine, for export into a pipeline system.

- The gas is dried to export specification between the second and third stage of the compressor by a TEG gas dehydration system.

- The produced oil and gas is metered to fiscal standards prior to export.

## OTHER

### Accommodation

Max 80 persons in 3 single and 39 double berth cabins.

### Main lifesaving

Two 60 persons TEMPSC.

### Helideck

EH101 (single main rotor), designed in accordance with requirements of LRS and CAP 437.

### Cranes

Two offshore pedestal cranes, with a lifting capacity of 15 t @ 30 m reach and 11 t @ 45 m reach.

### Oil export

Via stern offloading system @ 4,500 m<sup>3</sup>/hr through 16" hose, to tandem moored shuttle tankers up to 150,000 dwt.