

Amsterdam report 15743

pt. 5a.

REPORT ON BOILERS.

No. 27950

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Port of ROTTERDAM

AUG 10 1939

No. in Survey held at Flushing Date, First Survey 16-6-38 Last Survey 27-2-1939

on the BOILER No 1055 (Number of Visits 17) Gross Tons 6341 Net Tons 3606

Master Built at Amsterdam By whom built Ned Dok My Yard No. 91 When built 1939

Engines made at Amsterdam By whom made N. V. Weespoo Engine No. 747 When made 1939

Boilers made at Flushing By whom made Hon My. De Schelde Boiler No. 1055 When made 1939

Nominal Horse Power Owners Petr My. la Corona Port belonging to Gravenhage

MULTITUBULAR BOILERS - ~~MAN~~ ~~AMSTERDAM~~, OR DONKEY.

Manufacturers of Steel The Steel Co of Scotland (Letter for Record S.)

Total Heating Surface of Boilers 2560 sq ft Is forced draught fitted Yes Coal or Oil fired O.C.

No. and Description of Boilers One Multitubular Marine boiler Working Pressure 180 LBS

Tested by hydraulic pressure to 320 LBS Date of test 12-11-38 No. of Certificate 1022 Can each boiler be worked separately ✓

Area of Firegrate in each Boiler ✓ No. and Description of safety valves to each boiler 2 spring loaded

Pressure of each set of valves per boiler per Rule 10630 as fitted 90 mm Pressure to which they are adjusted 100 lb Are they fitted with easing gear Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Smallest distance between boilers or uptakes and bunkers or woodwork ✓ Is oil fuel carried in the double bottom under boilers ✓

Smallest distance between shell of boiler and tank top plating ✓ Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 4400 mm Length 3468 mm Shell plates: Material S.M. Steel Tensile strength 46.8-52 kg/mm²

Thickness 29 mm Are the shell plates welded or flanged but straps Description of riveting: circ. seams end Lap 2 x 200 inter. ✓

Long. seams Double butt strap 3 x riv Diameter of rivet holes in circ. seams 30 mm Pitch of rivets 87 mm long. seams 30 mm 200 mm

Percentage of strength of circ. end seams plate 64% rivets 52% Percentage of strength of circ. intermediate seam plate ✓ rivets ✓

Percentage of strength of longitudinal joint plate 85% rivets 85% combined 87% Working pressure of shell by Rules 12.8 kg/cubo

Thickness of butt straps outer 25 mm inner 25 mm No. and Description of Furnaces in each Boiler 3 Morrison patent

Material S.M. Steel Tensile strength 41.47 kg/mm² Smallest outside diameter 1130 mm

Length of plain part top ✓ bottom ✓ Thickness of plates crowd 15 mm bottom 15 mm Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 15.22 kg/cubo

End plates in steam space: Material S.M. Steel Tensile strength 41.47 kg/mm² Thickness 29 mm Pitch of stays 440 x 450 mm

How are stays secured Secured in plates with nuts inside & outside Working pressure by Rules 12.65 kg/cubo

Tube plates: Material front S.M. Steel back S.M. Steel Tensile strength 41.47 kg/mm² Thickness 28 mm 20 mm

Lean pitch of stay tubes in nests 200 x 294 mm Pitch across wide water spaces 360 mm Working pressure front 17.8 kg/cubo back ✓

Girders to combustion chamber tops: Material S.M. Steel Tensile strength 44.50 kg/mm² Depth and thickness of girder

at centre 220 x 2 x 19 mm Length as per Rule 776 mm Distance apart 220 mm No. and pitch of stays

in each 3 & 200 mm Working pressure by Rules 17.2 kg/cubo Combustion chamber plates: Material S.M. Steel

Tensile strength 41.47 kg/mm² Thickness: Sides 18 mm Back 19 mm Top 18 mm Bottom 25 mm

