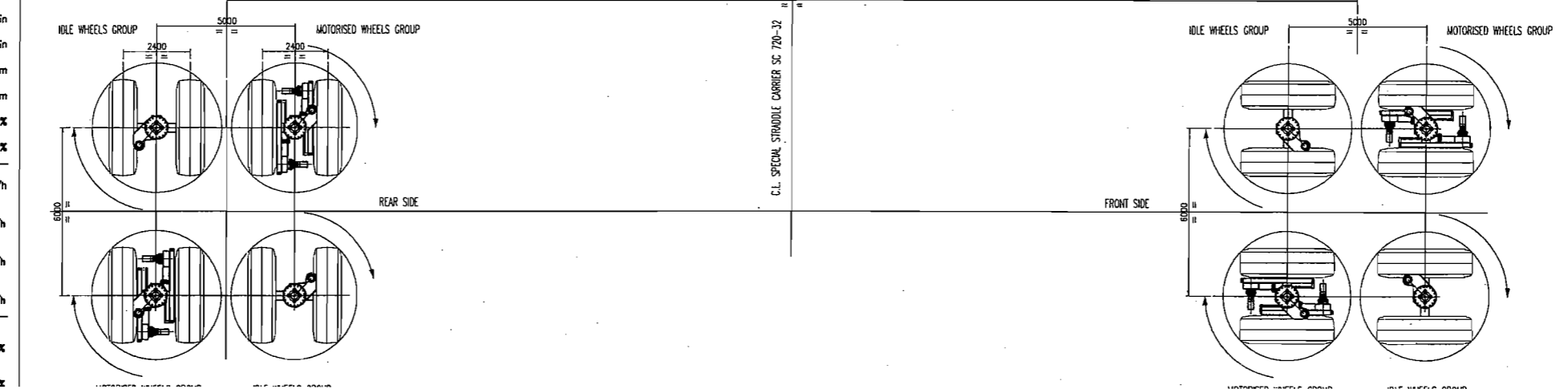


WHEEL'S GROUP ORIENTATION GENERAL ARRANGEMENT



TECHNICAL CHARACTERISTICS OF THE EQUIPMENT

Lift Capacity	7065 kN
Lifting Height	10000 mm
Vertical Clearance of Main Girder from the Ground - Minimum	12000 mm
Internal Clearance	32400 mm
Span - Distance from the centerlines of the Trolleys	41000 mm
Minimum radius of Curve	60 m
Lifting Speed with Hook Load (variable speed)	0.1 - 1.0 m/min
Lifting Speed without Hook Load (variable speed)	0.1 - 2.0 m/min
Longitudinal regulation of Hoisting Points	+ / - 500 mm
Transversal regulation of Hoisting Points	+ / - 200 mm
Longitudinal slope of Hoisting Points	+ / - 5 %
Cross slope of Hoisting Points	+ / - 5 %
Longitudinal Travelling Speed (variable speed) (with hook load / longitudinal slope 0 %)	0.3 - 2 km/h
Longitudinal Travelling Speed (variable speed) (with hook load / longitudinal slope 2.5 %)	0.3 - 1.3 km/h
Longitudinal Travelling Speed (variable speed) (without hook load / longitudinal slope 0 %)	0.3 - 4 km/h
Max Transversal Travelling Speed (variable speed)	0.3 km/h
Maximum Slope on Well Compacted Ground (longitudinal movement only)	2.5 %
Maximum Slope on Special Ramps (Concrete)	5 %

TOTAL WEIGHT = 494400 Kg

POS.	QTY	DESCRIPTION	COD.	MATERIAL	WEIGHT	NOTES
		ELECTRICAL GENERAL COMPONENTS			1500	
		HYDRAULIC GENERAL COMPONENTS			5000	
13	2	FUEL TANKS			1100	2200
12	1	HEAT EXCHANGER			300	
11	1	GENERATING SET			500	
10	2	ELECTRICAL PANELS			350	700
9	1	LIFTING BEAM ASSEMBLY	T06 CA AD E-020			41850
8	1	HOISTING WINCH	T06 CA AD E-001			49100
7	1	WALKWAYS ON LOWER	T06 DM AD F-031			2100
6	1	VERTICAL STRUCTURE	T06 DM AD F-030			18590
5	1	TROLLEY	T06 TP AD F-001			221150
4	1	POWER GROUP	T06 DM AD H-003			6650
3	1	REAR SIDE WALKWAYS	T06 DM AD H-002			4150
2	1	FRONT SIDE WALKWAYS	T06 DM AD H-001			700
1	1	MAIN ORDER	T06 DM AD A-001			140000

DEAL STRADDLE CARRIER SC 720 - 32

GENERAL ARRANGEMENT

Scale: 1:75

Sheet: 1 of 1

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FILE NO. T06DUA00001.DWG

DATE: 19/04/02

REV. DATE: 19/04/02

REV. OBJECT: FIRST ISSUE

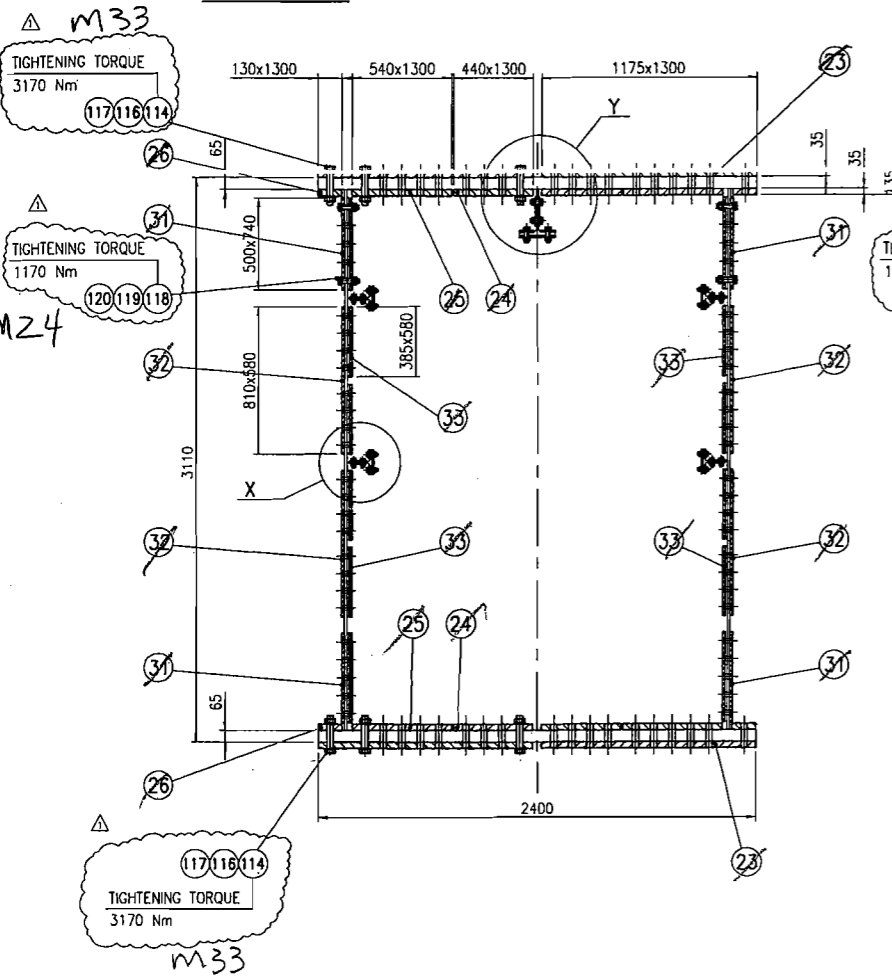
DESIGN: S. CERIANO

CHECKED: CUCCHIANO

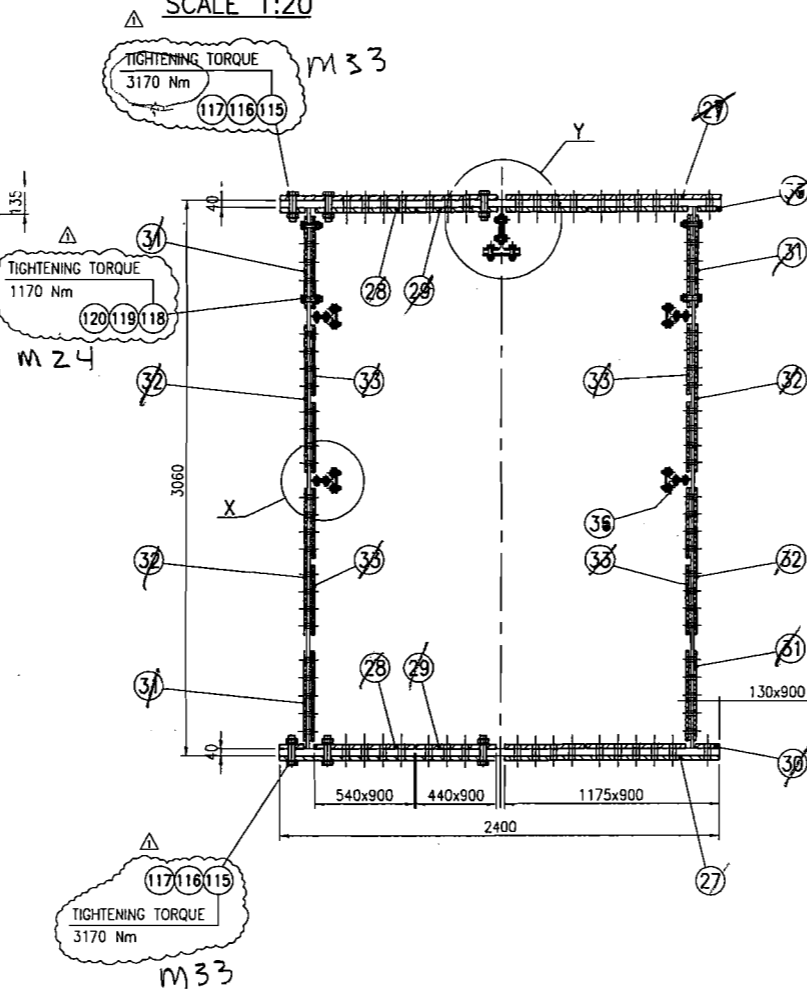
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PROJECT: SKYWAY BRIDGE PROJECT

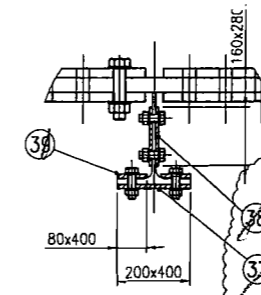
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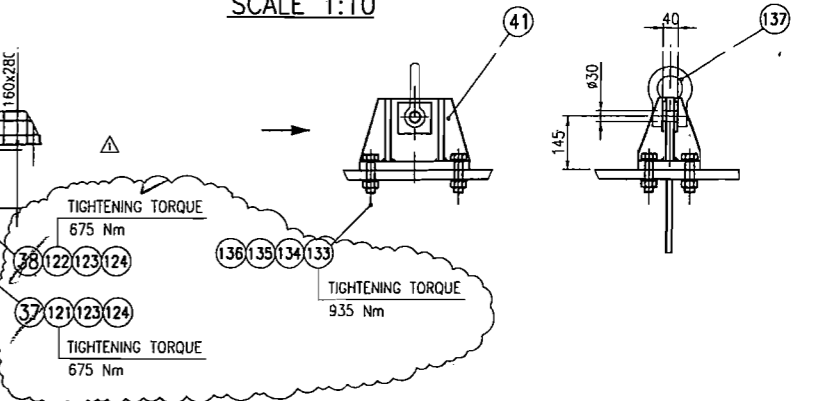
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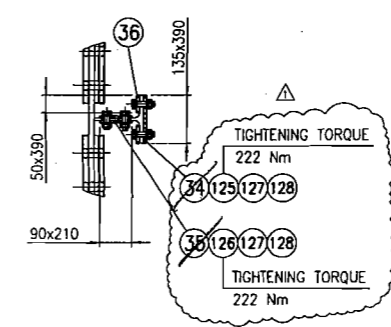
DETAIL Y
SCALE 1:10



DETAIL Z
SCALE 1:10



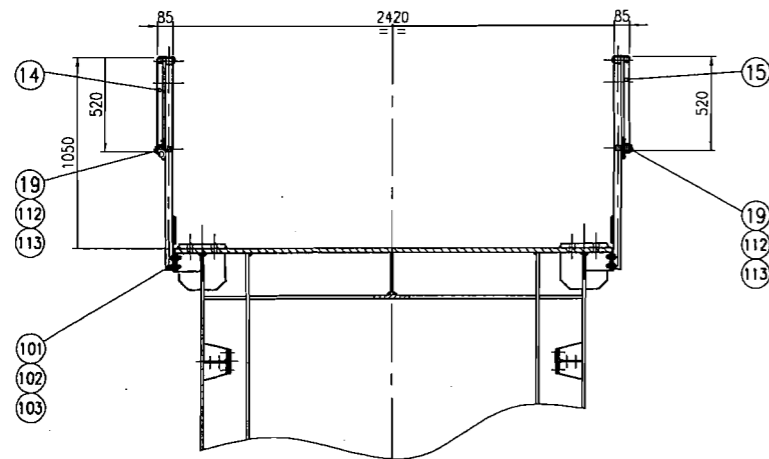
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SCALE 1:10



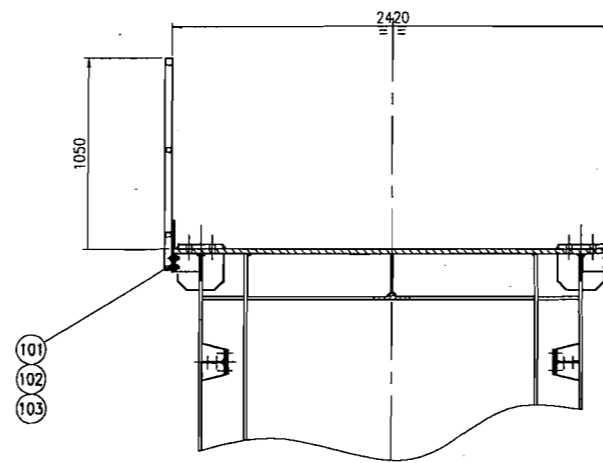
Main Beam Torques

M33's - 2,340 ft/lbs
M24's - 863
M20's - 500
M14's - 163

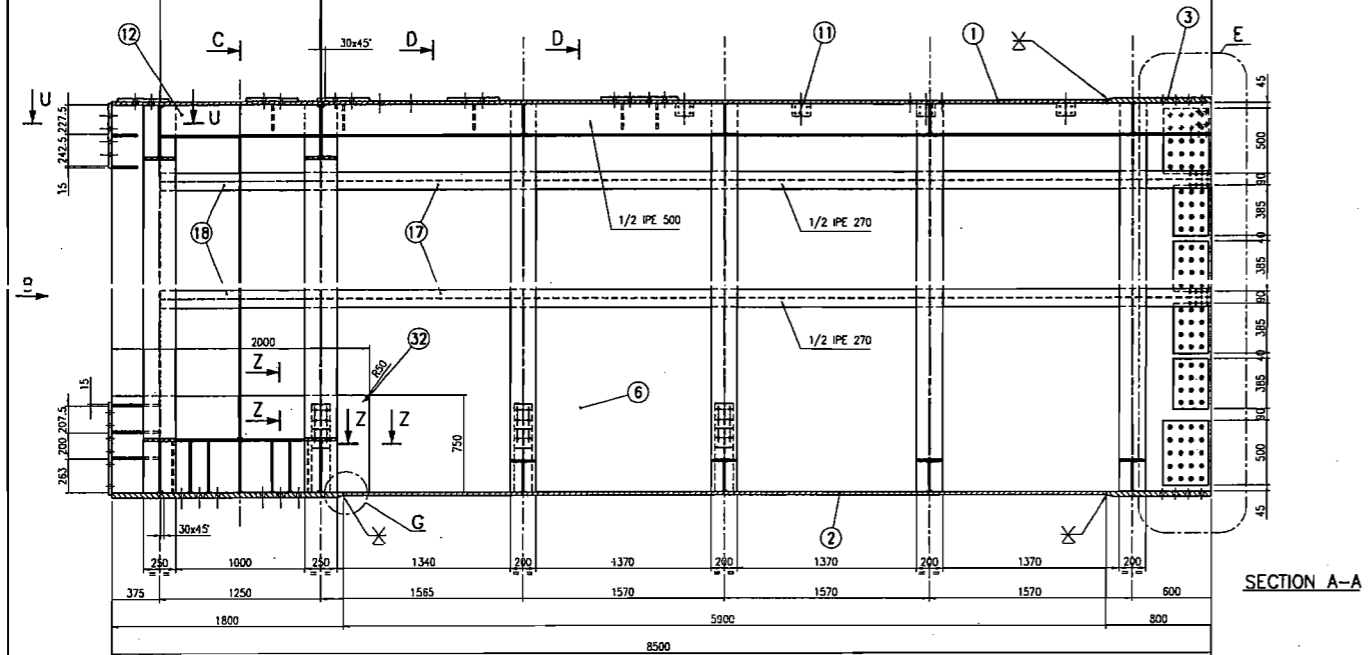
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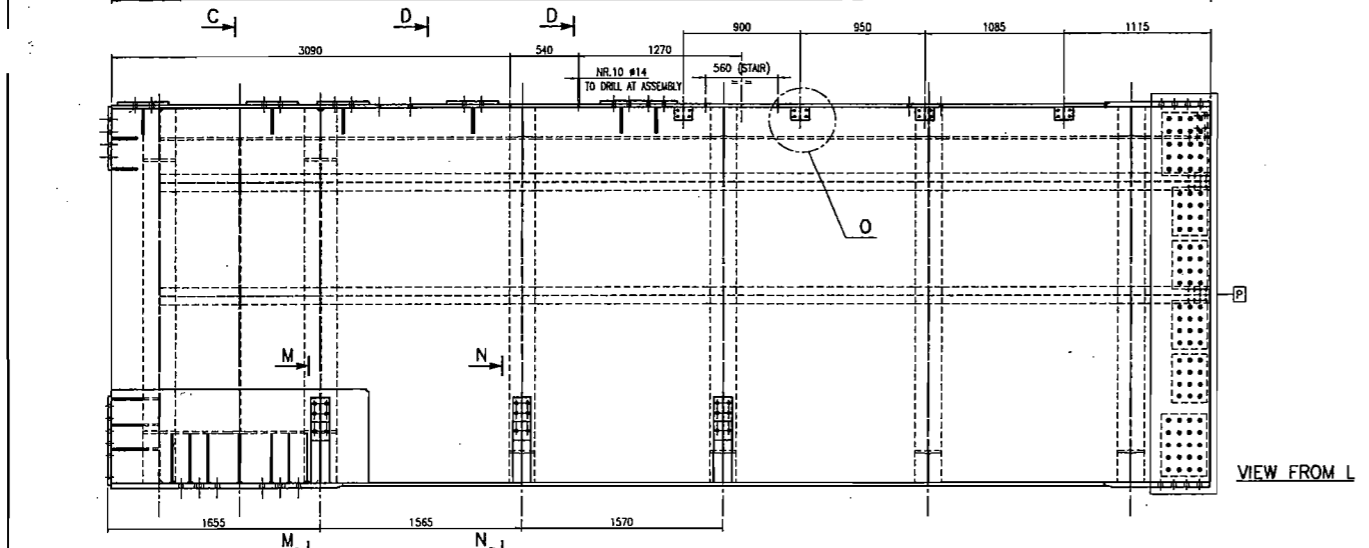
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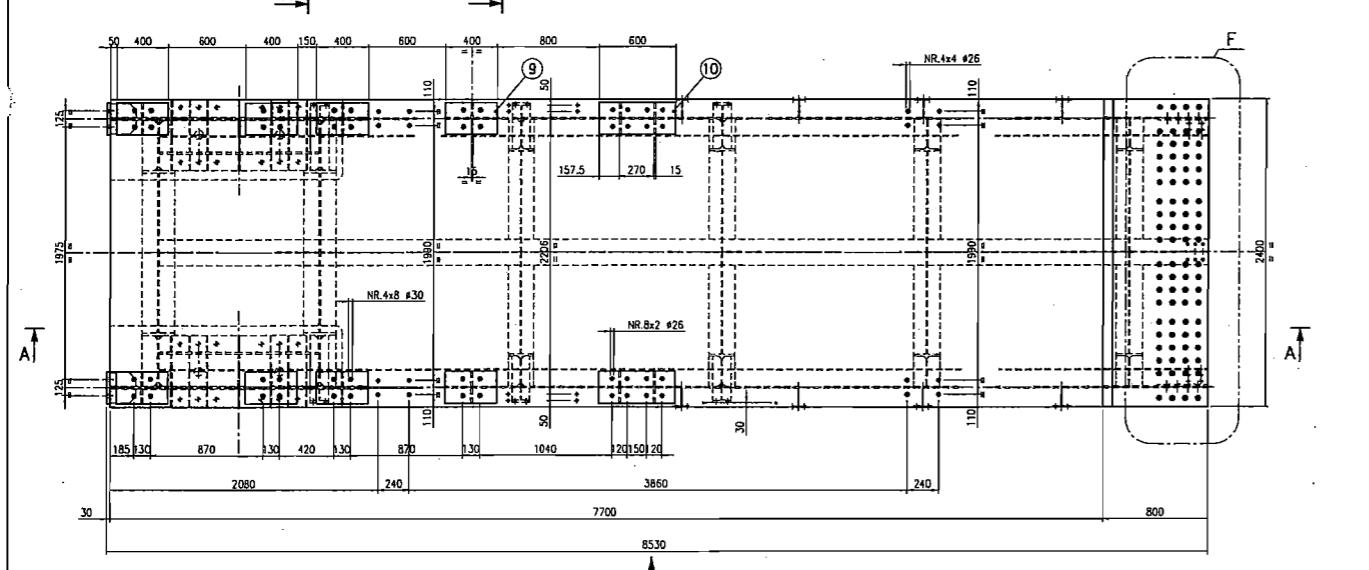
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0	19/06/02	FIRST ISSUE	EsseTre	CUCCHARO	RIBIS
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
REFERENCE:			STRADDLE CARRIER SC 720 - 32		
OBJECT:			MAIN GIRDER		
TITLE:			GENERAL ARRANGEMENT		
Substitutes for:		Scale: 1:20	Sheet: 2	Of: 2	
File: T06DMADA001B.DWG		Format: A1			
Job No.: -600311		Sub.J.N.: -060200	Mtr.: - - - - -		
Tab. No.	Dep.	Doc. Type	Part.	No.	Rev.
T06	DM	ADA	A	001	1
CLIENT: KIEWIT / FCI / MANSON JV					
PROJECT: SKYWAY BRIDGE PROJECT					



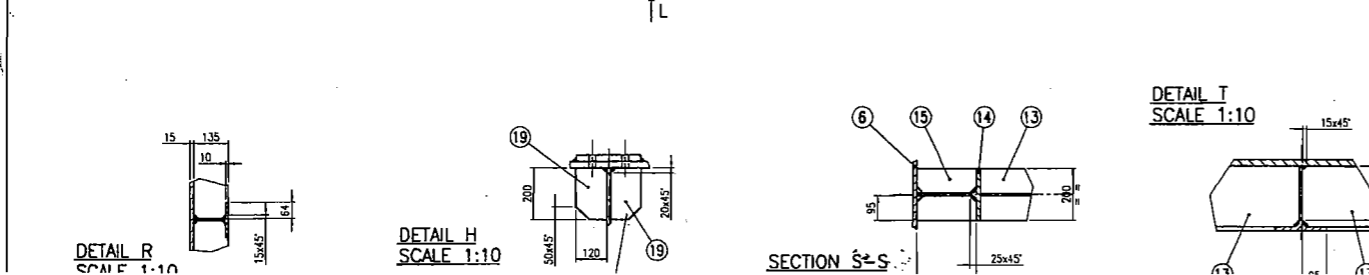
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VIEW FROM L



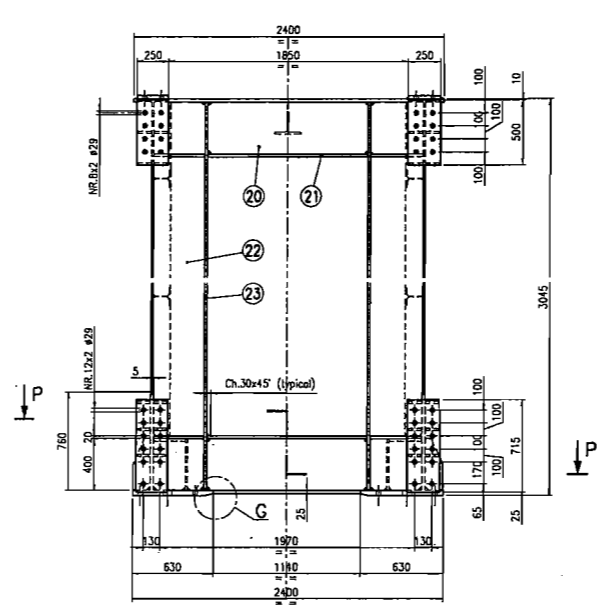
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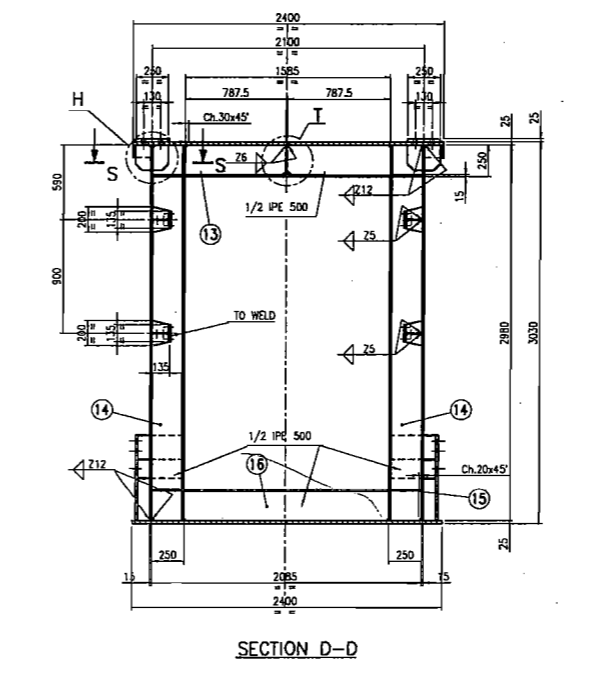
DETAIL T SCALE 1:10

DETAIL H SCALE 1:10

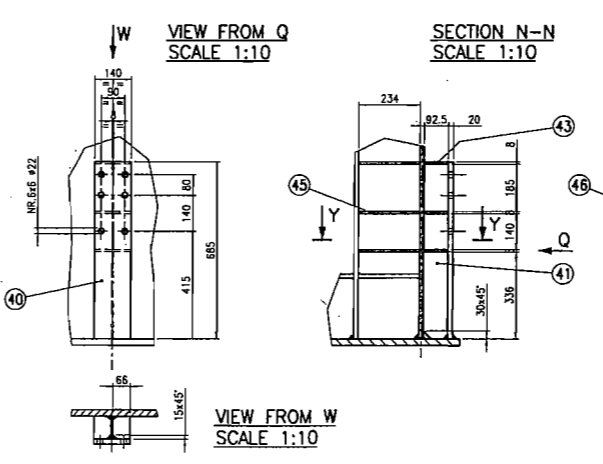
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VIEW FROM P SCALE 1:5



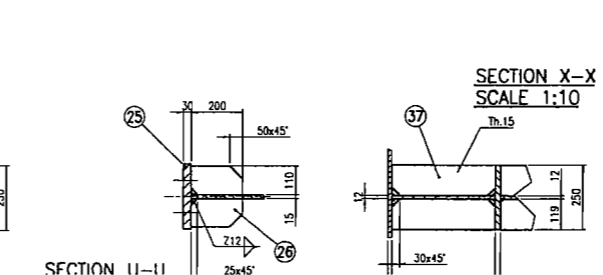
SECTION Y-Y SCALE 1:10



VIEW FROM Q SCALE 1:10

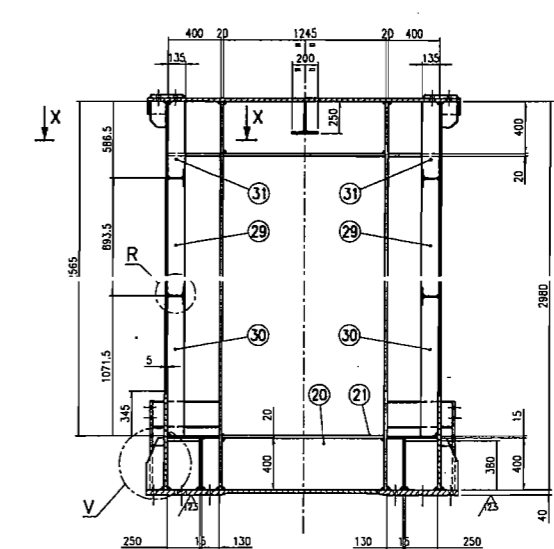
SECTION N-N SCALE 1:10

SECTION M-M SCALE 1:10

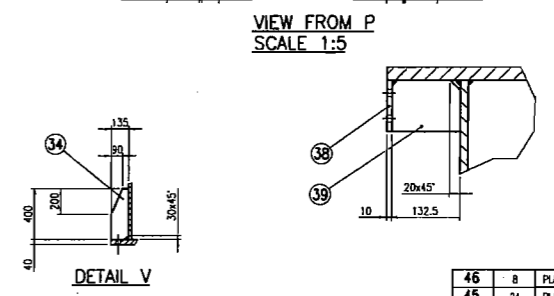


SECTION X-X SCALE 1:10

SECTION U-U



DETAIL O SCALE 1:5



DETAIL V

POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	REMARKS	NOTES
46	8	PLATE 6x8 L=395 SHAPED	*	Fe 510 C	1.5	12	
45	24	PLATE 6x8 L=234 SHAPED	*	Fe 510 C	0.9	21.6	
44	12	PLATE 6x8 L=87.5 SHAPED	*	Fe 510 C	0.4	4.8	
43	24	PLATE 6x8 L=92.5 SHAPED	*	Fe 510 C	0.4	9.6	
42	2	PLATE 87.5x8 L=685 SHAPED	*	Fe 510 C	3.7	7.4	
41	4	PLATE 92.5x8 L=685 SHAPED	*	Fe 510 C	3.9	15.6	
40	8	PLATE 140x20 L=685	*	Fe 510 C	14.7	88.2	
39	8	PLATE 100x10 L=132.5 SHAPED	*	Fe 510 C	1	8	
38	8	PLATE 100x10 L=140	*	Fe 510 C	1.1	8.8	
37	8	PLATE 119x20 L=400 SHAPED	*	Fe 510 C	7.3	58.4	
36	14	PLATE 250x10 L=380	*	Fe 510 C	7.4	103.6	
35	14	PLATE 130x10 L=400	*	Fe 510 C	4	56	
34	14	PLATE 135x10 L=400 SHAPED	*	Fe 510 C	3.5	49	
33	2	PLATE 395x15 L=1238 SHAPED	*	Fe 510 C	57.4	114.8	
32	2	PLATE 70x25 L=2000 SHAPED	*	Fe 510 C	29.4	588	
31	2	PLATE 135x15 L=585.5 SHAPED	*	Fe 510 C	9.2	18.4	
30	2	PLATE 135x15 L=1071.5 SHAPED	*	Fe 510 C	16.8	33.6	
29	2	PLATE 135x15 L=893.5 SHAPED	*	Fe 510 C	14	28	
28	2	PLATE 250x30 L=715	*	Fe 510 C	40.2	80.4	
27	12	PLATE 112.5x15 L=389 SHAPED	*	Fe 510 C	4.8	57.6	
26	8	PLATE 110x15 L=200 SHAPED	*	Fe 510 C	2.4	19.2	
25	2	PLATE 250x30 L=500	*	Fe 510 C	28.2	56.4	
24	4	PLATE 119x20 L=395 SHAPED	*	Fe 510 C	5.5	22	
23	4	PLATE 250x20 L=2980	*	Fe 510 C	117	468	
22	4	PLATE 400x12 L=2980 SHAPED	*	Fe 510 C	112.3	449.2	
21	4	PLATE 250x20 L=1245	*	Fe 510 C	48.9	195.6	
20	4	PLATE 400x12 L=1245 SHAPED	*	Fe 510 C	46.8	187.2	
19	24	PLATE 120x15 L=200 SHAPED	*	Fe 510 C	2.7	64.8	
18	4	1/2 IPE 270 L=1238 SHAPED	*	Fe 510 C	22.3	89.2	
17	4	1/2 IPE 270 L=685 SHAPED	*	Fe 510 C	12.4	49.6	
16	4	1/2 IPE 500 L=1585 SHAPED	*	Fe 510 C	71.9	287.6	
15	32	PLATE 95x15 L=234 SHAPED	*	Fe 510 C	2.5	80	
14	8	1/2 IPE 500 L=2980 SHAPED	*	Fe 510 C	135.1	1080.8	
13	8	1/2 IPE 500 L=787.5 SHAPED	*	Fe 510 C	33.3	266.4	
12	1	1/2 IPE 500 L=1238 SHAPED	*	Fe 510 C	56.1	56.1	
11	1	1/2 IPE 500 L=685 SHAPED	*	Fe 510 C	311.5	311.5	
10	2	PLATE 250x25 L=600	*	Fe 510 C	28.3	56.6	
9	8	PLATE 250x25 L=400	*	Fe 510 C	19	152	
8	8	PLATE 270x12 L=385	*	Fe 510 C	9	72	
7	4	PLATE 350x12 L=500	*	Fe 510 C	13	52	
6	2	PLATE 2980x15 L=8500 SHAPED	*	Fe 510 C	2788	5576	
5	2	PLATE 400x15 L=1238 SHAPED	*	Fe 510 C	58	116	
4	2	PLATE 630x40 L=1800 MACHINING	*	Fe 510 C	342	684	
3	2	PLATE 2400x40 L=800 SHAPED	*	Fe 510 C	567	1134	
2	1	PLATE 2400x25 L=7700 SHAPED	*	Fe 510 C	3174	3174	
1	1	PLATE 2400x25 L=7700 SHAPED	*	Fe 510 C	3624	3624	

MARK A101
NR. PIECES 1
UNIT WEIGHT 20140Kg
TOTAL WEIGHT 20140Kg

FINAL PAINTING :
ENAMEL YELLOW RAL 1007
TOTAL WEIGHT = 20140Kg

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 05-01-96, or ASME sect. IX

SURFACE TREATMENT FOR FRICTION JOINTS
SAND BLASTING SA 2 1/2
PAINTING WITH A PRODUCT GUARANTEEING A MINIMUM FRICTION COEFFICIENT OF $\mu = 0.45$

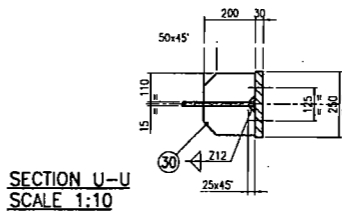
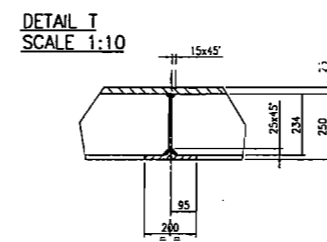
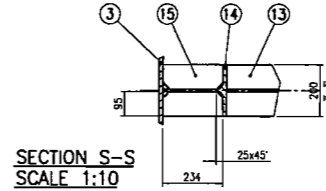
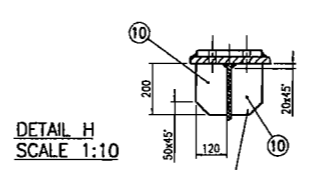
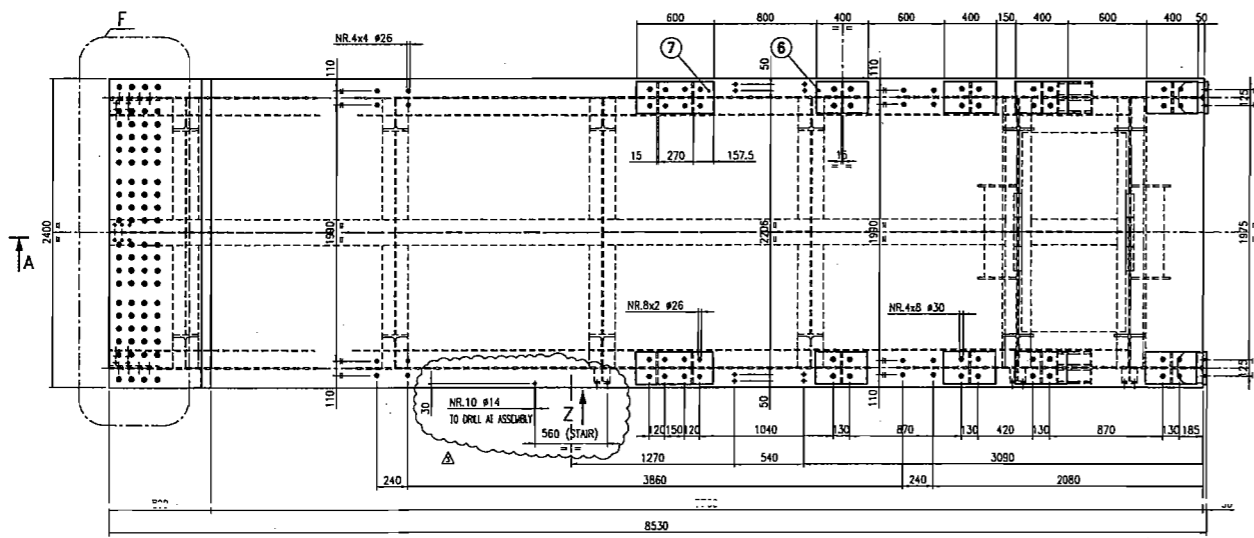
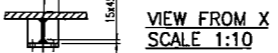
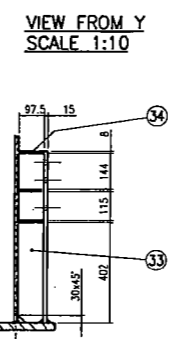
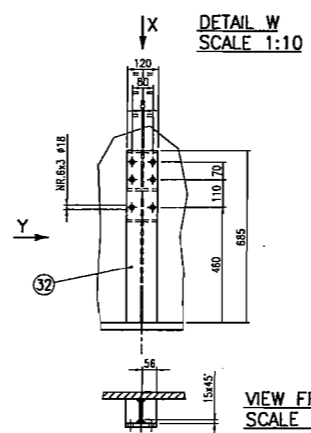
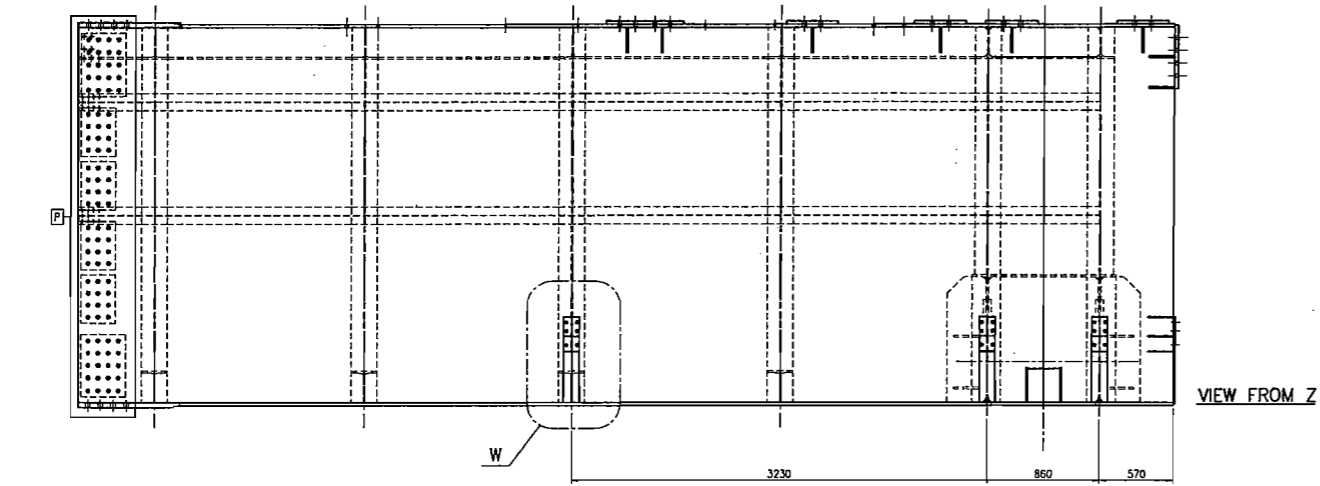
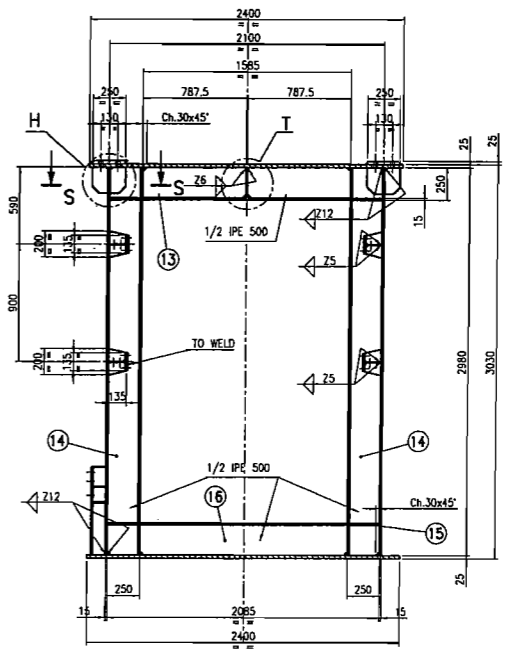
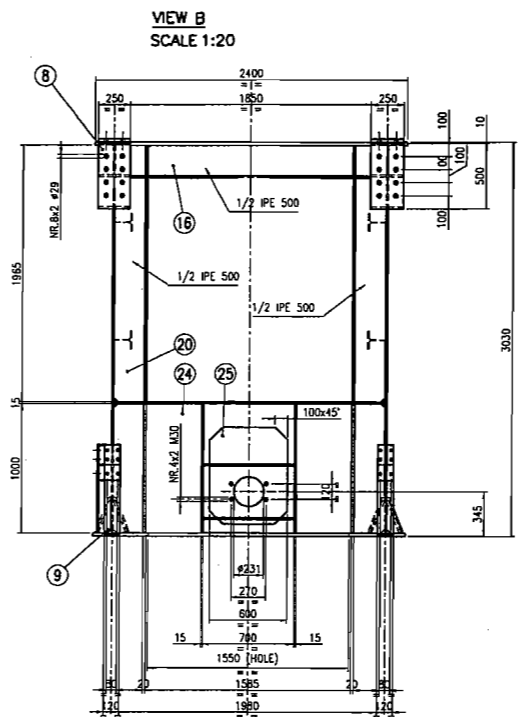
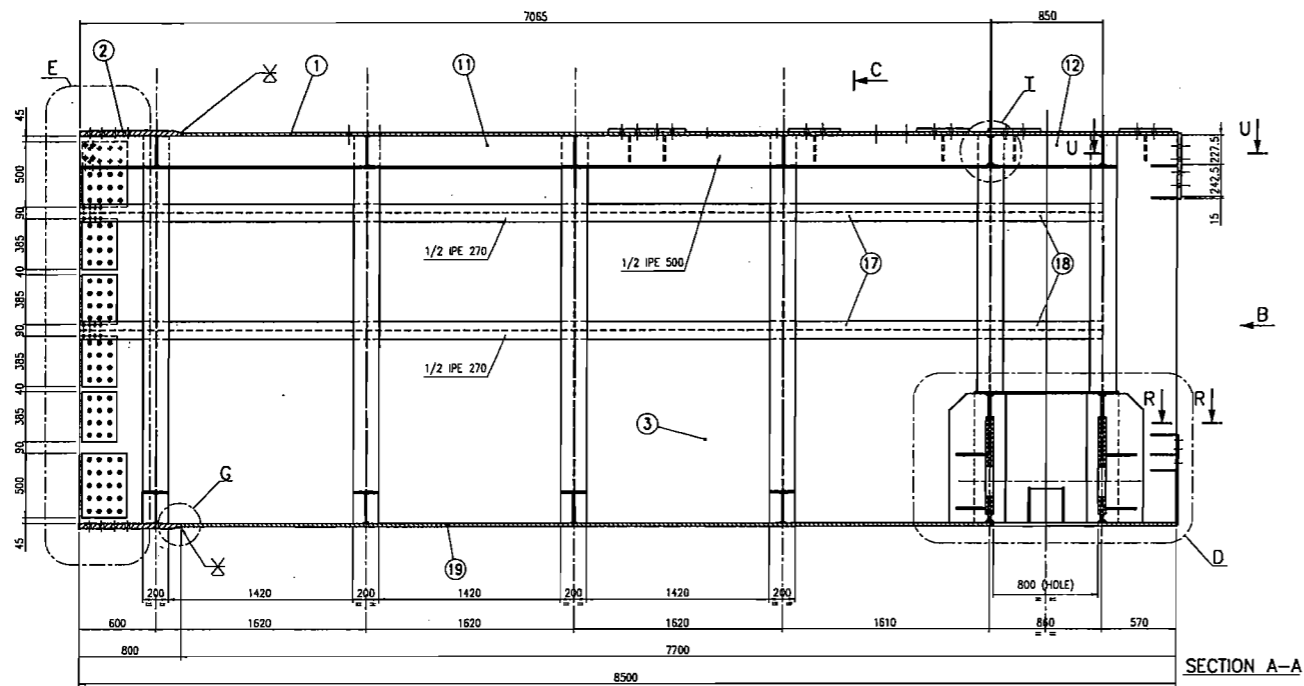
DEAL

STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER
1' ELEMENT

Scale: 1:20 Sheet: 1 of 2

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KIEWIT / FCI / MANSON JV
SKYWAY BRIDGE PROJECT



MARK	A401
NR. PIECES	1
UNIT WEIGHT	19360kg
TOTAL WEIGHT	19360kg

FINAL PAINTING :
ENAMEL YELLOW RAL 1007
TOTAL WEIGHT = 19360kg

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

SURFACE TREATMENT FOR FRICTION JOINTS
SAND BLASTING SA 2 1/2
PAINTING WITH A PRODUCT GUARANTEEING A MINIMUM FRICTION COEFFICIENT OF μ=0.45

POS.	QTY	DESCRIPTION	COOL.	MATERIAL	WEIGHT	VOL.	NOTES
36	4	PLATE 250x15 L=285	*	Fe 510 C	7	28	
35	8	PLATE 120x10 L=275 SHAPED	*	Fe 510 C	2	16	
34	18	PLATE 56x8 L=97.5 SHAPED	*	Fe 510 C	0.3	5.4	
33	3	PLATE 97.5x8 L=685 SHAPED	*	Fe 510 C	4.2	12.6	
32	3	PLATE 120x15 L=685	*	Fe 510 C	9.5	28.5	
31	12	PLATE 52.5x8 L=200 SHAPED	*	Fe 510 C	0.6	7.2	
30	8	PLATE 110x15 L=200 SHAPED	*	Fe 510 C	2.4	19.2	
27	8	PLATE 110x20 L=1000 SHAPED	*	Fe 510 C	17.2	137.6	
26	4	PLATE 250x15 L=700 SHAPED	*	Fe 510 C	19.2	76.8	
25	4	PLATE 600x20 L=750 SHAPED	*	Fe 510 C	60.9	243.6	
24	2	PLATE 1000x20 L=2085 SHAPED	*	Fe 510 C	320.5	841	
23	4	PLATE 300x15 L=1000 SHAPED	*	Fe 510 C	34.2	136.8	
21	1	PLATE 1100x15 L=2085	*	Fe 510 C	270	270	
20	4	1/2 IPE 500 L=1985 SHAPED	*	Fe 510 C	89.1	356.4	
19	1	PLATE 2400x25 L=7700 SHAPED	*	Fe 510 C	3380	3380	
18	4	1/2 IPE 270 L=850 SHAPED	*	Fe 510 C	15.3	61.2	
17	4	1/2 IPE 270 L=7065 SHAPED	*	Fe 510 C	127.5	510	
16	6	1/2 IPE 500 L=1585 SHAPED	*	Fe 510 C	71.9	431.4	
15	40	PLATE 85x15 L=234 SHAPED	*	Fe 510 C	2.5	100	
14	8	1/2 IPE 500 L=2980 SHAPED	*	Fe 510 C	135.1	1080.8	
13	8	1/2 IPE 500 L=787.5 SHAPED	*	Fe 510 C	33.3	266.4	
12	1	1/2 IPE 500 L=850 SHAPED	*	Fe 510 C	33.7	33.7	
11	1	1/2 IPE 500 L=7065 SHAPED	*	Fe 510 C	318	318	
10	24	PLATE 120x15 L=200 SHAPED	*	Fe 510 C	2.7	64.8	
9	2	PLATE 120x15 L=695	*	Fe 510 C	9.6	19.2	
8	2	PLATE 250x30 L=500	*	Fe 510 C	28.2	56.4	
7	2	PLATE 250x25 L=600	*	Fe 510 C	28.3	56.6	
6	8	PLATE 250x25 L=400	*	Fe 510 C	19	152	
5	8	PLATE 270x12 L=385	*	Fe 510 C	9	72	
4	4	PLATE 350x12 L=500	*	Fe 510 C	13	52	
3	2	PLATE 2380x15 L=8500	*	Fe 510 C	2383	5966	
2	2	PLATE 800x40 L=2400 SHAPED	*	Fe 510 C	568	1136	
1	1	PLATE 2400x25 L=7700 SHAPED	*	Fe 510 C	3524	3524	

REV.	DATE	REV. OBJECT	DESIGN	CHECKED	APPROVED
3	06/08/02	REVISED WHERE INDICATED	S. GERHARD	S. GERHARD	G. RIBS
2	03/06/02	REVISED WHERE INDICATED	S. GERHARD	S. GERHARD	G. RIBS
1	16/05/02	REVISED WHERE INDICATED	Esseire	S. GERHARD	G. RIBS
0	10/05/02	FIRST ISSUE	Esseire	S. GERHARD	G. RIBS

DEAL

STRADDLE CARRIER
SC 720 - 32

MAIN GIRDER
5' ELEMENT

Scale: 1:20

Sheet: 1 of 2

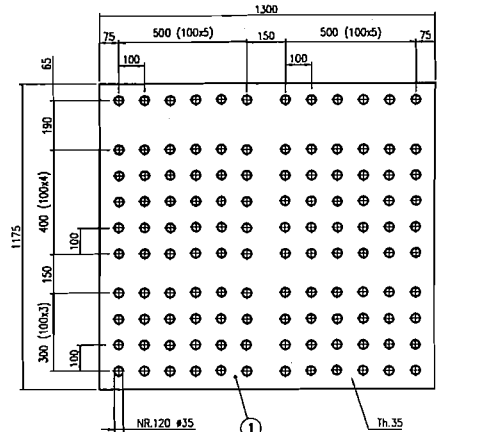
Project: T06DMDCA-0043.DWG

Author: AO

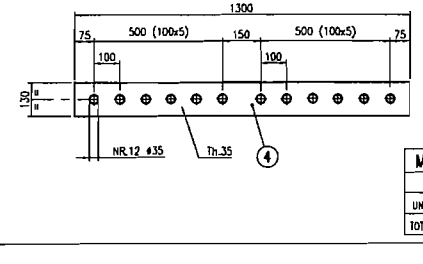
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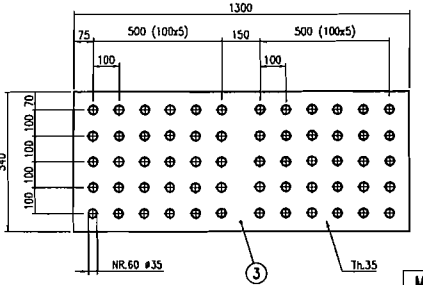
PROJECT: KIEWIT / FCI / MANSON JV



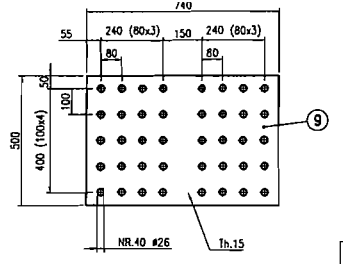
MARK A2104
NR PECS 8
UNIT WEIGHT 45.2 Kg
TOTAL WEIGHT 369.6Kg



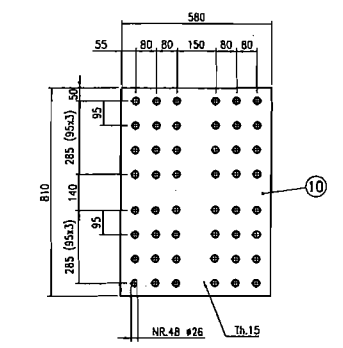
MARK A2109
NR PECS 32
UNIT WEIGHT 41 Kg
TOTAL WEIGHT 1312 Kg



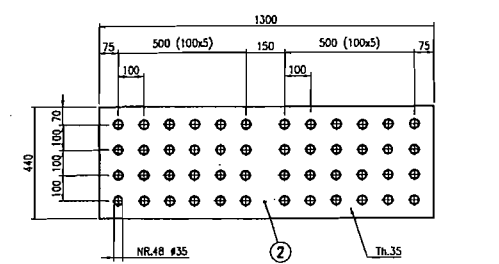
MARK A2103
NR PECS 8
UNIT WEIGHT 177 Kg
TOTAL WEIGHT 1416 Kg



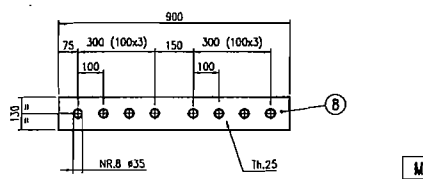
MARK A2110
NR PECS 16
UNIT WEIGHT 52.3 Kg
TOTAL WEIGHT 836.8 Kg



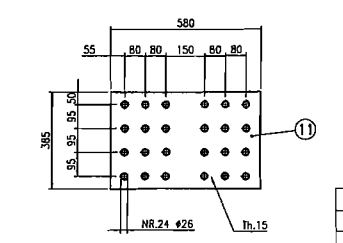
MARK A2108
NR PECS 8
UNIT WEIGHT 21.4 Kg
TOTAL WEIGHT 171.2 Kg



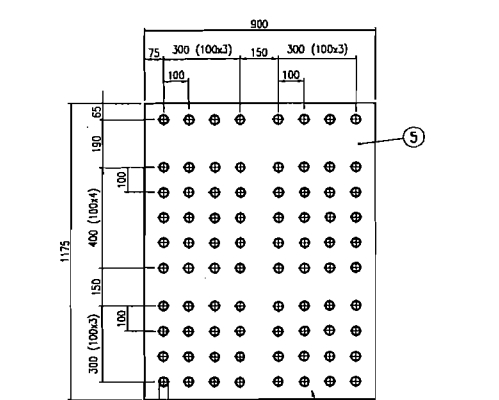
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NR PECS 8
UNIT WEIGHT 144.5 Kg
TOTAL WEIGHT 1156Kg



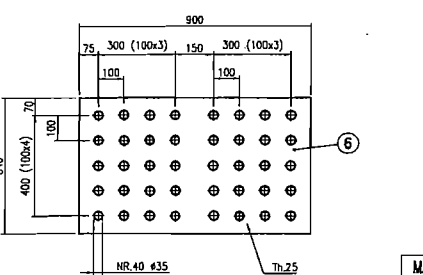
MARK A2111
NR PECS 32
UNIT WEIGHT 24.8 Kg
TOTAL WEIGHT 793.6 Kg



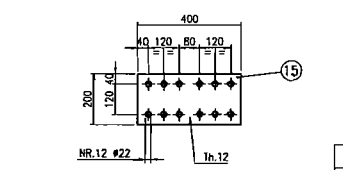
MARK A2114
NR PECS 32
UNIT WEIGHT 1.1 Kg
TOTAL WEIGHT 35.2 Kg



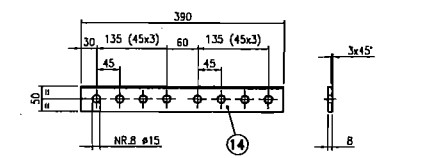
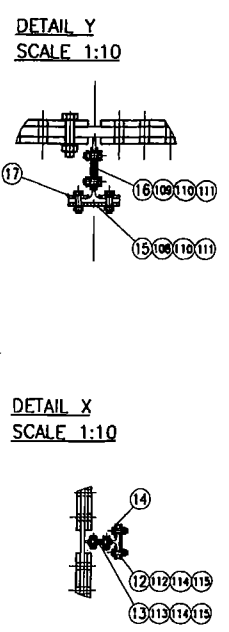
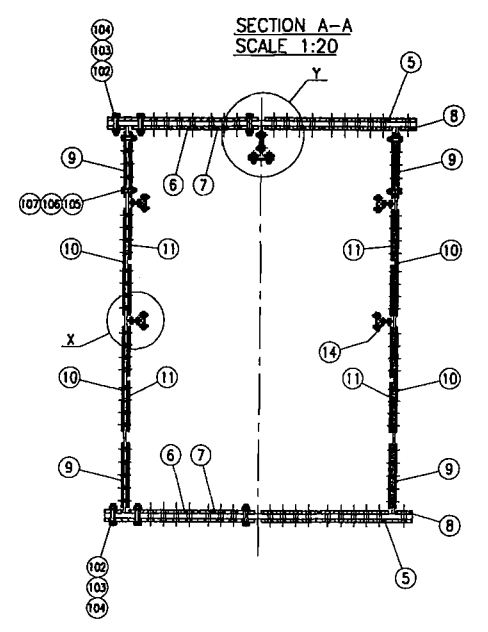
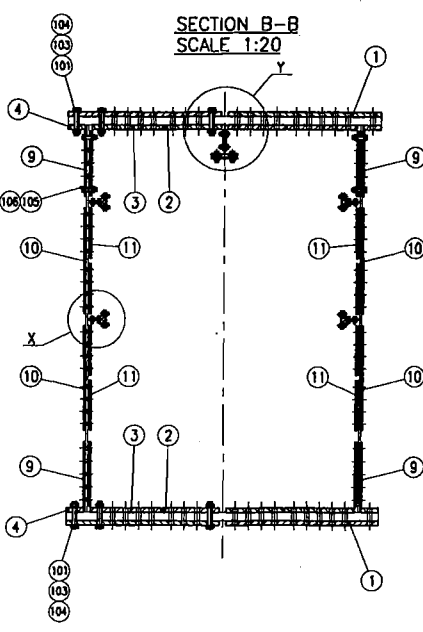
MARK A2105
NR PECS 8
UNIT WEIGHT 192.4 Kg
TOTAL WEIGHT 1539.2 Kg



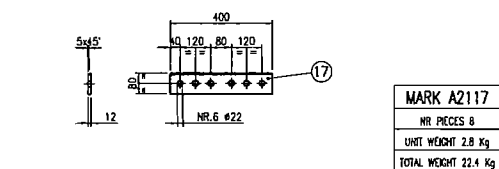
MARK A2106
NR PECS 8
UNIT WEIGHT 87.8 Kg
TOTAL WEIGHT 702.4 Kg



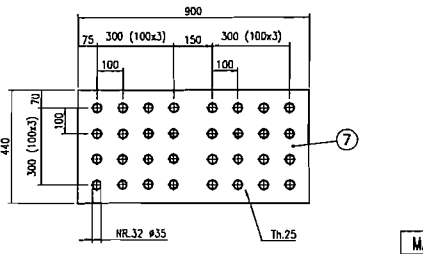
MARK A2115
NR PECS 4
UNIT WEIGHT 7.1 Kg
TOTAL WEIGHT 28.4 Kg



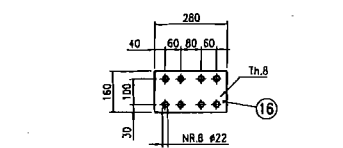
MARK A2112
NR PECS 16
UNIT WEIGHT 3.1 Kg
TOTAL WEIGHT 49.6 Kg



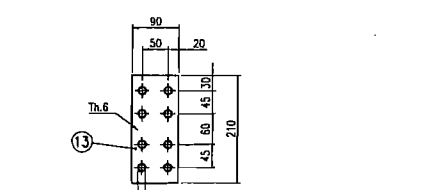
MARK A2117
NR PECS 8
UNIT WEIGHT 2.8 Kg
TOTAL WEIGHT 22.4 Kg



MARK A2107
NR PECS 8
UNIT WEIGHT 71.7 Kg
TOTAL WEIGHT 573.6 Kg



MARK A2116
NR PECS 8
UNIT WEIGHT 2.6 Kg
TOTAL WEIGHT 20.8 Kg



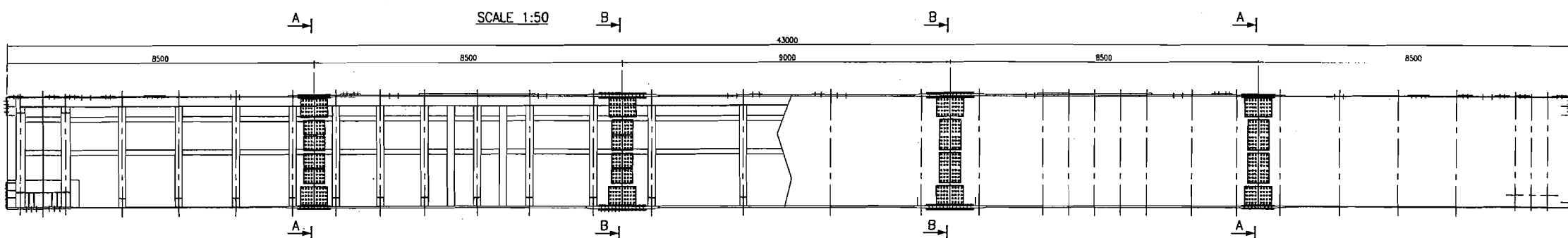
MARK A2113
NR PECS 32
UNIT WEIGHT 0.8 Kg
TOTAL WEIGHT 25.6 Kg

FINAL PAINTING :
ENAMEL YELLOW RAL 1007

TOTAL WEIGHT = 12156Kg

Surface treatment for friction joints
SAND BLASTING SA 2 1/2
PAINTING WITH A PRODUCT GUARANTEEING
A MINIMUM FRICTION COEFFICIENT OF $\mu = 0.45$

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	NOTES
115	768	WASHER 15 UNI 5714	*	C50	*	*
114	384	NUT M14 UNI 5713	*	10	*	*
113	128	SCREW M14x45 UNI 5712	*	10.9	*	*
112	256	SCREW M14x50 UNI 5712	*	10.9	*	*
111	160	WASHER 21 UNI 5714	*	C50	*	*
110	80	NUT M20 UNI 5713	*	10	*	*
109	32	SCREW M20x60 UNI 5712	*	10.9	*	*
108	48	SCREW M20x70 UNI 5712	*	10.9	*	*
107	2816	WASHER 25 UNI 5714	*	C50	*	*
106	1408	NUT M24 UNI 5713	*	10	*	*
105	1408	SCREW M24x100 UNI 5712	*	10.9	*	*
104	3200	WASHER 34 UNI 5714	*	C50	*	*
103	1600	NUT M33 UNI 5713	*	10	*	*
102	640	SCREW M33x150 UNI 5712	*	10.9	*	*
101	960	SCREW M33x190 UNI 5712	*	10.9	*	*
17	8	PLATE 80x12 L=400	*	Fe 510 C	2.8	22.4
16	8	PLATE 160x8 L=280	*	Fe 510 C	2.6	20.8
15	4	PLATE 200x12 L=400	*	Fe 510 C	7.1	28.4
14	32	PLATE 50x8 L=390	*	Fe 510 C	1.1	35.2
13	32	PLATE 90x6 L=210	*	Fe 510 C	0.8	25.6
12	16	PLATE 135x8 L=390	*	Fe 510 C	3.1	49.6
11	32	PLATE 385x15 L=580	*	Fe 510 C	24.8	793.6
10	16	PLATE 560x15 L=810	*	Fe 510 C	52.3	836.8
9	32	PLATE 500x15 L=740	*	Fe 510 C	41	1312
8	8	PLATE 130x25 L=900	*	Fe 510 C	21.4	171.2
7	8	PLATE 440x25 L=900	*	Fe 510 C	71.7	573.6
6	8	PLATE 540x25 L=900	*	Fe 510 C	87.8	702.4
5	8	PLATE 900x25 L=1175	*	Fe 510 C	192.4	1539.2
4	8	PLATE 130x35 L=1300	*	Fe 510 C	46.2	369.6
3	8	PLATE 540x35 L=1300	*	Fe 510 C	177	1416
2	8	PLATE 440x35 L=1300	*	Fe 510 C	144.5	1156
1	8	PLATE 1175x35 L=1300	*	Fe 510 C	388	3104



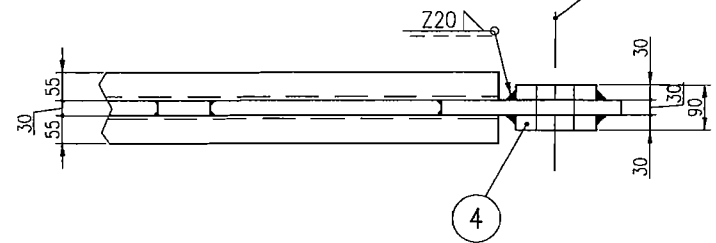
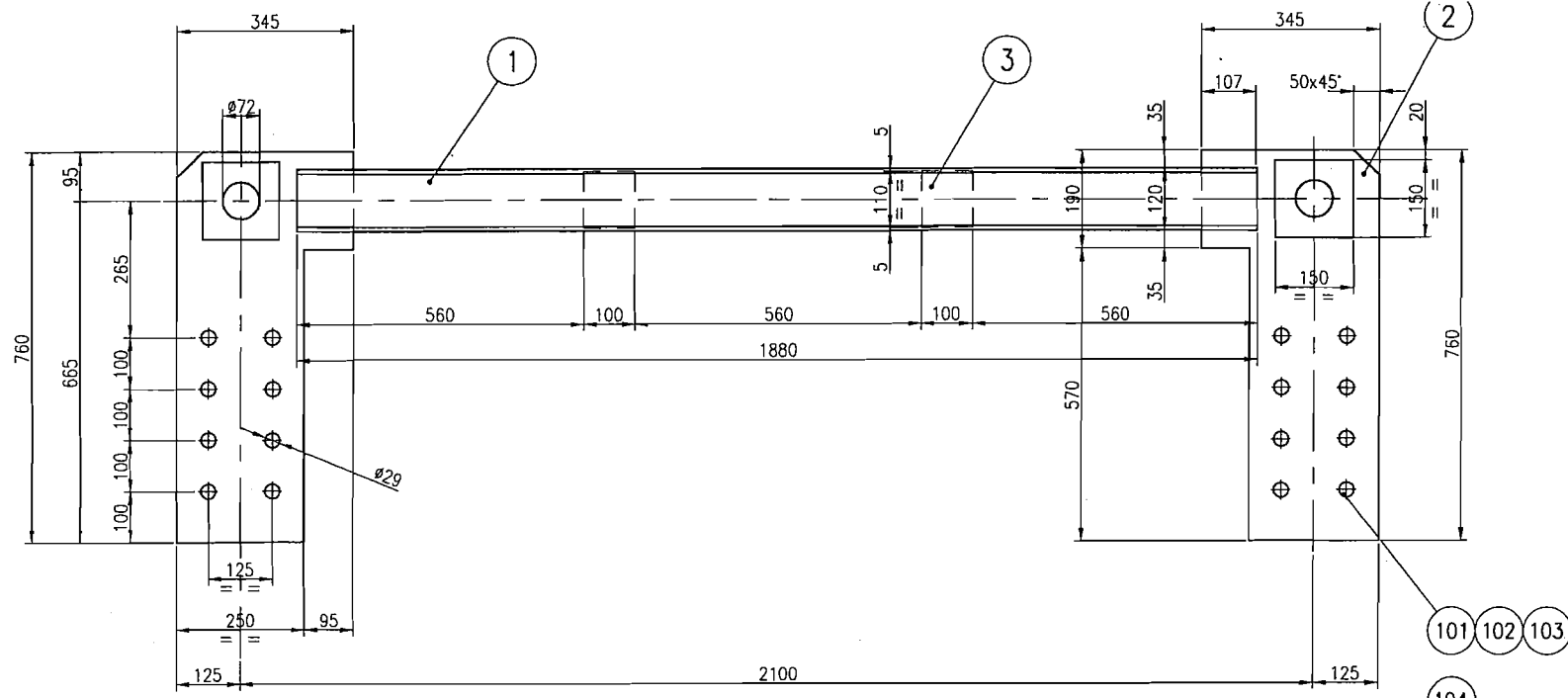
DEAL

STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER
JUNCTION PLATES

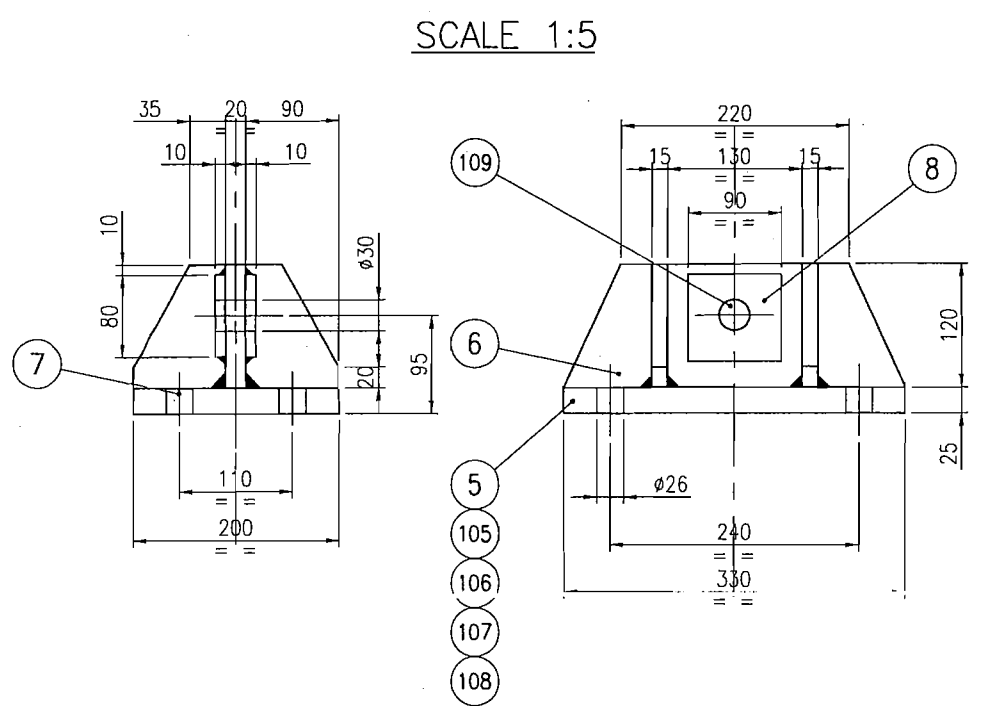
Scale: 1:10
Project: AD
Drawing No: T06D021.DWG
Rev: 02

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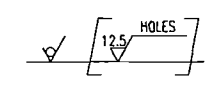
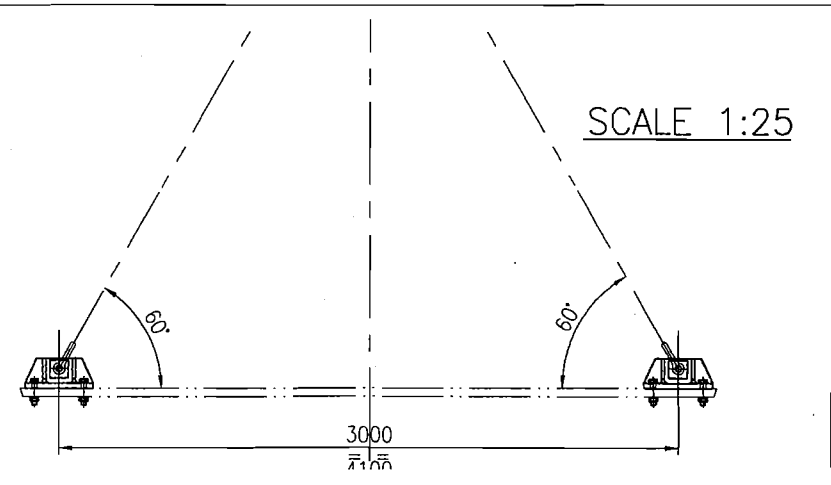
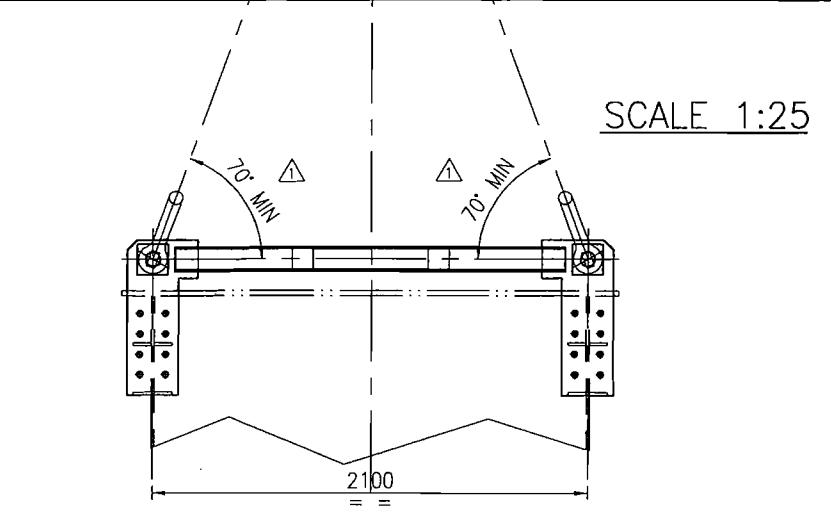
KIEWIT / FCI / MANSON JV



MARK A2201
NR PIECES 2
UNIT WEIGHT 167.2Kg
TOTAL WEIGHT 334.4Kg



MARK A2202
NR PIECES 20
UNIT WEIGHT 23.2Kg
TOTAL WEIGHT 464Kg



WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

TOTAL WEIGHT = 955 Kg

FINAL PAINTING :
ENAMEL YELLOW RAL 1007

REMOVE SHARP CORNERS
WITH R=2

DWG size	A2
WELDS (UNI 1310)	Where not otherwise indicated α=0.7 of minimum thk. to be connected (Continuous welds)
TOLERANCES	Dimension without tolerance indication Structural steel work UNI ISO 2768-M Mechanics UNI ISO 2768-F
FINISHING	Machining UNI 4600
TOLERANCES	Fit ISO (UNI 7218)

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
109	4	HOOK "OMEGA" 8500 Kg		FROM MARKET	2.3	9.2	
108	48	SCREW M24x110 UNI 5737		8.8			
107	160	WASHER 25x44 UNI 6592					
106	80	NUT M24 UNI 5588		6S			
105	32	SCREW M24x90 UNI 5737		8,8			
104	4	HOOK "OMEGA" 55000Kg		FROM MARKET	37	148	
103	32	NUT M27 UNI 5588		6S			
102	64	WASHER 28x50 UNI 6592					
101	32	SCREW M27x100 UNI 5737		8,8			
8	40	PLATE 80x10 L= 90		Fe 510 C	0.5	20	
7	80	PLATE 90x15 L= 120 SHAPED		Fe 510 C	1	80	
6	20	PLATE 120x20 L= 330 SHAPED		Fe 510 C	5.2	104	
5	20	PLATE 200x25 L= 330		Fe 510 C	13	260	
4	8	PLATE 150x30 L= 150		Fe 510 C	4.3	34.4	
3	4	PLATE 100x30 L= 110		Fe 510 C	2.6	10.4	
2	4	PLATE 345x30 L= 760 SHAPED		Fe 510 C	47.4	189.6	
1	4	UPN 120 L= 1880		Fe 430 B	25	100	

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2					
1	25/10/02	REVISED WHERE INDICATED	S. GERMANO	LONGOBARDI	RIBIS
0	21-05-02	FIRST ISSUE	EsseTre	S. GERMANO	G. RIBIS

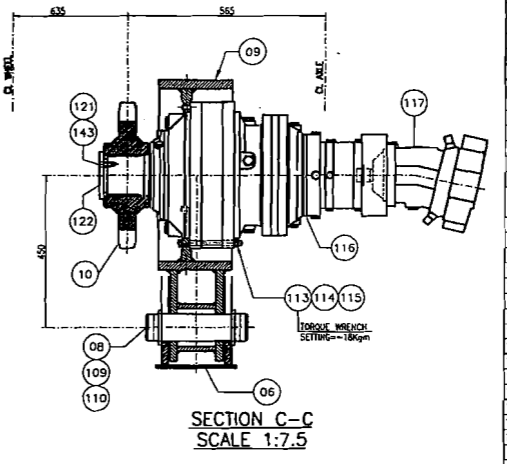
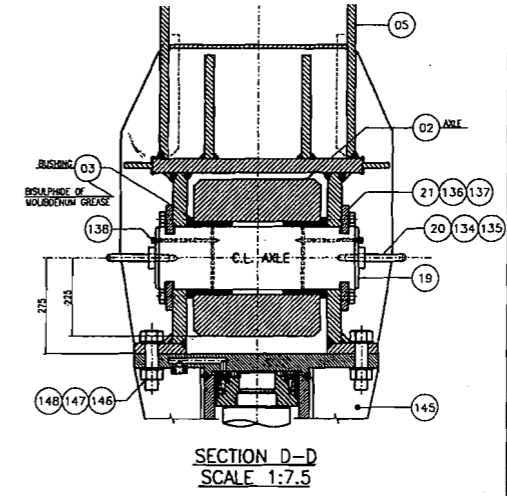
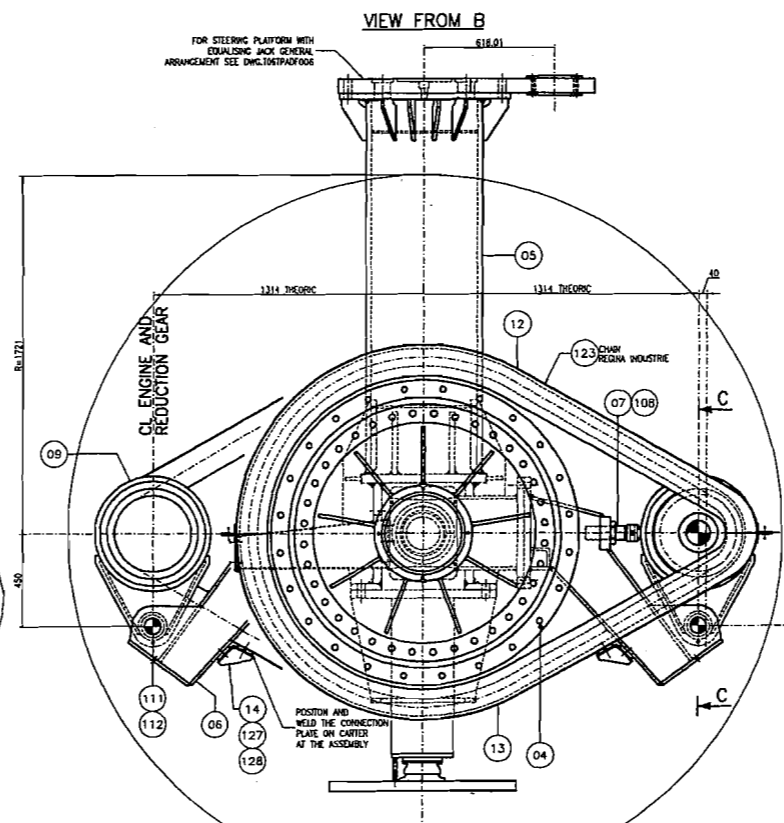
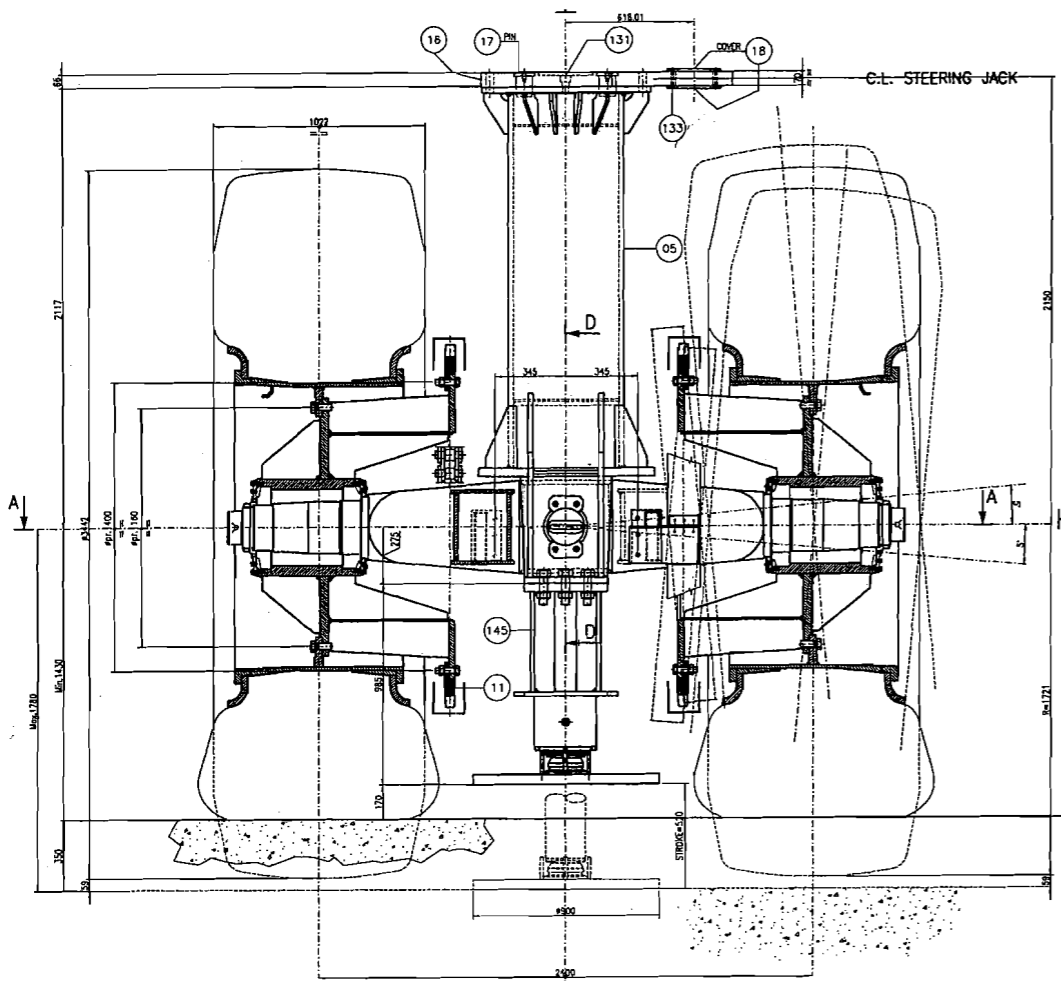
DEAL

