

REPORT ON OIL ENGINE MACHINERY.

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Survey held at Genoa - La Spezia Date, First Survey 23-6-1951 Last Survey 19-10-1953
Book. 43 on the Twin Triple Quadruple Screw vessel 1/4" FRANCESCO BIBOLINI
By whom built Loc. Quaro. "Dusaleb. Cant. di Muggiana" Card No. 1414 When built 1953
By whom made Loc. Quaro. "FIRT. S.G.M." Engine No. 13639 When made 1953
Boilers made at Genoa - La Spezia By whom made Loc. Quaro. "Dusaleb. Cant. di Muggiana" Boiler No. 15518-5519 When made 1953
Horse Power 5500 x 3 = 14700 Owners C.R. di NAVIGAZIONE BIBOLINI S.p.A. Port belonging to Genoa
Power as per Rule 3200 2940 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted YES.
for which vessel is intended Carrying petroleum in bulk.

Engines, &c. - Type of Engines "FIRT. 75% oiler injection" 2 or 4 stroke cycle 3 Single or double acting single
Mean pressure in cylinders 60 kg/cm² Diameter of cylinders 150 mm Length of stroke 1320 mm No. of cylinders 7 No. of cranks 7
Indicated Pressure 6.3 kg/cm² Ahead Firing Order in Cylinders 1.6.3.4.5.2.7 Span of bearings, adjacent to the crank, measured
inner edge to inner edge 968 mm Is there a bearing between each crank YES. Revolutions per minute 135-
Crank dia. 245 mm Weight 3930 kg Moment of inertia of flywheel (the 1/2 of Kg.cm.²) 16968 Means of ignition Compression Kind of fuel used diesel
Solid forged dia. of journals as per Rule as offered 550 mm Crank pin dia. 550 mm Crank webs Mid. length breadth 1 shrunk Thickness parallel to axis 318 mm
Semi built dia. of journals as fitted 550 mm Crank webs Mid. length thickness 316 mm shrunk Thickness around eye hole 358.5 mm
All built as per Rule as offered Intermediate Shafts, diameter as per Rule as offered 390 mm Thrust Shaft, diameter at collars as fitted 550 mm
as fitted 550 mm as per Rule as offered Shaft, diameter as fitted 550 mm Is the (tube) shaft fitted with a continuous liner YES.
Screw Shaft, diameter as per Rule as offered 436 mm as fitted 436 mm Is the (screw) shaft fitted with a continuous liner YES.
e Liners, thickness in way of bushes as per Rule as offered 21 mm Thickness between bushes as per Rule as offered 16.5 mm Is the after end of the liner made watertight in the
ter boss YES. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner YES.
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-
ve. If two liners are fitted, is the shaft lapped or protected between the liners. Is an approved Oil Gland or other appliance fitted at the after
tube shaft. If so, state type Length of bearing in Stern Bush next to and supporting propeller 191 mm
ler, dia. 4200 mm Pitch 4338 mm No. of blades four Material M.B. whether moveable solid Total developed surface 8.3 sq. feet
of inertia of propeller (the 1/2 of Kg.cm.²) 3930 Kind of damper, if fitted
d of reversing Engines diesel Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES. Means of
tion forced Thickness of cylinder liners. Are the cylinders fitted with safety valves YES. Are the exhaust pipes and silencers water cooled
ed with non-conducting material lagged. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
the engine. Cooling Water Pumps, No. three 3.W. pump - F.W. pump = 3 flow pump each 540 lts/hr. capae. YES.
Is the sea suction provided with an efficient strainer which can be cleared within the vessel.

Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work.
connected to the Main Bilge Line No. and size three in eng. room = 300 - 150 - 150 lts/hr = 100 lts/hr steam driven.
