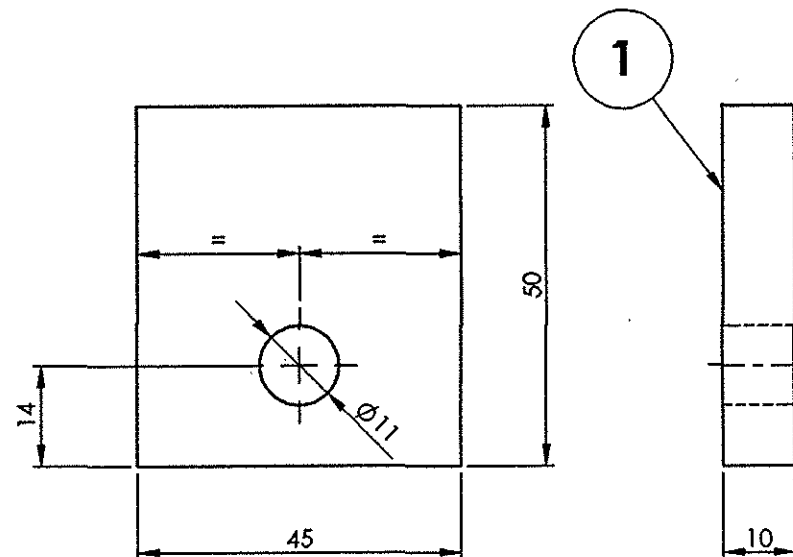


AAB10073

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

REVISIONS

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



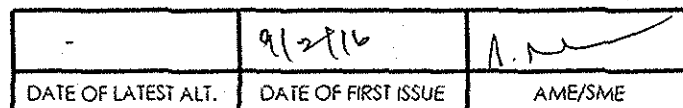
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.

1	PLATE	10 x 45 x 50	1		RDSO/SPEC C-K201 X2CrNi12	0.172	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.007			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	

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



REF.DRG.NO.-

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

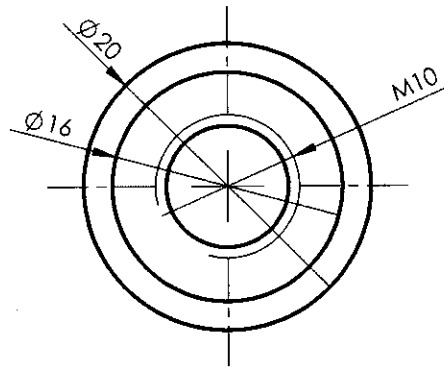
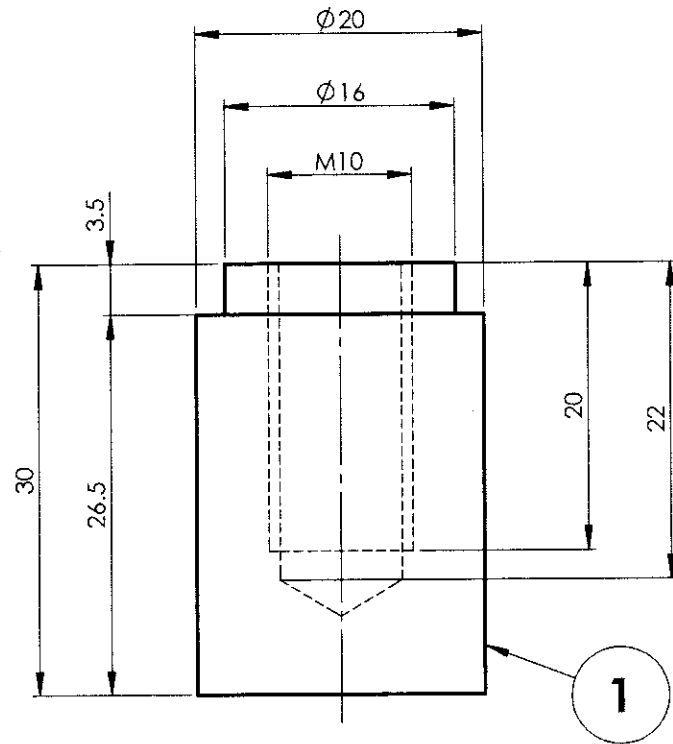
1		2		3		4		5		6		7		8			
AAD16884				▽ ROUGH MACHINED		⑩ ROUGH CLEANED		REVISIONS									
				▽▽ FINISH MACHINED		⑪ BURRS REMOVED		ALT.		ZONE		DESCRIPTION				APPROVED & DATE	
				▽▽▽ FINE F.N.SH MACHINED		⑫ CHAMFERED											

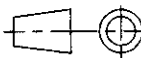
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.		06-03-21		16/12/21	
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME	

GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
SCREWING PIECE				SCALE	SSE/D	<i>L. Panduranga</i>
				2:1	CHD	
				ALT.	ALTD	
				-	DRN	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038						
				AAD16884		
				A3		


REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

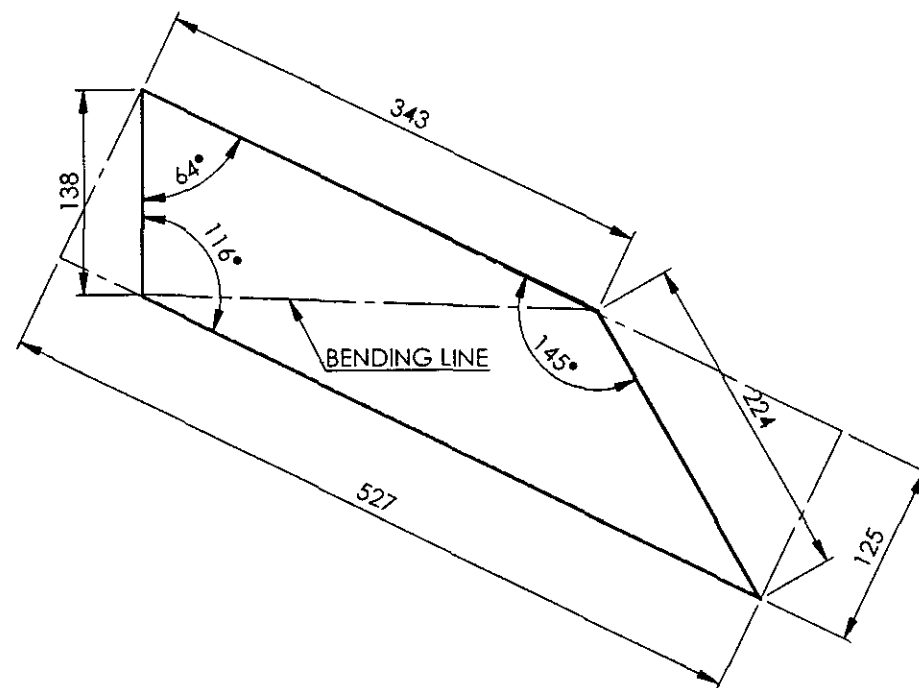
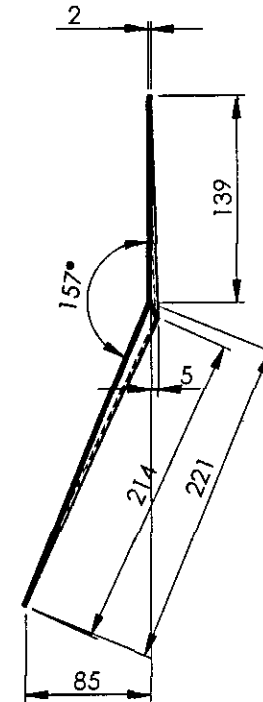
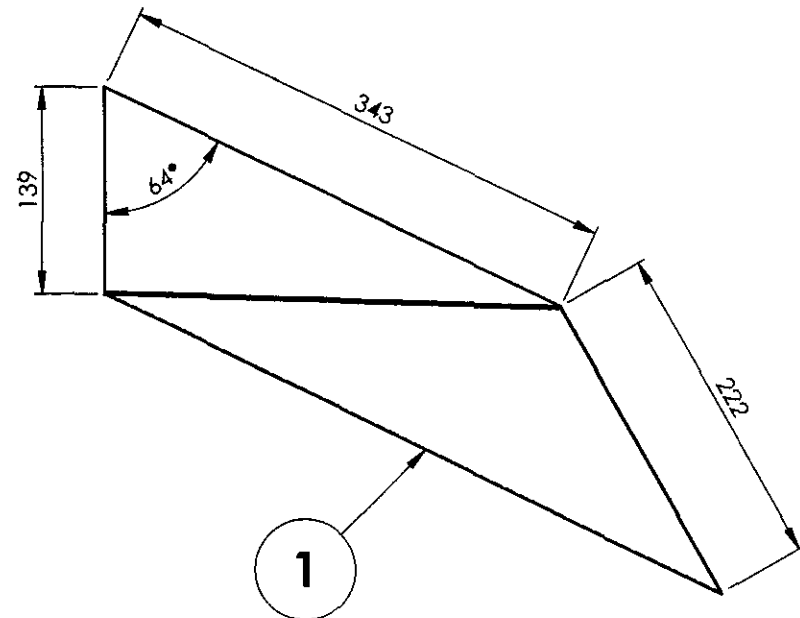


1	SCREWING PIECE	Ø 20 X 30	1		AISI 304	0.06	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
SCREWING PIECE					SCALE	SSE/D	<i>L. Panduranga Rao</i>
					2:1	CHD	
					ALT.	ALTD	S K MUTHUKUMAR
					-	DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAD16884		A3

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
					2	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

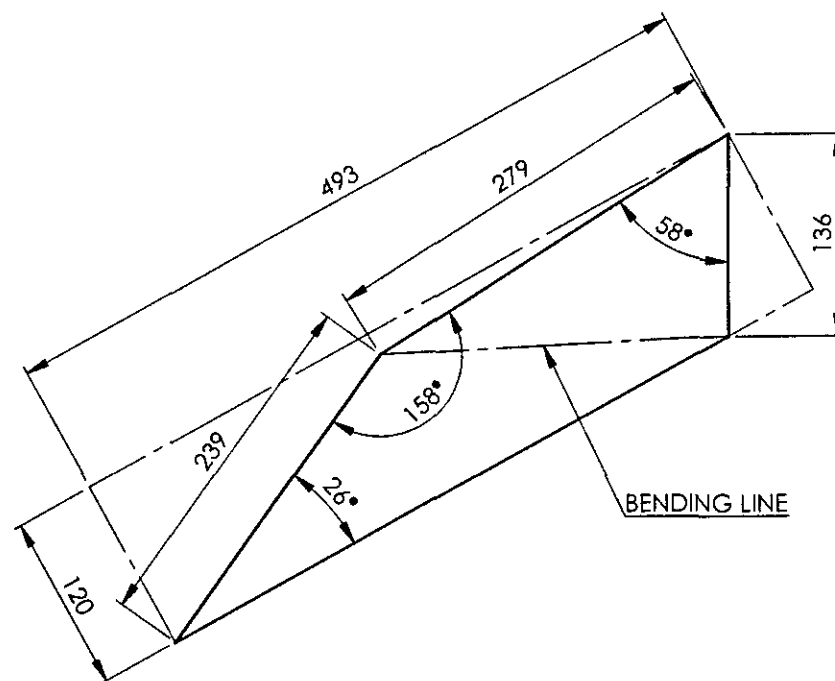
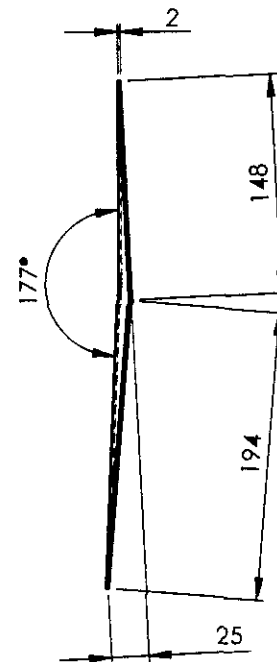
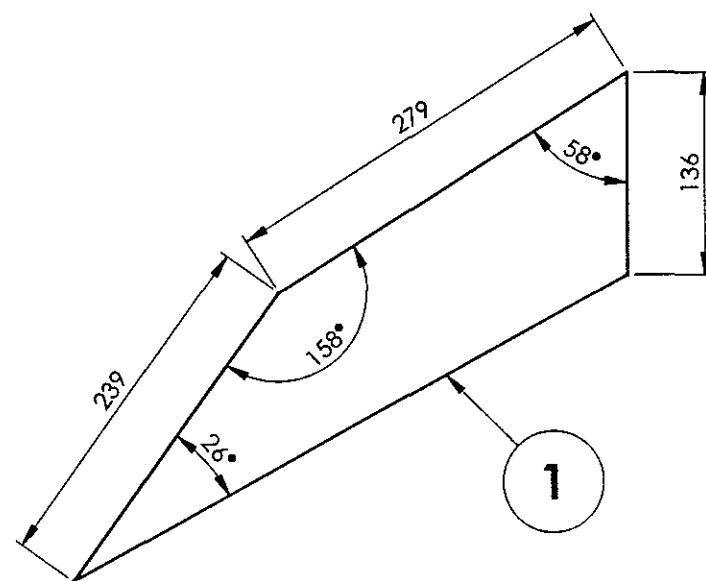
15-03-24	07-06-23	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

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


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.

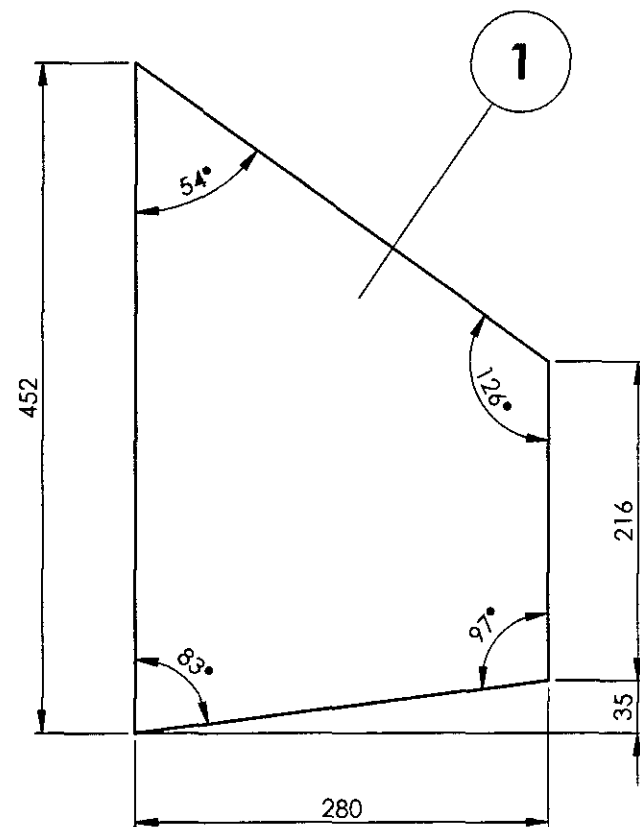
REF.DRG.NO.3 10113.0.20.200.144


1		2		3		4		5		6		7		8	
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.		17/12/24	
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.															
15-03-24 07-06-23															
DATE OF LATEST ALT. DATE OF FIRST ISSUE AAE/SME															
GROUP: 1-6 Roof Construction SURFACE AREA IN Sq.m.: 0.287 WT/ASSY IN Kgs: 2.269															
BOTTOM SHEET															
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038															
SHEET 1 OF 1															
AAE16688 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.	 8/13/24



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. Pandiragala
					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	AAE16689		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 10113.0.20.200.139

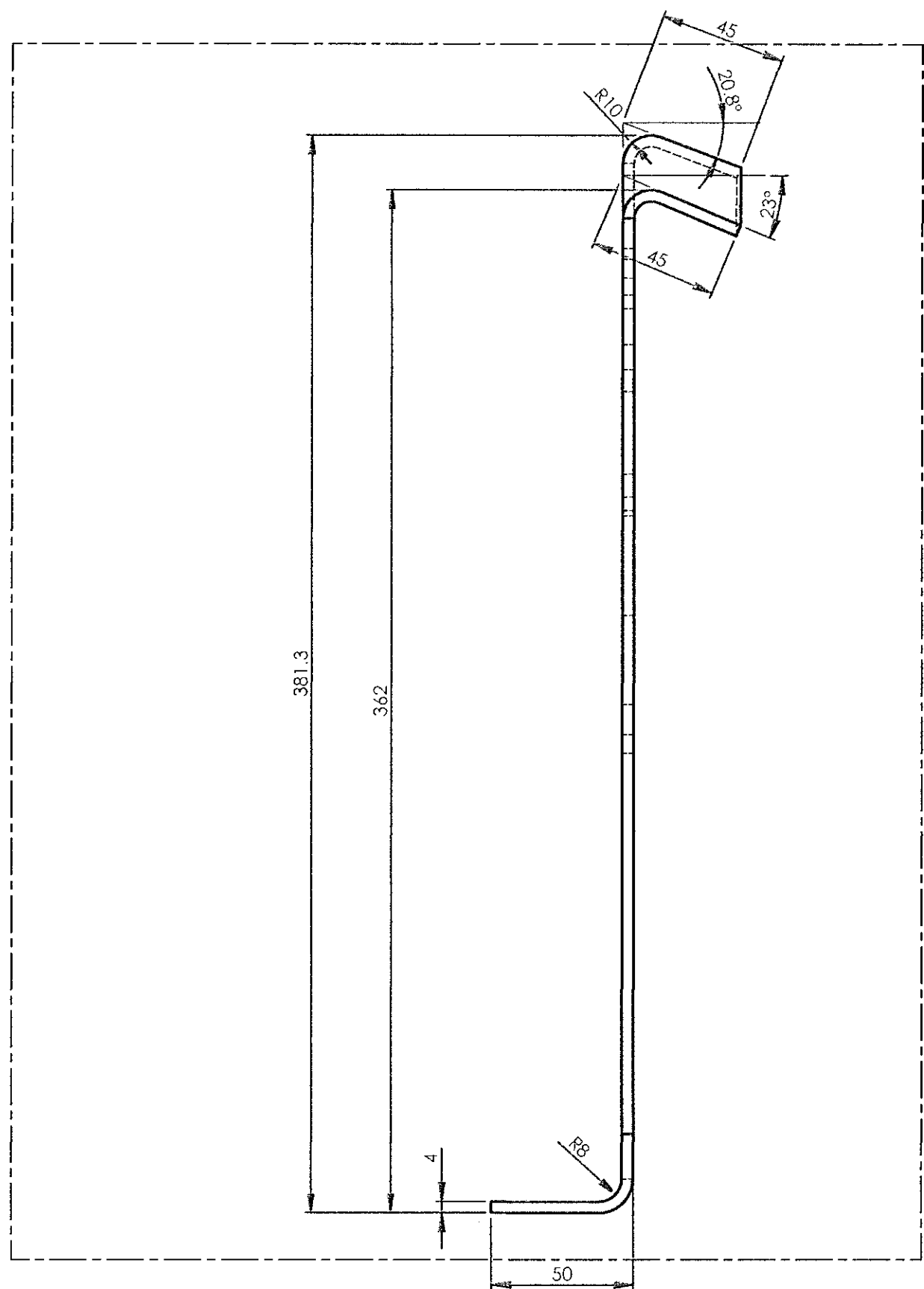
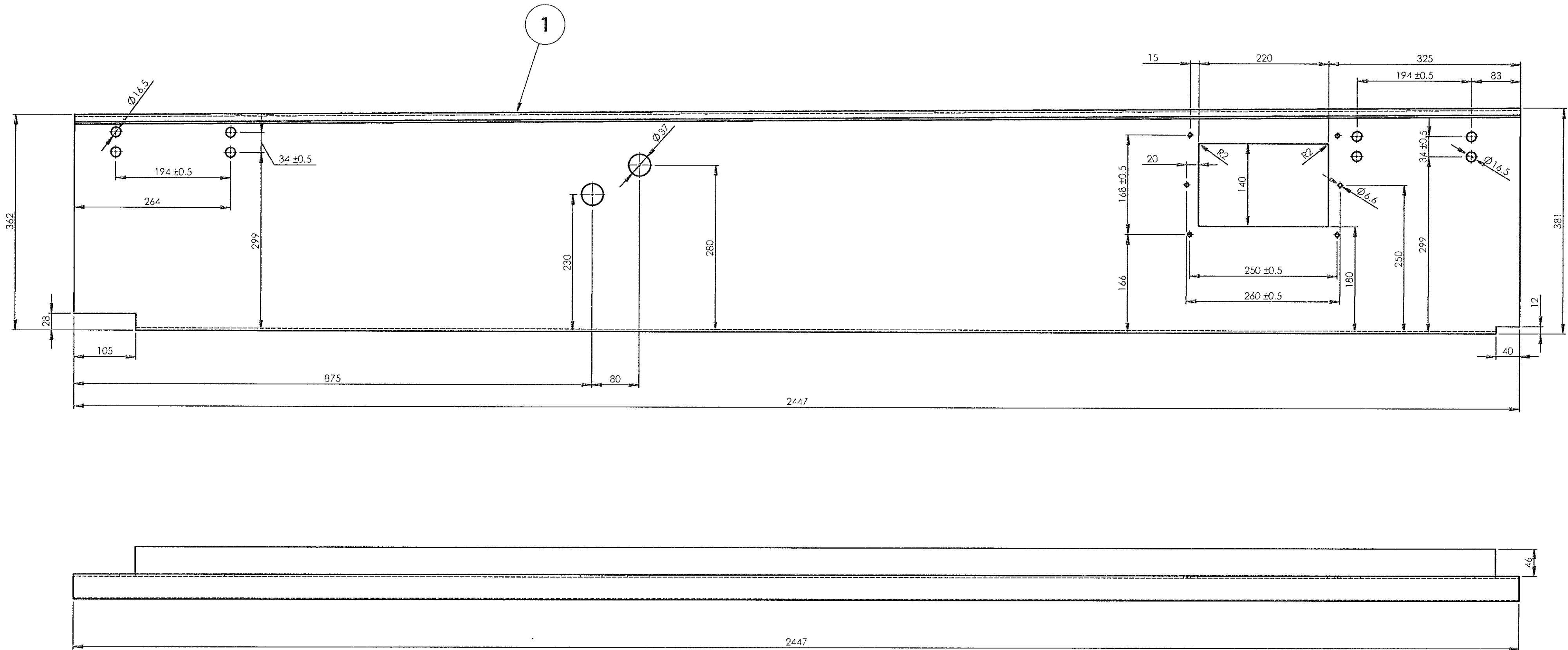
15-03-24	07-06-23	V. Sathish Kumar
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAF16122

