

No.	Amendments	Date	Approved
1	Container Berths D102 & D103 added (JCH)	2012-09-23	

Drawn	Scale	Date	Checked	Approved
JCH	1:300	2013-08-23		
DWH				



Port of Ngqura

LAYOUT OF BERTHS

Port Manager

Date

Designed

Drawn

Checked

Approved

NH 71

V 0016

Sheet 1

NH71V0016-001-01

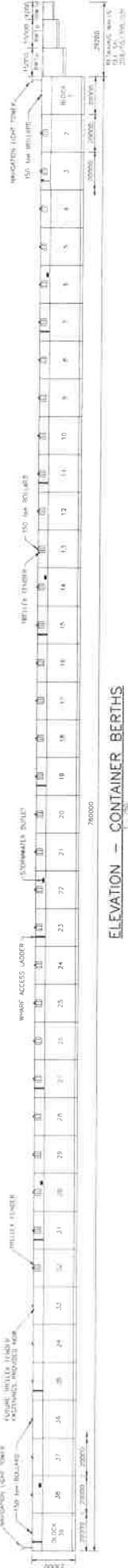


NOTE:

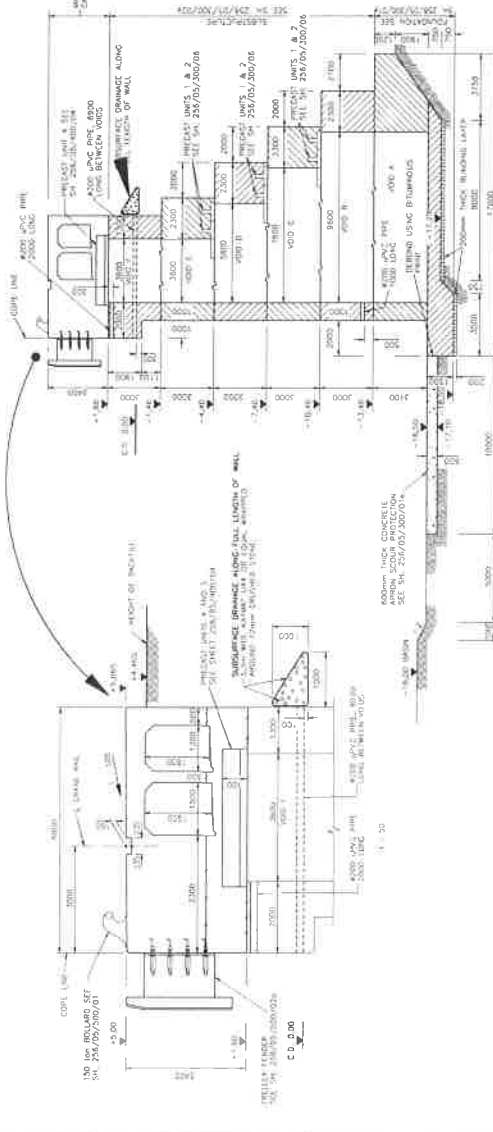
1. CLIENT TO RELOCATE S/S CRANE STORM TIE DOWN ANCHORS IN LOCATIONS INDICATED.
2. TIE OFF EYES ARE OBTAINED BY MOORMASTER SYSTEM.

DATE	APPROVED FOR COMPLETION	BY	DATE

NOT TO BE SCALED



ELEVATION - CONTAINER BERTHS

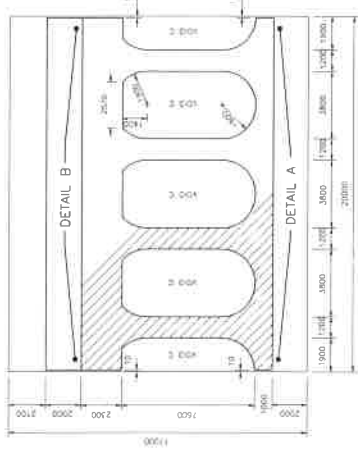


SECTION A-A

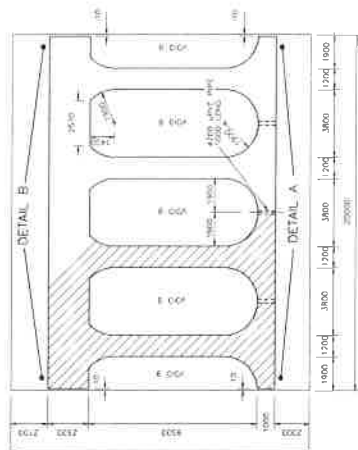
ALL LEVELS REFER TO CHART DATUM (CDPM)
WHICH IS 1.27m BELOW MSL

NOTE: REFLECTOR UNITS A, B, C AND BEAMS A, B, C
NOT SHOWN ON SECTION C-C
SEE SH. 256/05/200/06
REFLECTOR UNITS A, B, C DO NOT
OCCUR AT BIRTH FAC END OF BIRTH 18

TYPICAL ELEVATION



SECTION C-C



SECTION B-B

PROJECT NO.	11100
DATE	11/11/00
PROJECT NAME	AGOURA PORT MARITIME GROUP
PROJECT NO.	5000 D
PROJECT NAME	QUAY WALLS
PROJECT NO.	5000 D
PROJECT NAME	QUAY WALLS
PROJECT NO.	5000 D
PROJECT NAME	QUAY WALLS

