t. 4c

of writing report 14-5-64 Received London Port MILAN. No. 46

ey held at No. of visits First date Last date

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

ne of Ship Owners (Or Consignees)

Contract No. if name unknown).

Built at Genova-Sestri by Ansaldo - Cantieri Navali when Yard No. 1594

iliary Engines or Gas Turbines made at Saronno by Isotta Fraschini e Motori when '63-64 Eng. Nos. 266089

al No. of sets and description (including type name) 1 - D 26 S6V DK 556 A 4. Breda

TERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 180 mm. Stroke 190 mm.

r 4 stroke cycle 4 Maximum approved BHP 384 at 1500 RPM Corresponding MIP 9.7 Maximum pressure 109.4

el class A BSS 2869 Are cylinders arranged in Vee or other special formation? 'V' of 60° If so, No. of

nkshafts per engine 1 Is engine of opposed piston type? no. No. and type of mechanically driven scavenge pumps or blowers

engine – No. of exhaust gas driven blowers or superchargers per engine – Is welded construction

d for: Bedplate? yes Entablature? yes Total internal volume of crankcase (if 20 cu. ft. or over) 5 cu. ft. No. and total area of

nkcase explosion relief devices 2 22 sq.in. Are flame guards or traps fitted? pyropress Cooling medium for: Cylinders water

stons oil No. of attached pumps: F.W. cooling 1 S.W. cooling – Lubricating oil 1 How is engine started? electrically

Mate

HAFTING. Is a damper or detuner fitted? No. No. of main bearings 5 Are bearings of ball or roller type? no Distance between

ner edges of bearings in way of cranks 140 mm. Crankshaft: ~~built, semi-built~~ solid. Material of crankshaft 38 NCD4 steel Approved

inimum tensile strength 95 Kg/mm2 Dia. of pins 110 mm. Journals 140 mm. Breadth of webs at mid throw 230 mm. Axial

ickness 47 mm. If shrunk, radial thickness around eyeholes solid Dia. of flywheel 765 mm. Weight 380 Kg. Are balance

eights fitted? yes Total weight 84 Kg. Rad. of gyration 152 mm. Dia. of flywheel shaft 140 mm.

as each engine been tested in shop? yes How long at full power? 4 hours Was it tested with driven machinery attached? Yes Was the

overning tested and found satisfactory? yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 18-10-63 & 4-2-64

ate of approval of shafting 2.5.63 Identification marks on shafting LLOYD'S MI. 16.7.1963 - GL.

articulars of driven machinery type DK 556 A 4 'Still' generator

562 U

ort and No. of Certificate for Starting Air Receivers –

UXILIARY GAS TURBINES. BHP per set At RPM of output shaft. Open or closed cycle?

rrangement of turbines. HP drives at RPM HP gas inlet temp. pressure

IP ,, at ,, IP ,, ,, ,, ,,

A small diagram should be ttached showing gas cycle) LP ,, at ,, LP ,, ,, ,, ,,

lo. 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

urbines 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

er 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

ttached? 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 Hamburg Cert. No. 63/1970

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)

Isotta Fraschini & Motori Breda - Saronno. Manufacturer

Is this machinery duplicate of a previous case? yes If so, which? see Rpt .45 for yard No. 1593.

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.

The above machinery was constructed under special survey, in accordance with the Rules and approved plans. All the materials were submitted to the tests required by the Rules and found satisfactory; workmanship satisfactory throughout.

Survey Fee 101280 Lire

Expenses 9108 lire

Date when a/c rendered 17.2.64

(Ing. G. Levi) 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