

REPORT ON OIL ENGINE MACHINERY

No. 8297

15 SEP '33

Received at London Office

of writing Report 4-8-33 19 When handed in at Local Office 16-8-33 19 Port of Kobe
in Survey held at Tama Date, First Survey 24-8-32 Last Survey 1-8-33 19
Book. on the Tama Triple Screw vessel "AZKMASAN MARK" Tons Gross 7614
Single Triple Quadruple
Built at Tama By whom built Inoue Nitsei Bunran Kaisha Ltd. No. 195 When built 1933
Engines made at Tama By whom made Inoue Nitsei Bunran Kaisha Ltd. Engine No. 195 When made 1933
Boiler made at Tama By whom made Inoue Nitsei Bunran Kaisha Ltd. Boiler No. 195 When made 1933
Horse Power 7000 Owners Inoue Nitsei Bunran Kaisha Ltd. Port belonging to Kobe
Horse Power as per Rule 1230 Is Refrigerating Machinery fitted for cargo purposes yes Is Electric Light fitted yes
For which vessel is intended Ocean Going B+W type 24 1/16 55g

ENGINES, &c.—Type of Engines Vertical Direct horizontal type 2 stroke cycle 2 Single or double acting Double
Maximum pressure in cylinders 45 kg/cm² Diameter of cylinders 620 mm Length of stroke 1400 mm No. of cylinders 6 No. of cranks 6
of bearings, adjacent to the Crank, measured from inner edge to inner edge 945 mm Is there a bearing between each crank yes
Revolutions per minute 110 Turning gear 1975 mm Weight 2200 kgs Means of ignition Airless Kind of fuel used Diesel Oil
Crank Shaft, dia. of journals as per Rule 467 Crank pin dia. 485 mm Crank Webs Mid. length breadth 860 mm Thickness parallel to axis 305 mm
as fitted 485 mm Crank pin dia. 485 mm Crank Webs M.A. length thickness 305 mm Thickness around eye hole 232 mm
Wheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule 17 3/4 Thrust Shaft, diameter at collars as per Rule 18.25 18 1/4
as fitted e Shaft, diameter as per Rule Screw Shaft, diameter as per Rule 19 1/4 Is the tube shaft fitted with a continuous liner yes
as fitted size Liners, thickness in way of bushes as per Rule 0.878 Thickness between bushes as per rule 7/8 Is the after end of the liner made watertight in the
after boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner —
the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive —
no liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube
no If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 6'-5" sq. feet
Propeller, dia. 18'-0" Pitch 15'-8" No. of blades 4 Material Inconel whether Moveable yes Total Developed Surface 110
Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when decoupled yes Means of lubrication
oil Thickness of cylinder liners 42 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine —
Suction Water Pumps, No. 2-40 H.P. 300 lbs 9 Delivery lbs Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
Pumps worked from the Main Engines, No. 2 Diameter 160 mm Stroke 238 mm Can one be overhauled while the other is at work yes
Pumps connected to the Main Bilge Line No. and Size 2-165-230 mm Bilge Sanitary Ballast 250-300 mm Three throw
How driven Motor Lubricating Oil Pumps, including Spare Pump, No. and size 2-60 H.P. 250 lbs 10 Delivery lbs
Two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces 203; 204; 108; 109; 110; 111; 112; 113; 114; 115; 116; 117; 118; 119; 120; 121; 122; 123; 124; 125; 126; 127; 128; 129; 130; 131; 132; 133; 134; 135; 136; 137; 138; 139; 140; 141; 142; 143; 144; 145; 146; 147; 148; 149; 150; 151; 152; 153; 154; 155; 156; 157; 158; 159; 160; 161; 162; 163; 164; 165; 166; 167; 168; 169; 170; 171; 172; 173; 174; 175; 176; 177; 178; 179; 180; 181; 182; 183; 184; 185; 186; 187; 188; 189; 190; 191; 192; 193; 194; 195; 196; 197; 198; 199; 200; 201; 202; 203; 204; 205; 206; 207; 208; 209; 210; 211; 212; 213; 214; 215; 216; 217; 218; 219; 220; 221; 222; 223; 224; 225; 226; 227; 228; 229; 230; 231; 232; 233; 234; 235; 236; 237; 238; 239; 240; 241; 242; 243; 244; 245; 246; 247; 248; 249; 250; 251; 252; 253; 254; 255; 256; 257; 258; 259; 260; 261; 262; 263; 264; 265; 266; 267; 268; 269; 270; 271; 272; 273; 274; 275; 276; 277; 278; 279; 280; 281; 282; 283; 284; 285; 286; 287; 288; 289; 290; 291; 292; 293; 294; 295; 296; 297; 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1750; 1751; 1752; 1753; 1754; 1755; 1756; 1757; 1758; 1759; 1760; 1761; 1762; 1763; 1764; 1765; 1766; 1767; 1768; 1769; 1770; 1771; 1772; 1773; 1774; 1775; 1776; 1777; 1778; 1779; 1780; 1781; 1782; 1783; 1784; 1785; 1786; 1787; 1788; 1789; 1790; 1791; 1792; 1793; 1794; 1795; 1796; 1797; 1798; 1799; 1800; 1801; 1802; 1803; 1804; 1805; 1806; 1807; 1808; 1809; 1810; 1811; 1812; 1813; 1814; 1815; 1816; 1817; 1818; 1819; 1820; 1821; 1822; 1823; 1824; 1825; 1826; 1827; 1828; 1829; 1830; 1831; 1832; 1833; 1834; 1835; 1836; 1837; 1838; 1839; 1840; 1841; 1842; 1843; 1844; 1845; 1846; 1847; 1848; 1849; 1850; 1851; 1852; 1853; 1854; 1855; 1856; 1857; 1858; 1859; 1860; 1861; 1862; 1863; 1864; 1865; 1866; 1867; 1868; 1869; 1870; 1871; 1872; 1873; 1874; 1875; 1876; 1877; 1878; 1879; 1880; 1881; 1882; 1883; 1884; 1885; 1886; 1887; 1888; 1889; 1890; 1891; 1892; 1893; 1894; 1895; 1896; 1897; 1898; 1899; 1900; 1901; 1902; 1903; 1904; 1905; 1906; 1907; 1908; 1909; 1910; 1911; 1912; 1913; 1914; 1915; 1916; 1917; 1918; 1919; 1920; 1921; 1922; 1923; 1924; 1925; 1926; 1927; 1928; 1929; 1930; 1931; 1932; 1933; 1934; 1935; 1936; 1937; 1938; 1939; 1940; 1941; 1942; 1943; 1944; 1945; 1946; 1947; 1948; 1949; 1950; 1951; 1952; 1953; 1954; 1955; 1956; 1957; 1958; 1959; 1960; 1961; 1962; 1963; 1964; 1965; 1966; 1967; 1968; 1969; 1970; 1971; 1972; 1973; 1974; 1975; 1976; 1977; 1978; 1979; 1980; 1981; 1982; 1983; 1984; 1985; 1986; 1987; 1988; 1989; 1990; 1991; 1992; 1993; 1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011; 2012; 2013; 2014; 2015; 2016; 2017; 2018; 2019; 2020; 2021; 2022; 2023; 2024; 2025; 2026; 2027; 2028; 2029; 2030; 2031; 2032; 2033; 2034; 2035; 2036; 2037; 2038; 2039; 2040; 2041; 2042; 2043; 2044; 2045; 2046; 2047; 2048; 2049; 2050; 2051; 2052; 2053; 2054; 2055; 2056; 2057; 2058; 2059; 2060; 2061; 2062; 2063; 2064; 2065; 2066; 2067; 2068; 2069; 2070; 2071; 2072; 2073; 2074; 2075; 2076; 2077; 2078; 2079; 2080; 2081; 2082; 2083; 2084; 2085; 2086; 2087; 2088; 2089; 2090; 2091; 209