How driven electrically driven
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
ements

Pumps, No. and size one: 100 lts/hr in fuel pump room. Power Driven Lubricating Oil Pumps, including spare pump, No. and size three = 230 lts/hr electrically.
one: 300 - two: 150 lts/hr.
independent means arranged for circulating water through the Oil Cooler YES. Suctions, connected to both main bilge pumps and auxiliary
umps, No. and size: In machinery spaces two: 80 = five: 100 = one: 150 = one: 200 = one: 250 mm φ In pump room two: 80 mm φ (steam ejector)
s, &c. fuel dry hold: two 100 mm φ one: 150 mm φ (stopping pump) one: 80 mm φ in fuel pump room.
ndent Power Pump Direct Suctions to the engine room bilges, No. and size one: 150 = one: 200 = one: 250 mm φ =

the bilge suction pipes in holds and bilges fitted with strum-boxes YES. Are the bilge suction in the machinery spaces led from easily
le mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES.
Sea Connections fitted direct on the skin of the Ship on stools - welded to ship side. Are they fitted with valves or cocks. valve Are they fixed
tly 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
y 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 YES.
ipes pass through the bunkers How are they protected.
ipes pass through the deep tanks F.P. suction & coff. bilge suction Have they been tested as per Rule YES.
pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times YES.

rrangement 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
or from one compartment to another YES. Is the shaft tunnel watertight. Is it fitted with a watertight door worked from.
od vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.
Air Compressors, No. No. of stages diameters stroke driven by.
ary Air Compressors, No. two: 400 m³/hr No. of stages two diameters 280-440 mm stroke 300 mm driven by electrically
Auxiliary Air Compressors, No. one: 14 m³/hr No. of stages two diameters 75-64 mm stroke 60 mm driven by diesel engine 9 HP

provision is made for first charging the air receivers. The above small aux. air compressors.
ging Air Pumps, No. one (two pistons in tandem) 1406 mm stroke 960 mm driven by main engine crank
