# SFI DETAIL CODE

# General information on use of SFI

The SFI Code is an international classification standard used in shipping.

The numbers consist of main components and sub component(s). In the example 112.005 Ship control. The component 112 is the main component and 005 is the subcomponent. You can also have subcomponents of a subcomponent such as 112.005.001. It is not recommended to have more then 3 levels of subcomponents, to make it easier to follow the component scheme.

The main components are grouped under different categories. For example "112 Classification & Statuary fees & Certificates" main component, is grouped under "1 Ship General" and "11 Insurance, fees, certificates, representation".

If there are gaps in numbers between main or sub components, you can use those numbers as you wish, as long as they fit the category in which it is listed.

Also components 900-999 is open and you can use those to specify things that do not fit in any of the other categories. Group 0-99 can also be used for custom things as well, if it does not fit the already specified SFI list codes.

In Oceantiger Software's MMaster (<a href="https://www.oceantiger-software.com">https://www.oceantiger-software.com</a>) you can use the SFI codes to define your component tree. On the webpage you can download Oceantiger MMaster demo version, and get more information about this very user friendly and affordable ship maintenance system.

# 1 SHIP GENERAL

10 S	SPECIFICATION, ESTIMATING, DRAWING, INSTRUCTION, COURSES
11 I	NSURANCE, FEES, CERTIFICATES, REPRESENTATION
12 (	QUALITY ASSURANCE, GENERAL WORK, MODELS
13 F	PROVISIONAL RIGGING
14 V	WORK ON WAYS, LAUNCHING, DOCKING
15 (	QUALITY CONTROL, MEASUREMENTS, TESTS, TRIALS
16 (	GUARANTEE/MENDING WORK
17 S	SHIP REPAIR, SPECIAL SERVICES
19 (	CONSUMPTION ARTICLES
<u> 2 HU</u>	T <u>LL</u>
20 H	HULL MATERIALS, GENERAL HULL WORK
21 A	AFTERBODY
22 E	ENGINE AREA
23 (	CARGO AREA - HULL SMALL VESSELS
24 F	FOREBODY
25 I	DECK HOUSES & SUPERSTRUCTURES
26 H	HULL OUTFITTING
27 N	MATERIAL PROTECTION, EXTERNAL
28 N	MATERIAL PROTECTION, INTERNAL
29 N	MISCELLANEOUS HULL WORK (NOT STANDARD)
<u>3 EQ</u>	<u>UIPMENT FOR CARGO</u>
30 H	HATCHES, PORTS
31 E	EQUIPMENT FOR CARGO IN HOLDS/ON DECK
32 S	SPECIAL CARGO HANDLING EQUIPMENT
33 I	DECK CRANES FOR CARGO
34 N	MASTS, DERRICK POSTS, RIGGING & WINCHES FOR CARGO
35 I	LOADING/DISCHARGING SYSTEMS FOR LIQUID CARGO
36 F	FREEZING, REFRIGERATING & HEATING SYSTEMS FOR CARGO
37 (	GAS/VENTILATION SYSTEMS FOR CARGO HOLDS/TANKS
38 <i>A</i>	AUXILIARY SYSTEMS & EOUIPMENT FOR CARGO

# 4 SHIP EQUIPMENT

40 M	MANOEUVRING MACHINERY & EQUIPMENT
41 N	AVIGATION & SEARCHING EQUIPMENT
42 C	OMMUNICATION EQUIPMENT
43 A	NCHORING, MOORING & TOWING EQUIPMENT
44 R	EP./MAINT./CLEAN. EQUIP. WORKSHOP/STORE OUTFIT, NAME PLATES
45 L	IFTING & TRANSPORT EQUIPMENT FOR MACHINERY COMPONENTS
46 H	IUNTING & FISHING EQUIPMENT
	RMAMENT, WEAPON & WEAPON COUNTERMEASURES
48 S	PECIAL EQUIPMENT
49 F	ISH PROCESSING EQUIPMENT
	AND ADM HOD ODEW AND DAGGEN CODE
	VIPMENT FOR CREW AND PASSENGERS
	IFESAVING, PROTECTION & MEDICAL EQUIPMENT
	NSULATION, PANELS, BULKHEADS, DOORS, SIDESCUTTLES, SKYLIGHTS
	NTERNAL DECK COVERING, LADDERS, STEPS, RAILING
	XT. DECK COVERING, LADDERS, STEPS, FORE & AFT GANGWAY
	URNITURE, INVENTORY, ENTERTAINMENT EQUIPMENT
	FALLEY/PANTRY EQUIP., PROVISION PLANTS, LAUNDRY/IRONING EQU
56 T	RANSPORT EQUIPMENT FOR CREW, PASSENGERS & PROVISIONS
57 V	ENTILATION, AIR-CONDITIONING & HEATING SYSTEMS
58 S.	ANITARY SYST. W/DISCHARGES, ACCOMMODATION DRAIN SYSTEMS
59 P.	ASSENGER VESSEL CABINS & PUBLIC ROOMS
6 MA	CHINERY MAIN COMPONENTS
	DIESEL ENGINES FOR PROPULSION
	TEAM MACHINERY FOR PROPULSION
	THER TYPES OF PROPULSION MACHINERY
	ROPELLERS, TRANSMISSIONS, FOILS
	OILERS, STEAM & GAS GENERATORS
	OTOR AGGREGATES FOR MAIN ELECTRIC POWER PRODUCTION
	THER AGGR. & GEN. FOR MAIN & EMERGENCY EL. POWER PRODUCTION
	UCLEAR REACTOR PLANTS
11/ N	IUCLEAN NEACTUN ELANTS

#### <u>7 SYSTEMS FOR MACHINERY MAIN COMPONENTS</u> 70 FUEL SYSTEMS ..... 107 71 LUBE OIL SYSTEMS ...... 109 72 COOLING SYSTEMS ..... 111 73 COMPRESSED AIR SYSTEMS ..... 111 74 EXHAUST SYSTEMS & AIR INTAKES..... 112 75 STEAM, CONDENSATE & FEED WATER SYSTEMS ..... 114 76 DISTILLED & MAKE-UP WATER SYSTEMS ..... 116 79 AUTOMATION SYSTEMS FOR MACHINERY ..... 117 8 SHIP COMMON SYSTEMS 80 BALLAST & BILGE SYSTEMS, GUTTER PIPES OUTSIDE ACCOMMOD...... 121 81 FIRE & LIFEBOAT ALARM, FIRE FIGHTING & WASH DOWN SYSTEMS ...... 122 82 AIR & SOUNDING SYSTEMS FROM TANKS TO DECK ...... 124 83 SPECIAL COMMON HYDRAULIC OIL SYSTEMS ..... 124 84 CENTRAL HEAT TRANSFER SYSTEMS W/CHEMICAL FLUIDS/OIL ..... 124 85 COMMON ELECTRIC & ELECTRONIC SYSTEMS..... 125 86 ELECTRIC POWER SUPPLY 126 87 COMMON ELECTRIC DISTRIBUTION SYSTEMS ..... 127

88 ELECTRIC CABLE INSTALLATION .....

89 ELECTRIC CONSUMER SYSTEMS .....

128

129

# 1 SHIP GENERAL

# 10 SPECIFICATION, ESTIMATING, DRAWING, INSTRUCTION, COURSES

#### 101 CONTRACT/SPECIFIC. WORK, GENERAL DESIGN, MODEL TESTING

- 101.001 Towing tank tests
- 101.005 Funnel tests
- 101.010 Propeller cavitation tests
- 101.011 Noise measurements/analyses
- 101.012 Vibration measurements/analyses
- 101.015 Travel/per diem expenses
- 101.020 General EDP expenses

#### 102 DRAWING, ORDERING ETC. WITH REGARD TO HULL

- 102.001 Hull half models
- 102.003 Film, development, copying
- 102.005 Hull EDP expenses
- 102.010 Optical drawings
- 102.020 CAD drawings

# 103 DRAWING, ORDERING ETC. W.R.T. EQUIPMENT FOR CARGO

#### 104 DRAWING, ORDERING ETC. W.R.T. SHIP EQUIPMENT

# 105 DRAWING, ORDERING W.R.T. EQUIPMENT FOR CREW & PASSENGERS

#### 106 DRAWING, ORDERING W.R.T. MACH. COMPONENTS, MACH/SHIP SYSTEMS

106.001 Film, development, copying

106.020 CAD drawings

#### 107 ESTIMATING, DRAWING & OFFERS W.R.T. CHANGE ORDERS

#### 108 PURCHASE/RENTING OF DRAWINGS, PATENTS, LICENCES & CONSULTATI

- 108.001 Drawing purchases
- 108.010 Drawing rentals
- 108.020 General licence/patent fees
- 108.025 General consultants' fees
- 108.026 Class newbuilding survey

#### 109 MAINTENANCE SYSTEMS, INSTRUCTION MATERIAL

- 109.001 Instruction material
- 109.005 Maintenance/spare parts systems
- 109.007 Contingency plans
- 109.009 Alarm instructions
- 109.010 Travel/per diem expenses
- 109.020 Course instructors' salaries

# 11 INSURANCE, FEES, CERTIFICATES, REPRESENTATION

#### 111 GENERAL INSURANCE

- 111.001 Construction risk insurance
- 111.005 Trial trip insurance
- 111.010 Delay insurance
- 111.015 Guarantee insurance
- 111.020 Currency insurance
- 111.025 Discount rate insurance

#### 112 CLASSIFICATION & STATUTORY FEES & CERTIFICATES

- 112.001 Classification societies' fees
- 112.003 Letter of official registration
- 112.005 Ship control
- 112.008 Ship registration
- 112.009 Safety equipment
- 112.010 International tonnage certificates
- 112.012 International loadline certificates
- 112.015 Panama Canal tonnage certificates
- 112.020 Suez Canal tonnage certificates
- 112.022 RINA certificates
- 112.024 FMC certificates
- 112.025 Construction certificates
- 112.030 USCG certificates
- 112.034 TOVALOP certificates
- 112.035 IMO certificates
- 112.050 Passenger certificates
- 112.052 Car freight certificates
- 112.054 Container certificates
- 112.056 Chemical tanker certificates
- 112.058 Gas tanker certificates
- 112.060 Product tanker certificates
- 112.062 Oil tanker certificates
- 112.064 Oil production/storage certificates

#### 113 BUILDING ADVANCE INTEREST, DISCOUNT, FINANCE COSTS

- 113.001 Interest expenses
- 113.005 Discount rate losses
- 113.010 Exchange rate losses
- 113.015 Financial costs

#### 114 CANCELLATION EXPENSES

114.001 Cancellation expenses

#### 115 PENALTIES

115.001 Contract penalties

#### 116 BROKERS' COMMISSIONS

116.001 Brokers' commissions

#### 117 REPRESENTATION, TRAVELS, CONFERENCES

- 117.001 Travel/per diem expenses
- 117.010 Premises rental
- 117.015 Catering
- 117.020 Representation

#### 118 LAUNCHING & DELIVERY REPRESENTATION

- 118.001 Catering
- 118.005 Travel/per diem expenses
- 118.010 Gifts
- 118.015 Entertainment
- 118.017 Film, development, copying
- 118.020 Representation
- 118.025 Trial trip representation
- 118.030 Menus, guest lists, printed matter

# 12 QUALITY ASSURANCE, GENERAL WORK, MODELS

# 121 QUALITY ASSURANCE, PLANNING, WORK PREPARATION

- 121.001 EDP expenses
- 121.005 Quality assurance manuals
- 121.010 Progress plans
- 121.015 Work preparation
- 121.020 Work hours/progress control

#### 122 WORK MANAGEMENT, FIRE GUARD, SUPERVISION, WATCH KEEPING

- 122.001 Hull work management
- 122.005 Machinery work management
- 122.010 Pipe work management
- 122.015 Carpenter work management
- 122.020 Work management
- 122.025 Fire guard
- 122.030 Watch keeping

#### 123 CLEARING & CLEANING

- 123.001 Cleaning
- 123.005 Engine room cleaning
- 123.010 Accommodation cleaning

#### 124 SNOW CLEARING, DE-ICING

#### 125 TRANSPORTATION (EXCL. HULL PARTS)

125.001 Freight, minor

#### 126 ASSISTANCE WITH OWNER'S SUPPLY

126.001 External transport costs

# 127 MODELS, ALBUMS, PHOTOS

127.001 Exhibition models 127.005 Arrangement models 127.010 Full scale models 127.015 Photo albums

#### 128 HEALTH, ENVIRONMENT, SAFETY

# 13 PROVISIONAL RIGGING

131 PROV. GANGWAYS, ROOFS, HATCHES, STAIRS, STAGES FOR HULL EXT.

132 PROV. ROOFS, HATCHES, STAGES F. DECK HOUSES & SUPERSTR. EXT.

133 PROV. HATCHES, LADDERS, STAGES IN CARGO HOLDS/TANKS

134 PROV. HATCHES, LADDERS, STAGES IN ENGINE ROOM & ACCOMMOD.

**135 PROV. ELECTRIC POWER, LIGHTING, MACHINERY** 135.001 Diesel aggregate hire

136 PROV. STEAM, WATER, HEATING & VENTILATION PLANTS

137 PROV. GAS, OXYGEN & COMPRESSED AIR PLANTS

#### 138 TARPAULIN RENTALS

138.001 Storage tent hire

139 PROV. LIFTING & TRANSPORT EQUIPMENT

# 14 WORK ON WAYS, LAUNCHING, DOCKING

# 141 KEEL BLOCKS, PILLARS, CUSHIONS

# 142 LAUNCHING ARR. W/CRADLE, SUPPORTS, WATER FILLING, PLATFORM

# 143 CREW, PILOTS, TUGS, CLEARING AT LAUNCHING

143.001 Pilot expenses 143.005 Tug hire 143.010 Diver assistance

# 144 DRY DOCKING, SLIP DOCKING

144.001 Pilot expenses 144.005 Tug hire 144.010 Diver assistance

# 145 SHIFTING, TOWING (EXCL. LAUNCHING)

145.001 Pilot expenses 145.005 Tug hire

# 146 GAS FREEING, TANK CLEANING

147 BERTHING, ANCHORAGE

# 15 QUALITY CONTROL, MEASUREMENTS, TESTS, TRIALS

#### 151 MACHINERY TESTING

151.001 Testing instrument hire

# 152 CAPACITY, INCLINATION, VIBRATION MEASUREMENTS

152.001 Testing instrument hire

#### 153 FUEL & LUBE OIL FOR TESTS & TRIAL TRIPS

153.001 Trial trip FO

153.005 Trial trip LO

#### 154 TRIAL TRIPS

154.001 Harbour pilot expenses

154.005 Tug hire

154.010 Harbour dues

154.011 Speed-mile dues

154.012 Trial trip master hire

154.015 Trial trip crew catering

#### 155 SPECIAL TESTS/TRIALS

155.001 Test plant rentals

155.003 Gas purchases

155.005 Ammunition purchases

155.010 Harbour dues

155.012 Pilot expenses

155.014 Tug hire

155.016 Watch keeping

155.020 Ship operation to test location

155.030 Seine test settings

155.040 Trawl tests

155.045 Towing tests

155.050 Fi-Fi tests

155.055 Dynamic positioning tests

# 16 GUARANTEE/MENDING WORK

# 161 MENDING WORK AFTER TRIALS

# **162 GUARANTEE WORK**

162.001 Guarantee eng. travel/per diem expenses 162.005 Workers travel/per diem expenses

# 164 REPAIR OF DAMAGES CAUSED BY YARD

# 17 SHIP REPAIR, SPECIAL SERVICES

171 DISPOSAL OF WASTE, GARBAGE, OIL, CHEMICALS

172 CRANE ASSISTANCE TO SHIP'S CREW

173 TRANSPORT OF YARD PERSONNEL

174 TOILET & WASH ROOM OUTLETS

175 SERVICES TO SHIP'S CREW (MEALS ETC.)

# 19 CONSUMPTION ARTICLES

# 191 ELECTRODES

192 GAS, OXYGEN, COAL, OIL

193 TOOLS, JIGS

# 194 BINDING & MENDING MATERIAL, CLEANING ARTICLES

194.001 Soap, detergent 194.002 De-greasing agents

# 195 EQUIPMENT FOR OWNER'S REPRESENTATIVES

195.001 Owners' representatives expenses 195.005 Owners' deliveries

# 196 MISCELLANEOUS CONSUMPTION ARTICLES

# 2 HULL

# 20 HULL MATERIALS, GENERAL HULL WORK

#### 201 HULL MATERIALS

201.001 Steel ship plates

201.005 High tension steel ship plates

201.010 Alloy steel plates

201.015 Laminated steel plates

201.025 Steel profiles

201.030 High tension steel profiles

201.035 Alloy steel profiles

201.040 Steel tube supports

201.050 Aluminium plates

201.060 Composite materials

#### 202 TRANSPORTATION, SORTING & STORAGE OF HULL MATERIALS

202.001 Crane hire

202.005 Forklift hire

202.010 Truck hire

#### 203 BLASTING, SHOP-PRIMING, ROLLING & CLEANING OF MATERIALS

203.001 Sandblasting equipment hire

#### 204 TESTING OF TANKS, BULKHEADS

204.001 Testing equipment hire

#### 205 X-RAY & ULTRASONIC TESTING OF HULL PARTS

205.001 Testing equipment hire

205.005 X-ray film/development

#### 206 TEMPLATE & MOULD LOFT WORK

207 JOINING OF HULL PARTS AFLOAT

# 21 AFTERBODY

# 211 SHELL PANELS, SEPARATE SHELL PLATES

#### 214 1. DECK W/STIFFENING

# 216 STERN SECTIONS, STERN TUBE BULKHEADS

- 216.001 Afterpeak tanks
- 216.002 Stern tanks
- 216.003 Water ballast tanks
- 216.004 FW tanks
- 216.005 Steering gear room aft 216.010 Car bridge recess aft
- 216.015 Side thruster tunnel
- 216.020 Stern tube bulkhead room aft

#### 218 STERN FRAME SECTIONS

- 218.001 Stern boss
- 218.003 Rudder boss, cast steel
- 218.004 Stern boss lining
- 218.005 Intermediate piece 1, cast steel
- 218.006 Rudder trunk
- 218.007 Stern tube boss
- 218.009 Intermediate piece 2, cast steel
- 218.011 Heel piece, cast steel
- 218.020 Stern frame, cast steel

#### 22 ENGINE AREA

#### 220 GENERAL

220.001 FO storage tanks

220.005 FO settling tanks

220.007 FO service tanks

220.009 DO storage tanks

220.013 DO settling tanks

220.015 DO day tanks

220.017 FO waste tanks

220.019 FO overflow tanks

220.021 FO drain tanks

220.025 LO system tanks

220.027 System oil tanks, clean

220.029 System oil tanks, dirty

220.031 Turbine oil storage tanks

220.033 Turbine oil gravity tanks

220.035 Cylinder oil storage tanks

220.037 HDO storage tanks

220.039 LO drain tanks

220.041 LO waste tanks

220.045 FW tanks

220.050 Distilled water tanks

220.055 Water ballast tanks

#### 221 SHELL PANELS, SEPARATE SHELL PLATES

#### 222 BOTTOM, KEEL & BILGE PLATES W/STIFFENING

# 223 INNER BOTTOM W/STIFFENING, ENGINE FOUNDATIONS

223.001 ME foundations

223.003 MT foundations

223.005 Main condenser foundations

223.007 Main reduction gear foundations

223.010 Main boiler foundations

223.015 Aux boiler foundations

223.017 AE foundations

223.020 TG foundations

223.022 Shaft bearing foundations

223.025 Stern tube foundations

#### 224 1. DECK W/STIFFENING

# 226 DECKS, PLATFORMS, BULKHEADS, & HULL TANKS BELOW 1. DECK

226.001 Engine room decks w/stiffeners

226.010 Engine room platforms

226.020 Engine room bulkhead

226.030 FO tanks

226.040 ME FO settling tanks

226.041 ME FO day tanks

226.043 ME DO day tanks

226.050 Engine room LO tanks 226.060 ME system oil tanks 226.065 AE system oil tanks 226.070 ME cylinder oil tanks

# 23 CARGO AREA - HULL SMALL VESSELS

#### 230 GENERAL

230.001 Cargo tanks 230.020 Slop tanks 230.030 Ballast tanks 230.040 Ballast/F.O. tanks

# 231 SHELL PANELS, SEPARATE SHELL PLATES

#### 232 BOTTOM, KEEL & BILGE PLATES W/STIFFENING

#### 233 INNER BOTTOM W/STIFFENING

233.010 Ballast tanks 233.020 FW tanks 233.030 Sewage tanks 233.040 Dry tanks 233.050 Cofferdams 233.070 FO tanks

#### 234 1. DECK W/STIFFENING

234.010 Deck 234.020 Deck tanks

#### 235 DECKS BELOW 1. DECK W/STIFFENING

235.010 Shelterdeck

#### 236 TRANSVERSE BULKHEADS W/STIFFENING

237 LONGITUDINAL BULKHEADS W/STIFFENING

238 BOTTOM SIDE TANKS, ETC. (SPECIAL LOWER CONSTRUCTIONS)

239 TOP SIDE TANKS, ETC. (SPECIAL UPPER CONSTRUCTIONS)

# 24 FOREBODY

#### 240 GENERAL

240.001 FO deep tanks 240.005 Ballast deep tanks 240.010 Forepeak tanks

# 241 SHELL PANELS, SEPARATE SHELL PLATES

#### 243 FORECASTLE DECKS & BULKHEADS W/STIFFENING

#### 244 1. DECK W/STIFFENING

#### 245 DECKS & STRINGERS BELOW 1. DECK W/STIFFENING

# 246 BOW & STEM SECTIONS, FOREBODY BULKHEADS

246.005 Steering gear room fwd 246.010 Car bridge recess fwd 246.015 Side thruster tunnel 246.020 Stern tube bulkhead room fwd 246.030 Chain lockers

