



DR FRIDTJOF NANSEN

Type: Fishery and Oceanographic Research Vessel

Hull material: Steel

Owner: Havforskningsinstituttet (Norway)

Design by: Skipsteknisk AS

Dr Fridtjof Nansen is a supersilent scientific research platform whose propulsion configuration, laboratory and working deck layout are purposely designed and built to comply with ICES CRR 209 -the most restrictive standard for vessel underwater noise control. Thanks to its wide range of cranes, winches and miscellaneous deck equipment, Fridtjof Nansen can conduct complex, multidisciplinary, multi-investigator research both through direct observation as well as through the deployment of autonomous vehicles and installations.

MAIN PARTICULARS

General information

Hull material:	Steel
Type	Fishery and Oceanographic Research Vessel
Delivery:	2017
DNV-GL Class notation	✕ 1A1 , EO, ICE-C, SPS, DYNOPUS-AUT, NAUT-AW, COMF-C(2)V(2), BMW-T, TIMON, Recyclable
Built in compliance with	ICES Cooperative Research Report no. 209 – Underwater Noise of Research Vessels

Dimensions

Length overall	74.5 m
Length between perpendiculares	66.1 m
Breadth moulded	17.4 m
Depth from main deck	8.6 m

Capacities

Fuel oil	About 490 m³
Fresh water	About 175 m³
Ballast	About 450 m³

Accommodation

Accommodation for	45, 15 crew + 30 scientists
Cabins:	19 single cabins + 13 double cabins
Laboratories	CTD Laboratory, Benthos/Plankton/Sediment Laboratory, Dry Lab, Photo Lab, Climate Lab, Fish -dry Lab, Fish -wet Lab, Clean SW Sampling Laboratory
Hangars	2, Main Hangar + CTD Hangar

PERFORMANCE & MACHINERY

Propulsion / Manouvering

Propulsion system	Diesel-Electric
Main Generator sets	1 x MAK 6M20C, 1,140 kW + 2 x MAK 9M20C, 1,710 kW each
Main propellers	1 x Fixed Pitch Proppeller, 5 blades, diameter 3,600 mm, 3,000 kW
Bow Tunnel Thruster	1 x Brunvoll FU 63LRC-1750, 600 kW, Super Silent
Retractable Azimuth Thruster	1 x Brunvoll AR 63LNC-1650, 860 kW
Stern Tunnel Thruster	1 x Brunvoll FU 63LTC-1550, 600 kW, Low noise configuration

Features

Maximum speed	14 Kn
Economic speed	10 Kn
Bollard pull at 4 Knots	30 t

EQUIPMENT

Deck / Special equipment

Deck cranes	1 x Main Deck crane 7.5 t at 16 m + 1 x Aft Deck Crane 3 t at 14.9 m + 1 x SB Crane 1.5 t at 14.5 m + 1 x Provision Crane 3 t at 10 m
Oceanographic Work Boat	1 x Gondan G10 WB 10 persons capacity, 20 Knots speed
Fast rescue craft	1 x FRB WEEDO 600 6 person capacity, 220 hp Max speed 34 Kn
Stern A-Frame	10 ton load, 170° tilt movement
Main Hangar A-Frame	15 ton load, 170° tilt movement
CTD Hangar L-Frame	3 ton load, CTD to be used 1,100 mm x 1,750 mm
Oceanographic deck equipment	17 x Rapp Hydema Scientific & Fishing winches