

AAA16936

▽ ROUGH MACHINED	(11) ROUGH CLEANED
▽▽ FINISH MACHINED	(12) BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	(13) CHAMFERED

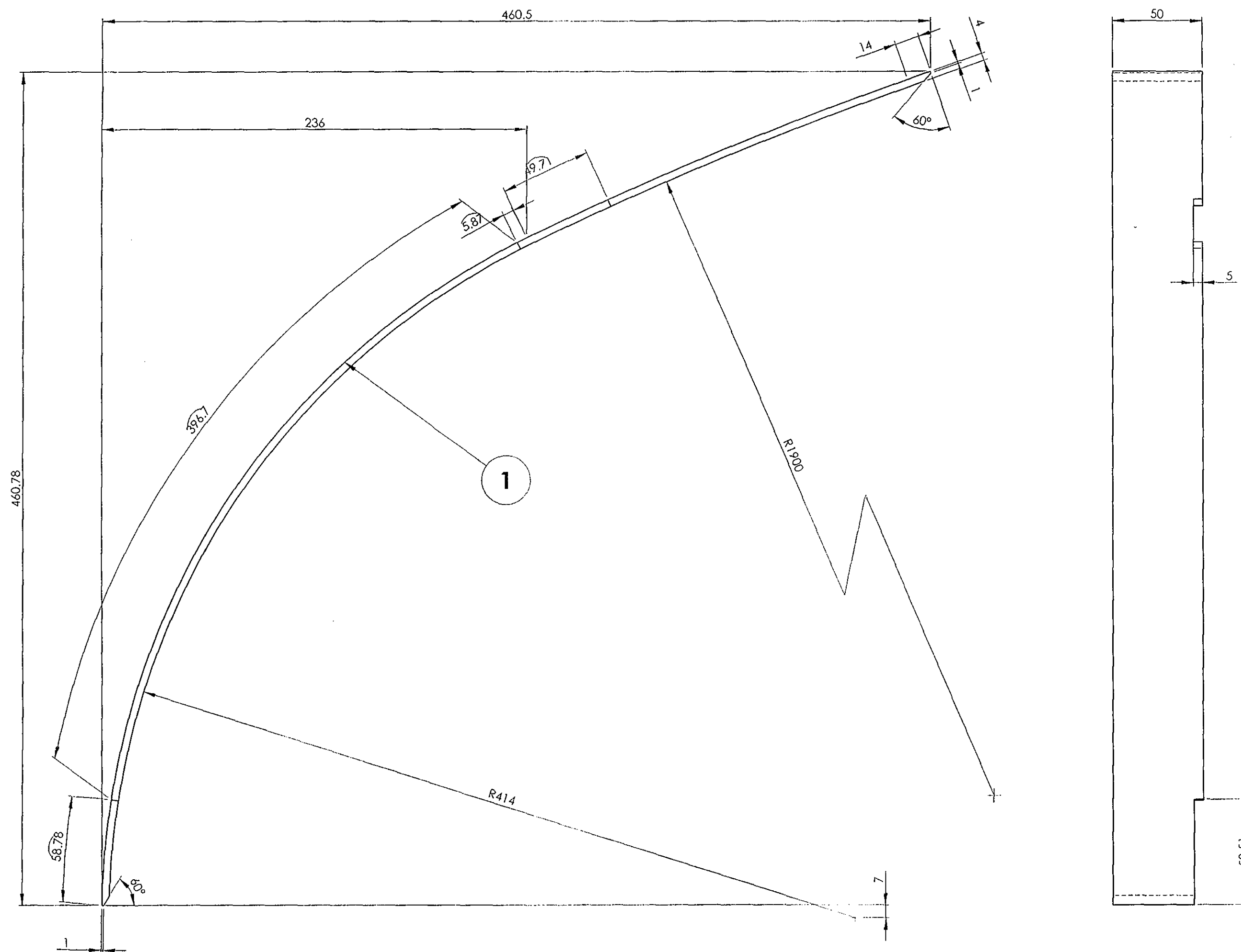
REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS813:1986.

REF.DRG.NO.3 10113.0.20.210.119

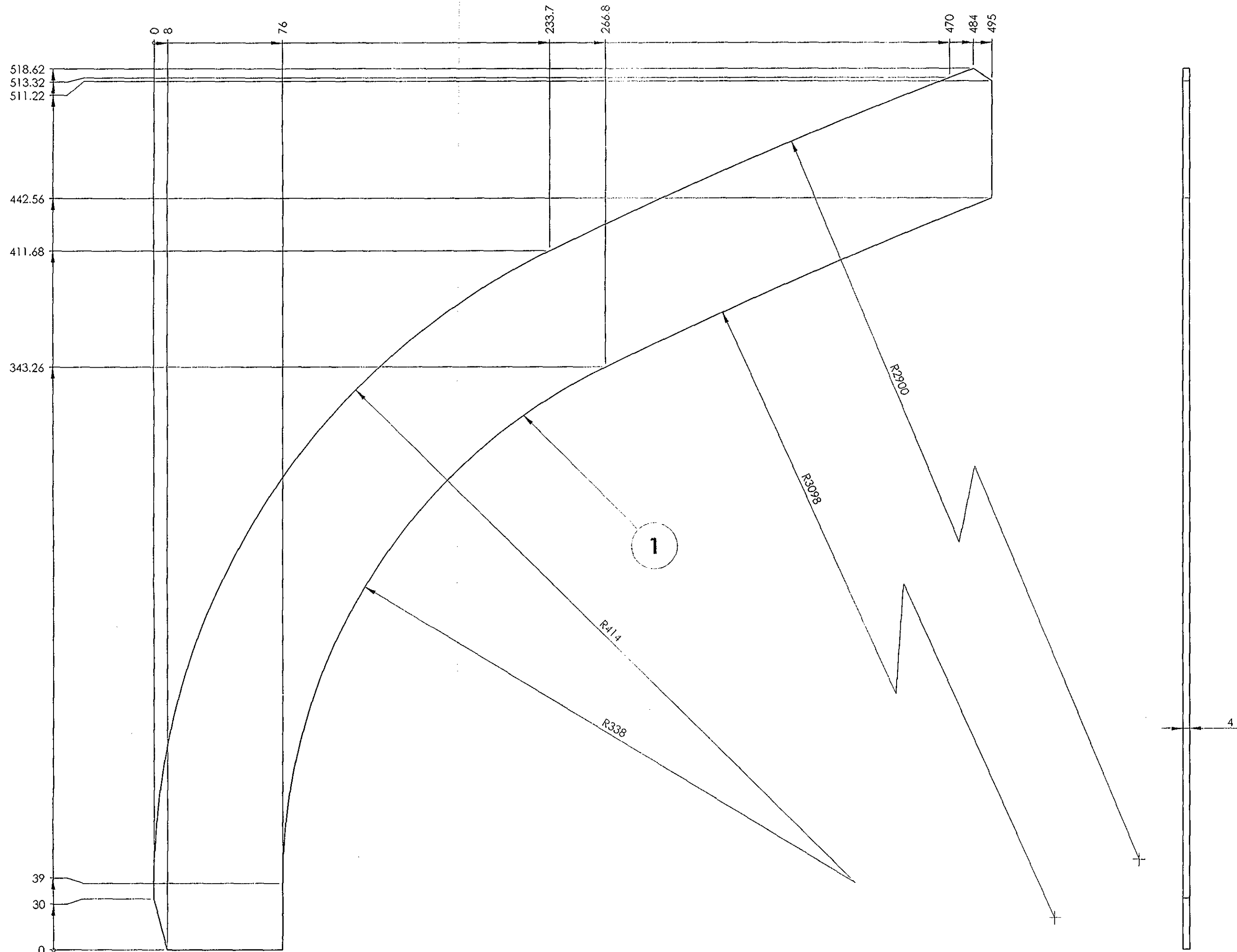
DATE OF LATEST ALI.	21-03-2013	AME/SME
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1	FLANGE	4 x 50 x 702	1	RDSO/SPEC C- K201 X2Cn12	1.098	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.075		WT/ASSY IN Kgs: 1.098		
FLANGE				SCALE 1:2	SSE/1	CHD
				ALT	ALTD	DRN
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038				AAA16936 A2		

AAA16937

▽ ROUGH MACHINED	⊖1 ROUGH CLEANED
▽▽ FINISH MACHINED	⊖1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖18 CHAMFERED

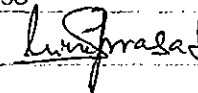
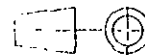
REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



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REF.DRG.NO.2 10113.0.20.210.105

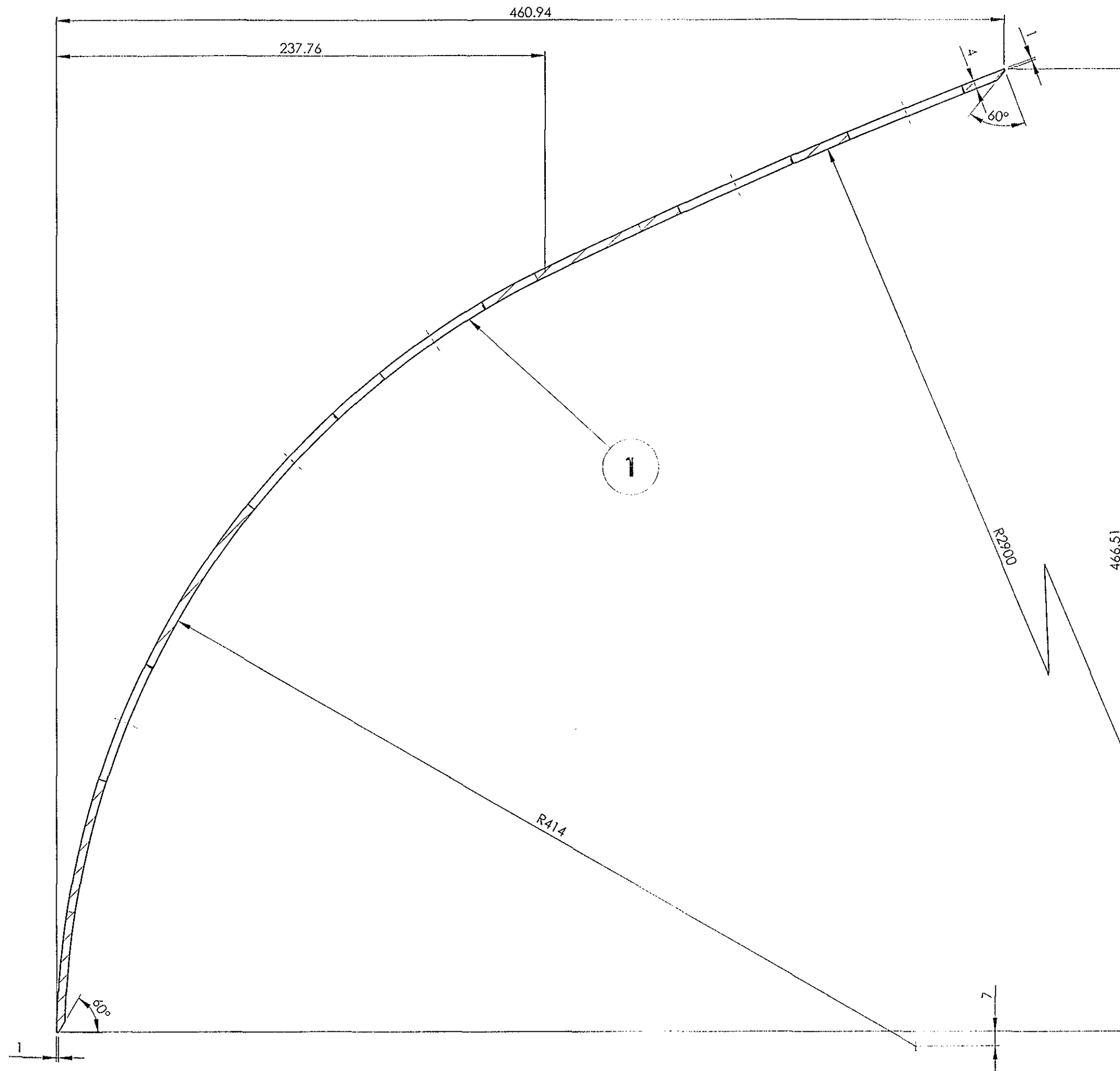
DATE OF LATEST ALL.	21-03-2013	AME/SME
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1	ROOF ARCH	4 x 495 x 519	1		RDSO/SPEC C- K201 X2CIN12	1.758					
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS				
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.116			WT/ASSY IN Kgs: 1.758						
ROOF ARCH					SCALE 1:2	SSE/D CHD					
					ALT	ALTD DRN		K.Sriram			
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						
										SHEET 1 OF 1	
					AAA16937		A2				

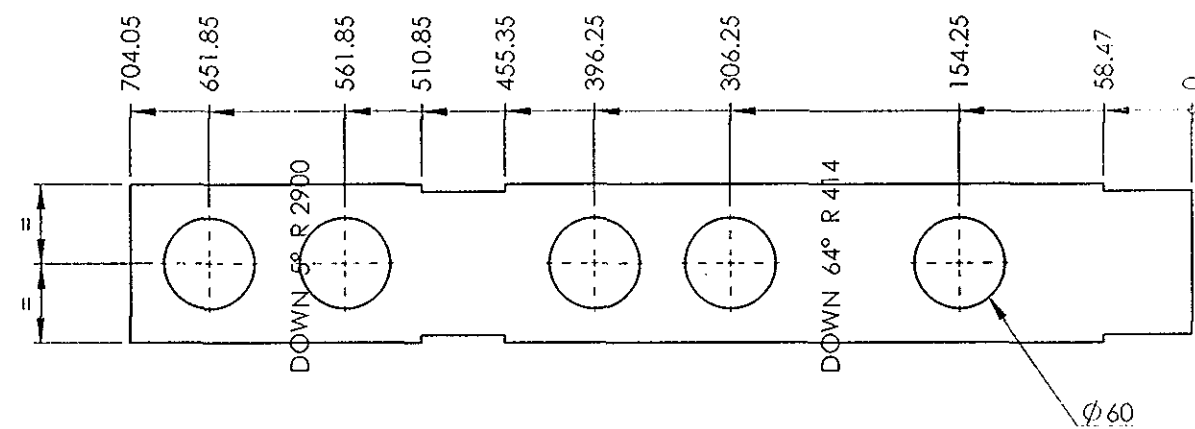
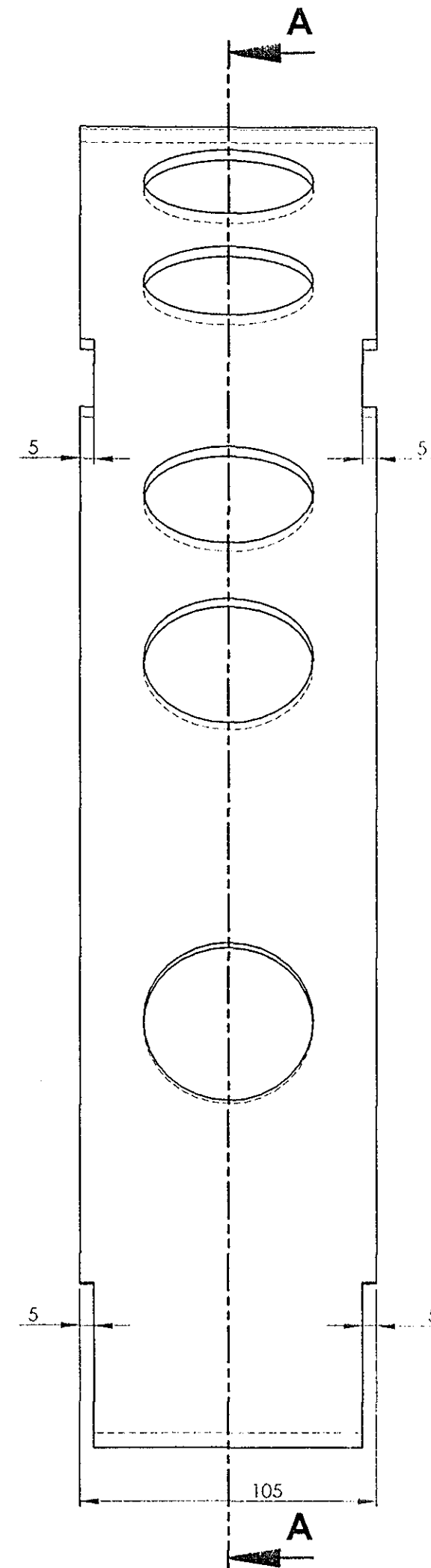
AAA16938

▽ ROUGH MACHINED	(11) ROUGH CLEANED
▽▽ FINISH MACHINED	(12) BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	(13) CHAMFERED

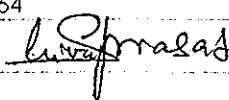

REVISIONS		APPROVED & DATE	
ALT.	ZONE	DESCRIPTION	



SECTION A-A



DEVELOPMENT VIEW

1	FLANGE	4 x 105 x 705	1		RDSO/SPEC C- K201 X2CrNi12	1.864	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: I-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.127			WT/ASSY IN Kgs: 1.864		
FLANGE				SCALE 1:2	SSE/D		
					CHD		
				ALT	ALTD		
					DRN		K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	 AAA16938		
							A2

DATE OF LATEST ALL.	21-03-2013	AME/SME
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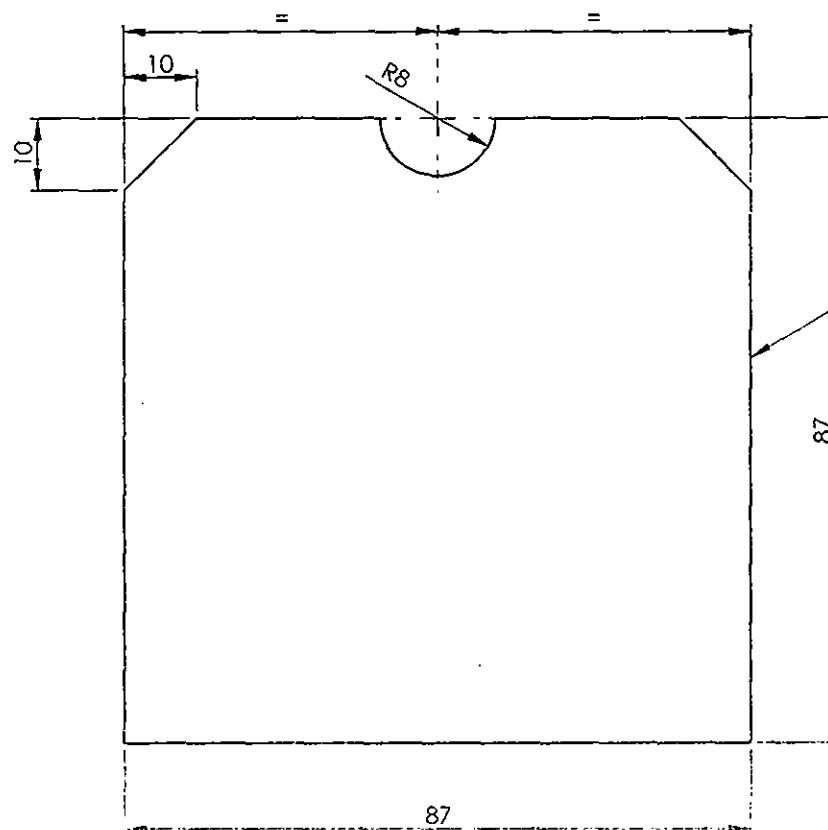
REF.DRG.NO.3 10113.0.20.210.121

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813:1986.

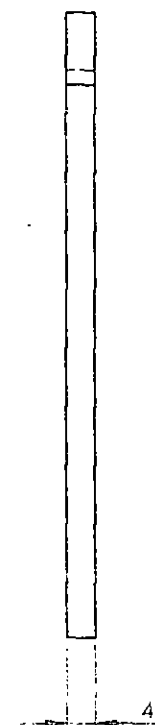
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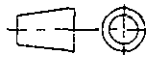
▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ VACUUM POLISHED	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1



1	WEB	4 x 87 x 87	1		RDSO/SPEC C-K201 X2CrNi12	0.236	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.016			WT/ASSY IN Kgs:0.236		
WEB					SCALE	SSE/D	K. Sriram
					1:1	CHD	
					ALT.	ALTD	
						DRN	K. Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16939

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD 9 0.001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.

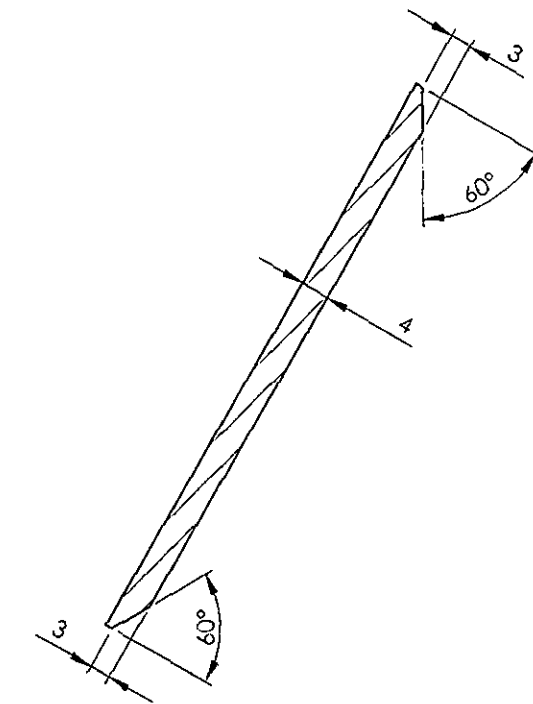
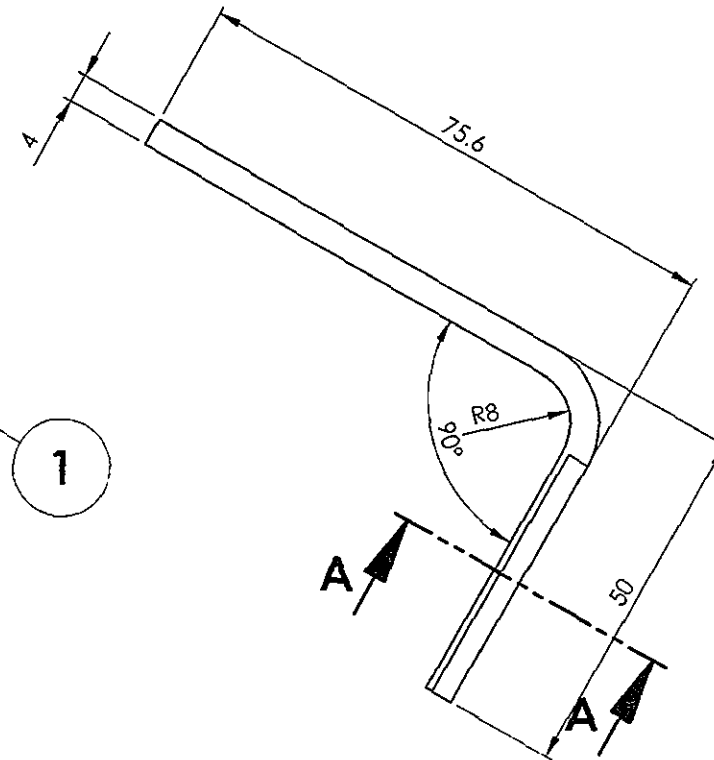
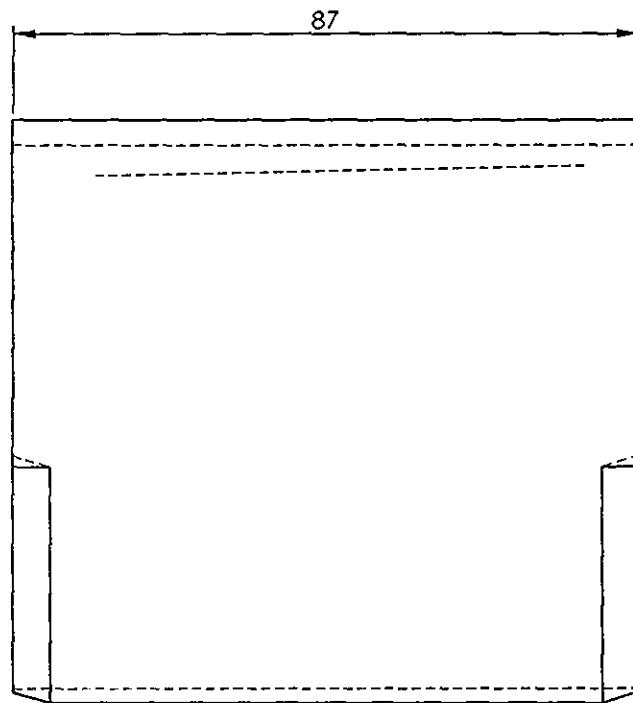
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	21-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

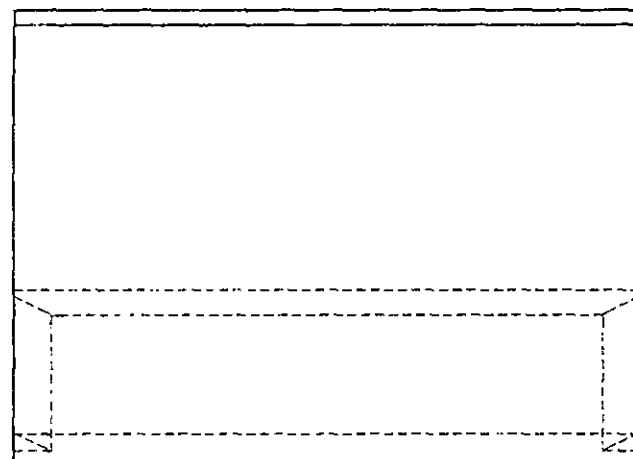
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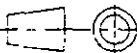
▽ ROUGH MACHINED	⊙ ROUGH CLEANED
▽▽ FINISH MACHINED	⊙⊙ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊙⊙⊙ CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



SECTION A-A



1	STIFFENING ANGLE	4 x 87 x 118	1		RDSO/SPEC C-K201 X2CrNi12	0.322	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.022			WT/ASSY IN Kgs:0.322		
STIFFENING ANGLE					SCALE	SSE/D	<i>As per lead</i>
					1:1	CHD	
					ALT.	ALTD	
					DRN	K.Sriram	
							
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038							
				AAA16940		A3	

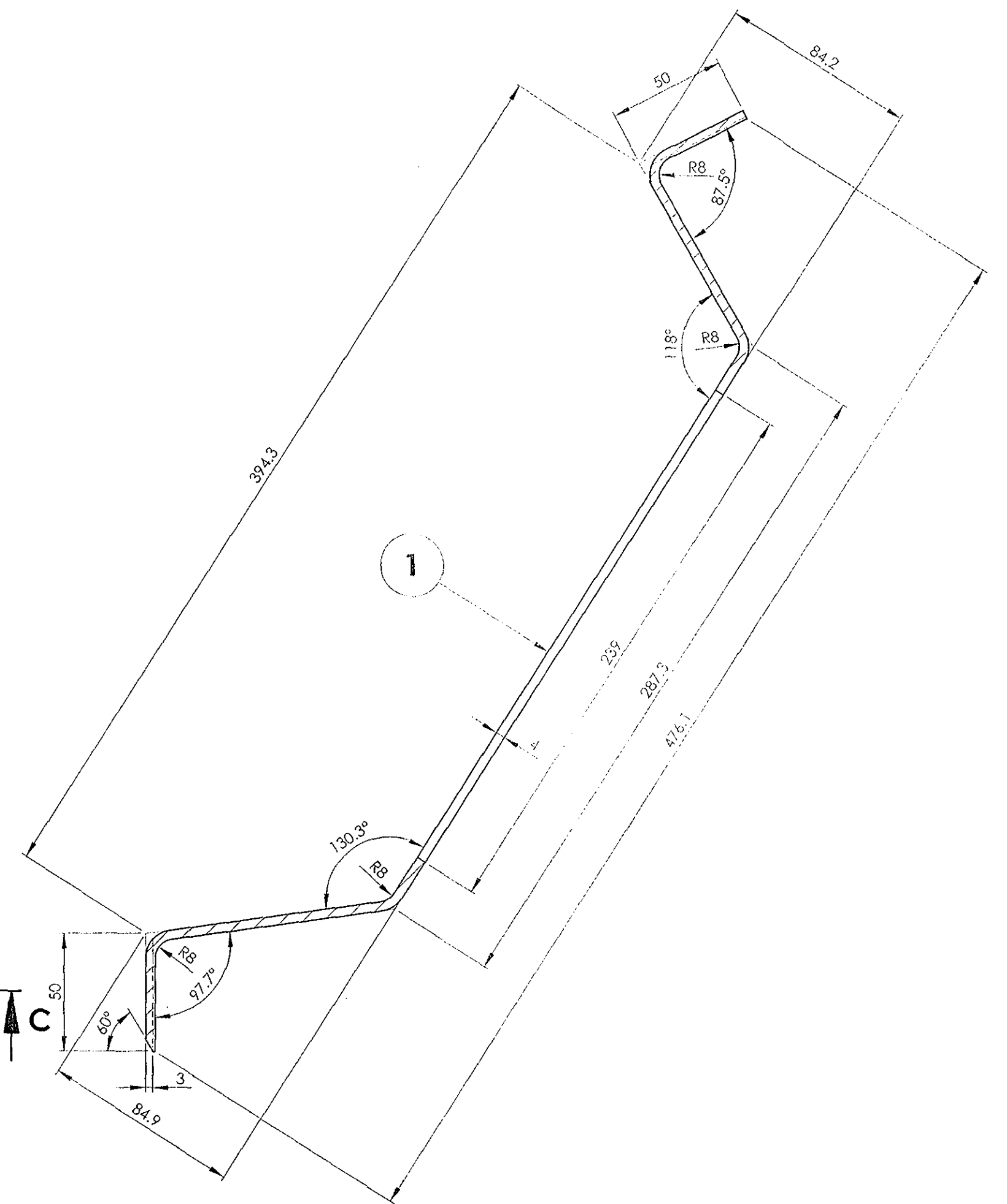
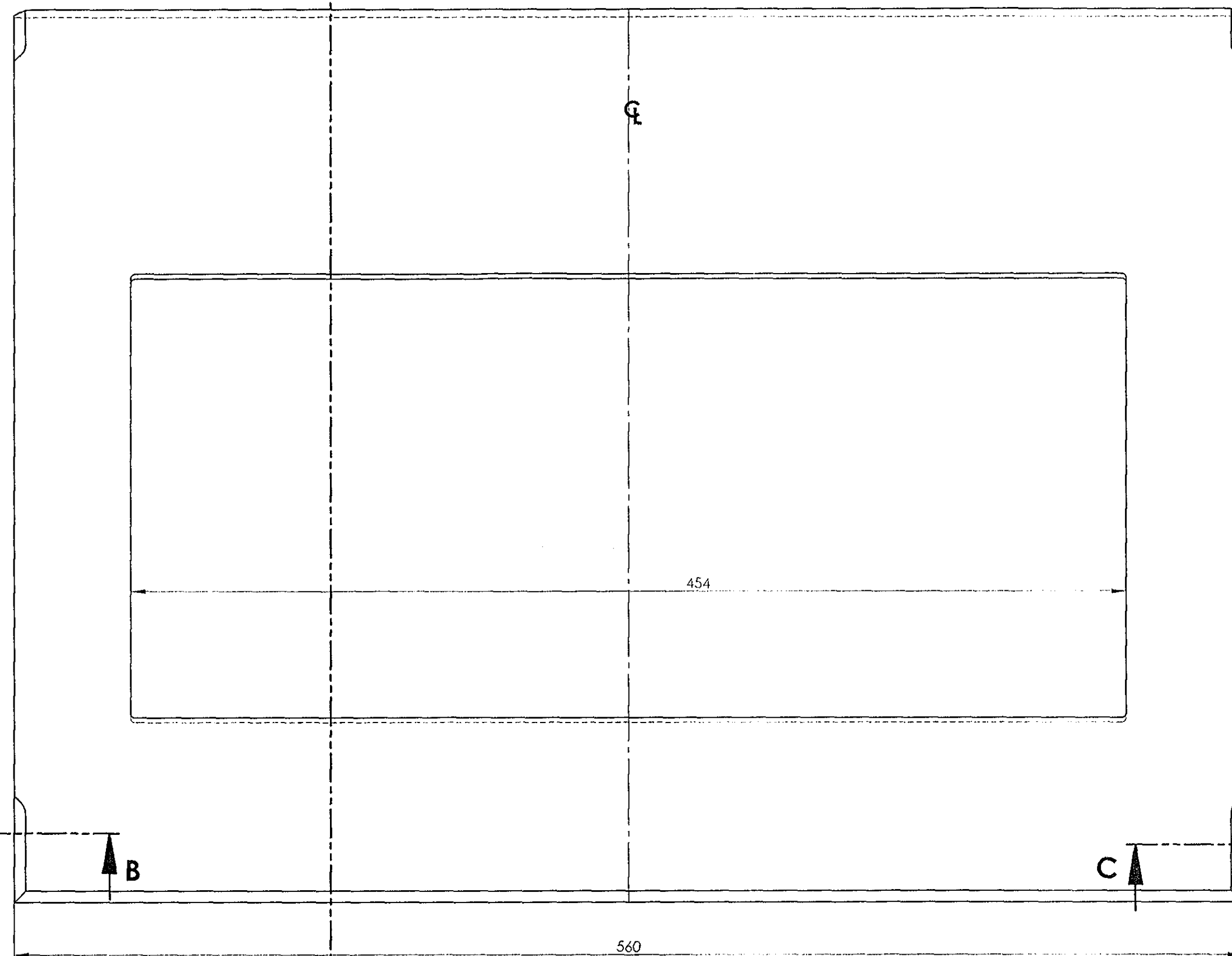
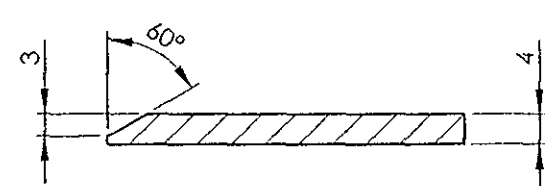
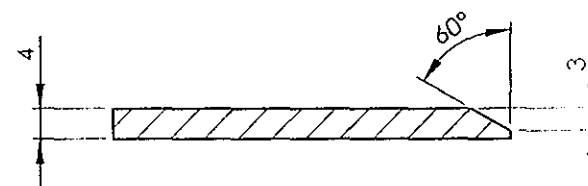
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICT/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.

