# SAYAN POLARIS - VS 4530 MPSV

General		
Design	VS 4530 MPSV	
Built	Tersan Shipyard	h
Delivered	May - 2018	
	9755086	
IMO	9755086	and the second s
Call Sign	5BJL6	
Flag	Cyprus	The second se
Port of Reg	Limassol	

### Class

Class: BV ✤ HULL ✤ MACH Offshore support vessel (Oil recovery; Standby rescue (270 survivors); Supply; Fire-fighting 2) SPS100 Unrestricted navigation COMF-NOISE 3, COMF-VIB 3 ♣ AUT-UMS, ♣ SYS-NEQ-OSV, GREEN PASSPORT, CLEANSHIP, ICE CLASS IA\* INWATERSURVEY ♣ DYNAPOS AM/AT R, SDS

Dimension		Deck Capacities	
Length overall:	89.10 m	Cargo deck area:	906m2 (max)
LPP:	80.30m	Cargo deck area:	824m2 (usable)
Breadth moulded:	22.00 m	Deck Capacity:	3450 MT (VCG 1m)
Depth moulded:	9.01 m	Deck Strength:	10 MT/m2
Maximum draught:	7.20 m	GRT	6453
DWT at max draught:	5,569 tons	NRT	1936
		Accommodation:	SPS 100

Power and Propulsion		
Main Engines:		Thrusters:
3 x Wartsila 8L26	3 x 2720 kW	2 x FP Tunnel thrusters fwd 2 x 1500 kW
		1 x FP Azimuth thruster fwd 1 x 1200 kW
3-phase synch. 690VAC Variable Frequency		
1 x Harbor/Emerg. generator	1 x 450 kW	2 x FP Steerprop (Z-drives) 2 x 3000 kW
		Frequency controlled rpm
Total installed power 8610kW (11.537 BHP)		

#### Siemens BLUEDRIVE PlusC<sup>™</sup> (Main Drives Unit)

The BLUEDRIVE Plus C<sup>™</sup> control system is dynamically setting the speed according to the optimal operational point of the engines, the system secures by this lowest possible specific fuel consumption. During DP operation the advantages are substantial as production and spinning reserve can be realized with limited consumption, emission and maintenance cost. Up to 20% fuel saving compared to other Diesel electric, constant speed gensets.

### Fuel Consumption figures (numbers are approximate, without guarantee)

Calm water, no adverse current	Calm water, no adverse current
8 knots 8.6 m3 / 7.4 mts/day	14 knots 27.0 m3 / 23.2 mts/day
9 knots 11.5 m3/ 9.9 mts/day	DP 8.3 m3 / 7.1 mts/day (3 gen)
10 knots 15.0 m3 / 12.9 mts/day	Green DP 5.3 m3 / 4.6 mts/day (1 gen)
11 knots 18.2 m3 / 15.7 mts/day	Standby field 4.5 m3 / 3.9 mts/day (1 gen)
12 knots 21.6 m3 / 18.6 mts/day	Harbour 4.0 m3 / 3.4 mts/day (1 gen)
13 knots 24,0 m3 / 20.6 mts/day	

Accommodation	
Accommodation for 100 persons (SPS)	1 Conference room
3 State Cabins (sep. bed-room)	2 Mess room
14 x 1-man cabin	1 Day room
37 x 2-man cabin	1 Gymnasium
3 x 4-man cabin	1 Hospital

