

BUILDER'S NOS. 133 →

M/V TAKAMISAN MARU

(SPARE GEARS)

All spare gears to be supplied according to the Teishinsho's and Lloyd's requirements and tied in place and neatly strapped on convenient places.

a) For Main Engine :-

- 1 - Cylinder head.
- 1 - Pair of crank pin brasses with bolts and nuts.
- 2 - Pairs ^{of} cross head brasses with key and set screw.
- 1 - Pair of main bearing brasses of each size with studs and nuts.
- 1 - Piston complete with rings and piston pin. & piston cooling pipes.
- 3 - Sets of piston rings for one piston.
- 6 - Exhaust valves with seats, cages, spindles, springs, etc. ready for fitting.
- 3 - Exhaust valve seats.
- 3 - Inlet air valves complete.
- 2 - Starting valves with cage complete.
- 3 - Fuel valves with cage complete.
- 3 - Loose spindles for fuel valves.
- 6 - Loose bottoms for fuel valves.
- 1 - Roller of each size with pins.
- 6 - Off adjusting screw for valve gear.
- 1 - Complete set of all the working parts for one fuel pump.
- 1 - Set of springs complete for one engine.
- 1 - Set of studs with nuts for one cylinder head.
- 1 - Set of leather collars and packings.
- 2 - Spindles for overflow valves.
- 1 - Set of air compressor crank pin brasses with bolts and nuts.
- 1/2 - Set of air compressor valves with seats and springs.
- 1 - Set of brasses for air compressor main bearing with bolts

- 2 -

and nuts.

- 1 - Set of piston rings of each size for air compressor.
- 1 - Cooling coil for main air compressor.
- 3 - Thermometer pieces for cooling water discharge on exhaust valves.
- 1 - Set of valves with seats for one bilge pump.
- 1 - Set of valves with seats for one sanitary pump.
- 1 - Set of coupling bolts for crank shaft.
- 1 - Set of coupling bolts for intermediate shaft.

b) Auxiliary Machinery :-

- 1 - Set of valves with seats for bilge and sanitary pump.
- 1 - Spring for each size of safety valves.
- 1 - Wing and 2 guide blocks for ballast pump.

c) General Spares :-

- 6 - Glasses for pressure lubricators.
- 1 - Packing of each size for air bottle valves.
- 1 - Pipe length with union for blast air.
- 1 - Pipe length with union for fuel oil.
- 1 - Pipe length with flanges for starting air.
- A quantity of assorted bolts and nuts.

d) Boiler :-

- 1 - Spring for safety valve.
- 1 - Valve for feed check valves.
- 6 - Water gauge glasses and 24 packing rings.
- 1 - Oil burner.

Sufficient number of fire brick.

(TOOLS AND OUTFITS)

a) Engine Room :-

- 1 - Engineer desk.



© 2021

Lloyd's Register
Foundation

01702/3

- 3 -

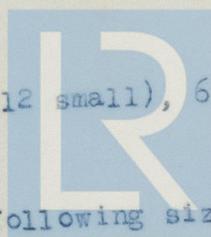
- 1 - 8 day engine room clock.
- 2 - Notice boards.
- 4 - Brass oil cans, each 3 lbs. capacity (i.e. one quart).
- 5 - Brass feeders ($\frac{1}{2}$, $\frac{3}{4}$, 1 and $1\frac{1}{2}$ pint each).
- 4 - Brass feeders with spring bottom ($\frac{3}{4}$ pint).
- 2 - Brass syringes, $1\frac{1}{4}$ " x 15".
- 2 - Brass trays for oil cans.
- 1 - Centre bit for oil barrel.
- 2 - 8" brass funnels.
- 2 - Filling cans (one gallon).
- 2 - Fire extinguishers, of approved maker.

b) Lamps, etc. :-

- 2 - Davy's safety lamps.
- 2 - Lamp shears.
- 2 " lbs. lamp wick for hand lamp.
- 1 - Box for lamp wicks (Japaned tin).

c) Lifting Gear, etc. :-

- 2 - 3 ton worm gear pulley blocks.
- 2 - $1\frac{1}{2}$ ton worm gear pulley blocks.
- 2 - One ton worm gear pulley blocks.
- 4 - Tackles with iron blocks and manila ropes.
- 2 - 3 ton lifting jacks.
- 2 - Crow bars (one large and one small).
- 4 - Beam grabs.
- 6 - Shackles, 1" dia. pin, corresponding with above mentioned blocks.
- 24 - Iron wedges (12 large and 12 small), $6" \times 3" \times \frac{3}{8}"$ and $4" \times 2" \times \frac{3}{4}"$.
- 2 - Eye bolts of each of the following sizes;



- 4 -

1/4" to 1 1/2" rising by 1/8".

4 - Hard wood wedges.

d) Instruments :-

1 - Planimeter.

1 - Diesel engine indicator with springs, scales and gears.

3 - 10" thermometers, graded to 212°F. in copper frame.

2 - Thermometers (Pole type) 100°C.

2 - Special high graded thermometers for exhaust gas and cooling water discharge, graded to 800°F.

2 - Adjusters for crank shaft fixed on engines.

e) Packing Tools :-

3 - Packing sticks, assorted.

3 - Packing screws, assorted.

4 - Packing knives, assorted.

f) Tools :-

1 - Micrometer.

1 - Metric feeler.

4 - Sets of vice grips (copper).

