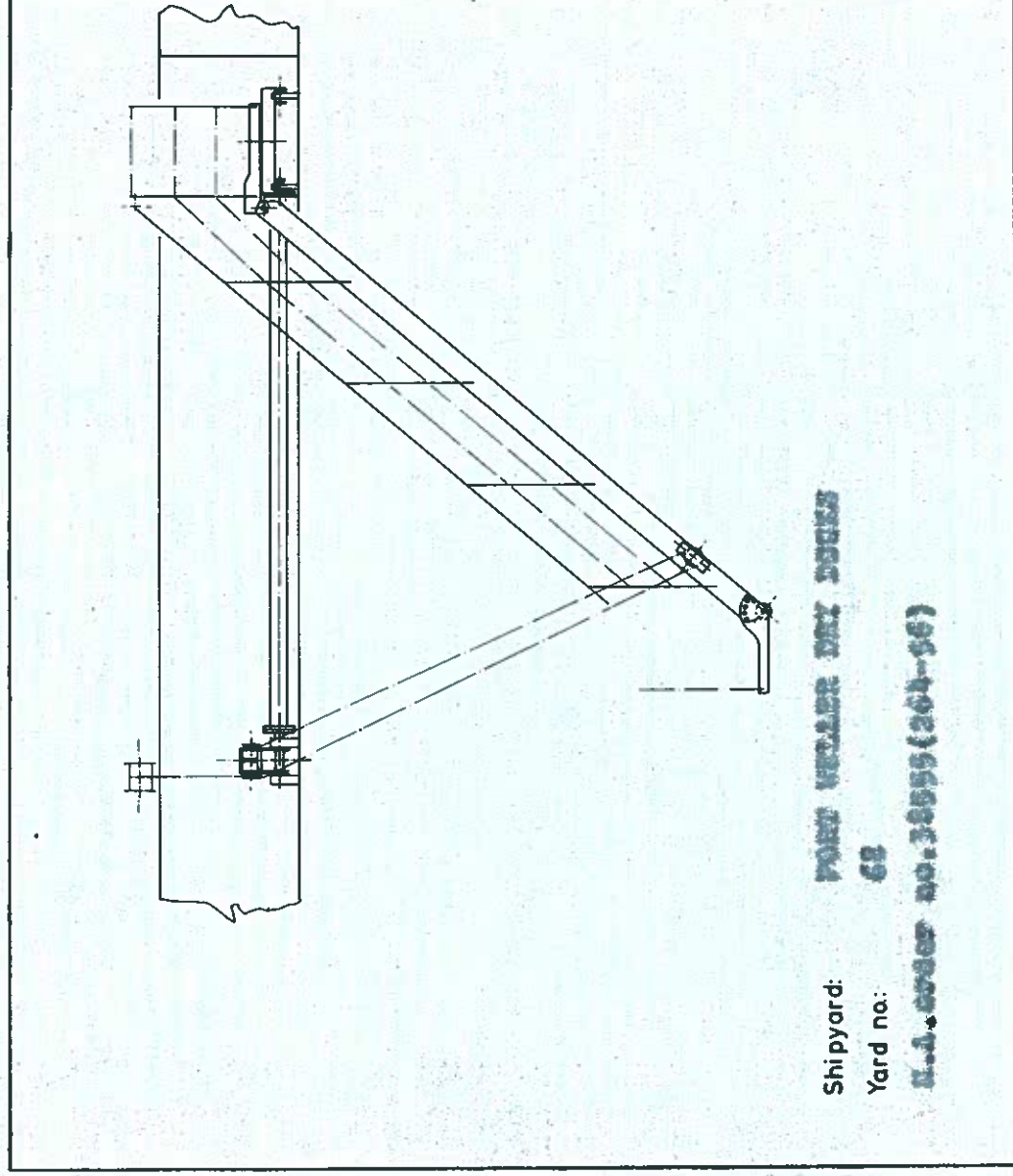


DAVIT AND ACCOMMODATION LADDER SYSTEM

INFORMATION
&
SPARE PARTS



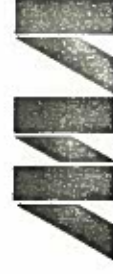
MARINE ALUMINIUM

AAENSEN & CO. AS

N-5501 HAUGESUND NORWAY - TEL 47-47-30510 - TELEX 42726

MARINE ALUMINIUM AANENSEN & CO. AS

TELEPHONE: 47 47 30 511 — CABLE: "MARINAL" — TELEX: 42726 ALU — BANKERS: BERGEN BANK, HAUGESUND



ACCOMMODATION LADDER ARRANGEMENT

DATA AND GENERAL INFORMATION

Shipyard: PORT WELER DRY DOCKS
Hull no: 68
Your ref: P.O.no. B.34118
Our ref: Order no. 38555(264-56)

The delivery consists of the following equipment:-

2 pcs. MARINAL accommodation ladders, made of seawater resistant aluminium alloy.

Type: 3
Length: 7950 mm (26 ft.)
Width: 700 mm (28")
Weight: 300 kg.
Drawing no. F3-5132

2 pcs. Upper platforms, turnable 180°, made of steel, with 3/4" rubber matting.
Weight: 100 kg.

2 pcs. Davit systems, made of steel.
Weight: 400 kg.
Drawing nos: DA-5133 & DA-5134

2 pcs. El-driven accommodation ladder winches.
Type: ACTA 10 KNS
Weight: 115 kg.
Drawing no: 43155.A. +43243.

1 set Spare parts for winch.
1 pc. Spare el-motor.

Type: FF.90
1 set Spare parts for el-motor.
1 pc. Control box.
2 pcs. End switches.