#### **248 BULB**

# 25 DECK HOUSES & SUPERSTRUCTURES

# 251 DECK HOUSES

251.001 Deck houses

# 252 MAST, PUMP, FAN & WINCH HOUSES, COMPANION WAYS

252.001 Mast houses 252.010 Companion ways 252.020 Emergency exits 252.030 Lift trunks

# **253 SUPERSTRUCTURES**

253.010 Decks w/bulkheads, stiffening 253.050 Wheelhouses

#### 26 HULL OUTFITTING

#### **261 HULL & HOUSE MARKINGS**

261.001 Builder's signplates

261.002 Hull marks, names

261.004 Draft marks

261.005 Loadline marks

261.006 Foot marks

261.010 Tank marks

261.011 Owner's marks bow/stern

261.012 Owner's marks funnel

261.015 Side thruster marks

261.020 Bulb marks

261.030 Drive lane marks

261.040 Sign plate arrangements

#### 262 BOTTOM PLUGS, SEA CHESTS, BILGE WELLS, WATER JET INTAKE

262.001 Bottom plugs

262.005 Bottom manhole covers

262.010 Sea chests

262.015 Bilge wells

262.040 Water jet intake

262.050 Fi-Fi sea intake

262.052 Fi-Fi sea intake strainer plate

#### **263 FOUNDATIONS**

263.010 Shaft bearing foundations

263.015 Stern tube foundations

263.016 Steering gear foundations

263.020 Boiler foundations

263.022 Exhaust gas boiler foundations

263.024 Silencer foundations

263.025 Anchor winch foundations

263.030 Lift foundations

263.035 Ventilation plant foundations

263.050 Lifeboat foundations

263.055 MOB boat foundations

263.059 MOB boat winch foundations

263.060 Liferaft foundations

# 264 FENDER & WEAR BARS, ICE FINS, BILGE KEELS, AIR CUSHION ARR.

264.001 Fender bars

264.010 Bilge keels

264.020 Bow fenders

264.030 Rubber fenders w/fixtures

264.050 Air cushion screens

264.055 Air cushion dampers

# 265 GUIDE, TRIM & COVER PLATES

# **266 HAWSE PIPES**

266.001 Hawse pipes 266.002 Wear rings

# 267 GUTTER BARS, BULWARK, BREAKWATERS, GAS BARRIERS

267.010 Bulwark 267.030 Side gates fwd 267.033 Side gates midship 267.035 Side gates aft

# **268 FUNNELS**

268.001 Funnels

# 27 MATERIAL PROTECTION, EXTERNAL

# 271 BOTTOM, BOOT TOP, RUDDER, RUDDER TRUNK

271.001 Bottom

271.005 Boot top

271.010 Rudder

271.015 Rudder trunk

271.030 Sea chests

# **272 TOP SIDE**

272.001 Top side

272.010 Superstructure shell plating outboard

#### **273 EXTERNAL DECKS**

273.001 Main decks

273.010 Shelter decks

273.020 Suspended decks

273.030 Boat decks

#### 274 EQUIPMENT ON EXTERNAL DECKS, BULWARK (INBOARD SIDE)

274.001 Masts fwd

274.002 Masts aft

274.010 Booms

274.020 Ventilation pipes

274.030 Deck machinery

274.040 Bulwark inboard

274.050 Superstructure shell plating inboard

274.060 Woodwork external

#### 275 SUPERSTRUCTURES, DECK HOUSES, MAST HOUSES

275.001 Superstructures

275.010 Wheelhouses

275.020 Funnels

#### 276 GALVANIZING, NICKEL PLATING, METALLIZING

276.001 Galvanizing

276.010 Nickel plating

276.020 Metallizing

# 278 EXTERNAL CATHODIC PROTECTION

278.001 Hull/rudder anodes

278.005 Sea chest anodes

278.010 Impressed current systems

278.012 Impressed current anodes

278.014 Reference cell

278.016 Control unit

278.018 Power unit

# 28 MATERIAL PROTECTION, INTERNAL

#### 281 ACCOMMODATION, DECK HOUSES, STORE ROOMS

281.001 Deck house rooms

281.010 Saloons

281.020 Cabins

281.030 Toilets

281.040 Corridors

281.050 Messrooms, galleys

281.060 Shell plating inboard

281.070 Store rooms

#### 282 ENGINE, BOILER & PUMP ROOMS, STEERING GEAR COMPARTMENTS

282.001 Engine rooms

282.004 Engine room casings

282.006 Piping, silencers

282.010 Engine room equipment

282.020 Boiler rooms

282.025 Pump rooms

282.030 Gear rooms

282.040 Steering gear room

#### 283 CARGO HOLDS

#### 284 CARGO TANKS

#### 285 BALLAST, SEA W. & STABIL. TANKS, COFFERDAMS, CHAIN LOCKERS

285.001 Ballast tanks/SW tanks

285.020 Sewage tanks

285.030 Dry tanks, void spaces

285.040 Cofferdams

285.050 Chain lockers

#### 286 FRESH WATER TANKS, MISC. TANKS

286.001 FW tanks

286.020 Wash water tanks

286.030 Cooling water tanks

# 287 FUEL OIL & LUBE OIL TANKS

287.001 FO tanks

287.020 DO tanks

287.030 GO tanks

287.050 LO tanks

#### 288 INTERNAL CATHODIC PROTECTION

288.001 Separate sacrificial anodes

288.010 Impressed current systems

288.012 Impressed current anodes

288.014 Reference cell

288.016 Control unit

288.018 Power unit

# 29 MISCELLANEOUS HULL WORK (NOT STANDARD)

291 MARKING

**292 FLAME CUTTING** 

293 CUTTING, SHEARING

294 BENDING, FLANGING, ROLLING

295 BURNING, CHISELLING & GRINDING FOR BACKWELDS

298 FITTING & JOINING OF COMPOSITE MATERIALS

# 3 EQUIPMENT FOR CARGO

# 30 HATCHES, PORTS

#### 301 CARGO HATCH COVERS W/EQUIPMENT ON WEATHER DECKS

- 301.001 Patent hatches w/coaming
- 301.005 Patent hatches without coaming
- 301.010 Patent hatch drive units
- 301.015 Patent hatch closing arr.
- 301.018 Manoeuvre consoles
- 301.020 Valve boards
- 301.025 Hatch hydr. cylinders
- 301.030 Pontoon hatches, complete
- 301.035 Hatch sections
- 301.038 Hatch beams w/lock fitting
- 301.045 Separate hydr. oil systems
- 301.047 Hydr. oil pumps w/drive unit
- 301.049 Hydr. oil preheaters
- 301.051 Hydr. oil coolers
- 301.053 Hydr. oil filters
- 301.055 Hydr. oil expansion tanks
- 301.057 Hydr. oil storage tanks
- 301.060 Hydr. oil pump starter systems
- 301.062 Hatch cover control systems

#### 302 CARGO HATCH COVERS W/EQUIPMENT, ON TWEEN DECKS

- 302.001 Patent hatches w/coaming
- 302.005 Patent hatches without coaming
- 302.010 Patent hatch drive units
- 302.015 Patent hatch closing arr.
- 302.018 Manoeuvre consoles
- 302.020 Valve boards
- 302.030 Pontoon hatches, complete
- 302.035 Hatch sections
- 302.038 Hatch beams w/lock fitting
- 302.045 Separate hydr. oil systems
- 302.047 Hydr. oil pumps w/drive unit
- 302.049 Hydr. oil preheaters
- 302.051 Hydr. oil coolers
- 302.053 Hydr. oil filters
- 302.055 Hydr. oil expansion tanks
- 302.057 Hydr. oil storage tanks

#### **303 CARGO TANK HATCHES**

- 303.001 Cargo tank hatches
- 303.010 MUCKING HATCHES

#### 304 SMALLER HATCHES, GRAIN HATCHES, MANHOLE COVERS

304.001 Grain hatches

304.002 Manhole hatches w/gaskets

304.005 Trimming hatches

304.010 Suez hatches

304.012 Provision hatches

304.014 Access hatches

304.020 Emergency hatches

304.025 Observation hatches

304.030 Sounding hatches

304.035 Tonnage hatches

304.040 Tank cleaning hatches

304.060 Engine room hatches

304.065 Steering gear hatches

304.070 Mud tank hatches

#### **305 BOW PORTS**

305.001 Bow port w/coaming

305.002 Bow port hinges/fittings

305.003 Driving ramp w/coaming

305.004 Driving ramp hinges/fittings

305.007 Manoeuvre machinery

305.010 Locking devices

305.013 Manoeuvre consoles

305.016 Valve boards

305.020 Bow port hydr. cylinders

305.025 Driving ramp hydr. cylinders

305.045 Separate hydr. oil systems

305.047 Hydr. oil pumps w/drive unit

305.049 Hydr. oil preheaters

305.051 Hydr. oil coolers

305.053 Hydr. oil filters

305.055 Hydr. oil expansion tanks

305.057 Hydr. oil storage tanks

305.060 Hydr. pump starter systems

305.065 Bow port control systems

#### **306 STERN PORTS**

306.001 Stern port w/coaming

306.002 Stern port hinges/fittings

306.003 Driving ramp w/coaming

306.004 Driving ramp hinges/fittings

306.007 Manoeuvre machinery

306.010 Locking devices

306.013 Manoeuvre consoles

306.016 Valve boards

306.020 Stern port hydr. cylinders

306.025 Driving ramp hydr. cylinders

306.045 Separate hydr. oil systems

306.047 Hydr. oil pumps w/drive unit

306.049 Hydr. oil preheaters

306.051 Hydr. oil coolers

306.053 Hydr. oil filters

306.055 Hydr. oil expansion tanks

306.057 Hydr. oil storage tanks

306.060 Hydr. pump starter systems

306.065 Stern port control systems

#### **307 SIDE PORTS**

307.001 Side port w/coaming

307.003 Side port/ramp w/coaming

307.007 Manoeuvre machinery

307.010 Locking devices

307.013 Manoeuvre consoles

307.045 Separate hydr. oil systems

307.047 Hydr. oil pumps w/drive unit

307.049 Hydr. oil preheaters

307.051 Hydr. oil coolers

307.053 Hydr. oil filters

307.055 Hydr. oil expansion tanks

307.057 Hydr. oil storage tanks

307.060 Hydr. pump starter systems

307.065 Side port control systems

#### 308 CARGO DOORS IN BULKHEADS

308.001 Bulkhead doors w/coaming

308.005 Manoeuvre machinery

308.009 Locking devices

308.013 Manoeuvre consoles

308.014 Valve boards

308.020 Bridge front doors w/coaming, complete

308.022 Manoeuvre machinery

308.024 Locking devices

308.026 Manoeuvre consoles

308.028 Valve boards

308.045 Separate hydr. oil systems

308.047 Hydr. oil pumps w/drive unit

308.049 Hydr. oil preheaters

308.051 Hydr. oil coolers

308.053 Hydr. oil filters

308.055 Hydr. oil expansion tanks

308.057 Hydr. oil storage tanks

308.060 Hydr. pump starter systems

308.065 Bulkhead door control systems

# 309 COMMON HYDRAULIC OIL SYSTEM FOR HATCHES/PORTS

309.001 Common hydr. oil systems

309.005 Hydr. oil pumps w/drive unit

309.010 Hydr. oil preheaters

309.015 Hydr. oil coolers

309.020 Hydr. oil filters

309.025 Hydr. oil expansion tanks 309.030 Hydr. oil storage tanks 309.035 Hydr. oil regenerator 309.060 Hydr. oil pump starter systems

# 31 EQUIPMENT FOR CARGO IN HOLDS/ON DECK

#### 311 LOOSE DECKS & PLATFORMS FOR CARGO, RAMPS

- 311.001 Onboard driving ramps w/coaming
- 311.003 Manoeuvre machinery
- 311.005 Locking devices
- 311.007 Manoeuvre consoles
- 311.009 Valve boards
- 311.010 Suspended decks
- 311.011 Platforms, steel
- 311.012 Platforms, sandwich elements
- 311.013 Ramps w/rail, steel
- 311.014 Ramps, sandwich elements
- 311.015 Tween deck ramps
- 311.017 Lifting/lowering machinery
- 311.018 Wire arrangement
- 311.019 Locking devices
- 311.020 Preventer arrangement
- 311.021 Manoeuvre consoles
- 311.023 Valve boards
- 311.030 Loading platforms
- 311.032 Lifting/lowering machinery
- 311.034 Locking devices
- 311.036 Manoeuvre consoles
- 311.038 Valve boards
- 311.042 Cargo shifting boards
- 311.045 Separate hydr. oil systems
- 311.047 Hydr. oil pumps w/drive unit
- 311.049 Hydr. oil preheaters
- 311.051 Hydr. oil coolers
- 311.053 Hydr. oil filters
- 311.055 Hydr. oil expansion tanks
- 311.057 Hydr. oil storage tanks

#### 312 LOOSE TANKS FOR CARGO

- 312.001 Loose cargo tanks
- 312.002 Cement tanks
- 312.003 Mud/oil tanks
- 312.015 Loose auxiliary tanks

# 313 LOOSE BULKHEADS FOR CARGO, GRAIN FEEDERS

- 313.001 Loose bulkheads
- 313.015 Grain feeders

#### 314 HOLD BATTENS & GRATING

314.001 Grating

#### 315 DECK/HOLD CARGO PILLARS, BINS, SHELVES, CASES

- 315.001 Cargo supports
- 315.002 Loading rails
- 315.005 Shoring bags
- 315.010 Nets
- 315.015 Bins
- 315.020 Shelves/racks
- 315.030 Car lashing fixtures

#### 316 PROTECTION PLATES, COVERS, HATCH TENTS & TARPAULINS

- 316.001 Protection covers/plates
- 316.010 Hatch tents
- 316.015 Seattle tents
- 316.020 Tarpaulins
- 316.025 Tarpaulin hoods

#### 317 CONTAINERS, PALLETS

- 317.001 Containers
- 317.010 Pallets/cargo boards
- 317.015 Fish crates
- 317.020 Barges
- 317.025 Auto platforms

# 32 SPECIAL CARGO HANDLING EQUIPMENT

#### 321 CARGO LIFTS

- 321.001 Cargo lifts, complete
- 321.003 Lift cabins/platforms
- 321.005 Lift trunks, loose
- 321.007 Lift doors
- 321.015 Lift machinery
- 321.017 Manoeuvre consoles
- 321.019 Valve boards
- 321.030 Lifting/articulated board, complete
- 321.045 Separate hydr. oil systems
- 321.047 Hydr. oil pumps w/drive unit
- 321.049 Hydr. oil preheaters
- 321.051 Hydr. oil coolers
- 321.053 Hydr. oil filters
- 321.055 Hydr. oil expansion tanks
- 321.057 Hydr. oil storage tanks

#### 322 ROLLER WAYS, ROLLER CONVEYORS, TURNTABLES

- 322.001 Roller conveyors, complete
- 322.010 Roller ways, complete
- 322.020 Turn tables, complete

#### 323 TRAVELLING CRANES IN CARGO HOLDS

3230.01 Travelling cranes, complete

# 324 BULLDOZERS, MECHANICAL SHOVELS, TROLLEYS, TRUCKS

- 324.001 Bulldozers
- 324.005 Mechanical shovels
- 324.010 Shoveldozers
- 324.015 Forklifts
- 324.020 Trolleys
- 324.025 Charging apparatus

#### 325 SELF LOADERS, SCREW TRANSPORTERS, CONVEYOR BELTS

- 325.001 Conveyor belts, complete
- 325.005 Screw transporters, complete
- 325.010 Bucket elevators, complete
- 325.015 Charging chutes, complete
- 325.020 Cargo ducts, complete
- 325.025 Separate weighing equipment

# 326 PNEUMATIC PLANTS FOR BULK CARGO HANDLING

- 326.001 Air compressor aggregates
- 326.003 Air compressors w/drive unit
- 326.005 Oil/water separators
- 326.008 Air bottles/tanks, loose
- 326.015 Grain vacuum/blower plants
- 326.020 Cement plant, complete
- 326.022 Cement ejectors
- 326.030 Air compressor LO systems
- 326.031 LO pumps w/drive unit
- 326.032 LO coolers
- 326.033 LO filters
- 326.034 LO tanks

#### 327 GRABBING/LIFTING EOUIP. FOR CRANES, MASTS & BOOMS FOR CARGO

- 327.001 Grabs
- 327.005 Timber grabs
- 327.007 Pallet yokes
- 327.010 Lifting yokes
- 327.013 Lifting forks
- 327.016 Can/barrel hooks
- 327.019 Lifting magnets
- 327.022 Plate clamps
- 327.025 Loading/discharge containers
- 327.028 Cargo trays
- 327.031 Cargo boxes
- 327.034 Sling rope/belt slings/nets

# 33 DECK CRANES FOR CARGO

#### 331 ROTATING CRANES W/CRANE PILLARS

331.001 Rotating single cranes, complete

- 331.005 Crane foundations
- 331.009 Crane pillars w/house, machinery
- 331.010 Manoeuvre consoles
- 331.013 Crane jibs
- 331.017 Wire arrangement
- 331.021 Rotating twin cranes, complete
- 331.025 Crane foundations
- 331.029 Crane pillars w/house, machinery
- 331.030 Manoeuvre consoles
- 331.033 Crane jibs
- 331.037 Wire arrangement
- 331.040 Jib crutches
- 331.044 Separate weighing equipment
- 331.045 Separate hydr. oil systems
- 331.047 Hydr. oil pumps w/drive unit
- 331.049 Hydr. oil preheaters
- 331.051 Hydr. oil coolers
- 331.053 Hydr. oil filters
- 331.055 Hydr. oil expansion tanks
- 331.057 Hydr. oil storage tanks

#### 332 ROTATING TRAVELLING CRANES W/RAILS

- 332.001 Rotating travelling crane, complete
- 332.005 Hatch covers w/crane foundations
- 332.007 Crane propulsion machinery
- 332.009 Crane pillars w/house, machinery
- 332.010 Manoeuvre consoles
- 332.013 Crane iibs
- 332.017 Wire arrangement
- 332.020 Jib crutches
- 332.024 Separate weighing equipment
- 332.045 Separate hydr. oil systems
- 332.047 Hydr. oil pumps w/drive unit
- 332.049 Hydr. oil preheaters
- 332.051 Hydr. oil coolers
- 332.053 Hydr. oil filters
- 332.055 Hydr. oil expansion tanks
- 332.057 Hydr. oil storage tanks

#### 333 TRAVELLING TRAVERSE CRANES W/RAILS

- 333.001 Travelling traverse cranes, complete
- 333.003 Gantry structures w/machinery
- 333.005 Carriage w/machinery
- 333.024 Separate weighing equipment
- 333.045 Separate hydr. oil systems
- 333.047 Hydr. oil pumps w/drive unit
- 333.049 Hydr. oil preheaters
- 333.051 Hydr. oil coolers
- 333.053 Hydr. oil filters
- 333.055 Hydr. oil expansion tanks
- 333.057 Hydr. oil storage tanks

# 334 OTHER CRANES W/EQUIPMENT FOR CARGO

- 334.001 Stationary gantry cranes, complete
- 334.003 Gantry structures, complete
- 334.005 Carriage w/machinery
- 334.011 Bascule crane, complete
- 334.019 Crane pillars w/house
- 334.020 Manoeuvre consoles
- 334.023 Crane jibs
- 334.027 Wire arrangement
- 334.045 Separate hydr. oil systems
- 334.047 Hydr. oil pumps w/drive unit
- 334.049 Hydr. oil preheaters
- 334.051 Hydr. oil coolers
- 334.053 Hydr. oil filters
- 334.055 Hydr. oil expansion tanks
- 334.057 Hydr. oil storage tanks

# 34 MASTS, DERRICK POSTS, RIGGING & WINCHES FOR CARGO

#### 341 MASTS, DERRICK POSTS

- 341.001 Masts w/fittings, complete
- 341.005 Derrick posts
- 341.010 Top platforms
- 341.015 Top masts
- 341.020 Look-out platforms/crows nests
- 341.025 Lantern brackets/screens
- 341.030 Topping fittings
- 341.035 Derrick heel fittings
- 341.040 Ladders, complete