REF.DRG.NO.3 10113.0.20.200.117

AAA16941

▽ ROUGH MACHINED	⑥1 ROUGH CLEANED
▽▽ FINISH MACHINED	⑥1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑥1c CHAMFERED

REVISIONS			APPROVED & DATE
ALT.	ZONE	DESCRIPTION	

SECTION A-A
SCALE 1 : 2SECTION B-B
SCALE 1 : 1SECTION C-C
SCALE 1 : 1

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813:1986.

REF.DRG.NO.1 10113.0.20.200.127

DATE OF LATEST ALT.	21-03-2013	AME/SME
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1	TERMINAL FRAME	4 x 560 x 568	1	REF. DRGS	RDSO/SPEC C- K201 X2CIN12	6.658	REMARKS
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.: 0.432		WT/ASSY IN Kgs: 6.658	
TERMINAL FRAME					SCALE 1:2	SSE/D CHD	<i>Surfaced</i>
					ALT	ALTD	
					DRN	DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1	AAA16941 A2	

AAA16942

▽ ROUGH MACHINED

① ROUGH CLEANED

▽▽ FINISH MACHINED

② BURRS REMOVED

▽▽▽ FINE FINISH MACHINED

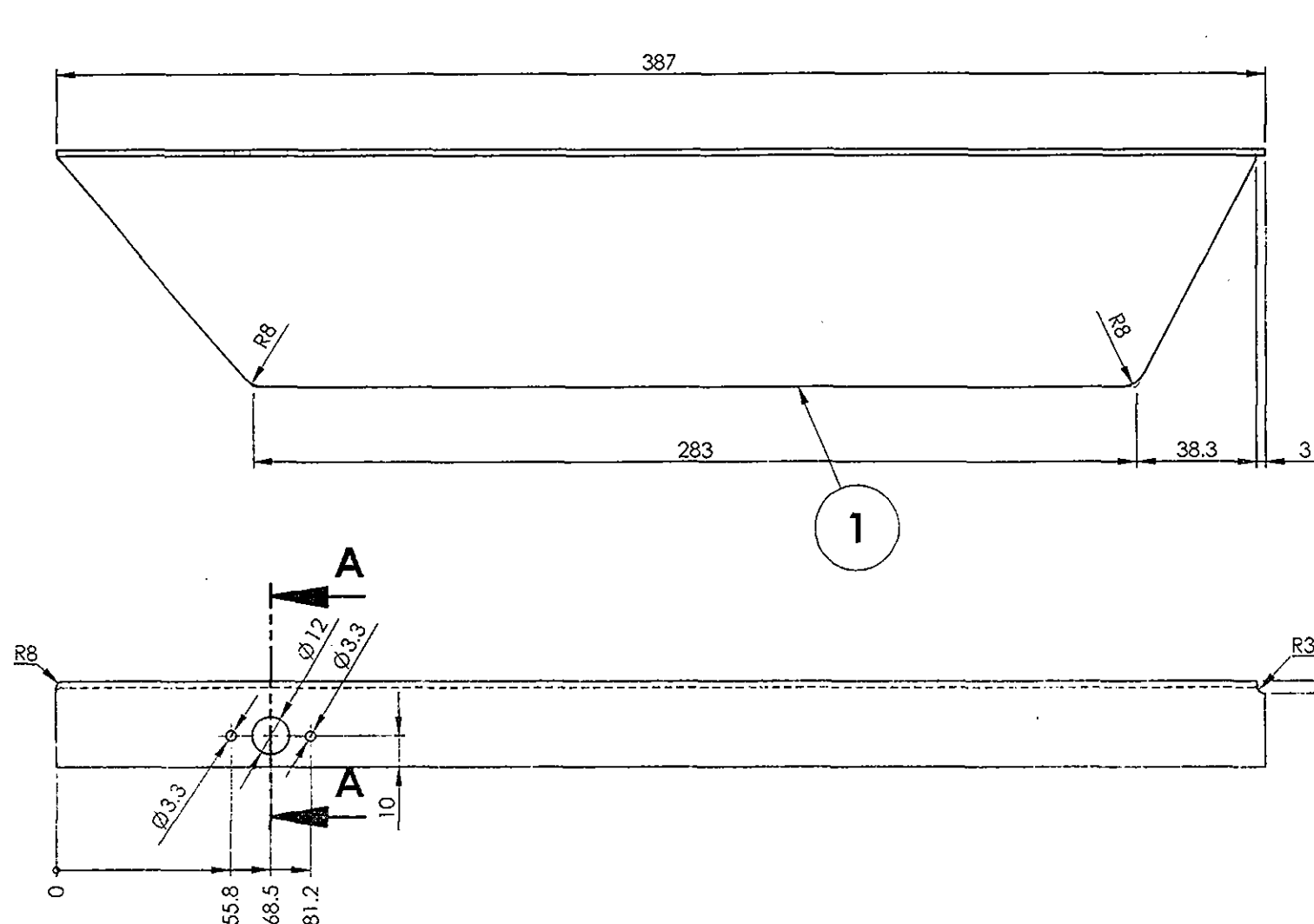
③ CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATESECTION A-A
SCALE 1:1

1	CLOSING ANGLE	2 x 101 x 387	1		RDSO/SPEC C-K201 X2CrNi12	0.556	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.:0.071		WT/ASSY IN Kgs:0.556	
CLOSING ANGLE					SCALE 1:2	SSE/D CHD	hira prasad
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAA16942	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD 9.0.001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

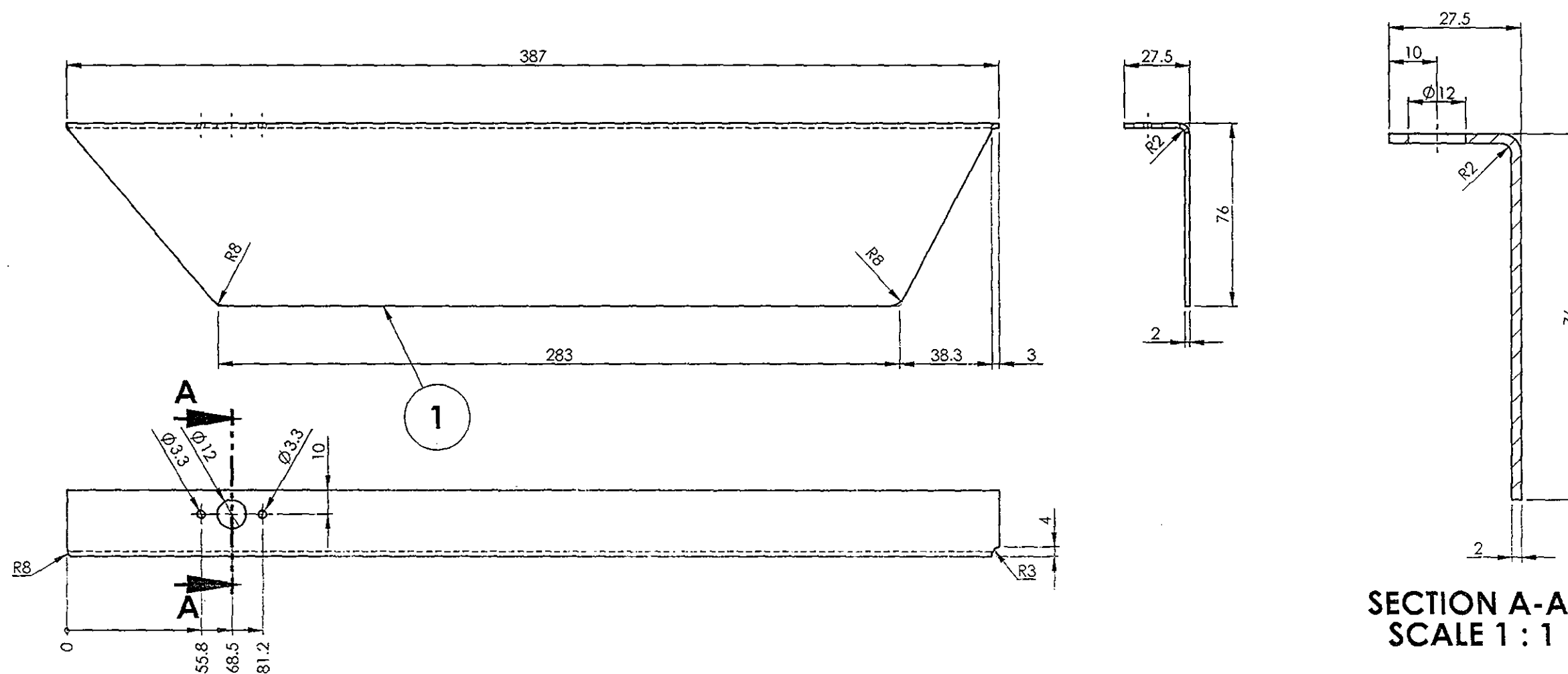
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	21-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA16943

▽ ROUGH MACHINED	⊙ ROUGH CLEANED
▽▽ FINISH MACHINED	⊙⊙ BURRS REMOVED
▽▽▽ FINE FINISH - VACUUM	⊙⊙ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1:1

1	CLOSING ANGLE	2 x 101 x 387	1		RDSO/SPEC C-K201 X2CrNi12	0.069	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.:0.07		WT/ASSY IN Kgs:0.56	
CLOSING ANGLE					SCALE 1:2	SSE/D	Signature
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAA16943		
					A3		

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ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

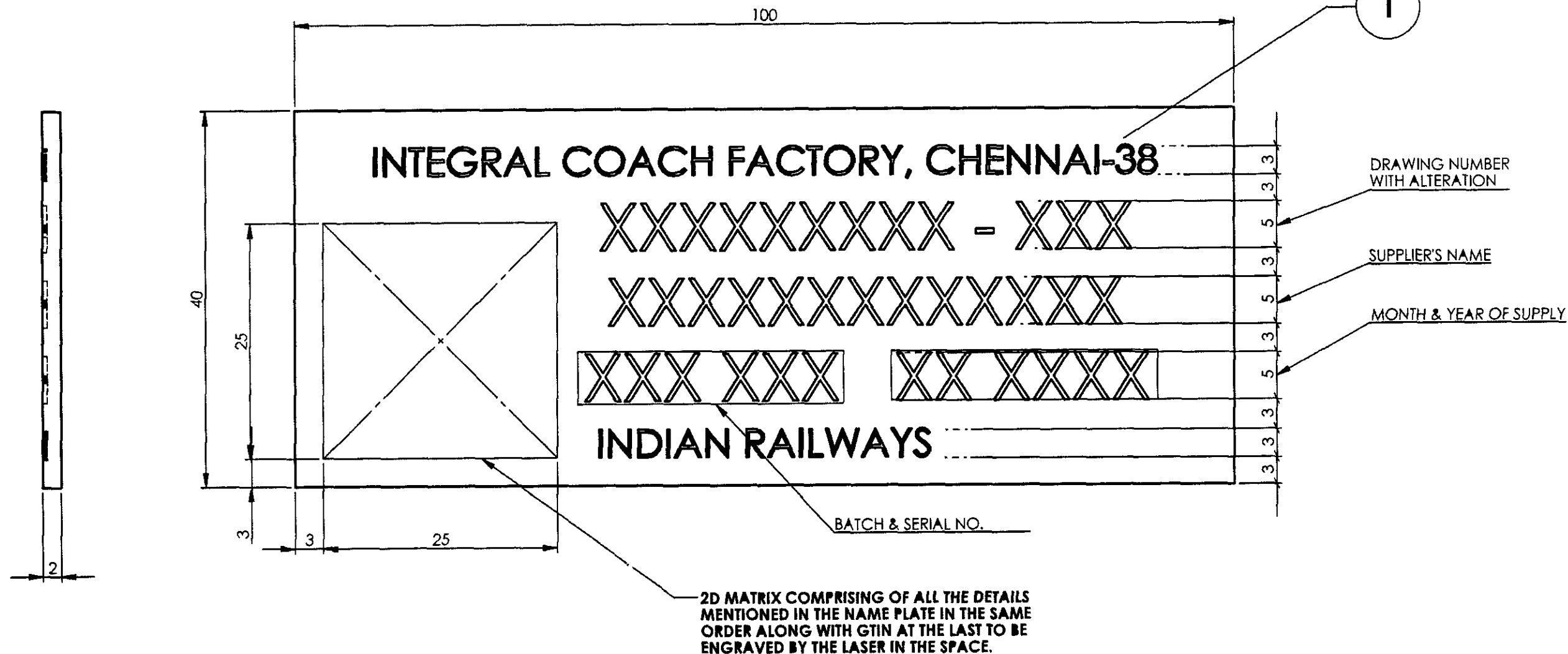
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	21-03-2013	Signature
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA51072

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①① BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①①① CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		NAME PLATE REVISED.	-sd-
b		DESIGN REVISED.	-sd-
c		BATCH & SERIAL NO. ADDED	-sd-
d		NOTE-2 ADDED.	<i>sd</i>

**NOTE:**

1. LETTERS TO BE PUNCHED OR ENGRAVED.

2. ALTERNATIVELY AISI-304/SS-304 (X02Cr19Ni10)/IS:6911(X04Cr19Ni9) ALSO ACCEPTABLE.

1	NAME PLATE FOR SUPPLIER IDENTIFICATION	2x40x100	1		RDSO/SPEC C-K201 X2 Cr Ni 12	0.063	\$
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 5-1 Body Side Doors		SURFACE AREA IN Sq.m.:0.009		WT/ASSY IN Kgs:			
NAME PLATE FOR SUPPLIER IDENTIFICATION				SCALE 2:1	SSE/D	<i>sd</i>	
				ALT. d	CHD		
INDIAN RAILWAY STANDARDS				ALT. d	ALTD	KUNTI THAKUR	
				ALT. d	DRN	G. NAGESWARAN	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAA51072 A3	
INTEGRAL COACH FACTORY, CHENNAI - 600038							

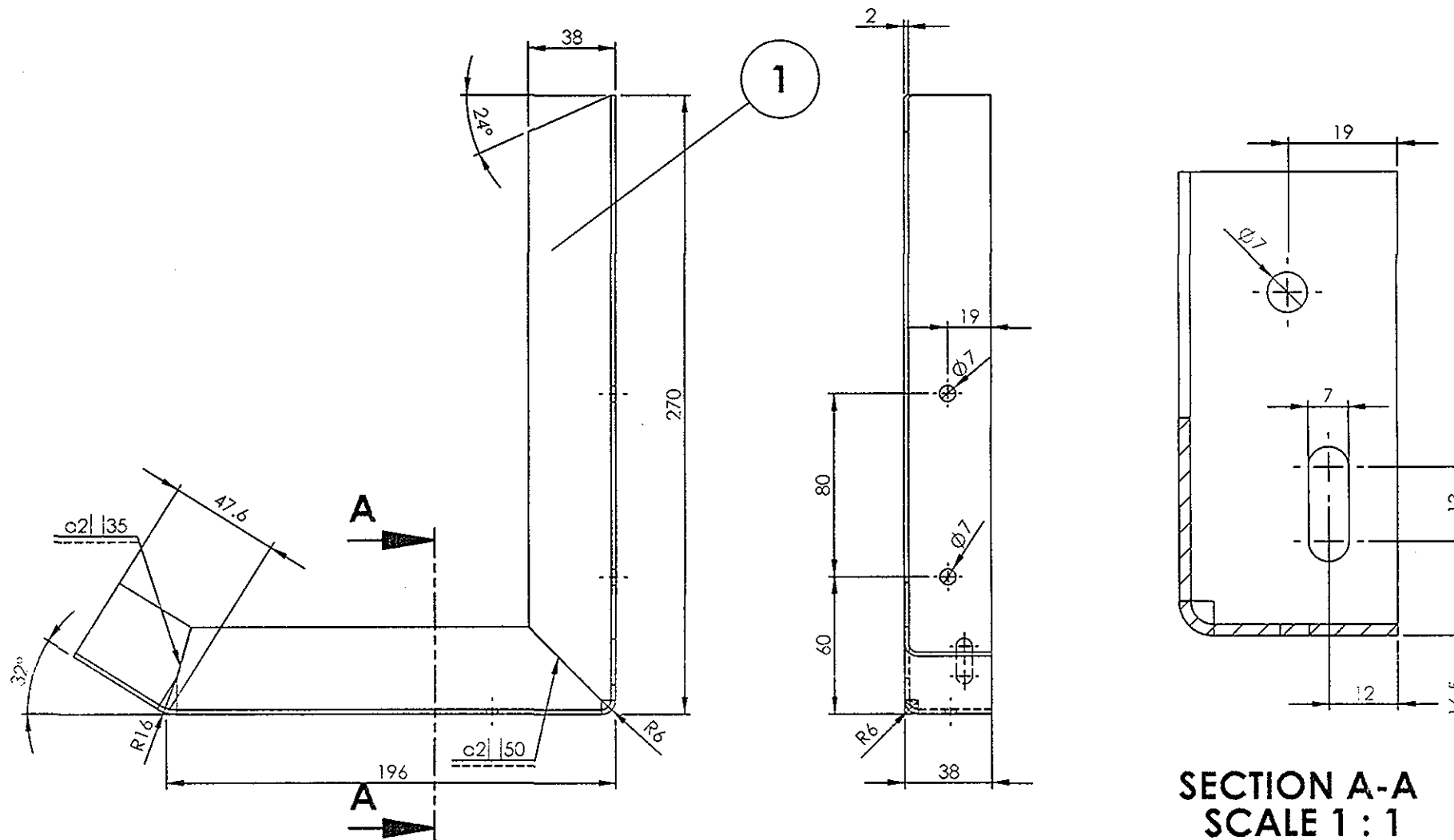
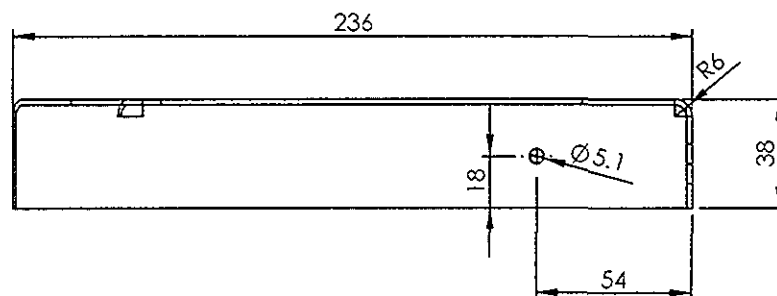
06-07-2024	02.06.2010	<i>sd</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

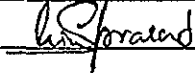
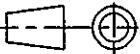
REF.DRG.NO.

AAB10005

▽ ROUGH MACHINED	① ROUGH CLEANED
▽ FINISH MACHINED	② BURRS REMOVED
▽ FINISH VACUUM	③ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 1

1	BRACKET	2x72x508	1		RDSO/SPEC C-K201 X2CrNi12	0.547	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-0		SURFACE AREA IN Sq.m.:0.071			WT/ASSY IN Kgs:0.547		
BRACKET					SCALE	SSE/D	
					1:2.5	CHD	
					ALT.	ALTD	
						DRN	L.PANDURANGA RAO
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1	AAB10005	
							A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND FINISHNESS VALUES, REFER DRAWING NO IC1/STD 9.0.001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

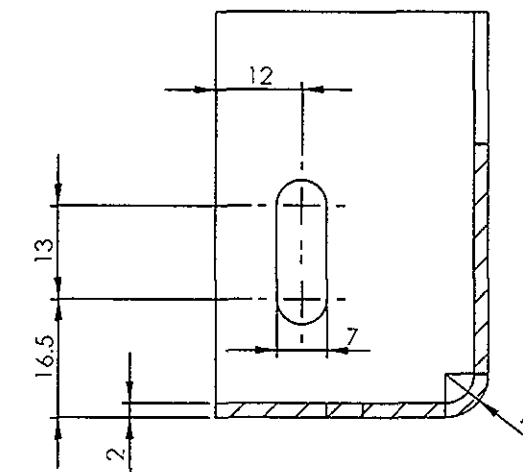
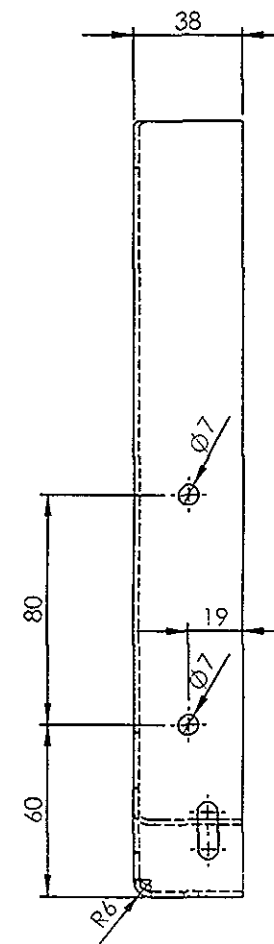
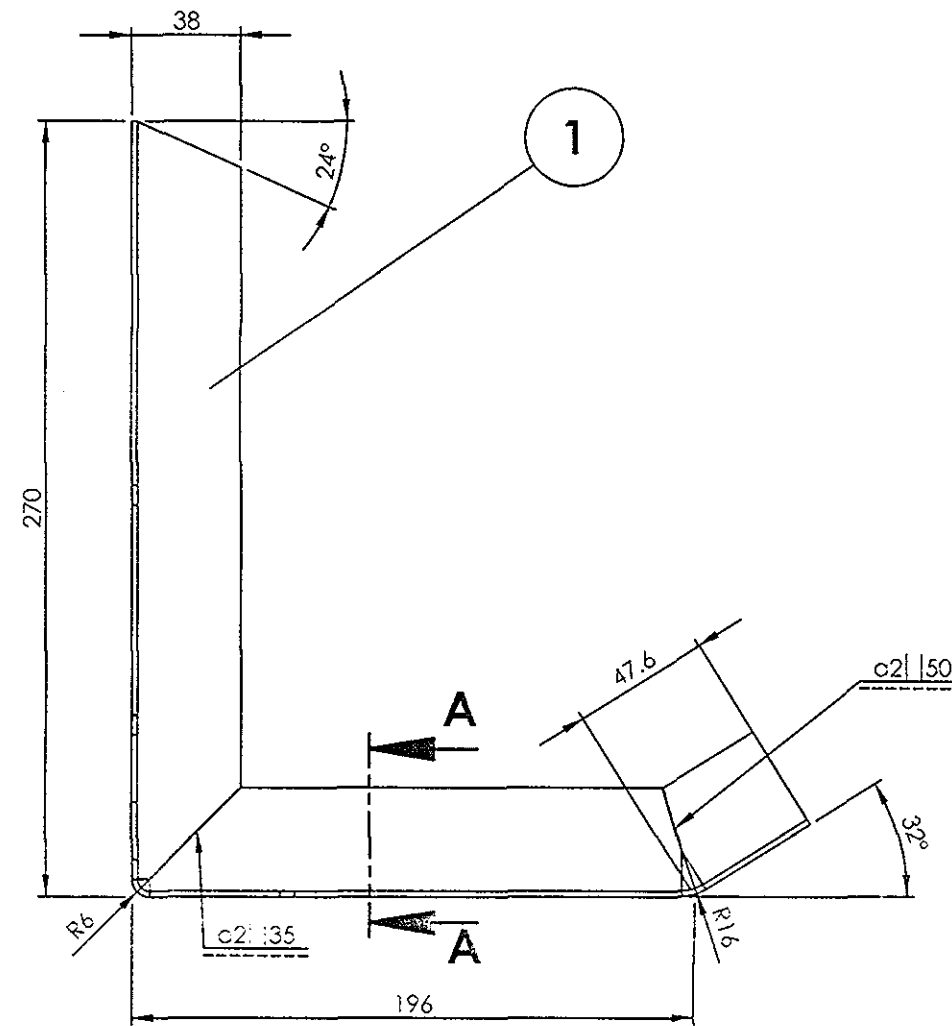
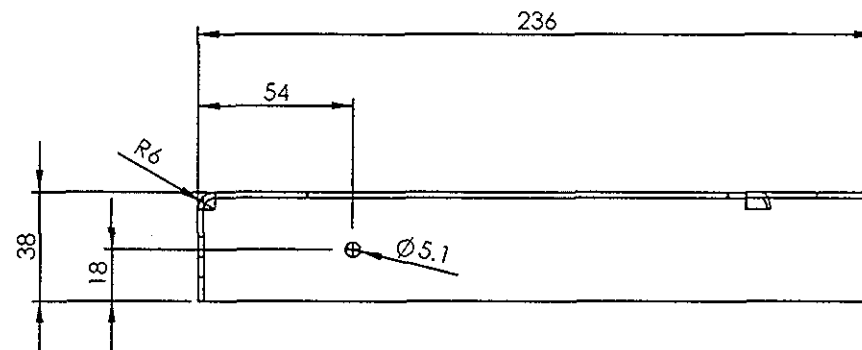
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DATE OF LATEST ALT.	10-04-2013	AME/SME
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AAB10006

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 1

1	BRACKET	2x72x508	1		RDSO/SPEC C-K201 X2CrNi12	0.547	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-0		SURFACE AREA IN Sq.m.:0.071			WT/ASSY IN Kgs:0.547		
BRACKET					SCALE	SSE/D	L.Panduranga Rao
					1:2	CHD	
					ALT.	ALTD	
					DRN	L.PANDURANGA RAO	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1	AAB10006		A3
INTEGRAL COACH FACTORY, CHENNAI - 600038							

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ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.

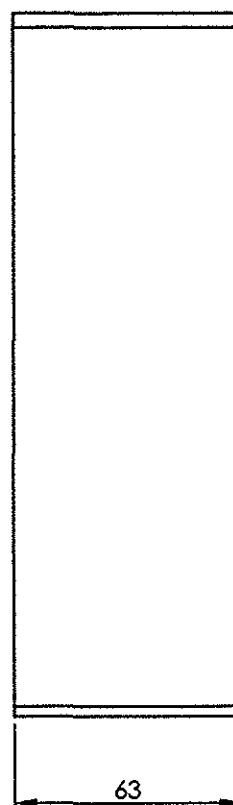
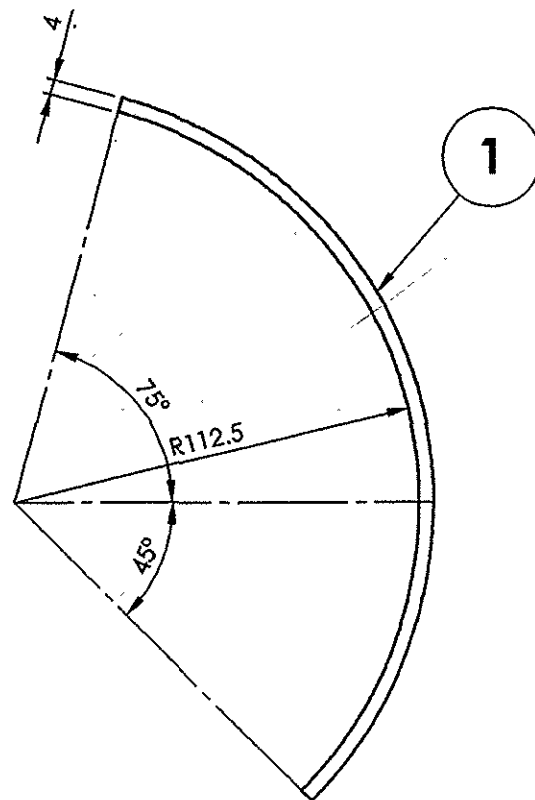
REF.DRG.NO.3 10113.0.20.095.113

	10-04-2013	10/4/12
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAB10008

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	RING	4 x 63 x 240	1		RDSO/SPEC C- K201 X2CrNi12	0.483	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.033			WT/ASSY IN Kgs:0.483		
RING					SCALE	SSE/D	<i>W. S. Prasad</i>
					1:2	CHD	
					ALT.	ALTD	
					DRN	K.Sriram	
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
AAB10008					A3		

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS, VALUES, REFER DRAWING NO IC/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.-

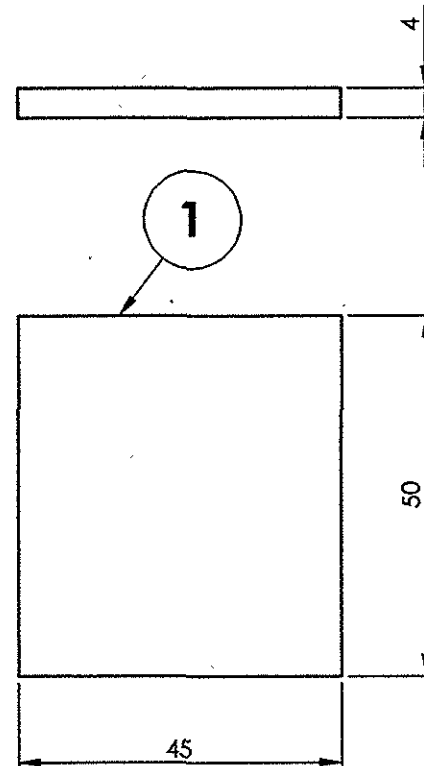
	12-06-2013	<i>W. S. Prasad</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAB10010

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

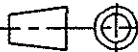
REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF:DRG.NO.-

1	PLATE	4 x 45 x 50	1		RDSO/SPEC C-K201 X2CrNi12	0.072	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.005			WT/ASSY IN Kgs:0.072		
PLATE					SCALE	SSE/D	K.Sriram
					1:1	CHD	
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAB10010

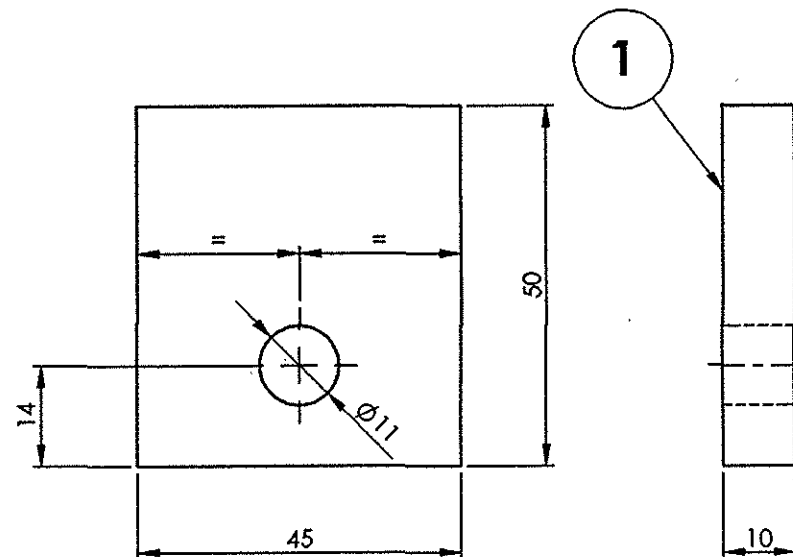
	12-06-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAB10073

