

REPORT ON OIL ENGINE MACHINERY.

No. 9686
14 JUN

Received at London Office

Date of writing Report 26-5-1954 When handed in at Local Office ✓ 19 54 Port of GRONINGEN

No. in Survey held at WATERHUIZEN Date, First Survey 15-12-53 Last Survey 22-5-1954
Reg. Book. Number of Visits 7

Single on the Twin Triple Quadruple Screw vessel N.V. "GRAMSBERGEN" Tons Gross 490.42 Net 317.31

Built at WATERHUIZEN By whom built SCHEER & DIEPEN Yard No. 929 When built 1954

Engines made at AMSTERDAM By whom made N.V. HERKSPOR Engine No. 1683 When made 1954

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power { Maximum 650 ✓ Service 650 ✓ Owners N.V. Nidhollandsche Scheepw. Mij. Port belonging to ROTTERDAM

M.N. as per Rule 130 ✓ Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

Trade for which vessel is intended OCEAN TRADE

OIL ENGINES, &c. — Type of Engines ✓ DIMENSIONS IN MM () 2 or 4 stroke cycle ✓ Single or double acting ✓

Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓

Mean Indicated Pressure ✓ Span of bearings (i.e., distance between inner edges of bearings in way of a crank) ✓ Is there a bearing between each crank ✓ Revolutions per minute { Maximum ✓ Service ✓

Flywheel dia. ✓ Weight ✓ Moment of inertia of flywheel (lbs. in² or Kg. cm.²) ✓ Means of ignition ✓ Kind of fuel used ✓

Crank Shaft, { Solid forged dia. of journals as per Rule ✓ as fitted ✓ Crank pin dia. ✓ Crank webs Mid. length breadth ✓ Mid. length thickness ✓ Thickness parallel to axis ✓ Thickness around eye-hole ✓

Flywheel Shaft, diameter as per Rule ✓ as fitted ✓ Intermediate Shafts, diameter as per Rule APPR. as fitted 175 ✓ Thrust Shaft, diameter at collars as per Rule ✓ as fitted ✓

Tube Shaft, diameter as per Rule ✓ as fitted ✓ Screw Shaft, diameter as per Rule APPR. as fitted 180 (N. BAR) ✓ Is the tube screw shaft fitted with a continuous liner NO ✓

Bronze Liners, thickness in way of bushes as per Rule ✓ as fitted ✓ Thickness between bushes as per Rule ✓ as fitted ✓ Is the after end of the liner made watertight in the propeller boss ✓

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓ If 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 ✓ If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved Oil Gland fitted at the after end of stern tube YES ✓ If so, state type RUBBER PRESSING RING Length of bearing in Stern Bush next to and supporting propeller 740 ✓

Propeller, dia. 1900 ✓ Pitch 1150 No. of blades 4 Material BRONZE whether moveable SOLID Total developed surface 487 sq. feet

Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm.²) 320 Kind of damper, if fitted ✓

Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine ✓ Means of lubrication ✓ Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with non-conducting material ✓ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ✓

Cooling Water Pumps, No. and how driven 2 ME Working F.W. 1 ME ✓ Spare F.W. 1 FROM A.E.S.W. 1 BALLAST Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES ✓

Bilge Pumps worked from the Main Engines, No. and capacity ✓ Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line { No. and capacity of each 2 @ 50 T/H ✓ How driven A.E. ✓

Is the cooling water led to the bilges NO ✓ If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements ✓

Ballast Pumps, No. and capacity 2 @ 50 T/H ✓ Power Driven Lubricating Oil Pumps, including spare pump, No. and size SPARE: 2 T/H ✓

Are two independent means arranged for circulating water through the Oil Cooler YES ✓ Branch Bilge Suctions ✓

No. and size:—In machinery spaces 1 @ 2 1/2" x 10 3/4" ✓ In pump room ✓

In holds, &c. 4 @ 3" ✓

Direct Bilge Suctions to the engine room bilges, No. and size 3 @ 4" ✓

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES ✓ Are the bilge suction pipes in the machinery spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES ✓

Are all Sea Connections fitted direct on the skin of the Ship 5 IN CHESTS Are they fitted with valves or cocks VALVES ✓ Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates YES ✓ Are the overboard discharges above or below the deep water line ABOVE ✓

Are they each fitted with a discharge valve always accessible on the plating of the vessel YES ✓ Are the blow off cocks fitted with a spigot and brass covering plate ✓

What pipes pass through the bunkers ✓ How are they protected ✓

What pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓

Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times YES ✓

Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another YES ✓ Is the shaft tunnel watertight MACH. TEST Is it fitted with a watertight door ✓ worked from ✓

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓

Main Air Compressors, No. ✓ No. of stages 2 diameters 150/180 stroke 100 driven by A.E.