#### 342 DERRICK BOOMS, BOOM RESTS

- 342.001 Derricks w/fitting, complete
- 342.010 Derrick crutches

#### 343 STANDING RIGGING

#### **344 RUNNING RIGGING**

344.001 Measuring/weighing equipment

#### 345 HOISTING WINCHES

- 345.001 Hoisting winches complete
- 345.005 Hoisting/topping winches, complete
- 345.010 Hoisting/slewing winches, complete
- 345.015 Hoisting/slewing/topping winches, complete
- 345.020 Cargo winch manoeuvre stands
- 345.025 Portable winch manoeuvre units
- 345.045 Separate hydr. oil systems
- 345.047 Hydr. oil pumps w/drive unit
- 345.049 Hydr. oil preheaters
- 345.051 Hydr. oil coolers
- 345.053 Hydr. oil filters
- 345.055 Hydr. oil expansion tanks
- 345057 Hydr. oil storage tanks

#### 346 MANOEUVRING WINCHES FOR DERRICK BOOMS

- 346.001 Topping winches, complete
- 346.005 Slewing winches, complete
- 346.010 Topping/slewing winches, complete
- 346.020 Manoeuvre stands
- 346.025 Portable winch manoeuvre units
- 346.045 Separate hydr. oil systems

346.047 Hydr. oil pumps w/drive unit

346.049 Hydr. oil preheaters

346.051 Hydr. oil coolers

346.053 Hydr. oil filters

346.055 Hydr. oil expansion tanks

346.057 Hydr. oil storage tanks

### 347 COMMON PLANTS FOR CARGO WINCHES

347.001 Cargo winch manoeuvre stands

347.005 Portable winch manoeuvre units

347.045 Common hydr. oil systems

347.047 Hydr. oil pumps w/drive unit

347.051 Hydr. oil preheaters

347.055 Hydr. oil coolers

347.059 Hydr. oil filters

347.063 Hydr. oil expansion tanks

347.065 Hydr. oil storage tanks

347.070 Regulating aggregate

# 35 LOADING/DISCHARGING SYSTEMS FOR LIQUID CARGO

#### 351 LOADING/DISCHARGING PUMPS

- 351.001 Cargo pumps w/bulkhead penetration
- 351.005 Cargo pump drive units
- 351.009 Spray pumps w/drive unit
- 351.010 Evacuation plants
- 351.012 Vacuum pumps w/drive unit
- 351.014 Vacuum ejectors
- 351.016 Vacuum pump coolers
- 351.018 Evacuation filters
- 351.020 Separator tanks
- 351.021 Self priming systems
- 351.022 Self priming units
- 351.024 Recirculation tanks
- 351.030 Cargo aggregate hydr. oil systems
- 351.031 Hydr. oil pumps w/drive unit
- 351.033 Hydr. oil preheaters
- 351.035 Hydr. oil coolers
- 351.037 Hydr. oil exp. tanks
- 351.039 Hydr. oil storage tanks
- 351.040 Cargo aggregate LO systems
- 351.041 LO pumps w/drive unit
- 351.043 LO coolers
- 351.045 LO filters
- 351.047 LO tanks
- 351.050 Cargo aggregate FO systems
- 351.051 FO pumps w/drive unit
- 351.053 FO preheaters
- 351.055 FO filters
- 351.057 FO tanks
- 351.060 Cargo aggregate air supply systems
- 351.061 Fans w/drive unit
- 351.062 Silencers 351063 Air filters
- 351.065 Cargo aggregate exhaust systems
- 351.066 Silencers
- 351.067 Spark arresters
- 351.070 Cargo aggregate cooling systems
- 351.071 Cooling pumps w/drive unit
- 351.073 Heat exchangers
- 351.075 Cooling medium tanks

#### 352 LOADING/DISCHARGING SYSTEMS ON DECK

- 352.001 Cargo heat exchangers
- 352.005 Cargo filters
- 352.010 Safety valve drain tanks
- 352.015 Drip trays
- 352.020 Cargo hoses
- 352.025 Hose adaptors
- 352.030 Cargo hose stowing equipment

#### 353 LOADING/DISCHARGING SYSTEMS IN PUMP ROOMS

- 353.001 Cargo heat exchangers
- 353.005 Air vessels
- 353.010 Cargo filters

#### 354 LOADING/DISCHARGING SYSTEMS IN CARGO TANKS

- 354.001 Suction spouts
- 354.010 Drop valves

#### 355 LOADING/DISCHARGING SYSTEMS FOR LPG/LNG IN GASEOUS PHASE

- 355.001 Compressor aggregates, complete
- 355.003 Compressors w/bulkhead penetration
- 355.005 Compressor drive units
- 355.007 Cargo heat exchangers
- 355.009 Cargo suction filters
- 355.013 Cargo hoses
- 355.015 Hose adaptors
- 355.020 Cargo hose stowing equipment
- 355.030 Compressor aggregate hydr. oil systems
- 355.031 Hydr. oil pumps w/drive unit
- 355.033 Hydr. oil preheaters
- 355.037 Hydr. oil expansion tanks
- 355.039 Hydr. oil storage tanks
- 355.040 Compressor aggregate LO systems
- 355.041 LO pumps w/drive unit
- 355.043 LO coolers
- 355.045 LO filters
- 355.047 LO tanks
- 355.050 Compressor aggregate FO systems
- 355.051 FO pumps w/drive unit
- 355.053 FO preheaters
- 355.055 FO filters
- 355.057 FO tanks
- 355.060 Compressor aggregate air supply systems
- 355.061 Fans w/drive unit
- 355.062 Silencers
- 355.063 Air filters
- 355.065 Compressor aggregate exhaust systems
- 355.066 Silencers
- 355.067 Spark arresters
- 355.070 Compressor aggregate cooling systems
- 355.071 Cooling pumps w/drive unit
- 355.073 Heat exchangers
- 355.075 Cooling medium tanks

#### 356 SEPARATE STRIPPING SYSTEMS

- 356.001 Stripping pumps w/drive unit
- 356.005 Stripping ejectors
- 356.015 Cargo suction filters
- 356.018 Air vessels

356.020 Stripping separators 356.025 Separator water tanks

# 357 MUD SYSTEMS W/PUMPS, PIPING

357.001 Mud discharge pumps

357.002 Mud circulating pumps 357.003 Mud agitators

357.010 Mud tanks

# 36 FREEZING, REFRIGERATING & HEATING SYSTEMS FOR CARGO

#### 361 INSULATION & SHEATHING OF CARGO HOLDS/TANKS

361.001 Insulation

#### 362 FREEZING & REFRIGERATING SYSTEMS FOR DRY CARGO

- 362.001 Cooling aggregate cooling medium
- 362.003 Cooling compressors w/drive unit
- 362.005 Condensers
- 362.007 Liquid receivers
- 362.009 Evaporators
- 362.011 Liquid separators
- 362.013 Drying filters
- 362.015 Suction filters
- 362.017 Oil separators
- 362.019 Cooling medium circulating pumps
- 362.021 Cooling medium supply pumps
- 362.023 Cooling medium tanks
- 362.025 Local control panels
- 362.030 Brine coolers
- 362.032 Brine preheaters
- 362.034 Brine mixing tanks
- 362.036 Brine circulating pumps
- 362.038 Brine supply pumps
- 362.040 Brine tanks
- 362.042 Cooling batteries
- 362.044 Circulating fans
- 362.070 Compressor LO systems
- 362.071 LO pump
- 362.073 LO filters
- 362.075 LO separator
- 362.077 LO coolers
- 362.079 LO tanks

#### 363 DIRECT COOLING SYSTEMS FOR LIQUID CARGO

- 363.001 1. stage cooling compressors
- 363.003 Compressors w/bulkhead penetration
- 363.005 Compressor drive units
- 363.007 Condensers
- 363.009 Liquid receivers
- 363.010 2. stage cooling compressors
- 363.012 Compressors w/bulkhead penetration
- 363.014 Compressor drive units
- 363.016 Condensers
- 363.018 Liquid receivers
- 363.020 Intermediate pressure tanks
- 363.021 Suction filters
- 363.022 Liquid separators

- 363.023 Heat exchangers
- 363.026 Return pumps
- 363.070 Compressor LO systems
- 363.071 LO pumps
- 363.073 LO filters
- 363.075 LO separator
- 363.077 LO coolers
- 363.079 LO tanks

#### 364 CASCADE COOLING SYSTEMS FOR LIQUID CARGO

- 364.001 1. stage primary system compressor aggregates
- 364.003 Compressors w/bulkhead penetration
- 364.005 Compressor drive units
- 364.007 Condensers
- 364.009 Liquid receivers
- 364.010 2. stage primary system compressor aggregates
- 364.012 Compressors w/bulkhead penetration
- 364.014 Compressor drive units
- 364.016 Condensers
- 364.018 Liquid receivers
- 364.020 Primary system intermediate pressure tanks
- 364.021 Primary system suction filters
- 364.022 Primary system liquid separators
- 364.023 Primary system heat exchangers
- 364.026 Primary system return pumps
- 364.030 1. stage secondary system compressor aggregates
- 364.032 Compressors w/drive unit
- 364.034 Condensers
- 364.036 Liquid receivers
- 364.039 2. stage secondary system compressor aggregates
- 364.041 Compressors w/drive unit
- 364.043 Condensers
- 364.045 Liquid receivers
- 364.050 Secondary system intermediate tanks
- 364.051 Secondary system suction filters
- 364.052 Secondary system drying filters
- 364.053 Secondary system liquid separators
- 364.054 Secondary system return pumps
- 364.055 Secondary system oil separators
- 364.056 Cooling medium tanks
- 364.057 Cooling medium supply pumps
- 364.058 Cooling medium bottles
- 364.070 Compressor LO systems
- 364.071 LO pumps
- 364.073 LO coolers
- 364.075 LO filters
- 364.077 LO separator
- 364.079 LO tanks

#### 365 INDIRECT COOLING/HEATING SYSTEMS, CARGO OIL HEATING

365.001 Cooling medium cooling aggregates

365.003 Cooling compressors w/drive unit

365.005 Condensers

365.007 Liquid receivers

365.009 Evaporators

365.011 Liquid separators

365.013 Drying filters

365.015 Suction filters

365.017 Oil separators

365.019 Cooling medium circulating pumps

365.021 Cooling medium supply pumps

365.023 Cooling medium tanks

365.025 Local control panels

365.030 Brine coolers

365.033 Brine preheaters

365.035 Brine mixing tanks

365.037 Brine circulating pumps

365.039 Brine supply pumps

365.041 Brine tanks

365.043 Heat exchangers

365.070 Compressor LO systems

365.071 LO pumps

365.073 LO filters

365.075 LO separator

365.077 LO coolers

365.079 LO tanks

#### 37 GAS/VENTILATION SYSTEMS FOR CARGO HOLDS/TANKS

# 371 VENTILATION SYSTEMS FOR REFRIGERATED CARGO HOLDS

- 371.001 Make-up air aggregates
- 371.003 Make-up air fans w/drive unit
- 371.005 Intake jalousies
- 371.007 Mixing batteries
- 371.009 Local control panels
- 371.010 Ventilation aggregates
- 371.012 Ventilation fans w/drive unit
- 371.014 Air dryers
- 371.016 Air filters
- 371.018 Local control panels
- 371.020 Ozone plants
- 371.021 Ozone generators
- 371.022 Suction fans
- 371.024 Drying filters
- 371.026 Dust filters
- 371.028 Collection pipes
- 371.029 Local control panels

#### 372 CLOSED VENTILATION/RETURN VAPOUR SYSTEMS FOR CARGO HOLDS

- 372.001 Make-up air aggregates
- 372.003 Make-up air fans w/drive unit
- 372.005 Intake jalousies
- 372.007 Mixing batteries
- 372.009 Local control panels
- 372.010 Ventilation aggregates
- 372.012 Ventilation fans w/drive unit
- 372.014 Air dryers
- 372.016 Air filters
- 372.017 Heating batteries
- 372.019 Local control panels
- 372.020 Ozone plants
- 372.021 Ozone generators
- 372.022 Suction fans
- 372.024 Drying filters
- 372.026 Dust filters
- 372.028 Collection pipes
- 372.029 Local control panels

# 373 OPEN VENTILATION SYSTEMS FOR CARGO HOLDS

- 373.001 Ventilation aggregates
- 373.003 Ventilation fans w/drive unit
- 373.005 Air dryers
- 373.007 Heating batteries

373.009 Air filters

373.015 Rotating air cowls

373.020 Air cowls w/fan

#### 374 VENT./GAS FREEING SYSTEMS FOR TANKS, WIND SAILS W/EQUIPMENT

374.001 Stationary fan aggregates

374.005 Portable fan aggregates

374.010 Ejectors

374.015 Wind sails, complete

374.020 Exhaust gas masts

374.025 Exhaust gas mast fans

374.030 Circulating pumps

374.035 Heating coils

374.040 Heat exchangers

# 375 BLOW-OFF SYST. FROM SAFETY VALVES (PRESSURE/VACUUM VALVES)

375.001 Pressure/vacuum valves

375.005 Pressure/vacuum breakers

375.010 Exhaust gas masts

375.012 Exhaust gas mast fans

375.014 Flame arresters

**375.015** Ejectors

375.018 Pressure membranes

375.025 Gas pressure gauges

#### 376 INERT GAS SYSTEMS W/CONDITIONING PLANT

376.001 Inert gas plant w/gas generator

376.003 Oil burners

376.005 Scrubbers

376.007 Freon compressors w/condenser

376.009 Freon coolers

376.011 Gas dryers

376.013 Condensate tanks

376.015 Gas filters

376.017 Gas fans

376.025 Inert gas plant w/exhaust gas

376.027 Afterburners

376.029 Scrubbers

376.031 Gas dryers

376.033 Condensate tanks

376.035 Gas filters

376.037 Gas fans

376.040 Inert gas plant without combustion

376.041 N2 tanks

376.043 N2 evaporators

376.044 N2 heat exchangers

376.045 N2 superheaters

376.046 N2 dehydrators

376.050 Watertraps

376.053 Pressure/vacuum breakers

376.055 O2 analyzers/regulators

376.057 Burner FO systems

376.058 FO pumps w/drive unit

376.059 FO preheaters

376.060 FO filters

376.061 FO tanks

376.062 Flowmeter

376.065 Inert gas plant cooling systems

376.066 Scrubber cooling water pumps

376.067 Burner cooling water pumps

376.070 Burner air supply systems

376.071 Air fans w/drive unit

376.072 Air compressors

376.073 Air filters

## 38 AUXILIARY SYSTEMS & EQUIPMENT FOR CARGO

#### 381 SOUNDING, SURVEIL. & OPERATING EQUIPMENT FOR CARGO SYSTEMS

- 381.001 Cargo plant manoeuvre consoles
- 381.002 Ferry ramp radio control
- 381.005 Cargo plant instrument consoles
- 381.010 Cargo plant automation centrals
- 381.015 Pump automation centrals
- 381.020 Fan automation centrals
- 381.025 Compressor automation centrals
- 381.030 Separator automation centrals
- 381.040 Remote sounding systems
- 381.041 Remote sounding sensors
- 381.044 Remote sounding indicators
- 381.046 Local gas indicators
- 381.050 Temperature indicator centrals
- 381.053 Pressure indicator centrals
- 381.056 Gas indicator centrals
- 381.060 Data loggers
- 381.063 Cargo control EDP plants
- 381.064 Central processing units
- 381.065 Interface input equipment
- 381.066 Interface output equipment
- 381.067 Peripheral equipment
- 381.068 Secondary storages
- 381.070 Separate hydr. oil systems
- 381.071 Hydr. oil pumps w/drive unit
- 381.073 Hydr. oil preheaters
- 381.075 Hydr. oil coolers
- 381.077 Hydr. oil expansion tanks
- 381.079 Hydr. oil storage tanks

#### 382 TANK CLEANING SYSTEMS & EQUIPMENT

- 382.001 Tank cleaning pumps
- 382.005 Water preheaters
- 382.008 Cleaning guns
- 382.010 Cleaning gun motors
- 382.015 Tank cleaning apparatus
- 382.020 Drain coolers
- 382.025 Tank cleaning dosage aggregates
- 382.026 Dosage pumps
- 382.029 Dosage tanks

#### 383 LIFTING GEAR FOR CARGO HOSES

- 383.001 Cargo hose cranes
- 383.005 Cargo hose davits
- 383.010 Cargo hose crane winches
- 383.011 Derrick posts
- 383.013 Derrick booms
- 383.015 Derrick winches
- 383.020 Boom crutches

#### 384 SEPARATE COOLING WATER SYSTEMS FOR CARGO EQUIPMENT

- 384.001 Cargo plant cooling water systems
- 384.004 Cooling water pumps w/drive unit
- 384.007 Cooling water filters
- 384.010 Heat exchangers
- 384.013 Cooling water tanks
- 384.020 RSW plants
- 384.022 SW cooling pumps
- 384.024 Heat exchangers
- 384.026 Loose tanks
- 384.030 Glycol plants
- 384.032 Glycol coolers
- 384.034 Glycol pumps
- 384.036 Glycol heaters
- 384.038 Glycol tanks

#### 385 INSULATION DRYING SYSTEM FOR CARGO HOLDS/TANKS

- 385.001 Ventilation fans
- 385.005 Dehydrators

### 386 EQUIPM. F. ADDITION OF PRESERVATIVES, INHIBITORS, SPIRITS

- 386.001 Dosage aggregates
- 386.005 Dosage pumps
- 386.010 Dosage tanks

#### 387 SPECIAL STRUCTURES FOR LOADING/DISCHARGING OVER STERN/STEM

# **4 SHIP EQUIPMENT**

# 40 MANOEUVRING MACHINERY & EQUIPMENT

#### **401 RUDDER W/WELDED PARTS**

401.001 Rudder blades

401.005 Rudders w/nozzle

401.010 Nozzle rudders

#### 402 RUDDER CARRIERS, RUDDER STOCKS, RUDDER BEARINGS

402.001 Rudder stocks

402.002 Rudder stock linings

402.003 Rudder nuts

402.004 Rudder axels/pintles

402.007 Rudder stock bearings

402.010 Rudder stock carriers

402.013 Rudder stuffing boxes

402.016 Rudder stock bearing LO equipment

402.020 Active rudder propellers

402.025 Propeller drive units

#### 403 STEERING GEAR/COLUMNS, TELEMOTOR SYS., RUDDER IND., EMERG.ST

403.001 Steering gears, complete

403.003 Steering columns

403.005 Hydr. oil pump aggregates

403.006 Hydr. oil pumps

403.007 Hydr. oil pump drive units

403.009 Hydr. oil filters

403.010 Hydr. oil magnetic filters

403.012 Hydr. oil storage tanks

403.013 Hydr. oil pressure tanks

403.014 Hydr. oil drain tanks

403.015 Hydr. oil cylinders

403.017 El. steering gear

403.020 Telemotor units

403.025 Emergency steering aggregates

403.030 Rudder indicators

403.050 Steering gear el. control systems

403.055 Steering gear remote control

403.060 Steering gear starter panels

# **404 SIDE THRUSTERS**

404.001 Transverse propellers

404.005 Transverse propeller motors

404.010 Transverse propeller remote control

404.011 Transverse propeller nozzle

404.015 Local operation panels

404.030 Transverse propeller hydr. systems

404.031 Hydr. oil pumps w/drive unit

404.033 Hydr. oil preheaters

404.035 Hydr. oil coolers

404.037 Hydr. oil expansion tanks

404.039 Hydr. oil storage tanks.

404.040 Transverse propeller LO systems

404.041 LO pumps w/drive unit

404.043 LO coolers

404.045 LO filters

404.047 LO tanks

404.050 Transverse propeller FO systems

404.051 FO pumps w/drive unit

404.053 FO preheaters

404.055 FO filters

404.057 FO tanks

404.060 Transverse propeller air supply systems

404.061 Fans w/drive unit

404.062 Silencers

404.063 Air filters

404.065 Transverse propeller exhaust systems

404.066 Silencers

404.067 Spark arresters

404.070 Transverse propeller cooling systems

404.071 Cooling pumps w/drive unit.

404.073 Heat exchangers

404.075 Cooling medium tanks

#### **405 STABILIZERS**

405.001 Stabilizer fins

405.005 Stabilizer fin moving machinery

405.020 Pump aggregates

405.025 Local sounding apparatus

405.030 Remote sounding apparatus

405.045 Separate hydr. oil systems

405.047 Hydr. oil pumps w/drive unit

405.049 Hydr. oil preheaters

405.051 Hydr. oil coolers

405.053 Hydr. oil filters

405.055 Hydr. oil expansion tanks

405.057 Hydr. oil storage tanks

405.060 Passive stabilizer plants

405.061 Passive stabilizer instrumentation

# **406 BRAKES**

406.001 Shaft brakes

406.003 Flaps

406.005 Flap moving machinery

406.007 Flap operating panels

406.010 Water parachute brakes

406.045 Separate hydr. oil systems

406.047 Hydr. oil pumps w/drive unit

406.049 Hydr. oil preheaters

406.051 Hydr. oil coolers

406.053 Hydr. oil filters

406.055 Hydr. oil expansion tanks

406.057 Hydr. oil storage tanks

#### **407 BUBBLE PLANTS**

407.001 Compressor aggregates

407.002 Compressors w/drive unit

407.004 Oil/water separators

407.006 Coolers

407.008 Compressor aggregate automation centrals

407.030 Compressor aggregate hydr. systems

407.031 Hydr. oil pumps w/ drive unit

407.033 Hydr. oil preheaters

407.035 Hydr. oil coolers

407.037 Hydr. oil expansion tanks

407.039 Hydr. oil storage tanks

407.040 Compressor aggregate LO systems

407.041 LO pumps w/drive unit

407.043 LO coolers

407.045 LO filters

407.047 LO tanks

407.050 Compressor aggregate FO systems

407.051 FO pumps w/drive unit

407.053 FO preheaters

407.055 FO filters

407.057 FO tanks

407.060 Compressor aggregate air supply systems

407.061 Fans w/drive unit

407.062 Silencers

407.063 Air filters

407.065 Compressor aggregate exhaust systems

407.066 Silencers

407.067 Spark arresters

407.070 Compressor aggregate cooling systems

407.071 FW cooling water pumps

407.072 SW cooling water pumps

407.073 Heat exchangers

407.075 Cooling medium tanks

#### **408 DYNAMIC POSITIONING SYSTEMS**

408.001 Dynamic positioning plants

408.003 Acoustic transmitters

408.004 Swinger bottom valve

408.005 Hydrophones

408.007 Reference cells

408.009 Self tension winches

408.011 EDP plants

408.012 Tension wire moonpools

408.045 Separate hydr. oil systems

408.047 Hydr. oil pumps w/drive unit 408.049 Hydr. oil preheaters 408.051 Hydr. oil coolers 408.053 Hydr. oil filters 408.055 Hydr. oil expansion tanks 408.057 Hydr. oil storage tanks