PROJECT NO. 11100

DATE 11/11/00

PROJECT NAME AGOURA PORT MARITIME GROUP

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 11100

DATE 11/11/00

PROJECT NAME AGOURA PORT MARITIME GROUP

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 11100

DATE 11/11/00

PROJECT NAME AGOURA PORT MARITIME GROUP

PROJECT NO. 5000 D

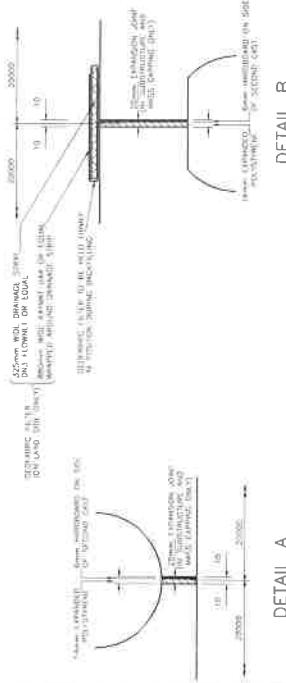
PROJECT NAME QUAY WALLS

PROJECT NO. 5000 D

PROJECT NAME QUAY WALLS

PROJECT NO. 5000 D

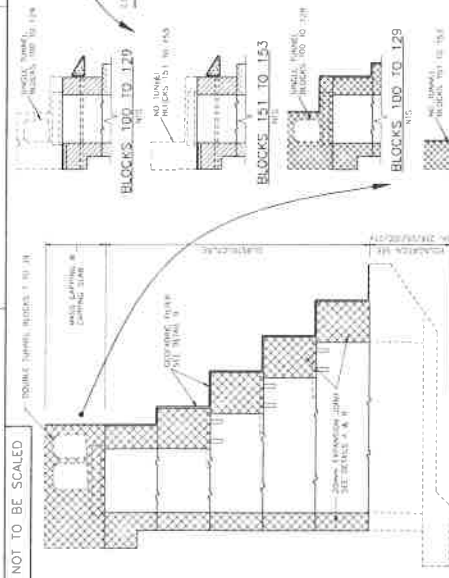
PROJECT NAME QUAY WALLS



DETAIL A

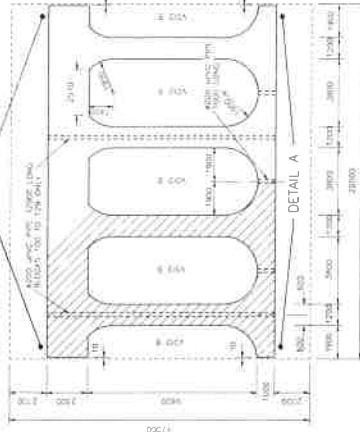
DETAIL B

NOT TO BE SCALED



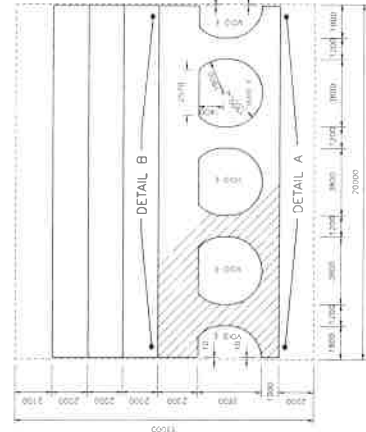
ELEVATION G-G

1:100



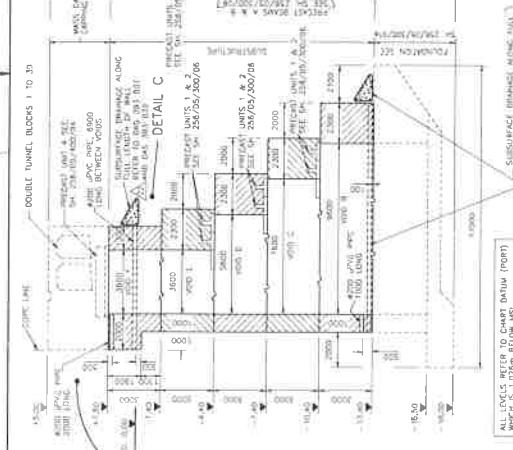
SECTION B-B

1:100



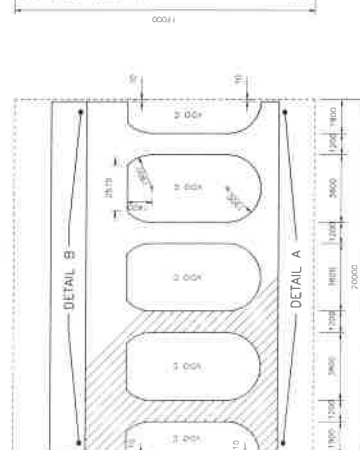
SECTION E-E

1:100



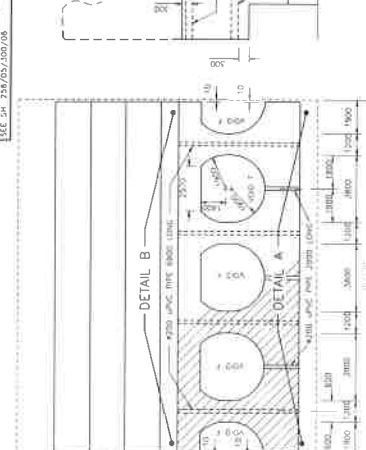
SECTION A-A

1:100



SECTION C-C

1:100



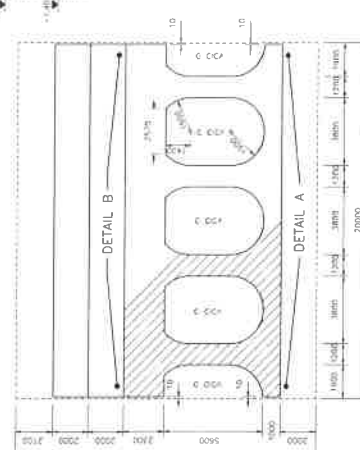
SECTION F-F

1:100



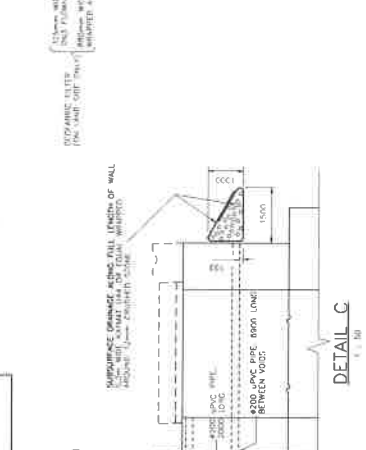
TYPICAL ELEVATION

1:100



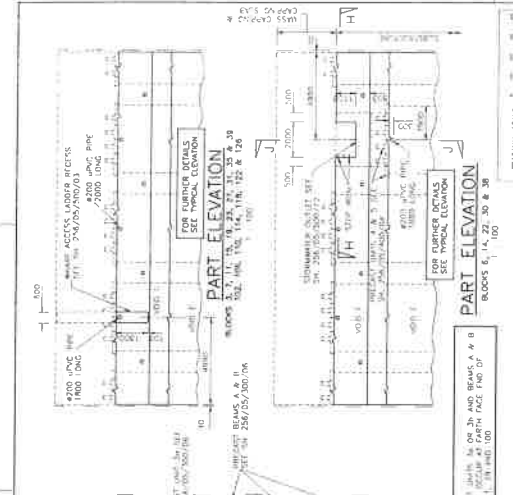
SECTION D-D

1:100



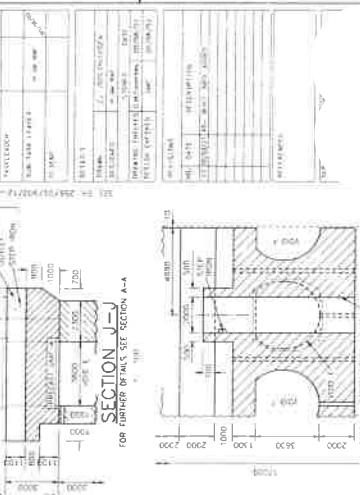
SECTION H-H

1:100



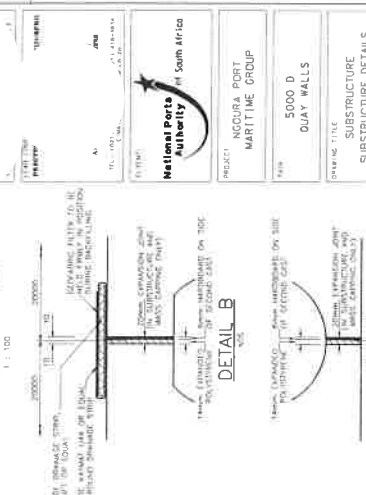
PART ELEVATION

1:100



SECTION J-J

1:100



DETAIL A

1:100

DETAIL B

1:100

DETAIL C

1:100

DETAIL D

1:100

DETAIL E

1:100

DETAIL F

1:100

DETAIL G

1:100

DETAIL H

1:100

DETAIL I

1:100

DETAIL J

1:100

DETAIL K

1:100

DETAIL L

1:100

DETAIL M

1:100

DETAIL N

1:100

DETAIL O

1:100

DETAIL P

1:100

DETAIL Q

1:100

DETAIL R

1:100

DETAIL S

1:100

DETAIL T

1:100

DETAIL U

1:100

DETAIL V

1:100

DETAIL W

1:100

DETAIL X

1:100

DETAIL Y

1:100

DETAIL Z

1:100

DETAIL AA

1:100

DETAIL BB

1:100

DETAIL CC

1:100

DETAIL DD

1:100

DETAIL EE

1:100

DETAIL FF

1:100

DETAIL GG

1:100

DETAIL HH

1:100

DETAIL II

1:100

DETAIL JJ

1:100

DETAIL KK

1:100

DETAIL LL

1:100

DETAIL MM

1:100

DETAIL NN

1:100

CONCOR HOLDINGS (PTY) LTD

PROJECT: Port of Ngqura, South Africa

APPENDIX 1

AS – BUILT DRAWINGS

- **UNIT ELEMENT FENDER
SYSTEMS**

COMMERCIAL IN CONFIDENCE THE DRAWING REMAINS THE PROPERTY OF TROBROOK AB AND MUST NOT BE REPRODUCED OR APPROVED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TROBROOK AB.

