

RAIL COACH FACTORY, KAPURTHALA

MD46131

Dated : 04/06/2024

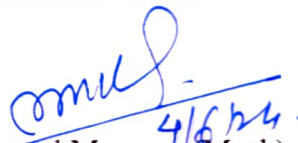
COACH ALTERATION INSTRUCTIONS

1. **CAI No.** : CAI/RCF/MECH/LHB/069.
2. **Group** : Under-frame/Front Part.
3. **Description** : **Part-I** : Replacement of Front Part with SS top flange front part.
Part-II : Replacement of front part top flange with SS top flange.
4. **Authority for CAI** : CDE letter no. MD26231 dated 13.05.2024.
5. **Drawing Numbers** : As per Table-1.
6. **Detail of modifications :**
 - 6.1. Material specification of front part top flange plate is changed from corten steel (IRS:M-41-97) to ferritic steel (CK-201, Grade X2CrNi12).
 - 6.2. Application of protective coating APP (Adhesion promoting primer) to RCF specification MDTs-48279 Rev 4 instead of ROZCP to spec. IS:2074-1974 with masking.
 - 6.2.1. **In LHB AC Coaches:** Adhesion Promoting Primer (APP) to spec no. MDTs48279 Rev-04 will be applied on complete front part with DFT of 35-45 Microns (Except CBC pocket). During painting of front part bottom is applied with high build elastified paint to RCF Spec no. MDTs-094 Rev-01 with minimum DFT of 140-200 Microns.
 - 6.2.2. **LHB Non-AC Coaches:** Adhesion Promoting Primer (APP) to spec no. MDTs48279 Rev-04 will be applied on complete front part with DFT of 35-45 Microns (Except CBC pocket). Epoxy high build elastified paint is applied on both sides of front part along with complete interior of body shell.
7. **Reason for modification:** Heavy corrosion has been reported by user railways on front part top flange plate as it is exposed to water seepage. So the material of this front part (4mm) top flange plate is to be replaced with ferritic stainless steel to grade RDSO Spec CK-201 Grade X2CrNi12.
8. **Coaches concerned:** LHB type coaches.
9. **Implementation stage:** Not mandatory, only applicable in case front part is being replaced in workshop by Railways.
 - 9.1. **Part-I : Replacement of Front Part :** The front part of LHB under frame is to be cut and replaced with new front part as per applicable drawings in Table-I.
 - Replace the Front Part with drawing by referring TABLE-1.
 - Painting with revised painting.
 - 9.2. **Part-II : Replacement of front part top flange.:** The front part of top flange to be removed and welding of SS top Flange with as per TABLE-I, followed by revised painting as mentioned in Para 6.2.

(TABLE-1)

Front parts and top cover plates drawing numbers:

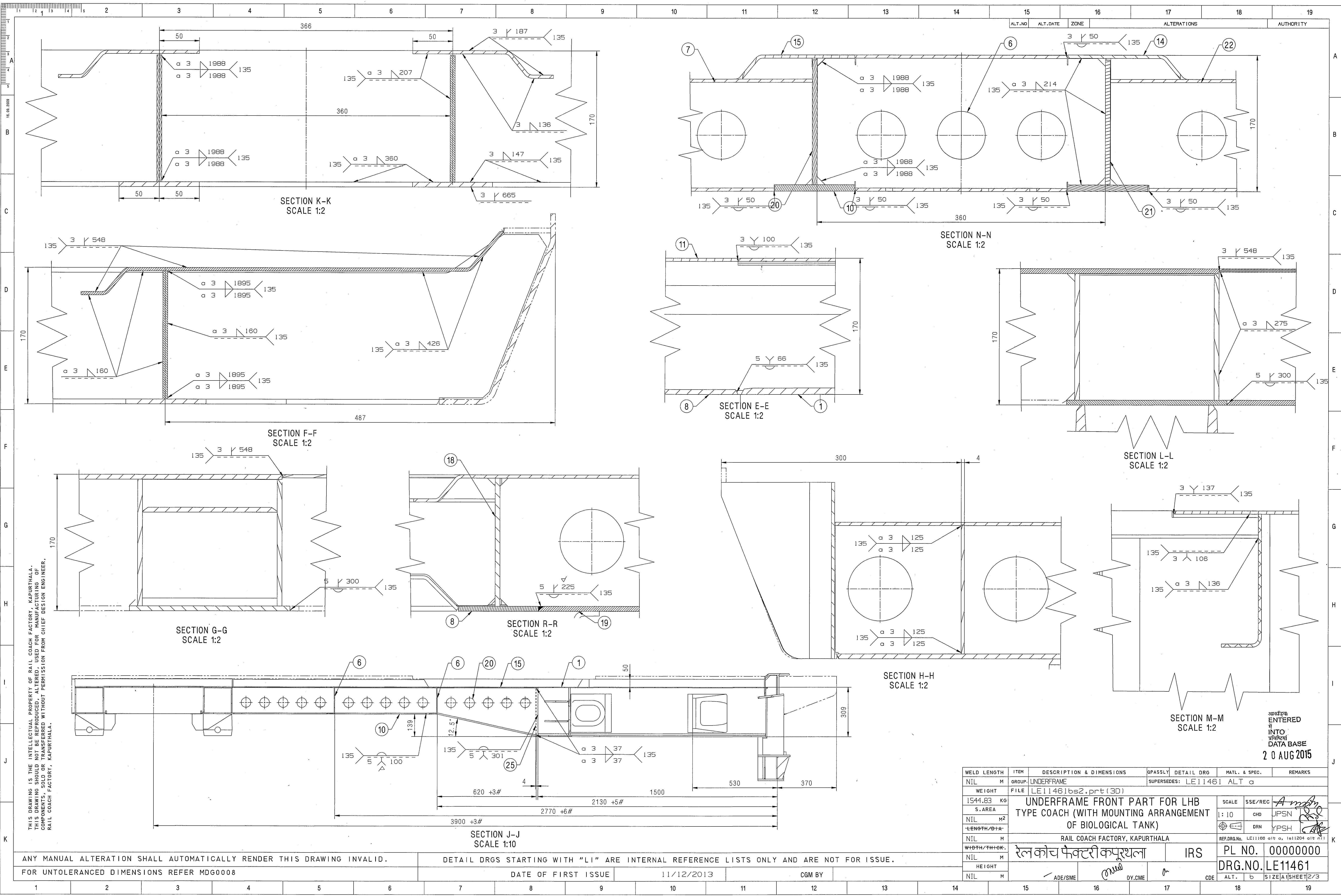
#	Coach type	Front part Drawing No.	Top cover plate Drawing No
1	LHB-AC-3T, AC-2T, First -AC, SCN, GS	LE11461	LE11284, LE11285
2	LHB-SLR	LP11105 1 11012.0.03.131.001	LE11284, LE11285, 2 10113.0.03.130.104 210113.0.03.130.143
3	LHB-Hot buffet	LE11461, LH11102	LE11284, LE11285, LH11111, LH11112
4	LHB-AC3T (Economy)	LE11461, LE11532	LE11284, LE11285
5	LHB-1st AC with under slung switch board cabinet.	LE11461& LE11532	LE11284, LE11285
6	LHB- 1st AC+2nd AC (Composite)	LE11461	LE11284, LE11285
7	LHB- 2nd Non AC Chair car & AC Chair car	LE11461	LE11284, LE11285


for General Manager (Mech)

Encl: Above drawings

To: As per Annexure -I enclosed.

NOTE: Soft copy available at <https://rcf.indianrailways.gov.in/>



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RAIL COACH FACTORY, KAPURTHALA.

अनुमोदित
ENTERED
INTO
DATA BASE
20 AUG 2015

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP: UNDERFRAME				
WEIGHT	KG	FILE: LE11461bs2.prt (3D)				
1544.83	KG					
S.AREA	M ²					
NIL	M ²					
LENGTH/DIA	M					
NIL	M					
WIDTH/THICK.	M					
NIL	M					
HEIGHT	M					
NIL	M					

SCALE	SSE/REC	PL NO.	00000000
1:10	CHD	DRN	YPSH
REF.DRG.No.	LE11108 alt a, 1011204 alt a	DRG.NO.	LE11461
ALT.	b	SIZE	A/SHEET 2/3

ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

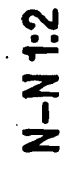
FOR UNTOLERANCED DIMENSIONS REFER MDG0008