# 41 NAVIGATION & SEARCHING EQUIPMENT

#### 411 RADAR PLANTS

- 411.001 Radar plants
- 411.004 Radar antenna
- 411.005 Deicing equipment
- 411.007 Signal converters
- 411.009 Pedestals
- 411.010 Indicator screens
- 411.011 Reflection plotters
- 411.012 Radar alarms
- 411.013 Interswitching units
- 411.016 Power converters
- 411.019 Power transformers
- 411.021 Gyro stabilizers
- 411.022 Gyro converters
- 411.025 Anticollision plant (ARPA)
- 411.027 Slave indicator screens
- 411.029 Signal converters
- 411.040 Plotting tables
- 411.042 Video plotters
- 411.044 Electronic plotters
- 411.046 Data loggers
- 411.048 Electronic units
- 411.050 Power supply

#### 412 DECCA, LORAN, OMEGA, RADIO DIRECTION FINDER

- 412.001 Decca plants w/antenna
- 412.003 Decca receivers
- 412.005 Power converters
- 412.006 Indicators
- 412.010 Loran plants w/antenna
- 412.013 Loran receivers
- 412.015 Power converters
- 412.017 Electronic units
- 412.020 Omega plants w/antenna
- 412.023 Omega receivers
- 412.025 Power converters
- 412.027 Electronic units
- 412.030 Consol plants w/antenna
- 412.033 Consol receivers
- 412.035 Power converters
- 412.037 Electronic units
- 412.040 Satellite navigation plants
- 412.041 Satellite navigation antenna
- 412.043 Satellite navigation receivers
- 412.045 Power converters
- 412.047 Electronic units
- 412.048 Printers
- 412.050 Inertia navigation systems
- 412.060 Doppler plants

- 412.065 MIPS plants w/antenna
- 412.070 MF/HF radio direction finders w/antenna
- 412.075 VHF radio direction finders w/antenna

#### 413 GYRO PLANTS, AUTOPILOTS, COMPASSES

- 413.001 Gyro plants
- 413.002 Master compass
- 413.004 Analog repeater compass
- 413.005 Digital repeater compass
- 413.006 Control boxes
- 413.008 Generators
- 413.010 Autopilots
- 413.012 Course recorders
- 413.013 Course deviation recorders
- 413.014 Position recorders
- 413.016 Electronic units
- 413.020 Separate compass
- 413.022 Standard compass
- 413.030 Rate of turn indicators

#### 414 UNDERWATER SEARCHING EQUIPM.: ASDIC, ECHO SOUNDER, SPEED LOG

- 414.001 Echo sounders
- 414.002 Transmitters/receivers
- 414..004 Indicator screens
- 414.005 Bottom equipment
- 414.006 Digital depth indicators
- 414.007 Echo sounder alarms
- 414.008 Data loggers
- 414.009 Electronic units
- 414.010 Hand leads
- 414.012 Deep sea leads
- 414.015 Sounding apparatus
- 414.016 Hand logs
- 414.017 Mechanical patent/tow logs w/line
- 414.018 Fish magnifiers
- 414.023 Electronic units
- 414.024 Bottom equipment
- 414.025 Electromagnetic logs w/outfit
- 414.026 Indicators
- 414.027 Electronic units
- 414.028 Bottom equipment
- 414.029 Bottom equipment gate valve
- 414.030 Asdic plant
- 414.031 Sound transmitters
- 414.032 Bottom equipment
- 414.033 Hydrophones
- 414.036 Indicators
- 414.037 Electronic units
- 414.040 Sonar plants
- 414.041 Bottom equipment
- 414.042 Hydrophones

- 414.043 Indicators
- 414.045 Electronic units
- 414.046 Sound transmitters
- 414.050 Doppler logs
- 414.051 Bottom equipment
- 414.052 Indicators
- 414.054 Electronic units
- 414.055 Doppler sonar two axis logs
- 414.056 Bottom equipment
- 414.057 Indicators
- 414.058 Doppler sonar current indicators
- 414.059 Indicators
- 414.060 Interference rejectors
- 414.061 Electronic units
- 414.062 Bottom equipment
- 414.065 Underwater searching equipment sluices
- 414.069 Electronic units
- 414.070 Trawl probes
- 414.072 Paravane receivers
- 414.074 Catch sensors
- 414.076 Catch sensor receivers
- 414.077 Trawl probe winches
- 414.078 Trawl probe winch control units
- 414.079 Batteries

### 415 CLINOMETERS, TRIM INDICATORS, LOAD INDICATORS

- 415.001 Clinometers
- 415.005 Trim indicators
- 415.010 Sag indicators
- 415.015 Draught gauges
- 415.020 Load calculators
- 415.030 Hull stress monitors
- 415.040 Air cushion indicators
- 415.042 Indicators
- 415.044 Sensors
- 415.046 Electronic units

#### **416 NAVIGATION TV**

- 416.001 Navigation TV plants
- 416.002 TV cameras
- **416.004 Monitors**
- 416.006 Electronic units
- 416.020 Periscope

#### 417 CLOCKS, FACSIMILE RECORDERS, MISC. NAUTICAL EQUIPMENT

- 417.001 Master clock systems
- 417.002 Master clocks
- 417.003 Satellite clocks
- 417.010 Chronometers
- 417.011 Radio clocks
- 417.012 Binoculars

- 417.013 Night binoculars
- 417.014 Sextants
- 417.015 Antenna
- 417.016 Pelorus
- 417.018 Facsimile recorders w/antenna
- 417.020 Azimuth apparatus
- 417.022 Course pointers
- 417.024 Planimeters
- 417.026 Integrators
- 417.030 Electronic windgauges
- 417.031 Mechanical windgauges
- 417.032 Wind indicators
- 417.035 Barometers
- 417.037 Thermometers
- 417.038 Hygrometers
- 417.050 Misc. nautical equipment
- 417.053 Parallel rulers
- 417.055 Roll rulers
- 417.057 Protractors
- **417.059 Dividers**
- 417.061 Chart lenses

### 418 RADAR, SIGNAL, OBSERVATION & ANTENNA MASTS

- 418.001 Radar masts
- 418.003 Signal masts
- 418.005 Observation masts
- 418.006 Crows nests
- 418.007 Masthead light masts
- 418.008 After light masts
- 418.010 Anchor light masts
- 418.012 Towing light masts
- 418.013 Antenna masts
- 418.014 Mast stays

#### 419 INTEGRATED NAVIGATION SYSTEMS

419.001 Central bridge consoles

# **42 COMMUNICATION EQUIPMENT**

#### **421 RADIO PLANT, GMDSS**

- 421.001 Main radio telegraph sets
- 421.002 Main telegraph transmitter/receiver
- 421.004 Main telegraph transmitter
- 421.006 Spare radio telegraph sets
- 421.007 Spare telegraph transmitter/receiver
- 421.009 Main receiver antenna
- 421.010 Spare transmitter/receiver antenna
- 421.011 Control panels
- 421.015 Radio telephone sets
- 421.017 Radio telephone antenna
- 421.020 Control panels
- 421.025 Autoalarm apparatus
- 421.026 Alarm executants
- 421.027 Automatic keying devices
- 421.028 Watch receiver
- 421.035 Main transmitter/receiver antenna
- 421.041 Autoalarm antenna
- 421.045 Power converters
- 421.047 Power transformers
- 421.049 Batteries
- 421.050 Battery boxes
- 421.051 Loudspeakers
- 421.053 Taperecorders
- 421.055 Tools
- 421.060 MF/HF selective calling receiver w/antenna
- 421.063 Cryptography units

#### 422 LIFEBOAT RADIO TRANSMITTERS, EPIRBS

- 422.001 Portable lifeboat radio equipment
- 422.002 Lifeboat radio sets
- 422.003 Lifeboat radio antenna
- 422.005 VHF emergency position indicating radio beacons
- 422.006 VHF float-free emergency position indicating radio beacons
- 422.007 VHF emergency communication sets
- 422.020 Radar transponders

#### 423 DATA TRANSMISSION PLANTS, COMMUNICATION

- 423.001 Telex systems
- 423.002 Printers
- 423.004 Antenna
- 423.005 Telefax systems
- 423.010 Central EDP plants
- 423.011 Central processing units
- 423.013 Interface input equipment
- 423.015 Interface output equipment
- 423.017 Peripheral equipment
- 423.019 Secondary storages
- 423.020 Network (LAN)

- 423.022 Modems
- 423.024 EDP voyage recorders
- 423.029 Power converters
- 423.033 Power transformers

#### **424 VHF/UHF TELEPHONES**

- 424.001 VHF radio simplex systems w/antenna
- 424.002 Control units
- 424.003 VHF radio duplex systems w/antenna
- 424.004 Control units
- 424.016 VHF selective calling receiver w/antenna
- 424.020 VHF/AM aviation frequency radio sets w/antenna
- 424.021 Control units
- 424.030 Power converters
- 424.033 Rectifiers
- 424.035 Power transformers
- 424.037 Lake transceivers
- 424.052 Portable VHF/AM aviation frequency radio sets
- 424.054 Portable UHF radio sets
- 424.055 Mobile telephone sets
- 424.056 Mobile telephone w/coin apparatus
- 424.058 SHF transceivers
- 424.060 Satellite communication systems w/antenna
- 424.062 Telephone responders
- 424.064 Tape recorders
- 424.066 Walkie-Talkies (citizen band)
- 424.070 Cryptography units

#### 425 CALLING/COMMAND/CREW CALL TELEPHONE PLANTS, WALKIE-TALKIES

- 425.001 Calling systems
- 425.002 Calling centrals
- 425.004 Signal executants
- 425.006 Command systems
- 425.008 Command centrals
- 425.012 Stationary apparatus
- 425.013 Loudspeakers
- 425.014 Portable apparatus
- 425.015 Microphones
- 425.018 Signal executants
- 425.020 Crew call systems
- 425.021 Crew call centrals
- 425.023 Signal executants
- 425.030 Telephone plant interface units
- 425.031 Telephone centrals
- 425.032 Tele-amplified telephone systems
- 425.033 Telephone apparatus
- 425.034 Engine room rotating lights
- 425.035 Telephone headsets
- 425.036 Shore telephone transfer
- 425.037 Radiostation/VHF transfer
- 425.038 Telephone boxes

- 425.040 Sound powered telephone system centrals
- 425.042 Sound powered telephone systems
- 425.045 Intercommunication system centrals
- 425.047 Intercommunication apparatus
- 425.050 Intrinsically safe telephones
- 425.055 Loudspeaker systems
- 425.057 Loudspeakers
- 425.071 Public address systems
- 425.072 Control panels
- 425.073 Interface units
- 425.074 Public address apparatus
- 425.075 Public address loudspeakers
- 425.076 Public address microphones
- 425.079 Walkie-Talkies

#### 426 SPEAKING TUBES, TUBE POST PLANTS

- 426.001 Speaking tubes
- 426.005 Tube post systems
- 426.006 Vacuum ejectors
- 426.008 Air compressors
- 426.010 Pressure tanks
- 426.012 Dispatch boxes

#### 427 LIGHT & SIGNAL EQUIPMENT, LANTERNS, TYPHONS

- 427.001 El. typhons
- 427.005 Typhons w/air preheater
- 427.006 Typhon control panels
- 427.008 Water separating tanks
- 427.010 Megaphones
- 427.012 Ship's bell
- 427.015 Gong
- 427.020 National flags
- 427.025 Signal flags
- 427.030 Flag staffs
- 427.032 Jack staffs
- 427.034 Wind socks
- 427.036 Anchor balls
- 427.040 Lanterns w/control unit
- 427.041 Lantern battery chargers
- 427.042 Lantern inverters
- 427.043 Signal lights
- 427.044 Signal light control units
- 427.045 Morse lamps
- 427.047 Nife lamps
- 427.050 Search lights
- 427.051 Search light control units

# 43 ANCHORING, MOORING & TOWING EQUIPMENT

#### **431 ANCHORS W/CHAINS & EQUIPMENT**

- 431.001 Bow anchors w/chain
- 431.003 Stern anchors w/chain
- 431.005 Spare anchors
- 431.007 Sea anchors
- 431.009 Warping anchors
- 431.015 Spare anchor davits
- 431.020 Anchor washdown systems

#### 432 WINDLASSES W/CHAIN STOPPERS, ROLLERS

- 432.001 Windlasses, complete
- 432.004 Chain messengers
- 432.007 Anchor winches
- 432.010 Mechanical brakes
- 432.013 Hydr. brakes
- 432.016 Windlass operating panels
- 432.020 Chain stoppers/rollers
- 432.021 Chain scissors
- 432.025 Chain gauges
- 432.045 Windlass hydr. systems
- 432.047 Hydr. oil pumps w/drive unit
- 432.049 Hydr. oil preheaters
- 432.051 Hydr. oil coolers
- 432.053 Hydr. oil filters
- 432.055 Hydr. oil expansion tanks
- 432.057 Hydr. oil storage tanks

#### 433 COMB. WINDLASS/MOORING WINCHES W/CHAIN STOPPERS, ROLLERS

- 433.001 Combined windlass/mooring winch
- 433.005 Chain messengers
- 433.009 Mooring drums
- 433.013 Warping leads
- 433.017 Winches
- 433.021 Mechanical brakes
- 433.025 Self tension equipment
- 433.029 Hydraulic brakes
- 433.033 Operating panels
- 433.039 Chain stoppers/rollers
- 433.042 Chain gauges
- 433.045 Windlass hydr. systems
- 433.047 Hydr. oil pumps w/drive unit
- 433.049 Hydr. oil preheaters
- 433.051 Hydr. oil coolers
- 433.053 Hydr. oil filters
- 433.055 Hydr. oil expansion tanks
- 433.057 Hydr. oil storage tanks

#### 434 CAPSTANS, WARPING & MOORING WINCHES

- 434.001 Mooring/warping winches
- 434.003 Capstans
- 434.006 Mooring drums
- 434.011 Warping heads
- 434.013 Hawser reels
- 434.016 Winches
- 434.021 Mechanical brakes
- 434.026 Self tension equipment
- 434.031 Operating panels
- 434.045 Winch hydr. systems
- 434.047 Hydr. oil pumps w/drive unit
- 434.049 Hydr. oil preheaters
- 434.051 Hydr. oil coolers
- 434.053 Hydr. oil filters
- 434.055 Hydr. oil expansion tanks
- 434.057 Hydr. oil storage tanks

#### **435 FIXED MOORING EQUIPMENT**

- 435.001 Bollards
- 435.005 Hawse pipes
- 435.010 Mooring cups
- 435.015 Rollers
- 435.020 Lake hawse pipes
- 435.025 Panama chocks
- 435.030 Fairleads
- 435.035 Rotor bollards

#### **436 LOOSE MOORING EQUIPMENT**

- 436.001 Hawser drums
- 436.003 Hawsers
- 436.005 Hawser bins
- 436.010 Fenders
- 436.015 Heaving lines
- 436.018 Rat guards
- 436.020 Mooring wire drums
- 436.025 Mooring wire

#### **437 TOWING EQUIPMENT**

- 437.001 Towing winches
- 437.002 Towing wire
- 437.003 Towing brackets
- 437.005 Towing rails
- 437.007 Towing hooks
- 437.008 Hydr. towing eyes
- 437.010 Spare wire drums
- 437.011 Hawser drums
- 437.013 Loose towing equipment, wire
- 437.016 Towing winch remote control
- 437.020 Anchor handling tongs

- 437.021 Towing pins
- 437.025 Combined powerpacks
- 437.030 Stern rollers
- 437.032 Stern roller bearings
- 437.045 Towing winch hydr. systems

# 438 COMMON HYDRAULIC OIL SYSTEM FOR ANCHORING/MOORING EQUIPMENT

- 438.001 Common hydr. systems
- 438.003 Hydr. oil pumps w/drive unit
- 438.006 Hydr. oil preheaters
- 438.009 Hydr. oil coolers
- 438.012 Hydr. oil filters
- 438.015 Hydr. oil expansion tanks
- 438.018 Hydr. oil storage tanks
- 438.021 Hydr. oil separating plants
- 438.030 Hydr. pump el. starter systems

### 439 COMMON HYDR. OIL SYST. FOR ANCHORING/MOORING/CARGO WINCHES

- 439.001 Common hydr. systems
- 439.003 Hydr. oil pumps w/drive unit
- 439.006 Hydr. oil preheaters
- 439.009 Hydr. oil coolers
- 439.012 Hydr. oil filters
- 439.015 Hydr. oil expansion tanks
- 439.018 Hydr. oil storage tanks
- 439.021 Hydr. oil separating plants
- 439.030 Hydr. pump el. starter systems

# 44 REP./MAINT./CLEAN. EQUIP. WORKSHOP/STORE OUTFIT, NAME PLATES

#### 441 MACHINE TOOLS, CUTTING & WELDING EQUIPMENT

- 441.001 Lathes
- 441.003 Drilling machines
- 441.005 Milling machines
- 441.007 Grinding machines
- 441.008 Emery wheels
- 441.009 Planing machines
- 441.011 Shaping machines
- 441.013 Tube bending machines
- 441.014 Tube cutters
- 441.015 Hack saws
- 441.017 Plate shearing machines
- 441.019 Plate presses
- 441.021 Plate rollers
- 441.023 Gas welding equipment
- 441.025 El. welding equipment
- 441.027 Geberitt welding equipment

# 442 TOOLS/EQUIP. FOR ENGINEERS, ELECTR., BOATSWAINS, CARPENTERS

- 442.001 Engineer's portable tools
- 442.002 Emery wheels
- 442.004 Portable grinding machines
- 442.006 Portable drills
- 442.008 Nut drivers
- 442.010 Screwdriver sets
- 442.012 Socket wrench sets
- 442.014 Constant wrench sets
- 442.016 Phillips screwdriver sets
- 442.017 Jaw pullers
- 442.018 Anvils
- 442.020 Hammer tools
- 442.022 Vices
- 442.024 Tongs
- 442.026 Blow torches
- 442.027 Max. pressure indicators
- 442.028 Loose lubricating equipment
- 442.030 Loose gauging instruments
- 442.032 Misc. loose engineer's machine tools
- 442.035 Electrician's tools
- 442.036 Soldering irons
- 442.038 Test panels
- 442.040 Test instruments
- 442.041 Pressostat calibrators
- 442.042 Thermostat calibrators
- 442.043 Insulated hand tools

- 442.044 Misc. loose electrician's tools
- 442.045 Battery service sets
- 442.050 Boatswain's/carpenter's tools
- 442.051 Sailmaker's equipment
- 442.052 Boatswain's chairs
- 442.053 Rigging tools
- 442.055 Carpenter's benches
- 442.057 Axes/saws
- 442.059 Planers
- 442.060 Misc. woodworking tools
- 442.062 Jacks
- 442.064 Step ladders
- 442.066 Misc. loose tools

### 443 PAINTING EQUIPMENT, SCAFFOLDING, PAINT RAFTS/BOATS (GIGS)

- 443.001 Paint boats
- 443.003 Paint rafts
- 443.005 Paint boat/raft davits
- 443.007 Paint scaffolding
- 443.009 Sand blasting equipment
- 443.011 Rust hammers
- 443.013 Paint spraying equipment
- 443.015 Pressure paint rollers
- 443.020 Misc. loose painting equipment

### 444 CLEANING EQUIPMENT, GARBAGE CHUTES

- 444.001 Deck cleaning machines
- 444.002 High pressure cleaning machines
- 444.003 Hull cleaning machines
- 444.005 Cleaning winches
- 444.007 Floor polishers
- 444.009 Sweeping machines
- 444.011 Vacuum cleaners
- 444.013 Soot sweeping machines
- 444.015 Misc. storage containers
- 444.017 Misc. loose cleaning equipment
- 444.020 Loose paraffin tanks
- 444.022 Cleaning pans
- 444.024 Filter steaming tanks
- 444.026 LO cooler cleaning plants
- 444.028 Scavenging air cooler cleaning plants
- 444.030 Evaporator plants
- 444.032 Garbage crates
- 444.035 Chemical spraying units