Pitch of stays to ditto: Sides 200 mm Back 200 x 195 mm Top 200 x 220 mm Are stays fitted with nuts or riveted over Riveted over

Working pressure by Rules 15.3 kg/cubo Front plate at bottom: Material S.M. Steel Tensile strength 41.47 kg/mm²

Thickness 23 mm Lower back plate: Material S.M. Steel Tensile strength 41.47 kg/mm² Thickness 23 mm

Pitch of stays at wide water space 366 mm Are stays fitted with nuts or riveted over Fitted with nuts

Working Pressure 17.7 kg/cubo Main stays: Material S.M. Steel Tensile strength 44.50 kg/mm²

Diameter At body of stay, 3" No. of threads per inch 9 Area supported by each stay 190000 mm²

Working pressure by Rules 15.5 kg/cubo Screw stays: Material S.M. Steel Tensile strength 41.47 kg/mm²

Diameter At turned off part, 1 3/8" No. of threads per inch 9 Area supported by each stay 40100 mm²

Working pressure by Rules *14.1.16/16* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter *At turned off part, 1 7/16" or Over threads 1 5/8"*

No. of threads per inch *9* Area supported by each stay *50091 mm²* Working pressure by Rules *14.1.16/16*

Tubes: Material *Iron* External diameter *Plain 2 3/4" Stay 2 3/4"* Thickness *4.9 L.S.G. 5/16" 9/16"* No. of threads per inch *9*

Pitch of tubes *98 x 100 mm* Working pressure by Rules *215 lb.* Manhole compensation: Size of opening *370 x 470 mm* Section of compensating ring *780 x 880 x 32 mm* No. of rivets and diameter of rivet holes *54 @ 32 mm*

Outer row rivet pitch at ends *220 mm* Depth of flange *if manhole flanged 100 mm* Steam Dome: Material *Iron*

Tensile strength *✓* Thickness of shell *✓* Description of longitudinal joint *✓*

Diameter of rivet holes *✓* Pitch of rivets *✓* Percentage of strength of joint *Plate ✓ Rivets ✓*

Internal diameter *✓* Working pressure by Rules *✓* Thickness of crown *✓* No. and diameter of stays *✓* Inner radius of crown *✓* Working pressure by Rules *✓*

How connected to shell *✓* Size of doubling plate under dome *✓* Diameter of rivet holes and of rivets in outer row in dome connection to shell *✓*

Type of Superheater *✓* Manufacturers of *Tubes ✓ Steel forgings ✓ Steel castings ✓*

Number of elements *✓* Material of tubes *✓* Internal diameter and thickness of tubes *✓*

Material of headers *✓* Tensile strength *✓* Thickness *✓* Can the superheater be shut off the boiler be worked separately *✓* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *✓*

Area of each safety valve *✓* Are the safety valves fitted with casing gear *✓* Working pressure as Rules *✓* Pressure to which the safety valves are adjusted *✓* Hydraulic test pressure tubes *✓* forgings and castings *✓* and after assembly in place *✓* Are drain cocks valves fitted to free the superheater from water where necessary *✓*

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *✓*

The foregoing is a correct description,

N.V. KON. M.I.J. "DE SCHELDE" Manufactured by *H.P. M. Schelle*

Dates of Survey *16/11, 17/11, 13/12, 14/12, 24/12, 25/12, 29/12, 30/12, 31/12, 1/1, 2/1, 3/1, 4/1, 5/1, 6/1, 7/1, 8/1, 9/1, 10/1, 11/1, 12/1, 13/1, 14/1, 15/1, 16/1, 17/1, 18/1, 19/1, 20/1, 21/1, 22/1, 23/1, 24/1, 25/1, 26/1, 27/1, 28/1, 29/1, 30/1, 31/1* Are the approved plans of boiler and superheater forwarded herewith *Retained* (If not state date of approval.) *as per Rules 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 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, 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2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 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