

JOHN BROWN & COMPANY, LIMITED,
CLYDEBANK.

GLASGOW REPORT No 148696

ENGINES NOS. 523.

LIST OF SPARE GEAR.



© 2021

Lloyd's Register
Foundation

W1625-0010 1/4

all sea connections joined direct on the stern of the ship
Are the Overboard Discharges above or below the d

NO.523.

SPARE GEAR AS REQUIRED BY B.O.T. AND LLOYDS TO BE SUPPLIED.
IF NOT LISTED BELOW.

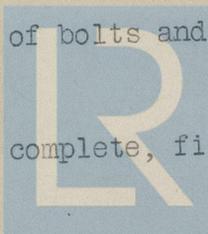
SPARE GEAR.

TURBINES.-

- + 5% of total number of bolts and nuts or studs and nuts for turbine casings.
- + One-fortieth of quantity of each size of blading material fitted.
- + 2 bolts and nuts (or studs and nuts) for each size of rotor bearing.
- + 1 main bearing bush for each turbine bearing fitted.
- + 1 set of pads for each of collar for one thrust block of each size.
- 8 rings angular and 4 rings rectangular carbons for H.P. turbine glands.
- 1 set labyrinth gland rings for each I.P. & L.P. turbine.
- 1 set blading tools, 1 liner for adjusting block for 4 springs for angular and 2 for rectangr. carbon rings for H.P. Turbine, each fitted.
- 1 cage for each Main steamstrainer.
- 1 " " 15.1/2 Steam Strainers.
- 100 assorted bolts and nuts for pipes.

GEARING.-

- + 1, set of bearing bushes for one gear wheel shaft.
- + set of bearing bushes for pinion shafts.
- + 2 bolts and nuts (or studs and nuts) for main gear wheel bearing.
- + 2 bolts and nuts (or studs and nuts,) for pinion bearings.
- + 5% of total number of bolts and nuts (or studs and nuts) for each gear case joint.
- + 1 pinion and shaft complete, fitted with claw coupling for each size fitted.
- + 1/



© 2021
Lloyd's Register
Foundation

W1625-0010 1/4

GEARING (CONTD.)

+ 1 Main gear wheel.

MAIN CONDENSERS.-

50, ferrules with cord packing for condenser tubes.

50, plugs " " "

MAIN FEED PUMPS.-

+ 1 set suction and delivery valve seats, with valve and guards complete for one pump.

1 set steam piston rings, complete.

1 set water piston packing rings.

1 steam shuttle valve and chest complete.

U.S. Metallic packing spares for one pump.

1 piston rod and pump rod with nuts and crosshead.

AUXILIARY FEED PUMPS.-

+ 1 set suction and delivery valve seats, with valves and guards for one pump complete.

1 set steam piston packing rings.

1 set water piston packing rings.

1 set of United States packing spares.

1 shuttle valve chest complete.

1 piston rod and pump rod with nuts and crosshead.

MAIN AIR PUMPS.-

+ 1 bucket with valves and guards complete.

+ 1 head valve seat with valves and guards complete.

+ 1 foot valve seat with valves and guards complete.

1 steam valve and chest complete.

1 piston rod and pump rod with crosshead complete.

1 set steam piston packing rings.

1 set bucket packing rings.

1 Paragon valve for each pump.

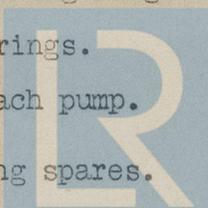
U.S. piston rod packing spares.

6 tubes and 12 ferrules for water cooler.

MAIN/

Bilges, No. an

Are the Bilge



© 2021

Lloyd's Register
Foundation

W1625-0010 3/4

MAIN CIRCULATING PUMP.-

+ 1 Impeller and shaft for one pump.

EVAPORATOR AND DISTILLERS.-

1 complete set of heating coils for evaporator, ready for fitting, 1 set of joints.

1 complete set of tubes ready for fitting (ferrules and tubes).

SHAFTING.-

1 tail shaft key and nut complete.

2 propellers one (R.H. and one L.H.) cast steel, }
duplicates of working propellers. } 518 only.

1 set of coupling bolts of each size used 1/8" larger in diameter than working bolts.

Lignum Vitae lining for each length of stern bush.

STERN GLANDS.-

2 studs and nuts with pinions.

TORSIONMETERS.-

Spares complete for one torsionmeter (in suitable wood case).

SURFACE FEED HEATERS.-

20% of tubes for primary heater (brass tubes) 27

" " " secondary " (copper tubes) 24.

GENERAL SERVICE PUMPS.-

+ Shafts and impellers for 2 pumps.

FRESH WATER PUMPS.-

1 impeller and shaft complete.

FEED WATER FILTERS.-

1 set of filtering media for each size fitted.