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

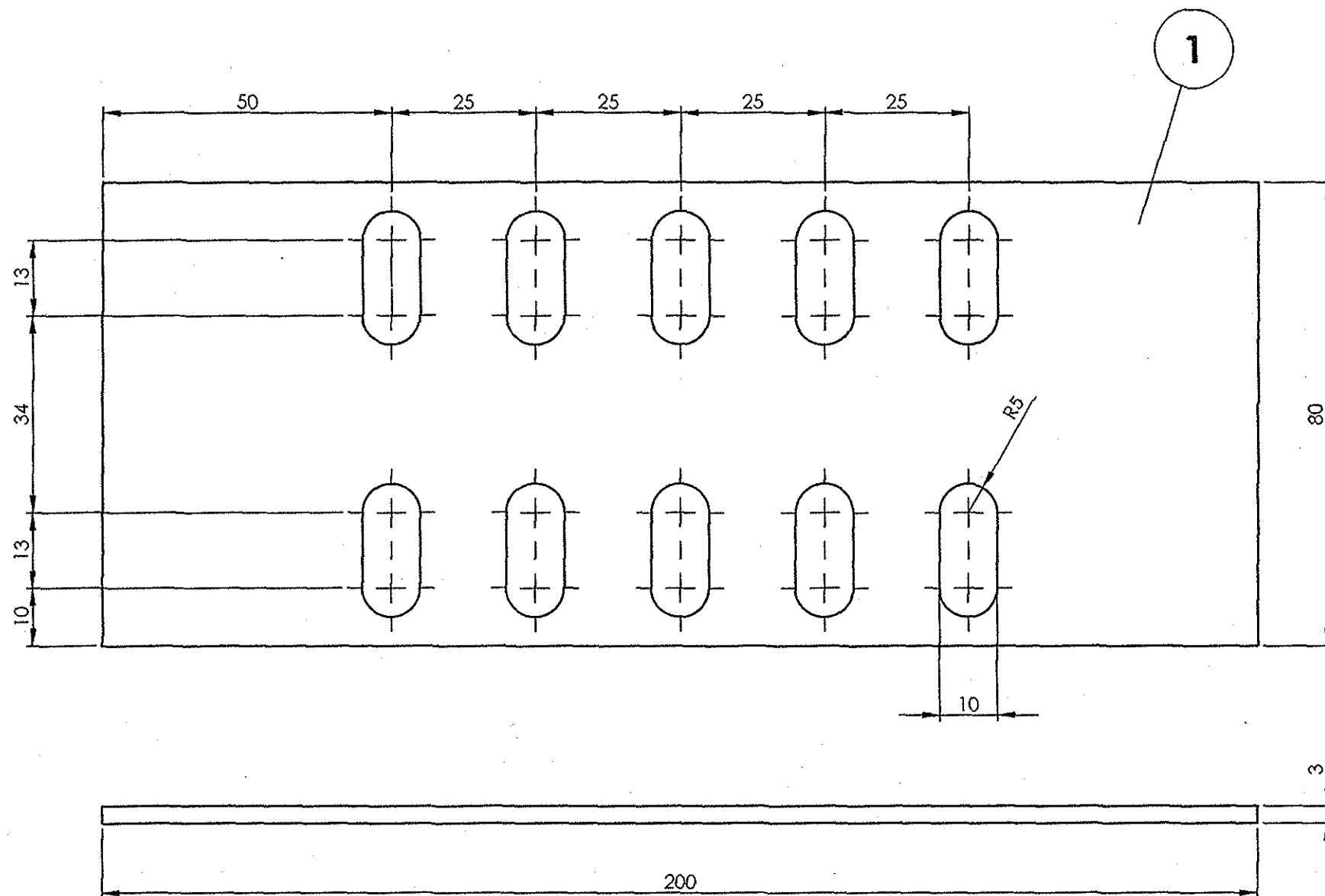
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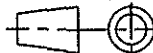
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GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.007			WT/ASSY IN Kgs:0.172		
PLATE					SCALE	SSE/D	<i>K.Sriram</i>
					1:1	CHD	
					ALT.	ALTD	
					DRN	K.Sriram	
INDIAN RAILWAY STANDARDS				SHEET			
INTEGRAL COACH FACTORY, CHENNAI - 600038				1 OF 1			
AAB10073						A3	

AAB16550

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED


REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	FLAT	3x80x200	1		RDSO/SPEC C- K201 X2CrNi12	0.33	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
FLAT					SCALE	SSE/D	<i>P. Shango</i>
					1:1	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAB16550		A3

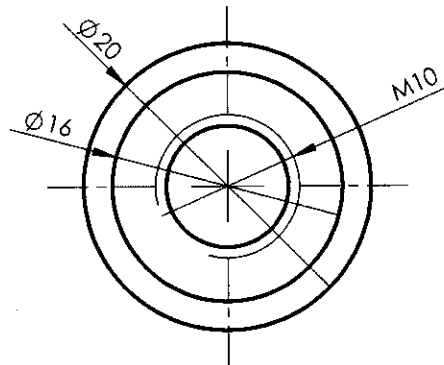
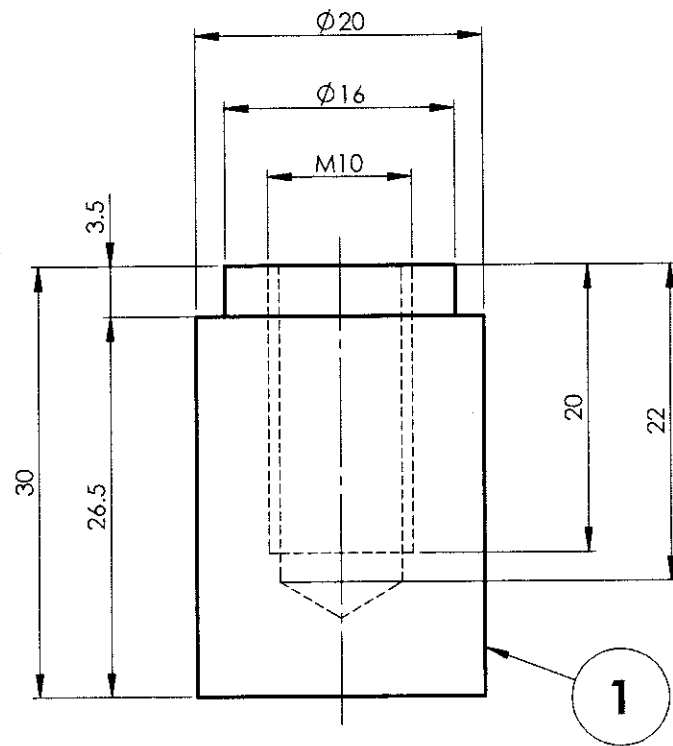
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

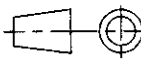
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-	9/29/16	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

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<div style="border: 1px solid black; padding: 5px; display: inline-block;"> AAD16884 </div>						<div style="display: flex; justify-content: space-between;"> <div> ▽ ROUGH MACHINED ▽▽ FINISH MACHINED ▽▽▽ FINE F.N.SH MACHINED </div> <div> (01) ROUGH CLEANED (01-02) BURRS REMOVED (18) CHAMFERED </div> </div>		<div style="display: flex; justify-content: space-between;"> <div> REVISIONS ALT. ZONE DESCRIPTION APPROVED & DATE </div> </div>																																																																			
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">1</td> <td style="width: 45%;">SCREWING PIECE</td> <td style="width: 20%;">Ø 20 X 30</td> <td style="width: 5%;">1</td> <td style="width: 10%;">REF. DRGS</td> <td style="width: 10%;">AISI 304</td> <td style="width: 10%;">0.06</td> <td style="width: 15%;">REMARKS</td> </tr> <tr> <td>QTY</td> <td>DESCRIPTION</td> <td>DIMENSIONS</td> <td>ITEM NO.</td> <td>REF. DRGS</td> <td>MATL.SPEC.</td> <td>WT/UNIT IN KGS</td> <td></td> </tr> <tr> <td colspan="4">GROUP: 1-6 Roof Construction</td> <td colspan="2">SURFACE AREA IN Sq.m.:</td> <td colspan="2">WT/ASSY IN Kgs:</td> </tr> <tr> <td colspan="6" rowspan="4" style="text-align: center; vertical-align: middle;"> <div style="font-size: 1.2em; font-weight: bold;">SCREWING PIECE</div> </td> <td style="width: 10%;">SCALE</td> <td style="width: 10%;">SSE/D</td> <td rowspan="2" style="width: 20%; text-align: center; vertical-align: middle;"> <i>L. Panduranga</i> </td> </tr> <tr> <td>2:1</td> <td>CHD</td> </tr> <tr> <td>ALT.</td> <td>ALTD</td> <td rowspan="2" style="text-align: center; vertical-align: middle;">S K MUTHUKUMAR</td> </tr> <tr> <td></td> <td>DRN</td> </tr> <tr> <td colspan="6" style="text-align: center;"> INDIAN RAILWAY STANDARDS <small>INTEGRAL COACH FACTORY, CHENNAI - 600038</small> </td> <td colspan="2" style="text-align: center;"> SHEET 1 OF 1 </td> <td style="width: 20%; text-align: center; font-size: 1.2em; font-weight: bold;"> AAD16884 </td> <td style="width: 10%; text-align: center; font-size: 1.2em; font-weight: bold;"> A3 </td> </tr> <tr> <td colspan="2">REF.DRG.NO.</td> <td colspan="2">DATE OF LATEST ALT.</td> <td colspan="2">DATE OF FIRST ISSUE</td> <td colspan="2">AME/SME</td> <td colspan="2"></td> </tr> </table>																1	SCREWING PIECE	Ø 20 X 30	1	REF. DRGS	AISI 304	0.06	REMARKS	QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS		GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		<div style="font-size: 1.2em; font-weight: bold;">SCREWING PIECE</div>						SCALE	SSE/D	<i>L. Panduranga</i>	2:1	CHD	ALT.	ALTD	S K MUTHUKUMAR		DRN	INDIAN RAILWAY STANDARDS <small>INTEGRAL COACH FACTORY, CHENNAI - 600038</small>						SHEET 1 OF 1		AAD16884	A3	REF.DRG.NO.		DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME			
1	SCREWING PIECE	Ø 20 X 30	1	REF. DRGS	AISI 304	0.06	REMARKS																																																																				
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS																																																																					
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:																																																																					
<div style="font-size: 1.2em; font-weight: bold;">SCREWING PIECE</div>						SCALE	SSE/D	<i>L. Panduranga</i>																																																																			
						2:1	CHD																																																																				
						ALT.	ALTD	S K MUTHUKUMAR																																																																			
							DRN																																																																				
INDIAN RAILWAY STANDARDS <small>INTEGRAL COACH FACTORY, CHENNAI - 600038</small>						SHEET 1 OF 1		AAD16884	A3																																																																		
REF.DRG.NO.		DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME																																																																					


REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

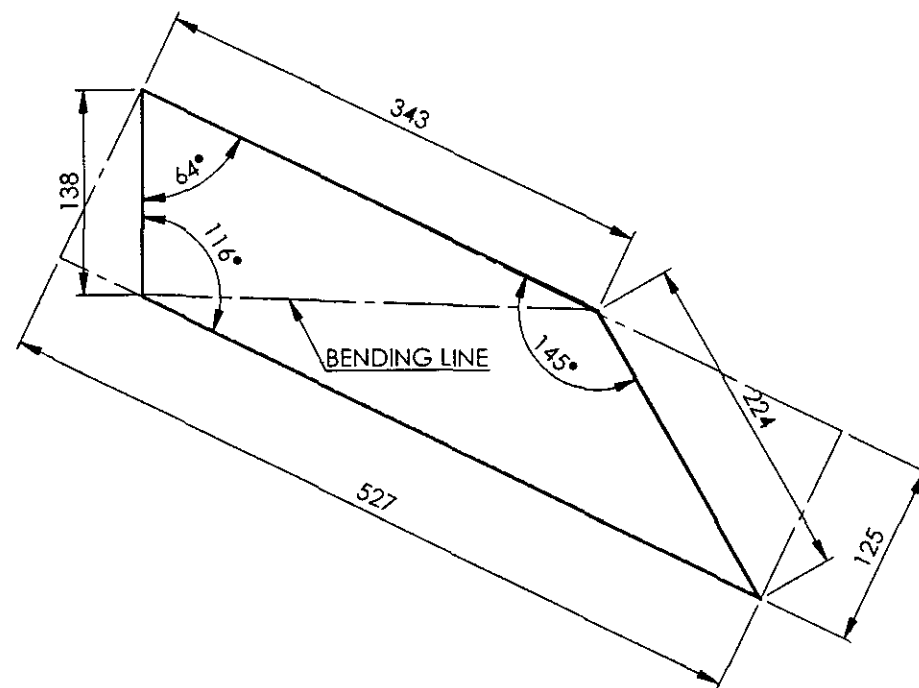
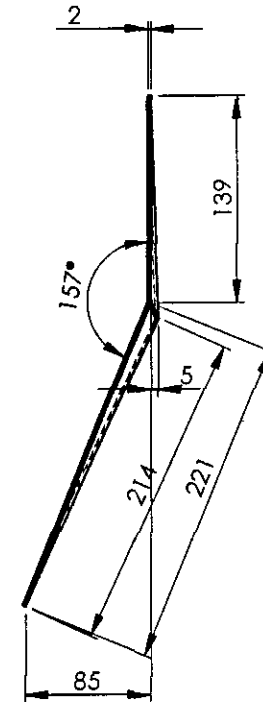
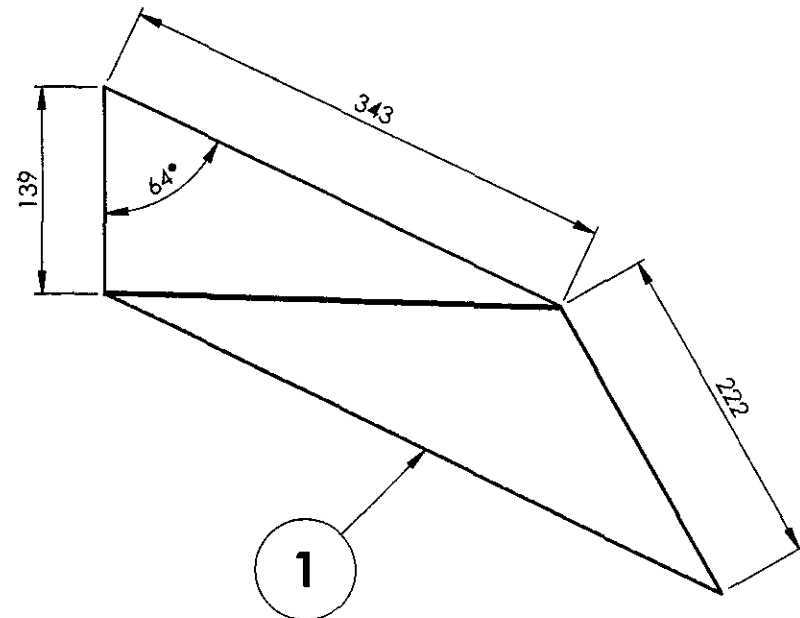


1	SCREWING PIECE	Ø 20 X 30	1		AISI 304	0.06	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
SCREWING PIECE					SCALE	SSE/D	<i>L. Panduranga Rao</i>
					2:1	CHD	
					ALT.	ALTD	
					-	DRN	S K MUTHUKUMAR
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			A3
INTEGRAL COACH FACTORY, CHENNAI - 600038							

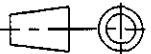
AAE16686

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION REVISED. VIEWS UPDATED.	



DEVELOPMENT VIEW

1	SIDE SHEET	2 x 126 x 531	1		RDSO/SPEC C-K201 X2CrNi12	0.865	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.111			WT/ASSY IN Kgs:0.865		
SIDE SHEET					SCALE	SSE/D	<i>[Signature]</i>
					1:5	CHD	
					ALT.	ALTD	E.SATHISH KUMAR
					a	DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAE16686

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.3 10113.0.20.200.140

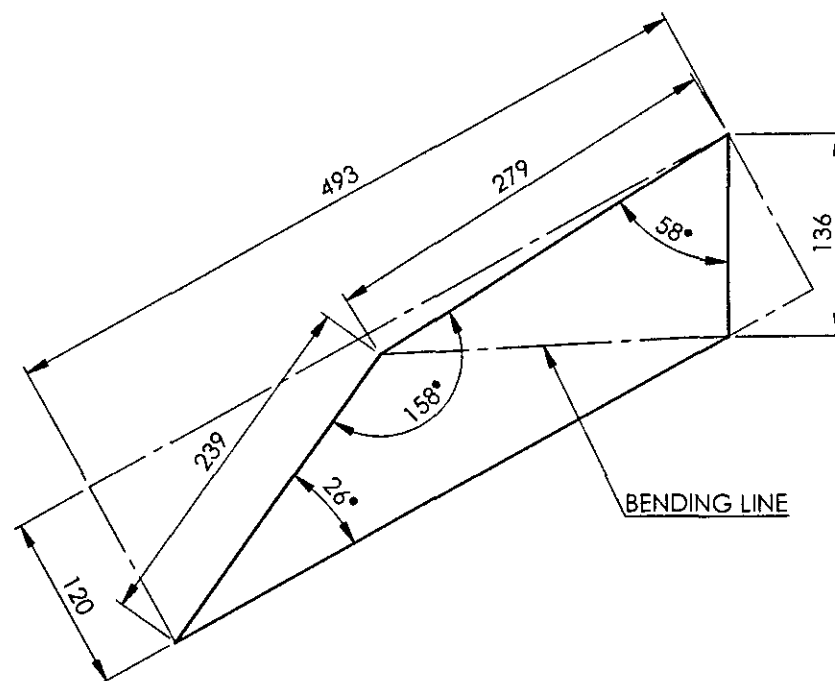
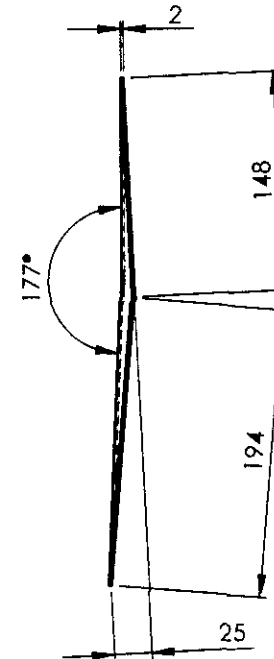
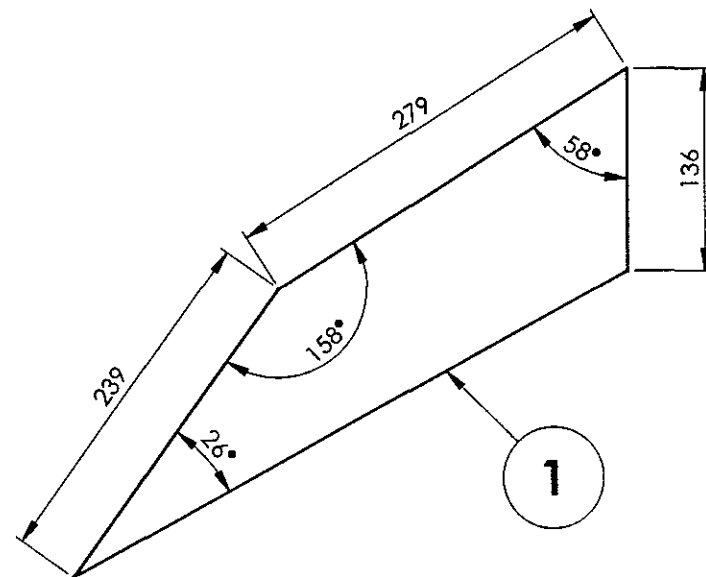
15-03-24	07-06-23	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAE16687

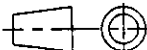
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION REVISED. VIEWS UPDATED.	<i>[Signature]</i> 19/3/24



DEVELOPMENT VIEW

1	SIDE SHEET	2 x 119 x 493	1		RDSO/SPEC C-K201 X2CrNi12	0.613	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.079			WT/ASSY IN Kgs:0.613		
SIDE SHEET					SCALE	SSE/D	<i>Pandurangam</i>
					1:5	CHD	
					ALT.	ALTD	E.SATHISH KUMAR
					2	DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1	AAE16687	
							A3

15-03-24

07-06-23

AME/SME

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

REF.DRG.NO.3 10113.0.20.200.144


ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

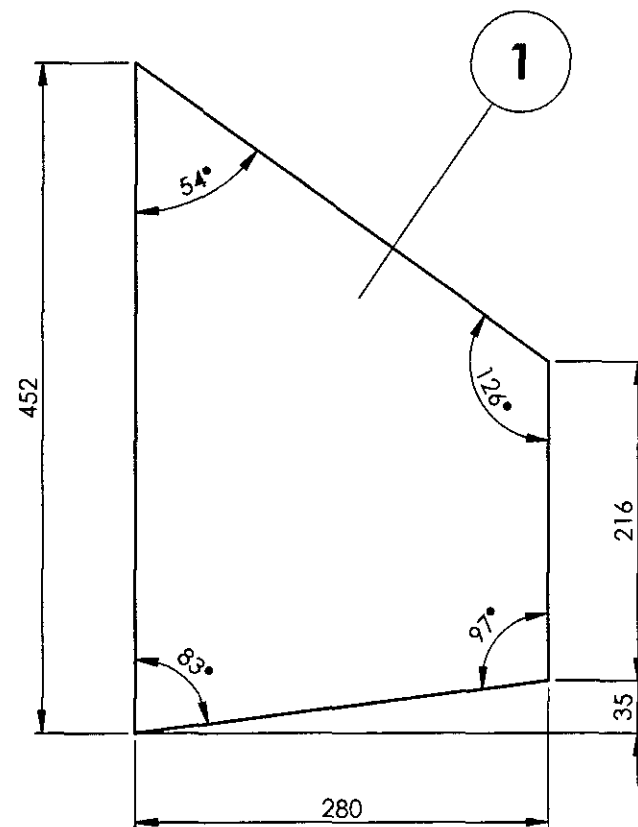
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AAE16688				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		①8 CHAMFERED		a				DIMENSION REVISED. VIEWS UPDATED.		17/11/24	
A															
B															
C															
D															
E															
F															
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.															
15-03-2407-06-23AME/SME															
REF.DRG.NO.3 10113.0.20.200.141															
12345678															
12345678															


1	BOTTOM SHEET	2 x 426 x 450	1		RDSO/SPEC C-K201 X2CrNi12	2.269	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.287		WT/ASSY IN Kgs:2.269	
BOTTOM SHEET					SCALE	SSE/D	E.SATHISH KUMAR
					1:5	CHD	
					ALT.	ALTD	E.SATHISH KUMAR
					a	DRN	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		AAE16688
INTEGRAL COACH FACTORY, CHENNAI - 600038							
							A3

AAE16689

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION REVISED. VIEWS UPDATED.	



1	TOP SHEET	2 x 280x 452	1		RDSO/SPEC C-K201 X2CrNi12	1.492	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.189			WT/ASSY IN Kgs: 1.492		
TOP SHEET					SCALE	SSE/D	L. Dandirajulu
					1:5	CHD	
					ALT. a	ALTD	E.SATHISH KUMAR
						DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAE16689		
					A3		

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REF.DRG.NO.3 10113.0.20.200.139

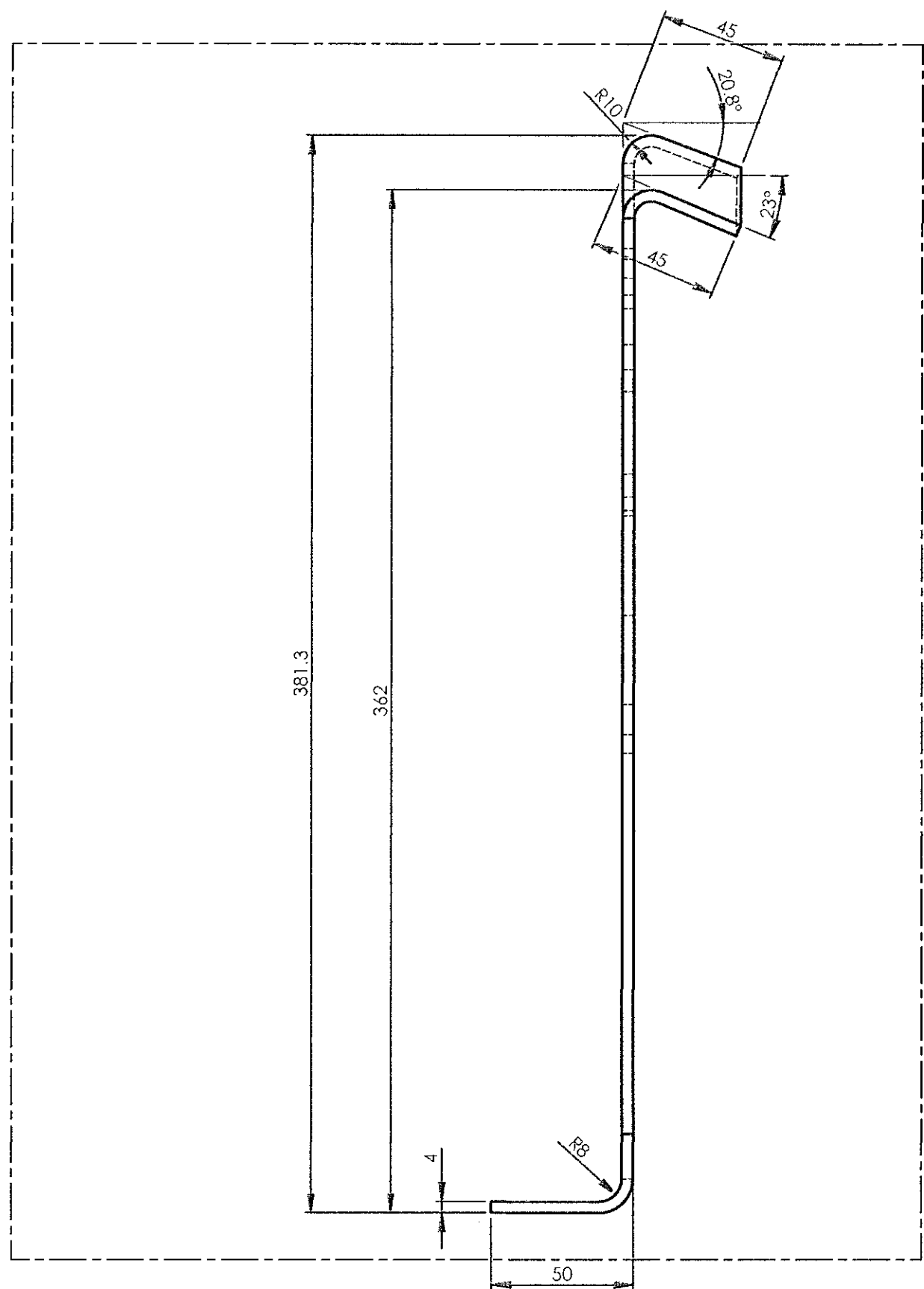
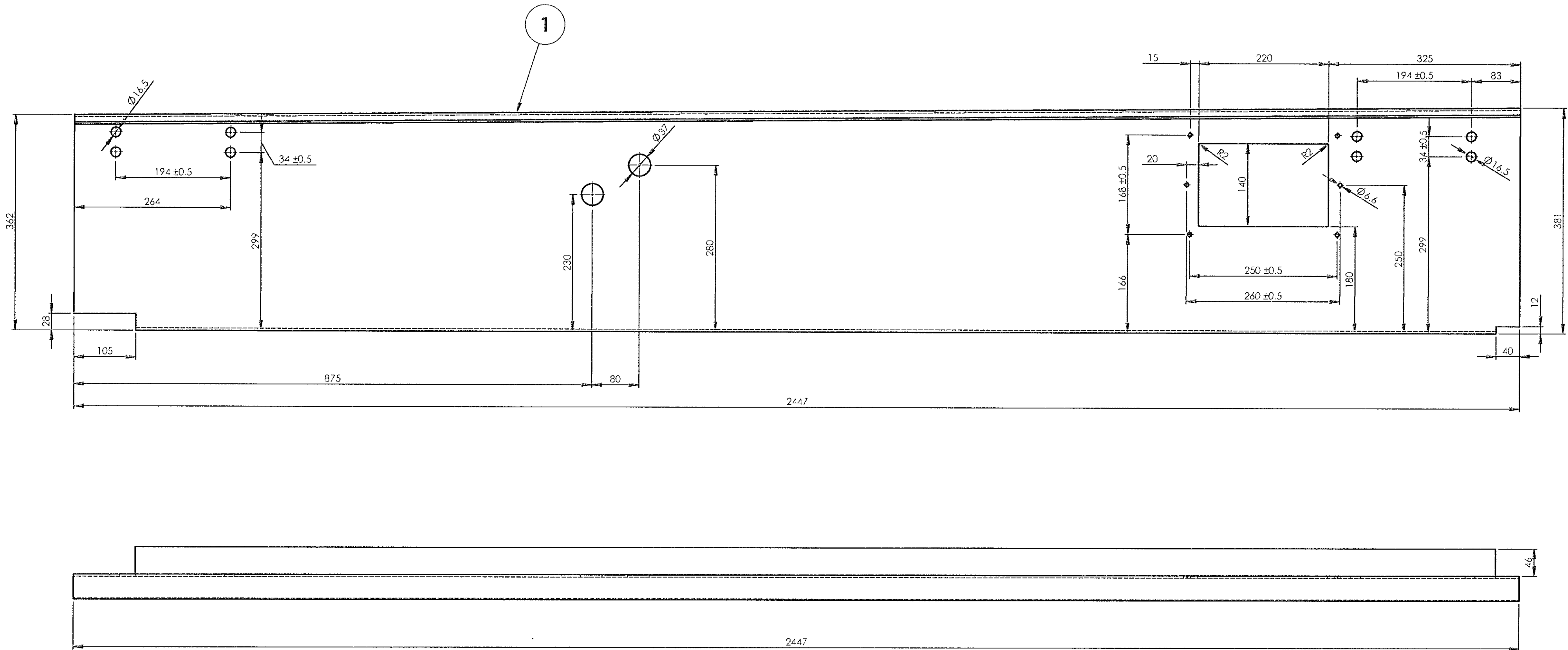
15-03-24	07-06-23	V. Sathish Kumar
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAf16122

▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED
①① BURRS REMOVED
①① CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		CUTAWAY ADDED AND VIEWS UPDATED.	



DETAIL X
SCALE 1 : 2

REF.DRG.NO.