ary Engines crank shafts, diameter as per Rule as offered 200 mm = 165 mm = 75 mm = 130 mm = 35 mm = 110 mm stroke 2:200 mm = 1:75 mm = 1:25 mm = 1:35 mm = 1:50 mm = 1:60 mm = 1:70 mm = 1:80 mm = 1:90 mm = 1:100 mm = 1:110 mm = 1:120 mm = 1:130 mm = 1:140 mm = 1:150 mm = 1:160 mm = 1:170 mm = 1:180 mm = 1:190 mm = 1:200 mm = 1:210 mm = 1:220 mm = 1:230 mm = 1:240 mm = 1:250 mm = 1:260 mm = 1:270 mm = 1:280 mm = 1:290 mm = 1:300 mm = 1:310 mm = 1:320 mm = 1:330 mm = 1:340 mm = 1:350 mm = 1:360 mm = 1:370 mm = 1:380 mm = 1:390 mm = 1:400 mm = 1:410 mm = 1:420 mm = 1:430 mm = 1:440 mm = 1:450 mm = 1:460 mm = 1:470 mm = 1:480 mm = 1:490 mm = 1:500 mm = 1:510 mm = 1:520 mm = 1:530 mm = 1:540 mm = 1:550 mm = 1:560 mm = 1:570 mm = 1:580 mm = 1:590 mm = 1:600 mm = 1:610 mm = 1:620 mm = 1:630 mm = 1:640 mm = 1:650 mm = 1:660 mm = 1:670 mm = 1:680 mm = 1:690 mm = 1:700 mm = 1:710 mm = 1:720 mm = 1:730 mm = 1:740 mm = 1:750 mm = 1:760 mm = 1:770 mm = 1:780 mm = 1:790 mm = 1:800 mm = 1:810 mm = 1:820 mm = 1:830 mm = 1:840 mm = 1:850 mm = 1:860 mm = 1:870 mm = 1:880 mm = 1:890 mm = 1:900 mm = 1:910 mm = 1:920 mm = 1:930 mm = 1:940 mm = 1:950 mm = 1:960 mm = 1:970 mm = 1:980 mm = 1:990 mm = 1:1000 mm = 1:1010 mm = 1:1020 mm = 1:1030 mm = 1:1040 mm = 1:1050 mm = 1:1060 mm = 1:1070 mm = 1:1080 mm = 1:1090 mm = 1:1100 mm = 1:1110 mm = 1:1120 mm = 1:1130 mm = 1:1140 mm = 1:1150 mm = 1:1160 mm = 1:1170 mm = 1:1180 mm = 1:1190 mm = 1:1200 mm = 1:1210 mm = 1:1220 mm = 1:1230 mm = 1:1240 mm = 1:1250 mm = 1:1260 mm = 1:1270 mm = 1:1280 mm = 1:1290 mm = 1:1300 mm = 1:1310 mm = 1:1320 mm = 1:1330 mm = 1:1340 mm = 1:1350 mm = 1:1360 mm = 1:1370 mm = 1:1380 mm = 1:1390 mm = 1:1400 mm = 1:1410 mm = 1:1420 mm = 1:1430 mm = 1:1440 mm = 1:1450 mm = 1:1460 mm = 1:1470 mm = 1:1480 mm = 1:1490 mm = 1:1500 mm = 1:1510 mm = 1:1520 mm = 1:1530 mm = 1:1540 mm = 1:1550 mm = 1:1560 mm = 1:1570 mm = 1:1580 mm = 1:1590 mm = 1:1600 mm = 1:1610 mm = 1:1620 mm = 1:1630 mm = 1:1640 mm = 1:1650 mm = 1:1660 mm = 1:1670 mm = 1:1680 mm = 1:1690 mm = 1:1700 mm = 1:1710 mm = 1:1720 mm = 1:1730 mm = 1:1740 mm = 1:1750 mm = 1:1760 mm = 1:1770 mm = 1:1780 mm = 1:1790 mm = 1:1800 mm = 1:1810 mm = 1:1820 mm = 1:1830 mm = 1:1840 mm = 1:1850 mm = 1:1860 mm = 1:1870 mm = 1:1880 mm = 1:1890 mm = 1:1900 mm = 1:1910 mm = 1:1920 mm = 1:1930 mm = 1:1940 mm = 1:1950 mm = 1:1960 mm = 1:1970 mm = 1:1980 mm = 1:1990 mm = 1:2000 mm = 1:2010 mm = 1:2020 mm = 1:2030 mm = 1:2040 mm = 1:2050 mm = 1:2060 mm = 1:2070 mm = 1:2080 mm = 1:2090 mm = 1:2100 mm = 1:2110 mm = 1:2120 mm = 1:2130 mm = 1:2140 mm = 1:2150 mm = 1:2160 mm = 1:2170 mm = 1:2180 mm = 1:2190 mm = 1:2200 mm = 1:2210 mm = 1:2220 mm = 1:2230 mm = 1:2240 mm = 1:2250 mm = 1:2260 mm = 1:2270 mm = 1:2280 mm = 1:2290 mm = 1:2300 mm = 1:2310 mm = 1:2320 mm = 1:2330 mm = 1:2340 mm = 1:2350 mm = 1:2360 mm = 1:2370 mm = 1:2380 mm = 1:2390 mm = 1:2400 mm = 1:2410 mm = 1:2420 mm = 1:2430 mm = 1:2440 mm = 1:2450 mm = 1:2460 mm = 1:2470 mm = 1:2480 mm = 1:2490 mm = 1:2500 mm = 1:2510 mm = 1:2520 mm = 1:2530 mm = 1:2540 mm = 1:2550 mm = 1:2560 mm = 1:2570 mm = 1:2580 mm = 1:2590 mm = 1:2600 mm = 1:2610 mm = 1:2620 mm = 1:2630 mm = 1:2640 mm = 1:2650 mm = 1:2660 mm = 1:2670 mm = 1:2680 mm = 1:2690 mm = 1:2700 mm = 1:2710 mm = 1:2720 mm = 1:2730 mm = 1:2740 mm = 1:2750 mm = 1:2760 mm = 1:2770 mm = 1:2780 mm = 1:2790 mm = 1:2800 mm = 1:2810 mm = 1:2820 mm = 1:2830 mm = 1:2840 mm = 1:2850 mm = 1:2860 mm = 1:2870 mm = 1:2880 mm = 1:2890 mm = 1:2900 mm = 1:2910 mm = 1:2920 mm = 1:2930 mm = 1:2940 mm = 1:2950 mm = 1:2960 mm = 1:2970 mm = 1:2980 mm = 1:2990 mm = 1:3000 mm = 1:3010 mm = 1:3020 mm = 1:3030 mm = 1:3040 mm = 1:3050 mm = 1:3060 mm = 1:3070 mm = 1:3080 mm = 1:3090 mm = 1:3100 mm = 1:3110 mm = 1:3120 mm = 1:3130 mm = 1:3140 mm = 1:3150 mm = 1:3160 mm = 1:3170 mm = 1:3180 mm = 1:3190 mm = 1:3200 mm = 1:3210 mm = 1:3220 mm = 1:3230 mm = 1:3240 mm = 1:3250 mm = 1:3260 mm = 1:3270 mm = 1:3280 mm = 1:3290 mm = 1:3300 mm = 1:3310 mm = 1:3320 mm = 1:3330 mm = 1:3340 mm = 1:3350 mm = 1:3360 mm = 1:3370 mm = 1:3380 mm = 1:3390 mm = 1:3400 mm = 1:3410 mm = 1:3420 mm = 1:3430 mm = 1:3440 mm = 1:3450 mm = 1:3460 mm = 1:3470 mm = 1:3480 mm = 1:3490 mm = 1:3500 mm = 1:3510 mm = 1:3520 mm = 1:3530 mm = 1:3540 mm = 1:3550 mm = 1:3560 mm = 1:3570 mm = 1:3580 mm = 1:3590 mm = 1:3600 mm = 1:3610 mm = 1:3620 mm = 1:3630 mm = 1:3640 mm = 1:3650 mm = 1:3660 mm = 1:3670 mm = 1:3680 mm = 1:3690 mm = 1:3700 mm = 1:3710 mm = 1:3720 mm = 1:3730 mm = 1:3740 mm = 1:3750 mm = 1:3760 mm = 1:3770 mm = 1:3780 mm = 1:3790 mm = 1:3800 mm = 1:3810 mm = 1:3820 mm = 1:3830 mm = 1:3840 mm = 1:3850 mm = 1:3860 mm = 1:3870 mm = 1:3880 mm = 1:3890 mm = 1:3900 mm = 1:3910 mm = 1:3920 mm = 1:3930 mm = 1:3940 mm = 1:3950 mm = 1:3960 mm = 1:3970 mm = 1:3980 mm = 1:3990 mm = 1:4000 mm = 1:4010 mm = 1:4020 mm = 1:4030 mm = 1:4040 mm = 1:4050 mm = 1:4060 mm = 1:4070 mm = 1:4080 mm = 1:4090 mm = 1:4100 mm = 1:4110 mm = 1:4120 mm = 1:4130 mm = 1:4140 mm = 1:4150 mm = 1:4160 mm = 1:4170 mm = 1:4180 mm = 1:4190 mm = 1:4200 mm = 1:4210 mm = 1:4220 mm = 1:4230 mm = 1:4240 mm = 1:4250 mm = 1:4260 mm = 