SECTION A-A

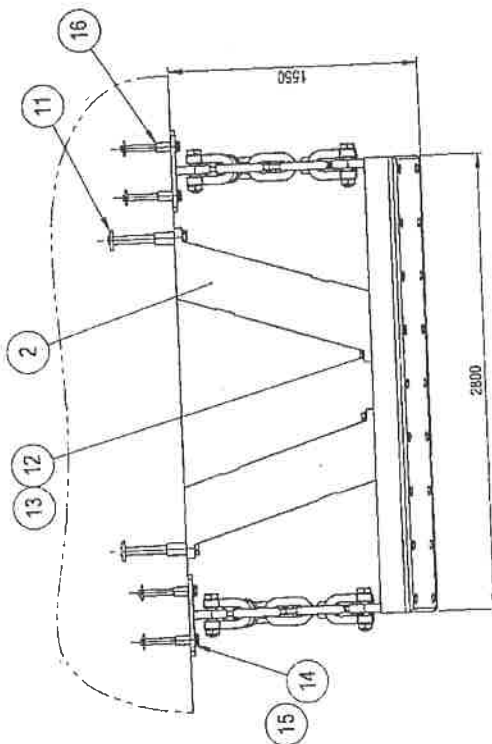
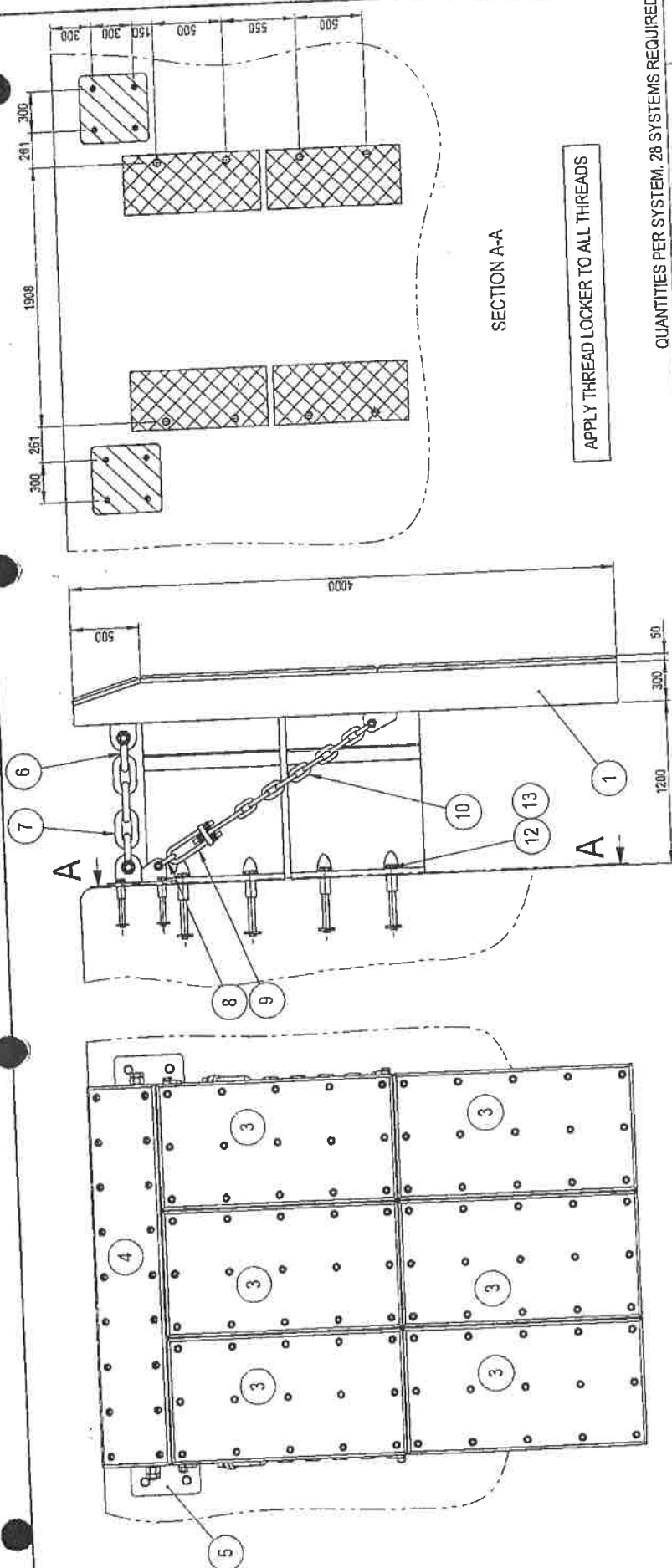
APPLY THREAD LOCKER TO ALL THREADS

QUANTITIES PER SYSTEM, 28 SYSTEMS REQUIRED.

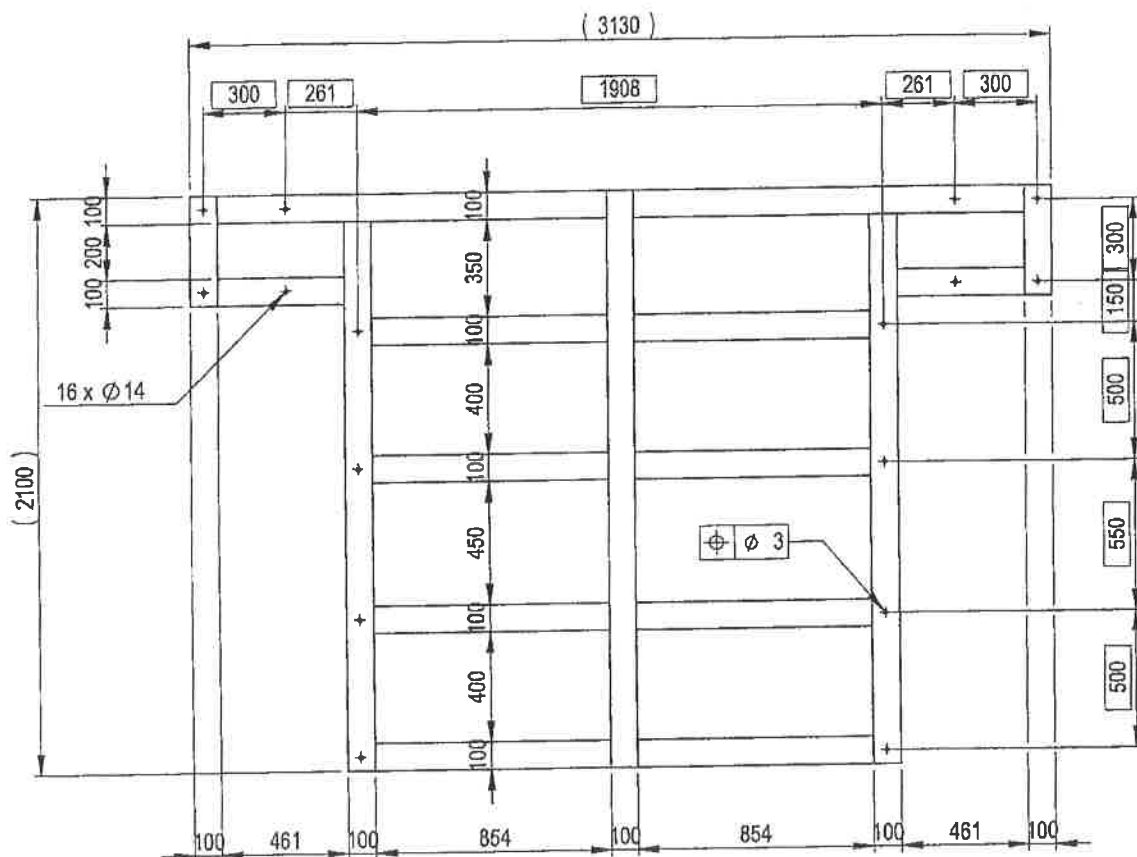
Item	Qty	Description	Dimension	Material	Weight
102	1	THREAD LOCKER		AN 302-45	
16	8	NC3-ANCHOR		WEICON	
15	8	BOLT	M36x80 - DIN 931	SS 316	
14	8	WASHER	Ø40x68x5 - DIN 125	SS 316	
13	16	BOLT	M48x120 - DIN 931	SS 316	
12	16	WASHER	Ø53x92x5 - DIN 125	SS 316	
11	8	NC3-ANCHOR	M48	SS 316	
10	2	CHAIN	Ø 30(4.00)x9-1080	HDG - MBL 706 KN SL3	
9	2	CHAIN TENSIONER	Ø 30x(530-720)	HDG	
8	4	SHACKLE	Ø 32/55x94	HDG - NBL 720 KN	
7	2	CHAIN	Ø 50(4.00)x3-600	HDG - MBL 1570 KN SL2	
6	4	SHACKLE	Ø 45/50x149	HDG - NBL 1500 KN	
5	2	CHAIN BRACKET	500x500x235	S355J2 - HDG	
4	1	CHIME-PE	50x2800x522	FO-1000	
3	6	UTIMW-PE	50x1745x927	FO-1000	
2	4	FENDER	UE 1200x1000	E2.0	
1	1	STEEL PANEL	4000x2800x300	S355J2	

DRAWN	AK	2008-03-25
CHECKED		
APPROVED		
SCALE	1:30	
PROJ NO.	ZAF-12327	
CONT NO.		
TITLE: FENDER ASSEMBLY		
PORT OF NGQURA, SOUTH AFRICA		
DRAWING NUMBER: 110853-001		
REV	A3	