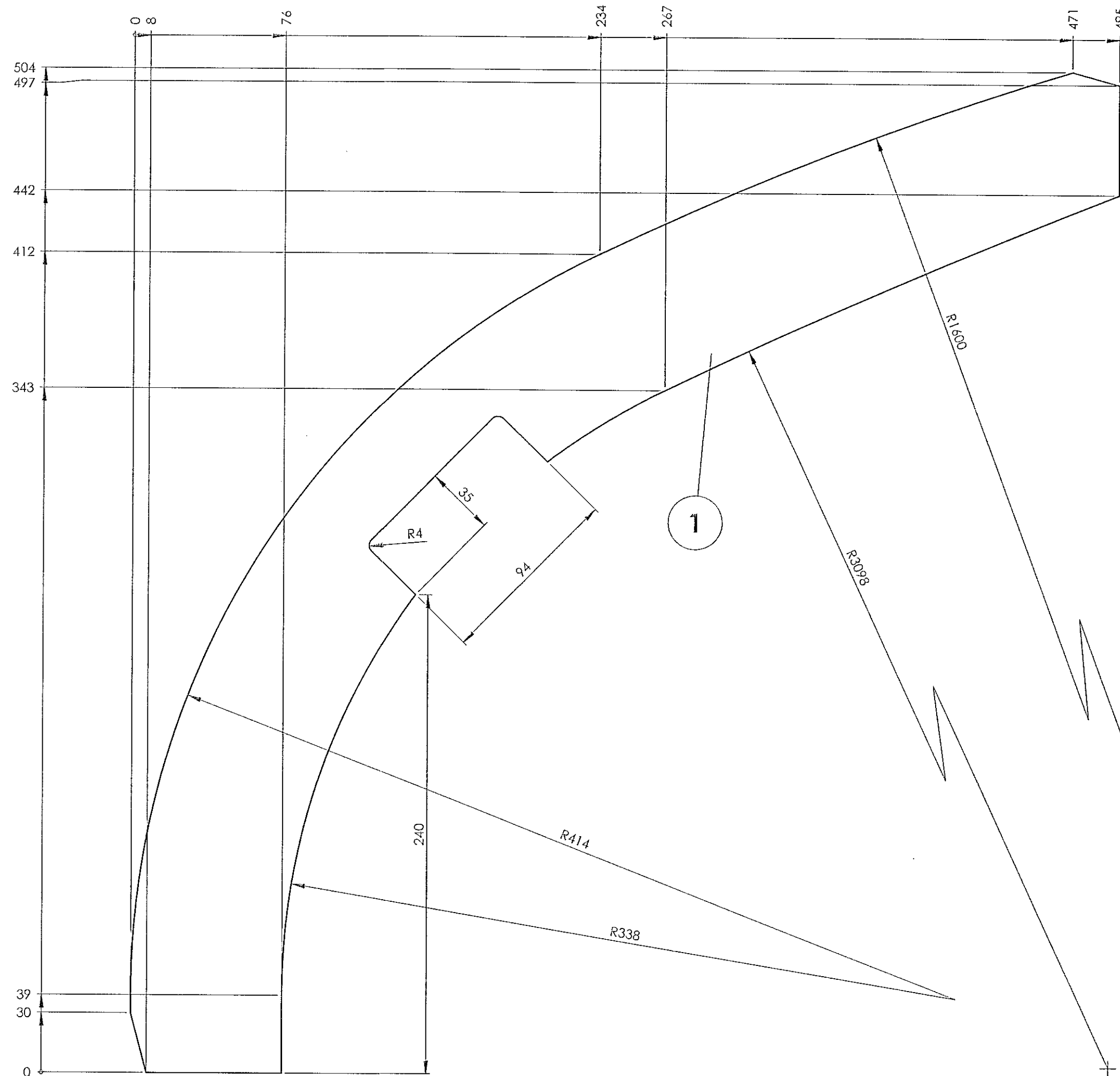
12/01/20 04/09/25
DATE OF LATEST ALT. DATE OF FIRST ISSUE NAME/SME

1	MEMBER	4 x 459 x 2447	1		RDSO/SPEC. C-K201 X2 Cr Ni 12	33.743	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Root Construction		SURFACE AREA IN Sq.m.: 2.139					
MEMBER					WT/ASSY IN Kgs:		
					SCALE 1:5	SSE/D CHD	
					ALT. a	ALTD DRN	E.SATHISH KUMAR
							E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAf16122	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A1	

AAF16158

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①⑤ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①⑧ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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REF.DRG.NO.2 10113.0.20.210.103

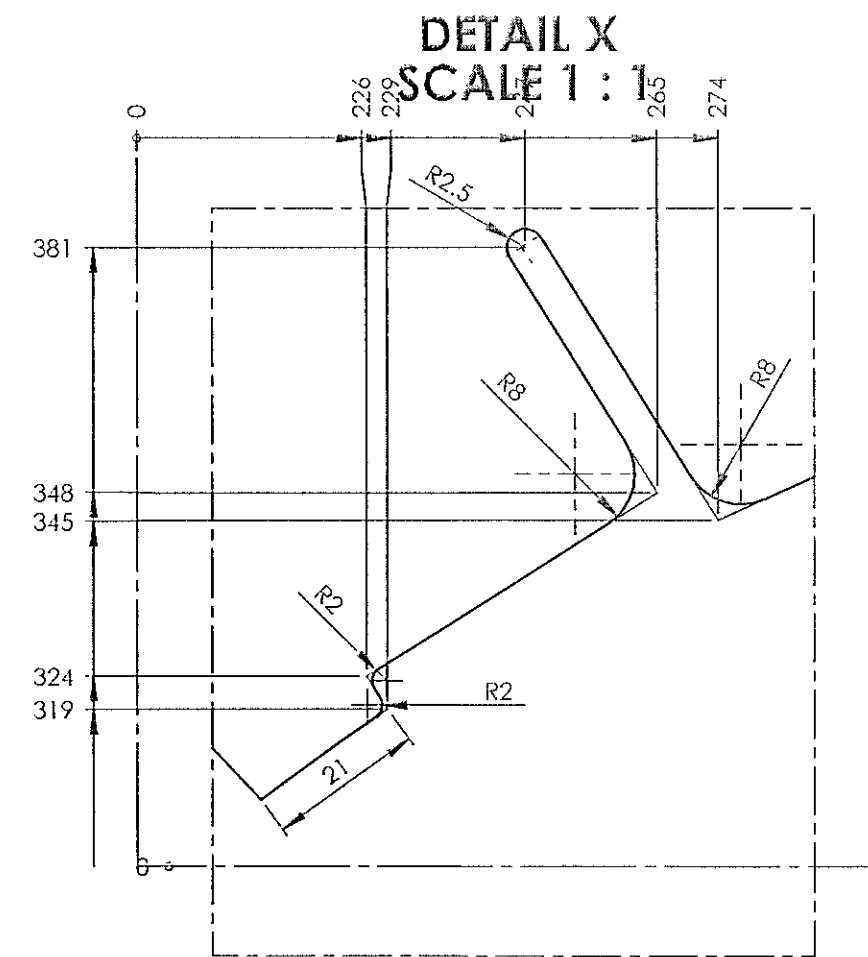
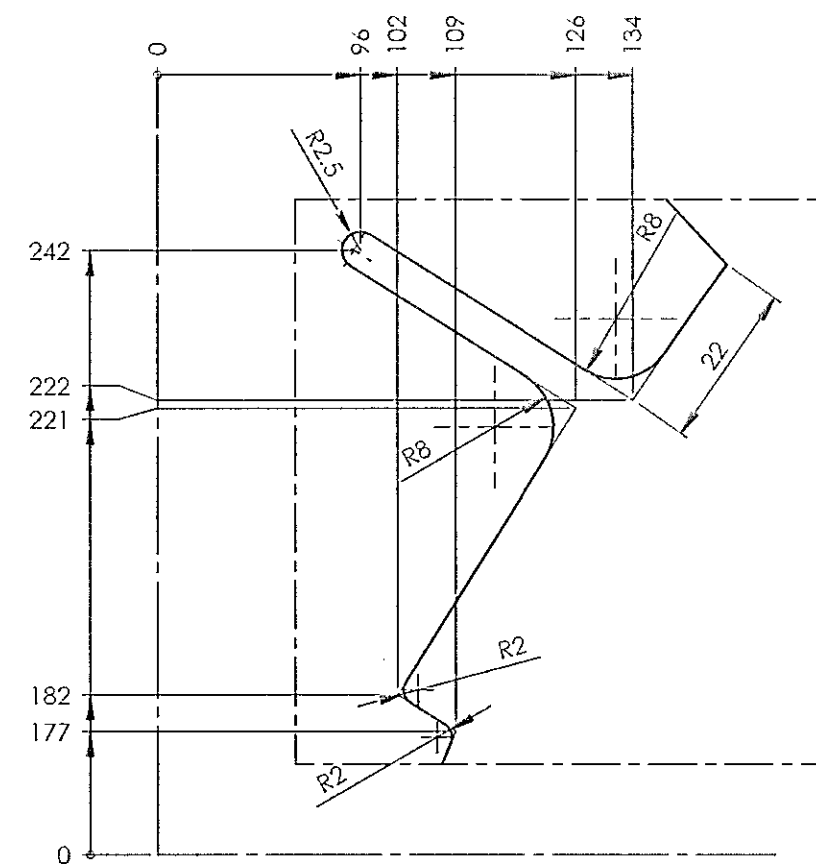
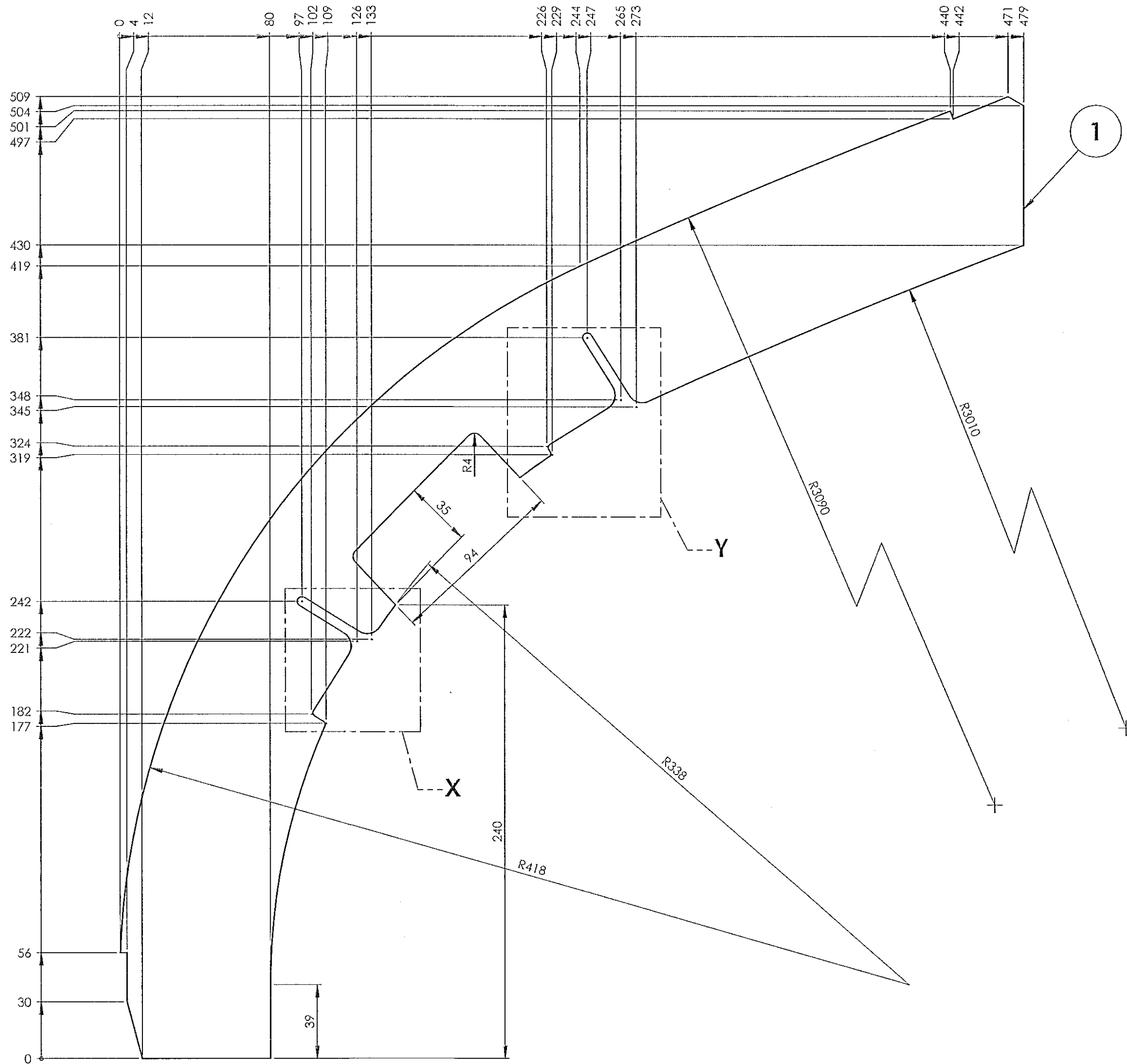
DATE OF LATEST ALT.	04/09/25	AME/SME
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1	ROOF ARCH	4 x 495 x 505	1		RDSO/SPEC C-K201 X2CrNi12	1.623	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 0.108		WT/ASSY IN Kgs: 1.623	
ROOF ARCH					SCALE 1:2	SSE/D CHD	E.SATHISH KUMAR
					ALT	ALTD	
						DRN	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAF16158		
					A2		

AAF16159

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01a BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	01b CHAMFERED

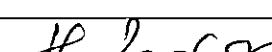
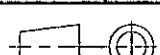
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



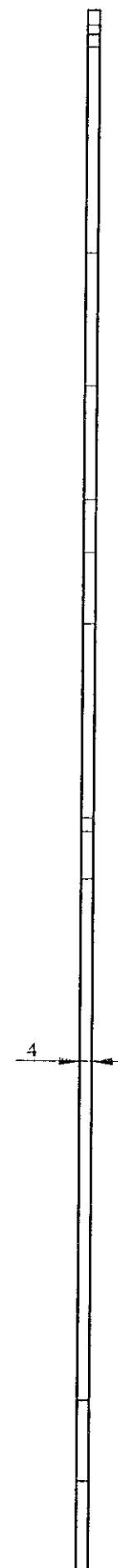
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

REF.DRG.NO.2 10113.0.20.210.112

DATE OF LATEST ALT.	04/09/25	AME/SME
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1	ROOF ARCH	4 x 479 x 508.5	1		RDSO/SPEC C-K201 X2CrNi12	1.660		
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 0.111		WT/ASSY IN Kgs:			
ROOF ARCH					SCALE 1:2	SSE/D		
						CHD		
					ALT'	ALTD		
						DRN		E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
						SHEET 1 OF 1		
					AAF16159		A2	

	A
	B
	C
	D
	E
	F
	G
	H



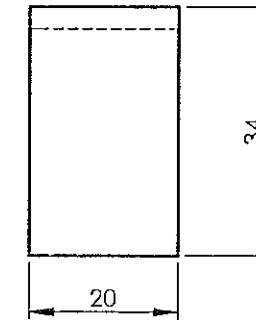
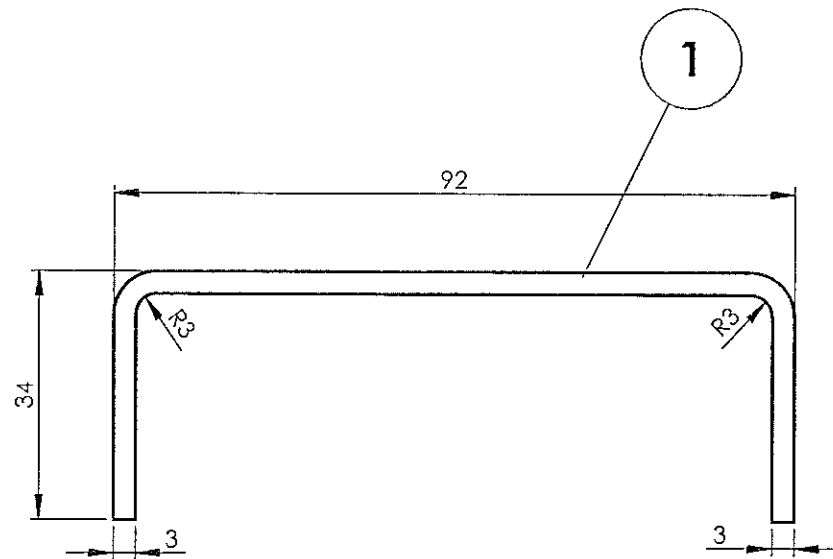
	04/09/25	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAF16161

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS

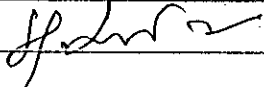
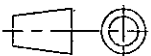
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

-	04/09/25	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	BACK PIECE	3x20x148	1		RDSO SPEC C-K201 X2 Cr NI 12	0.07	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
BACK PIECE					SCALE 1:1	SSE/D	
						CHD	
					ALT.	ALTD	
						DRN	VIJAYAKUMAR R
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAF16161		A3

AAf16201		▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS					
		▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		APPROVED & DATE	
		▽▽▽ FINE FINISH MACHINED		③ CHAMFERED							

136

73

R30

60

R7.5

1

235

110

348

190

45°

70

30

30

113

50

82

166

31

R50

10°

R116.5

R8

4

1	PLATE	4 x 136 x 348	1		RDSO/SPEC C-K201 X2CrNi12	0.610	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.: 0.043		WT/ASSY IN Kgs:
PLATE					SCALE 1:2	SSE/D	H. dunn
					CHD		
					ALT	ALTD	
					DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
					AAf16201		A2

REF.DRG.NO.-

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

AAf16201		▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS					
		▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		APPROVED & DATE	
		▽▽▽ FINE FINISH MACHINED		③ CHAMFERED							

136

73

R30

60

R7.5

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348

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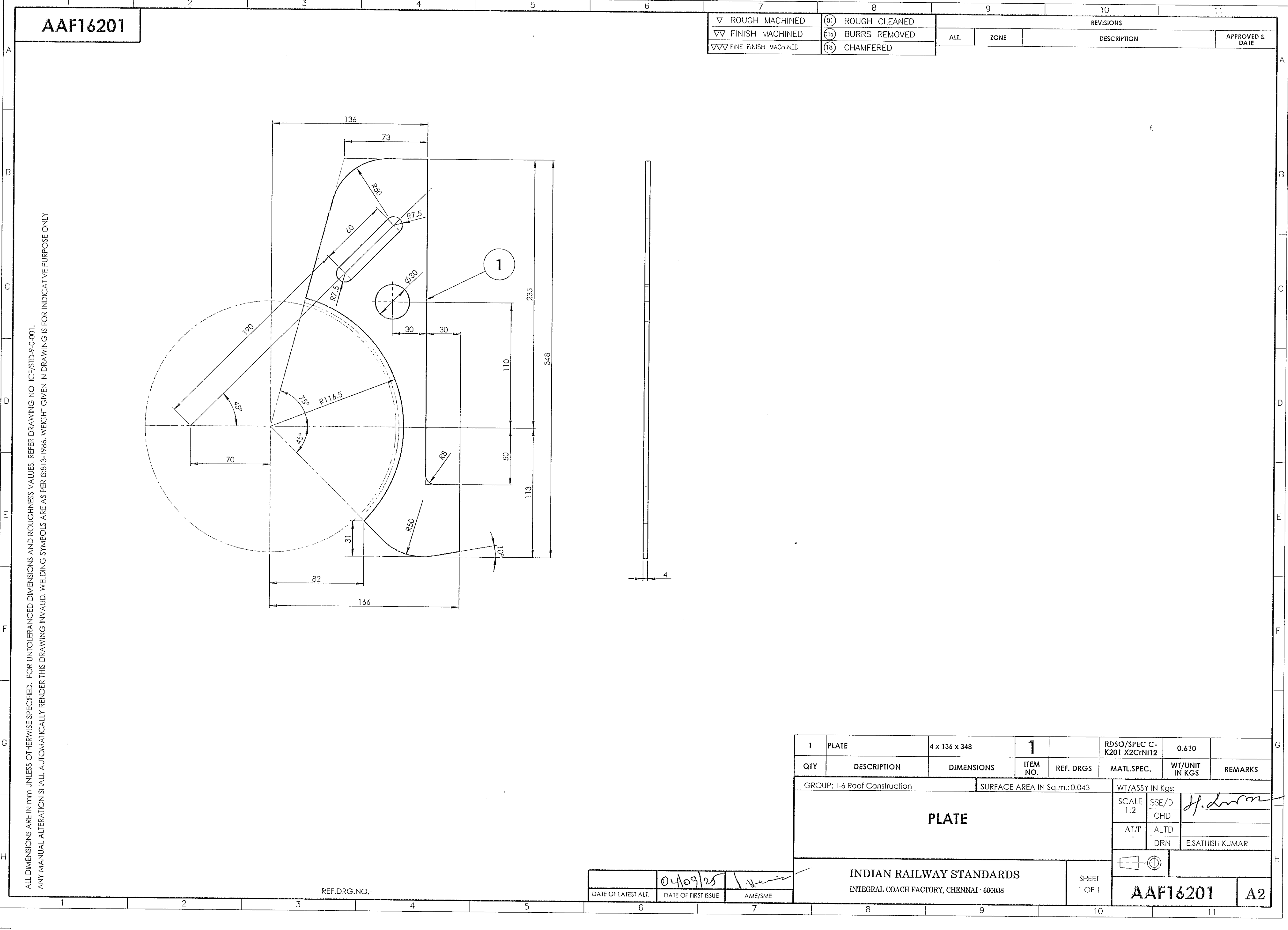
R116.5

R8

4

1	PLATE	4 x 136 x 348	1		RDSO/SPEC C-K201 X2CrNi12	0.610	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 0.043		WT/ASSY IN Kgs:			
PLATE				SCALE 1:2	SSE/D	H. dunn	
				ALT	CHD		
				ALT	ALTD		
				DRN	E.SATHISH KUMAR		
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAf16201	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A2	

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
	04/09/25	



AAf16201		▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS					
		▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		APPROVED & DATE	
		▽▽▽ FINE FINISH MACHINED		③ CHAMFERED							

136

73

R30

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R7.5

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235

110

348

190

45°

70

30

30

113

50

82

166

31

R50

10°

R116.5

R8

4

1	PLATE	4 x 136 x 348	1		RDSO/SPEC C-K201 X2CrNi12	0.610	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.: 0.043		WT/ASSY IN Kgs:
PLATE					SCALE 1:2	SSE/D	H. dunn
					CHD		
					ALT	ALTD	
					DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
					AAf16201		A2

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
	04/09/25	

AAf16201		▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS					
		▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		APPROVED & DATE	
		▽▽▽ FINE FINISH MACHINED		③ CHAMFERED							

136

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R116.5

R7.5

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R8

R50

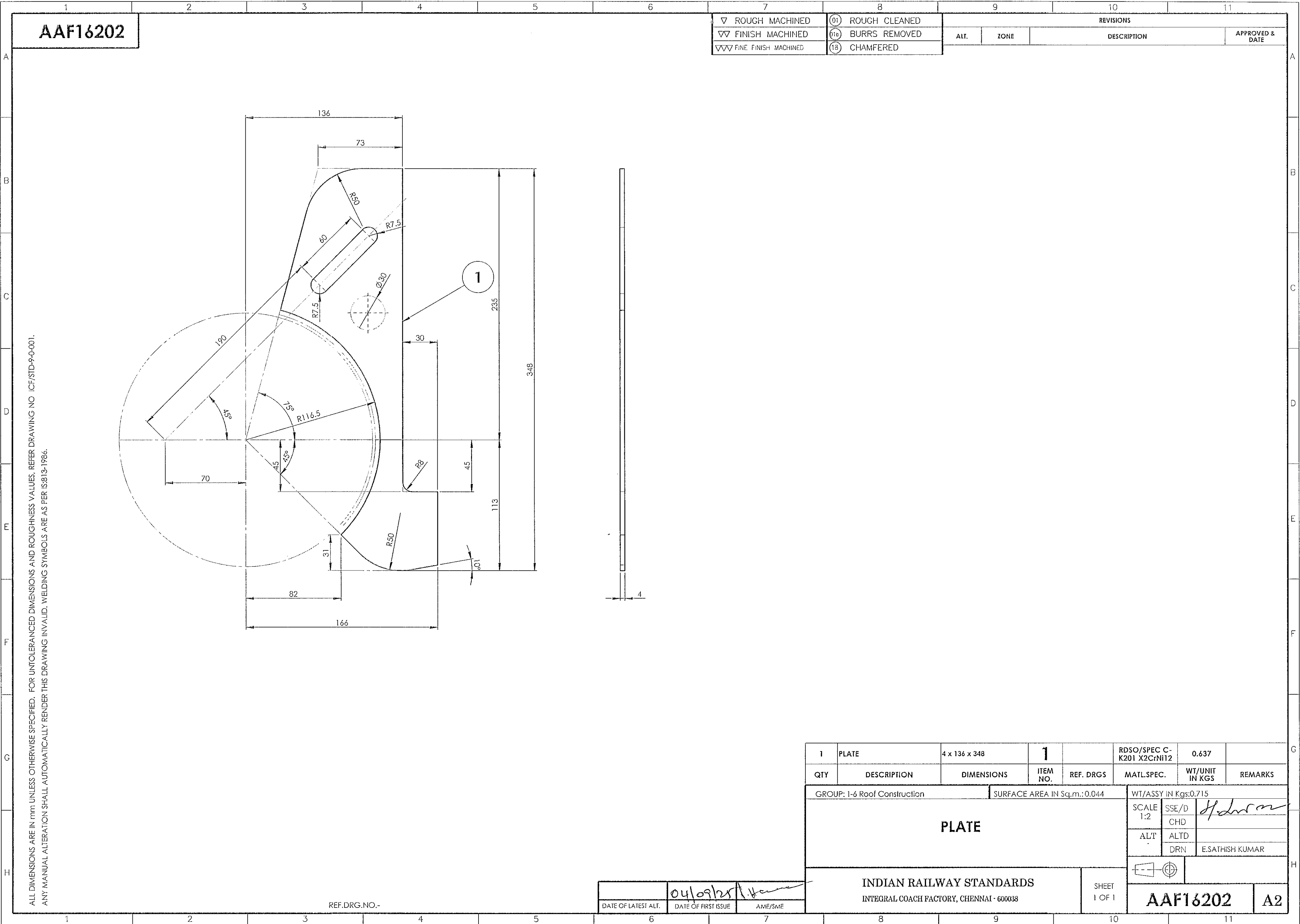
10°

4

REF.DRG.NO.-

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
	04/09/25	

1	PLATE	4 x 136 x 348	1		RDSO/SPEC C-K201 X2CrNi12	0.610	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.: 0.043		WT/ASSY IN Kgs:
PLATE					SCALE 1:2	SSE/D	H. dunn
					CHD		
					ALT	ALTD	
					DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
					AAf16201		A2



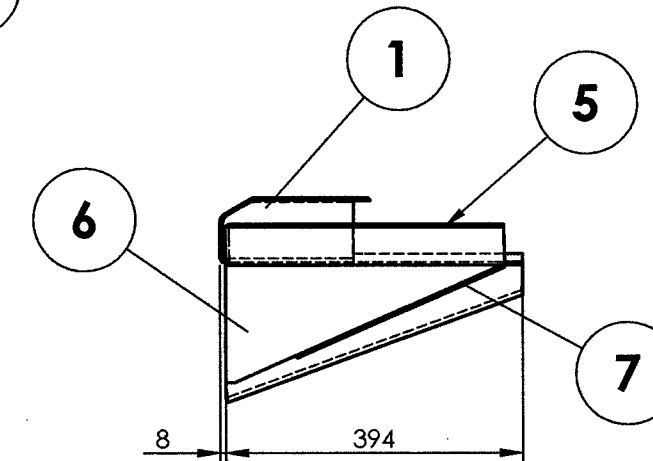
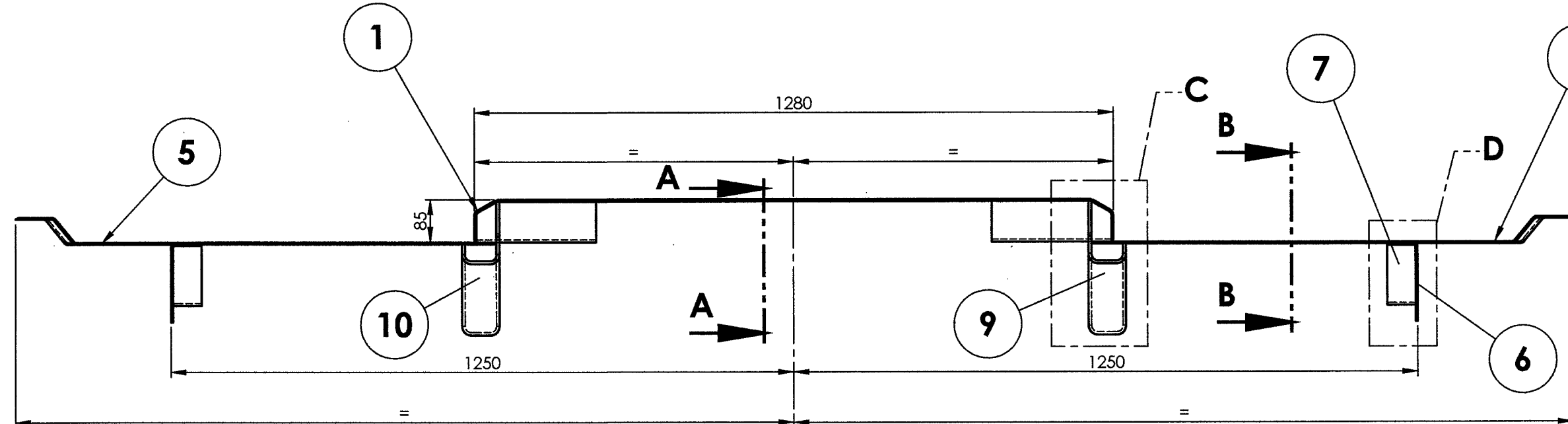
49515003

▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

01 ROUGH CLEANED
01b BURRS REMOVED
018 CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM-4 DELETED AND ITEM-8 ADDED.	Sd..06-09-2014
b		ITEMS-9&10 ADDED. ITEMS-2&3 DELETED. WELDING NOTE & GENERAL NOTE ADDED.	



WELD TESTING PREFERENCES AS PER EN 15085-3:2007(E) TABLE-4

WELD PERFORMANCE CLASS	QUALITY LEVEL FOR IMPERFECTIONS EN ISO 5817 €	INSPECTION CLASS	VOLUMETRIC TEST RT or UT	SURFACE TEST MPT or DPT	VISUAL EXAMINATION VT
CP C2	B	CT2 §	NOT REQUIRED	NOT REQUIRED	100%

THE TEST METHODS INDICATED IN THIS TABLE SHALL BE THE MINIMUM CAPABLE OF ENSURING COMPLIANCE OF THE WELDED JOINTS. ADDITIONAL TESTS DEPENDING ON THE MATERIAL, THE DESIGN OR CUSTOMER REQUIREMENTS MAY BE NECESSARY.

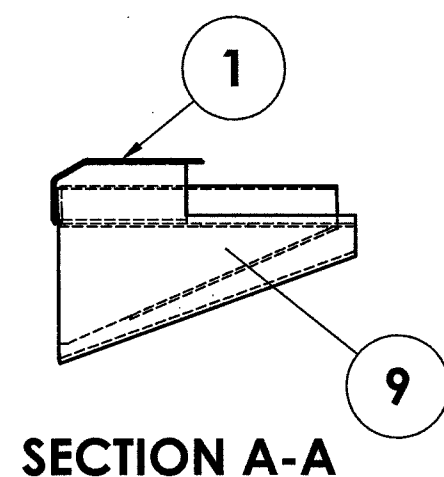
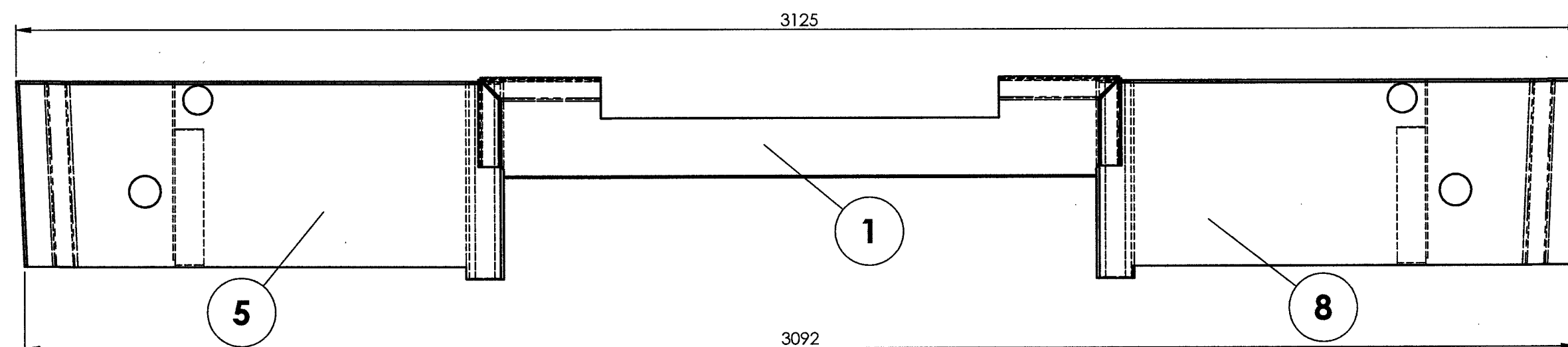
§ FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.

€ ALL APPLICABLE CLAUSES FOR VISUAL INSPECTION SHALL BE CARRIED OUT.

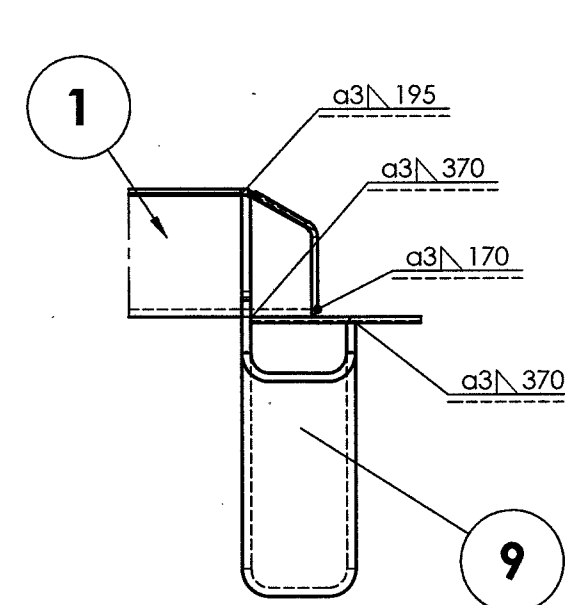
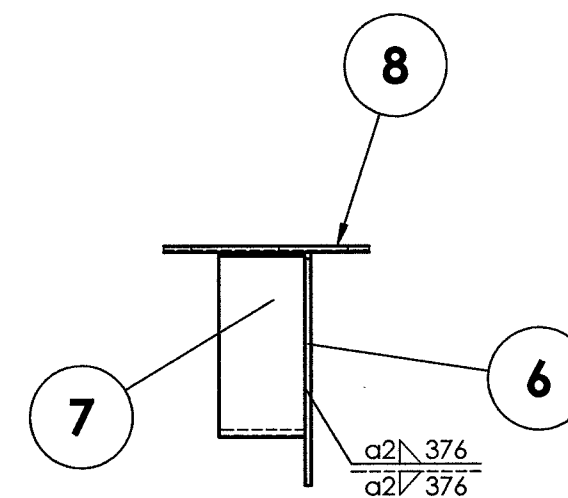
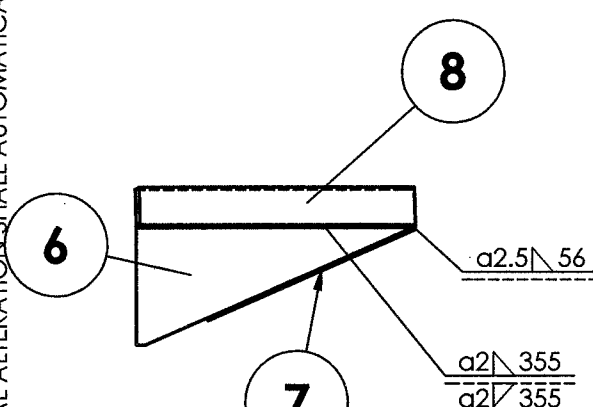
FOR APPLICABLE WELDING PROCEDURE SPECIFICATION (WPS) REFER DRAWING NO ICF/STD-9-0-999

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.