1:4270 mm = 1:4280 mm = 1:4290 mm = 1:4300 mm = 1:4310 mm = 1:4320 mm = 1:4330 mm = 1:4340 mm = 1:4350 mm = 1:4360 mm = 1:4370 mm = 1:4380 mm = 1:4390 mm = 1:4400 mm = 1:4410 mm = 1:4420 mm = 1:4430 mm = 1:4440 mm = 1:4450 mm = 1:4460 mm = 1:4470 mm = 1:4480 mm = 1:4490 mm = 1:4500 mm = 1:4510 mm = 1:4520 mm = 1:4530 mm = 1:4540 mm = 1:4550 mm = 1:4560 mm = 1:4570 mm = 1:4580 mm = 1:4590 mm = 1:4600 mm = 1:4610 mm = 1:4620 mm = 1:4630 mm = 1:4640 mm = 1:4650 mm = 1:4660 mm = 1:4670 mm = 1:4680 mm = 1:4690 mm = 1:4700 mm = 1:4710 mm = 1:4720 mm = 1:4730 mm = 1:4740 mm = 1:4750 mm = 1:4760 mm = 1:4770 mm = 1:4780 mm = 1:4790 mm = 1:4800 mm = 1:4810 mm = 1:4820 mm = 1:4830 mm = 1:4840 mm = 1:4850 mm = 1:4860 mm = 1:4870 mm = 1:4880 mm = 1:4890 mm = 1:4900 mm = 1:4910 mm = 1:4920 mm = 1:4930 mm = 1:4940 mm = 1:4950 mm = 1:4960 mm = 1:4970 mm = 1:4980 mm = 1:4990 mm = 1:5000 mm = 1:5010 mm = 1:5020 mm = 1:5030 mm = 1:5040 mm = 1:5050 mm = 1:5060 mm = 1:5070 mm = 1:5080 mm = 1:5090 mm = 1:5100 mm = 1:5110 mm = 1:5120 mm = 1:5130 mm = 1:5140 mm = 1:5150 mm = 1:5160 mm = 1:5170 mm = 1:5180 mm = 1:5190 mm = 1:5200 mm = 1:5210 mm = 1:5220 mm = 1:5230 mm = 1:5240 mm = 1:5250 mm = 1:5260 mm = 1:5270 mm = 1:5280 mm = 1:5290 mm = 1:5300 mm = 1:5310 mm = 1:5320 mm = 1:5330 mm = 1:5340 mm = 1:5350 mm = 1:5360 mm = 1:5370 mm = 1:5380 mm = 1:5390 mm = 1:5400 mm = 1:5410 mm = 1:5420 mm = 1:5430 mm = 1:5440 mm = 1:5450 mm = 1:5460 mm = 1:5470 mm = 1:5480 mm = 1:5490 mm = 1:5500 mm = 1:5510 mm = 1:5520 mm = 1:5530 mm = 1:5540 mm = 1:5550 mm = 1:5560 mm = 1:5570 mm = 1:5580 mm = 1:5590 mm = 1:5600 mm = 1:5610 mm = 1:5620 mm = 1:5630 mm = 1:5640 mm = 1:5650 mm = 1:5660 mm = 1:5670 mm = 1:5680 mm = 1:5690 mm = 1:5700 mm = 1:5710 mm = 1:5720 mm = 1:5730 mm = 1:5740 mm = 1:5750 mm = 1:5760 mm = 1:5770 mm = 1:5780 mm = 1:5790 mm = 1:5800 mm = 1:5810 mm = 1:5820 mm = 1:5830 mm = 1:5840 mm = 1:5850 mm = 1:5860 mm = 1:5870 mm = 1:5880 mm = 1:5890 mm = 1:5900 mm = 1:5910 mm = 1:5920 mm = 1:5930 mm = 1:5940 mm = 1:5950 mm = 1:5960 mm = 1:5970 mm = 1:5980 mm = 1:5990 mm = 1:6000 mm = 1:6010 mm = 1:6020 mm = 1:6030 mm = 1:6040 mm = 1:6050 mm = 1:6060 mm = 1:6070 mm = 1:6080 mm = 1:6090 mm = 1:6100 mm = 1:6110 mm = 1:6120 mm = 1:6130 mm = 1:6140 mm = 1:6150 mm = 1:6160 mm = 1:6170 mm = 1:6180 mm = 1:6190 mm = 1:6200 mm = 1:6210 mm = 1:6220 mm = 1:6230 mm = 1:6240 mm = 1:6250 mm = 1:6260 mm = 1:6270 mm = 1:6280 mm = 1:6290 mm = 1:6300 