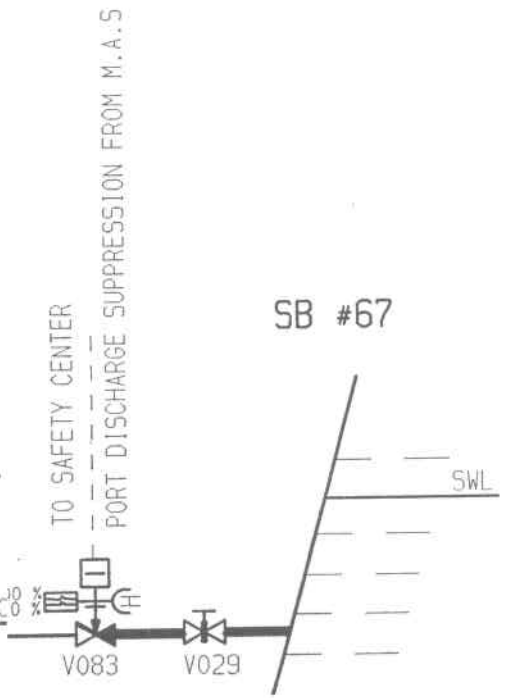


Muutos	Osa no.	Kentti	Muutos ja/tai huomautus	Päiväys	Muutt.	Hyv. tks.
B			ALTERATIONS INDICATED BY CLOUDS AND INDEX ARROWS	11.11.98	JRP	-
C			UPDATED ACCORDING TO OWNERS COMMENTS 262CMTAPP1 EXCLUDING POINT 3 AND ATTACHED 1	17.02.99	JRP	
			FLUSHING PIPES OF COLL. TANKS HAVE CHANGED			
D			BACKFLUSH FROM SWIMMING POOL ADDED	20.05.99	JNö	
			VALVE 5214V141 ADDED			
			VALVES 5214V074 AND 5214V132 MOVED			
E			UPDATED FROM 498 TO 499	20.5.99	JNö	
F			5212.004 BY PASS ADDED, AUTO SUPPRESSION CHANGED	6.8.99	JNö	
G			GREASE SUCTION SYSTEM ADDED	2.12.99	JNö	T00/JWP
H			AS BUILT ABOARD THE SHIP	28.11.00	JNö	JNö JWP

GREY WATER PIPE  
FROM ACCOM. TO COLLECTING TANKS

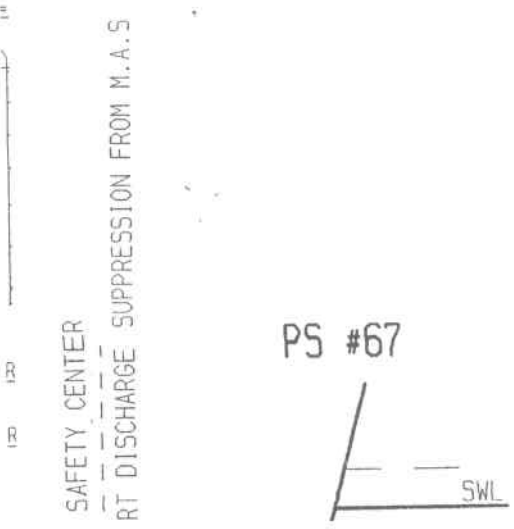


HOT ZINKED STEEL PIPES IN MACH. SPACES		MAT. NO
DN 150	168.3x5.0 ST 37.0 DIN 2448 183.101	183 564
DN 125	139.7x4.5 ST 37.0 DIN 2448 183.101	183 392
DN 100	114.3x4.5 ST 37.0 DIN 2448 183.101	183 403
DN 80	88.9x4.5 ST 37.0 DIN 2448 183.101	183 331
DN 65	76.1x4.5 ST 37.0 DIN 2448 183.101	183 358
DN 50	60.3x4.5 ST 37.0 DIN 2448 183.101	183 389
DN 40	48.3x4.5 ST 37.0 DIN 2448 183.101	183 387
DN 32	42.4x3.6 ST 37.0 DIN 2448 183.101	183 12
DN 25	33.7x3.2 ST 37.0 DIN 2448 183.101	183906
DN 20	26.9x3.2 ST 37.0 DIN 2448 183.101	183382

