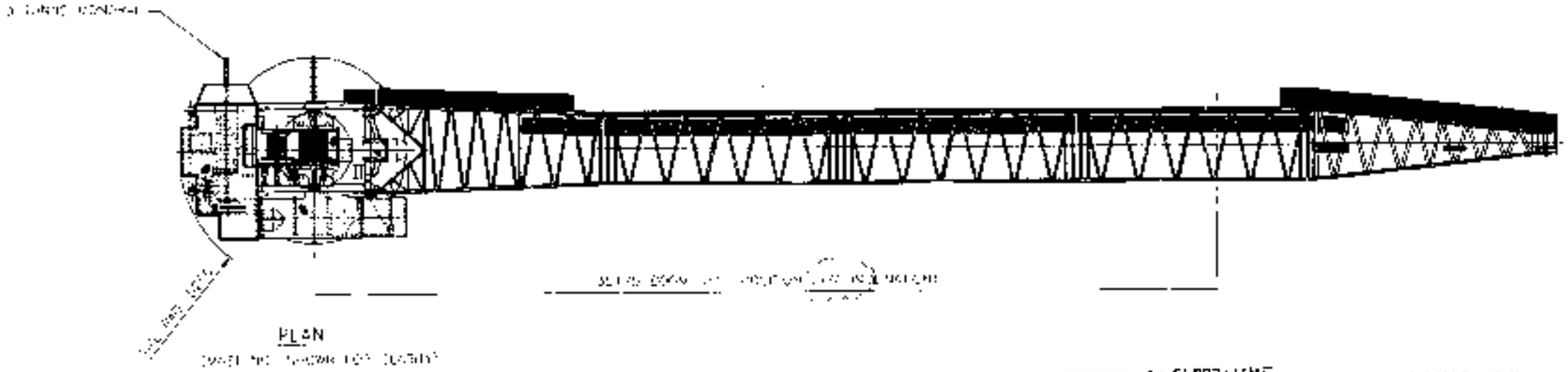

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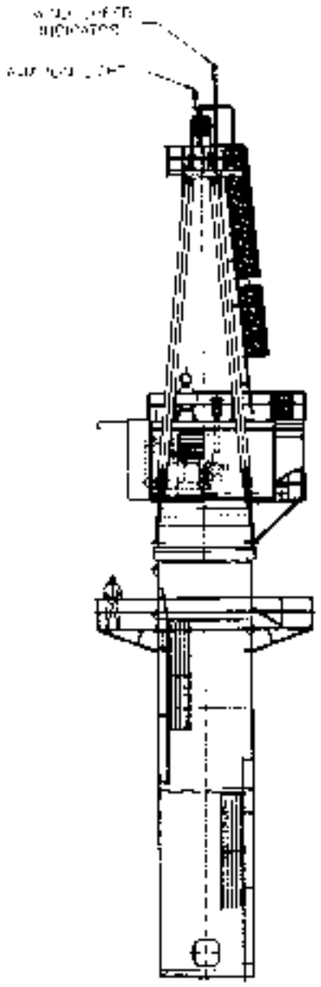
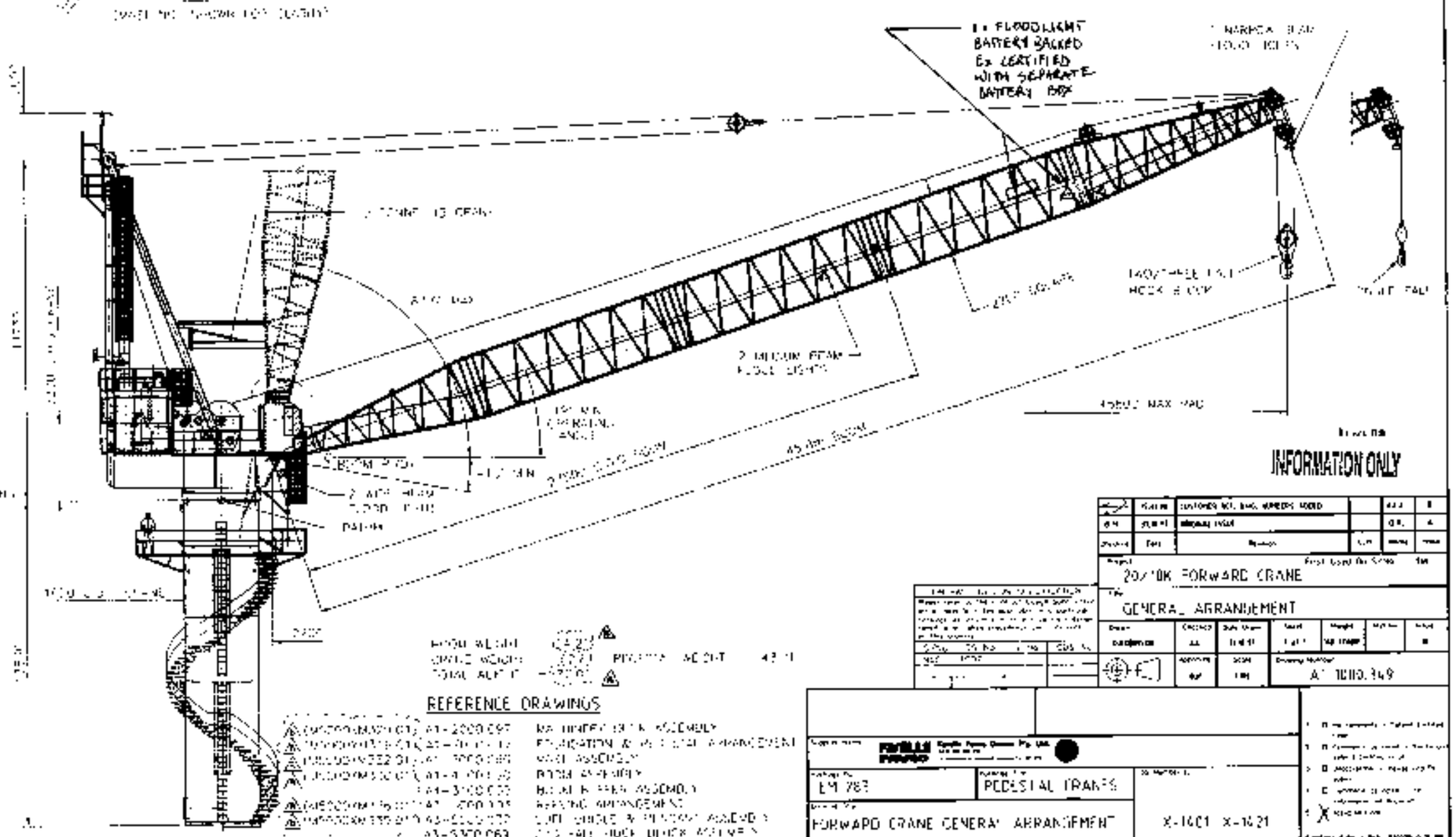


END ELEVATION

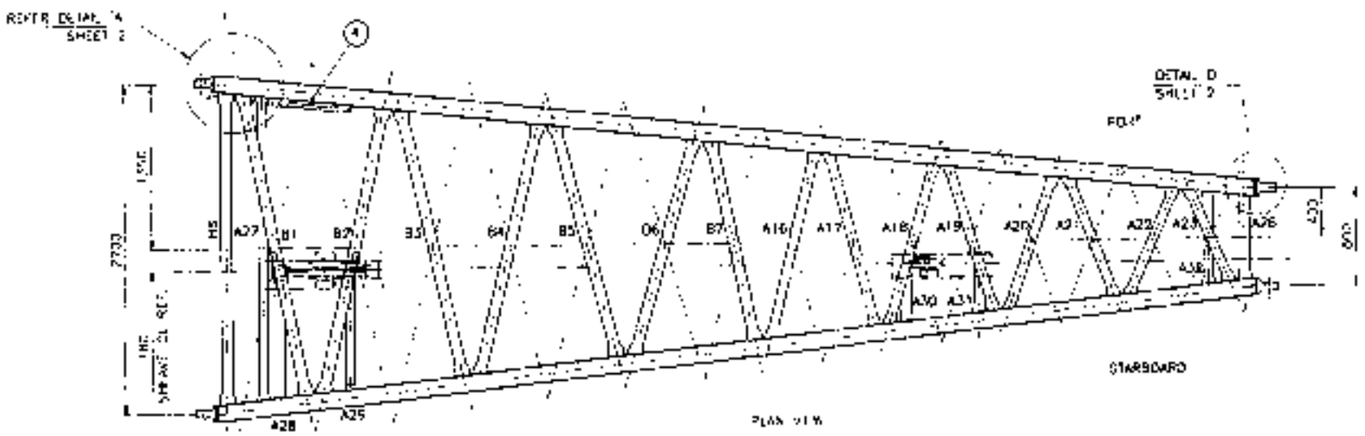


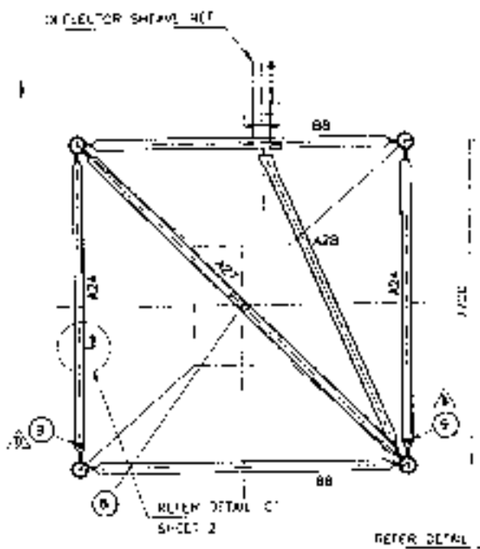
ELEVATION

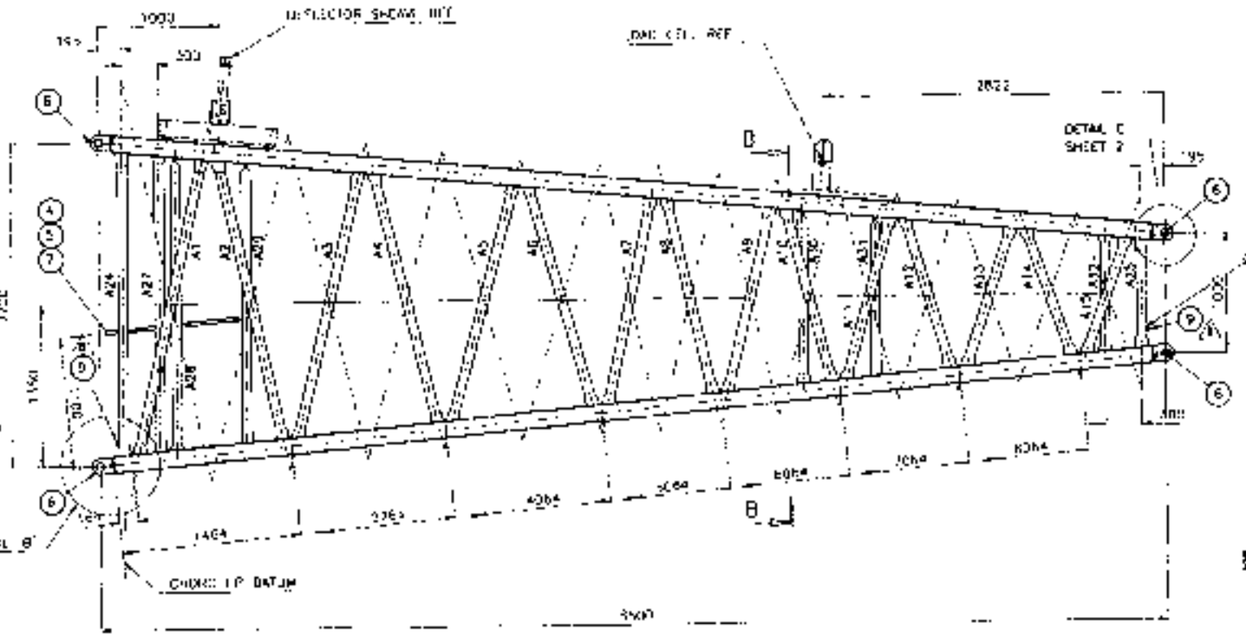
REFERENCE DRAWINGS

INFORMATION ONLY

EM 787	PEDESTAL CRANES				
FORWARD CRANE GENERAL ARRANGEMENT				X-1401 X-1421	
				A1 1000.349	
				14	H050
M	5	0	0	0	X	M	3	2	B	C	1	6.6