1 pc. MARINAL gangway, made of seawater resistant aluminium alloy.
Type: L2
Length: 25 ft.
Width: 28 ins.
Weight: 200 kg.
Drawing no. L1-L2-3173

1 pc. MARINAL bulwark ladder, made of seawater resistant aluminium alloy.
Bulwark height: 3' 6"
Weight: 15 kg.
Drawing no. RT-4600

3 pcs. Safety net, made of polypropylene rope, 18' long x 8' wide.

---oOo---

Haugesund, 12/10-1981.
LMK/jk

Prøvesertifikat nr. 22981/1100

Test Certificate No.

Form No. 5
Form. No. 5

Sertifikat for prøve og undersøkelse av ståltau (wire), før det tas i bruk.

Certificate of test and Examination of Wire Rope before being taken into Use.

Fastsatt av Sjøfartsdirektoratet, 19.....
Prescribed by the Maritime Directorate

Navn og adresse til fabrikant eller forhandler av tauet.
Name and address of the maker or supplier of the rope.

Stål & Tau, Tønsberg

Omkretsen av tauet i eng. tommer eller diameter i mm.*
Circumference of rope in English inches, or diameter in mm.*

10 m/m

Antall kordeller.
Number of strands.

6

Antall tråder i hver kordell.
Number of wires per strand.

36

Slåing (trosse, kabel, høyre, venstre).
(hawser, cable, right, left).

Høyre

Materialsort i trådene.
Quality of wire.

Sterkgalv. 180 kp/mm²

Datum da tauprøven ble utført.
Date of test of sample of rope.

5.940 kg

Bruddbelastningen av tauprøven.
Load at which sample broke.

Tillatt arbeidsbelastning med angivelse av enhver gitt betingelse for denne, som f.eks. en minste skivediameter, en direkte belastning etc.

20% av bruddlast

Safe working load subject to any qualifying conditions, such as minimum pulley diameter, direct tensile load etc.

Navn og adresse til den institusjon, det selskap eller firma som utførte prøven.

Prøveavdelingen

Name and address of public service, association, company or firm making the test.

Stillingen i ovennevnte institusjon, selskap eller firma til den som utførte prøven.

Position of signatory in public service, association, company or firm named above of person making the test.

Jeg attesterer herved at de ovennevnte oppgaver er riktige og at undersøkelsen og prøven ble foretatt av en sakkynndig person.

I certify that the above particulars are correct, and that the examination and test were carried out by a competent person.

..... den 19.....
the



Elkem-Spigerverket als

Stål og Tau

Underskrift
Signature

MARINE ALUMINIUM
Adnansen & Co. A/S
N-5501 HAUGESUND

* Stryk det som ikke passer.

* Delete whichever is not required.

Anm.: Se vailedning på haksiden



SERTIFIKAT NR. _____, 19 _____

for prøving og undersøkelse av kjettinger, ringer, kroker, sjakler, svivler,
blokker og andre redskaper ¹⁾

Kjenningnr. eller merke (1)	Angivelse av det som er prøvet med oppgave over materiale og dimensjoner (For kjetting bør lengden av 10 løkker oppgis.) (2)	Antall av det som er prøvet (3)	Datum da prøven ble utført (4)	Anvendt prøvevekt (last) (5)	Tillatt arbeids- belastning (6)
11 183	11 m/m Fram Alloy Blue kortl.kjetting			Tonn	Tonn
13 2277	13 m/m Fram Alloy Blue kortl.kjetting			9.9	3.3
8 33	Fram Alloy Blue Handy-link H2			14.1	4.7
8 44	Fram Alloy Blue Handy-link H3			8.25	3.3
				11.75	4.7

(7) Ble redskapene undersøkt av en sakkyndig person etter prøve-
belastningen og funnet å ha utholdt belastningen uten deformasjon
og å være fri for brudd, brist eller andre feil ?
Ja. _____

(8) Navn og adresse til fabrikanten eller forhandleren.
A/S Kjettingfabrikken, Oslo

(9) Navn og adresse på den institusjon, det firma eller den person som
utførte prøven og undersøkelsen.
som over _____

(10) Den ansvarshavendes stilling i ovennevnte institusjon eller firma
som utførte prøven og undersøkelsen, eller, dersom sertifikatet gis
av en person som utførte prøven og undersøkelsen på eget ansvar,
hans kvalifikasjoner for dette arbeid.

Jeg attesterer herved på vegne av dem som er nevnt under ovenstående nr. 8*/9*) at de ovennevnte oppgaver er riktige.
*) Stryk det som ikke passer.

Haugesund, den _____, 19 _____

Underskrift

MARINÉ ALUMINIUM
Aanensen & Co. A/S
N-5501 HAUGESUND

1) Se også merknader på baksiden.

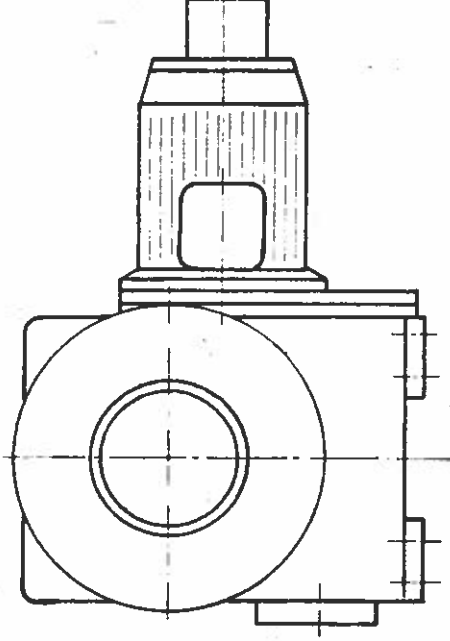
INFORMATIONS & SPARE PARTS

DIMENSIONED SKETCH: 43155A
PART LIST : 30782J

WINCH TYPE 10 KNS

MAX LOAD

DYNAMIC LOAD : 1000 KP
STATIC LOAD : 3000 KP
HOISTING SPEED: 10 M/MIN.



MARINE ALUMINIUM
"ACTA" SERIAL NO: 81-12263

ACTA

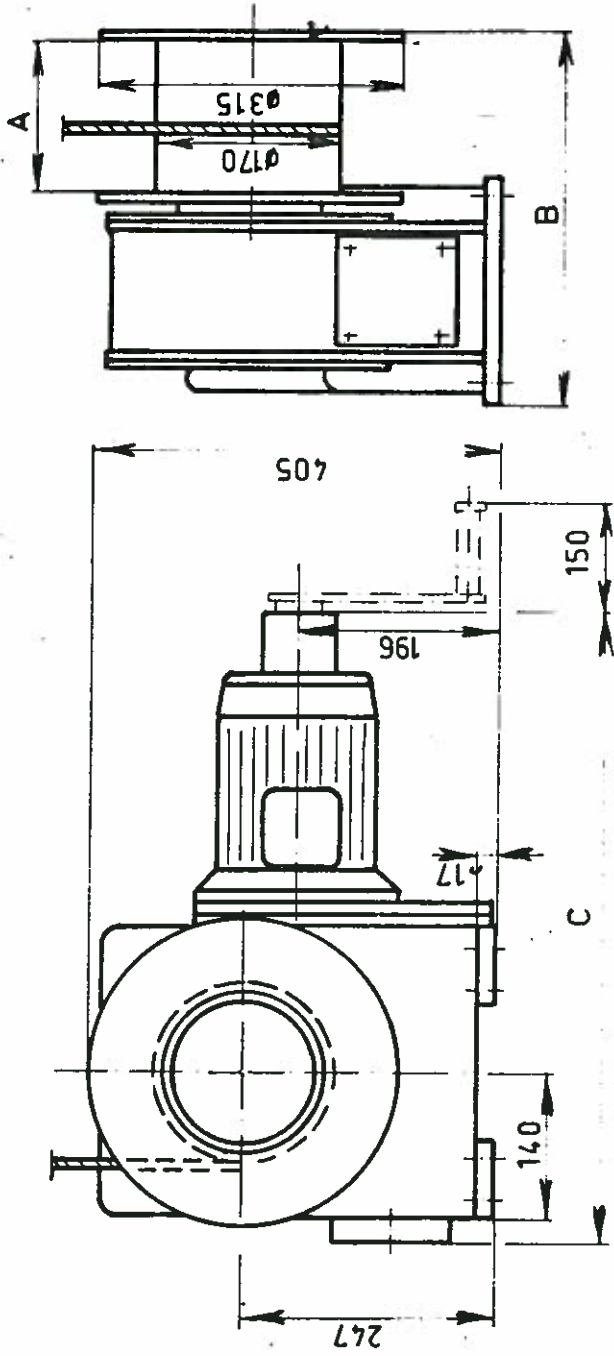
MASKINFABRIK A/S
DENMARK



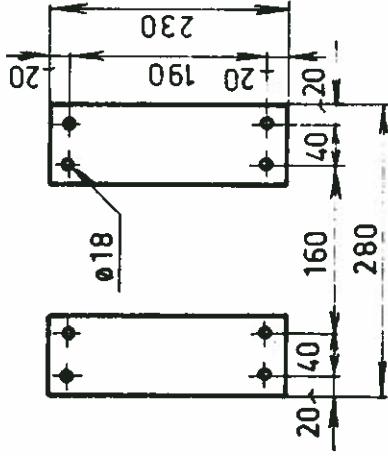
FLW

10000

Pos.: Ant.:	Bemærkning:	Matr.:	Dimension:	Tegn. nr.:	Ann.:



This document is strictly confidential and must
 on no account be copied or disclosed to any
 third person.
 MASKINFABRIK ACTA % - DENMARK



RIGHT - HAND "WINCH."

43155 H	160	375	620	600 KP ~ 6 KN	3000 KP ~ 30 KN	0,75 KW - 20 / ED	4 M/MIN	30782 S
43155 G	200	415	620	600 KP ~ 6 KN	3000 KP ~ 30 KN	0,75 KW - 20 / ED	4 M/MIN	30782 R
43155 F	160	375	620	600 KP ~ 6 KN	3000 KP ~ 30 KN	1,5 KW - 20 / ED	8 M/MIN	30782 P
43155 E	200	415	620	600 KP ~ 6 KN	3000 KP ~ 30 KN	1,5 KW - 20 / ED	8 M/MIN	30782 N
43155 D	160	375	660	1000 KP ~ 10 KN	3000 KP ~ 30 KN	1,5 KW - 20 / ED	5 M/MIN	30782 M
43155 C	200	415	660	1000 KP ~ 10 KN	3000 KP ~ 30 KN	1,5 KW - 20 / ED	5 M/MIN	30782 L
43155 B	160	375	660	1000 KP ~ 10 KN	3000 KP ~ 30 KN	3 KW - 20 / ED	10 M/MIN	30782 K
43155 A	200	415	660	1000 KP ~ 10 KN	3000 KP ~ 30 KN	3 KW - 20 / ED	10 M/MIN	30782 J
Drawno	A	B	C	Max dynamic load	Max static load	Effect	Speed	Part list

Tegn.: ØRUM	Godk.:	Kopi:	Dato:	Scale:	Klasse:
			27-03-74	~	SPY
<div> <div>MASKINFABRIK</div> <div>ACTA %</div> </div>					<div> <div>Erstatte:</div> <div>Erstatte:</div> </div>
<div> <div>ODENSE</div> <div>DENMARK</div> </div>					<div> <div>Tegning nr.:</div> <div>43155</div> </div>

Description of Winch Type 10 KNS

(Design variation: Fixed el-motor)

Design

The winch is designed for a maximum dynamic load of 10 kN and a maximum static load of 30 kN.

Due to the mechanical construction of the winch only one direction is permitted for hoisting when rotating. This is indicated on the dimension sketches, together with the other dimensions for the mounting.

Recommended wire dimension approx. 10 mm dia.

The base frame is designed for horizontally mounting only.

The winch motor drives the rope drum through a spur gear and worm gear transmission. The winch is of a totally enclosed water-tight construction. A compact oil-tight welded gearbox encloses the gearing which is precision machine cut throughout.

All bearings for shafts are ball- and roller bearings, and run together with the gears in oil bath.

The motor, of totally enclosed deck water-tight marine construction, is flange mounted directly to the winch gearbox.

Drum capacity (3 layers 10 mm. dia. wire)

Drum L=200 mm. max. 37 m

Drum L=160 mm. max. 29 m

Drum capacity (4 layers 10 mm. dia. wire)

Drum L=200 mm. max. 52 m

Drum L=160 mm. max. 42 m

INFORMATION

SPARE PARTS FOR WINCH 10KNS

WHEN ORDERING PLEASE STATE DRAWING NUMBER

43292

SKF 51110

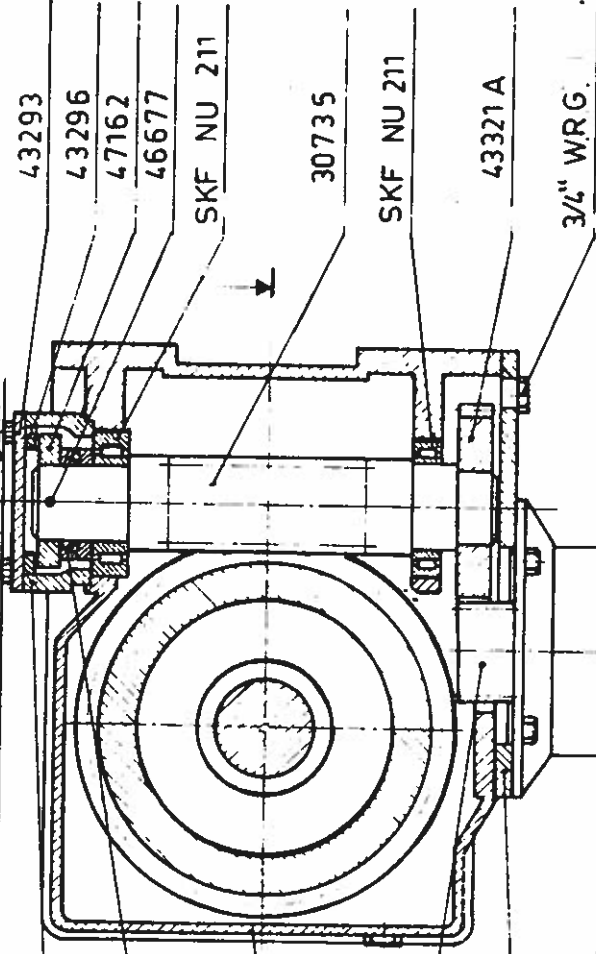
10068

42936 S

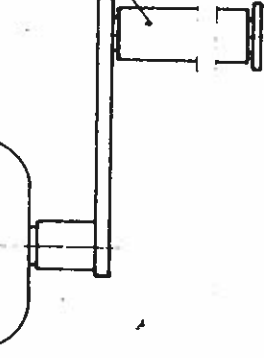
42965

FF 90 L2

FF 90 L4



30761



L = 200 ~ 30727

L = 160 ~ 30729

V-55 S

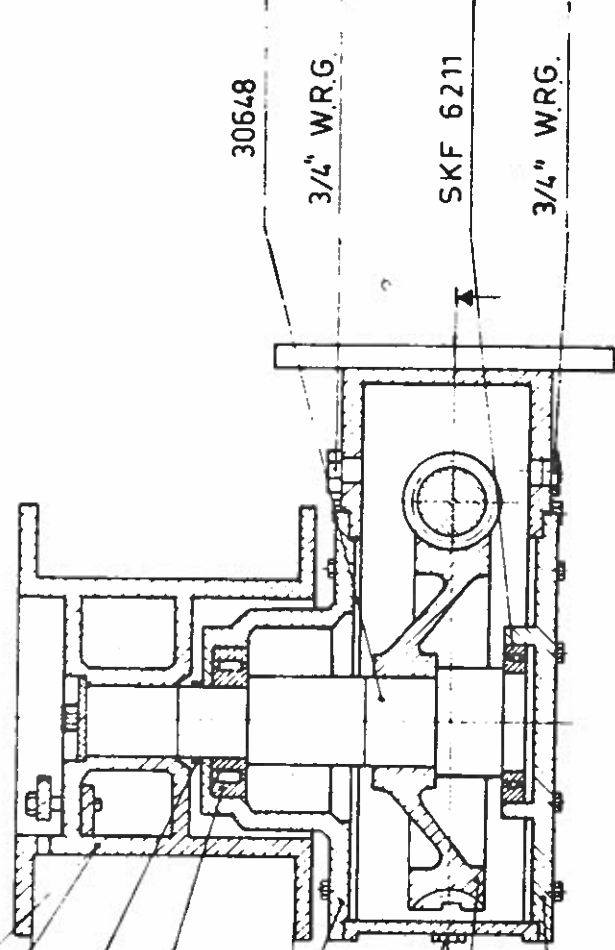
SKF NU 211E

30646

3/4" WRG.

30784

30642

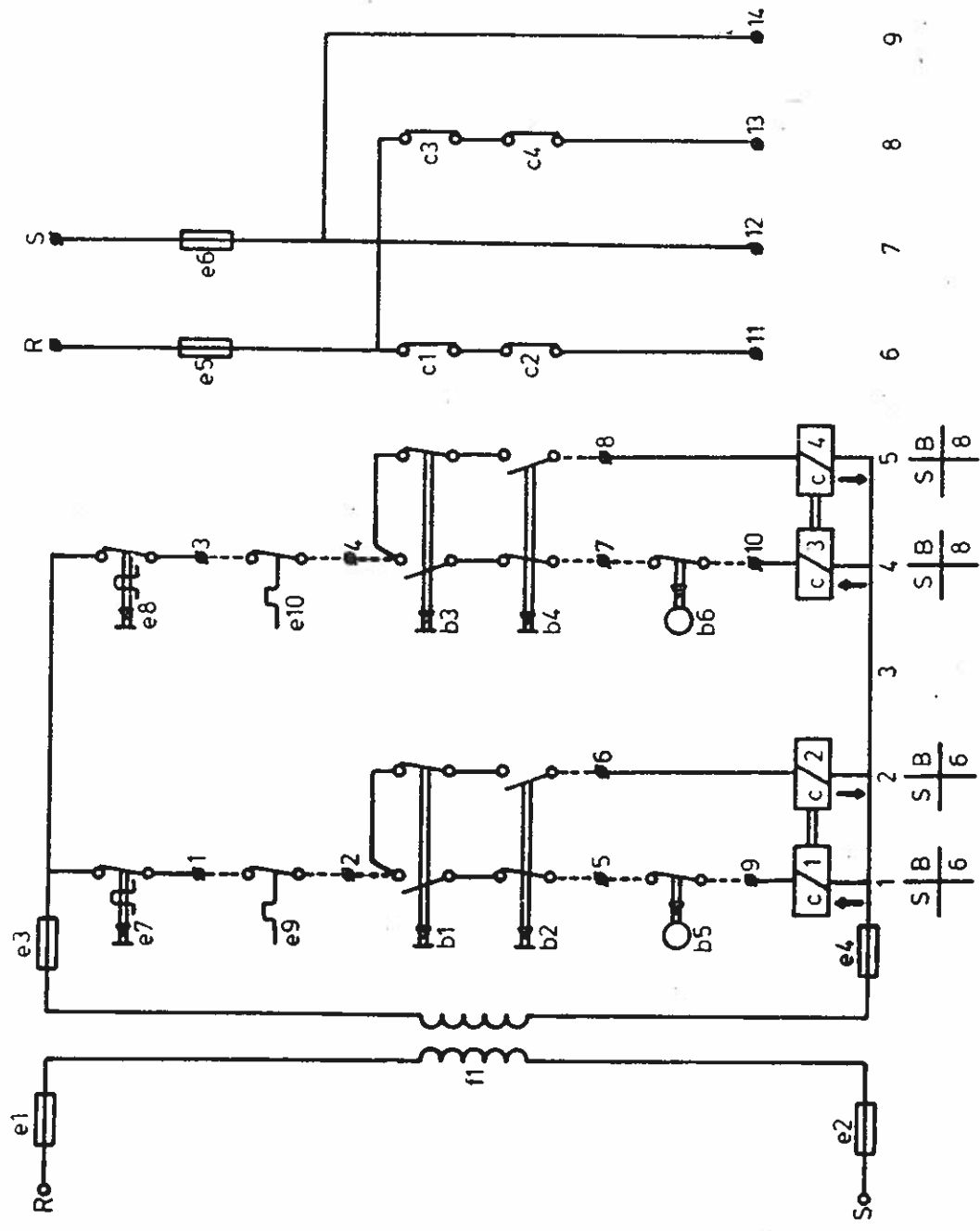


30648

3/4" WRG

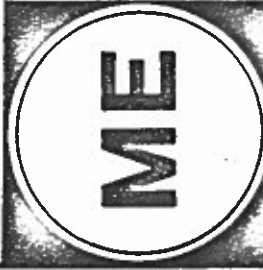
SKF 6211

3/4" WRG.



b1	PUSH BUTTON	MOTOR 1	e1	FUSE, CONTROL CIRCUIT
b2	---	---	e2	---
b3	---	---	e3	---
b4	---	---	e4	---
b5	LIMIT SWITCH	---	e5	HEATING SUPPLY
b6	---	---	e6	---
c1	MOTOR RELAY	MOTOR 1	e7	OVERLOAD RELAY
c2	---	---	e8	---
c3	---	---	e9	THERMO SWITCH
c4	---	---	e10	---
f1	TRAFO	24V		

R	S	T	U	V	W	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
MAIN SUPPLY						MOTOR 1		MOTOR 2		THERMO SWITCH 1		THERMO SWITCH 2		PUSH BUTTON 1		PUSH BUTTON 2		LIMIT SWITCH 1		LIMIT SWITCH 2		HEATING MOTOR 1		HEATING MOTOR 2	



ACTA A/S

MIDTFYNS ELEKTRO AUTOMATIK
SVENDBORGEJ 27 5750 RINGE · DANMARK · TLF. (09) 6215 27

A1-12-R

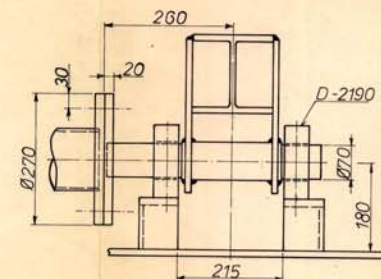
CK	78-05-19
BB	
nr.	

