Norwind Gale

VESSEL HANDBOOK



TECHNICAL DATA

GENERAL

Delivered	June 2023
Keel laid	26.01.2022
Port of Registry	Aalesund
Flag State	NIS
IMO No	9955753
Call sign	LAPH8
Yard No.	949
Design	Vard 4 19
Operator	Norwind Offshore AS
Builder – Outfitting	Vard Brattvåg (Norway)
Builder – Hull	Vard Braila (Romania)

CLASSIFICATION / INSPECTIONS

DNV *1A SPS, Walk2work, DYNPOS(AUTR), Naut(AW), Clean(Design), Strengthened (DK), Recyclable, COMF(V2, C2), E0, BIS, Battery(Power), Shore power, COAT-PSPC(B), ER(SCR)

BIS, Battery(Power), Shore power, COAT-PSPC(B), ER(SCR)		
Next Annual Class	(due) 2024-09-27	
Next Intermediate Class (In Water)	(due) 2026-09-27	
Next Main Class Dry	(due) 2028-06-27	
ISPS / MLC / ISM	(due) 2026-12-07	
OVID (last done)	2023-06-27	
CMID (last done)	NA	
FMEA Analyze (last done)	2023-07-03	
FMEA Trail (last done)	2023-05-30	
Annual 3`rd Party DP Trails (last done)	2023-05-30	

MAIN DIMENSIONS

Length overall incl. boat landing	88,71 m
Length overall - Hull	85,48 m
Length between p.p	79,20 m
Breath mld.	19,50 m
Depth main deck.	7,40 m
Max draught (summer)	5,60 m
Operational Draught	5,10 m
Air Draught (at 5,10 mtr draught)	39,70 m
Displacement at Summer draft	5941,5 t
Deadweight (DWT), 5,10 m draft	1900 t
Deadweight (DWT), max draft	2600 t

Gross Tonnage	5943
Net Tonnage	1783
Light Ship Weight	3342,0 t

OFFSHORE LOGISTICS

Gangway Type	Uptime – 30m AMC
3D Crane (Gangway)	Uptime
Deck Crane (3D)	Optional (up to 40 t Harbour and 10 t 3D)
Helideck	Optional (D17/7T)
Boat Landing	Stepless & adjustable between 2,75 and 4,5 mtr
Daughter Craft	Alusafe 1250 WF
ROV	Optional (deck strengthening and switchboard space)

MACHINERY AND PROPULSION

WIACI III VERTI AIND I INC	01011
Setup	Hybrid - Diesel Electric with Battery
Main Engines	4 off Diesel electric generators
	2 x 1700 ekW (CAT C3512), 1800 RPM, IMO Tier 2
	2 x 940 ekW (CAT C32) 1800 RPM, IMO Tier 2
Total Power	5280 ekW
Emergency Generator	1 x 280 ekW
Main propellers	2 x 2000 kW FP Azimuth Propellers, PM, ø2600 mm
Bow thrusters	2 x 1600 kW Tunnel Thruster, PM, ø2000 mm
Azimuth Thruster (Bow)	1 x 1500 kW Swing Up Azimuth Thruster, ø2200 mm
Catalyti c Converter (SCR)	Fitted
Shore Power (IEC 80005-3)	2x690V/600A,
Energy Storage System	2232 kW, 744 kWh, Battery
Bus Tie Operations	Open and Closed

SPEED AND FUEL CONSUMPTION

Economical Speed*	10 knots - 9,7 m3/24 hrs
Max speed*	14 knots - 21,7 m3/24 hrs
DP2 Position keeping*	2,8 m3/24 hrs
Standby on location*	2,6 m3/24 hrs
In port	0,9 m3/24 hrs
(60% Shore Power / 40% MGO	

*(no weather applied)

DP

DP Cap, level 1 numbers (DNV ST-0111)	9, 7, 8, 6
DP Maker	Kongsberg
Gyro, Laser type (Seatex MGC)	3 off
MRU, Laser type (same as gyro)	3 off
Wind Sensors – Gill Ultrasonic	3 off
DGPS – DPS i4	2 off
Relative Ref sys, Scenescan (laser)	1 off
Relative Ref sys, Range Guard (radar)	1 off
HIPAP (prepared with DN 500 gate valve)	1 off
K-IMS DP Logger & Viewer	Yes
High Speed DP Mode	Yes (10 kn)
Remote Diagnostic	Fitted

