

Design: STX AH 08
Built: 2011
IMO No: 9447639

Skandi Emerald



A part of the DDW Offshore Fleet

www.ddwoffshore.com

IMO No 9447639

Technical drawing of the Skandi Emerald ship, showing a side profile and a cross-section. The side profile includes labels for "AH08 CD", "SKANDI EMERALD", and "CD 08". The cross-section shows internal machinery, including engines and a propeller. A scale bar at the bottom indicates "Frame spacing 600 mm" and "PROFILE".



SKANDI EMERALD

VESSEL MAIN PARTICULARS

Vessel design	AH08
Vessel name	Skandi Emerald
Manager (DOC holder)	DDW Offshore AS
Owner	DDW Offshore AS
Type	AHTS
Class definition	1A1 Tug Fire Fighter I+ and II SF E0 DYNPOS-AUTR NAUT-OSV(A) CLEAN DESIGN DK(+) HL(2.8) TMON
Vessel built	2011
Yard	Vard Vung Tau
Yard no	10024383
Port of registry	Nassau
Flag state	Bahamas
Safe Manning	11
Next dry docking	MAR 2021

PRINCIPAL DIMENSIONS

LOA	75.0 m
LPP	68.0
Breadth mld	17.4 m
Depth mld to main deck	8.5 m
Min Draft	5,3 m
Summer draft	7,9 m
Airdraft	35,7 m (from keel to mast)
Deadweight	3195 t
Lightship	3287,85 t
Gross tonnage	3181 t
Net tonnage	1129 t

PERFORMANCE

Max speed	15,72 knots
BHP	12000 (KW)
Bollard Pull Continuous	201 t

PROPULSION / MAIN ENGINES

Main engines (make)	2 x Rolls-Royce B32:40 V12 - 6000 KW
Number of main engines	2
Total output main engines (kW)	16.320 BHP / 12 000kW
Main propellers	2 x SCANA VOLDA 4 blade propeller
Propellers diameter	Ø 4000mm
Drive type shaft/diesel-electric	Hybrid
Fuel type MGO/HFO	MGO

THRUSTERS / PROPELLERS

Bow thruster	2 x Brunvoll FU80LTC2000 - 880 KW
Stern thrusters	2 x Brunvoll FU80LTC2000 - 880 KW

GENERATORS / AUX GENERATORS

Shaft generators make:	AEM
Shaft generators capacity:	2x 2400 kW
Aux generators Make:	Scania DI 16 55M
Aux generators capacity:	2x 370 kW
EM generator make:	John Deere
EM generator capacity:	99 kW

CARGO DECK

Deck space	550 m ²
Deck length	41.1 m
Deck breadth	14.4 m
Deck strength	10 t/m ²
Deck cargo capacity (tonnes)	1 000 t
Height of cargo rail	2.6 m stb, 3.0 m port

CARGO CAPACITY SUMMARY

Fuel oil	1700 m ³
Base oil	230 m ³
Fresh water	650 m ³
Drill water	2019 m ³
Liquid Mud	460 m ³
Brine	460 m ³
Bulk Cement	264 m ³
Bulk Barite	264 m ³
Bulk Bentonite	264 m ³
Rig chain lockers	307 m ³
Slop	54 m ³
Combination tank system	(Mud, Brine & FO system), (Barite, Cement & Bentonite system) & (FO & BO system).

DRILL WATER

Tank capacity	2019 m ³
Number of tanks	8
Pump capacities	Main pump 200 m ³ /h
Pump type screw/centrifugal	Centrifugal
Number of pumps	1

FW

Tank capacity	650 m ³
Number of tanks	8
Pump capacity	200 m ³ /h
Pump type screw/centrifugal	Centrifugal
Number of pumps	2

FUEL OIL

Tank capacity	1700 m ³
Number of tanks	18
Pump capacity	200 m ³ /h
Pump type screw/centrifugal	Centrifugal
Number of pumps	1
Flowmeter	yes