© - Trobros AB



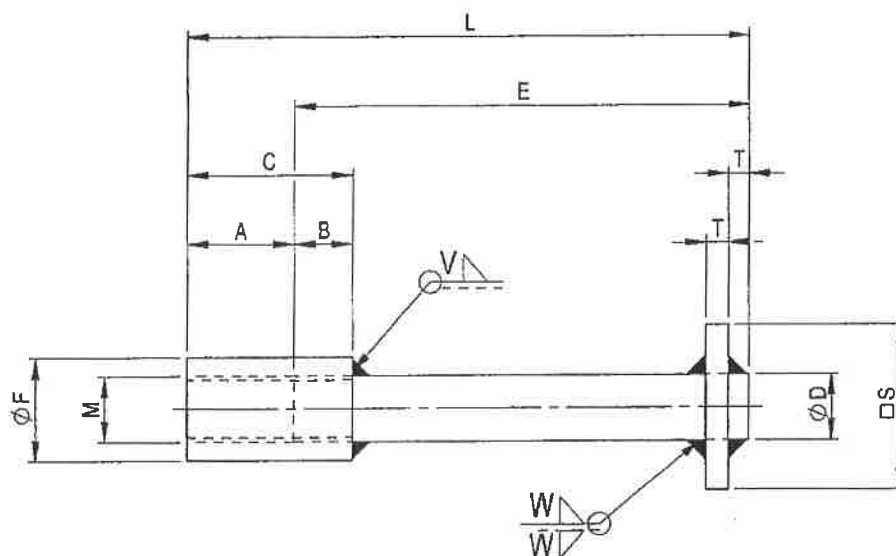
COMMERCIAL IN CONFIDENCE This drawing remains the property of Trelleborg AB and must not be reproduced or improperly used or communicated to the third party without our written consent in each case.



MANUFACTURE OUT OF STEEL FLATS 5x100, S235JR OR SIMILAR.
WEIGHT: 68,5 kg

DRAWN	AK	2008-04-02	TITLE: ANCHOR TEMPLATE ITEM 101 PORT OF NGQURA, SOUTH AFRICA © - Trelleborg AB	DRAWING NUMBER:	REV
CHECKED				110853-108	
APPROVED					
SCALE	1:25				
PROJ NO.	ZAF-12327				
CONT NO.					A4

COMMERCIAL IN CONFIDENCE This drawing remains the property of Trelleborg AB and must not be reproduced or improperly used or communicated to the third party without our written consent in each case.



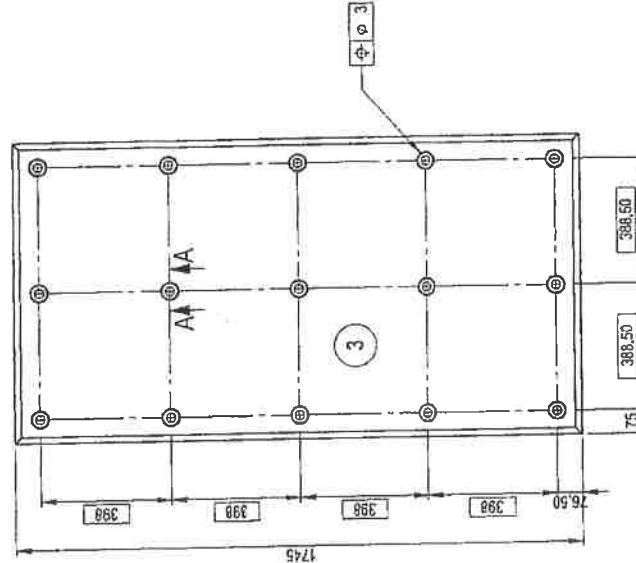
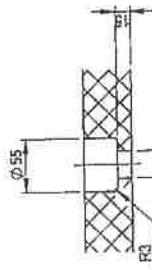
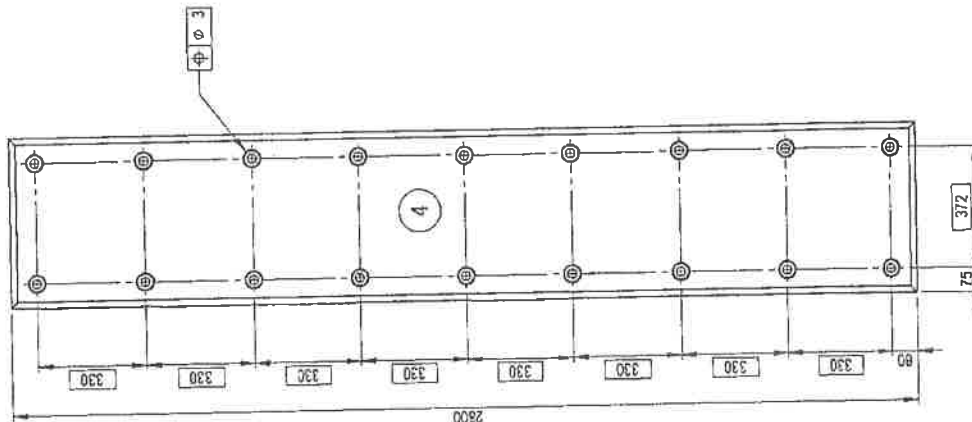
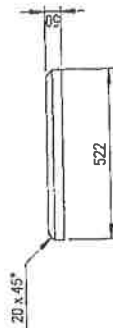
MATERIAL: STAINLESS STEEL GRADE 316

ITEM	THREAD	A	B	C	ϕD	E	ϕF	L	$\square S$	T	V	W	WEIGHT
16	M36	72	40	112	36	248	54	320	100	12	8	10	5.5 kg
11	M48	96	60	156	48	304	72	400	100	15	10	10	11.5 kg

224 PCS. REQUIRED OF ITEM 11.
224 PCS. REQUIRED OF ITEM 16.

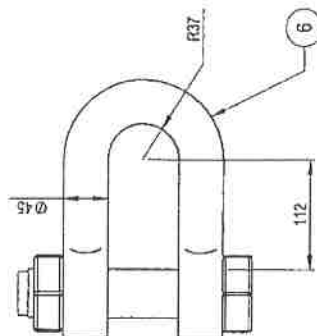
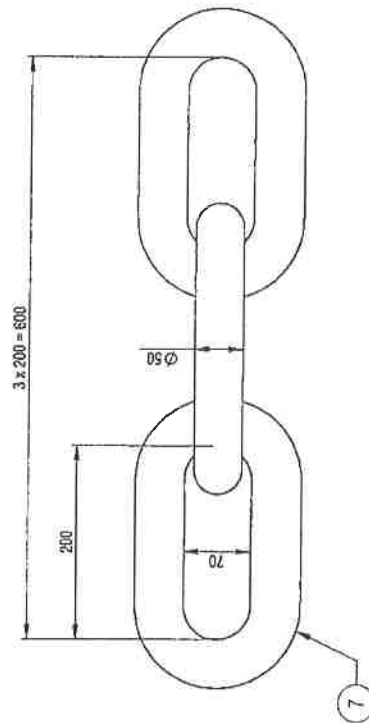
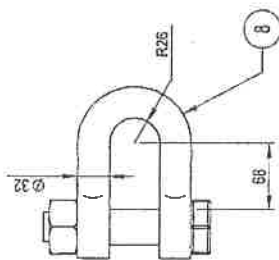
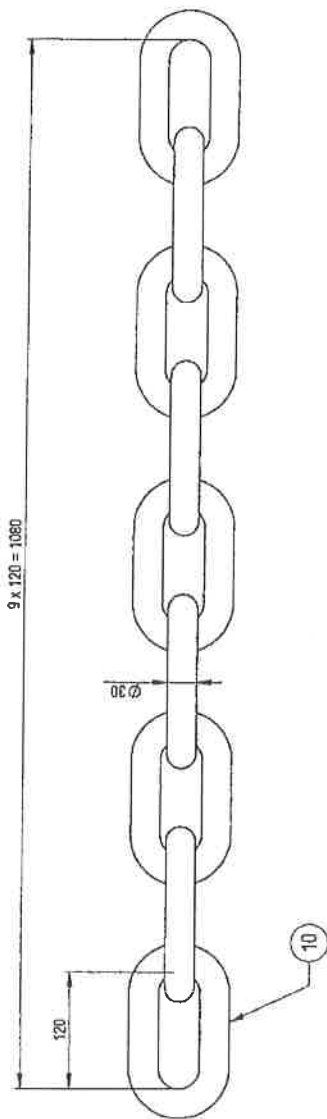
DRAWN	AK	2008-01-24			
CHECKED					
APPROVED					
SCALE	1:5		TITLE: NC3-ANCHORS ITEM 11 & 16 PORT OF NGQURA, SOUTH AFRICA © - Trelleborg AB	DRAWING NUMBER: 110853-107	REV
PROJ NO.					
CONT NO.					A4

Copyright in this drawing remains the property of Trakberg AB and must not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior written permission from Trakberg AB.



