

# DSV BELOV HUMAITÁ

Air Diving with Light Work Class ROV

# BELOV



THE ROYAL  
INSTITUTION  
OF NAVAL  
ARCHITECTS

Awarded a  
2020 Significant  
Small Ship  
by RINA

DSV designed by Robert Allan – Naval Architects and Marine Engineers (RAL). First Brazilian diesel-electric diving support vessel. The DP-2 rated vessel is fitted with air diving capabilities, a light Work Class ROV and knuckle-boom crane to allow effective offshore operations. The propulsion includes three main waterjets and three tunnel thrusters, which allow safe diving conditions while divers are near the surface.

## REGISTRATION

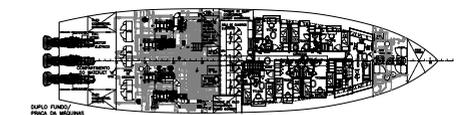
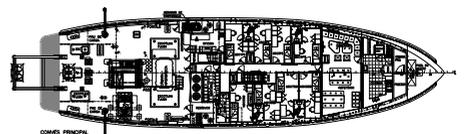
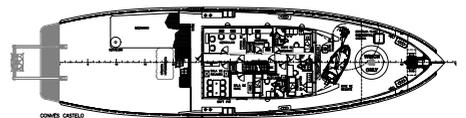
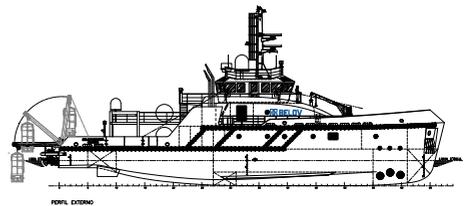
*Vessel Name:* BELOV Humaitá  
*Type:* Diving Support Vessel (Petrobras SDVS)

*Class:* RINA C\* SPECIAL SERVICE-DYNAPOS-AM-R, DIVING SUPPORT, UNRESTRICTED NAVIGATION, AUT-UMS

*Year:* 2020

*Builder:* BELOV Offshore Industrial Ltda.

*Owner:* BELOV Group



## MAIN PARTICULARS

### DIMENSIONS

Length overall	40.50 m
Moulded breadth	10.98 m
Depth	3.85 m
Draft	2.80 m
Deadweight	518.10 t
Net tonnage	149
Gross tonnage	499

### ACCOMMODATIONS

Accommodation for	35 POB
Cabins	14
Hospital	1

1 mess room, laundry, galley, stores, diving control room, ROV control room, 1 office, change room, gym.1 mess room, laundry, galley, stores, control room,

### CAPACITIES

Deck capacity	5.0 t/m <sup>2</sup>
Fuel oil	90.5 m <sup>3</sup>
Fresh water*	23.5 m <sup>3</sup>

Diesel oil filtration system:  
GEA Westphalia with CJC separator

\*Includes redundant fresh water generators (reverse osmosis)

## OPERATION

### PROPULSION - MACHINERY

Main generators	4 x 565 kW
Emergency generator	1 x 96 kW
Main waterjets	3 x 520 kW
Bow tunnel thruster	3 x 150 kW

### PERFORMANCE

Trial speed	11 knots
Economic speed	8 to 10 knots

**Remark:** vessel is diesel-electric

Includes Hull Vane ® system for hydrodynamic efficiency and fuel savings.

## EQUIPMENT & ELETRONICS

### DECK EQUIPMENT

Main knuckle boom crane:

1 MELCAL Offshore Crane Foldable Telescopic Boom (Model FL20T1)

Luffing (min/max boom angle)	-45/78°	Load capacity @ 6.15 m (max)	1.400 kg
Slewing range	360°	Load capacity @ 4.30	2.000 kg

### ALARM & MONITORING SYSTEM

1 WEG IAMCS system control: Engines, main and emergency generators and thrusters 1 K-IMS (Kongsberg Information Management System): heading, wind, motions, DP alerts

### ELETRONICS

Radar / ECDIS, Gyrocompass, Magnetic compass, Speed log, Autopilot, GPS, 2 DGPS (for DP), Echo sounder, AIS, GMDSS, Inmarsat C Radio VHF Class A VSAT

### GENERAL EQUIPMENT

Black water pump	1 x 5 m <sup>3</sup> /h
Gray water pump	1 x 5 m <sup>3</sup> /h
Ballast pump	2 x 130 m <sup>3</sup> /h
Bilge water separator	1 x 1 m <sup>3</sup> /h

### SAFETY EQUIPMENT

Life raft: 1 x auto inflatable for 20 people  
Life vests: 47 x class 2  
Fire-fighting/black water pump 2 x 55 m<sup>3</sup>/h  
Emergency fire-fighting pump 1 x 25 m<sup>3</sup>/h

## DIVING EQUIPMENT

### AIR DIVING EQUIPMENT (50 M DEPTH)

Diving A-frame with open bell	3.00 t
Man-rider Winches by Ekron model EKPH-MR-2,5T	2 x 2.50 t
Decompression chamber model Deco 1800 by Totalmat	1 each

*Air quads, compressor, filters, etc.*

### ROV EQUIPMENT

ROV A-frame	2.00 t
ROV AHC Winch Ibercisa Model MO-E/75/1000-26,72	1 each

Light Work Class ROV:

Leopard by SAAB Seaeye, 2000 m depth\* rated, payload up to 205 kg, FW thrust 500 kg, vertical thruster 200 kg, including 2 x 7 f manipulators (Orion), waterjet, cavitation cleaning, CP probe, UTM, hydraulic circuit 40 l/min @ 200 BAR, various tools, etc.

*\*Ibercisa winch drum limited to 1000 m of cable*

### PORTABLE CURRENT METER

Valeport 106 portable current meter	1 x 50 m depth
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### DYNAMIC POSITIONNING SYSTEM

1 Kongsberg DP system (class 2) comprising:

- 2 DGNSS (combined GLONASS and DGPS), including Follow target function, motion prediction and DP capability analysis functions.
- 1 Cyscan
- 1 RadaScan,
- 2 UPS
- 4 MRU-PD, 3 wind sensor
- 2 INS (inertial navigation system) MGC R1

### CCTV

CCTV system covering: Deck, ROV LARS, diving LARS, wheelhouse, engine room, subsea images from ROV and diving, DP system supervision and engine room control.





[www.belov.com.br](http://www.belov.com.br)

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