mm = 1:6310 mm = 1:6320 mm = 1:6330 mm = 1:6340 mm = 1:6350 mm = 1:6360 mm = 1:6370 mm = 1:6380 mm = 1:6390 mm = 1:6400 mm = 1:6410 mm = 1:6420 mm = 1:6430 mm = 1:6440 mm = 1:6450 mm = 1:6460 mm = 1:6470 mm = 1:6480 mm = 1:6490 mm = 1:6500 mm = 1:6510 mm = 1:6520 mm = 1:6530 mm = 1:6540 mm = 1:6550 mm = 1:6560 mm = 1:6570 mm = 1:6580 mm = 1:6590 mm = 1:6600 mm = 1:6610 mm = 1:6620 mm = 1:6630 mm = 1:6640 mm = 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1:7480 mm = 1:7490 mm = 1:7500 mm = 1:7510 mm = 1:7520 mm = 1:7530 mm = 1:7540 mm = 1:7550 mm = 1:7560 mm = 1:7570 mm = 1:7580 mm = 1:7590 mm = 1:7600 mm = 1:7610 mm = 1:7620 mm = 1:7630 mm = 1:7640 mm = 1:7650 mm = 1:7660 mm = 1:7670 mm = 1:7680 mm = 1:7690 mm = 1:7700 mm = 1:7710 mm = 1:7720 mm = 1:7730 mm = 1:7740 mm = 1:7750 mm = 1:7760 mm = 1:7770 mm = 1:7780 mm = 1:7790 mm = 1:7800 mm = 1:7810 mm = 1:7820 mm = 1:7830 mm = 1:7840 mm = 1:7850 mm = 1:7860 mm = 1:7870 mm = 1:7880 mm = 1:7890 mm = 1:7900 mm = 1:7910 mm = 1:7920 mm = 1:7930 mm = 1:7940 mm = 1:7950 mm = 1:7960 mm = 1:7970 mm = 1:7980 mm = 1:7990 mm = 1:8000 mm = 1:8010 mm = 1:8020 mm = 1:8030 mm = 1:8040 mm = 1:8050 mm = 1:8060 mm = 1:8070 mm = 1:8080 mm = 1:8090 mm = 1:8100 mm = 1:8110 mm = 1:8120 mm = 1:8130 mm = 1:8140 mm = 1:8150 mm = 1:8160 mm = 1:8170 mm = 1:8180 mm = 1:8190 mm = 1:8200 mm = 1:8210 mm = 1:8220 mm = 1:8230 mm = 1:8240 mm = 1:8250 mm = 1:8260 mm = 1:8270 mm = 1:8280 mm = 1:8290 mm = 1:8300 mm = 1:8310 mm = 1:8320 mm = 1:8330 mm = 1:8340 mm = 1:8350 mm = 1:8360 mm = 1:8370 mm = 1:8380 mm = 1:8390 mm = 1:8400 mm = 1:8410 mm = 1:8420 mm = 1:8430 mm = 1:8440 mm = 1:8450 mm = 1:8460 mm = 1:8470 mm = 1:8480 mm = 1:8490 mm = 1:8500 mm = 1:8510 mm = 1:8520 mm = 1:8530 mm = 1:8540 mm = 1:8550 mm = 1:8560 mm = 1:8570 mm = 1:8580 mm = 1:8590 mm = 1:8600 mm = 1:8610 mm = 1:8620 mm = 1:8630 mm = 1:8640 mm = 1:8650 mm = 1:8660 mm = 1:8670 mm = 1:8680 mm = 1:8690 mm = 1:8700 mm = 1:8710 mm = 1:8720 mm = 1:8730 mm = 1:8740 mm = 1:8750 mm = 1:8760 mm = 1:8770 mm = 1:8780 mm = 1:8790 mm = 1:8800 mm = 1:8810 mm = 1:8820 mm = 1:8830 mm = 1:8840 mm = 1:8850 mm = 1:8860 mm = 1:8870 mm = 1:8880 mm = 1:8890 mm = 1:8900 mm = 1:8910 mm = 1:8920 mm = 1:8930 mm = 1:8940 mm = 1:8950 mm = 1:8960 mm = 1:8970 mm = 1:8980 mm = 1:8990 mm = 1:9000 mm = 1:9010 mm = 1:9020 mm = 1:9030 mm = 1:9040 mm = 1:9050 mm = 1:9060 mm = 1:9070 mm = 1:9080 mm = 1:9090 mm = 1:9100 mm = 1:9110 mm = 