SECTION A-A

DETAIL C
SCALE 1 : 5DETAIL D
SCALE 1 : 5

SECTION B-B

1	CONSOLE		10	AAA15250		0.75	
1	CONSOLE		9	AAA15249		5.906	
1	FLANGE L.H		8	AAA15412		11.391	
2	SHEET		7	AAA15264		0.543	
2	WEB		6	AAA15263		0.935	
1	FLANGE R.H		5	AAA15244		11.394	
1	FLANGE L.H		4	AAA15243		11.403	
1	CONSOLE COMPLETE		3	49515005		0.877	
1	CONSOLE COMPLETE		2	49515004		6.031	
1	SILL COMPLETE		1	49515006		7.542	

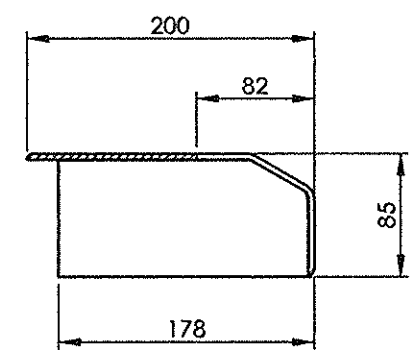
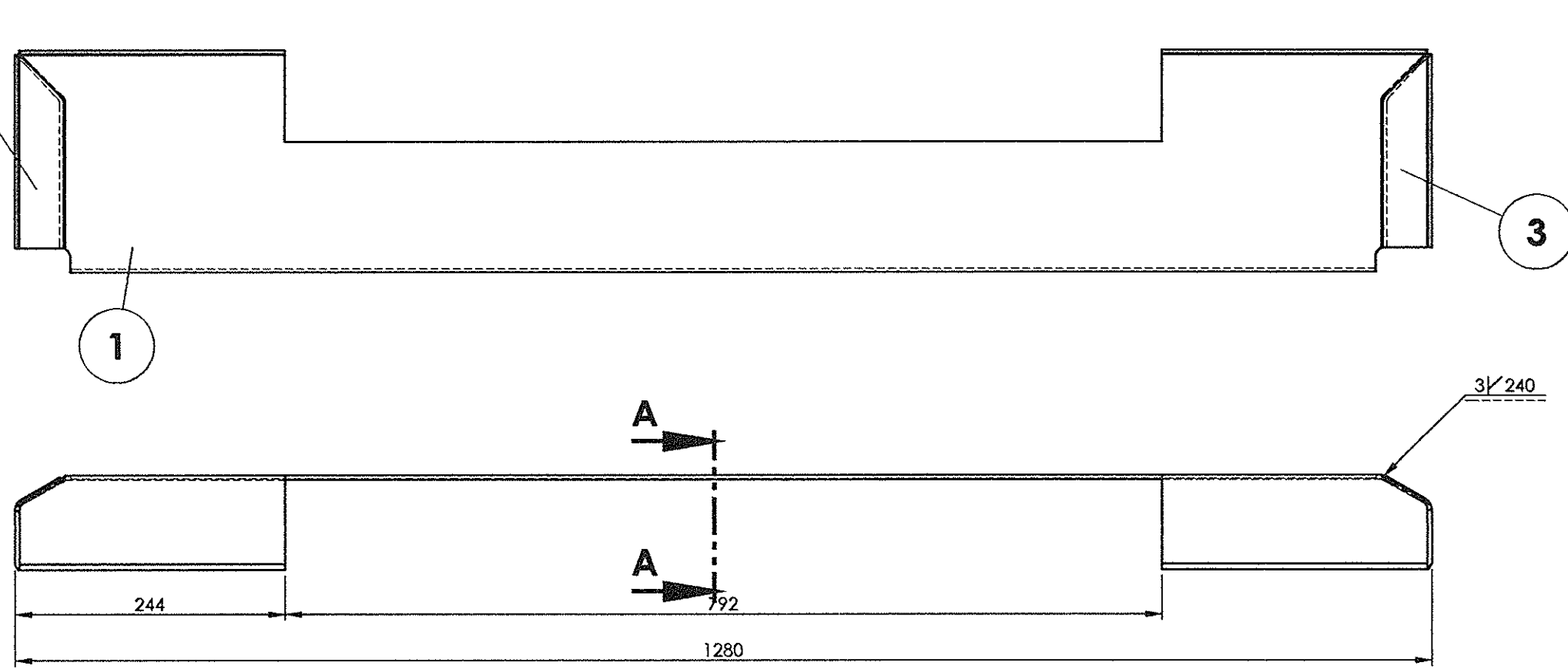
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION				SURFACE AREA IN Sq.m.: 2.706		WT/ASSY IN Kgs:	
SILL ARRANGEMENT				SCALE 1:10	SSE/D CHD	Sd..Pandurangas	
				ALT b	ALTD DRN	H. Irshath Ahamed	
						A.Palanichamy	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		LWGSCWAC2	
INTEGRAL COACH FACTORY, CHENNAI - 600038				49515003		A2	

07-04-19	27-03-2010	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.

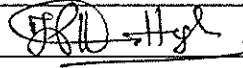
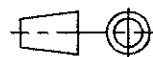
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



SECTION A-A

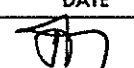
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

1	COVERING SHEET		3	AAA15248	SS-409M	0.542	
1	COVERING SHEET		2°	AAA15247	SS-409M	0.542	
1	SILL		1	AAA15261	SS-409M	6.458	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL. SPEC	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION		SURFACE AREA IN Sq.m.:0.491			WT/ASSY IN Kgs:7.542		
SILL COMPLETE					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	A.Palanichamy
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			LWGSCWAC2
					49515006		A3

49515012

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		M6 TAP 10 NO'S ADDED	

SECTION A-A
SCALE 1 : 4SECTION B-B
SCALE 1 : 4SECTION C-C
SCALE 1 : 4DETAIL E
SCALE 1 : 2DETAIL D
SCALE 1 : 2

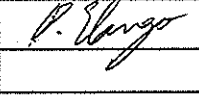
10	BACK PIECE		5	AAA15278		0.011	
1	SHEET		4	AAA15277		0.130	
1	FLANGE		3	AAA15199		0.980	
1	WEB		2	AAA15197		0.545	
1	FLANGE		1	AAA15198		1.099	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL.SPEC.	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 END CONSTRUCTION

SURFACE AREA IN Sq.m.: 0.294

WT/ASSY IN Kgs:

FRAME COMPLETE

SCALE 1:5	SSE/D CHD	
ALT. a	ALTD DRN	MATHANKUMAR J A.Palanichamy & T.J.K.V.

 LWGSCWAC2

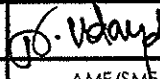
INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

49515012

A3

/0.-05-2017	27-03-2010	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

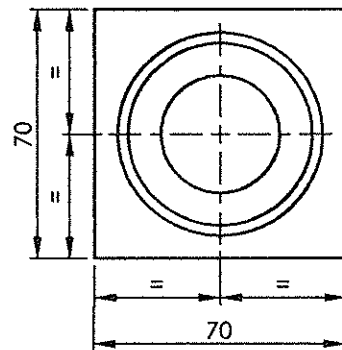
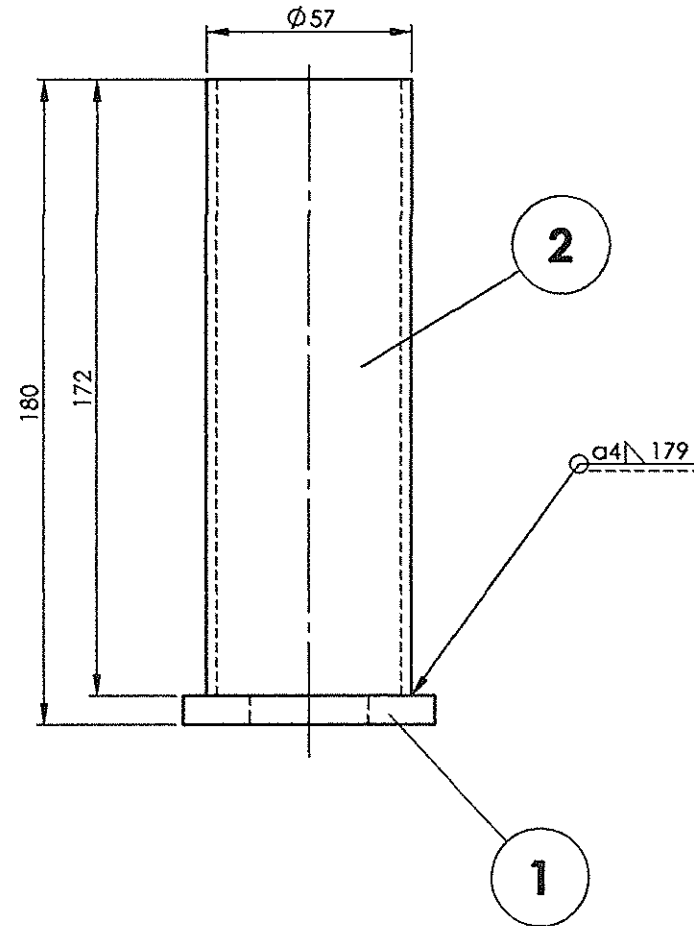
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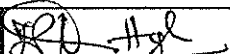

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

49515018

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



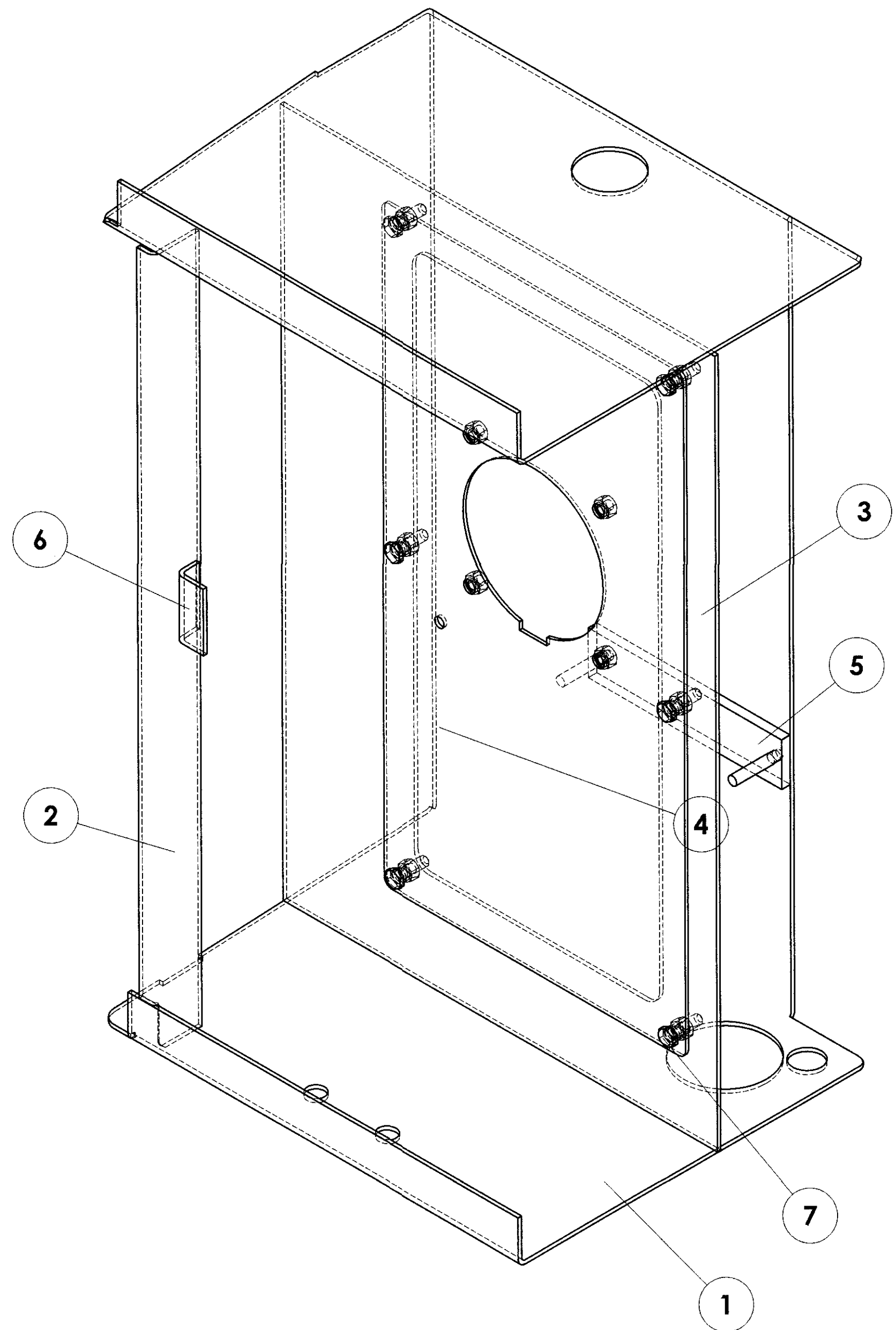
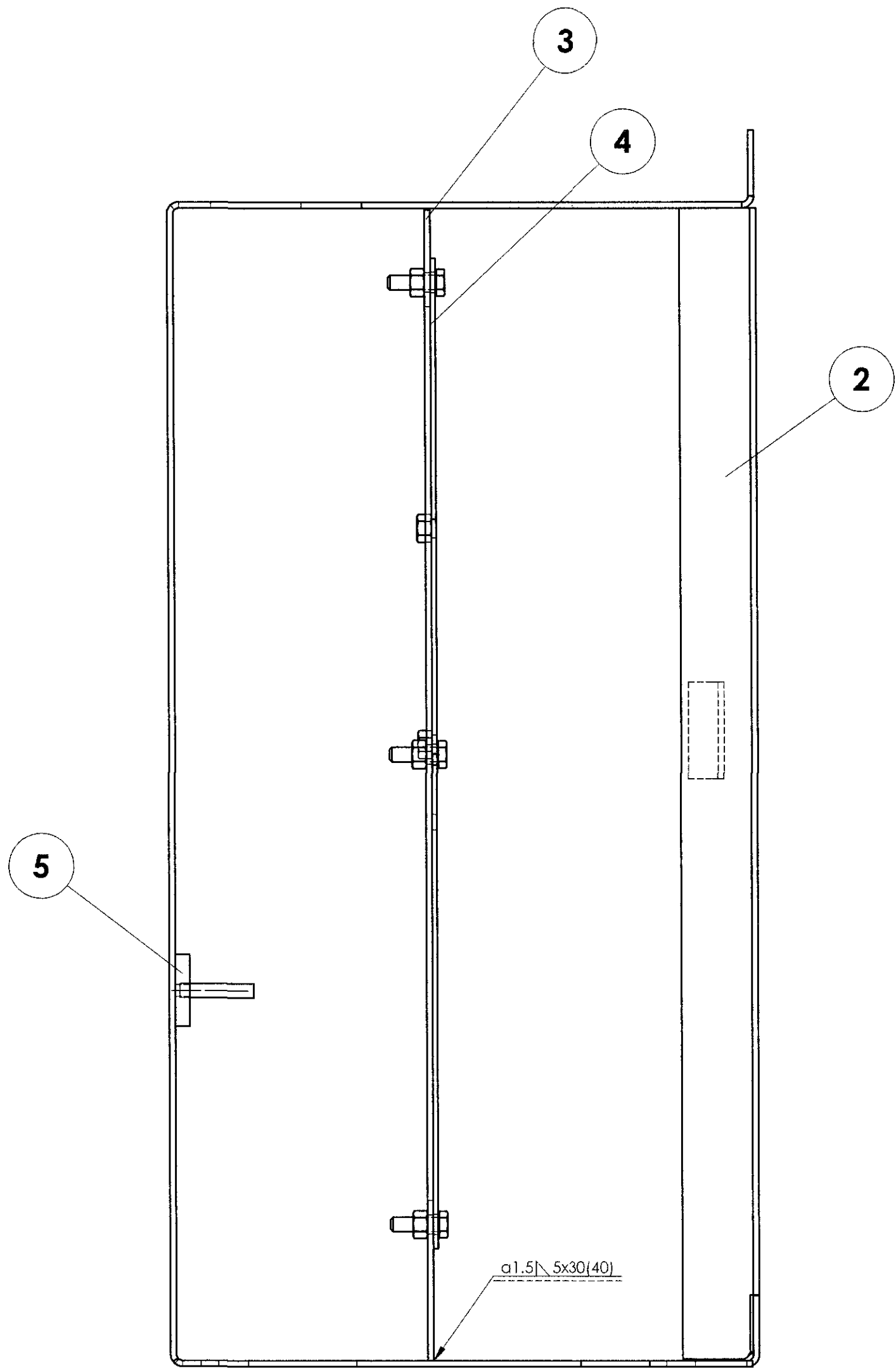
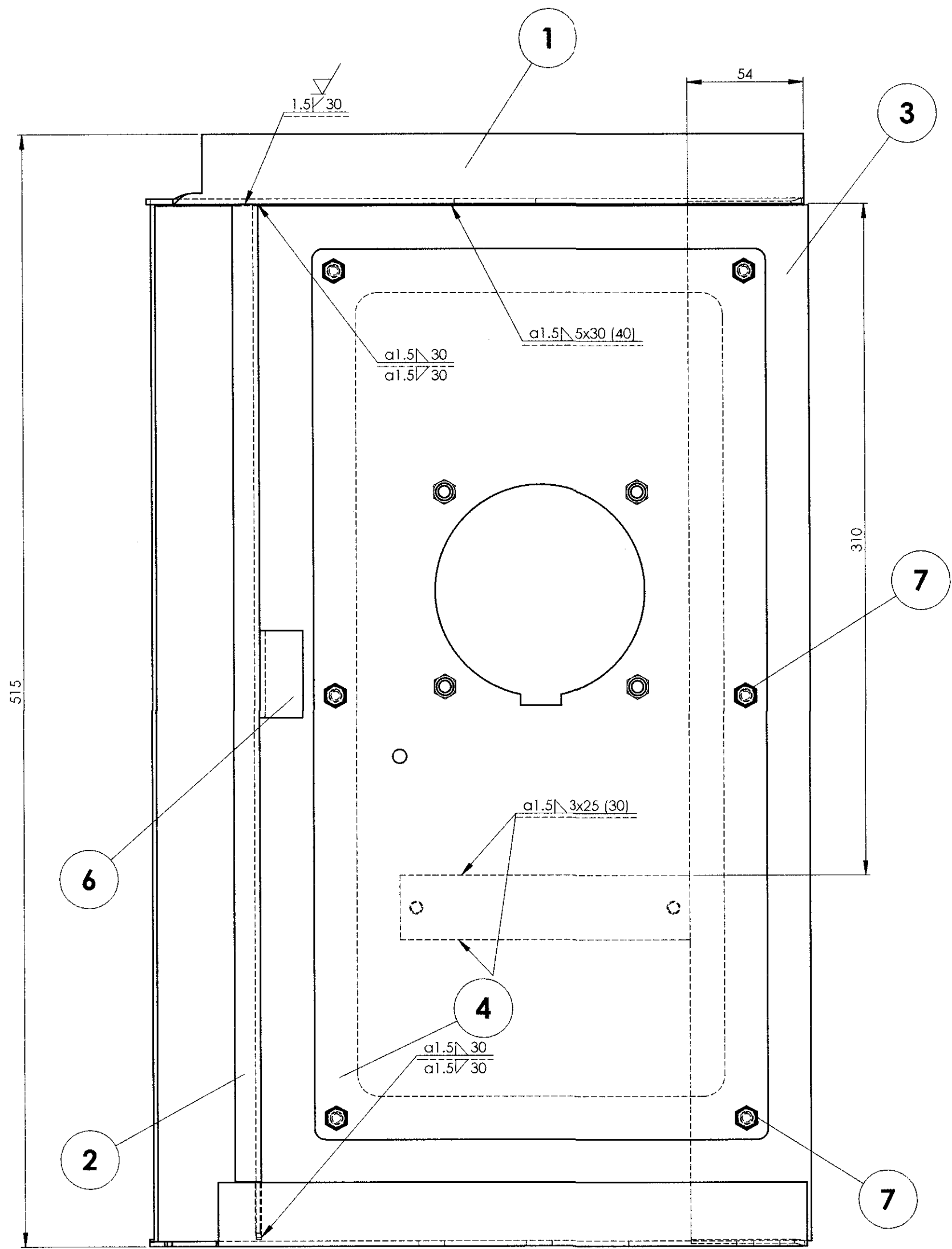
1	PIPE		2	AAA15287		0.670	
1	PLATE		1	AAA15203		0.259	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-5		SURFACE AREA IN Sq.m.:0.071			WT/ASSY IN Kgs:0.929		
PIPE COMPLETE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	D.MOSES
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							LWGSCWAC2
					SHEET 1 OF 1		
					49515018		A3

58115004

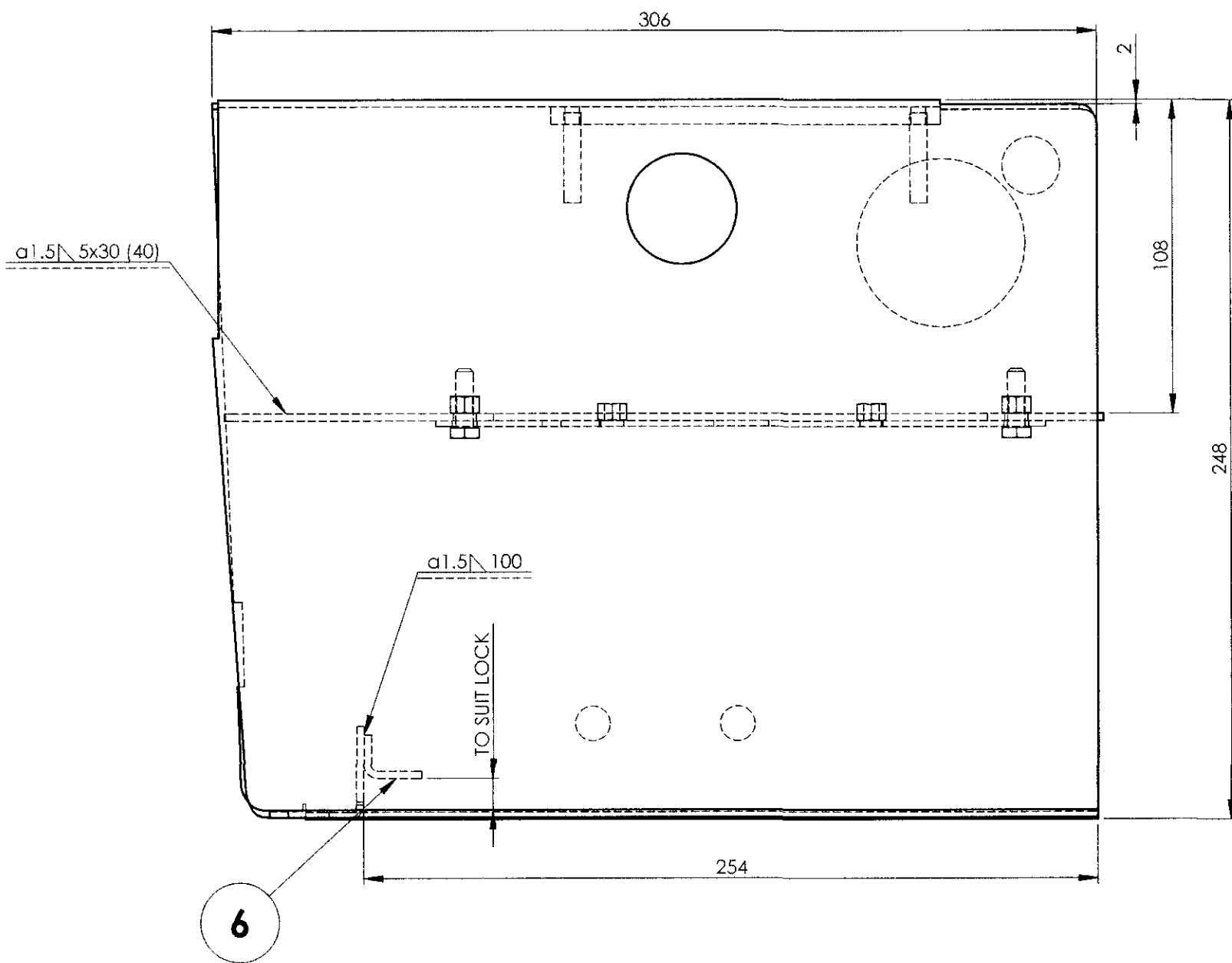
▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

①① ROUGH CLEANED
①①① BJRRS REMOVED
①⑤ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM-6 LOCATION REVISED.	N K X 26/02/23

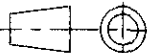


ISOMETRIC VIEW



NOTE:

1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

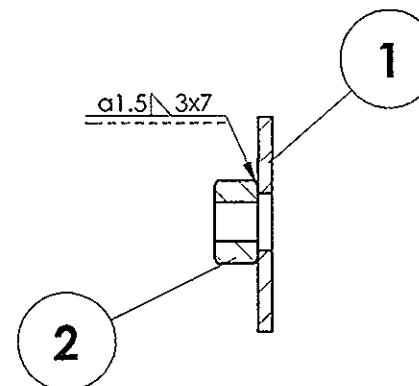
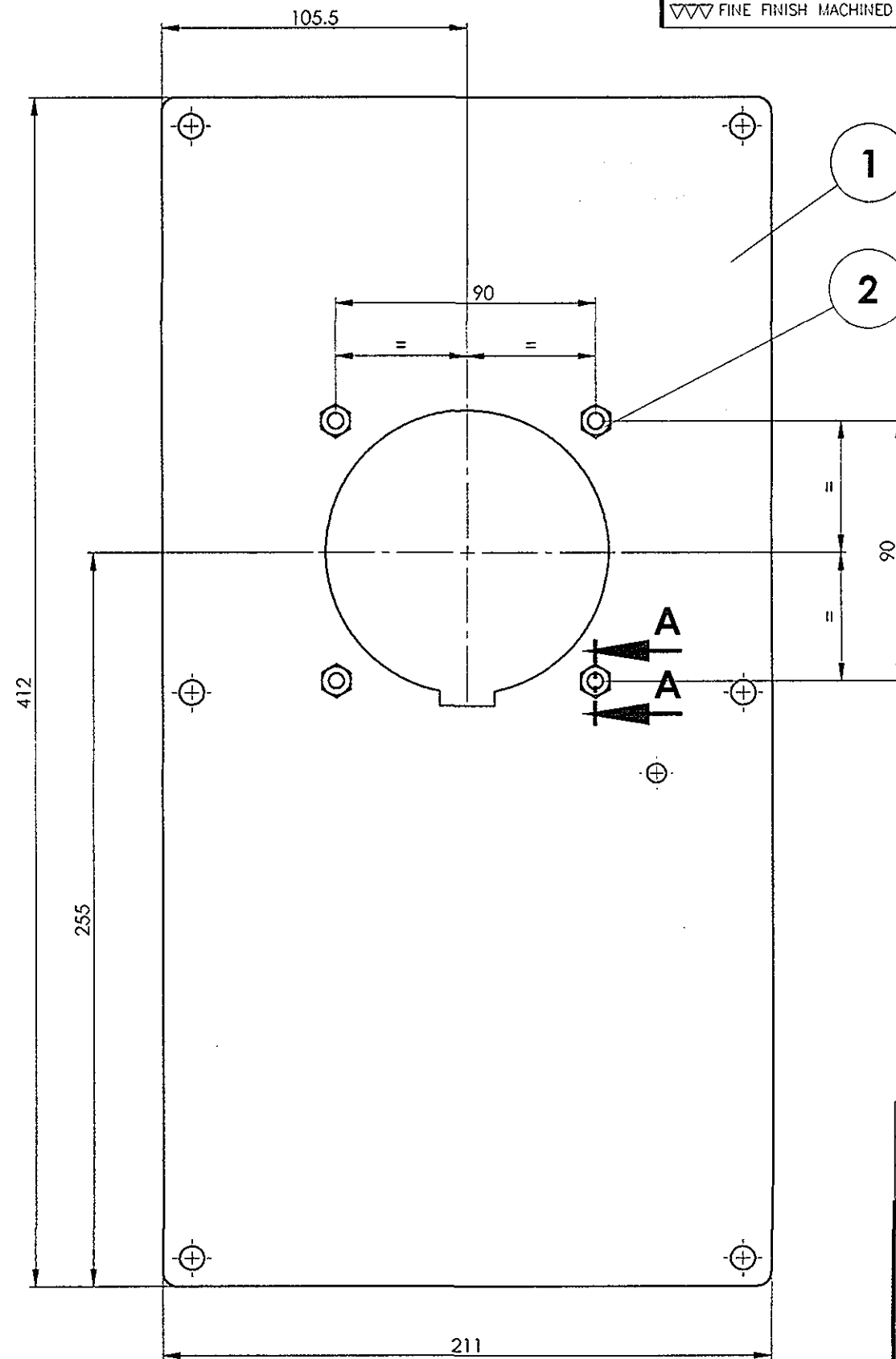
6	HEXAGON HEAD SCREW	IS 1364 (Part-2)/ ISO 4017 - M6 x 20-A2-70	7	IS:1364 (PART-2)	IS:1367 (P-14) A2-70					
1	STOP		6	AAA15193		0.025				
1	FIXING BRACKET		5	58115006		0.194				
1	COVERING SHEET COMPLETE		4	58115005		1.271				
1	BRACKET COMPLETE.		3	58115014		1.654				
1	ANGLE SUPPORT		2	AAA15431		0.377				
1	BRACKET		1	AAA15428		5.568				
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS			
GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.: 0.960			WT/ASSY IN Kgs: 9.449					
BRACKET COMPLETE					SCALE 1:2	SSE/D CHD	<i>H. Ishath Ahammed</i>			
					ALT. a	ALT.D DRN		H. Ishath Ahammed B.SARAVANAN		
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				 LGS/EOG	
				SHEET 1 OF 1	58115004		A1			

26-02-2013	03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

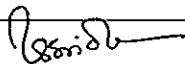
58115005

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 1**NOTE:**

1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

4	HEXAGON NUT	IS:1364(PART-3)/ISO 4032-M6-A2-70	2	IS:1364	IS:1367 (P-14) A2- 70		
1	SHEET		1	AAA15429		1.259	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION		SURFACE AREA IN Sq.m.:0.164			WT/ASSY IN Kgs:1.587		
COVERING SHEET COMPLETE FOR BULK SUPPLY MOUNTING ON LHB/EOG COACHES.					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	B.SARAVANAN
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038			58115005		A3		

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

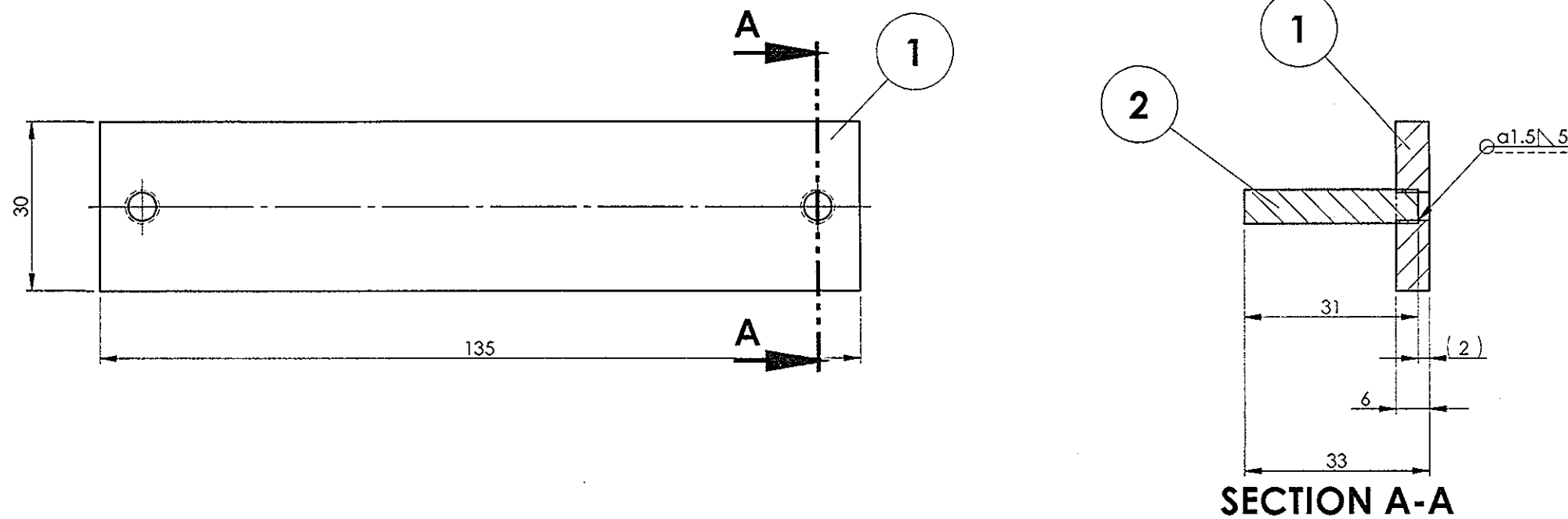
REF.DRG.NO.3 10113.0.20.120.183_BR

DATE OF LATEST ALT.	28 -03-2013	AME/SME
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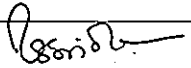
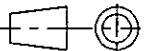
58115006

▽ ROUGH MACHINED	⑧ ROUGH CLEANED
▽▽ FINISH MACHINED	⑧ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑧ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

**NOTE:**

1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

2	STUD	A M6x25 IS:1862 P-8.8	2	IS 1862			
1	BRACKET		1	AAA15430		0.193	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5		SURFACE AREA IN Sq.m.:0.011			WT/ASSY IN Kgs:0.193		
FIXING BRACKET (RH)					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	B.SARAVANAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							LGS/EOG
SHEET 1 OF 1					58115006		A3

REF.DRG.NO. 3 10113.0.20.120.035

	28 -03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

58115014

4		5		6		7		8	
▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS					
▽▽ FINISH MACHINED		①① BURRS REMOVED		ALT.	ZONE	DESCRIPTION		APPROVED & DATE	
▽▽▽ FINE FINISH MACHINED		①①① CHAMFERED							

1

2

30

196 ±0.2

196 ±0.2

83

191 ±0.2

A

A

1

2

α1.5 3x7

SECTION A-A
SCALE 1 : 2

NOTE:

1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

6	HEXAGON NUT	IS:1364(PART-3)/ISO 4032-M6-A2-70	2	IS:1364	IS:1367 (P-14) A2-70		
1	BRACKET		1	AAA15433		1.636	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION				SURFACE AREA IN Sq.m.:0.173		WT/ASSY IN Kgs:1.654	
BRACKET COMPLETE.						SCALE	SSE/D
						1:5	CHD
						ALT.	ALTD
						DRN	B.SARAVANAN
INDIAN RAILWAY STANDARDS						SHEET 1 OF 1	
INTEGRAL COACH FACTORY, CHENNAI - 600038						58115014	
						A3	

REF.DRG.NO.3 10113.0.20.120.032_A

28 -03-2013

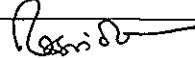
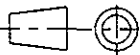
AME/SME

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

DATE

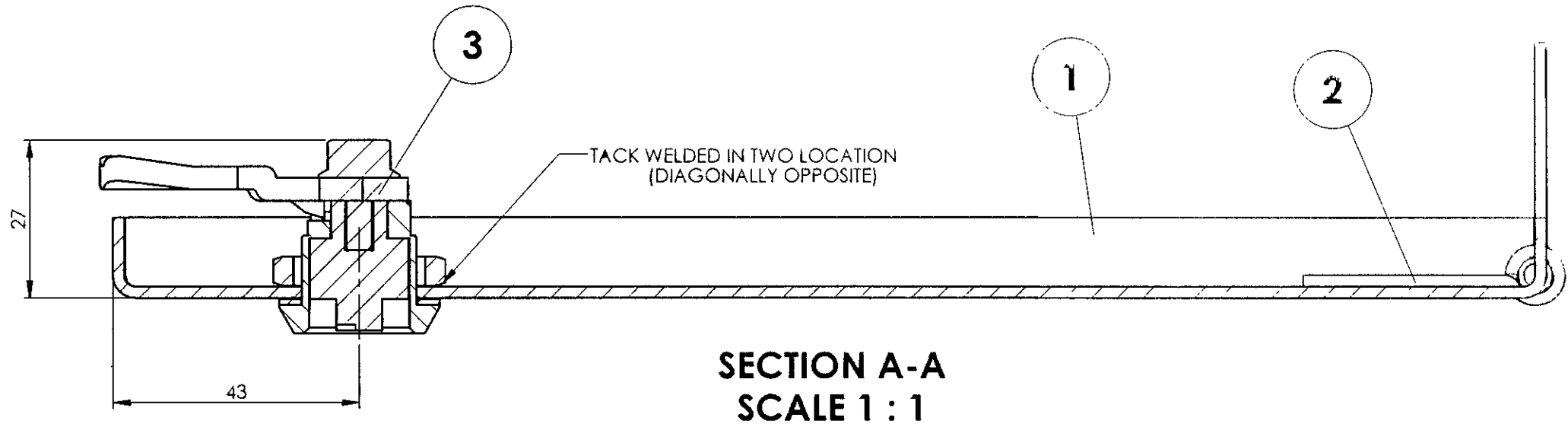
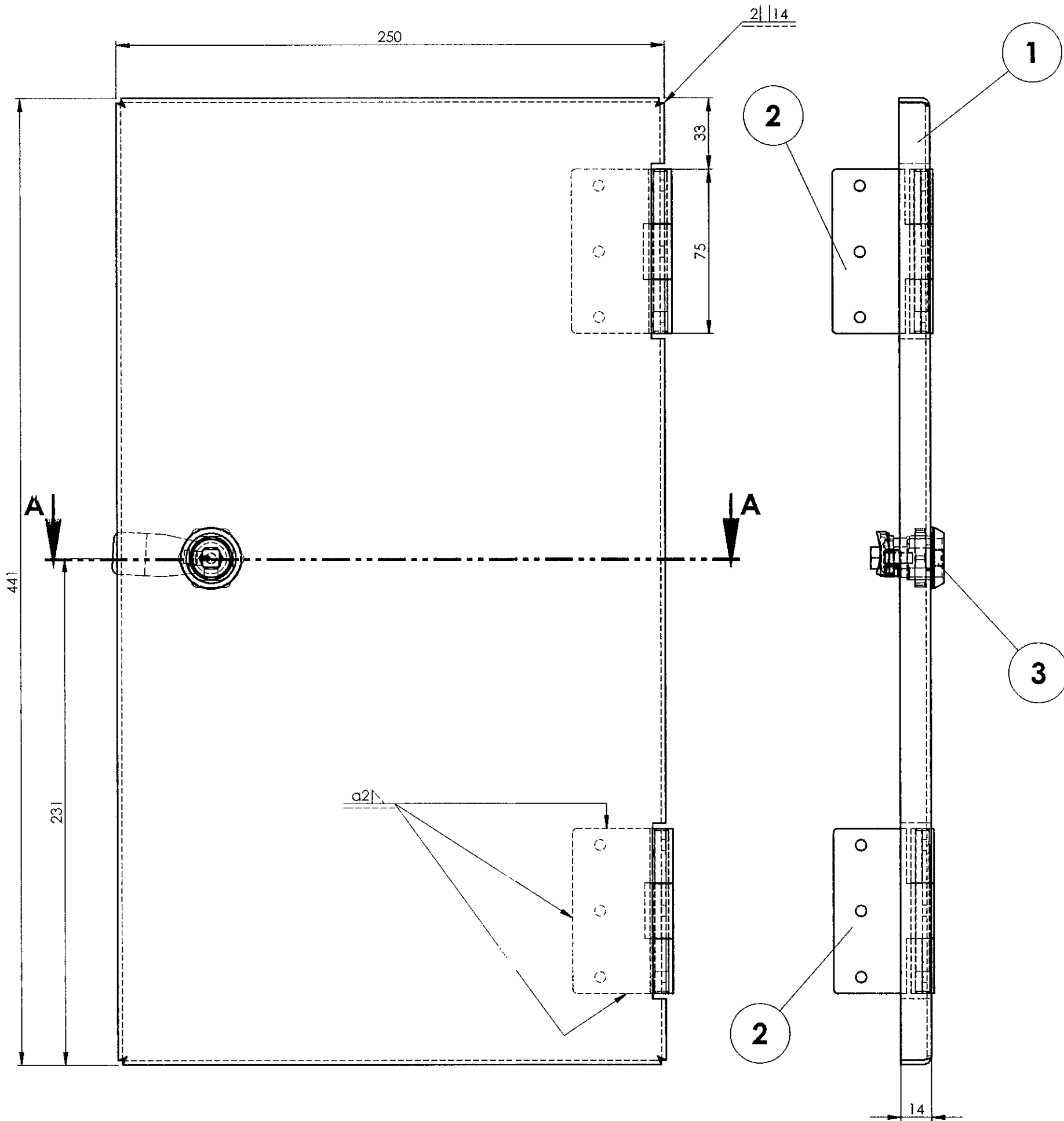
1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

6	HEXAGON NUT	IS:1364(PART-3)/ISO 4032-M6-A2-70	2	IS:1364	IS:1367 (P-14) A2- 70		
1	BRACKET		1	AAA15433		1.636	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION		SURFACE AREA IN Sq.m.:0.173			WT/ASSY IN Kgs:1.654		
BRACKET COMPLETE.					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	B.SARAVANAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	 LGS/EOG		
					58115014		A3

58115015

▽ ROUGH MACHINED	⊖1 ROUGH CLEANED
▽▽ FINISH MACHINED	⊖2 BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖3 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		REF. DRG. DELETED AND REMARK ALTD FOR ITEM-3.	SA. 04-2019
b		ITEM-4 AND NOTE-7&8 ADDED. ITEMS-1,2,3 & NOTE-6 REVISED.	SA. 25-06-2020
c		ITEM-4 & NOTE-8 DELETED. NOTE-6 & 7 REVISED.	11/2/24

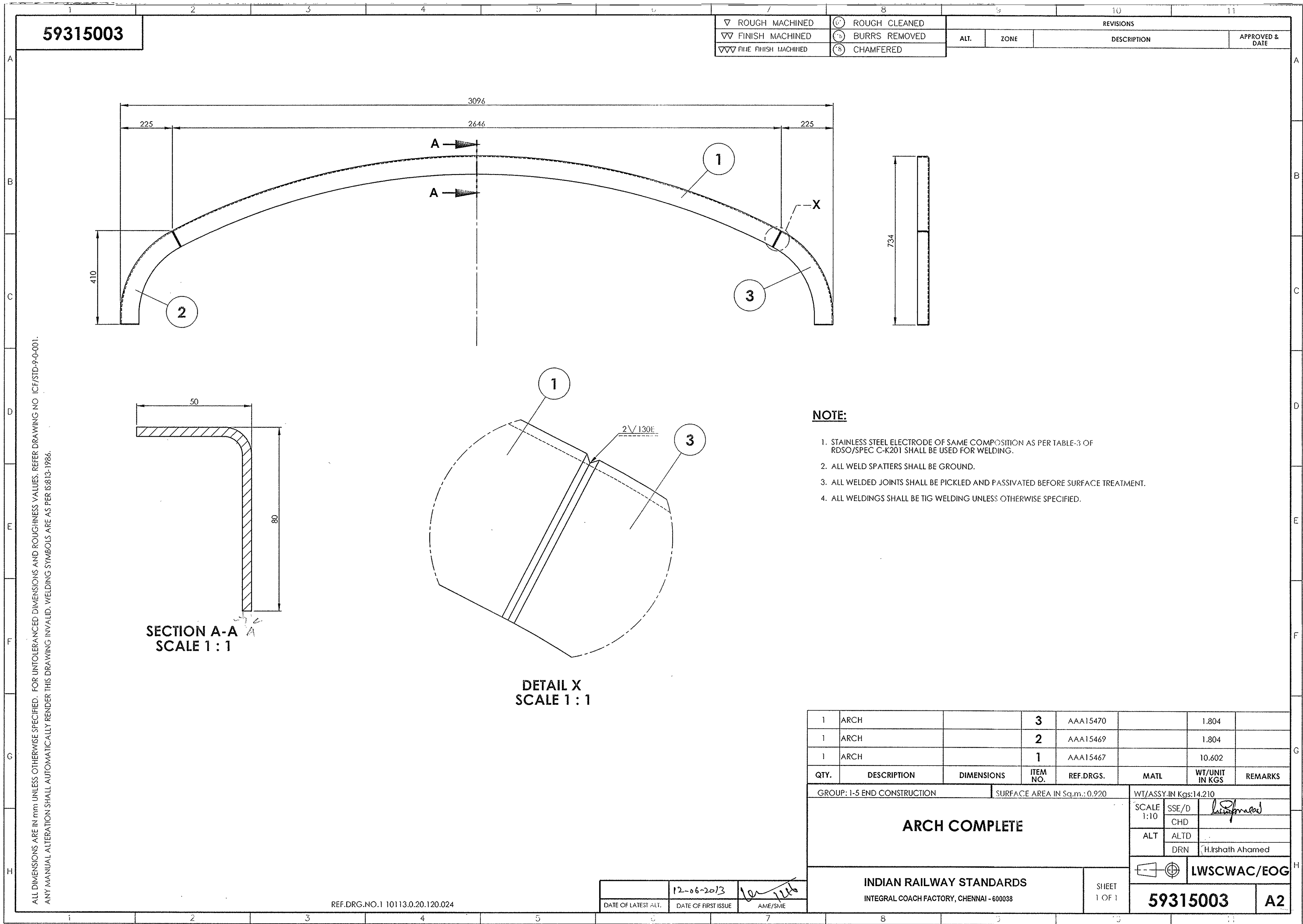


- NOTE:**
1. ALL WELD SPATTERS SHALL BE GROUND.
 2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT
 3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
 5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.
 6. # CAM LATCH TO PART NUMBER -E5-32-0524-111 OF M/S. SOUTHCO (OR) CAM LATCH TO PART NUMBER 379-0065.07-30326 AND PART NUMBER 200-0520 OF M/S DIRAK TO BE USED.
 7. \$ - HINGE TO PART NUMBER EH-99-314 OF M/S. SOUTHCO (OR) HINGE TO PART NUMBER 378-0007.07-07550 OF M/S DIRAK TO BE USED.
 8. @ - LATCH NUT TO PART NUMBER E3-0-64136 OF M/S. SOUTHCO TO BE USED TO PREVENT UNAUTHORISED REMOVAL OF LOCK.

4	LATCH NUT(WELDABLE)		4	-		0.00	@
1	LOCK ASSEMBLY		3			0.009	#
2	HINGE		2			0.02	\$
1	SHUTTER		1	AAA15432		1.949	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: (1-5) END CONSTRUCTI			SURFACE AREA IN Sq.m: 0.293		WT/ASSY IN Kgs:		
SHUTTER ASSEMBLY FOR EFT SOCKET					SCALE 1:2	SSE/LI CHD	<i>Pandurangappa</i>
					ALT c	ALTD DPH	VJAYAKUMAR B.SARAVATHI
					LGS/ECG		
					58115015		
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038							

01-02-2024	28-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

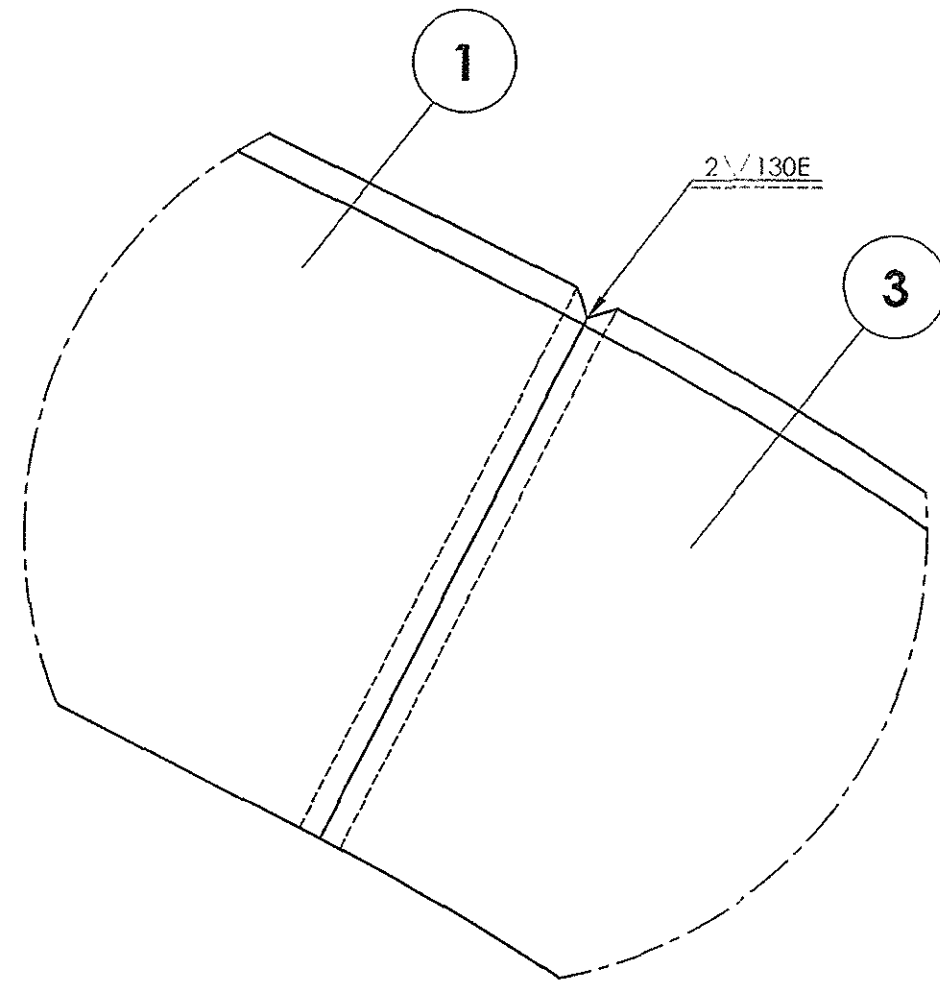
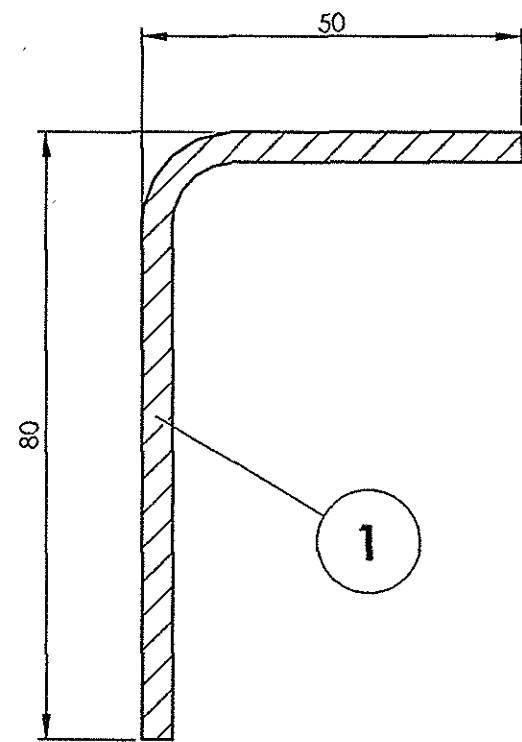
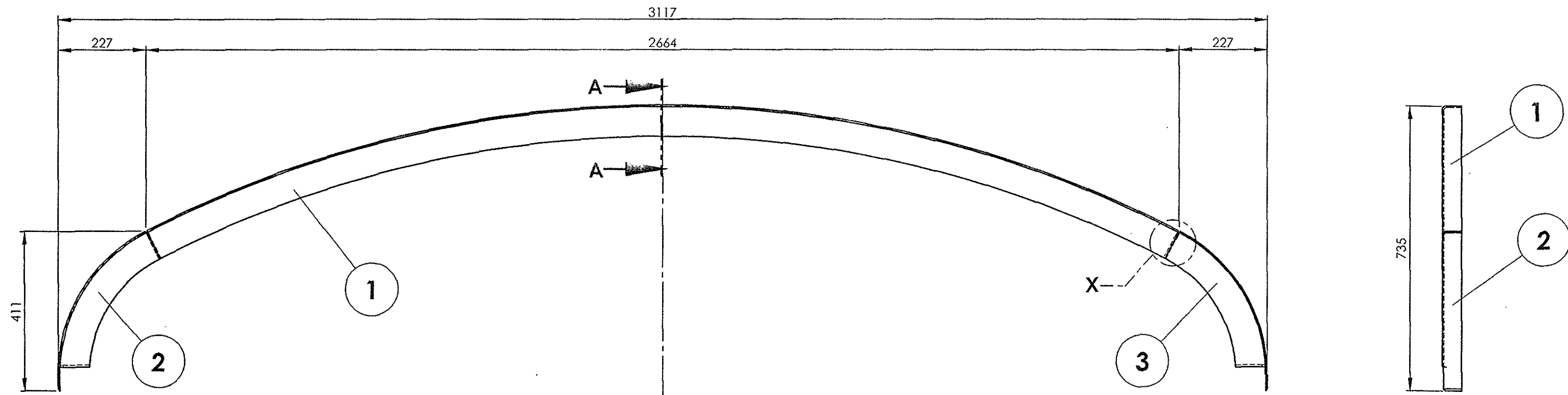
REF.DRG.NO.



59315004

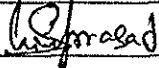
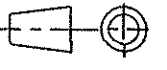
▽ ROUGH MACHINED	⊙ ROUGH CLEANED
▽▽ FINISH MACHINED	⊙ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊙ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELD SPATTERS SHALL BE GROUND.
3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.

1	ARCH		3	AAA15472		1.660	
1	ARCH		2	AAA15471		1.660	
1	ARCH		1	AAA15468		10.669	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION			SURFACE AREA IN Sq.m.: 0.907		WT/ASSY IN Kgs: 13.990		
ARCH COMPLETE					SCALE 1:10	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	H.Irshath Ahamed
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		LWSCWAC/EOG	
					59315004		A2

	12-06-2013	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

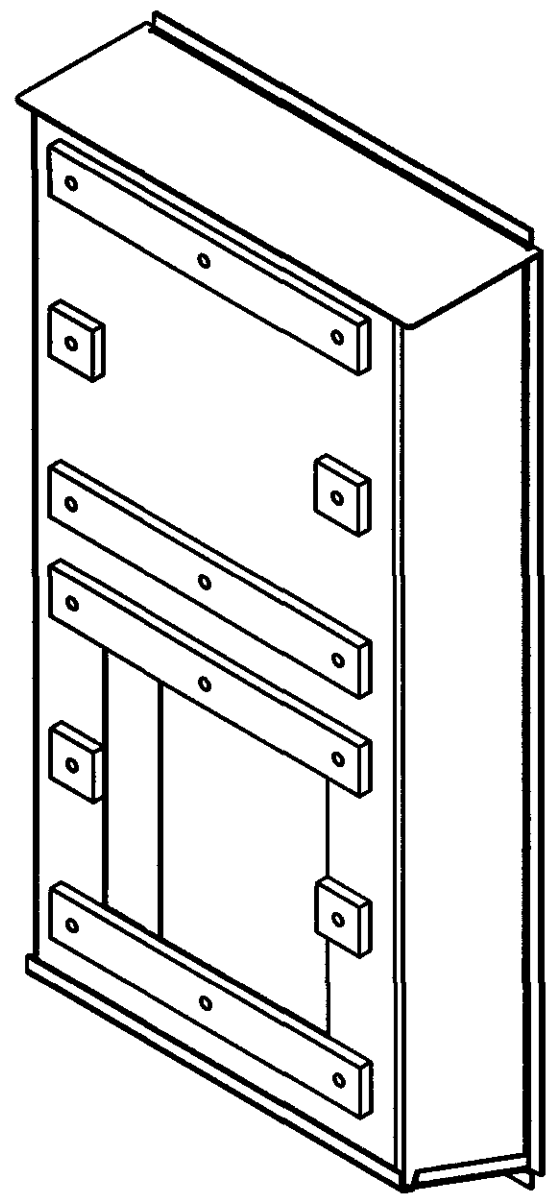
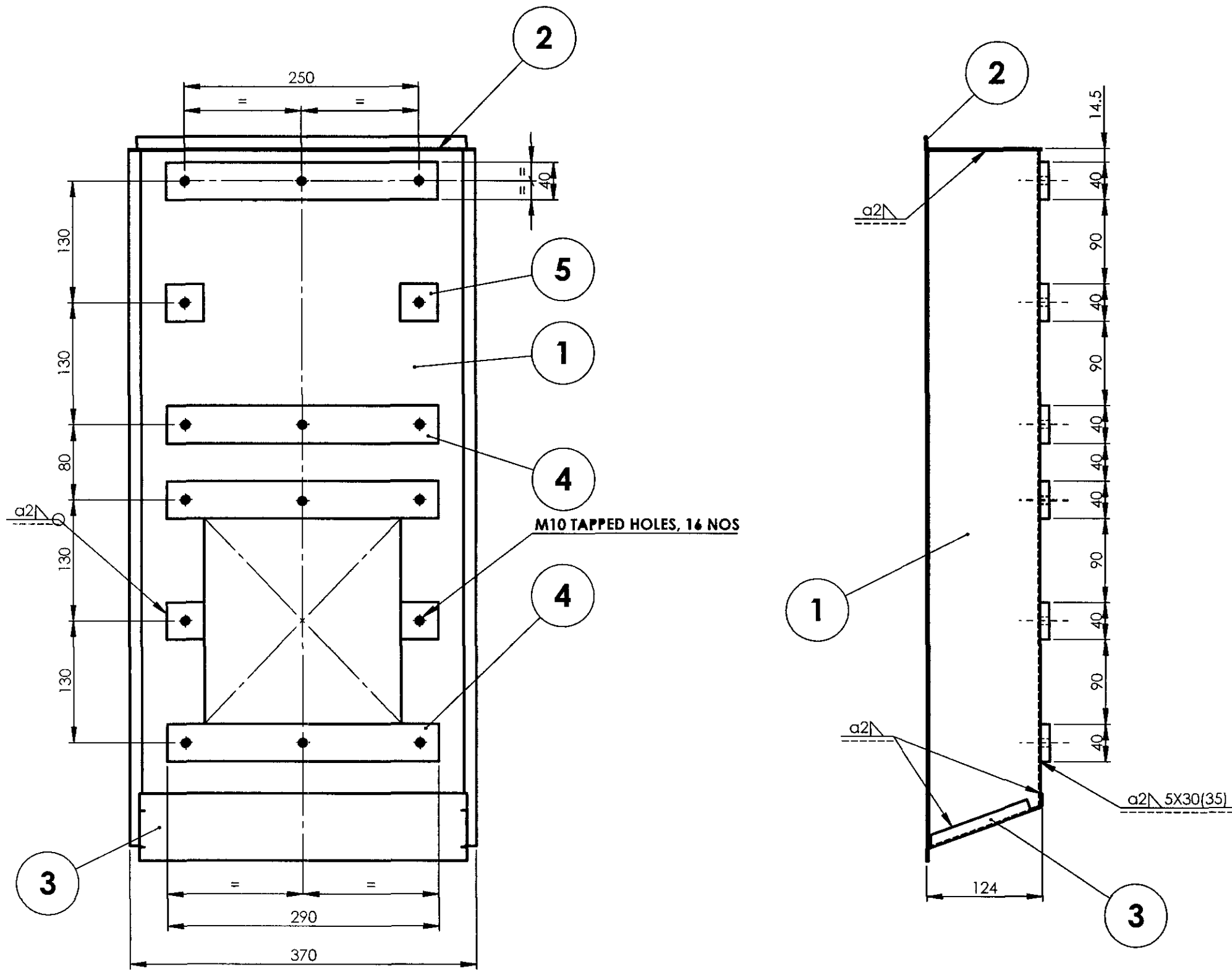
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS813:1986.

75415006

▽ ROUGH MACHINED	⓪1 ROUGH CLEANED
▽▽ FINISH MACHINED	⓪1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⓪1c CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:-

1. ALL WELDING SHALL BE OF TIG- UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

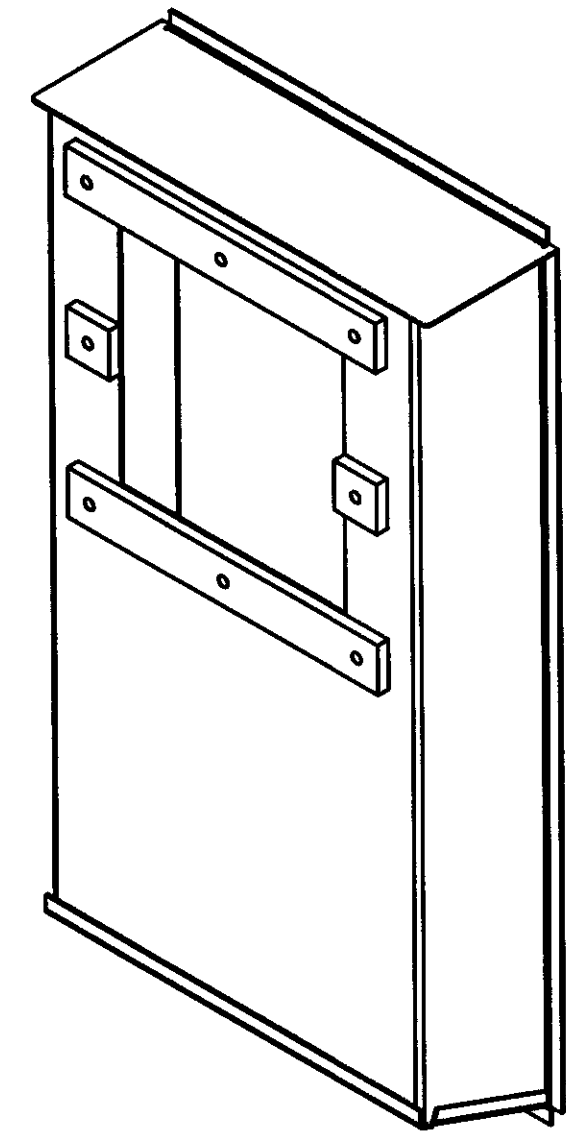
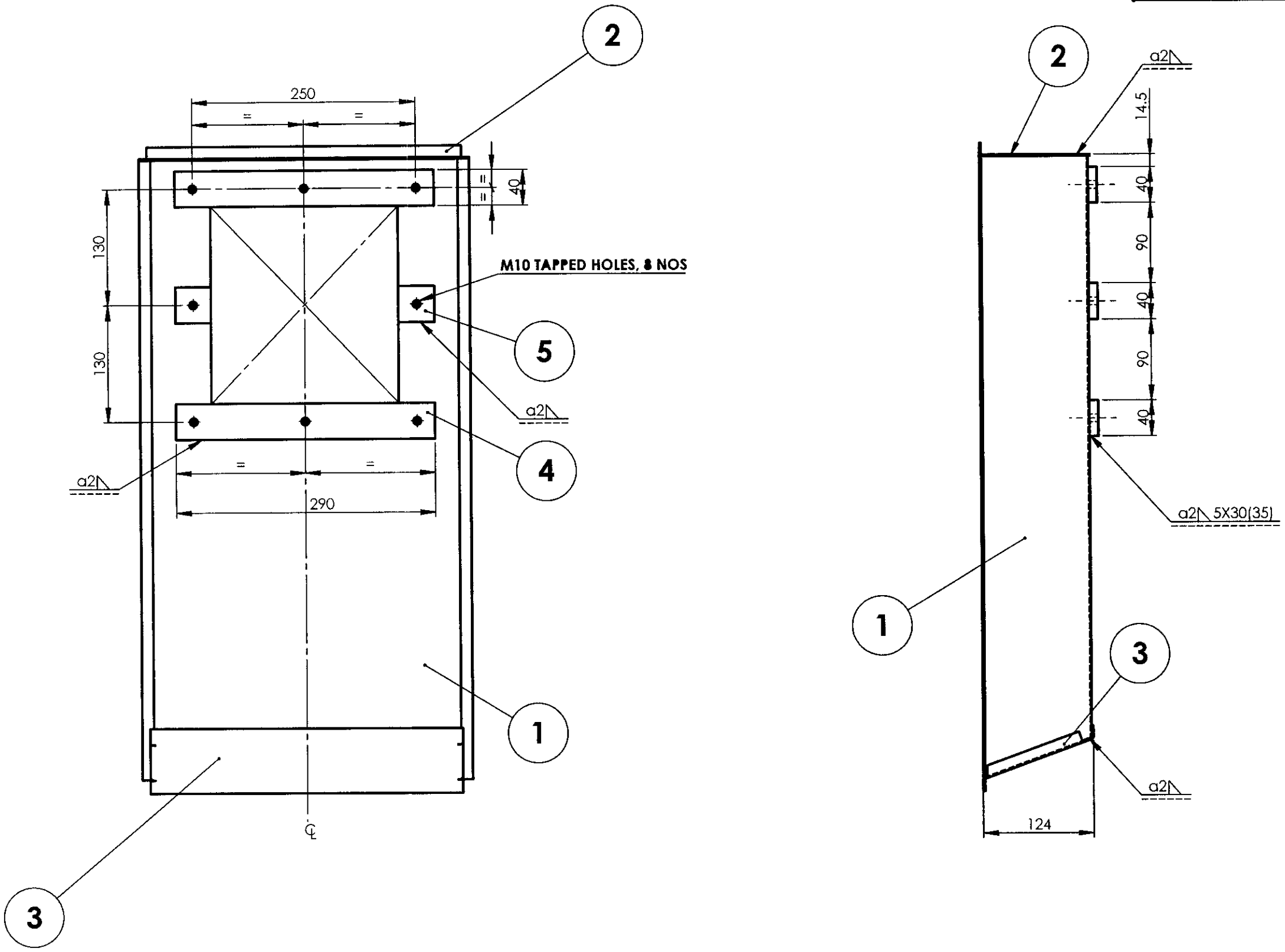
4	BACK PIECE	10x40x40	5		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
4	FLAT	10x40x290	4		RDSO SPEC C-K201 X2 Cr Ni 12	0.93	
1	CLOSING ANGLE		3	AAD15845		0.912	
1	CLOSING ANGLE		2	AAD15844		0.800	
1	BASE PLATE FOR COUPLER SOCKET		1	AAD15843		4.123	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
BRACKET ASSEMBLY FOR EFT AND PARKING			SCALE 1:5	SSE/D CHD	3D: MAHESH 2D: KUNTILHAKUR		
			ALT	ALTD			
			DRN				
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			SHEET 1 OF 1		LWS/PP2 75415006 A2		

75415007

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	01B CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:-

- ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
- STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
- ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
- ALL SHARP CORNERS SHALL BE ROUNDED OFF.
- ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
- ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
- FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
- FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

2	BACK PIECE	10x40x40	5		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
2	FLAT	10x40x290	4		RDSO SPEC C-K201 X2 Cr Ni 12	0.93	
1	CLOSING ANGLE		3	AAD15845		0.912	
1	CLOSING ANGLE		2	AAD15844		0.800	
1	BASE PLATE FOR COUPLER SOCKET		1	AAD15848		5.451	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
BRACKET ASSEMBLY FOR EFT AND PARKING				SCALE	SSE/D	3D: MAHESH 2D: KUNITHAKUR	
				1:5	CHD		
				ALT	ALTD	LWS/PP2	
					DRN		
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		75415007	
INTEGRAL COACH FACTORY, CHENNAI - 600035						A2	