GANGWAY

Maker		Uptime – 30m AMC
Gangway type		Hydraulic
Class		DNV ST-0358
Operation length (Horizonta	l)	20–30 m
Operation height (horizontal)	19,7 – 30 m
Max operational wind velocit	ty (3 sec gus	et) 25,0 m/s
Max luffing/lifting speed		6°/sec
Max luffing range		+/- 25°
Max slewing speed		6°/sec
Max slewing range		+/- 25°
Max telescope speed		2,5 m/s
Max telescope distance		+/- 5 mtr
Width		1,2 m between handrails
Stepless arrangement		Fitted
Trolley transfers possible		Yes
Operator Station	PS B	ridge wing & Remote Panel
Slip of detection (DNV-ST-03	358)	Fitted
Communication with DP/IAS		Fitted
Safe Landing system		Fitted
3D sensor system (gangway	end)	Fitted
Gangway cameras		Fitted
Remote Access		Fitted
Operation Modes	Manual, AN	AC, Bumper (active/tension) and Autonomous
Push on force (operator conf	trolled)	9,8-14,7 kN (1000-1500 kg)
Electric transfer line (gangwa	y tip)	400 V / 50 Hz / 125A
1" Fuel Line (dry break away)		1" fitted (gangway tip)

GANGWAY INTEGRATED CRANE

Inboard/Harbor Mode	19 mtr – 6 t
	27 mtr – 3 t
Offshore Mode	19 mtr – 6 t – 2,5 m Hs
	27 mtr – 2 t – 2,5 m Hs
	27 mtr – 3 t – 1,5 m Hs
3D Compensating	21-26,5 mtr – 3 t
Automatic hook	Fitted

ELEVATOR

• Personnel and equipment elevator in enclosed casing, reaching from main deck to upper position of gangway

Car dimension	1600 mm, 2400 mm, 2100 mm (w x d x h)
Door opening (aft)	1200 mm x 2100 mm (w x h)
(gangway, main, A & B	deck)
Door opening (fwd)	900 mm x 2100 mm (w x h)
(A, B, C & D deck)	
Payload	2000 kg / 26 persons
Speed	0,6 m/sec
Space for stretcher	Yes

WAREHOUSE CAPACITIES

Sheltered deck area	370 m2
Dry Store (PPE & Luggage)	10 m2
Free Height	2,9 m
Deck axle load capacity	2,5 t
Store	30 m2
IMDG Product Store	20 m2
Humidity Controlled Store 1	33 m2
Humidity Controlled Store 2	16,5 m2
Workshop 1	30 m2
Workshop 2	20 m2
Electric Forklift	2 off
Electric stacker	1 off

ACCOMODATION

- Complement with permanent capacity for 87 persons and according to MCL 2006. The accommodation is of high quality and according to VARD Accommodation Standard.
- 100 % air changeout in accommodation to minimize risk of spread of viruses.

Total POB	87 Persons
Single Cabins w/bathroom and daylig	tht 75 off
Double Cabins, w/bathroom and day	light 6 off
Offices	4 off
Main deck (warehouse offic	e) 2 desks
C-Deck, Client office 1	8 desks
C-Deck, Client Office 2	2 desks
C-deck, Office 3 (ships office	e) 2 desks
Meeting Rooms	
Duty Mess (main deck)	8 seats
Mess Room (main deck)	56 seats
ECR Room (tween-deck)	4 seats
Auditorium/Cinema w/videoconference (C-deck,	28 seats
Client office 1 (C-deck)	8 seats
Client office 2 (C-deck)	4 seats
Meeting room 1 w/videoconference (C-deck,	8 seats
Meeting room 1 w/videoconference (C-deck,	8 seats
Ships office (C deck)	2 seats
Bridge	10 seats
*Meeting room 1 & 2 can be opening folding wall	e merged to one large area, by
Day Rooms	3 off
Dayroom 1 (A-deck)	11 seats
Dayroom 2 (A-deck)	14 seats
Dayroom 3 (Main deck)	11 seats
Messroom (amount in one seating)	56 pers.
Gymnasium	1 off (84 m2)
Hospital with separate Ward	1 off
Wardrobes	2 x 30 pers Male
	1 x 14 pers female
Drying Room	38 survival suits
Drinking water cooler	Duty Mess, Wheelhouse, ECR, Gym and Client pantry

DECK CAPACITIES

Cargo Deck Area	414 m2 (wood covered)
	367 m2 (excl. daughter craft area)
Deck load capacity	5t/m2
Max. total deck load	590 t
Container capacity (20 ft and recessed twist locks)	10 off