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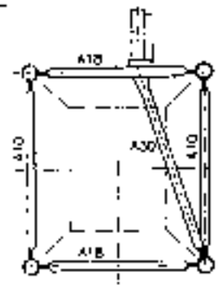
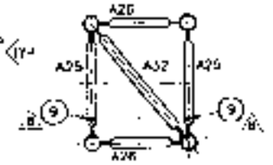


SECTION B-B



BRACE CUTTING DETAILS

	LENGTH	ANG. 1	ANGLE 2	QTY.		LENGTH	ANGLE 1	ANGLE 2	QTY.
A1	2525	17.5°	6.6°	2	A18	1311	22.6°	9.8°	2
A2	2403	18.7°	7.2°	2	A19	1266	24.1°	11.2°	2
A3	2283	18.8°	7.9°	2	A20	1168	25.2°	12.8°	2
A4	2164	19.6°	8.6°	2	A21	1068	23.3°	14.1°	2
A5	2049	20.5°	9.5°	2	A22	971	29.6°	17.0°	2
A6	1937	21.4°	10.4°	2	A23	863	35.4°	17.8°	2
A7	1780	17.8°	6.8°	2	A24	2537	5.5°	5.5°	2
A8	1688	18.4°	7.5°	2	A25	901	5.5°	5.5°	2
A9	1557	19.2°	8.3°	2	A26	690	6.3°	6.3°	2
A10	1506	20.1°	9.1°	2	A27	1550	6.3°	6.3°	1
A11	1415	21.1°	10.1°	2	A28	2722	22.3°	6.3°	1
A12	1326	27.7°	11.2°	2	A29	2700	23.0°	6.3°	1
A13	1237	24.4°	12.5°	2	A30	1518	18.9°	6.3°	1
A14	1149	24.9°	13.9°	2	A31	1501	18.1°	6.3°	1
A15	1049	24.8°	13.8°	2	A32	1322	6.3°	6.3°	1
A16	1578	20.2°	7.6°	2	B1	2530	11.9°	5.3°	2
A17	1414	21.2°	8.6°	2	B2	2393	18.6°	6.0°	2
					B3	2246	19.3°	6.8°	2
					B4	2118	20.2°	7.6°	2
					B5	1983	21.2°	8.6°	2
					B6	1849	22.3°	9.8°	2
					B7	1682	15.1°	6.3°	2
					B8	2554	6.3°	6.3°	2

TOTAL LENGTH OF 76.1 O.D. PIPE IS 136m

THIS HATCHED H (PRIMARY) PROVIDE SUITABILITY OF MECHANICAL AND CHEMICAL PROPERTIES FOR CHARPY IMPACT REQUIREMENTS REFER TO THE APPROVED DESIGN SPECIFICATION.

ORIGINAL

20/10K AFT & FORWARD CRANES

BOOM TOP SECTION

A1-4300.097

DAELIM

EM 283

PEDESTAL CRANES

AFT & FORWARD CRANE
BOOM TOP SECTION

X-1411/1417

A1-4300.097

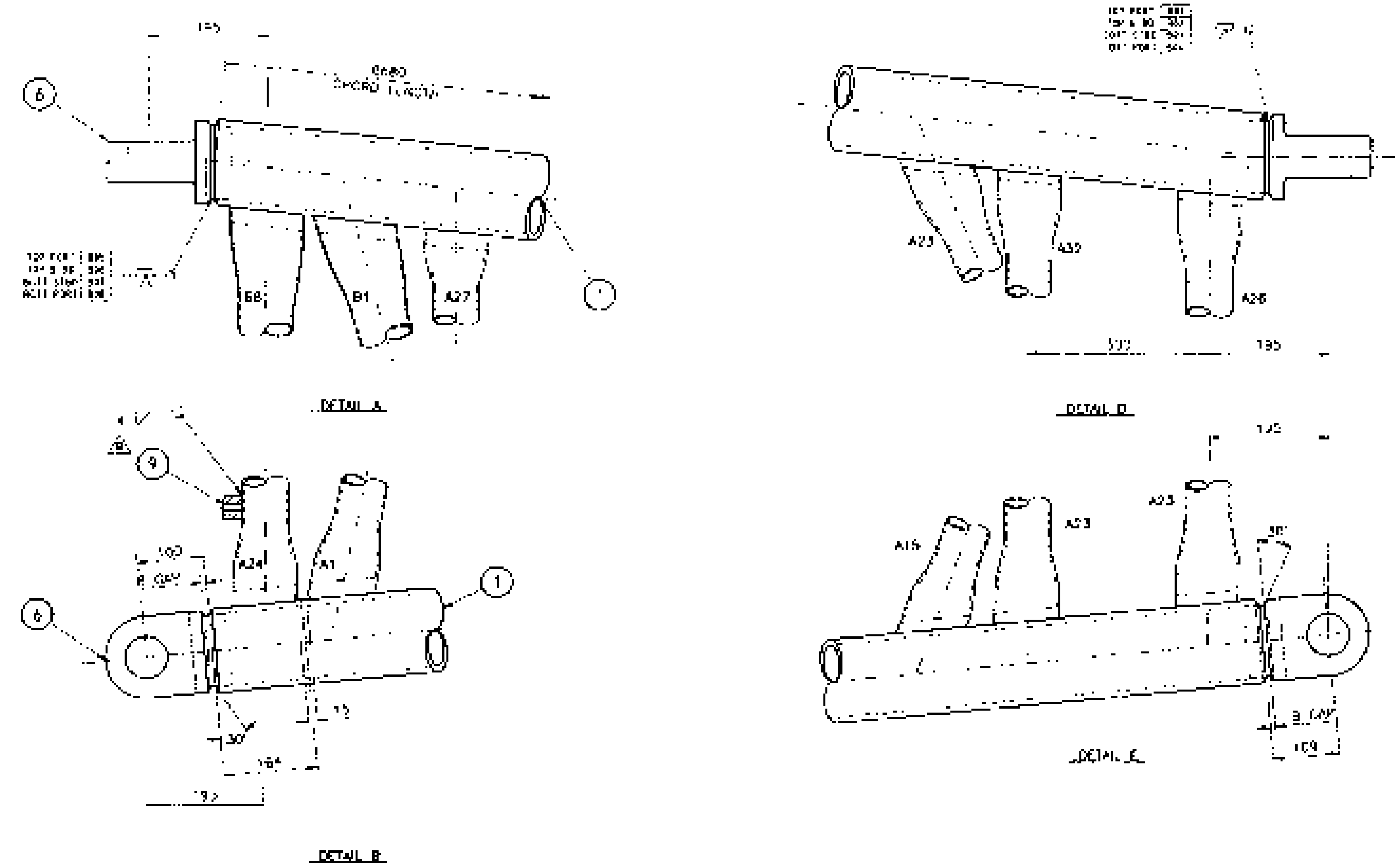
16

HD20/1060

9.3

M	5	0	0	0	X	M	3	4	5	0	1

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
P	1	4	TUBE Ø119.2x9.53	8680	AS1163-350	[illegible]
BRACE DESIGN "B"	2	REF TABLE	TUBE Ø88.9x4.?	[illegible]	AS1163-350	[illegible]
BRACE DESIGN "A"	4	REF TABLE	TUBE Ø76.1x3.?	[illegible]	AS1163-350	[illegible]
	L	[illegible]	PIPE Ø33.?	[illegible]	AS1163-350	5
	5	7	PL 3mm x Ø30		AS3678-250	
P	6	8	CONNECTOR-MALE	A2-9400.0??.C??		[illegible]
	7	2	RD Ø10	[illegible]	AS3679-250	2
	8	1	NAMEPLATE	A3-9900.00?		1
	9	4	EARTHING BOSS	A4-9400.C??		[illegible]

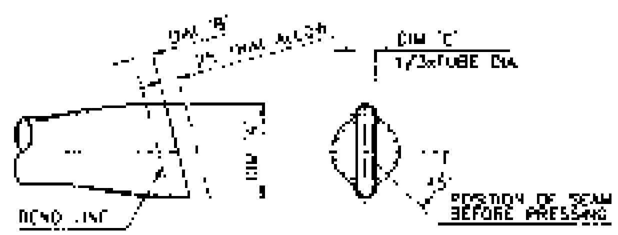


NOTES

1. ALL WELDING AND PREPARATION TO COMPLY WITH AWS-D1.1 LATEST EDITION
2. ALL WELDS, UNLESS NOTED, TO BE 4 mm CONTINUOUS FILLET WELDS
3. ALL JOINTS TO BE SEAL WELDED AGAINST CORROSION.
4. ABOVE SIZES DO NOT ALLOW FOR WELD PREPARATION.
5. FOR WELD PROCEDURES AND NDT REQUIREMENTS REFER TO WMS. [illegible].097
6. ITEMS MARKED 'P' (PRIMARY) REQUIRE TRACEABILITY TO MECHANICAL AND CHEMICAL MILL CERTIFICATES

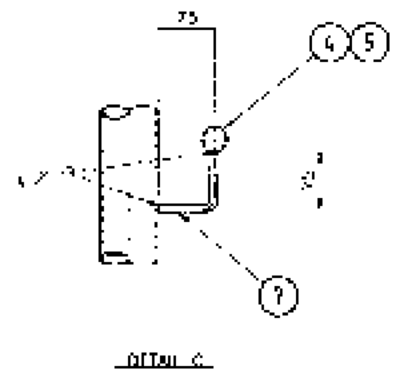
REFERENCE DRAWINGS

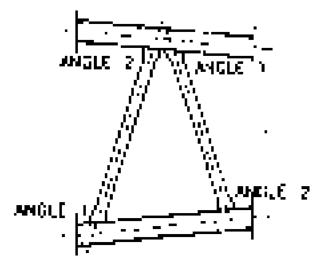
BOOM ASSEMBLY A1-4300.[illegible]