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

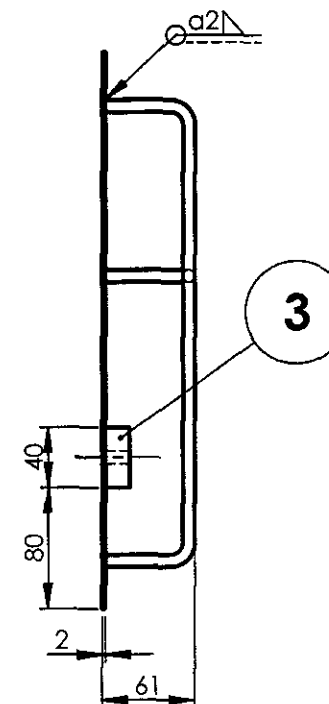
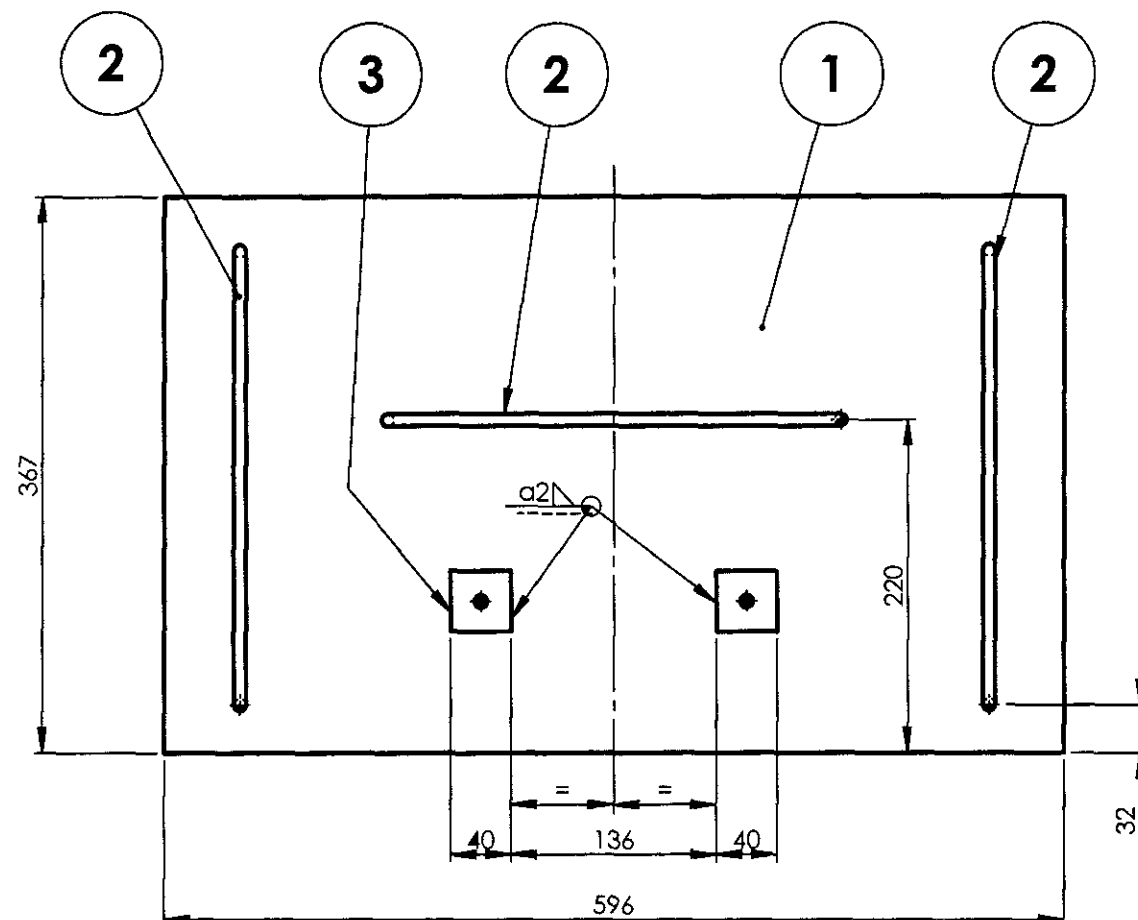
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DATE OF LATEST ALT.	17-05-2024	AME/SME
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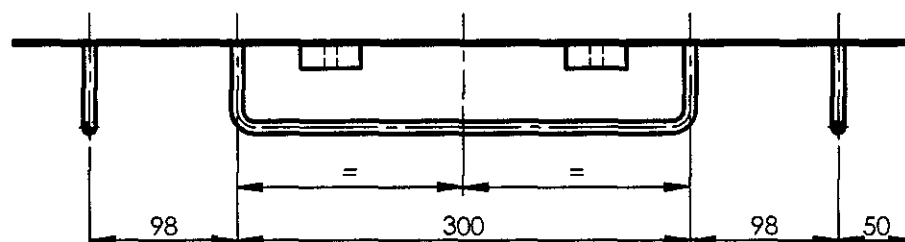
75415010

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

**NOTE:-**

1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



2	EARTHING BLOCK		3	AAD15485		0.20	
3	ELEC CABLE TIE ROD		2	AAB15177		0.14	
1	ELEC COUPLER COVER SHEET	2x367 x596	1		RDSO SPEC C-K201 X2 Cr Ni 12	3.50	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

ELEC COUPLER CLOSING PLATE

SCALE	SSE/D	3D: MAHESH 2D: KUNTI THAKUR
1:5	CHD	
ALT.	ALTD	
	DRN	

LWS/PP2

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1**75415010****A3**

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

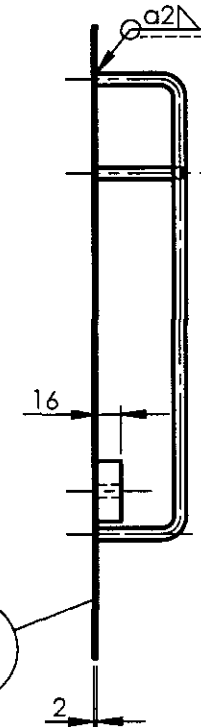
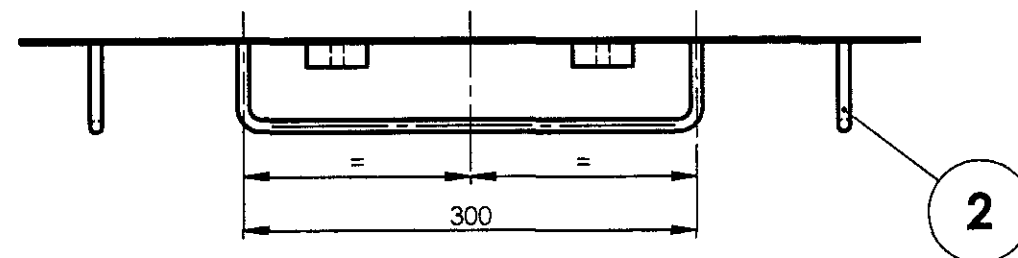
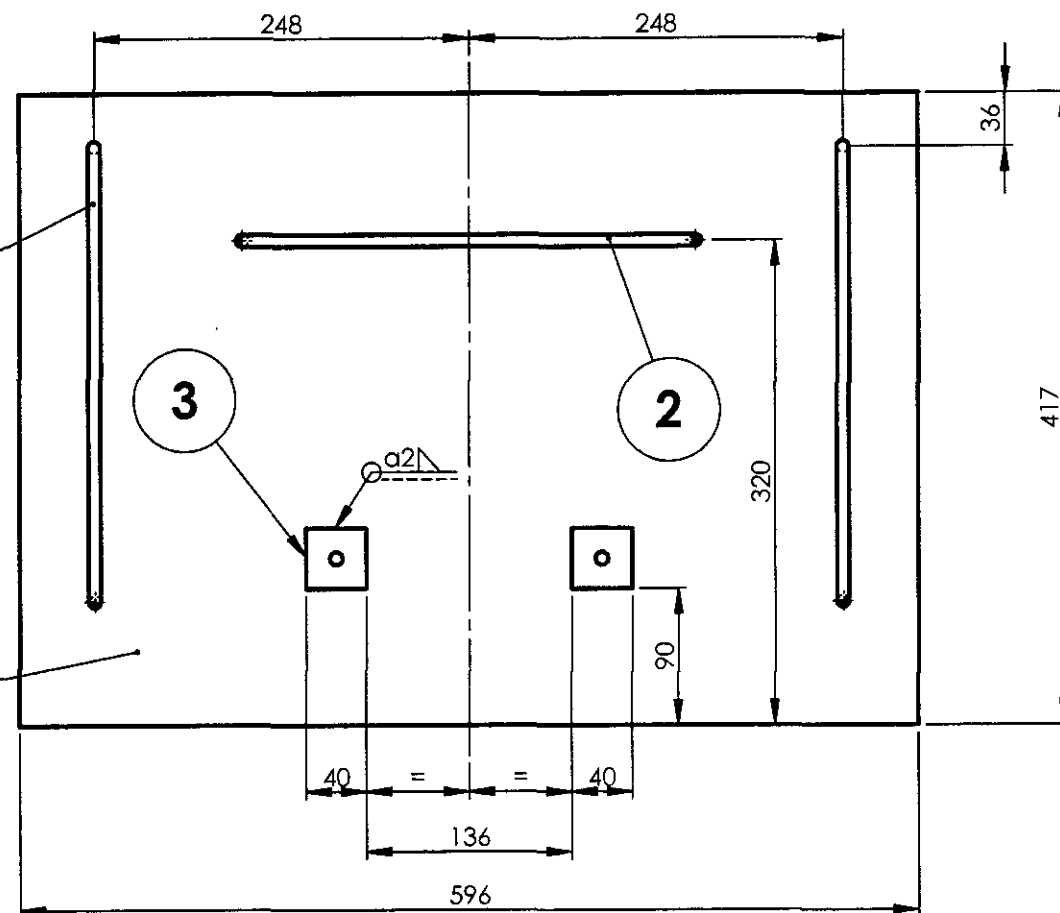
	17 -05-2024	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

75415011

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------

**NOTE:-**

1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

2	EARTHING BLOCK		3	AAD15485		0.20	
3	ELEC CABLE TIE ROD		2	AAB15177		0.16	
1	ELEC COUPLER COVER SHEET	2x417 x596	1		RDSO SPEC C-K201 X2 Cr Ni 12	3.98	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

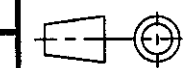
GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

ELEC COUPLER CLOSING PLATE

SCALE	SSE/D	
1:5	CHD	
ALT.	ALTD	3D: MAHESH 2D: KUNTI THAKUR
	DRN	

**LWS/PP2**

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1**75415011****A3**

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

17 -05-2024

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

75415013

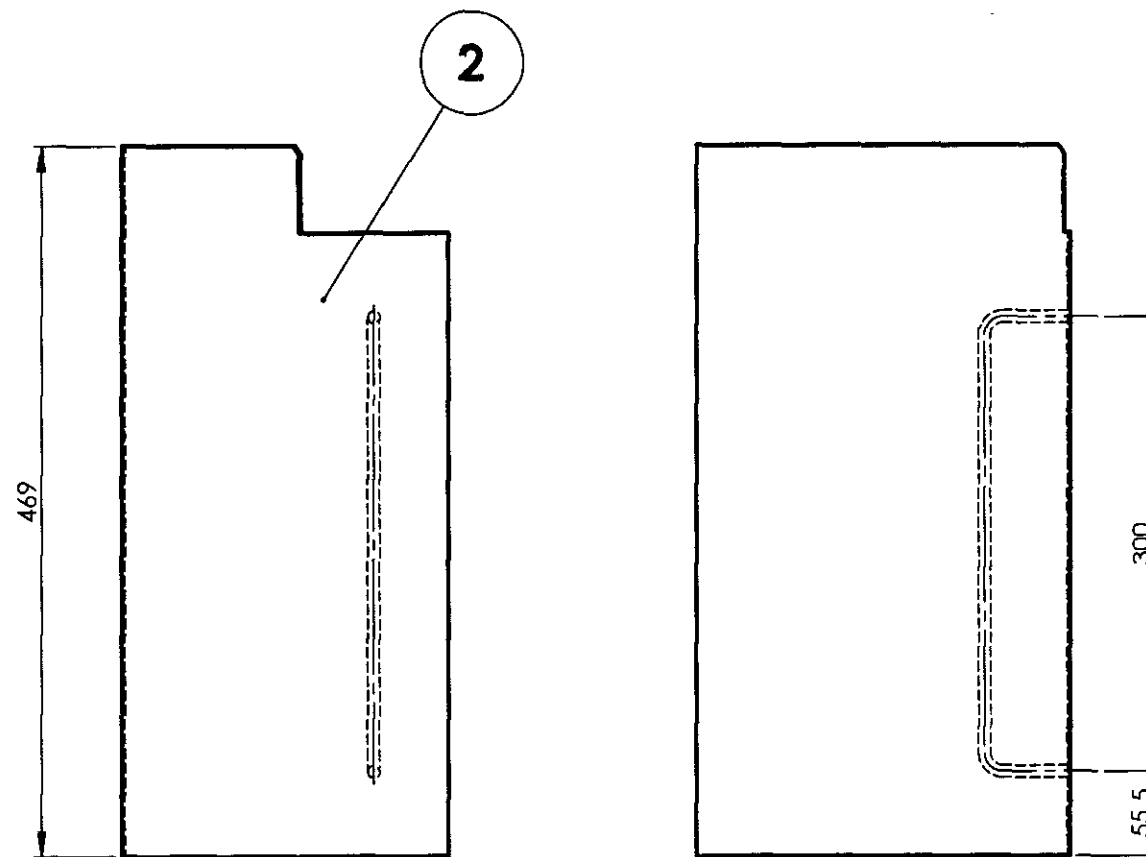
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS

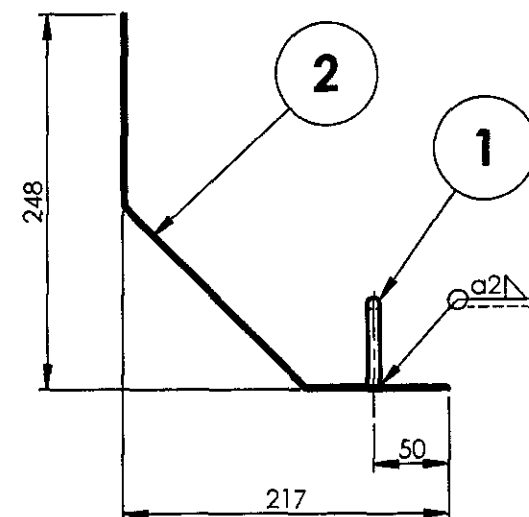
ALT.

ZONE

DESCRIPTION

APPROVED &
DATE**NOTE:-**

1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



1	ELEC COUPLER COVER		2	AAD15876		2.85	
1	ELEC CABLE TIE ROD		1	AAB15177		0.16	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

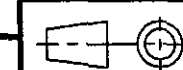
WT/ASSY IN Kgs:

ELEC COUPLER COVER COMPLETESCALE
1:5SSE/D
CHD

ALT.

ALTD

DRN

3D: MAHESH
2D: KUNTI THAKUR**LWS/PP2****INDIAN RAILWAY STANDARDS**

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1**75415013****A3**

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
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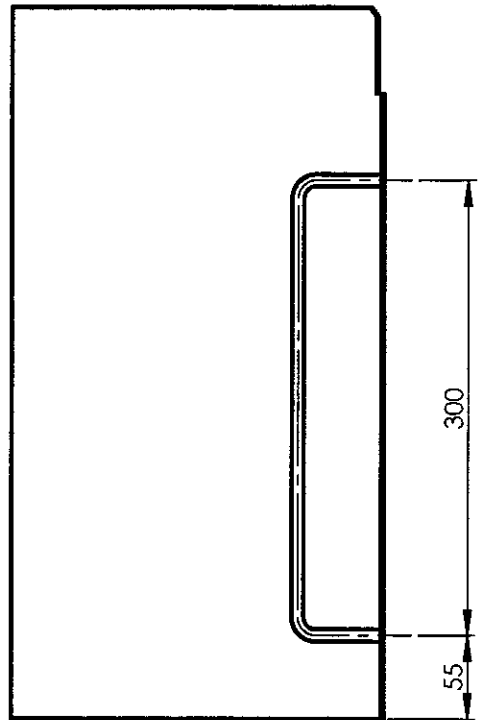
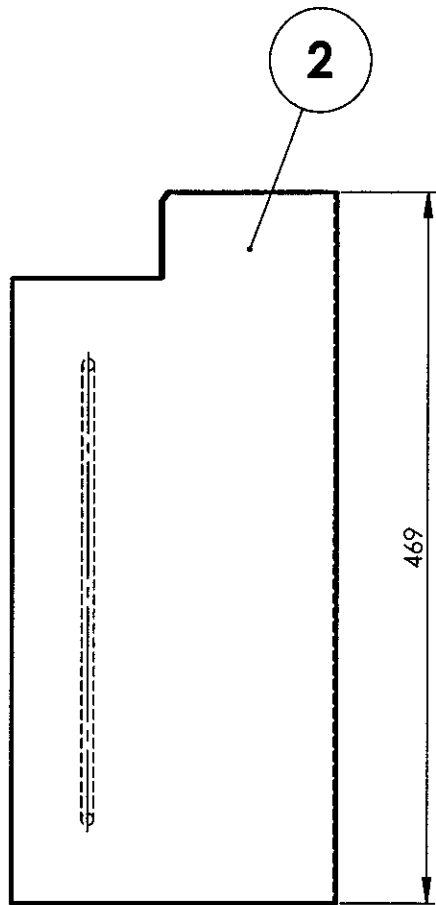
REF.DRG.NO.

	17-05-2024	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

75415014

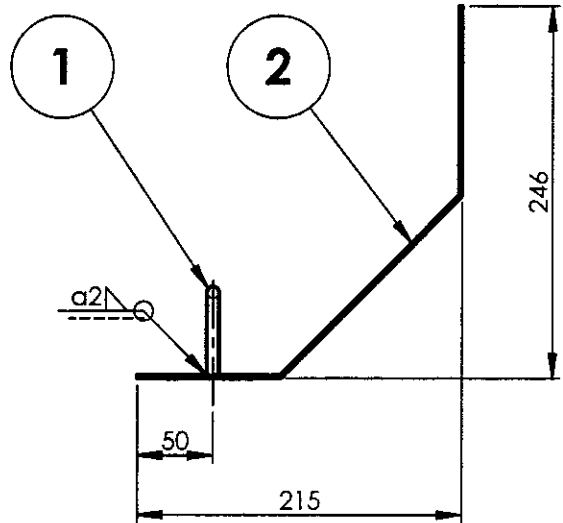
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

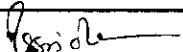



NOTE:-

1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



1	ELEC COUPLER COVER		2	AAD15877		2.83	
1	ELEC CABLE TIE ROD		1	AAB15177		0.16	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS


GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
ELEC COUPLER COVER COMPLETE				SCALE	SSE/D	
				1:5	CHD	
				ALT.	ALTD	
					DRN	3D: MAHESH 2D: KUNTI THAKUR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			SHEET 1 OF 1		LWS/PP2	
				75415014		A3

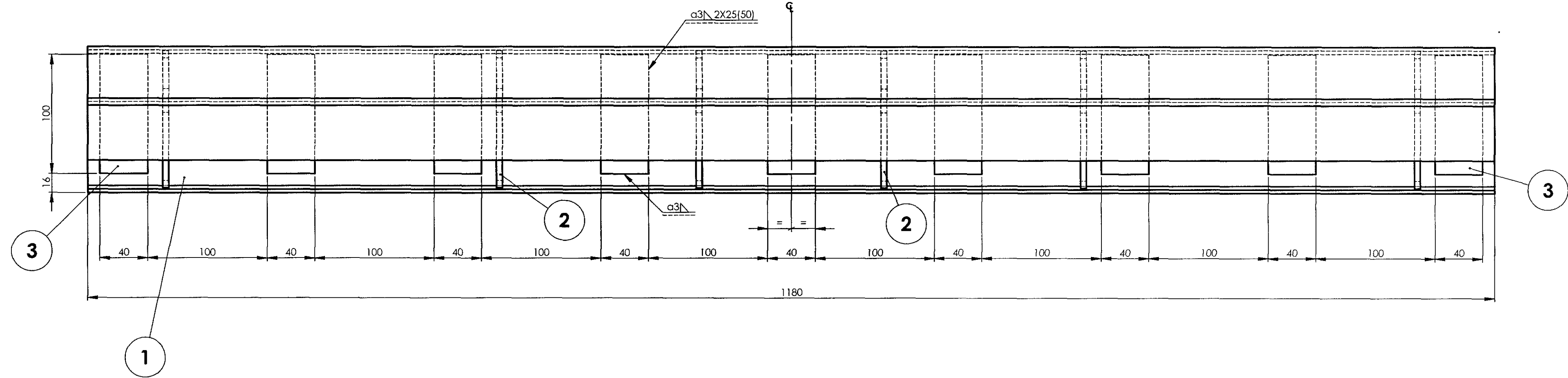
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
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REF.DRG.NO.

	17-05-2024	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.

	30-07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME



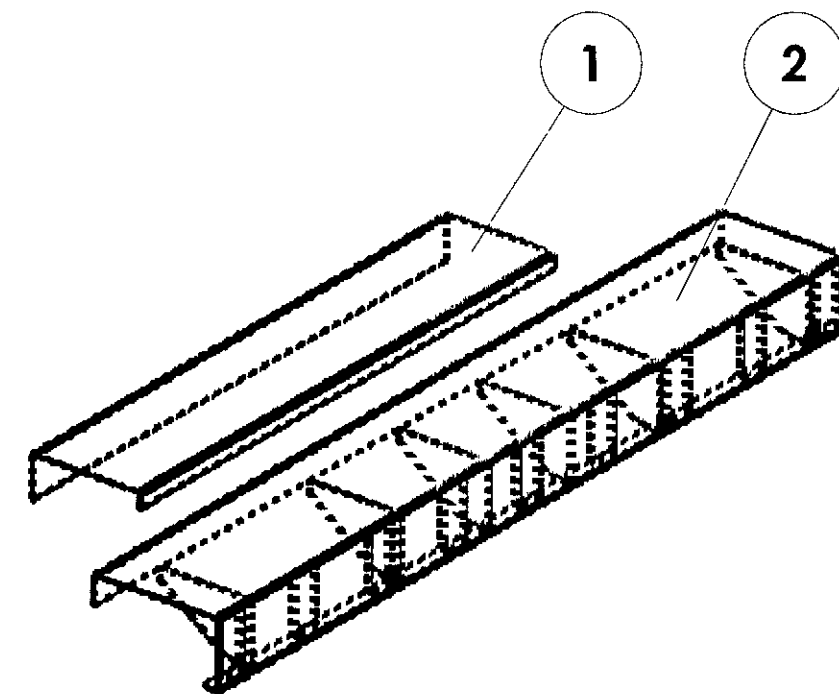
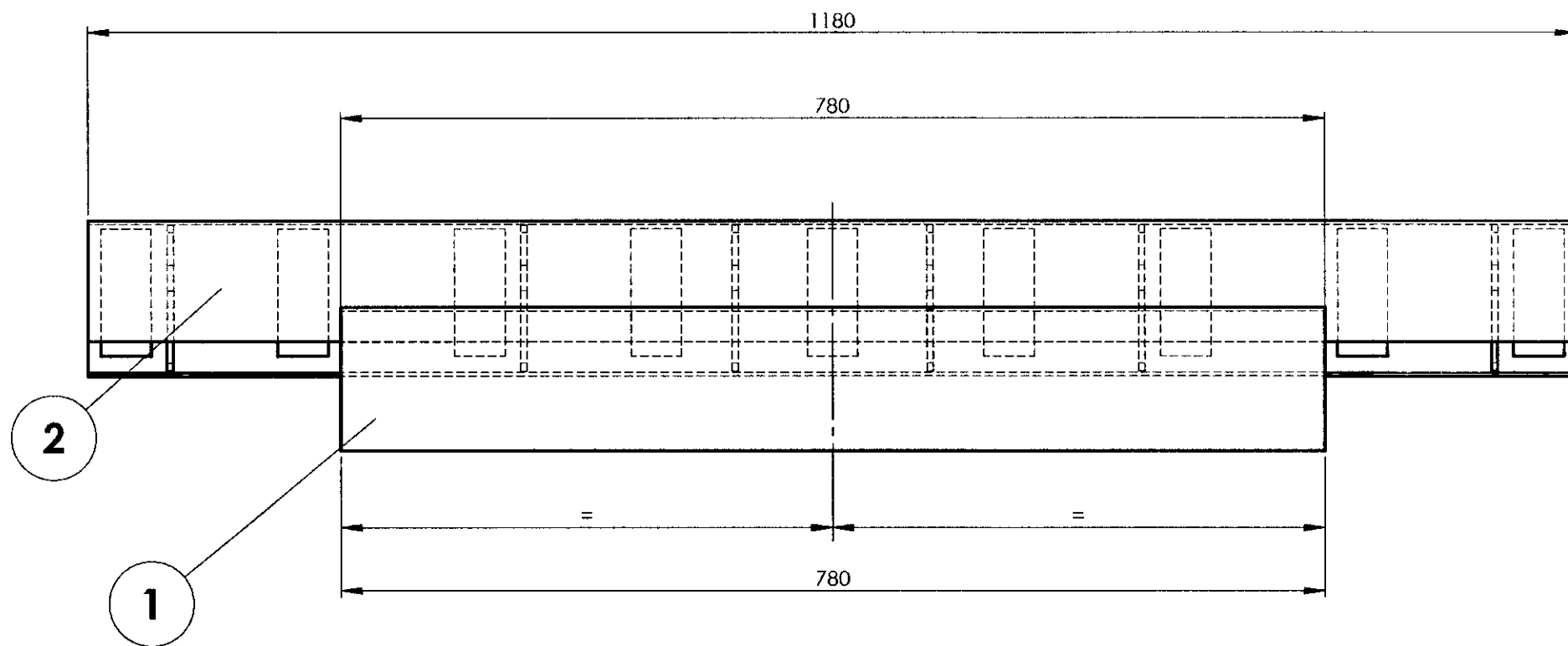
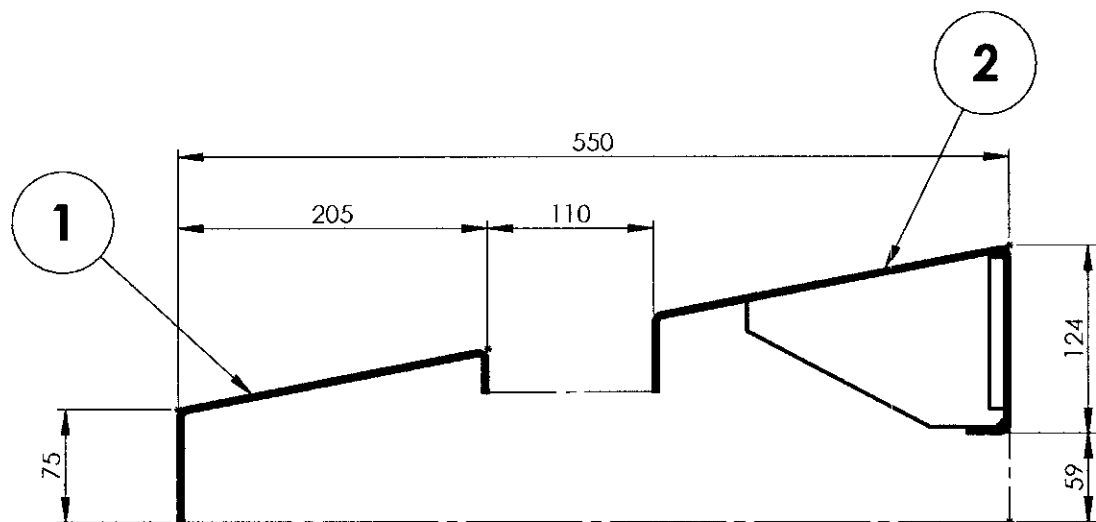
1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE 3 OF RDSO/SPCC C-201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CF C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
9. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY)ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPCC-231.

9	BACK PIECE	10x40x100	3		SS-409M	0.32	
6	RIB		2	AAE15024		0.52	
1	RAMP SHEET		1	AAE15023		12.10	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction			SURFACE AREA IN Sq.m.: 1.287			WT/ASSY IN Kgs:	
RAMP ARRANGEMENT				SCALE		I.S.	
				SSE/D		CHD	
				ALT.		ALTD	
				DRN		3D B.Surfesh 2D MA.FEESH	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		LWS/VA	
						75415015	
						A1	

75415022

▽ ROUGH MACHINED	①1 ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①d CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
9. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.
10. ITEM-1 SHALL BE SUPPLIED LOOSE AND WELDED AFTER BODY SHELL INTEGRATION.

1	RAMP ARRANGEMENT		2	75415015		18.124	
1	CHANNEL		1	AAB15841		5.44	\$
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction				SURFACE AREA IN Sq.m.: 1.765		WT/ASSY IN Kgs:	
RAMP ARRANGEMENT					SCALE 1:10	SSE: CHD	B-Suresh
					ALT	ALTD	
					DRN	DRN	B.Suresh
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		
					LWS/PP2		
					75415022		A2

REF.DRG.NO.-

DATE OF LATEST ALT.	30-07-2025	AME/SME
DATE OF FIRST ISSUE		

75415025		▽ ROUGH MACHINED		① ROUGH CLEANED	REVISIONS		APPROVED & DATE	
		▽▽ FINISH MACHINED		② BURRS REMOVED	ALT. ZONE		DESCRIPTION	
		▽▽▽ FINE FINISH MACHINED		③ CHAMFERED				

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

ISOMETRIC VIEW

DETAIL A SCALE 1 : 5

SECTION B-B SCALE 1 : 5

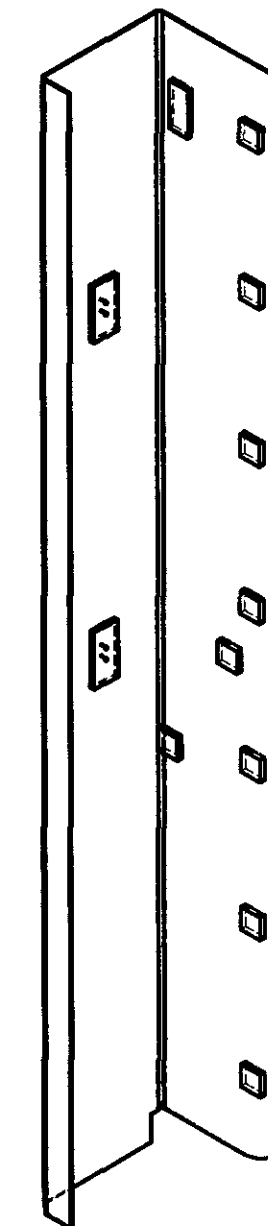
SECTION C-C SCALE 1 : 5

DETAIL D SCALE 1 : 5

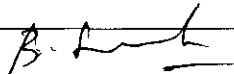
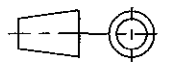
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
1	BACK PIECE	8x40x85	4		RDSO SPEC C-K201 X2 Cr Ni 12	0.22	
1	BACK PIECE	10x40x40	3		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
2	BACK PIECE	8 x 50 x 100	2		SS-409M	0.32	
1	PILLAR RH		1	AAE15039		26.54	

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
RAM PILLAR ASSEMBLY				SCALE 1:20	SSE/D
				ALT	CHD
				ALT	DRN
				ALT	MAHESH
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1	
INTEGRAL COACH FACTORY, CHENNAI - 600038				75415025 A2	

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



ISOMETRIC VIEW

1	BACK PIECE	8x40x85	4		RDSO SPEC C-K201 X2 Cr Ni 12	0.22	
9	BACK PIECE	10x40x40	3		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
2	BACK PIECE	8 x 50 x 100	2		SS-409M	0.32	
1	PILLAR RH		1	AAE15039		26.56	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
RAM PILLAR ASSEMBLY					SCALE 1:20	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	MAHESH
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					 LWCB/PP		A2
SHEET 1 OF 1					75415025		

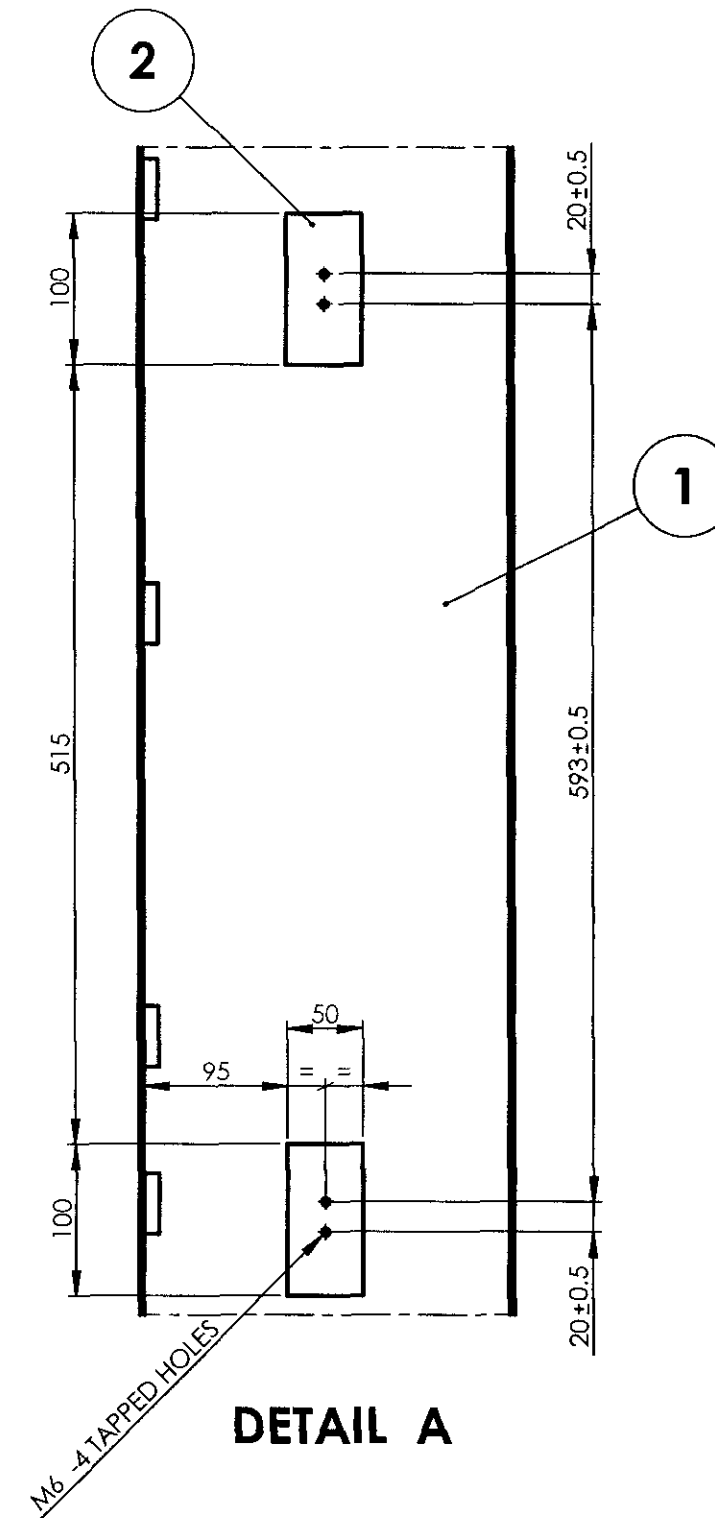
75415026

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

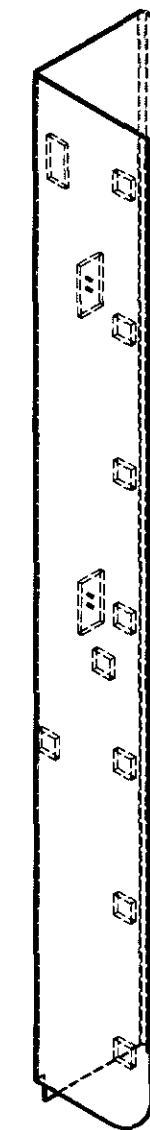
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