QUANTITIES PER SYSTEM. 35 SYSTEMS REQUIRED.

Item	Qty	Description	Dimension	Material	Weight
4	1	UHMW-PE (BLACK)	50x2800x522	FQ-1000	67
3	6	UHMW-PE (BLACK)	50x1745x927	FQ-1000	75
DRAWN	AK	2008-03-26			
CHECKED					
APPROVED					
SCALE	1:5				
PROJ. NO.	245-12327				
CONT. NO.					
TITLE:			UHMW-PE (BLACK)		
			ITEM 3 & 4		
			NGQURA, SOUTH AFRICA		
			DRAWING NUMBER:		
			110853-106		
			REV		
			A3		



HOT DIP GALVANIZE: EN ISO 1461 COATING 80-100 MICRON.
QUANTITIES PER SYSTEM. 35 SYSTEMS REQUIRED.

Item	Qty	Description	Dimension	Material	Weight
10	2	CHAIN	Ø 30(4.0D)x9=1080	HDG - MBL: 706 kN	18.9
8	4	SHACKLE	Ø 32(35x94)	HDG - NBL: 720 kN	4.7
7	2	CHAIN	Ø 50(4.0D)x3=600	HDG - MBL: 1570 kN	29.1
6	4	SHACKLE	Ø 45(50x149)	HDG - NBL: 1500 kN	12.8

DRAWN: AK 2008-03-26

CHECKED:

APPROVED:

SCALE: 1:5

PROJ NO: ZAF-12327

CONT NO:

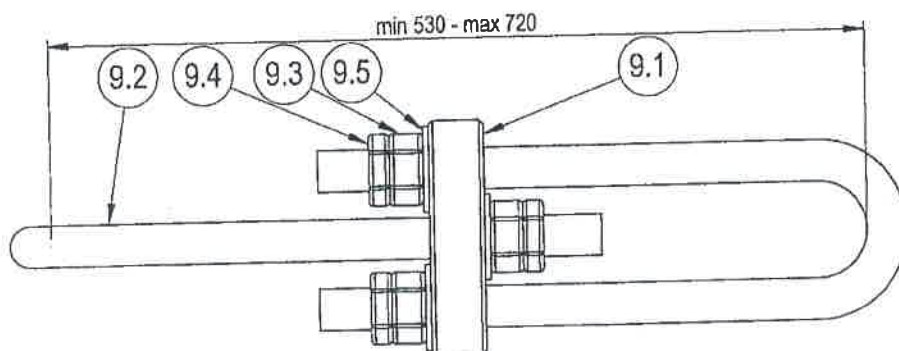
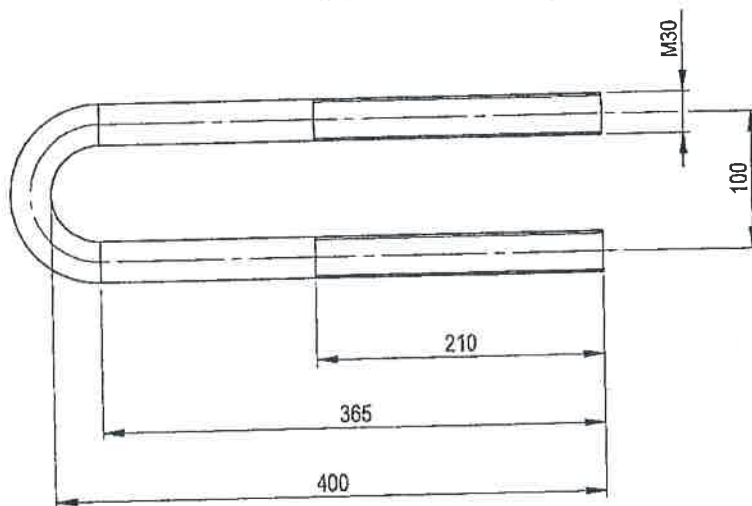
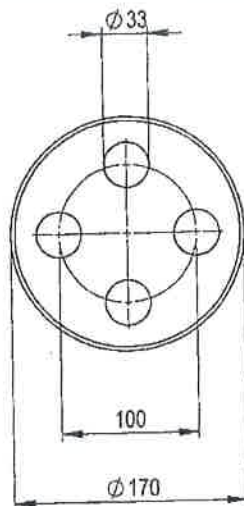
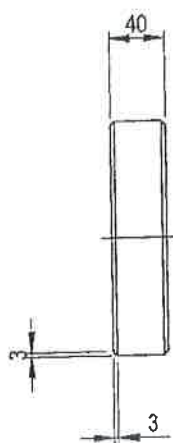
TITLE: CHAINS & SHACKLES
ITEM 6, 7, 8 & 10
NGQURA, SOUTH AFRICA

DRAWING NUMBER:
110853-105

REV: A3

© - Tridborg AB

COMMERCIAL IN CONFIDENCE This drawing remains the property of Trelleborg AB and must not be reproduced or improperly used or communicated to the third party without our written consent in each case.

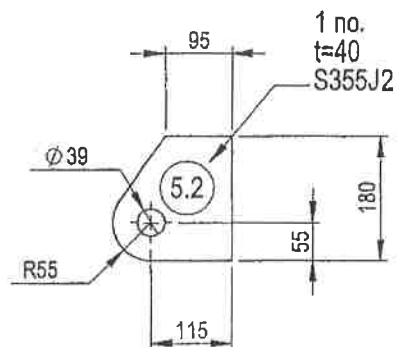
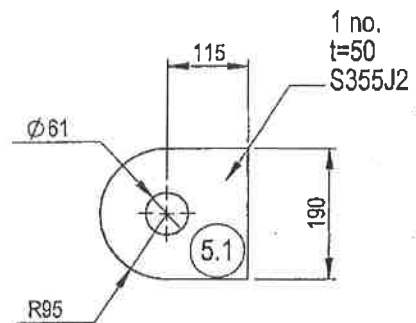
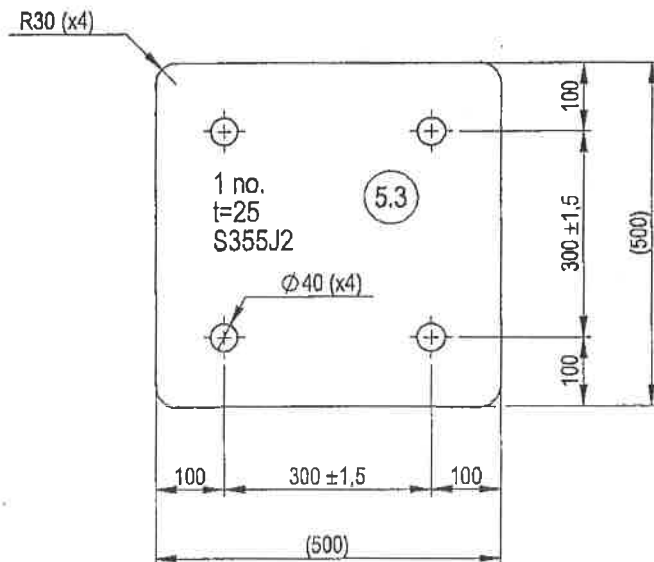
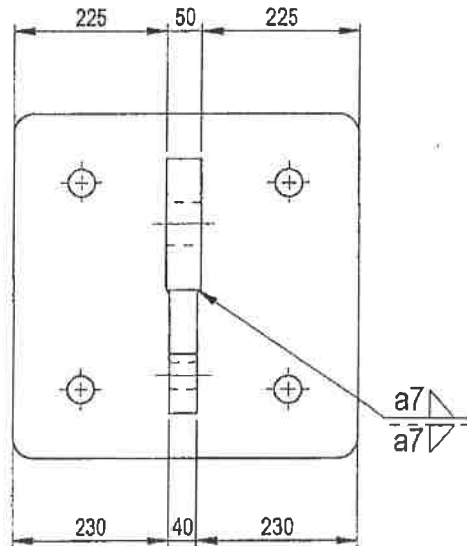
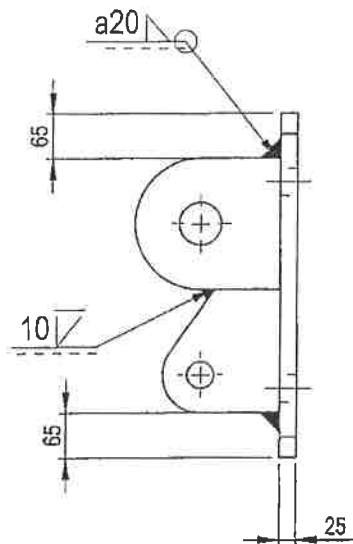


QUANTITIES ARE FOR ONE CHAIN TENSIONER, 70 CHAIN TENSIONERS REQUIRED.