Sede e Stabilimento
Via Bultrio-Frezzone Carnasco
33050-Pozzuolo del Friuli (UD)-Italy
Tel: +39 432 607 900
Fax: +39 432 607 902
e-mail: deal@deal.it

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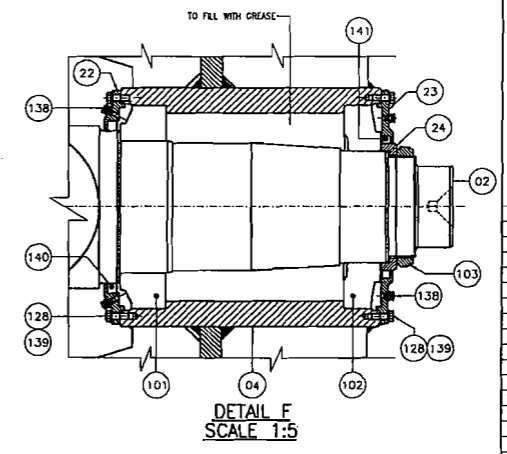
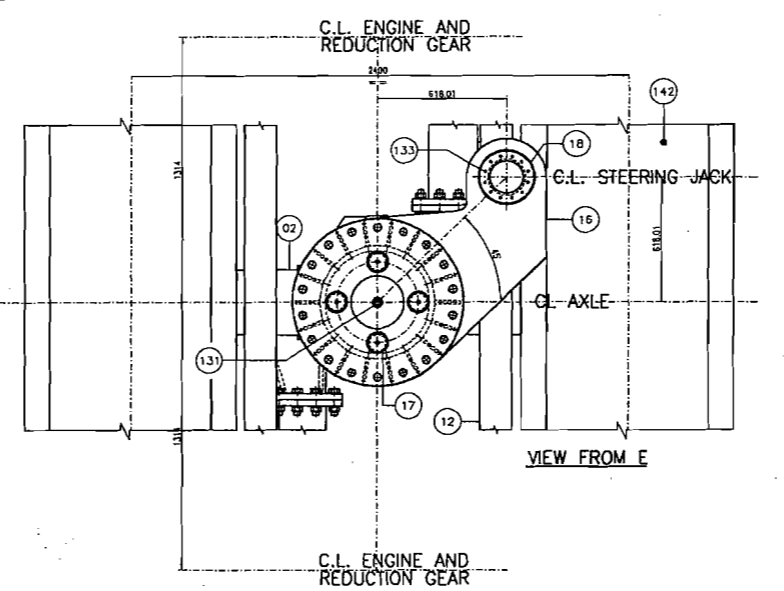
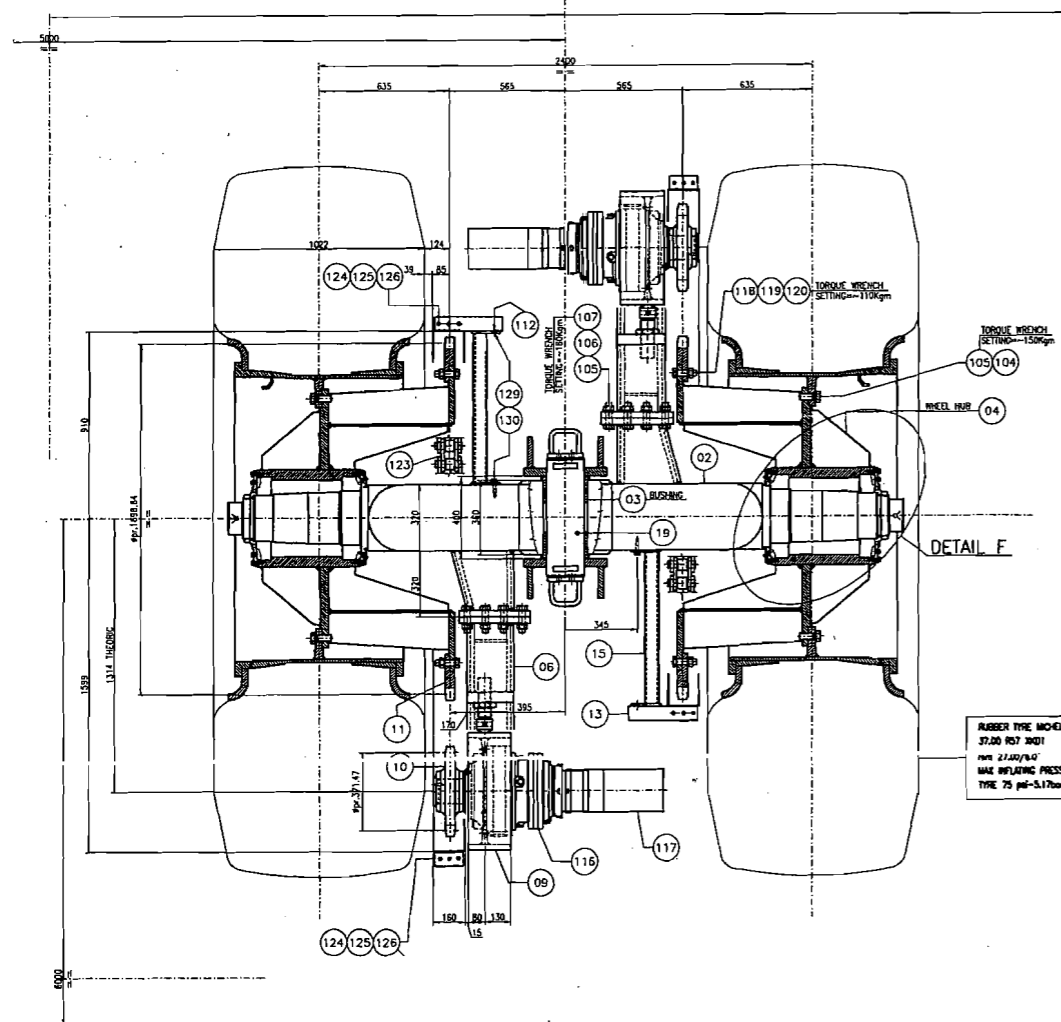
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OBJECT:	MAIN GIRDER			
TITLE:	ACCESSORIES			
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File No:	Doc. No.			
600311	060229			
Fab. Nr.	Dep.	Doc. Type	Part.	Nr.
T06	DM	CD	A-	0221

CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT
S. FRANCISCO - OAKLAND BAY BRIDGE - USA



NOTES:
 FOR TROLLEY GENERAL ASSEMBLY SEE DWG. T06TPAD001
 FOR WALKWAYS AND PLATFORM ASSEMBLY SEE DWG. T06TPAD002
 FOR IDLE WHEELS GROUP ASSEMBLY SEE DWG. T06TPAD004
 FOR ROTATION SUPPORT ASSEMBLY SEE DWG. T06TPAD005
 FOR STEERING PLATFORM WITH EQUALISING JACK GENERAL ARRANGEMENT SEE DWG. T06TPAD006A/B

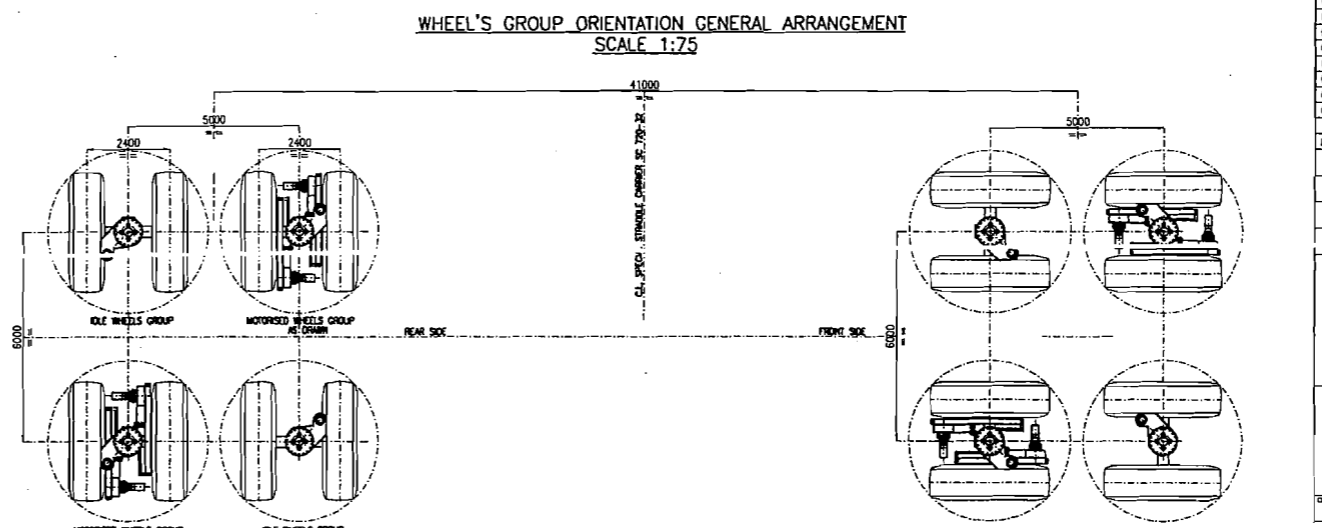
POS.	QTY.	DESCRIPTION	MATER.	COL.	W.U.	W.T.	NOTE
148	48	WASHER #37*66 UNI 6592 R40					COMM
147	24	NUT M36 UNI 5588 6S					COMM
146	24	SCREW M36*140 UNI 5737 8.8					COMM
145	4	SUPPORT JACK FOR 90° ROTATION FRAMEN	F30D	875	3500		COMM
143	24	WASHER #15*28 UNI 6592 R40					COMM
142	8	RUBBER TYRE MICHELIN 37.00 R57 XxD1 Rm27.00/6.0" MAX INFLATING PRESSURE TYRE 75 psi-5.17bar	F101	4100	32800		COMM
141	8	A+P 10025010A					COMM
140	8	A+P 10030010A					COMM
139	28	SCREW M12*35 UNI 5739 8.8					COMM
138	24	GREASER 8/410*1 UNI 7662					COMM
137	32	WASHER 25*44 UNI 6592 R40					COMM
136	32	SCREW M24*60 UNI 5739 8.8					COMM
135	16	WASHER #21*37 UNI 6592 R40					COMM
134	16	SCREW M20*50 UNI 5931 8.8					COMM
133	96	SCREW M12*35 UNI 5933 10.9					COMM
131	4	SCREW M30*80 UNI 5931 12.9					COMM
130	56	WASHER #17*30 UNI 6592 R40					COMM
129	40	SCREW M16*40 UNI 5739 8.8					COMM
128	160	WASHER #13*24 UNI 6592 R40					COMM
127	32	SCREW M12*20 UNI 5739 8.8					COMM
126	48	NUT M10 UNI 5588 6S					COMM
125	96	WASHER #10.5*21 UNI 6592 R40					COMM
124	48	SCREW M10*30 UNI 5739 8.8					COMM
123	8	CHAIN REGINA INDUSTRIE ISO 56B1 Lg.6223, 70 LINKS Lg.88.9mm	F804	230	1840		COMM
122	8	BREVINI RDF 400					COMM
121	24	SCREW M14*45 UNI 5739 8.8					COMM
120	192	NUT M27 UNI 5588 6S					COMM
119	384	WASHER #28*50 UNI 6592 R40					COMM
118	192	SCREW M27*100 UNI 5737 8.8					COMM
117	8	HYDRAULIC ENGINE "REXROTH" ABVM107HD2/63W-0340-V2B-027B				50	400
116	8	BREVINI ED400/400/1000 ZLC 2.3.450/611360023670				257	2056
115	240	NUT M14 UNI 5713 6S					COMM
114	480	WASHER #15*28 UNI 5714 C50					COMM
113	240	SCREW M14*170 UNI 5737 10.9					COMM
112	32	NUT M16 UNI 5588 6S					COMM
111	16	SCREW M16*50 UNI 5739 8.8					COMM
110	16	WASHER #8*105 UNI 1749 3.6					COMM
109	16	COTTER PIN B13*100 UNI 1336 3.6					COMM
108	8	NUT M8 UNI 5588 6S					COMM
107	88	NUT M30 UNI 5588 6S					COMM
106	88	SCREW M30*110 UNI 5737 8.8					COMM
105	464	WASHER #31*55 UNI 6592 R40					COMM
104	288	SCREW M30*80 UNI 5737 8.8					COMM
103	8	RING NUT SKF KMT 40					COMM
102	8	SKF-30244 220/400/72				40	320
101	8	SKF-32052X 260/400/87				40	320



ATTENTION:
 THIS MATERIALS LIST IS FOR THE CONSTRUCTION OF Nr. 4 MOTORISED WHEELS GROUP

UNIT WEIGHT 18610 Kg
 TOTAL WEIGHT 74440 Kg

POS.	QTY.	DESCRIPTION	MATER.	COL.	W.U.	W.T.	NOTE
24	8	SPACER	F1203	3.3	26.4		
23	8	COVER	F1202	12.96	103.7		
22	8	COVER	F1201	12	96		
21	16	PLATE	F1103	1.9	30		
20	8	HANDLE	F1102	2.3	18		
19	4	PIN	F1101	113.6	454.5		
18	8	COVER	F1003	3.15	25.23		
17	16	PIN	F1002	4.7	75.2		
16	4	STEERING ARM	F1001	421.12	1684.5		
15	8	SUPPORT	F804	18.4	147		
14	8	SUPPORT	F803	3.7	28.6		
13	8	CHAIN'S CARTER	F802	28.3	226		
12	8	CHAIN'S CARTER	F801	24.1	193		
11	8	CROWN GEAR	F803	300	2400		
10	8	SPROCKET	F802	52	416		
09	8	SUPPORT OF REDUCTION GEAR	F801	128.2	1025		
08	8	PIN	F703	11.2	90		
07	8	PIN	F702	7.6	61		
06	8	MOTORIZATION ARM	F701	213.8	1710		
05	4	AXLE'S TURNABLE STANDARD	F601	1274.6	5098.5		
04	8	MOTORISED WHEEL HUB	F401	1135.4	9083		
03	8	BUSHING	F202	9.6	76.8		
02	4	MOTORISED AXLE	F201	2534	10136		



DEAL

STRADDLE CARRIER
 SC 720 - 32

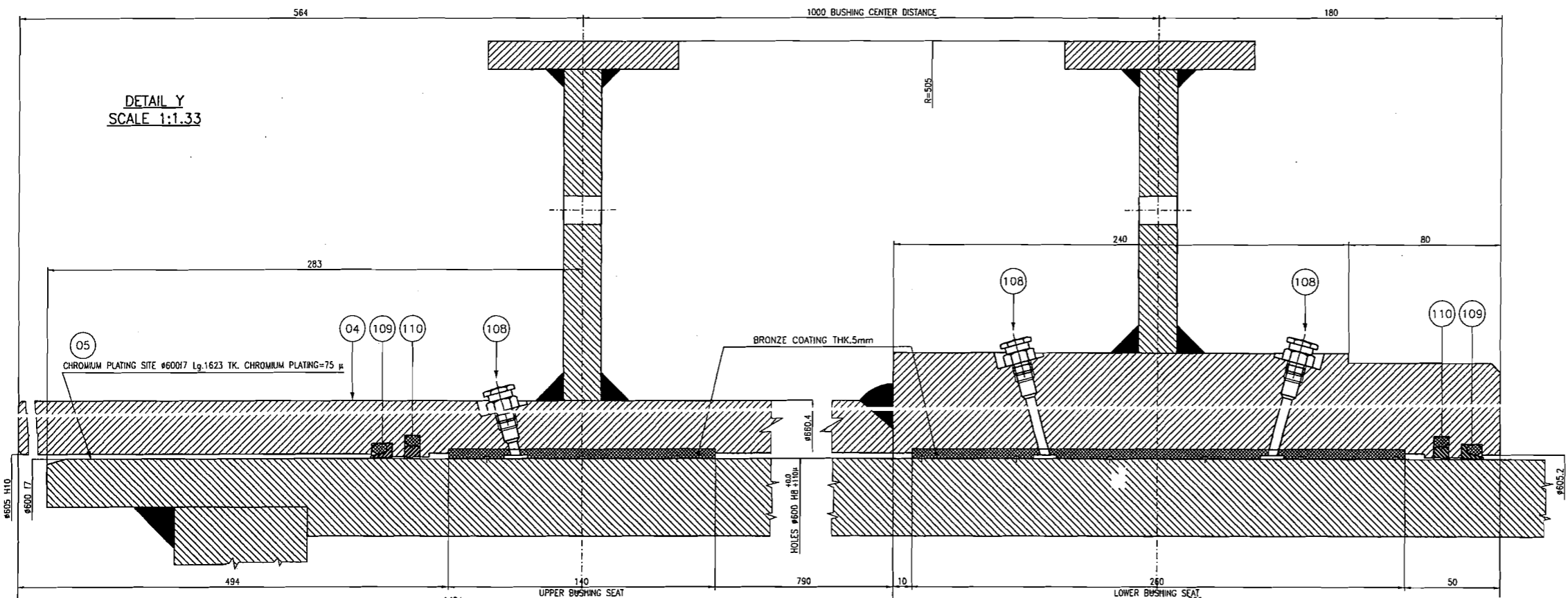
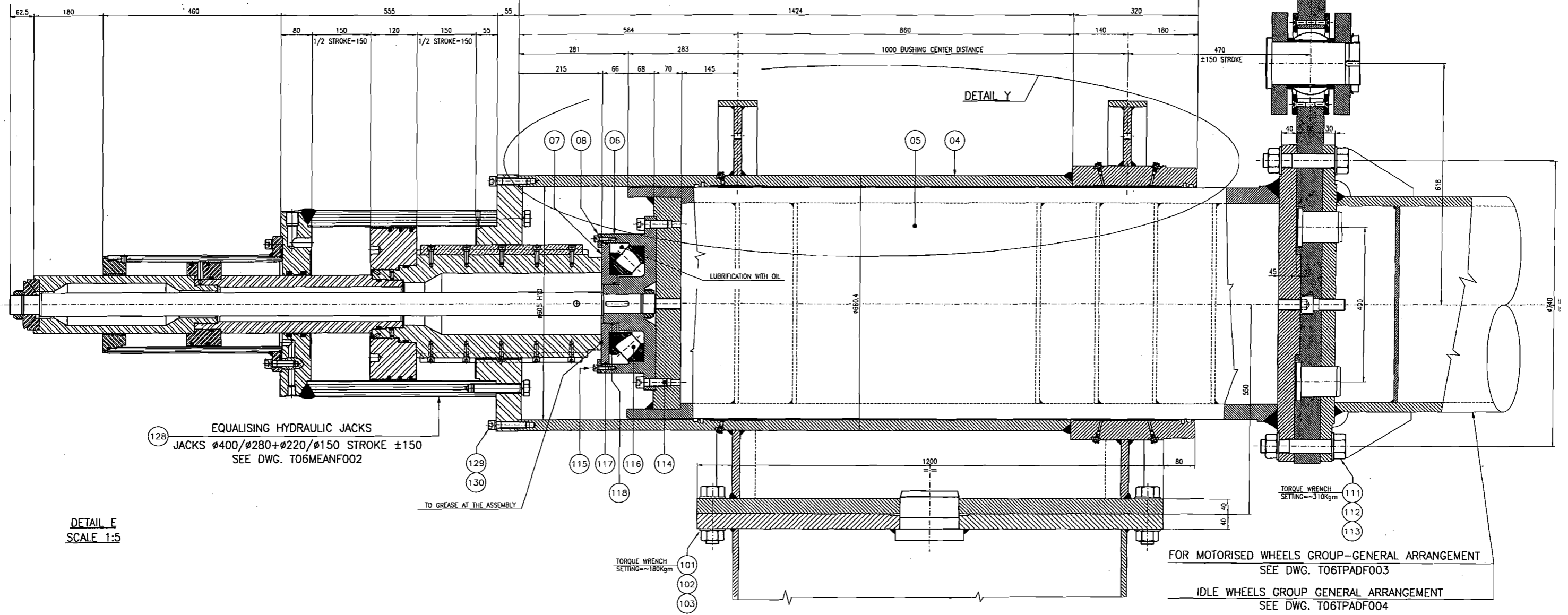
TROLLEYS AND SUPPORT

MOTORISED WHEELS GROUP-GENERAL ARRANGEMENT

Scale: 1:75

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KEWIT / FCI / MANSON JV



-NOTES-

FOR ASSEMBLY STEERING PLATFORM AND LIST OF MATERIAL
SEE DWG. T06TPADF006A

2					
1					
0	26-07-02	FIRST ISSUE	TECHPROGET S.F.	TECHPROGET CUCCHARD	LONGOBARDI
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED

REFERENCE: STRADDLE CARRIER SC 720 - 32

OBJECT: TROLLEYS AND SUPPORT

TITLE: CONNECTION EQUALISING JACK - DETAILS

Scale: 1:5 1:1.33 Sheet 2 of 2

Format: A1

File: T06TPADF006B.DWG

Job No. [600311] [060306] [---] [---]

Sub.J.Nr. [---] [---] [---] [---]

Fab. No. [T06TPADF-0060]

Doc. Type [---] Part. [---] No. [---] Rev. [---]

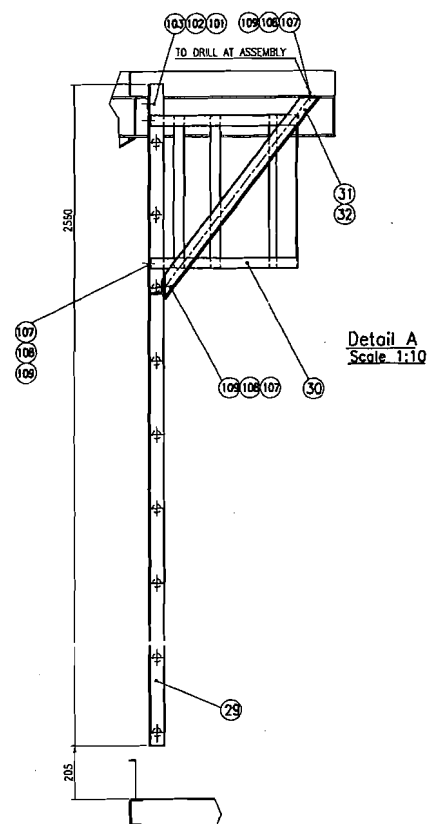
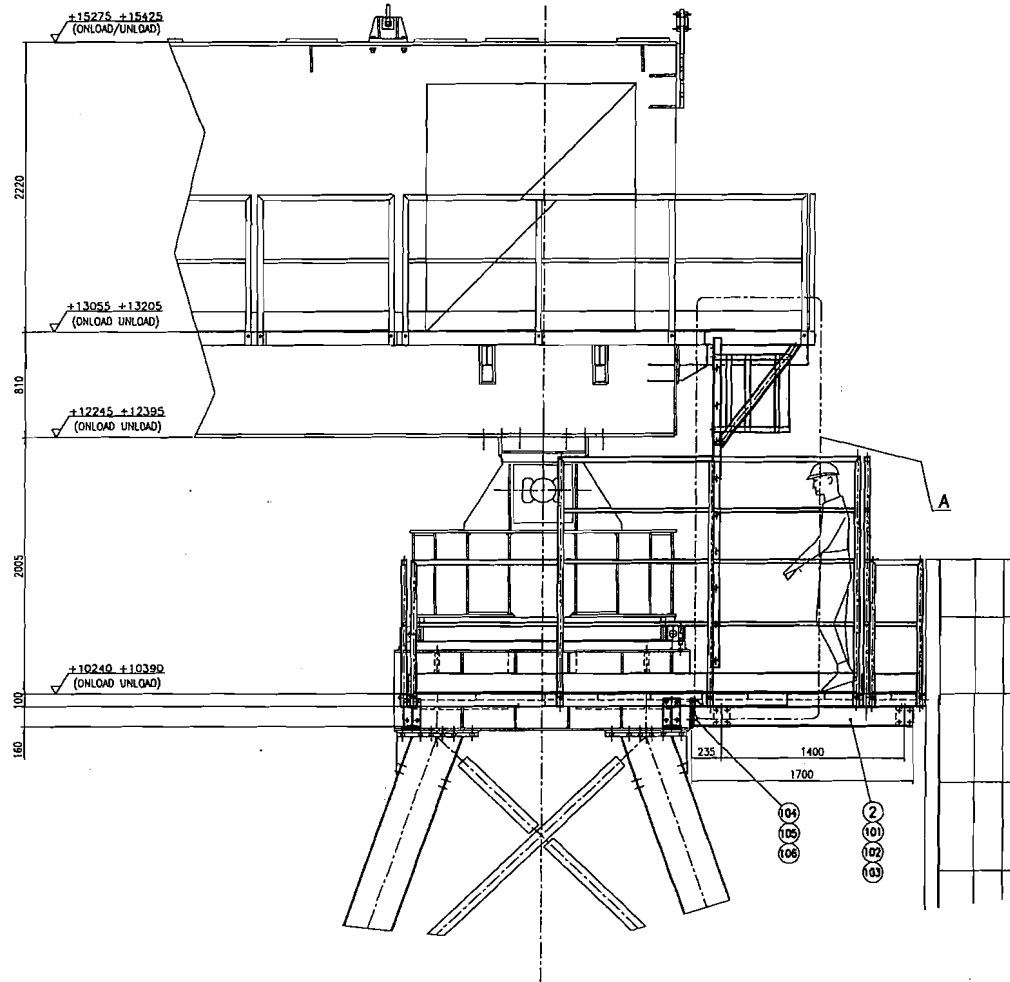
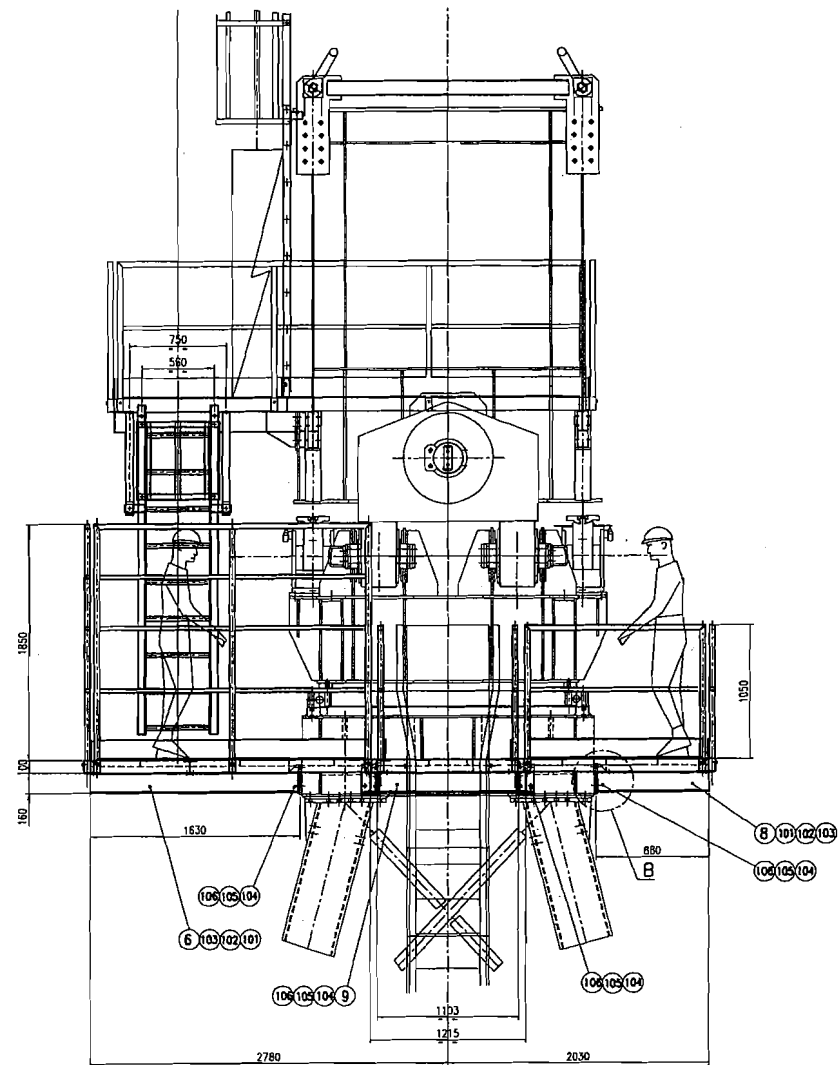
CLIENT: KIEWIT / FCI / MANSON JV

PROJECT: SKYWAY BRIDGE PROJECT

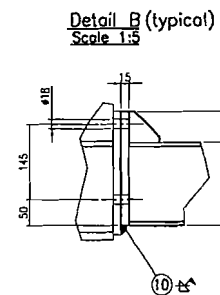
DEAL

Via Adriatico-Carpi
3300-Persepolis 40131-Modena
Tel: +39 052 407 800 Fax: +39 052 407 800
e-mail: deal@deal.it

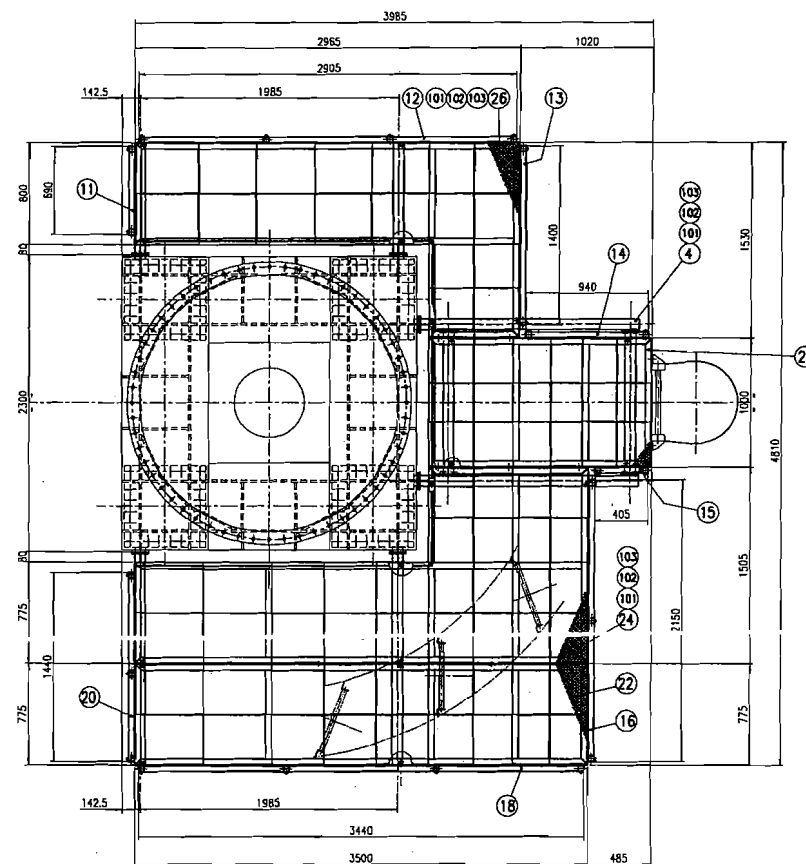
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Detail A
Scale 1:10

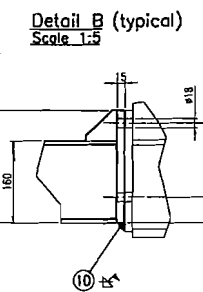
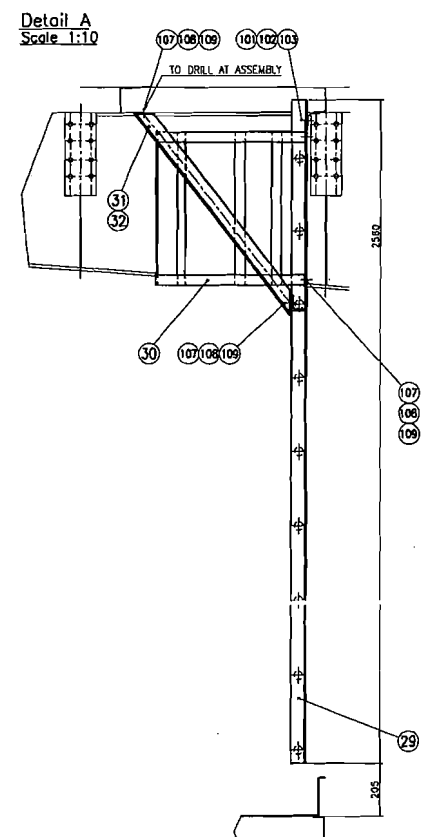
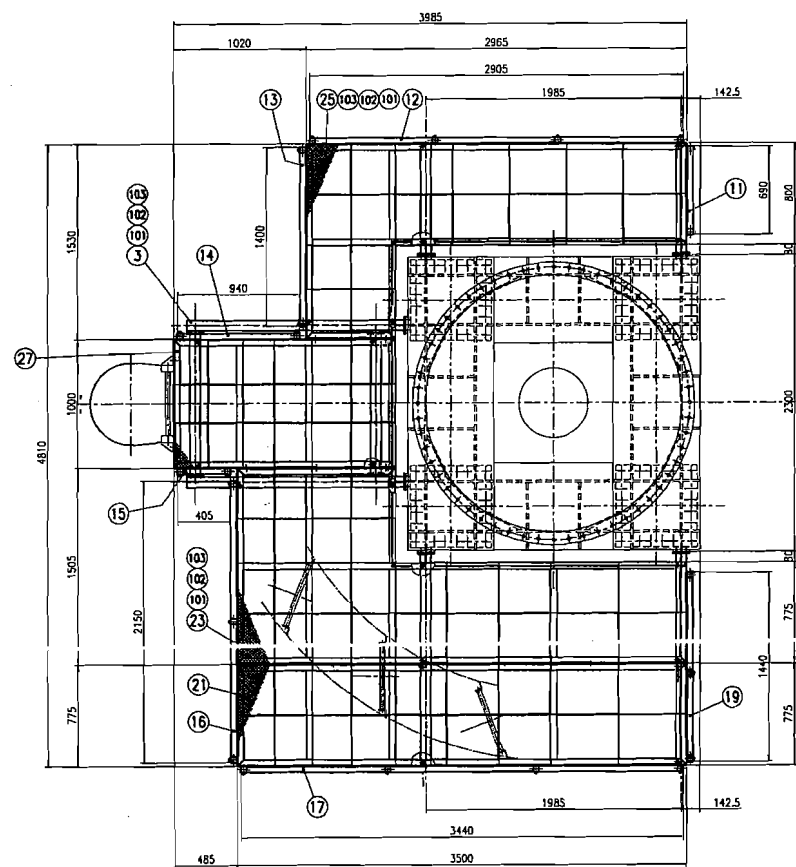
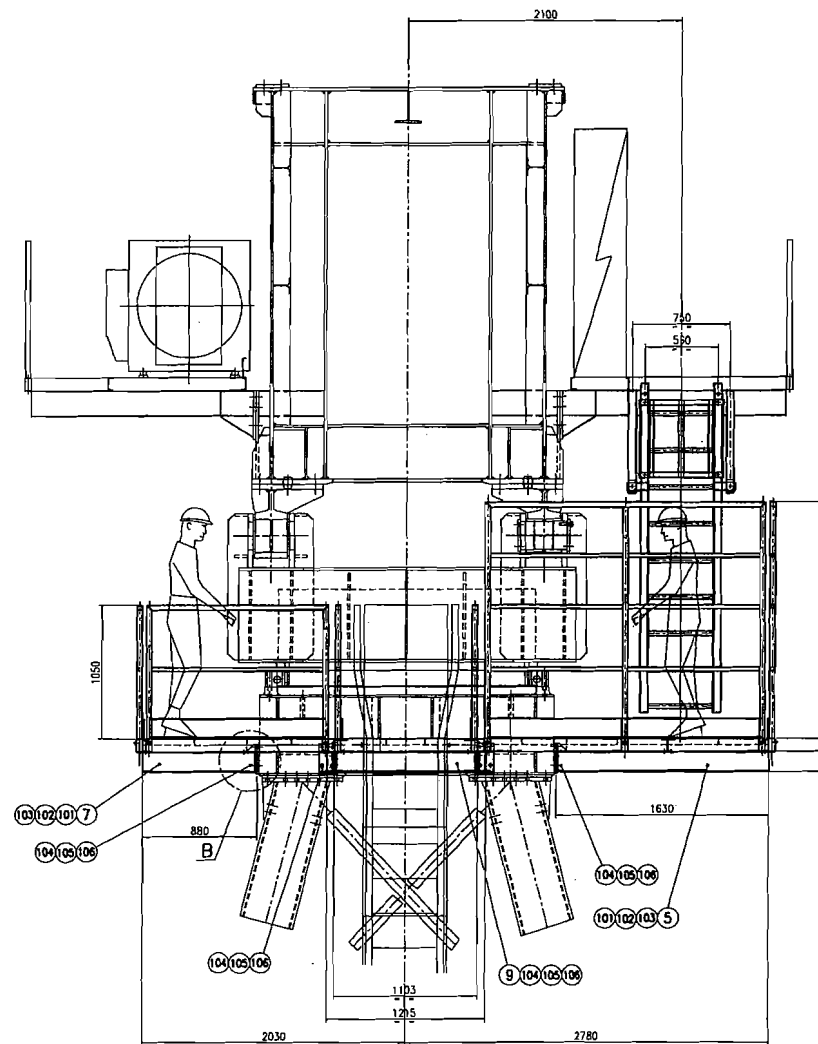
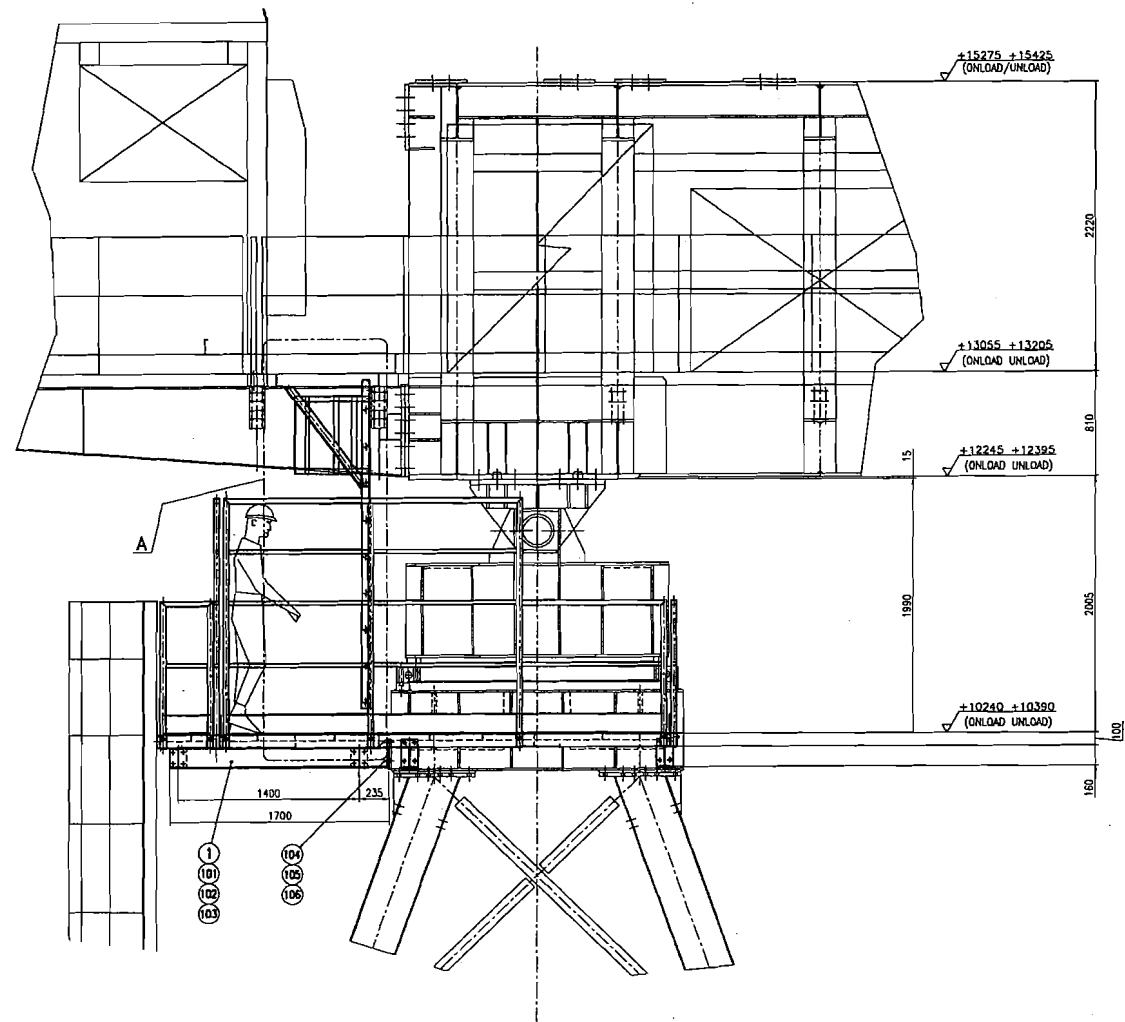


Detail B (typical)
Scale 1:5



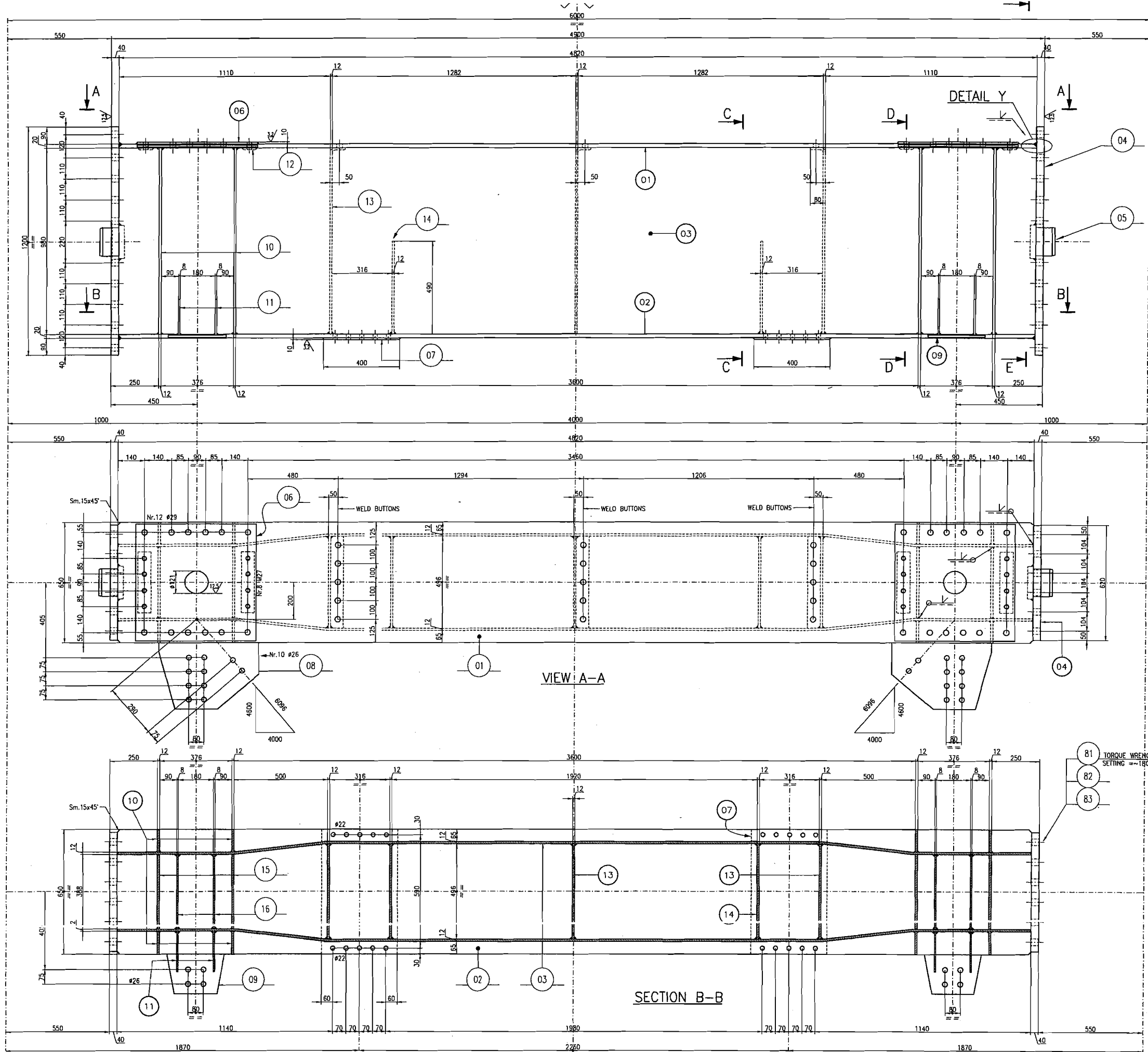
FRONT SIDE TOTAL WEIGHT = 2100 Kg

POS.	QTY	DESCRIPTION	CODE	MATERIAL	UNIT	WEIGHT	REMARKS
109	16	WASHER 10.5 UNI 6592			*		
108	16	NUT M10 UNI 5588			65		
107	16	SCREW M10x30 UNI 5739			8.8		
106	80	WASHER 17 UNI 6592			*		
105	80	NUT M16 UNI 5588			65		
104	80	SCREW M16x60 UNI 5739			8.8		
103	66	WASHER 13 UNI 6592			*		
102	110	NUT M12 UNI 5588			65		
101	110	SCREW M12x30 UNI 5739			8.8		
32	2	BEAM 60x60x992	F3804		6	12	
31	2	BEAM 60x60x992	F3803		6	12	
30	2	CHCE 600x600x648	F3802		8.8	17.8	
29	2	LAJDER 620x2500	F3801		37.5	75	
28	1	WALKWAY 1720x1000	F3708		84.5	84.5	
27	1	WALKWAY 1720x1000	F3707		84.5	84.5	
26	1	WALKWAY 2965x1530	F3706		130	130	
25	1	WALKWAY 2965x1530	F3705		130	130	
24	1	WALKWAY 3500x1505	F3704		163	163	
23	1	WALKWAY 3500x1505	F3703		163	163	
22	1	WALKWAY 3500x775	F3702		118.5	118.5	
21	1	WALKWAY 3500x775	F3701		118.5	118.5	
20	1	GUARD RAIL 1150x1440	F3610		29	29	
19	1	GUARD RAIL 1150x1440	F3609		29	29	
18	1	GUARD RAIL 1150x3440	F3608		74.5	74.5	
17	1	GUARD RAIL 1150x3440	F3607		74.5	74.5	
16	2	GUARD RAIL 1150x2150	F3606		56.6	113.2	
15	2	GUARD RAIL 1150x405	F3605		13.6	27.2	
14	2	GUARD RAIL 1150x610	F3604		18.5	37	
13	2	GUARD RAIL 1150x1400	F3603		23.2	46.4	
12	2	GUARD RAIL 1150x2905	F3602		47.5	95	
11	2	GUARD RAIL 1150x690	F3601		18.1	36.	



REAR SIDE

2					
1					
0	06-08-02	FIRST ISSUE	Esseire	GERMANN	RBS
REV.	DATE	REV. PROJECT	DESIGNER	DRAWN BY	CHECKED BY
DEAL		STRADDLE CARRIER SC 720 - 32			
		VERTICAL STRUCTURE			
		WALKWAYS ON LOWER BEARING SUPPORT			
ALL RIGHTS RESERVED INCLUDING THE RIGHT TO REPRODUCE OR TO DISCLOSE TO THIRD PARTIES THIS DRAWING OR POSITION THEREOF WITHOUT DEAL WRITTEN AUTHORIZATION		Scale: 1:20	Sheet: 2	of 2	
JOB NO. TOSDMDR0318.DWG		REV. AD			
DATE: 06/03/07		SCALE: 1:20			
PROJECT: T06DMADF-0310					
KIEWIT / FCI / MANSON JV					



N. PIEC.	PROFILE	WIDTH	LENGTH	MARK POS.	weight kg.		Code	Qual. material	NOTES
					Unit.	Total			
4	PL 20	650	4820	01	491.9	1968		FES10C	
4	PL 20	650	4820	02	491.9	1968		FES10C	
8	PL 12	980	4830	03	445.9	3567		FES10C	
8	PL 40	620	1200	04	233.4	1867		FES10C	
8	RDD175		130	05	19.2	154		30N1CRND3	
8	PL 10	630	630	06	31.2	249		FES10C	
8	PL 10	400	650	07	20.4	163		FES10C	
8	PL 12	355	524	08	14.4	115		FES10C	
8	PL 12	205	300	09	5.0	40		FES10C	
32	PL 12	119	980	10	11.0	352		FES10C	
16	PL 8	190	210	11	2.5	40		FES10C	
16	PL 10	70	330	12	1.8	29		FES10C	
12	PL 12	496	1040	13	48.6	583		FES10C	
8	PL 12	490	496	14	22.9	183		FES10C	
16	PL 12	388	980	15	35.8	573		FES10C	
16	PL 8	186	388	16	4.5	73		FES10C	
	224 SCREW M3X125 UNI5737				81			B. 8	
	448 WASHER 34X60 UNI 6592				82			R40	
	224 NUT M33 UNI 5588				83			6S	
						11923			

SCALE 1:10
 MARK F2101
 NR PIECES 4
 UNIT WEIGHT 2980.8 Kg
 TOTAL WEIGHT 11923 Kg

REMOVE SHARP CORNERS WITH R=2

WELDING PROCEDURES :
 The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

FINISHING
 Machining UNI 4600

TOLERANCES
 FH ISO (UNI 7218)

FINAL PAINTING :
 ENAMEL BLUE RAL 5017

NOTE:
 FOR SECTION C-C, D-D, E-E AND DETAIL SEE DWG. T06TPCDF021B

2					
1					
0	08-07-02	FIRST ISSUE	TECNOPROGET S.F.	TECNOPROGET R.V.	LONGOBARDI
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED

DEAL

STRADDLE CARRIER SC 720 - 32
 TROLLEYS AND SUPPORT
 TRANSVERSAL CROSS MEMBER

Scale 1:10 Sheet 01 of 2

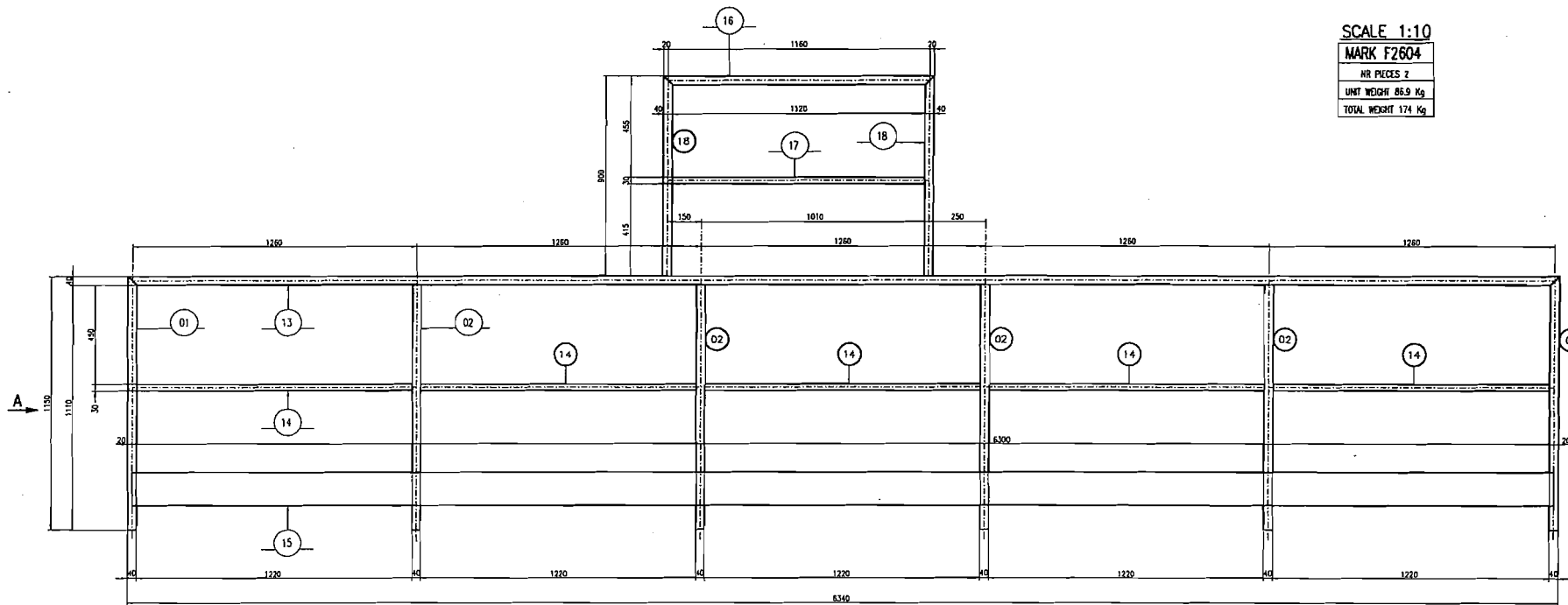
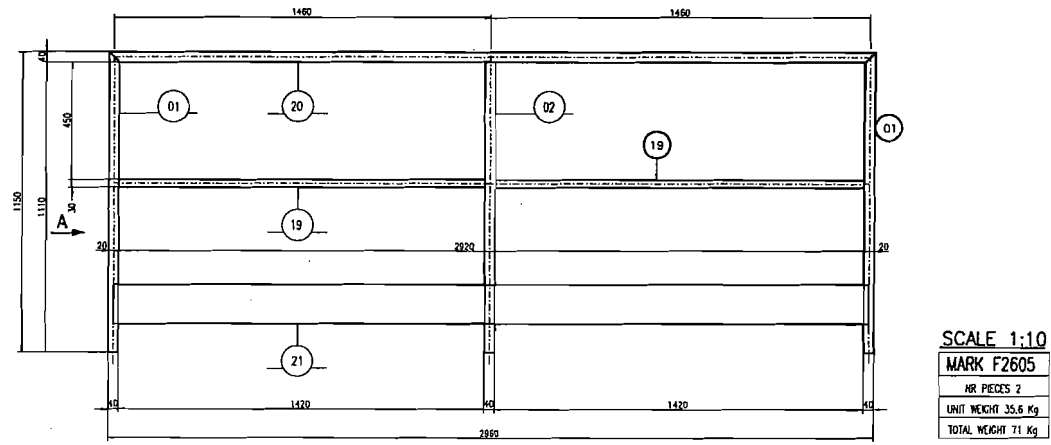
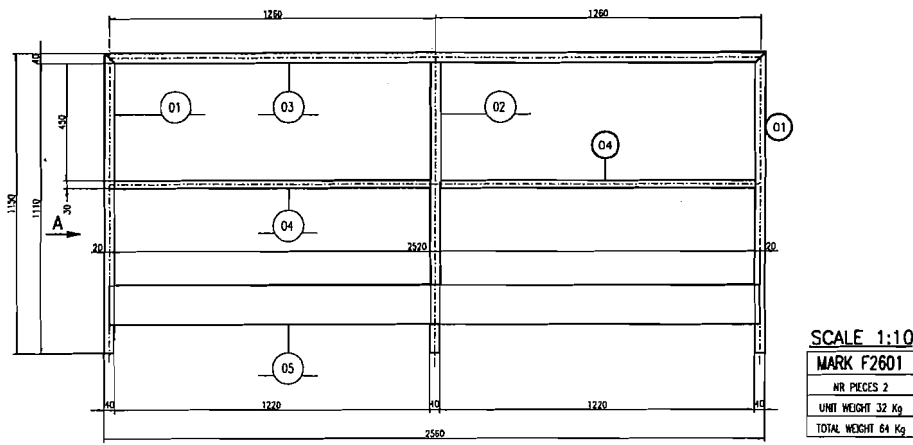
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Job No. [6]0[0]3[1]1 Sub.J.Nr. [0]6[0]3[1]0

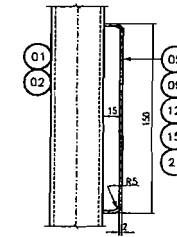
Rev. [0]2[1]0

ALL RIGHTS RESERVED INCLUDING THE RIGHT TO REPRODUCE OR TO DISCLOSE TO THIRD PARTIES THIS DRAWING OR POSITION THEREOF WITHOUT DEAL WRITTEN AUTHORIZATION

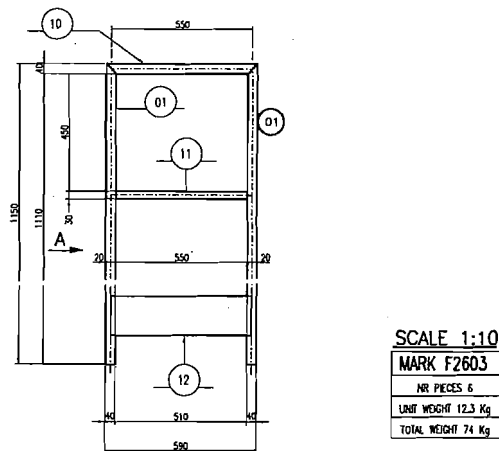
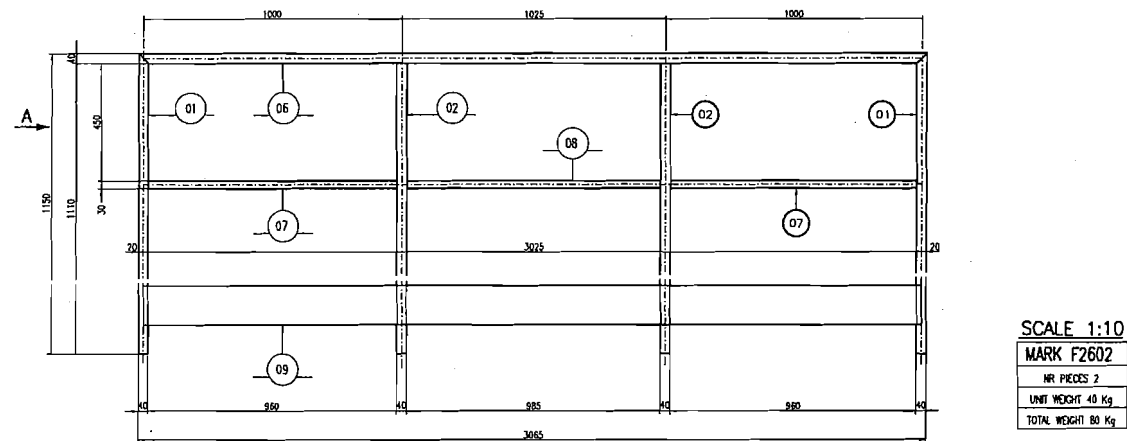
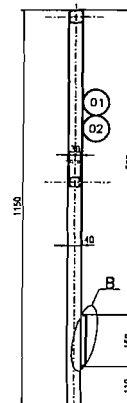
CLIENT: KIEWIT / FCI / MANSON JV
 PROJECT: SKYWAY BRIDGE PROJECT



DETAIL B
SCALA 1:2



VIEW FROM A
TYPICAL
SCALE 1:7.5



QTY	DESCRIPTION	UNIT	QTY	DESCRIPTION	UNIT	QTY	DESCRIPTION
2	PIPE 40x40	1130 01	4.0	111	FE3608		
2	PIPE 40x40	1110 02	3.8	61	FE3608		
2	PIPE 40x40	2560 03	8.9	18	FE3608		
4	PIPE 30x30	1200 04	2.4	10	FE3608		
2	PL. 2	250 05	6.6	13	FE3608		
2	PIPE 40x40	3065 06	10.7	21	FE3608		
4	PIPE 30x30	960 07	1.9	8	FE3608		
2	PIPE 30x30	965 08	2.0	4	FE3608		
2	PL. 2	3025 09	7.9	14	FE3608		
6	PIPE 40x40	590 10	2.0	12	FE3608		
6	PIPE 30x30	510 11	1.0	6	FE3608		
6	PL. 2	550 12	1.4	6	FE3608		
2	PIPE 40x40	6340 13	22.2	41	FE3608		
10	PIPE 30x30	1220 14	2.4	24	FE3608		
2	PL. 2	6300 15	16.5	23	FE3608		
2	PIPE 40x40	1200 16	4.2	8	FE3608		
2	PIPE 30x30	1120 17	2.2	4	FE3608		
4	PIPE 40x40	900 18	3.2	13	FE3608		
4	PIPE 30x30	1400 19	2.9	12	FE3608		
2	PIPE 40x40	2960 20	10.4	21	FE3608		
2	PL. 2	2920 21	7.7	15	FE3608		
						463	

REMOVE SHARP CORNERS WITH R=2

WELDING PROCEDURES:
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-95, or ASME sect. IX

FINAL PAINTING:
ENAMEL BLUE RAL 5017

TELEPHONE: 02 27 11 11 11

FR 50 (REV 7218)

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2					
1					
0	01-08-02	FIRST ISSUE	TECHPROJET S.F.	TECHPROJET CUCCARD	LONGOBARDI

DEAL

STRADDLE CARRIER
SC 720 - 32
TROLLEYS AND SUPPORT
HANDRAILS

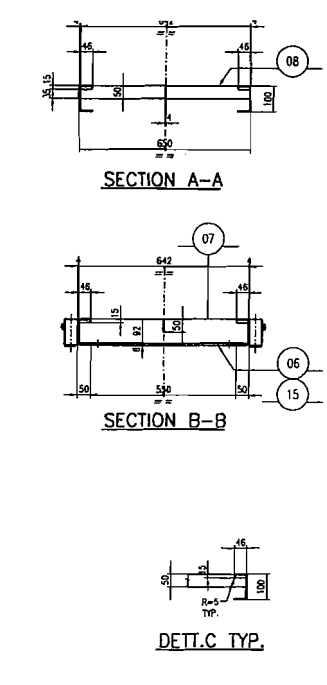
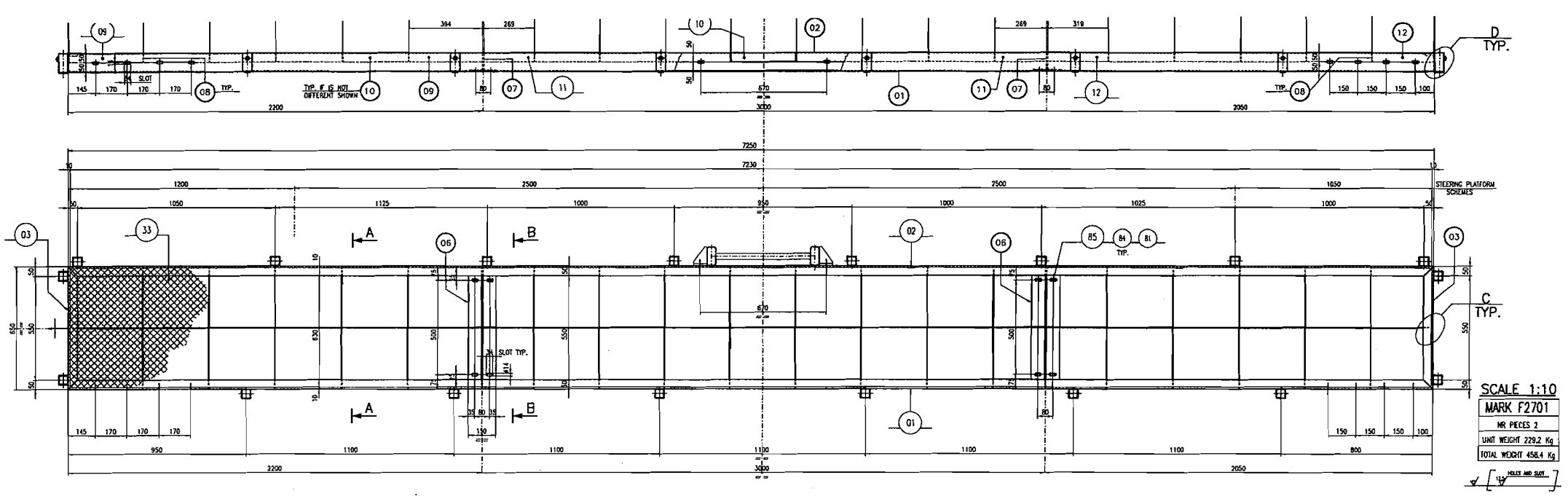
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File: TOSTPCDF026.DWG

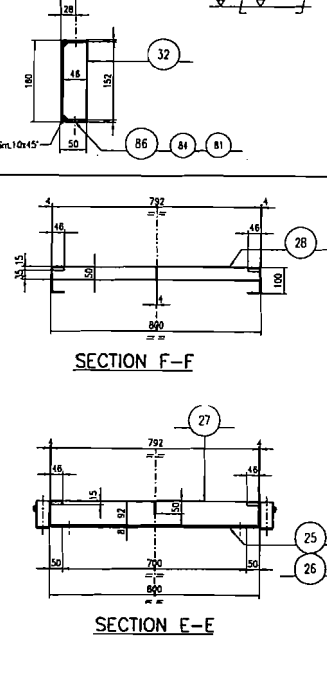
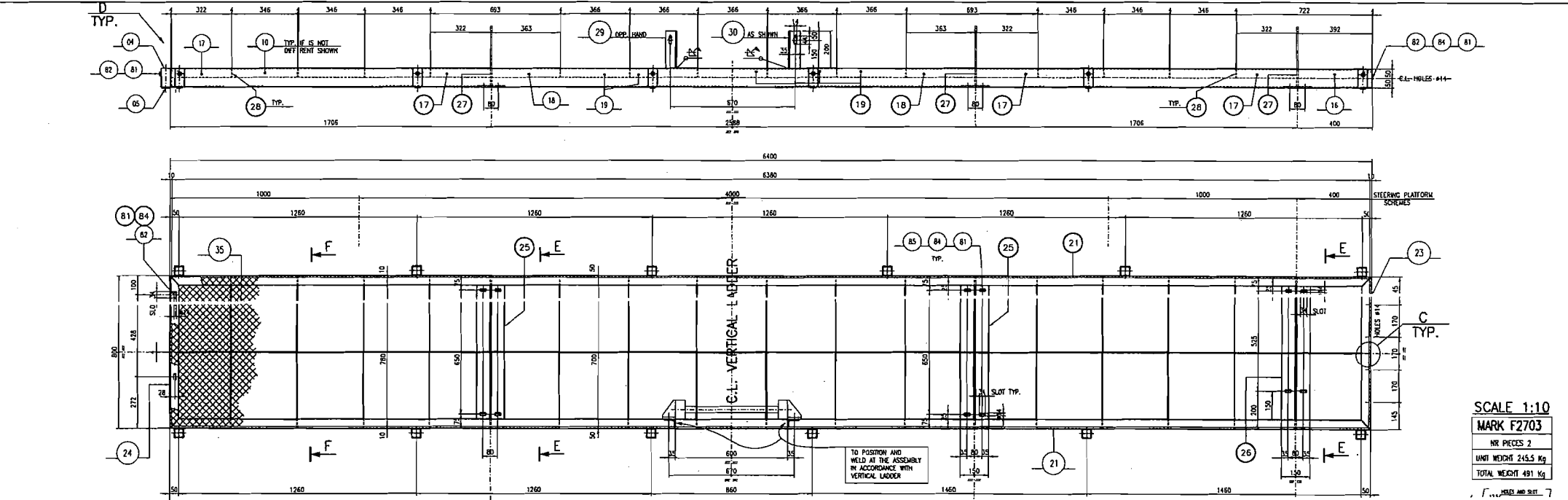
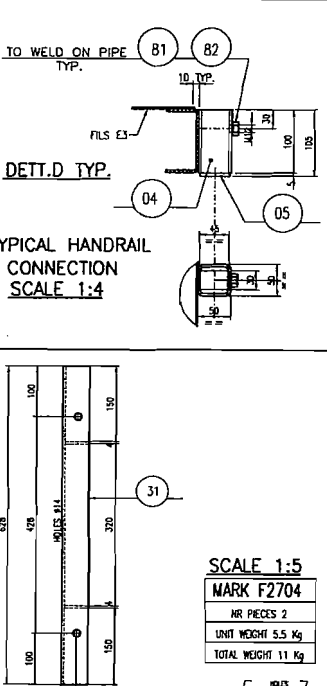
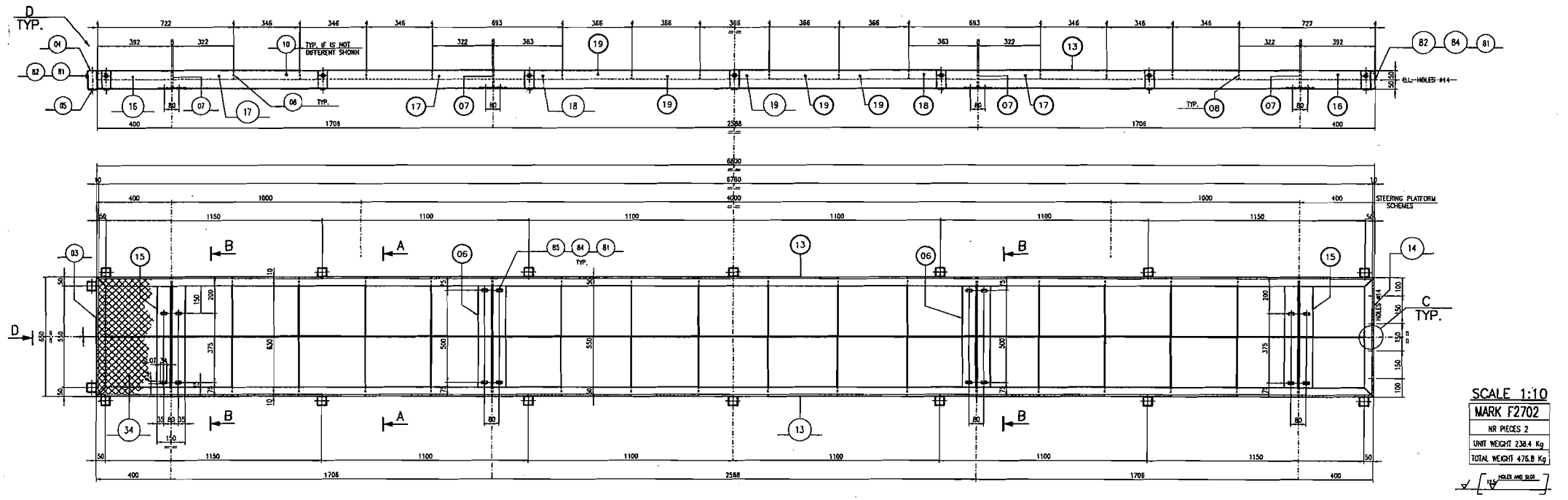
Sheet: 1 of 1

Project: 0260

Client: KIEWIT / FCI / MANSON JV



ITEM	QTY	UNIT	WEIGHT	TOTAL WEIGHT	MARK
2 1100S004	2250	01	31.8	64	FE360
2 1100S004	7250	02	31.8	64	FE360
4 1100S004	620	03	31.8	191	FE360
2 PL 5	100	04	0.5	46	FE360
2 PL 5	30	05	0.1	5	FE360
8 PL 8	130	06	5.2	41	FE360
12 PL 8	95	07	3.7	45	FE360
4 PL 4	50	08	1.0	20	FE360
4 PL 4	50	09	0.5	2	FE360
54 PL 4	50	10	0.5	29	FE360
4 PL 4	50	11	0.4	2	FE360
4 PL 4	50	12	0.5	2	FE360
4 1100S004	5800	13	31.8	127	FE360
2 1100S004	430	14	31.8	64	FE360
4 PL 8	150	15	5.2	21	FE360
4 PL 4	50	16	0.6	4	FE360
16 PL 4	50	17	0.5	8	FE360
8 PL 4	50	18	0.6	5	FE360
20 PL 4	50	19	0.6	12	FE360
4 1100S004	6100	20	31.8	127	FE360
2 1100S004	800	21	31.8	64	FE360
2 1100S004	900	22	31.8	64	FE360
4 PL 8	150	23	6.6	26	FE360
2 PL 8	130	24	6.6	13	FE360
6 PL 8	52	25	4.5	27	FE360
29 PL 4	50	26	1.2	34	FE360
2 L60x10x6	200	27	0.9	2	FE360
2 L60x10x6	200	28	0.9	2	FE360
2 1100S004	120	29	3.1	10	FE360
4 PL 4	44	30	0.2	1	FE360
2 FILS E3 TK.3	630	31	45.6	51	FE360
2 FILS E3 TK.3	630	32	45.6	66	FE360
2 FILS E3 TK.3	780	33	49.9	100	FE360
189 NR PLZ UNI 5008				65	
112 S00V M2000 UNI 3739				82	
150 W000R 12004 UNI5552				94	
72 S00V M2000 UNI5127				96	
4 S00V M2000 UNI5127				96	
				1437	



REMOVE SHARP CORNERS WITH R=2

WELDING PROCEDURES:
 The procedures used shall be qualified according to EN 288-3, D.M. 09-01-95, or ASME sect. IX

FINAL PAINTING:
 ENAMEL YELLOW RAL 1007

2					
1					
0	01-02	FIRST ISSUE	TECHPROJET S.F.	TECHPROJET CUCUBARO	LONGBOARD
REV.	DATE	REV. OBJECT	DESIGN	CHECKED	APPROVED

DEAL

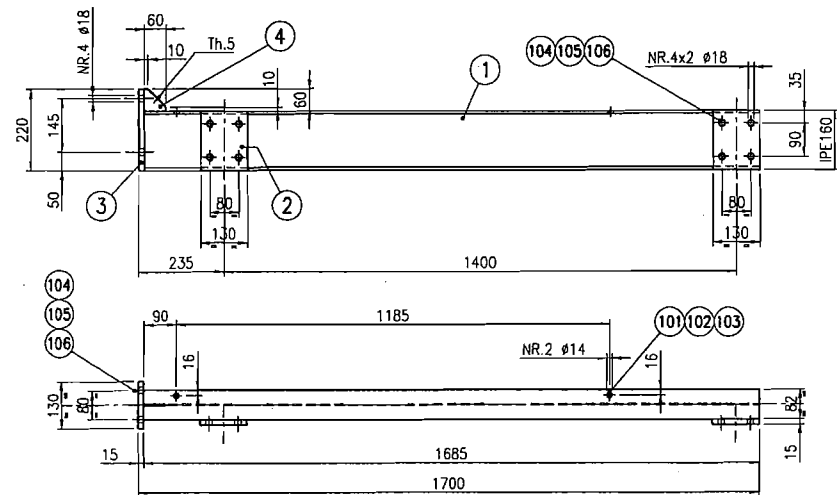
STRADDLE CARRIER
 SC 720 - 32
 TROLLEYS AND SUPPORT

WALKWAYS

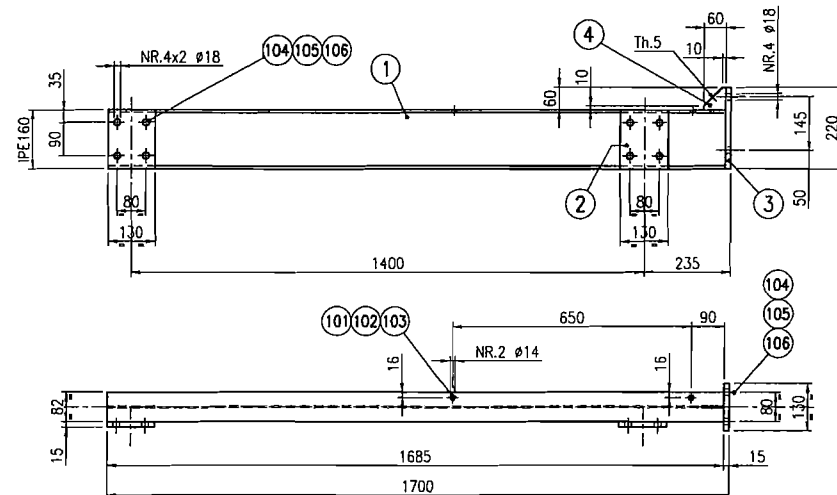
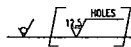
Scale: 1:10 1:4
 Sheet: 1 of 1

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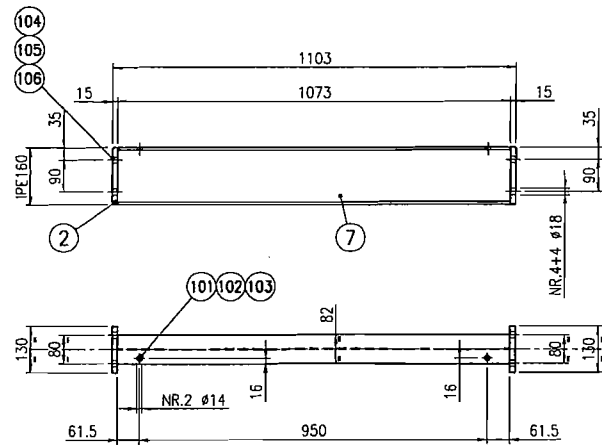
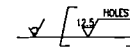
KIEWIT / FCI / MANSON JV



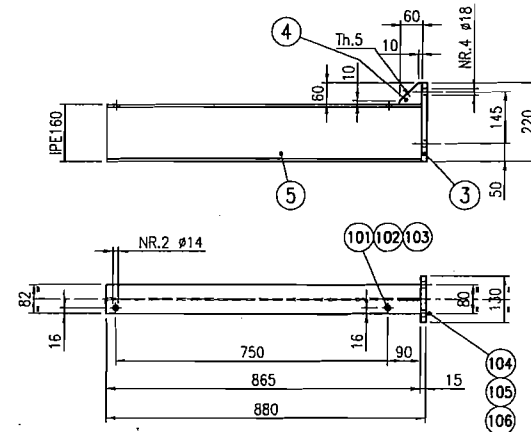
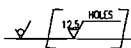
RIGHT PIECE
MARK F3501
Nr. PIECES 1
LEFT PIECE
MARK F3502
Nr. PIECES 1
UNIT WEIGHT 35 Kg
TOTAL WEIGHT 70 Kg



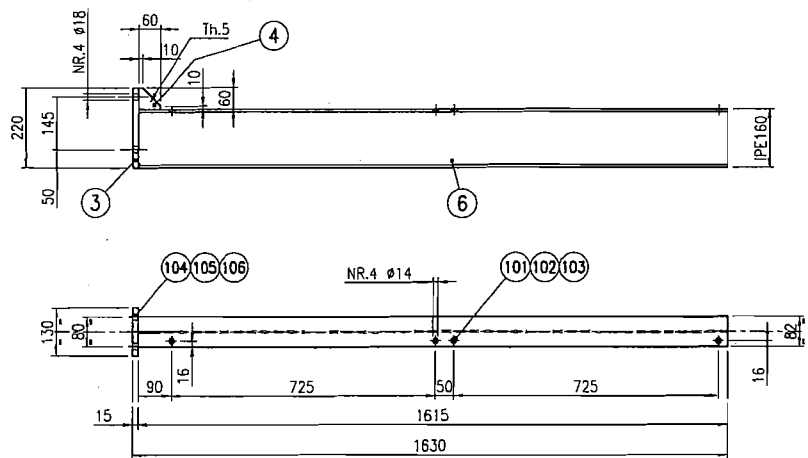
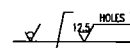
RIGHT PIECE
MARK F3503
Nr. PIECES 1
LEFT PIECE
MARK F3504
Nr. PIECES 1
UNIT WEIGHT 35 Kg
TOTAL WEIGHT 70 Kg



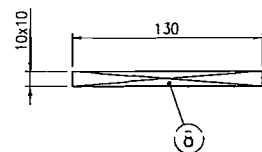
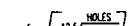
MARK F3509
NR PIECES 4
UNIT WEIGHT 21.8Kg
TOTAL WEIGHT 87.2Kg



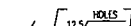
RIGHT PIECE
MARK F3507
Nr. PIECES 2
LEFT PIECE
MARK F3508
Nr. PIECES 2
UNIT WEIGHT 17.2 Kg
TOTAL WEIGHT 68.8 Kg



RIGHT PIECE
MARK F3505
Nr. PIECES 2
LEFT PIECE
MARK F3506
Nr. PIECES 2
UNIT WEIGHT 29 Kg



MARK F3510
NR PIECES 12
UNIT WEIGHT 0.1Kg



TOTAL WEIGHT = 415 Kg

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

FINAL PAINTING :
ENAMEL BLUE RAL 5017

A1	WELDS (UNI 1310)
	Where not otherwise indicated a 0.7 of minimum thick. to be connected
	(Continuous welds)
	Edge preparation for welding in accordance to UNI 11001
	TOLERANCES
	Dimension without tolerance indication
	Structural steel work UNI ISO 2768-M
	Mechanics UNI ISO 2768-T
	FINISHING
	Machining UNI 4300
	Welding UNI 4300
	Welding UNI 4300
	Welding UNI 4300

106	80	WASHER 17 UNI 6592					
105	80	NUT M16 UNI 5588			6S		
104	80	SCREW M16x60 UNI 5739			8.8		
103	40	WASHER 13 UNI 6592					
102	40	NUT M12 UNI 5588			6S		
101	40	SCREW M12x30 UNI 5739			8.8		
8	12	SQUARE 10x130			Fe 360 B	0.1	1.2
7	4	BEAM IPE 160 L=1073			Fe 430 B	17	68
6	4	BEAM IPE 160 L=1615			Fe 430 B	25.5	102
5	4	BEAM IPE 160 L=865			Fe 430 B	13.7	54.8
4	12	PLATE 60x5 L=60 SHAPED			Fe 360 B	0.1	1.2
3	12	PLATE 130x15 L=220			Fe 360 B	3.4	40.8
2	16	PLATE 130x15 L=160			Fe 360 B	2.4	38.4
1	4	BEAM IPE 160 L=1685			Fe 430 B	26.6	106.4
POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES

2							
1							
0	06-08-02	FIRST ISSUE	EsseTre	CUCCHIARO	RIBIS		
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED		

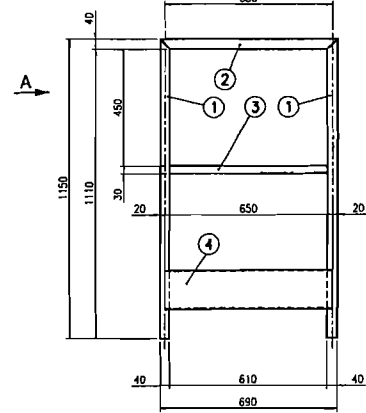
DEAL

Sub e Stabilimenti
33000-Pesaro del Friuli (UD)-Italy
Tel. +39 043 800 900
Fax: +39 043 800 902
e-mail: deal@deal.it

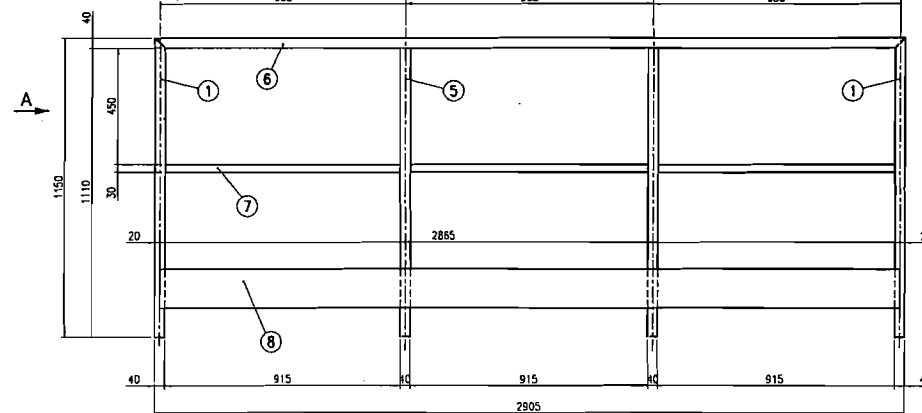
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INCLUDING THE RIGHT TO
REPRODUCE OR TO DISCLOSE
TO THIRD PARTIES THIS
DRAWING OR POSITION
THEREOF WITHOUT DEAL
WRITTEN AUTHORIZATION

REFERENCE:	STRADDLE CARRIER SC 720 - 32		
OBJECT:	VERTICAL STRUCTURE		
TITLE:	INTERMEDIATE BRACKET DETAILS		
Substituted for:	Scale	1:10	Sheet 1 of 1
File:	Format	A1	
Job No.	Sub.J.Nr.	Mir.	
-6003111	-0603110	- - - - -	
Fab. Nr.	Dep.	Doc. Type	Part.
T06DMCD	F-		
Nr.	Rev.		
0350			

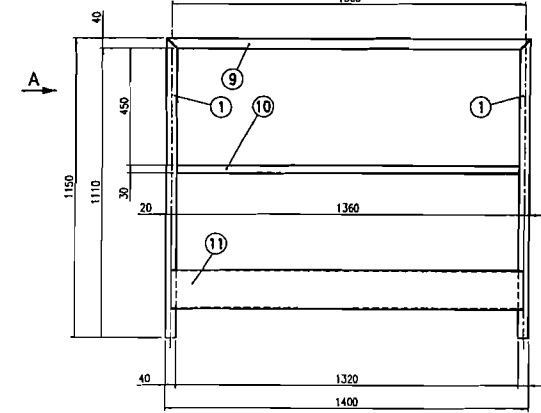
CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT



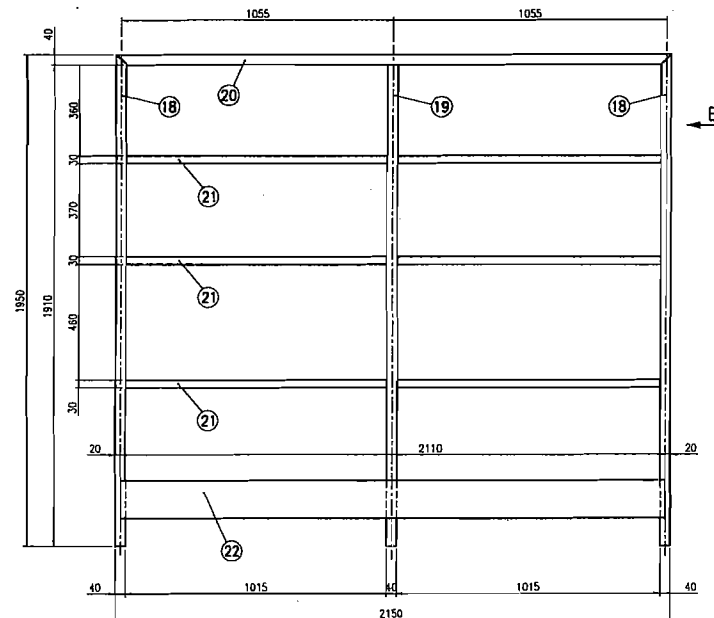
MARK F3601
NR PIECES 2
UNIT WEIGHT 16.1Kg
TOTAL WEIGHT 32.2kg



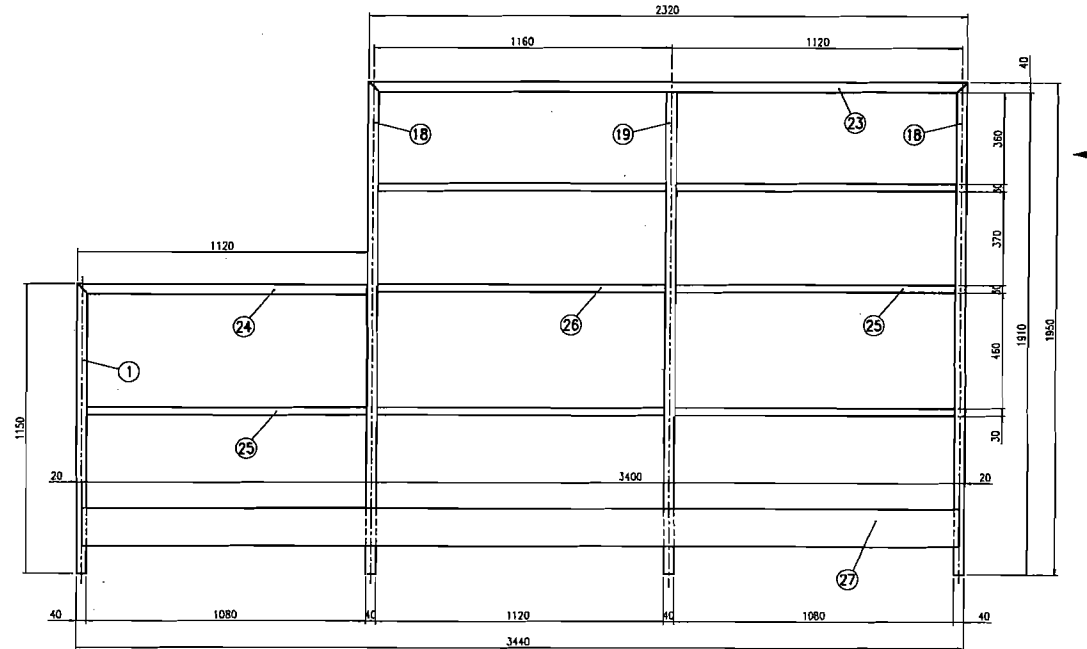
MARK F3602
NR PIECES 2
UNIT WEIGHT 47.5kg
TOTAL WEIGHT 95kg



MARK F3603
NR PIECES 2
UNIT WEIGHT 23.2kg
TOTAL WEIGHT 46.4kg



MARK F3606
NR PIECES 2
UNIT WEIGHT 56.6kg
TOTAL WEIGHT 113.2kg



RIGHT PIECE
MARK F3607
NR PIECES 1
LEFT PIECE
MARK F3608
NR PIECES 1
UNIT WEIGHT 74.5 Kg
TOTAL WEIGHT 149 Kg

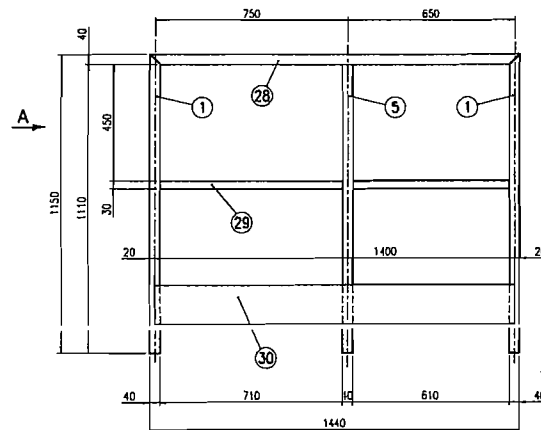
WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

FINAL PAINTING :
ENAMEL BLUE RAL 5017

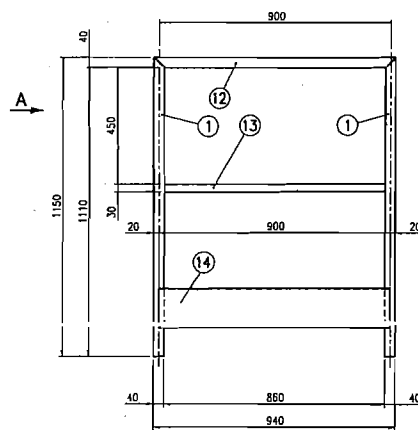
TOLERANCES :
EN 100 (EN 7210)

TOTAL WEIGHT = 560 Kg

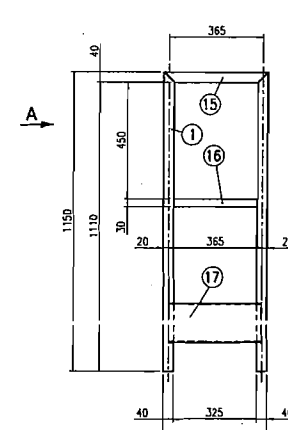
NO.	QTY	DESCRIPTION	COO.	MATERIAL	WEIGHT	UNIT WEIGHT	NOTES
30	2	PLATE 1672 L=1400 BENT	*	Fe 360B	3.7	7.4	
29	4	SQUARE PIPE 30x3 L=710	*	Fe 360B	1.8	7.2	
28	2	SQUARE PIPE 40x3 L=1440 SHAPED	*	Fe 360B	6.3	12.6	
27	2	PLATE 1672 L=3400 BENT	*	Fe 360B	8.5	17.8	
26	6	SQUARE PIPE 30x3 L=1120	*	Fe 360B	2.8	16.8	
25	8	SQUARE PIPE 30x3 L=1080	*	Fe 360B	2.7	21.6	
24	2	SQUARE PIPE 40x3 L=1120 SHAPED	*	Fe 360B	5	10	
23	2	SQUARE PIPE 40x3 L=2320 SHAPED	*	Fe 360B	10.3	20.6	
22	2	PLATE 1672 L=2110 BENT	*	Fe 360B	5.5	11	
21	12	SQUARE PIPE 30x3 L=1015	*	Fe 360B	2.6	31.2	
20	2	SQUARE PIPE 40x3 L=2150 SHAPED	*	Fe 360B	9.5	19	
19	4	SQUARE PIPE 40x3 L=1910	*	Fe 360B	8.6	34.4	
18	8	SQUARE PIPE 40x3 L=1950 SHAPED	*	Fe 360B	8.7	69.6	
17	2	PLATE 1672 L=365 BENT	*	Fe 360B	1	2	
16	2	SQUARE PIPE 30x3 L=325	*	Fe 360B	0.8	1.6	
15	2	SQUARE PIPE 40x3 L=405 SHAPED	*	Fe 360B	1.6	3.2	
14	2	PLATE 1672 L=900 BENT	*	Fe 360B	2.3	4.6	
13	2	SQUARE PIPE 30x3 L=860	*	Fe 360B	2.2	4.4	
12	2	SQUARE PIPE 40x3 L=940 SHAPED	*	Fe 360B	4	8	
11	2	PLATE 1672 L=1360 BENT	*	Fe 360B	3.6	7.2	
10	2	SQUARE PIPE 30x3 L=1320	*	Fe 360B	3.3	6.6	
9	2	SQUARE PIPE 40x3 L=1400 SHAPED	*	Fe 360B	6.1	12.2	
8	2	PLATE 1672 L=2855 BENT	*	Fe 360B	7.5	15	
7	6	SQUARE PIPE 30x3 L=915	*	Fe 360B	2.3	13.8	
6	2	SQUARE PIPE 40x3 L=2905 SHAPED	*	Fe 360B	12.9	25.8	
5	6	SQUARE PIPE 40x3 L=1110	*	Fe 360B	5	30	
4	2	PLATE 1672 L=650 BENT	*	Fe 360B	1.7	3.4	
3	2	SQUARE PIPE 30x3 L=610	*	Fe 360B	1.5	3	
2	2	SQUARE PIPE 40x3 L=650 SHAPED	*	Fe 360B	2.7	5.4	
1	26	SQUARE PIPE 40x3 L=1150 SHAPED	*	Fe 360B	5.1	132.6	



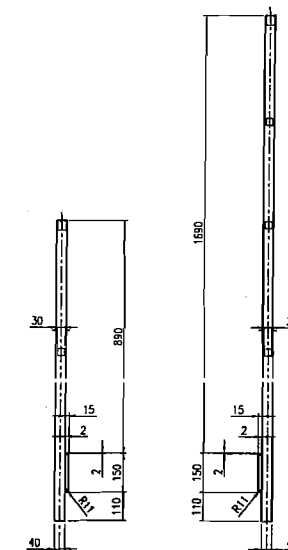
RIGHT PIECE
MARK F3609
NR PIECES 1
LEFT PIECE
MARK F3610
NR PIECES 1
UNIT WEIGHT 29 Kg



MARK F3604
NR PIECES 2
UNIT WEIGHT 18.5kg



MARK F3605
NR PIECES 2
UNIT WEIGHT 13.6kg



VIEW FROM A
TYPICAL

VIEW FROM B
TYPICAL

DEAL

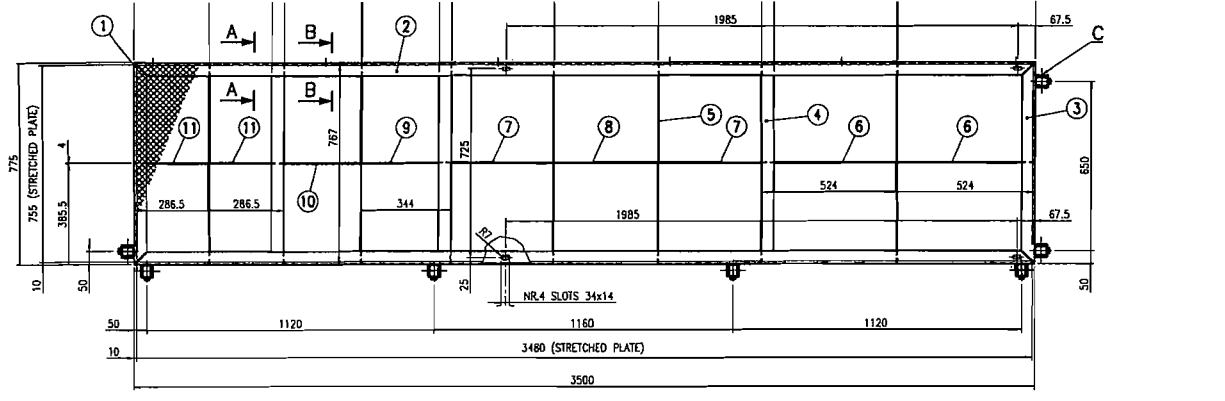
STRADDLE CARRIER
SC 720 - 32

VERTICAL STRUCTURE
INTERMEDIATE HANDRAILS DETAILS

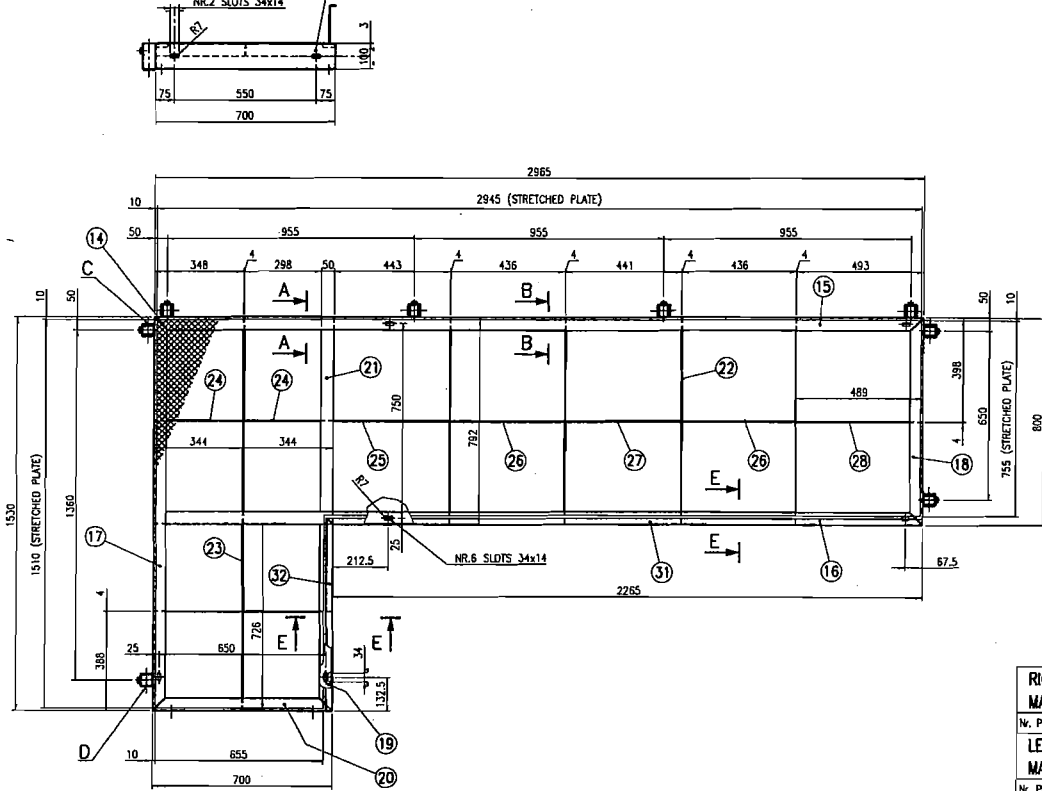
Scale: 1:10
Sheet: 1 of 1

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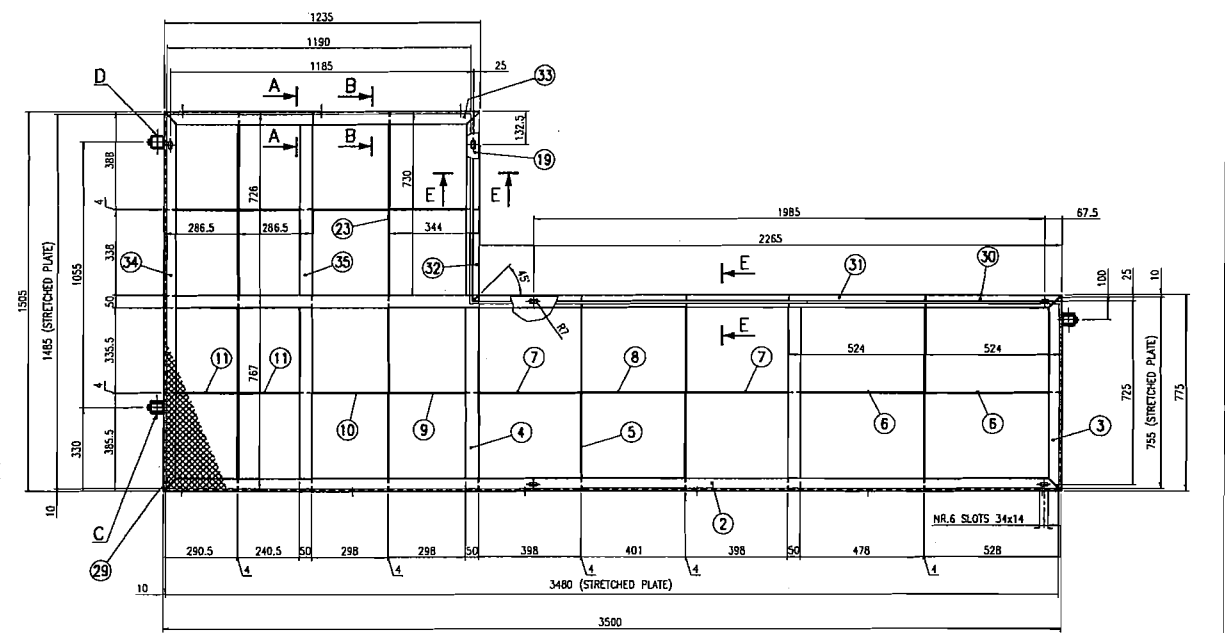
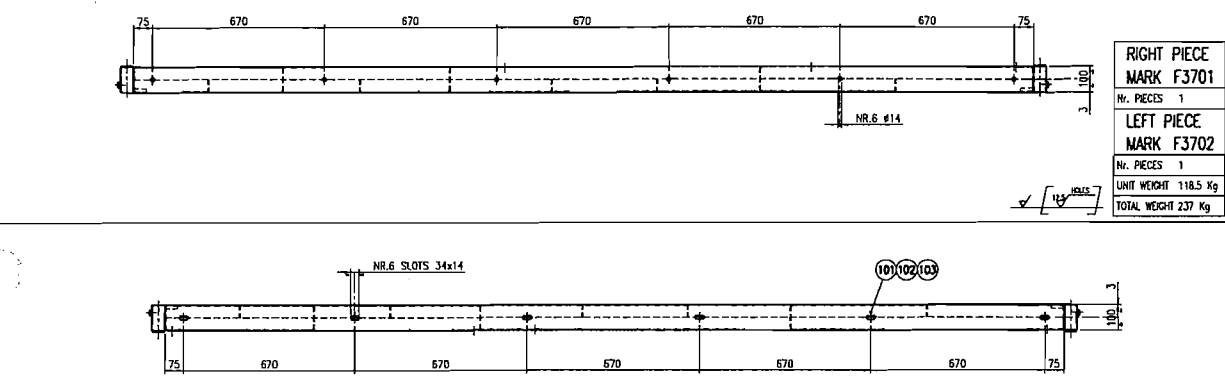
KIEWIT / FCI / MANSON JV



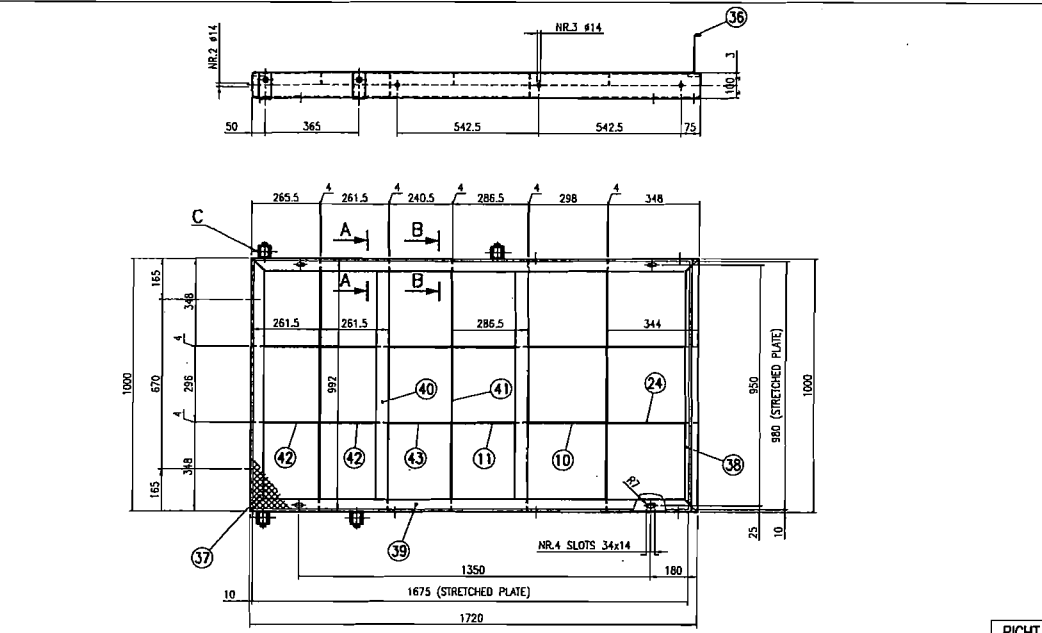
RIGHT PIECE
MARK F3701
Nv. PIECES 1
LEFT PIECE
MARK F3702
Nv. PIECES 1
UNIT WEIGHT 118,5 Kg
TOTAL WEIGHT 237 Kg



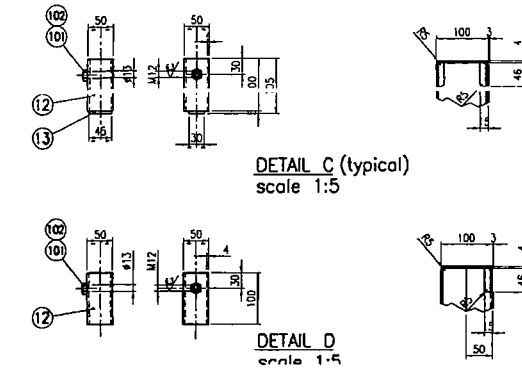
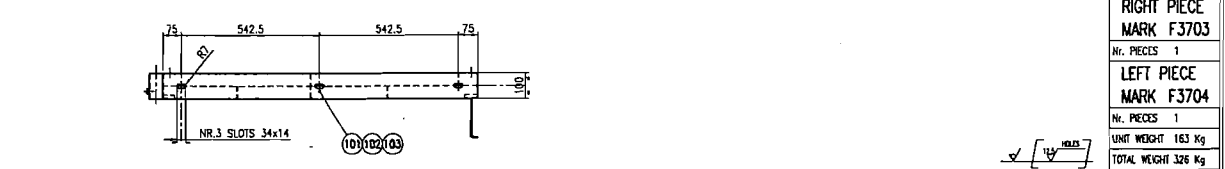
RIGHT PIECE
MARK F3705
Nv. PIECES 1
LEFT PIECE
MARK F3706
Nv. PIECES 1
UNIT WEIGHT 130 Kg
TOTAL WEIGHT 260 Kg



RIGHT PIECE
MARK F3703
Nv. PIECES 1
LEFT PIECE
MARK F3704
Nv. PIECES 1
UNIT WEIGHT 163 Kg
TOTAL WEIGHT 326 Kg



RIGHT PIECE
MARK F3707
Nv. PIECES 1
LEFT PIECE
MARK F3708
Nv. PIECES 1
UNIT WEIGHT 84,5 Kg
TOTAL WEIGHT 169 Kg

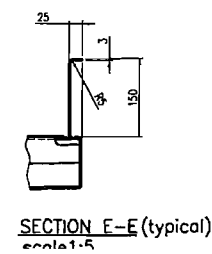


DETAIL C (typical)
scale 1:5

DETAIL D
scale 1:5

SECTION A-A (typical)
scale 1:5

SECTION B-B
scale 1:5

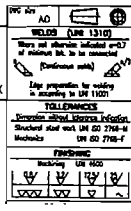


SECTION E-E (typical)
scale 1:5

TOTAL WEIGHT = 995Kg

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

FINAL PAINTING :
ENAMEL YELLOW RAL 1007



POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	NOTES
2						
1						
0	09-08-02	FIRST ISSUE	Essétre	DUCCOARD	RUBS	
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED	
103	22	WASHER 13 UNI 6592				
102	66	NUT M12 UNI 5588		6S		
101	66	SCREW M12x30 UNI 5739		8.8		
43	4	PLATE 50x4 L=240,5 SHAPED		Fe 360 B	0,4 1,6	
42	8	PLATE 50x4 L=261,5 SHAPED		Fe 360 B	0,4 3,2	
41	6	PLATE 50x4 L=992 SHAPED		Fe 360 B	1,6 9,6	
40	4	PLATE 186x4 L=992 SHAPED BENT		Fe 360 B	5,8 23,2	
39	4	PLATE 186x4 L=1720 SHAPED BENT		Fe 360 B	10 40	
38	4	PLATE 186x4 L=1000 SHAPED BENT		Fe 360 B	5,8 23,2	
37	2	STRETCHPLATE FILS E3 Th.3 1675x890 SHAP.		Fe 360 B	24,6 49,2	
36	2	PLATE 170x3 L=1000 BENT		Fe 360 B	4 8	
35	2	PLATE 186x4 L=720 SHAPED BENT		Fe 360 B	4,2 8,4	
34	2	PLATE 186x4 L=1505 SHAPED BENT		Fe 360 B	8,8 17,6	
33	2	PLATE 186x4 L=1235 SHAPED BENT		Fe 360 B	7,2 14,4	
32	4	PLATE 170x3 L=755 SHAPED BENT		Fe 360 B	3,1 12,4	
31	4	PLATE 170x3 L=2290 SHAPED BENT		Fe 360 B	6,9 27,6	
30	2	PLATE 186x4 L=3496 SHAPED BENT		Fe 360 B	20,4 40,8	
29	2	STRETCHPLATE FILS E3 Th.3 3480x1485 SHAP.		Fe 360 B	52,4 104,8	
28	2	PLATE 50x4 L=489 SHAPED		Fe 360 B	0,8 1,6	
27	2	PLATE 50x4 L=441		Fe 360 B	0,7 1,4	
26	4	PLATE 50x4 L=436		Fe 360 B	0,7 2,8	
25	2	PLATE 50x4 L=443		Fe 360 B	0,7 1,4	
24	12	PLATE 50x4 L=344 SHAPED		Fe 360 B	0,5 6	
23	6	PLATE 50x4 L=726 SHAPED		Fe 360 B	1,1 6,6	
22	10	PLATE 50x4 L=782 SHAPED		Fe 360 B	1,2 12	
21	2	PLATE 186x4 L=782 SHAPED BENT		Fe 360 B	4,5 9,2	
20	2	PLATE 186x4 L=700 SHAPED BENT		Fe 360 B	4,1 8,2	
19	4	PLATE 186x4 L=730 SHAPED BENT		Fe 360 B	4,3 17,2	
18	2	PLATE 186x4 L=800 SHAPED BENT		Fe 360 B	4,7 9,4	
17	2	PLATE 186x4 L=1530 SHAPED BENT		Fe 360 B	8,9 17,8	
16	2	PLATE 186x4 L=2961 SHAPED BENT		Fe 360 B	17,3 34,6	
15	2	PLATE 186x4 L=2965 SHAPED BENT		Fe 360 B	17,3 34,6	
14	2	STRETCHPLATE FILS E3 Th.3 2945x1510 SHAP.		Fe 360 B	48,7 97,4	
13	40	PLATE 30x5 L=45		Fe 360 B	0,05 2	
12	44	SQUARE PIPE 50x4 L=100		Fe 360 B	0,6 26,4	
11	16	PLATE 50x4 L=286,5 SHAPED		Fe 360 B	0,4 6,4	
10	10	PLATE 50x4 L=288		Fe 360 B	0,5 5	
9	4	PLATE 50x4 L=314 SHAPED		Fe 360 B	0,5 2	
8	4	PLATE 50x4 L=401		Fe 360 B	0,6 2,4	
7	8	PLATE 50x4 L=388		Fe 360 B	0,6 4,8	
6	8	PLATE 50x4 L=514 SHAPED		Fe 360 B	0,8 6,4	
5	20	PLATE 50x4 L=767 SHAPED		Fe 360 B	1,2 24	
4	12	PLATE 186x4 L=767 SHAPED BENT		Fe 360 B	4,5 54	
3	6	PLATE 186x4 L=775 SHAPED BENT		Fe 360 B	4,5 27	
2	6	PLATE 186x4 L=3500 SHAPED BENT		Fe 360 B	20,4 122,4	
1	2	STRETCHPLATE FILS E3 Th.3 3480x755		Fe 360 B	39,5 79	

DEAL

STRADDLE CARRIER
SC 720 - 32

VERTICAL STRUCTURE
INTERMEDIATE WALKWAY DETAILS

Scale: 1:10

Sheet: 1 of 1

Project: T06DMCD037.DWG

Author: AD

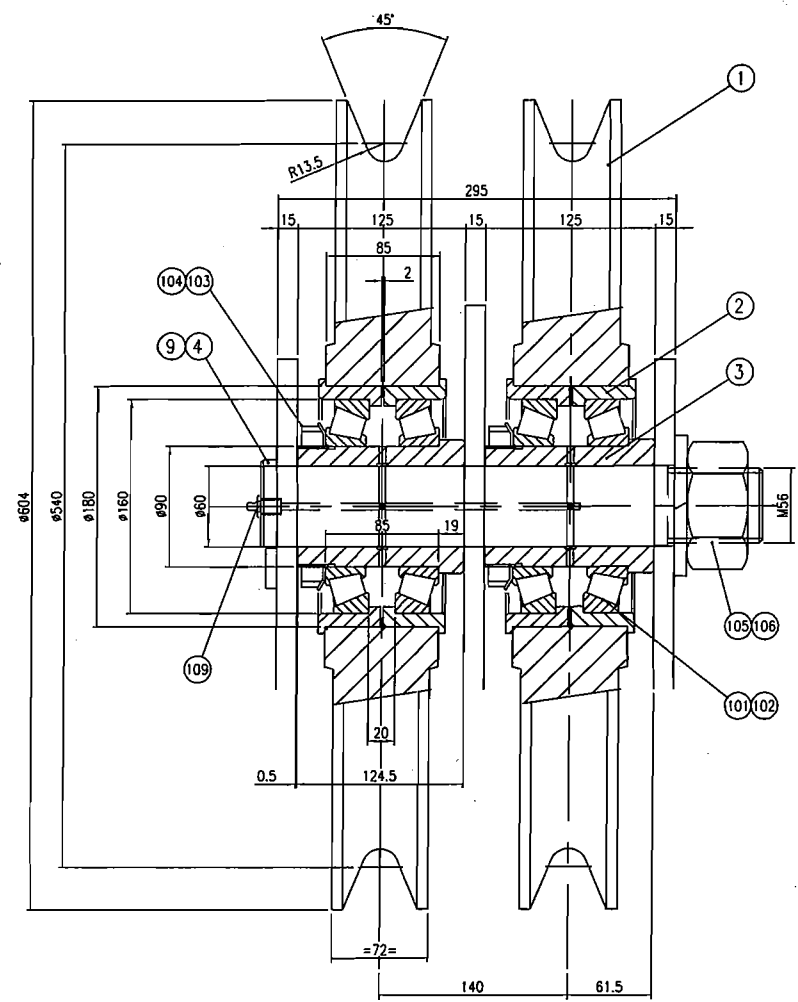
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DATE: 09-08-02

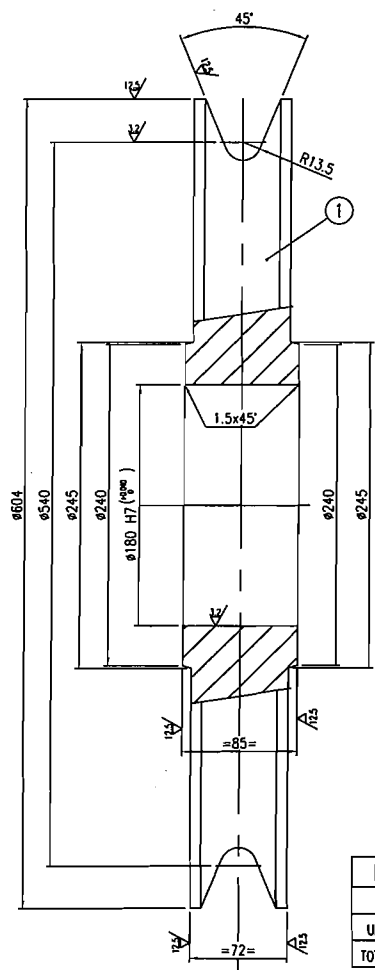
REV. DATE REV. OBJECT DRAWN CHECKED APPROVED

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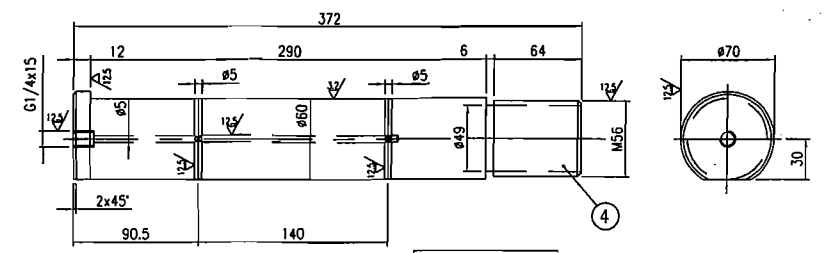
KIEWIT / FCI / MANSON JV



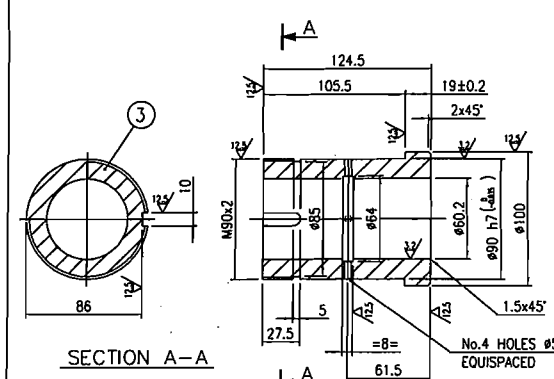
MARK E201
NR PIECES 12
UNIT WEIGHT 15 Kg
TOTAL WEIGHT 180 Kg



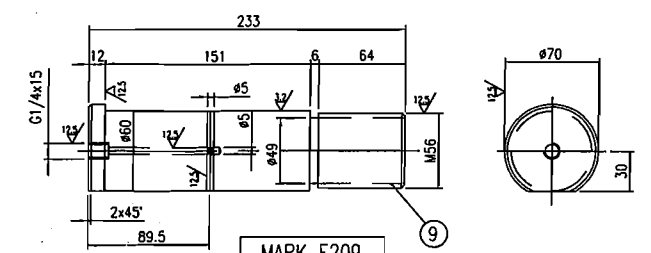
MARK E202
NR PIECES 24
UNIT WEIGHT 1.9 Kg
TOTAL WEIGHT 45.6 Kg



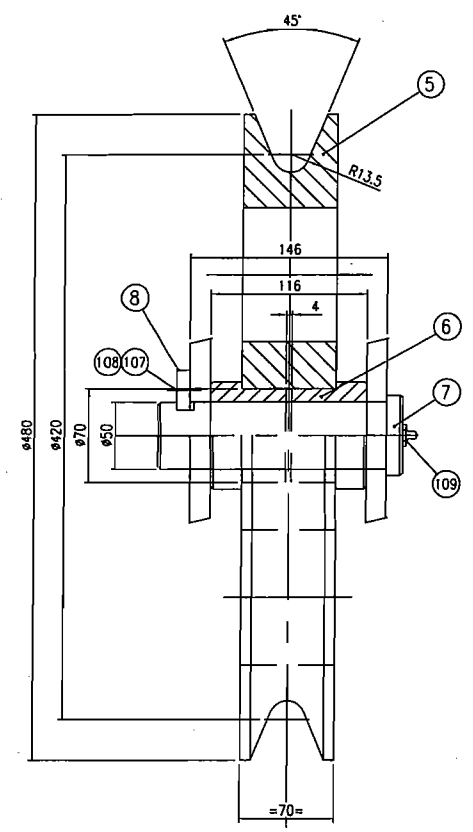
MARK E204
NR PIECES 4
UNIT WEIGHT 8.2 Kg
TOTAL WEIGHT 32.8 Kg



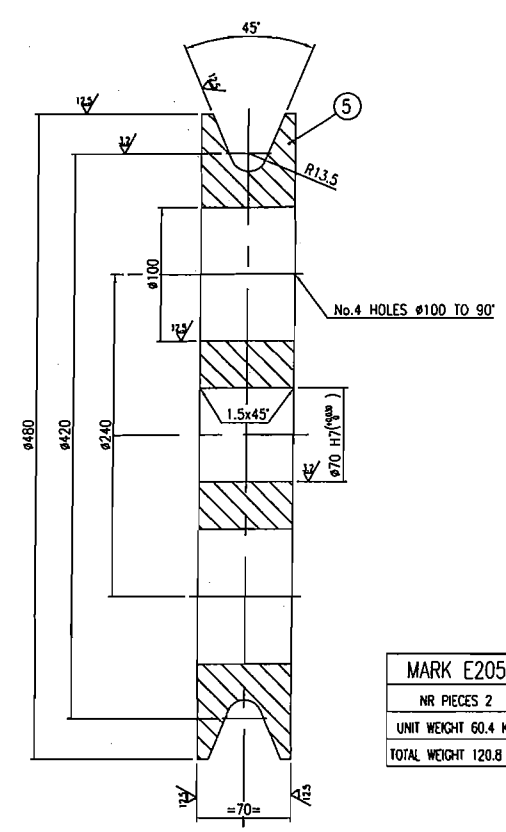
MARK E203
NR PIECES 12
UNIT WEIGHT 3.4 Kg
TOTAL WEIGHT 40.8 Kg



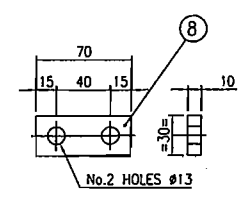
MARK E209
NR PIECES 4
UNIT WEIGHT 5.2 Kg
TOTAL WEIGHT 20.8 Kg



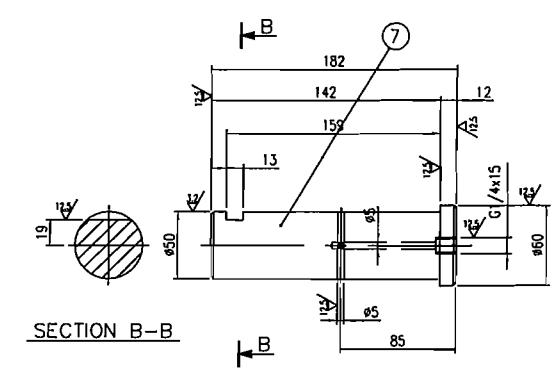
MARK E205
NR PIECES 2
UNIT WEIGHT 60.4 Kg
TOTAL WEIGHT 120.8 Kg



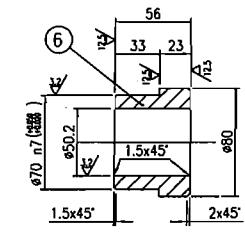
MARK E206
NR PIECES 4
UNIT WEIGHT 0.6 Kg
TOTAL WEIGHT 2.4 Kg



MARK E208
NR PIECES 2
UNIT WEIGHT 0.1 Kg
TOTAL WEIGHT 0.2 Kg



MARK E207
NR PIECES 2
UNIT WEIGHT 2.3 Kg
TOTAL WEIGHT 4.6 Kg



MARK E209
NR PIECES 4
UNIT WEIGHT 5.2 Kg
TOTAL WEIGHT 20.8 Kg

109	1	LUBRICATOR G1/4 FORME A UNI 7663	*						
108	2	WASHER #1.3x2x2.5 UNI 6592	*						
107	2	SCREW M12x25 UNI 5739	*						
106	1	WASHER #58x105x9 UNI 6592	*						
105	1	NUT M56 UNI 5588	*						
104	1	LOCK WASHER SKF MB 18	*						
103	1	LOCK RING NUT SKF KM18 M90x2	*						
102	2	NILOS SKF 3018 AV	*						
101	2	BEARING SKF 30218 (90x60x32.5)	*			2.55	5.1		

9	1	ROUND #70 L=233	*	C40	5.2	5.2			
8	1	PLATE 10x30 L=70	*	Fe 510C	0.1	0.1			
7	1	ROUND #60 L=182	*	C40	2.3	2.3			
6	1	ROUND #80 L=56	*	C65h12 UN7013	0.6	0.6			
5	1	PLATE #480 TH.70	*	Fe 510C	60.4	60.4			
4	1	ROUND #70 L=372	*	C40	8.2	8.2			
3	1	STEEL PIPE #101.6x25 L=125	*	Fe 510C	3.4	3.4			
2	1	STEEL PIPE #193.7x25 L=47	*	Fe 510C	1.9	1.9			
1	1	PULLEY POLYPENCO MOD.345	*		15	15			
POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	ROT.	NOTES		

2									
1									
0	12/06/02	FIRST ISSUE		P.M.B.		P.M.B.		DEAL	
REV.	DATE	REV. OBJECT		DRAWN		CHECKED		APPROVED	

REFERENCE: GANTRY CRANE GC 75+75 - 32

OBJECT: LIFTING WINCHES GROUP

TITLE: PULLEY AND ACCESSORIES

Scale: 1:2.5

Sheet: 1 of 1

File: G10PBCDE02.DWG

Job No.: 600312

Rev. No.: 0020

DEAL

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QUANTITY VALID FOR No. 1 CRANE MANUFACTURE No. 2 CRANES

REMOVE SHARP CORNERS WITH R=2

WELDS (UNI 1310)

TOLERANCES

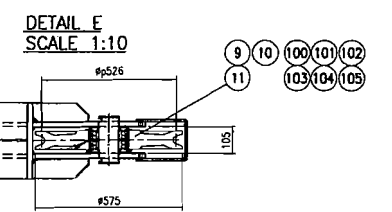
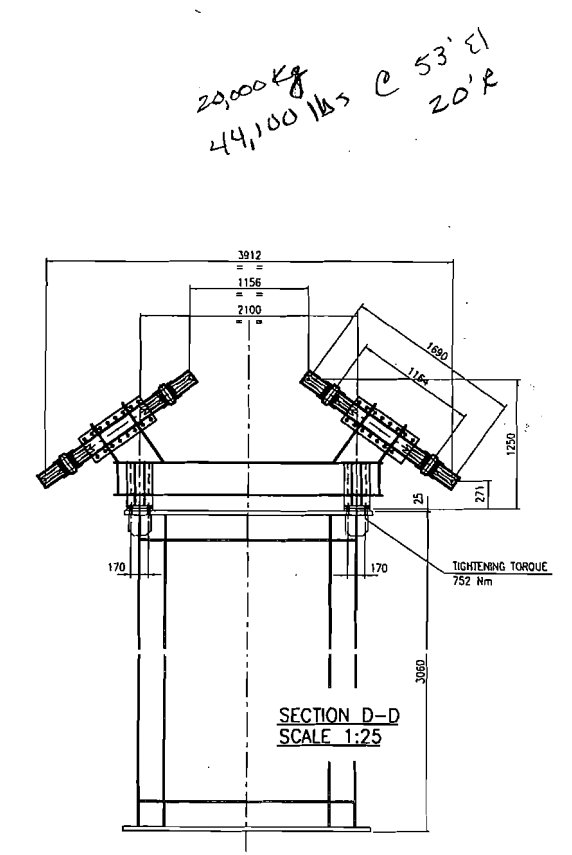
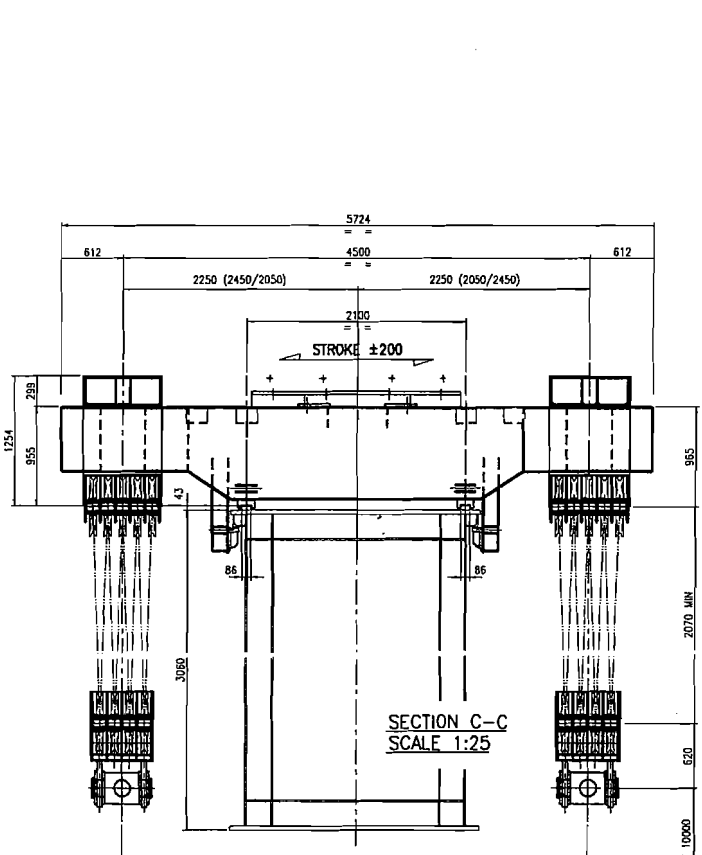
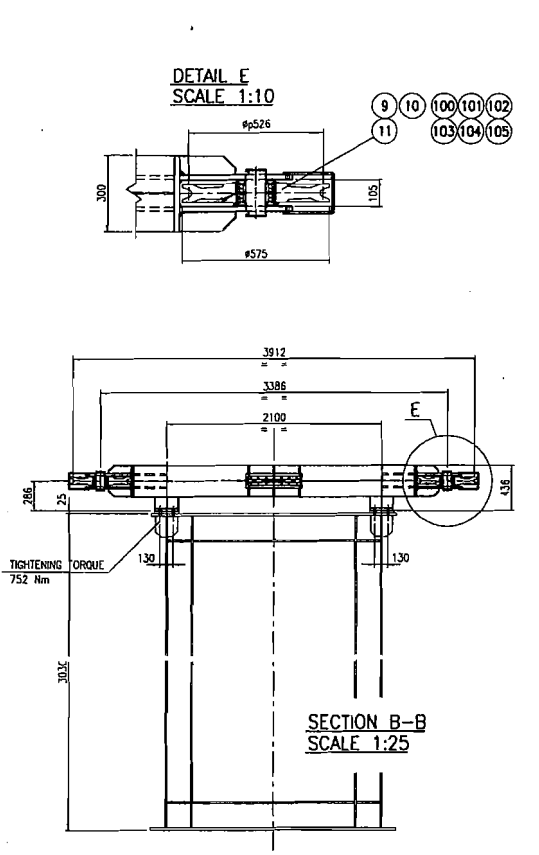
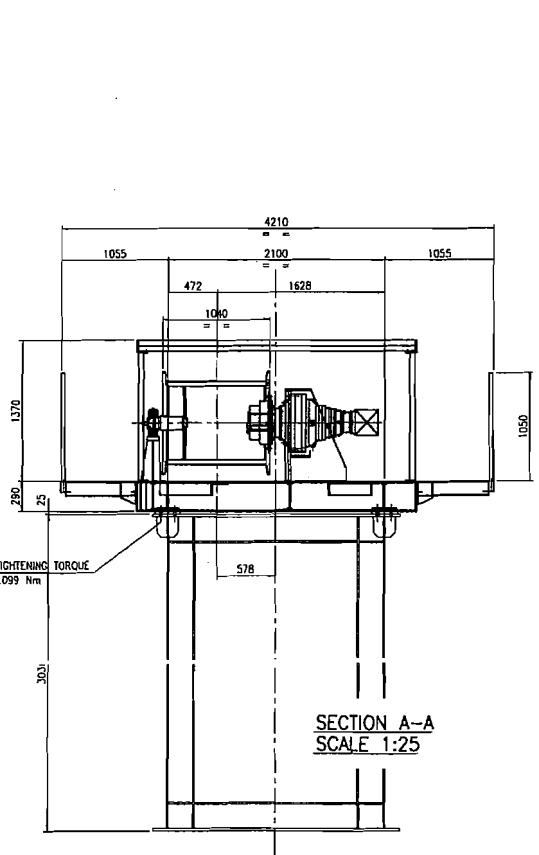
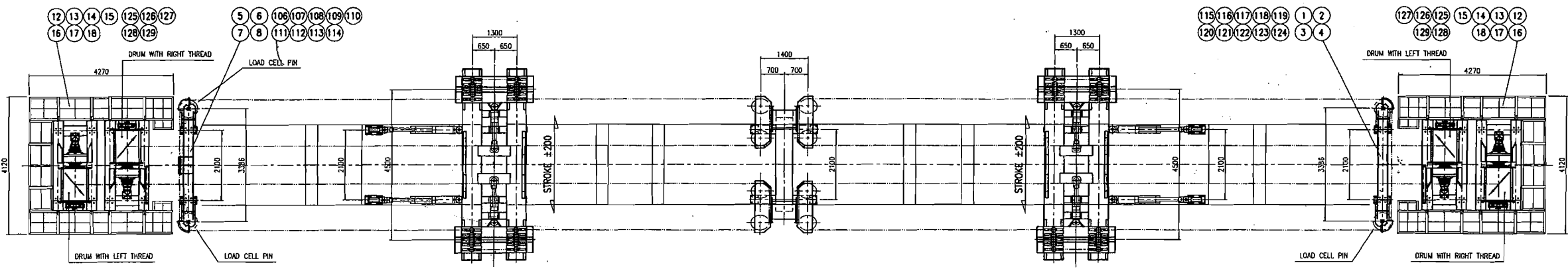
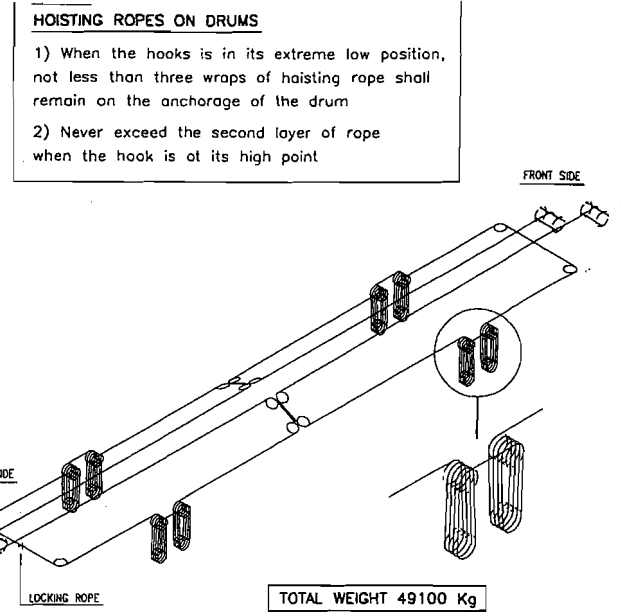
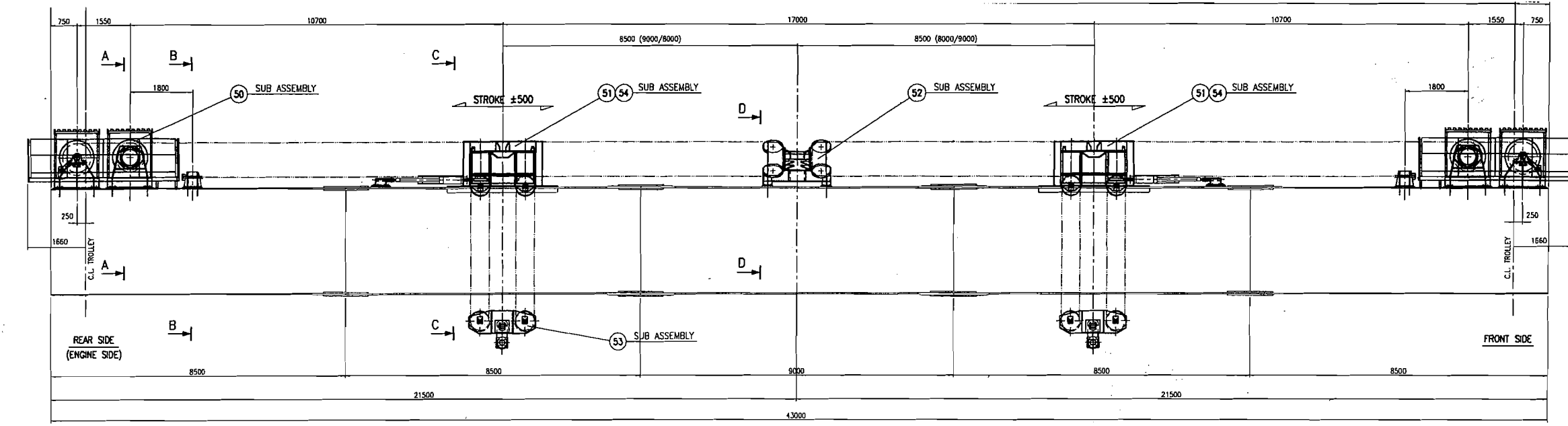
FINISHING

FINAL PAINTING: ENAMEL BLU RAL 5017

SKYWAY BRIDGE PROJECT S. FRANCISCO - OAKLAND BAY BRIDGE - USA

KIEWIT / FCI / MANSON JV

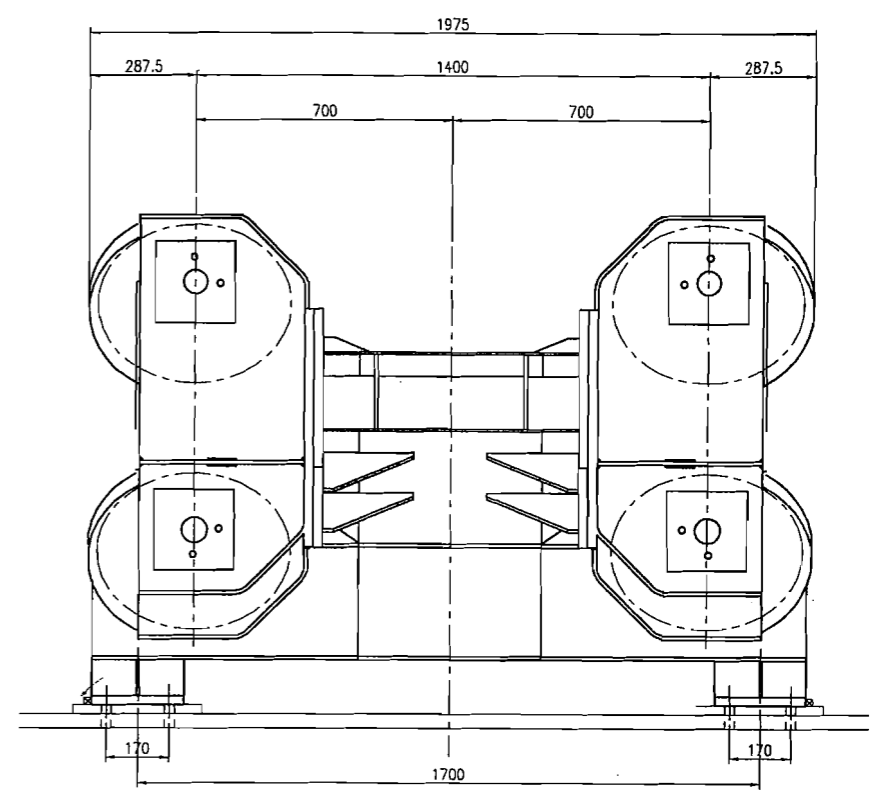
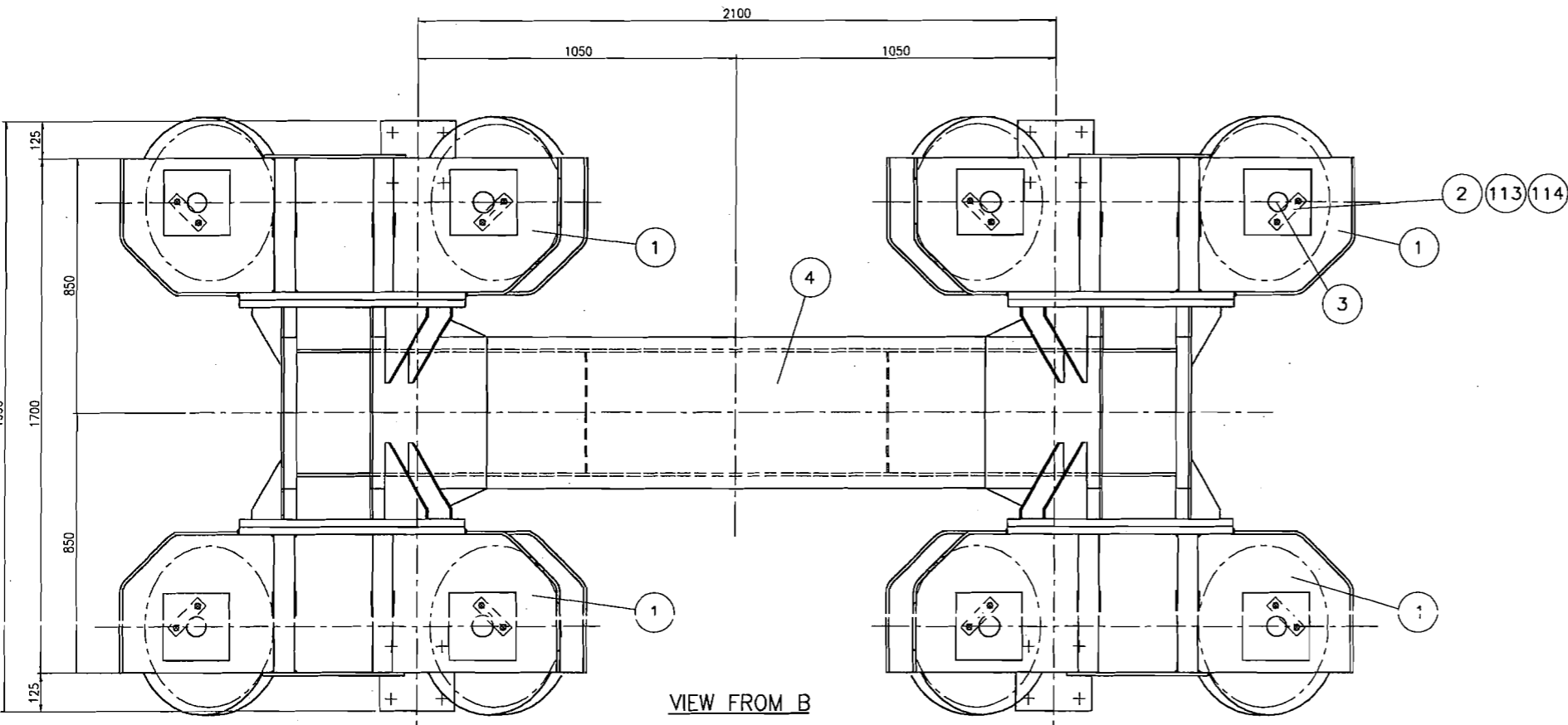
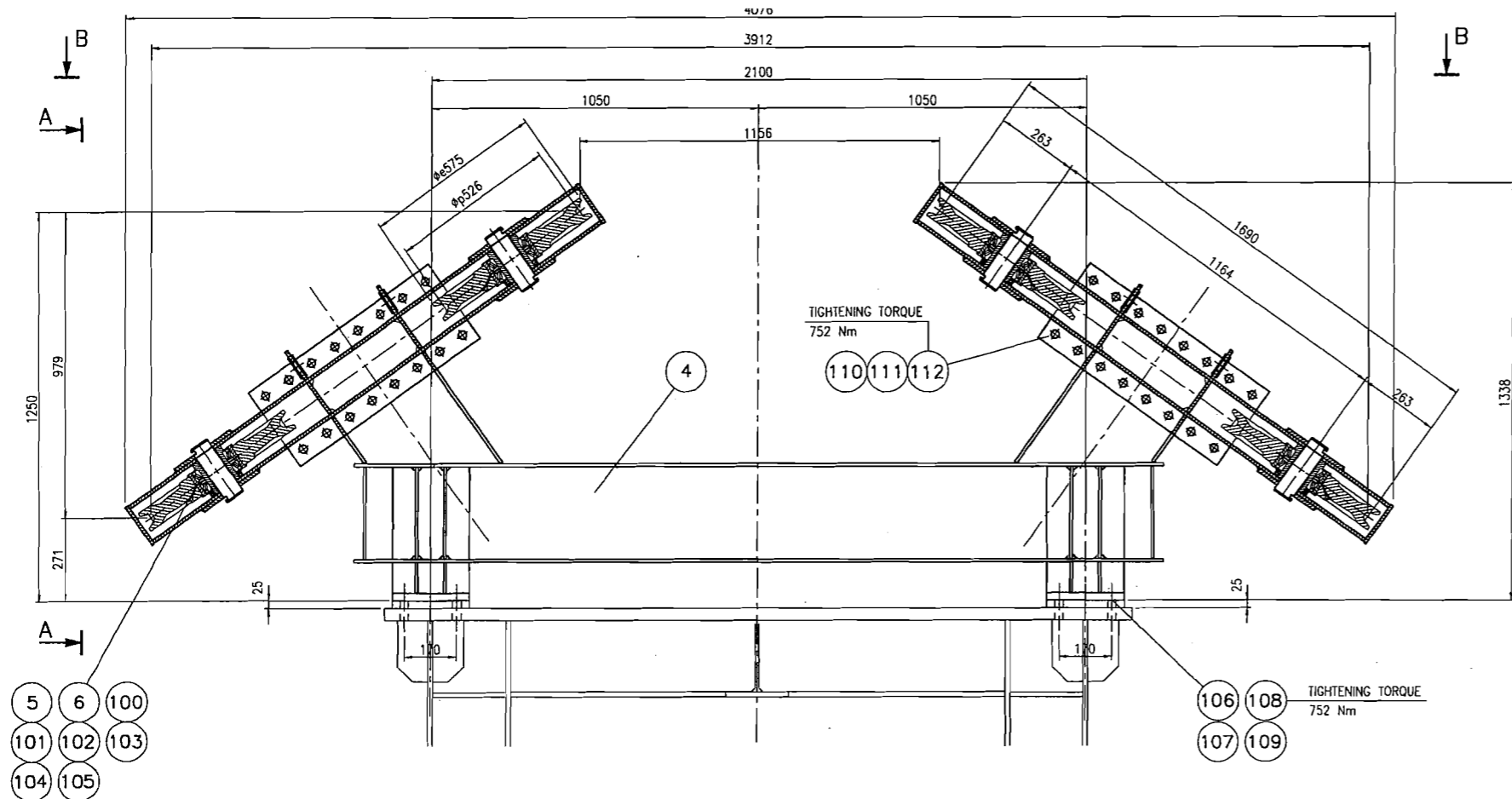
TOTAL WEIGHT = 454 Kg



29,000 kg
44,100 lbs @ 53' EI
20' R

129	136	NUT M12 6S UNI 5588							
128	272	PLAN WASHER 13 UNI 5714							
127	136	SCREW M12x40 UNI 5739 CL8.8							
126	42	NUT M12 6S UNI 5588							
125	42	SCREW M12x30 UNI 5739 CL8.8							
124	2	PLATE 20x20x230							
123	16	NUT M24 CL8.5 UNI 5588							
122	32	PLAN WASHER #25 UNI 5714							
121	16	SCREW M24x120 UNI5739 CL8.8							
120	30	PLAN WASHER 17 UNI 5714							
119	4	PLAN WASHER 13 UNI 5714							
118	14	SCREW M16x40 UNI5739 CL8.8							
117	16	SCREW M16x30 UNI5739 CL8.8							
116	4	SCREW M12x30 UNI5739 CL8.8							
115	1	LOAD CELL PIN #80x185				7	7		
114	2	PLATE 20x20x230							
113	16	NUT M24 CL8.5 UNI 5588							
112	32	PLAN WASHER #25 UNI 5714							
111	16	SCREW M24x120 UNI5739 CL8.8							
110	16	PLAN WASHER 17 UNI 5714							
109	4	PLAN WASHER 13 UNI 5714							
108	16	SCREW M16x30 UNI5739 CL8.8							
107	4	SCREW M12x25 UNI5739 CL8.8							
106	2	LOAD CELL PIN #80x185				7	14		
105	8	CREASE NIPPLE M10-1							
104	8	BEARING 22216E 80x40x33				2.1	16.8		
103	8	SNP RING 140 UNI 7433-75							
102	4	SNP RING 165 UNI 7435-75							
101	4	PULLEY POLYPMCO TP-428-2	E601			15	60		
100	8	MDS 22216 AV							
54	1	LIMIT SWITCHES FOR HOISTING BEAM	TORCADE-017			5	5		
53	4	SUB ASSEMBLY - MOBILE HOOK BLOCK	TORCADE-005			1840	7780		
52	1	SUB ASSEMBLY - CENTRAL PULLEY SUPPORT	TORCADE-004			2440	2440		
51	2	SUB ASSEMBLY - HOISTING BEAM	TORCADE-003			9875	19750		
50	4	SUB ASSEMBLY - DRUM AND FRAME	TORCADE-002			4150	16600		
18	4	HANDRAIL	E1407			14	56		
17	4	HANDRAIL	E1406			16	64		
16	2	HANDRAIL	E1405			35	70		
15	4	HANDRAIL	E1404			56	224		
14	2	GATEWAY FRAME	E1403			143	286		
13	2	GATEWAY FRAME	E1402			143	286		
12	2	GATEWAY FRAME	E1401			78	156		
11	4	SPACER	E604			0.04	0.16		
10	8	SPACER	E603			0.2	1.6		
9	4	BUSH	E602			5	20		
8	1	STOP PLATE ROPE	E604			7	7		
7	4	STOP PLATE	E603			0.25	1		
6	2	PULLEY PROTECTION	E602			18.8	37.6		
5	1	REWARD BEAM	E601			584	584		
4	1	PULLEY ADLE	E704			7	7		
3	4	STOP PLATE	E703			0.25	1		
2	2	PULLEY PROTECTION	E702			18.8	37.6		
1	1	FORWARD BEAM	E701			552	552		
POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	UNIT	WT	NOTES	

2									
1									
0	30.05.02	FIRST ISSUE	CAWOTH	CLICHARD	REBS				
REV	DATE	BY	DRIFT	NAME	RECORD	APP			
DEAL		STRADDLE CARRIER SC 720 - 32 HOISTING WINCH GENERAL ASSEMBLY							
ALL RIGHTS RESERVED INCLUDING THE RIGHT TO REPRODUCE OR TO DISCLOSE TO THIRD PARTIES THIS DRAWING OR POSITION THEREOF WITHOUT DEAL WRITTEN AUTHORIZATION		Scale: 1:50 1:25 1:10		Form: AD		Sheet: 1 of 1			
T O 6 C A A D E - 0 0 1 0		T O 6 C A A D E - 0 0 1 0		T O 6 C A A D E - 0 0 1 0		T O 6 C A A D E - 0 0 1 0			
KIEWIT / FCI / MANSON JV									



VIEW FROM A

UNIT WEIGHT 2440 Kg

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
114	64	PLAN WASHER 17 UNI 5714					
113	32	SCREW M16x30 UNI 5739 CL.B.8					
112	64	NUT M24 6S UNI 5588					
111	128	PLAN WASHER 25 UNI 5714					
110	64	SCREW M24x100 UNI 5739 CL.B.8					
109	4	PLATE 20x20x250					
108	16	NUT M24 6S UNI 5588					
107	16	PLAN WASHER 25 UNI 5714					
106	16	SCREW M24x140 CL.B.8					
105	8	PULLEY POLYPENCO TP. 428-2	E501		15	120	
104	16	GREASE NIPPLE M10x1					
103	16	NILOS FOR 32019X - TP. 32019 AV					
102	16	BEARING TP. 32019 X - 95x145x32			2	32	
101	8	TAB WASHER FOR RING NUT #95 TP. MB19			0.2	1.6	
100	8	RING NUT M95x2 TP. KM19			0.5	4	
6	16	BUSH #165/145	E503		1.5	24	
5	8	BUSH #95/70	E502		3.5	28	
4	1	CENTRAL PULLEY SUPPORT	E1001		1215	1215	
3	8	PULLEY AXLE	E903		5.4	43.2	
2	16	STOP PLATE	E902		0.4	6.4	
1	4	PULLEY SUPPORT	E901		239	956	

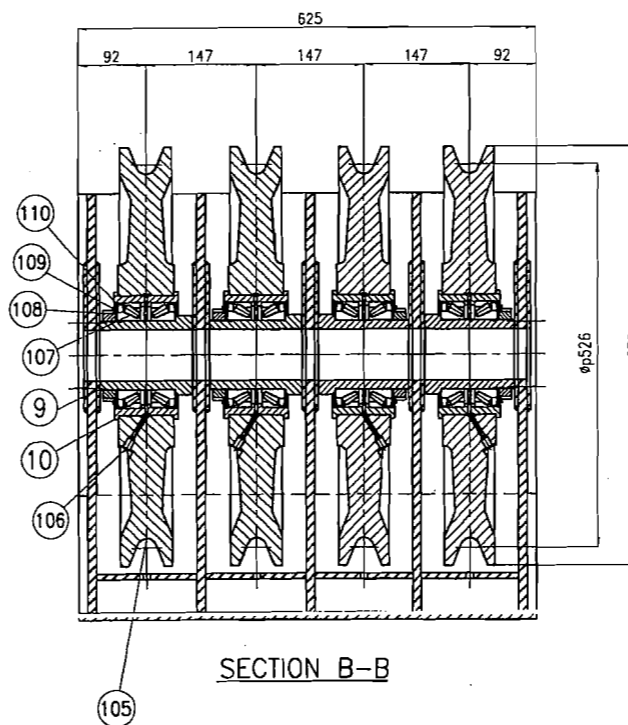
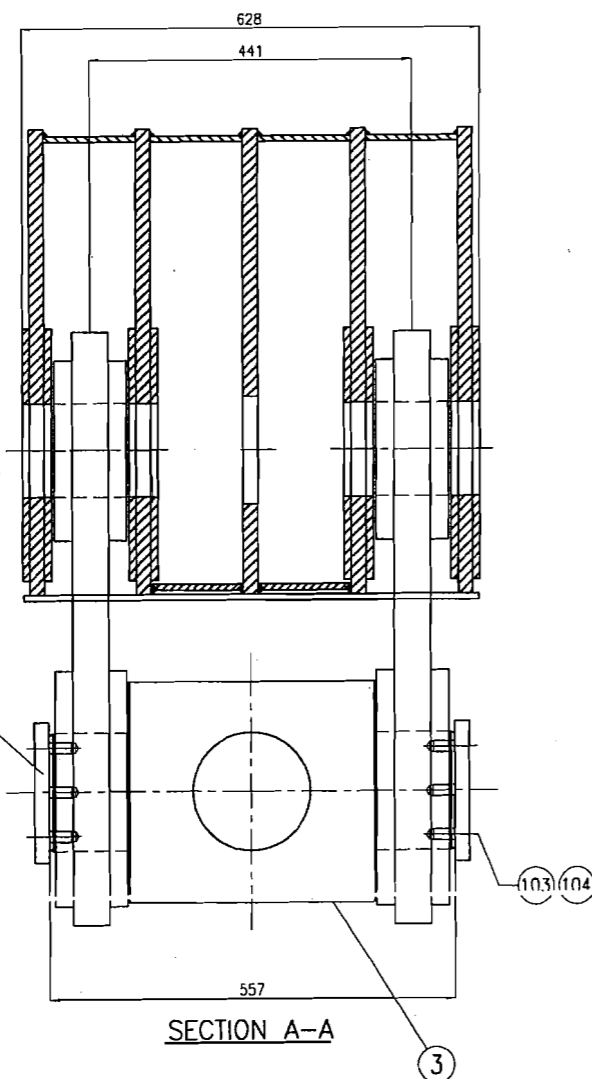
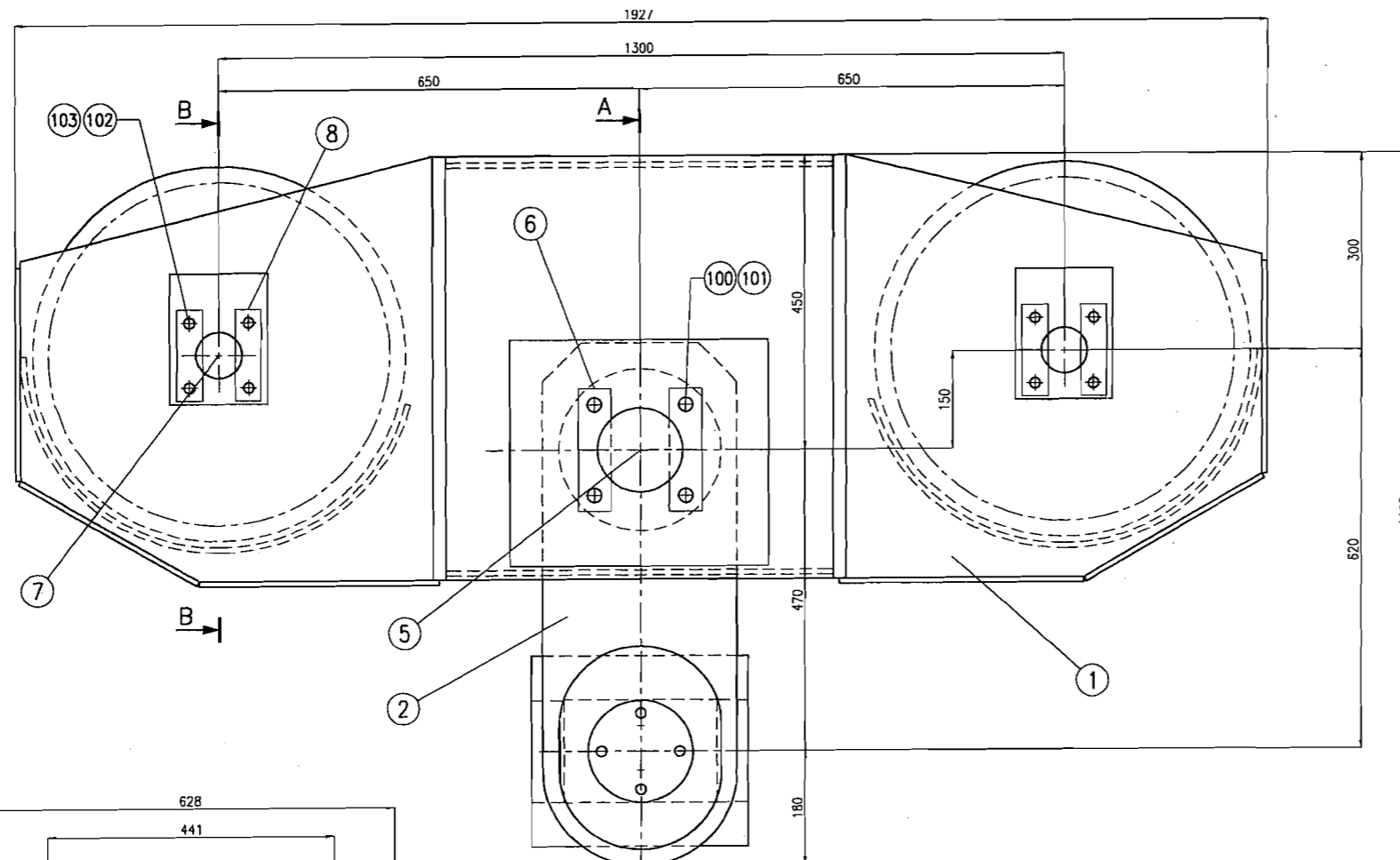
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DEAL
Sole e Stabilimento
Via S. Maria Maddalena, 100
33020 - Fiumane del Friuli (UD) - Italy
Tel.: +39 432 801 300
Fax: +39 432 801 302
e-mail: deal@deal.it

REFERENCE: STRADDLE CARRIER SC 720 - 32
OBJECT: HOISTING WINCH
TITLE: CUD ASSEMBLY - CENTRAL PULLEY SUPPORT
Scale: 1:10
Sheet: 1 of 1
Format: A1
FAC: T06CAADE004.DWG
Job Nr.: -6003111
Sub.J.Nr.: -0605000
Mtr.: - - - - -
Rev. Nr.: T06CAADE-0040

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CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT



UNIT WEIGHT 1940 Kg
 TOTAL WEIGHT 7760 Kg
 TO BUILT NR.4 PIECES

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
110	64	NILOS FOR 32019X - TP. 32019 AV					
109	32	TAB WASHER FOR RING NUT #95 TP. MB19			0.2	6.4	
108	32	RING NUT M95x2 TP. KM19			0.5	16	
107	64	BEARING TP. 32019 X - 95x145x32			2	128	
106	64	GREASE NIPPLE M10x1					
105	32	PULLEY POLYPENCO TP. 428-2	E501		15	480	
104	32	SCREW M16x50 CL.B.B UNI 5739					
103	96	PLAN WASHER 17 UNI 5714					
102	64	SCREW M16x35 CL.B.B UNI 5739					
101	32	PLAN WASHER 21 UNI 5714					
100	32	SCREW M20x50 CL.B.B UNI 5739					
10	64	BUSH #165/145	E503		1.5	96	
9	32	BUSH #95/70	E502		3.5	112	
8	32	STOP PLATE AXLE	E1308		0.4	12.8	
7	8	PULLEY AXLE3	E1307		19.8	158.4	
6	16	AXLE STOP PLATE	E1306		1.1	17.6	
5	4	CONNECTION HOOK AXLE	E1305		72	288	
4	8	STOP PLATE FOR JOINT	E1304		4.5	36	
3	4	ARTICULATED JOINT	E1303		240	960	
2	8	CONNECTION HOOK	E1302		107	856	
1	4	ROPE BLOCK STRUCTURE	E1301		1147	4588	

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2					
1					
0	30.05.02	FIRST ISSUE	CANDOTTI	CUCCHIARO	RIBIS

DEAL

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REFERENCE: STRADDLE CARRIER
 SC 720 - 32

OBJECT: HOISTING WINCH

TITLE: SUB ASSEMBLY - MOBILE HOOK BLOCK

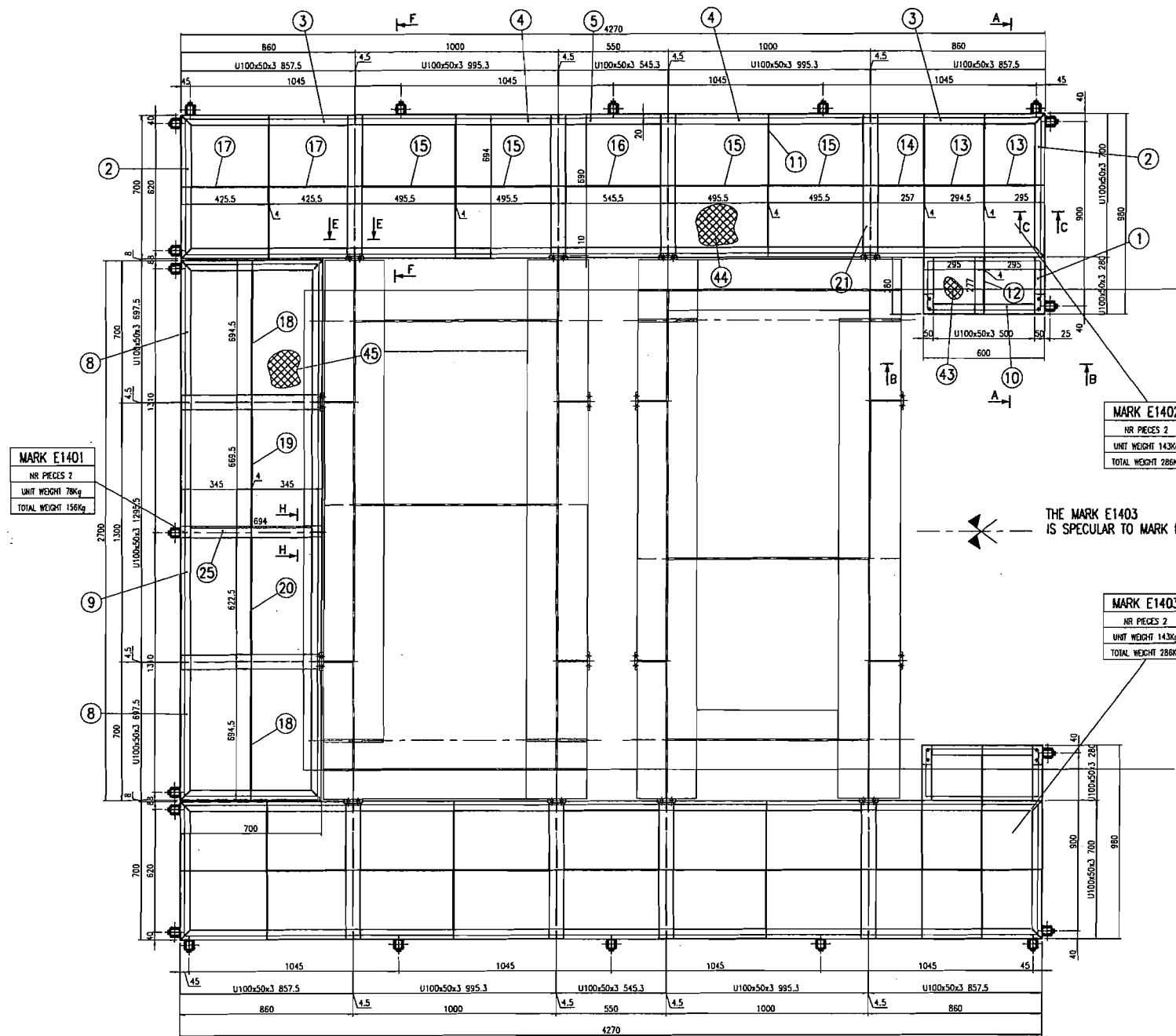
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File: T06CAADE005.DWG Format: A1

Job No. Sub.J.Nr. Mr. [- 6 0 0 3 1 1] [- 0 6 0 5 0 0] [- - - - -]

Feb. No. Dep. Doc. Type Part. Nr. Rev. [T 0 6 C A A D E - 0 0 5 0]

CLIENT: KIEWIT / FCI / MANSON JV
 PROJECT: SKYWAY BRIDGE PROJECT

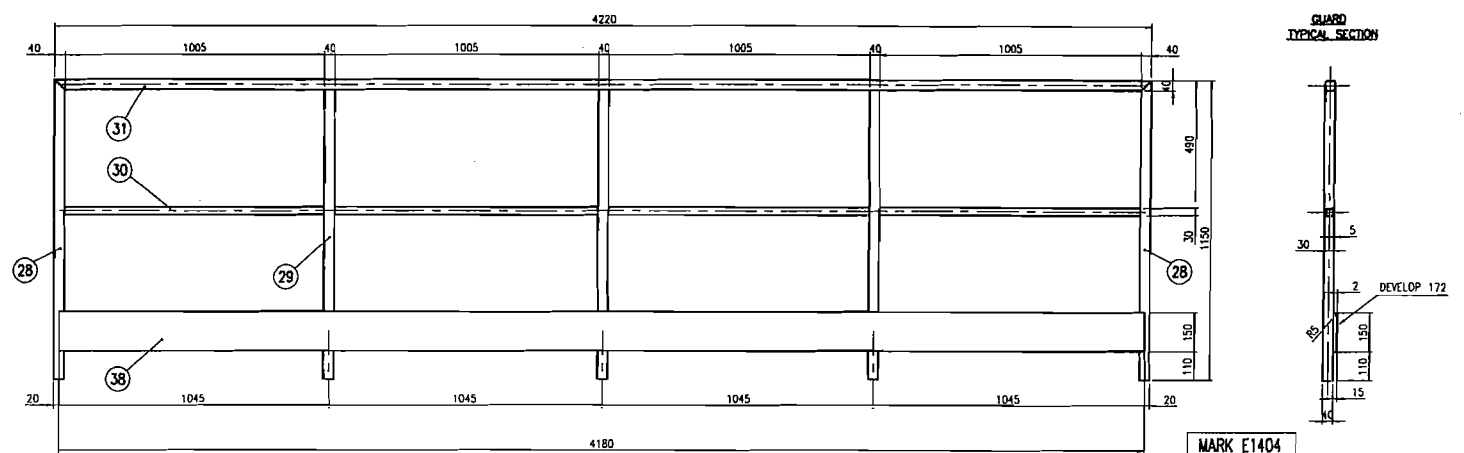


MARK E1401
 NR PIECES 2
 UNIT WEIGHT 78kg
 TOTAL WEIGHT 156kg

MARK E1402
 NR PIECES 2
 UNIT WEIGHT 143kg
 TOTAL WEIGHT 286kg

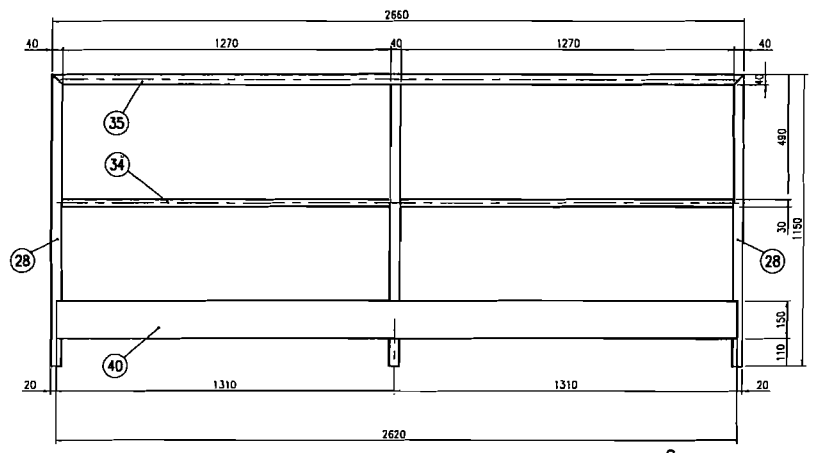
MARK E1403
 NR PIECES 2
 UNIT WEIGHT 143kg
 TOTAL WEIGHT 286kg

THE MARK E1403 IS SPECULAR TO MARK E1402

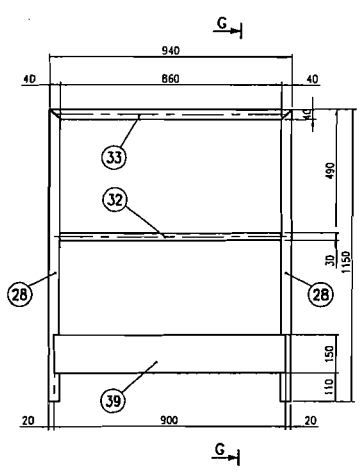


MARK E1404
 NR PIECES 4
 UNIT WEIGHT 56kg
 TOTAL WEIGHT 224kg

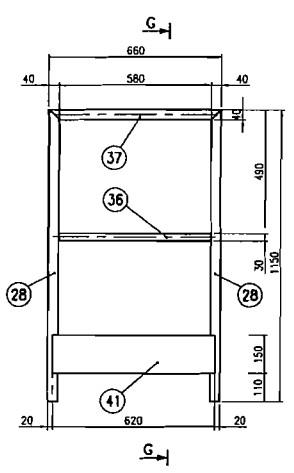
TOTAL WEIGHT 1090 Kg



MARK E1405
 NR PIECES 2
 UNIT WEIGHT 35kg
 TOTAL WEIGHT 70kg

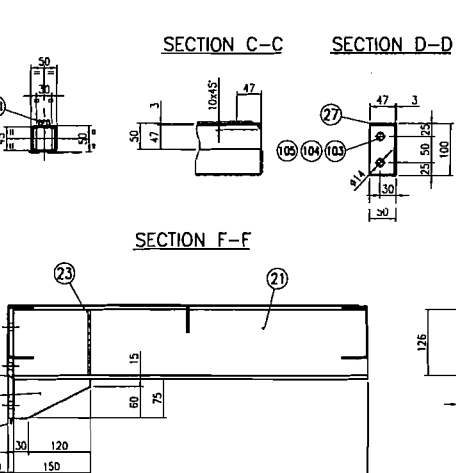
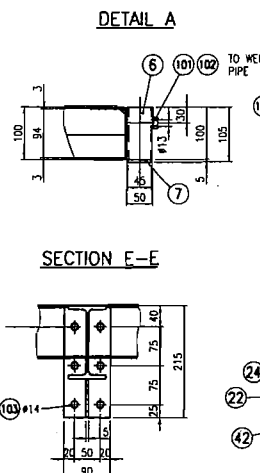
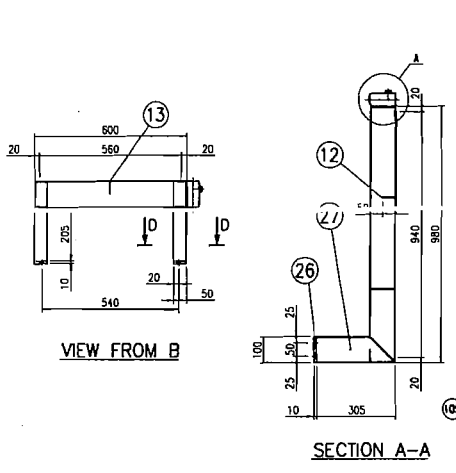
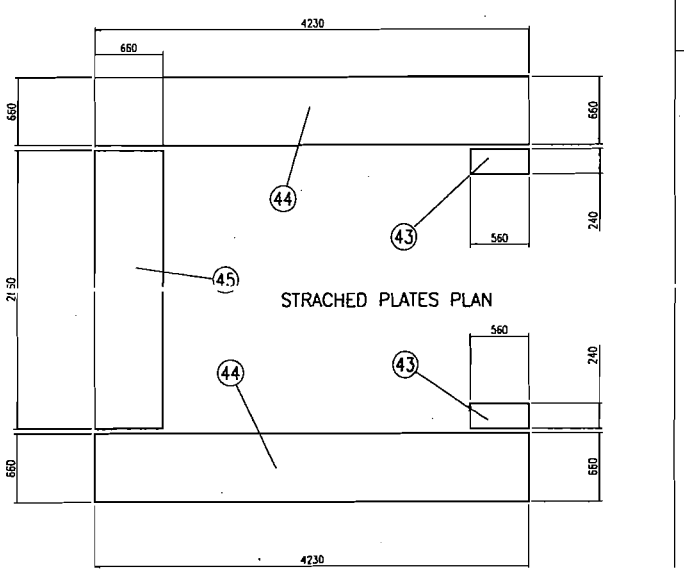


MARK E1406
 NR PIECES 4
 UNIT WEIGHT 16kg
 TOTAL WEIGHT 64kg



MARK E1407
 NR PIECES 4
 UNIT WEIGHT 14kg
 TOTAL WEIGHT 56kg

POS.	QTY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	REMARKS	NOTES
105	136	NUT M12 6S UNI 5588					
104	272	PLAN WASHER 13 UNI 6592					
103	136	SCREW M12x40 UNI 5739 CL8.8					
102	42	NUT M12 6S UNI 5588					
101	42	SCREW M12x30 CL8.8 UNI 5739					
45	2	STRETCHED PLATE FILS E3 660x2660	BY TRADE	15.3	30.6		
44	4	STRETCHED PLATE FILS E3 660x4230	BY TRADE	23.6	94.4		
43	4	STRETCHED PLATE FILS E3 560x240	BY TRADE	1.3	5.2		
42	20	PLATE 10x10x20	Fe360B	0.1	2.0		
41	4	PLATE 2x172x250	Fe360B	1.7	6.8		
40	2	PLATE 2x172x2620	Fe360B	7.0	14.0		
39	4	PLATE 2x172x290	Fe360B	2.4	9.6		
38	4	PLATE 2x172x1180	Fe360B	11.2	44.8		
37	4	SQUARE PIPE 40x40x3 L= 660	Fe360B	2.3	9.2		
36	4	SQUARE PIPE 30x30x3 L= 580	Fe360B	1.5	6.0		
35	2	SQUARE PIPE 40x40x3 L=2660	Fe360B	9.3	18.6		
34	4	SQUARE PIPE 30x30x3 L=1270	Fe360B	3.2	12.8		
33	4	SQUARE PIPE 40x40x3 L= 940	Fe360B	3.3	13.2		
32	4	SQUARE PIPE 30x30x3 L= 860	Fe360B	2.2	8.8		
31	4	SQUARE PIPE 40x40x3 L=4220	Fe360B	14.7	58.8		
30	16	SQUARE PIPE 30x30x3 L=1005	Fe360B	2.6	41.6		
29	14	SQUARE PIPE 40x40x3 L=1110	Fe360B	3.9	54.6		
28	28	SQUARE PIPE 40x40x3 L=1150	Fe360B	4.0	112		
27	8	U 100x50x3 L= 305	Fe360B	1.4	11.2		
26	8	PLATE 10x50x100	Fe360B	0.4	3.2		
25	2	U 100x50x3 L= 654	Fe360B	3.1	6.2		
24	20	PLATE 10x90x215	Fe360B	1.5	30.0		
23	40	PLATE 5x34x125	Fe360B	0.2	8.0		
22	20	PLATE 5x75x150	Fe360B	0.4	8.0		
21	20	IPE 140 L= 680	Fe360B	8.9	178		
20	2	PLATE 4x50x622.5	Fe360B	1.0	2.0		
19	2	PLATE 4x50x669.5	Fe360B	1.1	2.2		
18	4	PLATE 4x50x694.5	Fe360B	1.1	4.4		
17	8	PLATE 4x50x425.5	Fe360B	0.7	5.6		
16	4	PLATE 4x50x454.5	Fe360B	0.9	3.6		
15	16	PLATE 4x50x495.5	Fe360B	0.8	12.8		
14	4	PLATE 4x50x257	Fe360B	0.4	1.6		
13	8	PLATE 4x50x295	Fe360B	0.5	4.0		
12	4	PLATE 4x50x277	Fe360B	0.4	1.6		
11	20	PLATE 4x50x690	Fe360B	1.1	22		
10	4	U 100x50x3 L= 500	Fe360B	2.2	8.8		
9	4	U 100x50x3 L=1295.5	Fe360B	5.8	23.2		
8	8	U 100x50x3 L= 697.5	Fe360B	3.1	24.8		
7	42	PLATE 5x45x45	Fe360B	0.1	1.7		
6	42	SQUARE PIPE 50x50x4 L=100	Fe360B	0.6	12.1		
5	8	U 100x50x3 L= 545.3	Fe360B	2.4	19.2		
4	16	U 100x50x3 L= 995.5	Fe360B	4.5	72		
3	8	U 100x50x3 L= 857.5	Fe360B	3.8	30.4		
2	12	U 100x50x3 L= 700	Fe360B	3.1	37.2		
1	8	U 100x50x3 L= 280	Fe360B	1.3	10.4		



WELDING PROCEDURES:
 The procedure used shall be qualified according to EN 288-3, D.M. 09-01-95, or ASME sect. IX

REMOVE SHARP CORNERS WITH R=2

FINAL PAINTING:
 WALKWAY
 ENAMEL YELLOW RAL 1007
 HANDRAIL
 ENAMEL BLUE RAL 5017

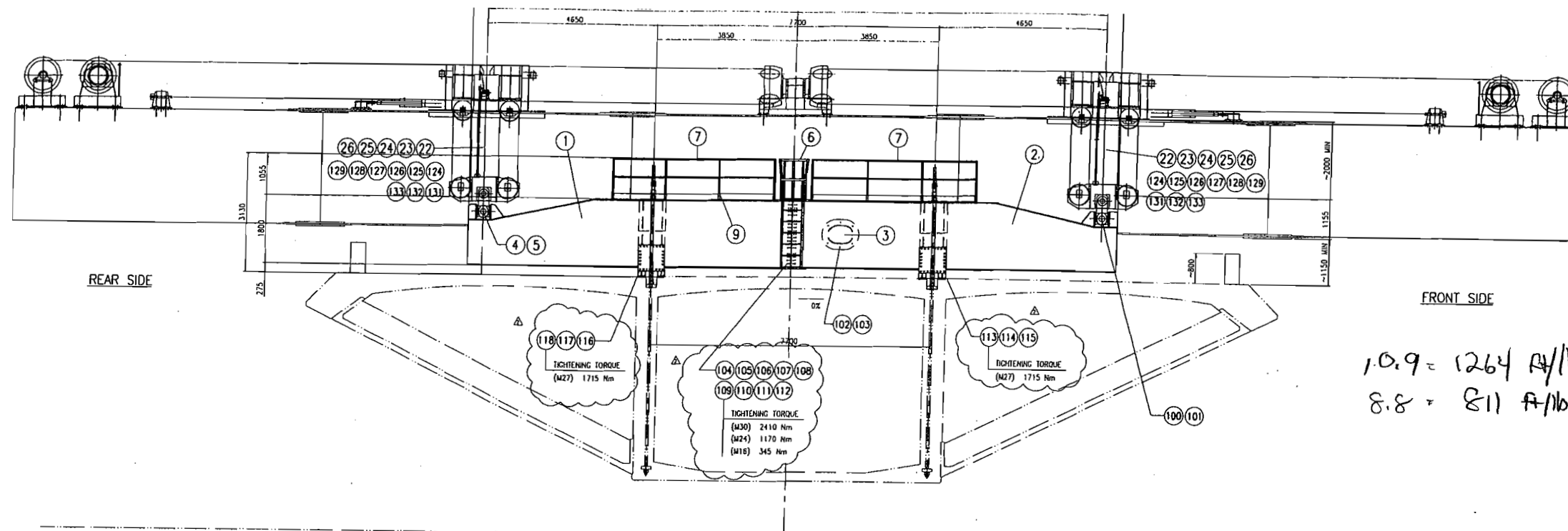
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DEAL

STRADOLE CARRIER SC 720 - 32
 HOISTING WINCH
 WALKWAYS

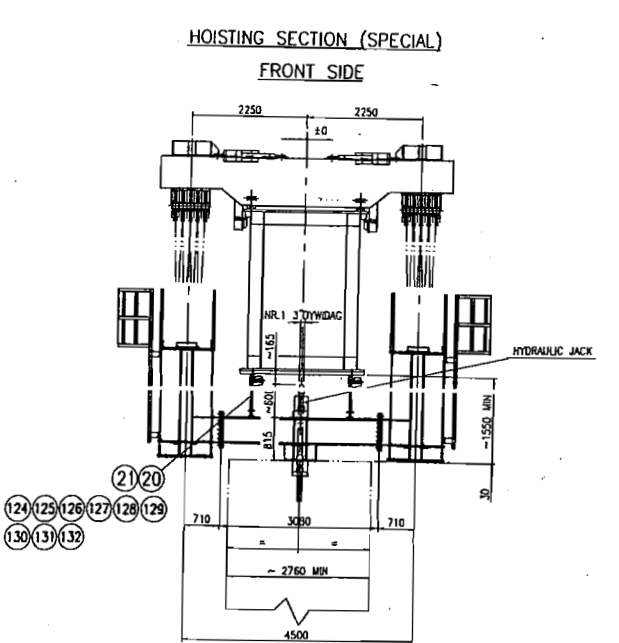
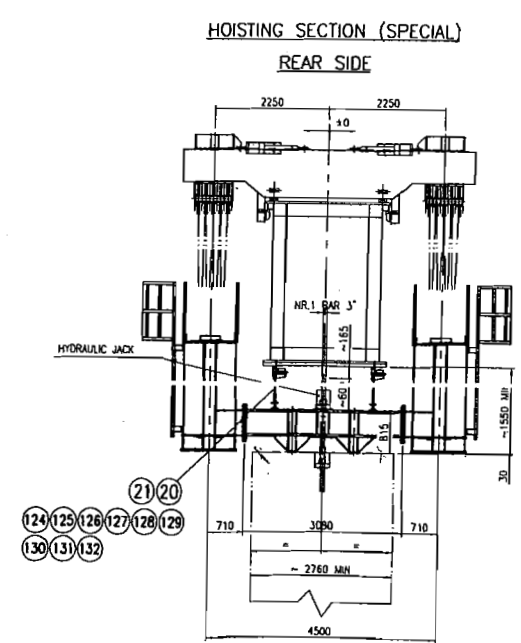
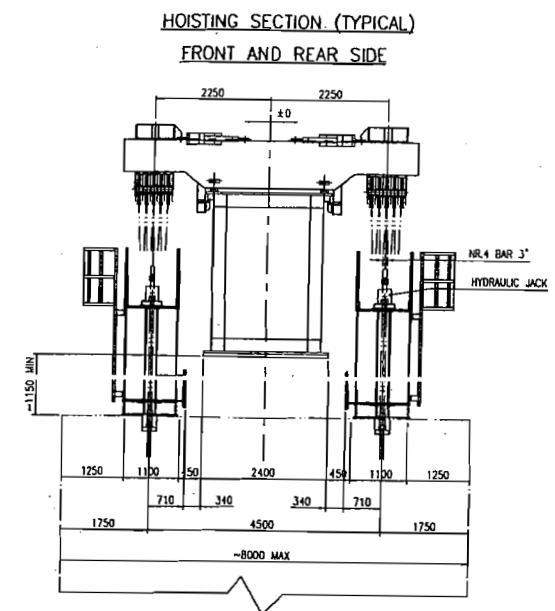
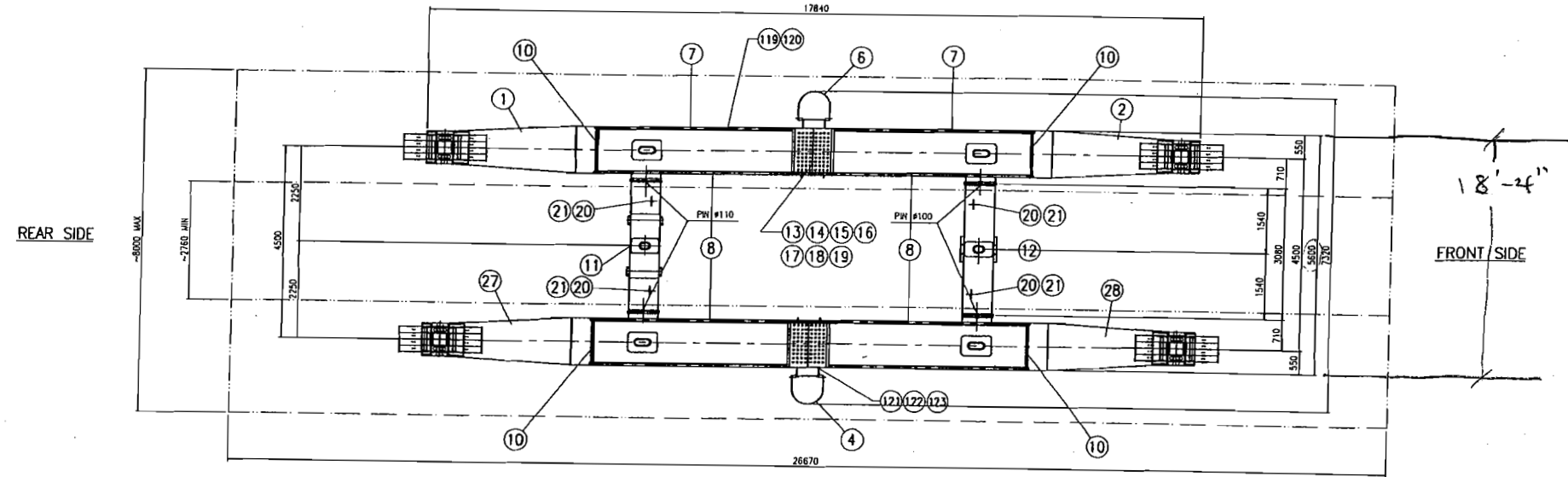
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KIEWIT / FCI / MANSON JV



92263 lbs
TOTAL WEIGHT 41850 Kg

10.9 = 1264 A/B
8.8 = 811 A/B



POS.	QTY	DESCRIPTION	CODE	MATERIAL	UNIT	WEIGHT	NOTE
133	4	SCREW M8x10 CL.8.8 UN5739					
132	8	CHWY 2x11 L=238					
131	16	CALVANIZED SPRING CATCH UN1947 TYPE A					
130	8	NUT M24 65 UN5588					
129	36	NUT M8 65 UN5588					
128	72	PLAN WASHER 48.4 UN5714					
127	32	SCREW M8x30 CL.8.8 UN5739					
126	32	PLAN WASHER #17 UN5714					
125	16	SCREW M16x40 CL.8.8 UN5739					
124	8	LIMIT SWITCH TZ067-20y			3.5	28	
123	32	WASHER #17 UN 5714					
122	16	NUT M16 65 UN 5588					
121	16	SCREW M16x30 CL.8.8 UN 5739					
120	40	NUT M12 65 UN 5588					
119	40	SCREW M12x30 CL.8.8 UN 5739					
118	52	NUT M27 80 UN 5713					
117	104	PLAN WASHER 27 UN 5714					
116	52	SCREW M27x120 CL.10.9 UN 5712					
115	104	NUT M27 80 UN 5713					
114	208	PLAN WASHER 27 UN 5714					
113	104	SCREW M27x120 CL.10.9 UN 5712					
112	48	NUT M16 80 UN 5713					
111	96	PLAN WASHER 16 UN 5714					
110	48	SCREW M16x50 CL.10.9 UN 5712					
109	272	NUT M24 80 UN 5713					
108	544	PLAN WASHER 24 UN 5714					
107	272	SCREW M24x70 CL.10.9 UN 5712					
106	320	NUT M30 80 UN 5713					
105	640	PLAN WASHER 30 UN 5714					
104	320	SCREW M30x145 CL.10.9 UN 5712					
103	12	PLAN WASHER 13 UN 5714					
102	12	SCREW M10x35 CL.8.8 UN 5739					
101	32	PLAN WASHER 17 UN 5714					
100	32	SCREW M16x50 CL.8.8 UN 5739					
28	1	GRIDDER	E2702		8425	8425	
27	1	GRIDDER	E2701		8425	8425	
26	4	LIMIT SWITCH HOISTING PLATE	E2605		4.4	17.6	
25	4	LIMIT SWITCH FIXING STRUCTURE TUBE	E2604		2.4	9.6	
24	4	LIMIT SWITCH FIXING ANGLE BWR	E2603		3.0	12	
23	4	LIMIT SWITCH BALANCE WEIGHT	E2602		0.9	3.6	
22	4	LIMIT SWITCH SUPPORT STRUCTURE	E2601		9.5	36	
21	4	LIMIT SWITCH BALANCE WEIGHT	E2502		3	12.0	
20	4	LIMIT SWITCH SUPPORT STRUCTURE	E2501		6.5	26.0	
19	16	GRIDDER JOINT PLATE	E2107		6.9	111.5	
18	8	GRIDDER JOINT PLATE	E2106		15.5	123.6	
17	8	GRIDDER JOINT PLATE	E2105		0.8	6.4	
16	4	GRIDDER JOINT PLATE	E2104		1.1	4.3	
15	4	GRIDDER JOINT PLATE	E2103		1.3	5.4	
14	4	GRIDDER JOINT PLATE	E2102		1.50	500	
13	4	GRIDDER JOINT PLATE	E2101		168.4	673.5	
12	1	STRONGER	E2201		2100	2100	
11	1	STRONGER	E2301		2740	2740	
10	4	HANDRAIL	E2404		13.9	55.6	
9	40	HANDRAIL SUPPORT	E2405		1.1	44	
8	4	HANDRAIL	E2402		35.8	143.2	
7	4	HANDRAIL	E2403		11.9	167.6	
6	4	ORDER RING LADDER	E2401		407.2	814.4	
5	8	ORDER AXLE STOP PLATE	E2005		4.5	36	
4	4	ORDER AXLE	E2004		75.4	301.6	
3	2	OPENING COVER	E2003		36.5	73	
2	1	GRIDDER	E2002		8425	8425	
1	1	GRIDDER	E2001		8425	8425	

WELDING PROCEDURES:
The procedures used shall be
qualified according to EN 4555-2,
D.M. 09-01-96, or ASME sect. IX

REMOVE SHARP CORNERS
WITH R=2

WELDS PER 13101

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THEREOF WITHOUT DEAL
WRITTEN
AUTHORIZATION

DATE: 01/07/02

REV. BY: []

REV. CHECK: []

DATE: []

REV. CHECK: []

DEAL

SKYWAY BRIDGE PROJECT

STRADDLE CARRIER
SC 720 - 32

HOISTING WINCH

LIFTING BEAM ASSEMBLY

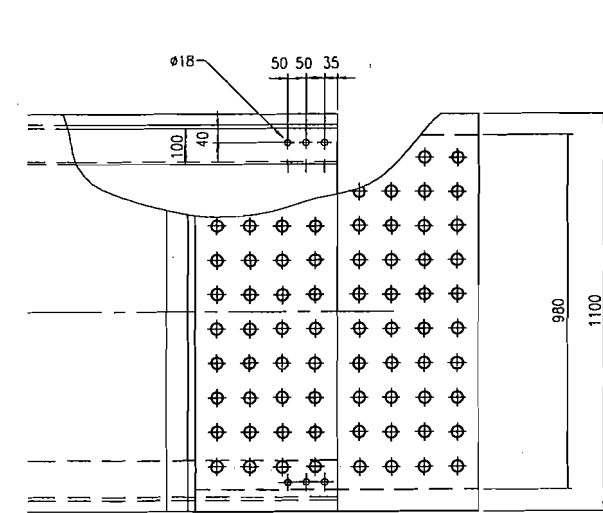
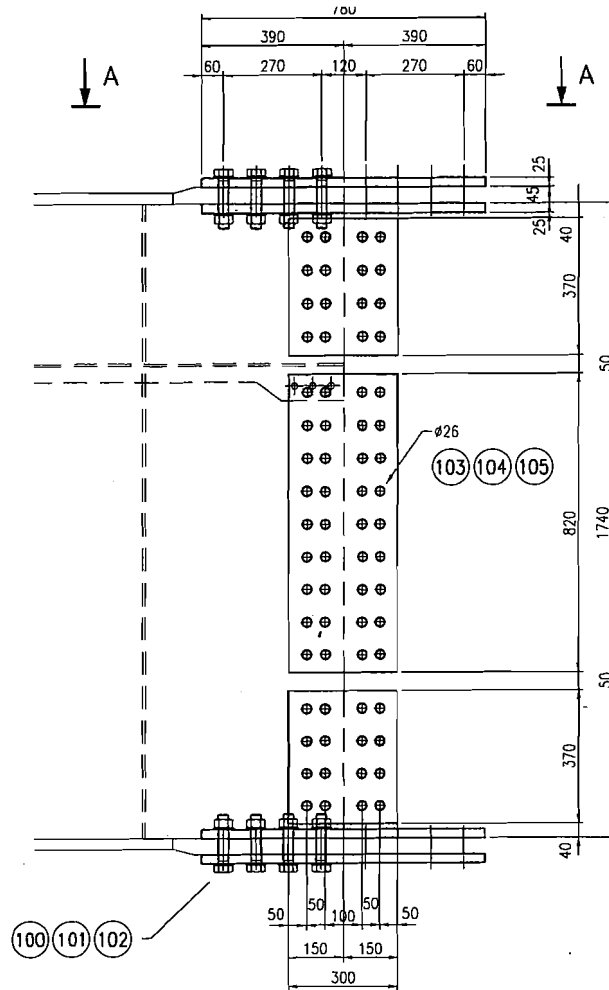
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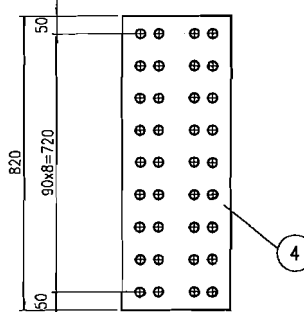
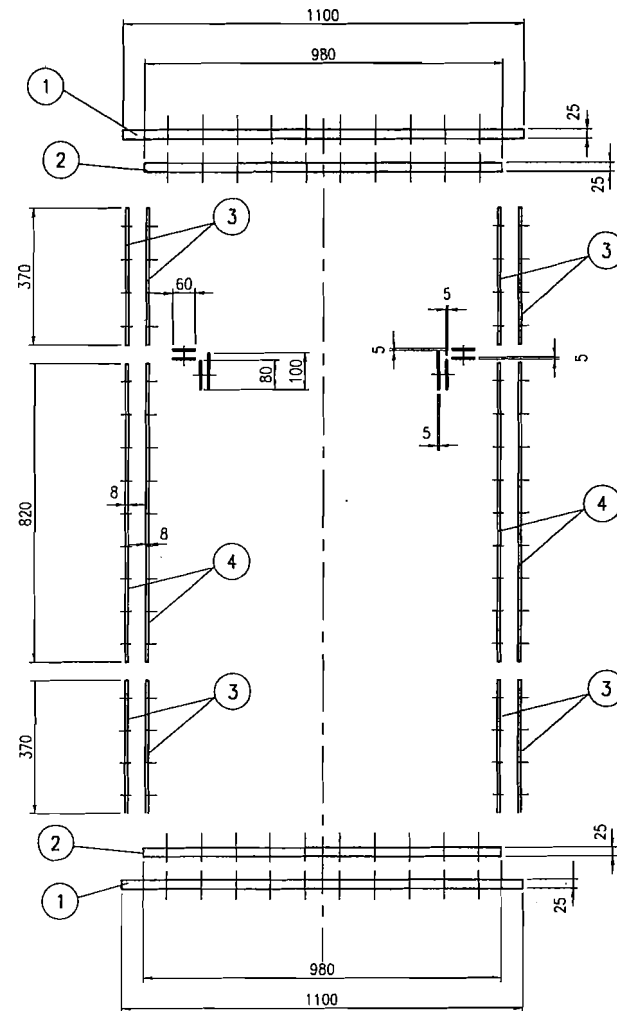
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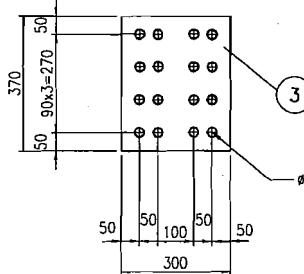
KIEWIT / FCI / MANSON JV



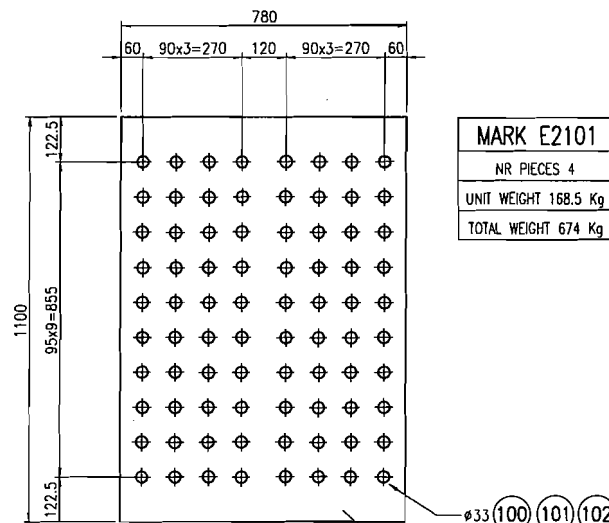
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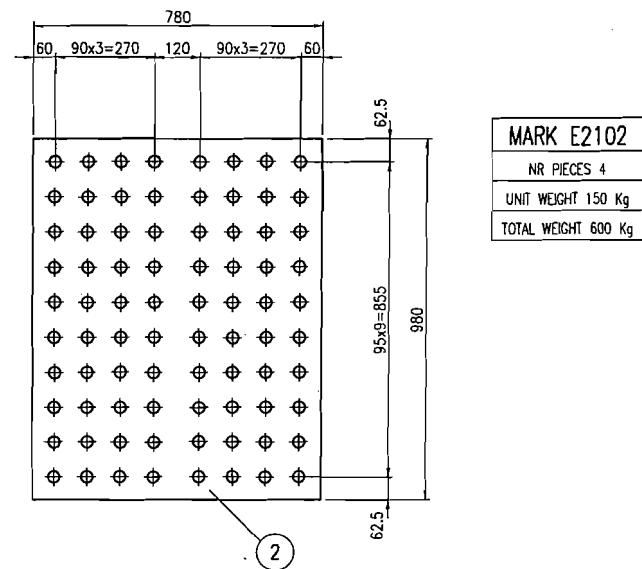
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NR PIECES 8
UNIT WEIGHT 15.5 Kg
TOTAL WEIGHT 124 Kg



MARK E2107
NR PIECES 16
UNIT WEIGHT 7 Kg
TOTAL WEIGHT 112 Kg

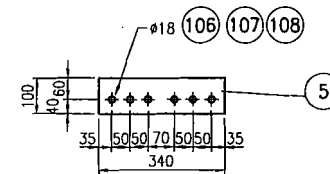


MARK E2101
NR PIECES 4
UNIT WEIGHT 168.5 Kg
TOTAL WEIGHT 674 Kg

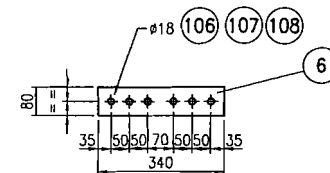


MARK E2102
NR PIECES 4
UNIT WEIGHT 150 Kg
TOTAL WEIGHT 600 Kg

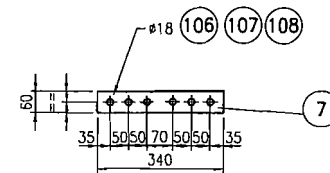
MARK E2103
NR PIECES 4
UNIT WEIGHT 1.3 Kg
TOTAL WEIGHT 5.2 Kg



MARK E2104
NR PIECES 4
UNIT WEIGHT 1.1 Kg
TOTAL WEIGHT 4.4 Kg



MARK E2105
NR PIECES 8
UNIT WEIGHT 0.8 Kg
TOTAL WEIGHT 6.4 Kg

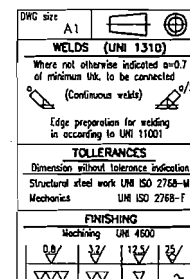


TOTAL WEIGHT 1530 Kg

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOTAL WEIGHT	NOTES
108	48	NUT M16 8G UNI 5713					
107	96	PLAN WASHER 17 UNI 5714					
106	48	SCREW M16x45 CL.10.9 UNI 5712					
105	272	NUT M24 8G UNI 5713					
104	544	PLAN WASHER 25 UNI 5714					
103	272	SCREW M24x65 CL.10.9 UNI 5712					
102	320	NUT M30 8G UNI 5713					
101	640	PLAN WASHER 31 UNI 5714					
100	320	SCREW M30x140 CL.10.9 UNI 5712					
7	8	PLATE 5x60x340		Fe510C	0.8	6.4	
6	4	PLATE 5x80x340		Fe510C	1.1	4.4	
5	4	PLATE 5x100x340		Fe510C	1.3	5.2	
4	8	PLATE 8x300x820		Fe510C	15.5	124	
3	16	PLATE 8x300x370		Fe510C	7	112	
2	4	PLATE 25x780x980		Fe510C	150	600	
1	4	PLATE 25x780x1100		Fe510C	168.5	674	

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

REMOVE SHARP CORNERS WITH R=2



FINAL PAINTING :
ENAMEL BLUE RAL 5017

P SURFACE TREATMENT FOR FRICTION JOINTS SAND BLASTING SA 2 1/2 PAINTING WITH A PRODUCT GUARANTEEING A MINIMUM FRICTION COEFFICIENT OF $\mu=0.45$

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2					
1					
0	13.06.02	FIRST ISSUE	CANDOTTI	CUCCHIARO	RIBIS

DEAL STRADDLE CARRIER SC 720 - 32

OBJECT: LIFTING BEAM

TITLE: JUNCTION PLATES

Scale: 1:10 Sheet: 01 of 01

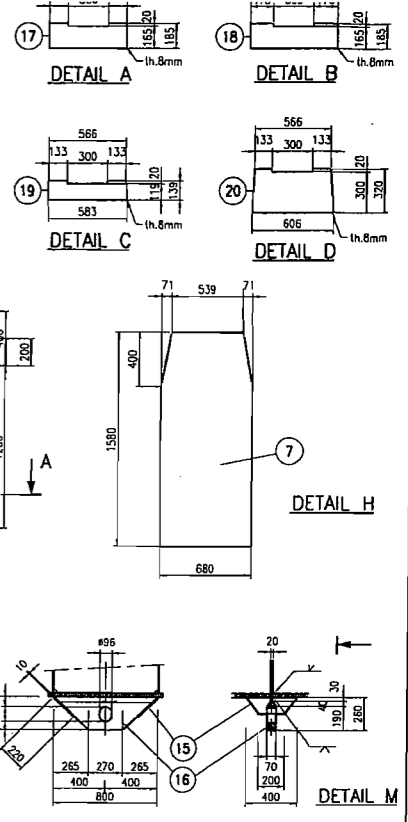
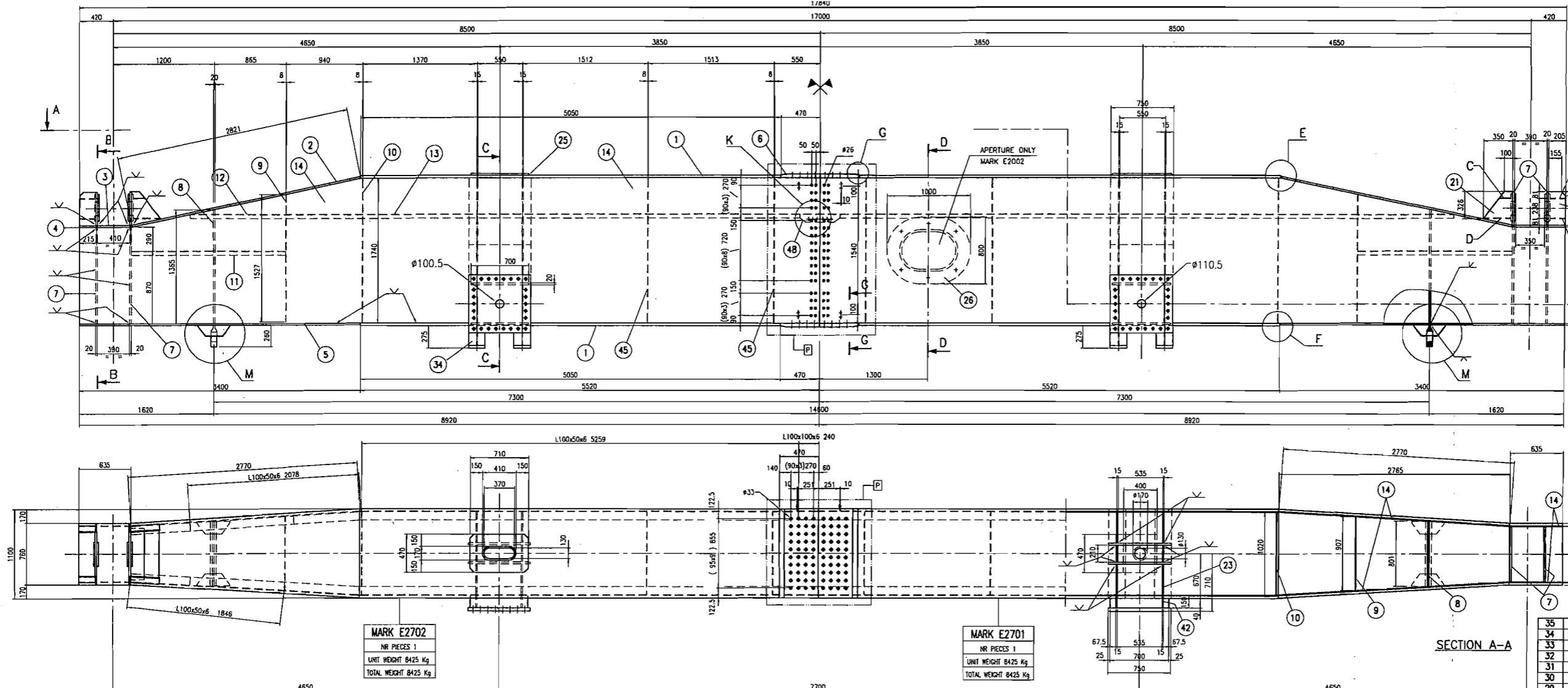
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Job No: [600311] Subj. No: [060610] Mr. [-----]

Feb. No. [T06] Dep. [C] Doc. Type [A] Part. [C] Nr. [E] Rev. [0210]

CLIENT: KIEWIT / FCI / MANSON JV

PROJECT: SKYWAY BRIDGE PROJECT



MARK E2702
 NR PIECES 1
 UNIT WEIGHT 8425 Kg
 TOTAL WEIGHT 8425 Kg

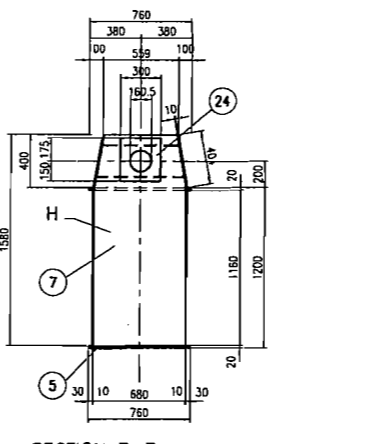
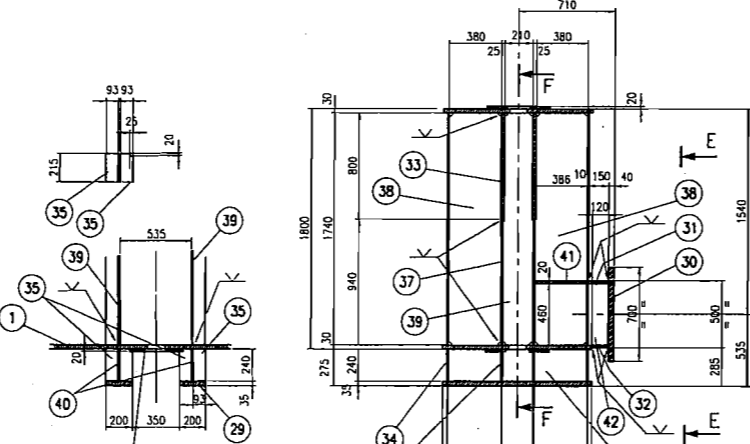
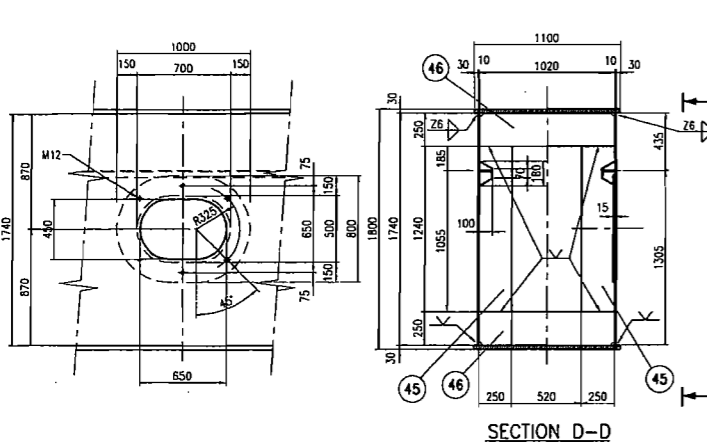
MARK E2701
 NR PIECES 1
 UNIT WEIGHT 8425 Kg
 TOTAL WEIGHT 8425 Kg

P SURFACE TREATMENT FOR FRICTION JOINTS
 SAND BLASTING SA 2 1/2
 PAINTING WITH A PRODUCT GUARANTEEING
 A MINIMUM FRICTION COEFFICIENT OF $\mu = 0.45$

TOTAL WEIGHT 17050 Kg

POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	NOTES
35	16	PLATE 12x93x240		Fe510C	2.0	32.0
34	8	PLATE 10x200x240		Fe510C	4.3	31.6
33	4	PLATE 25x750x800		Fe510C	117.8	471.2
32	2	PLATE 20x120x700		Fe510C	13.2	26.4
31	2	PLATE 20x150x700		Fe510C	16.5	33
30	2	PLATE 40x700x750		Fe510C	164.8	329.6
29	4	PLATE 35x200x1100		Fe510C	60.4	241.6
28	1	PLATE 8x90x100		Fe510C	0.5	0.5
27	1	PLATE 6x780x980 SHAPED		Fe510C	30	30
26	1	PLATE 15x800x1000 SHAPED		Fe510C	45	45
25	2	PLATE 20x470x710		Fe510C	52.3	104.6
24	8	PLATE 20x300x375		Fe510C	15.3	122.4
22	4	PLATE 10x40x215		Fe510C	6.5	26
21	4	PLATE 10x40x350 SHAPED		Fe510C	7	28
20	2	PLATE 8x320x566		Fe510C	11.4	22.8
19	2	PLATE 8x139x566		Fe510C	4.9	9.8
18	2	PLATE 8x185x650		Fe510C	7.5	15
17	2	PLATE 8x185x666		Fe510C	6.6	13.2
16	2	PLATE 20x250x800		Fe510C	64.1	128.2
15	4	PLATE 10x220x400		Fe510C	5.2	20.8
14	4	PLATE 10x1740x825 SHAPED BENT		Fe510C	1127	4508
13	4	L100x50x6 L=5299		Fe510C	36.1	144.4
12	4	L100x50x6 L=2078		Fe510C	14.2	56.8
11	4	L100x50x6 L=1846		Fe510C	12.6	50.4
10	2	PLATE 8x1020x1740		Fe510C	111.5	223
9	2	PLATE 8x907x1527		Fe510C	86.9	173.8
8	2	PLATE 20x801x1365		Fe510C	171.6	343.2
7	4	PLATE 20x680x1580 SHAPED		Fe510C	164	656
6	4	PLATE 45x470x1100		Fe510C	182.6	730.4
5	2	PLATE 20x1100x3400 SHAPED		Fe510C	478	958
4	2	PLATE 20x215x760 SHAPED		Fe510C	25.6	51.2
3	2	PLATE 20x160x760 SHAPED		Fe510C	48.9	97.8
2	2	PLATE 20x1100x2821 SHAPED		Fe510C	112	224
1	4	PLATE 30x1100x5050		Fe510C	1308	5232

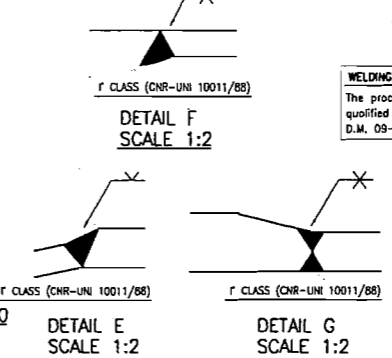
POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	NOTES
103	6	PLAN WASHER 13 UNI 6592				
102	6	SCREW M10x35 CL8.8 UNI 5739				
101	16	PLAN WASHER 17 UNI 6592				
100	16	SCREW M16x50 CL8.8 UNI 5739				
48	4	L100x100x6 L=240		Fe510C	2.2	8.8
47	4	PLATE 10x50x100		Fe510C	0.7	2.8
46	8	PLATE 8x250x1020		Fe510C	16.1	128.8
45	8	PLATE 8x250x1240		Fe510C	19.5	156
44	4	ROUND #190x20		Fe510C	4.5	18
43	2	ROUND #160 L=478		39NiCrMo3	25.5	51
42	4	PLATE 15x150x160		Fe510C	6.1	24.4
41	2	PLATE 20x386x535		Fe510C	32.5	65
40	4	PLATE 15x240x1040		Fe510C	29.3	117.2
39	4	PLATE 15x223x1740		Fe510C	45.7	182.8
38	8	PLATE 15x386x1740		Fe510C	77.9	311.2
37	4	PLATE 15x750x840		Fe510C	66.4	265.6
36	2	PLATE 20x400x470		Fe510C	29.5	59



MARK E2703
 NR PIECES 1
 UNIT WEIGHT 30.5 Kg
 TOTAL WEIGHT 30.5 Kg

MARK E2704
 NR PIECES 2
 UNIT WEIGHT 73.5 Kg

MARK E2705
 NR PIECES 4
 UNIT WEIGHT 4.5 Kg



FINAL PAINTING:
 ENAMEL BLUE RAL 5017

WELDING PROCEDURES:
 The procedures used shall be qualified according to EN 288-3, D.I.M. 09-01-96, or ASME sect. IX

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D 04.07.02

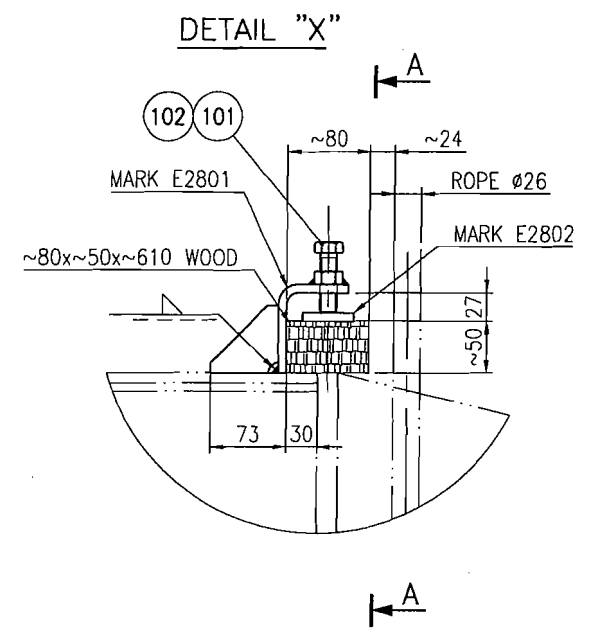
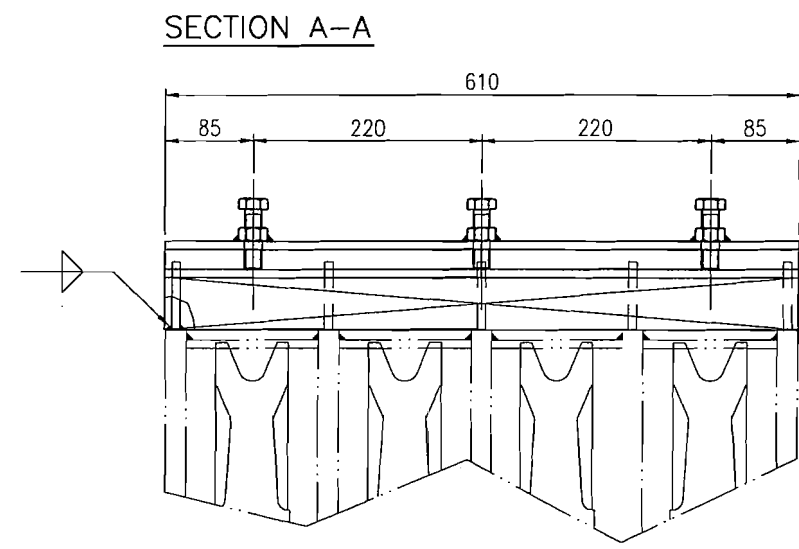
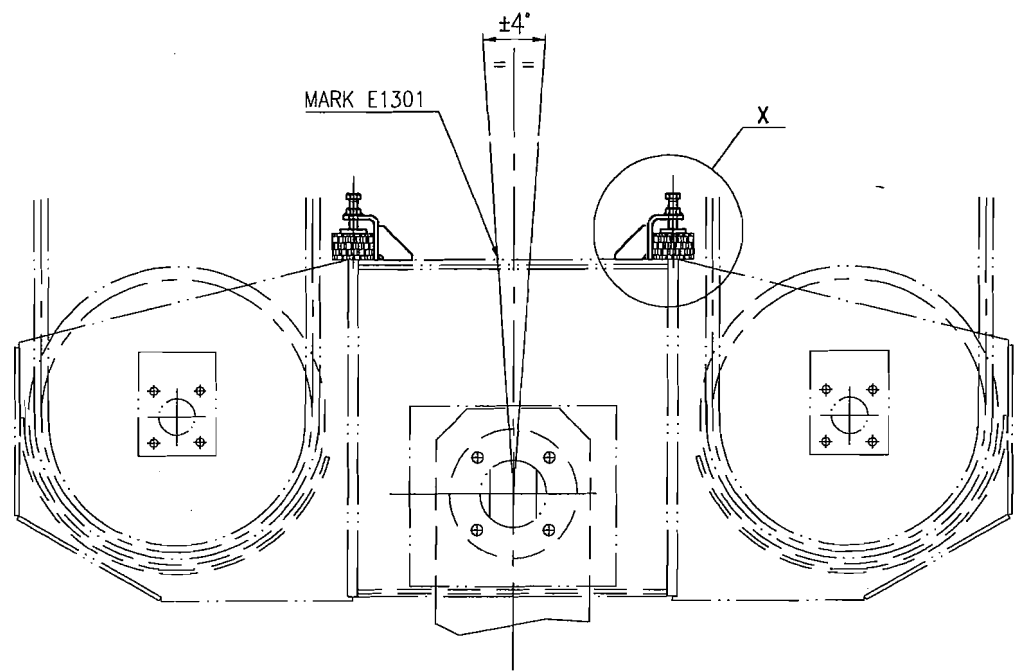
REV. DATE REV. OBJECT DRAWN CHECKED APPROVED

STRADDLE CARRIER
 SC 720 - 32
 LIFTING BEAM
 GIRDERS

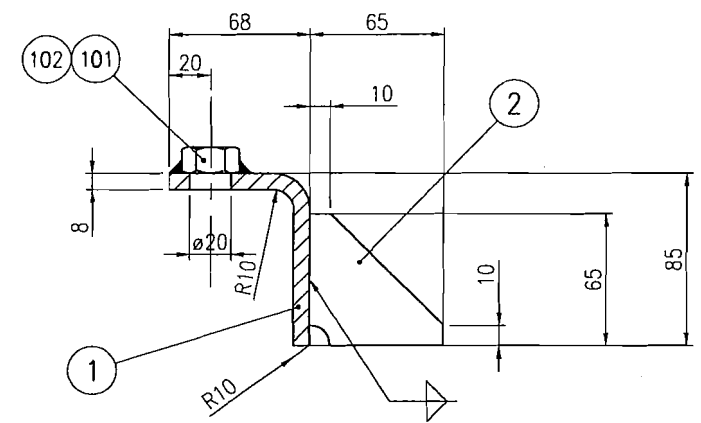
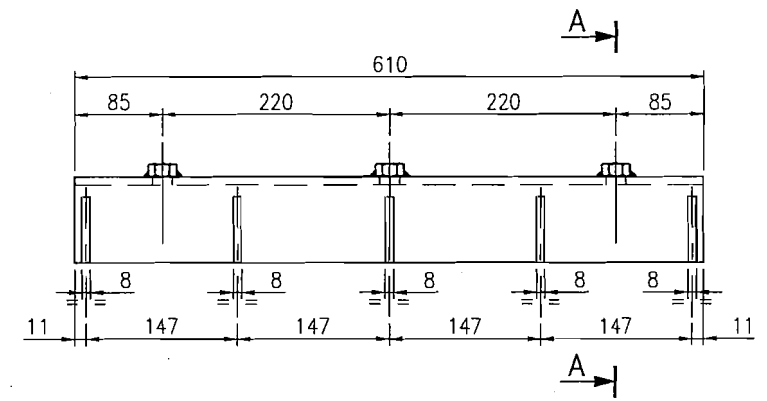
SCALE 1:20 1:10

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KIEWIT / FCI / MANSON JV



SECTION A-A
SCALE 1:2.5



MARK E2801
NR PIECES 8
UNIT WEIGHT 5Kg
TOTAL WEIGHT 40Kg

TOTAL WEIGHT = 52 Kg

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT.	NOTES
102	24	NUT M16	UNI 5588	6S			GALVANIZED
101	24	SCREW M16x50	UNI 5739	8.8			GALVANIZED
3	8	PLATE 50x8	L= 610	Fe 510 C	1.5	12	
2	40	PLATE 65x8	L= 65 SHAPED	Fe 510 C	0.1	4	
1	8	PLATE 140x8	L= 610 BENT	Fe 510 C	4.5	36	

Sede e Stabilimento
Via Bultrio-Frazione Cognocco
33050-Pozzuolo del Friuli (UD)-Italy
Tel: +39 432 607 900
Fax: +39 432 607 902
e-mail: deal@deal.it

REFERENCE: STRADDLE CARRIER
SC 720 - 32

OBJECT: HOISTING WINCH

TITLE: ACCESSORIES

Substitutes for: _____ Scale: 1:2.5 1:5 1:10 Sheet 1 of 1

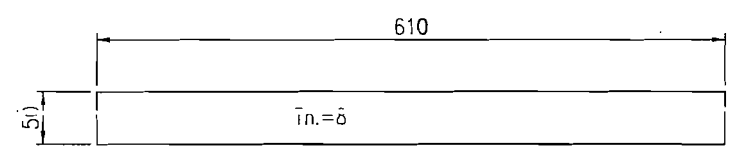
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Job No: -6003111 -060529

Fob. Nr. Dep. Doc. Type Part. Nr. Rev.
T 0 6 D U C D E - 0 2 8 0

CLIENT: KIEWIT / FCI / MANSON JV

PROJECT: SKYWAY BRIDGE PROJECT
S. FRANCISCO - OAKLAND BAY BRIDGE - USA



MARK E2802
NR PIECES 8
UNIT WEIGHT 1.5Kg
TOTAL WEIGHT 12Kg

FINAL PAINTING :
ENAMEL BLUE RAL 5017

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, EN 288-2, EN 288-1, EN 288-4, EN 288-5, EN 288-6, EN 288-7, EN 288-8, EN 288-9, EN 288-10, EN 288-11, EN 288-12, EN 288-13, EN 288-14, EN 288-15, EN 288-16, EN 288-17, EN 288-18, EN 288-19, EN 288-20, EN 288-21, EN 288-22, EN 288-23, EN 288-24, EN 288-25, EN 288-26, EN 288-27, EN 288-28, EN 288-29, EN 288-30, EN 288-31, EN 288-32, EN 288-33, EN 288-34, EN 288-35, EN 288-36, EN 288-37, EN 288-38, EN 288-39, EN 288-40, EN 288-41, EN 288-42, EN 288-43, EN 288-44, EN 288-45, EN 288-46, EN 288-47, EN 288-48, EN 288-49, EN 288-50, EN 288-51, EN 288-52, EN 288-53, EN 288-54, EN 288-55, EN 288-56, EN 288-57, EN 288-58, EN 288-59, EN 288-60, EN 288-61, EN 288-62, EN 288-63, EN 288-64, EN 288-65, EN 288-66, EN 288-67, EN 288-68, EN 288-69, EN 288-70, EN 288-71, EN 288-72, EN 288-73, EN 288-74, EN 288-75, EN 288-76, EN 288-77, EN 288-78, EN 288-79, EN 288-80, EN 288-81, EN 288-82, EN 288-83, EN 288-84, EN 288-85, EN 288-86, EN 288-87, EN 288-88, EN 288-89, EN 288-90, EN 288-91, EN 288-92, EN 288-93, EN 288-94, EN 288-95, EN 288-96, EN 288-97, EN 288-98, EN 288-99, EN 288-100

REMOVE SHARP CORNERS WITH R~2

DWG size A1

WELDS (UNI 1310)

Where not otherwise indicated $\alpha=0.7$ of minimum thk. to be connected (Continuous welds)

Edge preparation for welding in according to UNI 11001

TOLLERANCES

Dimension without tolerance indication

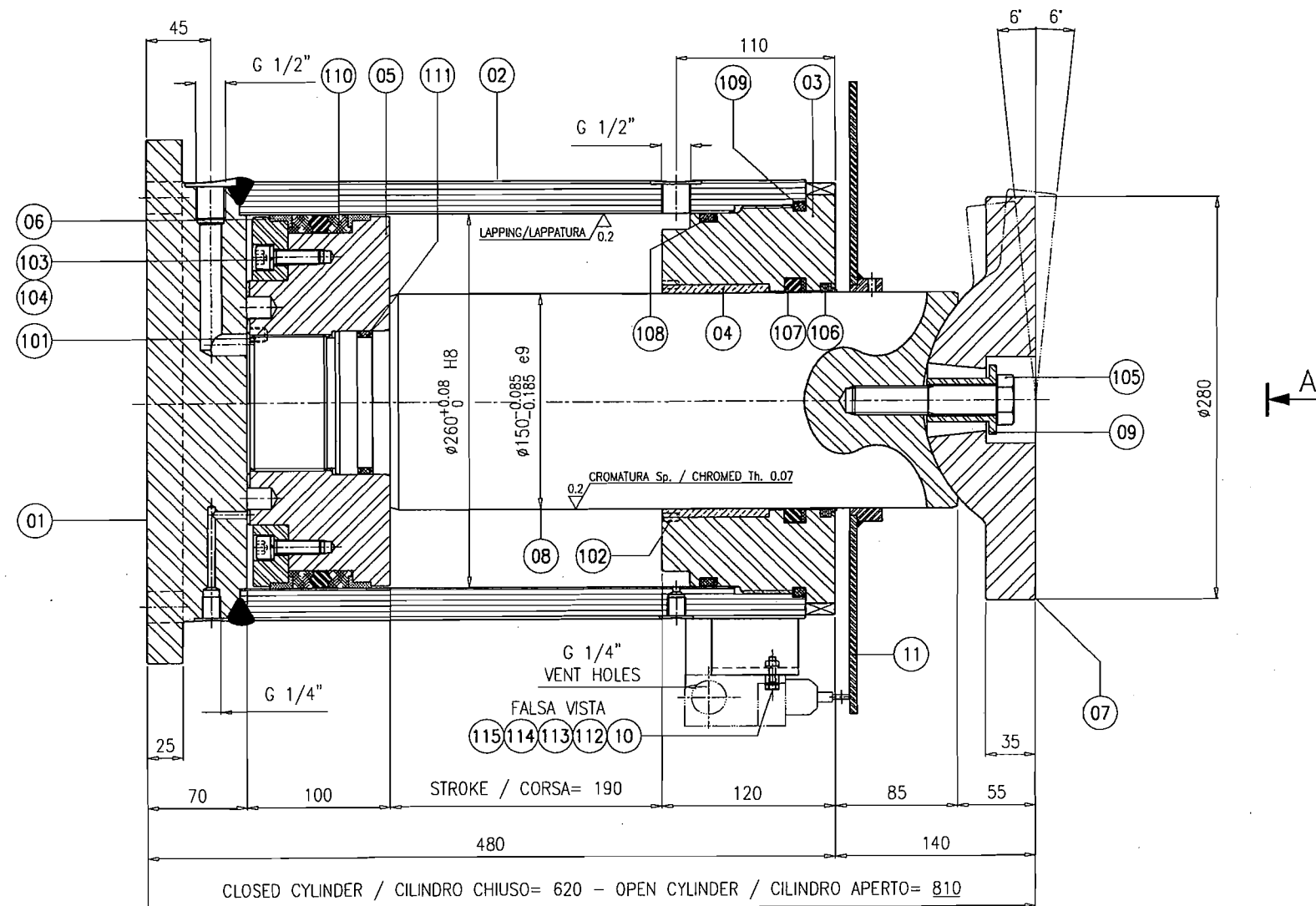
Structural steel work UNI ISO 2768-M Mechanics UNI ISO 2768-F

FINISHING

Machining UNI 4600

0.8 3.2 12.5 25

TOLLERANCES



TOTAL WEIGHT = 523.3 Kg

FINAL PAINTING :
ENAMEL RED RAL 3000

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT. WEIGHT	TOT. WEIGHT	NOTES
115	2	LIMIT-SWITCH 7722		RAVASI	0.2	0.4	
114	8	WASHER \ RONDELLA 5.3x10 UNI 6592					COMM.
113	4	NUT \ DADO M6 UNI 5588					COMM.
112	4	SCREW \ VITE TE M8x20 UNI 5739		8.8			COMM.
111	2	PISTON O-RING \ O-RING PER PISTONE		OR 621+2BR			POLYPAC
110	2	PISTON SEAL \ GUARNIZIONE PISTONE		DSM-1024925/1A			POLYPAC
109	2	EXTREMITY O-RING \ O-RING PER TESTATA		OR 682			POLYPAC
108	2	EXTREMITY O-RING \ O-RING D'ESTREMITA'		OR 680+BK			POLYPAC
107	2	ROD SEAL \ GUARNIZIONE STELO		B-669590/1			POLYPAC
106	2	WIPER SEAL \ RASCHIATORE		WRM-590637			POLYPAC
105	2	SCREW \ VITE TE M20x100 UNI 5737		8.8			COMM.
104	16	WASHER \ RONDELLA DIN 7980 - 10					COMM.
103	16	SCREW \ VITE TCEI M10x35 UNI 5931		8.8			COMM.
102	4	SCREW \ GRANO STEI M6x12 UNI 5923		8.8			COMM.
101	2	SCREW \ GRANO STEI M10x12 UNI 5923		8.8			COMM.
11	2	DISK \ DISCO PER MICRO		Fe 510	5.9	11.8	T06MEANA001
10	2	SUPPORT \ SUPPORTO MICRO		Fe 360	0.25	0.5	T06MEANA001
09	2	BUSH \ BOCCOLA		Fe 410	0.2	0.4	T06MEANA001
08	2	CHROMED ROD \ STELO CROMATO		C40 Chrom.	58.8	117.6	T06MEANA001
07	2	OSCILLATING SUPPORT \ PIATTELLO OSCILLANTE		Fe 490	20	40	T06MEANA001
06	2	RING PISTON \ ANELLO PISTONE		C40	5.2	10.4	T06MEANA001
05	2	PISTON \ PISTONE		C40	25	50	T06MEANA001
04	2	BRONZE RING GUIDE ROD \ BRONZINA GUIDA STELO		Br. B14 Centr.	1.9	3.8	T06MEANA001
03	2	FRONT EXTREMITY \ ESTREMITA' ANTERIORE		C40	33	66	T06MEANA001
02	2	CYLINDER BODY \ TUBO CAMICIA		Fe 510 C	61.4	122.8	T06MEANA001
01	2	REAR CLOSING FLANGE \ FONDELLO		Fe 490	50	100	T06MEANA001

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2					
1	11/09/02	REVISION POS. 10,11,105,112,113,114	MENGHINI	S. GERMANO	RIBIS
0	22/06/02	FIRST ISSUED	MENGHINI	CUCCHIARO	RIBIS

DEAL

Sede e Stabilimento
Via Bultrio-Frozone Carnagosa
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Tel: +39 432 521 836
Tel: +39 432 607 204
Fax: +39 432 607 202

Ufficio Commerciale e Tecnico
Via della Ferrovia-Borgo Carliello
33050-Pavia di Udine (UD)-Italy
Tel: +39 432 656 911
Fax: +39 432 675 216
E-Mail: deal@deal.it

REFERENCE: STRADDLE CARRIER SC 720 - 32

OBJECT: HYDRAULIC JACKS FOR BLOCK LONGITUDINAL HINGE

TITLE: HYDRAULIC JACKS ϕ 260/ ϕ s150/STROKE 190

Substitutes for: --- Scale 1:3 Sheet 1 of 1

File: T06MEANA001_1.dwg Format A2

Inh. Nr. 6003111 Sub. J. Nr. 060252 Mr. ---

Fob. Nr. Dep. Doc. Type Part. Nr. Rev.