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

① ROUGH CLEANED
①① BURRS REMOVED
①① CHAMFERED



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



DETAIL X
SCALE 1 : 2

REF.DRG.NO.

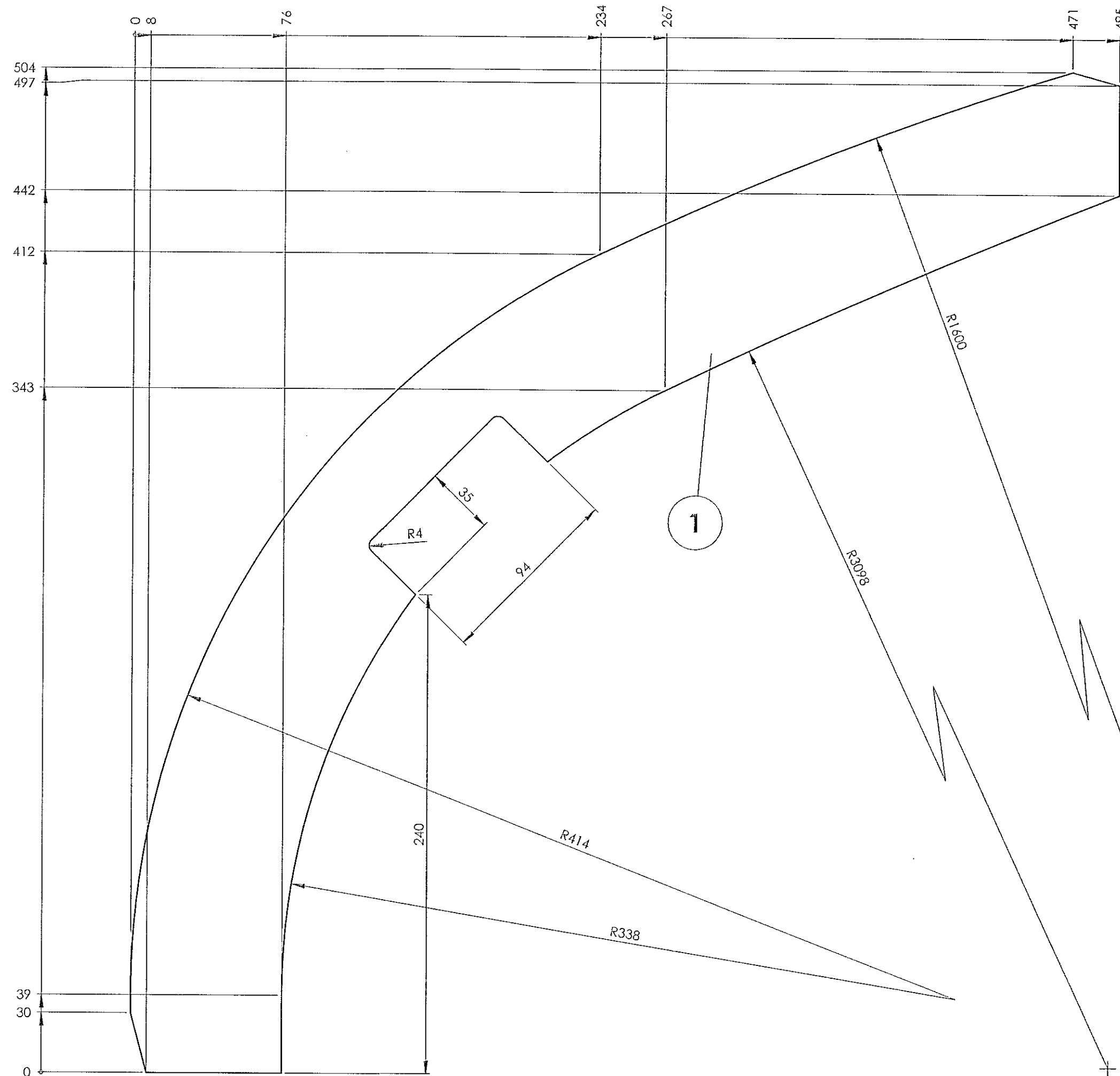
12/01/26 04/09/25
DATE OF LATEST ALT. DATE OF FIRST ISSUE NAME/SME

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	MATLSPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 2.139		WT/ASSY IN Kgs:		
MEMBER					SCALE		
					1:5	SSE/D CHD	
					ALT. α	ALTD	E.SATHISH KUMAR
						DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038							
SHEET 1 OF 1					AAF16122		A1

AAF16158

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①③ CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



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.2 10113.0.20.210.103

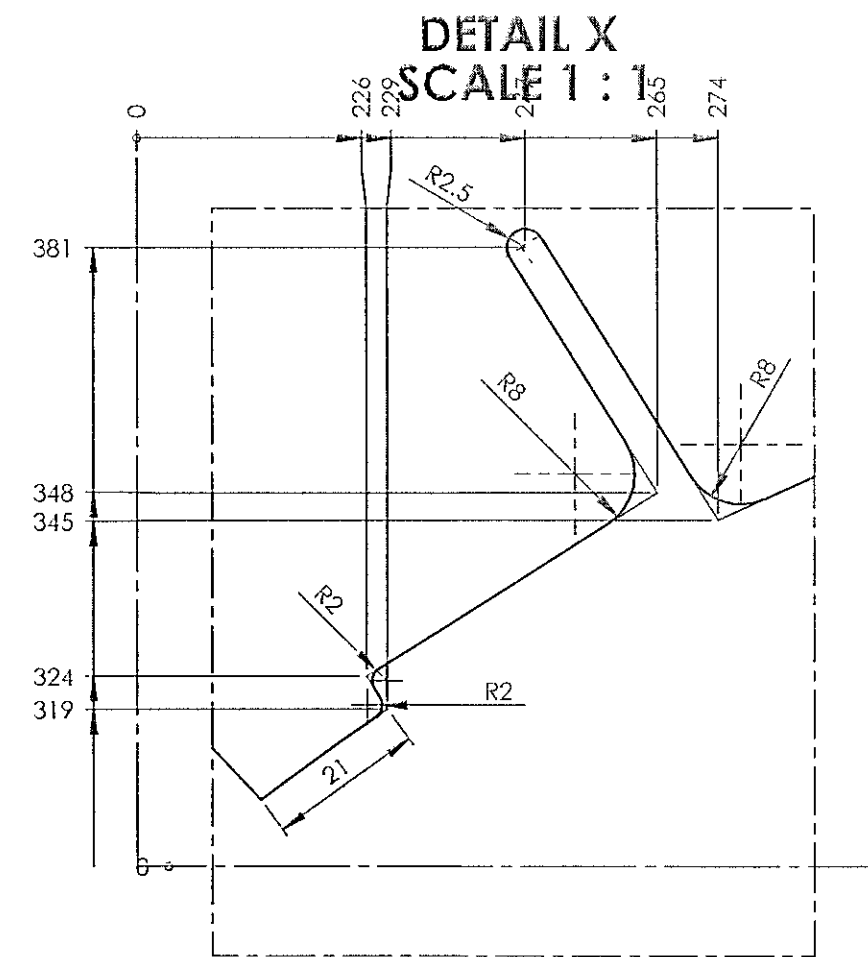
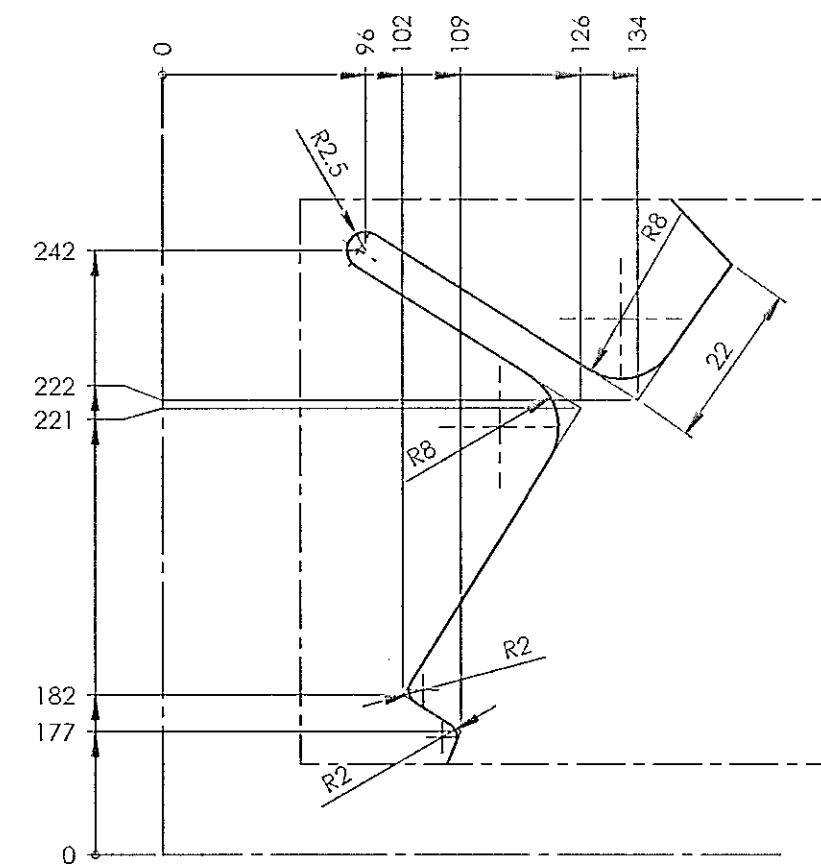
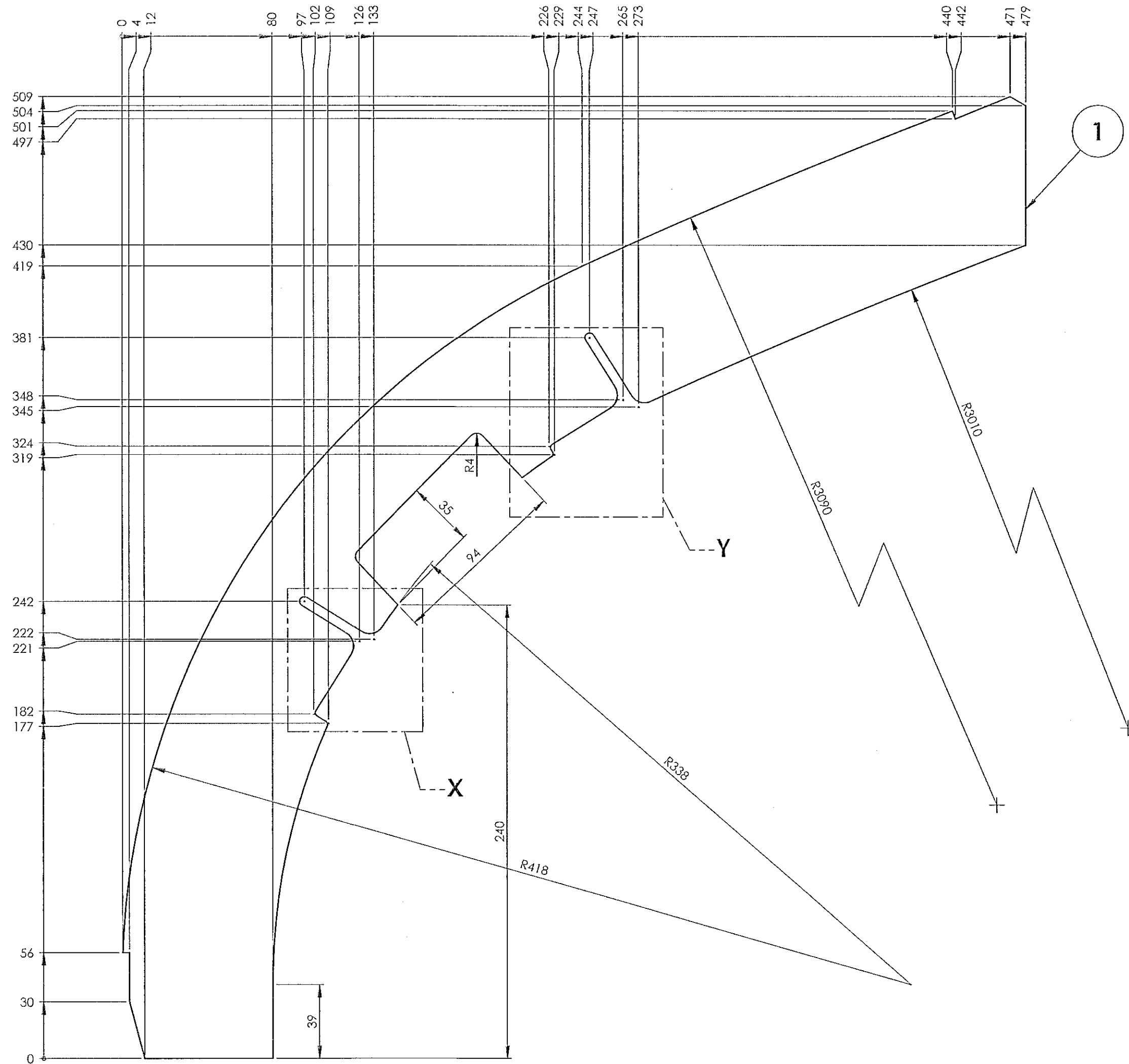
DATE OF LATEST ALT.	04/09/25	AME/SME
---------------------	----------	---------

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

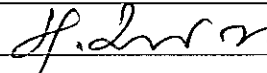
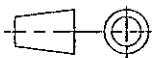
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

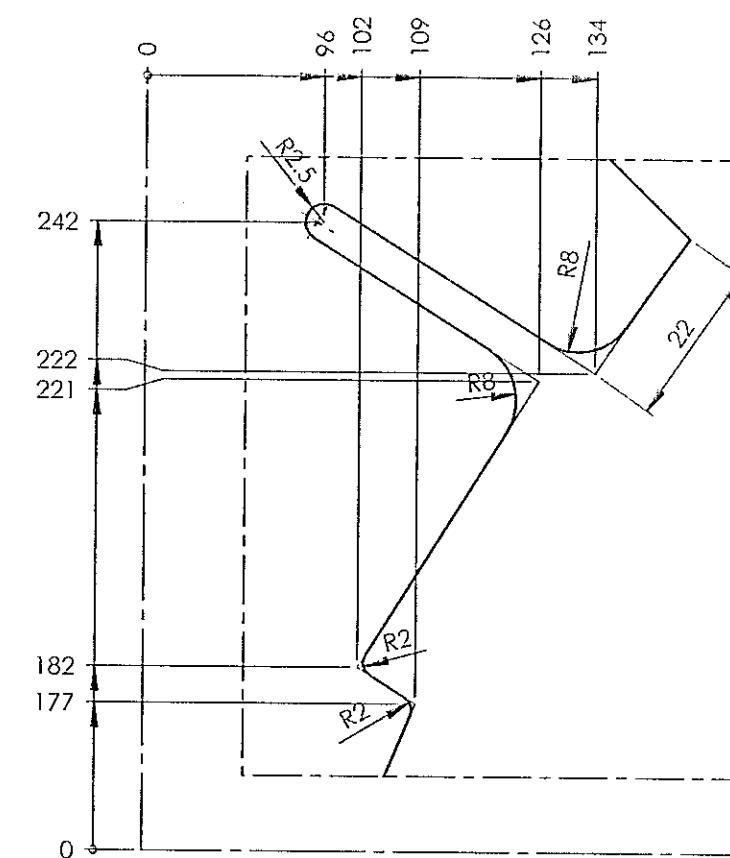
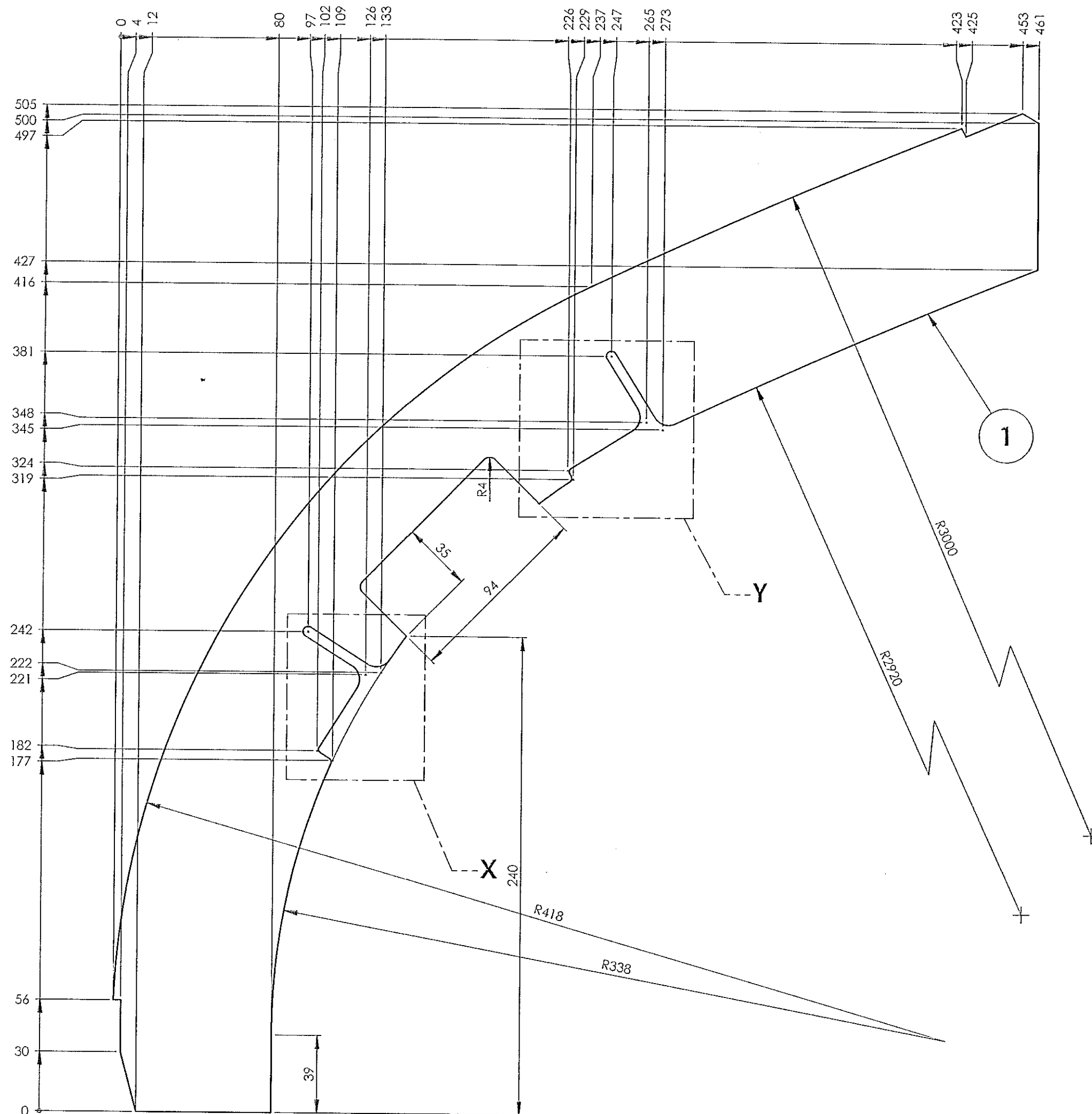
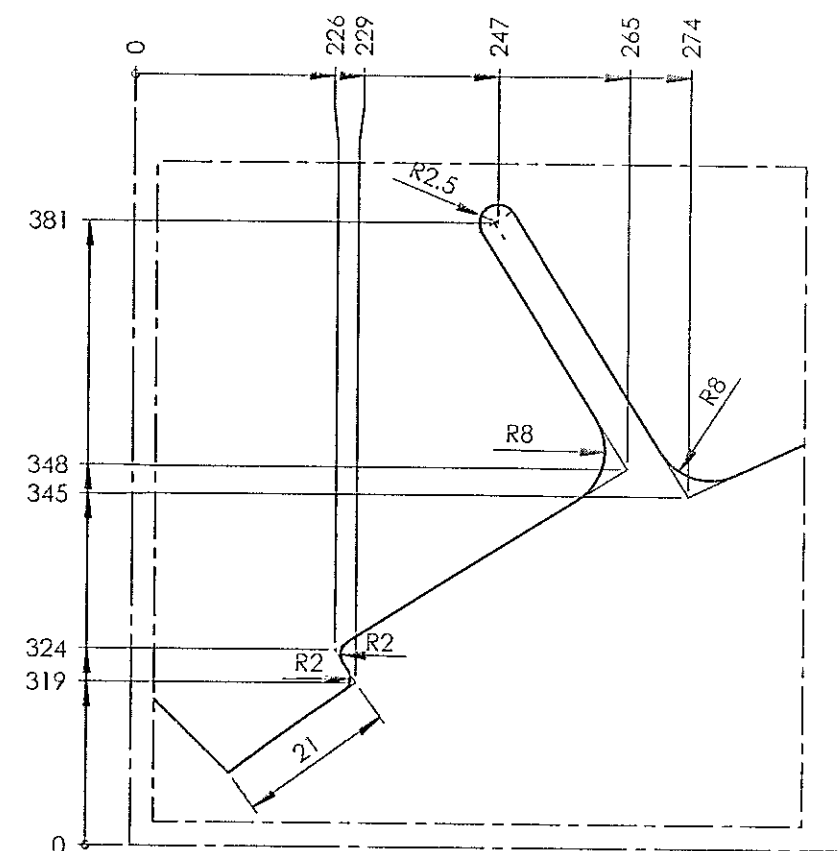
DATE OF LATEST ALT.	04/09/25	AME/SME
---------------------	----------	---------

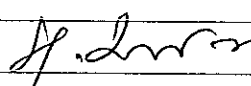
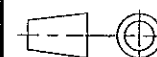
1	ROOF ARCH	4 x 479 x 508.5	1		RDSO/SPEC C-K201 X2CrNi12	1.660		
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 0.111		WT/ASSY IN Kgs:			
ROOF ARCH					SCALE 1:2	SSE/D		
						CHD		
					ALT'	ALTD		
						DRN		E.SATHISH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

AAFI16160

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

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		

DETAIL X
SCALE 1 : 1DETAIL Y
SCALE 1 : 1

1	ROOF ARCH	4 x 462 x 505	1		RDSO/SPEC C-K201 X2CrNi12	1.614		
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:			
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		AAF16160	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

REF.DRG.NO.

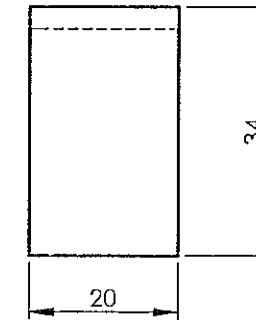
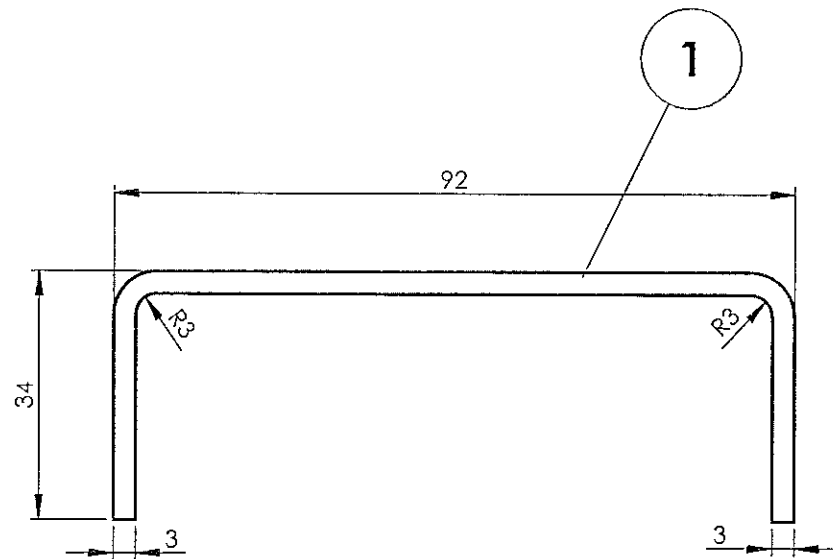
DATE OF LATEST ALT.	04/09/25	AME/SME
---------------------	----------	---------

AA16161

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

REVISIONS

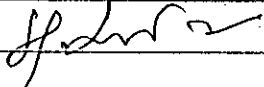
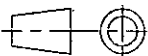
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------



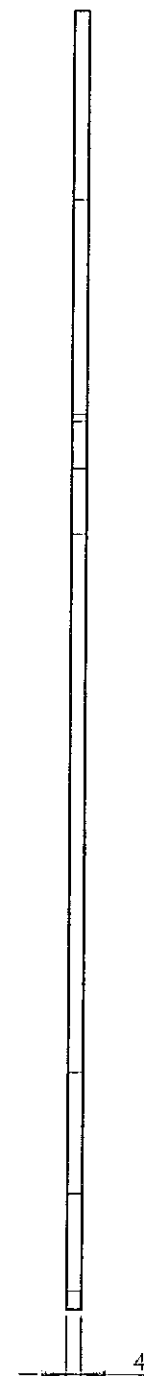
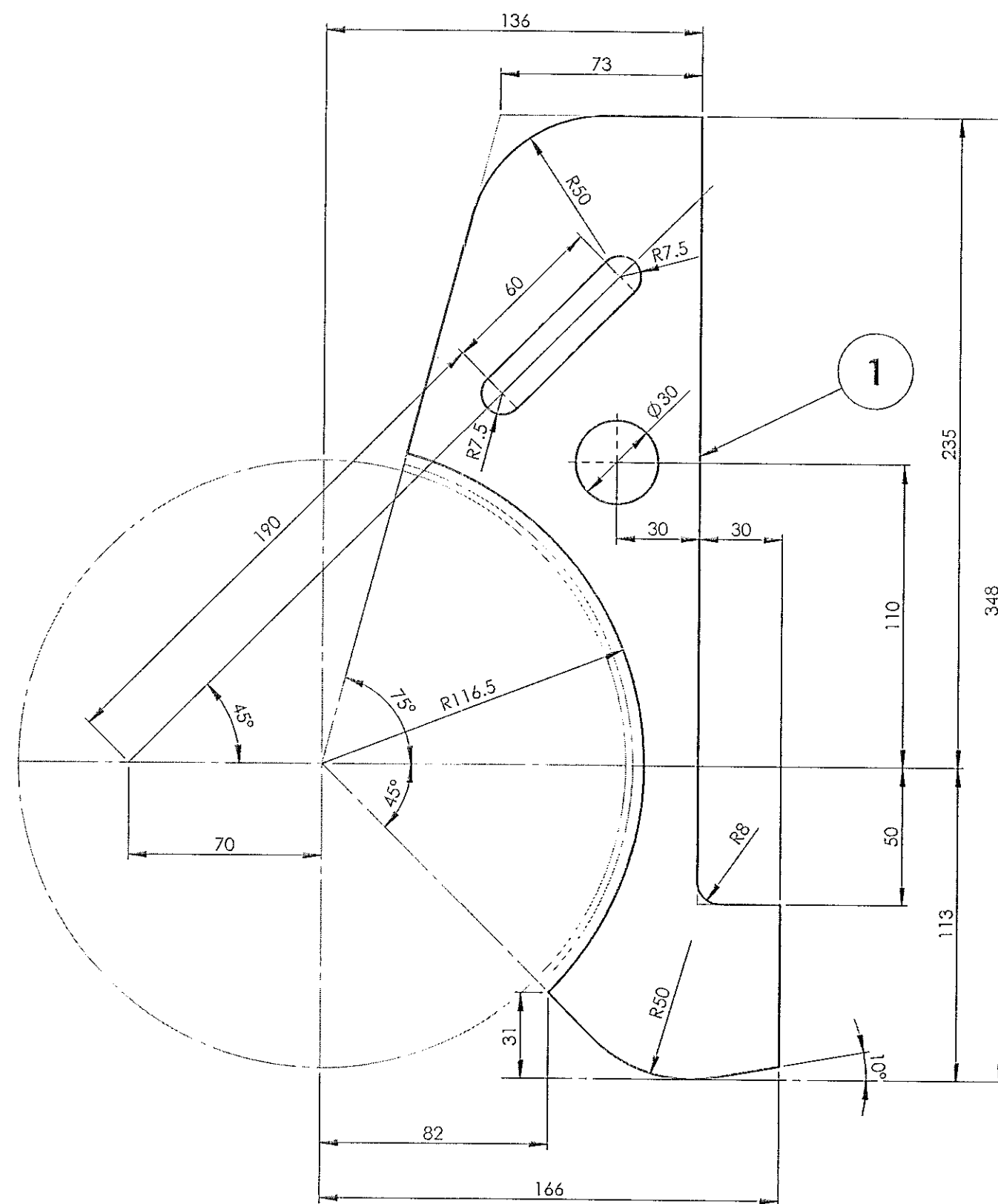
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-


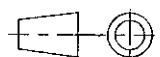
	04/09/25	H. K. S. S.
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

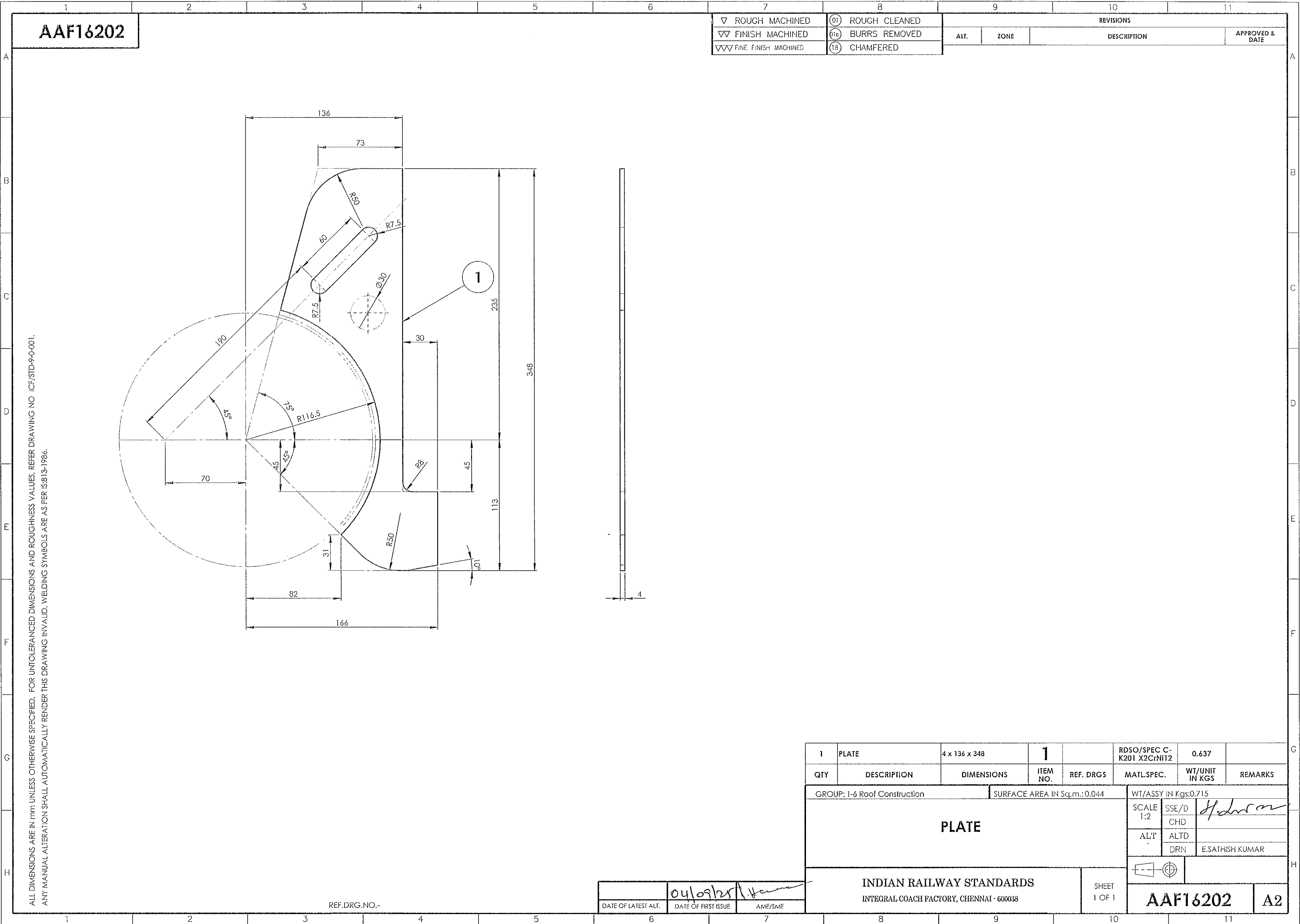
1	BACK PIECE	3x20x148	1		RDSO SPEC C-K201 X2 Cr Ni 12	0.07		
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
BACK PIECE					SCALE	SSE/D		
					1:1	CHD		
					ALT.	ALTD		
						DRN		
INDIAN RAILWAY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

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICFSTD-9-0001.
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

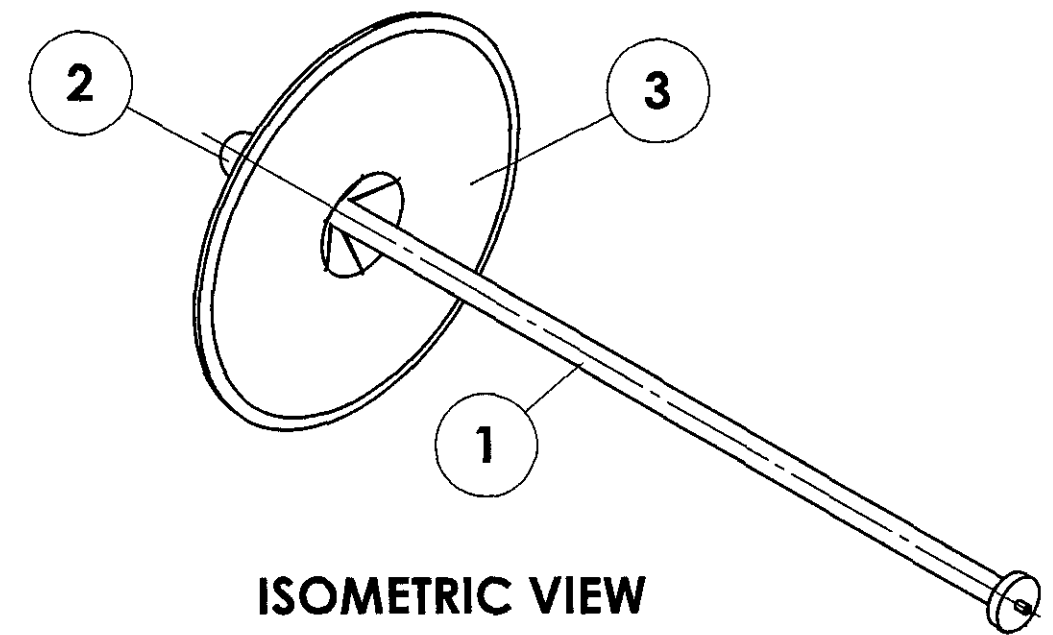
1	PLATE	4 x 136 x 348	1		RDSO/SPEC C-K201 X2CrNi12	0.610		
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: I-6 Roof Construction		SURFACE AREA IN Sq.m.: 0.043			WT/ASSY IN Kgs:			
PLATE					SCALE 1:2	SSE/D		
						CHD		
					ALT	ALTD		
						DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
					SHEET 1 OF 1		AAF16201	A2



49516008

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		NOTE REVISED. VIEWS UPDATED AS PER DETAIL.	



ISOMETRIC VIEW

NOTE:

- ITEM-1 TO BE RESISTANCE WELDED AS SHOWN IN THE RESPECTIVE DRAWING AND ITEMS-2&3 TO BE SUPPLIED IN LOOSE (TO BE ASSEMBLED IN FURNISHING AFTER INSERTING THERMAL INSULATION).
- 5% EXCESS QTY OF ITEMS-2&3 TO BE SUPPLIED AGAINST THE QTY CALLED FOR IN THE RESPECTIVE ASSEMBLY DRAWINGS.

1	SERRATED SPRING WASHER		3	AAA16495		0.003	
1	CAP		2	AAA16494		0.000	
1	WELDING PIN		1	AAA16493		0.002	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 ROOF CONSTRUCTION

SURFACE AREA IN Sq.m.:0.002

WT/ASSY IN Kgs:

WELDING PIN ASSEMBLY

SCALE 1:1	SSE/D CHD	
ALT. a	ALTD DRN	A.Palanichamy 3D:A.Palanichamy 2D:P.Murugan

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

LWGSCWAC2

49516008

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

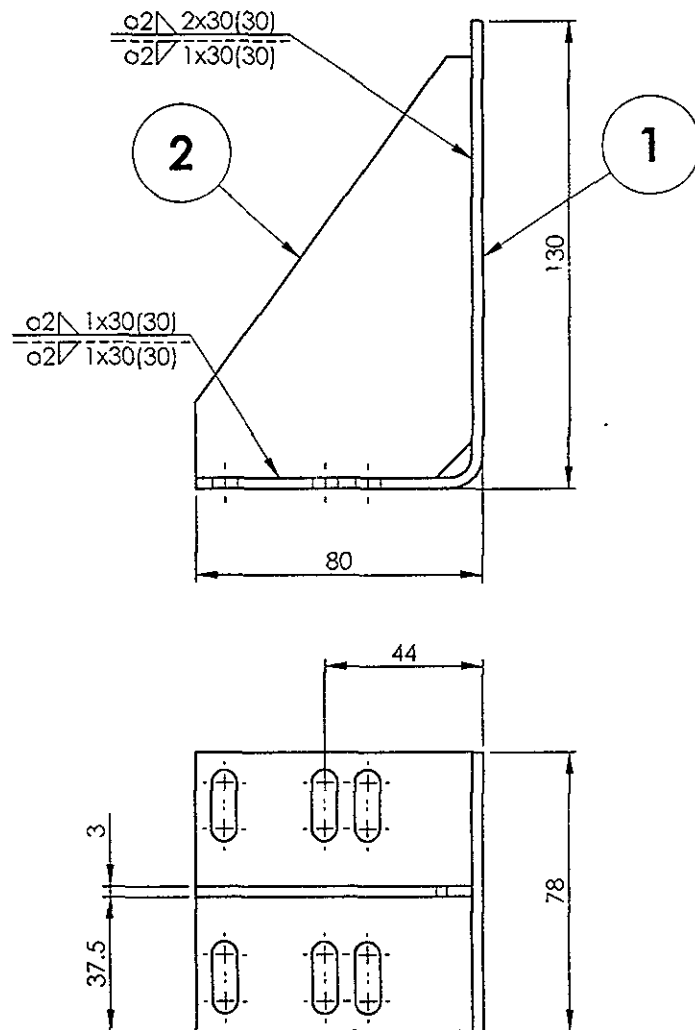
REF.DRG.NO.mi005176

06-02-2024	19-07-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

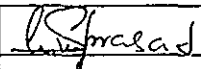
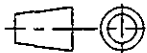
59316008

▽ ROUGH MACHINED	③ ROUGH CLEANED
▽▽ FINISH MACHINED	④ BURRS REMOVED
▽▽▽ FINE FINISH - VACUUM	⑤ 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.
6. ALL BUTT WELDINGS TO BE DONE AT COACH OUTSIDE AND ROUGH GRINDING TO BE DONE ON THE SAME SIDE. PENETRATION SHOULD NOT BE GROUND.

1	WEB		2	AAA16907		0.134	
1	ANGLE		1	AAA16906		0.363	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.045			WT/ASSY IN Kgs:0.496		
BRACKET COMPLETE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							LWSCWAC/EOG
SHEET 1 OF 1					59316008		A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS 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.

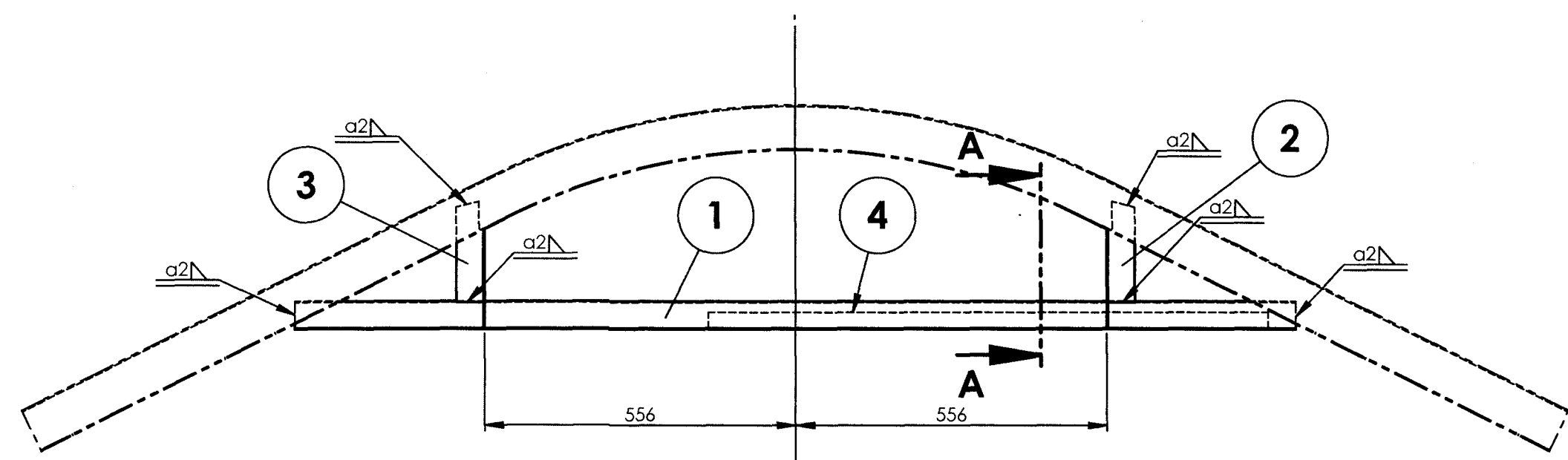
REF.DRG.NO.3.10113.0.20.095.007

	22-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

64516003

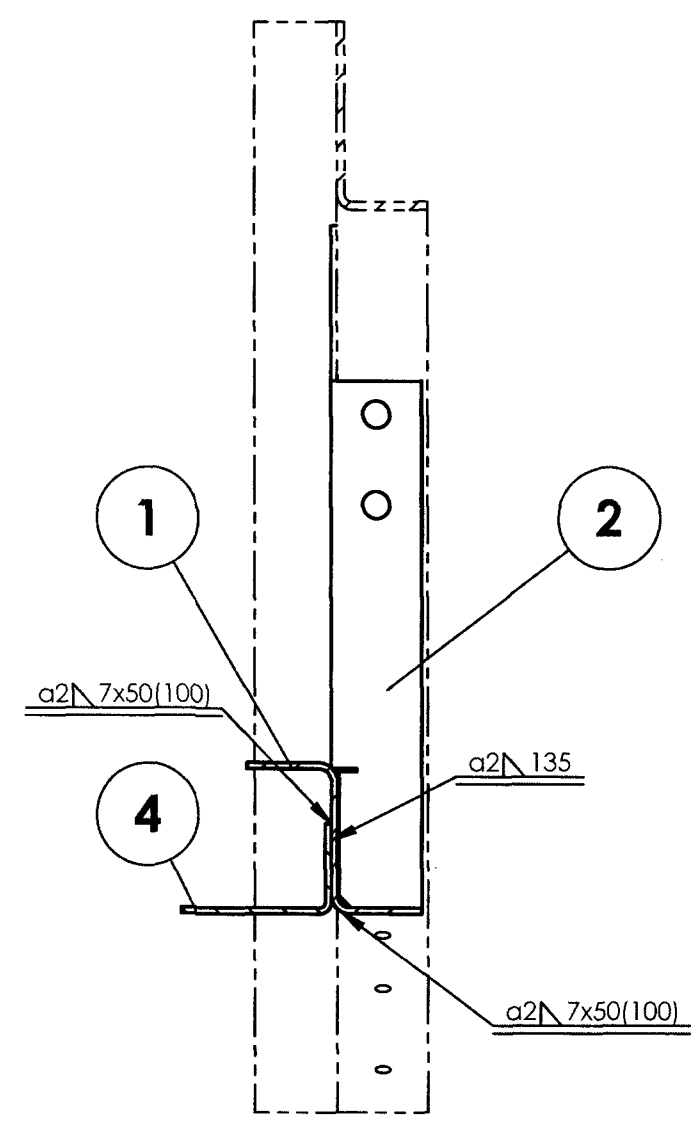
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①B CHAMFERED

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 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.



SECTION A-A
SCALE 2 : 5

1	ANGLE		4	AAB16326		1.23	
1	SUPPORTING ANGLE L.H.		3	AAB16324		0.203	
1	SUPPORTING ANGLE R.H.		2	AAB16323		0.203	
1	Z- MEMBER		1	AAB16325		2.91	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 ROOF

SURFACE AREA IN Sq.m.: 1.379

WT/ASSY IN Kgs:

CROSS BRACE COMPLETE FOR AC-3T LHB COACH

SCALE 1:10

ALT

CHD

ALTD

DRN

S.Bala V.subramani.

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

64516003

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.

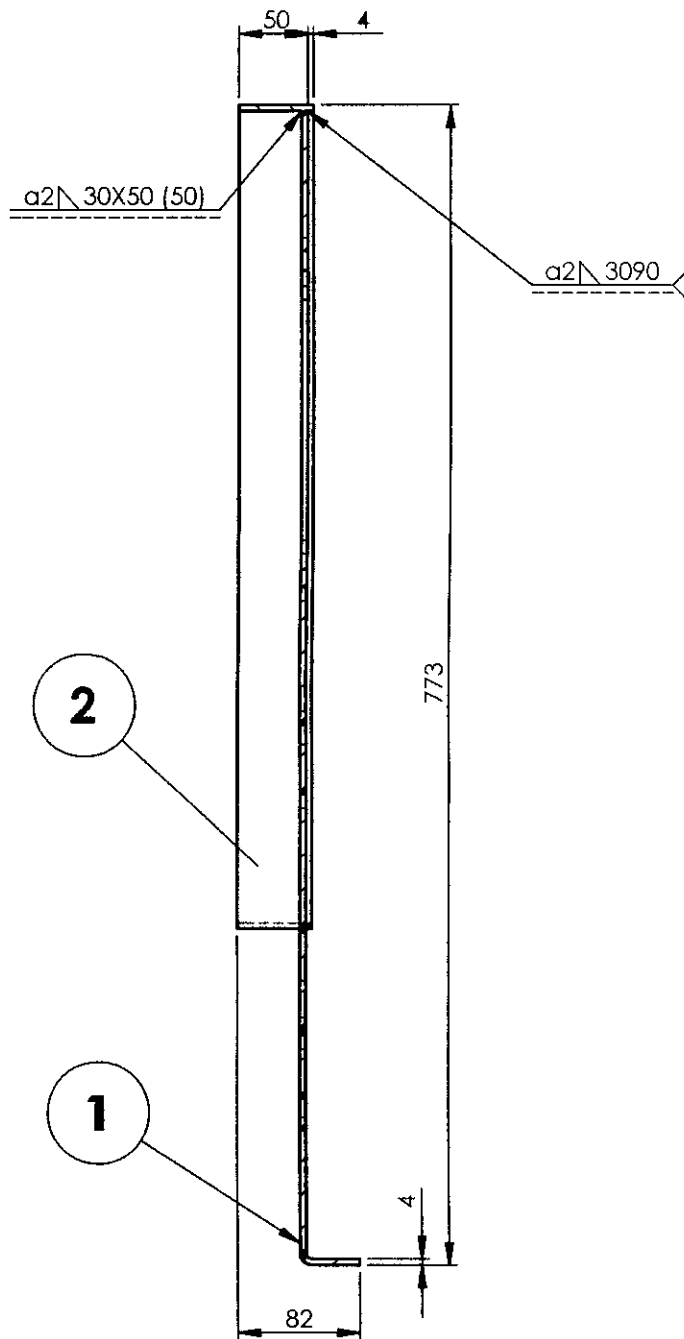
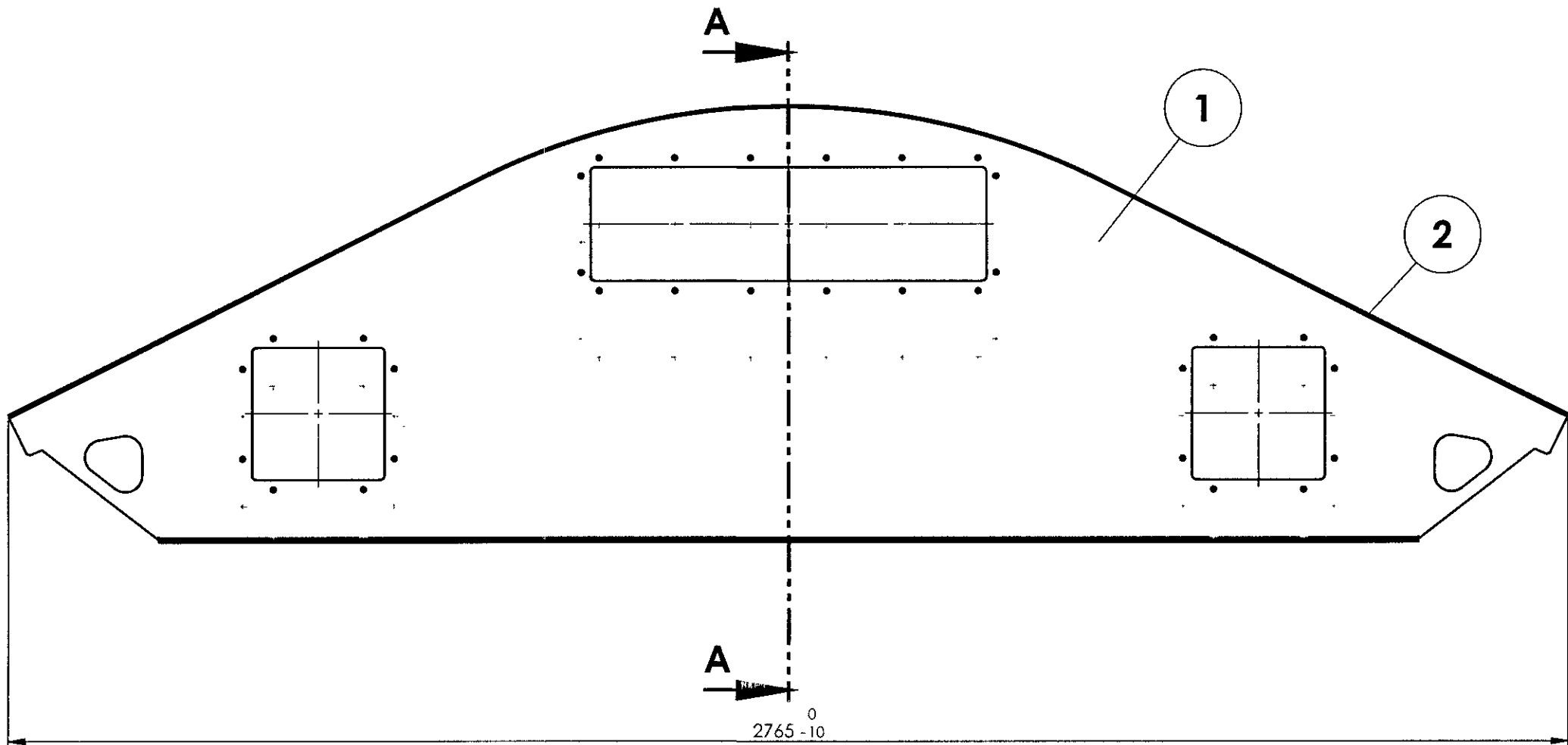
REF.DRG.NO.LE16104 alt-a

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
	14-09-2021	

82716014

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


REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



SECTION A-A
SCALE 1 : 5

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.
- FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
- FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

1	FLANGE FOR FINAL ROOF ARCH.		2	AA16333		4.80	
1	FRONT SHEET OF FINAL ROOF		1	AA16123		40.46	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 2.898			WT/ASSY IN Kgs:		
FINAL ROOF ARCH COMPLETE					SCALE 1:20	SSE/D	L. Pandurangam
						CHD	
					ALT	ALTD	
					DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		LWFAC/PP2	
						82716014	

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.