9.5	4	WASHER	Ø 31/56x4 ~ DIN 125	HDG	
9.4	4	THIN NUT	M30 - DIN 439	8. HDG	
9.3	4	NUT	M30 - DIN 934	8. HDG	
9.2	2	CYLINDER	Ø 30x887	6.8 - HDG	9.8
9.1	1	CYLINDER	Ø 170x40	S355J2 - HDG	6
Item	Qty	Description	Dimension	Material	Weight
DRAWN	AK	2008-03-26			
CHECKED					
APPROVED					
SCALE	1:5	TITLE: CHAIN TENSIONER		DRAWING NUMBER:	REV
PROJ NO.	ZAF-12327	ITEM 9		110853-104	
CONT NO.		NGQURA, SOUTH AFRICA			A4

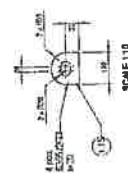
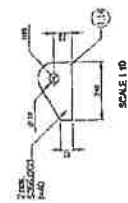
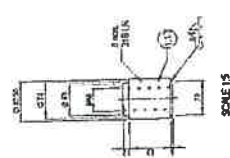
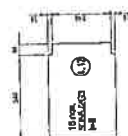
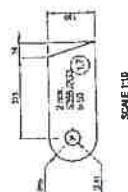
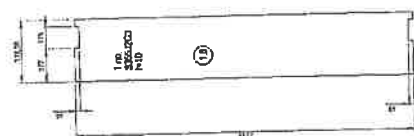
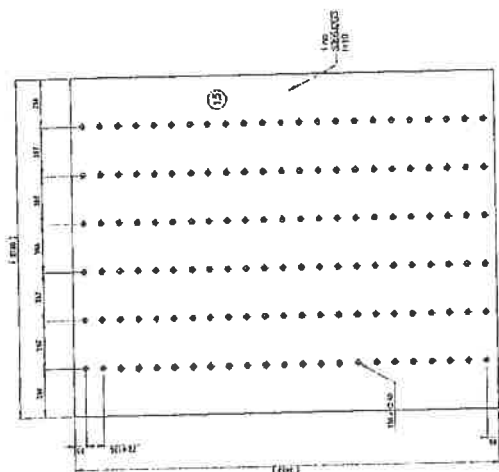
© - Trelleborg AB

COMMERCIAL IN CONFIDENCE This drawing remains the property of Trelleborg AB and must not be reproduced or improperly used or communicated to the third party without our written consent in each case.



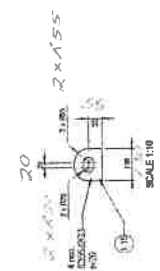
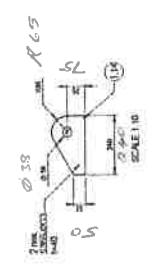
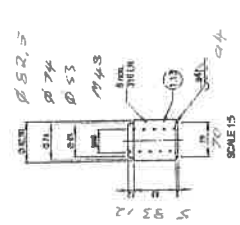
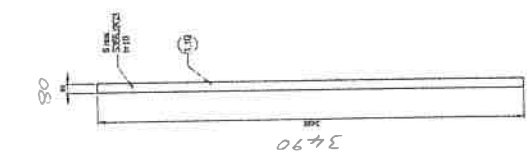
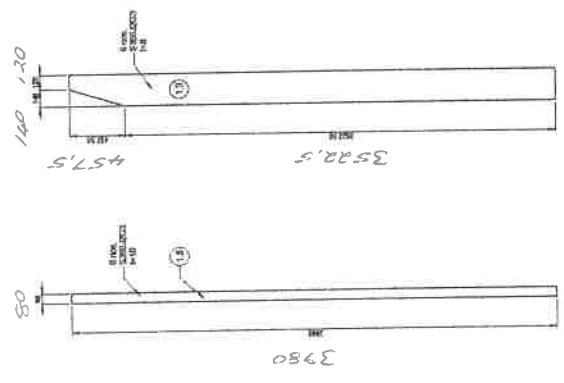
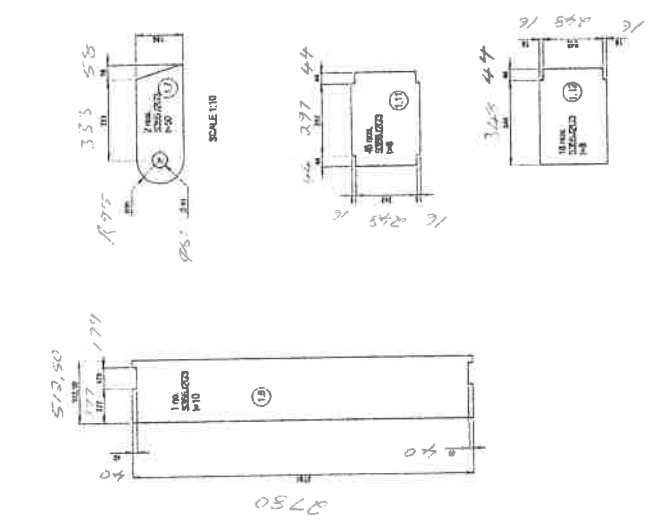
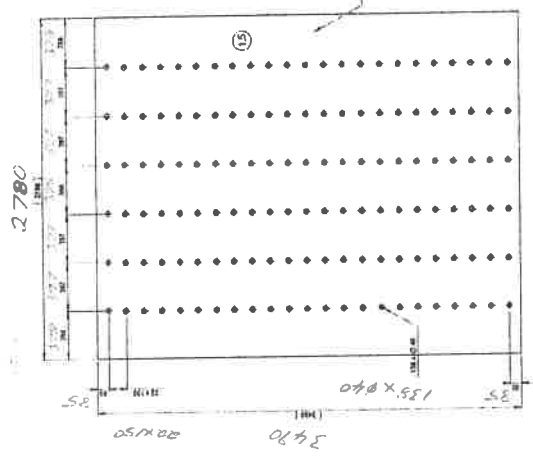
MATERIAL: S355J2
REMOVE ALL SHARP EDGES.
HOT DIP GALVANIZE: EN ISO 1461 MIN. COATING 105 MICRON.
WEIGHT: 69 kg
QUANTITIES PER BRACKET. 70 BRACKETS REQUIRED.

DRAWN	AK	2008-03-26	TITLE: CHAIN BRACKET ITEM 5 NGQURA, SOUTH AFRICA	DRAWING NUMBER: 110853-103	REV A4
CHECKED					
APPROVED					
SCALE	1:10				
PROJ NO.	ZAF-12327		© - Trelleborg AB		
CONT NO.					

