



30000 DWT SELF-UNLOADING BULK CARRIER

OC Agnes was built by Yantai CIMC Raffles Offshore Limited based on offshore standards. Theoretical weight is 30,000t. It features a world class hydraulic self-unloading system at 3,000mt (2,500 m3) per hour for transporting cargo, such as coal, stone and grain etc. OC Agnes was delivered in January 2010, it is the first self-unloading bulk carrier in China.

GENERAL

Class : ABS Class
Notation : I HULL, MACH, Bulk Carrier, BC-B,
Unrestricted navigation, AUT-UMS, VeriSTAR-HULL, MONSHAFT,
Builder INWATERSURVEY, Additional; ESP UWILD CRC

PRINCIPAL DIMENSIONS

Length o.a. : 175.00m
Length pp : 169.40m
Breadth moulded : 26.00 m
Design Draught : 9.00 m
Moulded Draught (freeboard): 10.63 m
Depth to main deck : 14.5m
Max. air draft : 32 m

DESIGN ENVIRONMENT

Service area : World wide
Self-unloading equipment:
Ambient temperature : -25°C min. to 45°C ~max .(assumed)
Operating wind speed : Approximately 13 m/sec. (assumed)

CARGO CAPACITIES

Cargo Hold : 28,400 m³
Tank Capacities:
Cargo holds : 28,400 m³
Discharging capacity per hour : 3,000 tons/2,500 m³
Boom outreach (beyond ship's side) : 77.00 m.
Clean water ballast : 15,000 m³
Fuel: H.F.O. (incl. settle./day tanks): 1,150 m³
Diesel oil (incl. day tank) : 240 m³
Technical freshwater, washing purpose only: 1,500 m³
Lubricating oil : 2 x 5 m³
Fresh water : 300 m³

MACHINERY/PROPULSION

Main engine : Rolls-Royce Marine AS, B32:40L8P,(2)x4000 KW.
Main Generators : 2x910kw/eachx1,800r/min.x450VAC,60HZ,
3p,0.8pf with exhaust turbo-charged trunkpiston type marine unit.
Shaft generator : 1x2000kwx1,800r/min.x450VAC,60Hz,3p,0.8pf.
Emergency : CATEPILLAR ARCB 450VAC, 315 KW
Propeller : One controllable pitch, Ni-A1-bronze,
clockwise looking from aft.
Thruster : 2x approx 750kw with controllable pitch propeller.
HFO Purifier : 2x1600 l/h
DO Purifier : 1x800 l/h
Lube Oil Purifier : 1x1600 l/h
Steam Boiler : K/KD 1.5 + (0.75+0.75)/7 :1500kg/h 9bar
Sewage Plant : 1x 23 persons complying with USCG.
Ballast System : 2 ballast main lines, stripping lines to be fitted.
FW Generator : 1x 15tons/day, plate type.
Main Air Compressor: 2x35 m³/h, 3.0Mpa , air cooled ,two stages,
two cylinder. Motor driven, screw type.
Ballast Pump : 2x800 m³/h, head water column 25,
motordriven vertical centrifugal with self priming unit.

FIRE FIGHTING & SAFETY

Fire Fighting : 2x 90 m³/hx7bar(head water column)+1x72
m³/h-7 bar Em. pump
Life Boat : 1xmin.21men free-fall life boat with
recovery davit .
Rescue Boat : 1x 6 men with provision crane.
Life Rafts : 2 x 21 men, 1x6 men.

NAVIGATION EQUIPMENT

Satellite Communication (standard-F): 1 set
Satellite Communication (standard-C): 2 set
AIS : 1 set
DGPS : 2 set
VDR : 1 set
ECDIS : 2 set
Magnetic Compass : 1 set
Radar Transponder : 2 set
Echo Sounder : 1 set
Navtex : 1 set
Speed Log : 1 set
Wind direction&speed Indicator: 1 set

COMMUNICATION EQUIPMENT

General alarm system : 1 set
Public address system : 1 set
Common battery telephone system: 1 set
Automatic telephone system: 1 set
LAN system : 1 set
Fire detection & alarm system: 1 set
Antenna multi-coupler for TV/FM/AM: 1 set

ACCOMMODATION

The accommodation is fit for 23 crew members and the spaces to be arranged, furnished and laid out in accordance with good Scandinavian standard.

REFRIGERATED STORAGE CAPACITY

Meat & fish room: 23 m³ Vegetable room: 29 m³
Dry provision: 29 m³

DECK MACHINERY

Windlass: 2-160KN+9m/min+1 C/L + 1 M/D +1W/E.
Mooring Winches:
2-2M/D +1W/E with capacity 125 KNx15m/min(self-tension)
2-1M/D +1W/E with capacity 125 KNx15m/min
Anchors:
2 x anchors, abt.4,210kg, high holding type.
Cranes:
1x1.5t SWL with outreach at least 7.5m
2x1t SWL with outreach of approx. 2-3m
HATCHES DIMENSIONS : (1)16.100M X 14.800M (2-7)14.700M X
14.800M
WEIGHT OF HATCH COVER : APPROX65 TONS
MAX PERMISSIBLE LOAD ON HATCH COVER:
17.2Kn/M2(1.75T/M2)
MAX PERMISSIBLE LOAD ON TANK TOP:1.5T/m2
BOW THRUSTER:1440KW(1927HP)/19 TON THRUST IMMER-
SION:3.500M
UNLOADING EQUIPMENT: EMS TECH INC SELF-UNLOADING
SYSTEM
CAPACITY : APPROX 3000 MT/HR(SUBJECT TO S/F OF CARGO)
BOOM LENGTH: 90.000M(Approx boom weight MT) (coal 1500mt/hr)
BOOM OUTREACH:77.000M
MAX BOOM ELEVATION :18.00 DEGREES
MAX HEIGHT ABV MAIN DECK : 31.560M(INCLUDING BOOM PED-
ESTAL 3.750M)