4 - Sets of vice grips (lead).

12 - Half round files, assorted.

12 - Flat files, assorted.

6 - Square files.

4 - 10" round files.

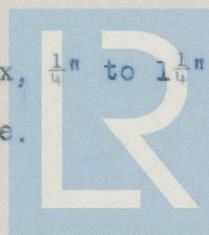
20 - File handles.

1 - Hack saw with six blades.

1 - Set of stocks and dies in box, 1/4" to 1 1/4", whitworth thread and three taps of each size.

1 - Screw plate.

6 - Triangular scrapers.



© 2021

Lloyd's Register
Foundation

- 5 -

- 6 - Flat scrapers.
- 1 - Surface plate (18" x 12").
- 2 - Straight edge (2'-0" and 4'-0").
- 2 - 12" and 24" square.
- 1 - Straight steel rule (inches and metre), one metre long.
- 2 - Pairs of inside callipers, 12".
- 1 - Pair of inside callipers, 4".
- 1 - Gauge for cylinder liner.
- 2 - Pairs of outside callipers, 16".
- 1 - Pair of outside callipers, 4".
- 1 - 36" adjustable bridge gauge for main engine pistons.
- 1 - Pair of dividers, 6".
- 1 - Pair of flat pliers, 6".
- 1 - Pair of round pliers, 6".
- 2 - Pairs of electric pliers, 6"
- 1 - Pair of nippers, 6".
- 4 - Screw drivers, 3", 5", 7" and 10" long.
- 4 - Hand hammers (one 1 lb. and three 1½ lb.)
- 2 - One 10 lbs. sledge hammer, and the other 20 lbs.
- 1 - Forge hammer, 10 lbs. with 36" shaft.
- 1 - Rivetting hammer, 3 lbs.
- 1 - Copper hammer, 10 lbs.
- 1 - Lead hammer, 5 lbs.
- 2 - Muntz metal drifts, 1½" x 12".
- 2 - Tin smith's wooden mallets.
- 10 - Hammer handles, 16"
- 12 - Flat chisels.
- 6 - Half round chisels.
- 12 - Cross cut chisels.



© 2021

Lloyd's Register
Foundation

- 6 -

- 12 - Punches, assorted.
- 2 - Centre punches, 3/8".
- 1 - Small portable forge with centrifugal blower, 18".
- 1 - Anvil (100 lbs.)
- 1 - Set of smith tool.
- 1 - Melting pot, 12".
- 2 - Soldering iron, 2 lbs.
- 2 - Soldering lamps (one small and the other large).
- 2 lbs. of soldering material.
- 1 - Bottle of soldering liquid.
- 1 - Ratchet^t brace with 12 bits (14").
- 1 - Ratchet brace with 12 bits (10").
- 1 - Drill knee.
- 1 - Breast drill with 12 spiral drills.
- 1 - Pair of tin man shears.
- 2 - Patent pipe wrenches, (one large and the other small) up to 4" and up to 1".
- 1 - Large chain wrench.
- 2 - Vices, 5½" mouth.

g) Joiner's Tools :-

- 1 - Hatchet.
- 1 - 7" screw driver.
- 1 - Crank brace with 6 bits (¼" to 1").
- 1 - 2½" hand plane.
- 1 - Hand saw 26" long G.S.
- 2 - Chisels (¾" and 1½").
- 2 - Gauge (1½" and 1")
- 1 - Wooden mallet (square head).
- 1 - Auger, 3/4".



© 2021

Lloyd's Register
Foundation

- 7 -

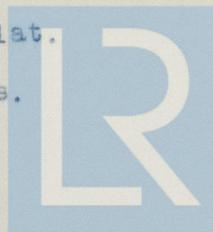
- 1 - Ginlet.
- 1 - Oil stone (8" long in case).

h) Miscellaneous :-

- 6 - Assorted scrapers.
- 1 - Box for emery (Japaned).
- 1 - Box for red lead, 12" square.
- 1 - Box for white lead, 12" square.
- 1 - Box for graphite, 12" square.
- 1 - Box for soap, 12" square.
- 4 - Sweeping brushes.
- 1 - Dust pan.
- 6 - Coir broom and handle.
- 6 - 3" paint pots.
- 12 - Paint brushes (assorted).
- 3 - Galvanized iron buckets.
- 4 - Mats.
- 1 - Benzine can with screw plug (20 lbs. capacity).
- 2 - One gallon American oil measures with brass.
- 2 - Trays for washing filter, 2'-0"x3'-0"x6", with lips.
- 1 - Talléw kettle.
- 1 - Combined stocks and dies, 1/16" to 1/4", in box.
- 4 - Reamers, ample size.
- 2 - Scribers.
- 1 - Set of painting stages for engine room.
- 4 - Steel wire brushes.
- A quantity of iron, round flat.
- A quantity of bolts and nuts.
- 4 - Plates.

i) Boiler Tools :-

- One set of boiler caulking tools.



© 2021

Lloyd's Register
Foundation

0170 7/4

- 8 -

One set of scaling tools.

Two salinometers and pots.

6 - Gauge glasses.

3 - Chain slings.

4 - Wire slings.

One Baume Hydrometer with thermometer for oil.

One bellow.

j) Electric Tools :-

One D.C. 300 volt meter (Portable).

One magnet bell.

One ammeter (15 amp.) portable.



© 2021

Lloyd's Register
Foundation