Auxiliary Air Compressors, No. ✓ No. of stages 2 diameters 60/145 stroke 110 driven by A.E.

Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ diameters ✓ stroke ✓ driven by ✓

What provision is made for first charging the air receivers HAND STARTER AUX. ENGINE ✓

Scavenging Air Pumps or Blowers, No. ✓ How driven ✓

Auxiliary Engines Have they been made under survey YES Engine Nos. 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 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

Makers name LISTER Position of each in engine room BRISTOL CERT Report No. 50 1944 150 2246 RESP.

AIR RECEIVERS:—Have they been made under survey YES State No. of report or certificate ✓

State full details of safety devices ✓

Can the internal surfaces of the receivers be examined and cleaned ✓ Is a drain fitted at the lowest part of each receiver ✓

Injection Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓

Seamless, welded or riveted longitudinal joint ✓ Material — Range of tensile strength — Working pressure —

Starting Air Receivers, No. 2 Total cubic capacity — Internal diameter — thickness —

Seamless, welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —

IS A DONKEY BOILER FITTED NO If so, is a report now forwarded —

Is the donkey boiler intended to be used for domestic purposes only —

PLANS, Are approved plans forwarded herewith for shafting 16-2-54 Receivers — Separate fuel tanks 26-4-54
(If not, state date of approval)

Donkey boilers — General pumping arrangements 15-5-53 Pumping arrangements in machinery space 26-4-54

Oil fuel burning arrangements 26-4-54

Have Torsional Vibration characteristics been approved YES Date and particulars of approval 8-2-54 for a static speed

SPARE GEAR.

325 rpm

Has the spare gear required by the Rules been supplied YES State if for "short voyages" only ✓

State the principal additional spare gear supplied —

The foregoing is a correct description, and the particulars of the installation is fitted on as approved for torsional vibration characteristics
Manufacturer. N.V. Machinefabriek & Rep. Bedrijf D. E. GORTER

Dates of Survey while building
During progress of work in shops - - 8 visits See A' dam Rpt No 19405
During erection on board vessel - - 1953 Dec. 15; 1954 Feb. 10-17; March 9-23-25-27 April 2-6-15-21-29 May 12-14-17-21-22
Total No. of visits 25

Dates of examination of principal parts—Cylinders — Covers — Pistons — Rods — Connecting rods —

Crank shaft — Flywheel shaft — Thrust shaft — Intermediate shafts 9-3-54 Tube shaft —

Screw shaft 25-3-54 Propeller 23-3-54 Stern tube 25-3-54 Engine seatings 21-4-54 Engine holding down bolts 21-4-54

Completion of fitting sea connections 24-3-54 Completion of pumping arrangements 17-5-54 Engines tried under working conditions 21-5-54
22-5-54

Crank shaft, material — Identification mark — Flywheel shaft, material, — Identification mark —

Thrust shaft, material — Identification mark — Intermediate shafts, material SM STEEL Identification marks L 980 190-1
CPM-4-3-54

Tube shaft, material — Identification mark — Screw shaft, material SM STEEL Identification mark L 980 239-7A/1
25-3-54

Identification marks on air receivers — Loose Coupling - L 980 516 - ANH/CPM - 9-3-54

Welded receivers, state Makers' Name —

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 ✓
Rule 26 9 LTRS + 1 @ 45 LITRES

Full description of fire extinguishing apparatus fitted in machinery spaces 4 FIREFOAMS @ 9 LTRS + 2 ER HOSE CONNECTIONS

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo NO If so, have the requirements of the Rules been complied with —

What is the special notation desired —

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with —

Is this machinery duplicate of a previous case YES If so, state name of vessel EBERGEN

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.)

This engine and auxiliaries have been constructed and fitted under special survey in accordance with the approved plans, Society's Rules and Secretary's letters - The workmanship was found good - The machinery has been tested under full working conditions on a trial trip and found working satisfactorily - In my opinion the machinery of this vessel meets the approval of the Committee and be recorded in the Society's Register Book 7 LMC 5-54 - Oil Eng

The amount of Entry Fee ... £ 308.-
Special ... £
Donkey Boiler Fee... £
Travelling Expenses (if any) £ 10.90.-

When applied for 5.6.1954
When received 19

[Signature]
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute —
Assigned + LMC 5.54
OG.