T06MEANA-0011

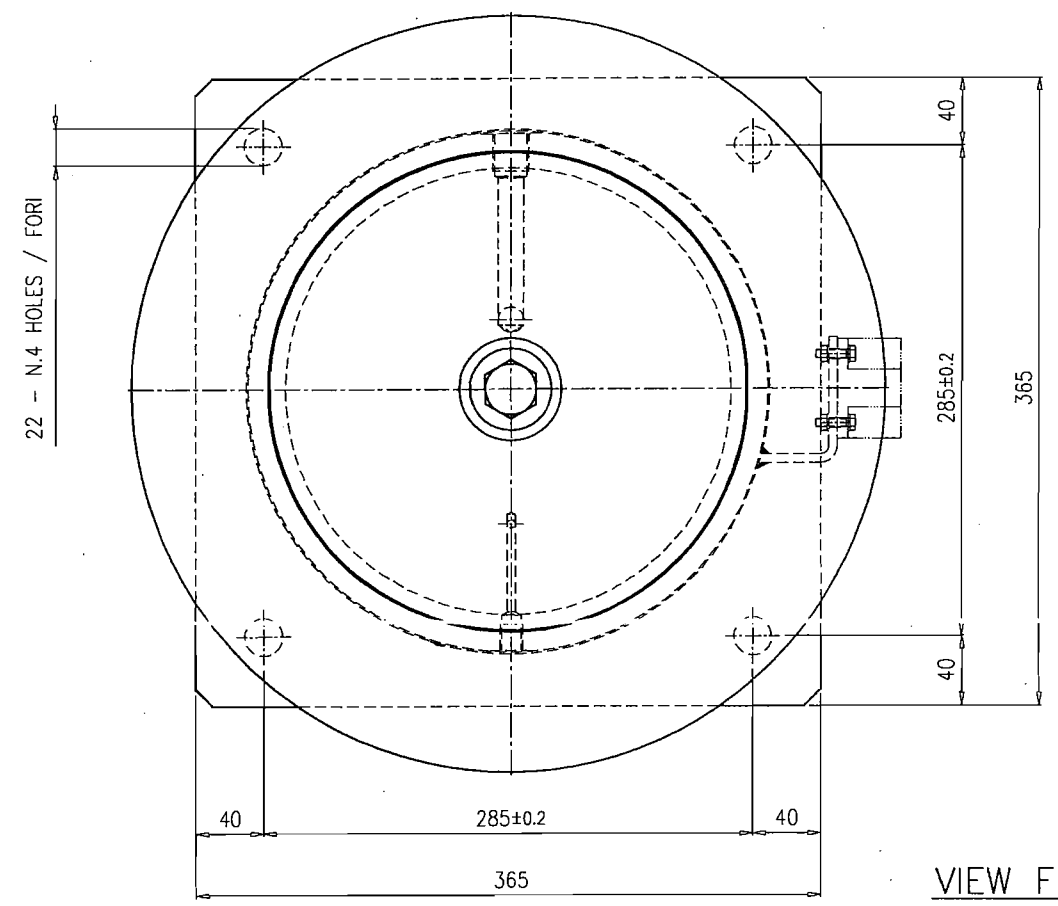
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CLIENT: KIEWIT / FCI / MANSON JV

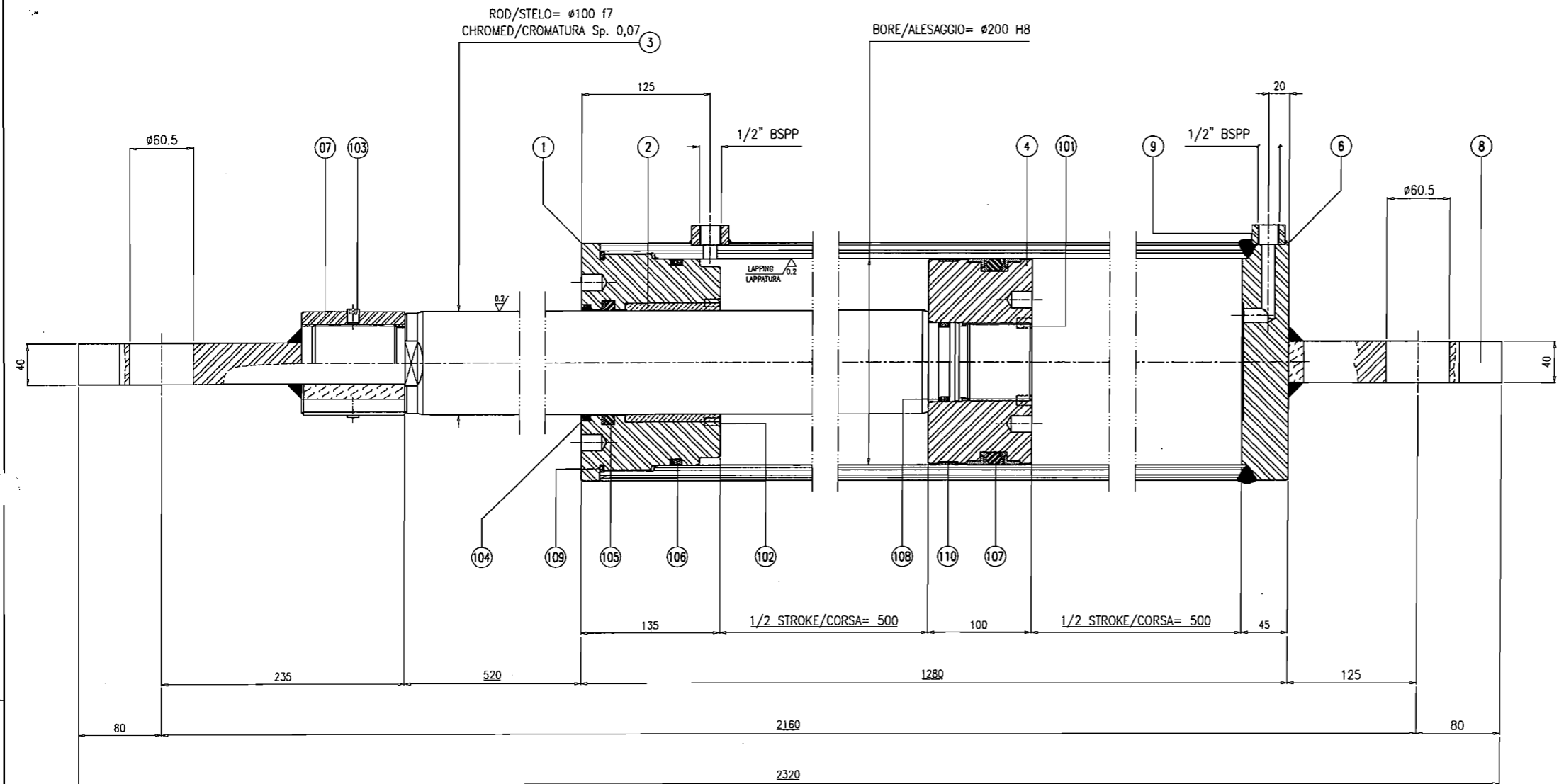
PROJECT: SKYWAY BRIDGE PROJECT
S. FRANCISCO - OAKLAND BAY BRIDGE - USA

MARK A100
NR. PIECES 2
UNIT WEIGHT 260 Kg
TOTAL WEIGHT 520 Kg

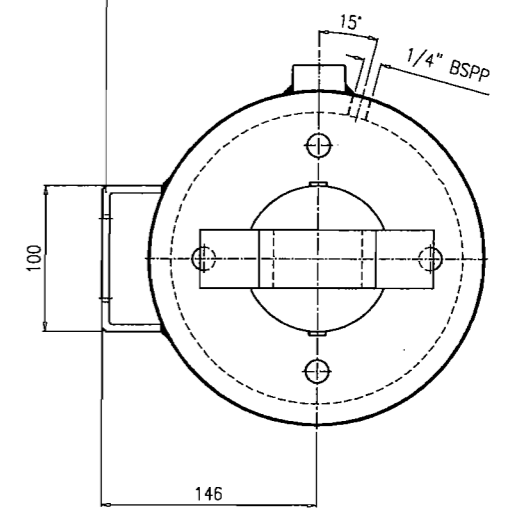
Technical Data \ Dati Tecnici
Pushing Force: 1400 KN
Reentering Force: 940 KN
Transversal Force on the Oscillating Support: 150 KN
Main Bore: ϕ 260 mm H8
Rod: ϕ 150 mm e9
Stroke: 190 mm
Working pressure: 26.4 MPa
Test pressure: 35 MPa
Pushing Section: 530.66 cm ²
Reentering Section: 354.03 cm ²
Ratio PS / RS: 1 : 1.498



VIEW FROM A



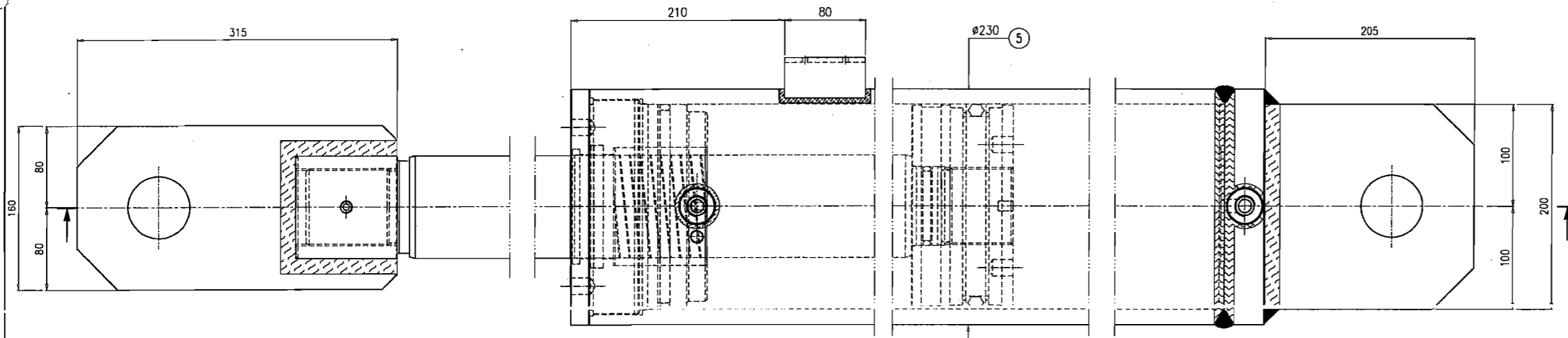
MARK E100	Technical Data \ Dati Tecnici
NR. PIECES 4	Reentering force: 600 KN
UNIT WEIGHT 270 Kg	Main Bore: Ø200 mm H8
TOTAL WEIGHT 1080 Kg	Stelo: Ø100 mm f7
	Stroke: 1000 mm (±500)
	Working pressure: 200 bar
	Test pressure: 300 bar
	Pushing Section: 314,16 cm ²
	Reentering Section: 235,62 cm ²
	Ratio SS / ST: 1.33



TOTAL WEIGHT = 1082 Kg

FINAL PAINTING : ENAMEL RED RAL 3000

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
110	4	PISTON GUIDE ELEMENT \ ANELLO DI GUIDA PISTONE		E/DWR 200			POLYPAC
109	4	EXTREMITY O-RING \ O-RING PER TESTATA		OR 369			POLYPAC
108	4	PISTON O-RING \ O-RING PER PISTONE		OR 334+2BR			POLYPAC
107	4	PISTON SEAL \ GUARNIZIONE PISTONE		DBM-787688			POLYPAC
106	4	EXTREMITY O-RING \ O-RING D'ESTREMITA'		OR 882+BR			POLYPAC
105	4	ROD SEAL \ GUARNIZIONE STELO		B-472393/1			POLYPAC
104	4	WIPER SEAL \ RASCHIATORE		WRM-393440			POLYPAC
103	8	SCREW \ GRANO STEI M12x15 UNI 5923		8.8			COMM.
102	8	SCREW \ GRANO STEI M8x15 UNI 5923		8.8			COMM.
101	8	SCREW \ GRANO STEI M10x15 UNI 5923		8.8			COMM.



POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
10	4	SUPPORT \ SUPPORTO MICRO	E109	Fe 410	0.5	2	
9	8	OIL PORT \ ATTACCO OLIO	E109	Fe 510 C	0.1	0.8	
8	4	REAR ATTACK \ ATTACCO POSTERIORE	E108	Fe 510 C	11.5	46	
7	4	ROD ATTACK \ ATTACCO PER STELO	E107	Fe 510 C	21.5	86	
6	4	REAR CLOSING FLANGE \ FONDELLO	E106	Fe 510 C	14	56	
5	4	CYLINDER BODY \ TUBO CAMICIA	E105	Fe 510 C	97	388	
4	4	PISTON \ PISTONE	E104	C40	20	80	
3	4	CHROMED ROD \ STELO CROMATO	E103	C43 Crom.	77	308	
2	4	BRONZE RING GUIDE ROD \ BRONZINA GUIDA STELO	E102	Br. B14 Centr.	2	8	
1	4	FRONT EXTREMITY \ ESTREMITA' ANTERIORE	E101	C40	24	96	

REFERENCE: STRADDLE CARRIER SC 720 - 32

OBJECT: WINCHES GROUP-LONGITUDINAL REGULATION JACKS

TITLE: HYDRAULIC JACKS Ø200/Ø100/ STROKE 1000 (±500)

Scale: 1:2.5

Sheet: 1 of 1

Format: A1

File: TO6DUANE001_1.dwg

Job No.: -6 0 0 3 1 1

Sub.J.Nr.: - 0 6 0 5 5 2

Mr.: - - - - -

Rev. No.: 06

Doc. Type: DUANE

Part: -

Mr.: 001

Rev.: 1

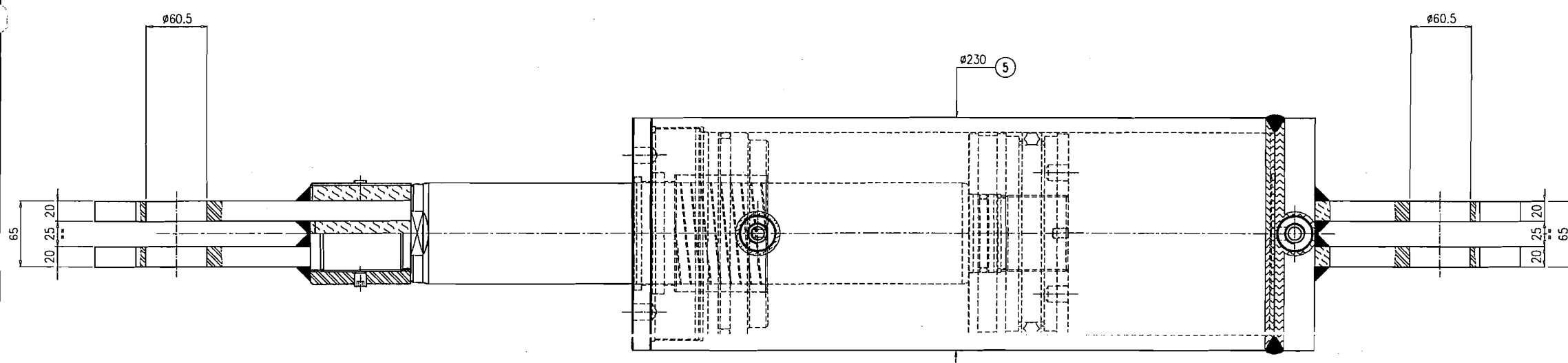
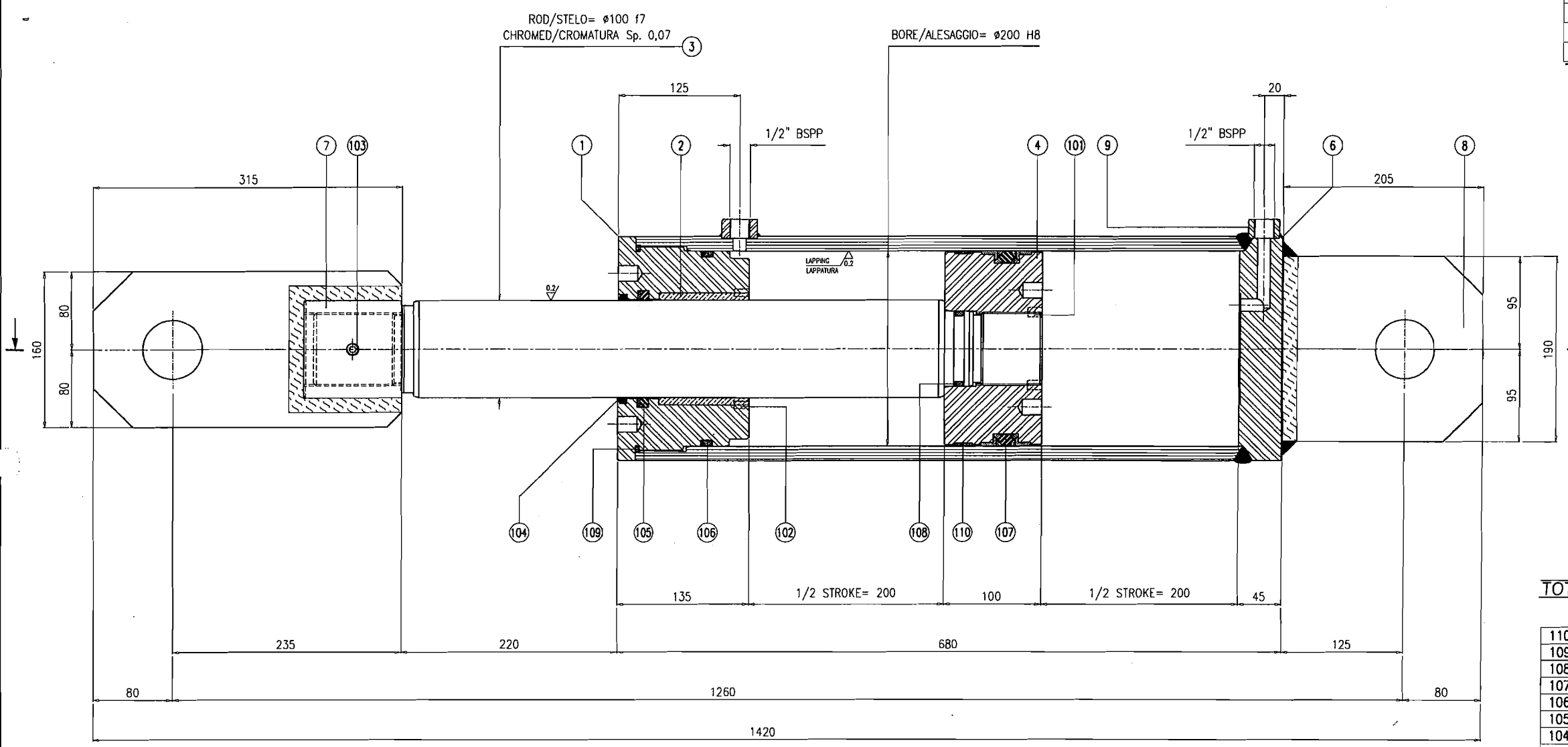
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CLIENT: KIEWIT / FCI / MANSON JV

PROJECT: SKYWAY BRIDGE PROJECT

MARK E200
 NR. PIECES 4
 UNIT WEIGHT 185 Kg
 TOTAL WEIGHT 740 Kg

Technical Data \ Dati Tecnici
 Reentering force: 600 KN
 Main Bore: #200 mm H8
 Stelo: #100 mm f7
 Stroke: 400 mm (±200)
 Working pressure: 200 bar
 Test pressure: 300 bar
 Pushing Section: 314,16 cm²
 Reentering Section: 235,62 cm²
 Ratio SS / ST: 1,33



TOTAL WEIGHT = 740 Kg

**FINAL PAINTING :
 ENAMEL RED RAL 3000**

POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNI.	TOT.	NOTES
110	4	PISTON GUIDE ELEMENT\ANELLO DI GUIDA PISTONE		E/DWR 200			POLYPAC
109	4	EXTREMITY O-RING\O-RING PER TESTATA		OR 369			POLYPAC
108	4	PISTON O-RING\O-RING PER PISTONE		OR 334+2BR			POLYPAC
107	4	PISTON SEAL \ GUARNIZIONE PISTONE		DBM-78768B			POLYPAC
106	4	EXTREMITY O-RING\O-RING D'ESTREMITA'		OR 882+BR			POLYPAC
105	4	ROD SEAL \ GUARNIZIONE STELO		B-472393/1			POLYPAC
104	4	WIPER SEAL \ RASCHIATORE		WRM-393440			POLYPAC
103	8	SCREW\GRANO STEI M12x15 UNI 5923		8.8			COMM.
102	8	SCREW\GRANO STEI M8x15 UNI 5923		8.8			COMM.
101	8	SCREW\ GRANO STEI M10x15 UNI 5923		8.8			COMM.
09	8	OIL PORT \ ATTACCO OLIO	E209	Fe 510 C	0.1	0.8	
08	8	REAR ATTACK \ ATTACCO POSTERIORE	E208	Fe 510 C	5.5	44	
07	4	ROD ATTACK \ ATTACCO PER STELO	E207	Fe 510 C	21.5	86	
06	4	REAR CLOSING FLANGE \ FONDELLO	E206	Fe 510 C	14	56	
05	4	CYLINDER BODY \ TUBO CAMICIA	E205	Fe 510 C	50	200	
04	4	PISTON \ PISTONE	E204	C40	20	80	
03	4	CHROMED ROD \ STELO CROMATO	E203	C43 Crom.	40	160	
02	4	BRONZE RING GUIDE ROD\BRONZINA GUIDA STELO	E202	Br. B14 Cenr.	2	8	
01	4	FRONT EXTREMITY \ ESTREMITA' ANTERIORE	E201	C40	24	96	

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
0	24/05/02	FIRST ISSUE	S. GERMANO	G. CUCCHIARO	G. RIBIS

DEAL

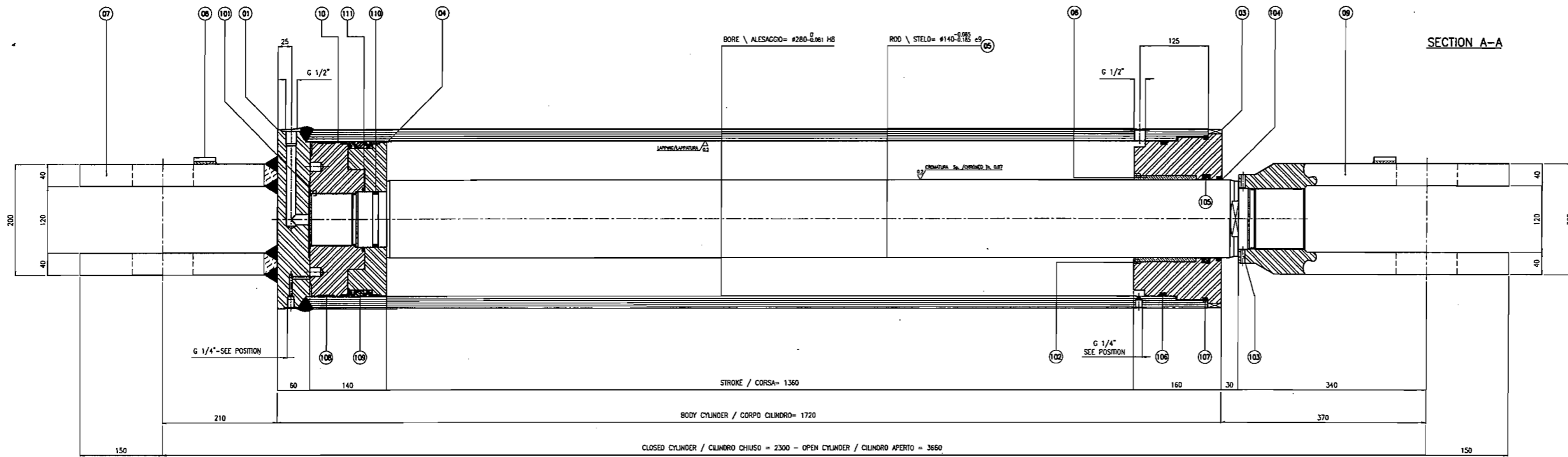
Sub e Sviluppo
 13050-Fornelle del Fuà (BO) Italy
 Tel: +39 052 807 800
 Fax: +39 052 807 900
 e-mail: deal@deal.it

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REFERENCE: STRADDLE CARRIER SC 720 - 32
 OBJECT: WINCHES GROUP-TRANSVERSAL REGULATION JACKS
 TITLE: HYDRAULIC JACKS #200/4100/ STROKE 400 (±200)

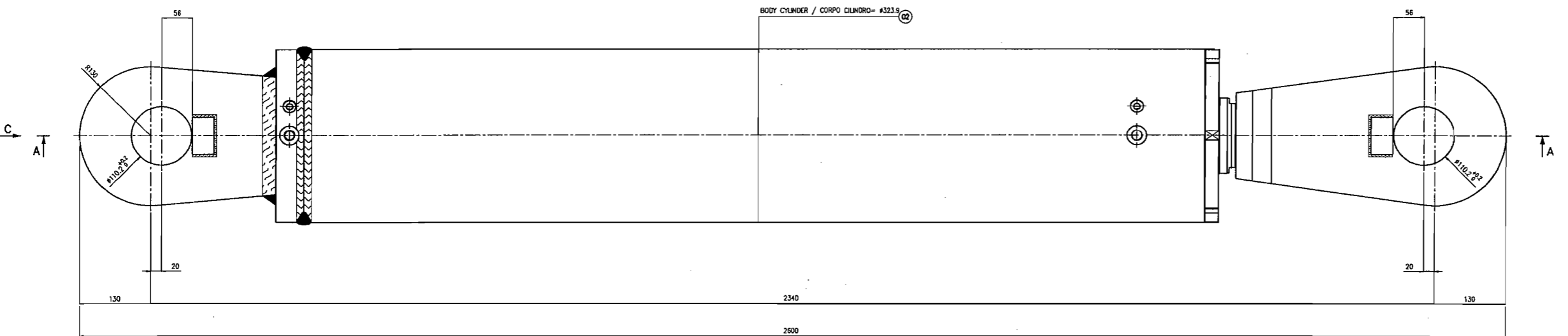
Substitutes for: Scale 1:2.5 Sheet 1 of 1
 File: TO6DUANE002.dwg Format A1
 Job No. Subj.Nr. Mir. - - - - -
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 Fab. Nr. Dep. Doc. Type Part. Nr. Rev.
 TO6DUANE-0020

CLIENT: KIEWIT / FCI / MANSON JV
 PROJECT: SKYWAY BRIDGE PROJECT



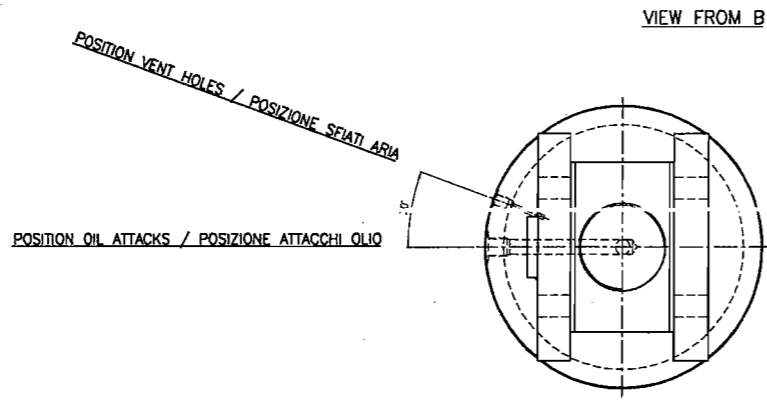
Technical Data \ Dati Tecnici	
Pushing / Reentering force:	1200 kN
Main Bore:	280 mm HB
Rod:	140 mm d
Stroke:	1360 mm
Working pressure:	26 MPa
Test pressure:	33 MPa
Pushing Section:	815.44 cm ²
Reentering Section:	461.58 cm ²
Ratio PS / RS:	1 : 1.33

MARK F100	
NR. PECEES	8
UNIT WEIGHT	725 Kg
TOTAL WEIGHT	5800 Kg



TOTAL WEIGHT = 5643.6 Kg FINAL PAINTING : ENAMEL RED RAL 3000

POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	REMARKS
111	8	ROD O-RING \ O-RING PER STELO		OR 346		POLYPAC
110	8	PISTON O-RING \ O-RING PER PISTONE		OR 621+2BR		POLYPAC
109	8	PISTON SEAL \ GUARNIZIONE PISTONE		SH-11210R/M		POLYPAC
108	8	RING GUIDE PISTON \ FASCIA GUIDA PISTONE	30x38x10	PIFE		POLYPAC
107	8	EXTREMITY O-RING \ O-RING PER TESTATA		OR 686		POLYPAC
106	8	EXTREMITY O-RING \ O-RING D'ESTREMITA'		OR 450+BR		POLYPAC
105	8	ROD SEAL \ GUARNIZIONE STELO		R-629551/1		POLYPAC
104	8	WIPER SEAL \ RASCHIATORE		WRM-551588		POLYPAC
103	16	SCREW \ GRANO STEI M8x25 UNI 5923		8.8		COMAL
102	16	SCREW \ GRANO STEI M8x12 UNI 5923		8.8		COMAL
101	8	SCREW \ GRANO STEI M10x12 UNI 5923		8.8		COMAL
10	8	PISTON \ PISTONE		C40	32.6	260.8 TORMECF001
09	8	ANTERIOR CYLINDER ATTACK \ ATTACCO ANTERIORE		Fe 510 B	69	552 TORMECF001
08	16	LOCK PLATE \ PIATTO DI FERRO		Fe 410	0.25	2 TORMECF001
07	16	REAR CYLINDER ATTACK \ ATTACCO POSTERIORE		Fe 510	11.4	91.2 TORMECF001
06	8	BRIDGE RING GUIDE ROD \ BRONZINA GUIDA STELO		Br. 814 Centr.	3.5	28 TORMECF001
05	8	CHROMED ROD \ STELO CROMATO		C40 Chrom.	205.3	1642.4 TORMECF001
04	8	RING PISTON \ ANELLO PISTONE		C40	21.2	189.6 TORMECF001
03	8	FRONT EXTREMITY \ ESTREMITA' ANTERIORE		C40	58.7	469.5 TORMECF001
02	8	CYLINDER BODY \ TUBO CAMMIA		Fe 510 C	267.6	2140.8 TORMECF001
01	8	REAR CLOSING FLANGE \ FONDELLO		Fe 490	35.9	287.2 TORMECF001



DEAL STRADOLE CARRIER SC 720 - 32 STEERING JACKS HYDRAULIC JACKS #280/#s140/STROKE 1360

Scale: 1:3 Sheet: 1 of 1

REV. DATE REV. DAUGHTER DRAWN CHECKED APPROVED

0 20/06/02 FIRST ISSUED MENCHINI BASSO LONGOBARDI

NOTES: TORMECF001.dwg

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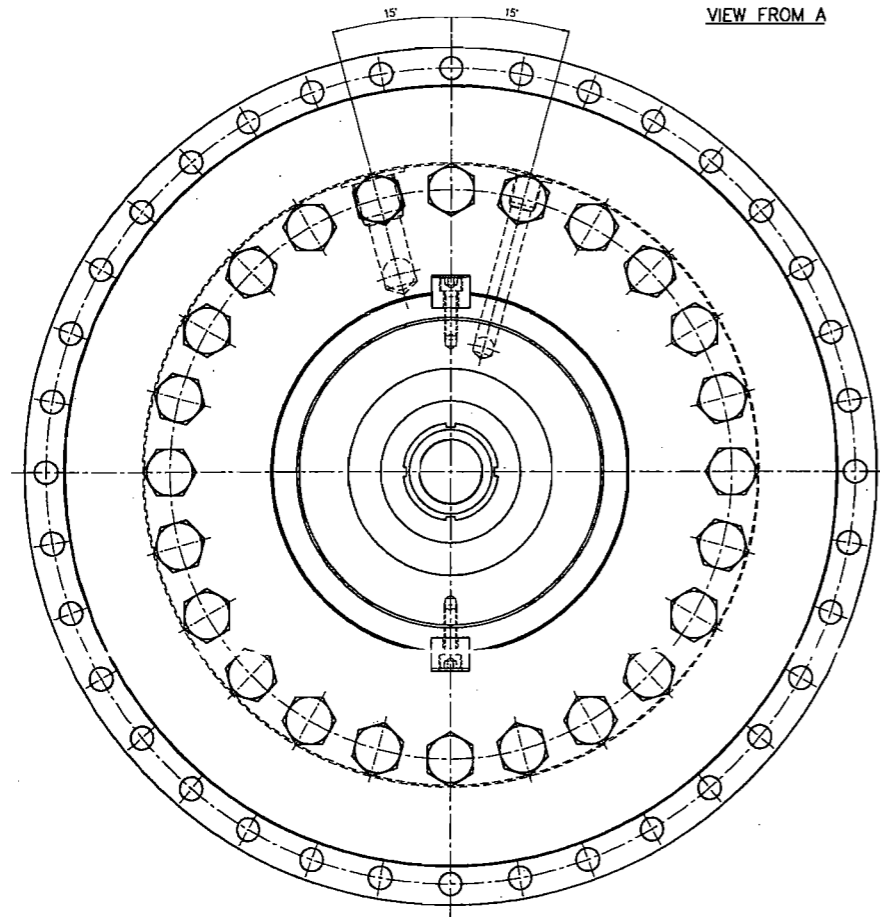
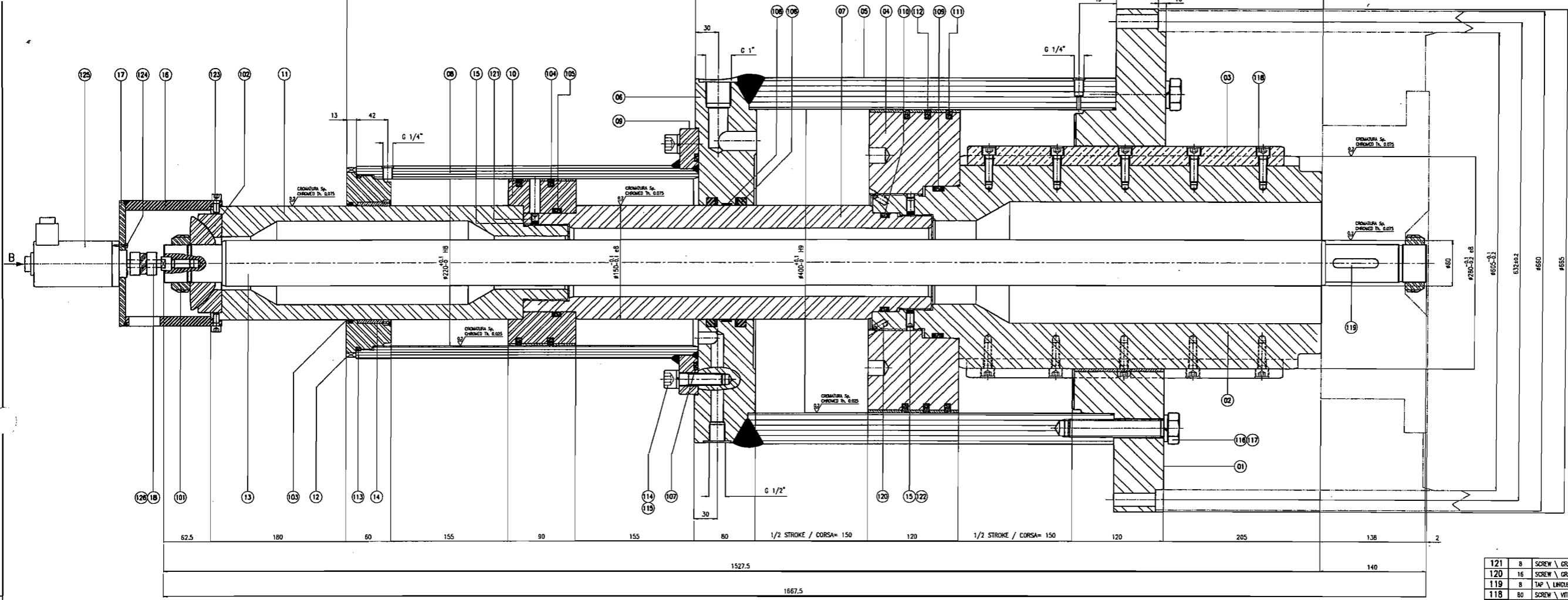
PROJECT: KIEWIT / FCI / MANSON JV

First Bore: #400 mm HS
Mechanical Rod: #280 mm øB
Mechanical Stroke: ±150 mm
Second Bore: #220 mm HS
Hydraulic Rod: #150 mm øB
Hydraulic Stroke: ±155 mm
Pushing Force: 3000 kN
Pushing Section: 1079.37 cm ²
Retracting Section: 203.31 cm ²
Ratio PS / RS: 1 : 5.3
Max Pressure: 28 MPa
Test Pressure in push: 35 MPa
Test pressure in return: 20 MPa

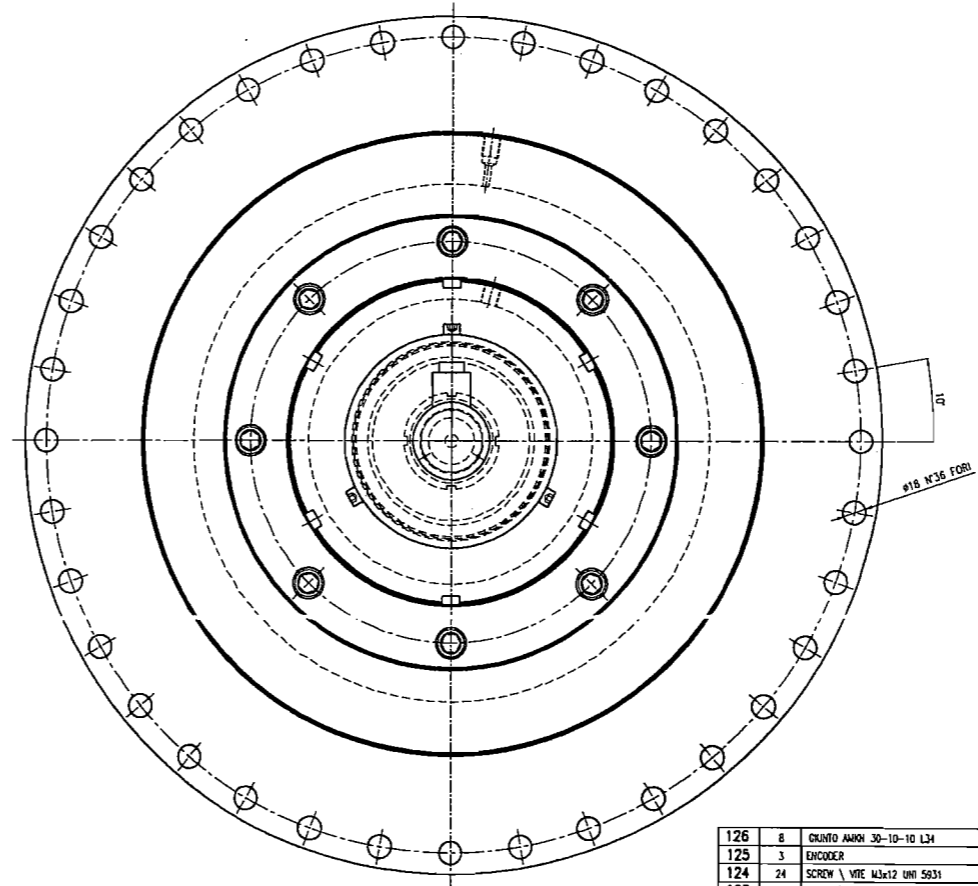
MARK F200
 NR. PIECES 8
 UNIT WEIGHT 950 Kg
 TOTAL WEIGHT 7600 Kg

FINAL PAINTING :
 ENAMEL RED RAL 3000

TOTAL WEIGHT = 7344 Kg



VIEW FROM A



VIEW FROM B

121	8	SCREW \ GRANO STEL M10x12 UNI 5923		B.8			COMA.
120	16	SCREW \ GRANO STD M10x15 UNI 5923		B.8			COMA.
119	8	TAP \ LINGHETTA A-12xR50 UNI 6604					COMA.
118	80	SCREW \ VITE TCI M10x35 UNI 5931		B.8			COMA.
117	192	WASHER \ RONDELLA ELASTICA-DM 7980-24					COMA.
116	192	SCREW \ VITE TE M12x130 UNI 5739		10.9			COMA.
115	64	WASHER \ RONDELLA ELASTICA-DM 7980-16					COMA.
114	64	SCREW \ VITE TCI M16x60 UNI 5831		B.8			COMA.
113	8	EXTREMITY O-RING \ O-RING PER TESTATA		OR 372			POLYPAC
112	8	ANTERIOR PISTON SEAL \ GUARNIZIONE PISTONE ANTERIORE		E/GR-4000 A			POLYPAC
111	16	ANTERIOR PISTON SEAL \ GUARNIZIONE PISTONE ANTERIORE		E/GR-4000 B			POLYPAC
110	8	INTERMEDIATE ROD O-RING \ O-RING STELO INTERMEDIO		OR 428+BR			POLYPAC
109	8	ANTERIOR PISTON O-RING \ O-RING PISTONE ANTERIORE		OR 882+2BR			POLYPAC
108	8	RING GUIDE \ FASCIA DI GUIDA		I/DWR-150			POLYPAC
107	8	FLANGE O-RING \ O-RING PER FLANGIA		OR 450			POLYPAC
106	16	INTERMEDIATE FLANGE SEAL \ GUARNIZIONE FONDELLO		B-66590/1			POLYPAC
105	8	POSTERIOR PISTON O-RING \ O-RING PISTONE POSTERIORE		OR 430+BR			POLYPAC
104	16	POSTERIOR PISTON SEAL \ GUARNIZIONE PISTONE POSTERIORE		E/GR-2200 B			POLYPAC
103	8	WIPER SEAL \ PASCCHATORE		WTF-1500			POLYPAC
102	8	AXIAL SPHERICAL BEARING \ SHMOO SFERICO ASSALE		GE-50-AW			ELGES
101	16	LOCK NUT \ CINGHERA DI BLOCCAGGIO M50x1.5		KNUT 10			SKF
18	8	PIVOT \ PIERNO #18x59		Fe 510	0.06	0.48	
17	8	COVER \ COPERTURA #185 Sp.8		Fe 510	1.2	8.6	
16	8	PIPE \ TUBO #158.3/140x128		Fe 510	5.7	45.6	
15	24	COPPER LOCKWASHER \ PASTIGLIA #7.5 H=3		RAMB			
14	8	BRONZE RING GUIDE \ PASTIGLIA BRONZINA GUIDA STELO		Br, B14 Contr.	1	8	TOMMECF002
13	8	INTERNAL SHAFT \ ASTA INTERNA		C43 Chrom.	37.2	297.6	TOMMECF002
12	8	POSTERIOR O-RING \ O-RING PISTONE POSTERIORE		C40	10	80	TOMMECF002
11	8	POSTERIOR O-RING \ O-RING PISTONE POSTERIORE		C43 Chrom.	33.1	264.8	TOMMECF002
10	8	POSTERIOR PISTON \ PISTONE POSTERIORE		Fe 510+B14	15.7	125.6	TOMMECF002
09	8	FLANGE \ FLANGIA		Fe 510	9	72	TOMMECF003
08	8	POSTERIOR CYLINDER BODY \ TUBO CILINDRO POSTERIORE		Fe 510 C	44	352	TOMMECF003
07	8	INTERMEDIATE CYLINDER BODY \ TUBO CILINDRO INTERMEDIO		Fe 510 C Dism.	41.6	332.8	TOMMECF003
06	8	INTERMEDIATE FLANGE \ FONDELLO INTERMEDIO		Fe 510	88.4	707.2	TOMMECF003
05	8	ANTERIOR CYLINDER BODY \ TUBO CILINDRO ANTERIORE		Fe 510 C	214.5	1716	TOMMECF003
04	8	ANTERIOR PISTON \ PISTONE ANTERIORE		Fe 510+B14	89.7	717.6	TOMMECF003
03	16	BRONZE TAP \ LINGHETTA		BRONZ A SLDR	2.7	43.2	TOMMECF002
02	8	ANTERIOR ENHANCED ROD \ STELO CILINDRO ANTERIORE		C40 Chrom.	184.4	1315.2	TOMMECF002
01	8	FRONT FLANGE \ FLANGIA ANTERIORE		Fe 510+B14	157	1256	TOMMECF002
POS.	QTY	DESCRIPTION		COO.	MATERIAL	WEIGHT	NOTES
2	10/09/02	GENERAL REVISION-POS. 2,13,16,17,18		MENCHINI	GERBANO		BOMASSI
1	03/07/02	GENERAL REVISION-POS. 108, 116		MENCHINI	CUCCARDI		BOMASSI
0	27/06/02	FIRST ISSUED		MENCHINI	CUCCARDI		BOMASSI
REV.	DATE	REV. OBJECT	DRW	CHECKED	APPROVED		

DEAL STRADDLE CARRIER
 SC 720 - 32
 EQUALISING HYDRAULIC JACKS
 JACKS #400/#280+#220/#150 STROKE ±150

Scale: 1:2 Sheet: 1 of 1

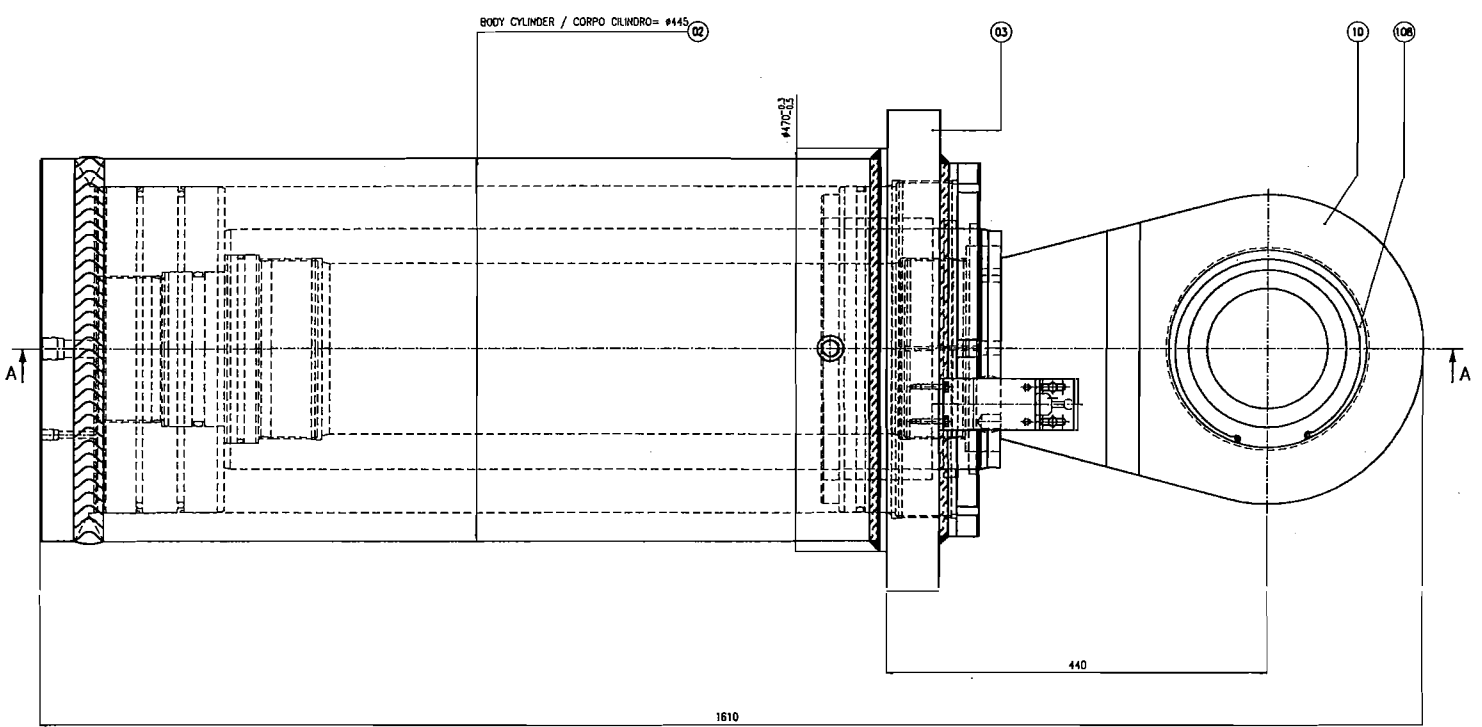
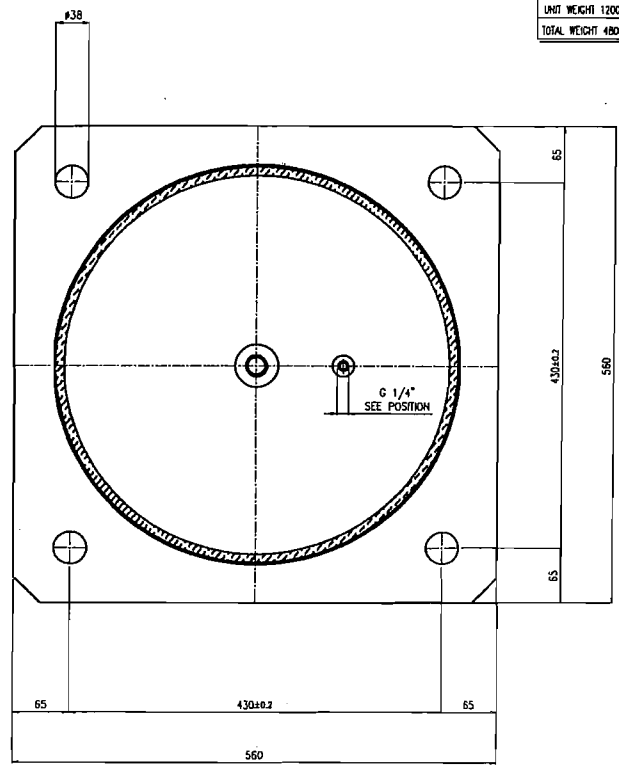
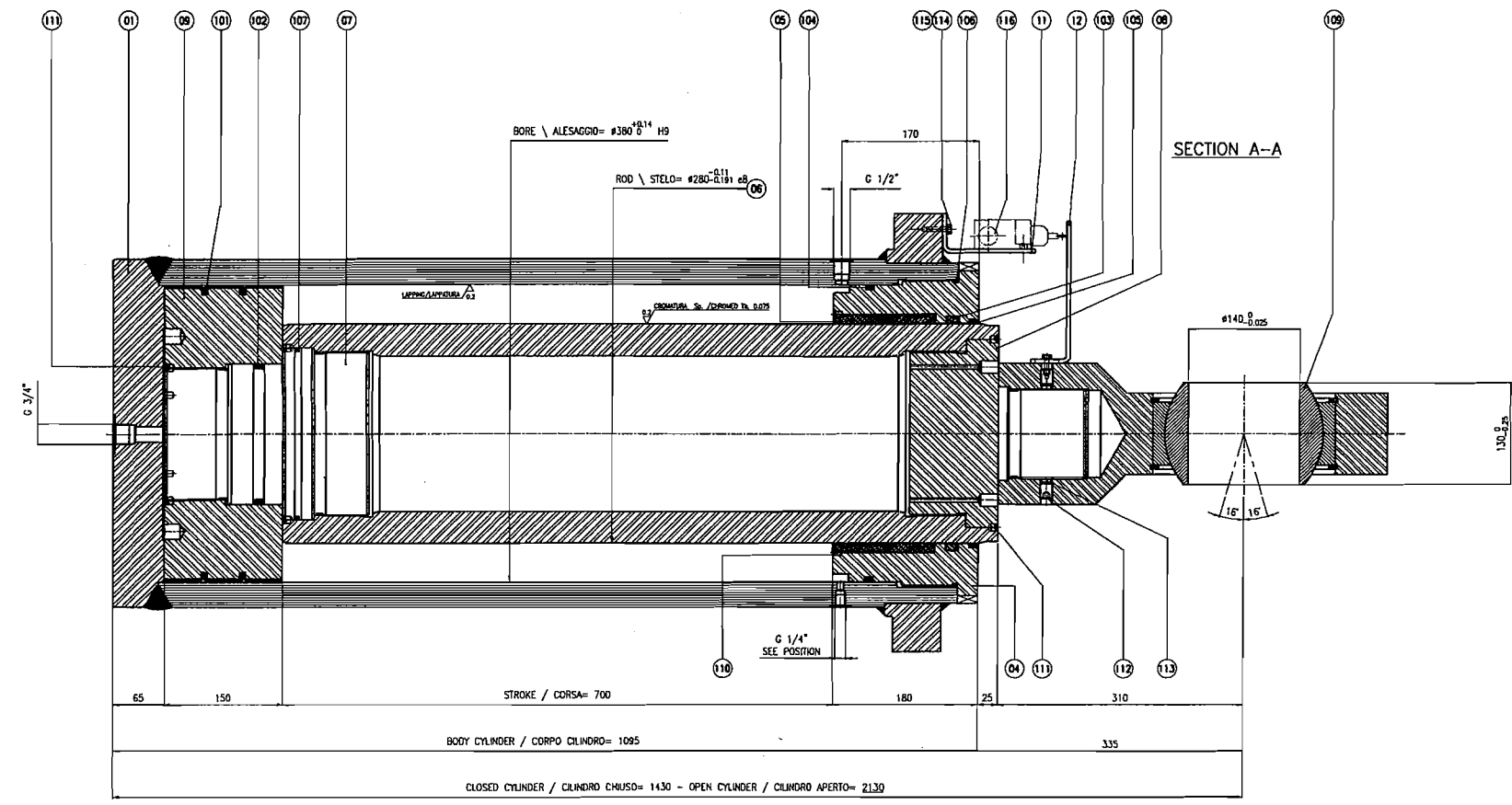
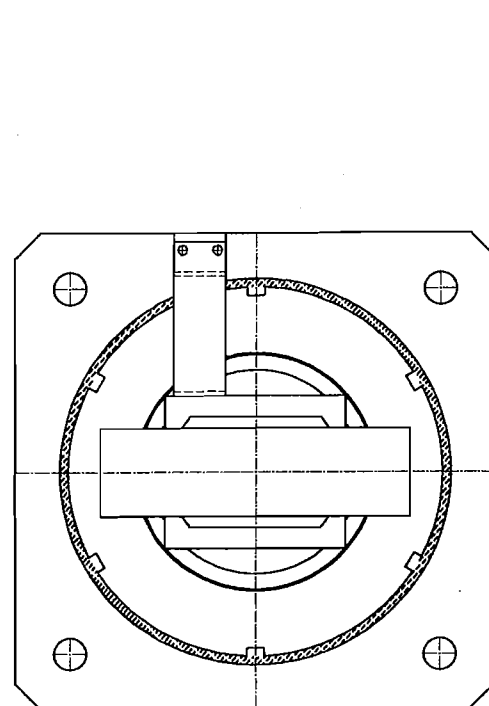
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KIEWIT / FCI / MANSON JV

126	8	GRIND ANCH 30-10-10 L34		0.1	0.8		RODOFLEX
125	3	ENCODER					ARZEA
124	24	SCREW \ VITE M3x12 UNI 5931		B.8			COMA.
123	24	SCREW \ VITE TCI M3x16 UNI 5831		B.8			COMA.

Technical Data \ Dati Tecnici	
Pushing / Reamting force:	3000 KN
Main Bore:	ø380 mm H9
Rod:	ø280 mm e8
Stroke:	700 mm
Working pressure:	26.5 MPa
Test pressure:	30 MPa
Pushing Section:	1133.54 cm ²
Reamting Section:	518.36 cm ²
Ratio PS / RS:	1 : 2.18

MARK F400	
NR. PECE	4
UNIT WEIGHT	1200 Kg
TOTAL WEIGHT	4800 Kg



FINAL PAINTING :
ENAMEL RED RAL 3000

TOTAL WEIGHT = 4554.2 Kg

POS.	QTY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	QTY	NOTES
116	4	LIMIT-SWITCH 7722		RAVASI	0.2	0.8	
115	16	WASHER \ RONDELLA 6.4x12.5 UNI 6592					COMM.
114	16	SCREW \ VITE TE M6x20 UNI 5839			8.8		COMM.
113	20	PASTIGLIA #12x4		RAMB			COMM.
112	8	SCREW \ GRANO STEI M16x20 UNI 5923			8.8		COMM.
111	24	SCREW \ GRANO STEI M16x12 UNI 5923			8.8		COMM.
110	12	SCREW \ GRANO STEI M8x12 UNI 5923			8.8		COMM.
109	4	SPHERICAL BEARING \ SNODO SFERICO		GE-140-70-2RS			ELICES
108	8	SEALER RING \ ANELLO SECCER		AM 7437-230			COMM.
107	4	TAMPON O-RING \ O-RING PER TAMPONE		OR 370+BK			POLYPAC
106	4	EXTREMITY O-RING \ O-RING PER TESTAMA		OR 384			POLYPAC
105	4	WIPER SEAL \ MASCHETTORE		WIF-2800			POLYPAC
104	4	EXTREMITY O-RING \ O-RING D'ESTREMITA'		OR 458+BK			POLYPAC
103	4	ROD SEAL \ GUARNIZIONE STELO		CSC-300280			MROS
102	4	PISTON O-RING \ O-RING PER PISTONE		OR 628+2BR			POLYPAC
101	8	PISTON SEAL \ GUARNIZIONE PISTONE		E/OR 3800 B			POLYPAC
12	4	ANGULAR \ ANGOLORE		Fe 360	0.5	2	T06MEANF004
11	4	ANGULAR OF SUPPORT \ ANGOLORE DI SUPPORTO		Fe 360	0.35	1.4	T06MEANF004
10	4	ANTERIOR CYLINDER ATTACK/ATTACCO ANTERIORE		Fe 510	92.2	368.8	T06MEANF004
09	4	PISTON \ PISTONE		Fe 510 B	103.7	414.8	T06MEANF004
08	4	FRONT TAMPON \ TAMPONE ANTERIORE		C40	41.8	167.2	T06MEANF004
07	4	TAMPON SUPPORT PISTON \ TAMPONE FONDA PISTONE		C40	58.3	233.2	T06MEANF004
06	4	CHROMED ROD \ STELO CROMATO		Fe 510	206.2	824.8	T06MEANF004
05	4	BRONZE RING GUIDE ROD/BRONZINA GUIDA STELO		Br. B14 Contr.	12.7	50.8	T06MEANF004
04	4	FRONT EXTREMITY \ ESTREMITA' ANTERIORE		Fe 510	68	272	T06MEANF004
03	4	FRONT FLANGE \ FLANGIA ANTERIORE		Fe 510	159	636	T06MEANF004
02	4	CYLINDER BODY \ TUBO CARICA		Fe 510 C	323	1292	T06MEANF004
01	4	REAR CLOSING FLANGE \ FONDELLO		Fe 510	72.8	291.2	T06MEANF004

REV.	DATE	REV. DESC.	DRAWN	DESIGN	APPROVED
0	26/06/02	FIRST ISSUED	MECHNER	S. GERMANO	FRS

DEAL STRADDLE CARRIER
SC 720 - 32

SUPPORT JACKS FOR WHEELS GROUP
HYDRAULIC JACKS ø380/ø280/STROKE 700

Scale: 1:3 Sheet 1 of 1

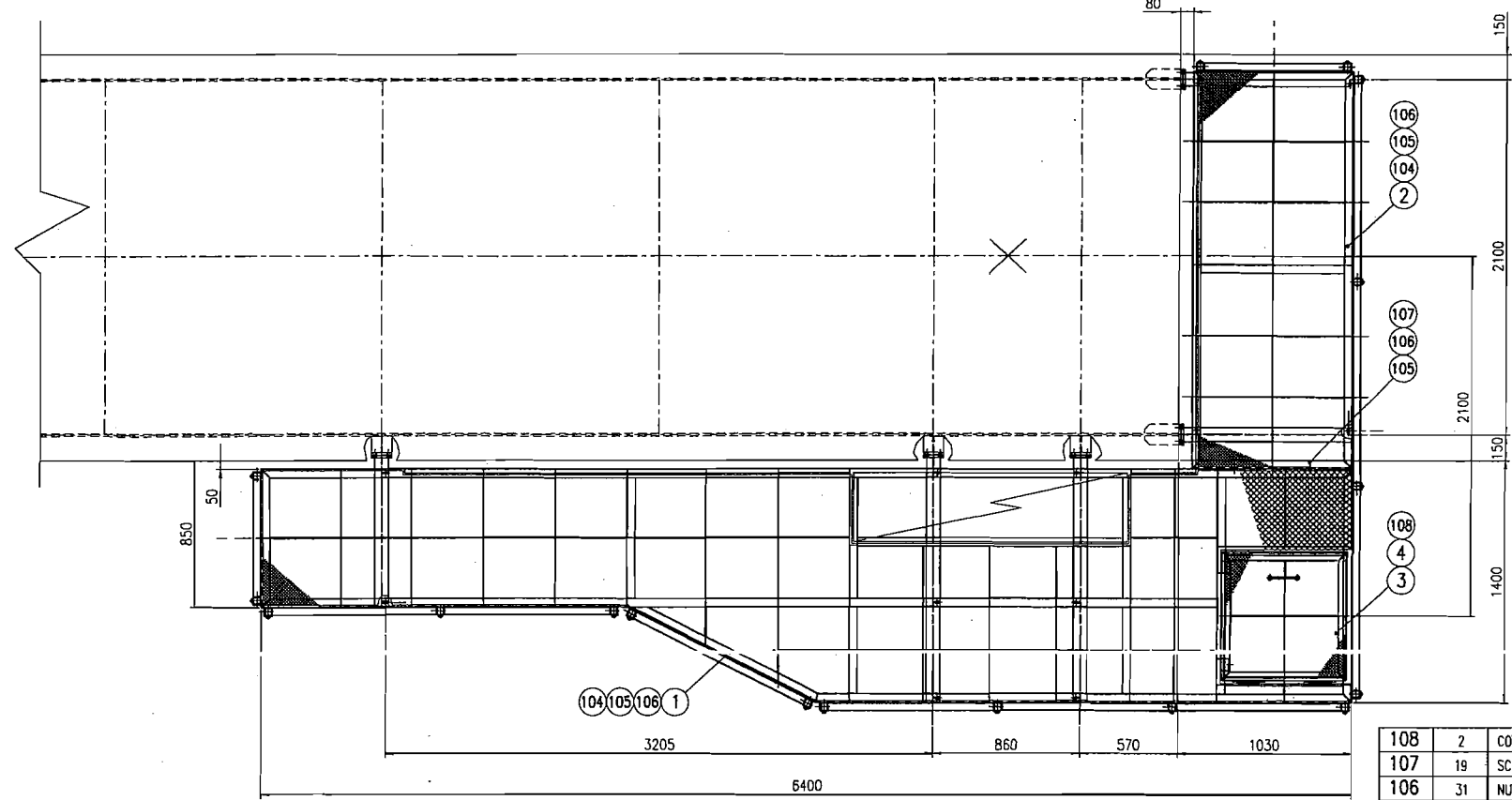
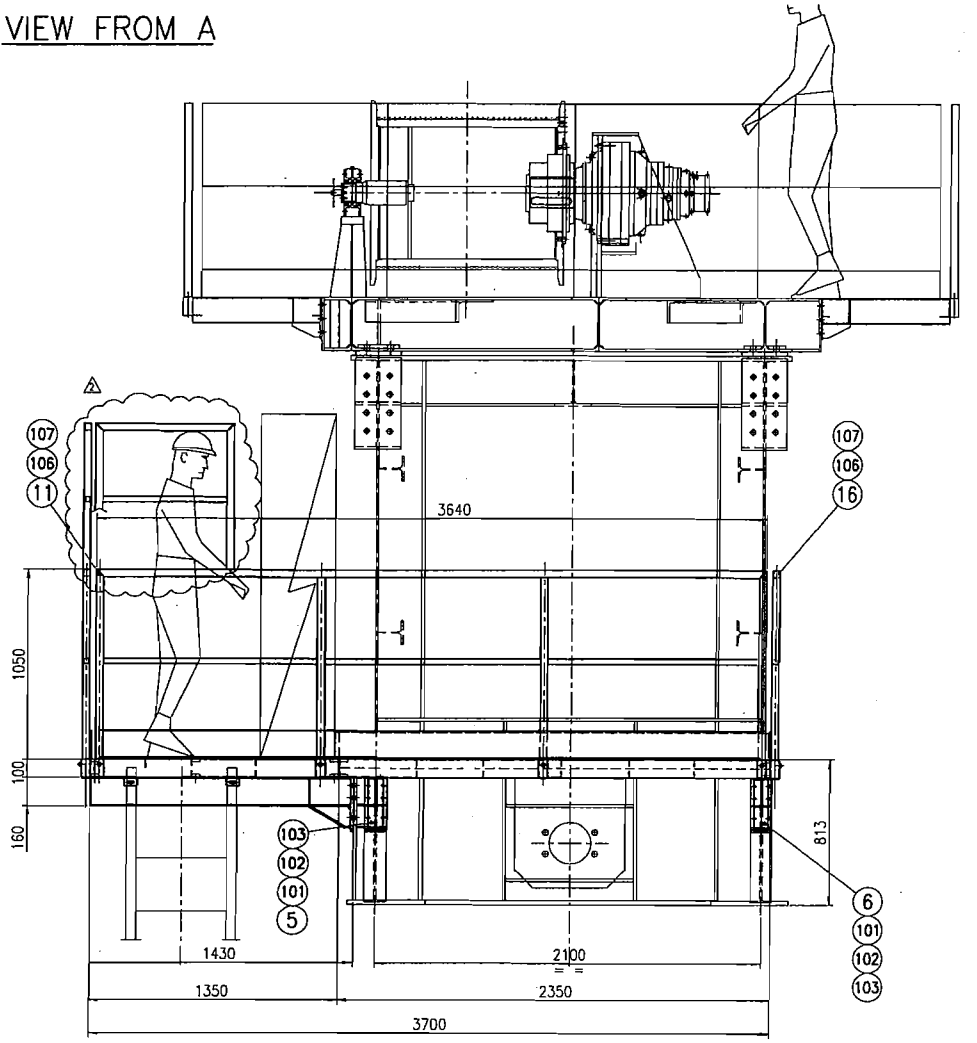
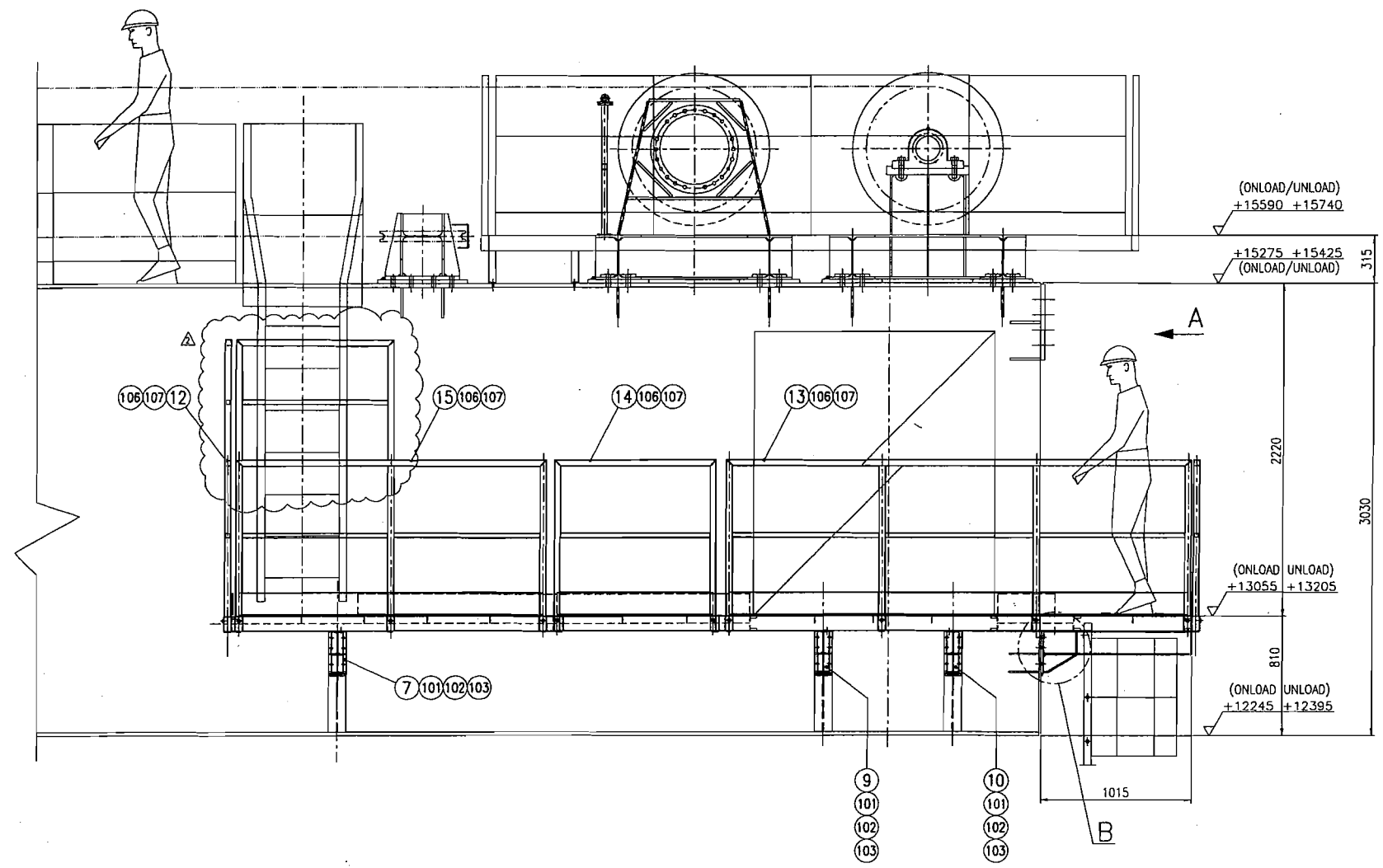
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DATE: 26/06/02

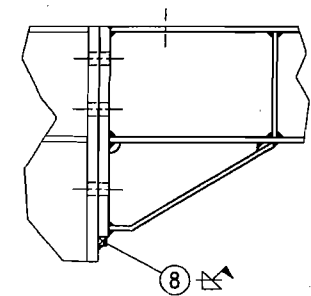
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KIEWIT / FCI / MANSON JV

VIEW FROM A



DETAIL B (Typical)
scale 1:5



TOTAL WEIGHT = 720 Kg

POS.	Q.TY	DESCRIPTION	MARK	MATERIAL	UNIT	WEIGHT	TOT.	NOTES
16	1	GUARD RAIL 910x1150	H206	*	15.5	15.5		
15	1	GUARD RAIL 2070x1950	H205	*	41.4	41.4		
14	1	GUARD RAIL 1190x1150	H204	*	18	18		
13	1	GUARD RAIL 3100x1150	H203	*	42.5	42.5		
12	1	GUARD RAIL 760x1950	H202	*	24.4	24.4		
11	1	GUARD RAIL 3640x1150	H201	*	47	47		
10	1	BRACKET L=1430 IPE 160 LEFT PIECE	H110	*	29	29		
9	1	BRACKET L=1430 IPE 160 RIGHT PIECE	H109	*	29	29		
8	5	SMALL BLOCK 12x12x120	H108	*	0.14	0.7		
7	1	BRACKET L=880 IPE 160	H107	*	20.5	20.5		
6	1	BRACKET L=1015 IPE 160 LEFT PIECE	H106	*	22.5	22.5		
5	1	BRACKET L=1015 IPE 160 RIGHT PIECE	H105	*	22.5	22.5		
4	2	PIN #10 L=132	H104	*	0.2	0.4		
3	1	TRAP DOOR 740x740	H103	*	21	21		
2	1	WALKWAY 2350x950	H102	*	97	97		
1	1	WALKWAY 6400x1350	H101	*	286	286		

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2	27/08/02	REVISED WHERE INDICATED	S. GERMANO	S. GERMANO	RIBIS
1	29/07/02	REVISED WHERE INDICATED	S. GERMANO	S. GERMANO	RIBIS
0	05-07-02	FIRST ISSUE	EsseTre	G.Cucchiara	G.Ribis

DEAL

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REFERENCE: STRADDLE CARRIER SC 720 - 32

OBJECT: MAIN GIRDER

TITLE: FRONT SIDE WALKWAYS GENERAL ASSEMBLY

Scale: 1:20 Sheet 1 of 1

File: T06DMADH001_2.DWG Formal A1

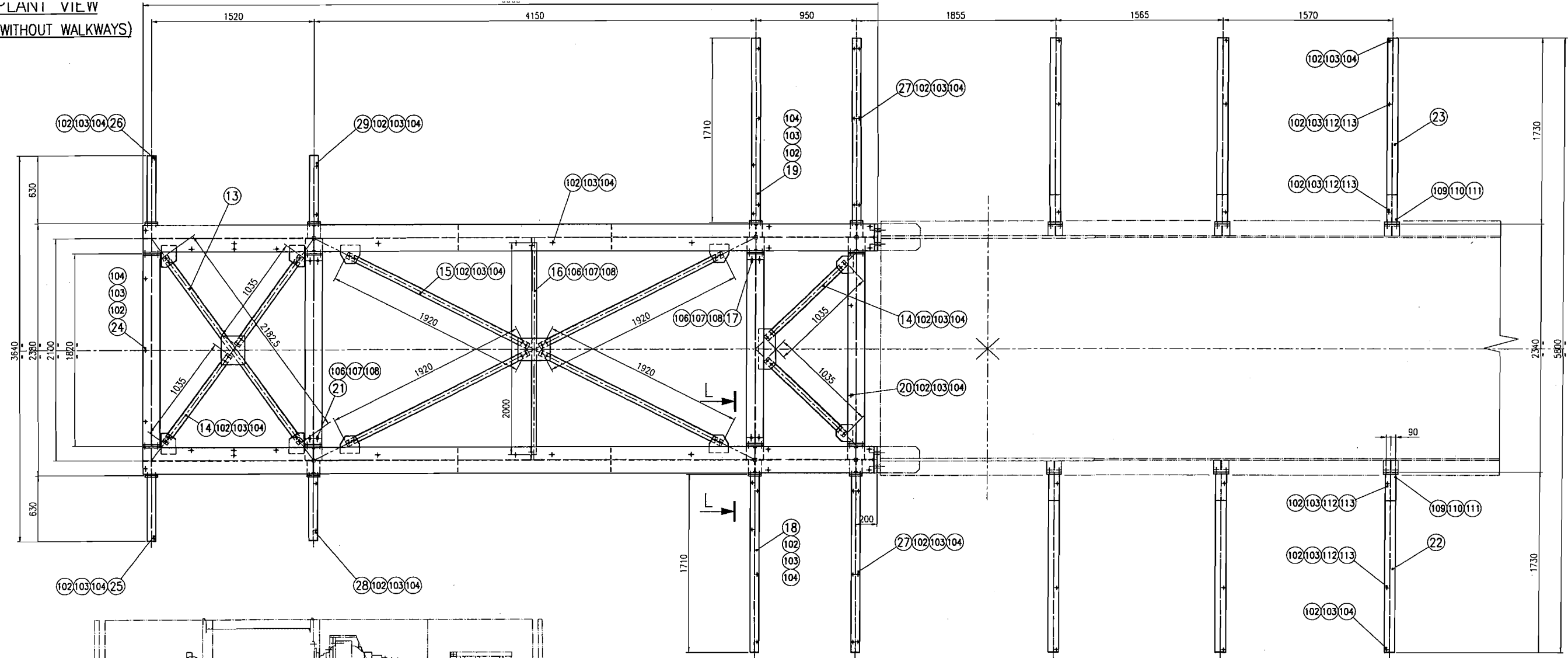
Job No. [6]0[0]3[1]1 Sub.J.Nr. [0]6[0]7[8]7

Feb. Nr. [T]06 D M A D H - 0012

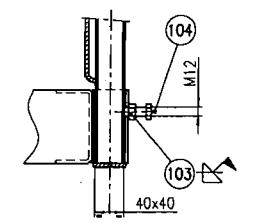
108	2	COTTER PIN #3.2x20 UNI 1336	*	*	*	*	*
107	19	SCREW M12x30 UNI 5739	*	8.8	*	*	*
106	31	NUT M12 UNI 5588	*	6S	*	*	*
105	14	WASHER 13 UNI 6592	*	*	*	*	*
104	12	SCREW M12x35 UNI 5739	*	8.8	*	*	*
103	30	NUT M16 UNI 5588	*	6S	*	*	*
102	30	WASHER 17 UNI 6592	*	*	*	*	*
101	30	SCREW M16x50 UNI 5739	*	8.8	*	*	*

CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT

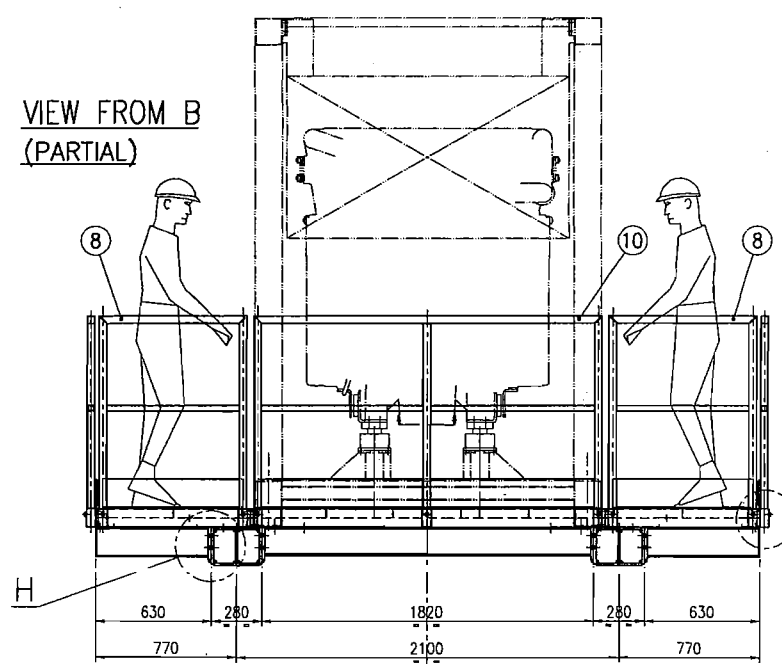
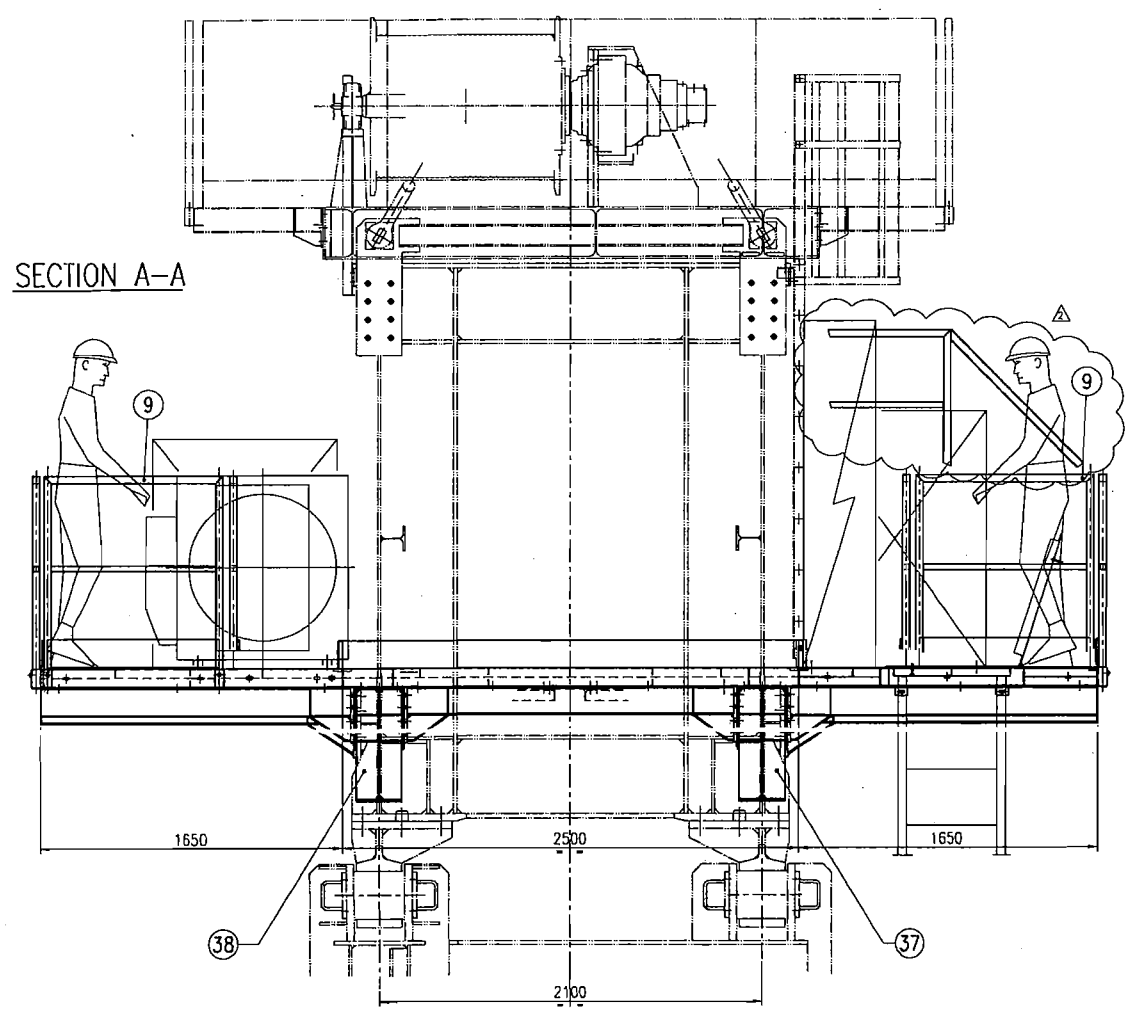
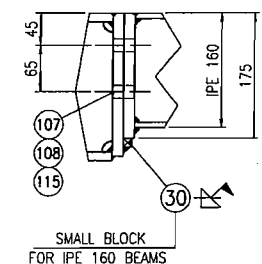
PLAN VIEW
(WITHOUT WALKWAYS)