## 445 GARBAGE DISPOSAL PLANTS, INCINERATORS

- 445.001 Garbage incinerator plants
- 445.003 Combustion chambers
- 445.005 Air supply fans
- 445.007 Garbage feeder transporter
- 445.009 Oil sludge treatment plants

445.011 DO pumps

445.013 DO filters

445.015 DO tanks

445.017 Exhaust gas fans

445.019 Exhaust gas separators

445.021 Ash ejectors

445.023 Cooling water pumps

445.025 Cooling water tanks

445.027 Heat exchangers

#### 446 OUTFITTING IN STORE ROOMS & WORKSHOPS

446.001 Workbenches

446.006 Worktables

446.010 Vice workbenches

446.015 Lockers

446.020 Shelves/racks

446.025 Tool boards

#### 447 CLAMPS/FOUNDATIONS FOR SPARE PARTS

447.001 Spare part mountings

### 448 NAME PLATES/MARKING ON MACHINERY, EQUIPM., PIPES, CABLES

448.001 Name plates

448.010 Message panels

448.015 Fire/safety plans

448.020 Wall charts

448.030 Engine room name plates

448.040 Bridge name plates

448.050 Accommodation name plates

448.060 Deck name plates

# 45 LIFTING & TRANSPORT EQUIPMENT FOR MACHINERY COMPONENTS

#### **451 ENGINE ROOM LIFTS**

451.001 Engine room lifts, complete

451.002 Lift cabins

451.003 Lift machinery

451.004 Lift doors

451.005 Operating panels

# 452 TRAVELLING CRANES & LIFTING GEAR IN ENGINE ROOM

452.001 Traverse cranes

452.005 Crane crabs

452.010 Pulleys

452.015 Trolleys

452.020 Waggons

### 453 EXTERNAL LIFTING GEAR FOR MACHINERY COMPONENTS

453.001 Derrick posts, complete

453.003 Derricks

453.005 Winch machinery

453.010 Cranes

453.045 Separate hydr. oil systems

453.047 Hydr. oil pumps w/drive unit

453.049 Hydr. oil preheaters

453.051 Hydr. oil coolers

453.053 Hydr. oil filters

453.055 Hydr. oil expansion tanks

453.057 Hydr. oil storage tanks

# **46 HUNTING & FISHING EQUIPMENT**

### 461 HUNTING EQUIPMENT FOR WHALE, SEAL

- 461.001 Whale guns
- 461.003 Harpoons
- 461.005 Winding apparatus
- 461.007 Hawser drums
- 461.010 Whale windlasses
- 461.015 Rifles
- 461.020 Hooking spikes/mallets

#### 462 LONGLINES W/EQUIPMENT, NETS, HANDFISHING EQUIPMENT

- 462.001 Longline windlass
- 462.003 Coiling apparatus
- 462.005 Baiting tables
- 462.007 Longlines baiting machines
- 462.009 Separating machines
- 462.011 Longline dropper machines
- 462.013 Magazines
- 462.015 Longlines
- 462.017 Longlines tubs
- 462.019 Buoys, complete
- 462.025 Nets, complete
- 462.029 Net bins
- 462.050 Hand fishing equipment
- 462.060 Fish traps

### 463 PURSE NETS & SEINE EQUIPMENT, POWER BLOCKS

- 463.001 Purse nets, complete
- 463.005 Ring nets, complete
- 463.010 Purse net winches
- 463.012 Ring net winches
- 463.015 Seine tracks
- 463.018 Seine rollers
- 463.021 Seine derricks
- 463.023 Seine gallows
- 463.025 Power blocks
- 463.027 Purse net winches
- 463.045 Separate hydr. oil systems
- 463.047 Hydr. oil pumps w/drive unit
- 463.049 Hydr. oil preheaters
- 463.051 Hydr. oil coolers
- 463.053 Hydr. oil filters
- 463.055 Hydr. oil expansion tanks
- 463.057 Hydr. oil storage tanks

### **464 TRAWLING EQUIPMENT**

464.001 Bottom trawl, complete

464.004 Pelagic trawl, complete

464.006 Danish seine, complete

464.010 Trawl gallows

464.015 Trawl winches

464.020 Trawl bollards

464.045 Separate hydr. oil systems

464.047 Hydr. oil pumps w/drive unit

464.049 Hydr. oil preheaters

464.051 Hydr. oil coolers

464.053 Hydr. oil filters

464.055 Hydr. oil expansion tanks

464.057 Hydr. oil storage tanks

#### 465 FISH PUMPING PLANTS AND LANDING EQUIPMENT

465.001 Fish pumping plants

465.002 Fish pumps

465.003 Suction heads

465.004 Filter chests

465.010 Scoop nets

### **466 SPECIAL FISHING EQUIPMENT**

466.001 Light hunting equipment

466.010 El. fishing equipment

# 47 ARMAMENT, WEAPON & WEAPON COUNTERMEASURES

## 471 HAND WEAPONS, LIGHT & HEAVY GUNS

**472 ROCKET PLANTS** 

**473 TORPEDO PLANTS** 

**474 ANTI-SUBMARINE WEAPONS** 

**475 MINELAYING EQUIPMENT** 

# **476 MINESWEEPING EQUIPMENT**

476.001 Mine sonars 476.010 Electronic units

#### **477 DE-GAUSSING PLANTS**

477.001 Control systems

# 478 TORPEDO COUNTERMEASURES, SMOKE GENERATING EQUIPMENT

### **479 WEAPON CONTROL SYSTEMS**

479.001 Tactical consoles 479.010 Mine warning consoles 479.015 ROV consoles

# **48 SPECIAL EQUIPMENT**

#### **481 DRILLING EQUIPMENT**

#### **482 DREDGING EQUIPMENT**

#### **483 DIVING EQUIPMENT**

483.001 Underwater ROVs

483.005 ROV winches

483.010 ROV cradles

#### **484 LABORATORY EQUIPMENT**

#### 485 AIRCRAFT, HELICOPTERS

#### 486 AUXILIARY VESSELS

#### **487 DE-ICING EQUIPMENT**

487.001 Steel de-icing systems

487.010 Machinery de-icing systems

487.020 El. de-icing systems

487.030 Chemicals de-icing systems

#### **488 SEISMIC EQUIPMENT**

488.001 Seismic canon cable

488.003 Seismic detector cable

488.005 Seismic canon cable drums

488.007 Seismic detector cable drums

488.010 Seismic air compressors

488.013 Seismic compressor FW cooling pumps

488.015 Seismic compressor el. motor FW pumps

488.017 Seismic hydr. oil aggregates

488.019 Seismic air compressor LO pumps

488.021 Seismic cable oil transfer pumps

488.022 Seismic cable oil separators

488.050 Seismic paravane

488.052 Seismic paravane winches

#### 489 ENVIRONMENTAL PROTECTION EQUIPMENT

489.001 Oil skimmers

489.003 Oil booms

489.005 Boom reels

489.007 Oil transfer hoses

489.009 Hose reels

489.011 Oil transfer pumps w/drive unit

489.015 Power supply

489.030 Oil recovery bags

489.040 Oil dispersion equipment

489.043 Spray booms

489.045 Chemicals

489.050 Foam plants

## **49 FISH PROCESSING EQUIPMENT**

#### **491 RAW MATERIAL HANDLING**

- 491.005 De-icing equipment
- 491.007 Chutes
- 491.010 Transport equipment
- 491.020 Reception tanks/bins
- 491.022 Tank/bin equipment
- 491.024 Tank/bin manoeuvre system
- 491.026 Tank/bin insulation
- 491.030 Ice store
- 491.032 Ice store equipment
- 491.034 Ice water system
- 491.036 Ice dosing system
- 491.038 Rinsing/draining system

#### **492 FILLET FACTORIES**

- 492.005 Head cutting machines
- 492.007 Washing/rinsing machines
- 492.009 Filet machines
- 492.012 Skinning machines
- 492.013 Garbage conveyors/chutes
- 492.035 Sorting machines
- 492.038 Conveyors
- 492.048 Hydr. oil aggregates
- 492.050 SW process pumps
- 492.060 Detaching machines
- 492.061 Weighing tables
- 492.062 Hot melt sealers
- 492.063 Auto markers
- 492.068 Strapping machines
- 492.069 Packing tables

#### **493 SHRIMP FACTORIES**

- 493.010 Cookers/coolers
- 493.013 Garbage conveyors/chutes
- 493.016 De-watering blowers
- 493.018 Vacuum peelers
- 493.028 Glazing units
- 493.035 Grading machines
- 493.037 Mixing units
- 493.038 Conveyors
- 493.048 Hydr. oil aggregates
- 493.050 SW process pumps
- 493.061 Weighing tables
- 493.068 Strapping machines
- 493.069 Packing tables
- 493.070 Control panels

# 494 MEAL AND OIL FACTORIES

- 494.001 Hasher machines
- 494.005 Feeder machines
- 494.007 Fish cookers
- 494.009 Strainer conveyors
- 494.011 Presses
- 494.013 Cutting machines
- 494.015 Pre dryers
- 494.017 After dryers
- 494.019 Separator filters
- 494.021 Milling machines
- 494.023 Weighing machines
- 494.025 Deodorizing plants
- 494.027 Sludge separators
- 494.029 Centrifuges
- 494.030 Softening tanks
- 494.031 Concentration cookers
- 494.033 Fish meal tanks
- 494.035 Fish oil tanks
- 494.037 Conveyors
- 494.039 Decanters
- 494.041 Bone discharge pump
- 494.043 Anti oxidant pumps
- 494.045 Oil separators
- 494.050 Guano grinders
- 494.055 Silos
- 494.070 Control panels

#### **495 SURIMI FACTORIES**

- 495.002 Forcemeat machines, complete
- 495.004 Roe separators
- 495.009 Filet machines
- 495.012 Skinning machines
- 495.013 Garbage conveyors/chutes
- 495.015 Bone separators
- 495.020 Rotary screen-forcemeat machines
- 495.022 Forcemeat bleaching tanks
- 495.024 Forcemeat refiner
- 495.026 Screw presses
- 495.028 Forcemeat preserving agent mixers
- 495.033 Scaling machines
- 495.035 Sorting machines
- 495.038 Conveyors
- 495.048 Hydr. oil aggregates
- 495.050 SW process pumps
- 495.055 Surimi water pumps
- 495.060 Detaching machines
- 495.062 Hot melt sealers
- 495.063 Auto markers

495.065 Metal detectors 495.067 Wrapping machines, pallets 495.070 Control panels **496 SHELL FACTORIES** 

# 5 EQUIPMENT FOR CREW AND PASSENGERS

# 50 LIFESAVING, PROTECTION & MEDICAL EQUIPMENT

# **501 LIFEBOATS W/EQUIPMENT**

- 501.001 Open lifeboats
- 501.002 Covered lifeboats
- 501.003 Partly covered lifeboats
- 501.004 MOB boats
- 501.005 Offshore MOB boats
- 501.007 Workboats
- 501.008 Rubber boats
- 501.009 Hyperbaric lifeboats
- 501.015 Shock absorbing fenders/skates
- 501.016 Inboard motors
- 501.017 Outboard motors
- 501.018 Lifeboat davits
- 501.019 Lifeboat winches
- 501.020 MOB boat davits
- 501.021 MOB boat winches
- 501.023 Hooks, release mechanisms
- 501.024 Wire falls
- 501.025 MOB boat cranes
- 501.026 Free fall lifeboat launching arrangements
- 501.027 MOB boat/workboat crabs
- 501.028 Lifeboat covers
- 501.029 Lifeboat ladders
- 501.030 Lifeboat provisions
- 501.031 Lifeboat FW containers
- 501.034 Lifeboat buoyancy material
- 501.035 Lifeboat retroreflective material
- 501.036 Lifeboat markerlights/lanterns
- 501.037 Lifeboat compass equipment
- 501.040 Lifeboat signalling equipment
- 501.041 Lifeboat buoyant smoke signals
- 501.042 Lifeboat hand flares
- 501.043 Lifeboat parachute signals
- 501.045 Lifeboat first aid outfit
- 501.050 Other loose lifeboat equipment

# **502 LIFERAFTS W/EQUIPMENT**

- 502.001 Rigid liferafts
- 502.005 Covered inflatable liferafts
- 502.006 Open inflatable liferafts
- 502.018 Liferaft davits
- 502.019 Liferaft winches
- 502.023 Liferaft hydrostatic release mechanisms
- 502.024 Liferaft wire falls
- 502.025 Liferaft mountings
- 502.026 Liferaft storm fixtures
- 502.028 Liferaft covers
- 502.029 Liferaft ladders
- 502.030 Liferaft provisions
- 502.031 Liferaft FW containers
- 502.035 Liferaft retroreflective material
- 502.040 Liferaft signalling equipment
- 502.042 Liferaft hand flares
- 502.043 Liferaft parachute signals
- 502.045 Liferaft first aid outfit
- 502.050 Other loose liferaft equipment

# 503 LIFESAVING, SAFETY & EMERGENCY EQUIPMENT

- 503.001 Lifebuoys
- 503.002 Buoyant smoke/light signals
- 503.003 Buoyant self-igniting light signals
- 503.004 Distress signalling equipment
- 503.005 Distress rockets
- 503.006 Smoke signals
- 503.010 Rigid life-jackets
- 503.011 Inflatable life-jackets
- 503.012 Survival suits
- 503.015 Thermal protection bags
- 503.016 Life-jacket/survival suit lights
- 503.018 Life-jacket containers
- 503.019 Line-throwing appliances
- 503.020 Wave dampening tanks
- 503.030 Divers' ladders
- 503.031 Raft station ladders
- 503.035 Rescue chutes
- 503.036 Safety harnesses
- 503.037 Bosuns' chairs
- 503.040 Rescue baskets
- 503.041 Boarding nets
- 503.042 Rescue stockings
- 503.043 Rescue nets
- 503.045 Rescue harpoon canons
- 503.050 Catering equipment
- 503.051 Corpse containers
- 503.070 Safety plan case

# 504 MEDICAL, FIRST AID & DENTAL EQUIPMENT, MEDICINES

504.001 Dentists' equipment

504.003 Dentists' chairs

504.005 Dentists' lamps

504.007 Heating cabinets

504.009 X-ray apparatus

504.011 Drilling equipment

504.013 Dentists' loose instruments

504.025 Doctors' equipment

504.027 Operating tables

504.028 Treatment tables

504.029 X-ray apparatus

504.031 Heating cabinets

504.033 Stretchers

504.035 Medicine lockers

504.037 Respirators

504.039 Medicines

504.041 First aid equipment

504.043 Doctors' loose instruments

504.045 Hospital furnishing

504.050 Protection equipment

504.052 Helmets

504.054 Ear protectors

504.056 Safety shoes

504.058 Work gloves

# 505 LOOSE FIREFIGHTING APPARATUSES & EQUIP., FIREMEN'S OUTFIT

505.001 Fire extinguishing apparatus

505.010 Fire axes/crowbars

505.015 Portable drills

505.020 Portable cutting equipment

505.025 Safety lamps

505.030 Gas masks

505.035 Smoke diving equipment

505.040 Smoke diving compressor

505.042 Compressor el. equipment

505.045 Firemens' clothing

# **506 ABC PROTECTION EQUIPMENT**

506.001 Radioactivity detection equipment

506.003 Radioactivity protection equipment

506.005 Radioactivity decontamination equipment

506.010 Biological detection equipment

506.013 Biological protection equipment

506.015 Biological decontamination equipment

506.020 Chemical detection equipment

506.023 Chemical protection equipment

506.025 Chemical decontamination equipment

# 51 INSULATION, PANELS, BULKHEADS, DOORS, SIDESCUTTLES, SKYLIGHTS

# 511 INSULATION, PARTITION BULKHEADS, PANELLING, WALLPAPER

- 511.001 Window recesses
- 511.002 Bulkhead/wall panelling
- 511.003 Preinsulated partition bulkheads
- 511.004 System-ceilings w/profiles
- 511.006 Wet-room panelling
- 511.010 Wallpaper

# 512 DOORS W/COAMINGS IN ACCOMMODATION

- 512.001 Doors w/coaming, complete
- 512.020 Sliding doors, complete
- 512.030 Folding doors, complete
- 512.035 Fixtures, locks

# 513 OTHER INTERNAL DOORS W/COAMINGS

- 513.001 Watertight doors, complete
- 513.002 Watertight sliding doors, complete
- 513.005 Spraytight doors, complete
- 513.010 Gastight A60 doors, complete
- 513.011 Gastight A30 doors, complete
- 513.012 Gastight A0 doors, complete
- 513.015 Insulated doors, complete
- 513.020 Emergency doors, complete
- 513.025 Stores doors, complete
- 513.030 Door closing mechanisms

# 514 EXTERNAL DOORS W/COAMINGS

- 514.001 Teak doors, complete
- 514.005 Weathertight doors, complete
- 514.009 Spraytight doors, complete
- 514.010 Gastight A60 doors, complete
- 514.011 Gastight A30 doors, complete
- 514.012 Gastight A0 doors, complete
- 514.015 Sliding doors, complete
- 514.025 Mosquito doors, complete

# 515 SIDE SCUTTLES & WINDOWS W/EQUIPMENT

- 515.001 Side scuttles, complete
- 515.005 Windows, complete
- 515.010 Clear view screens, complete
- 515.015 Sliding windows, complete
- 515.050 Window wiper plants

# **516 SKYLIGHTS W/EQUIPMENT**

- 516.001 Engine room skylights, complete
- 516.003 Pump room skylights, complete
- 516.005 Galley skylights, complete
- 516.007 Messroom skylights, complete

516.050 Skylight lifting equipment

# 52 INTERNAL DECK COVERING, LADDERS, STEPS, RAILING

#### 521 INTERNAL DECK BASE COVERING

521.001 Levelling compound

# 522 INTERNAL DECK TOP COVERING (LINOLEUM, TILES, PARQUET ETC.)

- 522.001 Vinyl covering, linoleum
- 522.002 Carpets, carpet tiles
- 522.003 Tiles
- 522.004 Scattered covering
- 522.010 Corridor deck covering
- 522.020 Public room deck covering
- 522.030 Galley deck covering
- 522.040 Cabin deck covering
- 522.050 Wheel house deck covering
- 522.060 Control room deck covering
- 522.070 Wet room deck covering

# **523 INTERNAL GRATING & WOOD DECKS**

523.001 Grating

# 524 LOOSE FLOOR PLATES, PLATFORMS, STEPS & LADDERS IN ACCOMMOD.

- 524.001 Steps w/railing
- 524.006 Ladders w/railing
- 524.011 Platforms w/railing
- 524.020 Computer flooring

# 525 LOOSE FLOOR PLATES, PLATFORMS & LADDERS IN ENG. & PUMP ROOMS

- 525.001 Steps w/railing
- 525.006 Ladders w/railing
- 525.011 Platforms w/railing

# 526 LADDERS, PLATFORMS & RAILING IN BALLAST & FUEL TANKS

- 526.001 Steps w/railing
- 526.006 Ladders w/railing
- 526.011 Platforms w/railing

# 527 PLATFORMS, LADDERS & RAILING IN CARGO TANKS

- 527.001 Steps w/railing
- 527.006 Ladders w/railing
- 527.011 Platforms w/railing

# 528 PLATFORMS, LADDERS & RAILING IN CARGO HOLDS

- 528.001 Steps w/railing
- 528.006 Ladders w/railing
- 528.011 Platforms w/railing

