



# POLARIS

## 280 CLASS PSV DP-2 PLATFORM SUPPLY VESSEL

### REGISTRATION

USCG Official #	1249448
Year Built	2014
Builder	Thomas Sea Shipyards
Flag	U.S.A.
Classification	ABS *A1(E) Offshore Support Vessel, *AMS, *ACCU, *DPS-2, FiFi 1, ENVIRO, SOLAS, USCG Subchapter L/I, Full Oceans

### MAIN CHARACTERISTICS

Length Overall	272 ft	(82.60 m)
Beam	58 ft	(17.67 m)
Depth	20 ft	(6.09 m)
Max Draft	16 ft 7 in	(5.07 m)
Operating Displacement	5,627 lt	(5,893.07 mt)

### CAPACITIES

Deadweight	3,524 lt	(3,580 mt)
Cargo Deck Area	8,160 ft <sup>2</sup>	(758 m <sup>2</sup> )
Cargo Deck Dimensions	170 ft x 48 ft	(51.8 m x 14.6 m)
Cargo Deck Loading	1,025 lbs / ft <sup>2</sup>	(5 mt / m <sup>2</sup> )
Fuel Oil Cargo	6,202 bbl (260,486 gal)	(986 m <sup>3</sup> )
Bulk Mud	9,180 ft <sup>3</sup> (6 tanks)	(260 m <sup>3</sup> )
Liquid Mud	10,804 bbl (8 tanks)	(1,717 m <sup>3</sup> )
Rig Water	10,389 bbl (436,339 gal)	(1,651 m <sup>3</sup> )
Cargo Fresh Water	1,418 bbl (59,585 gal)	(225 m <sup>3</sup> )

### PERFORMANCE

Top Speed	13.5 knots @ 280 gph
Cruise Speed	11 knots @ 162 gph
Economical Speed	10 knots @ 130 gph
DP Mode	55 gph

### DYNAMIC POSITIONING SYSTEM (CLASS II)

ABS classed DP2 L3 Platinum Redundant Positioning System consisting of:

- 2 x DP Operator Stations
- 3 x SIMRAD MX 512 DGPS Receivers
- 1 x Cyscan MK IV Laser
- 1 x GCS Mini-Rada Scan Radar Range and Bearing System (optional)
- 3 x Gill Wind Sensors
- 3 x TSS Meridian Gyro Compasses
- 3 x TSS DMS-SSORP Motion Sensors
- 1 x Portable Joystick Control System

### PROPULSION - MACHINERY

Total Installed Power	7,640 kW (10,245 hp)
Main Engines	4 x 1,730 kW each (2,320 hp each)
Auxiliary Generator	1 x 550 kW (738 hp)
	690 V / 60 Hz (CAT C18)
Emergency Generator	1 x 170 kW (228 hp)
	480 V / 60 Hz
Main Propulsion	2 x 2,000 kW each (2,680 hp each) Z-Drives
Retractable Bow Thruster	1 x 840 kW (1,125 hp) retractable azimuthing
Bow Tunnel Thruster	1 x 840 kW (1,125 hp) variable speed thruster

### CARGO DISCHARGE

Fuel Oil	750 gpm at 225 ft TDH (170 m <sup>3</sup> /h at 68 m TDH)
Rig Fresh Water	750 gpm at 200 ft TDH (170 m <sup>3</sup> /h at 60 m TDH)
Liquid Mud (LM)	1,000 gpm at 225 ft TDH (227 m <sup>3</sup> /h at 68 m TDH)
LM Segregated System	Integrated / Segregated (2 Tanks each system)
LM Agitation	Hydraulically Driven Mixers
LM Tank Cleaning System	Scan Jet
BM Segregated System	Integrated / Segregated (3 Tanks each system)

### DECK EQUIPMENT

Deck Cargo Crane	1 x 4.9 lt (5 mt)
Anchor Windlass	2
Fire Fighting	Class I, 2 x pumps, 2 x monitors

### CONTROL & SAFETY

Fully integrated DP / control dual redundant system  
 Alarm, monitoring and control system for periodically unattended machinery space  
 Remote control and monitoring of liquid mud and bulk mud cargo systems

### ELECTRONICS

2 Radars with ARPA	1 EPIRB (1 radar transponders)
1 Navigation Gyro Compass	3 VHF (bridge to bridge)
1 Autopilot	1 Weather Fax
1 Depth Sounder	1 Navtex
1 Speed Log	1 PA / Loud Hailer
1 Radio System Compliant	
1 ECDIS Unit	

### ACCOMMODATION

Fully Air-conditioned  
 Accommodations for 36 people consisting of:

- 2 x 1 man cabins
- 15 x 2 man cabins
- 1 x 4 man cabins

Galley, Provision Room, Stores, Mess  
 Walk in Refrigerator  
 Walk in Freezer