DECK EQUIPMENT

Foundation for optional crane	Port Side (Ø 2600 mm)
Boat landing Crane (ship to ship)	1t – 12 m in 1.5m Hs
	2t – 12 m in 0,3 m Hs
Container Power outlets	4 x 400V 60Hz 16A
Dry Waste Compactor	Fitted
Chilled Garbage room	1 off

DAUGHTER CRAFT DAVIT

Maker and type	Vestdavit PLD-16000
Amount	1 pce
Location	A-Deck Stb Side
Davit – Sea State	Beaufort 1-6 condition (Trim 10° / List 20°)

DAUGHTER CRAFT (Fleet unit – availability on request)

Maker	Maritime Partner
Туре	Alusafe 1250 WF
Amount	1 pce
Building Regulation	UK MCA Workboat Code
Hull, Structure & Stability	Acc to MCA Workboat code Cat 1
Building material	Aluminum
Certification	MCA Area Cat 2
Range	60 NM from Safe Haven
Limit for personnel transport	2-2,5m Hs
Capacity	2 x crew + 12 passengers
Seats	Fully suspended w/safety belt
Engines	2 x Volvo Penta D6-380D-G (2x 380 HP at 3500 rpm)
SCR (IMO TIER 3)	Yes
Propellers	TS propellers (IPS)
Shore Connection	230VAC
Length over all	13,15 m

Breadth, extreme	3,85 m
Depth	1,37
Weight dry, fully equipped	10930 kg
Max Speed	TBA 22-24 kn
Cruise Speed	TBA 20-22 kn
Fuel Capacity	800 ltr (2 x 400 ltr)
Freshwater	42 ltr
Grey Water	25 ltr
Deck cargo	2 cargo zones for a total of 1000 kg
Turbine landing	Bow fender acc to IMCA (1800 mm)
Toilet	Yes
Gyro Stabilizer	Yes
Navigation Equipment:	
Garmin Radar GMR18	1 pce
Echo Sounder GSD 24	1 pce
Furuno GPS GP-170	1 pce
Furuno AIS FA-170	1 pce
Communication Equipment	
Outfitting	Acc. To GMDSS A1
VHF 6210	1 pce
VHF 6222 + Class A DS	SC 1 pce
Portable VHF TRON TR	1 pce
Jotron EPIRB Tron 60GI	PS 1 pce
Jotron AIS SART	1 pce

MOORING EQUIPMENT

Combined capstan/bollards, aft	2 x 10 t
Combined windlass mooring	2 x 12 t
winch/capstan, fore	

TANK CAPACITIES

Fuel Oil	550 m3
Potable Water (inc Watermist)	710 m3
Technical Fresh Water	362 m3
Water Ballast	1200 m3
UREA	48 m3

DISCHARGE CAPACITIES

Fresh Water	75 m/h- 3 bar, Frequency controlled
Fuel Oil	75 m3/h – 3 bar, Centrifugal

Water Ballast	100 m3/h – 4 bar, Centrifugal
	100 m3/h – 4 bar, two-spindle screw
CTV Filling	9 m3/h @ 5 bar, at boat landing
Gangway FO Filling	9 m3/h @ 5 bar

NAVIGATION

Bridge	Vard SeaQ Bridge
Radar	S-Band and X-band
Wave radar	Fitted
Conning Display	Fitted
ECDIS	2 off
Gyro	3 off (same as DP)
DGPS	2 off
Planning Station	1 off
Autopilot	Fitted
Echo Sounder	1 off
Speed Log	1 off
Loading Computer	Fitted
AIS	Fitted
LRIT	Fitted
VDR	Fitted
Sound Reception system	Fitted
SSAS	Fitted
Bridge alarm system	Fitted
Bridge nav watch alarm system	Fitted

COMMUNICATION

GMDSS	A1, A2 and A3
Main Radio	MF/HF with DSC
Navtex Receiver	Fitted
EPIRB (free float)	1 off
EPIRB (manual)	1 off
SART	2 off
VHF Portable (GMDSS)	3 off
VHF w/DSC Fixed, Bridge	2 off
VHF Slave Unit, Bridge Wing	2 off
VHF Fixed, ECR	1 off
AERO VHF AERO, Portable	1 off
UHF Fixed, Bridge	2 off
UHF Fixed, ECR	1 off
UHF Portable	6 off

Heli-beacon	1 off
Inmarsat C	1 off (with EGC)
Iridium GMDSS	1 off
Fleet Broadband	Fitted
VSAT	Fitted
Portable Iridium	Fitted