# 53 EXT. DECK COVERING, LADDERS, STEPS, FORE & AFT GANGWAY

#### 531 EXTERNAL DECK COVERING

#### 532 EXTERNAL WOOD DECKS

532.001 Wood decks

532.002 Wood deck boundary bars

# 533 HANDRAILS, RAILING, RAIL GATES

533.001 Handrails

533.005 Toprails

533.010 Railgates

# 534 EXTERNAL PLATFORMS, STEPS, LADDERS & GRATING W/EQUIPMENT

534.001 Steps

534.006 Ladders

534.011 Platforms

534.016 Grating

# 535 FORE & AFT GANGWAYS W/EQUIPMENT

535.001 Fore & aft gangways w/railing

535.005 Steps w/railing

535.006 Ladders w/railing

535.011 Platforms w/railing

# **536 AWNINGS W/EQUIPMENT**

# 537 DECK TABLES & CHAIRS, SWIMMING POOLS

537.001 Deck tables

537.005 Deck chairs

537.010 Parasols

537.015 Swimming pools

537.020 Mud vacuum cleaners

# 54 FURNITURE, INVENTORY, ENTERTAINMENT EQUIPMENT

# 541 FURNITURE FOR CREW, STANDARD FURNITURE

541.001 Buffets

541.006 Chests of drawers

541.011 Tables

541.018 Chairs

541.025 Writing desks

541.028 Beds

541.030 Pelmets

541.035 Sofas

541.040 Bedside tables

541.041 Spectacle shelves

541.042 Wardrobes

541.045 Dressing tables

541.048 Bathroom shelves/lockers

541.050 Book shelves

541.052 Cloakroom shelves

541.055 Refrigerators

541.058 Bar lockers

541.060 Bar counters

541.065 Bar stools

541.070 Messroom furniture

# 542 OFFICE EQUIP. & SPEC. FURNITURE IN WHEELH., CHART & RADIOR.

542.001 Writing desks

**542.005** Counters

542.010 Office shelves

542.015 Chart tables

542.018 Chart racks

542.020 Flag lockers/racks

542.022 Tables

542.025 Chairs

542.030 Shelves, racks

542.035 Typewriters

542.040 Calculators

542.045 Cash registers

542.050 Safes

542.055 Filing cabinets

542.060 Key lockers

# **543 BEDCLOTH, MATTRESSES**

543.001 Mattresses

543.005 Eiderdowns

543.010 Pillows

543.015 Blankets, quilts

543.020 Bedspreads

543.023 Sheets

543.025 Drawsheets

543.027 Eiderdown covers

# **544 CURTAINS, CARPETS**

544.001 Curtains

544.008 Portieres

544.010 Carpets

# 545 DECORATIONS, FIGUREHEADS

545.001 Flower arrangement

545.003 Paintings w/frame

545.010 Reproductions w/frame

545.015 Photographs w/frame

545.025 Sculptures

545.030 Knick-knacks, figures

545.040 Wall tapestries

545.045 Table runners

545.050 Figureheads

# 546 HOBBY, SPORTS & ENTERTAINMENT EQUIPMENT

546.001 Trim apparatus

546.002 Ergometer bikes

546.003 Rowing apparatus

546.004 Strength training apparatus

546.005 Finnish bath stoves

546.007 Finnish bath heating coils

546.009 Dark room equipment

546.015 Books

546.025 Film projectors

546.027 Slide projectors

546.029 Movie screens

546.031 Television sets

546.032 Video players

546.033 Record players

546.034 CD players

546.035 Sound amplifiers

546.037 Tape recorders

546.039 Radios

546.041 Loud speakers

546.043 Games

546.045 Gambling machines

546.050 Radio/TV antenna (entertainment)

546.052 TV antenna

546.054 Radio antenna

# 547 INVENTORY, SMALLER ITEMS

547.001 Mirrors

547.005 Towel automats

547.010 Waste paper baskets

547.015 Ashtrays

# 548 FURNITURE FOR PASSENGERS

548.001 Buffets

548.006 Chests of drawers

548.011 Tables

548.018 Chairs

548.025 Writing desks

548.028 Beds

548.035 Sofas

548.040 Bedside tables

548.042 Wardrobes

548.045 Dressing tables

548.048 Bathroom shelves/lockers

548.050 Bookshelves

548.052 Cloakroom shelves

548.055 Refrigerators

548.058 Bar lockers

548.060 Bar counters

548.065 Bar stools

# 55 GALLEY/PANTRY EQUIP., PROVISION PLANTS, LAUNDRY/IRONING EQU.

# **551 GALLEY MACHINERY**

- 551.001 Ranges
- 551.002 Tilting fryingpans
- 551.005 Hot plates
- 551.010 Convection ovens
- 551.012 Grills
- 551.015 Baking ovens
- 551.016 Microwave ovens
- 551.017 Deep fat fryers
- 551.020 Boilers
- 551.025 Proving ovens
- 551.028 Mixers
- 551.030 Mills
- 551.032 Cutters
- 551.034 Kneading machines
- 551.036 Slicing machines
- 551.038 Potato peeling machines
- 551.040 Rubbish mills
- 551.041 Refuse compression units
- 551.042 Milk machines
- 551.043 Juice dispensers
- 551.044 Coffeemakers
- 551.045 Espresso machines
- 551.046 Refrigerators
- 551.047 Chocolate automats
- 551.048 Ice cubers
- 551.050 Deep freezers
- 551.055 Heating cupboards
- 551.056 Warming baths
- 551.057 Sausage warmers
- 551.060 Dishwashing machines

# 552 GALLEY/PANTRY EQUIPMENT FOR PREPARATION & SERVING

- 552.001 Galley outfitting, complete
- 552.002 Workbenches
- 552.005 Dishwashing benches
- 552.010 Soaking/thawing sinks
- 552.015 Shelves, racks
- 552.020 Cupboards
- 552.025 Serving trolleys
- 552.030 Serving counters
- 552.032 Serving windows
- 552.035 Steam hoods
- 552.040 Cooking/frying equipment
- 552.045 Cutlery
- 552.050 Linen

# 553 CAFETERIA PLANT W/EQUIPMENT

- 553.001 Cafeteria counters, complete
- 553.003 Cafeteria counters
- 553.005 Cooling aggregates
- 553.007 Cooling water pumps
- 553.009 Heating units
- 553.011 Food containers/trays
- 553.042 Milk machines
- 553.043 Juice dispensers/coolers
- 553.044 Coffeemakers
- 553.046 Refrigerators
- 553.048 Ice cubers
- 553.055 Heating cupboards
- **553.372** Toasters

#### 554 FREEZING/REFRIGERATING SYSTEMS FOR PROVISIONS

- 554.001 Provision cooling compressor aggregates
- 554.003 Compressors w/drive unit
- 554.005 Condensers
- 554.007 Liquid receivers
- 554.011 Oil separators
- 554.013 Evaporators
- 554.015 Circulating pumps
- 554.017 Local control panels
- 554.019 Valve boards
- 554.022 Temperature control central
- 554.026 Humidity control central
- 554.030 Poison control central
- 554.035 Cooling batteries, complete
- 554.038 Cooling elements
- 554.040 Air circulating fans
- 554.042 Freezing batteries, complete
- 554.045 Freezing elements
- 554.048 Air circulating fans
- 554.060 Compressor aggregate cooling water pumps

# 555 INSULATION, LINING & BATTENING IN PROV. ROOMS, DOORS & PORTS

- 555.001 Insulated doors, complete
- 555.010 Insulated ports, complete
- 555.020 Provision containers

# 556 WALLS, BINS, SHELVES, RACKS, GRATING & INVENT. IN PROV.ROOMS

- 556.001 Partition bulkheads
- 556.005 Meat brackets
- 556.008 Meat chopping blocks
- 556.010 Meat axes
- 556.012 Meat saws
- 556.015 Work benches
- 556.020 Bins, trays
- 556.025 Ribs
- 556.030 Shelves, racks
- 556.035 Gratings

# 557 INSULATION DRYING SYSTEMS FOR PROVISION ROOMS

- 557.001 Fans w/drive unit
- 557.005 Dehydrators
- 557.010 Air filters

# 558 LAUNDRY, IRONING & DRYING EQUIPMENT

- 558.001 Work clothing washing machines
- 558.002 Private clothing washing machines
- 558.004 Hydro extractors
- 558.007 Drying tumblers
- 558.010 Hot mangles
- 558.013 Cold mangles
- 558.016 Presses
- 558.018 Irons
- 558.021 Ironing machines
- 558.024 Sewing machines
- 558.030 Working tables
- 558.033 Benches
- 558.036 Laundry sinks
- 558.039 Ironing boards
- 558.042 Sewing tables
- 558.045 Drying cabinets
- 558.048 Starch containers
- 558.051 Shelves, racks
- 558.054 Lockers

# 56 TRANSPORT EQUIPMENT FOR CREW, PASSENGERS & PROVISIONS

#### 561 PERSONNEL LIFTS, ESCALATORS

561.001 Personnel elevators, complete

561.004 Elevator cabins

561.007 Elevator machinery

561.010 Elevator doors

561.013 Elevator operating panels

561.025 Escalators, complete

561.028 Escalators

561.031 Escalator machinery

561.034 Escalator operating panels

# **562 FOOD & LINEN LIFTS**

562.001 Freight elevators, complete

562.004 Elevator cabins

562.007 Elevator machinery

562.010 Elevator doors

562.013 Separate elevator shafts

562.016 Elevator operating panels

# **563 PROVISION CRANES & DERRICKS**

563.001 Provision cranes, complete

563.010 Provision derrick posts

563.012 Provision derrick booms

563.015 Provision winches

563.025 Travelling hoists, complete

563.030 Conveyor belts

563.035 Rollerways

563.040 Trolleys

# 564 SHORE GANGWAYS W/DAVITS, LANDING BOOMS

564.001 Accommodation ladders, complete

564.005 Accommodation ladder davits

564.010 Gangways, complete

564.015 Railing steps

564.018 Pilot ladders

564.020 Pilot hoists

564.025 Landing booms w/machinery

# 565 MISCELLANEOUS CONVEYANCE EQUIPMENT

565.001 Rafts

565.005 Bicycles

565.010 Scooters

565.015 Trolleys

# 566 HELICOPTER PLATFORMS W/EQUIPMENT

566.001 Helicopter deck

566.002 Helideck safety equipment

566.003 Helideck loose firefighting equip.

566.004 Foam firefighting equipment

566.005 Marker lights, floodlights

566.006 Helideck plaitwork

566.009 Helideck FO tanks

566.010 Helideck FO pumps

566.015 Turning motor, guides

566.020 Couplings

566.025 Helideck lights

# 57 VENTILATION, AIR-CONDITIONING & HEATING SYSTEMS

# 571 VENTILATION/AIR-CONDITIONING SYSTEMS FOR ACCOMMODATION

- 571.001 Air-condition central units
- 571.003 Air filters
- 571.005 Air preheaters
- 571.007 Cooling/heating batteries
- 571.009 Humidity regulating equipment
- 571.011 Fans
- 571.013 Distribution boxes
- 571.015 Ventilation ducts
- 571.016 Ventilation duct/pipe insulation
- 571.017 Ventilation duct dampers
- 571.020 Air-condition cooling compressors
- 571.022 Cooling water pumps
- 571.025 Ventilation fan centrals
- 571.040 Local ventilation cabinets
- 571.045 Ventilation plant fans
- 571.050 Separate filters
- 571.060 Ozone plants
- 571.061 Ozone generators
- 571.063 Suction fans
- 571.065 Drying filters
- 571.067 Dust filters
- 571.069 Local control panels
- 571.070 Air-condition control, local

#### 572 VENTILATION/AIR-CONDITIONING SYSTEMS FOR PROVISION ROOMS

- 572.001 Air-condition central units
- 572.003 Air filters
- 572.005 Air preheaters
- 572.007 Cooling/heating batteries
- 572.009 Humidity regulating equipment
- 572.011 Fans
- 572.013 Distribution boxes
- 572.015 Ventilation ducts
- 572.016 Ventilation duct/pipe insulation
- 572.017 Ventilation duct dampers
- 572.020 Air-condition cooling compressors
- 572.022 Cooling water pumps
- 572.025 Ventilation fan centrals
- 572.040 Local ventilation cabinets
- 572.050 Separate filters
- 572.060 Ozone plants
- 572.061 Ozone generators
- 572.063 Suction fans
- 572.065 Drying filters
- 572.067 Dust filters
- 572.069 Local control panels

#### 573 VENTILATION/AIR-CONDITIONING SYSTEMS FOR CONTROL ROOMS

- 573.001 Air-condition central units
- 573.003 Air filters
- 573.005 Air preheaters
- 573.007 Cooling/heating batteries
- 573.009 Humidity regulating equipment
- 573.011 Fans
- 573.013 Distribution boxes
- 573.014 Inlet nozzles
- 573.015 Ventilation ducts
- 573.016 Ventilation duct/pipe insulation
- 573.017 Ventilation duct dampers
- 573.020 Air-condition cooling compressors
- 573.022 Cooling water pumps
- 573.025 Ventilation fan centrals
- 573.040 Local ventilation cabinets
- 573.050 Separate filters
- 573.060 Ozone plants
- 573.061 Ozone generators
- 573.063 Suction fans
- 573.065 Drying filters
- 573.067 Dust filters
- 573.069 Local control panels

# 574 VENTILATION/AIR-CONDITIONING SYSTEMS FOR BOILER/ENG. ROOMS

- 574.001 Ventilation centrals
- 574.002 Charge air fans
- 574.004 Evacuation fans
- 574.005 Condensers
- 574.010 Ventilation cabinets
- 574.015 Ventilation ducts
- 574.016 Ventilation duct/pipe insulation
- 574.017 Ventilation duct dampers
- 574.020 Air filters
- 574.030 Cooling/heating batteries

# 575 VENTILATION/AIR-CONDITIONING SYSTEMS FOR PUMP ROOMS

- 575.001 Ventilation centrals
- 575.002 Charge air fans
- 575.004 Evacuation fans
- 575.010 Ventilation cabinets
- 575.015 Ventilation ducts
- 575.016 Ventilation duct/pipe insulation
- 575.017 Ventilation duct dampers
- 575.020 Air filters

# 576 VENTILATION/AIR-COND. SYSTEMS FOR STEERING GEAR COMPARTMENTS

- 576.001 Ventilation centrals
- 576.002 Charge air fans
- 576.010 Ventilation cabinets

576.015 Ventilation ducts 576.016 Ventilation duct/pipe insulation 576.017 Ventilation duct dampers 576.020 Air filters

# **577 CENTRAL HEATING SYSTEMS W/RADIATORS** 577.001 Circulating pumps

577.001 Circulating pump 577.005 Expansion tanks 577.010 Radiators

# 58 SANITARY SYST. W/DISCHARGES, ACCOMMODATION DRAIN SYSTEMS

# **581 SANITARY SUPPLY SYSTEMS**

- 581.001 FW hydrophore aggregates
- 581.002 FW hydrophore pumps
- 581.004 FW hydrophore tanks
- 581.006 FW cleaning filters
- 581.010 FW softening filters
- 581.012 Ion exchange filters
- 581.013 UV filters/sterilizers
- 581.014 Chlorine dosage aggregates
- 581.015 Chlorine tanks
- 581.016 Chlorine pumps
- 581.017 Chlorine filters
- 581.020 Hot water aggregates
- 581.021 Hot water calorifiers
- 581.023 Hot water circulating pumps
- 581.025 Hot water expansion tanks
- 581.030 Separate hot water calorifiers
- 581.040 SW hydrophore aggregates
- 581.041 SW hydrophore pumps
- 581.043 SW hydrophore tanks
- 581.045 SW cleaning filters
- 581.050 FW cooling plants
- 581.051 Cooling compressors
- 581.053 Evaporators
- 581.055 Condensers
- 581.057 Condenser cooling water pumps

# 582 SANITARY DISCHARGE SYSTEMS, ACCOMMODATION DRAINAGE SYSTEMS

- 582.001 Sewage pumps w/drive unit
- 582.003 Sewage tanks
- 582.005 Sewage lift stations
- 582.010 Vacuum plants
- 582.011 Vacuum pumps w/drive unit
- 582.013 Vacuum tanks
- 582.015 Receiver tanks
- 582.017 Discharge pumps w/drive unit
- 582.025 Sewage disinfection plants
- 582.026 Sewage transfer pumps
- 582.027 SW charge pumps

# 583 BATHTUBS, BIDETS, SHOWER CABINETS, W.C., WASHBASINS

- 583.001 Shower cabinets
- 583.002 Standard toilets
- 583,003 Washstands

583.004 Bathtubs

583.005 Bidets

583.010 Vacuum toilets

583.015 Wash basins w/equipment

# 584 DRINKING WATER SYSTEMS & COOLERS

584.001 Loose drinking water tanks

584.002 Drinking water pumps

584.005 Softening filters

584.006 Ion exchange filters

584.010 Chlorine dosage aggregates

584.011 Chlorine tanks

584.012 Chlorine pumps

584.013 Chlorine filters

584.018 Drinking water coolers

584.020 Drinking water cooling plants

584.021 Cooling compressors

584.023 Evaporators

584.025 Condensers

584.027 Condenser cooling water pumps

584.035 Separate icewater coolers

# 59 PASSENGER VESSEL CABINS & PUBLIC ROOMS

# 6 MACHINERY MAIN COMPONENTS

# **60 DIESEL ENGINES FOR PROPULSION**

#### **601 DIESEL ENGINES**

- 601.001 Main diesel engine, compl.
- 601.002 ME cylinder covers w/valves
- 601.003 ME cylinder liners
- 601.004 ME pistons, piston rods
- 601.005 ME connecting rods, crosshead, guides
- 601.006 ME bottom end bearings, crank pins
- 601.007 ME main bearings, journals
- 601.010 ME bedplates, frames
- 601.012 ME bolts, chocks
- 601.014 ME fastening bolts between cylinders
- 601.016 ME tiebolts
- 601.018 ME crankcases
- 601.020 ME crankcase doors w/safety valve
- 601.022 ME camshafts w/drive
- 601.026 ME HP fuel pumps
- 601.028 ME HP fuel pipes w/shielding
- 601.042 ME cylinder lubricating device
- 601.050 ME starting air distributor w/valves
- 601.051 ME scavenging air filters
- 601.052 ME scavenging air pumps
- 601.053 ME turbochargers
- 601.054 ME emergency air blowers
- 601.055 ME scavenging air coolers
- 601.056 ME charge air receiver w/valves
- 601.057 ME charge air spaces w/valves
- 601.058 ME charge air space drain tanks
- 601.059 ME exhaust gas manifolds/pipes w/insulation
- 601.060 ME crankshafts
- 601.061 ME thrust shafts/bearings
- 601.062 ME vibration dampers
- 601.063 ME couplings
- 601.064 ME turning gear
- 601.065 ME reversing/starting gear
- 601.066 ME indicators
- 601.067 ME tachometers
- 601.068 ME tripping/alarm/safety devices
- 601.069 ME regulators
- 601.071 ME local instrument panels
- 601.079 ME special tools

# 61 STEAM MACHINERY FOR PROPULSION

# 611 STEAM TURBINES W/CONDENSERS

- 611.001 Main steam turbines, complete
- 611.003 Steam turbines
- 611.005 Speed governors
- 611.007 Turning gear
- 611.009 Main condensers
- 611.011 Vacuum pumps
- 611.013 Vacuum ejectors

# **612 HIGH PRESSURE TURBINES**

- 612.001 HP turbines, complete
- 612.003 HP turbine casing, foundations, bolts
- 612.005 HP turbine diaphragms
- 612.007 HP turbine rotors w/blades
- 612.009 HP turbine main/thrust bearings
- 612.010 HP turbine shafts
- 612.012 HP turbine shafts/oil seals
- 612.014 HP turbine manoeuvre valves
- 612.016 HP turbine bleed/drain valves
- 612.018 HP turbine governor/servo systems
- 612.020 HP turbine nozzles
- 612.022 HP turbine couplings

# 613 MEDIUM & LOW PRESSURE TURBINES

- 613.001 LP turbines, complete
- 613.003 LP turbine casing, foundations, bolts
- 613.005 LP turbine diaphragms
- 613.007 LP turbine rotors w/blades
- 613.009 LP turbine main/thrust bearings
- 613.010 LP turbine shafts
- 613.012 LP turbine shafts/oil seals
- 613.014 LP turbine manoeuvre valves
- 613.016 LP turbine bleed/drain valves
- 613.018 LP turbine governor/servo systems
- 613.020 LP turbine nozzles
- 613.022 LP turbine couplings
- 613.031 Astern turbines, complete
- 613.033 Astern turbine casing, foundations, bolts
- 613.035 Astern turbine diaphragms
- 613.037 Astern turbine rotors w/blades
- 613.039 Astern turbine main/thrust bearings
- 613.040 Astern turbine shafts
- 613.042 Astern turbine shafts/oil seals
- 613.044 Astern turbine manoeuvre valves
- 613.046 Astern turbine bleed/drain valves
- 613.048 Astern turbine governor/servo systems
- 613.050 Astern turbine nozzles
- 613.052 Astern turbine couplings

# **614 MAIN CONDENSERS**

- 614.001 Main condensers, complete
- 614.003 Main condenser casing, foundations, bolts
- 614.005 Main condenser tubes
- 614.007 Main condenser hotwells
- 614.009 Main condenser ejectors

# 618 STEAM ENGINES W/CONDENSERS

- 618.001 Main reciprocating steam engines, complete
- 618.003 Steam engines
- 618.005 Thrust shafts
- 618.007 Thrust bearings
- 618.009 Turning gear
- 618.011 Speed governors
- 618.013 Main condensers
- 618.015 Vacuum pumps
- 618.017 Vacuum ejectors
- 618.019 Exhaust steam turbines

# 62 OTHER TYPES OF PROPULSION MACHINERY

# **621 GAS TURBINES W/AIR PREHEATERS**

- 621.001 Main gas turbine aggregates, complete
- 621.003 Power turbines
- 621.005 Gas generator compressors
- 621.007 Compressor drive units
- 621.009 Air preheaters
- 621.011 Intermediate coolers
- 621.013 Combustion chambers
- 621.015 Compressor turbines
- 621.017 Starting machinery
- 621.019 FO pumps
- 621.021 LO pumps
- 621.023 LO filters
- 621.025 LO coolers
- 621.027 Hydr. oil pumps

#### 625 EL. GENERATOR/EL. MOTOR PLANTS

- 625.001 Main propulsion el. generators
- 625.003 Propulsion el. motors
- 625.005 Gyropropeller el. motors
- 625.008 Magnetizing rectifiers
- 625.013 Hydr. motors
- 625.015 Accumulator batteries
- 625.019 Air coolers
- 625.045 Separate hydr. oil systems
- 625.047 Hydr. oil pumps w/drive unit
- 625.049 Hydr. oil preheaters