LIQUID MUD

Tank capacity	464 m ³
Number of tanks	6
Pump capacity	75 m ³ /h
Pump type screw/centrifugal	Screw pump
Number of pumps	2
Fixed tank cleaning system	No
Tank washing pipe system	No
Agitator or circulation	Agitator

Possible to handle two types of mud simultaneously	Yes
--	-----

Max SG	2,8
--------	-----

DRY BULK

Tank capacity	264 m ³
---------------	--------------------

Number of tanks	4
-----------------	---

Compressor capacity	25.9 m ³ /min/5.6 bar
---------------------	----------------------------------

Segregated system	yes, two systems
-------------------	------------------

Air dryer	2
-----------	---

BASE OIL

Tank capacity	235 m ³
---------------	--------------------

Number of tanks	2
-----------------	---

Pump capacity	150 m ³ /h
---------------	-----------------------

Pump type screw/centrifugal	Screw pump
-----------------------------	------------

Number of pumps	1
-----------------	---

Possible to handle two types of base oil simultaneously	No
---	----

BRINE

Tank capacity	464 m ³
---------------	--------------------

Number of tanks	6
-----------------	---

Pump capacity	75 m ³ /h
---------------	----------------------

Pump type screw/centrifugal	Screw pump
-----------------------------	------------

Number of pumps	2
-----------------	---

Fixed tank cleaning system	No
----------------------------	----

Possible to handle two types of brine simultaneously	No
--	----

SLOP TANKS

Tank capacity	54.4 m ³
---------------	---------------------

Number of tanks	6 (Bilgewater 13,6m ³ , Sludge 13.6m ³ , Dirty oil 8.5m ³ , F.O. drain 8.5m ³ , Clean oil 5,1m ³ , Water drain 5.1 m ³)
Pump capacity	5 m ³ /h @ 2bar

CARGO LOADING / DISCHARGING CONNECTIONS

Fuel oil	4" Dry Break & 4" Camlock & 5" Hammer Lug FIG 50
Fresh water	4" Hammer Lug FIG 200 & 4" Camlock & 5" Hammer Lug FIG 50
Liquid mud	4" Dry Break & 4" Camlock & 5" Hammer Lug FIG 50
Brine	4" Hammer Lug FIG 200 & 4" Camlock & 5" Hammer Lug FIG 50
Drill water	4" Hammer Lug FIG 200 & 4" Camlock & 5" Hammer Lug FIG 50
Drybulk	4" Hammer Lug FIG 200 & 4" Camlock & 5" Hammer Lug FIG 50
Base oil	4" Hammer Lug FIG 200 & 4" Camlock & 5" Hammer Lug FIG 50

POWER SUPPLY DECK

Air outlets	1 x Deck Workshop
Air outlet capacity	130 m ³ /h @ 7 bar
Reefer outlets	4 x 440V 30 amp reefer outlets
Reefer outlet capacity	230V - 16A, 440V - 32A

ROLL REDUCTION SYSTEM

Number of roll reduction tanks	2
Roll reduction system type	Passive

EVAPORATOR / OSMOSIS

Reverse osmosis type	Hansun HSRO-10
Reverse osmosis capacity	10 m ³ /day

DECK CRANES

Starboard crane	1 x Triplex, 15 m / 3.2 t, 10 m / 5 t
Aft crane	1 x Triplex Knuckle Boom, 12 m / 3 t on cargo rail port side

ANCHOR HANDLING WINCH

Type	R/R Brattvaag waterfall type SL350W/BSL350W
Length of drum	3.45 m + 0.9 m (compartment)
Inner drum diameter	1.05 m
Diameter of flanges	2.85 m
Low gear: Drive hoist first layer	350 t at 0 - 10.5 m/min
Low gear: Drive hoist top layer	144 t at 0 - 25 m/min
Low gear: Lowering first layer	0 - 34 m/min
Low gear: Lowering top layer	0 - 84 m/min
Low gear: Dynamic braking first layer	64 - 480 t at 0 -51 m/min
Low gear: Dynamic braking top layer	26 - 196 t at 0 - 126 m/min
High gear: Drive hoist first layer	90 t at 0 - 34 m/min
High gear: Drive hoist top layer	37 t at 0 - 84 m/min
High gear: Lowering first layer	0 - 34 m/min
High gear: Lowering top layer	0 - 84 m/min
High gear: Dynamic braking first layer	64 - 480 t at 0 -51 m/min
High gear: Dynamic braking top layer	26 - 196 t at 0 - 126 m/min
Brake holding first layer	450 t

TOW / WORK WINCH

Type	R/R Brattvaag waterfall type SL350W/BSL350W
Length of drum	3.45m + 0,9m(compartment)
Inner drum diameter	1.05 m
Diameter of flanges	2.85 m

Low gear: Drive hoist first layer	350 t at 0 - 10.5 m/min
Low gear: Drive hoist top layer	144 t at 0 - 25 m/min
Low gear: Lowering first layer	0 - 34 m/min
Low gear: Lowering top layer	0 - 84 m/min
Low gear: Dynamic braking first layer	64 - 480 t at 0 -51 m/min
Low gear: Dynamic braking top layer	26 - 196 t at 0 - 126 m/min
High gear: Drive hoist first layer	90 t at 0 - 34 m/min
High gear: Drive hoist top layer	37 t at 0 - 84 m/min
High gear: Lowering first layer	0 - 34 m/min
High gear: Lowering top layer	0 - 84 m/min
High gear: Dynamic braking first layer	64 - 480 t at 0 -51 m/min
High gear: Dynamic braking top layer	26 - 196 t at 0 - 126 m/min
Brake holding first layer	450 t

SECONDARY WINCHES

Type	R/R Brattvaag ALM63130
Length of drum	2 x 2.3 m + 2 x 0,75 m (compartment)
Inner drum diameter	1.5 m
Diameter of flanges	4.5 m
Drive hoist first layer	130 t at 0 -18 m/min, 160 t at 65 m/min
Drive hoist top layer	53 t at 0 - 45 m/min, 65 t at 174 m/min
Capacity wire	2 x 800 m - 203 mm / 8"

ANCHOR HANDLING EQUIPMENT

Smith bracket MBL	Design load : 3900 kN / 397 t
Shark jaws	2 x Karm 650 t
Spare shark jaw inserts	1 x 95 - 125 mm, 2 x 85- 102 mm, 2 x 75 - 90 mm, 2 x 60 - 80 mm, 1 x 50 - 65 mm
Towing pins	4 x Karm 330 t
Steering pins	2 x Karm 95 t
Stern roller dim	3.5 m

Water monitors	2 x Monitor FJM-100 DIN P16/JIS 100/10 (FOG/JET), man operated
J-hook	BEL 101 'J' Chain Chaser SWL 110 t
Grapnel	BEL 109 SWL 110 t
Swivel numbers of.	2
Swivel SWL	160 t
85 T shackles	6
120 T shackles	2

WIRE STATUS

AH drum	2255m 77mm
Tow drum	1320m - 83mm
Sec drum Starboard	150 m - 76 mm
Sec drum port	150 m - 76 mm
Storage drum	1000 m - 83 mm

GYPSYS INSTALLED

Gypsy starboard side	84 mm
Gypsy port side	76 mm
Spare Gypsy`s	84mm
Spare Gypsy`s	76mm

DECK MACHINERY

Tugger wich type	R/R Brattvaag LAKM132024
Tugger wich capacity	600m - 76 mm - 24 tonn
Tugger wich hoisting speed	22 m/min - 70 m/min
Capstan type	R/R Brattvaag LAKMX22012
Capstan capacity	70 m - 20 mm + 50 m - 63 mm synthetic rope - 12 tonn
Capstan hoisting speed	0 - 17 m/min

WINDLASS

Type	R/R Brattvaag Two declutchable cable lifters with band brakes LBFGX 63044 MA5
Cable lifter hoisting speed/pull	Nominal 9,8 tonnes pull at 0 - 13 m/min. at 32 bar,
Cable lifter Lowering speed	Lowering: 0 - 46 m/min.
Anchor type	Stockless bow anchor M Type Spek
Chain length	44 mm dia./247.5 m, 9 lengths each of 27.5 m, K3
Mooring drum capacity/pull	Two declutchable drums with band brakes, Wire / rope cap.: 230 m of dia. 60 mm