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
	8/8/25	

82816001

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

(01) ROUGH CLEANED
(04) BURRS REMOVED
(05) CHAMFERED

REVISIONS
ALT. ZONE DESCRIPTION

APPROVED & DATE

SECTION A-A
SCALE 1 : 25

SECTION B-B
SCALE 1 : 10

SECTION C-C
SCALE 1 : 5

SECTION D-D
SCALE 1 : 5

DETAIL X
SCALE 1 : 2.5

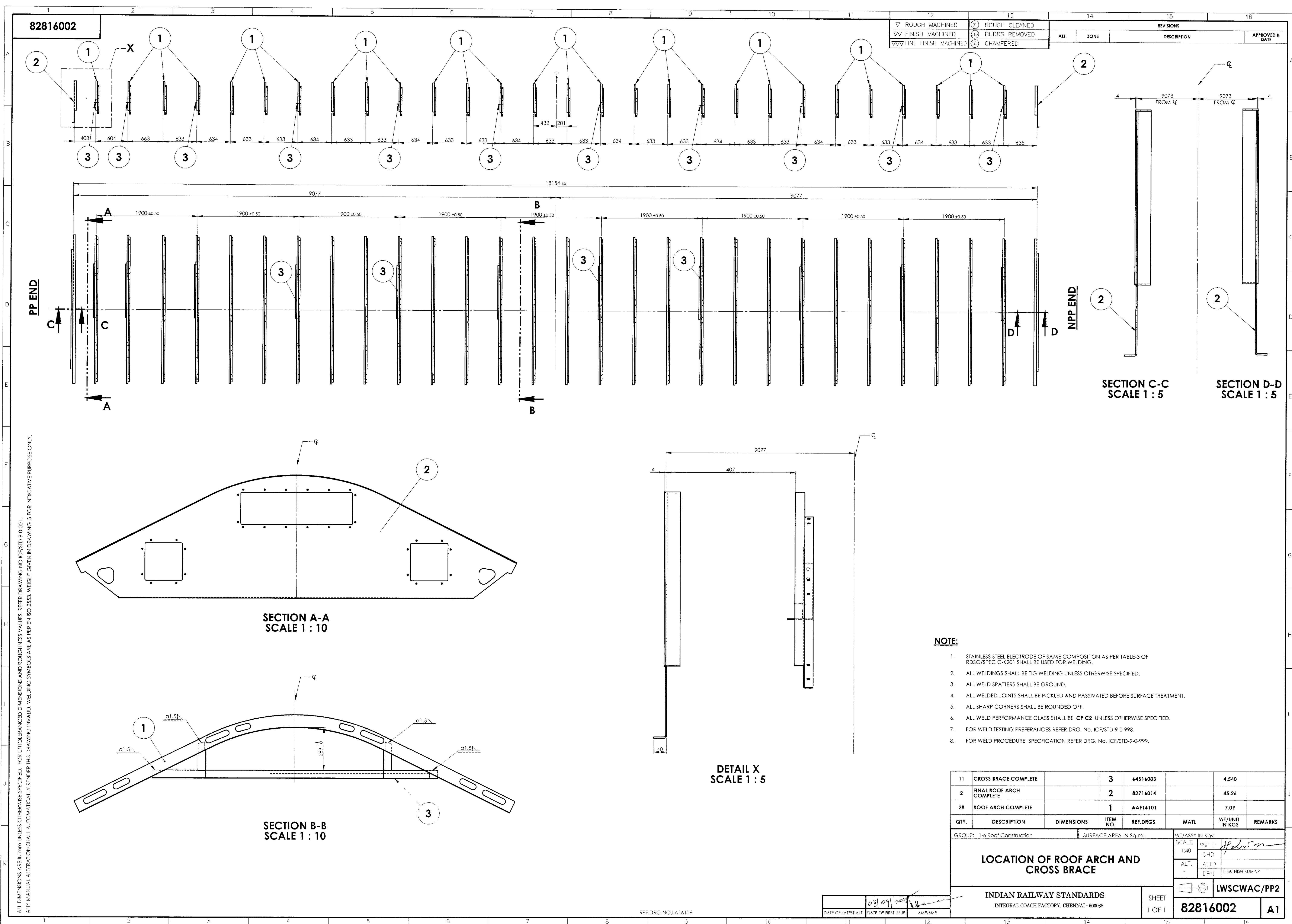
SECTION E-E
SCALE 1 : 10

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-X201 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. CENTRELIN OF COACH SHALL BE MARKED AS PER DRG No. 64516025
11. LEAK PROOF WELDING SHALL BE ENSURED.
12. ITEM-6 (NAME PLATE) SHALL BE WELDED OR RIVETED AT A SUITABLE LOCATION SHOWN IN THE DRAWING IF PROCURED FROM TRADE.
13. SCHEDULE OF TECHNICAL REQUIREMENTS FOR MANUFACTURE OF ROOF ASSEMBLY SHALL COMPLY TO ICF/M/D/SPEC-200 LATEST REVISION.

1	LAYOUT OF ELECTRICAL CONDUITS	10	82816005		191.42	
1	ARRANGEMENT OF WELDING PINS	9	82816004		2.85	
1	WELDING PARTS ON ROOF ASSY	8	82816003		34.938	
1	ROOF SHEET ASSEMBLY	7	82916013		722.19	
1	NAME PLATE FOR SUPPLIER IDENTIFICATION	6	AAA51072		0.06	
1	STIFFENING ANGLE	5	AAF16232		2.312	
1	STIFFENING ANGLE	4	AAF16231		2.312	
1	STIFFENING ANGLE	3	AAF16230		1.589	
1	STIFFENING ANGLE	2	AAF16229		1.589	
1	LOCATION OF ROOF ARCH AND CROSS BRACE	1	82816002		339.034	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS

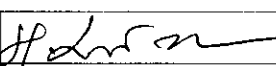
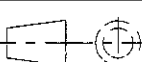
GROUP: 1-6 Roof Construction	SURFACE AREA IN Sq.m.: 248.101	WT/ASSY IN Kgs:
ROOF ASSEMBLY		SCALE 1:25
INDIAN RAILWAY STANDARDS		SSE/D
INTEGRAL COACH FACTORY, CHENNAI - 600038		CHD
SHEET 1 OF 1		ALTD
82816001		DRN
A1		E.SATHISH KUMAR
LWSCWAC/PP2		



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 THE DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RD50/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.

11	CROSS BRACE COMPLETE		3	44516003		4.540	
2	FINAL ROOF ARCH COMPLETE		2	82716014		45.26	
28	ROOF ARCH COMPLETE		1	AAF14101		7.09	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m:		WT/ASSY IN Kgs:		
LOCATION OF ROOF ARCH AND CROSS BRACE					SCALE	SSE (
					1:40	CHD	
					ALT.	ALTD	
					-	DR11	ESATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						LWSCWAC/PP2	
					SHEET		
					1 OF 1	82816002	
						A1	

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	APPROVED
08/09/2011	08/09/2011	

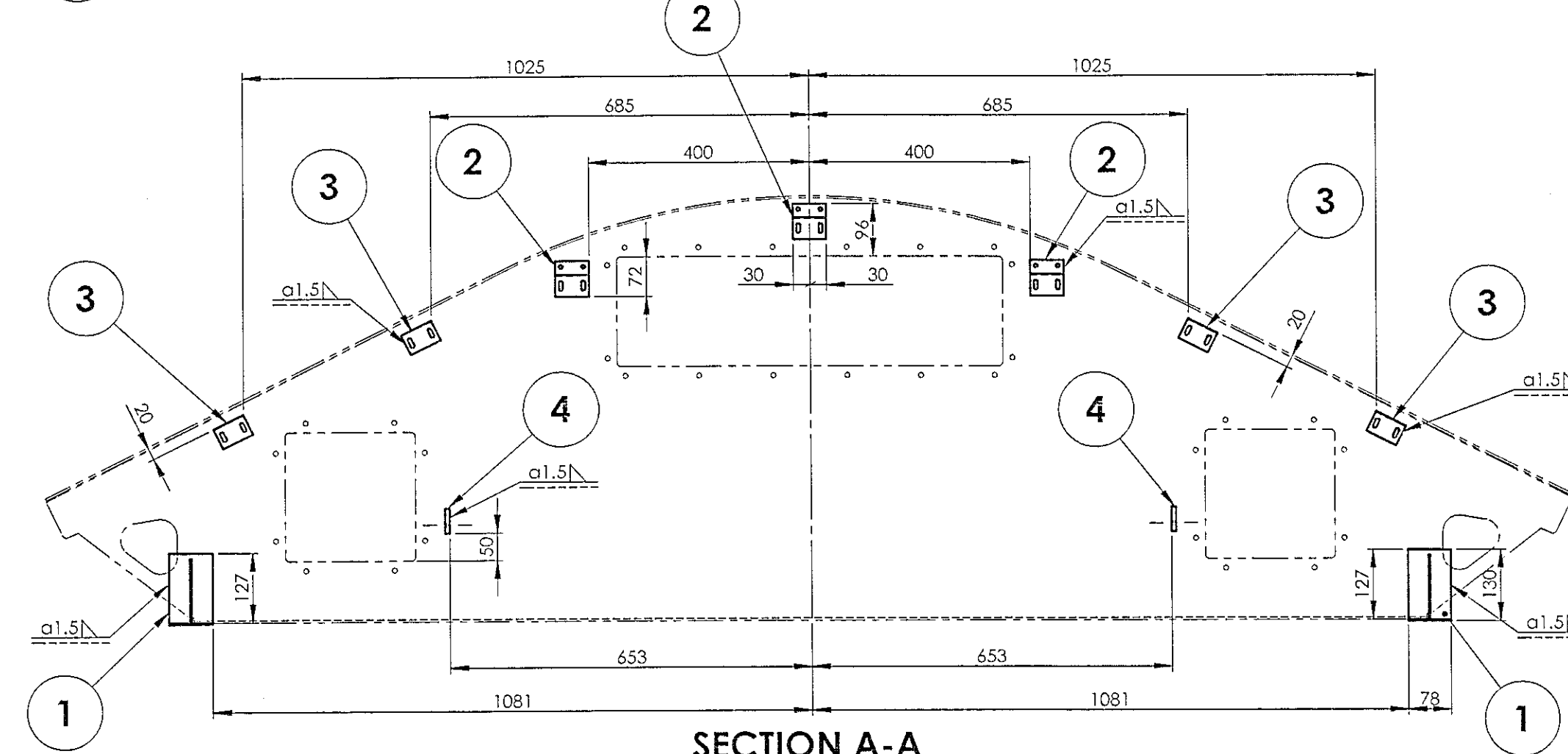
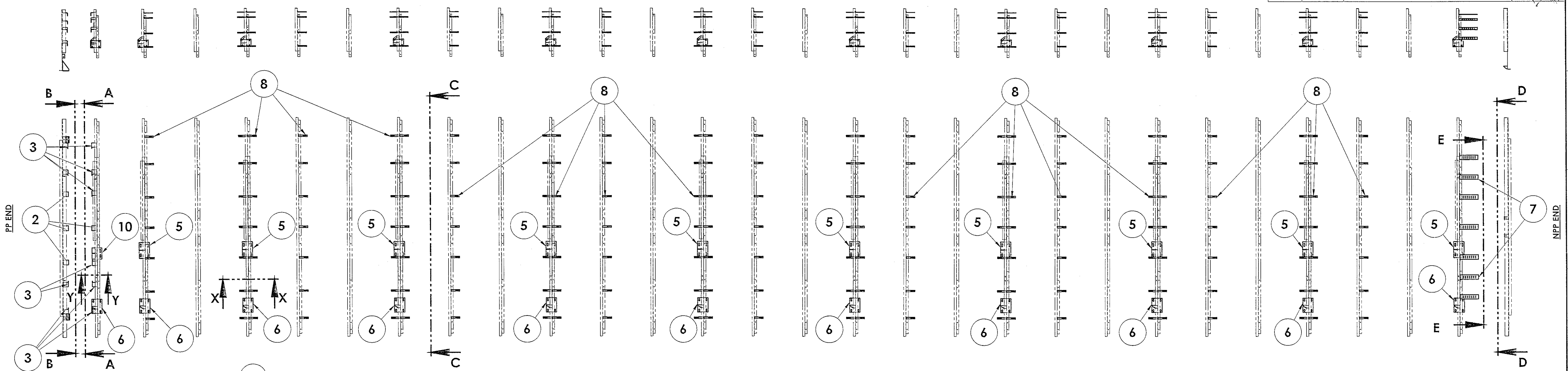
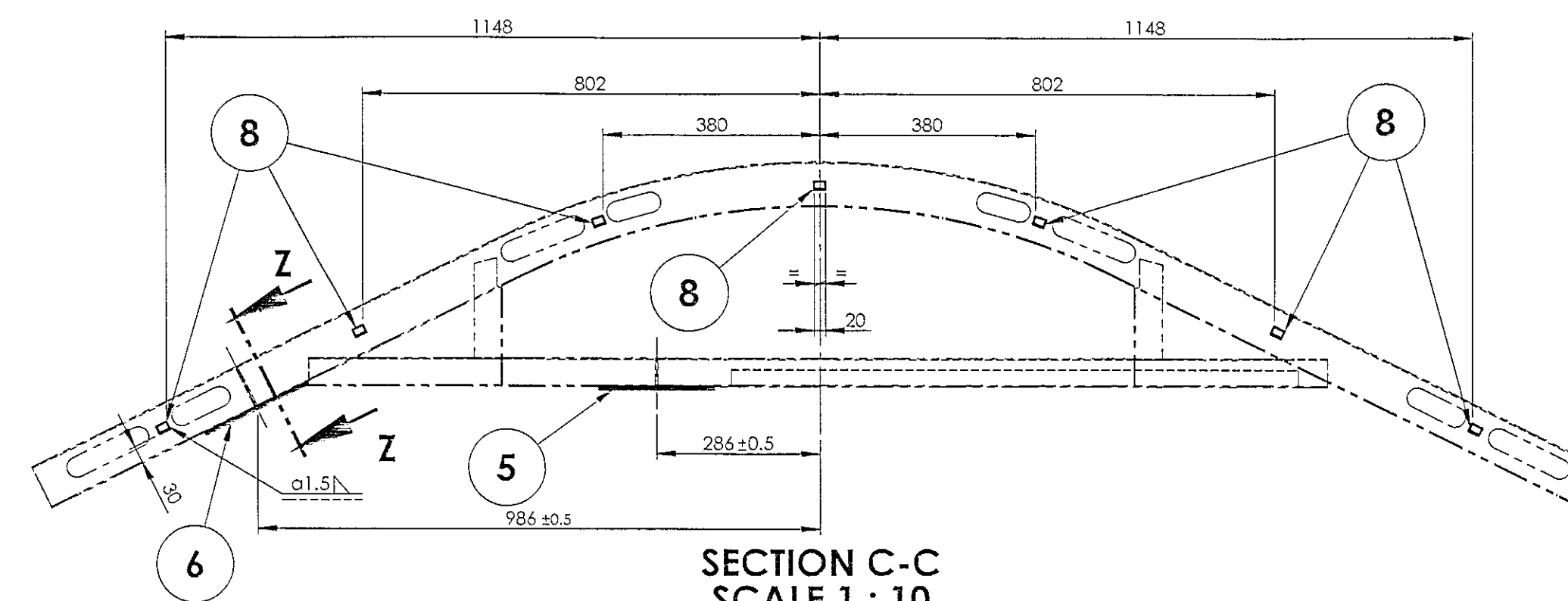
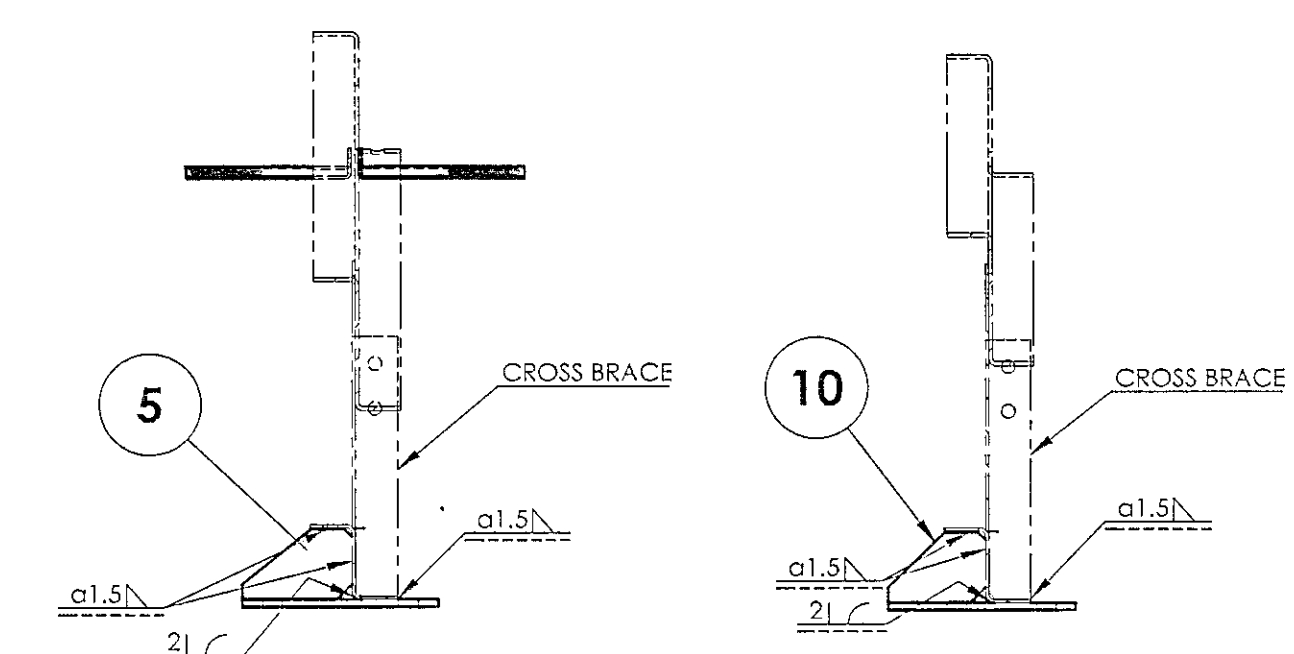
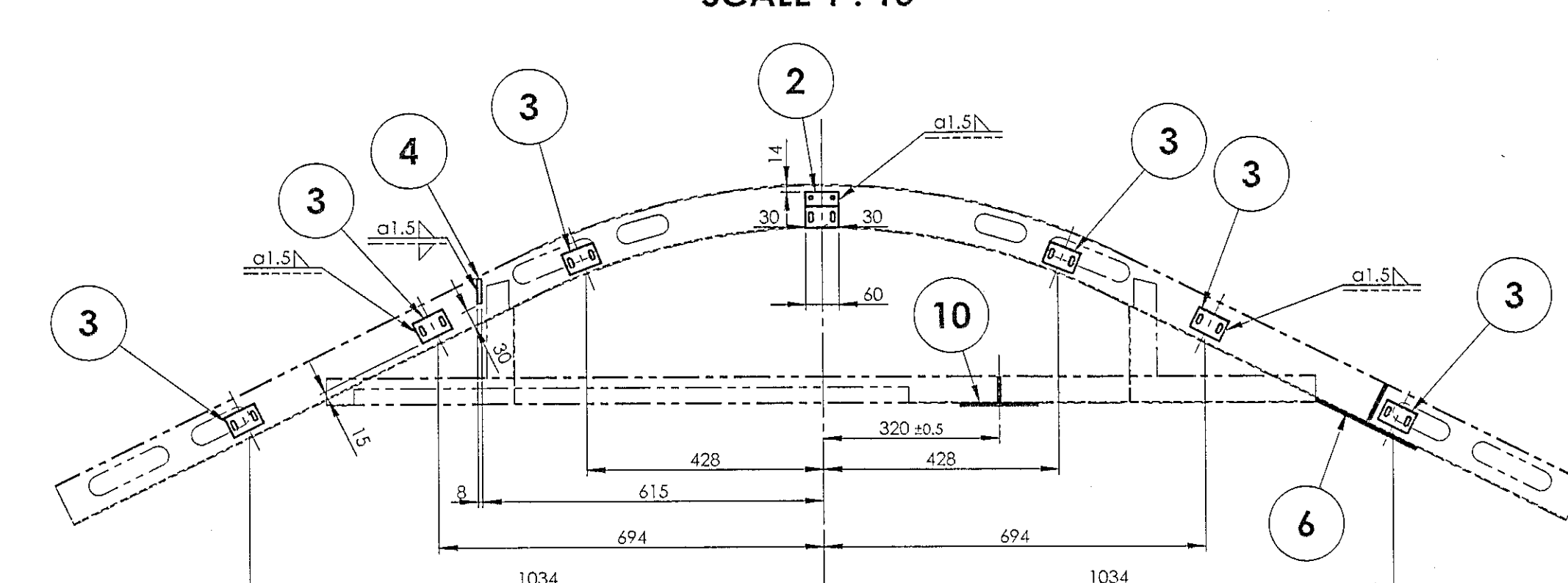
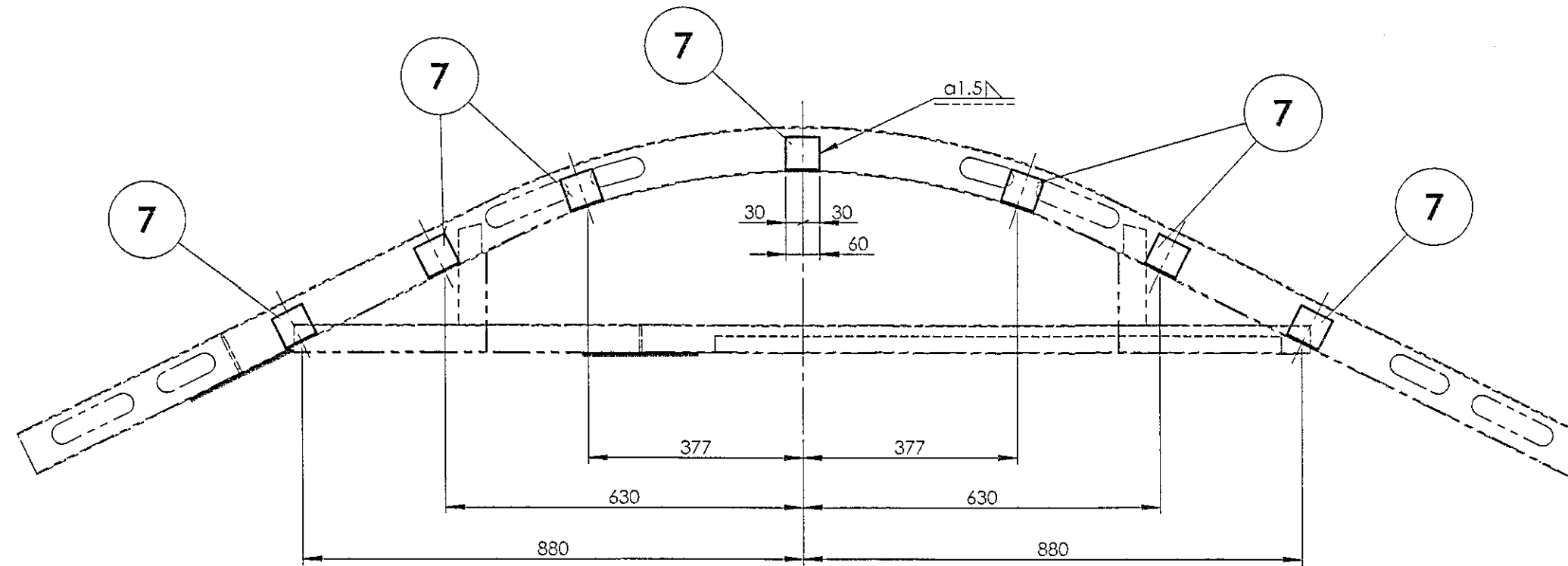
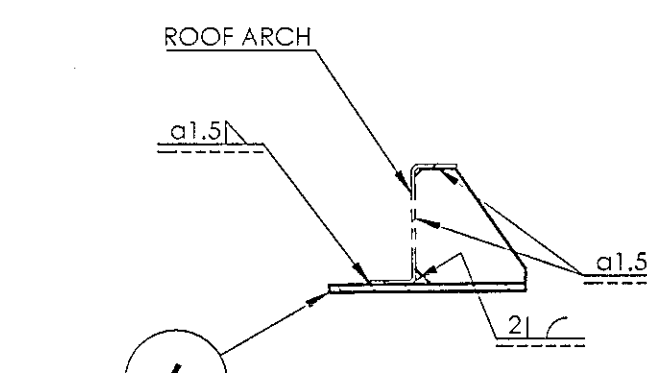
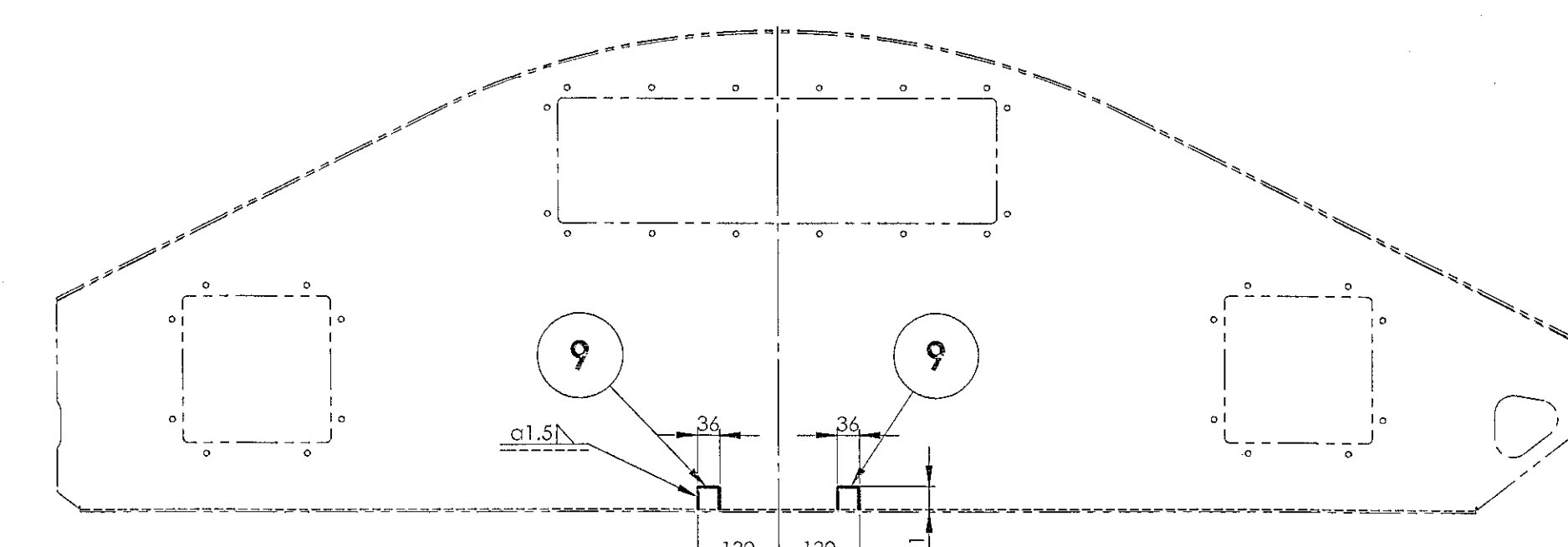
REF.DRG.NO.LA16106