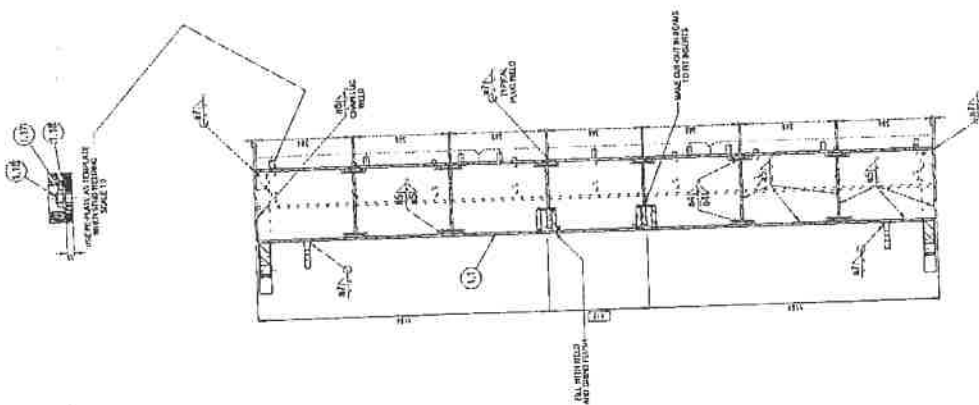
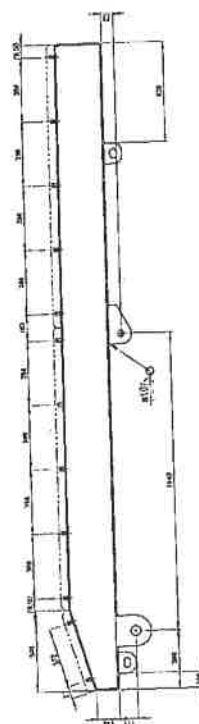
[illegible]

TITLE: STEEL PANEL DETAILS
ITEM 1
NIGUURA, SOUTH AFRICA

10053-102



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80																				



QUANTITIES IMPORTED		QUANTITIES EXPORTED		TOTAL	
1970-71	1971-72	1970-71	1971-72	1970-71	1971-72
1.15	1.05	1.15	1.05	2.30	2.10
1.16	1.06	1.16	1.06	2.32	2.12
1.17	1.07	1.17	1.07	2.34	2.14
1.18	1.08	1.18	1.08	2.36	2.16
1.19	1.09	1.19	1.09	2.38	2.18
1.20	1.10	1.20	1.10	2.40	2.20
1.21	1.11	1.21	1.11	2.42	2.22
1.22	1.12	1.22	1.12	2.44	2.24
1.23	1.13	1.23	1.13	2.46	2.26
1.24	1.14	1.24	1.14	2.48	2.28
1.25	1.15	1.25	1.15	2.50	2.30
1.26	1.16	1.26	1.16	2.52	2.32
1.27	1.17	1.27	1.17	2.54	2.34
1.28	1.18	1.28	1.18	2.56	2.36
1.29	1.19	1.29	1.19	2.58	2.38
1.30	1.20	1.30	1.20	2.60	2.40
1.31	1.21	1.31	1.21	2.62	2.42
1.32	1.22	1.32	1.22	2.64	2.44
1.33	1.23	1.33	1.23	2.66	2.46
1.34	1.24	1.34	1.24	2.68	2.48
1.35	1.25	1.35	1.25	2.70	2.50
1.36	1.26	1.36	1.26	2.72	2.52
1.37	1.27	1.37	1.27	2.74	2.54
1.38	1.28	1.38	1.28	2.76	2.56
1.39	1.29	1.39	1.29	2.78	2.58
1.40	1.30	1.40	1.30	2.80	2.60
1.41	1.31	1.41	1.31	2.82	2.62
1.42	1.32	1.42	1.32	2.84	2.64
1.43	1.33	1.43	1.33	2.86	2.66
1.44	1.34	1.44	1.34	2.88	2.68
1.45	1.35	1.45	1.35	2.90	2.70
1.46	1.36	1.46	1.36	2.92	2.72
1.47	1.37	1.47	1.37	2.94	2.74
1.48	1.38	1.48	1.38	2.96	2.76
1.49	1.39	1.49	1.39	2.98	2.78
1.50	1.40	1.50	1.40	3.00	2.80
1.51	1.41	1.51	1.41	3.02	2.82
1.52	1.42	1.52	1.42	3.04	2.84
1.53	1.43	1.53	1.43	3.06	2.86
1.54	1.44	1.54	1.44	3.08	2.88
1.55	1.45	1.55	1.45	3.10	2.90
1.56	1.46	1.56	1.46	3.12	2.92
1.57	1.47	1.57	1.47	3.14	2.94
1.58	1.48	1.58	1.48	3.16	2.96
1.59	1.49	1.59	1.49	3.18	2.98
1.60	1.50	1.60	1.50	3.20	3.00
1.61	1.51	1.61	1.51	3.22	3.02
1.62	1.52	1.62	1.52	3.24	3.04
1.63	1.53	1.63	1.53	3.26	3.06
1.64	1.54	1.64	1.54	3.28	3.08
1.65	1.55	1.65	1.55	3.30	3.10
1.66	1.56	1.66	1.56	3.32	3.12
1.67	1.57	1.67	1.57	3.34	3.14
1.68	1.58	1.68	1.58	3.36	3.16
1.69	1.59	1.69	1.59	3.38	3.18
1.70	1.60	1.70	1.60	3.40	3.20
1.71	1.61	1.71	1.61	3.42	3.22
1.72	1.62	1.72	1.62	3.44	3.24
1.73	1.63	1.73	1.63	3.46	3.26

THE CONTRIBUTION MUST BE COMPLETELY HEALTHY TO PREVENT THE INGRESS OF WATER FROM THE TESTED AREA TO THE ADJACENT AREAS. THE CONTRIBUTION IN THE PANEL SHALL BE WITHIN 1.5% JOCKET

IT SHALL BE WITHIN 1.5% JOCKET

IT APPLIES - VALVES AND CONNECT JOINTS

TEST TO 0.6 MPa FOR 15 MINUTES MINIMUM

CHECK ALL INTERNAL WELDS AND JOINTS

CHECK ALL EXTERNAL WELDS AND JOINTS

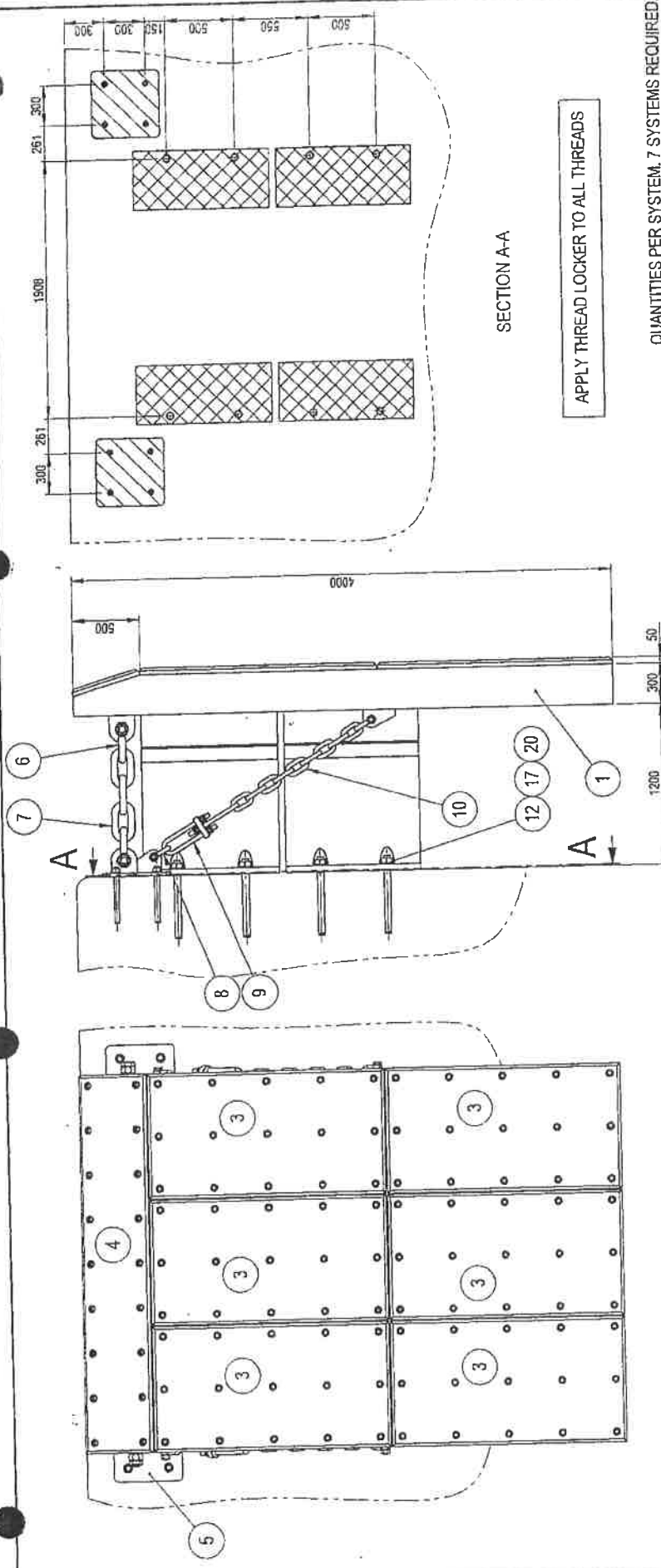
TEST TO 0.6 MPa FOR 15 MINUTES MINIMUM

IT SHALL BE WITHIN 1.5% JOCKET

[illegible]

[illegible]

COMMERCIAL IN CONFIDENCE. This drawing remains the property of Treiborg AB and must not be reproduced or further used or communicated to the third party without our written consent in each case.