TUBE DIA.	DIM 'A'	DIM 'B'	DIM 'C'
48.3	66.8	15	15.9
60.3	83.4	15	19.9
76.1	106.5	25	25.4
88.9	124.4	25	29.6
101.6	140.5	25	33.5

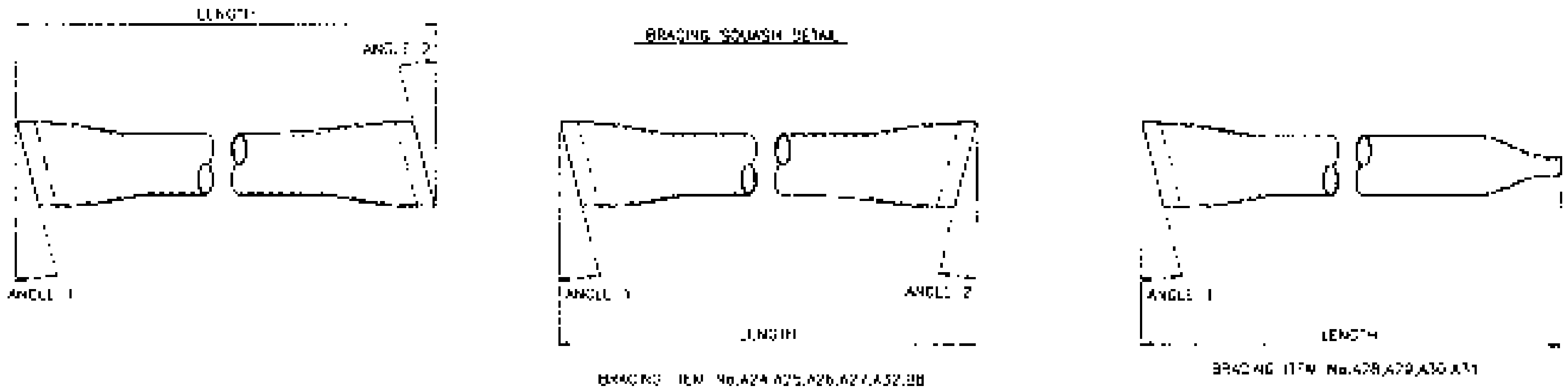
BRACING SQUASH DETAIL





BRACE ORIENTATION

ORIGINAL



BRACE CUTTING DETAILS

PROJECT DOCUMENT NUMBER												
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Favelle Favco Cranes Pty. Ltd.

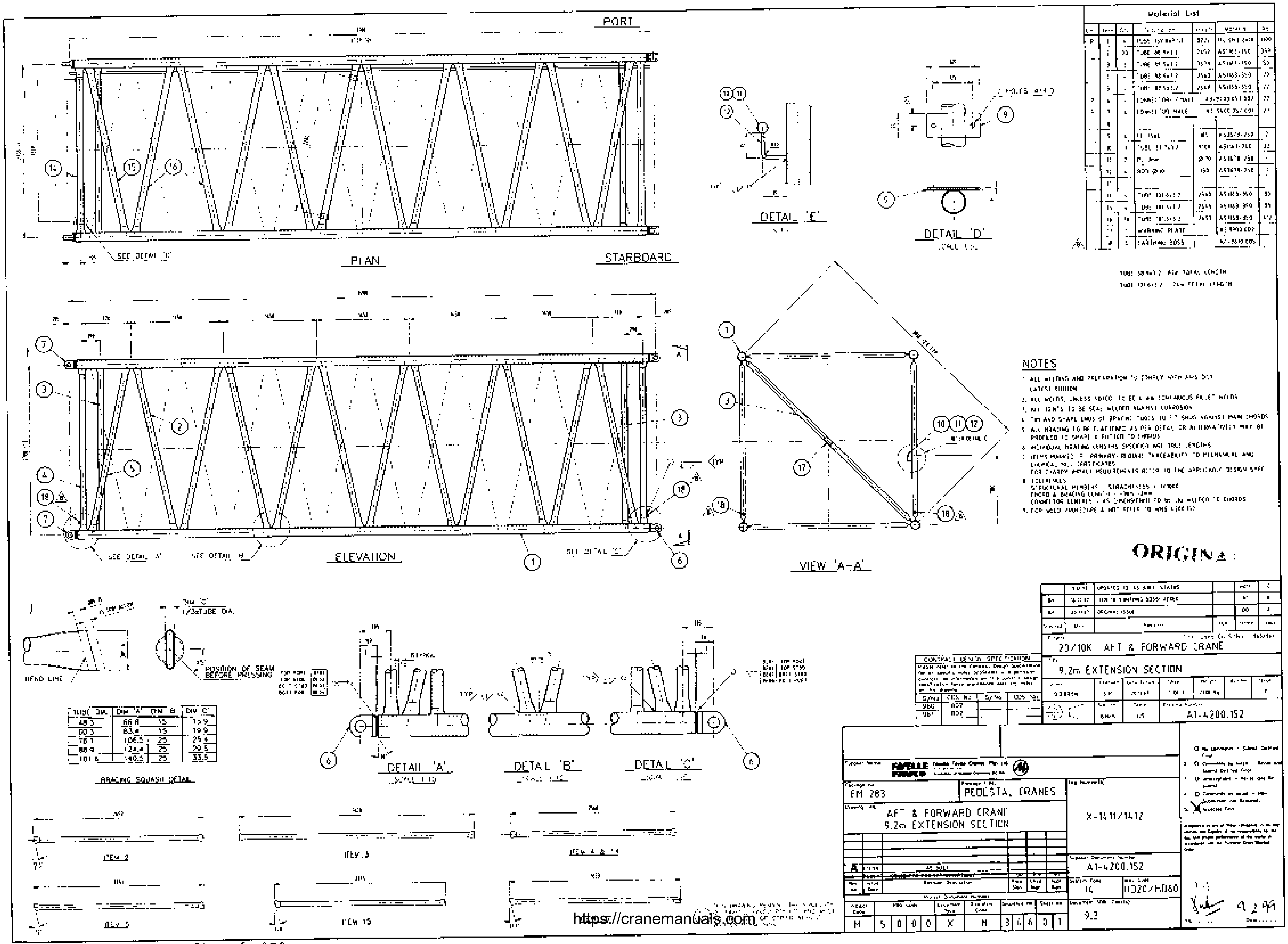
20/10K AFT & FORWARD CRANE

BOOM TOP SECTION

A1-4300.097

https://cranemanuals.com

765 of 1370


PORT
PLAN
STARBOARD
SEE DETAIL 'D'
DETAIL 'E'
DETAIL 'D'
Material List
ELEVATION
SEE DETAIL 'A'
SEE DETAIL 'B'
SEE DETAIL 'C'
VIEW 'A-A'
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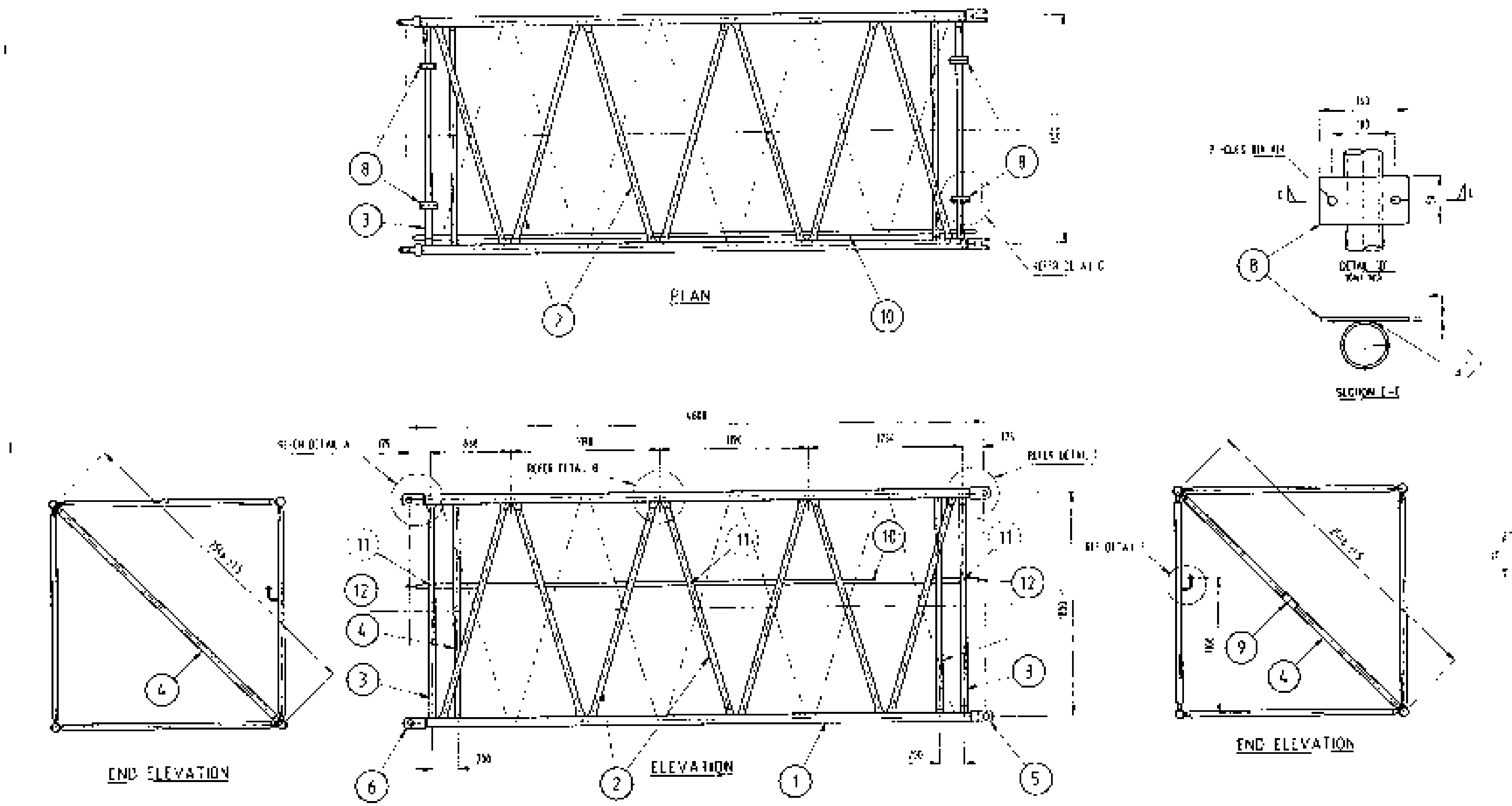
BRACING SQUASH DETAIL
POSITION OF SEAM BEFORE PRESSING
BEND LINE
DETAIL 'A'
DETAIL 'B'
DETAIL 'C'
ITEM 2
ITEM 3
ITEM 4 & 14
ITEM 5
ITEM 15
23/10K AFT & FORWARD CRANE
9.2m EXTENSION SECTION
A1-4200.152
EM 283
PEDESTAL CRANES
AFT & FORWARD CRANE
9.2m EXTENSION SECTION
X-1411/1412
A1-4200.152
M 5 0 0 0 X N 3 4 6 0 1
9.3
https://cranemanuals.com