82816003

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

⑪ ROUGH CLEANED
⑫ BURRS REMOVED
⑬ CHAMFERED

REVISIONS
ALT. ZONE DESCRIPTION APPROVED & DATE
a ITEM-10 & SECTION Y-Y ADDED. QTY OF ITEM-6 MODIFIED.

SECTION A-A
SCALE 1:10SECTION C-C
SCALE 1:10SECTION X-X
SCALE 1:5SECTION Y-Y
SCALE 1:5SECTION B-B
SCALE 1:10SECTION D-D
SCALE 1:10SECTION Z-Z
SCALE 1:5SECTION E-E
SCALE 1:10

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. ITEM-7 SHALL BE SUPPLIED LOOSE AND WELDED AT SHELL ASSEMBLY STAGE.

REF.DRG.NO.

07/11/25 08-09-25
DATE OF LATEST ALT. DATE OF FIRST ISSUE NAME/SME

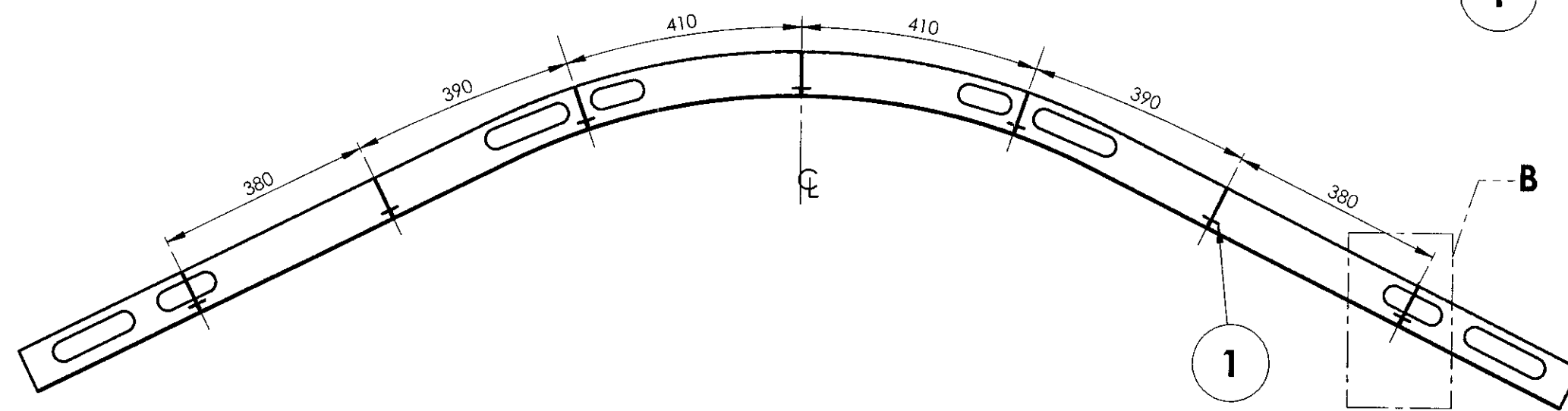
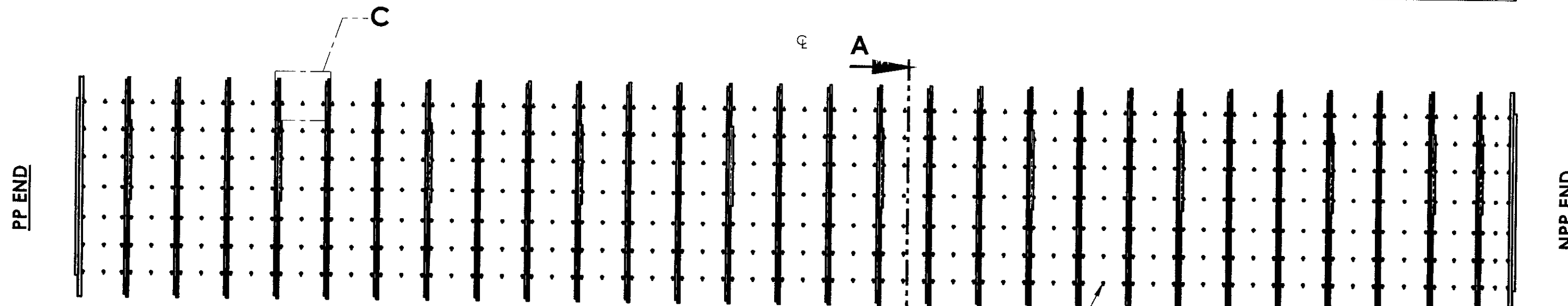
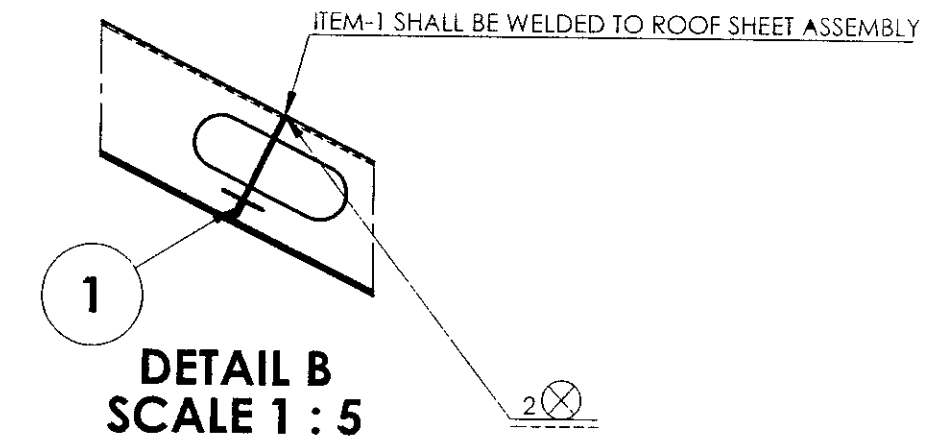
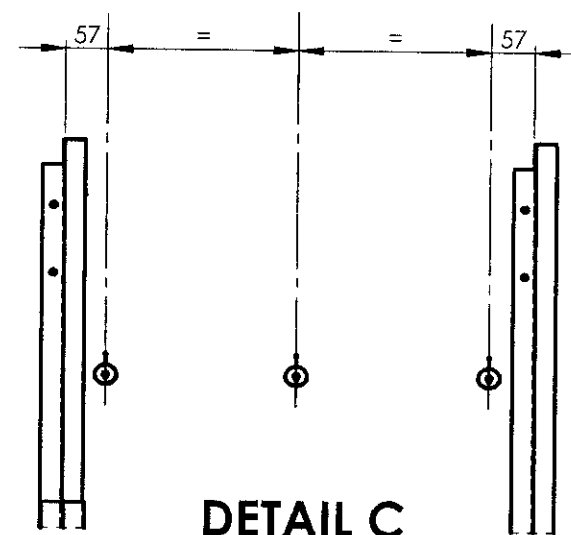
1	BRACKET FOR PARTITION PILLAR MOUNTING	10	82816006		0.71	
2	BRACKET	9	AAA16896		0.050	
175	BRACKET FOR CONDUIT FIXING	8	AA816026		0.034	
7	ANGLE	7	AAE16518		0.396	
11	BRACKET FOR PILLAR MOUNTING ON ROOF	6	82916015		1.14	
10	BRACKET FOR PARTITION PILLAR MOUNTING	5	82916014		1.06	
3	GROUNDING FLAP	4	AAA16900		0.084	
10	BRACKET COMPLETE	3	AAF16249		1.8	
4	BRACKET	2	AAF16250		0.171	
2	BRACKET COMPLETE	1	59316008		0.497	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRG.	MATL	WT/UNIT IN KGS

GROUP: 1-6 Roof Construction	SURFACE AREA IN Sq.m.: 35.485	WT/ASSY IN Kgs:	SCALE 1:40	SSE/D CHD VEDA VARSHINIE	ALT. DRN ESATHISH KUMAR	WELDING PARTS ON ROOF ASSY	INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600088	SHEET 1 OF 1	82816003	A1
------------------------------	-------------------------------	-----------------	------------	--------------------------	-------------------------	----------------------------	-------------------------------------------------------------------	--------------	----------	----

82816004

▽ ROUGH MACHINED	(G1) ROUGH CLEANED
▽▽ FINISH MACHINED	(G1b) BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	(1b) CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 10DETAIL B
SCALE 1 : 5DETAIL C
SCALE 1 : 10

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

609	WELDING PIN ASSEMBLY		1	49516008		0.005	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 33.97		WT/ASSY IN Kgs:		
ARRANGEMENT OF WELDING PINS					SCALE 1:100	SSE/D	3D E SATHISH KUMAR 2D VILAYAKUMAR P.
						CHD	
					ALT	ALTD	
						DRN	
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
					82816004		

REF.DRG.NO.-


DATE OF LATEST ALT.	08/09/2025	AME/SME
---------------------	------------	---------

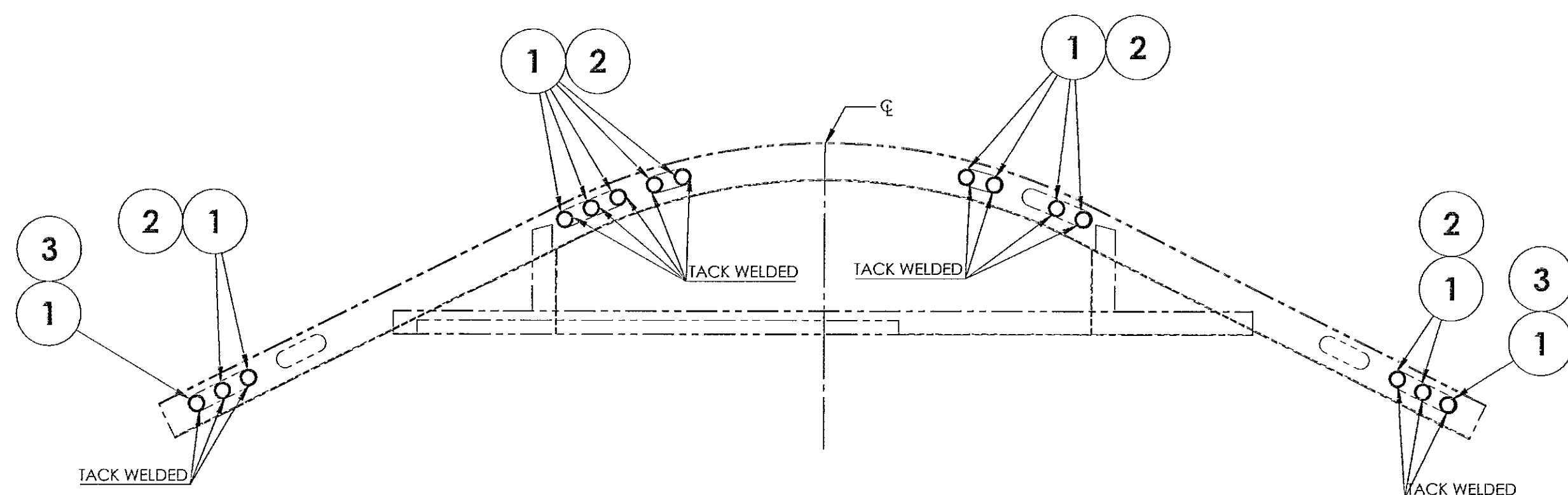
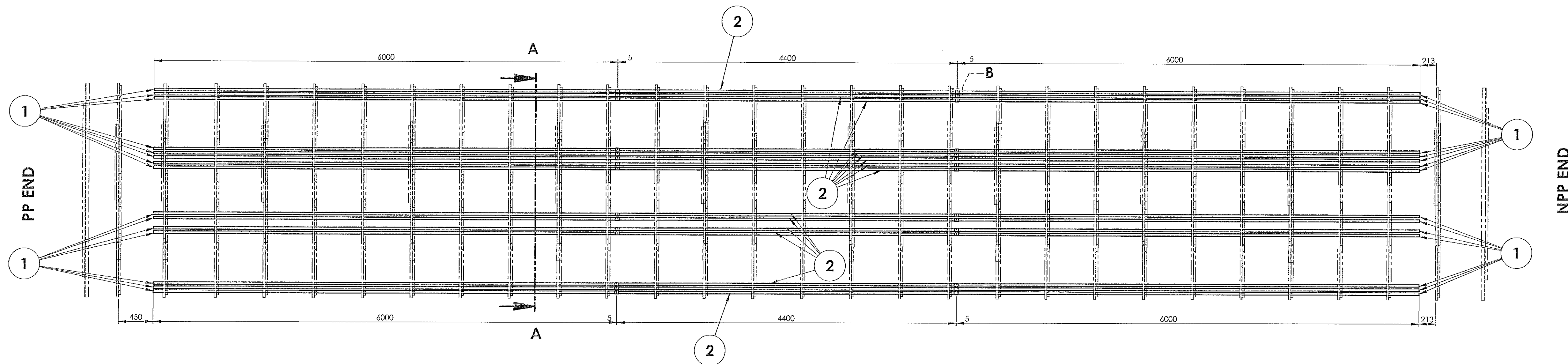
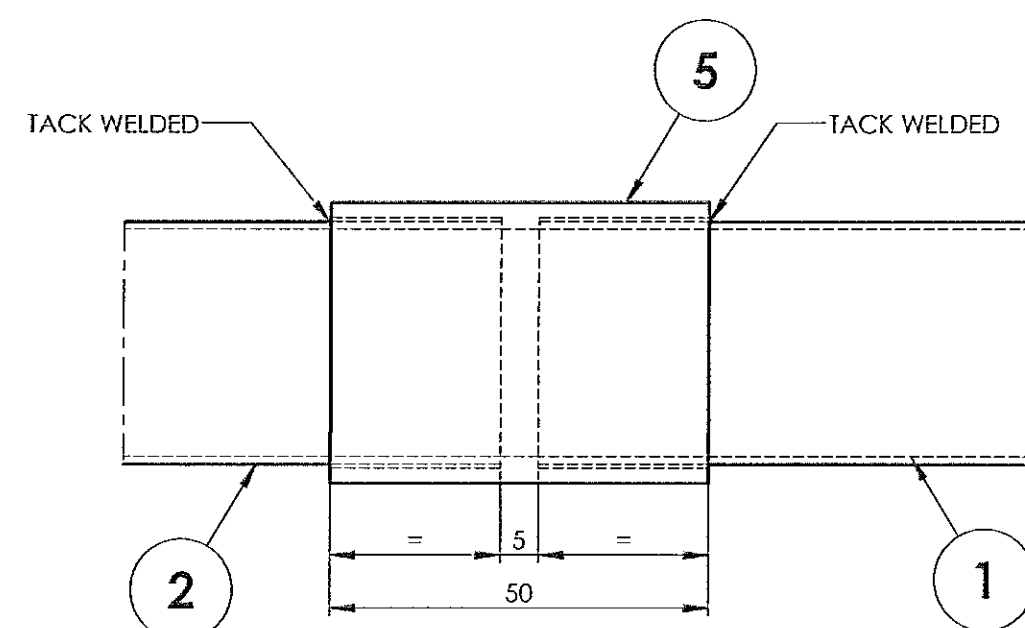
82816005

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

(01) ROUGH CLEANED
(010) BURRS REMOVED
(10) CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		VIEW ORIENTATION CHANGED, ITEMS-3 & 4 DELETED, ITEM-2 QTY REVISED - VIEWS UPDATED.	