Cargo - Tank Capacities / Pumps			
Tank		Pump	
Ballast water/drill water	2861 m3	3x Allweiler vertical single-satge pump	
		150 m <sup>3</sup> /hr 90mlc 9 Bar	
		75 m <sup>3</sup> /hr 22mlc 9 Bar	
Fresh water (14 dedicated)	814 m3	2x Allweiler vertical single-satge pump	
		150 m <sup>3</sup> /hr 90,4m head  8,9 Bar	
		80 m <sup>3</sup> /hr 22,6m head 8,9 Bar	
Dry bulk (5 tanks)	273 m3	2 Segregated systems	
		2x Oil-injected rotary screw compressor	
		2x30,0 m3/oper. pressure 5,6 bar, max 6 bar	
Base oil (3 combo – Mud/ORO)	500 m3	2 x 2- screw horizontal screw pump	
		100m <sup>3</sup> /hr 90mlc, 9,0 Bar	
Fuel Oil (9 dedicated)	1359m3	2 x 2- screw horizontal screw pump	
		250 m <sup>3</sup> /hr 90mlc, 9 Bar	
Liquid mud SG 2,8 (15 combo)	2323 m3	2 x 100m <sup>3</sup> /hr 90m head 24 Bar	
Brine –SG 2,5 (8combo)	1520 m3	2 x horizontal eccentric screw pump	
		100m <sup>3</sup> /hr 90m head 20,3 Bar	
ORO (13 tanks)	2072 m3	All NOFO 2009 approved	
Methanol / Special Products SG 2,8	3 (not fully	4 x Allweiler / Vogelsang	
commissioned)		75m3 / 90 mlc 12 Bar	
(4 combo Mud/ ORO) LFL* below	43°)		
	307 m3		
Slop tank	44 m3	1x2- horizontal screw pump 100 m <sup>3</sup> /hr 9 Bar	
Dispersant 73 m3			
4 manifolds, all outside cargo deck (in safe havens) two on each side and two PS/SB aft			
Mud Box installed on all filling lines			
15 Allweiler submerged hydraulic agitators			
The piping arranged as two systems capable of discharging two types of bulks simultaneously			
through two separate discharge lines. Mucking ejector fitted.			
2 fresh water cool air dryers with automatic drain water			
Tank air vent system are fitted with two independent dust cyclones and collection system			

## Cargo - Tank Capacities / Pumps

Tank Cleaning – VAMO 2/2,5/5 Ejector

16 Tank washing machines (all in combo tanks) 10m3/hr – 12 bar – 60°C (T-82)

Deck Equipment	
MacGregor Crane	2 x Tugger winches (15mt)
1 el-hydr. knuckle boom	(SB incl 300mtr towrope – NOFO 2009)
Lifting capacity SWL 3t/15m, 2t/18m	2 x Capstans (10mt)
Hoisting speed: 75 m/min (Rescue).	6 x Cargo securing winch, 3 each side (2mt)
Dynamic Factor: 15%	Max Deck: 18,30m x 52,37m: 906m2
Approved for rescue basket and MOB Boat	Usable Deck: 18,30m x 45,03m: 824m2
Mariner Deck Crane	
1 el-hydr. boom	
Lifting capacity SWL 15t/4-13,5m	
Hoisting speed: 20 m/min (empty hook)	
Dynamic Factor: 17%	

Various	
4 Sea chest High/Low w/ Ice chest	CCTV monitoring system, 17 cameras and 6
2 Separate Sea inlets for FiFi pumps	monitors, monitoring all machinery
	equipment and deck areas.
Removable Bulwark at stern (7m x 1,8m)	Oil Radar according to NOFO Standard 2009
Hydraulic operated (NOFO 2009)	2 RO plants (reverse osmosis fresh water
	maker). NORWATER NWE8-30; NWE8-
	30/20

FIFI II Equipment	MOB / Standby
2 remotely operated FiFi II monitors on	FRC – Mare GTC 700-2VD - 10 Pax,
wheelhouse top	2 Yanmar 4JH Solas engines, water jet type,
1 remote operated FiFi II monitor on	max speed 35 kn
bow/mooring deck (Iceberg management)	
	2 Lifeboats, each 50 persons
All 3600m3/hr each	
	6 Life rafts, 105 persons each side
2x FiFi pumps, 7200m3/hr (2x 3600)	
Permanently installed water spraying system	Standby Vessel (S) 270 persons (Opt)
with sprinkle nozzles and water shield	
nozzles	

DP Interfaces & Position ref. systems	De-ice Equipment
K-Pos DP-21 Included GreenDP® Control	DNV Notation DEICE Category I & II
3 Gyrocompass Interfaces.	De-Ice for temperature up to -30 degrees
3 MRU-D / 5 Interfaces.	Anti-Icing and anti-freezing to maintain
1 RADius 1000 D Dual	surface temperatures of at least + 3 degrees
1 CyScan Mk4 Laser Ref System	
1 VDR.	
3 Wind Sensor Interfaces.	
3 DGPS Interface.	

DP Interfaces & Position ref. systems	De-ice Equipment
2 RADius 700X EX Transponder	

Particulars believed to be correct, but without guarantee. Revision 27/08/2024