MATERIAL LIST



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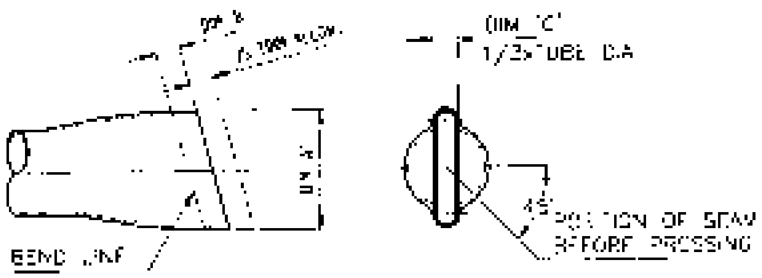
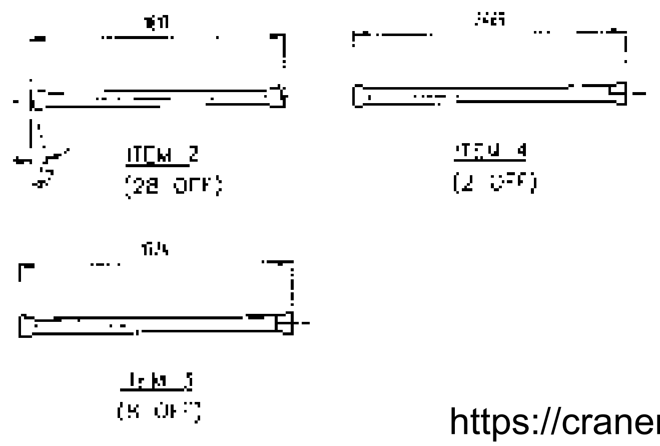
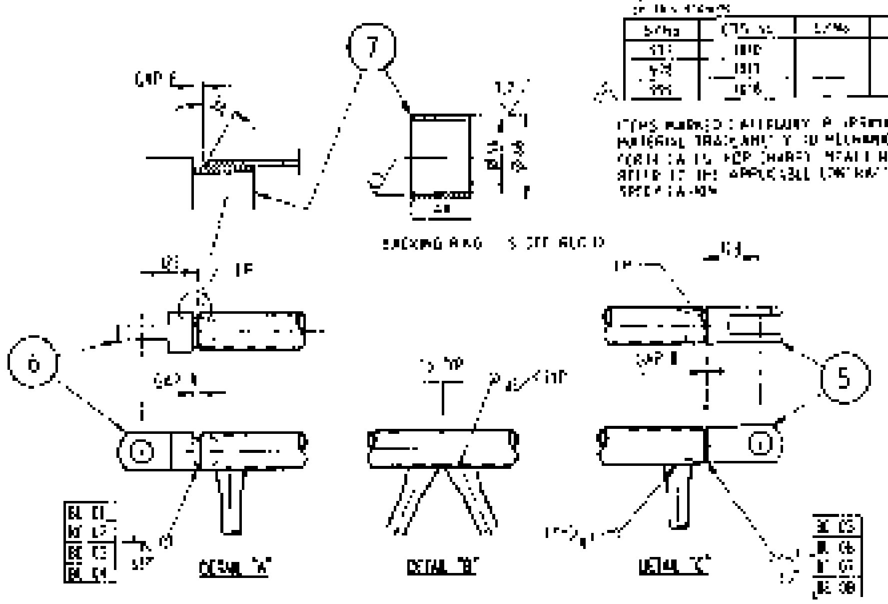


TUBE DIA	DIM 'A'	DIM 'B'	DIM 'C'
* 48.3	68.6	15	15.0
60.3	85.4	15	19.0
76.1	105.5	25	22.8
88.9	124.4	25	26.7
101.6	140.5	25	33.5

BRACE FLATTENING DETAIL

THE BELOW DIMENSIONS DO NOT INCLUDE TRIM ALLOWANCE (REF. BRACE FLATTENING DETAIL)





Favelle Favco Cranes Pty. Ltd

5/10K PEDESTAL CRANE

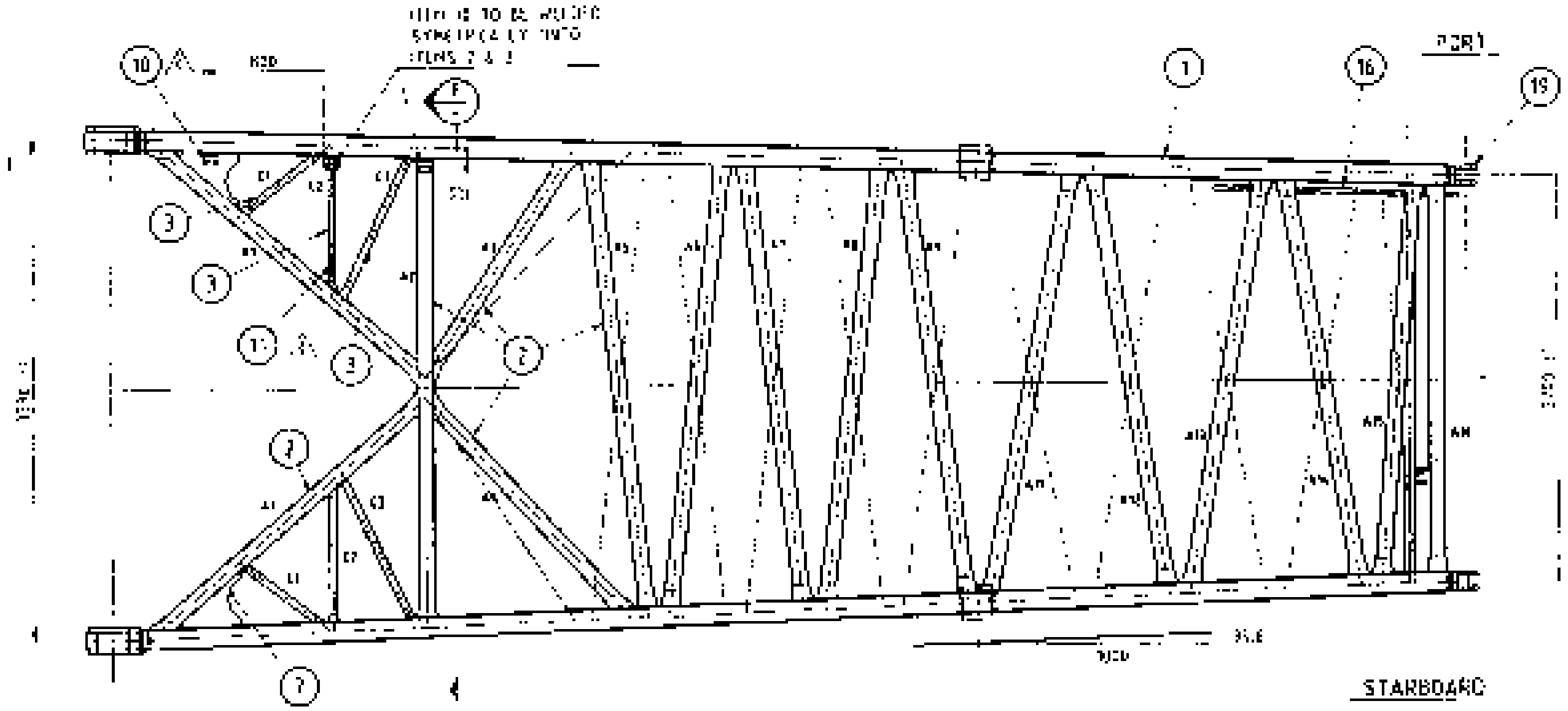
4.6m BOOM EXTENSION SECTION

A1-4300.150

PROJECT DOCUMENT NUMBER

M 5 0 0 0 X M 3 4 6 0 2 A

https://cranemanuals.com



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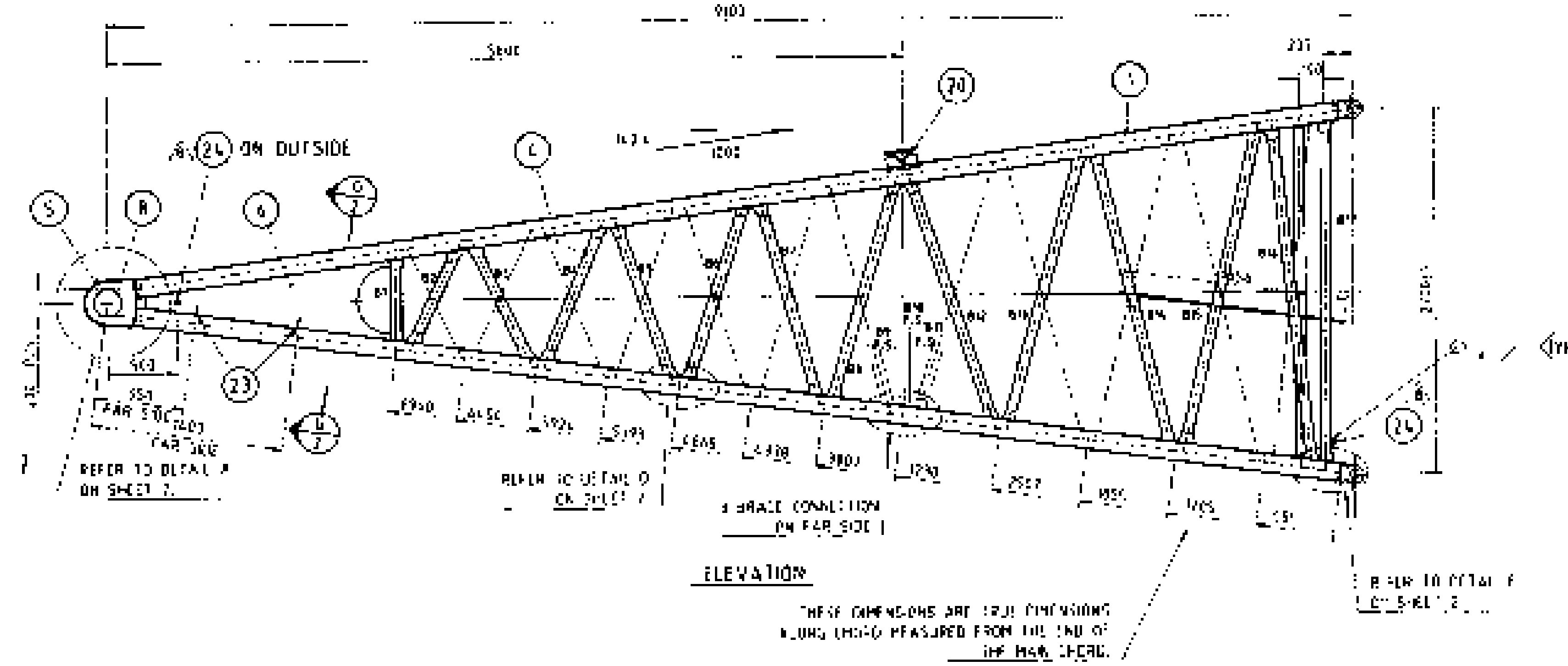
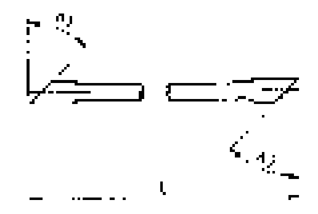
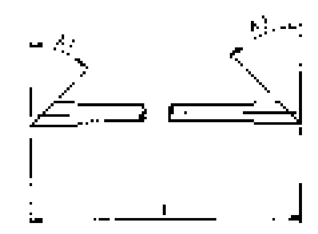


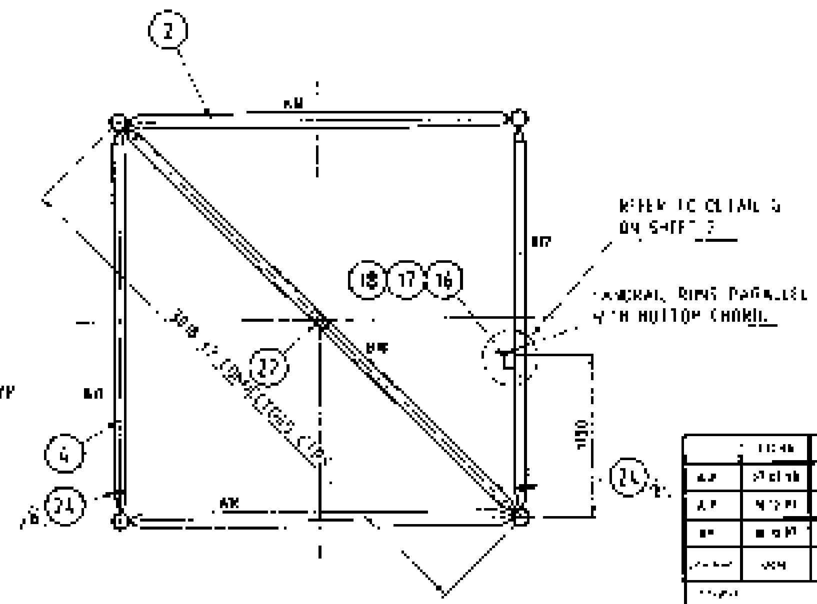
ELEVATION



TYPICAL BRACE CUTTING



SPECIAL BRACE CUTTING
A1,2,3
B1,12,17
C1



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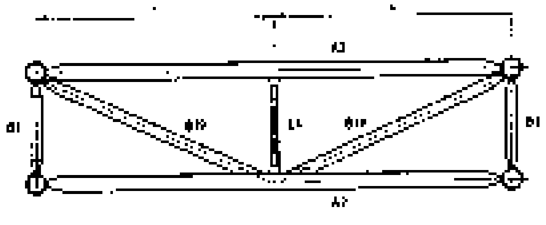
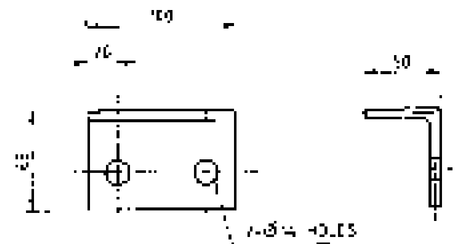
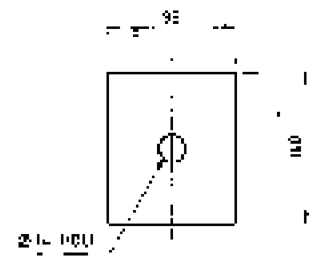


SECTION F



DETAIL ITEM 10



DETAIL ITEM 11

BRACE CUTTING DETAILS

No.	LENGTH	MAT'L ITEM	ANGLE 1	ANGLE 2	QTY
A1	[illegible]	1	56.6°	49.7°+	4
A2	2948	2	7.1°	2.1°+	1
A3	1175	2	56.3°	3°.6°+	2
A4	3031	2	46.8°	47.2°	2
A5	2952	2	5.1°	8.2°	2
A6	2569	2	8.2°	5.1°	2
A7	3326	2	5.1°	9.0°	2
A8	3892	2	9.5°	5.4°	2
A9	2459	2	4.4°	10.5°	2
A10					
A11	3467	2	9.4°	11.5°	3
A12	3182	2	12.3°	8.3°	3
A13	2138	2	8.3°	13.4°	3
A14	2492	3	14.6°	6.5°	3
A15	2185	2	6.8°	7.7°	3
A16	2172	3	7.7°	2.7°+	2

No.	LENGTH	MAT'L ITEM	ANGLE 1	ANGLE 2	QTY
B1	666	4	4.8°	8.0°+	2
B2	794	4	12.3°	34.2°	2
B3	854	4	12.5°	17.3°	2
B4	1019	4	14.7°	30.2°	2
B5	1010	4	11.5°	21.5°	2
B6	1346	4	9.5°	26.5°	2
B7	1484	4	7.9°	23.8°	2
B8	1665	4	4.7°	24.1°	1
B9	1828	4	4.3°	22.7°	1
B10	1847	4	0°	0°+	[illegible]
B11	1854	4	9.3°	25.3°	[illegible]
B12	1846	4	14.8°	26.8°	5
B13	2525	4	7.3°	33.2°	2
B14	2196	4	4.1°	33°	2
B15	2168	4	5°	40.9°	2
B16	2482	4	5.2°	44.8°	2
B17	2546	4	0°	0°+	2
B18	3174	4	TO SUIT		1
B19	1648	4	TO SUIT		1
C1	666	3	10°	59.4°+	4
C2	999	3	48.5	2.1°	4
C3	1861	3	25.5°	16.3°	4
C4	233	3	0°	0°	[illegible]

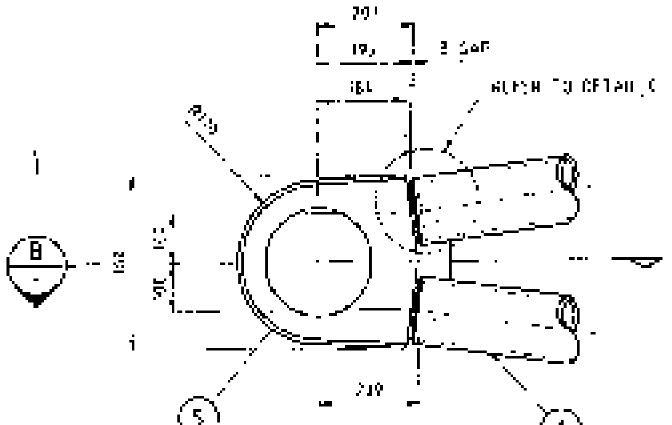
20/10K AFT & FORWARD CRANE

BOOM BOTTOM SECTION

A1-4100.083

Package No.	EM 283
Package Title	PEDESTAL CRANES
Drawing Title	AFT & FORWARD CRANE BOOM BOTTOM SECTION
Tag Number(s)	X-1411/1412
Supplier Document Number	A1-4100.083
Supplier Code	14
Area Code	HD20/HD60
	9.3
Project Document Number	M 5000 X M 36791

9-2-99



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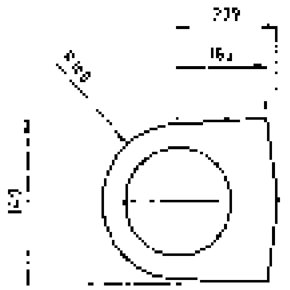
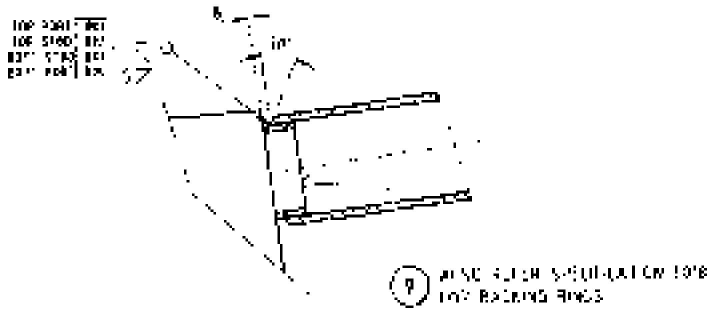
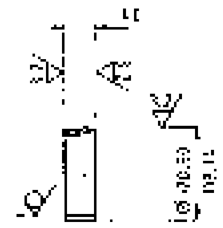


DETAIL ITEM 8



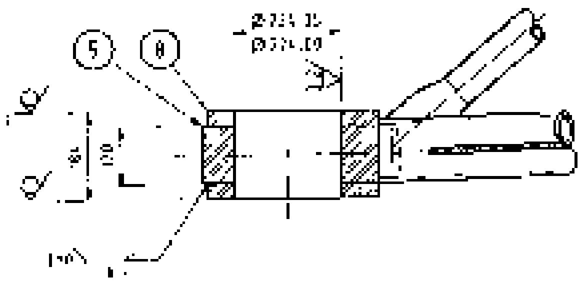
DETAIL C
NOT TO SCALE



DETAIL ITEM 5
(BACKING RINGS)

Material List

[illegible]



SECTION B
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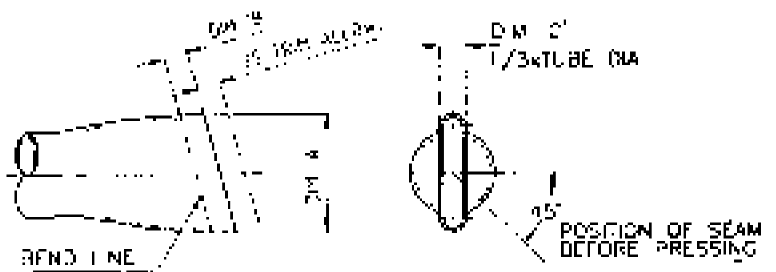
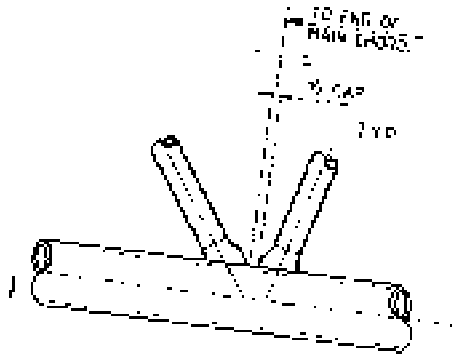


TUBE DIA.	DIM 'A'	DIM 'B'	DIM 'C'
48.3	66.8	15	15.9
60.3	83.4	15	19.9
76.1	106.5	25	25.4
88.9	124.4	25	29.6
101.6	140.5	25	33.5

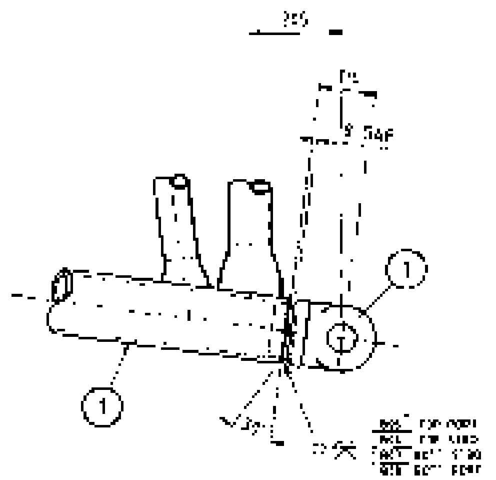
BRACING SQUASH DETAIL

NOTES

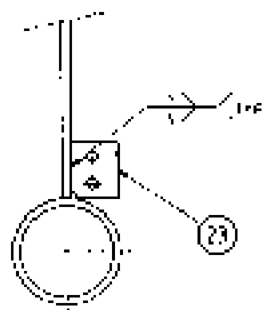
[illegible]



DETAIL D
SCALE 1:10

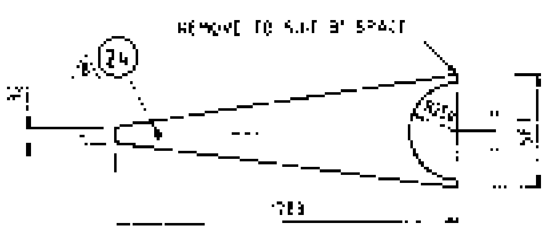


DETAIL E
SCALE 1:10



SECTION C

ORIGINAL



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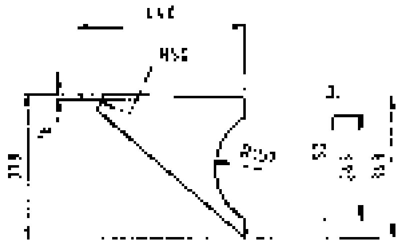
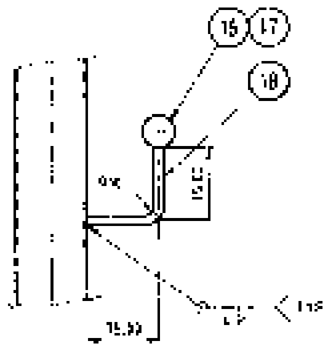


DETAIL ITEM 7



DETAIL G

PROJECT DOCUMENT NUMBER

Favelle Favco Cranes Pty. Ltd.

