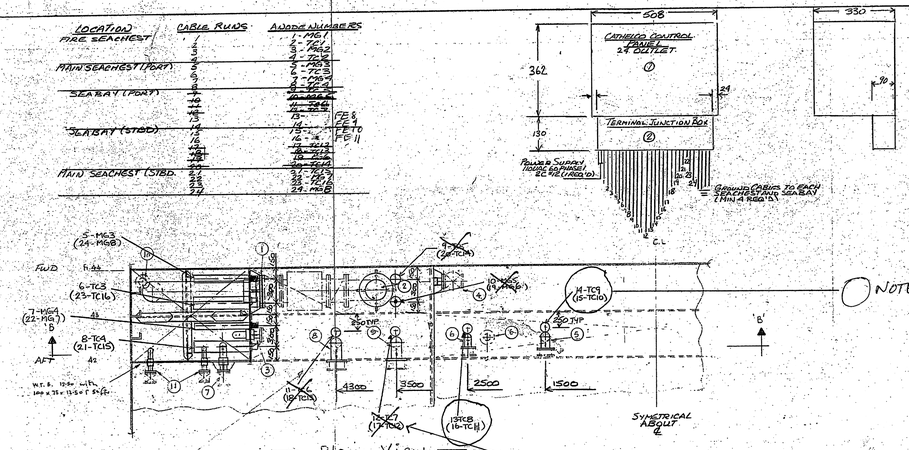
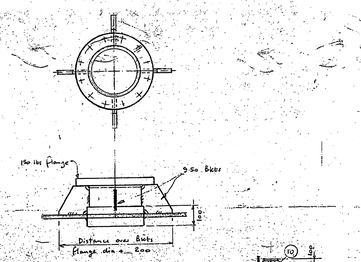
LOCATION	CABLE RUNS	ANODE NUMBERS
FIRE SEACHEST	1	1 - MG 1
	2	2 - TC 1
	3	3 - TC 2
	4	4 - MG 2
MAIN SEACHEST (PORT)	5	5 - MG 3
	6	6 - TC 3
	7	7 - MG 4
	8	8 - TC 4
SEA BAY (PORT)	9	9 - MG 5
	10	10 - MG 6
	11	11 - TC 5
	12	12 - TC 6
SEABAY (STBD)	13	13 - FE 8
	14	14 - FE 9
	15	15 - FE 10
	16	16 - FE 11
MAIN SEACHEST (STBD)	17	17 - MG 7
	18	18 - MG 8
	19	19 - TC 7
	20	20 - TC 8
	21	21 - MG 9
	22	22 - MG 10
	23	23 - TC 9
	24	24 - TC 10

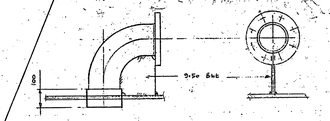


NOTE! THESE ANODES CHANGED FROM ALUMINUM TO IRON IN 2005. NOW DESIGNATED FE8, FE9, FE10 & FE11

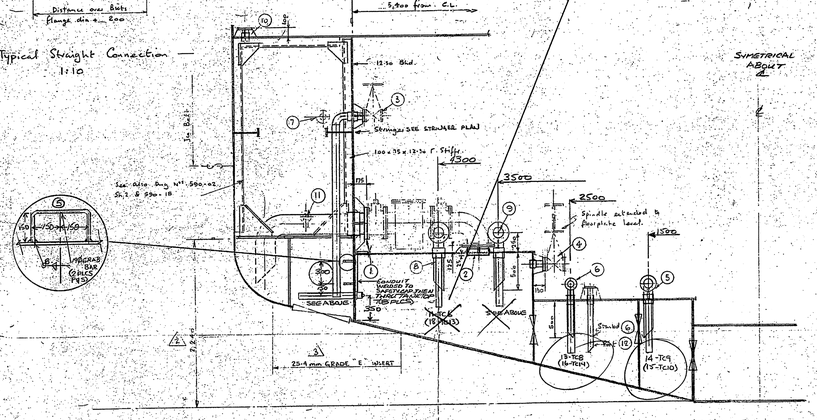
X NOTE! THESE 8 ANODES PERMANENTLY REMOVED IN 2005 AND SAFETY CAPS REMOVED AND BLANKED OFF.



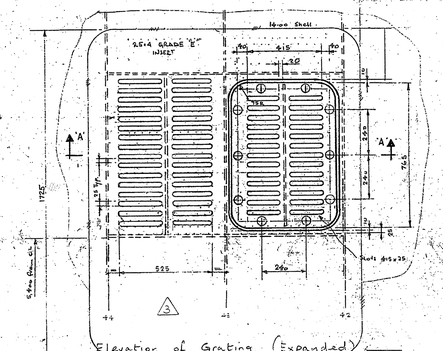
Typical Straight Connection
1:10



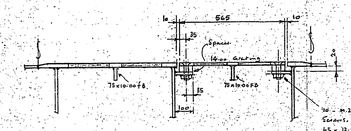
90° Angle Connection
1:10.



Section 'B'-'B'
PORT SHOWN
STBD-OPPOSITE (NUMBERS IN BRACKETS).



Elevation of Grating (Expanded)
Scale 1:10



'A' - 'A'

30 - M.20 C.S. Stainless Steel Machine Screws, Studs welded to Bars of Tray.
S.S. & Tap C.S. Lugs.