IS A DONKEY BOILER FITTED?

yes

If so, is a report now forwarded?

yes

PLANS. Are approved plans forwarded herewith for Shafting 4-5-32; 31-3-32; 28-3-33 Receivers 17-5-32

Separate Tanks 31-8-32

Donkey Boilers 4-10-32

General Pumping Arrangements 29-7-32

Oil Fuel Burning Arrangements 22-3-33

SPARE GEAR

As required by Rules. List attached

The foregoing is a correct description,
PER PRO. MITSUI BUSSAN KAISHA, LTD.

MANAGER, SHIPBUILDING DEPT

Manufacturer.

Dates of Survey while building
During progress of work in shops-- 1932 Aug. 24, Oct 26, Nov 4, 9, 14, 15, 21, Dec 13, 1933 Jan 9, 11, 16, 25, 31, Feb 14, 21, March 1, 13, 22, 31, April 10, 17, 26, 28, May 8, 9, 17, 19, 22
During erection on board vessel-- June 19, July 7, 10, 11, 14, 26, Aug 1
Total No. of visits 36

Dates of Examination of principal parts—Cylinders 28-4-33 Covers 17-4-33 Pistons 9-5-33 Rods 31-3-33 Connecting rods 14-3-33

Crank shaft 30-5-33 Flywheel shaft Thrust shaft 21-1-33 Intermediate shafts 14-2-33, 31-3-33 Tube shaft -

Screw shaft 19-4-33, 19-5-33 Propeller 9-5-33, 30-5-33 Stern tube 8-5-33, 17-5-33 Engine seatings 11-1-33 Engines holding down bolts 7-7-33

Completion of fitting sea connections 20-5-33 Completion of pumping arrangements 26-7-33 Engines tried under working conditions 26-7-33

Crank shaft, Material Steel Identification Mark N° 3519 A.B. Flywheel shaft, Material - Identification Mark LLOYDS

Thrust shaft, Material Steel Identification Mark N° 819 Intermediate shafts, Material Steel Identification Marks N° 824, 821, 818, 817

Tube shaft, Material - Identification Mark 21-1-33 M.K. Screw shaft, Material Steel Identification Mark LLOYDS

Is the flash point of the oil to be used over 150° F. yes

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo yes

If so, have the requirements of the Rules been complied with

Is this machinery duplicate of a previous case no If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, etc.)

This machinery has been constructed under special survey in accordance with the Rules and approved plans. The materials & workmanship are good. On completion the machinery was efficiently installed in the vessel and tested under full working conditions and is shippable, in my opinion, for classification with the use of +L.M.C 8.33 Oil Engines; T.S.S. 33 P.L. and D.B. 120 lbs.

The advice notes and several firing certificates are being retained until the Sister Vessel is completed

The amount of Entry Fee ... £ 97.00
* add for S.K.C. ... £ 53.00
Special ... £ 108.00
Donkey Boiler Fee ... £ 26.00
Travelling Expenses (if any) £

When applied for,

2nd Aug. 1933

When received,

26-10-1933

Committee's Minute

TUE. 12 SEP 1933

FRI. 29 SEP 1933

Assigned

+ L.M.C 8.33

D.B. 120 lbs.

Engine Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation