

Multi-purpose research vessel

Flag: Germany
Call sign: DBKR
IMO-Nr 8521438
MMSI 218 601 000
Classification: GL 100 A5 M E (Dry Cargo Ship)
Owner: Land Mecklenburg-Vorpommern
History: 1987 built as research vessel for German Navy by Kröger-Werft Rendsburg
 2010 purchased by Land Mecklenburg-Vorpommern, and converted in 2011 to a multi purpose research vessel at Peene Werft in Wolgast

Management: Technical management: BRIESE Schifffahrt GmbH & Co KG, Abt. Forschungsschifffahrt Scientific coordination: Leibniz- Institut for Baltic Sea Research Warnemünde (IOW)

Personnel: Crew: 11
 Scientists: 12

Basic dimensions:

BRZ: 850
 Length o.a.: 56,50 m
 Length p.p.: 50,00 m
 Beam: 10,80 m
 Draught: 3,65 m
 Free board: 1,70 m
 Service Speed: 11 kn

Main engine: 3 diesel generators (520 kW each)
 Typ MTU 6V 396 TB 53

Propulsion: diesel-electric;
 Permasyn-motor
 single propeller

Manoeuvring propulsion devices:

transverse thrusters (147 kW each),
 at bow and stern

Voltage: 660 V, 60 Hz rotary main power
 440 V, 60 Hz rotary power supply
 220 V 50 Hz in labs as UPS
 220 V/380 V 50 Hz for containers
 24 V DC

Bunker cap.: 82 m³ marine gas oil
 26 t drinking water

Consumption: 3,5 t gas oil/day

Cruising range: 4000 nm

Navigation Equipment:

2 radars, gyrocompass,
 ECDIS and auto-pilot,
 echo sounders, DOLOG, 3 GPS-Systems

Scientific Equipment:

DWD-weather-station,
 Data system D-SHIP® by WERUM
 Surface water thermosalinograph,
 Clean seawater system,
 ADCP VM Ocean Surveyor OSII 150 kHz,
 SES2000 medium, sediment echo sounder by
 INNOMAR, 100kHz
 R2Sonic 2024, Broadband multibeam
 echosounder 200-400 kHz
 Motion Reference Unit (MRU) IXSEA Phins
 Hydrographic well
 CTD-system with vessel swell moving
 compensation
 Utility and fast rescue boat

Communication: GSM- Tel.& Fax, IRIDIUM,
 V-SAT- (digital data-transmission),
 Wireless station with GMDSS for area A3

Lifting gear: Hydraulic crane SWL 4,5 t/ up to 8 m with own
 winch 400 m
 Hydraulic crane 1,5 t/ up to 6 m with own
 winch 300 m
 A- frame 4 t
 Provisions Crane on forecandle 0,9 t

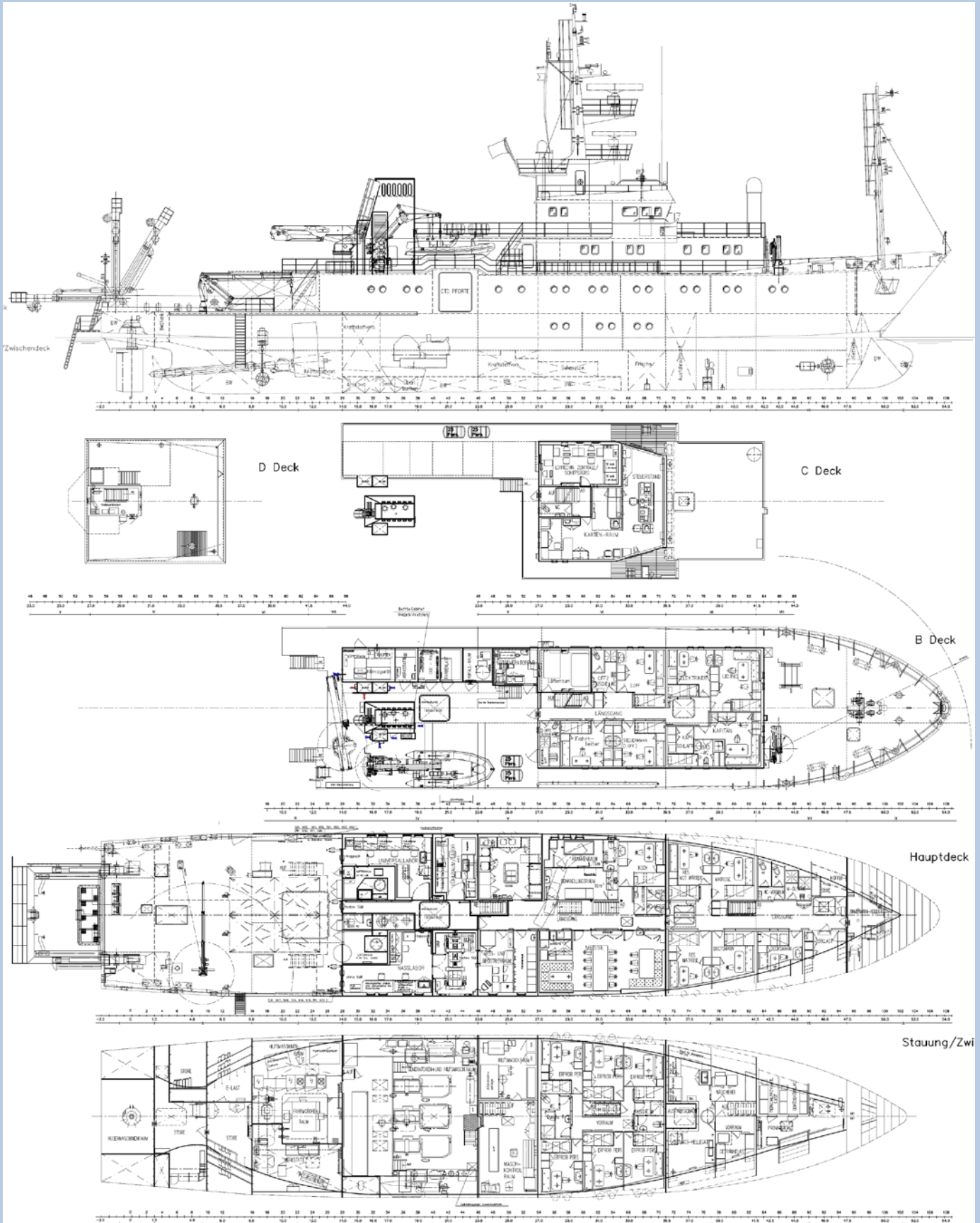
Special winches: CTD-winch up to 1500 m with cable
 Ø12,7 mm,
 Double drum hydraulic winch (mobile) 1 t with 600
 m coaxial tross cable Ø8,1mm/
 1000 m steel rope 6 mm

Container: 2 places for 20 ft. à 15 t incl. infrastructure
 also possible 4x 10 ft. container

Laboratories: all labs with LAN, PC, miscellaneous media,
 universal lab 16 m²
 cold storage lab (adjustable 4- 23 °C) 11 m²
 wet lab 17 m²
 CTD room (with gate to outboard) 11 m²
 measuring room 8 m²
 hydro acoustics control 14 m²
 surface registration room 9 m²

Accommodation: 11 x one bed cabins, air conditioned
 7 x two bed cabins, air conditioned

r/v ELISABETH MANN BORGESSE General Arrangement Plan



Scientific Co-ordination:
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