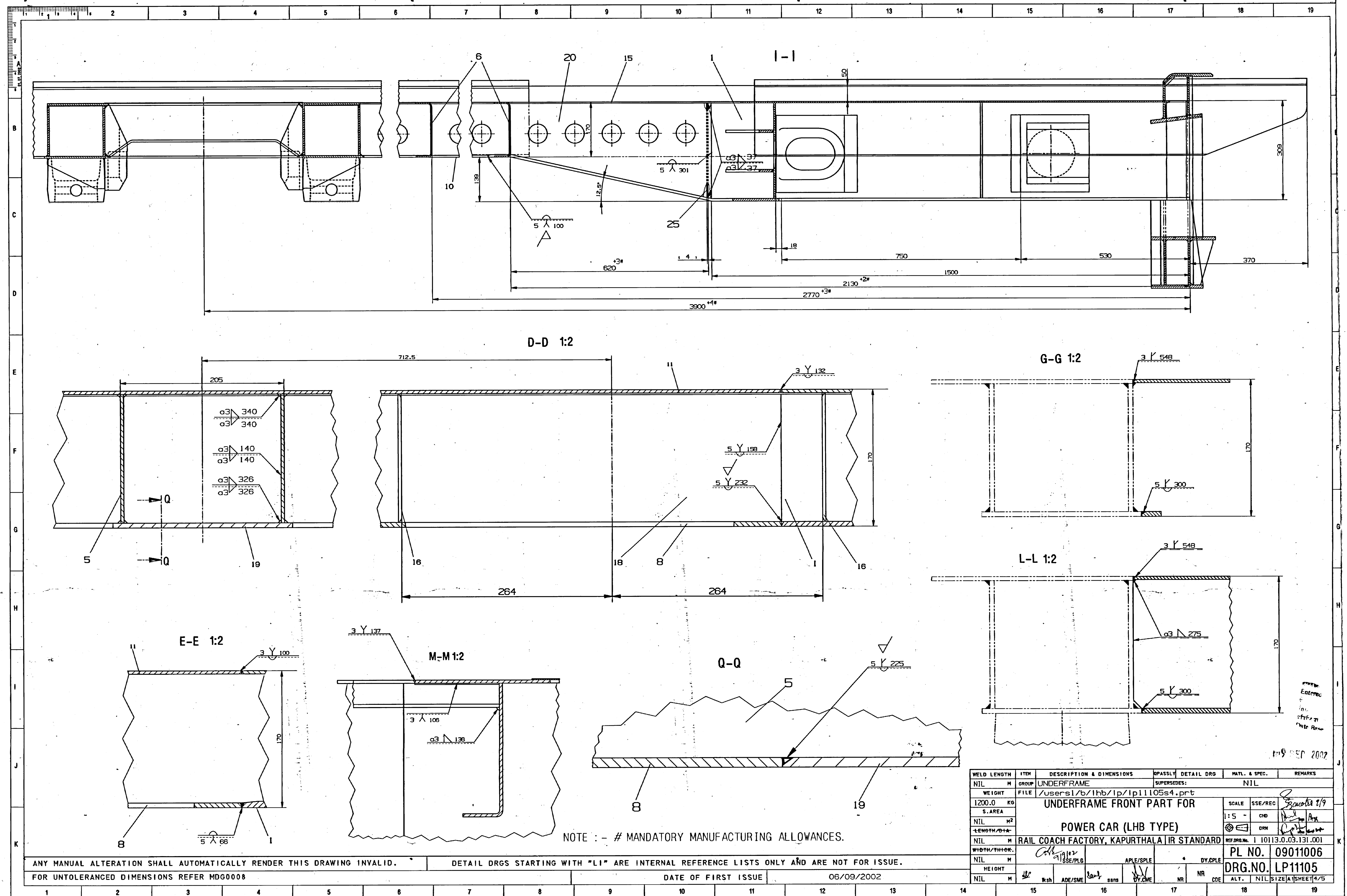
DATE OF FIRST ISSUE

11/12/2013

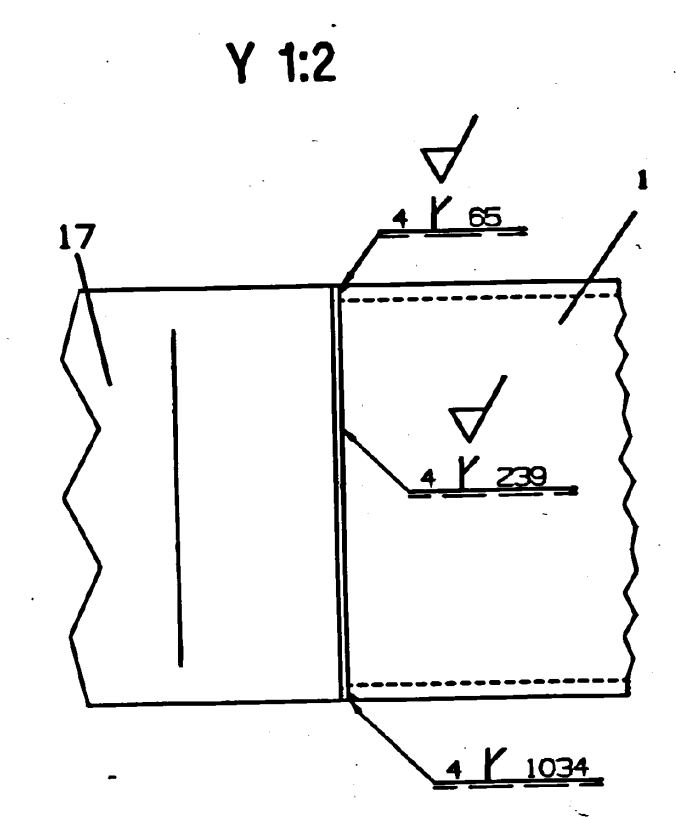
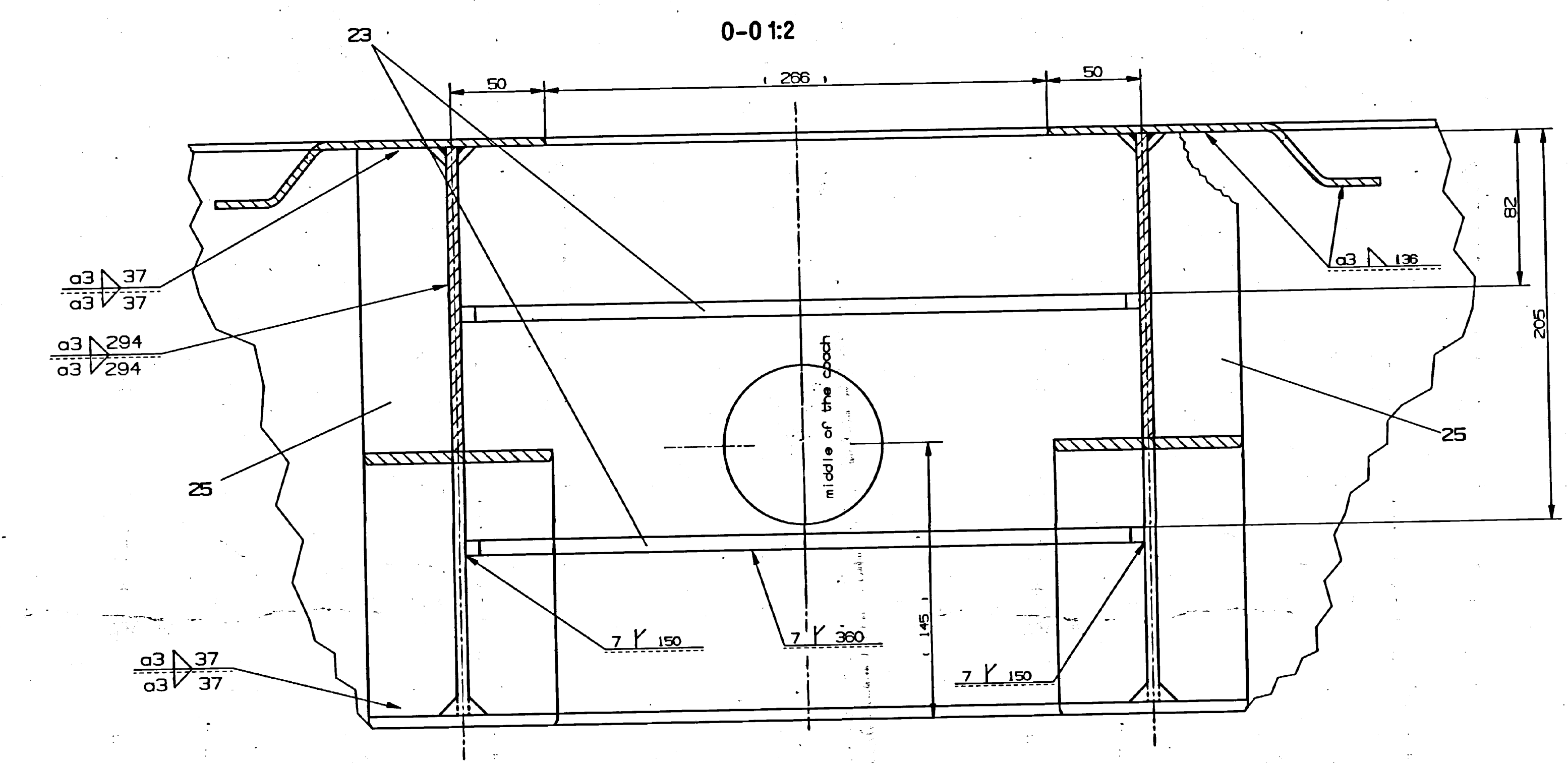
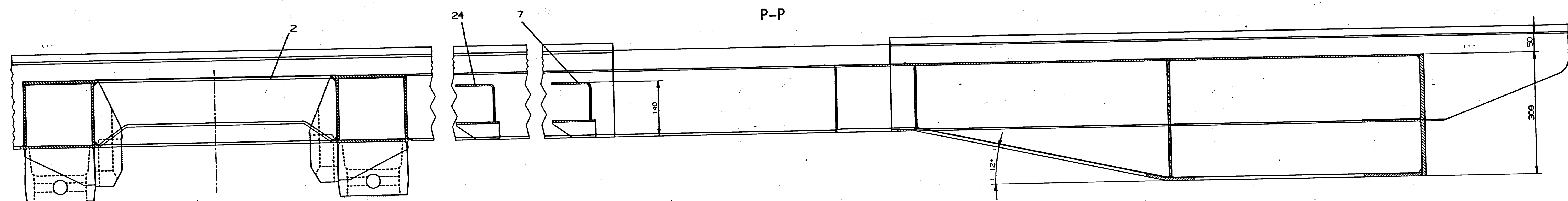
CGM BY

K

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ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
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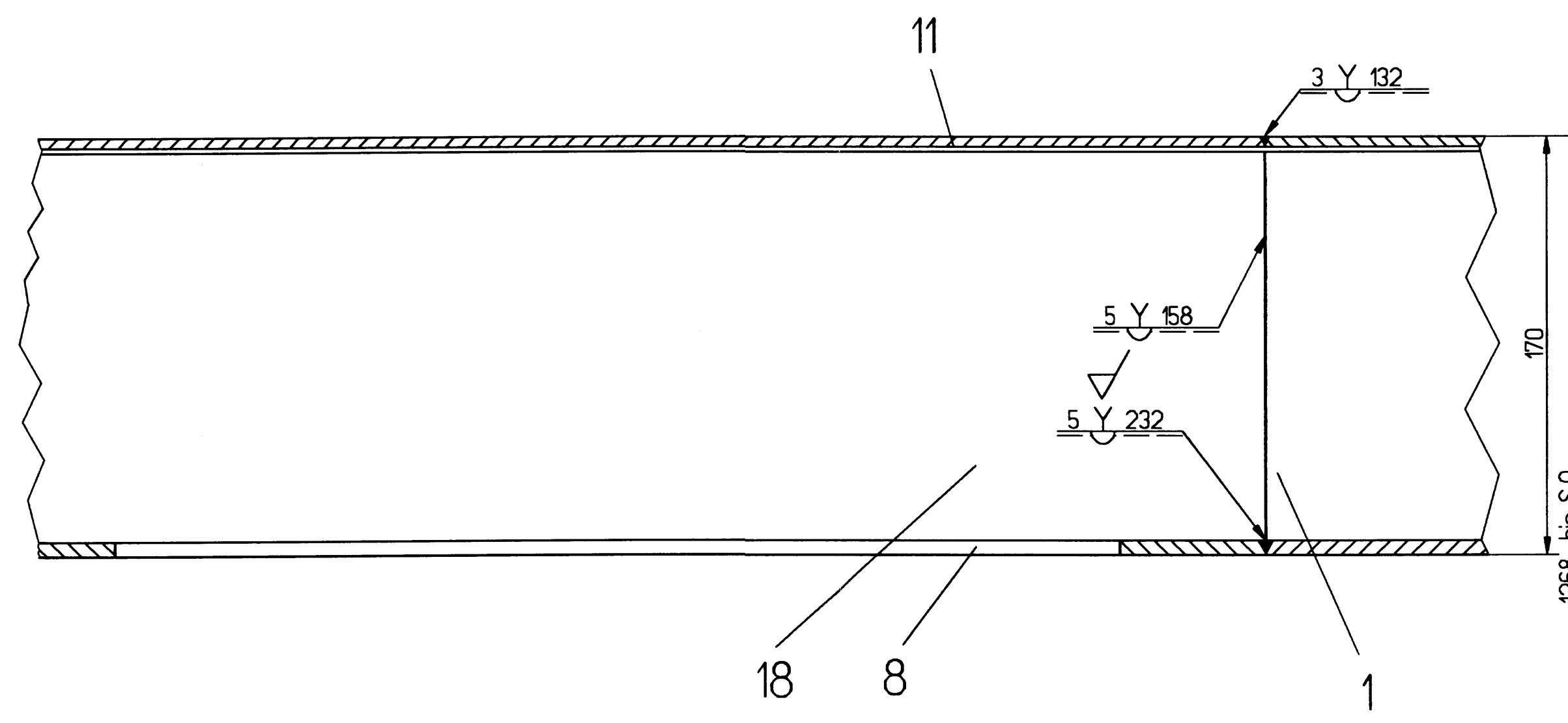
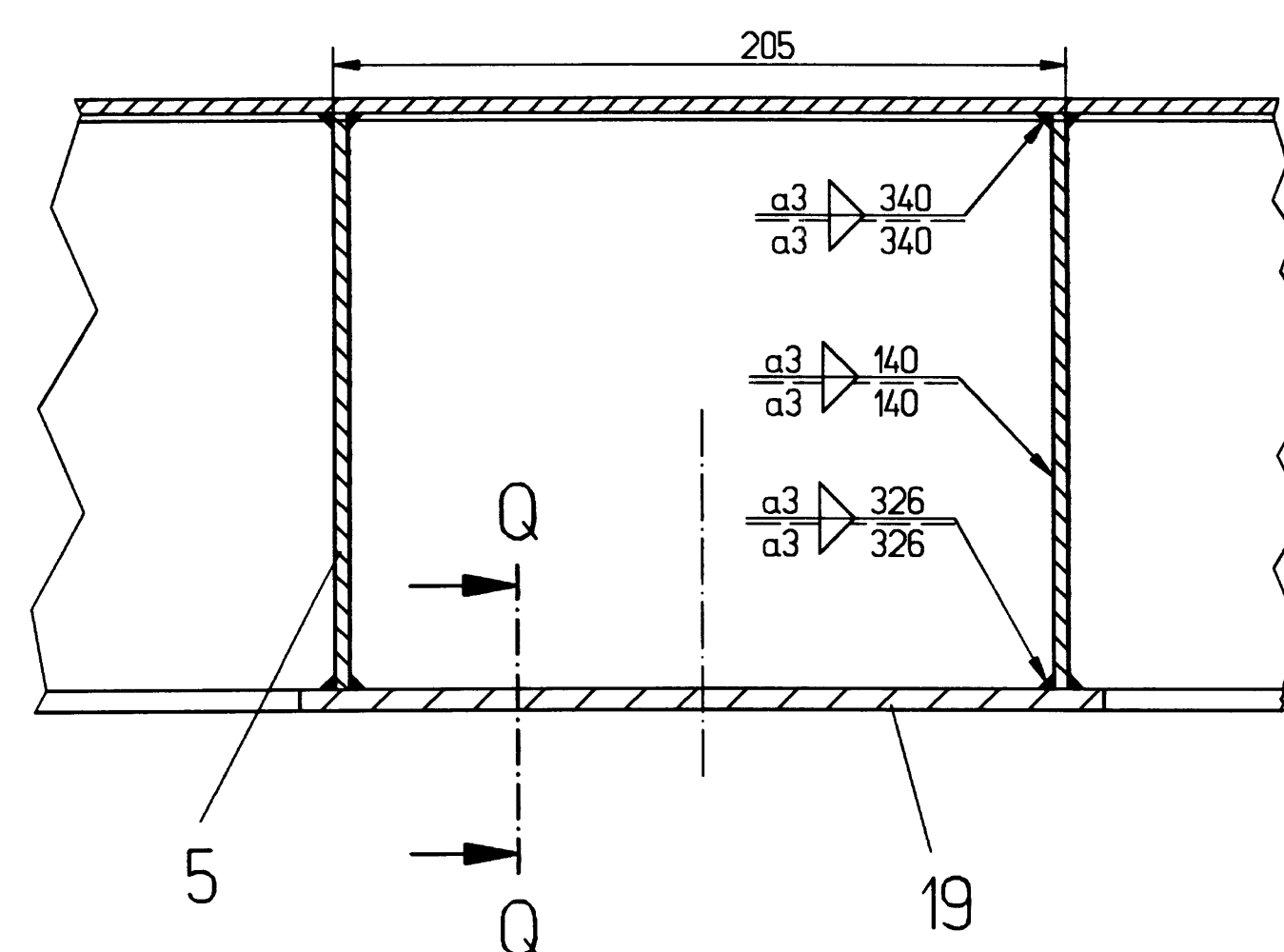
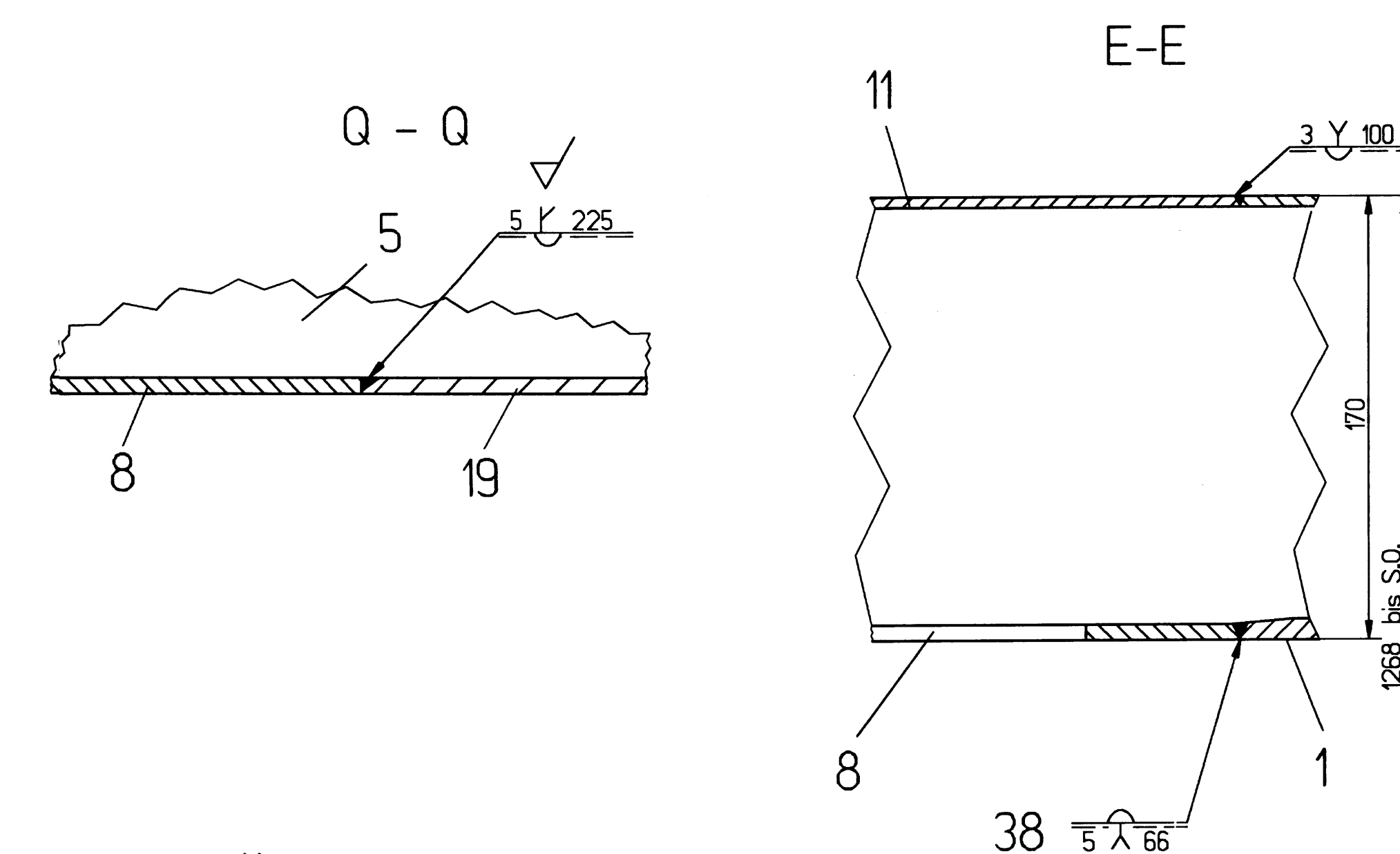
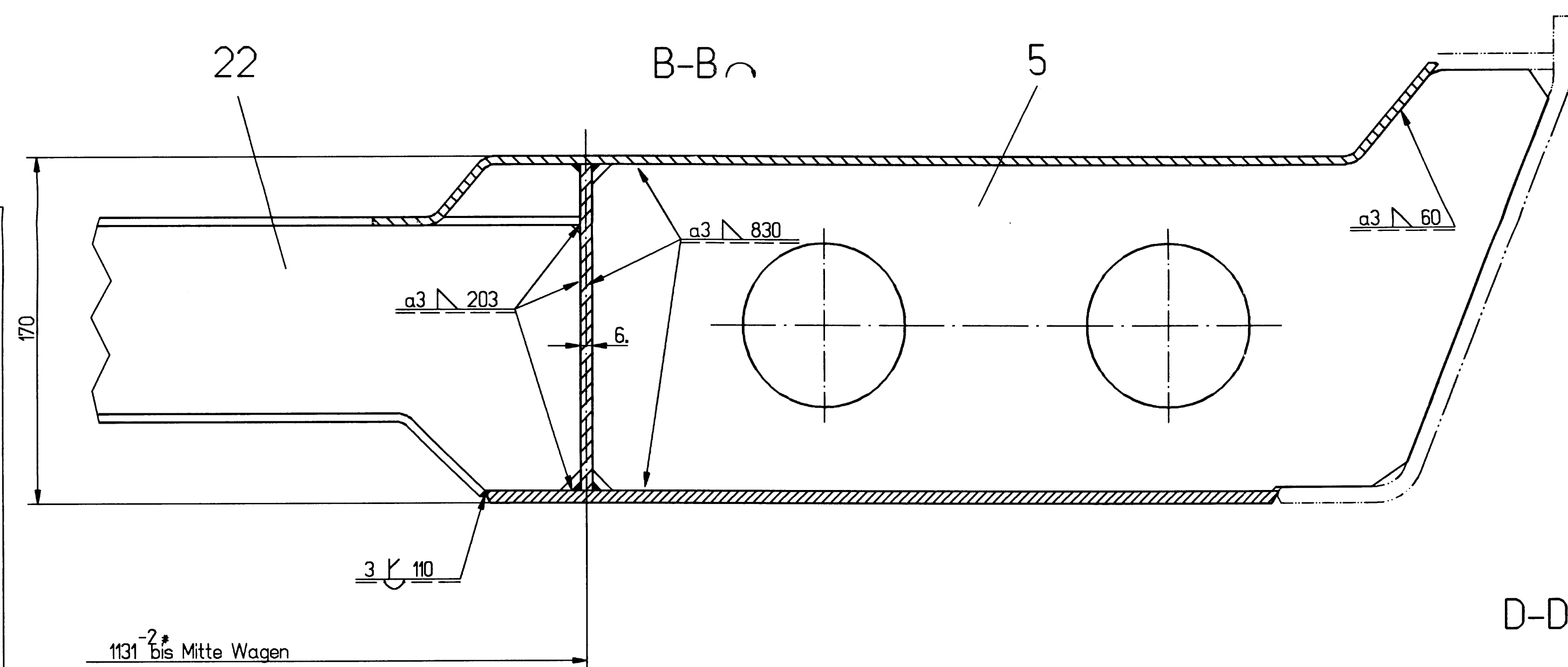
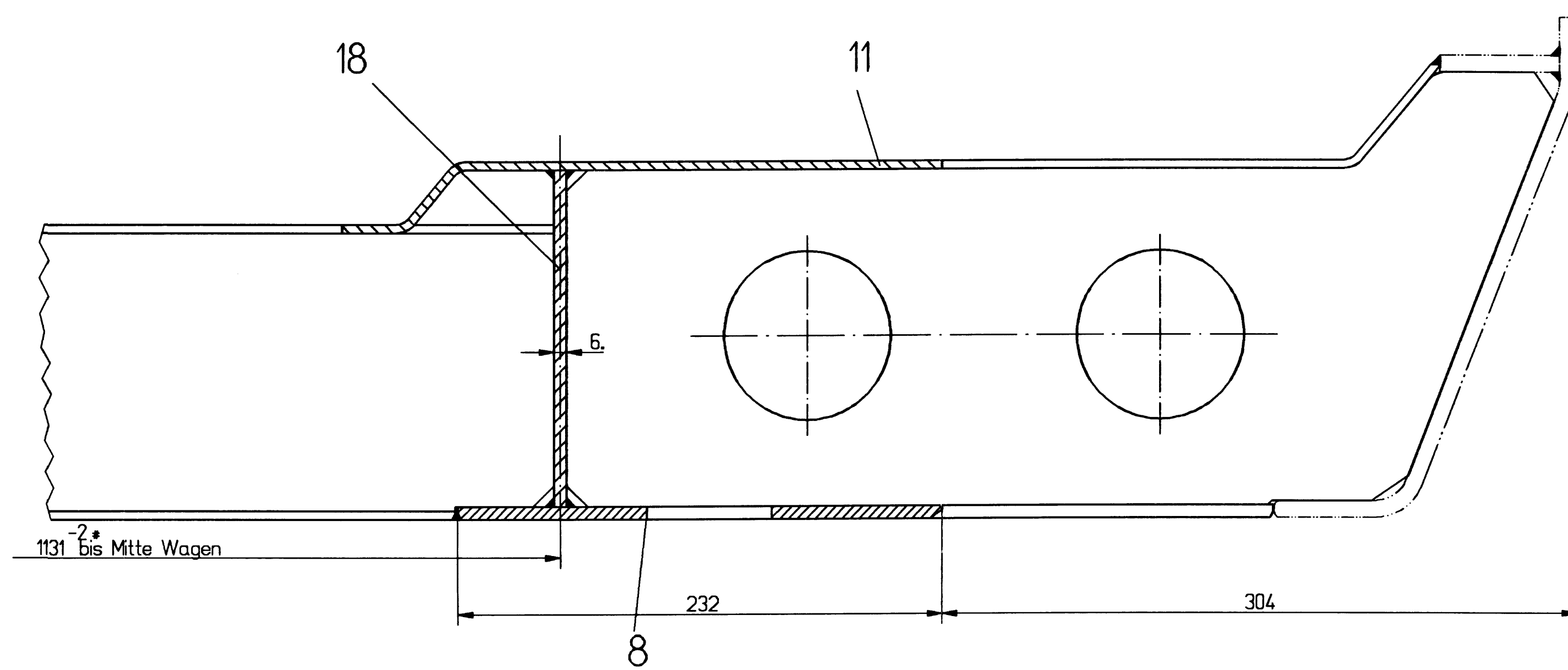


