

PLEASE RETURN THIS REPORT WITH YOUR FIRST ENTRY.

Rpt. 4c

Date of writing report April 28, 1961 Received London Port PHILADELPHIA, PA. No. 1113 MAY 1961
Survey held at Trenton, N.J. No. of visits Ten First date Dec. 6, 1960 Last date April 24, 1961

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM RECIPROCATING ENGINES

Name of Ship Hull 204 Owners California Transport Corporation
(Or Contract No. if name unknown)
Ship Built at Uddevalla by Sorviksvarvet Aktiebolag when 1962 Yard No. 204
Auxiliary turbines ~~engines~~ made at Trenton, N.J. by De Laval Steam Turbine Co. when 1961 Eng. Nos. 652035-6 ✓
Total No. of sets and description 2 - 750 KW A.C. Generator Turbines

STEAM TURBINES. No. of turbines per set 1 BHP per set 1,005 Steam pressure 585 psig Steam temperature 865°
Type of turbines Multi-Stage (8 rows blading) ✓
Particulars of gearing Parallel axis - Single reduction
RPM of turbine shaft(s) 9283 - PCD of pinion(s) 4.889" ✓ PCD of wheels(s) 37.817" ✓ Material of pinion(s) Steel IA Material of wheel rim(s) Steel EB-2 Has rotor been dynamically balanced? Yes Diameter of rotor shaft at bearings 4.494" ✓ Does the set include a steam condenser? No Is an emergency governor fitted? Yes No. and purpose of attached pumps 1 - Gov. & Lube Oil, 1 hand pump for starting Has the set been tested in the shop? Yes If so, for how long at full power? Approx. 1 hr. Was the governing tested and found satisfactory? Yes Was the set tested with driven machinery attached? Yes
Identification marks LLOYDS PHL 9060 & 9061 20.4.61 D.J.A. ✓ Particulars of driven machinery G.E. 750 KW AC Generator
3 Phase 60 Cycle 450 Volt 1200 RPM ✓

STEAM RECIPROCATING ENGINES. BHP of each at RPM Steam pressure
Dia. of cylinders Stroke Dia. of crankshaft journals Pins Material of crankshaft Is crankcase enclosed? If so, is the internal volume 20 cu. ft. or over? No. and total area of crankcase explosion relief devices fitted? Are the bearings forced lubricated? No. and Purpose of attached pumps Is a Governor Fitted? Identification Marks

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over NYk. 2508, 2509 9 MAR 61 JMCG
For generators under 100 Kw., has Makers' Certificate been obtained? - Are Certificates attached? No YES

The foregoing description is correct.

H. G. Bauer, Executive Vice President
DE LAVAL STEAM TURBINE COMPANY Manufacturer

Is this machinery duplicate of a previous case? YES If so, which? Eng. Nos. 652033/4 - Hull 202

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.
These generator turbines have been constructed under special survey in accordance with the Rules, approved plans and New York letters.
The materials and workmanship are good.
The turbines have been examined and tested under working conditions in the shop coupled to their respective 750 K.W. alternators, afterwards fully opened out, examined and found satisfactory.

Survey Fee \$514.00
Expenses 33.00
Date when a/c rendered April 28, 1961

A. J. Orsted
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 S/S ASA V. CALL at UDDEVALLA in a proper manner and found satisfactory when tested on the (date) 19/27/62 under full working conditions.



Date of writing report Received London Port No. Survey held at No. of visits First date Last date

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship (Or Contract No. if name unknown) Owners (Or Consignees) Ship Built at by when Yard No. Auxiliary Engines or Gas Turbines made at by when Eng. Nos. Total No. of sets and description (including type name)

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine Dia. of cylinders Stroke 2 or 4 stroke cycle Maximum approved BHP at RPM Corresponding MIP Maximum pressure Fuel Are cylinders arranged in Vee or other special formation? If so, No. of crankshafts per engine Is engine of opposed piston type? No. and type of mechanically driven scavenge pumps or blowers per engine No. of exhaust gas driven blowers or superchargers per engine Is welded construction used for: Bedplate? Entablature? Total Internal volume of crankcase (if 20 cu. ft. or over) No. and total area of crankcase explosion relief devices Are flame guards or traps fitted? Cooling medium for: Cylinders Pistons No. of attached pumps: F.W. cooling S.W. cooling Lubricating oil How is engine started?

SHAFTING. Is a damper or detuner fitted? No. of main bearings Are bearings of ball or roller type? Distance between inner edges of bearings in way of cranks Crankshaft: Built, semi-built, solid Material of crankshaft Approved minimum tensile strength Dia. of pins Journals Breadth of webs at mid throw Axial thickness If shrunk, radial thickness around eyeholes Dia. of flywheel Weight Are balance weights fitted? Total weight Rad. of gyration Dia. of flywheel shaft Has each engine been tested in shop? How long at full power? Was it tested with driven machinery attached? Was the governing tested and found satisfactory? Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) Date of approval of shafting Identification marks on shafting Particulars of driven machinery

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 IP at IP LP at LP Material of turbine blades No. of air compressors per set Centrifugal or axial flow type? No. of air coolers per set No. of heat exchangers per set How are turbines started? Are the turbines operated in conjunction with free piston gas generators? 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 For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached?

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

Is this machinery duplicate of a previous case? 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.

Survey Fee Expenses 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 at in a proper manner and found satisfactory when tested on the (date) under full working conditions.

Engineer Surveyor to Lloyd's Register Lloyd's Register Foundation

29 MAR '62