20/10K AFT & FORWARD CRANE

BOOM BOTTOM SECTION

A1-4100.083

https://cranemanuals.com

Table of Contents

MECHANICAL DATA SHEET
PEDESTAL CRANE

PACKAGE NO.	DOC.NO. M5000KM301	REV. A	DATE. 25.07.1997	PAGE: 3 of 21

1	TAG				MODEL		
2	DESCRIPTION				SERIAL NO.		
3	SIZE (DX,DY,DZ)				LAYOUT DWG. NO.		
4	VENDOR				P & ID NO.		
5	MANUFACTURER				AREA/ELEVATION		
6							
7							
	1.0 ENVIRONMENT						
8	OUTSIDE TEMPERATURE MIN/MAX/DESIGN [°C]			41	20	0	
9	PERMISSIBLE MACHINE ROOM TEMP., MIN/MAX [°C]						
10	RELATIVE HUMIDITY, MIN/MAX/DESIGN [%]				100	100	
11	DESIGN WIND	VELOCITIES	[M/SEC]		ELEVATION		
12	IN SERVICE	CONSTANT		25			
13	IN SERVICE	5 SEC. GUST		38			
14	OUT OF SERVICE	CONSTANT		40			
15	OUT OF SERVICE	60 SEC. GUST		60			
16							
17	MACHINERY HOUSING			AREA CLASSIFICATION	SAFE		
18	DRIVERS CAB				SAFE		
19	BOOM				ZONE 1		
20							
21							
22							
	2.0 DESIGN REQUIREMENTS						
23	TO MEET SPECIFICATION NO.				M5000SM380		
24	SPECIFIED CRANE STANDARD				LRS Code for lifting equipment in a marine environment		
25					AS1418/BS2573		
26				DESIGN CLASSIFICATION			
27	STRUCTURAL: DUTY GROUP				A5		
28	STRUCTURAL: CLASS OF UTILIZATION				U5		
29	STRUCTURAL: STATE OF LOADING				Q2		
30	MACHINERY	WHIP HOIST	MAIN HOIST	LUFF HOIST	SLEW DRIVE	SPLITTER G. BOX	
31	GROUP	NA	M5	M6	M4	M5	
32	CLASS OF OPERATION	NA					
33	STATE OF LOADING	NA					
34	OPERATION UNDER MAX. LOAD AND RADIUS AT [DEG. LIST]				2deg. ROLL AND PITCH		
35							
36	NOTES:						
37	1 Design classification according to BS 2573.						
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							

3.0 DIMENSIONAL DATA (MM)

A-MAX OVALL HT ABOVE UPSIDE OF SLEW RING		H-MAX. HOOK HT ABOVE PIVOT	
B-BOOM LENGTH	45000	LW-MAX. HOOK TRAVEL	
D-PIVOT PIN TO UPSIDE OF SLEW RING		⍺-MAX. BOOM ANGLE ABOVE HOR.	83deg
E-HT. OF SLEWING COLUMN		LENGTH OF BOOM FOOT SECTION	9100
F-PEDEST.CENTRE TO PIVOT PIN	1700	LENGTH OF BOOM HEAD SECTION	9100
G-TAIL RADIUS	5200	LENGTH OF BOOM CENTRE SECT.	9200
K-HT. OF SLEW RING AB L.A.T.		NO. OF BOOM CENTRE SECTIONS	3
R-HOOK RADIUS, MAX	45000		

NOTES

1. PEDESTAL (ADAPTOR), MAIN DIMENSIONS, MM
   OUTER DIAMETER. 3178
   FLANGE OUTER DIAMETER:3178
   HEIGHT. 5000

MATERIALS AS3678 350MPa
BOLTING FLANGE. AS3678 350MPa
CYLINDRICAL PART· AS3678 350MPa
SECONDARY STEELWORK· AS3678 250MPA

Missing data to be completed by bidder.

4.0 WEIGHT FORCES AND MOMENTS

WEIGHTS (TONNES)

CRANE BASE FRAME WITH MACHINERY HOUSE/CAB	23.8 (note2)
"A" FRAME WITH ANY WINCHES, SHEAVES AND AUXILIARIES	28.0 (note3)
BOOM WITH SHEAVES ETC.	12.0
MAIN HOOK AND SHEAVE/SWIVEL BLOCK	1.5
WHIP HOOK AND BALL/SWIVEL	0.5
WIRE ROPES	3.0
TOTAL DRY WEIGHT	69.8
FUEL, HYDRAULIC FLUID ETC.	5.0

FORCES AND MOMENTS

MAX. STATIC VERTICAL FORCE AT SLEW RING (KN)	
MAX. DYNAMICAL VERTICAL FORCE AT SLEW RING (KN)	
MAX. OVERTURNING MOMENT INCL. CRANE WEIGHT AT SLEW RING: STATIC (KNM)	
: DYNAMIC (KNM)	

5.0 LIFTING CAPACITIES

TABLE 5.1

MAIN HOIST (STAT. LIFTS, SINGLE FALL)

REQ'D VALUES RAD R(M)	REQ'D VALUES S.W.L TONN	REQ'D VALUES S.W.L TONN	ACTUAL VALUES RAD R(M)	ACTUAL VALUES S.W.L TONN	ACTUAL VALUES S.W.L TONN
8	15				
45	15				

MAIN HOIST (STATIC) 2 AND 3 FALLS

REQ'D VALUES RAD R(M)	2 FALLS S.W.L TONN	3 FALLS S.W.L TONN	ACTUAL VALUES RAD R(M)	2 FALLS S.W.L TONN	3 FALLS S.W.L TONN
8	30	46			
16	30	45			
25	30				
45					

NOTES:

1) SLEW BEARING
MANUFACTURER:HOECHST ROTHE ERDE
MODEL:192.32.3150
TYPE (ball/roller, etc.):3-ROW ROLLER
NOMINAL DIAMETER, mm:3150
BEARING OD, mm:3368
BEARING HEIGHT, mm:203
NO. OF/SIZE OF BOLTS, OUTER RING:70/42Ø
NO. OF/SIZE OF BOLTS, INNER RING:70/42Ø
BEARING MATERIAL:42CrMo4MODV
BOLT MATERIAL:10K
CONDITION MONITORING, TYPE:NONE

2)INCLUDING SLEW BEARING AND SLEW DRIVE

3)INCLUDING WINCHES AND POWER PACK

Missing data to be completed by bidder

6.0 LIFTING AND HOOK SPEEDS

TABLE 6.1

HOOK S.W.L	MAIN HOIST NO. OF ROPE FALLS 3			NO. OF ROPE FALLS 2			MAIN HOIST SINGLE ROPE FALL		
%	LOAD TONNES	SPEED (M/S) UP	DOWN	LOAD TONNES	SPEED (M/S) UP	DOWN	LOAD TONNES	SPEED (M/S) UP	DOWN
100	45	0.3	0.3	30	0.5	0.5	15	>1.0	>1.0
75									
50									
EMPTY HOOK	0	1.0	1.0	0	1.5	1.5	0	2.5	2.5

7.0 SLEWING AND LUFFING

TABLE 7.1 SLEWING AT MAX. TRIM/LIST OF +2 °

PERCENTAGE OF SLEWING MOMENT	0	40	60	80	100
SLEWING MOMENT [KNM]					
SLEWING SPEED [RPM]	1				1.0

TABLE 7.2 BOOM HOISTING (LUFFING) DEGREES/SECOND

LOAD AT MAX. RADIUS	MAX. S.W.L AT MAX. RADIUS	EMPTY HOOK
FROM MAX. TO MIN. RADIUS (UP)	AVER. 0.9(80secs.)	90SECS.
FROM MIN. TO MAX. RADIUS (DOWN)	AVER. 0.9 (70 secs.)	

NOTES:

1 DIESEL ENGINE
MAKE:CATERPILLAR
MODEL/TYPE.3406BDTA(electronic)
SWEPT VOLUME. cm3:14,600
RATED POWER, kW:321 at 2100 RPM
STARTING SYSTEM:ELECTRIC
NO. OF STARTS REQUIRED 6
ALARMS AND SAFETY SHUTDOWNS
OVERSPEED _____
LOW L. O. PRESSURE.138KpA
HIGH L. O. TEMP :_____
HIGH J. W. TEMP.: 86-99 degC

Missing data to be completed by bidder

8.0 HOIST DRUMS, SHEAVES AND WIRE ROPE

TABLE 8.1

DATA	HOIST MAIN	HOIST WHIP	HOIST BOOM
DRUM:			
DIAMETER (1) (MM)	1132	N/A	812
FLANGE DIAMETER (MM)	1600		1250
WIDTH BETWEEN FLANGES (MM)	990		907
NO. OF LAYERS	3		13
NO. OF DEAD TURNS (2)	6		5
DIAMETER SHEAVE	620		620
WIREROPE:			
TYPE	NON ROTATING		LANGS LAY
CONSTRUCTION	35x7		
DIAMETER (MM)	32		32
CORE MATERIAL	STEEL		STEEL
WIRE MATERIAL	STEEL		STEEL
TENSILE STRENGTH (N/MM²)	2070		2070
TOTAL BREAKING LOAD (KN)			
CROSS SECTION NOM. EFFECTIVE (MM²)			
CORROSION PROTECTION	GALVANIZED		GALVANIZED
NO. OF FALLS FOR MAX. S.W.L	3		6
TOTAL LENGTH (M)			
WEIGHT PER METRE (KGS)			
OPERATING TEMP. °C : MAX	TO BE CONFIRMED		TO BE CONFIRMED
OPERATING TEMP. °C : MIN			