SAFETY EQUIPMENT

Life Rafts	2x12P
Fast Rescue Craft	1 off
Lifeboat	2 off 2x45P
Survival Suits	87 off
Work Suits for FRC	6 off
People Tracking System	Scan Reach
People Control System	Scan Reach
PLT	1 off
EEBD	Fitted

HOSPITAL

Treatment Bench	1 off
Tub	1 off
Separate ward	1 off
Window between rooms	Fitted
Bed size	130x200 cm
Emergency call function	Fitted

FIRE DETECTION SYSTEM

 Stand-alone addressable fire detection system with graphic presentation on IAS.

FIRE FIGHTING SYSTEMS

- Water mist full flooding system for engine room
- Automatic extinguisher for Fat Fryer in Galley

VIDEO AND MONITORING SYSTEM

Fixed Cameras	13 off
Doom Cameras	5 off
Integration to TV distribution system	Fitted

INTERNAL COMMUNIATION / TV

- Modern internal two-way communication system
- Public address system
- IPTV system in all cabins meeting rooms and public areas, with EPG, Radio, Info, Video on Demand, PA CCTV
- Public Wi-Fi network

ROLL DAMPING SYSTEM

Passive roll reduction tank	1 off
U-Shape tanks, type Hoppe	2 off

FRESHWATER PRODUCTION

Evaporator	25 t / 24 hrs
Reverse Osmosis	25 t / 24 hrs

SANITARY SUPPLY AND DISCHARGE SYSTEM

- Two UV Sterilizers
- Vacuum sewage toilet plant
- Sewage treatment plant

PURIFICATION PLANTS

- Two MGO depth filters
- Ballast water treatment system (IMO approved)

HULL

Impressed	current cathodic protection	Fitted

ELECTRICAL SYSTEMS

- LED lighting in all areas
- Main switchboards 690 V
- Aux. Switchboards 440 and 220 V
- Emergency switchboard, 440 V and 220 V
- Electric shore supply (Yard), 440 V 500A