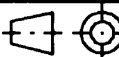
26	RIB	2	LE11185	NIL	NIL
25	RIB	2	3 10113.0. 03.131.127	NIL	NIL
24	CROSS MEMBER COMPLETE	1	2 10113.0. 03.131.004	NIL	NIL
23	RIB	2	3 10113.0. 03.131.124	NIL	NIL
22	CROSS MEMBER COMPLETE	2	2 10113.0. 03.131.003	NIL	NIL
21	WEB	1	3 10113.0. 03.131.117	NIL	NIL
20	WEB	1	3 10113.0. 03.131.119	NIL	NIL
19	FLANGE PLATE	2	4 10113.0. 03.131.120	NIL	NIL
18	WEB	2	3 10113.0. 03.131.115	NIL	NIL
17	COLLAR	2	LE11217	NIL	NIL
16	WEB	4	4 10113.0. 03.131.119	NIL	NIL
15	TOP FLANGE	1	2 10113.0. 03.131.112	NIL	NIL
14	TOP FLANGE	1	2 10113.0. 03.131.111	NIL	NIL
13	WEB	2	4 10113.0. 03.130.122	NIL	NIL
12	FLANGE PLATE	1	LP11106	NIL	NIL
11	FLANGE PLATE	1	LP11107	NIL	NIL
10	FLANGE PLATE	1	2 10113.0. 03.131.107	NIL	NIL
9	FLANGE PLATE	1	LE11220	NIL	NIL
8	FLANGE PLATE	1	LE11219	NIL	NIL
7	CROSS MEMBER COMPLETE	1	2 10113.0. 03.131.002	NIL	NIL
6	MEMBER	2	2 10113.0. 03.131.103	NIL	NIL
5	WEB	4	2 10113.0. 03.131.102	NIL	NIL
4	MEMBER	1	1 10113.0. 03.131.101	NIL	NIL
3	MEMBER	1	1 10113.0. 03.131.100	NIL	NIL
2	MAIN CROSS MEMBER COMPLETE	1	1 10113.0. 03.121.001	NIL	NIL
1	HEADSTOCK FOR AC 3-TIER (S.G.) LHB TYPE COACH	1	LE11165	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	ASSEMBLY DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	GROUP	UNDERFRAME	SUPERSEDES:	NIL	
WEIGHT	FILE	/users1/b/1hb/lp/lp11105s5.prt			
1200.0	KG	UNDERFRAME FRONT PART FOR			
S.AREA	M2	POWER CAR (LHB TYPE)			
LENGTH/DIA	M	RAIL COACH FACTORY, KAPURTHALA IIR STANDARD			
WIDTH/THICK.	M	REF.DWG. No. 1 10113.0.03.131.001			
NIL	M	PL NO. 09011006			
NIL	M	DRG.NO. LP11105			
HEIGHT	M	ALT. NIL SIZE 11 SHEET 5/5			

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 DATE OF FIRST ISSUE 06/09/2002



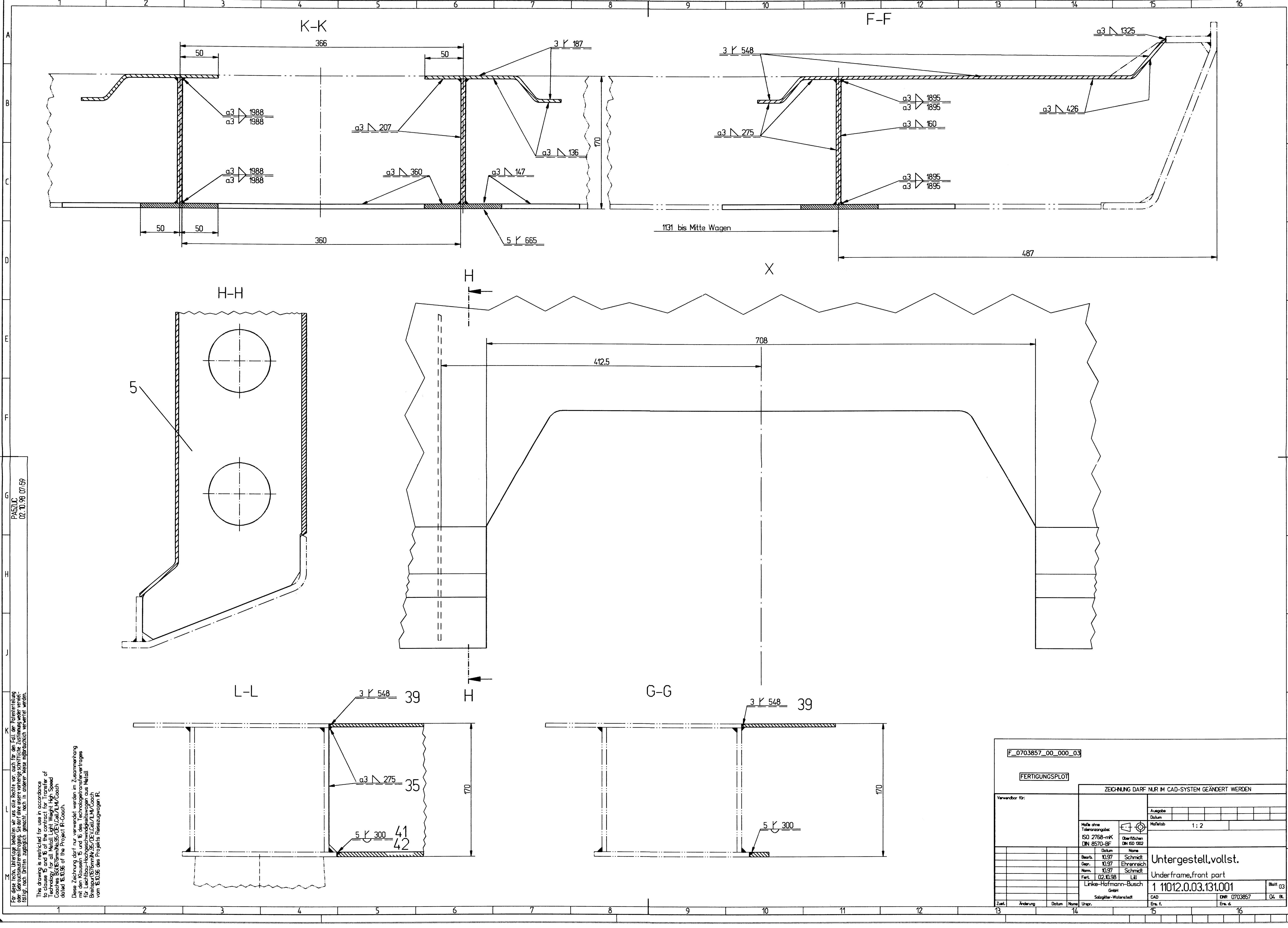
F_0703857_00_000_02			
FERTIGUNGSPLAN			
ZEICHNUNG DARF NUR IM CAD-SYSTEM GEÄNDERT WERDEN			
Verwendbar für:		INDIAN RAILWAYS	
		Ausgabe _____ Datum _____ Maßstab 1 : 2	
Maße ohne Toleranzangaben ISO 2768-mK DIN 8570-BF		 Überflößen DIN ISO 1002	
		Datum _____ Name _____ Bezeichnet 10.97 Schmidt Gepr. 10.97 Ehrenreich Norm. 10.97 Schmidt Fert. 02.10.98 Lil Linke-Hofmann-Busch GmbH Salzgitler-Walmetried	
Zust.		Änderung	Datum
Urspr.		CAD	DNr. 0703857
		Err. f.	Err. d.
		1 11012.0.03.131.001	
		Untergestell, Vorbau	
		Underframe, front part	
		Blatt 02	
		04 BL	

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 M L K

This drawing is restricted for use in accordance to clause 15 and 16 of the Contract for Transfer of Technology for all Metal Light Weight High Speed Coaches BGA/6mm/No.35/DEV/CL/LM/Coach dated \$1.01.96 of the Project R-Coach.