HYDRAULIC PUMP FOR WATERTIGHT DOORS.-

2 sets steam piston packing rings, 1 pump rod and piston rod.

2/



© 2021

Lloyd's Register
Foundation

HYDRAULIC PUMP FOR WATERTIGHT DOORS. (CONTD.)-

- 2 sets ram leathers.
- 1 set suction and delivery valve seats, with valves, guards and springs complete.
- One valve chest complete.
- 1 set of U.S. metallic packings and springs.
- 1 set spanners.

MAIN BOILERS. W.T.-

- 4 tubes of each length, marked for position, 12 bolts for manhole doors.
- Joints for manhole doors for 2 boilers.
- 3 sets water gauge glasses and 36 woodite rings.
- 4 superheater elements of each length in boiler and joints.
- Safety valve springs for one boiler (superheater steam).
- 3 feed check valves.
- 6 complete superheater drain valves.

AUXILIARY BOILERS.-

- 1 safety valve spring.
- 12 tubes, plain,
- 6 tubes, stay.
- 2 studs for manhole doors.
- 1 set boiler door joints for one boiler.
- 4 gauge glasses and washers.
- 1 feed check valve.
- 1 feed escape valve spring.
- 1 furnace door, 1 ash pit door.
- Air valves and handles for one furnace.
- 1 metallic flexible steam tubing 40 feet long.
- 1 Pensky Martin oil flash test apparatus (electric heating and flash.)

OIL FUEL PRESSURE PUMPS. /



© 2021

Lloyd's Register
Foundation

W1675-0010 3/4

OIL FUEL PRESSURE PUMPS.-

1 set suction and delivery valves and seats with valves and guards complete for 1 pump of each size.

1 set steam piston packing rings for 1 pump of each size.

2 sets oil piston packing rings for 1 pump of each size.

1 Steam Shuttle Valve & Chest complete for each pump of each size.

OIL FUEL HEATERS.-

2 gauge glasses and woodite washers for steam drain trap.

OIL FUEL STRAINERS.-

2 fine mesh cages of each size fitted for suction strainers.

OIL FUEL BURNERS.-

6 burner bodies.

6 Burner caps.

130 Burner Nozzles.

130 Burner Diaphragm.

12 Thermometers.

8 torches,

8 Extinguishers,

13 flame inspection glasses.

2 Firebrick Quarls.

OIL FUEL TRANSFER PUMP.-

1 set suction and delivery valve seats complete with valves, guards and springs.

1 set crank pin brasses for 1 pump.

Oil piston packing rings, 1 set.

Pump rod with nut.

BULKHEAD SELF-CLOSING VALVES.-

2 discs.

MANOEUVRING VALVES/



© 2021

Lloyd's Register
Foundation

W1625-0010 1/4

MANOEUVRING VALVES.-

- 1 regulating valve with spindle and seats complete.
- 4 flexible discs for valves.

ROTARY FORCED LUBRICATION PUMPS.-

- 1 shaft and 2 impellers.

FORCED LUBRICATION OIL COOLERS.-

- 1 complete tube unit.

DIESEL GENERATORS.-

- + 2 connecting rod bottom end bolts and nuts for each size of engine.
- + 2 main bearing studs and nuts.
- + 1 set of piston rings for each engine.
- + 2 fuel valves with casings complete.
- + 2 exhaust valves with casings complete.
- + 1 air starting valve with casings complete.
- + 2 fuel valve spindles.
- + 1 set fuel valve pulveriser rings.
- + 1 fuel valve roller.
- + 1 fuel pump plunger.
- + 1 fuel suction valve.
- + 1 fuel delivery valve.
- + 1 fuel oil filter cartridge.
- + 1 set suction and delivery valves for air compressors.
- + 1 set piston rings for air compressor.
- + 1 cooling coil for each type fitted.
- 4 springs for inlet or exhaust valves.
- 2 springs for each air compressor suction and delivery valve.
- 1 each of all other springs fitted.
- 1 rubber ring for cylinder liners, for each fitted.
- 4 rubber rings for exhaust valve boxes for each fitted.
- 4 rubber rings for compressor mantle for each fitted.
- Sufficient packing to replace once, fuel valve spindle and fuel pump plungers.
- 1 glass for sight feed lubricators for each size fitted.
- + 1/

DIESEL GENERATORS (CONTD.)-

- + 1 crank shaft for one engine.
- + 1 piston rod and piston.
- + 1 connecting rod.

GEARED TURBO GENERATOR.-

- + 1 turbine shaft.
- + 1 wheel.
- Spare parts for Governor.

Items marked thus (+) to be tried in place.



© 2021

Lloyd's Register
Foundation

W1625-0010 1/9

No.
Re

HN BROWN & COMPANY, LIMITED,
CLYDEBANK.



© 2021

Lloyd's Register
Foundation

W1625-0010³/₄

Bilges, A