INFORMATION

LUBRICATION INSTRUCTIONS FOR DECK MACHINERY

"ACTA" RECOMMEND THE FOLLOWING LUBRICANT OR OTHER FULLY COMPARABLE TYPES

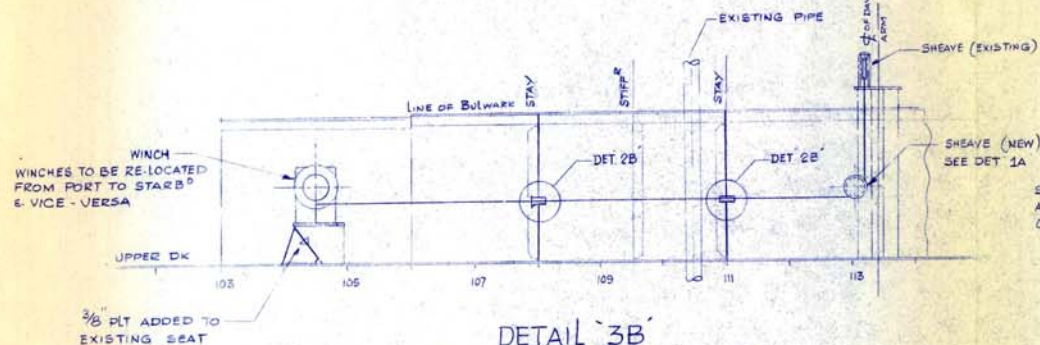
WORM GEARS AND BUILT-IN GEARS	BP CASTROL CHEVRON ESSO GULF MOBIL SHELL TEXACO	ENERGOL GR - XP 150 ALPHA LS/SP 150 or ALPHA 317 NON-LEADED GEAR COMPOUND 150 SPARTAN EP 150 EP LUBRICANT HD 220 MOBILGEAR 629 OMALA OIL 150 MEROPA 150
OPEN GEARS	BP CASTROL CHEVRON ESSO GULF MOBIL SHELL TEXACO	ENERGOL GR 3000-2 GRIPPA 335 or 60S or RUSTILO 553 PINION GREASE MS SURETT FLUID 4K LUBCOTE MOLY MOBILTAC D. CARDIUM FLUID F or COIP. D CRATER 2X FLUID or CRATER 1
PLAIN- AND BALL BEARINGS	BP CASTROL CHEVRON ESSO GULF MOBIL SHELL TEXACO	ENERGREASE MM - EP SPHEREOL AP 3 INDUSTRIAL GREASE HEAVY BEACON 2 or 3 GULFCROWN GREASE NO. 2 or GULFLEX 4 MOBILUX EP 2 ALVANIA GREASE EP 2 or R2 or R3 MULTIFAK EP 2
ROPES	BP CASTROL CHEVRON ESSO GULF MOBIL SHELL TEXACO	GRIPPA 335 or 60S RUST PREVENTIVE OF RUST PREVENTIVE "H". RUSTBAN 330 or RUSTBAN 335 NO RUST VW or LUBCOTE FLUID MOBIL ARMA 798 CARDIUM FLUID or COIP. D CRATER 2X FLUID or CRATER 0



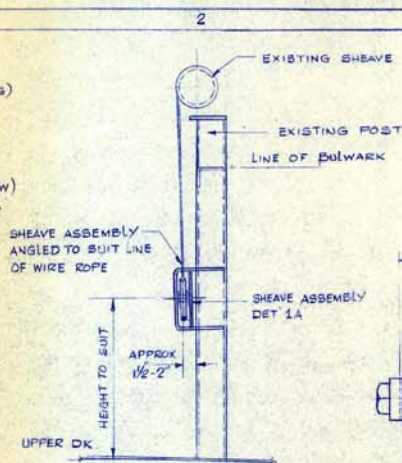
Stringer	A	B	σ_t	σ_m
U-178	150	415	127	10
U-228	150	415	127	10
U-270	200	465	1524	12
U-300	230	495	1524	12
U-380	300	565	1524	13