Diese Zeichnung darf nur verwendet werden in Zusammenhang mit den Klauseln 15 und 16 des Technologietransfervertrages für Leichtbau-Hochgeschwindigkeitswagen aus Metall Breitspur/6mm/No.35/DEV/CL/LM/Coach vom \$1.01.96 des Projekts Reisezugwagen R.

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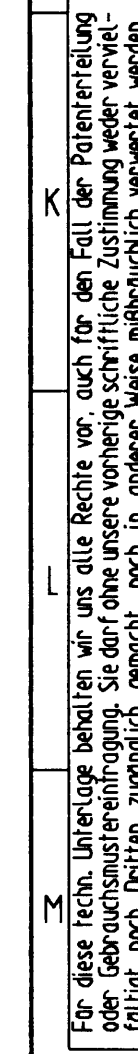
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Verwendbar für:		ZEICHNUNG DARF NUR IM CAD-SYSTEM GEÄNDERT WERDEN	
Ausgabe		Datum	
Maßstab		1:2	
Hülle ohne Toleranzangabe		Oberflächen	
ISO 2768-mK		DIN 8570-BF	
Datum		Name	
Bezeichnung		Schmidt	
Gepr.		Ehrenreich	
Norm.		Schmidt	
Fert.		Lil	
Linke-Hofmann-Busch GmbH		Salzgitter-Watenstedt	
Zust.		Änderung	
Datum		Name	
Urspr.		Erm. f.	
Erm. d.		DNR: 0703857	
Blatt 03		04 BL	

Untergestell,vollst.

Underframe,front part

1 11012.0.03.131.001



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Rastermaß 4,23 x 2,54

PA5TOK 12:54 19.05.00

1	2				3	4	5	6	7	8	
Pos.	D	C	B	A	Einheit	Benennung	Sachnummer / Norm-Kurzbezeichnung	Werkstoff	Gewicht kg /Einheit	RC	Bemerkung
	-	-	-	X		underframe, front part	01013249		1270,0		
1	-	-	-	1	STK	head stock	1 11012.0.03.130.001MSP.A 01013246		661,10		
2	-	-	-	1	STK	main cross member compl.	1 10113.0.03.121.001MSP.A 01000146		375,60		
3	-	-	-	1	STK	member	1 10113.0.03.131.100P. 1 01000090		2,700		
4	-	-	-	1	STK	member	1 10113.0.03.131.101P. 1 01000094		2,700		
5	-	-	-	6	STK	web	2 10113.0.03.131.102P. 1 01000097		2,000		
6	-	-	-	2	STK	member	2 10113.0.03.131.103P. 1 01000087		1,500		
7	-	-	-	1	STK	cross member, comp	2 10113.0.03.131.002MSP.A 01003524		7,400		
Angaben zu den Mengenspalten						Zeichng. St. Ausg. Zustand	Änderung / Datum				
A	WLRRM/L					00 0		INDIAN RAILWAYS			
B								Bearb. 04.97 FKTHIE Gepr. 10.98 TR3EHR Norm. .	underframe front part		
C								ALSTOM LHB GmbH Linke-Hofmann-Busch-Straße Salzgitter-Watenstedt	1 11012.0.03.131.001 CAD	0703857	Blatt 01
D								Ers.f. -	04 Bl.		

1	2				3	4	5			6		7	8	
Pos.	Menge				Einheit	Benennung	Sachnummer / Norm-Kurzbezeichnung	Werkstoff	Gewicht kg /Einheit	Bemerkung				
	D	C	B	A						RC				
8	-	-	-	1	STK	flange plate	2 10113.0.03.131.105P. 1		14,210					
						01000095								
9	-	-	-	1	STK	flange plate	2 10113.0.03.131.106P. 1		14,210					
						01000086								
10	-	-	-	1	STK	flange plate	2 10113.0.03.131.107P. 1		12,600					
						01000089								
11	-	-	-	1	STK	flange plate	1 10113.0.03.131.108P. 1		28,780					
						01000092								
12	-	-	-	1	STK	flange plate	1 10113.0.03.131.109P. 1		28,780					
						01000083								
14	-	-	-	1	STK	top flange	2 10113.0.03.131.111P. 1		11,900					
						01000088								
15	-	-	-	1	STK	top flange	2 10113.0.03.131.112P. 1		11,900					
						01000085								
18	-	-	-	2	STK	web	3 10113.0.03.131.115P. 1		14,300					
						01000101								
Angaben zu den Mengenspalten						Zeichng. St. Ausg. Zustand	Änderung / Datum							
A	WLRRM/L					00 0		INDIAN RAILWAYS						
B								Bearb. 04.97 FKTHIE	underframe					
C								Gepr. 10.98 TR3EHR	front part					
D								Norm. .						
								ALSTOM LHB GmbH		1 11012.0.03.131.001	Blatt			
								Linke-Hofmann-Busch-Straße		CAD	0703857 02			
								Salzgitter-Watenstedt		Ers.f. -	04 Bl.			

Rastermaß 4,23 x 2,54

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Pos.	D	C	B	A	Einheit	Benennung	Sachnummer / Norm-Kurzbezeichnung	Werkstoff	Gewicht kg /Einheit	RC	Bemerkung
19	-	-	-	2	STK	flange plate	4 10113.0.03.131.120P. 1 01002926		3,080		
20	-	-	-	1	STK	web	3 10113.0.03.131.118P. 1 01000082		14,300		
21	-	-	-	1	STK	web	3 10113.0.03.131.117P. 1 01000084		14,300		
22	-	-	-	2	STK	cross member, comp	2 10113.0.03.131.003MSP.A 01003525		7,400		
23	-	-	-	2	STK	rib	3 10113.0.03.131.124P. 1 01005678		2,680		
26	-	-	-	1	STK	cross member, compl.	2 10113.0.03.131.004MSP.A 01019008		7,400		
27	-	-	-	2	STK	rib	3 10113.0.03.131.127P. 1 01019006		0,400		
34	-	-	-	,140	M	I-WELD 4	DS95201 -2a 00477799	NiCuI-IG			Fa. Böhler
Angaben zu den Mengenspalten						Zeichng. St. Ausg. Zustand	Änderung / Datum				
A	WLRRM/L					00 0		INDIAN RAILWAYS			
B								Bearb. 04.97 FKTHIE	underframe		
								Gepr. 10.98 TR3EHR	front part		
C								Norm. .			
D								ALSTOM LHB GmbH Linke-Hofmann-Busch-Straße Salzgitter-Watenstedt	1 11012.0.03.131.001 CAD	0703857	Blatt 03
									Ers.f. -	04 Bl.	