Notes:-

1. Sea Chests to be located port and starboard with Sea Bay between bilge keel and Sea Pipe. Water above.
2. Cable Runs: See Sheet Blocks 1 - 0.1850 (FE 8,9,10,11) = 0.1151 (FE 8,9,10,11) = 0.2307 m²
   Area of Pipe Section = 150 dia x 11.70 wall pipe = 0.0402 m²
   Ratio Pipe/Cable Grating/Pipe Area = 0.2307 / 0.0402 = 5.738:1
3. Two Inspection Plates are to be installed in Sea Bay - Manholes are not to be fitted in Sea Chests.
4. Anodes to be welded on Sea Chests and Sea Pipes.
5. Sea Chest and Sea Pipe Seacocks are to be positioned in conjunction with individual pipeline system layouts.

List of Connections

No.	Description	Pipe Size	No. Reqd.	Valve
1	Sea Bay Suction from Sea Chest	150 dia x 12.70 Wall	1 P. 1 S.	6" Fig 66
2	Sea Bay Discharge into Sea Box	150 dia x 3.70 Wall	1 P. 1 S.	6" Fig
3	M.E. Cooling Discharge into Sea Chest	80 dia x 7.620 Wall	1 P. 1 S.	Grove Goodall
4	M.E. Cooling Discharge into Sea Box	80 dia x 7.620 Wall	1 P. 1 S.	" "
5	M.E. Cooling Suction from Sea Box	125 dia x 5.525 Wall	1 P. 1 S.	5" Fig
6	I.G. Cooling Suction from Sea Box		1 P. 1 S.	" "
7	G.E. Cooling Discharge into Sea Chest		1 P. 1 S.	" "
8	General Service Pump Suction from Sea Box	150 dia x 10.973 Wall	1 P.	"
9	Fire & Bilge Pump Suction from Sea Box	150 dia x 10.973 Wall	1 P.	"
10	Sea Chest Vent	50 dia x 5.537 Wall	1 P. 1 S.	2" Hose
11	Compressed Air into Sea Chest	20 dia x 3.80 Wall	1 P. 1 S.	Globe Stop
12	Air Compressor Cooling Suction		1 P.	3" Fig

ITEM NO.	QTY	MATERIAL AND DESCRIPTION	LENGTH	SUPPLY
1	1	24 OUTLET-AUTOMATIC CONTROL PANEL		EMCS
2	1	TERMINAL JUNCTION BOX		"
3		ANODES:-		
		2ND EMERGENCY BAR SEACHEST		
	2	M.G.-30-75		
	2	T.C.-30-35		
		SEA BAY		
	~~2~~	~~M.G. 30-75~~		
	10	T.C.-30-35		
		MAIN SEACHESTS (PORT & STBD)		
	~~4~~ 1	~~M.G. 30-75~~		
	~~4~~ 1	~~T.C. 30-35~~		
4	~~16~~ 10	ANODE SAFETY CAPS		
5	6	19mm DIA BENT BARS	600.	SHIPYARD
6	16	WATERTIGHT GLANDS c/w PACKS		
7	8	RUNS OF CONDUIT:-		
8	24	TERMINALS		
9	24	8-32 SCREW K 6mm c/w NUT		
10	1	2C #12 AC LINE		
11	24	2C #12 ANODE CABLE		
12	4	2C #12 GROUND CABLE		
13		CABLEWAYS / CHANNEL, ETC.		
14	1	CONTROL PANEL MOUNT FRAME		

KEY

◉ - MARINE GROWTH ANODES (M.G.)

○ - TRAP CORROSION ANODES (T.C.) OR FE, SEE NOTES

NOTES - CATHELCO SYSTEM:-

1. WIDEST SURFACE OF THE ANODE TO BE POSITIONED IN THE DIRECTION OF FLOW.
2. ALL CABLES TO BE CROSS-LINKED POLYETHELENE INSULATED WITH TAPE/VINOUS SHEATH - MARINE TYPE, UNLESS OTHERWISE INDICATED.
3. PAINTING ALWAYS TO BE FOLLOWED WHEREVER POSSIBLE.
4. ALL SEACHESTS/SEABAY TO HAVE MINIMUM 50mm AIR ESCAPE DRUMS.
5. FOR DETAIL OF CABLE ENTRY AND TYPICAL ANODE INSTALLATION SEE E.M.C.S DRWG.# EMCS-05-04-02.

REVISED JUNE 2007

Rev.	Description	Date

ELECTROLYTIC MARINE CORROSION SERVICES LTD
1630 STORIE ST. VICTORIA, B.C. CANADA. V8W1N8

SHIPYARD: RIVTOW INDUSTRIES LTD.
WEST COAST MARINE SHIPYARD
3055a EAST HEBERT AVE. VANCOUVER, B.C. CDN

Owner: GOVERNMENT OF CANADA, DEPT. OF FISHERIES AND OCEANS, SHIP BRANCH

Vessel: 73 METRE FISHERIES PATROL VESSEL

Title: CATHELCO SYSTEM - SEABOXES AND SEABAY - ELECTROLYTIC PROTECTION

Approval	Date	Approval	Date

Scale: 1:25 AND AS MARKED

Drawn: RD

Des. MAINT/84

Drawing No. EMCS-05-04-01

CHK'D BY

APP'D BY

Rev.