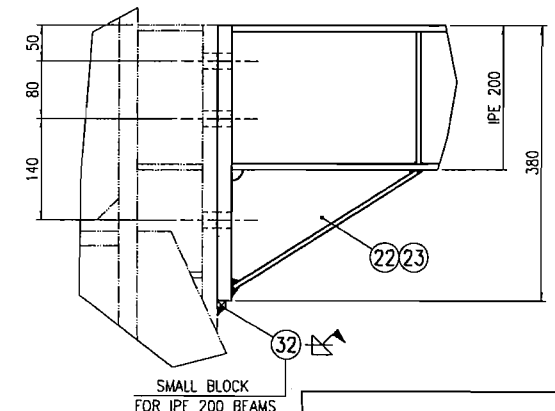
DET. "G"-TYPICAL
SC. 1:5



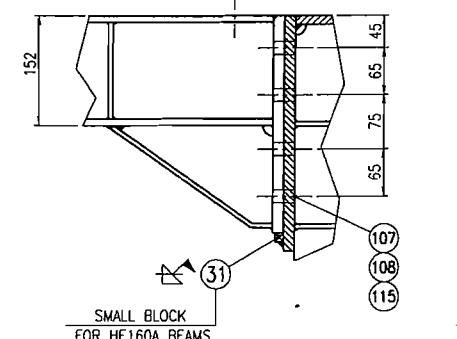
DET. "H"-TYPICAL
SC. 1:5



SECTION M-M (PARTIAL)
SC. 1:5



SECTION L-L (PARTIAL)
TURNED OF 90°
SC. 1:5



DEAL
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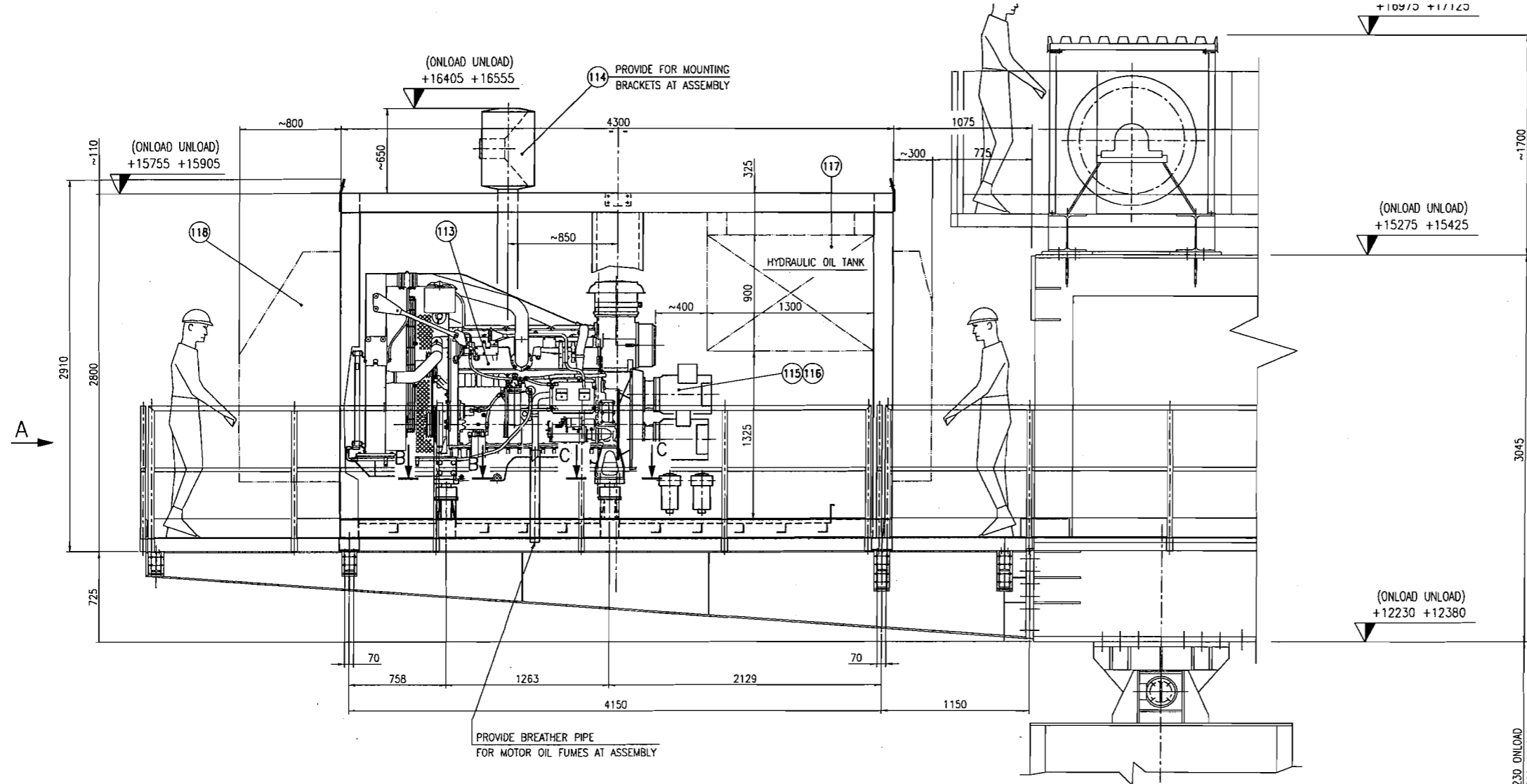
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AUTHORIZATION

CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT

2	28/08/02	REVISED WHERE INDICATED	S. GERMANO	S. GERMANO	RIBIS
1	29/07/02	REVISED WHERE INDICATED	S. GERMANO	S. GERMANO	RIBIS
0	23-07-02	FIRST ISSUE	EsseTre	G.Cucchiario	G.Ribis

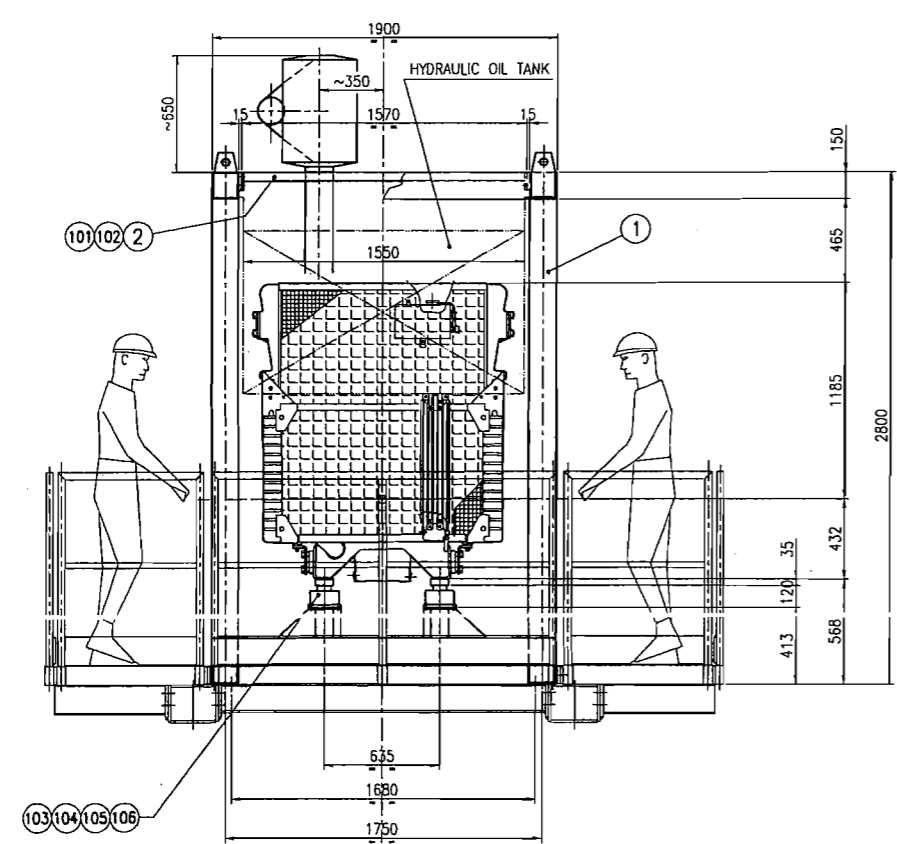
REFERENCE:	STRADDLE CARRIER SC 720 - 32	
OBJECT:	MAIN GIRDER	
TITLE:	REAR SINE POWER WALKWAYS GENERAL ASSMPLY	
Scale:	1:20	Sheet 2 of 2
Form:	A1	
Job No.:	-600311	Sub.J.Mr. -080787
File:	T06DMADH-0022	

No.	Date	Description	Author	Reviewer	Checked
2	28/08/02	REVISED WHERE INDICATED	S. GERMANO	S. GERMANO	RIBIS
1	29/07/02	REVISED WHERE INDICATED	S. GERMANO	S. GERMANO	RIBIS
0	23-07-02	FIRST ISSUE	EsseTre	G.Cucchiario	G.Ribis

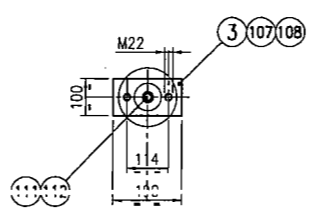


TOTAL WEIGHT = 6650 Kg

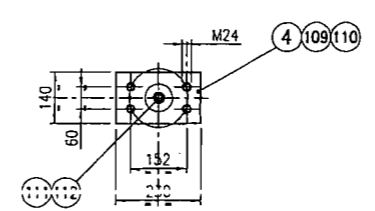
VIEW FROM A



SECTION B-B
scale 1:10



SECTION C-C
scale 1:10



POS.	Q.TY	DESCRIPTION	MARK	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
118	1	SOUNDPROOF PANELS CABIN			500	500	
117	1	HYDRAULIC OIL TANK			2000	2000	
116	3	HYDRAULIC PUMPS			100	300	
115	1	PUMP DRIVERS "BREVINI" TYPE BZ3-470			200	200	
114	1	EXHAUST SILENCER "COWL" TYPE TS60PR			45	45	
113	1	DIESEL MOTOR "CATERPILLAR" TYPE C-15 ATAAC			2250	2250	
112	4	WASHER 19 "SCHNORR"					
111	4	SCREW TC M18x50 UNI 5931		8.8			
110	8	WASHER 25 UNI 6592					
109	8	SCREW M24x50 UNI 5739		8.8			
108	4	WASHER 23 UNI 6592					
107	4	SCREW M22x50 UNI 5739		8.8			
106	16	NUT M14 UNI 5588		6S			
105	32	WASHER 15 UNI 6592					
104	16	SCREW M14x50 UNI 5737		8.8			
103	4	PUFFER "VIBROSTOP" TYPE AA/800/N			10	40	
102	8	WASHER 13 UNI 6592					
101	8	SCREW M12x25 UNI 5739		8.8			
4	2	PLATE 230x140x35		H704	8.8	17.6	
3	2	PLATE 190x100x35		H703	5.2	10.4	
2	1	BEAM 1570x100x50		H702	17.5	17.5	
1	1	FRAME 4300x1900x2800		H701	1255	1255	
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED		
D	23-07-02	FIRST ISSUE	EsseTre	CUCCHIARO	RIBIS		

DEAL

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REFERENCE: STRADDLE CARRIER SC 720 - 32

OBJECT: MAIN GIRDER

TITLE: POWER GROUP - GENERAL ASSEMBLY

Scale: 1:20 Sheet 1 of 1

File: T06DMADH003.DWG Format: A1

Job No: 600311 Sub.J.Nr: 060787

Rev. 1

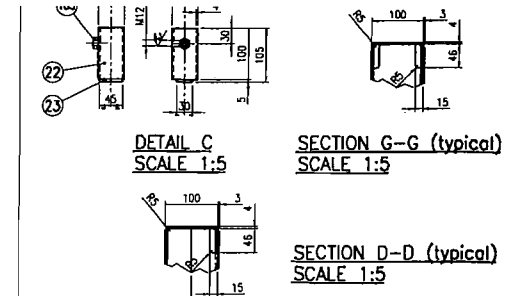
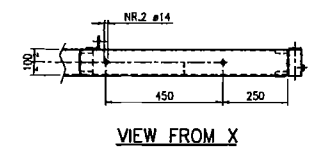
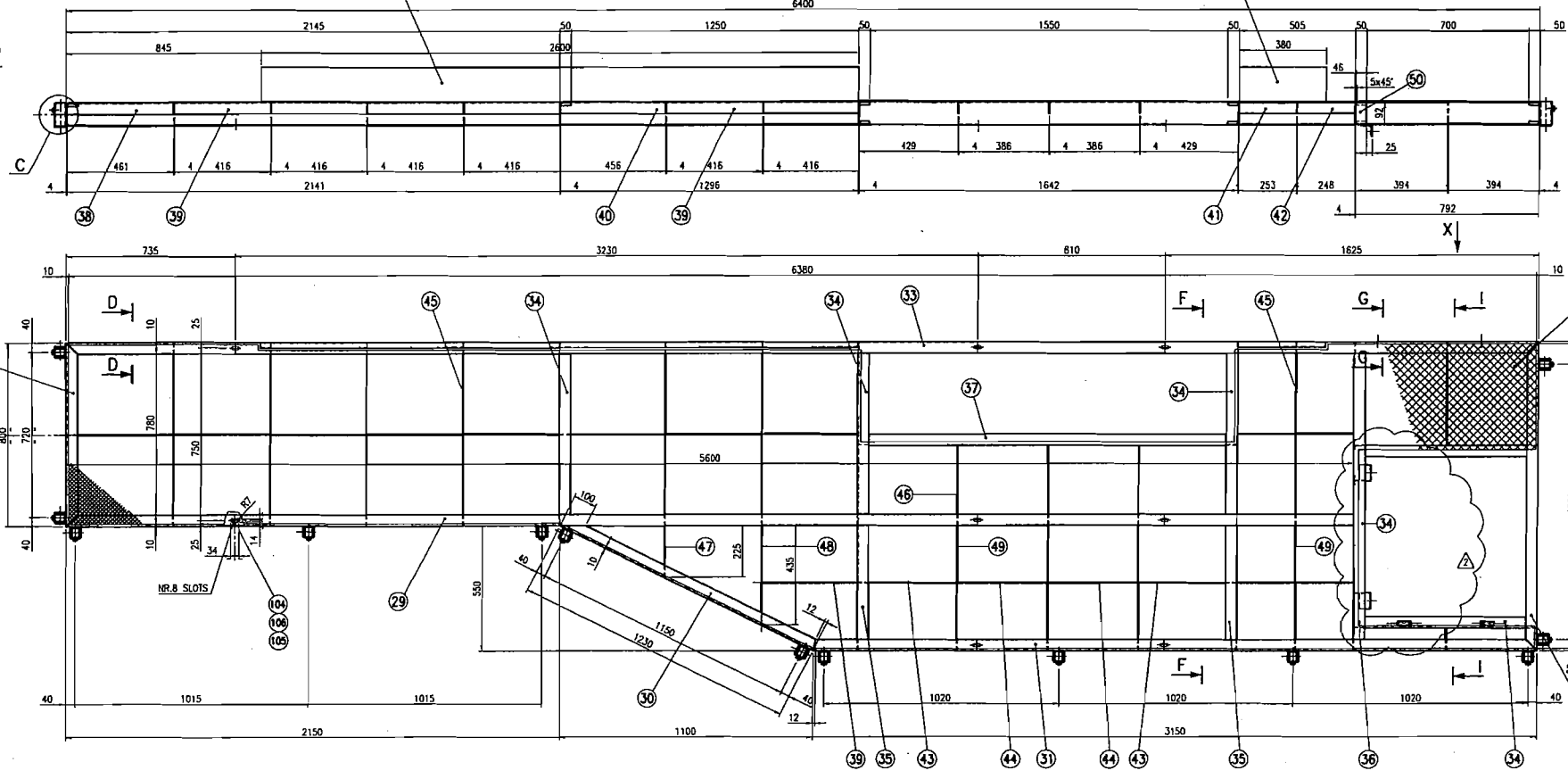
Feb. Nr. Dep. Doc. Type Part. Nr. Rev.

T 0 6 D M A D H - 0 0 3 0

CLIENT: KIEWIT / FCI / MANSON JV

PROJECT: SKYWAY BRIDGE PROJECT

UNIT WEIGHT 286 Kg
TOTAL WEIGHT 286 Kg

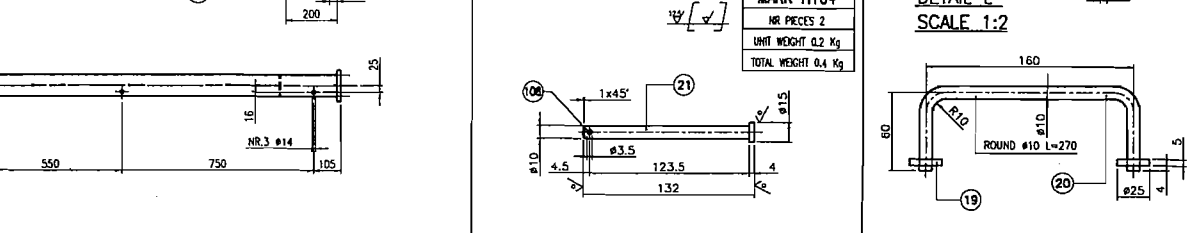
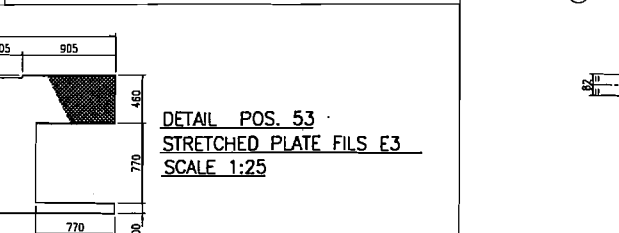
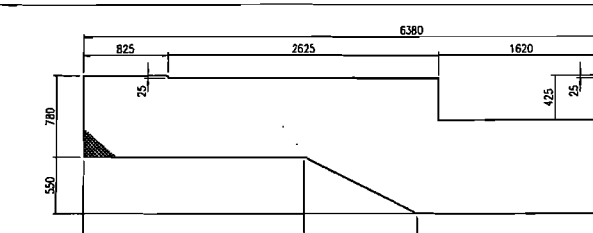
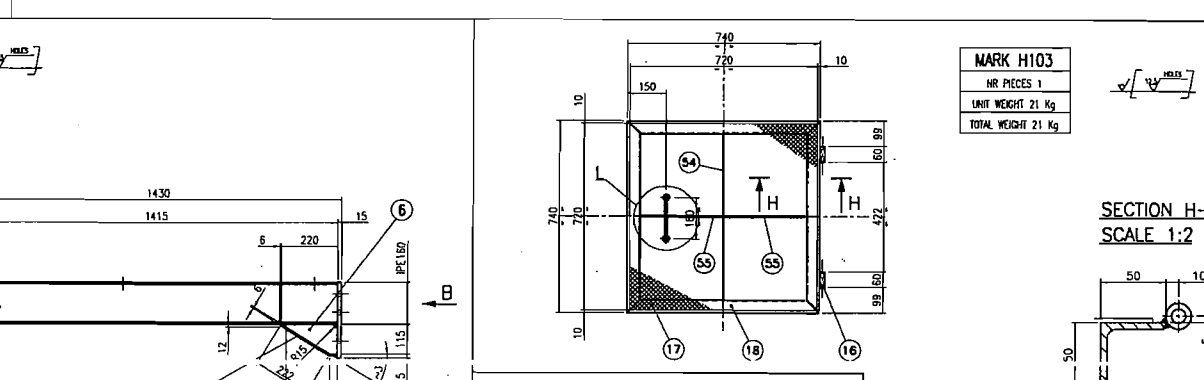
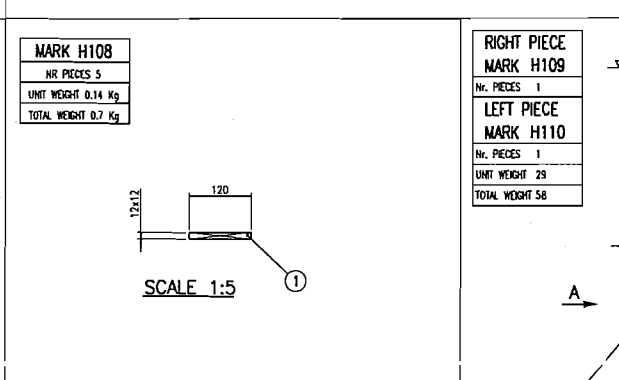
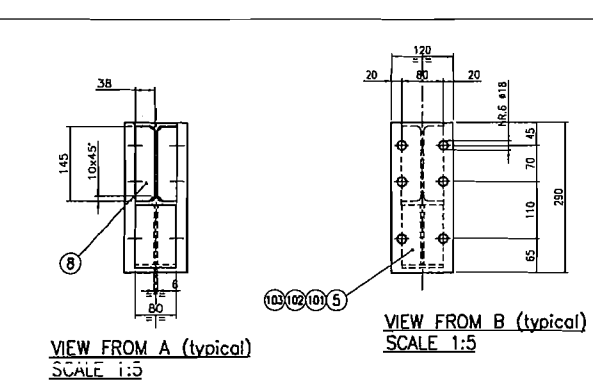
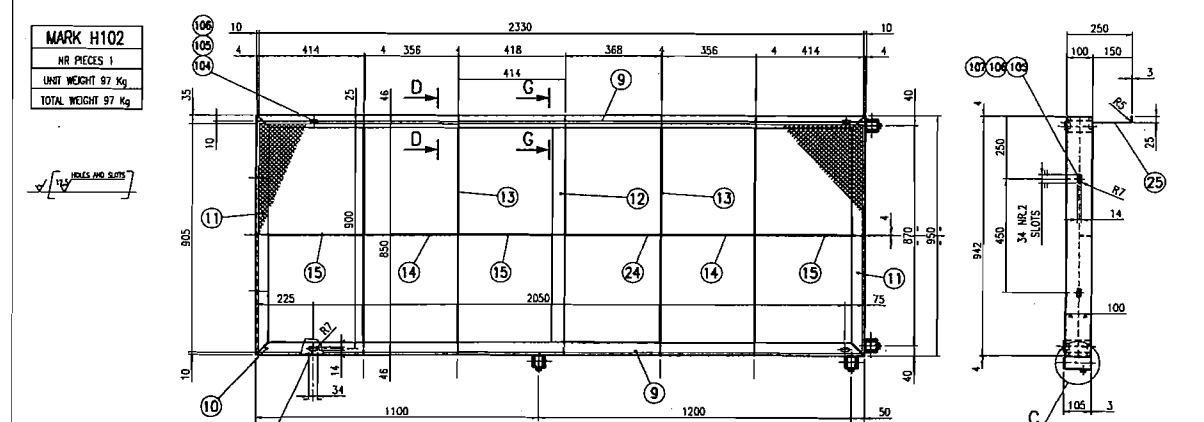
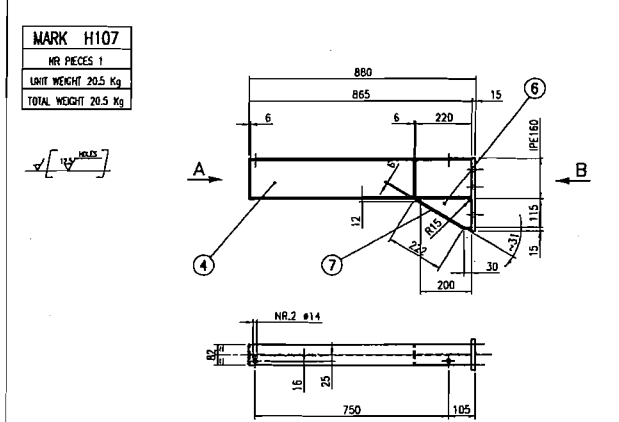
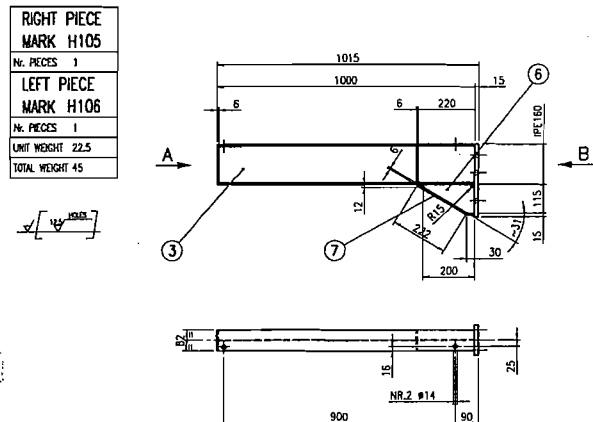


TOTAL WEIGHT = 540 Kg

FINAL PAINTING : ENAMEL YELLOW RAL 1007
WELDING PROCEDURES : The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

108	2	COTTER PIN #3.2x20 UNI 1336			
107	19	SCREW M12x30 UNI 5739	8.8		
106	31	NUT M12 UNI 5588	8S		
105	14	WASHER 13 UNI 6592			
104	12	SCREW M12x35 UNI 5739	8.8		
103	30	NUT M16 UNI 5588	8S		
102	30	WASHER 17 UNI 6592			
101	30	SCREW M16x50 UNI 5739	8.8		

56	1	PLATE 50x4 L=446 SHAPED	Fe 360-B	0.6	0.6
55	2	PLATE 50x4 L=318	Fe 360-B	0.5	1
54	1	PLATE 50x4 L=640	Fe 360-B	1	1
53	1	STRET. PLATE FLS E3 Th.3 630x1330 SHAP	Fe 360-B	85	85
52	1	PLATE 50x4 L=96 SHAPED	Fe 360-B	0.15	0.15
51	2	ANGLE 50x50x5 L=70	Fe 360-B	0.26	0.52
50	2	PLATE 40x4 L=92 SHAPED	Fe 360-B	0.1	0.2
49	4	PLATE 50x4 L=546 SHAPED	Fe 360-B	0.85	3.4
48	1	PLATE 50x4 L=435 SHAPED	Fe 360-B	0.7	0.7
47	1	PLATE 50x4 L=225 SHAPED	Fe 360-B	0.4	0.4
46	3	PLATE 50x4 L=346 SHAPED	Fe 360-B	0.5	1.5
45	7	PLATE 50x4 L=792 SHAPED	Fe 360-B	1.2	8.4
44	2	PLATE 50x4 L=386	Fe 360-B	0.6	1.2
43	2	PLATE 50x4 L=429 SHAPED	Fe 360-B	0.7	1.4
42	2	PLATE 50x4 L=248	Fe 360-B	0.4	0.8
41	2	PLATE 50x4 L=253	Fe 360-B	0.4	0.8
40	1	PLATE 50x4 L=456 SHAPED	Fe 360-B	0.7	0.7
39	7	PLATE 50x4 L=416	Fe 360-B	0.65	4.6
38	1	PLATE 50x4 L=461 SHAPED	Fe 360-B	0.7	0.7
37	1	PLATE 186x4 L=1642 SHAPED BENT	Fe 360-B	9.5	9.5
36	1	PLATE 186x4 L=1342 SHAPED BENT	Fe 360-B	7.8	7.8
35	2	PLATE 186x4 L=546 SHAPED BENT	Fe 360-B	3	6
34	5	PLATE 186x4 L=792 SHAPED BENT	Fe 360-B	4.6	23
33	1	PLATE 186x4 L=640 SHAPED BENT	Fe 360-B	3.7	3.7
32	1	PLATE 186x4 L=1250 SHAPED BENT	Fe 360-B	8	8
31	1	PLATE 186x4 L=3150 SHAPED BENT	Fe 360-B	18.3	18.3
30	1	PLATE 186x4 L=1230 SHAPED BENT	Fe 360-B	7	7
29	1	PLATE 186x4 L=5600 SHAPED BENT	Fe 360-B	32.4	32.4
28	1	PLATE 186x4 L=800 SHAPED BENT	Fe 360-B	4.6	4.6
27	1	PLATE 170x3 L=380 SHAPED BENT	Fe 360-B	1.5	1.5
26	1	PLATE 170x3 L=2600 SHAPED BENT	Fe 360-B	10.4	10.4
25	1	PLATE 170x3 L=2350 SHAPED BENT	Fe 360-B	9.4	9.4
24	1	PLATE 50x4 L=388 SHAPED	Fe 360-B	0.6	0.6
23	17	PLATE 30x5 L=45	Fe 360-B	0.05	0.85
22	17	SQUARE PIPE 50x4 L=100	Fe 360-B	0.8	10.2
21	2	ROUND #15 L=132	Fe 360-B	0.2	0.4
20	1	ROUND #10 L=270 BENT	Fe 360-B	0.2	0.2
19	2	ROUND #25 L=4	Fe 360-B	0.1	0.2
18	4	ANGLE 50x50x5 L=740 SHAPED	Fe 360-B	2.6	10.4
17	1	STRETCHED PLATE FLS E3 Th.3 720x720	Fe 360-B	8.1	16.2
16	4	PIPE #20x4.5 L=60	Fe 360-B	0.1	0.4
15	3	PLATE 50x4 L=414 SHAPED	Fe 360-B	0.7	2.1
14	2	PLATE 50x4 L=356	Fe 360-B	0.6	1.2
13	4	PLATE 50x4 L=942 SHAPED	Fe 360-B	1.5	6
12	1	PLATE 186x4 L=942 SHAPED BENT	Fe 360-B	5.5	5.5
11	2	PLATE 186x4 L=950 SHAPED BENT	Fe 360-B	5.5	11
10	1	STRETCHED PLATE FLS E3 Th.3 2330x905	Fe 360-B	31.6	31.6
9	2	PLATE 186x4 L=2350 SHAPED BENT	Fe 360-B	13.6	27.2
8	20	PLATE 145x6 L=385 SHAPED	Fe 360-B	0.3	9.6
7	5	PLATE 80x6 L=250 BENT	Fe 360-B	0.9	4.5
6	5	PLATE 115x6 L=200 SHAPED	Fe 360-B	0.6	3
5	5	PLATE 120x15 L=290	Fe 360-B	4.1	20.5
4	1	BEAM IPE 160 L=865	Fe 430-B	13.7	13.7
3	2	BEAM IPE 160 L=1000	Fe 430-B	15.8	31.6
2	2	BEAM IPE 160 L=1415	Fe 430-B	22.4	44.8
1	5	SQUARE 12 L=120	Fe 360-B	0.14	0.7



DETAIL POS. 53
STRETCHED PLATE FLS E3
SCALE 1:25

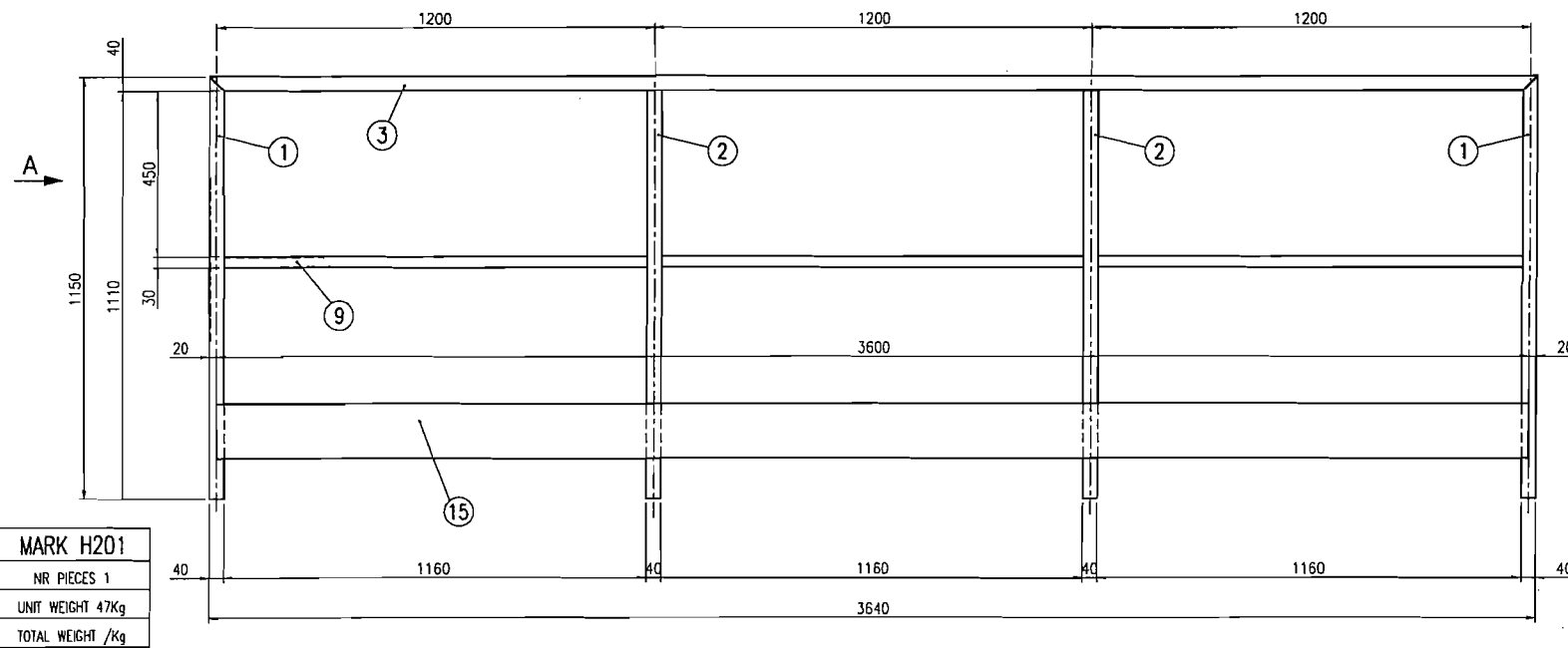
DEAL

STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER
FRONT SIDE WALKWAYS - DETAILS

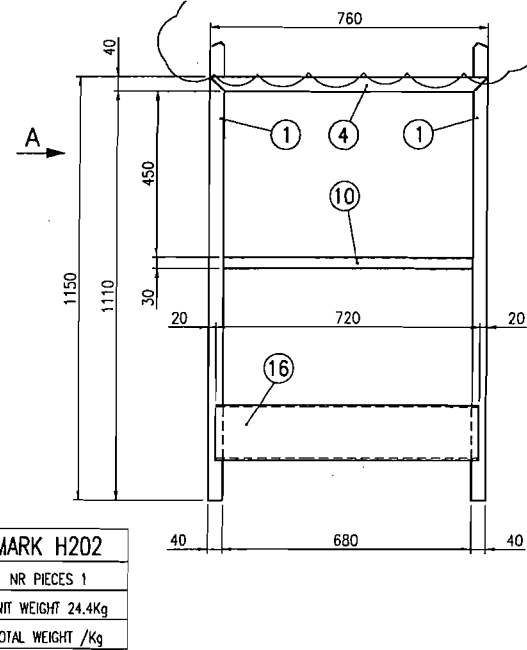
SCALE 1:10

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KIEWIT / FCI / MANSON JV



MARK H201
 NR PIECES 1
 UNIT WEIGHT 47Kg
 TOTAL WEIGHT /Kg



MARK H202
 NR PIECES 1
 UNIT WEIGHT 24.4Kg
 TOTAL WEIGHT /Kg

WELDING PROCEDURES :
 The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

DWG size A1

WELDS (UNI 1310)
 Where not otherwise indicated $\phi=0.7$ of minimum thickness to be connected
 (Continuous welds)
 Edge preparation for welding in accordance to UNI 11001

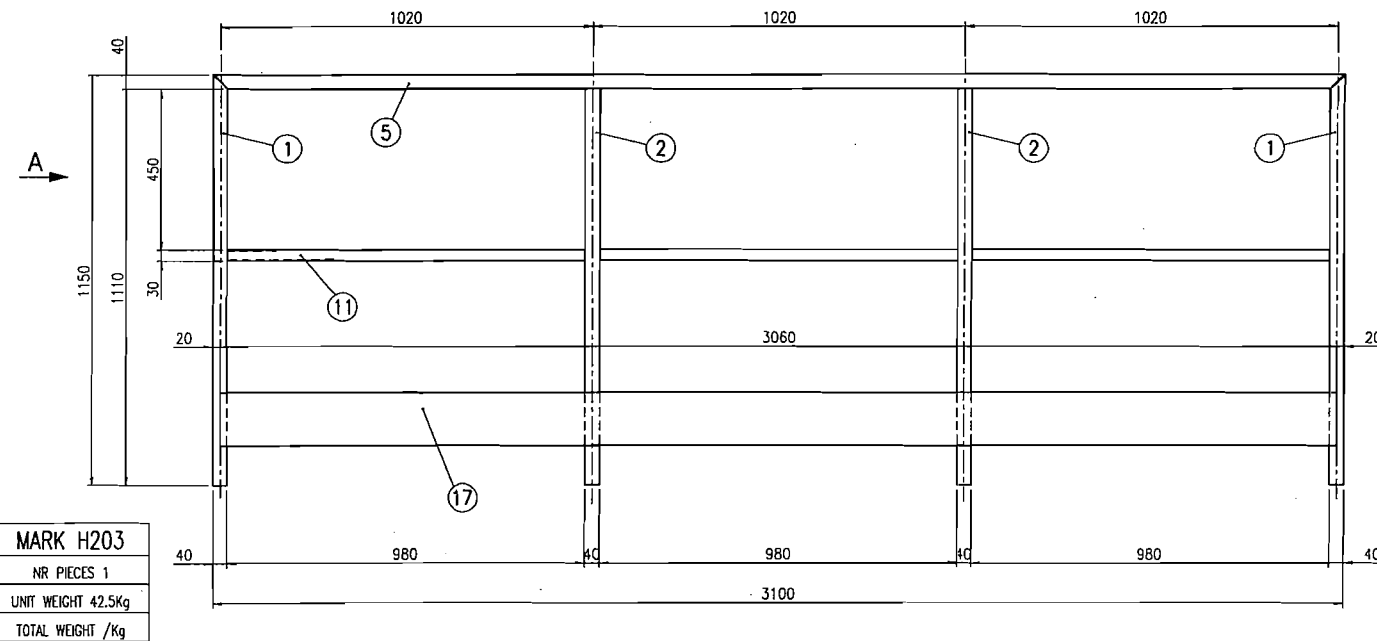
TOLERANCES
 Dimension without tolerance indication
 Structural steel work UNI ISO 2768-M
 Mechanics UNI ISO 2768-f

FINISHING
 Machining UNI 2600

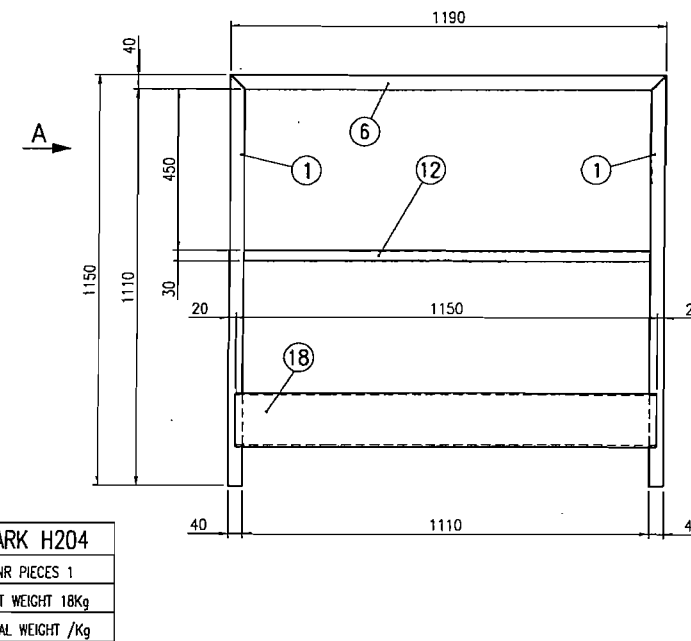
TOLERANCES
 Fit ISO (UNI 7218)

TOTAL WEIGHT = 190Kg Δ

FINAL PAINTING :
 ENAMEL BLUE RAL 5017

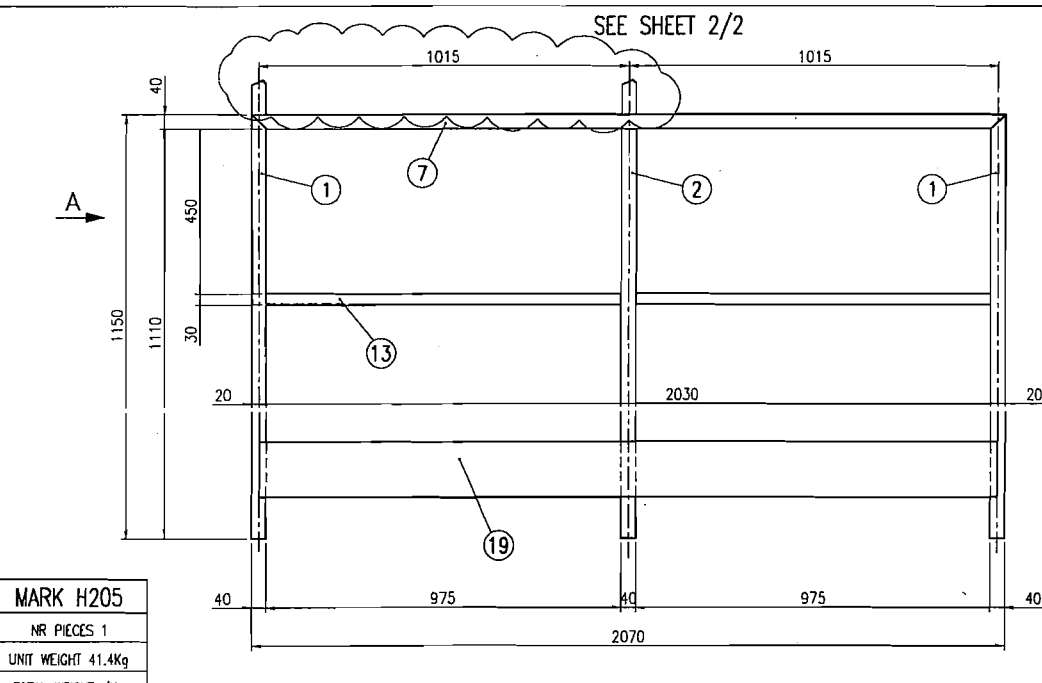


MARK H203
 NR PIECES 1
 UNIT WEIGHT 42.5Kg
 TOTAL WEIGHT /Kg

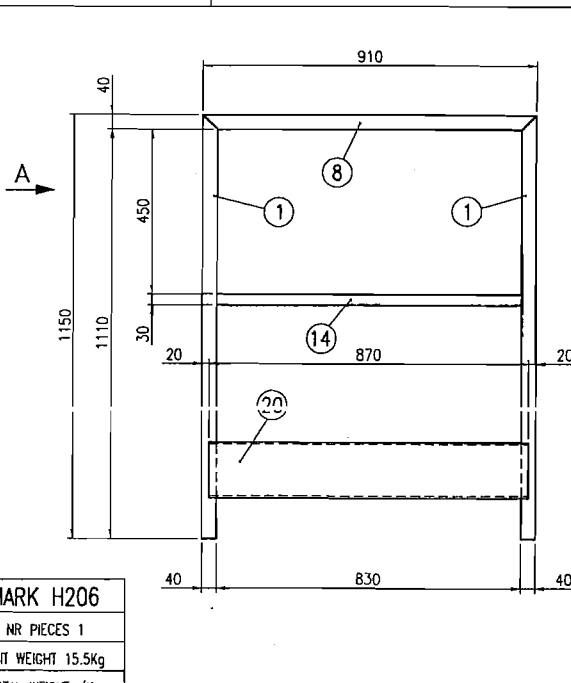


MARK H204
 NR PIECES 1
 UNIT WEIGHT 18Kg
 TOTAL WEIGHT /Kg

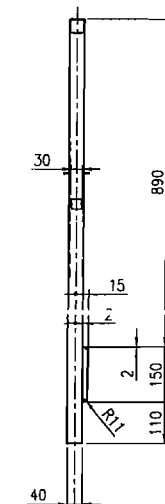
POS.	Q.TY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOT. WEIGHT	NOTES
22	1	SQUARE PIPE 40x3 L=1055 SHAPED		Fe 360-B	3.8		
21	4	SQUARE PIPE 40x3 L=800 SHAPED		Fe 360-B	2.8	11.2	
20	1	PLATE 167x2 L=870 BENT		Fe 360-B	2.2		
19	1	PLATE 167x2 L=2030 BENT		Fe 360-B	5.2		
18	1	PLATE 167x2 L=1150 BENT		Fe 360-B	2.9		
17	1	PLATE 167x2 L=3060 BENT		Fe 360-B	8		
16	1	PLATE 167x2 L=720 BENT		Fe 360-B	1.9		
15	1	PLATE 167x2 L=3600 BENT		Fe 360-B	9.4		
14	1	SQUARE PIPE 30x3 L=830		Fe 360-B	2		
13	3	SQUARE PIPE 30x3 L=975		Fe 360-B	2.5	7.5	
12	1	SQUARE PIPE 30x3 L=1110		Fe 360-B	2.7		
11	3	SQUARE PIPE 30x3 L=980		Fe 360-B	2.5	7.5	
10	2	SQUARE PIPE 30x3 L=680		Fe 360-B	1.7	3.4	
9	3	SQUARE PIPE 30x3 L=1160		Fe 360-B	2.9	8.7	
8	1	SQUARE PIPE 40x3 L=910 SHAPED		Fe 360-B	2.9		
7	1	SQUARE PIPE 40x3 L=2070 SHAPED		Fe 360-B	7.1		
6	1	SQUARE PIPE 40x3 L=1190 SHAPED		Fe 360-B	3.9		
5	1	SQUARE PIPE 40x3 L=3100 SHAPED		Fe 360-B	10.6		
4	2	SQUARE PIPE 40x3 L=760 SHAPED		Fe 360-B	2.6	5.2	
3	1	SQUARE PIPE 40x3 L=3640 SHAPED		Fe 360-B	12.4		
2	5	SQUARE PIPE 40x3 L=1110		Fe 360-B	4	20	
1	12	SQUARE PIPE 40x3 L=1150 SHAPED		Fe 360-B	4.1	49.2	



MARK H205
 NR PIECES 1
 UNIT WEIGHT 41.4Kg
 TOTAL WEIGHT /Kg



MARK H206
 NR PIECES 1
 UNIT WEIGHT 15.5Kg
 TOTAL WEIGHT /Kg



VIEW FROM A TYPICAL

DEAL
 Sede e Stabilimento
 Via Belfiore, 10 - 20139 Milano - Italia
 Tel. +39 02 607 800
 Fax +39 02 607 800
 e-mail: deal@deal.it

REFERENCE: STRADDLE CARRIER SC 720 - 32
 OBJECT: MAIN GIRDER
 TITLE: FRONT SIDE WALKWAYS - DETAILS

Scale: 1:10
 Sheet: 1 of 2

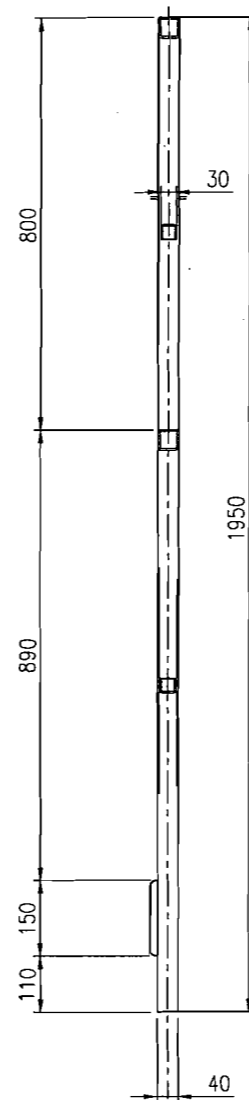
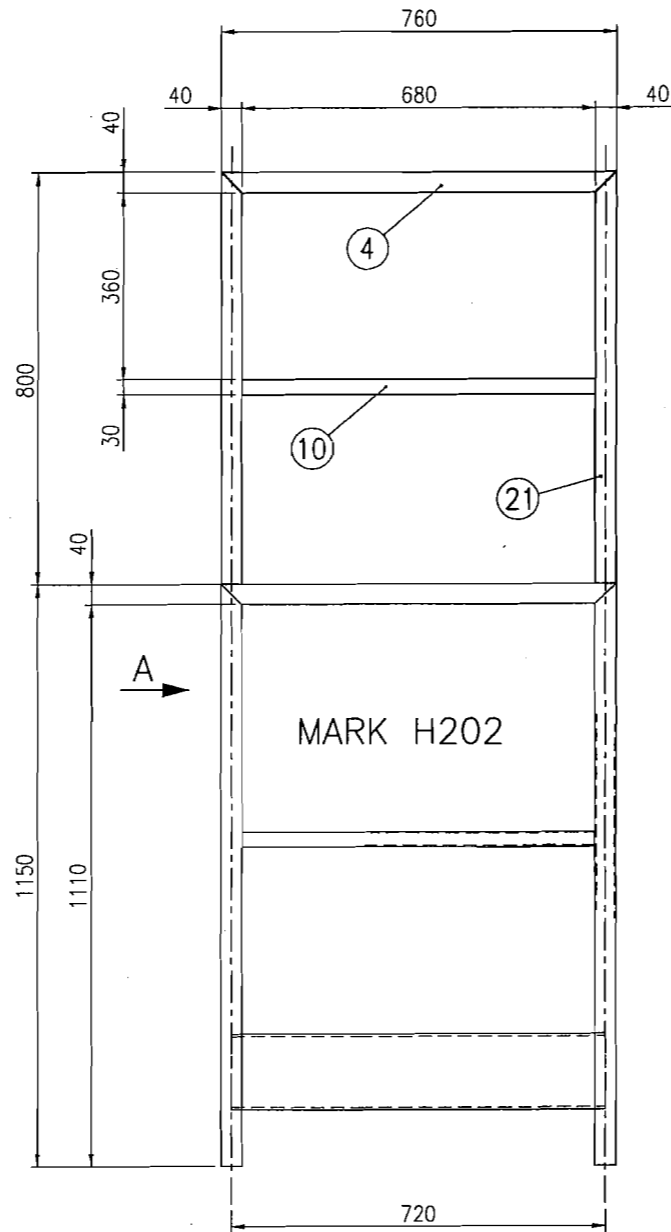
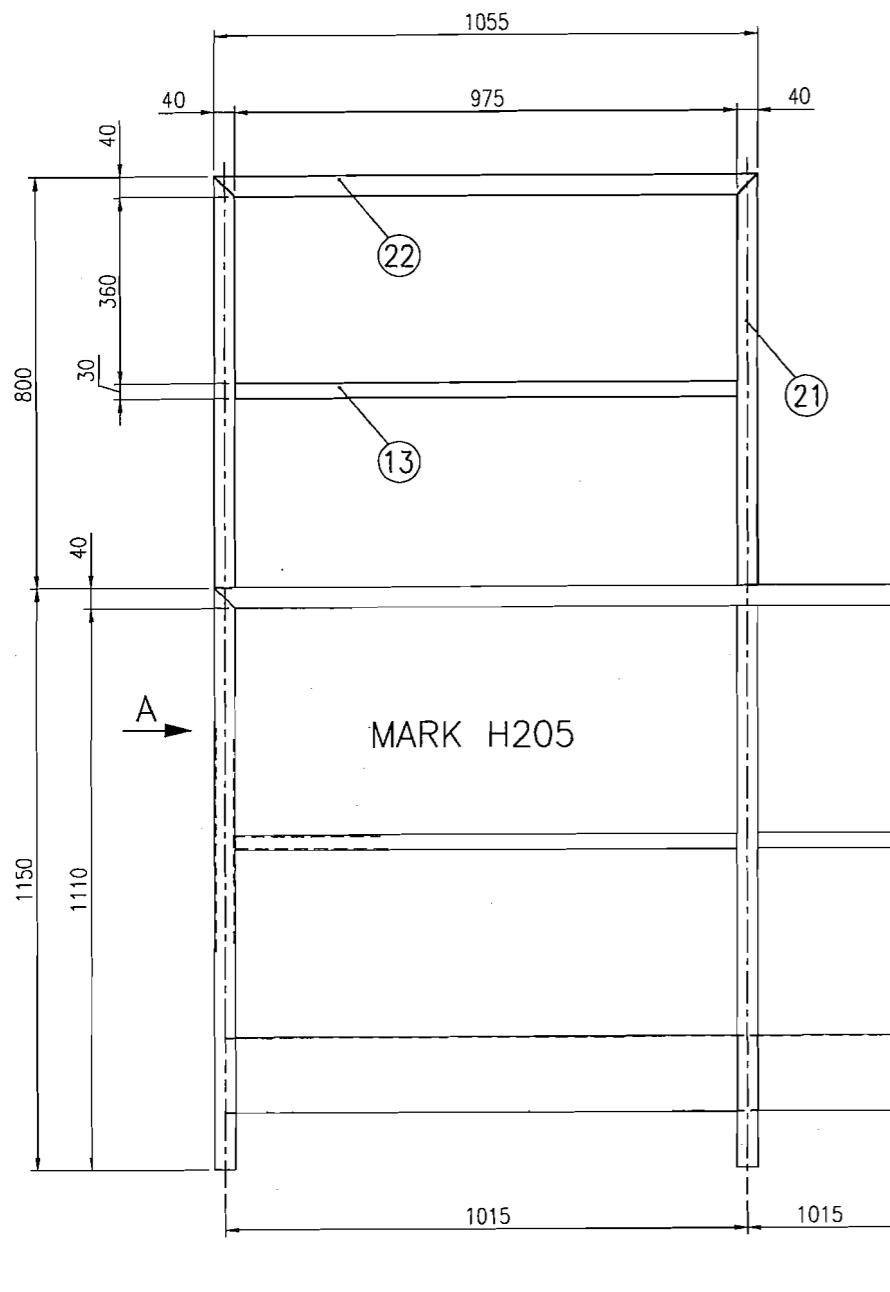
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 Format: A1

Job No.: 600311
 Sub.J.Nr.: 060787
 Mr.: - - - - -

Rev. No.: T06DMCDH-0021

PROJECT: KIEWIT / FCI / MANSON JV
 SKYWAY BRIDGE PROJECT

REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
2					
1	28/08/02	ADD SHEET 2/2	S. GERMAND	CUCCHIARO	RIBIS
0	24.05.02	FIRST ISSUE	EsseTre	CUCCHIARO	RIBIS



VIEW FROM A
TYPICAL

2					
1	28/08/02	REVISED MARK H202 - H205	S. GERMANO	CUCCHIARO	RIBIS
0	24.05.02	FIRST ISSUE	EsseTre	CUCCHIARO	RIBIS
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED

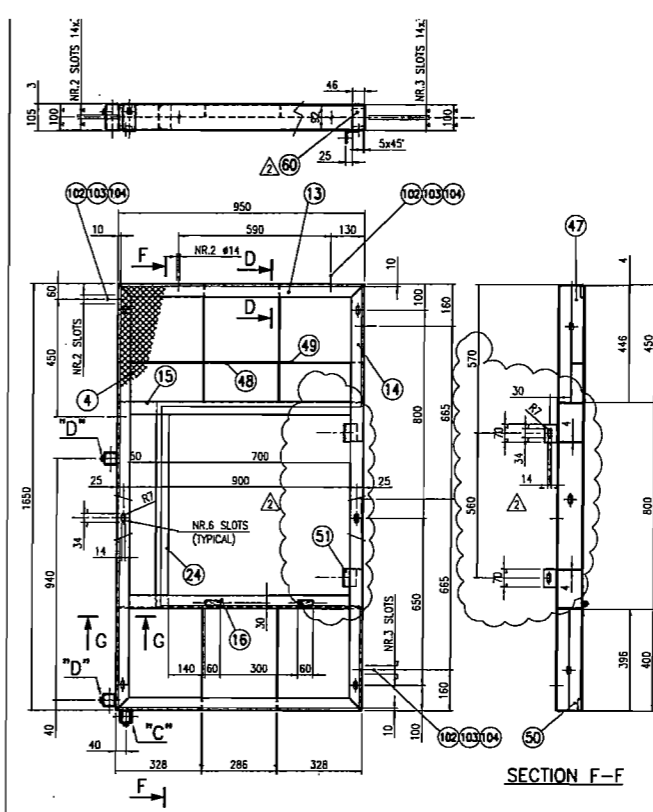
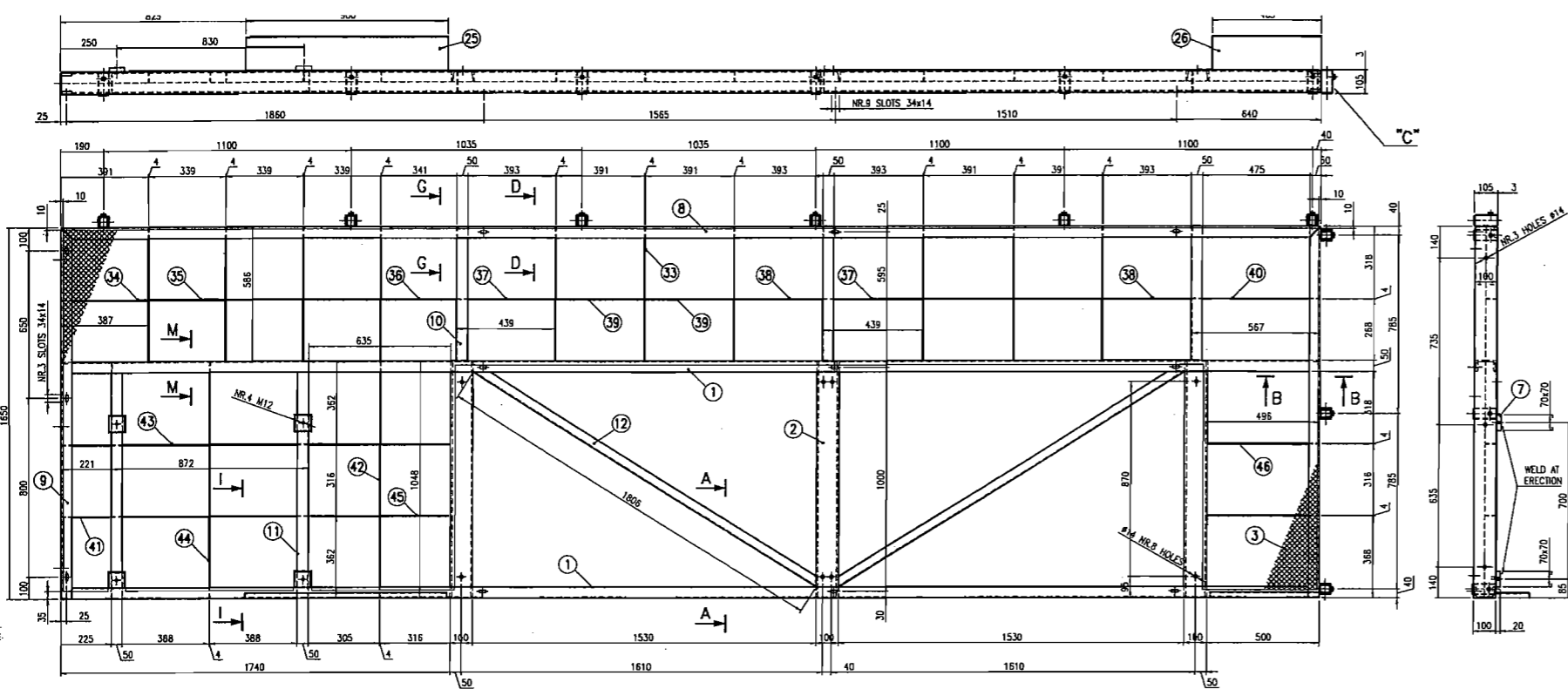
DEAL

Sede e Stabilimento
Via Bullirio-Franzone Carogno
33050-Pozzuolo del Friuli (UD)-Italy
Tel: +39 432 607 900
Fax: +39 432 607 902
e-mail: deal@deal.it

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DRAWING OR POSITION
THEREOF WITHOUT DEAL
WRITTEN AUTHORIZATION

REFERENCE:		STRADDLE CARRIER SC 720 - 32			
OBJECT:		MAIN GIRDER			
TITLE:		FRONT SIDE WALKWAYS - DETAILS			
Substitutes for:	Scale	1:10	Sheet	Of	
	Format	A2	2	2	
File:	Job Nr.	Sub.J.Nr.	Mtr.		
T06DMCDH002B_1.DWG	-6003111	-060787			
Fab. Nr.	Dep.	Doc. Type	Part.	Nr.	Rev.
T06	DM	CD	H-	002	1

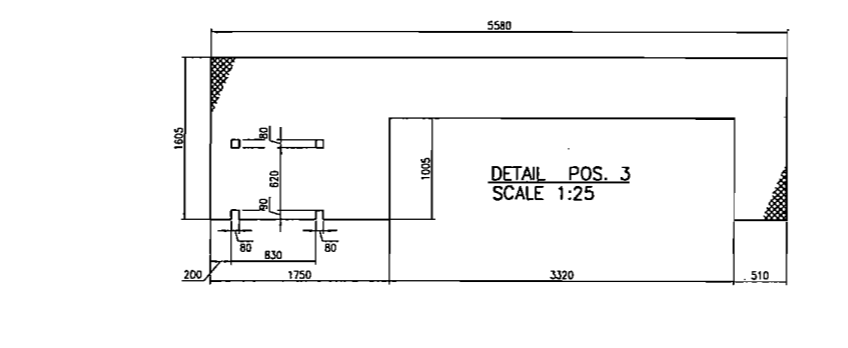
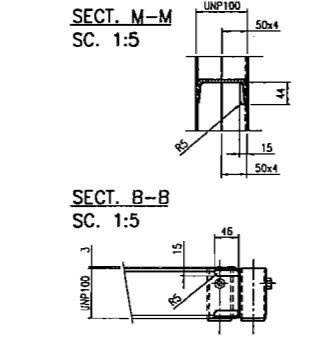
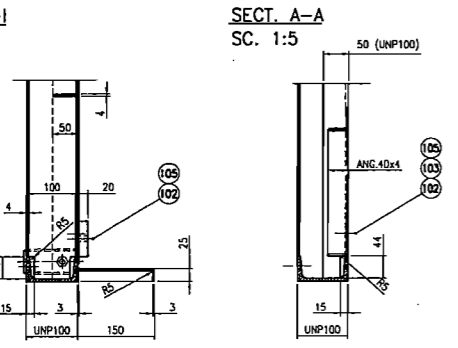
CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT
S. FRANCISCO - OAKLAND BAY BRIDGE - USA



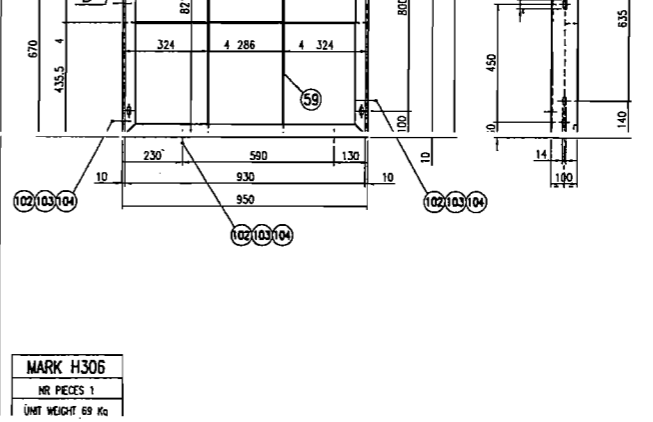
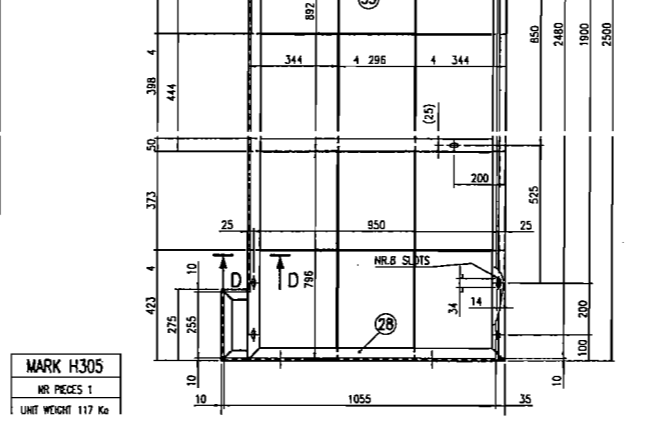
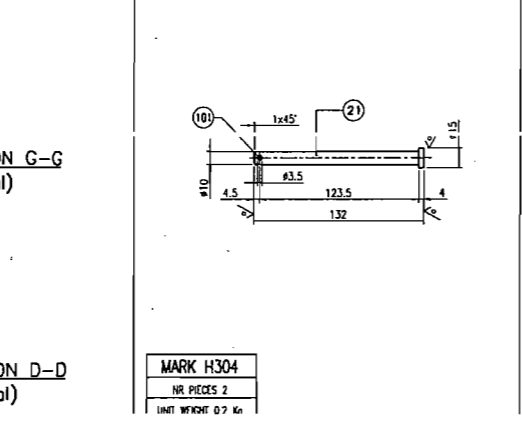
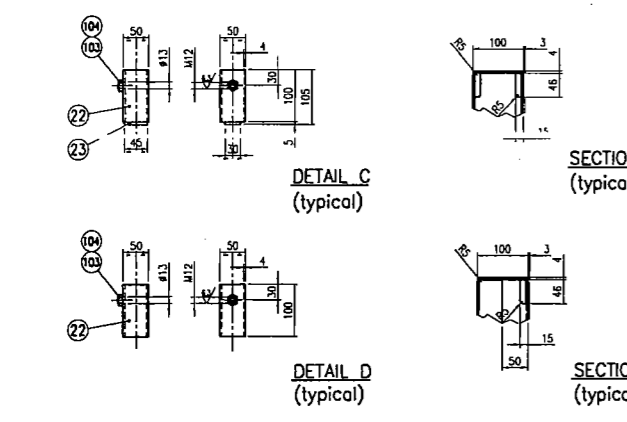
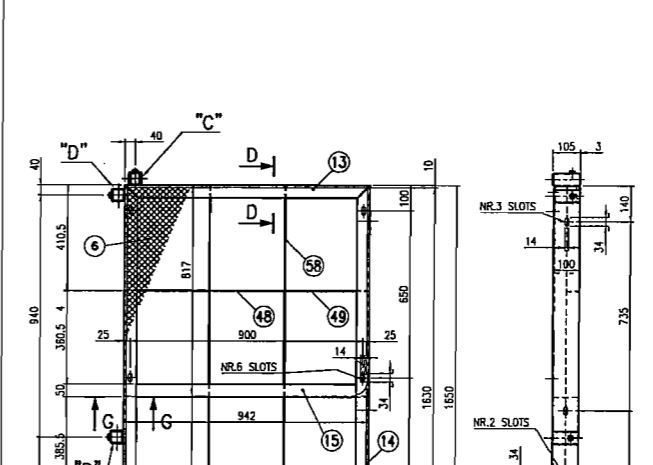
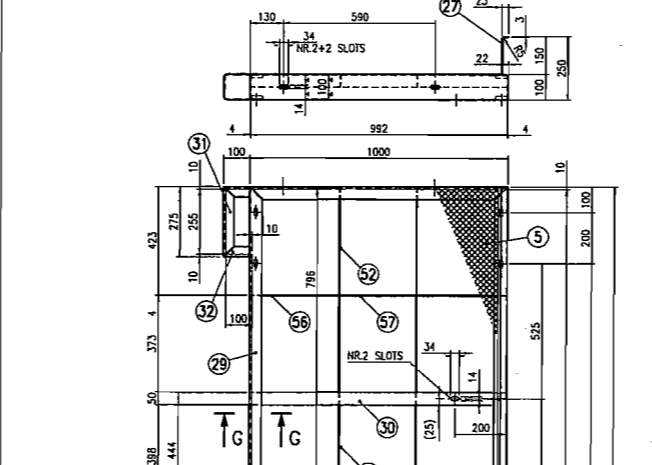
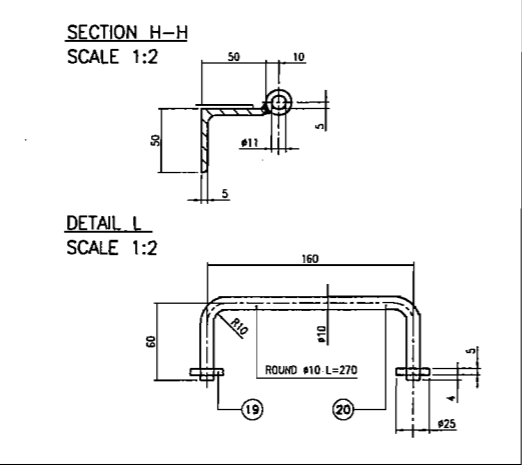
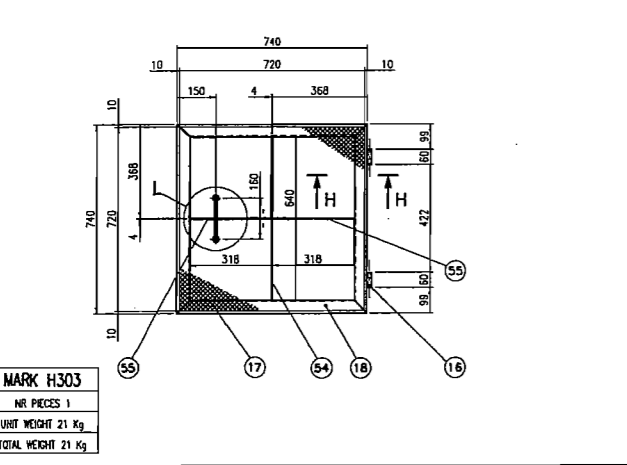
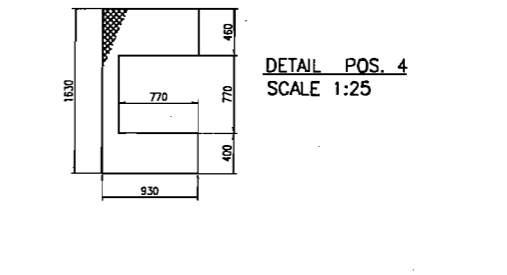
TOTAL WEIGHT = 650 Kg
 FINAL PAINTING :
 ENAMEL YELLOW RAL 1007
 REMOVE SHARP CORNERS WITH R=2
 WELDING PROCEDURES :
 The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX
 WELDING PROCEDURE QUALIFICATION (WPQ) TABLE
 WELDER: [Signature]
 WELDING ENGINEER: [Signature]
 DATE: [Date]

105	12	SCREW M12x60 UNI 5739	8,8
104	29	SCREW M12x30 UNI 5739	8,8
103	41	NUT M12 UNI 5588	8,8
102	26	WASHER 13 UNI 5592	8,8
101	2	COILER PH #3,2x20 UNI 1336	8,8
60	2	PLATE 40x4 L=92 SHAPED	Fe 360 B 0,15 0,3
59	2	PLATE 50x4 L=821 SHAPED	Fe 360 B 1,3 2,6
58	2	PLATE 50x4 L=817 SHAPED	Fe 360 B 1,3 2,6
57	3	PLATE 50x4 L=296	Fe 360 B 0,45 1,35
56	6	PLATE 50x4 L=344 SHAPED	Fe 360 B 0,55 3,3
55	2	PLATE 50x4 L=318	Fe 360 B 0,5 1
54	1	PLATE 50x4 L=640	Fe 360 B 1 1
53	2	PLATE 50x4 L=892 SHAPED	Fe 360 B 1,4 2,8
52	4	PLATE 50x4 L=796 SHAPED	Fe 360 B 1,2 4,8
51	2	ANGLE 50x50x5 L=70	Fe 360 B 0,28 0,52
50	2	PLATE 50x4 L=395 SHAPED	Fe 360 B 0,3 0,6
49	6	PLATE 50x4 L=324 SHAPED	Fe 360 B 0,5 3
48	3	PLATE 50x4 L=786	Fe 360 B 0,45 1,35
47	2	PLATE 50x4 L=446 SHAPED	Fe 360 B 0,65 1,3
46	3	PLATE 50x4 L=496 SHAPED	Fe 360 B 0,75 2,25
45	2	PLATE 50x4 L=635	Fe 360 B 1 2
44	4	PLATE 50x4 L=362	Fe 360 B 0,5 2
43	2	PLATE 50x4 L=872 SHAPED	Fe 360 B 1,4 2,8
42	2	PLATE 50x4 L=316 SHAPED	Fe 360 B 0,5 1
41	2	PLATE 50x4 L=221 SHAPED	Fe 360 B 0,35 0,7
40	1	PLATE 50x4 L=567 SHAPED	Fe 360 B 0,9 0,9
39	4	PLATE 50x4 L=391	Fe 360 B 0,6 2,4
38	2	PLATE 50x4 L=393	Fe 360 B 0,6 1,2
37	2	PLATE 50x4 L=439 SHAPED	Fe 360 B 0,7 1,4
36	1	PLATE 50x4 L=341	Fe 360 B 0,53 0,53
35	3	PLATE 50x4 L=339	Fe 360 B 0,53 1,6
34	1	PLATE 50x4 L=367 SHAPED	Fe 360 B 0,6 0,6
33	10	PLATE 50x4 L=586 SHAPED	Fe 360 B 0,9 9
32	4	PLATE 186x4 L=100 SHAPED BENT	Fe 360 B 0,8 2,4
31	2	PLATE 186x4 L=275 SHAPED BENT	Fe 360 B 1,6 3,2
30	2	PLATE 186x4 L=892 SHAPED BENT	Fe 360 B 5,8 11,6
29	2	PLATE 186x4 L=2500 SHAPED BENT	Fe 360 B 14,6 29,2
28	2	PLATE 186x4 L=1000 SHAPED BENT	Fe 360 B 5,9 11,8
27	1	PLATE 170x3 L=2500 SHAPED BENT	Fe 360 B 10 10
26	1	PLATE 170x3 L=485 SHAPED BENT	Fe 360 B 2 2
25	1	PLATE 170x3 L=900 SHAPED BENT	Fe 360 B 3,6 3,6
24	1	PLATE 186x4 L=792 SHAPED BENT	Fe 360 B 4,6 4,6
23	11	PLATE 30x5 L=45	Fe 360 B 0,05 0,55
22	15	SQUARE PIPE 50x4 L=100	Fe 360 B 0,6 9
21	2	ROUND #15 L=132	Fe 360 B 0,2 0,4
20	1	ROUND #10 L=270 SHAPED	Fe 360 B 0,2 0,2
19	2	ROUND #25 L=4	Fe 360 B 0,1 0,2
18	4	ANGLE 50x50x5 L=740 SHAPED	Fe 360 B 2,8 10,4
17	1	STRETCHED PLATE FLS E3 Th.3 720x720	Fe 360 B 8,1 8,1
16	4	PIPE #20x1,5 L=60	Fe 360 B 0,1 0,4
15	3	PLATE 186x4 L=942 SHAPED BENT	Fe 360 B 5,5 16,5
14	4	PLATE 186x4 L=1650 SHAPED BENT	Fe 360 B 9,6 38,4
13	4	PLATE 186x4 L=950 SHAPED BENT	Fe 360 B 5,5 22
12	2	EQUAL ANGLE 40x4 L=1806 SHAPED	Fe 360 B 10,5 21
11	2	PLATE 186x4 L=1048 SHAPED BENT	Fe 360 B 6,1 12,2
10	3	PLATE 186x4 L=586 SHAPED BENT	Fe 360 B 3,4 10,2
9	2	PLATE 186x4 L=1650 SHAPED BENT	Fe 360 B 9,6 19,2
8	1	PLATE 186x4 L=5600 SHAPED BENT	Fe 360 B 32,7 32,7
7	4	PLATE 70x20 L=70	Fe 360 B 0,75 3
6	1	STRETCHED PLATE FLS E3 Th.3 930x1630	Fe 360 B 22,8 22,8
5	1	STRETCHED PLATE FLS E3 Th.3 1055x2480 SHAPED	Fe 360 B 36,2 36,2
4	1	STRETCHED PLATE FLS E3 Th.3 330x1630 SHAPED	Fe 360 B 13,8 13,8
3	1	STRETCHED PLATE FLS E3 Th.3 1605x5580 SHAPED	Fe 360 B 84 84
2	3	UPN 100 L=1048 SHAPED	Fe 360 B 11,1 33,3
1	2	UPN 100 L=5592 SHAPED	Fe 360 B 58,3 116,6

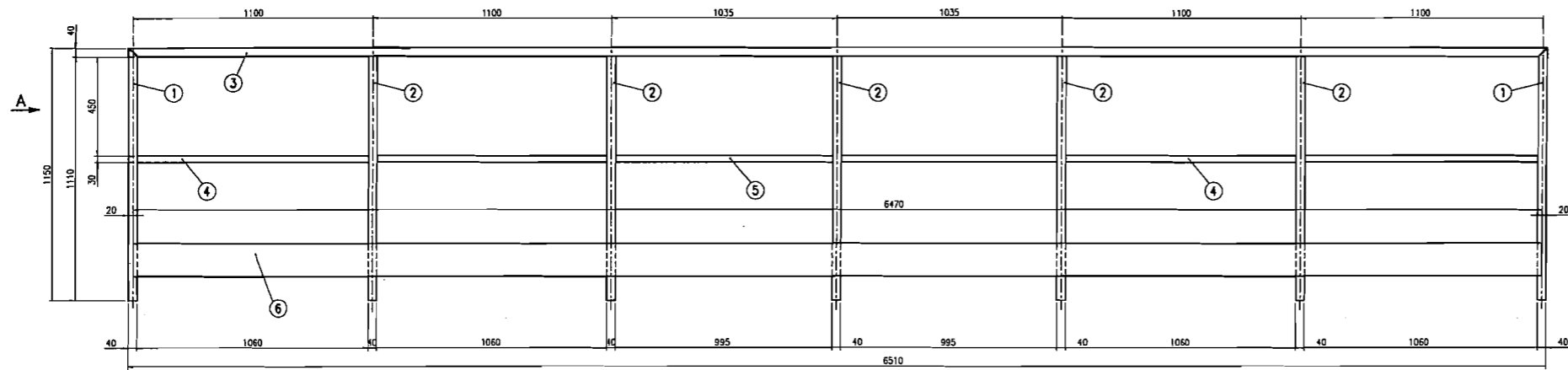
MARK H301
 NR PIECES 1
 UNIT WEIGHT 374 Kg
 TOTAL WEIGHT 374 Kg



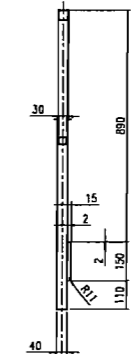
MARK H302
 NR PIECES 1
 UNIT WEIGHT 66 Kg
 TOTAL WEIGHT 66 Kg



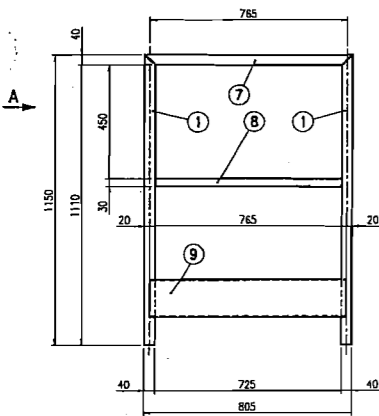
DEAL
 STRADDLE CARRIER
 SC 720 - 32
 MAIN GIRDER
 REAR SIDE POWER WALKWAYS - DETAILS
 SCALE 1:10
 1 of 1
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 KIEWIT / FCI / MANSON JV



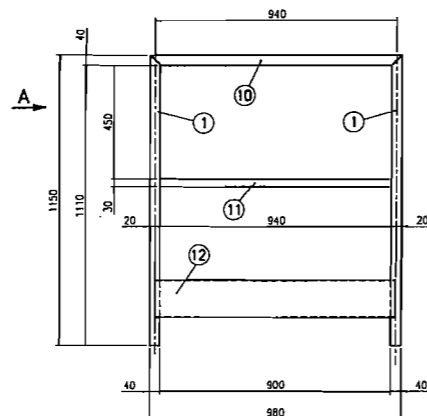
MARK H401
NR PIECES 2
UNIT WEIGHT 84.2 Kg
TOTAL WEIGHT 168.4 Kg



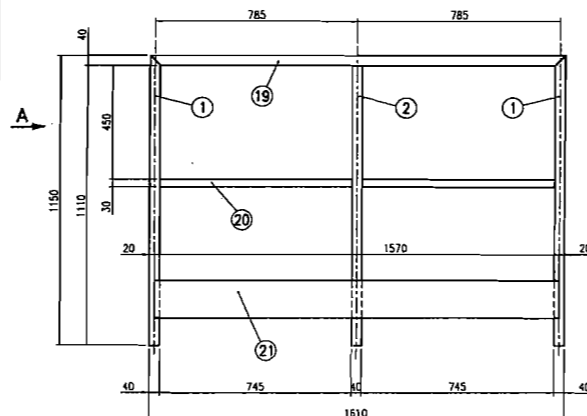
VIEW FROM A
TYPICAL



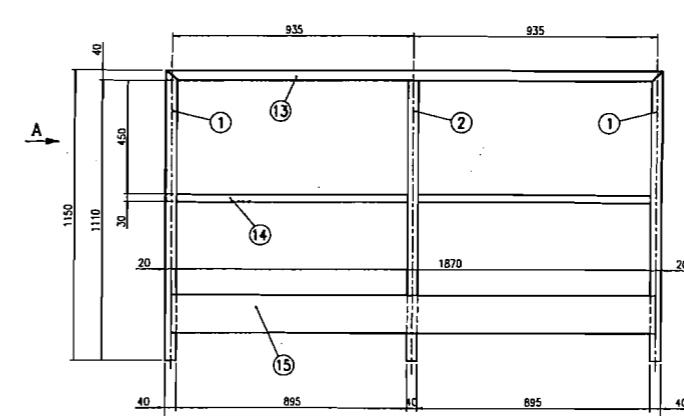
MARK H402
NR PIECES 2
UNIT WEIGHT 14.8 Kg
TOTAL WEIGHT 29.6 Kg