Rastermaß 4,23 x 2,54

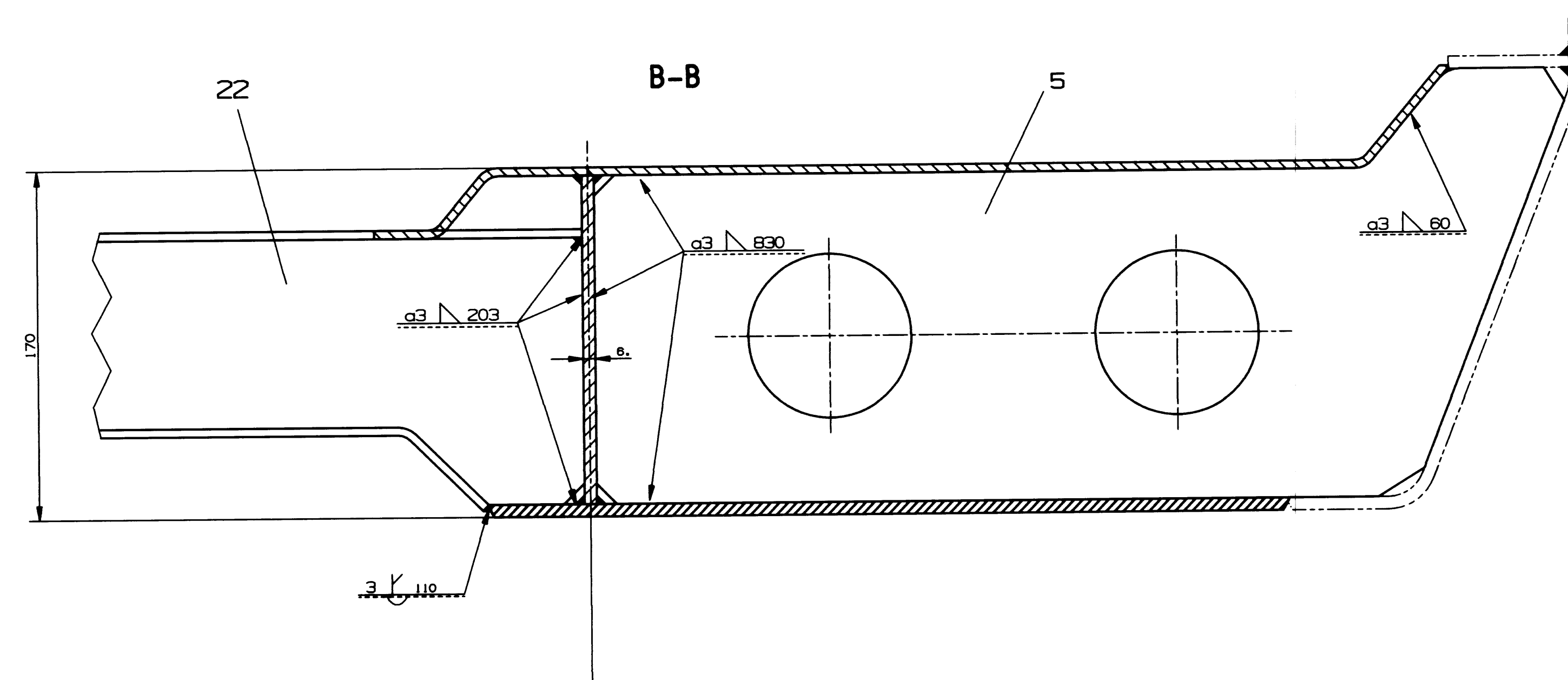
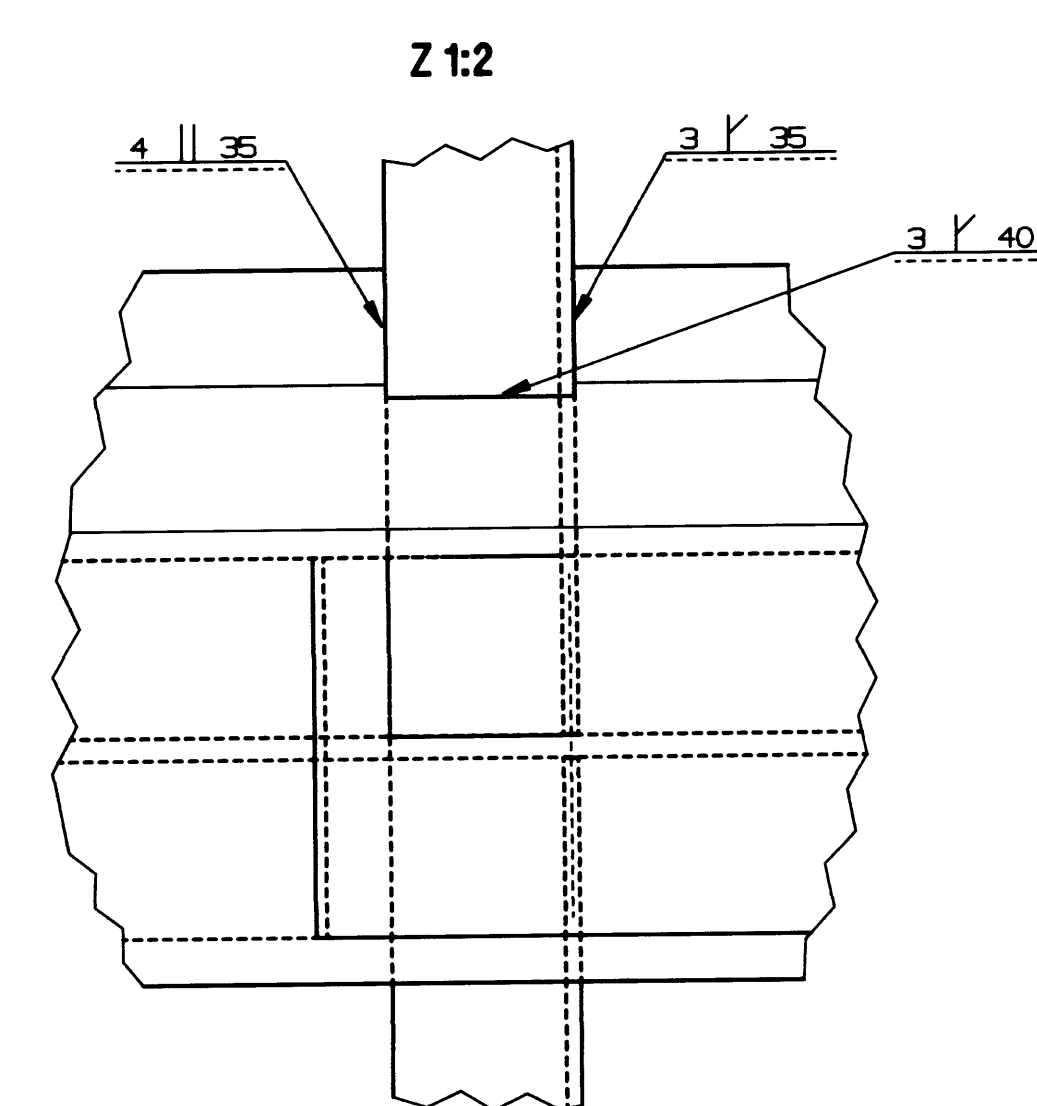
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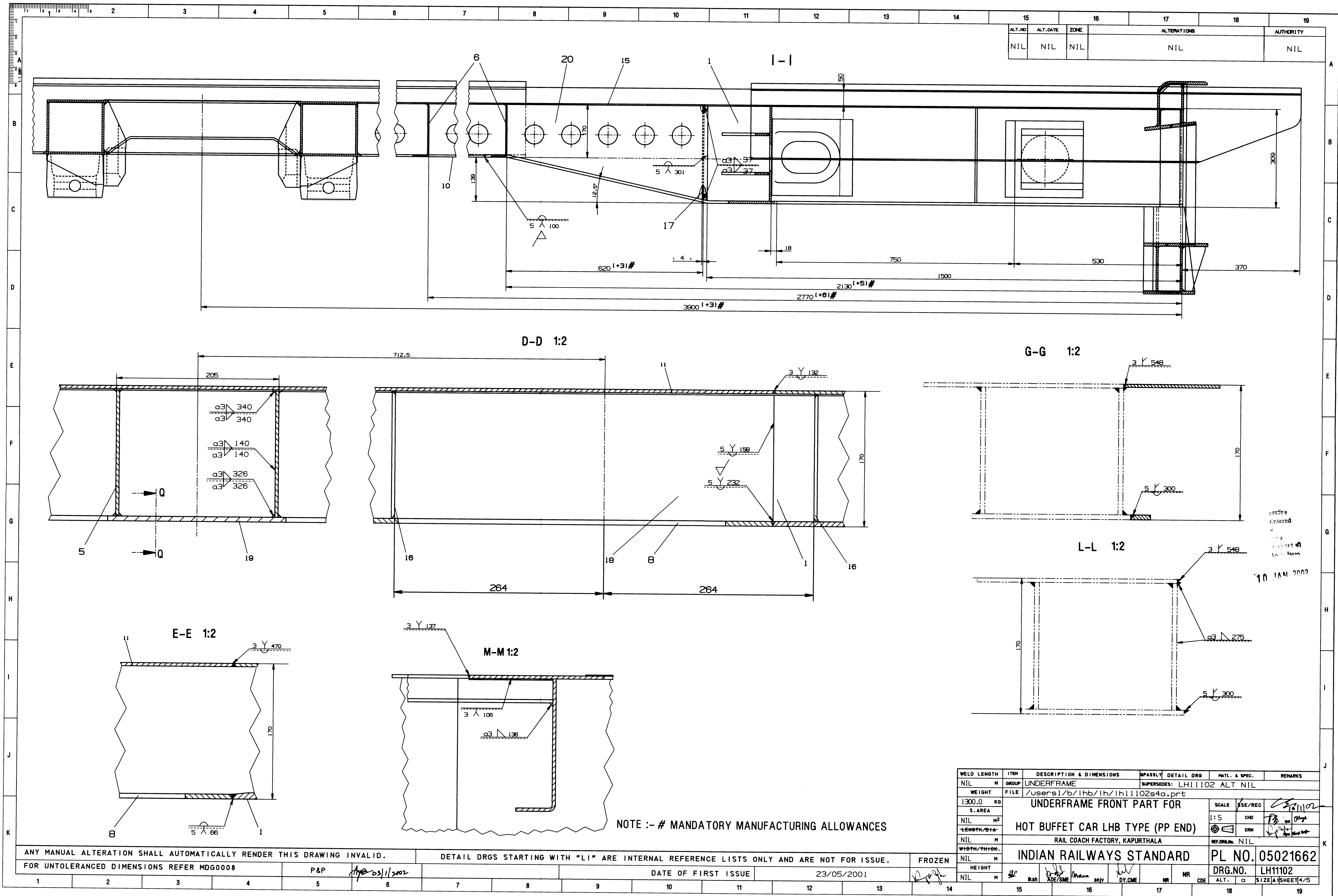
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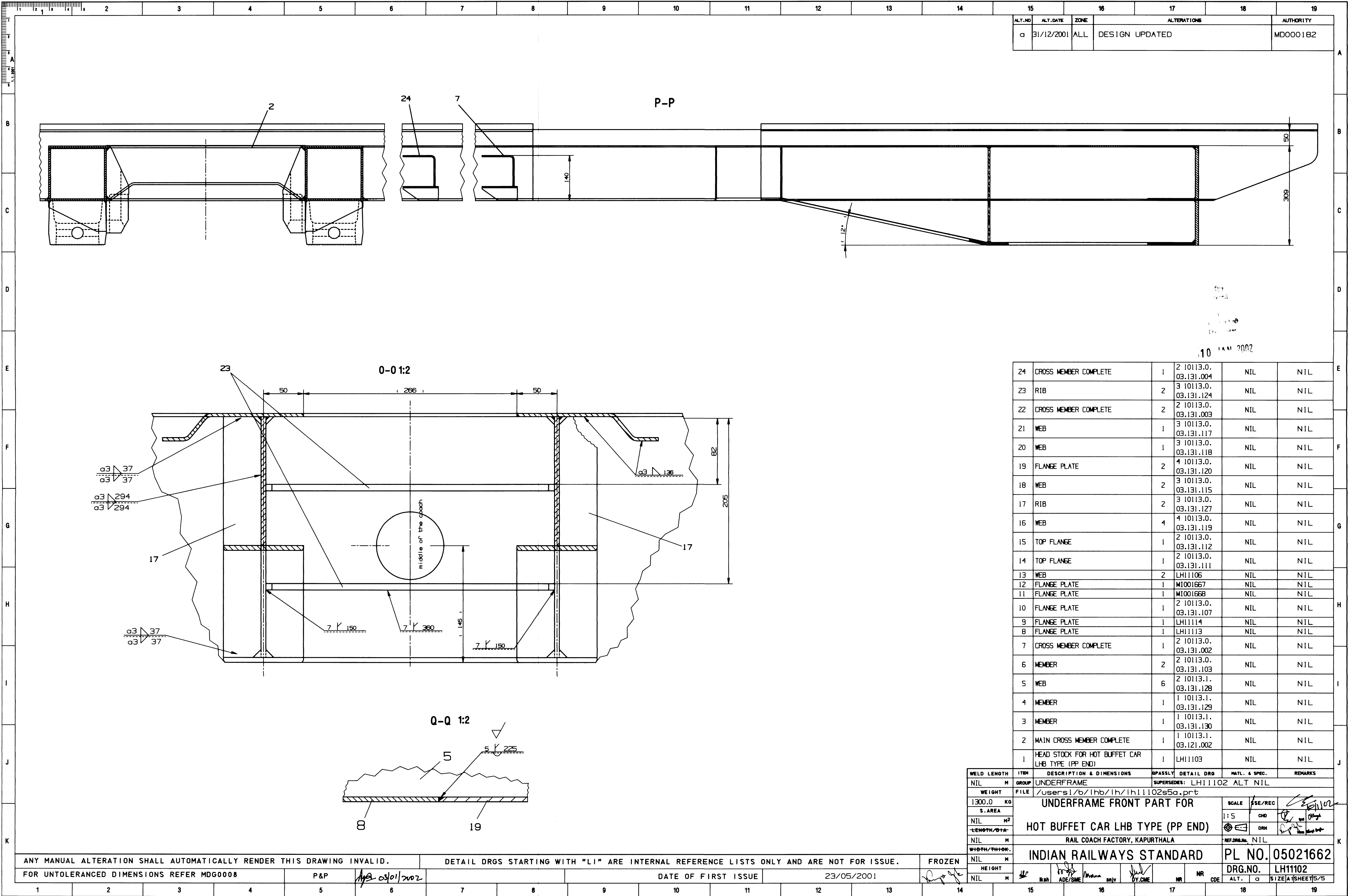
1	2				3	4	5	6	7	8	
Pos.	Menge				Einheit	Benennung	Sachnummer / Norm-Kurzbezeichnung	Werkstoff	Gewicht kg / Einheit	Bemerkung	
	D	C	B	A						RC	
35	-	-	-	53,4	M	FILLET WELD 3	DS95201 -2a 00477792	NiCul-IG			Fa. Böhler
36	-	-	-	1,65	M	Y-WELD 3	DS95201 -2a 00477806	NiCul-IG			Fa. Böhler
38	-	-	-	2,30	M	Y-WELD 5	DS95201 -2a 00477807	NiCul-IG			Fa. Böhler
39	-	-	-	2,30	M	HY-WELD 3	DS95201 -2a 00477800	NiCul-IG			Fa. Böhler
40	-	-	-	1,32	M	HY-WELD 7	DS95201 -2a 00477802	NiCul-IG			Fa. Böhler
41	-	-	-	2,80	M	HY-WELD 5	DS95201 -2a 00477805	NiCul-IG			Fa. Böhler
42	-	-	-	4,95	M	OPPOSITE WELD	DS95201 -2a 00477795	NiCul-IG			Fa. Böhler
Angaben zu den Mengenspalten						Zeichng. St. Ausg. Zustand	Änderung / Datum				
A	WLRRM/L					00 0		INDIAN RAILWAYS			
B								Bearb. 04.97 FKTHIE	underframe		
								Gepr. 10.98 TR3EHR	front part		
								Norm. .			
C								ALSTOM LHB GmbH	1 11012.0.03.131.001		Blatt
								Linke-Hofmann-Busch-Straße	CAD		04
D								Salzgitter-Watenstedt	Ers.f. -		04 Bl.

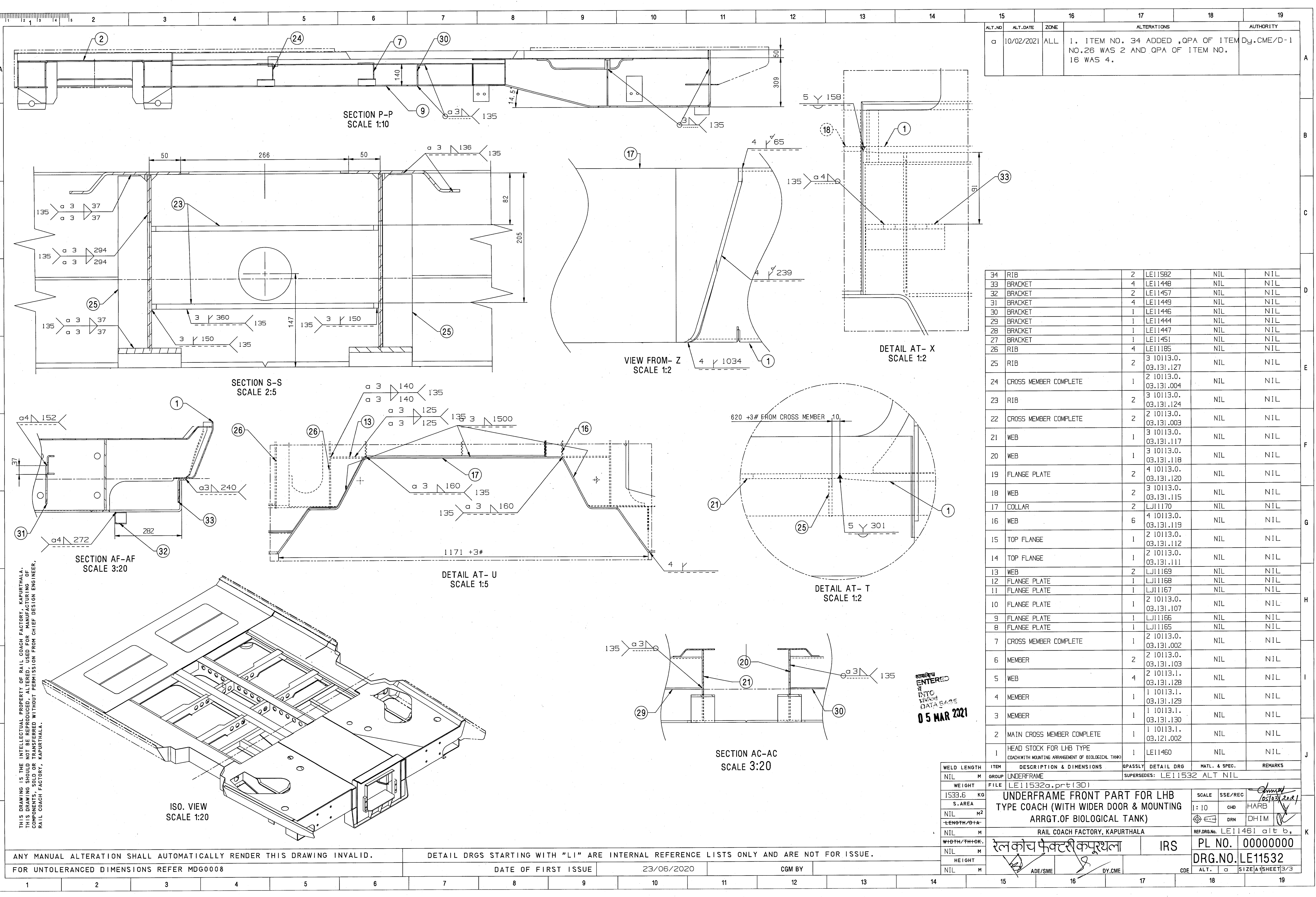


ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	PASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS		
NIL	M	GROUP UNDERFRAME	SUPERSEDES: LH11102 ALT NIL					
WEIGHT	FILE	/users/l/b/lhb/lh/lh11102s2a.prt						
1300.0	KG	UNDERFRAME FRONT PART FOR HOT BUFFET CAR LHB TYPE (PP END)			SCALE	XSE/REC	2/10/19	
S. AREA					1:2	CND	BZ	
NIL	M ²	RAIL COACH FACTORY, KAPURTHALA				DRN	2/10/19	
LENGTH/DIA								
NIL	M	INDIAN RAILWAYS STANDARD			REF.DWG. NO.		NIL	
WIDTH/THICK.					PL NO.		05021662	
NIL	M	DRG.NO.			LH11102			
HEIGHT								
NIL	M	ADE/SME	DIY.CME	MR	CDE	ALT.	a	SIZE/A SHEET/2/5







ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
1	10/02/2021	ALL	1. ITEM NO. 34 ADDED ,QPA OF ITEM NO.26 WAS 2 AND QPA OF ITEM NO. 16 WAS 4.	Dy.CME/D-1

34	RIB	2	LE11582	NIL	NIL
33	BRACKET	4	LE11448	NIL	NIL
32	BRACKET	2	LE11457	NIL	NIL
31	BRACKET	4	LE11449	NIL	NIL
30	BRACKET	1	LE11446	NIL	NIL
29	BRACKET	1	LE11444	NIL	NIL
28	BRACKET	1	LE11447	NIL	NIL
27	BRACKET	1	LE11451	NIL	NIL
26	RIB	4	LE11185	NIL	NIL
25	RIB	2	3 10113.0. 03.131.127	NIL	NIL
24	CROSS MEMBER COMPLETE	1	2 10113.0. 03.131.004	NIL	NIL
23	RIB	2	3 10113.0. 03.131.124	NIL	NIL
22	CROSS MEMBER COMPLETE	2	2 10113.0. 03.131.003	NIL	NIL
21	WEB	1	3 10113.0. 03.131.117	NIL	NIL
20	WEB	1	3 10113.0. 03.131.118	NIL	NIL
19	FLANGE PLATE	2	4 10113.0. 03.131.120	NIL	NIL
18	WEB	2	3 10113.0. 03.131.115	NIL	NIL
17	COLLAR	2	LJ11170	NIL	NIL
16	WEB	6	4 10113.0. 03.131.119	NIL	NIL
15	TOP FLANGE	1	2 10113.0. 03.131.112	NIL	NIL
14	TOP FLANGE	1	2 10113.0. 03.131.111	NIL	NIL
13	WEB	2	LJ11169	NIL	NIL
12	FLANGE PLATE	1	LJ11168	NIL	NIL
11	FLANGE PLATE	1	LJ11167	NIL	NIL
10	FLANGE PLATE	1	2 10113.0. 03.131.107	NIL	NIL
9	FLANGE PLATE	1	LJ11166	NIL	NIL
8	FLANGE PLATE	1	LJ11165	NIL	NIL
7	CROSS MEMBER COMPLETE	1	2 10113.0. 03.131.002	NIL	NIL
6	MEMBER	2	2 10113.0. 03.131.103	NIL	NIL
5	WEB	4	2 10113.1. 03.131.128	NIL	NIL
4	MEMBER	1	1 10113.1. 03.131.129	NIL	NIL
3	MEMBER	1	1 10113.1. 03.131.130	NIL	NIL
2	MAIN CROSS MEMBER COMPLETE	1	1 10113.1. 03.121.002	NIL	NIL
1	HEAD STOCK FOR LHB TYPE COACH WITH MOUNTING ARRANGEMENT OF BIOLOGICAL TANK	1	LE11460	NIL	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP UNDERFRAME				
WEIGHT	FILE	LE11532a.prt (3D)				
1533.6	KG					
S.AREA						
NIL	M ²					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

UNDERFRAME FRONT PART FOR LHB TYPE COACH (WITH WIDER DOOR & MOUNTING ARRG.T.OF BIOLOGICAL TANK)

RAIL COACH FACTORY, KAPURTHALA

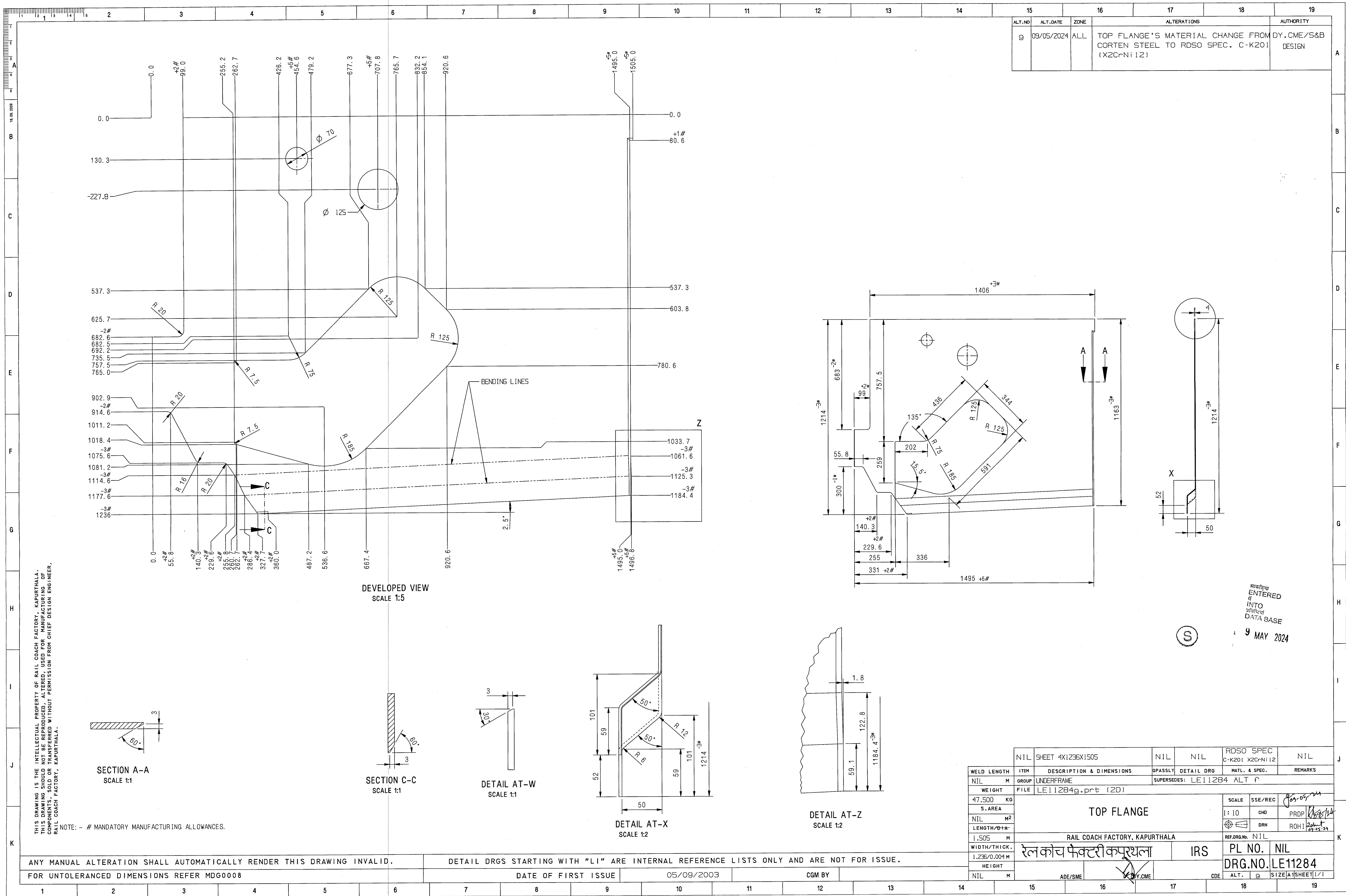
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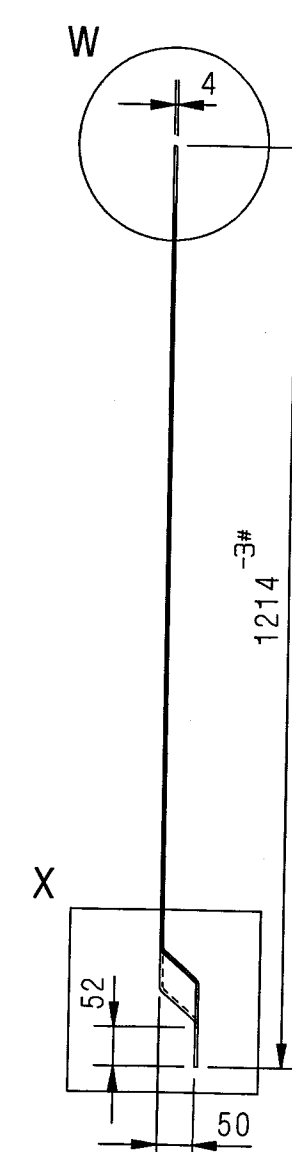
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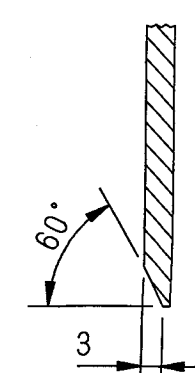
SIZE A1 SHEET 3/3

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FOR UNTOLERANCED DIMENSIONS REFER MDG0008	DATE OF FIRST ISSUE 23/06/2020 CGM BY





SECTION A-A
SCALE 1:1



Technical drawing of a bent plate. The drawing shows a profile of a plate with a total height of 1214 and a width of 50. The plate is bent into a shape with two 50° angles. The dimensions and radii are as follows:

- Total height: 1214
- Width: 50
- Top vertical segment height: 101
- First vertical segment height: 59
- Radius of the first bend: R 12
- Radius of the second bend: R 6
- Second vertical segment height: 59
- Bottom vertical segment height: 52
- Angle of the first bend: 50°
- Angle of the second bend: 50°

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions in millimeters (mm) and tolerances.

Overall Dimensions:

- Top Horizontal: 1406 $+3^{\#}$
- Left Vertical: 1163 $-3^{\#}$
- Bottom Horizontal: 1495 $+5^{\#}$
- Right Vertical: 1214 $-3^{\#}$

Internal Features and Dimensions:

- Top Horizontal Segments:** 1205, 25, 683 $-2^{\#}$
- Left Vertical Segments:** 80, 250, 259
- Right Vertical Segments:** 99 $+2^{\#}$, 55.8, 300 $-1^{\#}$
- Bottom Horizontal Segments:** 336, 229.6 $+2^{\#}$, 255, 331 $+2^{\#}$
- Internal Angles:** 135.0°, 15.5°
- Internal Dimensions:** 344, 436, 591, 125, 75, 185, 202, 140.3 $+2^{\#}$
- Radiuses:** R 125, R 75, R 125
- Center Mark:** A circle with a crosshair, indicating a center point.

NIL		SHEET 4X1236X1505		NIL		NIL		RD50 SPEC C-K201 X2C-N112		NIL	
WELD LENGTH		ITEM		DESCRIPTION & DIMENSIONS		GPASSLY DETAIL DRG		MATL. & SPEC.		REMARKS	
NIL		M		UNDERFRAME		SUPERSEDES: LE11285		ALT g			
WEIGHT		FILE		\\10.12.17.155\shell\ROH\LE11285.prt							
47.500		KG		<div style="text-align: center;">TOP FLANGE</div>							
S. AREA											
NIL		M ²									
LENGTH/D+▲											
1.505		M		RAIL COACH FACTORY, KAPURTHALA				SCALE		SSE/REC	
WIDTH/THICK.		1.236/0.004 M		<div style="text-align: center;">रेल कोच फैक्टरी कपूरथला</div>				1:10		CHD	
HEIGHT								DRN		ROH1	
NIL		M						REF.DRG.No.		NIL	
		ADE/SME		DY.CME		CODE		PL NO.		NIL	
								DRG.No.		LE11285	
								ALT. h		SIZE A1 SHEET 1/1	

