

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship..... M.V. "NORWID"
(Or Contract No. if name unknown)..... Owners..... Polish Ocean Liners.
Ship Built at..... Grand Quevilly..... Ch. Reunis Loire-Normandie
Auxiliary Engines ~~or Gas Turbines~~ made at..... Lincoln..... by Societe Des Chantiers Reunis, when 1961. Yard No. 323. ✓
Total No. of sets and description (including type name)..... One - Auxiliary - 5VCBXZ, Paris. when Eng. Nos. 46398. ✓

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine..... 5 ✓ Dia. of cylinders..... 8" Stroke..... 10³/₄"
2 or 4 stroke cycle..... 4 ✓ Maximum approved BHP..... 255 ✓ at..... 600 RPM ✓ Corresponding MIP..... 146 lbs. ✓ Maximum pressure..... 1050 ± 3%
Fuel..... Diesel Oil. ✓ Are cylinders arranged in Vee or other special formation?..... No. ✓ If so, No. of
crankshafts per engine..... None. ✓ Is engine of opposed piston type?..... No. ✓ No. and type of mechanically driven scavenge pumps or blowers
per engine..... None. ✓ No. of exhaust gas driven blowers or superchargers per engine..... One. ✓ Is welded construction
used for: Bedplate?..... No. ✓ Entablature?..... No. ✓ Total internal volume of crankcase (if 20 cu. ft. or over)..... 40.5 c.ft. ✓ No. and total area of
crankcase explosion relief devices..... 10 - 238 sq. ins. ✓ Are flame guards or traps fitted?..... Yes. ✓ Cooling medium for: Cylinders..... Water. ✓
Pistons..... Air. ✓ No. of attached pumps: F.W. cooling..... One. ✓ S.W. cooling..... - ✓ Lubricating oil..... One. ✓ How is engine started? Comp. Air. ✓

SHAFTING. Is a damper or detuner fitted? No. No. of main bearings 7 Are bearings of ball or roller type? No. Distance between inner edges of bearings in way of cranks 9.3/16" Crankshaft: Built, semi-built, solid. Material of crankshaft Steel. Approved minimum tensile strength - Dia. of pins 4 3/4" Journals 6" Breadth of webs at mid throw 8" Axial thickness 2 1/2" If shrunk, radial thickness around eyeholes - Dia. of flywheel 3'-9" Weight 21 cwts. Are balance weights fitted? No. Total weight - Rad. of gyration - Dia. of flywheel shaft 6" Has each engine been tested in shop? Yes. How long at full power? - Was it tested with driven machinery attached? Yes. Was the governing tested and found satisfactory? Yes. Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 20.1.61. Date of approval of shafting 20.12.38. Identification marks on shafting LL.12870. RG.9408. Particulars of driven machinery 17.2 kW. DC. Thrige Alternator No. 908487.

Port and No. of Certificate for Starting Air Receivers (One) Marked A 5728 NOTTINGHAM C 33596

AUXILIARY GAS TURBINES.

BHP per set	At	RPM of output shaft.	Open or closed cycle?
Arrangement of turbines.	HP drives at RPM	HP gas inlet temp.	pressure.
(A small diagram should be attached showing gas cycle)	IP " at "	IP " " " "	" " " " "
	LP " at "	LP " " " "	" " " " "
No. of air compressors per set	Centrifugal or axial flow type?	Material of turbine blades	
Material of compressor blades	No. of air coolers per set	No. of heat exchangers per set	How are turbines started?
Total No. of free piston gas generators	Dia. of working pistons	Dia. of compressor pistons	No. of double strokes per minute at full power.
Gas delivery pressure	Gas delivery temperature		
Have the turbines and attached equipment been tested in shop?	How long at full power?	Were they tested with driven machinery attached?	
Particulars of gearing			
Date of approval of plans	Identification marks	Particulars of driven machinery	

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over..... Copenhagen No. 908487
For generators under 100 Kw., has Makers' Certificate been obtained?..... Are Certificates attached?..... No..

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable)..... Date.....
MARINE ENGINEERING DEPT.
Manufacturer

Is this machinery duplicate of a previous case?.....No.... If so, which?

GENERAL REMARKS. *State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.*

This Engine has been built under Special Survey in accordance with the Approved Plans and the Regulations of the Society, materials and workmanship being good.

On completion the engine was tried in the Shops under working conditions driving against brake loading, running at varying loads and speeds with satisfactory results.

The machinery has been forwarded for installation in the vessel.

Explosion relief devices and Flame Deflectors fitted.

Survey Fee.....£25.12/6d.

Expenses incl.

Date when a/c rendered

Engineer Surveyor to Lloyd's Register

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the.....M.V. "NORWID"
at Grand Quevilly.....in a proper manner and found satisfactory when tested on the (date) 24.1.1961.....under full working conditions.
Rouen

M.V. "NORWICH"

Engineer Surveyor to Lloyd's Register

P.F. Chesters

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