

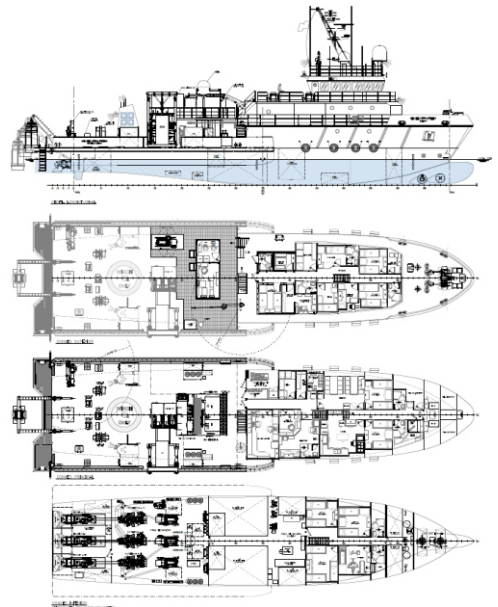
DSV Cidade Ouro Preto

Air diving with light work class vessel

BELOV



This DSV, designed by INACE – Indústria Naval do Ceará, is diesel powered DP-2 rated vessel, 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 two tunnel thrusters, which allow safe diving conditions while divers are near the surface.



REGISTRATION

Vessel Name: Cidade Ouro Preto
Builder: INACE Indústria Naval do Ceará

Class: C ⚓ Special Service - Working Boat Unrestricted Navigation - DP2
Year: 2013

Flag: Brazilian

Owner: BELOV Engenharia S.A.

MAIN PARTICULARS

DIMENSIONS

Length overall	42.20m
Breadthmoulded	10.56m
Depth	3.75m
Draft	2.59m
Deadweight	551.9t
Net tonnage	147
Gross tonnage	461

CAPACITIES

Deck capacity	5.0 t/m ²
Fuel oil	60.0 (121,62) m ³
Fresh water*	10 (27,73) m ³

*Includes redundant fresh water generators (reverse osmosis)

ACCOMMODATIONS

Accommodation for	37 pax
Cabins	11
Hospital	1

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

Diesel oil filtration system:
GEA Westphalia with CJC separator

OPERATION

PROPULSION - MACHINERY

Diesel engines	3 x 250 kW
Main generators	3 x 250 kW
Emergency generator	1 x 72 kW
Main waterhets	3 x 520 kW
Bow tunnel thruster	2 x 225 kW

PERFORMANCE

Trial speed	11 knots
Economic speed	8 to 10 knots

Remark: vessel is diesel-electric

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

GENERAL EQUIPMENT

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

ELETRONICS

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

SAFETY EQUIPMENT

Life raft: 4 x auto inflatable for 10 people each
Life vests: 50 x class 2
Fire-fighting/black water pump 2 x 55 m³/h
Emergency fire-fighting pump 1 x 25 m³/h

DIVING EQUIPMENT

AIR DIVING EQUIPMENT (50 M DEPTH)

Diving A-frame with open bell	3.0 ton
Man-rider Winches by Ekron model EKPH-MR-2,5T	2 x 2.5 ton
Decompression chamber model Deco 1800 by Totalmat	1 each

Air quads, compressor, filters, etc.

ROV EQUIPMENT

ROV A-frame	2.0 ton
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
-------------------------------------	----------------

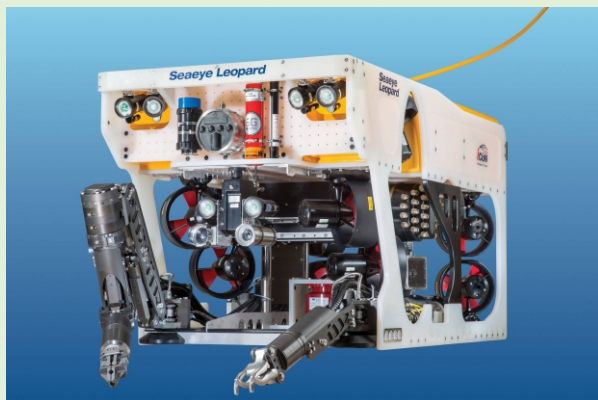
DYNAMIC POSITIONNING SYSTEM

1 Kongsberg DP system (class 2) comprising:

- 2 DGNS (combined GLONASS and DGPS), including Follow target function, motion prediction and DP capability analysis functions.
- 1 Cyscan
- 1 RadaScan,
- 2 UPS
- 2 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

Matriz - Escritório Central

Rua Quinta dos Lázaros, nº 50 - Quintas, Salvador - BA
CEP: 40303-300
Telefone: (71) 3416.1900

Canteiro Marítimo de Mapele - CMM

Rua do Túnel s/n, Mapele - Simões Filho - BA
CEP :43727-050
Telefone: (71) 3416.1970

Base Macaé

Avenida Nossa Senhora da Glória nº1181 - 4º andar - Praia Campista
Macaé - RJ - CEP: 27923-215
Telefone: (22) 2773.4023

Base Guapimirim

Estrada Martha Alcântara Fares nº3000, Lote 40, Bairro/Distrito Cotia
Guapimirim - RJ - CEP: 25947-040
Telefone: (21) 2632.4683