NOTE: (1) CTR. OF ROPE

NOTE: (2) WITH HOOK OR BOOM AT MAX. LOWER LIMIT OF TRAVEL

NOTES:

9.0 ELECTRICAL LIGHTNING AND EQUIPMENT

TABLE 9.1 FLOODLIGHTS

LOCATION	SLEWING STRUCTURE	BOOM TIP	BOOM
TYPE	200MK II Zone 1	200MK II Zone 1	200MK II Zone1
SUPPLIER	Chalmit	Chalmit	Chalmit
NO. REQUIRED	2	2	2
FOCUSED ON			
BEAM ANGLE (X,Y)			
POWER SUPPLY			
RATING (WATT)			
OUTPUT (LUMEN)			
HAZARD CLASSIFICATION	ZONE 1	ZONE 1	ZONE 1
LIGHT DATA:			
DIST. FROM PEDESTAL (M)			
INTENSITY AT DECK LEVEL (LUX)			
DIST. FROM BOOM TIP (M)			
INTENSITY AT BEAM CENTRE (LUX)			

TABLE 9.2 AIRCRAFT WARNING LIGHTS

LOCATION	"A" FRAME APEX	BOOM
TYPE		
SUPPLIER		
NO. REQUIRED	1	0
SPACING		
POWER SUPPLY		
RATING		
HAZARD CLASSIFICATION	EExd	

TABLE 9.3 CRANE LIGHTNING

LOCATION	CAB	WALKWAYS	PED ADAPTER	MACHINERY HOUSE
TYPE	Protecta II(1)	Protecta II (1)	Protecta II (1)	Protecta II (1)
SUPPLIER	Chalmit	Chalmit	Chalmit	Chalmit
NO. OF UNITS				
POWER SUPPLY				
RATING				
HAZARD CLASSIFICATION	Zone 1	Zone 1	Zone 1	Zone 1
INTENSITY				
NOTES				

(1). Protecta II XPD2436H Zone 1 for normal use, Protecta II XPDE52435H Zone 1 for emergency use.

TABLE 9.4 COLLECTOR RINGS

SERVICE	NUMBER	ENCLOSURE	GLAND- TYPE/SIZE
MAIN POWER SUPPLY	3 note(1)	EExd	
NEUTRAL	1	EExd	
EARTH	1	EExd	
EMERGENCY POWER SUPPLY	3 note (1)	EExd	
INSTRUMENT EARTH (IE)	See note (2)		
FIRE ALARMS CABIN			
GAS DETECTION			
CONTINGENCY/SPARE			
INSTRUMENT EARTH (IE)			
PROTECTIVE EARTH (PE)			
FIRE DETECTORS/FIRE ALARM			
TELECOM , PA, LOUDSPEAKERS			
CONTINGENCY SPARE			
TOTAL			

NOTES:

(1) If 3-phase:480V 3Ph 60Hz, If single phase 240V 1Ph 50Hz

(2)INSTRUMENT SLIPRINGS REQUIRED.

EExd rated circuits.
-PA system A, 100V, 2rings
-PA system B, 100V, 2rings
-Telephone, 48V, 2rings
-Beacon, loop A, 48V, 2rings
-Beacon, loop B, 48V, 2rings
-Gas detectors (3off), 24V, 6rings
-Sol. valve release (2off), 24V, 4rings
-Audible alarm (1off), 24V, 2rings
-Visual alarm (1off), 24V, 2rings
-Instrument Earth (2off), 2rings
-Protective Earth (1off), 1ring
-TOTAL : 30 rings

-S rated circuits:
-Heat detectors (2off), 24V, 4rings
-Smoke detectors (2off), 24V, 4rings
-Manual alarm call points, (2off), 24V, 4rings
-Platform & Crane status (4off), 24V, 8rings
-Lockout switch (1off), 24V, 2rings
-Released pressure Transm (1off), 24V, 2rings
TOTAL : 24rings

SPARE/CONTINGENCY : >6rings

10.0 HYDRAULIC SYSTEM

OPERATING PRESSURE (BARG)	305
RESERVOIR CAPACITY (LITRES)	
RESERVOIR LOCATION	Above pumps in machinery house
HYDRAULIC FLUID TYPE	Shell TELLUS ?
HYDRAULIC FLUID SYSTEM CAPACITY (LITRES)	
HYDRAULIC TUBING: TYPE	Hoses and hard tubing
HYDRAULIC TUBING: MATERIAL	Tubing SS306L; Hoses Steel reinforced "rubber"
HYDRAULIC FITTINGS: TYPE	
HYDRAULIC FITTINGS: MATERIAL	Carbon steel, corrosion protected

DATA		CRANE FUNCTION			
		MAIN HOIST	WHIP HOIST	BOOM HOIST	SLEWING DRIVE
PUMPS	EQUIPT. NO.	2 off	N/A	1 off	2 off
	OUTPUT (KW)				
	OPERAT. SPEED (RPM)	2375		2375	
	SUPPLIER/TYPE	A4VG90 (1)		A4VG90 (1)	A4VG90 (1)
MOTORS	EQUIPT. NO.	3 off		2 off	2 off
	OUTPUT (KW)				
	OPERAT. SPEED (RPM)	643/2300		1200/4000	
	SUPPLIER/TYPE	A6VM200 (1)		A6VM80 (1)	A2FM63 (1)
FILTERS	EQUIPT. NO				
	FILTRAT. RATIO				
	SUPPLIER/TYPE				
	EQUIPT. NO	1 off			
GEAR BOX	OUTPUT (KW)				
	INPUT (KW)	421			
	OUTP. SPEED(S) (RPM)	2375			
	SUPPLIER/TYPE	AM 450	TECHNODRIVE		
MAIN LINE PULL ON FIRST LAYER (KN)		168.7		156.0	

NOTES.

(1) Hydraulic pumps and motors of make REXROTH

11.0 INSTRUMENTATION

TABLE 11.1 DRIVERS CAB

INSTRUMENT	INDICATOR	WARNING LIGHT	AUDIBLE ALARM
DIESEL ENGINE			
TACHOMETER			
COOLING WATER - TEMPERATURE			
COOLING WATER - LEVEL			
LUBRICATING OIL - PRESSURE			
LUBRICATING OIL - TEMPERATURE			
LUBRICATING OIL - LEVEL			
FUEL OIL - PRESSURE AT INJECTION			
FUEL OIL PUMP INLET			
FUEL OIL LEVEL			
PNEUMATIC START RECEIVER PRESSURE			
HYDRAULIC SYSTEM:			
OPERATING PRESSURE - BOOSTER & CONTR			
FLUID TEMPERATURE		ANNUNCIATOR	
RESERVOIR LEVEL		ANNUNCIATOR	
FILTER DIFFERENTIAL PRESSURE			
HOIST WINCHES:			
MOVEMENT DIRECTION			
SPEED (LINE SPEED M/S)			
LOAD RADIUS INDICATOR			
GAS/FIRE DETECTION			
GAS ALARM			
ESD ALARM			
FIRE ALARM			
MISCELLANEOUS			
BOOM TEMPERATURE			
WINDSPEED	YES	YES	
NOTES:			

MECHANICAL DATA SHEET
PEDESTAL CRANE

TABLE 11.2 MACHINERY HOUSE

	INDICATOR	VISUAL ALARM	AUDIBLE ALARM
RUNNING HOURS COUNTER			
LUB. OIL - LEVEL SIGHT GLASS			
LUB. OIL FILTER DIFF. PRESSURE			
LUB. OIL TEMPERATURE			
COOLING WATER - LEVEL SIGHT GLASS			
COOLING WATER TEMPERATURE			
FUEL OIL - PRESSURE			
FUEL OIL - FILTER DIFF. PRESSURE			
FUEL OIL - LEVEL SIGHT GLASS			
HYDRAULIC OIL - OPERATING PRESSURE			
HYDRAULIC OIL - BOOST PRESSURE			
HYDRAULIC OIL - CONTROL PRESSURE			
HYDRAULIC OIL - FILTER DIFF. PRESSURE			
HYDRAULIC OIL - FLUID TEMPERATURE			
HYDRAULIC OIL - RESERVOIR LEVEL SIGHT GLASS			
COMPRESSED AIR - PRESSURE	N/A		

TABLE 11.3 AUXILLIARY SYSTEMS

	INDICATOR	VISUAL ALARM	AUDIBLE ALARM
OVER LOAD/PROTECTION			
ACCUMULATOR PRESSURE			
OIL LEVEL SIGHT GLASS			
CAB AIR CONDITIONING/HEATING:			
TEMPERATURE			
FIRE PROTECTION			
GAS PRESSURE	N/A		

NOTES:

12.0 SEASTATE LOAD DERATING CHARTS

TABLE 12.1 MAIN HOIST - CASE 1

HOOK SPEEDS	NO. OF FALLS	ONE								
DERATING SPEEDS	RADIUS (M)	8	10	15	20	25	30	35	40	45
	LOADS IN TONNES									
PLATFORM		15	15	15	15	15	15	15	15	15
DYNAMIC FACTOR										
STIFFNESS FACTOR										
0,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
0,5 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
1,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
2,0 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
3,0 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
4,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD		15	15	15	15	15	15	1.82		
5,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
NOTES:										
15										

TABLE 12 2 MAIN HOIST - CASE 2

HOOK SPEEDS

NO OF FALLS				TWO					
DERATING SPEEDS	RADIUS (M)	8	10	15	20	25	30	35	40	45
	LOADS IN TONNES									
PLATFORM		30	30	30	30	30				
DYNAMIC FACTOR		1 33	1 33	1 33	1.33	1.33				
STIFFNESS FACTOR										
0,0 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
0.5 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
1,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
2,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD						1.88				
						28				
3,0 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
4,0 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
5,0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										

NOTES:

TABLE 12.3 MAIN HOIST - CASE 9

HOOK SPEEDS	NO. OF FALLS				THREE					
	RADIUS (M)									
DERATING SPEEDS	8	10	15	20	25	30	35	40	45	
	LOADS IN TONNES									
PLATFORM	45	45	45							
DYNAMIC FACTOR	1.33	1.33	1.33							
STIFFNESS FACTOR										
0.0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
0.5 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
1.0 M SIG. WAVE HT										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
2.0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD									1.84	
									35	
3.0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
4.0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										
5.0 M SIG. WAVE HT.										
DERATED FACTOR										
DYNAMIC FACTOR										
DERATED LOAD										

NOTES:

13.0 MATERIALS OF CONSTRUCTION

	CERT. DIN 50049	MDS NO.
BOOM		ASTM A513-94 TYPE1
A FRAME		AS 3679 GR 350
MACHINERY BED		AS 3679 GR 350
SHEAVES		
SHEAVE SHAFT		
BOOM PIVOT PIN		
HOOK		
HOOK BLOCK PLATES		
SECONDARY STRUCTURE STEELWORK		AS 3679

14.0 SURFACE TREATMENT AND COLOURS

GENERAL	TO M5000SG400
GALVANIZED ITEMS:	
BOOM, A FRAME AND PEDESTAL ADAPTOR	TO M5000SG400
TOP COAT COLOURS	TO M5000SG400
COLOUR SCHEME	ACCORDING TO BS4800
CRANE BODY FROM SLEWING TO TOP OF A FRAME:	ORANGE. 08 E 51
DRIVERS CABIN:	EXTERNAL: ORANGE, INTERNAL: OFFWHITE?
BOOM.	ORANGE. 06 E 51
PEDESTAL ADAPTOR FROM TOP FLANGE TO SERVICE PLATFORM:	ORANGE, 06-E-51
FROM SERVICE PLATFORM TO LOWER END	ORANGE. 08 E 51