MARK H403
NR PIECES 2
UNIT WEIGHT 16.4 Kg
TOTAL WEIGHT 32.8 Kg

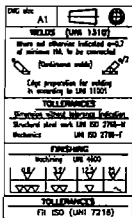


MARK H406
NR PIECES 1
UNIT WEIGHT 26.2 Kg
TOTAL WEIGHT 26.2 Kg



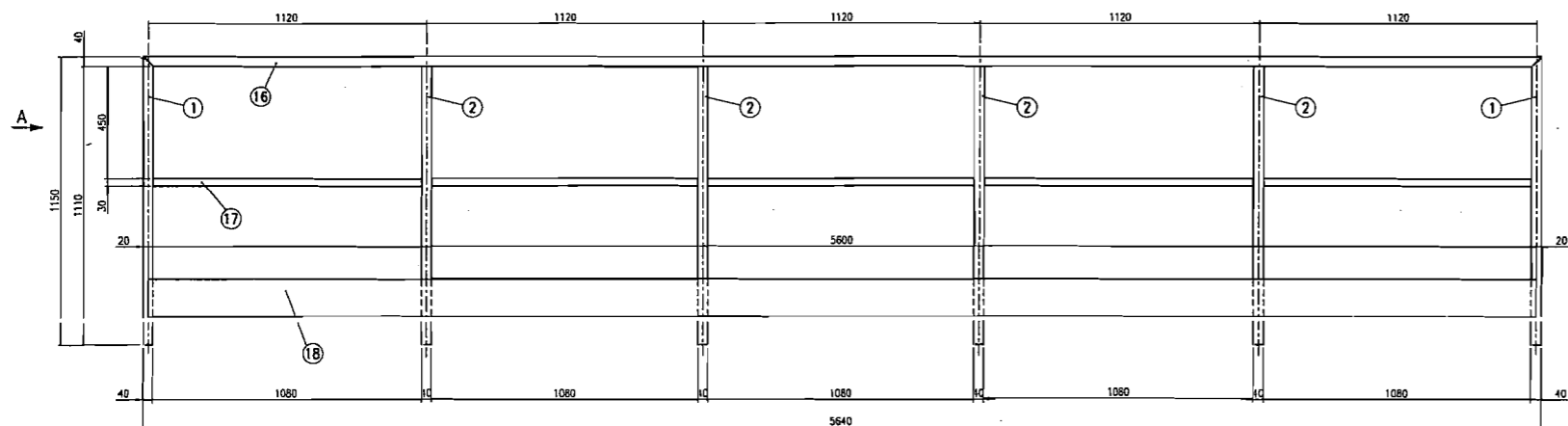
MARK H404
NR PIECES 1
UNIT WEIGHT 14.2 Kg
TOTAL WEIGHT 14.2 Kg

WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-95, or ASME sect. IX

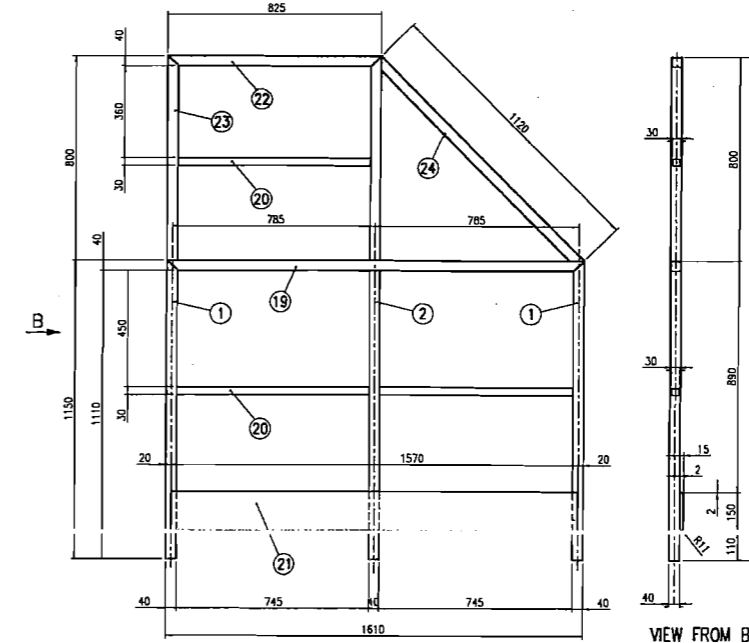


TOTAL WEIGHT = 480 Kg Δ

FINAL PAINTING :
ENAMEL BLUE RAL 5017



MARK H405
NR PIECES 2
UNIT WEIGHT 71.7 Kg



MARK H407
NR PIECES 1
UNIT WEIGHT 45 Kg

VIEW FROM B
TYPICAL

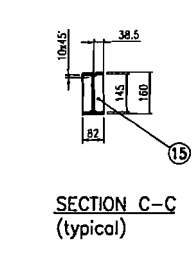
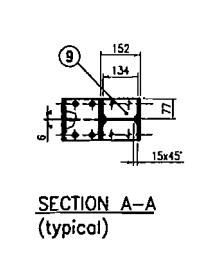
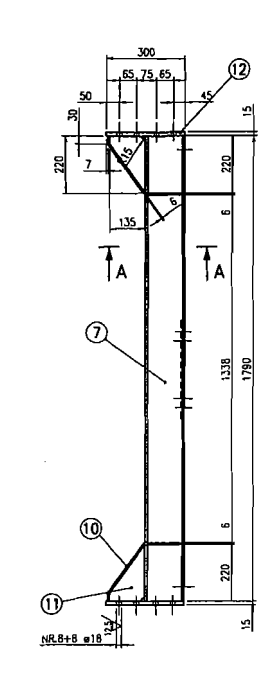
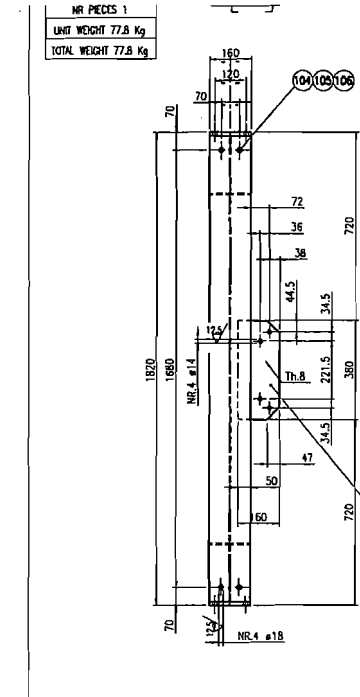
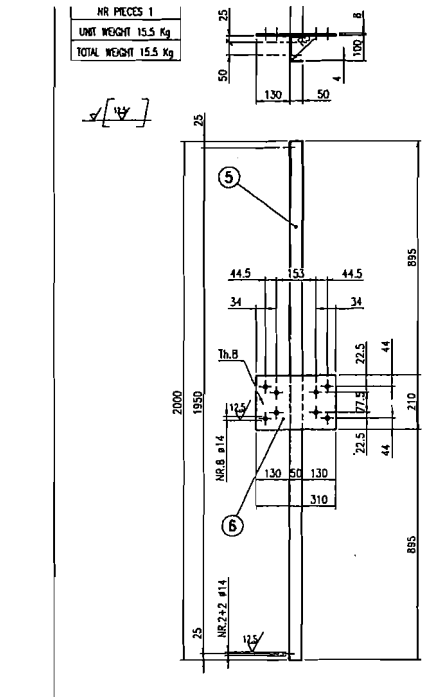
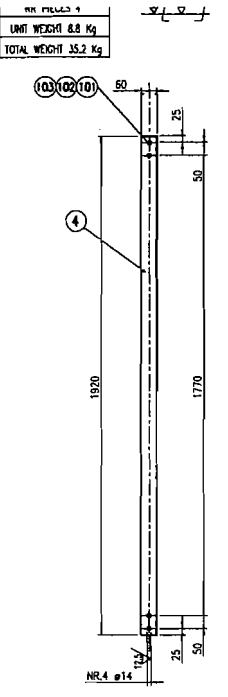
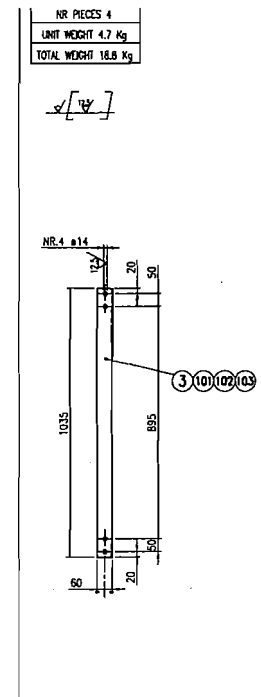
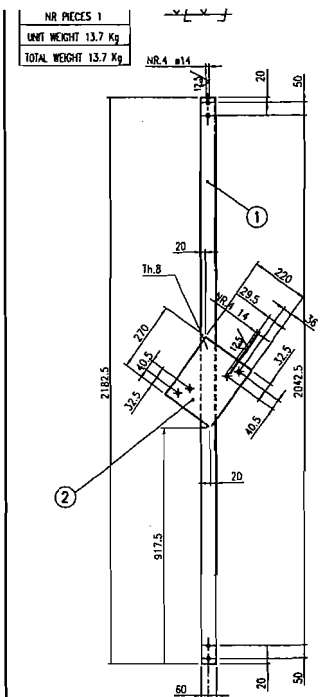
POS.	QTY	DESCRIPTION	COO.	MATERIAL	UNIT WEIGHT	NOTES
24	1	SQUARE PIPE 40x3 L=1120		Fe 360 B	4	4
23	2	SQUARE PIPE 40x3 L=800		Fe 360 B	3	6
22	1	SQUARE PIPE 40x3 L=825		Fe 360 B	3.2	3.2
21	2	PLATE 167x2 L=1570 BENT		Fe 360 B	4	8
20	5	SQUARE PIPE 30x3 L=745		Fe 360 B	2	10
19	2	SQUARE PIPE 40x3 L=1610 SHAPED		Fe 360 B	6	12
18	2	PLATE 167x2 L=5600 BENT		Fe 360 B	15	30
17	10	SQUARE PIPE 30x3 L=1060		Fe 360 B	2.7	27
16	2	SQUARE PIPE 40x3 L=5640 SHAPED		Fe 360 B	20	40
15	1	PLATE 167x2 L=1870 BENT		Fe 360 B	4.9	4.9
14	2	SQUARE PIPE 30x3 L=895		Fe 360 B	2.3	4.6
13	1	SQUARE PIPE 40x3 L=1910 SHAPED		Fe 360 B	6.7	6.7
12	2	PLATE 167x2 L=940 BENT		Fe 360 B	2.5	5
11	2	SQUARE PIPE 30x3 L=900		Fe 360 B	2.3	4.6
10	2	SQUARE PIPE 40x3 L=930 SHAPED		Fe 360 B	3.4	6.8
9	2	PLATE 167x2 L=785 BENT		Fe 360 B	2	4
8	2	SQUARE PIPE 30x3 L=725		Fe 360 B	1.8	3.7
7	2	SQUARE PIPE 40x3 L=805 SHAPED		Fe 360 B	2.8	5.6
6	2	PLATE 167x2 L=6470 BENT		Fe 360 B	17	34
5	4	SQUARE PIPE 30x3 L=955		Fe 360 B	2.5	10
4	8	SQUARE PIPE 30x3 L=1060		Fe 360 B	2.7	22
3	2	SQUARE PIPE 40x3 L=6510 SHAPED		Fe 360 B	23	46
2	21	SQUARE PIPE 40x3 L=1110		Fe 360 B	4	84
1	22	SQUARE PIPE 40x3 L=1150 SHAPED		Fe 360 B	4.1	90.2

REV.	DATE	BY	CHKD	APPD	NOTES
2					
1	28/04/02		S. GERMANO	S. GERMANO	REB
0	31.05.02		Estre	CHUCHARD	REB

DEAL STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER
REAR SIDE POWER WALKWAYS - DETAILS

Scale: 1:10
Sheet: 1 of 1
Doc: TOEDMCDH004_1.DWG
Proj: AO
Rev: 1
Date: 06/03/11
Drawn: TOEDMCDH
Checked: CDH
Approved: H-0041

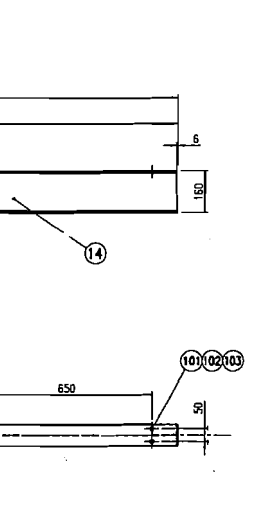
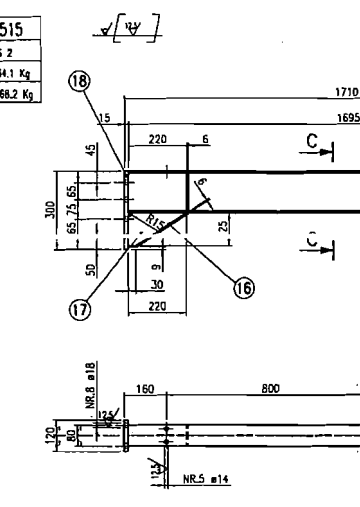
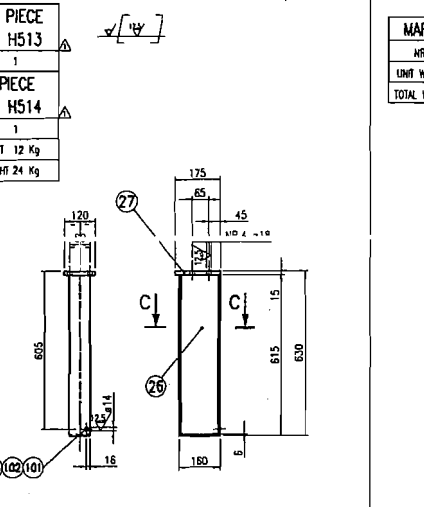
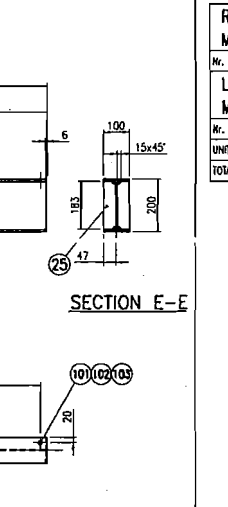
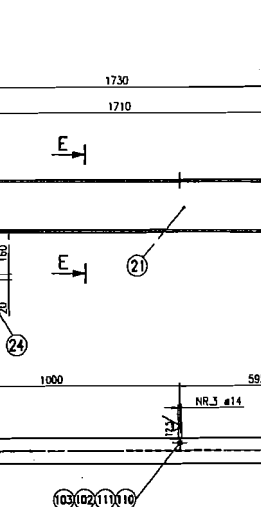
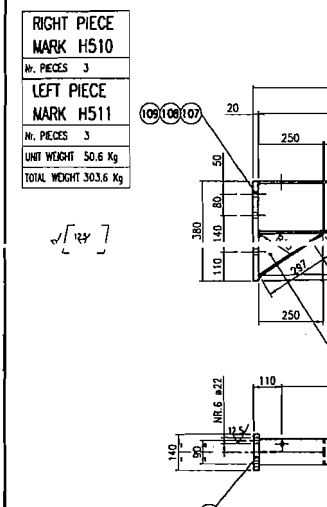
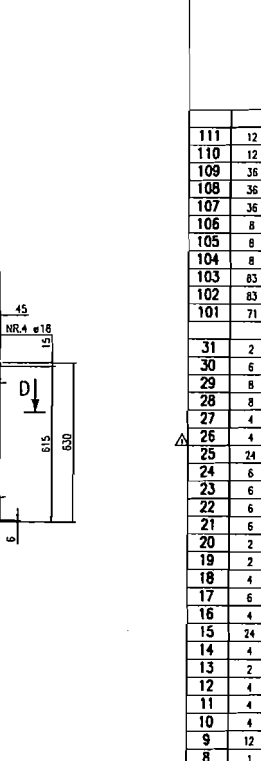
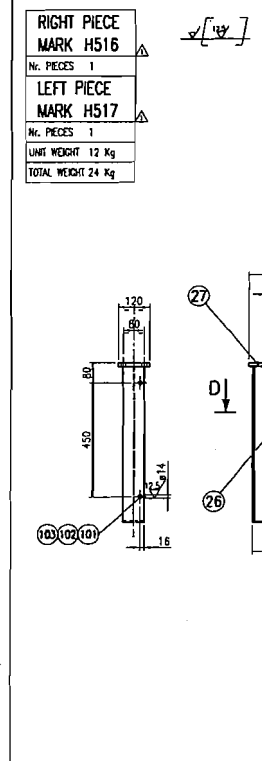
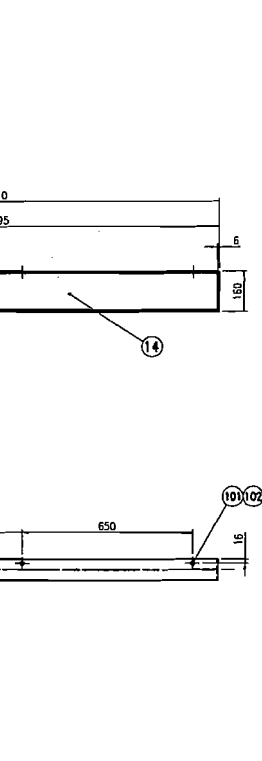
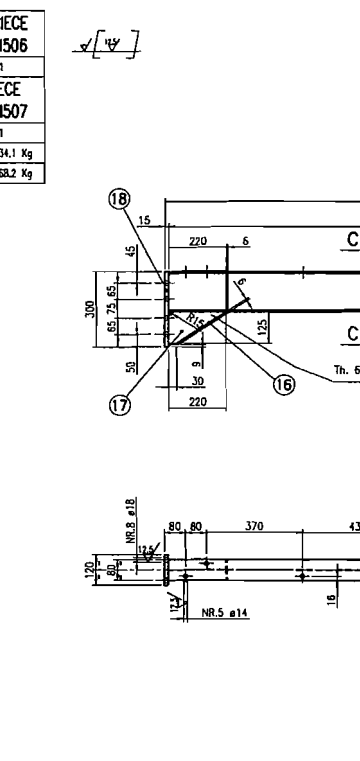
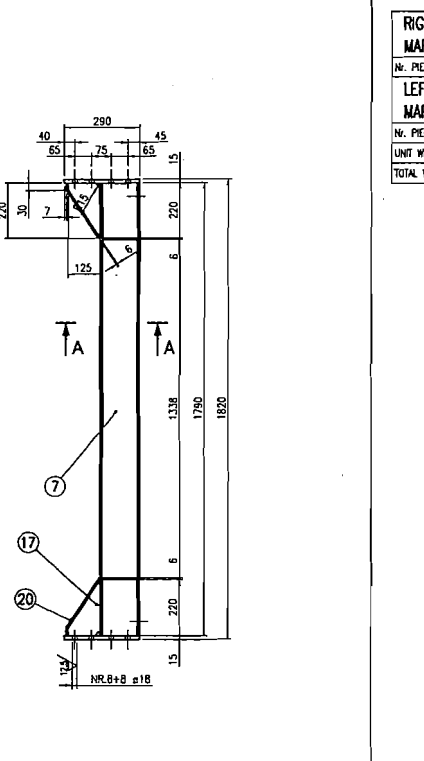
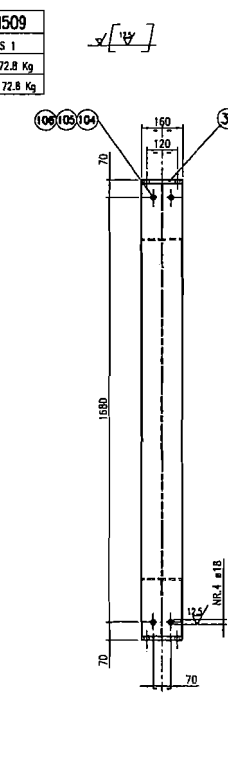
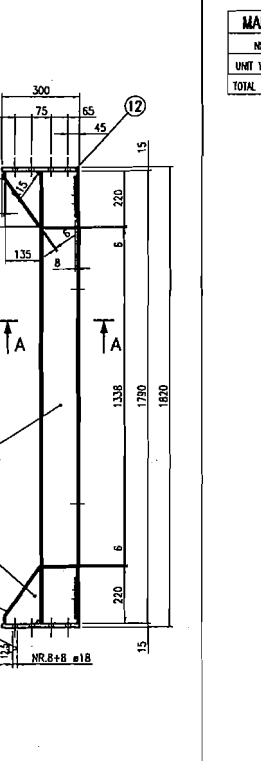
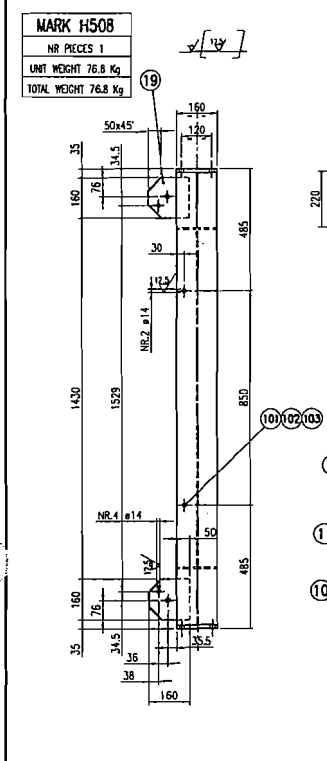
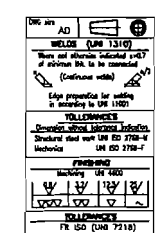
KIEWIT / FCI / MANSON JV



WELDING PROCEDURES :
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

TOTAL WEIGHT = 875 Kg

FINAL PAINTING :
ENAMEL YELLOW RAL 1007



111	12	UPN PLATE #13 UNI 5716	C50	
110	12	SCREW M12x35 UNI 5739	8.8	
109	36	WASHER 21 UNI 5592		
108	36	NUT M20 UNI 5588	65	
107	36	SCREW M20x70 UNI 5737	8.8	
106	8	WASHER 17 UNI 5592		
105	8	NUT M16 UNI 5588	65	
104	8	SCREW M16x40 UNI 5737	8.8	
103	83	WASHER 13 UNI 5592		
102	83	NUT M12 UNI 5588	65	
101	71	SCREW M12x30 UNI 5739	8.8	

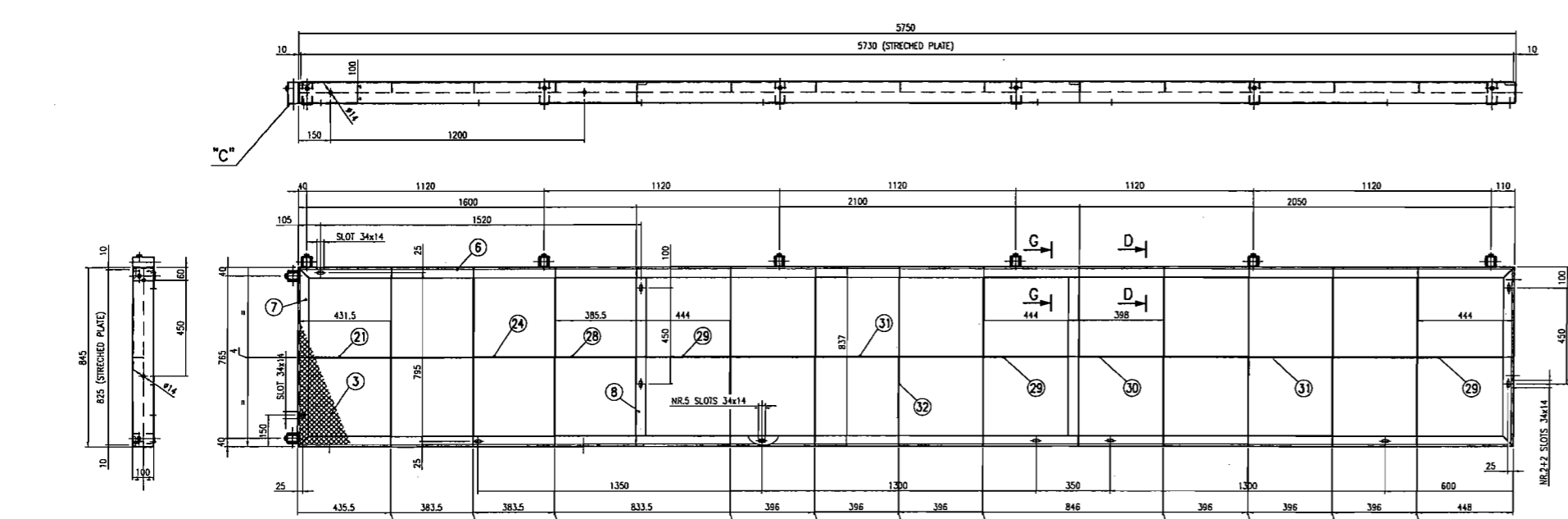
31	2	PLATE 160x15 L=290	Fe 430 B	5.5	11
30	6	SQUARE 12 L=140	Fe 430 B	0.15	0.9
29	8	SQUARE 12 L=160	Fe 430 B	0.2	1.6
28	8	SQUARE 12 L=120	Fe 430 B	0.13	1
27	4	PLATE 120x15 L=175	Fe 430 B	2.5	10
26	4	BEAM IPE 160 L=515	Fe 430 B	9.5	38
25	24	PLATE 47x6 L=183	Fe 430 B	0.4	9.6
24	6	PLATE 100x6 L=297	Fe 430 B	1.4	8.4
23	6	PLATE 150x6 L=250 SHAPED	Fe 430 B	0.9	5.4
22	6	PLATE 140x20 L=380	Fe 430 B	8.4	50.4
21	6	BEAM IPE 200 L=1710	Fe 430 B	38.3	229.8
20	2	PLATE 150x6 L=261	Fe 430 B	2	4
19	2	PLATE 150x6 L=160 SHAPED	Fe 430 B	1.4	2.8
18	4	PLATE 120x15 L=300	Fe 430 B	4.2	16.8
17	6	PLATE 125x6 L=220 SHAPED	Fe 430 B	0.7	4.2
16	4	PLATE 62x6 L=261 SHAPED	Fe 430 B	1	4
15	24	PLATE 38x6 L=145 SHAPED	Fe 430 B	0.3	7.2
14	4	BEAM IPE 160 L=1655	Fe 430 B	27	108
13	2	PLATE 160x15 L=175	Fe 430 B	3.2	6.4
12	4	PLATE 150x15 L=300	Fe 430 B	6	20
11	4	PLATE 135x6 L=220 SHAPED	Fe 430 B	0.8	3.2
10	4	PLATE 160x6 L=266	Fe 430 B	2	8
9	12	PLATE 77x6 L=134 SHAPED	Fe 430 B	0.5	6
8	1	PLATE 150x8 L=380 SHAPED	Fe 430 B	3.8	3.8
7	4	BEAM IPE 150 A L=1790	Fe 430 B	54.1	217.6
6	1	PLATE 210x8 L=310	Fe 430 B	4	4
5	1	PLATE 150x4 L=2000 SHAPED BDM	Fe 430 B	11.5	11.5
4	4	ANGLE 60x60x5 L=1920	Fe 430 B	8.8	35.2
3	4	ANGLE 60x60x5 L=1035	Fe 430 B	4.7	18.8
2	1	PLATE 220x8 L=270	Fe 430 B	3.7	3.7
1	1	ANGLE 60x60x5 L=2182.5	Fe 430 B	10	10

DEAL

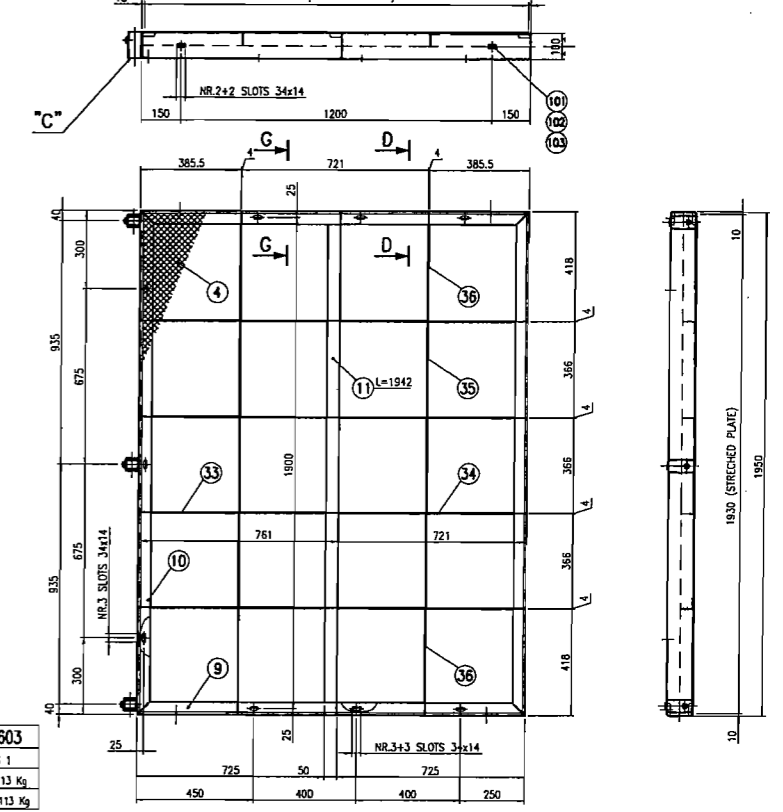
STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER
REAR SIDE POWER WALKWAYS - DETAILS

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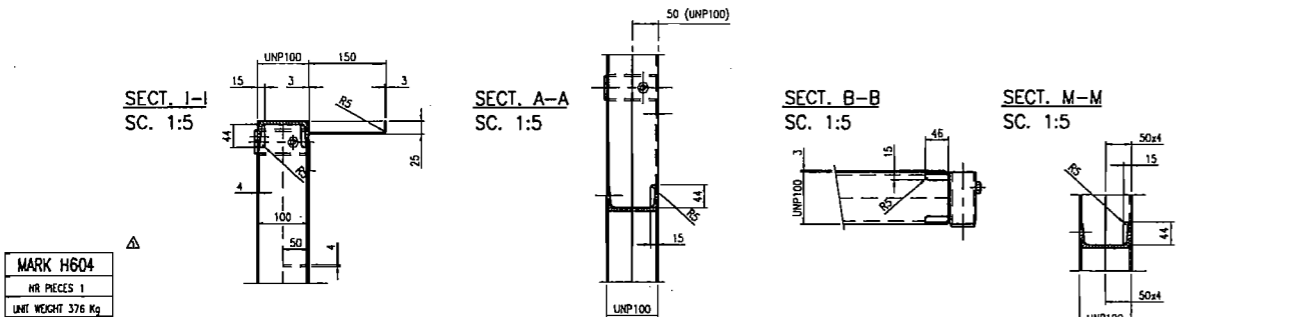
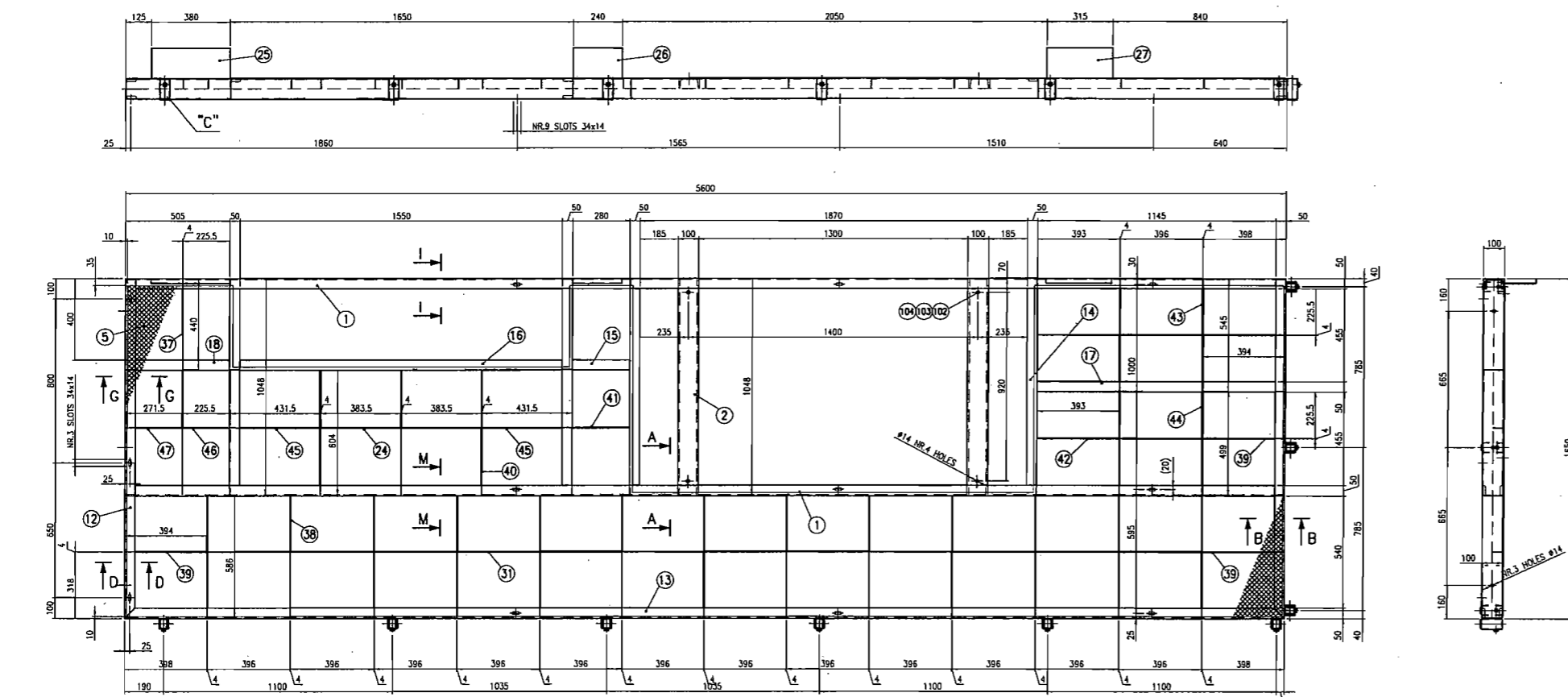
KIEWIT / FCI / MANSON JV



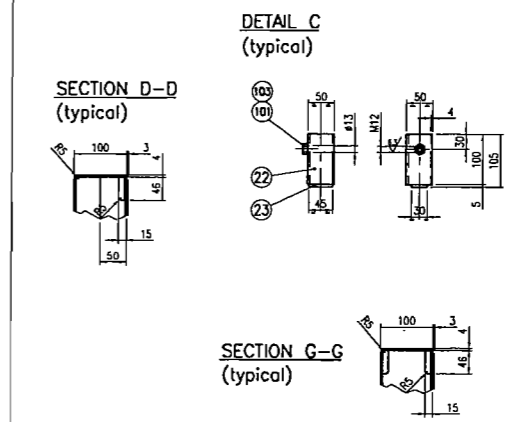
RIGHT PIECE
MARK H601
NR. PIECES 1
LEFT PIECE
MARK H602
NR. PIECES 1
UNIT WEIGHT 186.5 Kg
TOTAL WEIGHT 373 Kg



MARK H603
NR. PIECES 1
UNIT WEIGHT 113 Kg
TOTAL WEIGHT 113 Kg



MARK H604
NR. PIECES 1
UNIT WEIGHT 376 Kg



SECTION D-D
(typical)

DETAIL C
(typical)

SECTION G-G
(typical)

WELDING PROCEDURES:
The procedures used shall be qualified according to EN 288-3, D.M. 09-01-98, or ASME sect. IX

REMOVE SHARP CORNERS WITH R=2

TOTAL WEIGHT - 870 Kg

FINAL PAINTING:
ENAMEL YELLOW RAL 1007

NO.	QTY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOTAL WEIGHT	NOTES
46	1	PLATE 50x4 L=225		Fe 360 B	0.35	0.35	
45	2	PLATE 50x4 L=431 SHAPED		Fe 360 B	0.67	1.35	
44	2	PLATE 50x4 L=499 SHAPED		Fe 360 B	0.78	1.56	
43	2	PLATE 50x4 L=545 SHAPED		Fe 360 B	0.85	1.7	
42	2	PLATE 50x4 L=393		Fe 360 B	0.81	1.62	
41	1	PLATE 50x4 L=280		Fe 360 B	0.43	0.43	
40	4	PLATE 50x4 L=604 SHAPED		Fe 360 B	0.95	3.8	
39	4	PLATE 50x4 L=394 SHAPED		Fe 360 B	0.5	2.0	
38	13	PLATE 50x4 L=585 SHAPED		Fe 360 B	0.9	11.7	
37	1	PLATE 50x4 L=440 SHAPED		Fe 360 B	0.69	0.69	
36	4	PLATE 50x4 L=414 SHAPED		Fe 360 B	0.65	2.6	
35	6	PLATE 50x4 L=368		Fe 360 B	0.57	3.4	
34	4	PLATE 50x4 L=721 SHAPED		Fe 360 B	1.19	4.8	
33	4	PLATE 50x4 L=761 SHAPED		Fe 360 B	1.2	4.8	
32	22	PLATE 50x4 L=837 SHAPED		Fe 360 B	1.3	28.6	
31	26	PLATE 50x4 L=396		Fe 360 B	0.81	21.1	
30	2	PLATE 50x4 L=398		Fe 360 B	0.82	1.64	
29	6	PLATE 50x4 L=444 SHAPED		Fe 360 B	0.7	4.2	
28	2	PLATE 50x4 L=385		Fe 360 B	0.6	1.2	
27	1	PLATE 170x3 L=315 SHAPED BENT		Fe 360 B	1.3	1.3	
26	1	PLATE 170x3 L=240 SHAPED BENT		Fe 360 B	1	1	
25	1	PLATE 170x3 L=380 SHAPED BENT		Fe 360 B	1.5	1.5	
24	6	PLATE 50x4 L=383		Fe 360 B	0.6	3.6	
23	28	PLATE 30x5 L=45		Fe 360 B	0.05	1.4	
22	28	SQUARE PIPE 50x4 L=100		Fe 360 B	0.6	16.8	
21	2	PLATE 50x4 L=431 SHAPED		Fe 360 B	0.65	1.3	
20							
19							
18	1	PLATE 186x4 L=501 SHAPED BENT		Fe 360 B	2.9	2.9	
17	1	PLATE 186x4 L=1191 SHAPED BENT		Fe 360 B	6.8	6.8	
16	1	PLATE 186x4 L=1642 SHAPED BENT		Fe 360 B	9.5	9.5	
15	1	PLATE 186x4 L=280 SHAPED BENT		Fe 360 B	1.6	1.6	
14	4	PLATE 186x4 L=1048 SHAPED BENT		Fe 360 B	6.1	24.4	
13	1	PLATE 186x4 L=5800 SHAPED BENT		Fe 360 B	32.7	32.7	
12	2	PLATE 186x4 L=1650 SHAPED BENT		Fe 360 B	9.8	19.2	
11	1	PLATE 186x4 L=1942 SHAPED BENT		Fe 360 B	11.3	11.3	
10	2	PLATE 186x4 L=1950 SHAPED BENT		Fe 360 B	11.4	22.8	
9	2	PLATE 186x4 L=1500 SHAPED BENT		Fe 360 B	8.76	17.5	
8	4	PLATE 186x4 L=837 SHAPED BENT		Fe 360 B	4.9	19.6	
7	4	PLATE 186x4 L=845 SHAPED BENT		Fe 360 B	5	20	
6	4	PLATE 186x4 L=5750 SHAPED BENT		Fe 360 B	33.5	134	
5	1	STRETCHED PLATE FILE E3 Th.3 1605x5580 SHAPED		Fe 360 B	83.5	83.5	
4	1	STRETCHED PLATE FILE E3 Th.3 1480x1930		Fe 360 B	43.1	43.1	
3	2	STRETCHED PLATE FILE E3 Th.3 825x5730		Fe 360 B	70.9	141.8	
2	2	UPH 100 L=1048 SHAPED		Fe 360 B	11.1	22.2	
1	2	UPH 100 L=5592 SHAPED		Fe 360 B	59.3	118.6	

DEAL

STRADDLE CARRIER
SC 720 - 32

MAIN GIRDER
REAR SIDE POWER WALKWAYS - DETAILS

SCALE: 1:10

DATE: 27.04.02

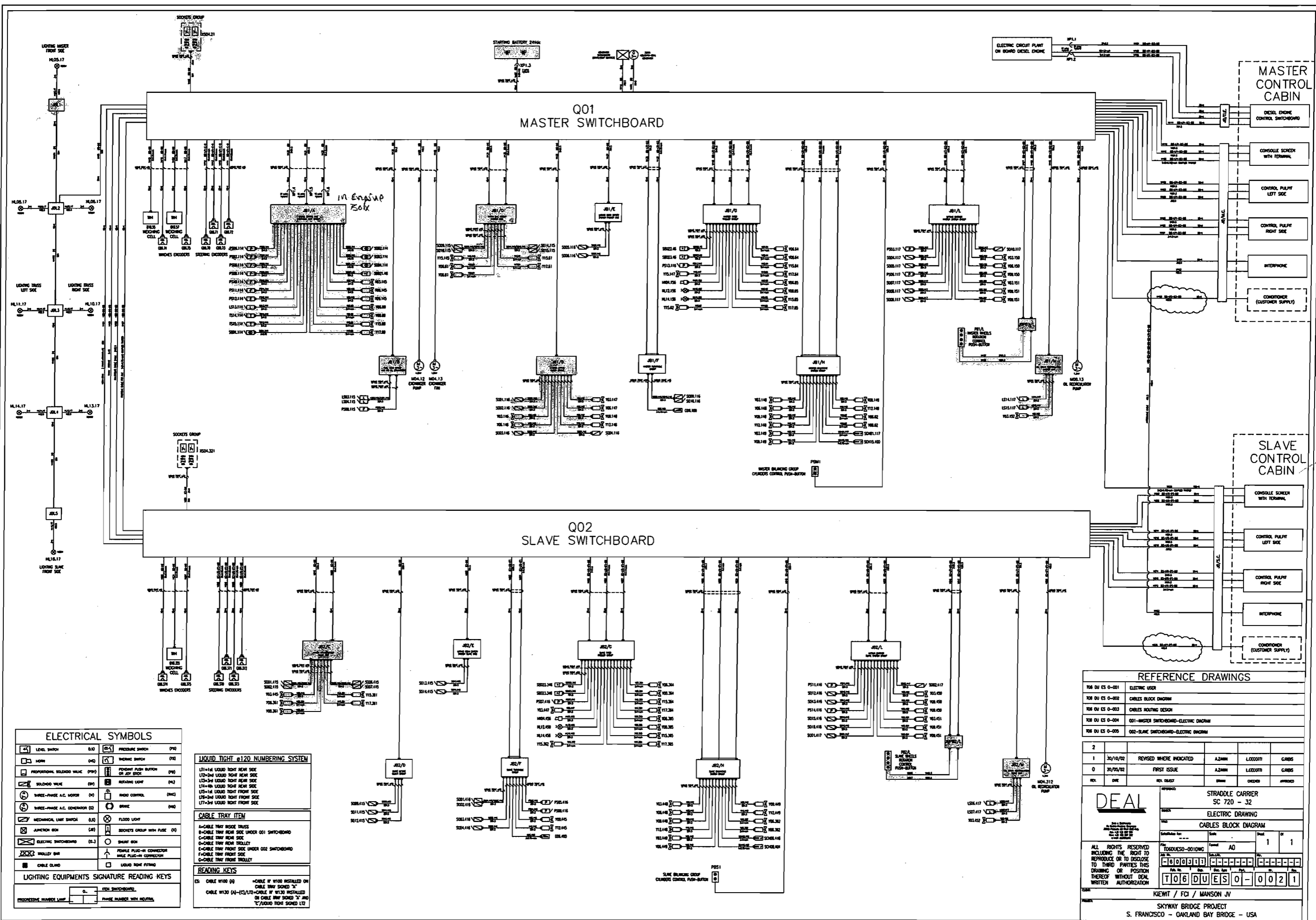
REVISIONS:

NO.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED
1	27.04.02	REVISED WHERE INDICATED	EssaFre	CUCCIBARO	FRS
0	10.04.02	FIRST ISSUE	EssaFre	CUCCIBARO	FRS

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KIEWIT / FCI / MANSON JV

NO.	QTY	DESCRIPTION	COD.	MATERIAL	UNIT WEIGHT	TOTAL WEIGHT	NOTES
104	4	SCREW M12x40 UNI 5737		B.8			
103	36	NUT M12 UNI 5588		6S			
102	8	WASHER 13 UNI 6692					
101	32	SCREW M12x30 UNI 5737		B.8			



ELECTRICAL SYMBOLS

[Symbol]	LEVEL SWITCH	[Symbol]	PRESSURE SWITCH
[Symbol]	HEAT	[Symbol]	TRIP SWITCH
[Symbol]	PROPORTIONAL SOLENOID VALVE	[Symbol]	TRIP SWITCH (P)
[Symbol]	SOLENOID VALVE	[Symbol]	WARNING LIGHT
[Symbol]	THREE-PHASE A.C. MOTOR	[Symbol]	WIND CONTROL
[Symbol]	THREE-PHASE A.C. GENERATOR	[Symbol]	WIND
[Symbol]	MEDICAL UNIT SWITCH	[Symbol]	FLOOD LIGHT
[Symbol]	JUNCTION BOX	[Symbol]	SOCKET GROUP WITH FUSE
[Symbol]	ELECTRIC INTERPHONE	[Symbol]	SHIRT BOX
[Symbol]	SHIELD SHEET	[Symbol]	POLE PLUG-IN CONNECTOR
[Symbol]	CABLE CLAMP	[Symbol]	POLE PLUG-IN CONNECTOR

LIGHTING EQUIPMENTS SIGNATURE READING KEYS

[Symbol]	PROGRESSIVE NUMBER LIGHT	[Symbol]	PHASE NUMBER WITH NUMBER
----------	--------------------------	----------	--------------------------

LIQUID TIGHT #120 NUMBERING SYSTEM

L11-116 LIQUID TIGHT REAR SIDE
 L12-24 LIQUID TIGHT REAR SIDE
 L13-34 LIQUID TIGHT REAR SIDE
 L14-44 LIQUID TIGHT REAR SIDE
 L15-14 LIQUID TIGHT FRONT SIDE
 L16-24 LIQUID TIGHT FRONT SIDE
 L17-34 LIQUID TIGHT FRONT SIDE

CABLE TRAY ITEM

A=CABLE TRAY INSIDE TRUSS
 B=CABLE TRAY REAR SIDE UNDER Q01 SWITCHBOARD
 C=CABLE TRAY REAR SIDE UNDER Q02 SWITCHBOARD
 D=CABLE TRAY FRONT SIDE UNDER Q01 SWITCHBOARD
 E=CABLE TRAY FRONT SIDE UNDER Q02 SWITCHBOARD
 F=CABLE TRAY FRONT SIDE UNDER TRUSS

READING KEYS

ES: CABLE W100 (A) =CABLE # W100 INSTALLED ON CABLE TRAY SIGNED "A"
 CABLE W130 (A)-(C/L/T)=CABLE # W130 INSTALLED ON CABLE TRAY SIGNED "A" AND "C"/"L"/"T"
 "C"/"L"/"T" LIQUID TIGHT SIGNED "L2"

REFERENCE DRAWINGS

108 DU ES 0-001	ELECTRIC USER
108 DU ES 0-002	CABLES BLOCK DIAGRAM
108 DU ES 0-003	CABLES ROUTING DESIGN
108 DU ES 0-004	Q01-MASTER SWITCHBOARD-ELECTRIC DIAGRAM
108 DU ES 0-005	Q02-SLAVE SWITCHBOARD-ELECTRIC DIAGRAM

2					
1	30/10/72	REVISED WHERE INDICATED	AJMM	LACOTT	CRMS
0	30/10/72	FIRST ISSUE	AJMM	LACOTT	CRMS
REV.	DATE	REV. DESC.	BY	CHECKED	APPROVED

DEAL

STRADDLE CARRIER
 SC 720 - 32

ELECTRIC DRAWING
 CABLES BLOCK DIAGRAM

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PROJECT: SKYWAY BRIDGE PROJECT
 S. FRANCISCO - OAKLAND BAY BRIDGE - USA

SECTION A-A

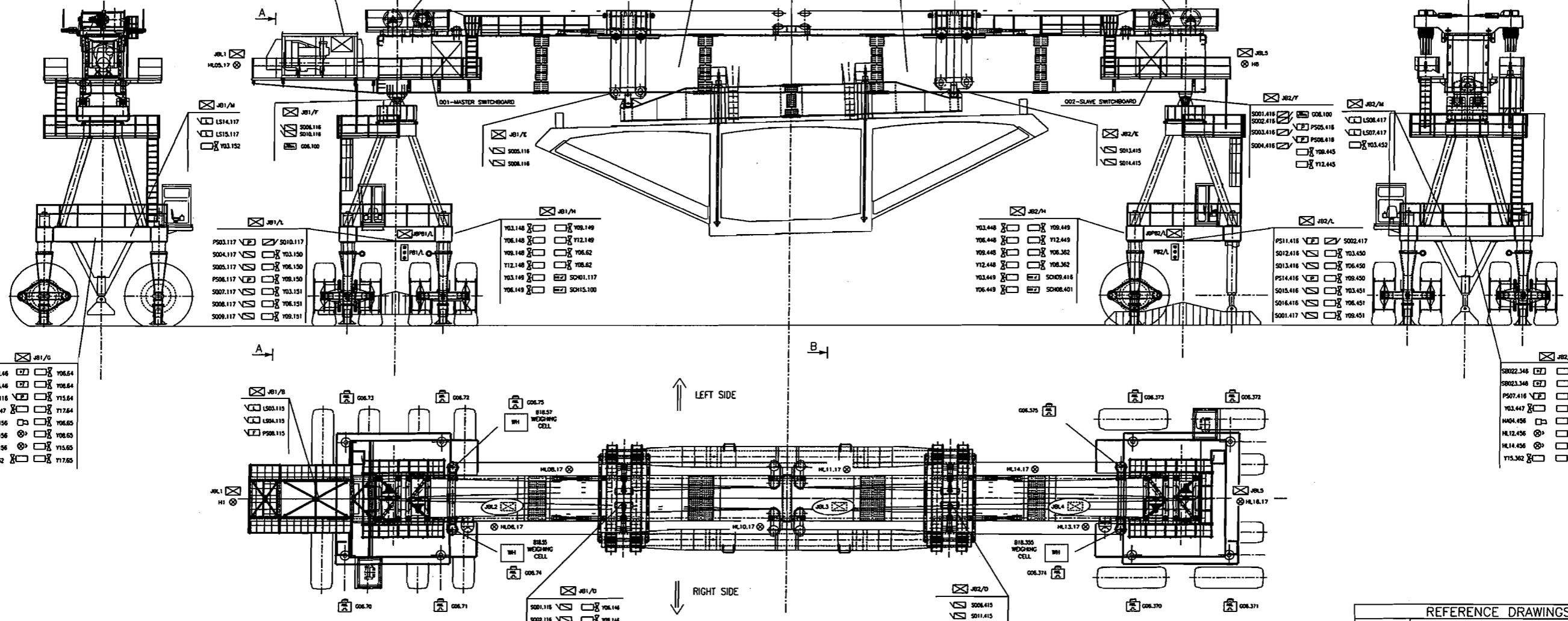
SECTION B-B

← STRADDLE CARRIER
BACKWARD DIRECTION

STRADDLE CARRIER →
FORWARD DIRECTION

↑ LEFT SIDE

↓ RIGHT SIDE



- SR022.46
- SR023.46
- PS13.116
- MA04.156
- HL12.156
- HL14.156
- Y15.52

- PS06.114
- PS07.114
- PS08.114
- PS09.114
- PS10.114
- PS11.114
- PS12.114
- PS13.114
- PS14.114
- PS15.114
- SO01.114

- SO08.115
- SO10.115
- SO12.115
- SO14.115
- SO16.115
- SO18.115
- SO20.115

- SO01.415
- SO02.415
- SO04.415
- SO06.415
- SO08.415
- SO10.415
- SO12.415

- LS14.117
- LS15.117
- Y03.152

- SO06.116
- SO08.116
- SO10.116

- SO05.116
- SO07.116
- SO09.116

- SO13.415
- SO15.415
- SO17.415

- PS03.117
- SO04.117
- SO05.117
- SO06.117
- SO07.117
- SO08.117
- SO09.117

- SO10.117
- Y03.150
- Y06.150
- Y09.150
- Y12.150
- Y15.151
- Y18.151

- Y03.148
- Y06.148
- Y09.148
- Y12.148
- Y15.148
- Y18.148
- SO01.117
- SO15.100

- Y03.448
- Y06.448
- Y09.448
- Y12.448
- Y15.448
- Y18.448
- SO09.416
- SO08.401

- SO01.416
- SO02.416
- SO03.416
- SO04.416
- COE.100
- PS05.416
- PS06.416
- Y08.445
- Y12.445

- LS08.417
- LS07.417
- Y03.452

- PS11.416
- SO12.416
- SO13.416
- SO14.416
- SO15.416
- SO16.416
- SO01.417

- SO02.417
- Y03.450
- Y06.450
- Y09.450
- Y12.451
- Y15.451
- Y18.451

- SR022.346
- SR023.346
- PS07.416
- MA04.456
- HL12.456
- HL14.456
- Y15.362
- Y06.364
- Y15.364
- Y17.364
- Y06.365
- Y15.365
- Y17.365

- SO01.118
- SO02.118
- SO03.118
- SO04.118
- Y03.146
- Y06.146
- Y09.146

- SO06.415
- SO11.415
- SO14.415

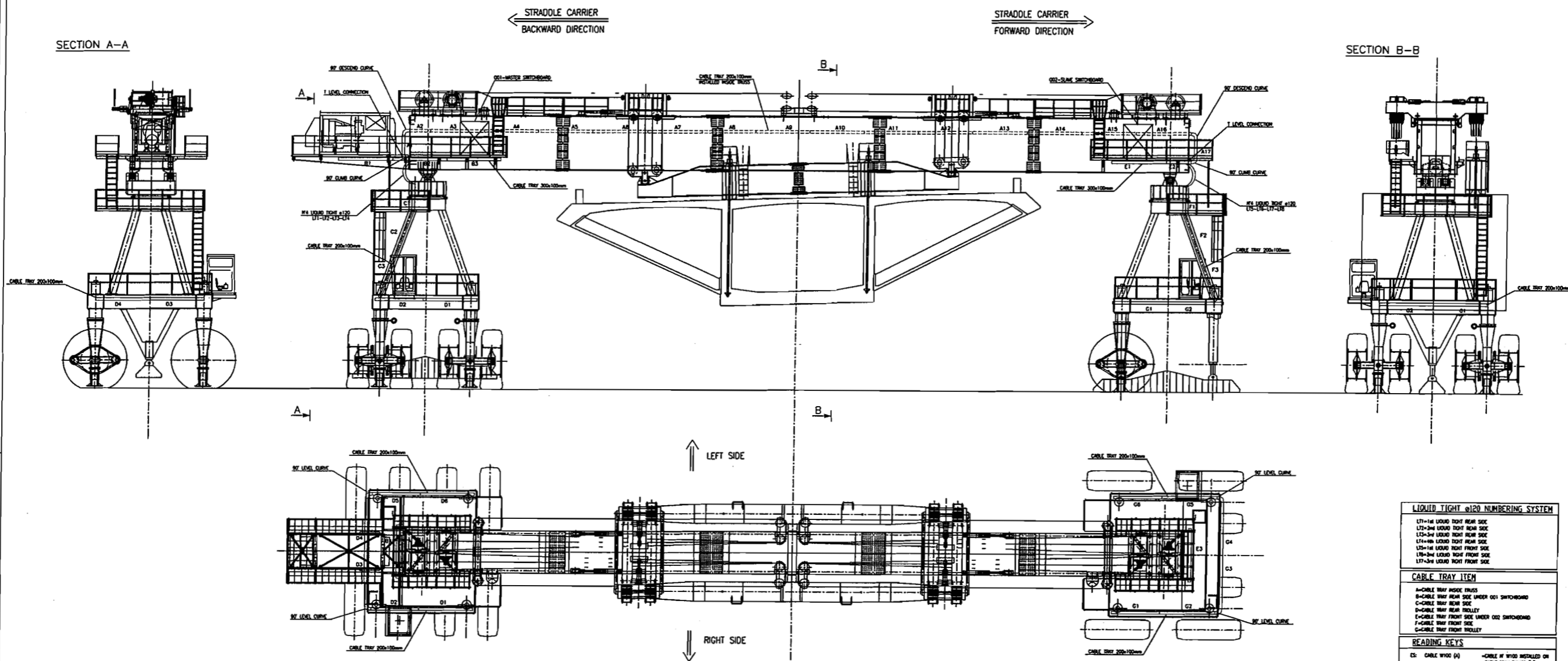
ELECTRICAL SYMBOLS					
	LEVEL SWITCH	(LS)		PRESSURE SWITCH	(PS)
	MOTOR	(M)		THERMAL SWITCH	(TS)
	PROPORTIONAL SOLENOID VALVE	(PSV)		EMERGENCY STOP BUTTON OR JOY STICK	(ES)
	SOLENOID VALVE	(SV)		ROTATING LIGHT	(RL)
	THREE-PHASE A.C. MOTOR	(M3)		RADIO CONTROL	(RC)
	THREE-PHASE A.C. GENERATOR	(G3)		BRAKE	(B)
	MECHANICAL LIMIT SWITCH	(LS)		FLOOD LIGHT	(FL)
	JUNCTION BOX	(JB)		SOCKETS GROUP WITH FUSE	(SG)
	ELECTRIC SWITCHBOARD	(ES)		SMART BOX	(SB)
	TROLLEY BAR	(TB)		FEMALE PLUG-IN CONNECTOR	(FC)
	CABLE CLAMP	(CC)		MALE PLUG-IN CONNECTOR	(MC)
LIGHTING EQUIPMENTS SIGNATURE READING KEYS					
	LIGHTING EQUIPMENT	(LE)		PHASE NUMBER WITH NEUTRAL	(PN)

REFERENCE DRAWINGS				
TON DU ES 0-001	ELECTRIC USER			
TON DU ES 0-002	CABLE BLOCK DIAGRAM			
TON DU ES 0-003	CABLE ROUTING DESIGN			
TON DU ES 0-004	001-MASTER SWITCHBOARD-ELECTRIC DIAGRAM			
TON DU ES 0-005	002-SLAVE SWITCHBOARD-ELECTRIC DIAGRAM			
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1				
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REV.	BY	REV. DESC.	DATE	APPROVED
DEAL		STRADDLE CARRIER SC 720 - 32		
		ELECTRIC DRAWING		
		ELECTRIC USER		
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KIEWIT / FCI / MANSON JV				
SKYWAY BRIDGE PROJECT				
S. FRANCISCO - OAKLAND BAY BRIDGE - USA				

- Tray in Main beam - installed
 - Everything else

SECTION A-A

SECTION B-B



LIQUID TIGHT @120 NUMBERING SYSTEM	
L17=18	LIQUID RIGHT REAR SIDE
L13=14	LIQUID RIGHT REAR SIDE
L13=14	LIQUID RIGHT REAR SIDE
L17=18	LIQUID RIGHT REAR SIDE
L13=14	LIQUID RIGHT FRONT SIDE
L13=14	LIQUID RIGHT FRONT SIDE
L17=18	LIQUID RIGHT FRONT SIDE

CABLE TRAY ITEM	
A	-CABLE TRAY INSIDE TRUSS
B	-CABLE TRAY REAR SIDE UNDER 001 SWITCHBOARD
C	-CABLE TRAY REAR SIDE
D	-CABLE TRAY REAR TROLLEY
E	-CABLE TRAY FRONT SIDE UNDER 002 SWITCHBOARD
F	-CABLE TRAY FRONT SIDE
G	-CABLE TRAY FRONT TROLLEY

READING KEYS	
01	CABLE W/100 (A)
02	CABLE W/100 (A)
03	CABLE W/100 (A)-(C)/17=CABLE W/100 INSTALLED ON CABLE TRAY SIDES 'X' AND 'Y' / LIQUID RIGHT SIDED LT

REFERENCE DRAWINGS				
106 BU ES 0-001	ELECTRIC USER			
106 BU ES 0-002	CABLES BLOCK DIAGRAM			
106 BU ES 0-003	CABLES ROUTING DESIGN			
106 BU ES 0-004	001-MINOR SWITCHBOARD-ELECTRIC DIAGRAM			
106 BU ES 0-005	002-SLACK SWITCHBOARD-ELECTRIC DIAGRAM			

2					
1					
0	20/06/02	FIRST ISSUE	A.J.M.H.	L.C.C.O.H.	C.M.H.S.
REV.	DATE	REV. BY	BY	CHKD.	APPROV.

DEAL					
STRADDLE CARRIER SC 720 - 32					
ELECTRIC DRAWING					
CABLES ROUTING AND DESIGN					
Scale:	1:1	Sheet:	1	of	1
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KIEWIT / FCI / HANSON JV					
SKYWAY BRIDGE PROJECT S. FRANCISCO - DAKLAND BAY BRIDGE - USA					

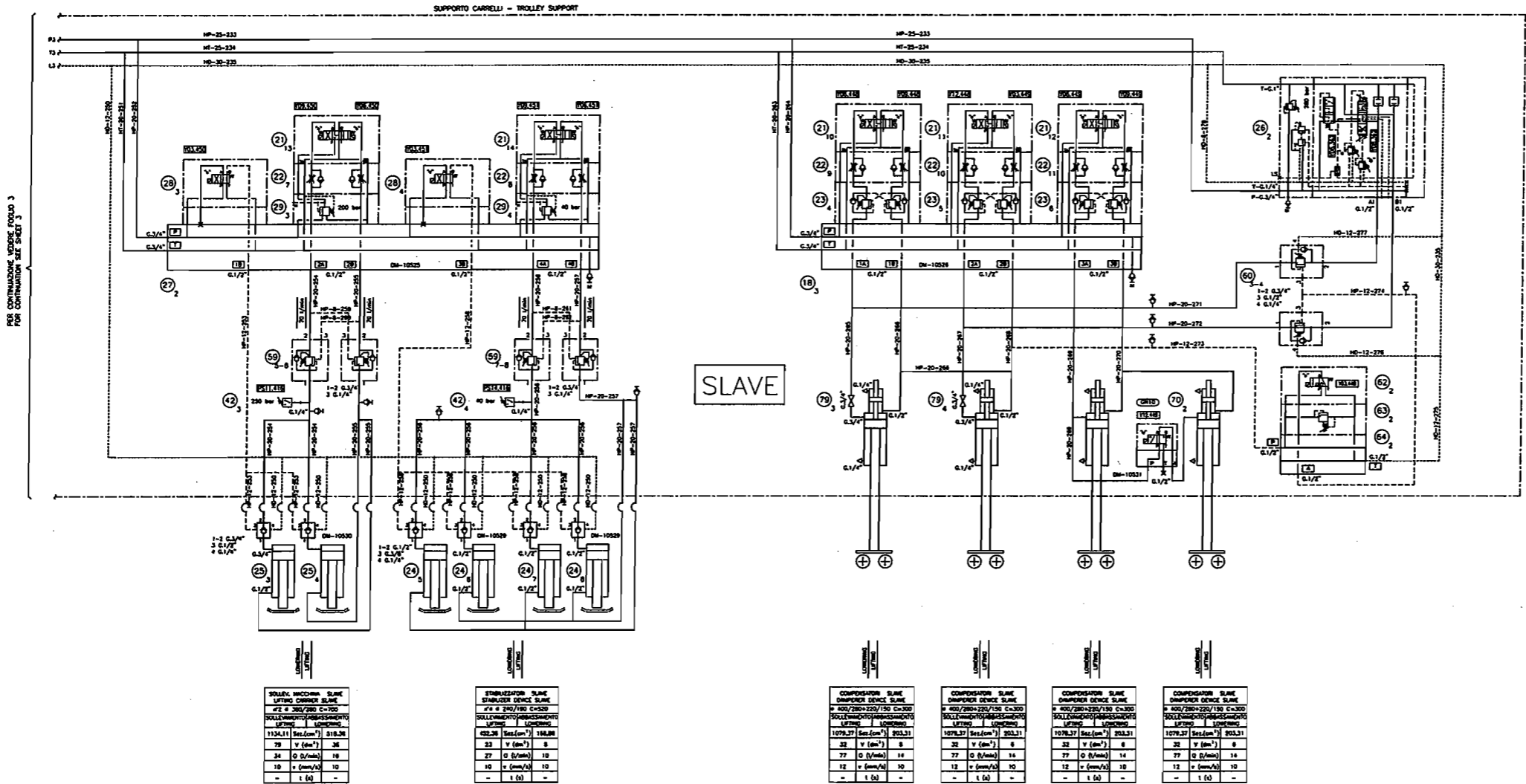
LISTA MATERIALI - LIST OF MATERIAL

70	4	VALVOLA A SFERA BALL VALVE	RHB-G3/4-1212-01X	HYDAC	
70	1	BLOCCO MANIFOLD	CP0102 T06-DU-CP-0-001	DEAL	
77	1	BLOCCO MANIFOLD	CP0101 T06-DU-CP-0-001	DEAL	
76	8	VALVOLA A SFERA BALL VALVE	RHB-G3/8"-1112-01X	HYDAC	
75	2	SPRINT ARIA AIR VENT	80400P2W1.0	HYDAC	
74	1	FILTRO FILTER	RF-8H/HC1300-DF-10-C-1.1/	HYDAC	
73	2	FILTRO FILTER	RF-8H/HC330-F-10-C-1.1/	HYDAC	
72	2	FILTRO FILTER	LF-8H/HC330-F-10-C-1.0/	HYDAC	
71	1	SCAMBIORE DI CALORE HEAT EXCHANGER	GRAN-EL10L-130/2.0/C/ M/A/ALP280/10/1	HYDAC	
70	2	ELETTROVALVOLA SOLENOID VALVE	3WE 632/024H8K4 PIASTRA C 67/D1 (G.1/2")	REXROTH	
69	90	PRESA DI PRESSIONE PRESSURE CONNECTION	0714G00C G.1/4"	MINI PRESS	
68	1	VALVOLA DI NON RITORNO CHECK VALVE	S15A1.0	REXROTH	
68	1	VALVOLA A SFERA BALL VALVE	RHB-G3/4"-1112-01X	HYDAC	
68	1	PIASTRA PLATE	G 534/G1	REXROTH	
65	1	VALVOLA DI MAX. PRESSIONE SOLENOID VALVE	Z20B10VC2-6X/100V	REXROTH	
64	2	PIASTRA PLATE	G 502/G1	REXROTH	
63	2	VALVOLA DI MAX. PRESSIONE RELIEF VALVE	Z20B0P2-6X/315V	REXROTH	
62	2	ELETTROVALVOLA SOLENOID VALVE	M-35EW6C3X/420AC24H8K4	REXROTH	
Pos. 0.1y		Description		Type	Contributore
Pos. 0.1b		Description		Type	Manufacturer

LISTA MATERIALI - LIST OF MATERIAL

81	2	VALVOLA DI NON RITORNO CHECK VALVE	CHEB-RCH-80W/S	SUN
80	4	VALVOLA DI BILANCIAMENTO BALANCING VALVE	CWCA-UH-NM/S	SUN
59	8	VALVOLA DI BILANCIAMENTO BALANCING VALVE	CBEA-UH-80W/S	SUN
58	2	VALVOLA A SFERA BALL VALVE	RHB-G.1"-1112-01X	HYDAC
57	2	VALVOLA A SFERA BALL VALVE	RHB-G.1/2"-1112-01X	HYDAC
56	6	VALVOLA A SFERA BALL VALVE	RHM-G.1.1/2"-1112-01X	HYDAC
55	2	VALVOLA DI NON RITORNO CHECK VALVE	S30A1.0	REXROTH
54	2	ACCUMULATORE ACCUMULATOR	SBO140-1.4E1/112S140K	HYDAC
53	2	IMP. ACCOPPIAMENTO POMPA P/PO MOTORE M2AS05A	PO=10 ASME "1" STAMP POMPA P/PO MOTORE M2AS05A	REXROTH
52	2	POMPA A INGRANAGGI GEAR PUMP	PLP20-31.500-82E2- 10E/00-M G.3/4"	CASAPPA
51	2	BLOCCO CONNECTOR	00.01.01.01.00.00	EDI SYSTEM
50	2	BLOCCO ELECTRIC PLUG	SB 00.02-11-01.30-0C	EDI SYSTEM
49	2	BLOCCO COL	SB 00.02-11-01.30-0C	EDI SYSTEM
48	2	ELETTROVALVOLA SOLENOID VALVE	4E-8A-24-12-NA-S1 00.18.02.21-17-09	EDI SYSTEM
47	2	REGOLATORE DI FLUSSO FLOW REGULATOR	F7257/2-100 G.1"	TOCHILLA
46	2	VALVOLA DI NON RITORNO CHECK VALVE	S20A1.0	REXROTH
45	2	VALVOLA DI NON RITORNO CHECK VALVE	S20A3.0	REXROTH
44	2	VALVOLA DI NON RITORNO CHECK VALVE	S30A3.0	REXROTH
43	6	VALVOLA DI NON RITORNO CHECK VALVE	S20A1.0	REXROTH
42	6	PRESSOSTATO PRESSOSTATO	HEDE80A1X/S30K14AS	REXROTH
41	2	PRESSOSTATO PRESSURE SWITCH	HEDE80A1X/S0K14AS	REXROTH
40	2	SPRINT ARIA AIR VENT	80100P2W1.0	HYDAC
39	2	LIVELLO ELETTRICO ELECTRIC LEVEL	EG-TC1 A=250	MP FILTR
38	2	LIVELLO ELETTRICO ELECTRIC LEVEL	EG-TC1 A=150	MP FILTR
37	1	LIVELLO ELETTRICO ELECTRIC LEVEL	EG-TC1 A=500	MP FILTR
36	2	LIVELLO OTTICO OPTICAL LEVEL	LW30-127-M12	MP FILTR
35	1	LIVELLO OTTICO OPTICAL LEVEL	LW30-254-M12	MP FILTR
34	2	TEMPERATURE SWITCH THERMISTOR	EFS-77	OMFLOSS
33	1	VALVOLA A FARFALLA BUTTERFLY VALVE	DN100 PN16	
32	1	VALVOLA A SFERA BALL VALVE	G.2" PN16	
31	3	VALVOLA A SFERA BALL VALVE	G.1" PN16	
30	3	VALVOLA A SFERA BALL VALVE	G.1" PN16	
29	4	ROUTING E PRESSIONE PRESSURE REDUCING VALVE	ZDR10HP5-3X/200M	REXROTH
28	4	SOLENOID VALVE SOLENOID VALVE	4WE6D62/EG24H8K4+	REXROTH
27	2	ELETTROVALVOLA SOLENOID VALVE	4WE6D62/EG24H8K4+	REXROTH
26	2	BLOCCO DISTRIBUTORE PROPORZIONALE PROPORTIONAL CONTROL BLOCK	MM-5145-00/ 1M4-12/21R 775530	REXROTH

25	4	VALVOLA DI RITORNO CHECK VALVE	CHEB-RCH-NM/S	SUN	
24	8	VALVOLA DI RITORNO CHECK VALVE	CWCA-UH-NM/S	SUN	
23	8	VALVOLA DI BILANCIAMENTO BALANCING VALVE	CBEA-UH-80W/S	SUN	
22	11	REGOLATORE DI FLUSSO FLOW REGULATOR	ZDF510-5-3X/V	REXROTH	
21	14	SOLENOID VALVE SOLENOID VALVE	4WE10A3X/024H8K4	REXROTH	
20	3	VALVOLA DI RITORNO CHECK VALVE	S2510-1-3E/	REXROTH	
19	3	REGOLATORE DI FLUSSO FLOW REGULATOR	ZDF510-5-3X/S2V	REXROTH	
18	3	BLOCCO VALVOLE VALVES BLOCK	0420-5/3Y	REXROTH	
17	4	BLOCCO DISTRIBUTORE PROPORZIONALE PROPORTIONAL CONTROL BLOCK	MM-5146-00/ 2M4-12/21R 775537	REXROTH	
16	2	PRESSOSTATO PRESSURE SWITCH	HEDE80A1X/S0K14AS 30-26-013	REXROTH	
15	2	VALVOLA PROPORZIONALE CONTROLLO PRESS. PROPORTIONAL CONTROL VALVE	4WE6D62/EG24H8K4+	REXROTH	
14	2	SOLENOID VALVE SOLENOID VALVE	4WE6D62/EG24H8K4+	REXROTH	
13	8	ELETTROVALVOLA SOLENOID VALVE	4WE6D62/EG24H8K4+	REXROTH	
12	2	SCHEMA ELETTRONICA ELECTRONIC CARD	PIR24F/11	REXROTH	
11	2	POMPA A PISTONE PISTON PUMP	4WY6250P201/S2L- M2010P010	REXROTH	
10	2	BLOCCO DISTRIBUTORE PROPORZIONALE PROPORTIONAL CONTROL BLOCK	MM-5145-00/ 2M4-12/21R 775531	REXROTH	
9	12	REGOLATORE DI FLUSSO FLOW REGULATOR	MR6G1X/V	REXROTH	
8	4	VALVOLA DI BILANCIAMENTO BALANCING VALVE	8V020W28W11B- M030000000000	REXROTH	
7	4	MOTORE IDRAULICO HYDRAULIC MOTOR	ASMT070/10/83W-0500- V2B3708	REXROTH	
6	4	SOLENOID VALVE SOLENOID VALVE	4WE6D62/EG24H8K4+	REXROTH	
5	4	ELETTROVALVOLA SOLENOID VALVE	PIASTRA C342/D1 (G.3/8") PIASTRA C341/D1 (G.1/4")	REXROTH	
4	1	ELETTROVALVOLA SOLENOID VALVE	PIASTRA C341/D1 (G.1/4")	REXROTH	
3	4	SCHEMA ELETTRONICA ELECTRONIC CARD	MRV481X/024F	REXROTH	
2	1	POMPA A PISTONE PISTON PUMP	ZP211-11L213	REXROTH	
1	1	POMPA A PISTONE PISTON PUMP	HMV500R/SOL-P281300H	REXROTH	
Pos. 0.1y		Description		Type	Contributore
Pos. 0.1b		Description		Type	Manufacturer



SEE CONTINUING USE SHEET 3 FOR CONTINUATION OF SHEET 3

SOLENOID VALVE LIFTING CYLINDER SLIME	STABILIZER SLIME STABILIZER DEVICE SLIME	COMPENSATOR SLIME COMPENSATOR DEVICE SLIME	COMPENSATOR SLIME COMPENSATOR DEVICE SLIME	COMPENSATOR SLIME COMPENSATOR DEVICE SLIME	COMPENSATOR SLIME COMPENSATOR DEVICE SLIME
110A/11 (mm ²) 818.36	62.28 (mm ²) 116.88	1079.27 (mm ²) 163.21	1079.27 (mm ²) 163.21	1079.27 (mm ²) 163.21	1079.27 (mm ²) 163.21
78 V (mm ²) 8	23 V (mm ²) 8	32 V (mm ²) 8	32 V (mm ²) 8	32 V (mm ²) 8	32 V (mm ²) 8
24 Q (mm ²) 18	27 Q (mm ²) 18	77 Q (mm ²) 14	77 Q (mm ²) 14	77 Q (mm ²) 14	77 Q (mm ²) 14
10 v (mm ² /s) 10	10 v (mm ² /s) 10	12 v (mm ² /s) 10	12 v (mm ² /s) 10	12 v (mm ² /s) 10	12 v (mm ² /s) 10
- 1 (G)	- 1 (G)	- 1 (G)	- 1 (G)	- 1 (G)	- 1 (G)

DEAL

STRADDLE CARRIER
SC 720 - 32

HYDRAULIC DIAGRAM

Scale: A0

4 of 4

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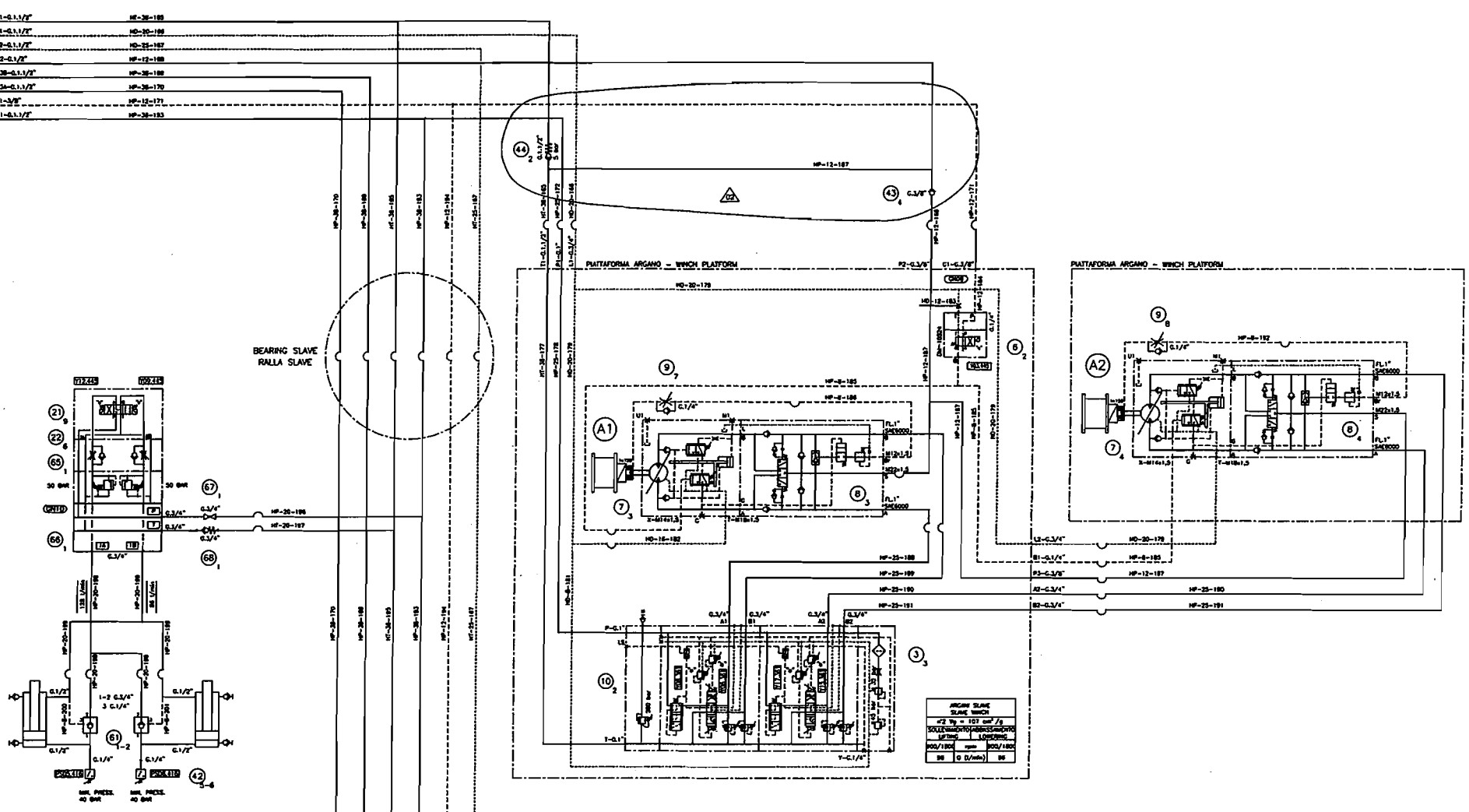
KIEWIT / FCI / MANSON JV
SKYWAY BRIDGE PROJECT
S. FRANCISCO - OAKLAND BAY BRIDGE - USA

SLAVE

FOR CONTINUATION WORKSHEET FOR CONTINUATION SHEET 2

T1	HP-38-028	T1-0.1/2"	HP-38-188
L1	HP-38-029	L1-0.1/2"	HP-38-189
L2	HP-38-030	L2-0.1/2"	HP-38-190
P2	HP-38-031	P2-0.1/2"	HP-38-191
P2R	HP-38-032	P2R-0.1/2"	HP-38-192
P2L	HP-38-033	P2L-0.1/2"	HP-38-193
O1	HP-38-034	O1-0.1/2"	HP-38-194
P1	HP-38-035	P1-0.1/2"	HP-38-195

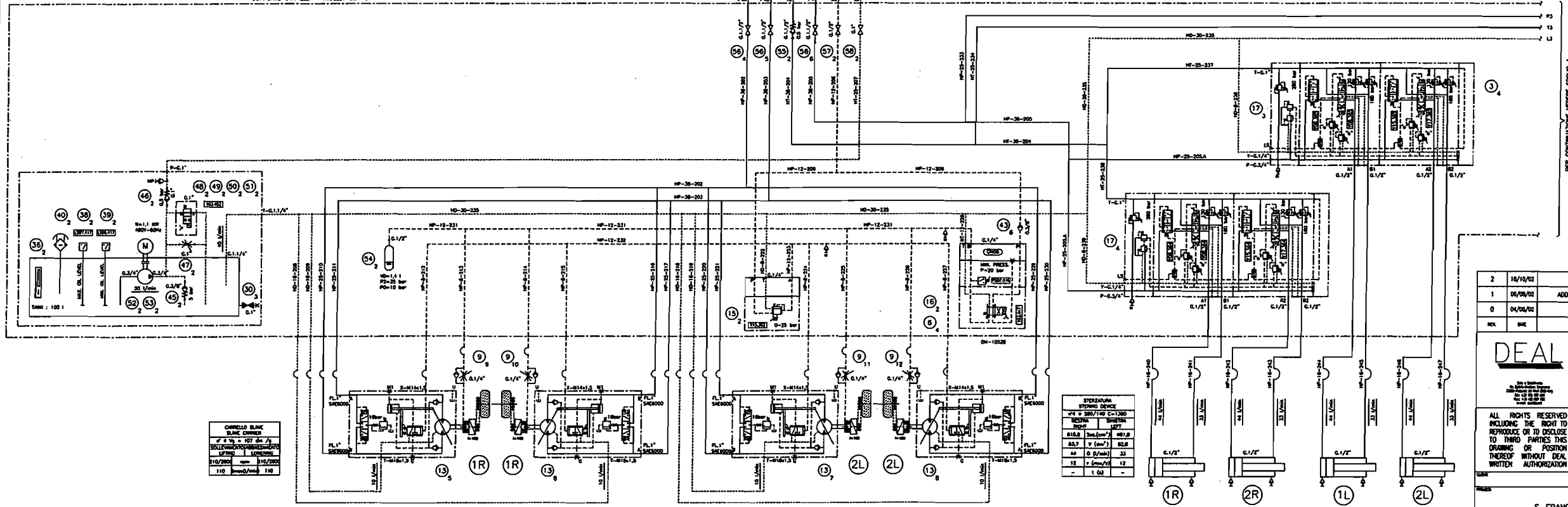
TRAVATA PRINCIPALE - MAIN BEAM



RISERAZIONE RALLA	
LUNGO	
22	300/150
23	300/150
24	300/150
25	300/150
26	300/150
27	300/150
28	300/150
29	300/150
30	300/150
31	300/150