FLOOD LIGHTS AND SEARCHLIGHTS

• 3 x 1000 W halogen searchlights, remote controlled



Vessel Pictures



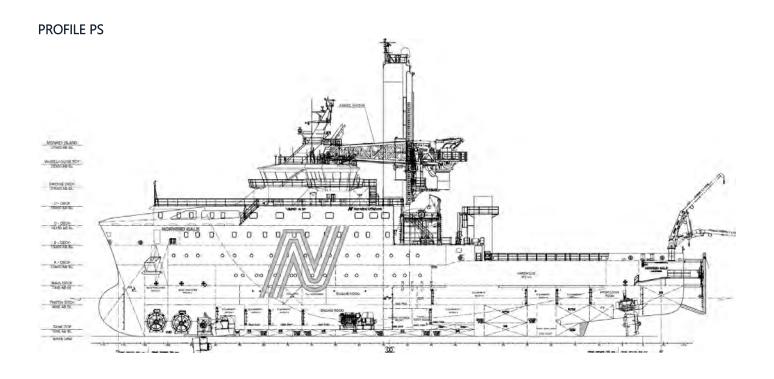


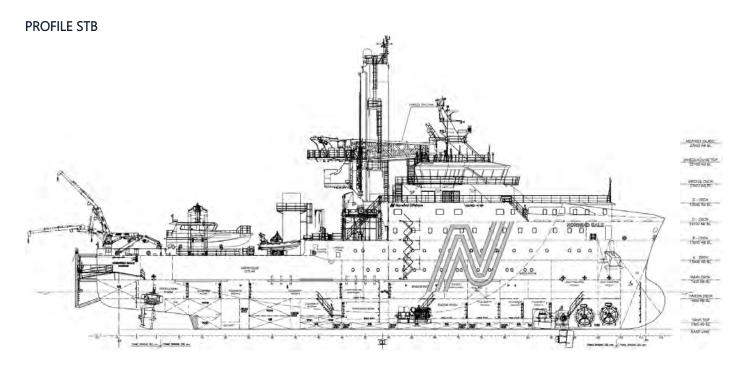
Vessel Pictures



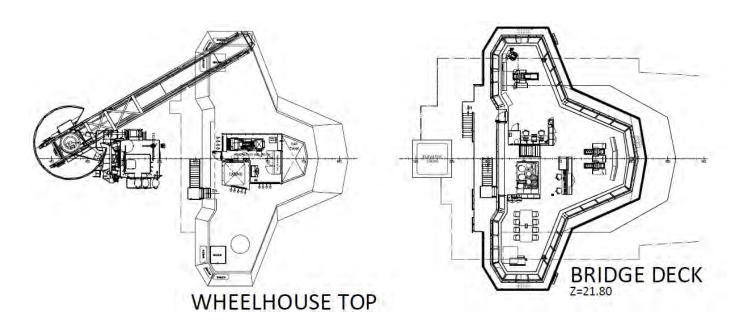


GENERAL ARRANGEMENT



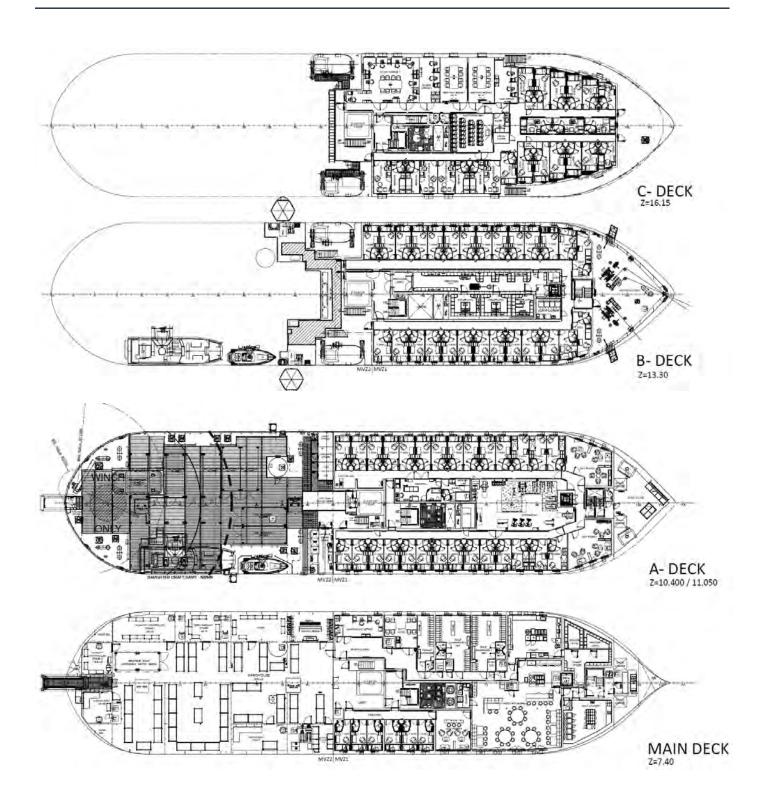