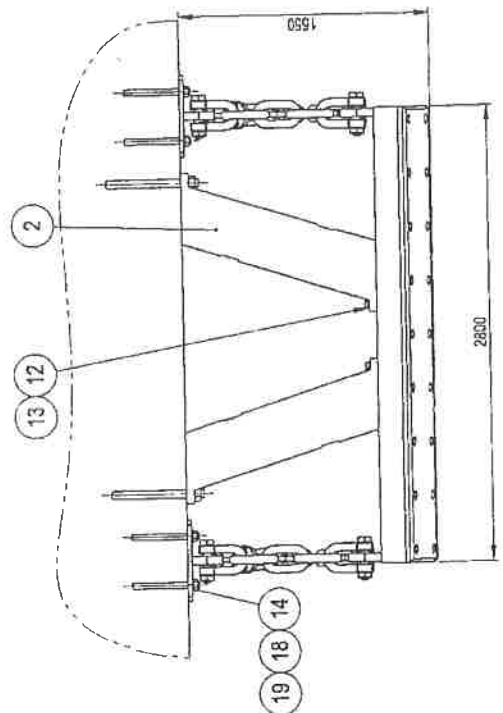


SECTION A-A

APPLY THREAD LOCKER TO ALL THREADS

QUANTITIES PER SYSTEM. 7 SYSTEMS REQUIRED.

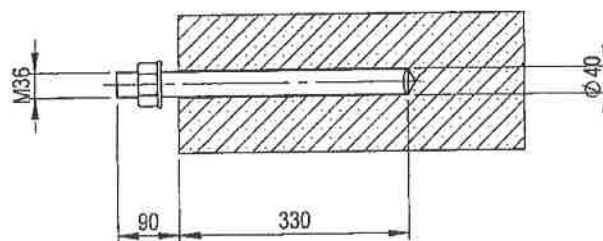
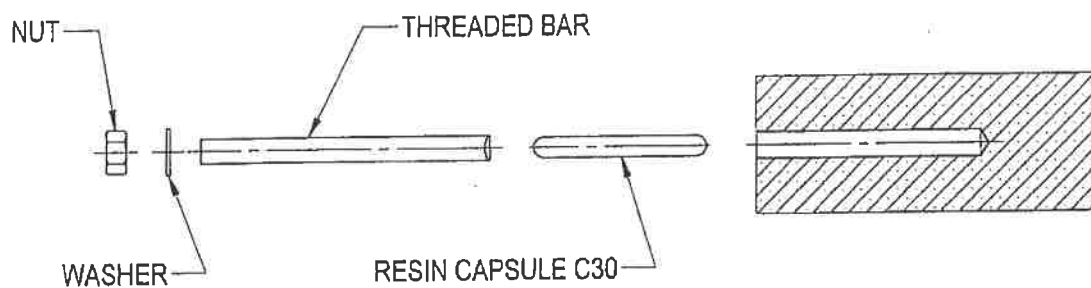
Item	Qty	Description	Dimension	Material	Weight
102	1	THREAD LOCKER		WEICON	AN 302-45
20	8	NUT	M48 - DIN 934	SS 316	
19	8	NUT	M36 - DIN 934	SS 316	
18	8	THREADED BAR + CAPSULE	M36x420 + C30	SS 316	
14	8	WASHER	Ø 408x5 - DIN 125	SS 316	
13	8	BOLT	M48x170 - DIN 931	SS 316	
12	16	WASHER	Ø 53x92x6	SS 316	
17	8	THREADED BAR + CAPSULES	M48x580 + 2xC30 + 1xC24	SS 316	
10	2	CHAIN	Ø 30x4,0 DIN 51080	HDG - MBL 706 kN SL3	
9	2	CHAIN TENSIONER	Ø 30x(530-720)	HDG	
8	4	SHACKLE	Ø 32x35x54	HDG - NBL 720 kN	
7	2	CHAIN	Ø 50x4,0 DIN 51080	HDG - MBL 1570 kN SL2	
6	4	SHACKLE	Ø 45x50x149	HDG - NBL 1500 kN	
5	2	CHAIN BRACKET	500x500x235	S355J2 - HDG	
4	1	UHMW-PE	50x2800x522	FO-1000	
3	6	UHMW-PE	50x1745x927	FO-1000	
2	4	FENDER	UE 1200x1000	E20	
1	1	STEEL PANEL	4000x2800x300	S355J2	



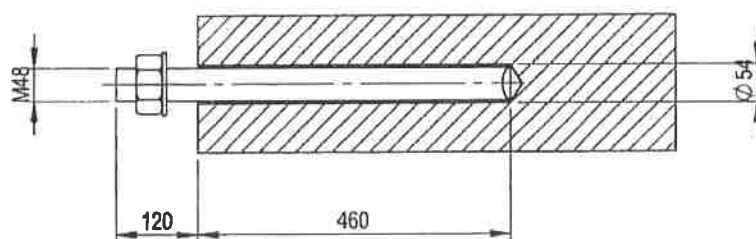
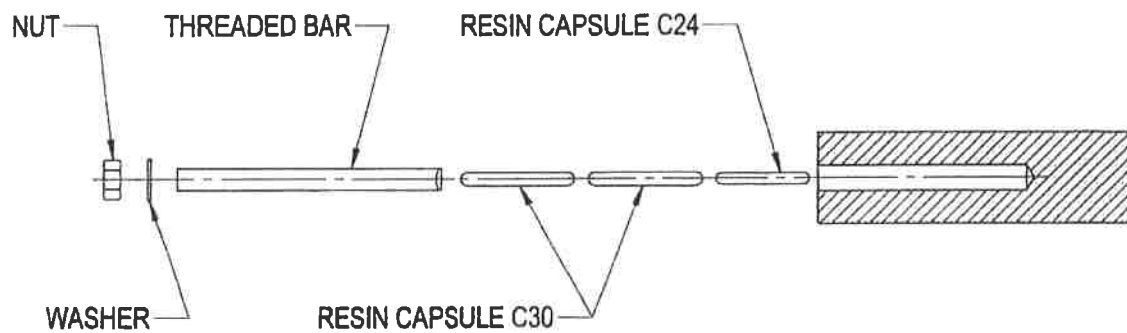
DRAWN	AK	2008-05-28
CHECKED		
APPROVED		
SCALE	1:30	
PROJ. NO.	ZAF-1237	
CONT. NO.		
TITLE: FENDER ASSEMBLY		
PORT OF NGOURA, SOUTH AFRICA		
DRAWING NUMBER: 110853-002		
REV	A3	

© - Treiborg AB

COMMERCIAL IN CONFIDENCE This drawing remains the property of Trelleborg AB and must not be reproduced or improperly used or communicated to the third party without our written consent in each case.



DRAWN	AK	2008-04-04			
CHECKED					
APPROVED					
SCALE	1:10		TITLE: RESIN ANCHOR (M36) INSTALLATION PROCEDURE PORT OF NGQURA, SOUTH AFRICA © - Trelleborg AB	DRAWING NUMBER: 110853-109	REV
PROJ NO.	ZAF-12327				A4
CONT NO.					



DRAWN			TITLE: RESIN ANCHOR (M48) INSTALLATION PRCEDURE PORT OF NGQURA, SOUTH AFRICA		DRAWING NUMBER: REV A4	
CHECKED						
APPROVED						
SCALE	1:15					
PROJ NO.						
CONT NO.						

AMS & FENDER SPACERS PICTURES