625.051 Hydr. oil coolers 625.053 Hydr. oil filters 625.055 Hydr. oil expansion tanks 625.057 Hydr. oil storage tanks

# 627 FAN PLANTS, WATER-JET PUMP PLANTS W/NOZZLES

- 627.001 Main propulsion fans
- 627.003 Propulsion fan nozzles
- 627.005 Lifting fans
- 627.015 Water-jet pumping plants
- 627.017 Pumping plant nozzles

# 628 SPECIAL PROPULSION AGGREGATES

628.001 Outboard engines

# 63 PROPELLERS, TRANSMISSIONS, FOILS

# 631 FIXED PROPELLER PLANTS INCL. NOZZLES

- 631.001 Propulsion propellers
- 631.003 Propeller shafts
- 631.005 Spare shafts
- 631.007 Intermediate shafts
- 631.009 Thrust shafts
- 631.011 Thrust bearings
- 631.013 Shaft bearings
- 631.015 Stern tubes
- 631.017 Stern tube bushes
- 631.021 Stern tube sealing
- 631.027 Bulkhead shaft seals
- 631.029 Propeller nuts
- 631.031 Propeller fairwater cones
- 631.033 Propeller boss stoprings
- 631.035 Rope guards
- 631.038 Propeller nozzles

# 634 CONTROLLABLE PITCH PROPELLER PLANTS INCL. NOZZLES

- 634.001 Contr. pitch propeller plants
- 634.003 Contr. pitch propellers
- 634.005 Hydr. oil pumps
- 634.007 Hydr. oil filters
- 634.009 Hydr. oil gravity tanks
- 634.011 Hydr. oil drain tanks
- 634.013 Hydr. oil distribution box
- 634.015 Propeller shafts
- 634.017 Shaft couplings
- 634.018 Intermediate shaft couplings
- 634.019 Shaft brakes
- 634.020 Propeller knifes
- 634.025 Intermediate shafts
- 634.027 Thrust shafts
- 634029 Thrust bearings
- 634.031 Shaft bearings
- 634.033 Stern tubes
- 634.035 Stern tube bushes

- 634.037 Stern tube sealing
- 634.039 Bulkhead shaft seals
- 634.041 Propeller nuts
- 634.043 Propeller fairwater cones
- 634.045 Propeller boss stoprings
- 634.047 Rope guards
- 634.050 Propeller nozzles
- 634.070 Stern tube machining apparatus hire

# 635 SPEC. PROPELLER PLANTS INCL. NOZZLES (EXCL. SIDE THRUSTERS)

- 635.001 Voigt Schneider plants
- 635.010 Gyropropellers w/drive unit
- 635.020 Contra rotating propeller plants

# **636 SPARE PROPELLERS**

- 636.001 Spare propellers
- 636.005 Spare propeller blades
- 636.010 Spare propeller nuts
- 636.015 Spare propeller fairwater cones

# 637 MAIN REDUCTION GEARS W/THRUST BEARINGS & COUPLINGS

- 637.001 Main reduction gears, complete
- 637.003 Main reduction gear casings, foundations, bolts
- 637.005 Main gear HP 1st red. pinions, shafts, bearings
- 637.007 Main gear HP 1st red. wheels, shafts, bearings
- 637.009 Main gear HP 2nd red. pinions, shafts, bearings
- 637.011 Main gear HP 2nd red. wheels, shafts, bearings
- 637.013 Main gear LP 1st red. pinions, shafts, bearings
- 637.015 Main gear LP 1st red. wheels, shafts, bearings
- 637.017 Main gear LP 2nd red. pinions, shafts, bearings
- 637.019 Main gear LP 2nd red. wheels, shafts, bearings
- 637.021 Main gear main wheels, shafts, bearings
- 637.023 Main gear thrust shafts/bearings
- 637.025 Main gear couplings
- 637.051 Main gear LO pumps
- 637.053 Main gear LO filters
- 637.055 Main gear LO coolers
- 637.057 Main gear alarm/monitoring panels
- 637.059 Main gear remote control systems

# 638 CENTRAL GEARS (JOINT AUXILIARY GEAR, NOT FOR PROPULSION)

- 638.001 Central gear plants
- 638.003 Central gears
- 638.005 Central gear couplings
- 638.007 Central gear LO pumps
- 638.009 Central gear LO filters

# 639 FOILS, SAILS W/MASTS & RIGGING

- 639.001 Foils
- 639.005 Sail masts
- 639.015 Sails

# 64 BOILERS, STEAM & GAS GENERATORS

#### **641 MAIN BOILERS**

- 641.001 Main boilers, complete
- 641.003 Main boiler casings, foundations, bolts
- 641.005 Reheaters
- 641.007 Economizers
- 641.009 Burners
- 641.011 Gas air preheaters
- 641.013 Steam air preheaters
- 641.015 Boiler fans w/drive unit
- 641.017 Soot blowers
- 641.019 Photocell fans
- 641.025 Boiler dosage aggregates
- 641.027 Dosage pumps
- 641.029 Chemical feed tanks
- 641.035 Exhaust gas analyzers
- 641.037 Orsat apparatus
- 641.039 Salinometers
- 641.041 Testwater coolers
- 641.043 Exhaust gas coolers

# **644 AUXILIARY BOILERS**

- 644.001 Aux. boilers, complete
- 644.003 Aux. boiler casings, foundations, bolts
- 644.005 Reheaters
- 644.007 Economizers
- 644.009 Burners
- 644.011 Gas air preheaters
- 644.013 Steam air preheaters
- 644.015 Boiler fans w drive unit
- 644.017 Soot blowers
- 644.019 Photocell fans
- 644.025 Aux. boiler dosage aggregates
- 644.027 Dosage pumps
- 644.029 Chemical feed tanks
- 644.035 Exhaust gas analyzers
- 644.037 Orsat apparatus
- 644.039 Salinometers
- 644.041 Testwater coolers
- 644.043 Exhaust gas coolers

# 646 EXHAUST GAS BOILERS

- 646.001 Exhaust gas boilers
- 646.005 Combined boilers, complete
- 646.007 Combined boiler casings, foundations, bolts
- 646.009 Economizers
- 646.011 Burners
- 646.013 Gas air preheaters
- 646.015 Steam air preheaters
- 646.017 Boiler fans w/drive unit

646.019 Soot blowers

646.021 Photocell fans

646.025 Combined boiler dosage aggregates

646.027 Dosage pumps

646.029 Chemical feed tanks

646.031 Exhaust gas analyzers

646.033 Orsat apparatus

646.035 Salinometers

646.037 Testwater coolers

646.039 Exhaust gas coolers

# **647 STEAM CONVERTERS**

647.001 Steam to steam generators

647.003 Testwater coolers

# 648 CENTRAL HEATING & THERMAL OIL BOILERS

648.001 Hot water boilers

648.005 Heat exchangers/preheaters

648.010 Low pressure boilers

648.015 Circulating pumps

648.020 Thermal oil boilers

# **649 GAS GENERATORS**

649.001 Gas generators, complete

649.003 Compressors

649.005 Compressor drive units

649.007 Air preheaters

649.009 Combustion chambers

649.011 Compressor turbines

# 65 MOTOR AGGREGATES FOR MAIN ELECTRIC POWER PRODUCTION

# **651 MOTOR AGGREGATES**

651.001 Aux. diesel generator aggregates, complete

651.002 AE cylinder covers w/valves

651.003 AE cylinder liners

651.004 AE pistons, piston rods

651.006 AE bottom end bearings, crank pins

651.007 AE main bearings, journals

651.010 AE bedplates, frames

651.012 AE bolts, chocks

651.014 AE fastening bolts between cylinders

651.016 AE tiebolts

651.018 AE crankcases

651.020 AE crankcase doors w/safety valve

651.022 AE camshafts w/drive, pushrods

651.024 AE FO booster pumps

651.026 AE HP fuel pumps

- 651.028 AE HP fuel pipes w/shielding
- 651.030 AE fuel valve coolers
- 651.032 AE fuel valve cooling oil pumps
- 651.034 AE fuel filters
- 651.036 AE LO pumps
- 651.038 AE rocker arm LO pumps
- 651.040 AE LO priming pumps
- 651.042 AE cylinder lubricating device
- 651.044 AE LO coolers
- 651.046 AE LO filters
- 651.048 AE FW cooling pumps
- 651.050 AE starting air distributors w/valves
- 651.051 AE scavenging air filters
- 651.053 AE turbochargers
- 651.055 AE scavenging air coolers
- 651.059 AE exhaust manifolds/pipes w/insulation
- 651.060 AE crankshafts
- 651.061 AE thrust shafts/bearings
- 651.062 AE flywheels, vibration dampers
- 651.063 AE couplings
- 651.065 AE starting/timing gear
- 651.067 AE tachometers
- 651.068 AE tripping/alarm/safety devices
- 651.069 AE regulators
- 651.071 AE local instrument panels
- 651.075 AE el. generators
- 651.076 AE magnetizing dynamos
- 651.077 AE generator air coolers
- 651.078 AE generator regulators
- 651.079 AE special tools

# 66 OTHER AGGR. & GEN. FOR MAIN & EMERGENCY EL. POWER PRODUCTION

# 661 STEAM TURBO AGGREGATES

- 661.001 Steam turbo generator aggregates, complete
- 661.003 TG turbine casings, foundations, bolts
- 661.005 TG manoeuvre valves
- 661.017 TG LO coolers
- 661.019 TG LO pumps
- 661.021 TG LO sump tanks
- 661.023 TG couplings
- 661.025 TG reduction gear
- 661.027 TG el. generators
- 661.029 TG magnetizing dynamo
- 661.031 TG generator air coolers
- 661.033 TG generator regulators

# 663 GAS TURBO AGGREGATES

- 663.001 Gas turbo generator aggregates, complete
- 663.003 GT turbine casings, foundations, bolts
- 663.007 GT air preheaters
- 663.009 GT combustion chambers
- 663.011 GT compressors
- 663.013 GT starting machinery
- 663.015 GT FO pumps
- 663.017 GT LO coolers
- 663.019 GT LO pumps
- 663.023 GT couplings
- 663.025 GT reduction gears
- 663.027 GT el. generators
- 663.029 GT magnetizing dynamos
- 663.031 GT generator air coolers
- 663.033 GT generator regulators

# 665 HARBOUR & EMERGENCY AGGREGATES W/EQUIPMENT

- 665.001 Emergency generator aggregates, complete
- 665.003 Emergency generator drive units
- 665.005 Emergency el. generators
- 665.007 Emergency generator couplings
- 665.010 Emergency generator FO systems
- 665.011 Emergency generator FO pumps
- 665.013 Emergency generator FO filters
- 665.015 Emergency generator FO preheaters
- 665.017 Emergency generator FO tanks
- 665.020 Emergency generator LO systems
- 665.021 Emergency generator LO pumps
- 665.023 Emergency generator LO coolers
- 665.025 Emergency generator LO filters
- 665.027 Emergency generator LO tanks
- 665.030 Emergency generator cooling water pumps
- 665.033 Emergency generator air supply fans
- 665.036 Emergency generator spark arresters
- 665.039 Emergency generator silencer
- 665.045 Emergency generator starting battery

#### 667 SHAFT GENERATORS

- 667.001 Shaft generators, complete
- 667.003 Shaft generator magnetizing dynamos
- 667.005 Shaft generator air coolers
- 667.007 Shaft generator governors
- 667.009 Shaft generator clutches
- 667.011 Shaft generator gear
- 667.015 Shaft generator shafts
- 667.020 Shaft generator intermediate bearings
- 667.025 Shaft generator LO systems
- 667.030 Shaft generator automatic clutch control
- 667.050 Shaft generator vibration instruments

# 669 GENERATORS W/HYDRAULIC DRIVE

669.001 El. generators

669.003 El. generator hydr. motors

669.005 El. generator magnetizing dynamos

669.007 El. generator air coolers

669.009 El. generator governors

669.011 El. generator clutches

669.013 El. generator gear

669.020 Separate hydr. oil systems

669.021 Hydr. oil pumps w/drive unit

669.023 Hydr. oil preheaters

669.025 Hydr. oil coolers

669.027 Hydr. oil filters

669.029 Hydr. oil expansion tanks

669.031 Hydr. oil storage tanks

# **67 NUCLEAR REACTOR PLANTS**

# 7 SYSTEMS FOR MACHINERY MAIN COMPONENTS

# 70 FUEL SYSTEMS

# 701 FUEL OIL TRANSFER & DRAIN SYSTEMS

701.001 FO transfer systems

701.002 FO distribution boxes

701.004 FO coarse filters

701.006 FO transfer pumps

701.008 FO fine filters

701.020 DO transfer systems

701.021 DO distribution boxes

701.023 DO coarse filters

701.025 DO transfer pumps

701.027 DO fine filters

701.030 Trimming pumps

# 702 FUEL OIL PURIFICATION PLANTS

702.001 FO separator booster pumps

702.003 FO preheaters

702.005 FO separators

702.010 DO separator booster pumps

702.012 DO separator preheaters

702.014 DO separators

702.016 Stand by separators

702.018 Separator water tanks

702.020 DO purification systems

702.030 Sludge pumps

702.032 Sludge ejectors

702.034 Sludge tanks

# 703 FUEL OIL SUPPLY SYSTEMS

703.001 Main engine/boiler FO systems

703.003 FO booster pumps

703.005 FO circulating pumps

703.007 FO preheaters

703.009 FO coarse filters

703.011 FO fine filters

703.020 Main engine DO systems

703.022 DO booster pumps

703.024 DO preheaters

703.026 DO fine filters

703.027 Viscosity regulators/monitors

703.028 Econometers

703.029 Preheater control panels

703.030 GO fuel systems

703.032 GO booster pumps

703.034 GO fine filters

703.040 Aux. engine FO systems

703.041 FO booster pumps

703.043 FO preheaters

703.045 FO coarse filters

703.047 FO fine filters

703.050 Aux. engine DO systems

703.051 DO booster pumps

703.053 DO preheaters

703.055 DO fine filters

703.060 Donkey boiler fuel systems

703.065 Gas turbo aggregate fuel systems

703.070 DO daytanks

703.072 GO daytanks

703.074 Mixing tanks

703.076 FO meters

703.078 DO meters

# 704 HEATING COILS IN FUEL OIL TANKS

704.001 Heating coils

704.005 FO heat exchangers

# 707 GAS FUEL SYSTEM

708 SOLID FUEL SYSTEMS (E.G. COAL)

#### 71 LUBE OIL SYSTEMS

#### 711 LUBE OIL TRANSFER & DRAIN SYSTEMS

- 711.001 LO transfer systems
- 711.003 LO transfer pumps
- 711.005 LO coarse filters
- 711.007 LO fine filters
- 711.015 LO waste tanks
- 711.020 LO waste trays

#### 712 LUBE OIL PURIFICATION PLANTS

- 712.001 LO separator aggregates
- 712.003 LO booster pumps
- 712.005 LO coarse filters
- 712.007 LO fine filters
- 712.009 LO preheaters
- 712.011 LO separators
- 712.013 LO separator booster pumps
- 712.020 LO separator water tanks
- 712.025 LO dosage aggregates
- 712.030 LO washing plants
- 712.035 LO sludge pumps
- 712.037 LO sludge ejectors
- 712.039 LO sludge tanks

#### 713 LUBE OIL SYSTEMS FOR PROPULSION MACHINERY & TRANSMISSIONS

- 713.001 Main LO aggregates
- 713.002 LO suction filters
- 713.004 Main LO pumps
- 713.005 Stand by LO pumps
- 713.006 LO pressure filters
- 713.007 LO booster pumps
- 713.008 SW cooled LO coolers
- 713.010 Condensate cooled LO coolers
- 713.012 LO fine filters
- 713.013 Self cleaning LO fine filters
- 713.014 LO coarse filters
- 713.015 Gear oil pumps
- 713.016 Gear oil coolers
- 713.020 Stern tube LO aggregates
- 713.021 Stern tube LO pumps
- 713.022 Stern tube LO supply pumps
- 713.023 Stern tube LO coolers
- 713.025 Stern tube LO filters
- 713.027 Stern tube LO level tanks
- 713.028 Stern tube LO drain tanks
- 713.030 Turbocharger LO systems
- 713.031 Turbocharger LO pumps
- 713.033 Turbocharger LO coolers
- 713.035 Turbocharger LO fine filters
- 713.037 Turbocharger LO drain tanks

713.038 Turbocharger LO level tanks

713.040 Cylinder LO systems

713.041 Cylinder LO pumps

713.043 Cylinder LO coolers

713.045 Cylinder LO filters

713.047 Cylinder LO service tanks

713.050 Camshaft LO systems

713.051 Camshaft LO pumps

713.055 Camshaft LO filters

713.057 Camshaft LO tanks

713.060 Air preheater LO systems

713.061 Air preheater LO pumps

713.063 Air preheater LO coolers

713.065 Air preheater LO filters

713.067 Air preheater LO tanks

713.070 Hand lubrication tanks

#### 714 LUBE OIL SYSTEMS FOR MOTOR/TURBO AGGREGATES

714.001 Motor aggregate LO systems

714.002 Motor aggregate LO pumps

714.003 Motor aggregate LO coolers

714.005 Motor aggregate LO filters

714.007 Motor aggregate LO tanks

714.010 Gas turbo aggregate LO systems

714.011 Gas turbo aggregate LO pumps

714.013 Gas turbo aggregate LO coolers

714.015 Gas turbo aggregate LO filters

714.017 Gas turbo aggregate LO tanks

714.030 Steam turbo aggregate LO systems

714.031 Steam turbo aggregate LO pumps

714.033 Steam turbo aggregate LO coolers

714.035 Steam turbo aggregate LO filters

714.037 Steam turbo aggregate LO tanks

#### 715 L.O. SYST. FOR GAS GEN., COMMON L.O. SYST. FOR OTHER MACH.

715.001 Gas generator LO systems

715.002 Gas generator LO pumps

715.003 Gas generator LO coolers

715.005 Gas generator LO filters

715.007 Gas generator LO tanks

715.010 Common LO systems

715.011 Common LO pumps

715.013 Common LO coolers

715.015 Common LO filters

715.017 Common LO tanks

#### 72 COOLING SYSTEMS

#### 721 SEA WATER COOLING SYSTEMS

- 721.001 Main SW cooling pumps
- 721.003 Aux. SW cooling pumps
- 721.005 Main condenser SW cooling pumps
- 721.007 Aux. condenser SW cooling pumps
- 721.009 FW generator SW cooling pumps
- 721.011 FW cooler SW cooling pumps
- 721.013 Aux. machinery SW cooling pumps
- 721.014 Bulk cargo compressor SW cooling pumps
- 721.016 Seismic compressor SW cooling pumps
- 721.017 Hydr. aggregate SW cooling pumps
- 721.020 SW filters
- 721.030 SW chlorine dosage aggregates
- 721.031 SW dosage pump
- 721.032 Chlorine tanks
- 721.035 SW sawdust injectors
- 721.036 SW sawdust tanks

#### 722 FRESH WATER & OTHER COOLING SYSTEMS

- 722.001 FW coolers
- 722.003 Main FW cooling pumps
- 722.005 Aux. FW cooling pumps
- 722.007 FW level tanks
- 722.010 Nozzle coolers
- 722.012 Nozzle cooling pumps
- 722.014 Stand by nozzle cooling pumps
- 722.016 Nozzle cooling tanks
- 722.020 Piston cooling medium coolers
- 722.022 Piston cooling medium pumps
- 722.024 Piston cooling medium tanks
- 722.031 Seismic compressor FW cooling pumps

#### 73 COMPRESSED AIR SYSTEMS

#### 731 STARTING AIR SYSTEMS (HIGH PRESSURE)

- 731.001 Starting air compressors
- 731.003 Starting air emergency compressors
- 731.005 Starting air water/oil separators
- 731.006 Starting air water separators
- 731.007 Starting air oil separators
- 731.010 Starting air tanks
- 731.012 Starting air bottles
- 731.014 Starting air coolers
- 731.016 Starting air compressor silencers
- 731.020 Portable starting air compressors

#### 732 GENERAL PURPOSE AIR SYSTEMS FOR ENGINE ROOM (LOW PRESSURE)

732.001 L.T. air compressors, complete

#### 733 GENERAL PURPOSE AIR SYSTEMS FOR DECK (LOW PRESSURE)

- 733.001 Service air compressors
- 733.005 Service air water/oil separators
- 733.006 Service air water separators
- 733.007 Service air oil separators
- 733.010 Service air tanks
- 733.014 Service air coolers
- 733.016 Service air compressor silencers
- 733.020 Portable service air compressors

#### 734 INSTRUMENT AIR SUPPLY SYSTEMS

- 734.001 Instrument air compressors
- 734.005 Instrument air water/oil separators
- 734.006 Instrument air water separators
- 734.007 Instrument air oil separators
- 734.010 Instrument air tanks
- 734.014 Instrument air filters/coolers/dryers
- 734.015 Instrument air filters
- 734.016 Instrument air coolers
- 734.017 Instrument air dryers
- 734.020 Instrument air compressor silencers

#### 74 EXHAUST SYSTEMS & AIR INTAKES

#### 741 FRESH AIR INTAKES (NOT VENTILATION)

- 741.001 Air suction aggregates
- 741.003 Fans w/drive unit
- 741.005 Air filters
- 741.007 Silencers
- 741.009 De-icers
- 741.011 Water separators