No.	Item	Description	Dimensions	Material
	</			

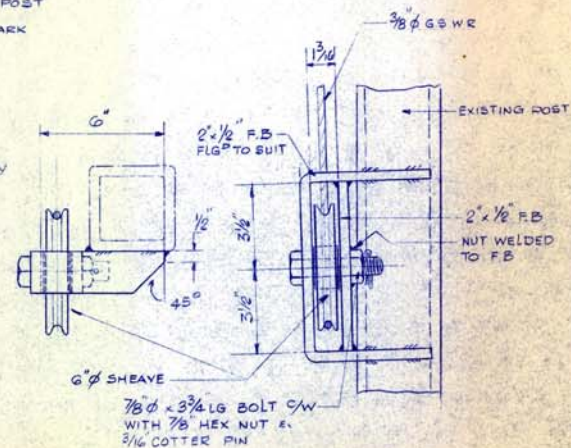


DETAIL 3B
ELEVATION LOOKING INBOARD



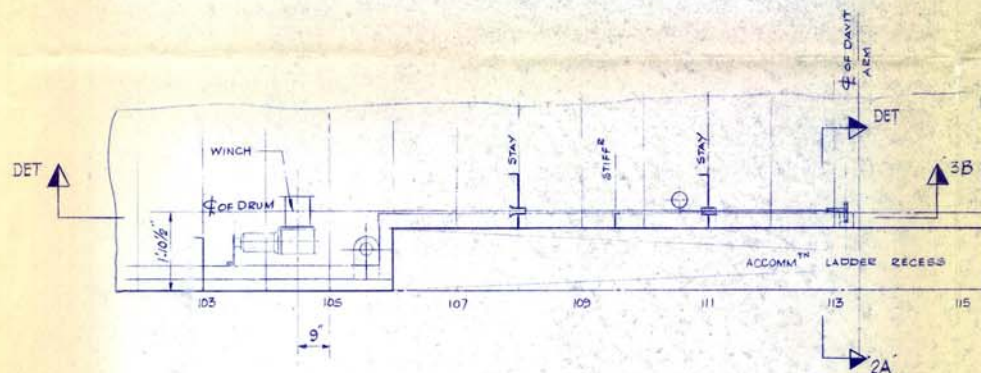
DETAIL 2A

1" = 1 FT



PLAN

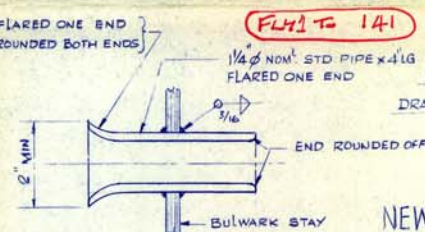
SECTION



DETAIL 3A

PLAN AT UPPER DK
DRAWN FOR STARBOARD PORT SIDE SIMILAR
TO OPPOSITE HAND
1/2" = 1 FT

2 OFF - FLARED ONE END
2 OFF - ROUNDED BOTH ENDS



DETAIL 2B
HALF SIZE

FLY PLAN TO 141

DETAIL 1A

SHEAVE ASSEMBLY

DRAWN FOR STARBOARD PORT SIDE SIMILAR
TO OPPOSITE HAND
3" = 1 FT

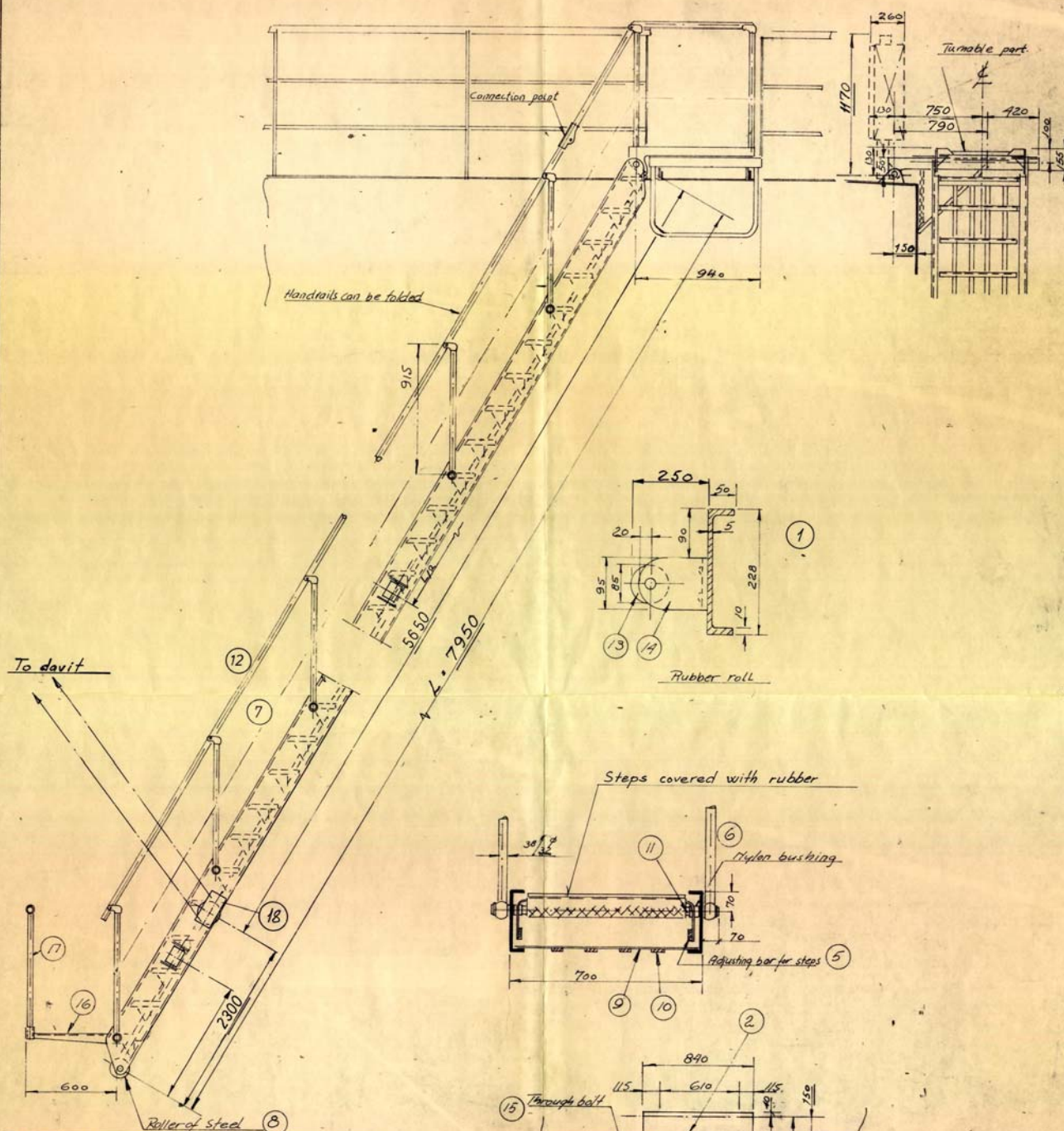
NEW POSITION OF ACCOMM^{TN}
LADDER WINCH