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DATA BASE
9 MAY 2024

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DATE OF FIRST ISSUE

09/05/2024

CGM BY

CDE	ALT.	h	SIZE	A1	SHEET	1/1
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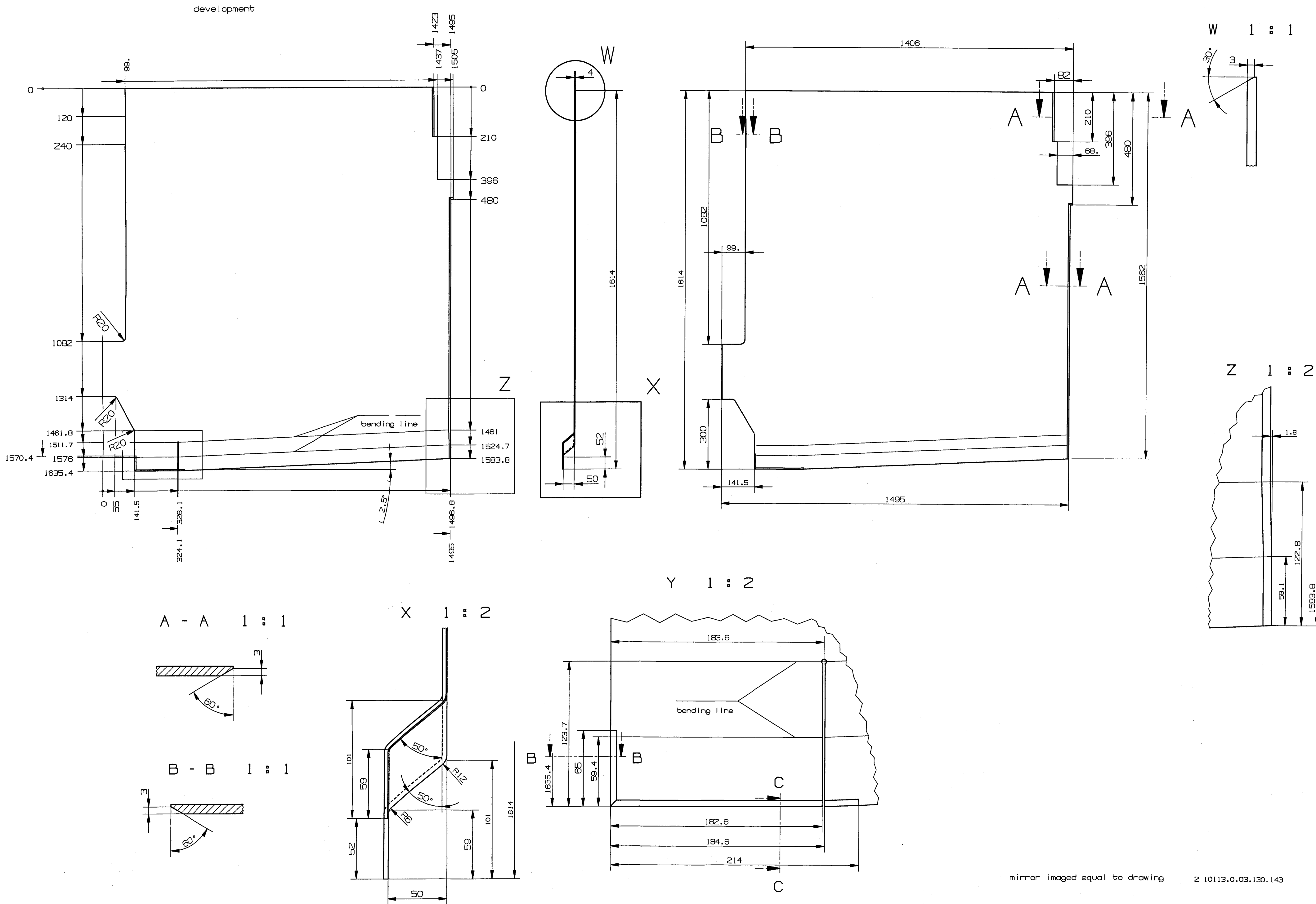
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE

01/11/1998

CGM BY

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
GR 12/03/2018	ALL		1. LAVATORY CUT-OUT DELETED AND DRG UPDATED.	DY. CME/D-1
GR 20/05/2024	ALL		1. MATERIAL OF TOP FLANGE UPDATED.	DY. CME S&B/DESIGN



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DATA BASE

2 5 MAY 2024

NIL SHEET 4X1636X1505		NIL	NIL	RDSO SPEC. CK-201X2CrNi12	NIL
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.
NIL	M	GROUP	UNDERFRAME	SUPERSEDES: 210113.0.03.130.104	ALT GR
WEIGHT	FILE	2 10113.0.03.130.104GR1.prt (2D)			
70.190	KG	TOP FLANGE			
S.AREA					
NIL	M ²				
LENGTH/DIA					
1.636	M				
WIDTH/THICK.		RAIL COACH FACTORY, KAPURTHALA			
1.505/0.004	M	REF.DRG.No. 2 10113.0.03.130.104 alt-G			
HEIGHT		PL NO. NIL			
NIL	M	DRG.NO. 2 10113.0.03.130.104			
ADE/SME		CME		CDE	
		ALT.		GR1 SIZE A1 SHEET 1/1	

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
MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

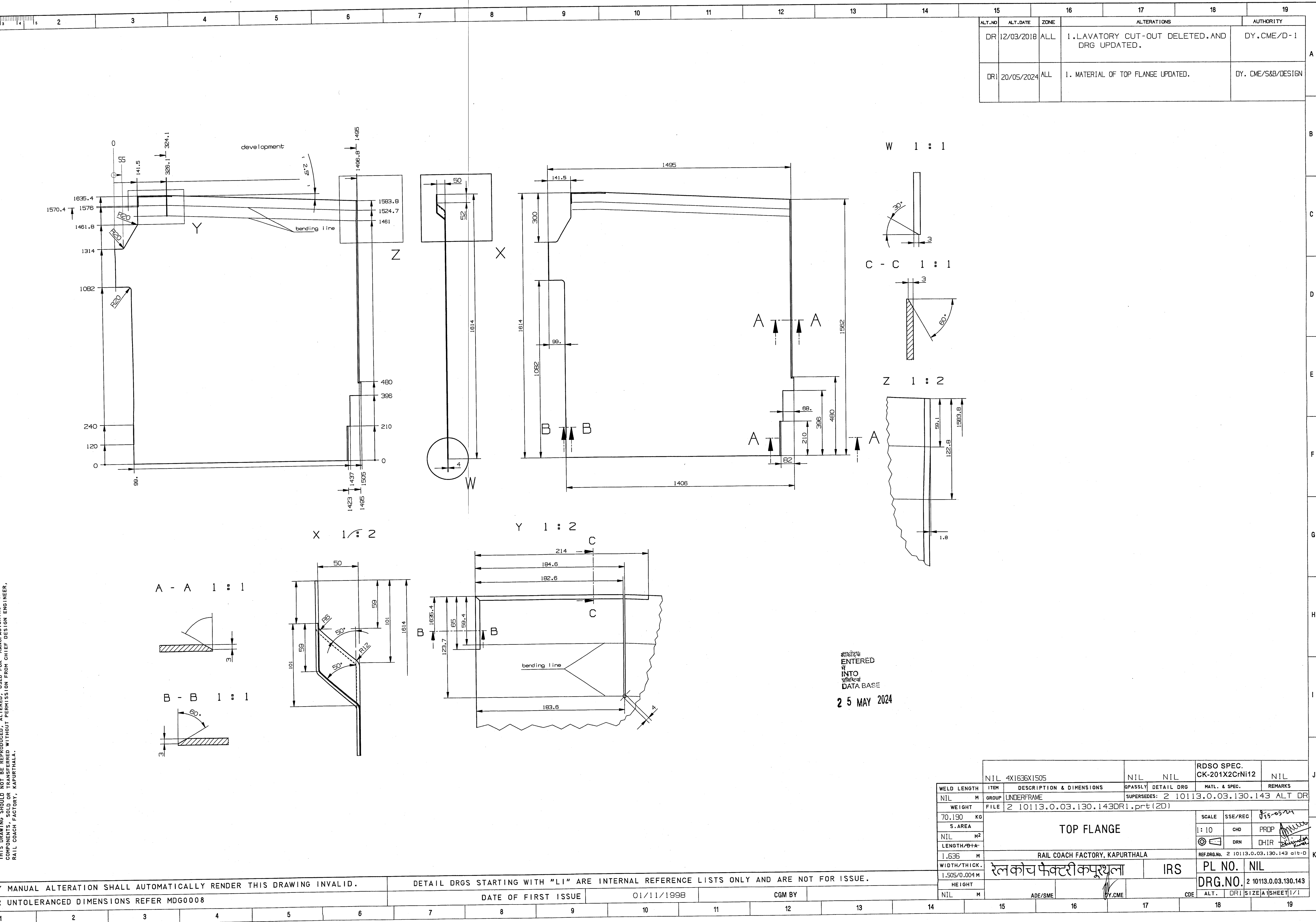
DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