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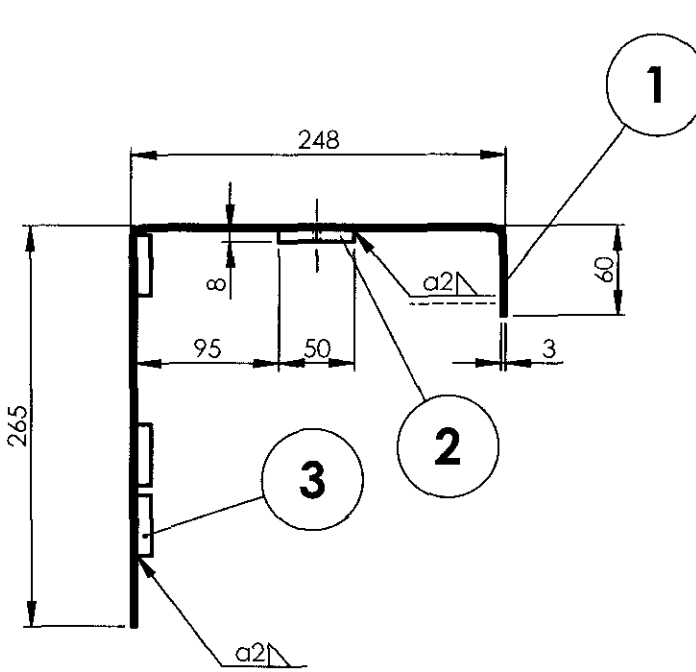
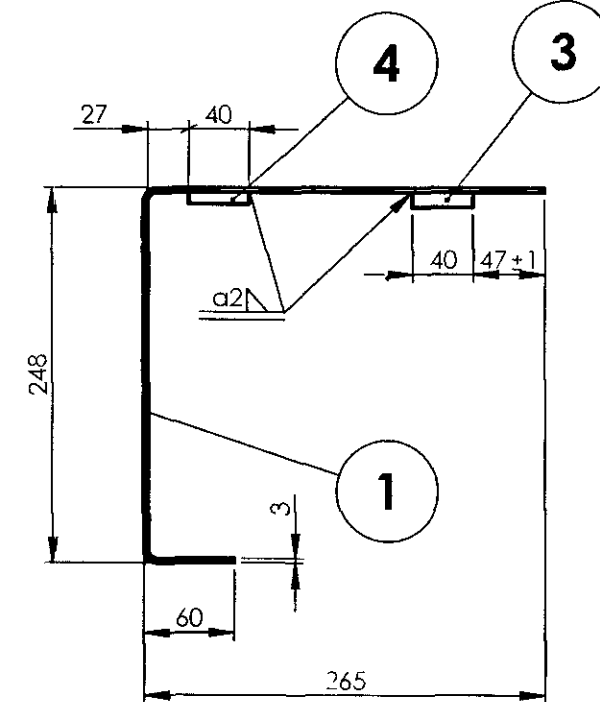
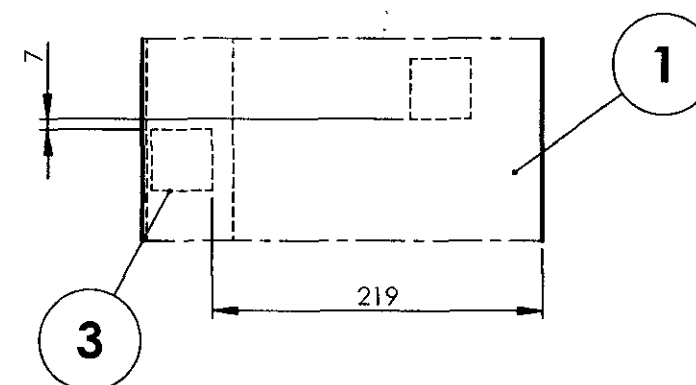
1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



DETAIL A



ISOMETRIC VIEW

SECTION B-B
SCALE 1 : 5SECTION C-C
SCALE 1 : 5DETAIL D
SCALE 1 : 5

1	BACK PIECE	8x40x85	4		RDSO SPEC C-K201 X2 Cr Ni 12	0.22	
9	BACK PIECE	10x40x40	3		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
2	BACK PIECE	8 x 50 x 100	2		SS-409M	0.32	
1	PILLAR LH		1	AAE15040		26.56	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

RAM PILLAR ASSEMBLY

SCALE 1:20

SSE/D

CHD

ALT

DRN

MAHESH

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038SHEET
1 OF 1

75415026

A2

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001.
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75415027

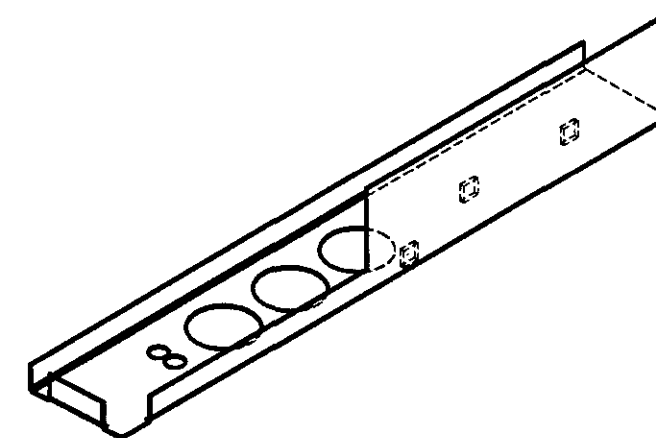
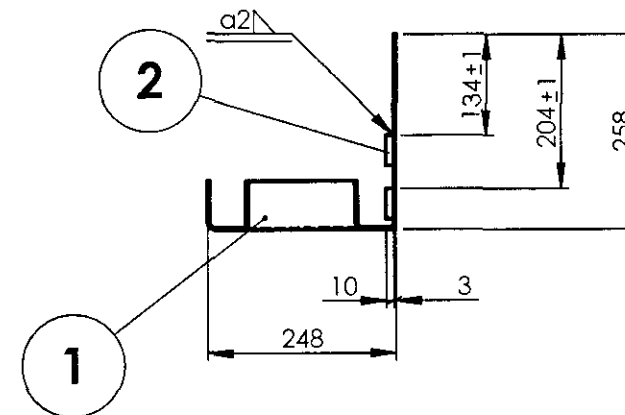
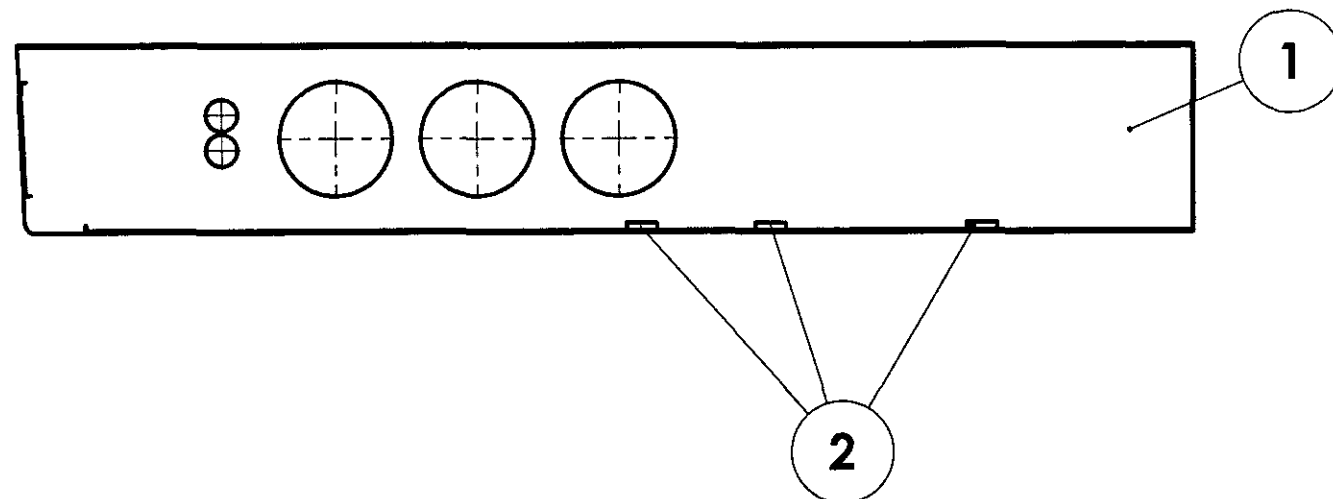
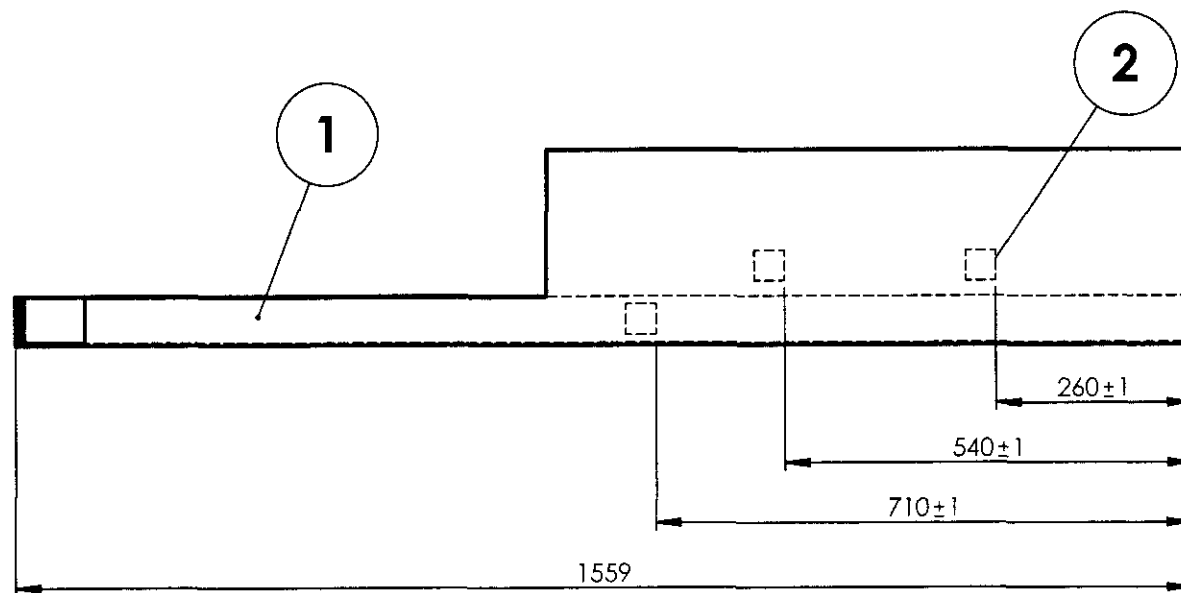
▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

ISOMETRIC VIEW

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
9. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

3	BACK PIECE	10x40x40	2		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
1	FLANGE		1	AAE15041		16.262	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction				SURFACE AREA IN Sq.m.:1387769.89		WT/ASSY IN Kgs:	
FLANGE					SCALE	SSE/D	<i>B. Lush</i>
					1:10	CHD	
					ALT.	ALTD	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					DRN	Maresh	
					LWS/PP2		
SHEET 1 OF 1				75415027		A3	

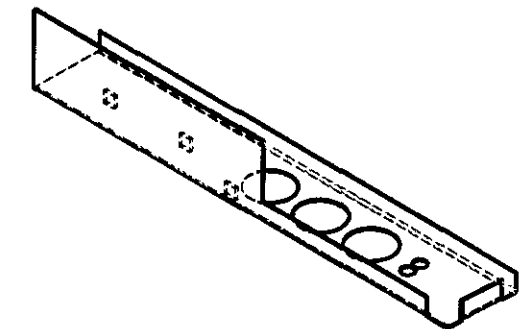
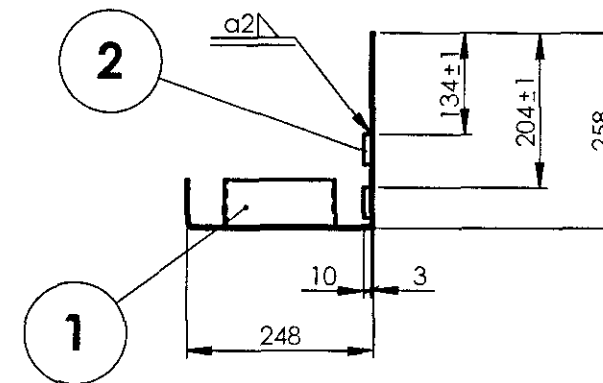
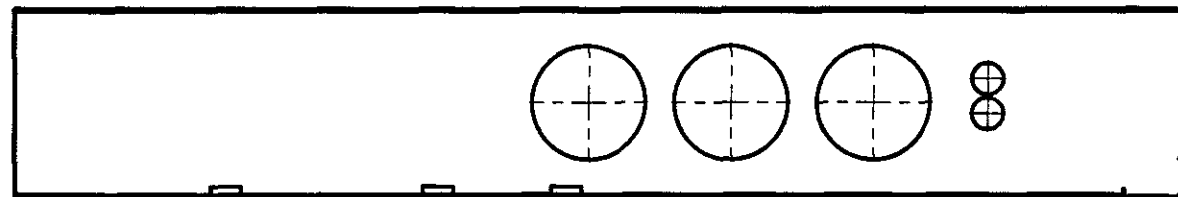
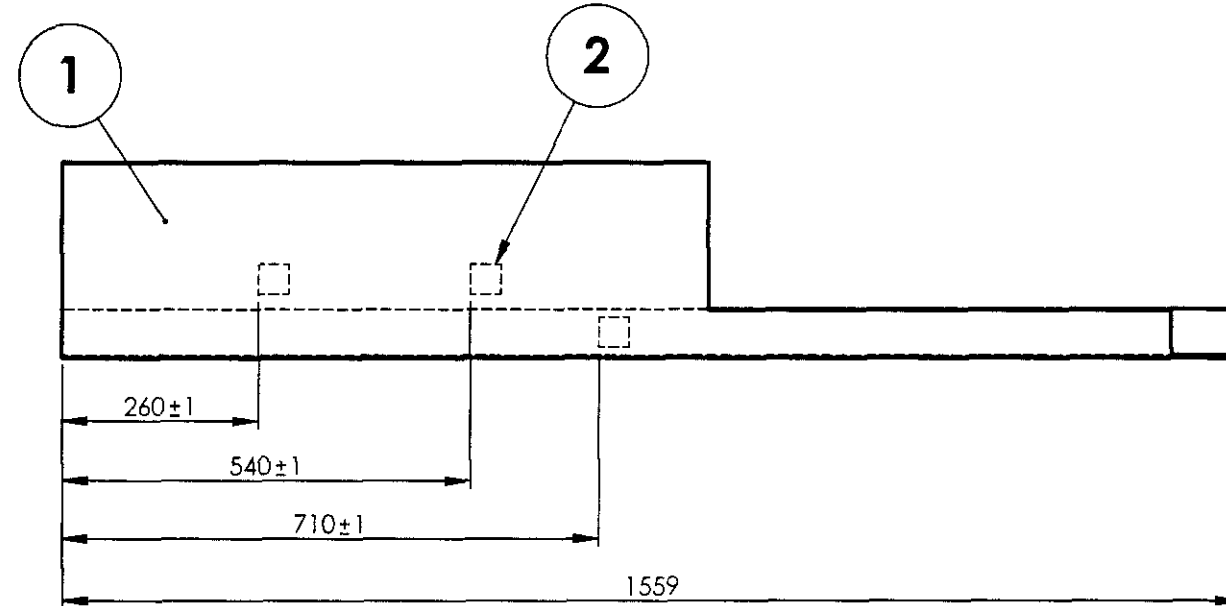
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	30/07-2025	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

75415028

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
9. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

3	BACK PIECE	10x40x40	2		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
1	FLANGE		1	AAE15042		14.262	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction				SURFACE AREA IN Sq.m.: 1387767.01		WT/ASSY IN Kgs:	
FLANGE					SCALE	SSE/D	B. Smith
					1:10	CHD	
					ALT.	ALTD	
						DRN	Maresh
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					LWS/PP2		
					75415028		A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

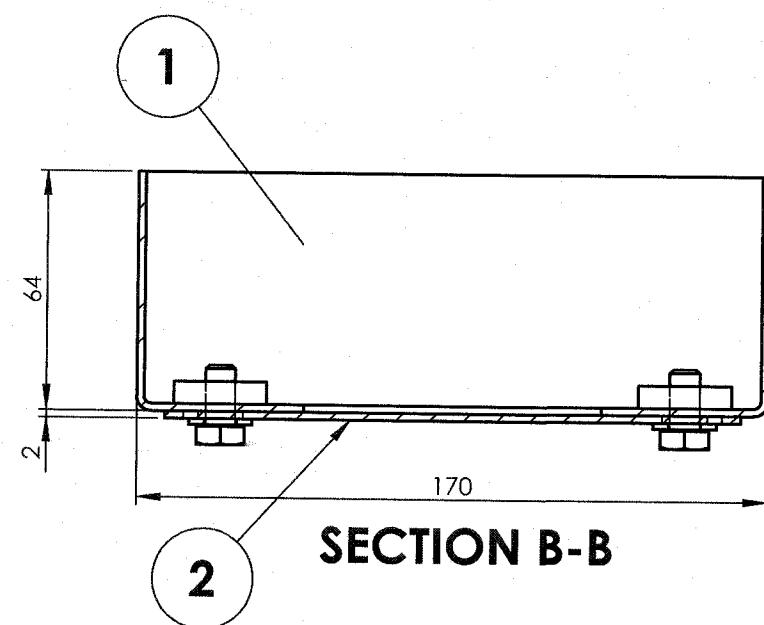
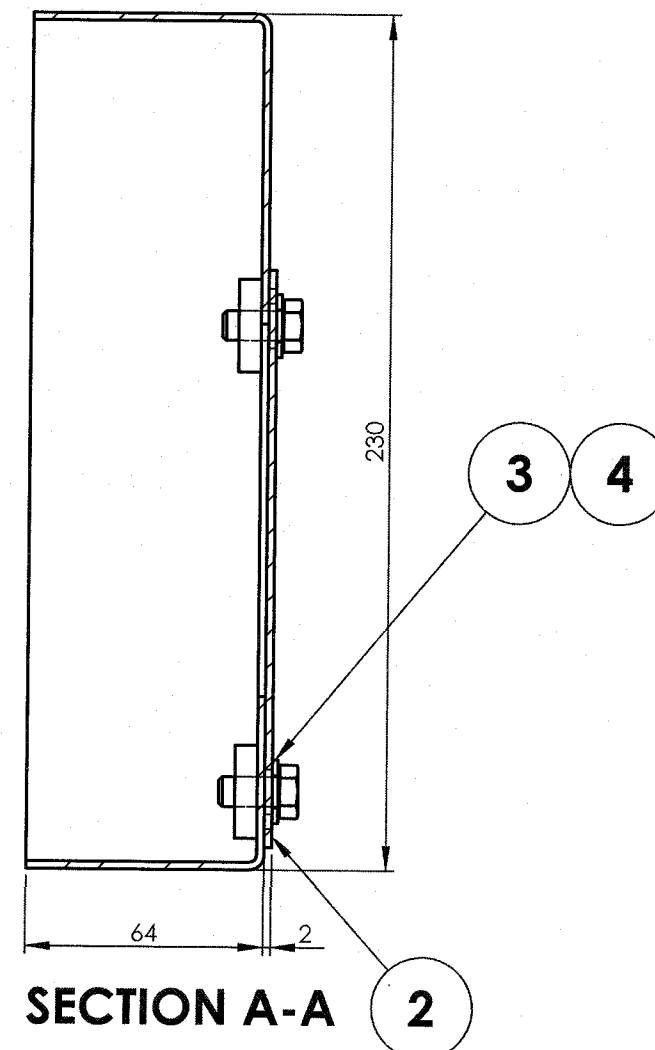
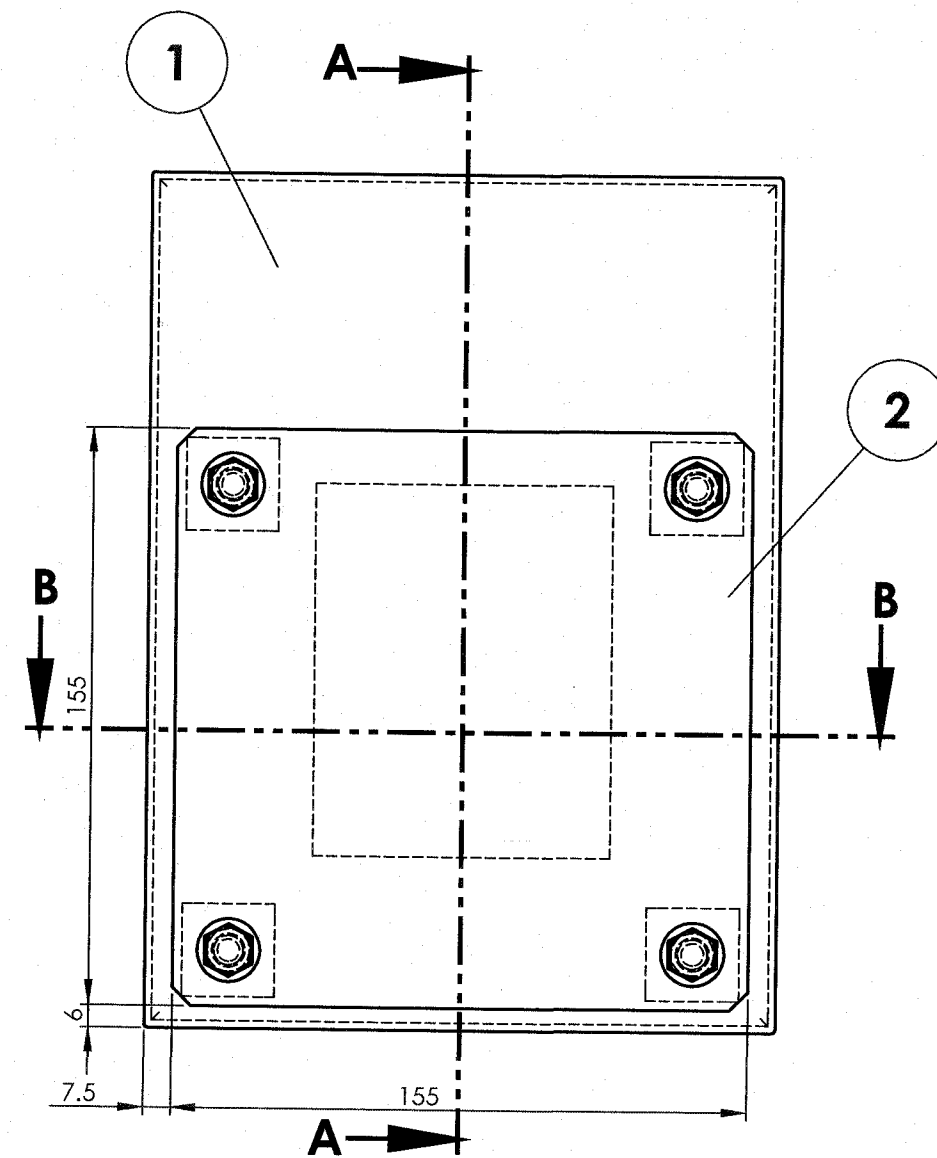
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	30-07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

79115005

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		



NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELD SPATTERS SHALL BE GROUND.
3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.

WELD TESTING PREFERENCES AS PER EN 15085-3:2007 (E) TABLE-4

WELD PERFORMANCE CLASS	QUALITY LEVEL FOR IMPERFECTIONS EN ISO 5817 €	INSPECTION CLASS	VOLUMETRIC TEST RT or UT	SURFACE TEST MPT or DPT	VISUAL EXAMINATION VT
CP C2	B	CT2 \$	NOT REQUIRED	NOT REQUIRED	100%

THE TEST METHODS INDICATED IN THIS TABLE SHALL BE THE MINIMUM CAPABLE OF ENSURING COMPLIANCE OF THE WELDED JOINTS. ADDITIONAL TESTS DEPENDING ON THE MATERIAL, THE DESIGN OR CUSTOMER REQUIREMENTS MAY BE NECESSARY.

\$ FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.

€ ALL APPLICABLE CLAUSES FOR VISUAL INSPECTION SHALL BE CARRIED OUT.

FOR APPLICABLE WELDING PROCEDURE SPECIFICATION (WPS) REFER DRAWING NO ICF/STD-9-0-999

4	HEXAGON HEAD SCREW	IS 1364 (Part-2)/ ISO 4017 - M8 x 16-A2-70	4	IS:1364 (PART-2)	IS:1367 (P-14) A2-70			
4	PUNCHED WASHER	A9 IS:2016-SS	3	IS:2016	AISI-304			
1	CLOSING PIECE FOR GPS ANTENA ASSY		2	AAB15423		0.38		
1	BRACKET ASSY FOR GPS ANTENA		1	79115006		1.374		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: 1-5			SURFACE AREA IN Sq.m.: 0.222			WT/ASSY IN Kgs:		
BRACKET ASSY COMPLETE FOR GPS ANTENA						SCALE 1:2	SSE/D	
							CHD	
						ALT	ALTD	
						DRN	V.SURESHBA3U	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							EMU/US/MC/AC	
							79115005	
						SHEET 1 OF 1		
						A2		

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

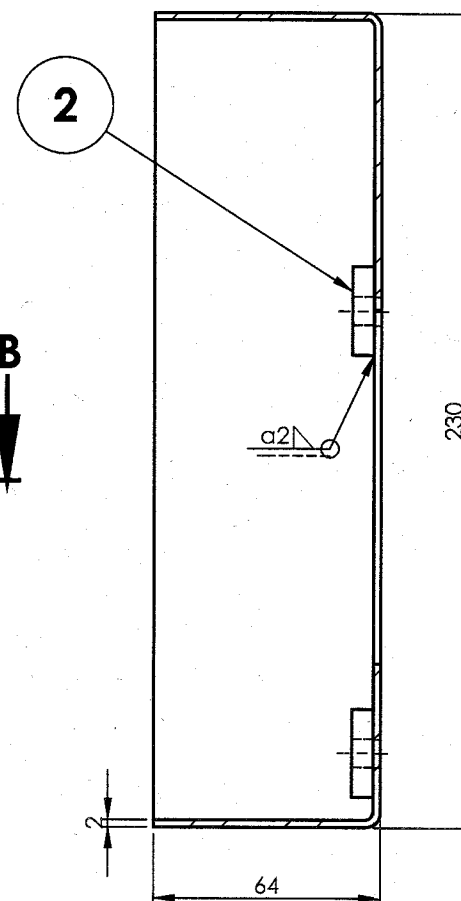
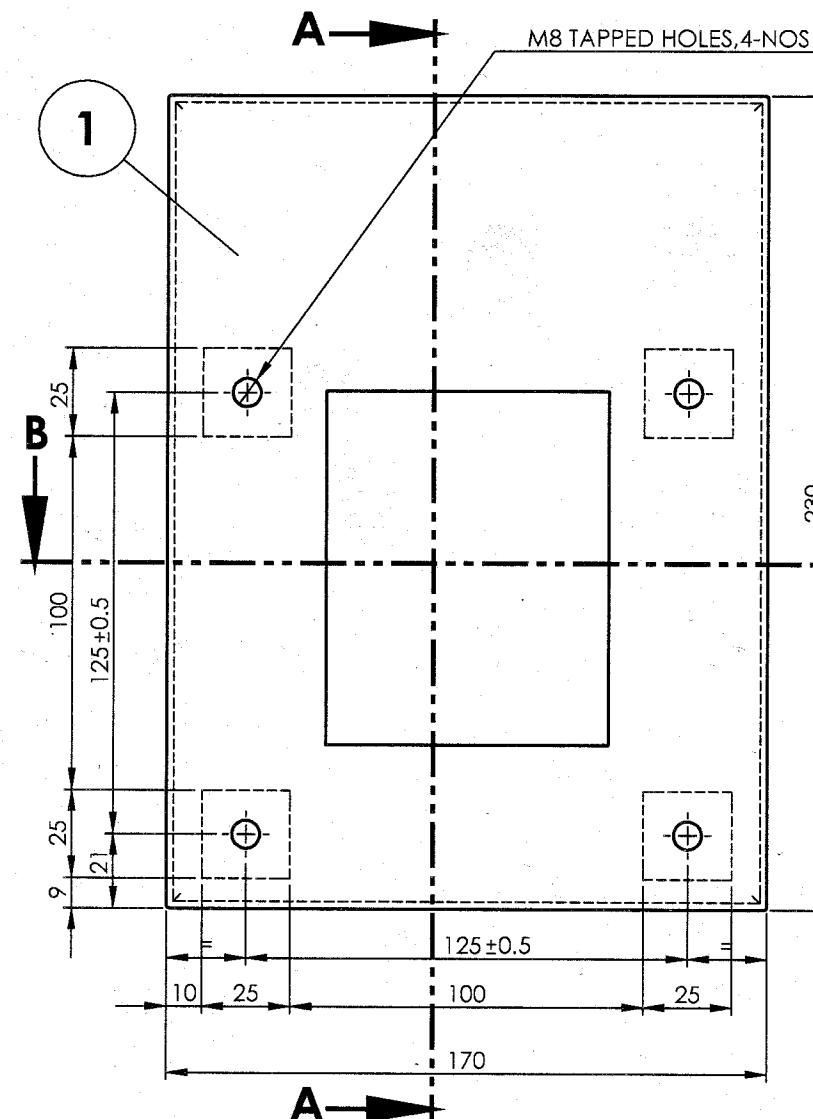
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DATE OF FIRST ISSUE		

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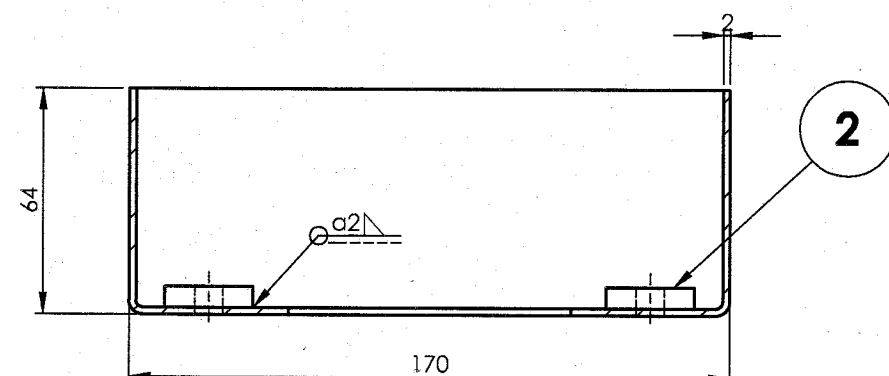
▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	018 CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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SECTION A-A



SECTION B-B

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
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WELD TESTING PREFERENCES AS PER EN 15085-3:2007(E) TABLE-4

WELD PERFORMANCE CLASS	QUALITY LEVEL FOR IMPERFECTIONS EN ISO 5817 €	INSPECTION CLASS	VOLUMETRIC TEST RT or UT	SURFACE TEST MPT or DPT	VISUAL EXAMINATION VT
CP C2	B	CT2 \$	NOT REQUIRED	NOT REQUIRED	100%

THE TEST METHODS INDICATED IN THIS TABLE SHALL BE THE MINIMUM CAPABLE OF ENSURING COMPLIANCE OF THE WELDED JOINTS. ADDITIONAL TESTS DEPENDING ON THE MATERIAL, THE DESIGN OR CUSTOMER REQUIREMENTS MAY BE NECESSARY.

\$ FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.

€ ALL APPLICABLE CLAUSES FOR VISUAL INSPECTION SHALL BE CARRIED OUT.

FOR APPLICABLE WELDING PROCEDURE SPECIFICATION (WPS) REFER DRAWING NO ICF/STD-9-0-999

4	FLAT	6x25x25	2		SS-409M	0.03	
1	BRACKET FOR GPS ANTENA		1	AAB15410		1.27	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5

SURFACE AREA IN Sq.m.: 0.168

WT/ASSY IN Kgs:

BRACKET ASSY FOR GPS ANTENA

SCALE

1:2

ALT.

DRN

EMU/US/MC/AC

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

79115006

A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.:-

DATE OF LATEST ALT.

11-08-2018

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