#### 743 EXHAUST GAS SYSTEMS FOR PROPULSION MACHINERY

- 743.001 Silencers/spark arresters
- 743.003 Main engine silencers
- 743.005 Main engine spark arresters
- 743.006 Compensators
- 743.007 Suspensions/absorbers
- 743.010 Exhaust pipe insulation

#### 744 EXHAUST GAS SYSTEMS FOR MOTOR AGGREGATES

- 744.001 Silencers/spark arresters
- 744.003 Aux. machinery silencers
- 744.005 Aux. machinery spark arresters
- 744.006 Compensators
- 744.007 Suspensions/absorbers

#### 744.020 Salinometers

### 745 EXHAUST GAS SYSTEMS FOR BOILERS

745.001 Silencers/spark arresters745.003 Boiler silencers745.005 Boiler spark arresters

### 748 ASH/SLAG HANDLING SYSTEMS

#### 75 STEAM, CONDENSATE & FEED WATER SYSTEMS

#### 751 PRIMARY FULL PRESSURE STEAM SYSTEMS

751.001 Water separators

#### 752 PRIMARY REDUCED PRESSURE STEAM SYSTEMS IN ENGINE ROOM

752.001 External desuperheaters

752.005 Water separators

#### 753 PRIMARY REDUCED PRESSURE SYSTEMS OUTSIDE ENGINE ROOM

753.001 Water separators

#### 754 PRIM. DRAIN, BLOW-OFF, EXH. STEAM & DEAERATION SYST. IN E/R

#### 755 PRIMARY CONDENSATE SYSTEMS

755.001 Atmospheric aux. condensers

755.003 Vacuum aux. condensers

755.005 Gland exhaust condensers

755.007 Atmospheric drain tanks

755.009 Aux. condenser air ejectors

755.011 Aux. condenser vacuum pumps

755.013 Gland condenser exhausters

755.017 Main condenser condensate pumps

755.019 Aux. condenser condensate pumps

755.021 Condensate drain pumps

755.023 Circulating pumps

755.025 1. stage LP feed water heaters

755.027 2. stage LP feed water heaters

755.029 Deaerators

755.031 Condensate tanks

755.033 Condensate filter tanks

755.035 Condensate observation tanks

755.040 Condensate de-oilers

755.042 Drain coolers

755.044 Condensate test water coolers

755.046 Condensate suction filters

755.050 Condensate pressure filters

755.052 Condensate ion exchange filters

755.054 Condensate softening filters

755.060 Condensate chemicals dosage aggregates

755.062 Condensate dosage pumps

755.064 Chemicals tanks

#### 756 PRIMARY FEED WATER SYSTEMS

756.001 Main boiler main feed pumps

756.003 Main boiler aux. feed pumps

756.005 Aux. boiler main feed pumps

756.007 Aux. boiler aux. feed pumps

756.009 Main boiler feed water ejectors

756.011 Aux. boiler feed water ejectors

756.015 1. stage HP feed water heaters

756.017 2. stage HP feed water heaters

756.019 Exhaust boiler circulating pumps

756.021 Pressure filters

756.050 Feed water chemicals dosage aggregates

756.052 Feed water dosage pumps

756.054 Chemicals tanks

#### 757 SECONDARY STEAM SYSTEMS IN ENGINE ROOM

757.001 Water separators

#### 758 SECONDARY STEAM SYSTEMS OUTSIDE ENGINE ROOM

758.001 Water separators

758.003 Degassing tanks

#### 759 SECONDARY CONDENSATE & FEED WATER SYSTEMS

759.001 Steam generator main feed pumps

759.003 Steam generator aux. feed pumps

759.005 Steam generator condenser

759.007 Steam generator oil/water separators

759.010 Steam generator feed water tanks

759.012 Steam generator filter tanks

759.014 Steam generator observation tanks

759.020 Steam generator ion exchange filters

759.022 Steam generator softening filters

759.024 Steam generator test water coolers

759.026 Steam generator chemicals dosage aggregates

759.028 Steam generator dosage pumps

759.030 Chemicals tanks

#### 76 DISTILLED & MAKE-UP WATER SYSTEMS

#### 761 DISTILLED & MAKE-UP WATER SYSTEMS

- 761.001 SW cooled FW generator
- 761.003 Condensate cooled FW generator
- 761.005 FW generator vacuum pumps
- 761.007 FW generator SW pumps
- 761.009 FW generator circulating pumps
- 761.015 FW generator distillate pumps
- 761.017 FW generator distillate coolers
- 761.019 FW generator distillate tanks
- 761.025 FW generator brine pumps
- 761.027 FW generator brine ejectors
- 761.030 FW generator softening filters
- 761.033 FW generator chemicals dosage aggregates
- 761.035 FW generator dosage pumps
- 761.037 Chemicals tanks
- 761.040 Make-up pumps
- 761.050 Reverse osmosis units
- 761.051 Reverse osmosis unit SW pumps
- 761.052 Reverse osmosis unit preheaters
- 761.053 Reverse osmosis unit FW pumps

#### 79 AUTOMATION SYSTEMS FOR MACHINERY

#### 791 MANOEUVRE CONSOLES, MAIN CONSOLES

- 791.001 Engine room machinery panels
- 791.002 Engine room manoeuvre desks
- 791.005 Engine room instrument consoles
- 791.007 Engine room automation cabinets
- 791.010 Bridge machinery panels
- 791.011 Bridge manoeuvre desks
- 791.014 Bridge instrument consoles
- 791.016 Bridge automation cabinets

#### 792 COMMON AUTOMATION EQUIPMENT, ENGINE ROOM ALARM SYSTEMS

- 792.001 Alarm/monitoring systems
- 792.002 Relay/logics centrals
- 792.005 Signal annunciators
- 792.007 Acoustic signal devices
- 792.009 Optical signal devices
- 792.011 Alarm recorders/printers
- 792.013 Dataloggers
- 792.015 Monitoring system batteries
- 792.017 Charging rectifiers
- 792.030 Machinery EDP plants
- 792.031 Central processing units
- 792.033 Interface input equipment
- 792.035 Interface output equipment
- 792.037 Peripheral equipment
- 792.039 Secondary storages
- 792.050 TV supervising plants
- 792.051 TV cameras
- 792.053 TV monitors
- 792.055 TV control units
- 792.057 TV lighting equipment

#### 793 AUTOM. EQUIP. FOR PROP. MACH. & TRANSMIS., ENG. TELEGRAPH

- 793.001 Engine telegraph equipment
- 793.002 Bridge engine telegraph units
- 793.003 Engine room engine telegraph units
- 793.005 Acoustic signal devices
- 793.007 Order recorders/printers
- 793.010 ME transmission remote control systems
- 793.012 Automation equipment w/programming units
- 793.015 Manoeuvre controls
- 793.017 Overload regulators
- 793.020 Operation instruments
- 793.021 ME tachometers
- 793.023 Turbocharger tachometers
- 793.025 Revolution counters
- 793.027 Torque meters
- 793.029 Rotating direction indicators
- 793.040 Alarm/safety system components

- 793.041 Pressure centrals/instruments
- 793.043 Temperature centrals/instruments
- 793.045 Vibration centrals/instruments
- 793.047 Axial displacement instruments
- 793.051 Level instruments
- 793.053 Flow instruments
- 793.055 Oil mist detectors
- 793.057 Wear down detectors
- 793.059 Recorders/printers

#### 794 AUTOMATION EQUIPMENT FOR BOILERS

- 794.001 Main boiler burner control
- 794.002 FO temperature/pressure regulators
- 794.004 Combustion air regulators
- 794.005 Sequencing equipment
- 794.007 Alarm/safety system components
- 794.008 Remote reading instrument transmitters
- 794.009 Indicators
- 794.010 Main boiler control
- 794.011 Feed water regulators
- 794.013 Steam temperature regulators
- 794.015 Steam pressure regulators
- 794.017 Alarm/safety system components
- 794.018 Remote reading instrument transmitters
- 794.019 Indicators
- 794.020 Main boiler flue gas control
- 794.021 Gas system regulators
- 794.022 Soot blower automation/instruments
- 794.023 Flue gas indicators/analyzers
- 794.024 Air preheater automation/instruments
- 794.026 Remote reading instrument transmitters
- 794.028 Indicators
- 794.040 Aux. boiler burner control
- 794.041 FO temperature/pressure regulators
- 794.043 Combustion air regulators
- 794.044 Sequencing equipment
- 794.046 Alarm/safety system components
- 794.047 Remote reading instrument transmitters
- 794.048 Indicators
- 794.050 Aux. boiler control
- 794.051 Feed water regulators
- 794.052 Steam temperature regulators
- 794.053 Steam pressure regulators
- 794.054 Alarm/safety system components
- 794.055 Remote reading instrument transmitters
- 794.056 Indicators
- 794.060 Aux. boiler flue gas control
- 794.061 Gas system regulators
- 794.062 Soot blower automation/instruments
- 794.063 Flue gas indicators/analyzer
- 794.064 Air preheater automation/instruments

- 794.065 Alarm/safety system components
- 794.066 Remote reading instrument transmitters
- 794.067 Indicators

#### 795 AUTOMATION EQUIPMENT FOR MOTOR/TURBO AGGREGATES

- 795.001 Aux. diesel engine automation equipment
- 795.002 Start/stop automation
- 795.004 Alarm/safety system components
- 795.006 Remote reading instrument transmitters
- 795.008 Indicators
- 795.020 Aux. steam turbine automation equipment
- 795.022 Start/stop automation
- 795.024 Alarm/safety system components
- 795.026 Remote reading instrument transmitters
- 795.028 Indicators
- 795.040 Aux. gas turbine automation equipment
- 795.042 Start/stop automation
- 795.044 Alarm/safety system components
- 795.046 Remote reading instrument transmitters
- 795.048 Indicators
- 795.060 Generator automation equipment
- 795.062 Synchronizing automation
- 795.064 Load sharing automation
- 795.066 Alarm/safety system components
- 795.068 Remote reading instrument transmitters
- 795.070 Indicators

#### 796 AUTOMATION EQUIPMENT FOR NUCLEAR REACTOR PLANTS

#### 797 AUTOMATION EQUIPMENT FOR OTHER MACHINERY COMPONENTS

- 797.001 FO system instruments
- 797.002 Regulators
- 797.003 Motor control/separator automation
- 797.005 Alarm/safety system components
- 797.006 Remote reading instrument transmitters
- 797.007 Indicators
- 797.010 LO system instruments
- 797.011 Regulators
- 797.012 Motor control/separator automation
- 797.014 Alarm/safety system components
- 797.015 Remote reading instrument transmitters
- 797.016 Indicators
- 797.020 Ballast/bilge system instruments
- 797.022 Motor control/separator automation
- 797.024 Alarm/safety system components
- 797.026 Remote reading instrument transmitters
- 797.028 Indicators
- 797.030 Exhaust gas system instruments
- 797.032 Regulators
- 797.034 Alarm/safety system components
- 797.036 Remote reading instrument transmitters

797.038 Indicators

797.040 Compressed air system instruments

797.041 Regulators

797.042 Motor control automation

797.044 Alarm/safety system components

797.045 Remote reading instrument transmitters

797.046 Indicators

797.050 Cooling water system instruments

797.051 Regulators

797.052 Motor control automation

797.054 Alarm/safety system components

797.055 Remote reading instrument transmitters

797.056 Indicators

797.060 Feed water/condensate system instruments

797.061 Regulators

797.062 Motor control automation

797.064 Alarm/safety system components

797.065 Remote reading instrument transmitters

797.066 Indicators

797.070 Steam system instruments

797.071 Regulators

797.072 Motor control automation

797.074 Alarm/safety system components

797.075 Remote reading instrument transmitters

797.076 Indicators

#### 798 CABLES/LEADS & PIPING FOR AUTOMATION SYSTEMS FOR MACHINERY

# **8 SHIP COMMON SYSTEMS**

# 80 BALLAST & BILGE SYSTEMS, GUTTER PIPES OUTSIDE ACCOMMOD.

#### 801 BALLAST SYSTEMS, SOLID BALLAST

801.001 Clean ballast pumps

801.003 Dirty ballast pumps

801.005 Ballast ejectors

801.007 Bilge/ballast pumps

801.010 Ballast self suction ejectors

801.015 Ballast water filters

801.018 Ballast water separators

801.020 Ballast sludge pumps

801.022 Ballast sludge ejectors

801.024 Ballast sludge tanks

801.045 Separate hydr. oil systems

801.047 Hydr. oil pumps w/drive unit

801.049 Hydr. oil preheaters

801.051 Hydr. oil coolers

801.053 Hydr. oil filters

801.055 Hydr. oil expansion tanks

801.057 Hydr. oil storage tanks

801.060 Solid ballast

#### 802 HEATING COILS IN BALLAST TANKS

802.001 Heating coils

#### **803 BILGE SYSTEMS**

803.001 Bilge pumps

803.005 Bilge ejectors

803.007 Bilge wells

803.009 Changeover wells

803.010 Emergency bilge pumps

803.012 Bilge Self suction ejectors

803.020 Bilge water filters

803.025 Bilge water separators

803.027 Bilge sludge pumps

803.029 Bilge sludge ejectors

803.031 Bilge sludge tanks

#### 804 GUTTER PIPES OUTSIDE ACCOMMODATION

804.001 Gutter pipe drain tanks

804.005 Gutter pipe filters

# 81 FIRE & LIFEBOAT ALARM, FIRE FIGHTING & WASH DOWN SYSTEMS

#### 811 FIRE DETECTION, FIRE & LIFEBOAT ALARM SYSTEMS

- 811.001 Fire/lifeboat alarm plant
- 811.003 Fire alarm centrals
- 811.005 Smoke detectors
- 811.007 Heat detectors
- 811.008 Flame detectors
- 811.009 Alarm push-buttons
- 811.011 Alarm bells
- 811.013 Alarm lamps
- 811.015 Batteries
- 811.017 Charging rectifiers
- 811.020 Magnetic door holders

#### 812 EMERGENCY SHUTDOWN SYSTEM

#### 813 FIRE/WASH DOWN SYST., EMERGENCY FIRE PUMPS, SPRINKLER SYST.

- 813.001 Fire pumps
- 813.003 Fire/wash down pumps
- 813.005 Swimmingpool pumps
- 813.007 General service pumps
- 813.009 Pressure tanks
- 813.011 Fire hoses
- 813.013 Fire hose lockers
- 813.015 Hose drums
- 813.020 Sprinkler nozzles
- 813.030 Emergency fire pump aggregates
- 813.031 Emergency fire pumps w/drive unit
- 813.033 Emergency fire pump silencers/spark arresters
- 813.035 Emergency fire pump fuel pumps
- 813.037 Emergency fire pump fuel tanks
- 813.039 Emergency fire pump fuel filters
- 813.041 Emergency fire pump LO pumps
- 813.043 Emergency fire pump LO filters
- 813.045 Emergency fire pump cooling water pumps
- 813.047 Emergency fire pump starting batteries
- 813.051 Charging rectifiers
- 813.053 Hydr. oil pumps w/drive unit
- 813.055 Hydr. oil preheaters
- 813.057 Hydr. oil filters
- 813.059 Hydr. oil expansion tanks
- 813.061 Hydr. oil storage tanks
- 813.070 ABC wash down systems

#### 814 FIRE FIGHTING SYSTEMS FOR EXTERNAL FIRES

- 814.001 Fire pumps w/drive unit
- 814.005 Water cannons
- 814.010 Platform

#### 815 FIRE FIGHTING SYSTEMS W/GAS (CO2, HALON, ETC)

815.001 HP CO2 plants

815.003 Flask batteries

815.005 CO2 release lockers

815.007 CO2 alarms

815.009 Suction fans

815.011 Smoke detectors

815.020 LP CO2 plants

815.022 CO2 tanks

815.024 CO2 tank cooling plants

815.026 CO2 release lockers

815.028 CO2 alarms

815.030 Suction fans

815.032 Smoke detectors

815.040 Halon plants

815.042 Halon containers

815.044 Propellant gas flasks

815.046 Halon release lockers

815.048 Suction fans

815.050 Smoke detectors

#### 816 FIRE FIGHTING SYSTEMS W/FOAM

816.001 Light foam plants

816.003 Foam tanks

816.005 Water tanks

816.007 Foam aggregate

816.009 Foam fans

816.011 Light foam release lockers

816.020 Heavy foam plants

816.022 Foam liquid tanks

816.024 Foam liquid pumps

816.026 Liquid mixers

816.028 Foam cannons

816.030 Heavy foam release lockers

#### 817 FIRE FIGHTING SYSTEMS W/STEAM

#### 818 FIRE FIGHTING SYSTEMS W/POWDER

818.001 Powder plants

818.003 Powder containers

818.005 Propellant gas tanks

818.007 Hose stands

818.009 Powder release lockers

#### 819 FIRE FIGHTING SYSTEMS W/OTHER AGENTS

#### 82 AIR & SOUNDING SYSTEMS FROM TANKS TO DECK

#### 821 AIR & SOUNDING SYSTEMS FROM TANKS TO DECK

#### 83 SPECIAL COMMON HYDRAULIC OIL SYSTEMS

#### 831 SPECIAL COMMON HYDRAULIC OIL SYSTEMS

831.001 Common hydr. oil systems

831.003 Hydr. oil pumps w/drive unit

831.007 Hydr. oil preheaters

831.011 Hydr. oil coolers

831.015 Hydr. oil filters

831.019 Hydr. oil expansion tanks

831.021 Hydr. oil storage tanks

831.025 Hydr. oil separator plants

# 84 CENTRAL HEAT TRANSFER SYSTEMS W/CHEMICAL FLUIDS/OIL

841 HEATING OIL TREATMENT SYSTEMS

842 HEATING OIL DISTRIBUTION SYSTEMS FOR ENGINE ROOM

843 HEATING OIL DISTRIBUTION SYSTEMS OUTSIDE ENGINE ROOM

# 85 COMMON ELECTRIC & ELECTRONIC SYSTEMS

# **855 COMMON COMPUTER SYSTEMS**

# **86 ELECTRIC POWER SUPPLY**

#### **861 (GENERATORS/ALTERNATORS)**

861.001 AC generators 861.010 DC generators

#### **865 TRANSFORMERS**

865.001 Transformers

### 866 BATTERIES & CHARGERS

866.001 Batteries 866.030 Spare batteries 866.050 Battery boxes 866.060 Battery chargers

#### **867 RECTIFIERS & CONVERTERS**

867.001 Rectifiers 867.010 Charging rectifiers 867.020 Alternating rectifiers 867.040 Converters 867.050 Static converters 867.060 Voltage stabilizers

#### 868 ELECTRIC SHORE SUPPLY SYSTEMS

868.001 Shore connections

# 87 COMMON ELECTRIC DISTRIBUTION SYSTEMS

#### **871 MAIN SWITCHBOARDS**

871.001 Main switchboards

871.005 DC switchboards

871.010 High voltage switchboards

#### **872 EMERGENCY SWITCHBOARDS**

872.001 Aux. switchboards

872.005 DC switchboards

872.010 High voltage switchboards

872.020 Distribution switchboards

872.030 Emergency switchboards

872.035 Clean power switchboards

#### **873 GROUP STARTERS**

873.001 Starter centrals

873.005 Motor starters

873.020 Motor protection relays

#### **874 LOCAL STARTERS**

874.005 Motor starters

874.020 Motor protection relays

#### 875 DISTRIBUTION PANELS & BOARDS

875.001 Fuse lockers

875.010 Distribution panels

#### 88 ELECTRIC CABLE INSTALLATION

#### 881 CABLE TRAYS & INSTALLATION IN ENGINE & BOILER ROOMS

- 881.001 Cable trays/fittings
- 881.005 RM rails
- 881.020 Two phase earthed cables
- 881.030 Two phase unearthed cables
- 881.040 Three phase cables

#### 882 CABLE TRAYS W/INSTALLATION IN ACCOMMODATION

- 882.001 Cable trays/fittings
- 882.005 RM rails
- 882.030 Two phase unearthed cables
- 882.040 Three phase cables

#### 883 CABLE TRAYS & INSTALLATION ON DECK & IN CARGO HOLDS

- 883.001 Cable trays/fittings
- 883.005 RM rails
- 883.020 Two phase earthed cables
- 883.030 Two phase unearthed cables
- 883.040 Three phase cables

#### 886 SPECIAL CABLES

- 886.001 Coaxial cables
- 886.005 Wide band cables
- 886.010 Interference protected cables
- 886.015 Fibre optic cables
- 886.020 De-gaussing cables

# 89 ELECTRIC CONSUMER SYSTEMS

#### 891 ELECTRIC LIGHTING SYSTEMS FOR ENGINE & BOILER ROOM

891.001 Light fittings 891.020 Heating cables

891.040 Panel heaters/fans

#### 892 ELECTRIC LIGHTING SYSTEMS FOR ACCOMMODATION

892.001 Light fittings 892.020 Heating cables

892.040 Panel heaters/fans

#### 893 ELECTRIC LIGHTING SYSTEMS FOR DECK & CARGO HOLDS

893.001 General lighting

893.020 Flood lighting

893.030 Spot lighting

897 (ELECTRIC FANS)

**898 (ELECTRIC MOTORS)**