STORAGE WINCH

Type	R/R Brattvaag ALMX41011
Capacity	1200 m of 76 mm wire rope
Hoisting power	8,4 t pull at 0 - 94 m/min

RIG CHAIN LOCKERS

Chain lockers numbers & m ³	2 x 153 m ³
Capacity 76 mm chain	2 x 1250 m
Capacity 84 mm chain	2 x 1030 m
Capacity 110 mm chain	2 x 600 m

NAVIGATION EQUIPMENT

X-band Radar	1 x Sperry Marine VISIONMASTER RADAR X-BAND 65608/A
S band Radar	1 x Sperry Marine VISIONMASTER RADAR S-BAND
Electronic chart system	2 x Sperry Marine VisionMaster FT ECDIS with C-Map Professional +
Autopilot	Sperry Marine Navipilot 4000
GPS	2 x Sperry Marine DGPS R4
Echosounder	1 x Sperry Marine LAZ 5100
Magnetic Compass	
Gyro compass	3 x Plath Navigat X MK1

Wind gauge	2 x Kongsberg OMC 1390 - PK - 006
Speed Log	Sperry Marine Naviknot 350 E
AIS	Sperry Marine / SAAB R4 - J4

COMMUNICATION EQUIPMENT

MF/HF	Sailor CU 5100
MF/HF DSC	Sailor CU 5100 / Sailor TU 5150
VHF	2 (Sailor RT 2048 & Sailor RT 6210)
VHF DSC	2 x Sailor RT 5022
EPIRB	2 (Sailor SE 406-II & Sailor SGE 406-II)
SART	2 x Sailor SART II 9GHz SAR
Inmarsat C	2 x Sailor TT 3026C
Portable VHF	3 x Sailor SP 3520
Portable UHF	4 x Motorola GM-339
Weather fax	Furuno FAX - 30
Mobilephone	n/a
Inmarsat FleetBroadband	Sailor Fleet-77 TT 3622B

DYNAMIC POSITIONING SYSTEM

Class definition	DYNPOS - AUTR, (IMO DP2)
Type	Kongsberg K-Pos 21
DGPS no1	1 x Seatex DPS 116
DGPS no2	1 x Kongsberg DPS232
Diff correction	IALA, Inmarsat, Spotbeam
Fanbeam	MDL Fanbeam 5.0
Radius	Kongsberg Radius 1000
ERN number	99,99,99

JOYSTICK

Type	Kongsberg c-Joy OT & c-Joy WT (c-Wing)
Connections points	3 (Bridge Aft Console, Port & Stb wing)

ACCOMMODATION

Total number of bunks	27
Officers Cabins	7
Crew double Cabins	10
Messroom/Rec rooms	2
Lounges	2
Gymnasium	1
Hospital	1
Offices	2

GALLEY

Freezer space(m ³)	6.3 m3 (fish) + 6.3 m3 (meat), -25 C
Cooler space (m ³)	11.6 m3, +4 C

LIFE SAVING EQUIPMENT

MOB boat	Norsafe 7.5 m Magnum Rescue Boat for 6 persons
Liferafts	6 x Viking, 3 x 16 persons each side. In total for 96 POB
Lifejackets	33 x Rigid Lifejackets Viking > 40kg
Survival suits	39 x Viking Immersion Suits
Working/MOB-boat suits	n/a

FIFI / DISPERSANT SYSTEM

Type	FM400HD-01
Fire Fighting class	Fire Fighter I + II
Throw height / length	110m above sea lvl at 70m distance / 180m from bow
Monitor count	2 x Jason FiFi Monitor System - single flow path
Monitors capacity	2 x Water 3600 m3/h, 13-15 bar

INCINERATOR

Incinerator type

HSINC-18



DDW Offshore AS

Oksenøyveien 10
1366 Lysaker
NORWAY

+47 21 52 58 00