UNTOLERANCED DIMENSIONS REFER MDG0008

DATE OF FIRST ISSUE 01/11/1998

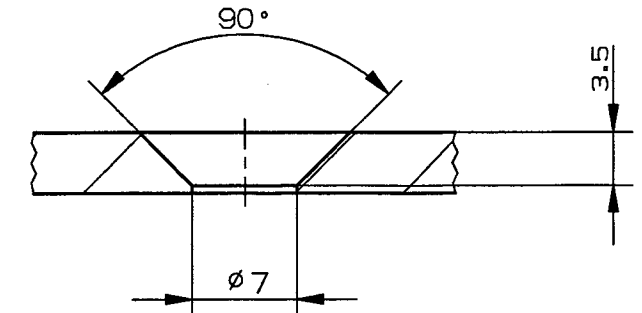
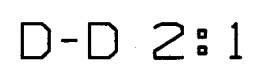
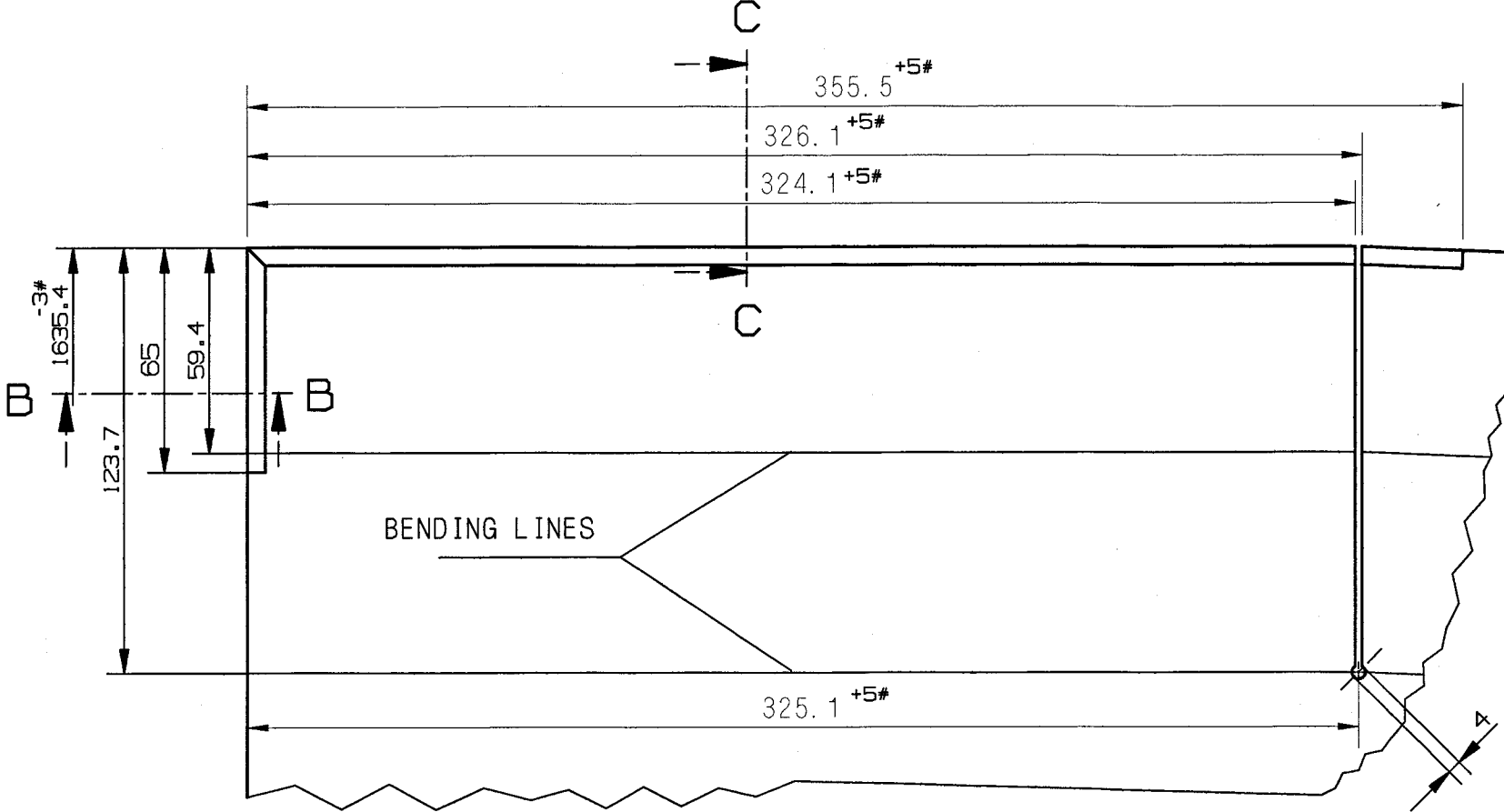
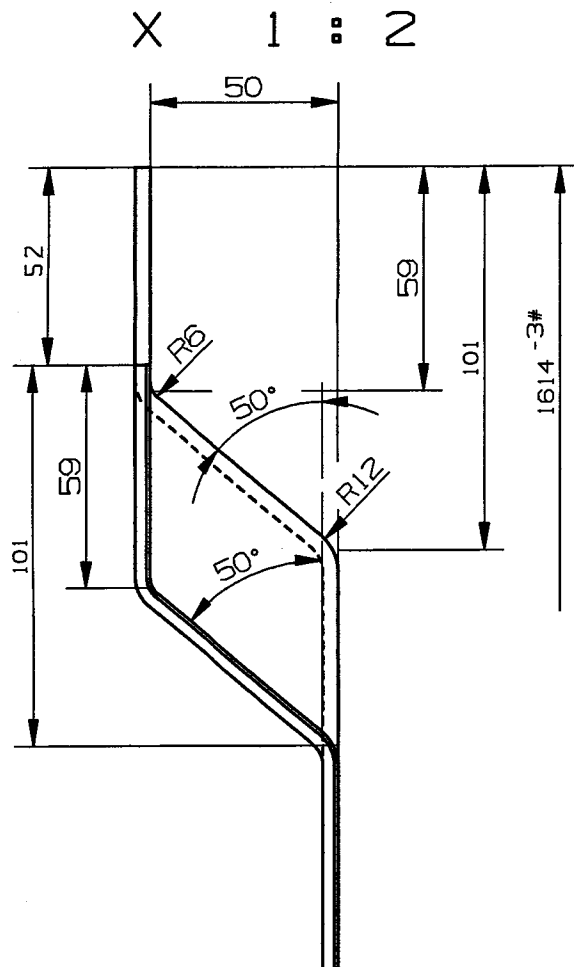
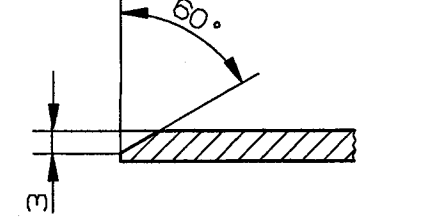
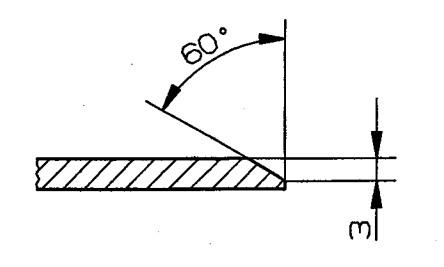
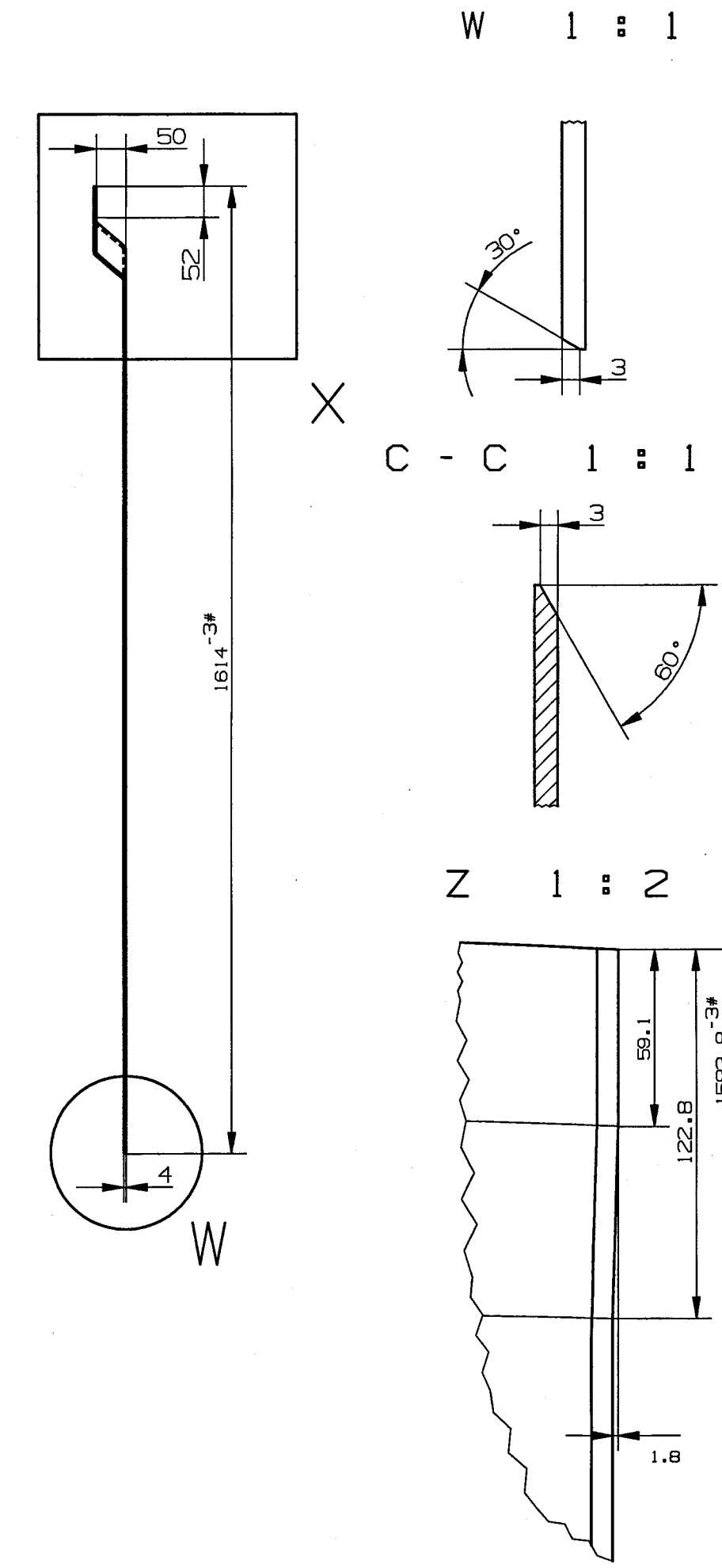
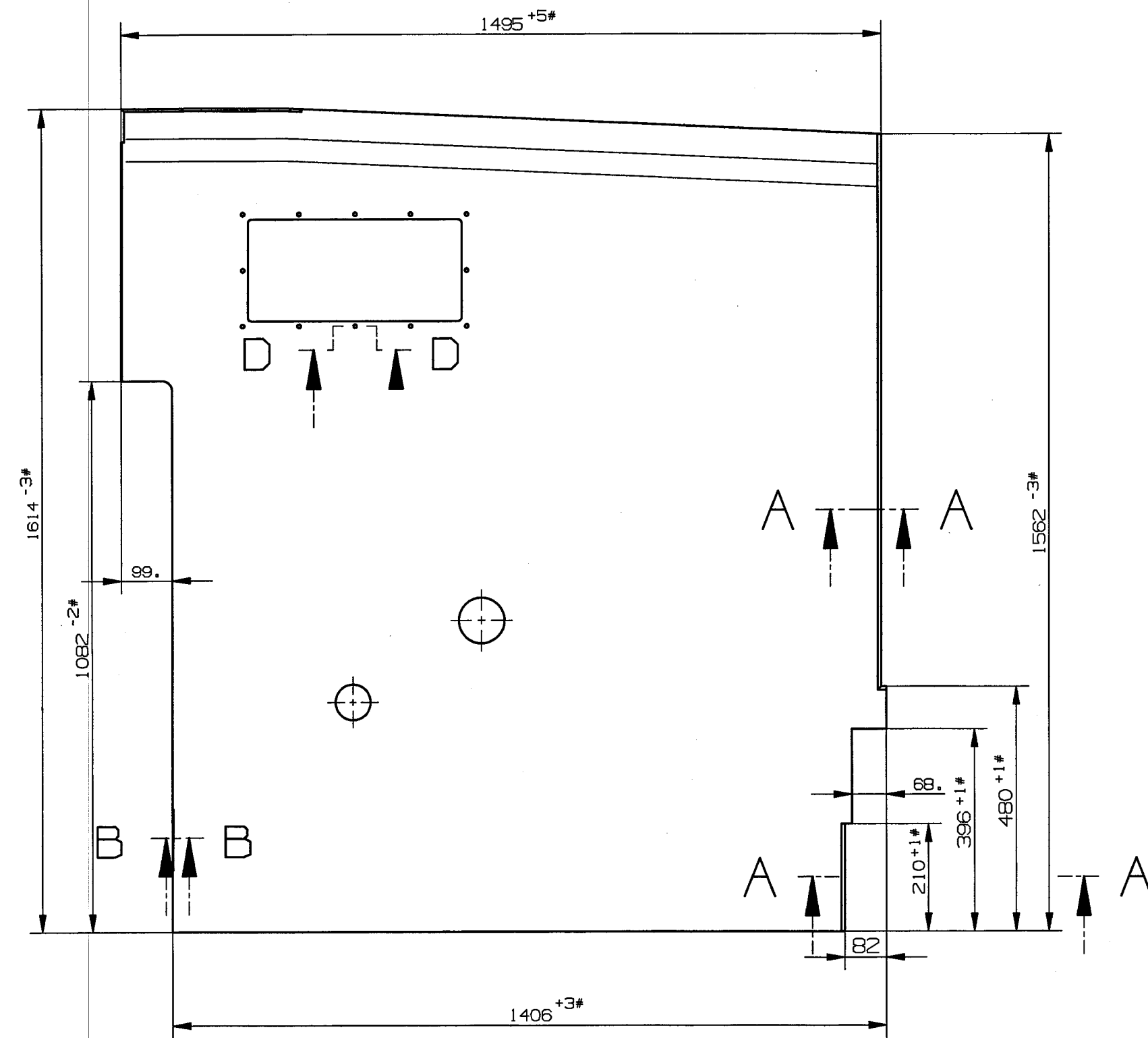
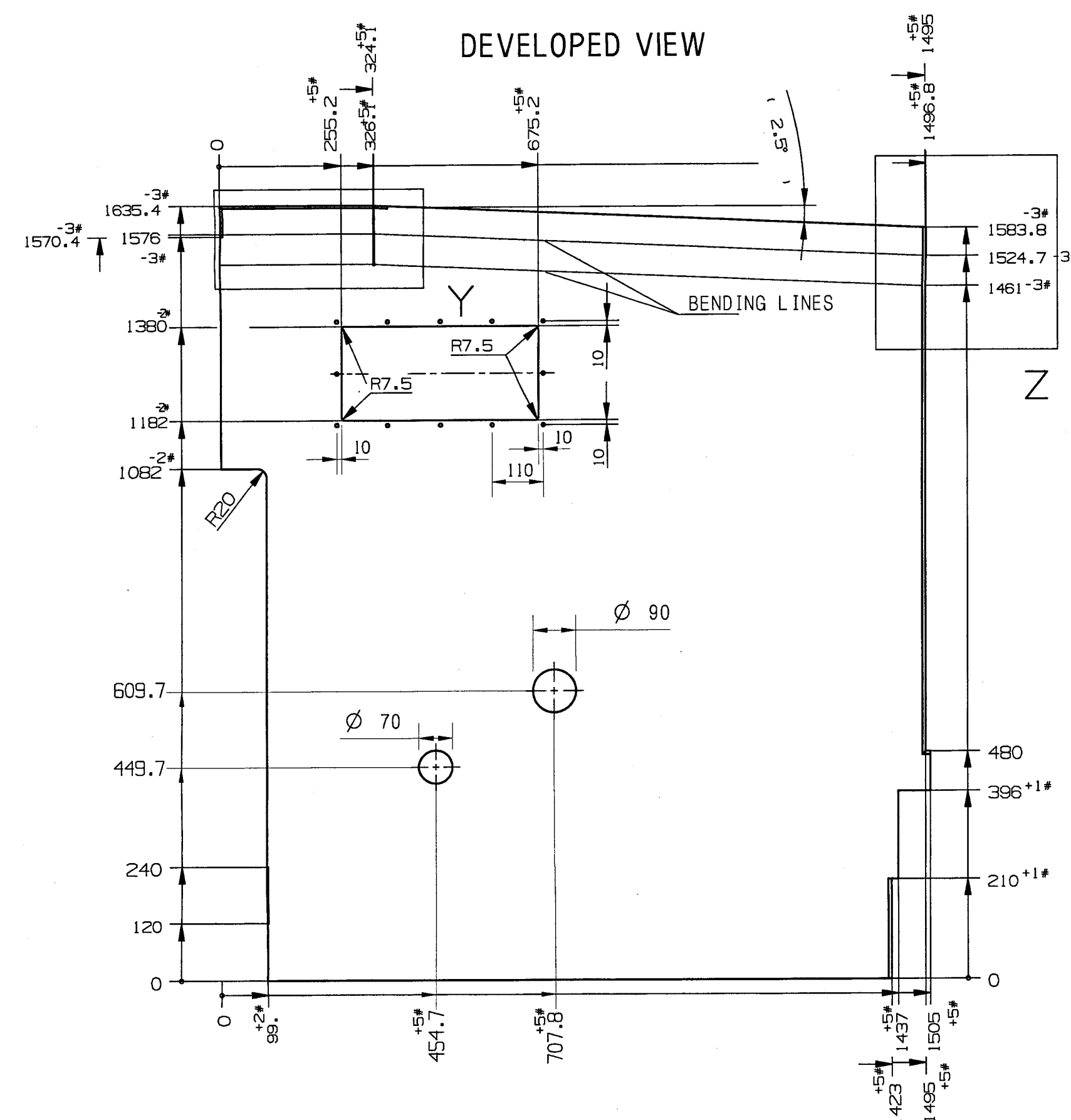
CGM BY

NIL 4X1636X1505			NIL		NIL		RDSO SPEC. CK-201X2CrNi12		NIL						
TH	ITEM	DESCRIPTION & DIMENSIONS			OPASSLY	DETAIL DRG		MATL. & SPEC.		REMARKS					
M	GROUP	UNDERFRAME			SUPERSEDES: 2 10113.0.03.130.143 ALT DR										
FILE	2 10113.0.03.130.143DR1.prt (2D)														
KG	TOP FLANGE							SCALE	SSE/REC	815-05-21					
M2								1:10	CHD	PROP	815-05-21				
A									DRN	CHIR	Dimensional Control				
CK.								RAIL COACH FACTORY, KAPURTHALA							REF.DRG.No. 2 10113.0.03.130.143 alt-D
M								रेल कोच फैक्टरी कपूरथला					IRS		PL NO.
								DRG.NO.	2 10113.0.03.130.143						
M	ADE/SME		UY.CME		CDE		ALT.	ORI	SIZE A1	SHEET 1/1					



ENTERED
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DATA BASE
25 MAY 2024

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
a	19/03/2002	H13	DETAIL OF SECTION D-D ADDED.	DIC NO. MD000182
b	17/05/2024	ALL	MATERIAL OF TOP FLANGE UPDATED	DY. CME S&B/DESIGN



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25 MAY 2024

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P&F

DATE OF FIRST ISSUE

28/12/2001

CGM BY

NIL		SHEET 4X163X1505		NIL		NIL		RDSO SPEC. CK-201 X2C/N112		NIL	
WELD LENGTH		ITEM DESCRIPTION & DIMENSIONS		GPASSLY DETAIL DRG		MATL. & SPEC.		REMARKS			
NIL		M GROUP UNDERFRAME		SUPERSEDES: LH11112 ALT a							
WEIGHT		FILE //10.12.17.155/shell/DH1R/1h11112bprt(2D)									
66.300 KG		<div style="text-align: center;">TOP FLANGE</div>									
S.AREA											
NIL											
LENGTH/DIA		<div style="text-align: center;">RAIL COACH FACTORY, KAPURTHALA</div>									
1.636		REF.DRG.NO. 2 10113.0.03.130.143									
WIDTH/THICK.		रेल कोच फैक्टरी कपूरथला				IRS		PL NO.		NIL	
1.505/0.004 M		DRG.NO. LH11112									
HEIGHT		ADE/SME		DVE/SME		CDF		ALT.		SIZE/A1 SHEET/1/1	
NIL		M		M		M		b			