

FLOATING ASSET TECHNICAL SPECIFICATION



FSO SUKSAN SALAMANDER

PRINCIPAL PARTICULARS

Name of Asset	:	FSO Suksan Salamander
Owner	:	Samos Energy Mauritius
Type	:	Floating, Storage and Offloading unit (FSO)
Propulsion Equipment	:	Un-removed & Decommissioned
Classification	:	ABS A1 Floating Storage and Offloading System
Port of Registry	:	Port Louis (Ex-Nassau)
Flag State	:	Mauritius (Ex-The Commonwealth of the Bahamas)
IMO Number	:	9045974
Gross Tonnage	:	42843
Net Tonnage	:	23049
Deadweight	:	77,043 Tonnes
Lightweight	:	15,227 MT
Built / Hull No	:	October 1992 / TS-1397
Previous names	:	Poly Clipper / Navion Clipper
Converted to FSO	:	July 2014 @ Yiu Lian Dockyard (Shekou) Ltd, China
Mooring Type & Design	:	Rigid Arm External Cantilever Turret / LMC
Mooring Type	:	3 X 3 Cluster , total 9 mooring lines
LOA	:	242.23 m
Breadth (Mld)	:	38.018 m
Depth (Mld)	:	19.615 m
Offloading	:	Tandem
Storage Tanks	:	Total 12 tanks (6 x 2 pairs along the center line)
Slop Tanks	:	Port & Stbd
Wing Tanks	:	Nil
Tanks used for Crude Storage	:	Twelve (12) excluding Slops
Cargo Tank Capacity 98%	:	74,782 M3 / 470,363 bbls (12 tanks)
Accommodation capacity	:	60 pax
Life-saving & Fire-fighting	:	Comply with SOLAS, CLASS & MODU Code Requirement
Classification	:	American Bureau of Shipping (ABS)
Class Notations	:	✱A1, Floating Storage and Offloading System (Ship-Type) (CI) Bualuang Field Offshore Thailand RFL (15) 2029 Additional Notations : CRC(I), HELIDK(SRF), UWILD
First Oil Production	:	12 August 2014
Original Vessel Design Life	:	15 years until June 2029.

FSO Equipment / brief Particulars

Cargo Capacity

- 76,308.1 m³ (100%) - excluding slops.
- 12 heated cargo tanks (pairs, Port & Starboard)

Ballast Capacity

- 33,063.1 m³ in 20 ballast tanks, including forepeak and aft peak tanks

Cranes

- 1 × 15 tons hose-handling crane
- 2 × 12 tons @ 15 m outreach, Offshore Cranes
- 1 × 5 tons provision crane (monorail type)

Main Engine

- Maker: Mitsui-B&W 6S60MC
- Power: 10,590 kW @ 96 rpm
- (now decommissioned)

Auxiliary Engines

- 5 × Bergen Diesel, 4-stroke
- Power: 1,325 kW @ 720 rpm (each)
- Operates on LSHFO / MGO.

Generators

- Nishishiba alternators
- Output: 1,240 kW / 1,550 kVA
- 60 Hz, 3-phase

Cargo Pumps

- 3 × 2000 m³/hr
- 2 × 250 m³/hr cargo eductor

Ballast Pumps

- 2 × 1,500 m³/hr
- 1 × 300 m³/hr eductor

Steam System

- 2 × Aalborg boilers rated at 20T/Hr

Operational Profile at Bualuang Field

- Primary role : Storage and off-take only.
- Production rate : Stable at 5,000–6,000 barrels/day.
- Off-take frequency : Approx. every 6 to 8 weeks.
- Storage capacity : 480,000 barrels of crude oil.
- Peak Production : up to 20,000 barrels/day.
- Tanker offloading : stern-mounted hose, 20,000 barrels/hour.

Mooring & Riser System

- Turret mooring: External turret with a single 6-inch crude riser.
- Produced water handling: Separate 6-inch riser system transfers water from slop tanks to nearby platform for re-injection into wells.
- Spare riser provision: Capacity available, but not currently installed.

TANK STORAGE CAPACITY

- Cargo Storage Capacity : 74,782 M3 / 470,362 bbls (12 tanks) (98%)
(6 x 2 pairs Centre storage tanks)
- Slop Tanks Port & Stbd : 5,593 m3 / 35,178 bbls (98%)

Note: Total storage capacity 505,541 bbls (98%) if centre and Slop tanks are utilised.

POWER GENERATION

- Diesel Engine generator : 1 x 1500 Kw
- Black-start Diesel Generator : 1 x 609 Kw
- Emergency Diesel Generator : 1 x 197 Kw

EXPORT SYSTEM

- Cargo Oil Pump (COP) : 3 units x Vertical Centrifugal Pump x 2000 m3/hr x 145 m Head
(Steam Turbine driven)

AUX. STEAM PRODUCTION PLANT

- Water Tube Boiler in ER : 2 units x 16 Bar
(A dual fuel system comprising of LSFO & MDO firing is installed on both No. 1 & 2 Boilers)

FIRE FIGHTING SYSTEM

- Fixed CO2 fire extinguishing system protection for Machinery Space and the Pump room space.
- Low Expansion Foam supply for Helideck coverage and to the main deck foam monitors.
- Sea water Deluge system for Turret area.
- Sprinkler system for Paint store.

LIFE BOAT

- Portside (No.2) : 1 unit x 60 pax capacity
- Stbdside (No.1) : 1 unit x 60 pax capacity

PEDESTAL CRANE

Two(2) offshore rated/man-riding cranes designed in accordance to API RP 2C.

Deck hose handling Crane: SWL 15.0 tons @ 12 m radius

Monorail hoist crane : SWL 5 tons.

HELIDECK

- The Helideck design conforms to CAP 437.

CARGO OIL TANK CAPACITY TABLE

CARGO OIL TANK CAPACITY						
COMPARTMENTS		FRAME NO	CAPACITY (100% FULL)		CAPACITY (98% FULL)	
			VOLUME		VOLUME	
			CUB.M	BBLS	CUB.M	BBLS
NO. 1 C.O.T	P	79-85	4288.9	26976	4203.1	26437
	S	79-85	4289.5	26980	4203.7	26440
NO. 2 C.O.T	P	73-79	6603.7	41536	6471.6	40705
	S	73-79	6603.4	41534	6471.3	40703
NO. 3 C.O.T	P	67-73	6872.8	43228	6735.3	42364
	S	67-73	6872.5	43227	6735.1	42362
NO. 4 C.O.T	P	61-67	6872.8	43228	6735.3	42364
	S	61-67	6872.5	43227	6735.1	42362
NO. 5 C.O.T	P	55-61	6872.8	43228	6735.3	42364
	S	55-61	6872.5	43227	6735.1	42362
NO. 6 C.O.T	P	49-55	6643.6	41787	6510.7	40951
	S	49-55	6643.1	41784	6510.2	40948
CARGO TANK TOTAL			(76308.1)	(479962)	(74781.8)	(470362)
SLOP TANK	P	46-49	2854.0	17951	2796.9	17592
	S	46-49	2853.1	17945	2796.0	17586
SLOP TANK TOTAL			(5707.1)	(35896)	(5592.9)	(35178)
GRAND TOTAL			82015.2	515858	80374.7	505540