RALLA SLAVE	
LUNGO	
22	300/150
23	300/150
24	300/150
25	300/150
26	300/150
27	300/150
28	300/150
29	300/150
30	300/150
31	300/150

SUPPORTO CARRELLI - TROLLEY SUPPORT



CORREDO SLAVE	
LUNGO	
22	300/150
23	300/150
24	300/150
25	300/150
26	300/150
27	300/150
28	300/150
29	300/150
30	300/150
31	300/150

SOSTEGNO CARRELLI	
LUNGO	
22	300/150
23	300/150
24	300/150
25	300/150
26	300/150
27	300/150
28	300/150
29	300/150
30	300/150
31	300/150

2	18/10/02	REVISED /02/	BASSO	
1	04/09/02	ADDED ELECTRICAL TAG	BASSO	
0	04/09/02	FIRST ISSUE	BASSO	
REV.	DATE	REV. DESCRIPTION	BY	CHECKED / APPROVED

DEAL

STRADDLE CARRIER
SC 720 - 32

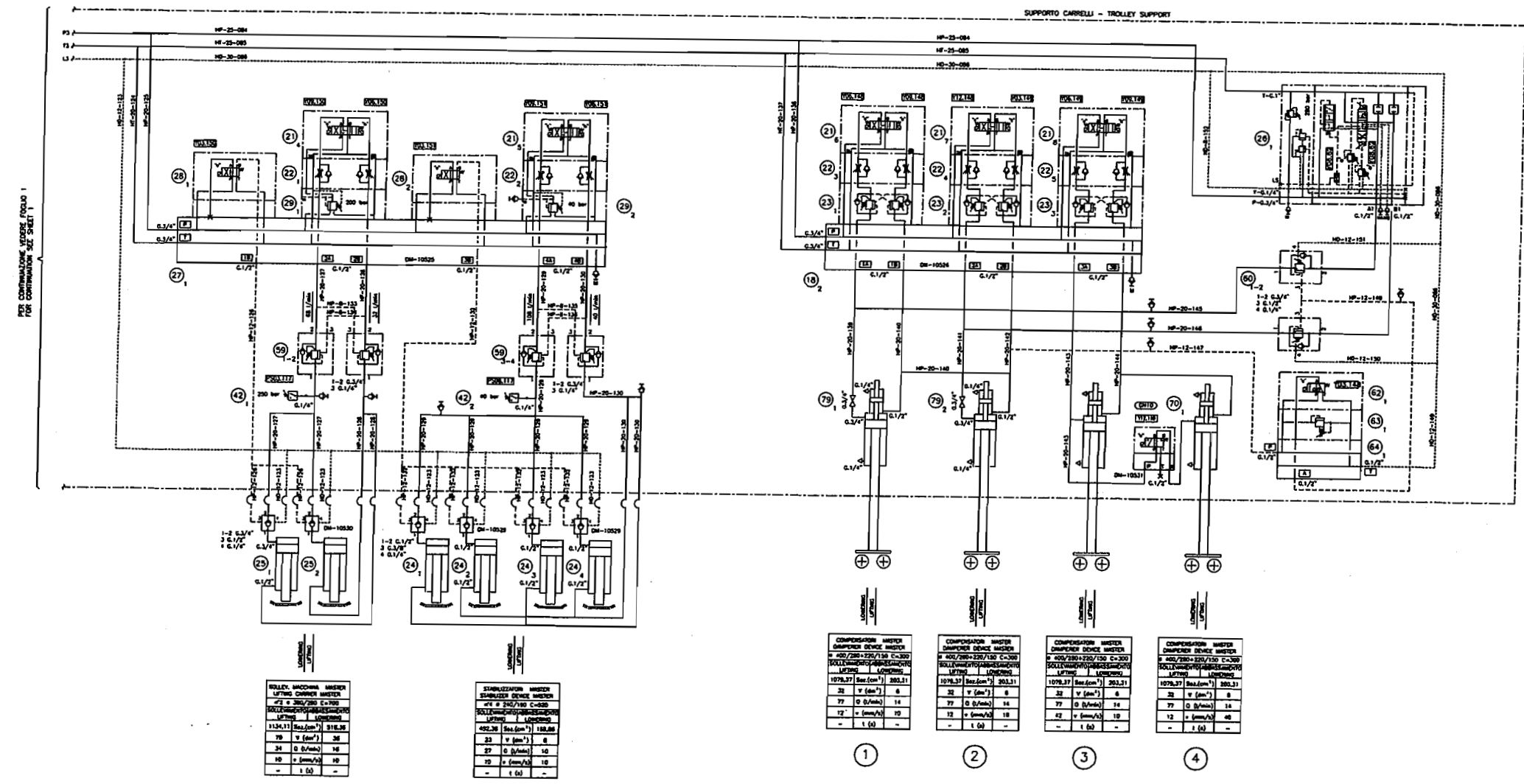
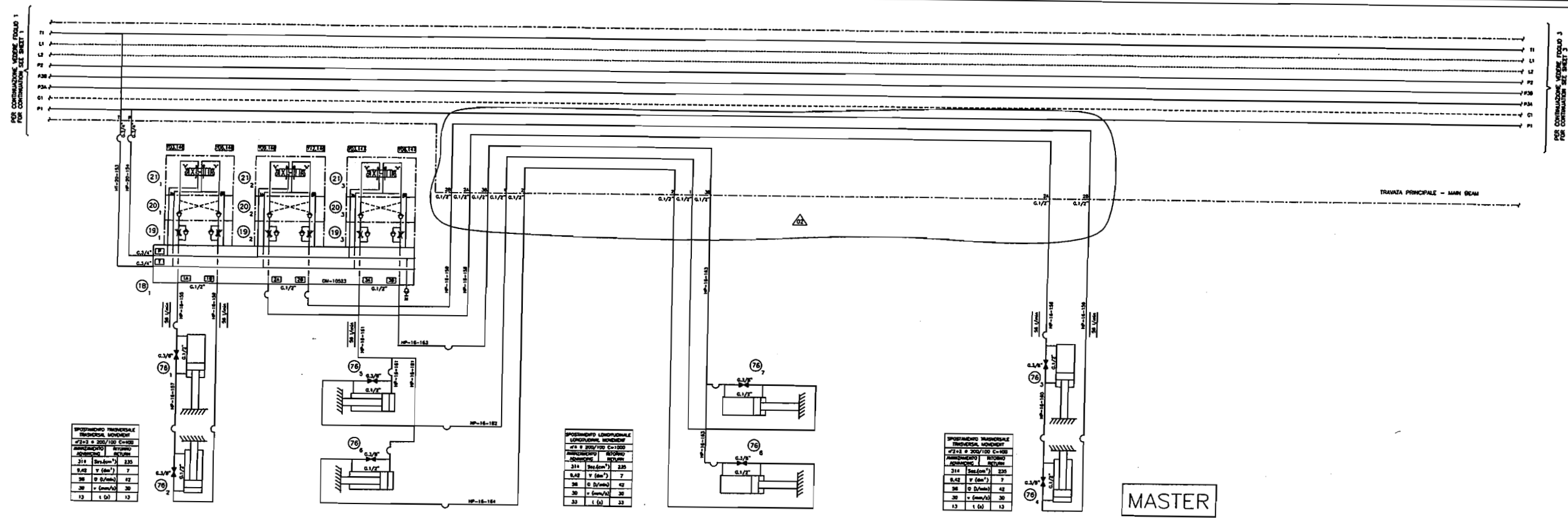
HYDRAULIC DIAGRAM

Scale: 3 4

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T06DUHS0-0012

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0	04/08/02	FIRST ISSUE	MS30	
REV.	DATE	REV. DESC.	DESIGN	CHECKED

DEAL

STRADDLE CARRIER
SC 720 - 32

HYDRAULIC DIAGRAM

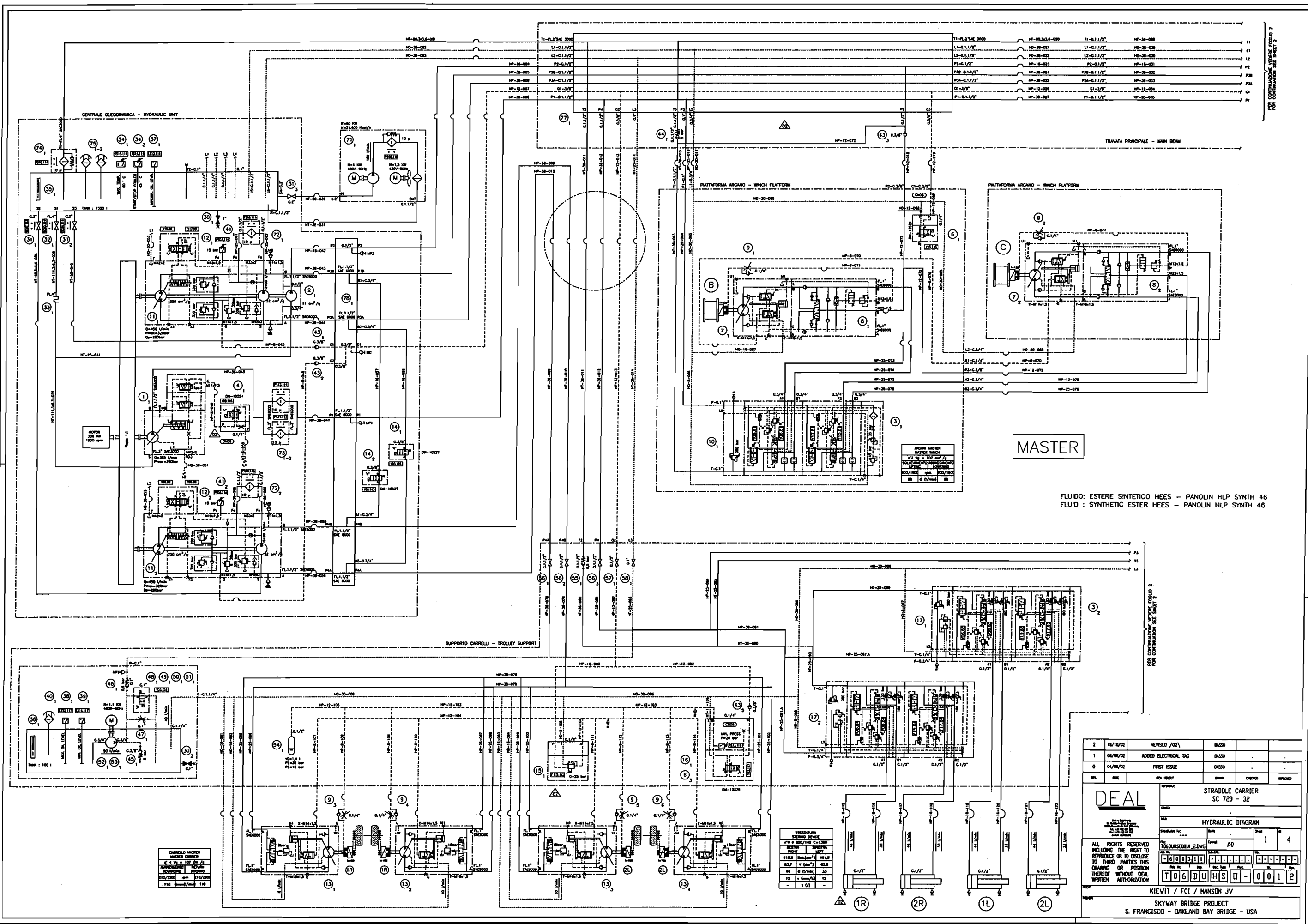
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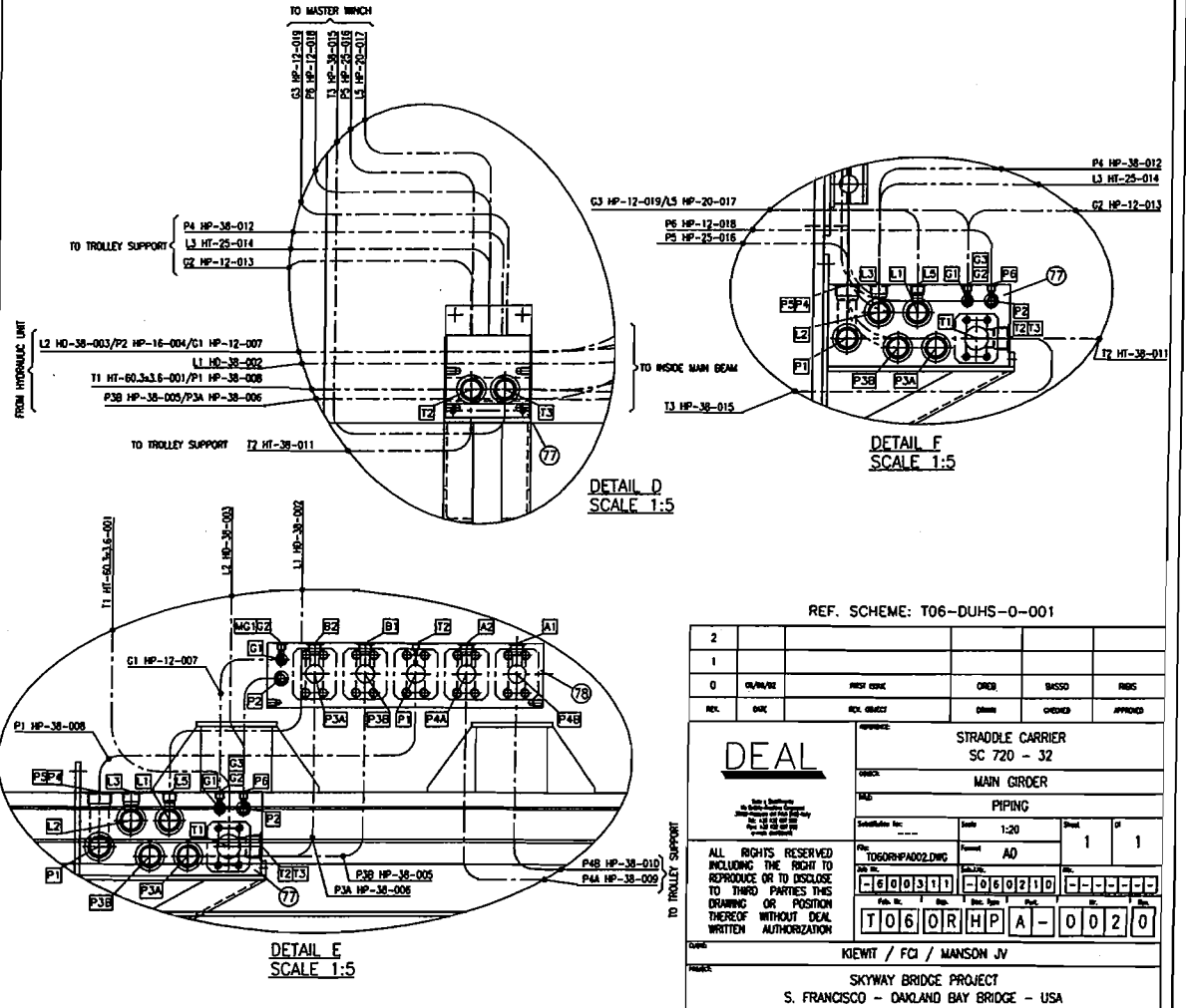
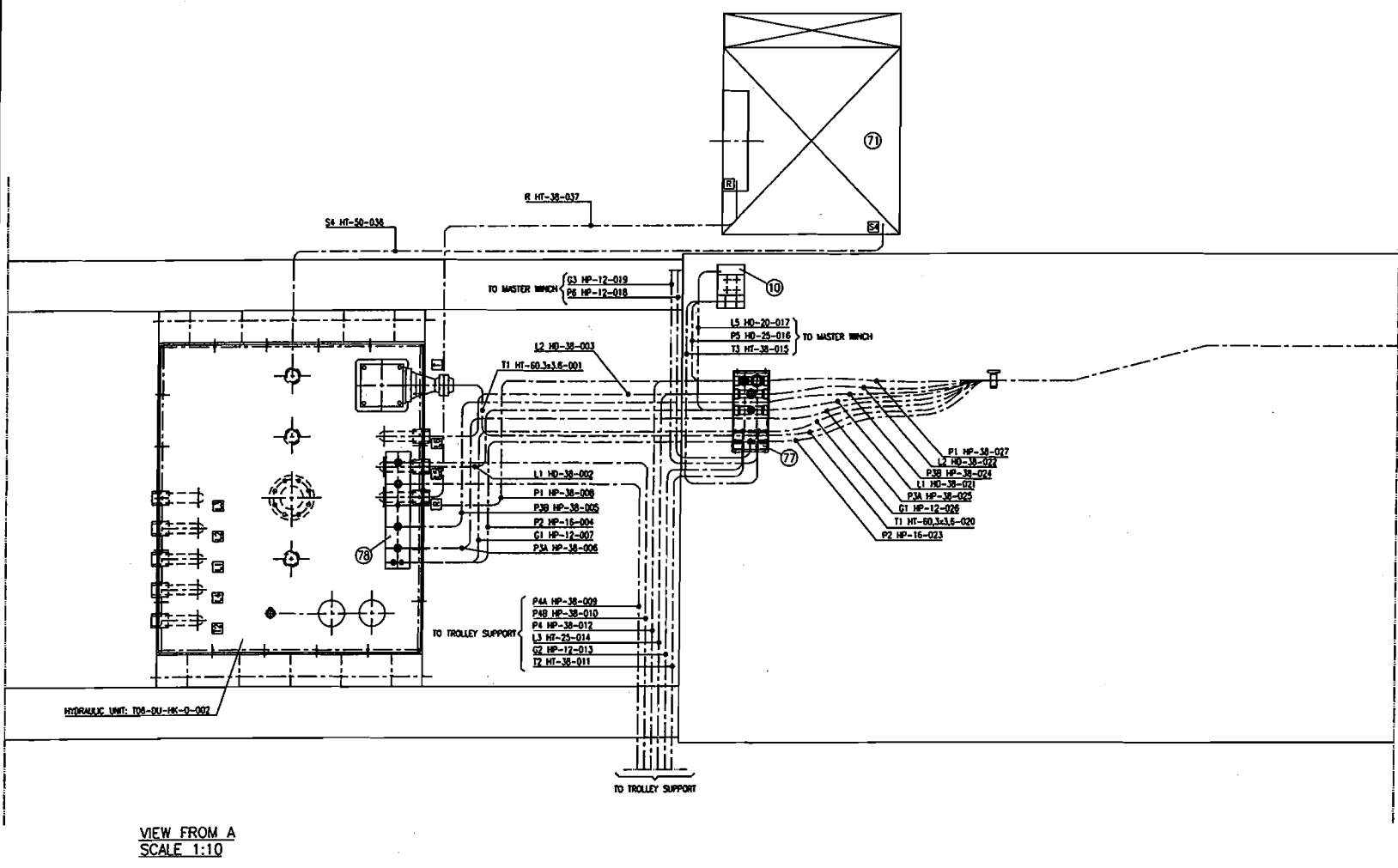
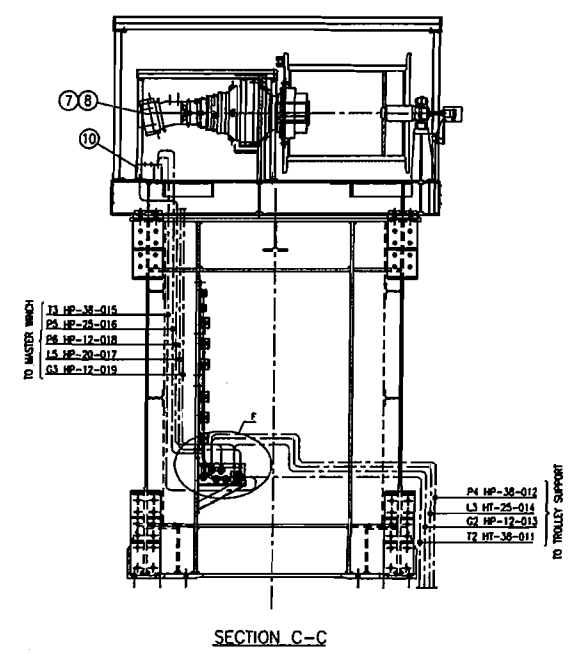
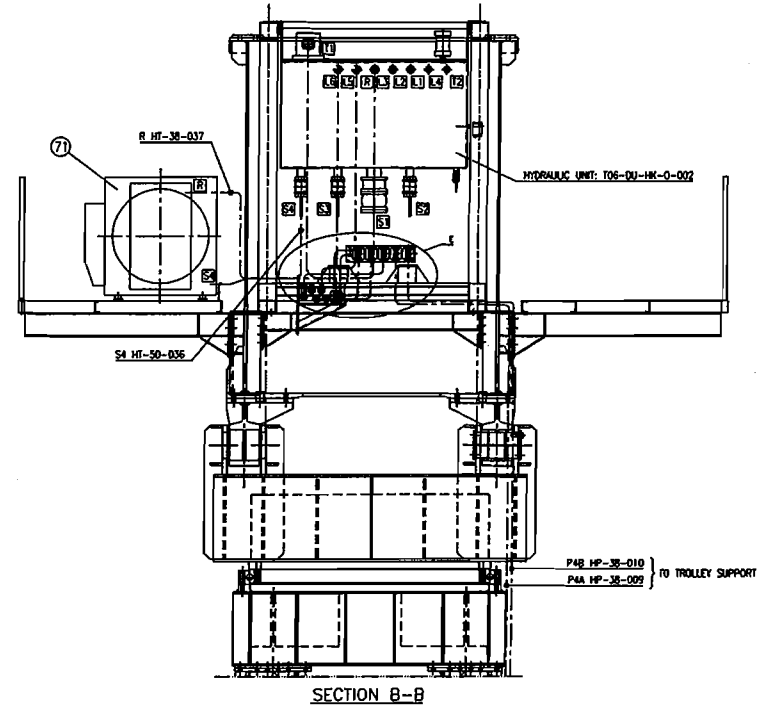
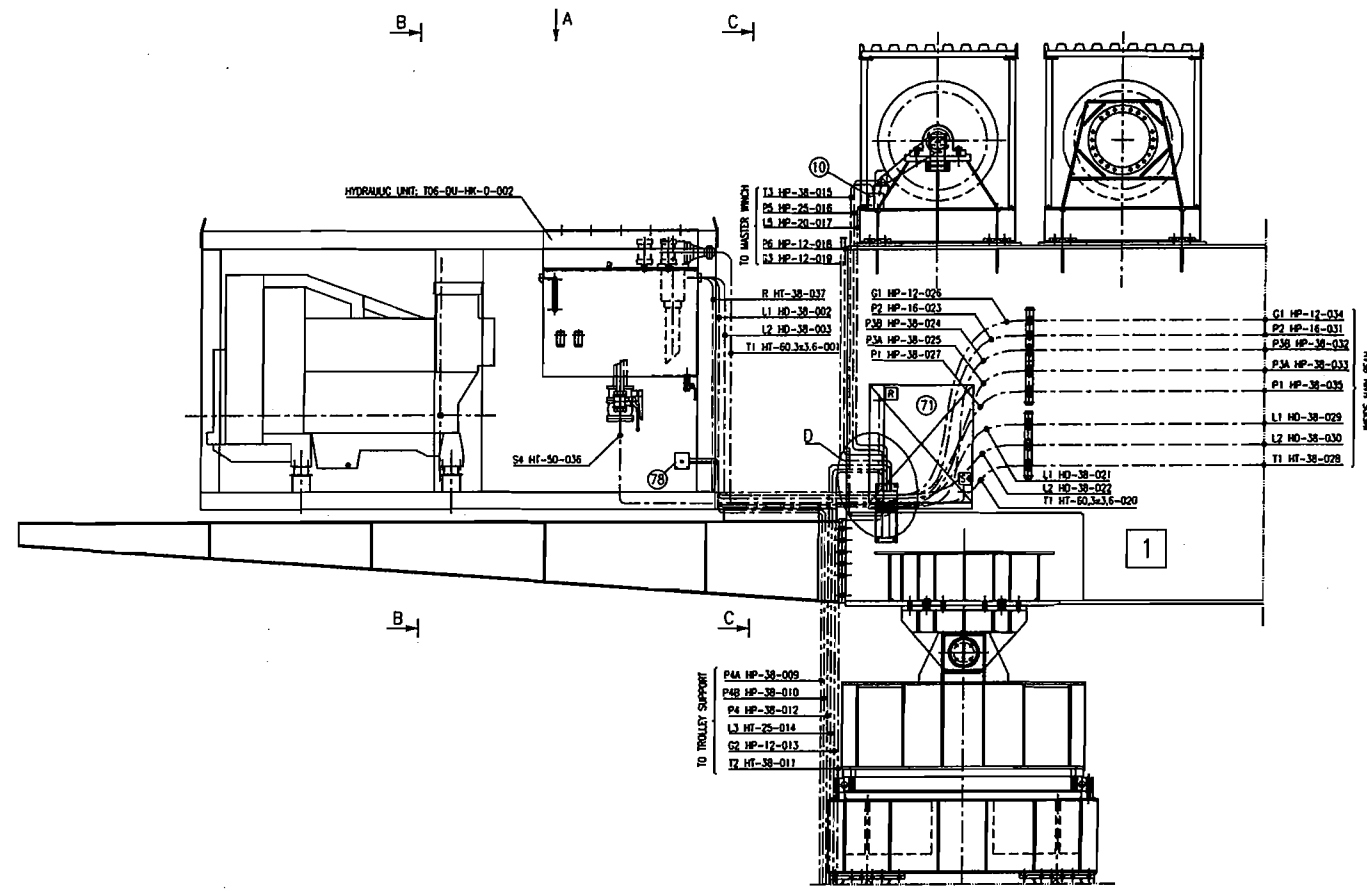
PER CONTINUAZIONE VEDERE FIGURA 2
FOR CONTINUATION SEE SHEET 2

MASTER

FLUIDO: ESTERE SINTETICO HEES - PANOLIN HLP SYNTH 46
 FLUID : SYNTHETIC ESTER HEES - PANOLIN HLP SYNTH 46

PER CONTINUAZIONE VEDERE FIGURA 2
FOR CONTINUATION SEE SHEET 2

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1	06/06/02	ADDED ELECTRICAL ENG	BASSO		
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			STRADDLE CARRIER SC 720 - 32		
HYDRAULIC DIAGRAM			1 4		
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2					
1					
0	REV. NO.	REV. DATE	REV. BY	REV. CHECKED	REV. APPROVED

STRADDLE CARRIER
SC 720 - 32

MAIN GIRDER
PIPING

DATE: 1-20

SCALE: AD

PROJECT: T06-DUHS-0-001

REV. NO.: 001

REV. DATE: 01/20

REV. BY: [Signature]

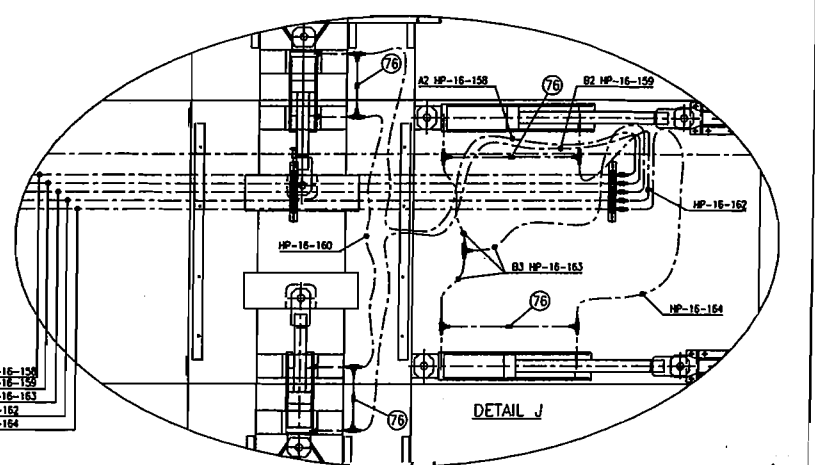
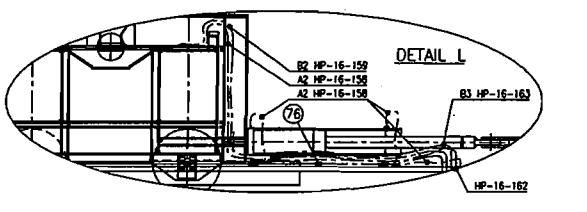
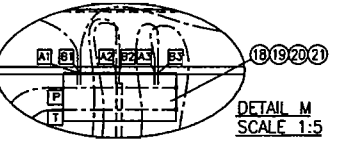
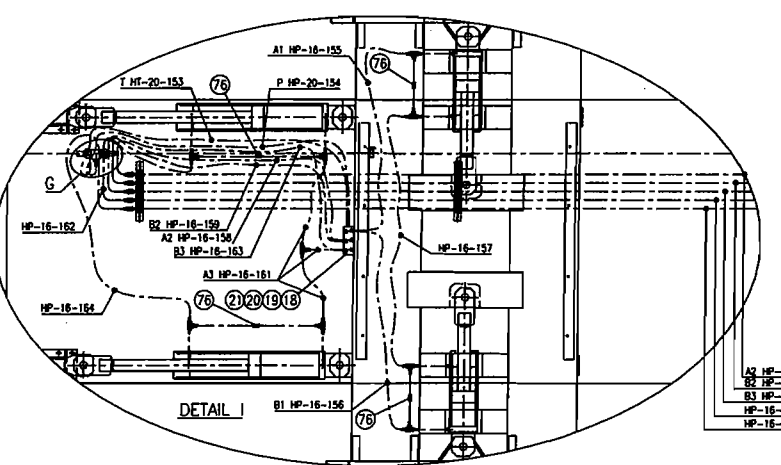
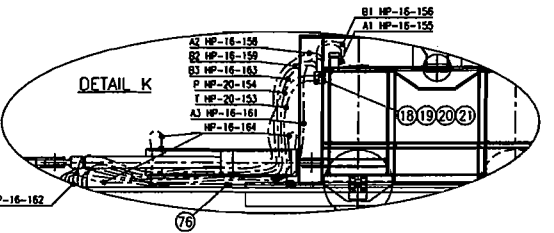
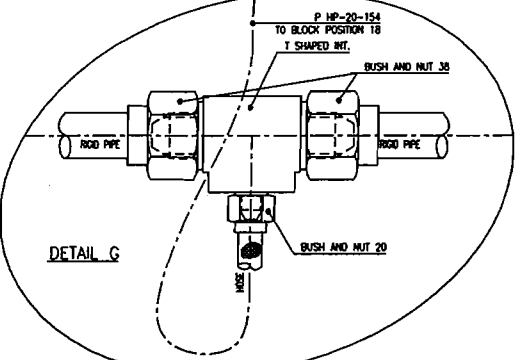
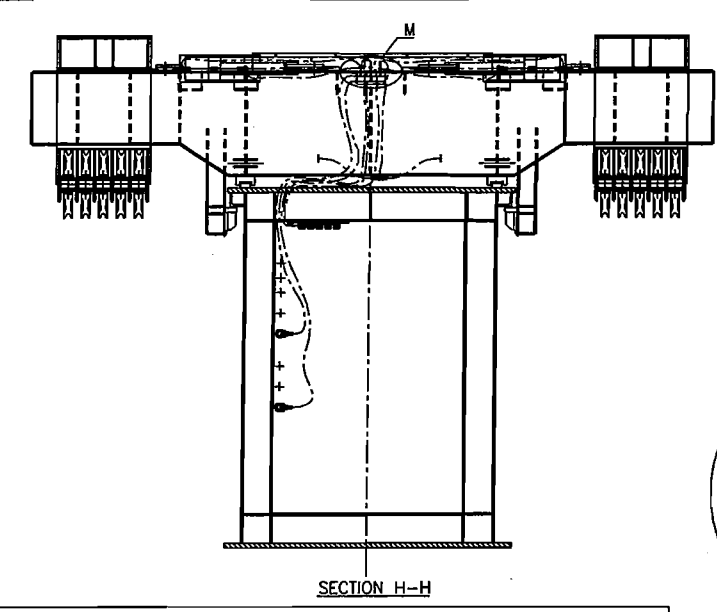
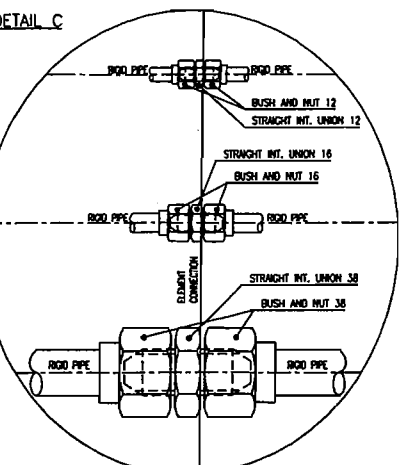
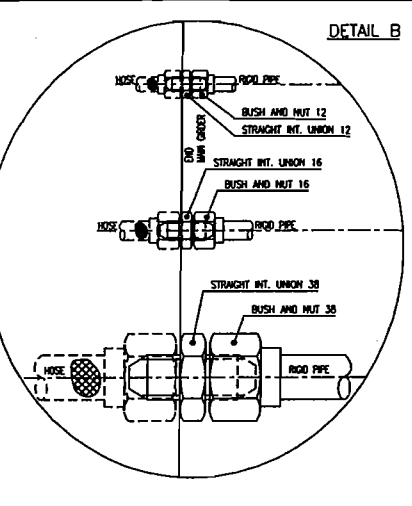
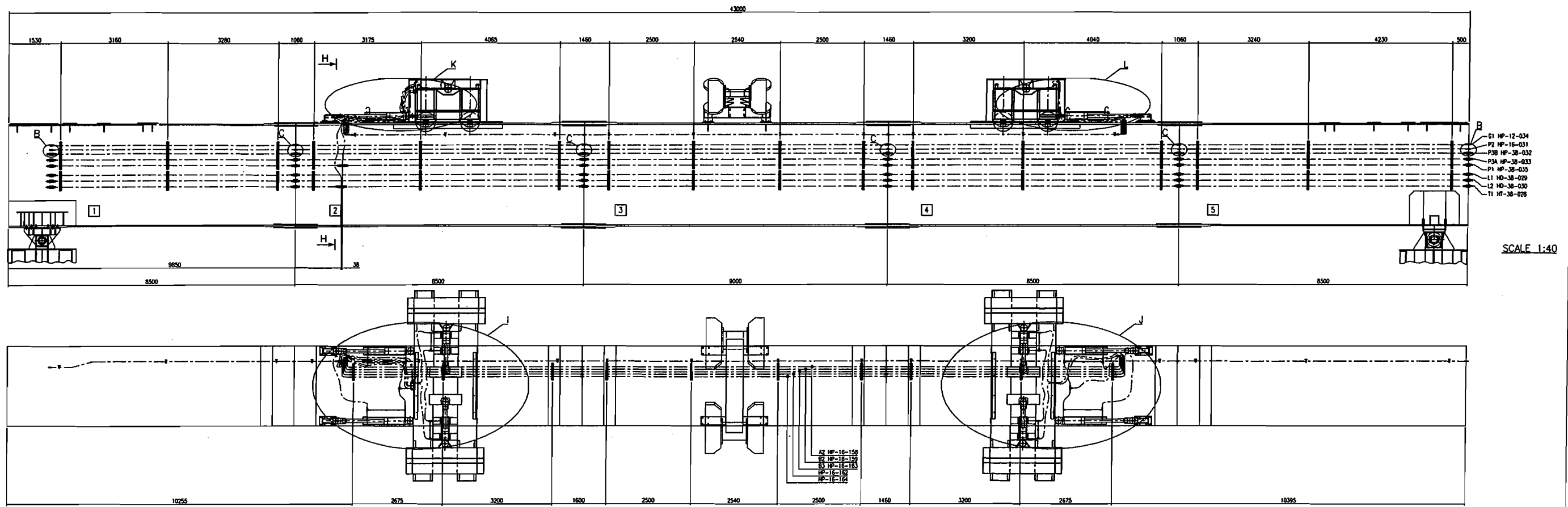
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PROJECT: KIEWIT / FCI / MANSON JV

SKYWAY BRIDGE PROJECT

S. FRANCISCO - OAKLAND BAY BRIDGE - USA



SCALE 1:2

DEAL

STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER
PIPING

Scale: 1:20
Sheet: 1 of 2

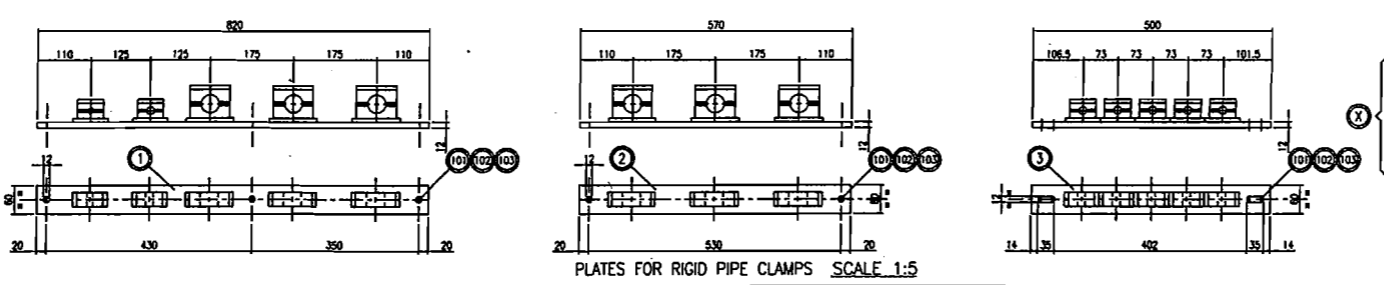
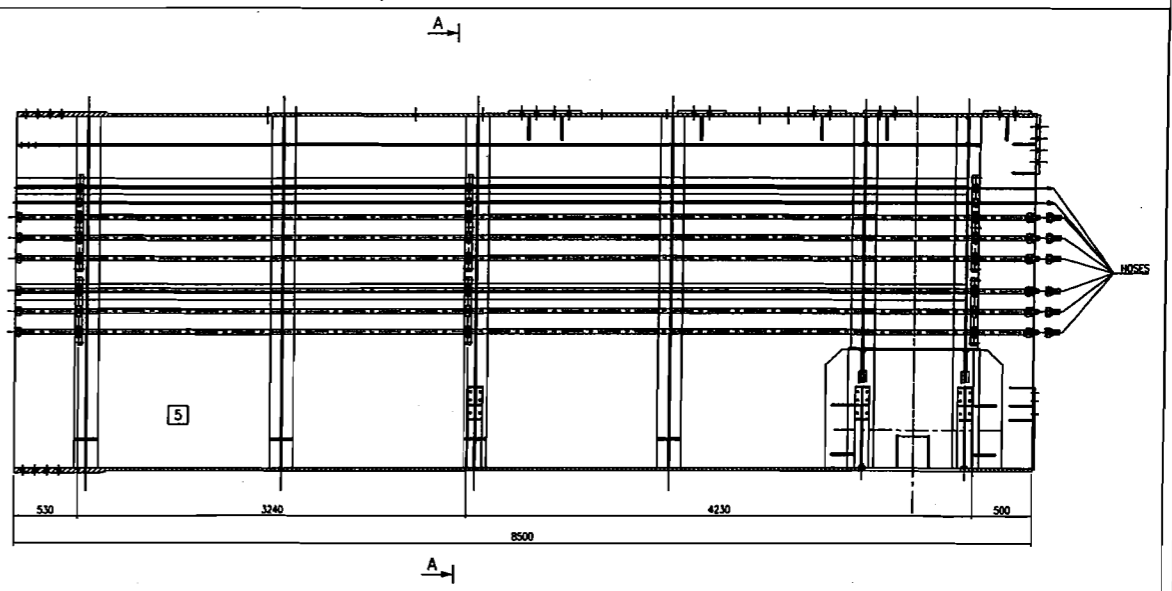
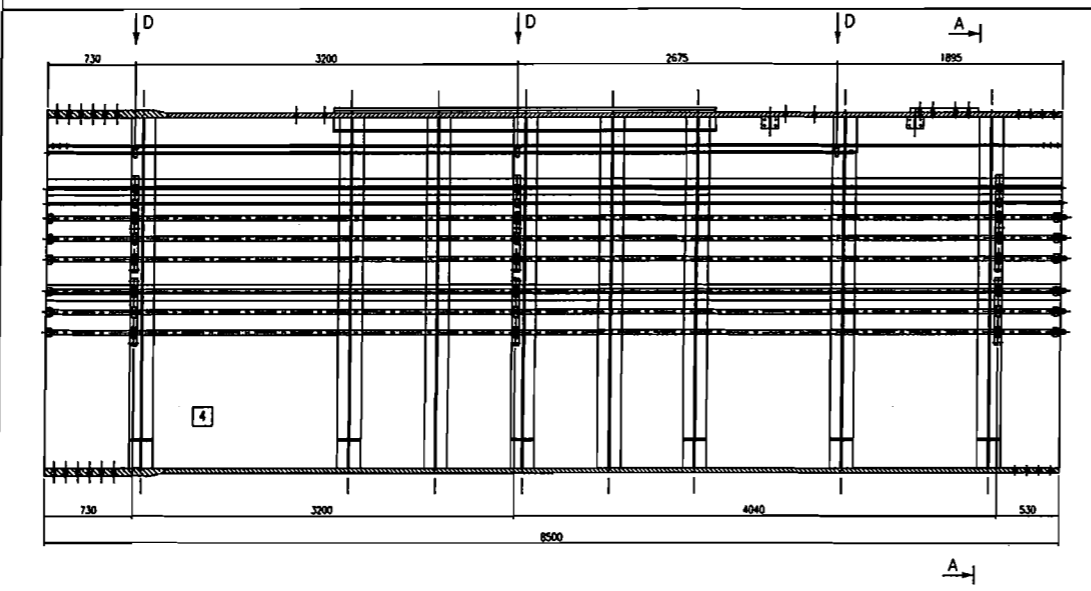
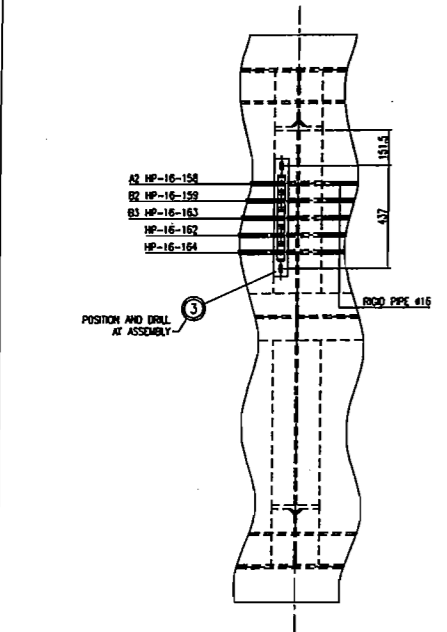
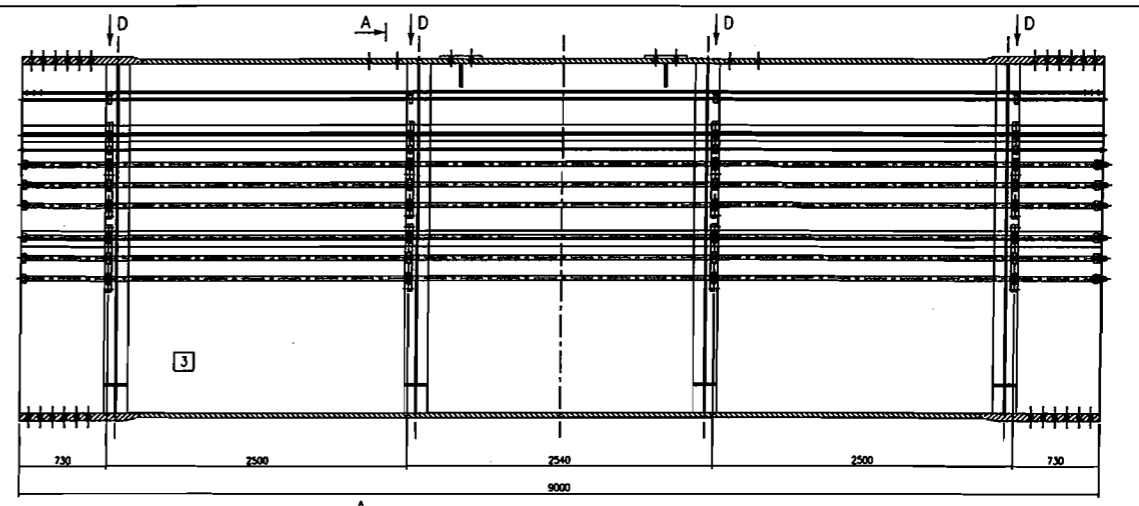
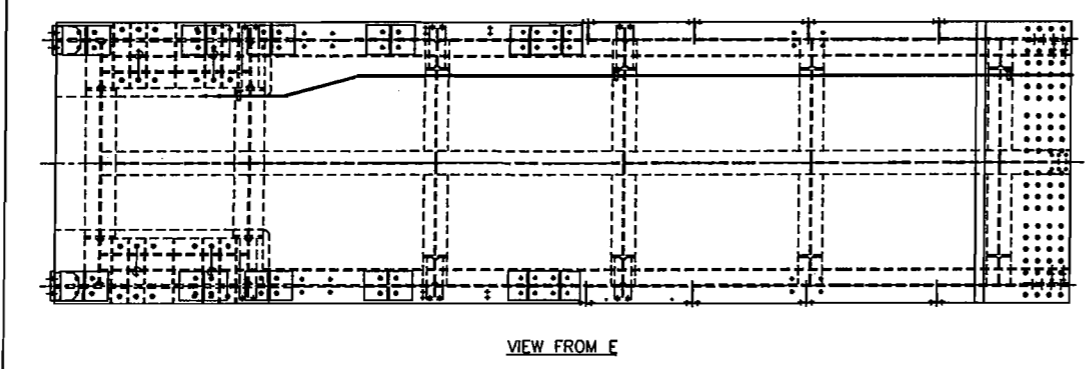
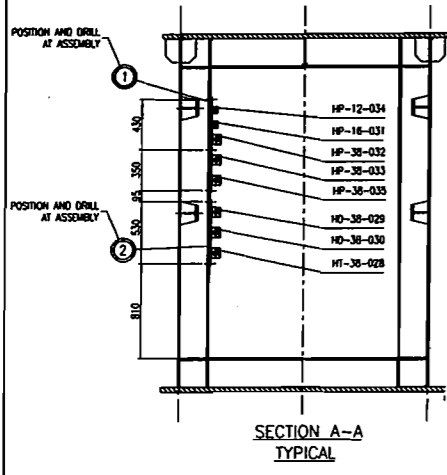
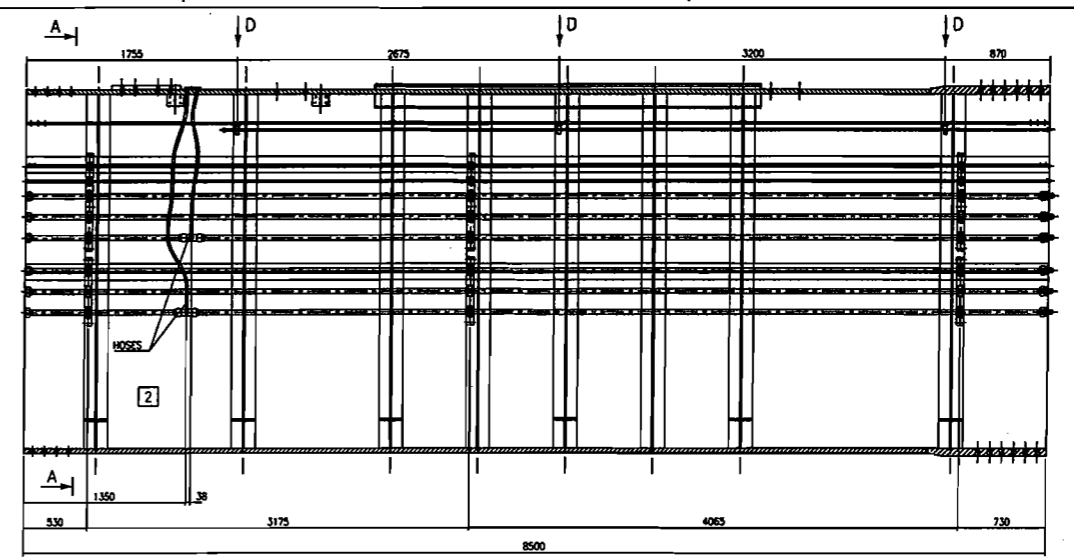
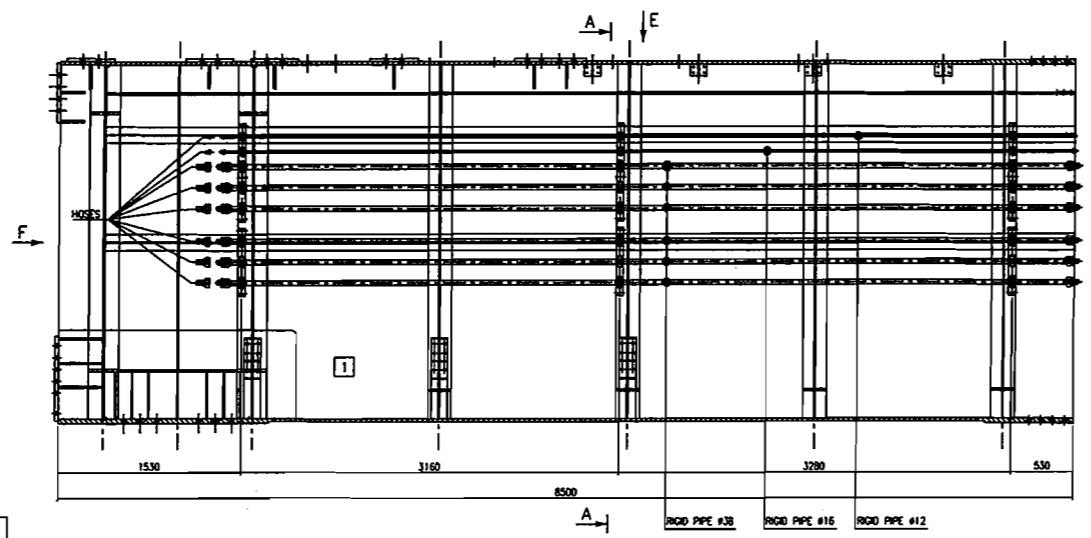
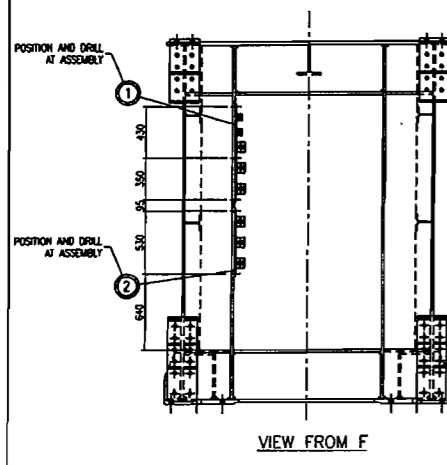
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Date: 06/03/11
Rev: 01

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REF. SCHEME: T06-DUHS-0-001
REF. LIST OF MATERIAL: T06-DU-HM-0-001

NO.	QTY	DESCRIPTION	UNIT	ISSUED	REVISED	APPROVED
2						
1	HP/HP	STEEL MEMBER	ORIG	ISSD		
0	HP/HP	PIPE FITTING	ORIG	ISSD		
0	HP	PIPE	ORIG	ISSD		



REF. SCHEME: T06-DUHS-0-001
REF. LIST OF MATERIAL: T06-DU-HM-0-001

POS.	QTY	DESCRIPTION	COD.	MATERIAL	WGT	REMARKS
103	100	NUT M10 UN 5588 BS				
102	200	WASHER 10.5x20 UN5588 R40				
101	100	SCREW M10x50 UN5588 8.8				
3	10	PLATE 06x12 L=500		Fe 430 B	2.7	27
2	16	PLATE 06x12 L=570		Fe 430 B	3.2	51.2
1	16	PLATE 06x12 L=820		Fe 430 B	4.6	73.6

DEAL

STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER

Scale: 1:20
Sheet: 2 of 2

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T06ORHPA-0011

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NOTE GENERALI - GENERAL NOTE

Prevedere dei pannelli di chiusura asportabili sui quattro lati dotati di opportune aperture per l'uscita dei tubi e la ventilazione dei motori elettrici.

To provide removable panel on four side of the group with suitable opening for piping connection and ventilation of the electric motor.

I motori elettrici dovranno essere installati su supporti antivibranti ed il piping di collegamento delle pompe sarà realizzato con tubo flessibile a giunti elastici.

The electric motor will be installed on vibration damper and piping connection of the pump will be done with flexible hose or expansion joint.

Tutte le tubazioni di ritorno e aspirazione dovranno terminare al di sotto del livello minimo del serbatoio.

All the return and suction pipe must finish under the minimum level of the tank.

Il serbatoio dovrà essere dotato di opportuni portelli di ispezione su uno o più lati.

The tank will be equipped with inspection door on one or more side.

Materiale serbatoio : Fe 360 B

Tank material: Fe 360 B

Colorazione esterna: RAL 3000

External color: RAL 3000

Tutte le connessioni dovranno essere contrassegnate come da indicazioni riportate sullo schema oleodinamico corrispondente.

All the connection have to be marked according to the hydraulic diagram.

Tutti i tubi flessibili dovranno riportare la data di fabbricazione.

All the flexible hose have to be marked with the manufacturing date.

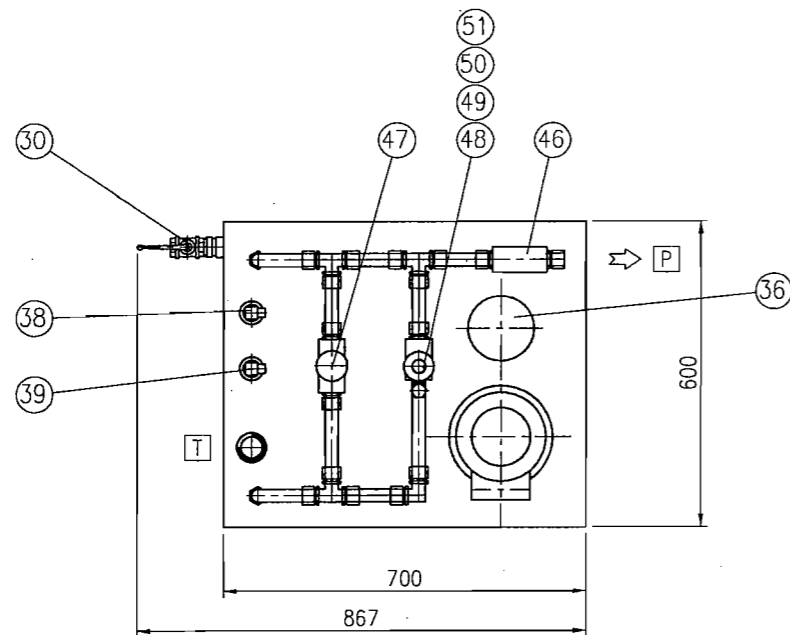
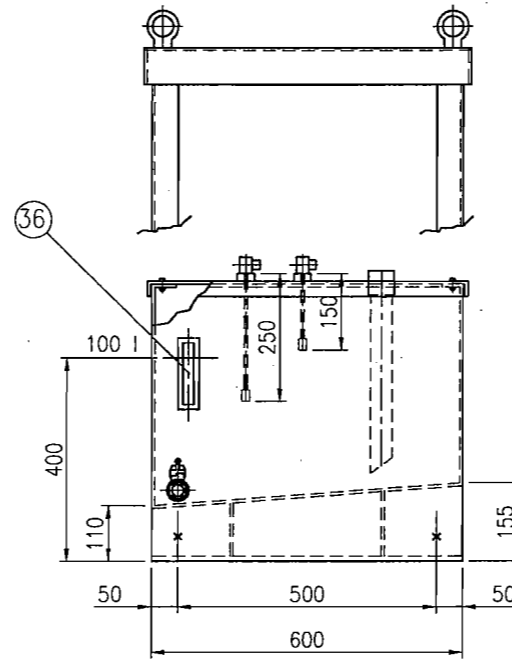
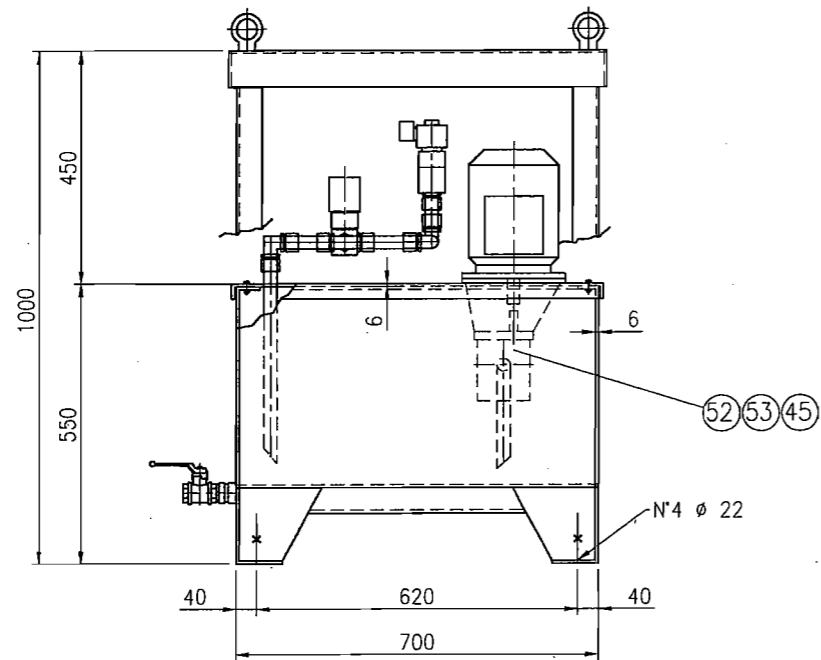


TABELLA CONNESSIONI
CONNECTION TABLE

PORT	CONNECTION TYPE
P	G.1"
T	G.1.1/4"

REMOVE SHARP CORNERS
WITH R~2

DWG size A*

WELDS (UNI 1310)
Where not otherwise indicated $\alpha=0.7$ of minimum thk. to be connected
(Continuous welds) $\alpha/2$
Edge preparation for welding in according to UNI 11001

TOLLERANCES
Dimension without tolerance indication
Structural steel work UNI ISO 2768-M
Mechanics UNI ISO 2768-F

FINISHING
Machining UNI 4600
0.8/ | 3.2/ | 12.5/ | 25/ |
▽▽▽ | ▽▽ | ▽ | ~

TOLLERANCES
Fit ISO (UNI 7218)

WELDING PROCEDURES :
The proceures usea shall be qualified according to EN 288-3, D.M. 09-01-96, or ASME sect. IX

SCHEMA OLEODINAMICO: T06-DU-HS-0-001
HYDRAULIC DIAGRAM : T06-DU-HS-0-001

2					
1					
0	25/06/02	FIRST ISSUE	BASSO		
REV.	DATE	REV. OBJECT	DRAWN	CHECKED	APPROVED

DEAL
Sede e Stabilimento
Via Bullino-Frazione Corgnazzo
33050-Pozzolo del Friuli (UD)-Italy
Tel.: +39 432 609 990
Fax: +39 432 609 992
e-mail: deal@deal.it

REFERENCE: STRADDLE CARRIER
SC 720 - 32

OBJECT: -

TITLE: HYDRAULIC UNIT

Substitutes for: --- Scale 1:10 Sheet 1 Of 1

File: T06DUHK001.DWG Format A2

Rev. Nr. 06003111 | 060750 | - - - - -

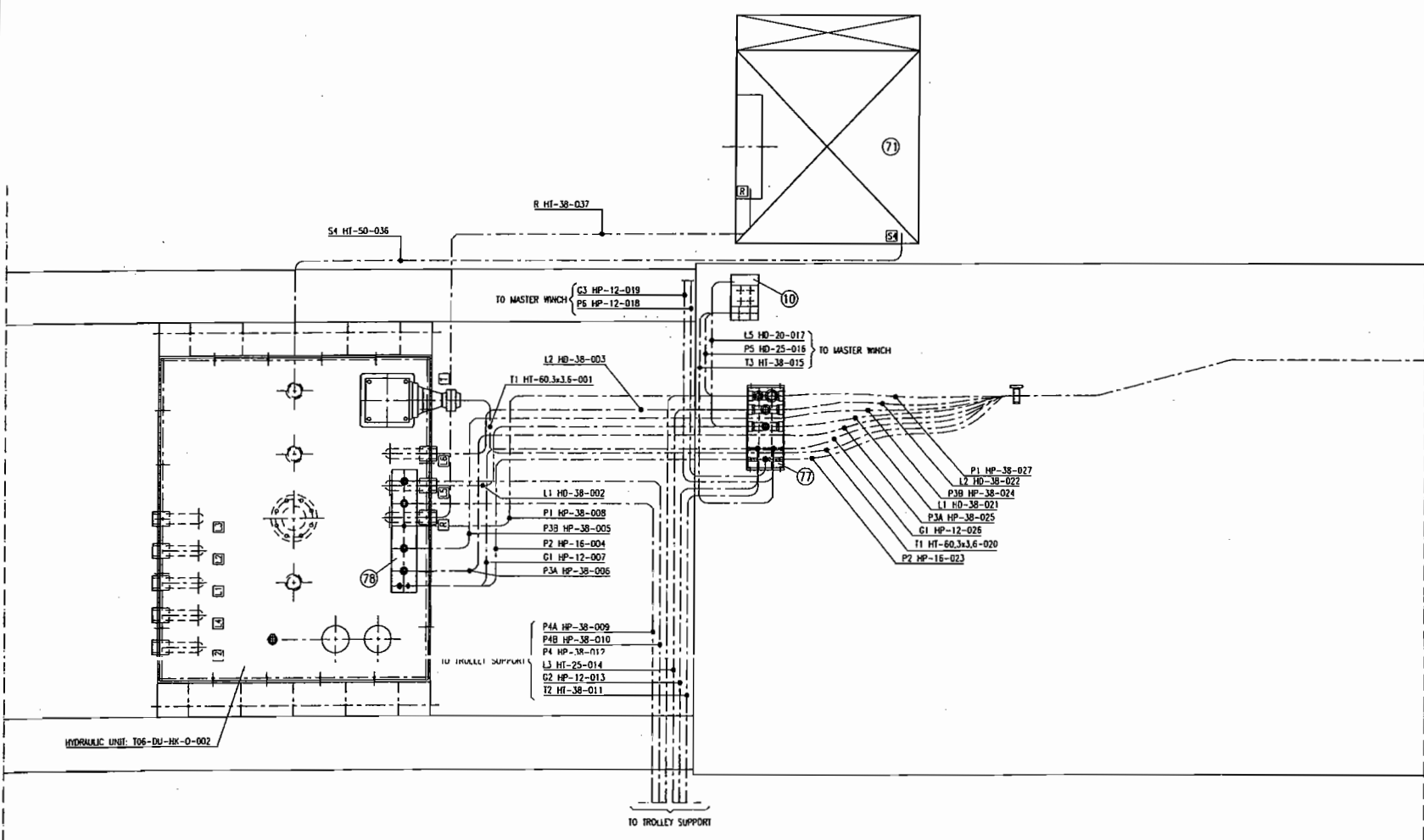
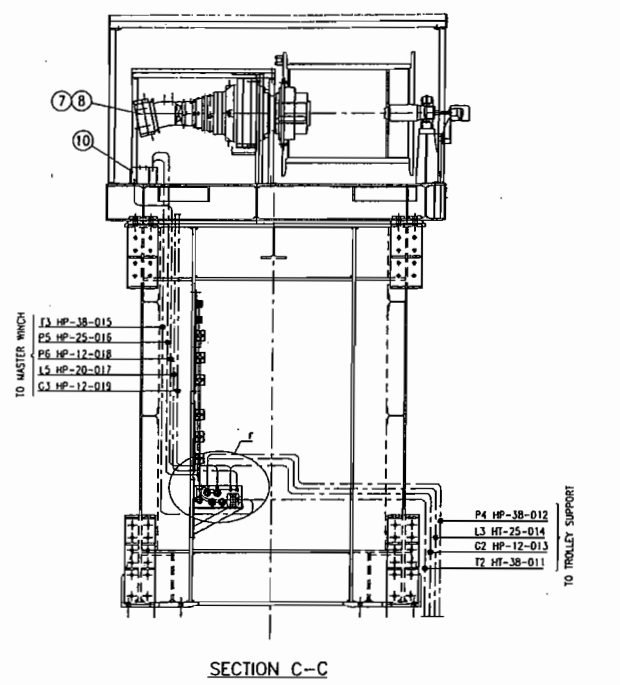
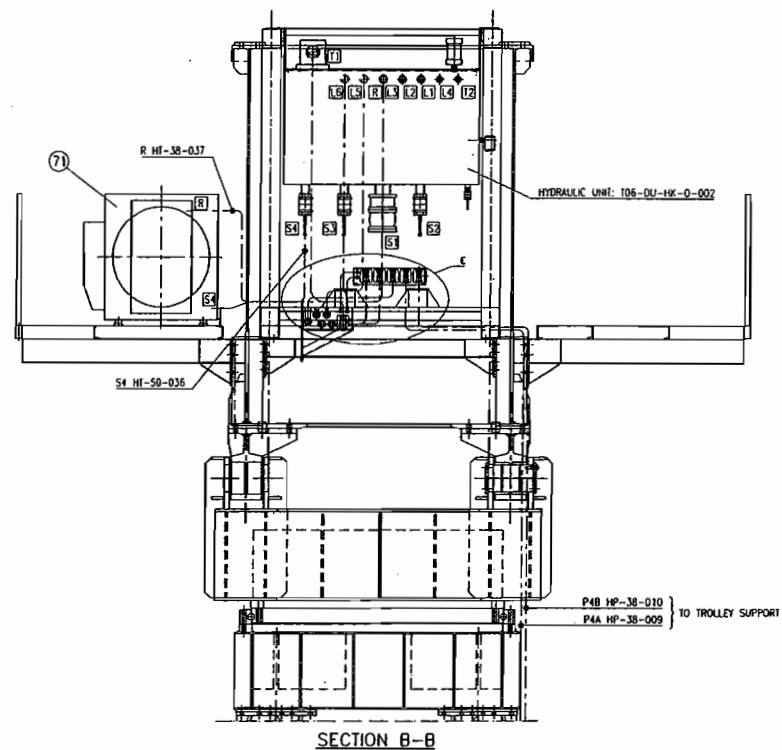
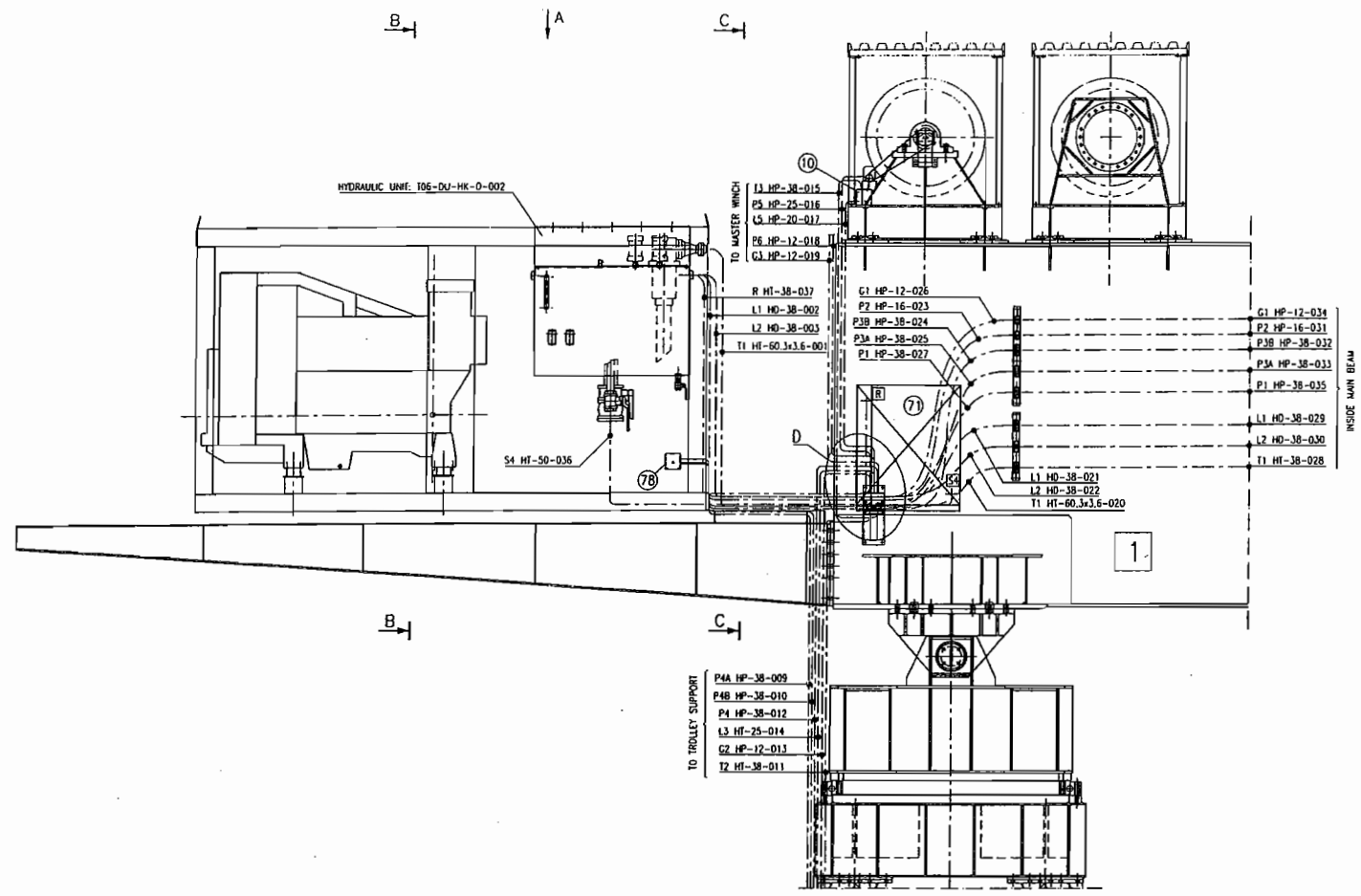
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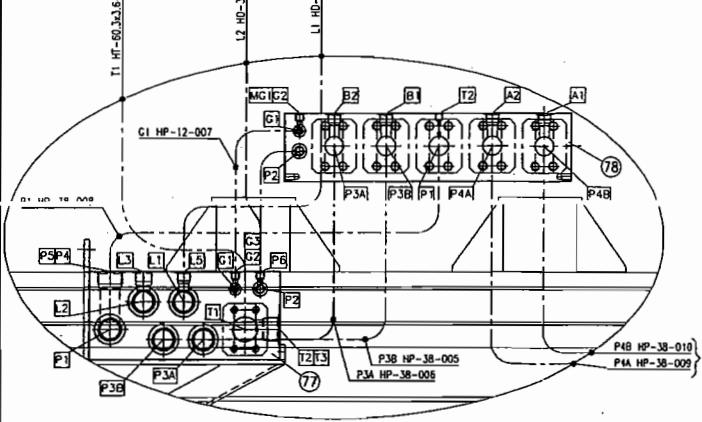
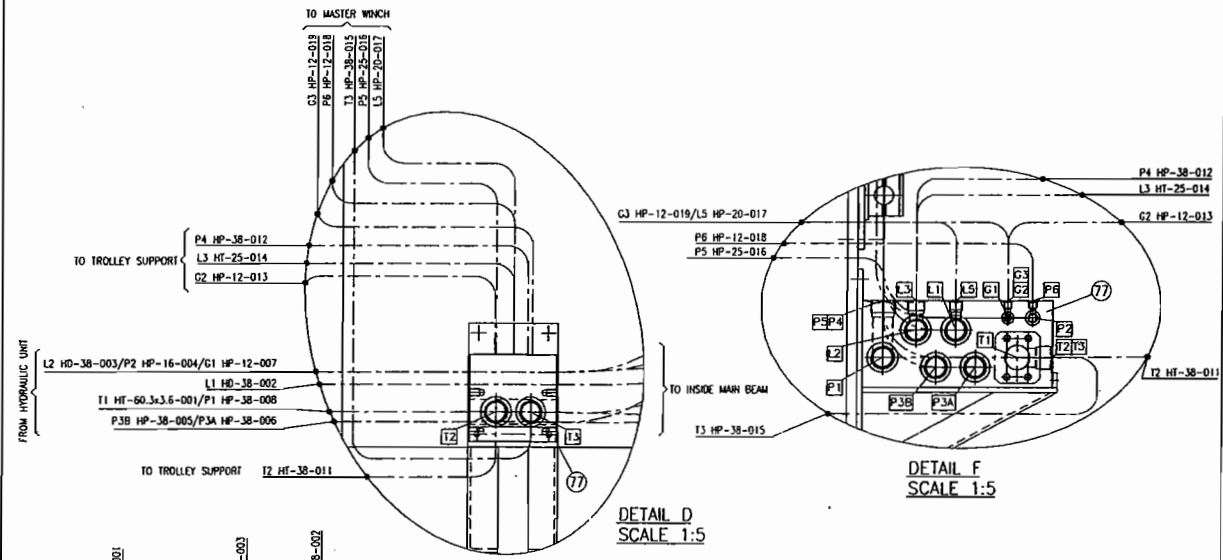
CLIENT: KIEWIT / FCI / MANSON JV
PROJECT: SKYWAY BRIDGE PROJECT
S. FRANCISCO - PAKI AND BAY BRIDGE - USA

N° 2 CENTRALI OLEODINAMICHE
N° 2 HYDRAULIC UNIT

TOTAL WEIGHT = 150 Kg



VIEW FROM A
SCALE 1:10



DETAIL E
SCALE 1:5

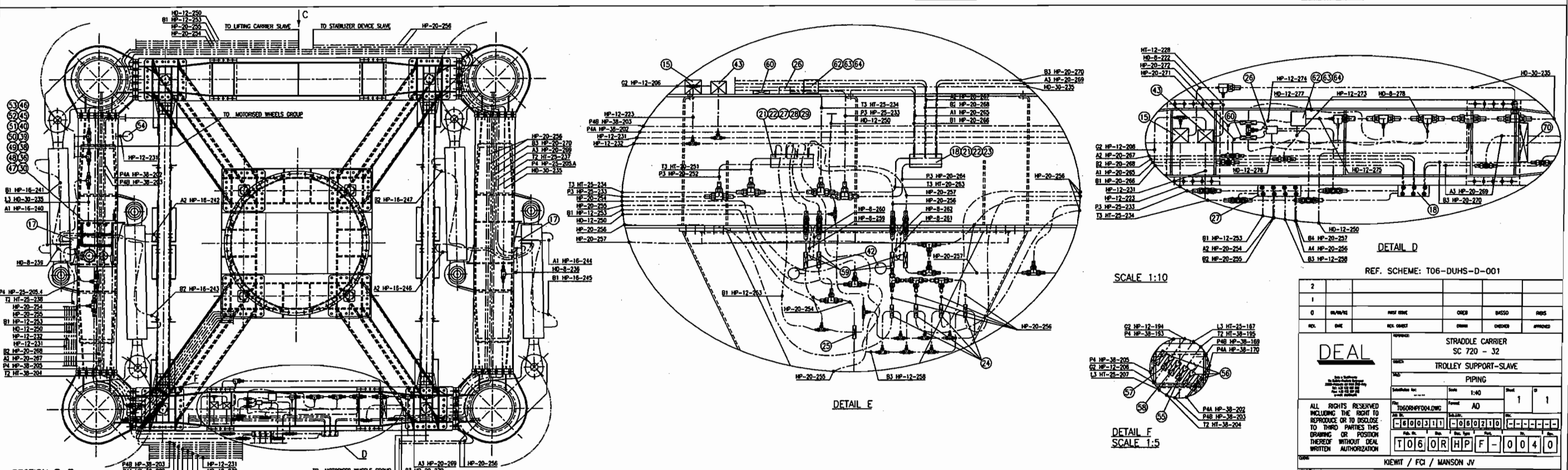
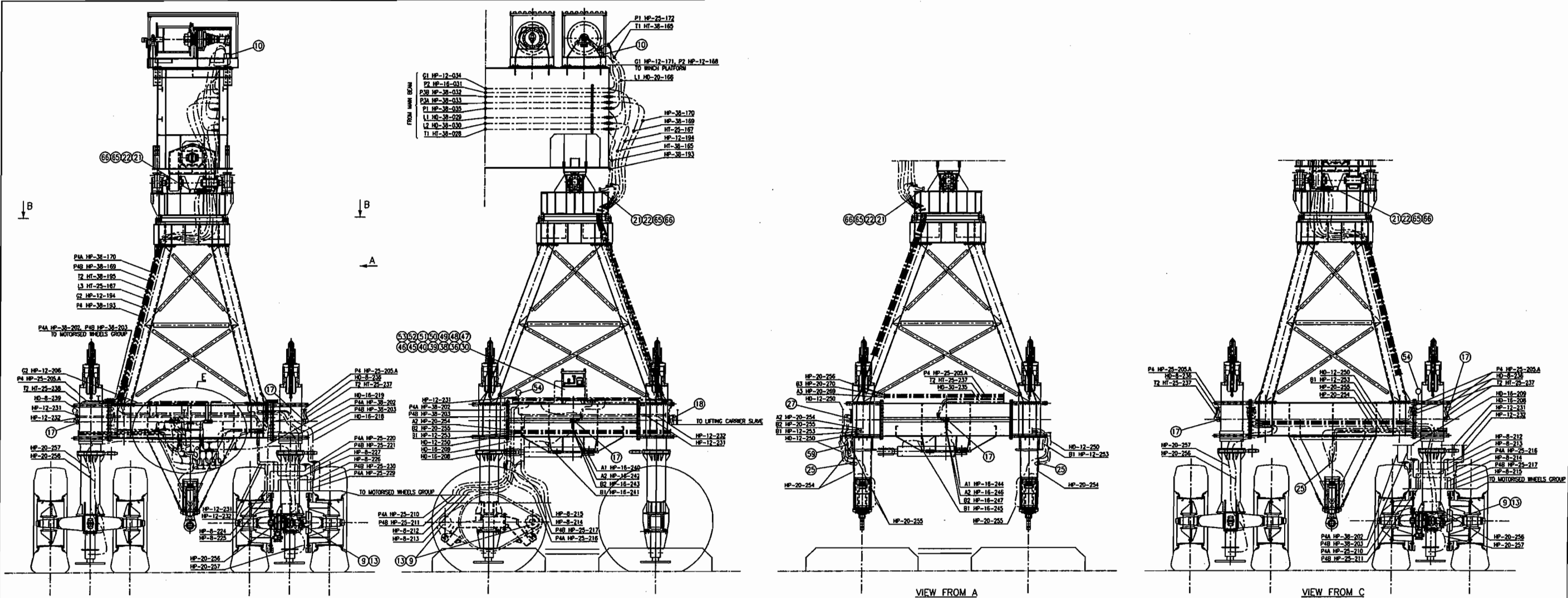
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REV	DATE	REV. OBJECT	BY	CHECKED
				APPROVED

STRADDLE CARRIER
SC 720 - 32
MAIN GIRDER

DEAL

PROJECT: SKYWAY BRIDGE PROJECT
S. FRANCISCO - OAKLAND BAY BRIDGE - USA



REF. SCHEME: T06-DUHS-D-001

2					
1					
0	DATE	REV. NO.	REV. DATE	BY	CHKD.
0					
DEAL STRADDLE CARRIER SC 720 - 32 TROLLEY SUPPORT-SLAVE PIPING					
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