

t. 4c

of writing report 31.12.1963

Received London

Port TRIESTE

No.

held at TRIESTE

No. of visits 15

First date 25.9.1963

Last date 13.12.1963

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship "FEDOR POLETAEV"

Owners BLACKSEA STATE STEAMSHIP LINES, USSR.
(Or Consignees)

Contract No. if name unknown).

Built at GENOA

by Messrs. Ansaldo S.p.A.

when Yard No. 1594

Auxiliary Engines ~~or Gas Turbines~~ made at TRIESTE

by Messrs. C.R.D.A.

when 1963 Eng. Nos. (5807

No. of sets and description (including type name) Three C.R.D.A. SULZER 6 BCAH 29

(5808

(5809

INTERNAL COMBUSTION RECIPROCATING ENGINES.

No. of cylinders per engine 6

Dia. of cylinders 290mm.

Stroke 360mm.

4 stroke cycle 4

Maximum approved BHP 825

at 500

RPM

Corresponding MIP 12.2 kg/cm²Maximum pressure 70 kg/cm²

Diesel Oil

Are cylinders arranged in Vee or other special formation? no

If so, No. of

Crankshafts per engine

Is engine of opposed piston type? no

No. and type of mechanically driven scavenge pumps or blowers

engine none

No. of exhaust gas driven blowers or superchargers per engine one

Is welded construction

for: Bedplate? no

Entablature? no

Total Internal volume of crankcase (if 20 cu. ft. or over) 1750 lts.

No. and total area of

Crankcase explosion relief devices 3 - 240 cm²

Are flame guards or traps fitted? no

Cooling medium for: Cylinders fresh water

Connections none

No. of attached pumps: F.W. cooling one

S.W. cooling none

Lubricating oil one

How is engine started? compressed air

SHAFTING.

Is a damper or detuner fitted? no

No. of main bearings 7

Are bearings of ball or roller type? no

Distance between

Edges of bearings in way of cranks 320mm

Crankshaft: ~~BAR, 150mm~~ solid.

Material of crankshaft el. furnace steel Approved

Minimum tensile strength 56 kg/mm²

Dia. of pins 185mm.

Journals 200mm.

Breadth of webs at mid throw 295mm

Axial

Thickness 92mm

If shrunk, radial thickness around eyeholes solid

Dia. of flywheel 1500 mm

Weight 1400 kgs.

Are balance

Weights fitted? no

Total weight -

Rad. of gyration -

Dia. of flywheel shaft none

Has each engine been tested in shop? yes

How long at full power? 4 hours

Was it tested with driven machinery attached? yes

Was the

Engineering tested and found satisfactory? yes

Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 30.10.62

Date of approval of shafting 30.10.62

Identification marks on shafting

KLN-AS-931-20.5.63. = KLN-AS-886-11.2.63. = KLN-AS-916-16.5.63

Particulars of driven machinery 690 KVA Alternator N°s. 8003801-02-03

Port and No. of Certificate for Starting Air Receivers

Starting air bottle will be supplied on board.

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

Small diagram should be

IP

at

IP

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

Small diagram should be

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?

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.

Our Certificate N°s. 5371-5372-5373

For generators under 100 Kw., has Makers' Certificate been obtained?

Are Certificates attached?

No. (Certificates forwarded to Genoa)

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

CANTIERI RIUNITI DELL'ADRIATICO

Fabbrica Macchine S. Andrea

Manufacturer

Is this machinery duplicate of a previous case? yes

If so, which? Eng. N°s. 5804/05/06 Our Rpt. N° 16066.

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 auxiliary engines have been constructed with tested materials under special survey in

accordance with the Rules, approved plans and Secretary's letters. Material and workmanship

are good. The engines have been tested in the shop at full load with satisfactory results.

On completion of the shop trials they have been partly dismantled, the parts examined, found

good and re-assembled.

Survey Fee Lire 574.695.

Expenses " 15.000.

Total " 19.460.

Date when a/c rendered 3.1.1964

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

mt "FEDOR POLETAEV"

GENOVA

in a proper manner and found satisfactory when tested on the (date) 20.3.64 under full working conditions.

Engineer Surveyor to Lloyd's Register

011864-011876-0046