SECTION A-A
SCALE 1 : 10DETAIL B
SCALE 1 : 1

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. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
7. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

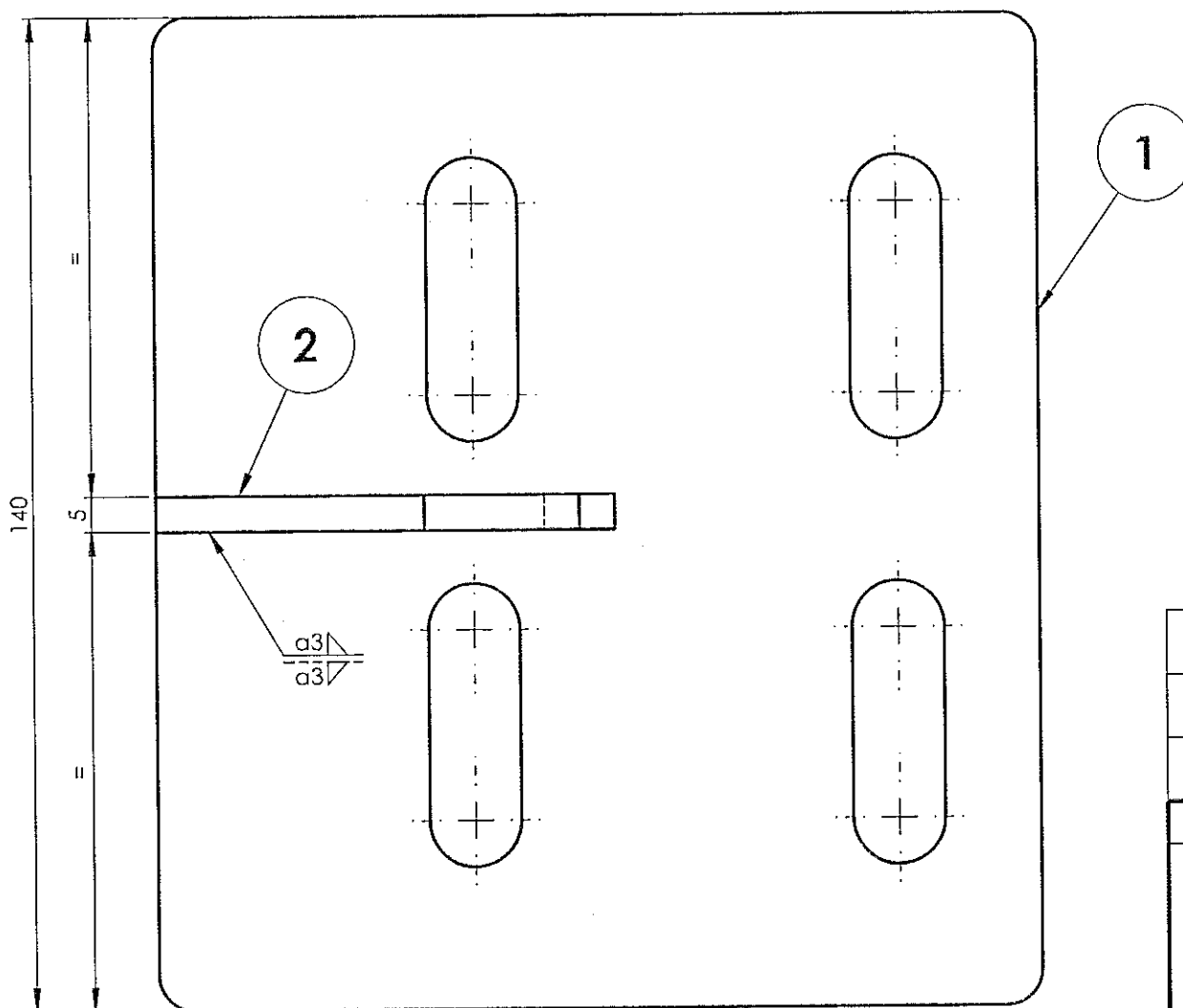
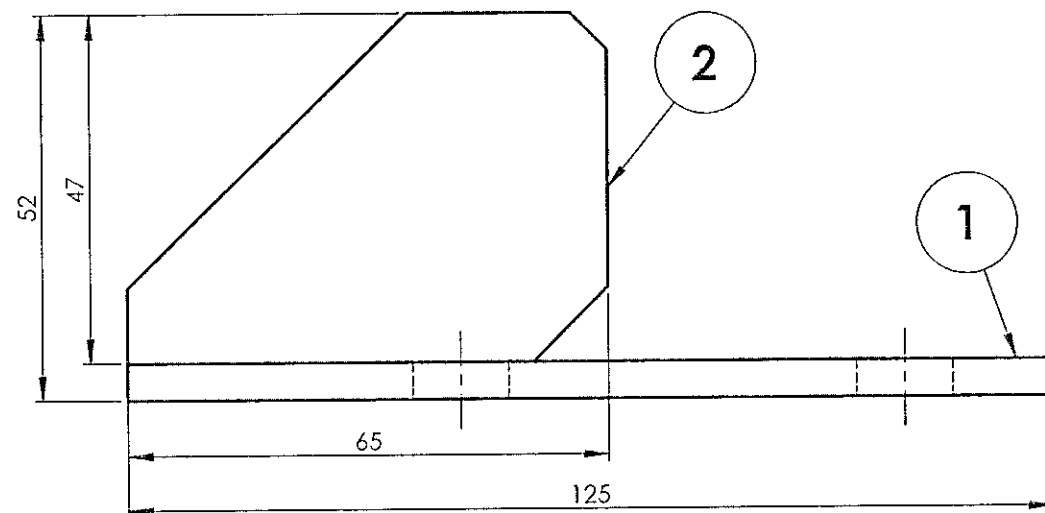
30	COUPLER FOR CONDUITS		5	AAE16764		0.09	
2	CONDUIT	1 X OD-32 X-1750	4	-	IS:17876-X04Cr19Ni9	1.35	
2	CONDUIT	1 X OD-32 X-2350	3	-	IS:17876-X04Cr19Ni9	1.81	
15	CONDUIT	1 X OD32 X 4400	2		IS:17876-X04Cr19Ni9	3.39	
30	CONDUIT	1 X OD 32 X 6000	1		IS:17876-X04Cr19Ni9	4.62	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGs.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 81		WT/ASSY IN Kgs:	
LAYOUT OF ELECTRICAL CONDUITS		SCALE 1:30		SSE/D CHD	
INDIAN RAILWAY STANDARDS		DATE OF LATEST ALT. 16-2-26		ALT. a	
INTEGRAL COACH FACTORY, CHENNAI - 600038		DATE OF FIRST ISSUE 08-09-2025		ALTD DRN	
SHEET 1 OF 1		AME/SME		E.SATHISH KUMAR	
82816005		LWSCWAC/PP2		A1	

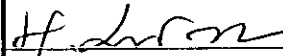

82816006

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①b 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 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. FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
7. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

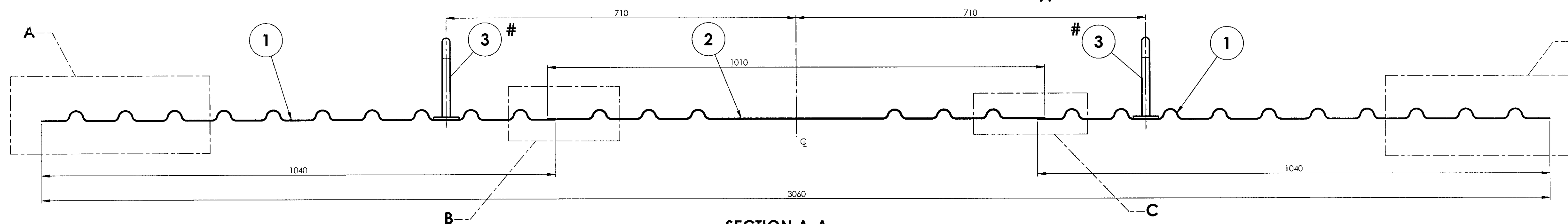
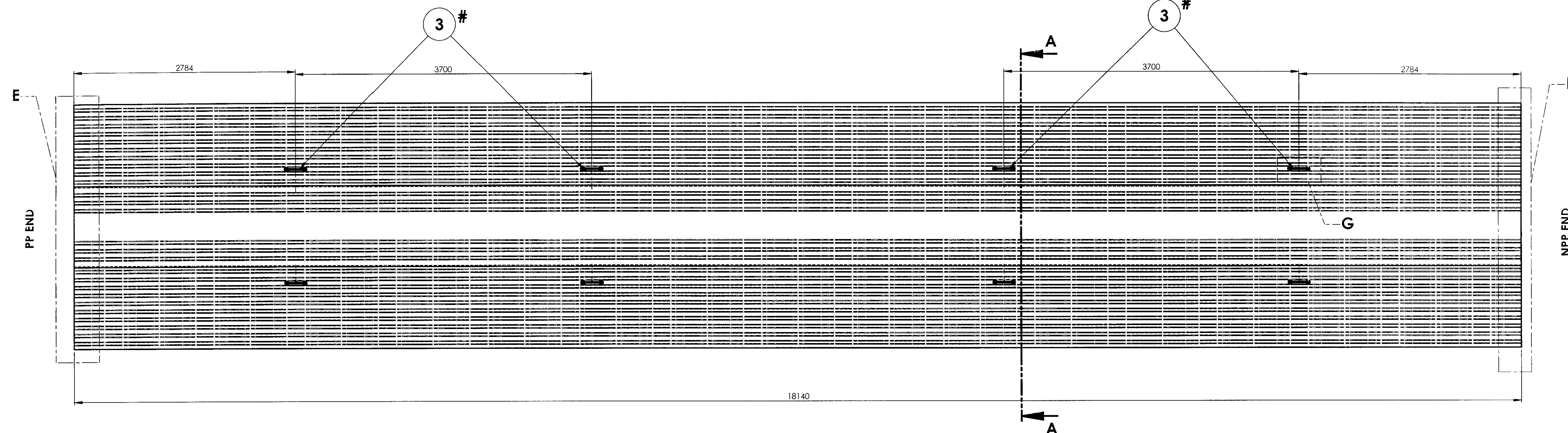
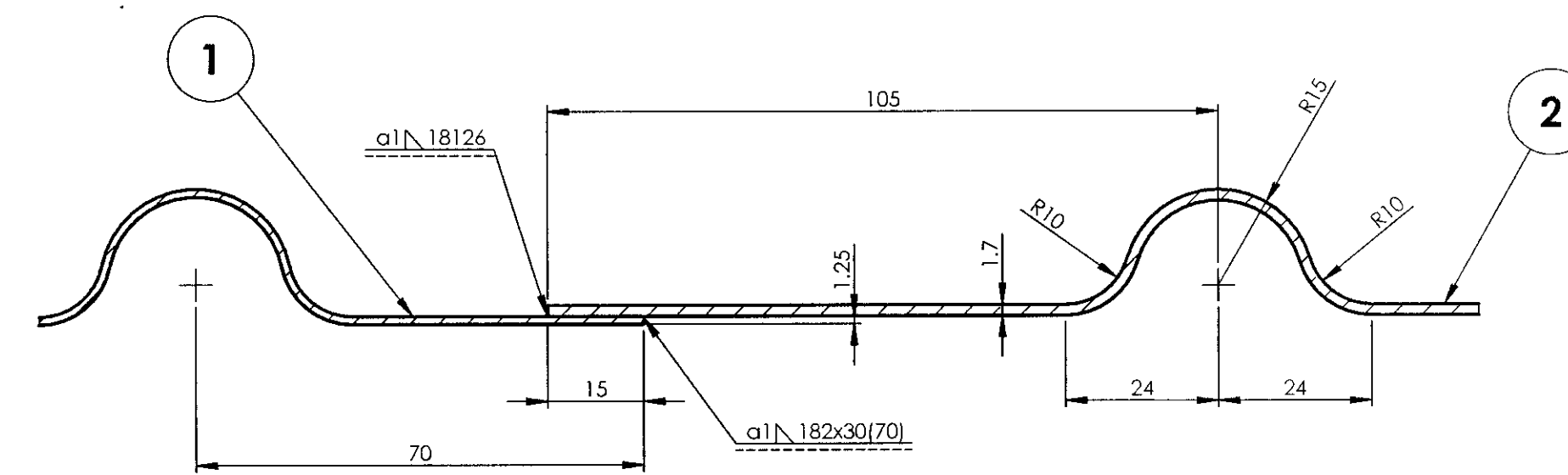
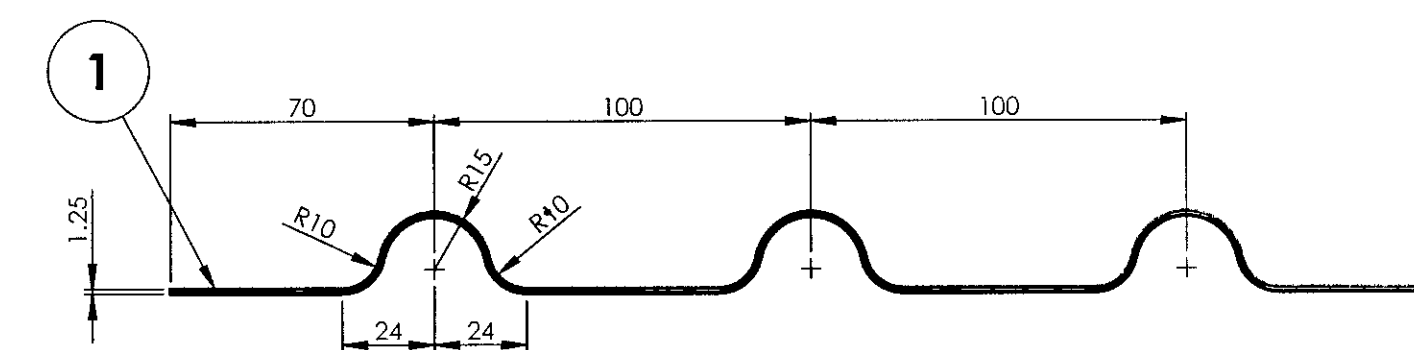
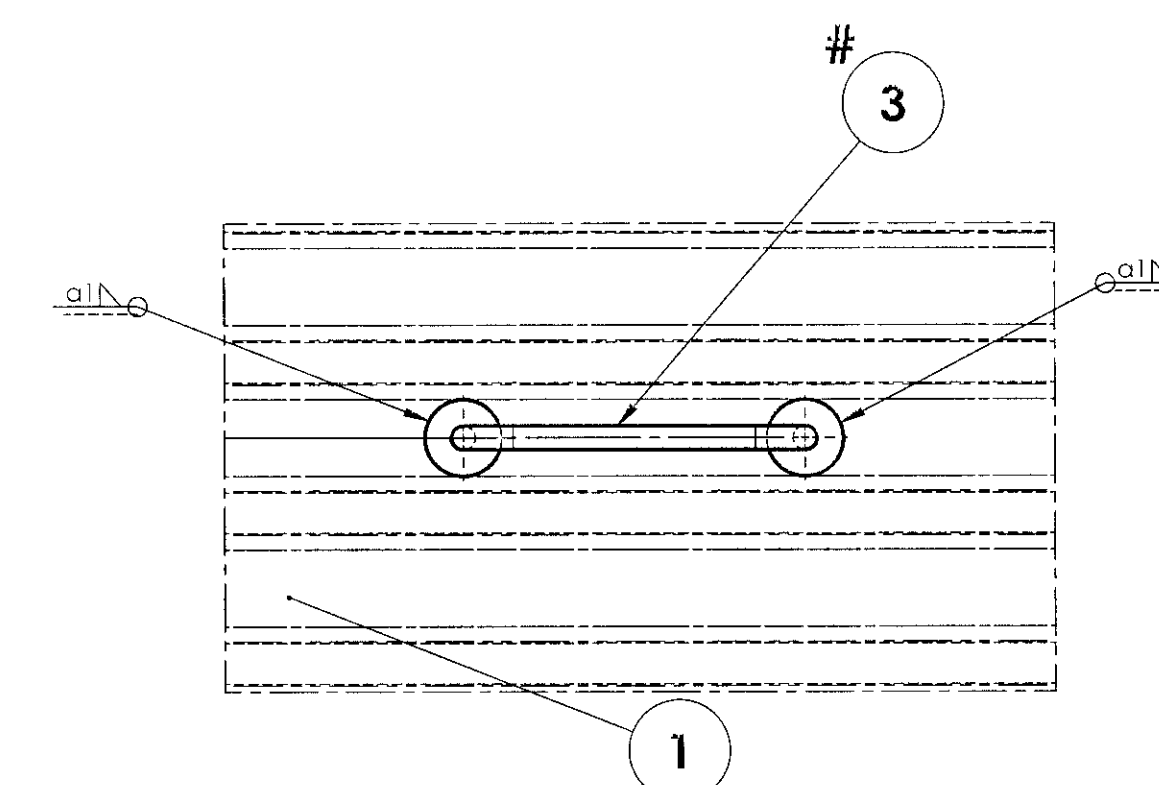
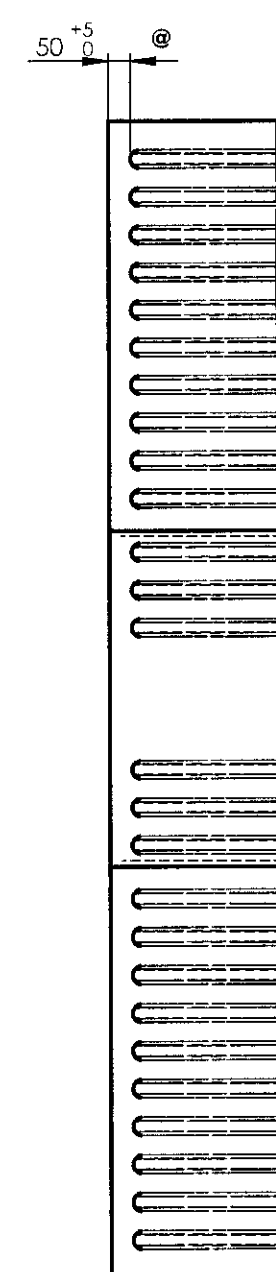
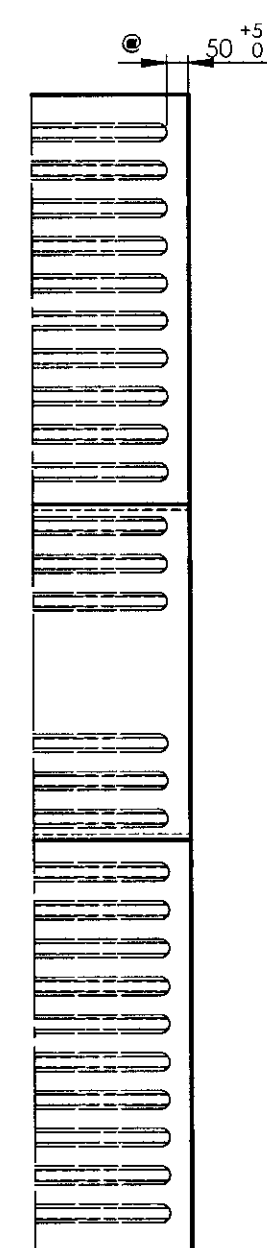
1	RIB		2	AAF16304		0.09		
1	PLATE		1	AAF16303		0.62		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 41136.37			WT/ASSY IN Kgs:			
BRACKET FOR PARTITION PILLAR MOUNTING					SCALE	SSE/D		
					1:1	CHD		
					ALT.	ALTD		
						DRN	VEDA VARSHINILE	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							LWSCWAC/PP2	
					SHEET 1 OF 1		82816006	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.

