RV „A. v. Humboldt“, technical details

Multi-purpose research vessel for non-living resources, world-wide operation

Flag: Federal Republic of Germany
Call sign: Y3CW
Classification: GL 100 A4 E1
Owner: Land Mecklenburg-Vorpommern
Management: BMS-Baltic Marine Service GmbH
IOW- Institute for Baltic Sea Research Warnemuende
Built: 1967 at Peenewerft Wolgast as modified fishing vessel, converted 1970 as research vessel for Institute for Marine Research in Warnemuende, fully reconstructed 1977/78 as oceanographic research vessel in the actual form; since 1992 under management of BMS/IOW
Personnel: Nautical crew: 16, Scientists: 12

Basic dimensions:
BRZ: 1249; NRZ: 374; Length o.a.: 64,23m, Length p.p.: 56,15m, Beam: 10,5m, Draught(max.): 5,20m, free board: 1,86m, Service Speed 10kn (max. 12 kn).

Main engine: type 6 NZD 72, 1286 kW
Propulsion: variable pitch propeller
Manoeuvring propulsion devices:
bow thruster 70 kW, active rudder 70 kW
Generators:
3 diesel generators 330/150/75 kVA, shaft generator 400 kVA
Voltage: 380/220V, 50 Hz partly stabilised

Accommodation:
air-conditioned 1 or 2 pers. cabins

Bunker capacity:
330 qbm gas oil, 55 qbm drinking water, 50 qbm fresh water, fresh water production max 8 qbm/day

Consumtion:
4,5 t gas oil /day at service speed

Navigation Equipment:
2 radars, gyrocompass, auto-pilote, 3 echo sounders, doppler log, track plotter, 2 DGPS-System, electronic chart system

Scientific Equipment:
DWD-weather-station, Data collection an distribution system DATADIS® incl. surface water thermostalinograph, echo sounder for sediment, LAN

Intercom:
INMARSAT tel.&Fax, IRIDIUM, GSM-Tel.&Fax, board telephone, walky-talkies, wireless station with GMDSS, telex, GSM-data-transmission

Lifting gear:
hydraulic A-frame at stern 5 t, slewing boom 4 t with electric winches, capstan winches, derricks etc.

Special winches:
hydraulic CTD-winch 2 t/ 5000m coaxial tross cable 8,2mm in a dry CTD-cabinet with hydraulic gate midship starboard, 2 rope winches 4000/6000m 4mm, hydraulic double drum winch 1t, 1200m coaxial tross cable 11mm/2000m steel rope 6mm

Laboratories:
dry lab 17m², chemical lab 20m², bio lab 22,5 m², computer lab 14 m², electronic lab 17 m², physics lab 11m², C14 lab 4,5 m², photo lab 4 m², weather lab 2,7 m²; all with 220/380V AC, telephone and DATADIS(R)-connection, fresh water, some with sea water