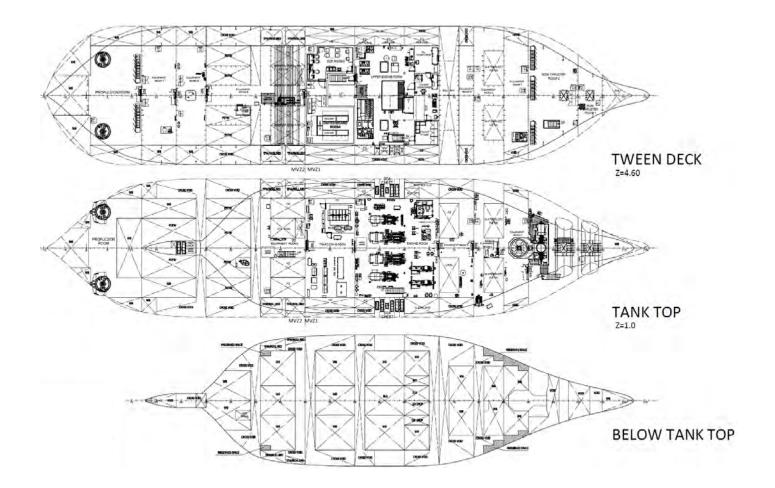
WHEELHOUSE TOP AND BRIDGE DECK

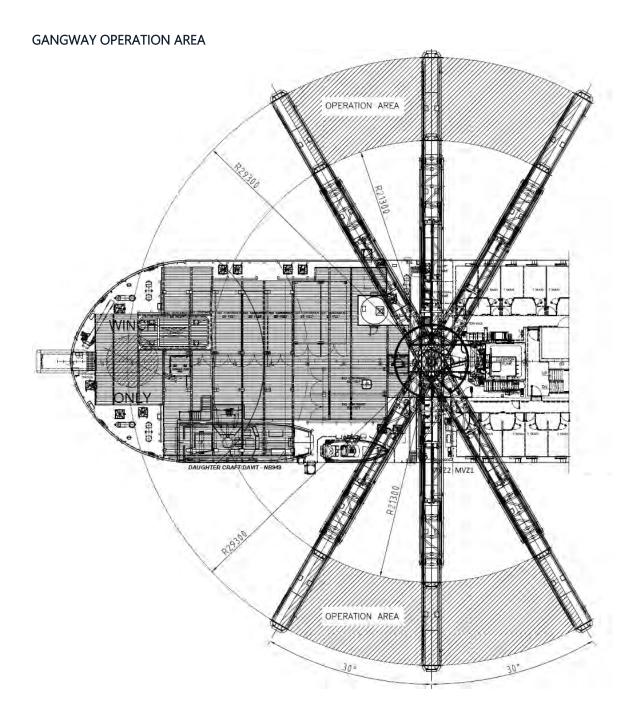


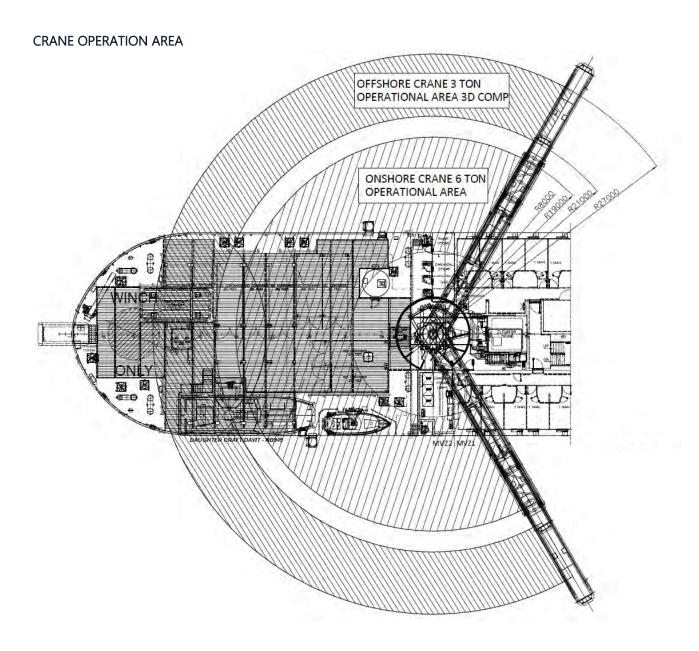
D-DECK

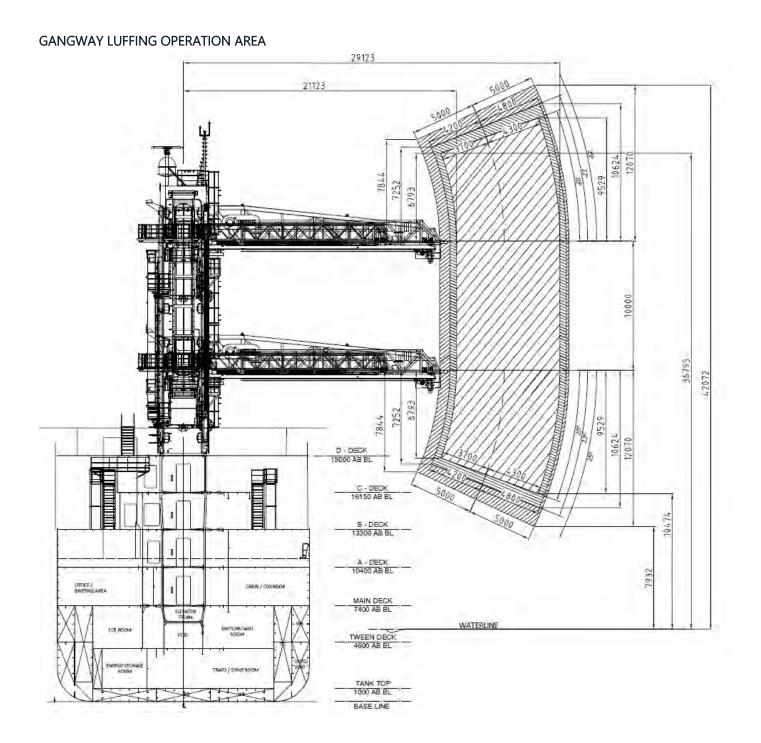
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GANGWAY CURSOR HEIGHT