HOT ZINKED STEEL PIPES BETWEEN HULL PLATING AND SIDE VALVE		MAT. NR
DN 150	168.3x10.0 ST 37.0 DIN 2448 183.101	183 54
DN 100	114.3x8.8 ST 37.0 DIN 2448 183.101	183 2500

BLUCHER PIPES IN ACCOMMODATION	
BL-DN50	50x1.0
BL-DN75	75x1.0
BL-DN110	110x1.0

LIST OF SYMBOLS	
	BUTTERFLY VALVE
	VALVE
	GLOBE VALVE/STOP VALVE
	GATE VALVE



M F Z

DECK B  
 ( 7.10 M / 7.80 M / 7.10 M / 7.80 M )

Crew	CABIN TYPE	PCS	TOTAL
	F1	1	
	F2	52	
	FF1	13	
	K2/1	198	
	K2/2	36	300

PIPE JOINTS  
 STAINLESS STEEL PIPES WITH PUSH-FIT JOINT  
 HOT DIP GALVANIZED STEEL PIPES : SLIP ON SLEEVE OR  
 FLANGED (L-TYPE) PN10, Fa37  
 YARD STANDARD 616.15, 616.151 OR 617.101, 617.154  
 NOTE:  
 MECHANICAL JOINTS ARE NOT ALLOWED IN  
 ELECTRICAL AND FOOD HANDLING AREAS

GATE VALVES:  
 -FLANGED  
 BODY : CAST IRON, RUBBER LINED  
 WEDGE : CAST IRON  
 SPINDLE: BRASS  
 SEAT: BRASS  
 NON RETURN VALVES  
 -FLANGED  
 BODY :BRASS  
 INSIDE PARTS: BRASS  
 GLOBE VALVES  
 INSIDE PARTS: ST. STEEL  
 BALL VALVES:  
 - FLANGED  
 BODY: CAST STEEL  
 BALL AND SPINDLE: ST. STEEL  
 PACKING: PTFE  
 PACKING (SPINDLE): GRAPHITE  
 GATE VALVES FOR O. B.  
 DISCH. AND COMPARTMENTS:  
 -FLANGED  
 BODY : RG10  
 WEDGE : RG10  
 SPINDLE: BRASS  
 SEAT: RG10

BLUCHER PIPES IN ACCOMMODATION	MAT.NO
BL-DN50 50x1.0	2000 3000 6257961 6257964
BL-DN75 75x1.0	2000 3000 6257962 6257965
BL-DN110 110x1.0	2000 3000 6257963 6257966

HOT DIP GALVANIZED STEEL PIPES IN MACH., EL. AND FOOD HANDLING AREAS	MAT.NO
DN 200 219.1x6.3 ST 37.0 DIN 2448 183.101	183 154
DN 150 168.3x5.0 ST 37.0 DIN 2448 183.101	183 109
DN 125 139.7x4.5 ST 37.0 DIN 2448 183.101	183 392
DN 100 114.3x4.5 ST 37.0 DIN 2448 183.101	183 403
DN 80 88.9x4.5 ST 37.0 DIN 2448 183.101	183 331
DN 65 76.1x4.5 ST 37.0 DIN 2448 183.101	183 358
DN 50 60.3x4.5 ST 37.0 DIN 2448 183.101	183 389
DN 40 48.3x4.5 ST 37.0 DIN 2448 183.101	183 387
DN 32 42.4x3.6 ST 37.0 DIN 2448 183.101	183 12
DN 25 33.7x3.2 ST 37.0 DIN 2448 183.101	183 906
DN 20 26.9x3.2 ST 37.0 DIN 2448 183.101	183 382

HOT DIP GALVANIZED STEEL PIPES BETWEEN HULL PLATING AND SIDE VALVE	MAT.NO
DN 150 168.3x10.0 ST 37.0 DIN 2448 183.101	183 54
DN 100 114.3x8.8 ST 37.0 DIN 2448 183.101	183 2500

380

BASED ON GA INDEX H

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Stain. Desigm. JnÄ/Kone-öljn/J.Laitinen  
 Pvm 24.06.98

Goatno DnÄ. 250  
 Kva. 2656  
 Pvm 2656  
 Dns

Korjattu: Updated:  
 Piirretty: Drawn:  
 Hyv. Appr. A1  
 Käytetty pöytä. App. to draw

**Kvaerner Masa-Yards**  
 Helsinki New Shipyard

GREY WATER PIPING DIAGRAM

*Revised 20*

DECK B, A AND 1

1:200

D.499.5210.251.002

1 2