1:9120 mm = 1:9130 mm = 1:9140 mm = 1:9150 mm = 1:9160 mm = 1:9170 mm = 1:9180 mm = 1:9190 mm = 1:9200 mm = 1:9210 mm = 1:9220 mm = 1:9230 mm = 1:9240 mm = 1:9250 mm = 1:9260 mm = 1:9270 mm = 1:9280 mm = 1:9290 mm = 1:9300 mm = 1:9310 mm = 1:9320 mm = 1:9330 mm = 1:9340 mm = 1:9350 mm = 1:9360 mm = 1:9370 mm = 1:9380 mm = 1:9390 mm = 1:9400 mm = 1:9410 mm = 1:9420 mm = 1:9430 mm = 1:9440 mm = 1:9450 mm = 1:9460 mm = 1:9470 mm = 1:9480 mm = 1:9490 mm = 1:9500 mm = 1:9510 mm = 1:9520 mm = 1:9530 mm = 1:9540 mm = 1:9550 mm = 1:9560 mm = 1:9570 mm = 1:9580 mm = 1:9590 mm = 1:9600 mm = 1:9610 mm = 1:9620 mm = 1:9630 mm = 1:9640 mm = 1:9650 mm = 1:9660 mm = 1:9670 mm = 1:9680 mm = 1:9690 mm = 1:9700 mm = 1:9710 mm = 1:9720 mm = 1:9730 mm = 1:9740 mm = 1:9750 mm = 1:9760 mm = 1:9770 mm = 1:9780 mm = 1:9790 mm = 1:9800 mm = 1:9810 mm = 1:9820 mm = 1:9830 mm = 1:9840 mm = 1:9850 mm = 1:9860 mm = 1:9870 mm = 1:9880 mm = 1:9890 mm = 1:9900 mm = 1:9910 mm = 1:9920 mm = 1:9930 mm = 1:9940 mm = 1:9950 mm = 1:9960 mm = 1:9970 mm = 1:9980 mm = 1:9990 mm = 1:10000 mm = 1:10010 mm = 1:10020 mm = 1:10030 mm = 1:10040 mm = 1:10050 mm = 1:10060 mm = 1:10070 mm = 1:10080 mm = 1:10090 mm = 1:10100 mm = 1:10110 mm = 1:10120 mm = 1:10130 mm = 1:10140 mm = 1:10150 mm = 1:10160 mm = 1:10170 mm = 1:10180 mm = 1:10190 mm = 1:10200 mm = 1:10210 mm = 1:10220 mm = 1:10230 mm = 1:10240 mm = 1:10250 mm = 1:10260 mm = 1:10270 mm = 1:10280 mm = 1:10290 mm = 1:10300 mm = 1:10310 mm = 1:10320 mm = 1:10330 mm = 1:10340 mm = 1:10350 mm = 1:10360 mm = 1:10370 mm = 1:10380 mm = 1:10390 mm = 1:10400 mm = 1:10410 mm = 1:10420 mm = 1:10430 mm = 1:10440 mm = 1:10450 mm = 1:10460 mm = 1:10470 mm = 1:10480 mm = 1:10490 mm = 1:10500 mm = 1:10510 mm = 1:10520 mm = 1:10530 mm = 1:10540 mm = 1:10550 mm = 1:10560 mm = 1:10570 mm = 1:10580 mm = 1:10590 mm = 1:10600 mm = 1:10610 mm = 1:10620 mm = 1:10630 mm = 1:10640 mm = 1:10650 mm = 1:10660 mm = 1:10670 mm = 1:10680 mm = 1:10690 mm = 1:10700 mm = 1:10710 mm = 1:10720 mm = 1:10730 mm = 1:10740 mm = 1:10750 mm = 1:10760 mm = 1:10770 mm = 1:10780 mm = 1:10790 mm = 1:10800 mm = 1:10810 mm = 1:10820 mm = 1:10830 mm = 1:10840 mm = 1:10850 mm = 1:10860 mm = 1:10870 mm = 1:10880 mm = 1:10890 mm = 1:10900 mm = 1:10910 mm = 1:10920 mm = 1:10930 mm = 1:10940 mm = 1:10950 mm = 1:10960 mm = 1:10970 mm = 1:10980 mm = 1:10990 mm = 1:11000 mm = 1:11010 mm = 1:11020 mm = 1:11030 mm = 1:11040 mm = 1:11050 mm = 1:11