REV	ZONE	ALTERATION	DRG. No.	ALT.	DISTRIBUTION		
Title			68-H 140	0	alt	dept.	No. date
HULL No. 68			A/C# 3220	Scale: AS	des. mod.	1	15/7/82
Drawn by: D.L. MORRISON			CHKD by:	Date: 14th JULY 82	App. Rev. Mod.	1	
					Checked	1	
					Q. Checked	1	
					Drawn	1	
					Supervised	2	
					At. Drawn	2	
					W.S.	1	
					Drawn	1	
					Drawn	1	



PORT WELLER DRY DOCKS
A DIVISION OF UPPER LAKES SHIPPING LTD.
P.O. BOX 3011 ST. CATHARINES ONT. L2R 7C1

15



2	18	Sheave housing	Al. 57S	
2	17	Portable stanchion	Al. 57S	
1	16	Lower platform	Al. 17g. S. Rubber covered	
2	15	Through bolt	Galv. st.	30"
1	14	Roll-holders	Al. 57S	
1	13	Roller	Rubber	
2	12	Handrail (al. tub 25)	plastic covered	
1	11	Axles	Al. 57S	30"
4	10	Bottom-bars	---	35x4"
9	9	Distance-plate	Al. 57S	
1	8	Quay-roller	Steel	100"
4	7	Manrope 1 1/4"	Polystyrene	
6	6	Stanchions	Al. 57S	30x32"
2	5	Adjusting bar for steps	---	35x6"
1	4	Steps (Pl. 4 1/2")	Al. 17g. S. Rubber covered	
1	3	Platform, upper part	Al. 57S	
1	2	Platform, lower part	Galv. st.	
2	1	Stringers	Al. 57S	
No. Item Description		Material Remark		

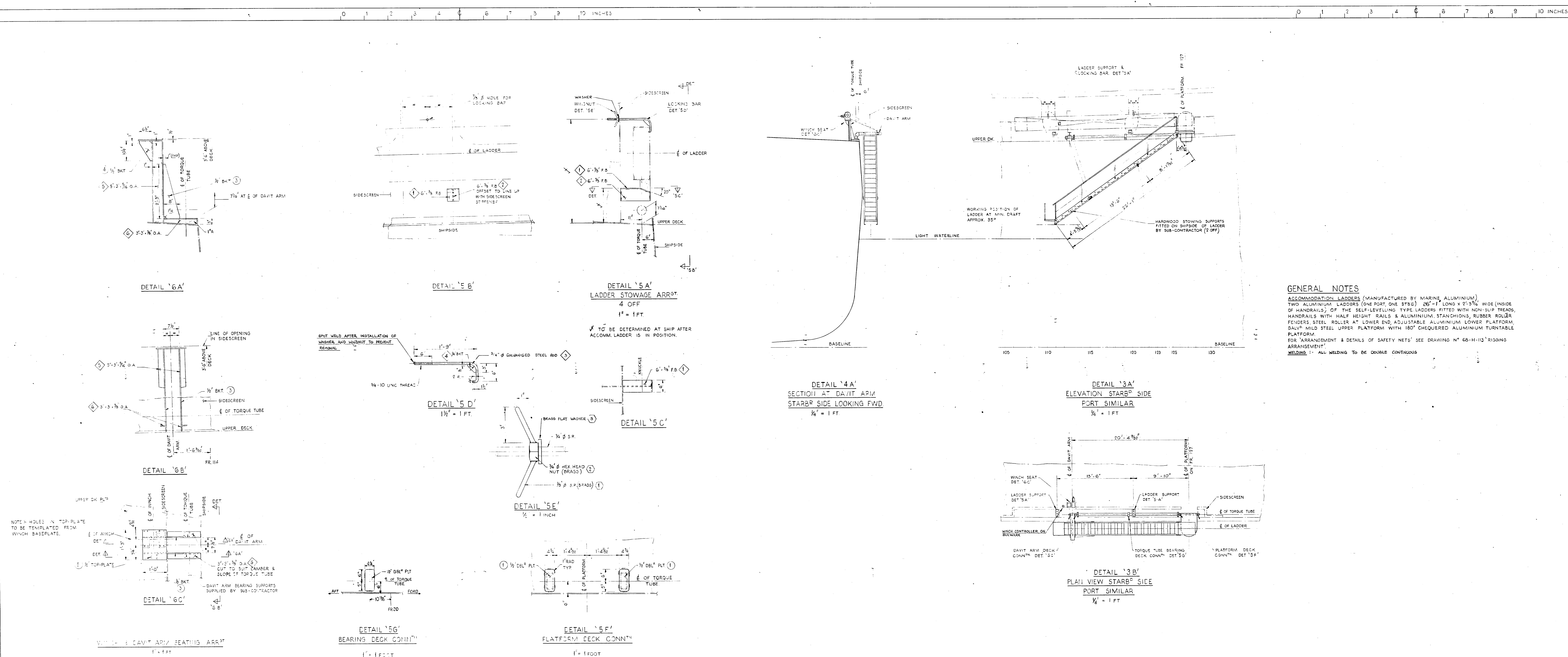
Port Weller Dry Docks, Hull- 68- Acct. # 3220

Accommodation ladder
Mounting arrangement

MARINE ALUMINIUM
HAUGESUND

Scale
1:20, 1:10, 1:5
Temp. 21.65
App. 2/3-76
2/8-76

F3-5132

[illegible][illegible]