NOTES:

MECHANICAL DATA SHEET
PEDESTAL CRANE

PACKAGE NO	DOC.NO. M5000KM301	REV. A	DATE: 25.07.1997 PAGE 17 of 21
TAG	X-1401	MODEL	20/10t
DESCRIPTION	PEDESTAL CRANE	SERIAL NO	
SIZE (DX,DY,DZ)		LAYOUT DWG. NO.	
VENDOR	Favelle Favco Cranes Pty. Ltd.	P & ID NO	
MANUFACTURER	Favelle Favco Pty.Ltd	AREA/ELEVATION	HD40
TAG	X-1402	MODEL	20/10t
DESCRIPTION	PEDESTAL CRANE	SERIAL NO.	
SIZE (DX,DY DZ)		LAYOUT DWG. NO.	
VENDOR	Favelle Favco Cranes Pty Ltd.	P & ID NO	
MANUFACTURER	Favelle Favco pty.ltd	AREA/ELEVATION	HD20

DATA SHEET
NOISE

PACKAGE NO. | DOC.NO.: M5000KM301 | REV. A | DATE: 25.07.1997 |

TAG							MODEL										
SERVICE							SERIAL NO										
SIZE (DX,DY,DZ)							LAYOUT DWG. NO										
VENDOR							P & ID NO.										
MANUFACTURER							AREA/ELEV										
TYPE OF DATA			1			2			3			4			5		
STATUS OF DATA	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
dBA	65	65		70	70		110	110		80	80(1)		75	75				
31.5																		
63																		
125																		
250																		
500																		
1000																		
2000																		
4000																		
8000																		
dB lin																		

STATUS OF DATA: A - PROJECT LIMIT B - SUPPLIER GUARANTEED DATA C - MEASURED DATA

TYPE OF DATA:

1	x	Lp	Lw	L	SPL, INSIDE CABIN, IDLE
2	x	Lp	Lw	L	SPL, INSIDE CABIN, MAX POWER/LOAD
3	x	Lp	Lw	L	SPL, INSIDE MACHINE ROOM
4	x	Lp	Lw	L	SPL, ACCESS PLATFORM
5	x	Lp	Lw	L	SPL, LAYDOWN AREAS

Delta L

Lp = SOUND PRESSURE LEVEL IN dB (re: 20 µ Pa) AT 1 METER DISTANCE FREE FIELD CONDITIONS OVER A REFLECTING PLANE
Lw = SOUND POWER LEVEL IN dB (ref. 1 pico W)
L = SEE TEXT
Delta L = CALCULATED DIFFERENCE BETWEEN Lw AND Lp IN dB
ALL OCTAVE BAND LEVELS IN ONES TO BE ARITHMETIC VALUES

NOISE TEST	REQUIRED BY PROJECT	x YES	NO	OPTION
	INCLUDED BY SUPPLIER	YES	NO	OPTION
	MEASUREMENT STANDARD			

OPERATING CONDITIONS APPLICABLE FOR NOISE DATA:
LEVEL AT IDLING INCLUDING ALL A/C VENT, FANS, WIPER OPERATION

DESCRIPTION OF NOISE CONTROL MEASURES INCLUDED:
SOUND PROOFING OF MACHINERY HOUSE AND DRIVERS CABIN

NOTES:
VIBRATION LEVEL DRIVER'S SEAT TO MEET 1/h EXPOSURE "RED COMFORT BOUND." ISO 2631.
VIBRATION TEST REQUIRED.
(1) REF. TYPE 4: 80dBA GUARANTEED AT IDLE 85dBA GUARANTEED AT FULL WINCH OPERATION.

DATA SHEET
NOISE

PACKAGE NO.		DOC.NO. ME000KM307	REV. A	DATE: 25.07.1997	PAGE. 19 of 21

TAG	X-1401		
SERVICE	PEDESTAL CRANE	MODEL	20/10k
SIZE (DX,DY,DZ)		SERIAL NO	
VENDOR	Favelle Favco Cranes Pty Ltd.	LAYOUT DWG. NO.	
MANUFACTURER	Favelle Favco Pty Ltd	P & ID NO	
		AREA/ELEV.	HD40

TAG	X-1402		
SERVICE	PEDESTAL CRANE	MODEL	20/10k
SIZE (DX,DY,DZ)		SERIAL NO.	
VENDOR	Favelle Favco Cranes Pty. Ltd.	LAYOUT DWG. NO.	
MANUFACTURER	Favelle Favco pty.ltd	P & ID NO.	
		AREA/ELEV.	HD20

WEIGHT DATA SHEET
TAGGED EQUIPMENT

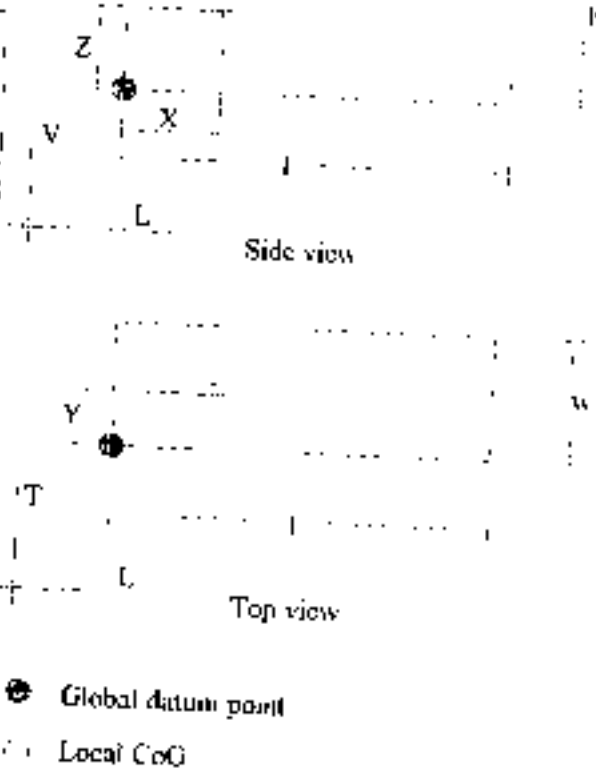
TAG NO	X-1401	SERIAL NO	
DESCRIPTION	PEDESTAL CRANE		
VENDOR	Favelle Favco Cranes Pty. Ltd.	LAYOUT DWG NO.	
MANUFACTURER	Favelle Favco Pty Ltd	P & ID NO	
MODEL	20/10tx	AREA	HD40

WEIGHT OF COMPLETE UNIT [kg]

CONDITION	WEIGHT	REMARKS
DRY DELIVERED FROM VENDOR	72900	
+ CONTENT NORMAL OPERATING	1000	
= OPERATING	73900	FILLING [%]
TEST (FILLED WITH FLUID)		
LIFTING MAX. AT PAD EYES		
LARGEST REMOVABLE ITEM		

OVERALL SIZES AND POSITIONS OF LOCAL CENTER OF GRAVITY (CoG) [mm]

PROFILE OF EQUIPMENT WITH GLOBAL DIRECTIONS



Global datum point

Local CoG

LENGTH (l)		DRY CoG X:	0
WIDTH (w)		DRY CoG Y:	0
HEIGHT (h)		DRY CoG Z:	0
VENDOR DWG. REF		OPER CoG X:	0
		OPER CoG Y:	0
REV	DATE:	OPER CoG Z	0

GLOBAL POSITION OF DATUM POINT [mm]

LONG: TRANS: VERT:

WEIGHT/COG STATUS (BY VENDOR)

E1 Estimate at bid , E2 Confirmed after P.O.
E3. Recalculated/Catalogue data, E4: Final calculated
E5: Weighed

STATUS: E2

NOTES:

DATE 25.07.1997 SIGN:

WEIGHT DATA SHEET
TAGGED EQUIPMENT

PACKAGE NO. EM283 | DOC NO M5000K(M301 | REV A |

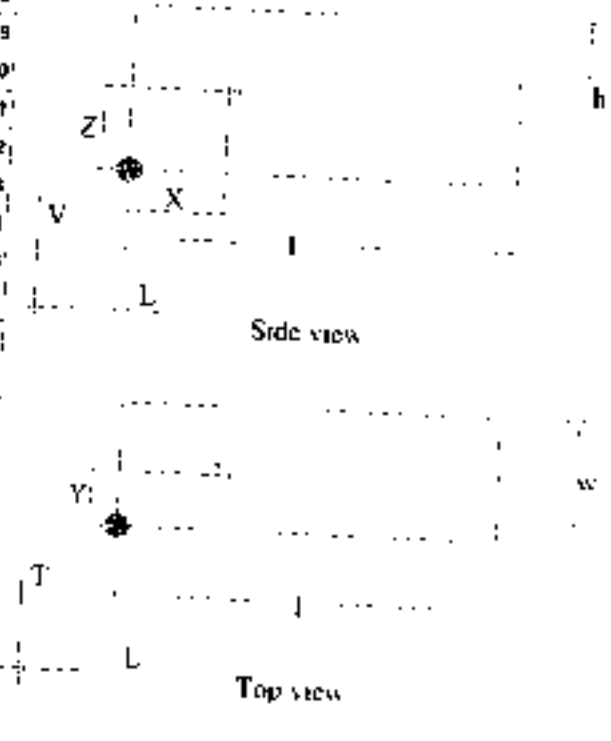
TAG NO	X-1402
DESCRIPTION	PEDESTAL CRANE
VENDOR	Favelle Favco Cranes Pty Ltd
MANUFACTURER	Favelle Favco pty.ltd
MODEL	20/10k
SERIAL NO.	
LAYOUT DWG. NO.	
P & ID NO.	
AREA	HD20

WEIGHT OF COMPLETE UNIT [kg]

CONDITION	WEIGHT	REMARKS
DRY DELIVERED FROM VENDOR	72900	
+ CONTENT NORMAL OPERATING	1000	FILLING [%]
= OPERATING	73900	
TEST (FILLED WITH FLUID)		
LIFTING MAX. AT PAD EYES		
LARGEST REMOVABLE ITEM		

OVERALL SIZES AND POSITIONS OF LOCAL CENTER OF GRAVITY (CoG) [mm]

PROFILE OF EQUIPMENT WITH LOCAL DIRECTIONS



Global datum point

Local CoG

LENGTH (l)		DRY CoG X:	0
WIDTH (w)		DRY CoG Y	0
HEIGHT (h)		DRY CoG Z:	0
VENDOR DWG. REF		OPER CoG X	0
		OPER CoG Y:	0
REV.	DATE:	OPER CoG Z	0

GLOBAL POSITION OF DATUM POINT [mm]

LONG.	TRANS	VERT.

WEIGHT/COG STATUS (BY VENDOR)

E1: Estimate at bid, E2: Confirmed after P.O.
E3: Recalculated/Catalogue data, E4: Final calculated
E5: Weighed

STATUS E2

NOTES

DATE: 25.07.1997 SIGN.