82916013

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

SECTION A-A
SCALE 1 : 5DETAIL B
SCALE 1 : 1DETAIL A
SCALE 1 : 2DETAIL G
SCALE 1 : 5DETAIL E
SCALE 1 : 20DETAIL F
SCALE 1 : 20

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/7/STD-9-001.
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.

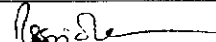
DATE OF LATEST ALT.	15-04-2025	AME/SME
DATE OF FIRST ISSUE		

GROUP: 1-6 Roof Construction	SURFACE AREA IN Sq.m.: 130.25	WT/ASSY IN Kgs:
SCALE 1:30		SSE, D
CHD		
ALT.		ALTD
DRN		Amal George
INDIAN RAILWAY STANDARDS		LWACCN/PP2
INTEGRAL COACH FACTORY, CHENNAI - 600038		
SHEET 1 OF 2		82916013 A1

12	13	14	15	16
▽ ROUGH MACHINED	① ROUGH CLEANED	REVISONS		
▽▽ FINISH MACHINED	② BURRS REMOVED	ALT.	ZONE	DESCRIPTION
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED			APPROVED & DATE

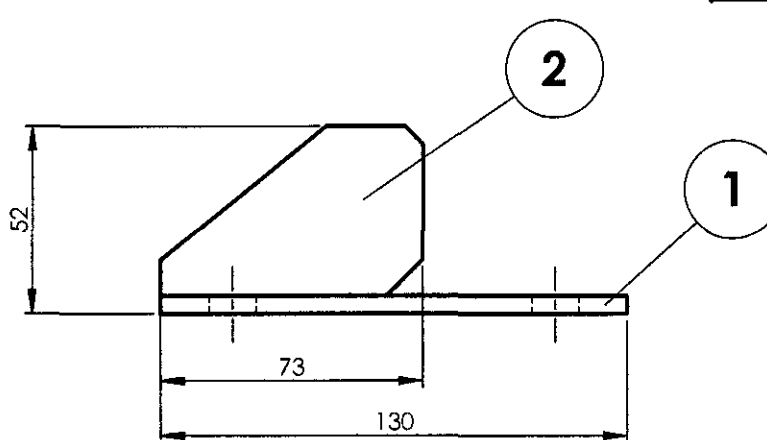
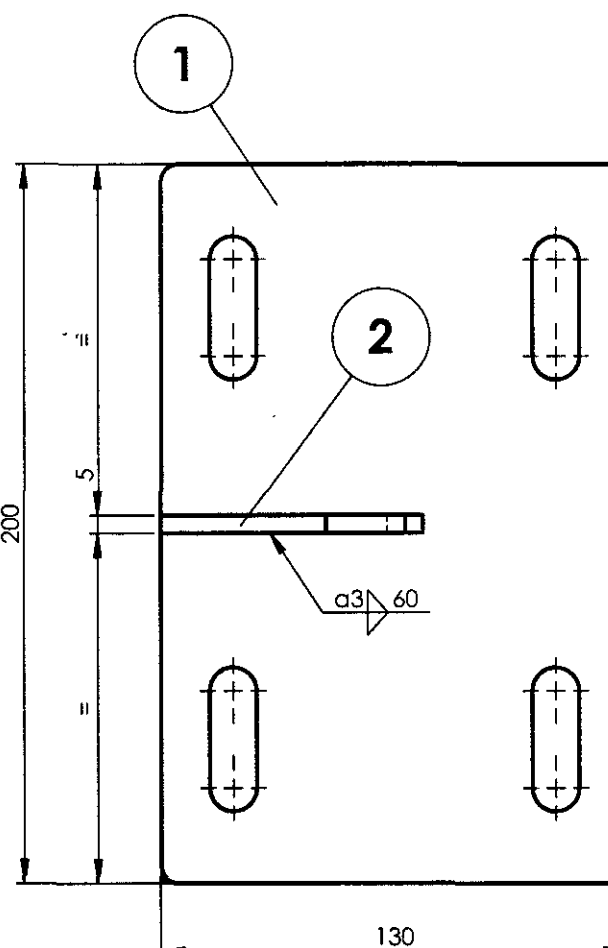


1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP 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. NIBBLER CUTTING TO 80mm, FLATTENING TO 50mm AND LEAK ROOF WELDING SHALL BE DONE ON ROOF SHEET CORRUGATIONS AT BOTH ENDS OF ROOF SHEET ASSEMBLY AS PER THE DRAWING. AFTER COMPLETING THESE OPERATIONS THE FINAL ROOF SHEET ASSEMBLY SHALL CONFORM TO THE IMAGE " **ANNEXURE-1 TO DRG 58214002.PDF** " .
10. ROOF SHEET ASSEMBLY CAN ALSO BE MADE WITH LAP JOINTS ALONG LONGITUDINAL DIRECTION AS PER ALTERNATE DESIGN 1 & 2 OF ROOF SHEET ASSEMBLY AS SHOWN IN THE DRAWING WITH AN OVERLAPPING LENGTH OF 20mm .
11. FOLLOWING ADDITIONAL NOTES ARE APPLICABLE ONLY FOR PROCUREMENT OF ROOF SHEET ASSEMBLIES FROM TRADE.
 - a) ROOF SHEET ASSEMBLY SHALL BE SUPPLIED AS SINGLE ASSEMBLY IF PROCURED FROM TRADE.
 - b) HANDLE COMPLETE TO DRG . NO . 87416034 SHALL BE SUPPLIED LOOSE & WELDED ON ROOF SHEET ASSEMBLY BEFORE ROOF ASSEMBLY STAGE. THIS ITEM SHALL BE CUT & REMOVED AFTER THE SHELL ASSEMBLY IS PLACED ON THE BRISTLE . **THIS NOTE IS APPLICABLE ONLY FOR ROOF SHEET ASSEMBLIES BOTH IN HOUSE AND RECEIVED FROM TRADE & NOT APPLICABLE FOR ROOF ASSEMBLY COMPLETE RECEIVED FROM TRADE**

8	HANDLE COMPLETE		3	87414034		0.96	
1	MIDDLE ROOF SHEET	1.7 x 1108 x18140	2		RDSO SPEC C- K201 X5 Cr Ni 18 10	273.37	
2	ROOF SHEET PART	1.25 x 1235 x 18140	1		RDSO SPEC C- K201 X5 Cr Ni 18 10	224.00	
QTY.	DESCRIPTION	Dimensions	ITEM NO.	REF.DRG.	MATERIAL	Weight/Unit in Kgs	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m: 130.25		WT/ASSY IN Kgs:	
ROOF SHEET ASSEMBLY				SCALE		SCE D 	
				1:30		CHD	
				4L1		ALTD	
				-		DRN	
						Amal George	
INDIAN RAILWAY STANDARDS				SHEET		LWACCN/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038				2 OF 2		82916013	
						A1	

REF.DRG.NO.

	15-07-2025	<i>CA</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SM

1		2		3		4		5		6		7		8																																																																																						
82916014				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																																												
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION																																																																																								
				▽▽▽ FINE FINISH MACHINED		①8 CHAMFERED		APPROVED & DATE																																																																																												
																																																																																																				
																																																																																																				
<p>NOTE:</p> <ol style="list-style-type: none">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 PREFERANCES REFER DRG. No. ICF/STD-9-0-998.8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.																																																																																																				
<table><tr><td>1</td><td>RIB</td><td></td><td>2</td><td>AAF16194</td><td></td><td>0.10</td><td></td></tr><tr><td>1</td><td>PLATE</td><td></td><td>1</td><td>AAF16195</td><td></td><td>0.96</td><td></td></tr><tr><td>QTY</td><td>DESCRIPTION</td><td>DIMENSIONS</td><td>ITEM NO.</td><td>REF.DRGS.</td><td>MATL</td><td>WT/UNIT IN KGS</td><td>REMARKS</td></tr><tr><td colspan="4">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:0.06</td><td colspan="2">WT/ASSY IN Kgs:</td></tr><tr><td colspan="6" rowspan="4">BRACKET FOR PARTITION PILLAR MOUNTING</td><td>SCALE</td><td>SSE/D</td></tr><tr><td>1:2</td><td>CHD</td></tr><tr><td>ALT.</td><td>ALTD</td></tr><tr><td>DRN</td><td>Amal George</td></tr><tr><td colspan="6">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td></tr><tr><td colspan="6">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2">82916014</td></tr><tr><td colspan="6">DATE OF LATEST ALT.</td><td colspan="2">A3</td></tr><tr><td colspan="6">DATE OF FIRST ISSUE</td><td colspan="2"></td></tr><tr><td colspan="6">AME/SME</td><td colspan="2"></td></tr></table>															1	RIB		2	AAF16194		0.10		1	PLATE		1	AAF16195		0.96		QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.06		WT/ASSY IN Kgs:		BRACKET FOR PARTITION PILLAR MOUNTING						SCALE	SSE/D	1:2	CHD	ALT.	ALTD	DRN	Amal George	INDIAN RAILWAY STANDARDS						SHEET 1 OF 1		INTEGRAL COACH FACTORY, CHENNAI - 600038						82916014		DATE OF LATEST ALT.						A3		DATE OF FIRST ISSUE								AME/SME							
1	RIB		2	AAF16194		0.10																																																																																														
1	PLATE		1	AAF16195		0.96																																																																																														
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS																																																																																													
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.06		WT/ASSY IN Kgs:																																																																																														
BRACKET FOR PARTITION PILLAR MOUNTING						SCALE	SSE/D																																																																																													
						1:2	CHD																																																																																													
						ALT.	ALTD																																																																																													
						DRN	Amal George																																																																																													
INDIAN RAILWAY STANDARDS						SHEET 1 OF 1																																																																																														
INTEGRAL COACH FACTORY, CHENNAI - 600038						82916014																																																																																														
DATE OF LATEST ALT.						A3																																																																																														
DATE OF FIRST ISSUE																																																																																																				
AME/SME																																																																																																				
REF.DRG.NO.87416006 Alt NIL																																																																																																				

82916015

REVISIONS		APPROVED & DATE	
ALT.	ZONE	DESCRIPTION	
▽	ROUGH MACHINED	01	ROUGH CLEANED
▽▽	FINISH MACHINED	01b	BURRS REMOVED
▽▽▽	FINE FINISH MACHINED	01c	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 PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
1	RIB		2	AAF16197		0.16	
1	PLATE		1	AAF16196		0.98	

GROUP: 1-6 Roof Construction SURFACE AREA IN Sq.m.:0.06 WT/ASSY IN Kgs:

BRACKET FOR MOUNTING PILLAR ASSEMBLY

SCALE 1:2 SSE/D CHD ALT. ALTD DRN Amal George

INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

82916015 A3

15-07-2025

DATE OF LATEST ALT. DATE OF FIRST ISSUE AME/SME

82916015

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

① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

ALT. ZONE DESCRIPTION APPROVED & DATE

130 77 73 5 60 α3

200 5

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 PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
1	RIB		2	AAF16197		0.16	
1	PLATE		1	AAF16196		0.98	

GROUP: 1-6 Roof Construction SURFACE AREA IN Sq.m.:0.06 WT/ASSY IN Kgs:

BRACKET FOR MOUNTING PILLAR ASSEMBLY

SCALE 1:2 SSE/D CHD ALT. ALTD DRN Amal George

INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

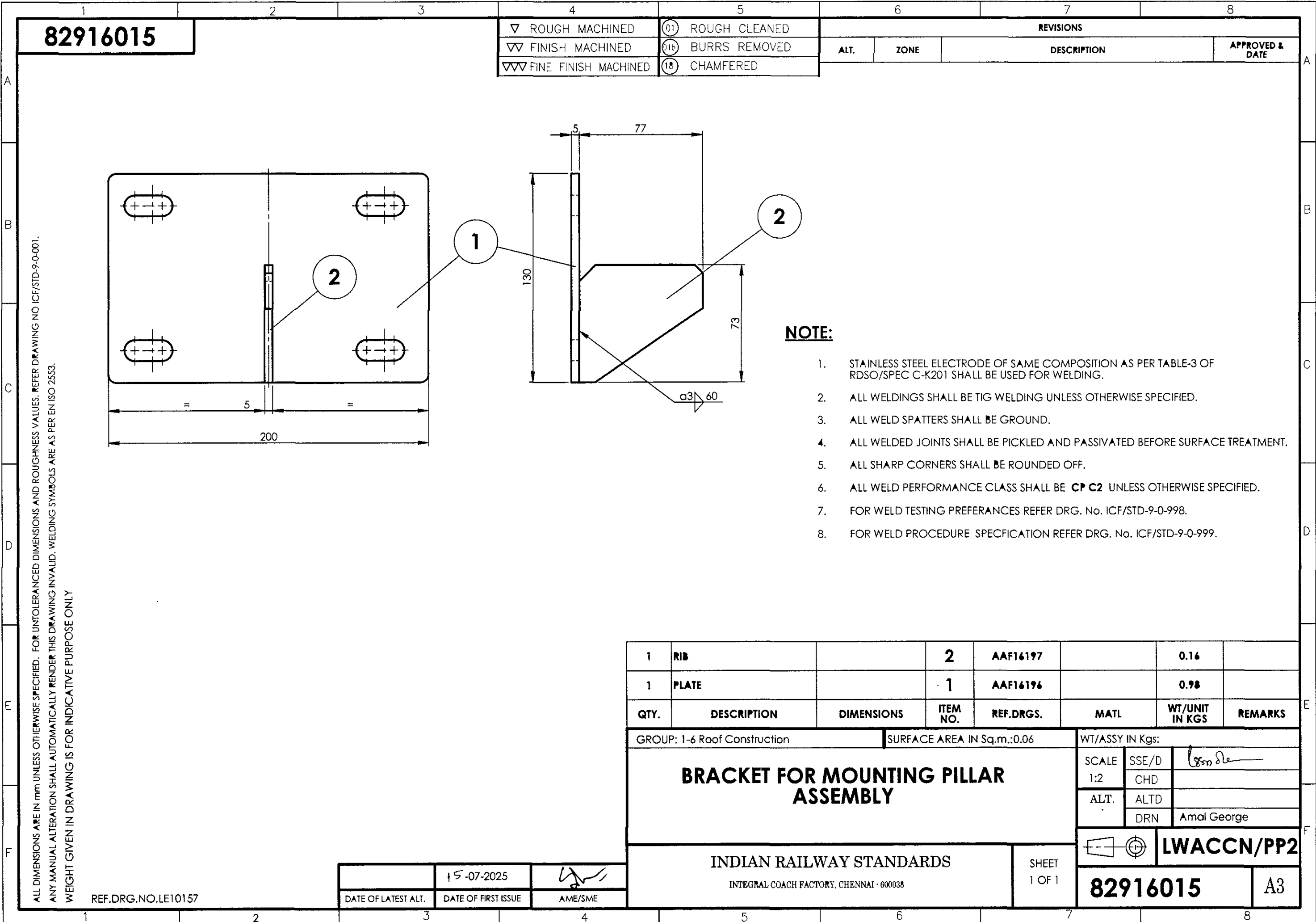
82916015 A3

15-07-2025

DATE OF LATEST ALT. DATE OF FIRST ISSUE AME/SME

REF.DRG.NO.LE10157

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



- 82916015

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

① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

ALT. ZONE DESCRIPTION APPROVED & DATE

130 77 73 5 60 α3

200 5

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 PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
 8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
1	RIB		2	AAF16197		0.16	
1	PLATE		1	AAF16196		0.98	

GROUP: 1-6 Roof Construction SURFACE AREA IN Sq.m.:0.06 WT/ASSY IN Kgs:

SCALE 1:2 SSE/D CHD
ALT. ALTD
DRN Amal George

BRACKET FOR MOUNTING PILLAR ASSEMBLY

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

82916015 A3

15-07-2025
DATE OF LATEST ALT. DATE OF FIRST ISSUE AME/SME

REF.DRG.NO.LE10157

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

82916015

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

① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

ALT. ZONE DESCRIPTION APPROVED & DATE

130 77 73 5 60 α3

200 5

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 PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
1	RIB		2	AAF16197		0.16	
1	PLATE		1	AAF16196		0.98	

GROUP: 1-6 Roof Construction SURFACE AREA IN Sq.m.:0.06 WT/ASSY IN Kgs:

SCALE 1:2 SSE/D CHD
ALT. ALTD
DRN Amal George

BRACKET FOR MOUNTING PILLAR ASSEMBLY

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

82916015 A3

15-07-2025
DATE OF LATEST ALT. DATE OF FIRST ISSUE AME/SME

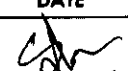
REF.DRG.NO.LE10157

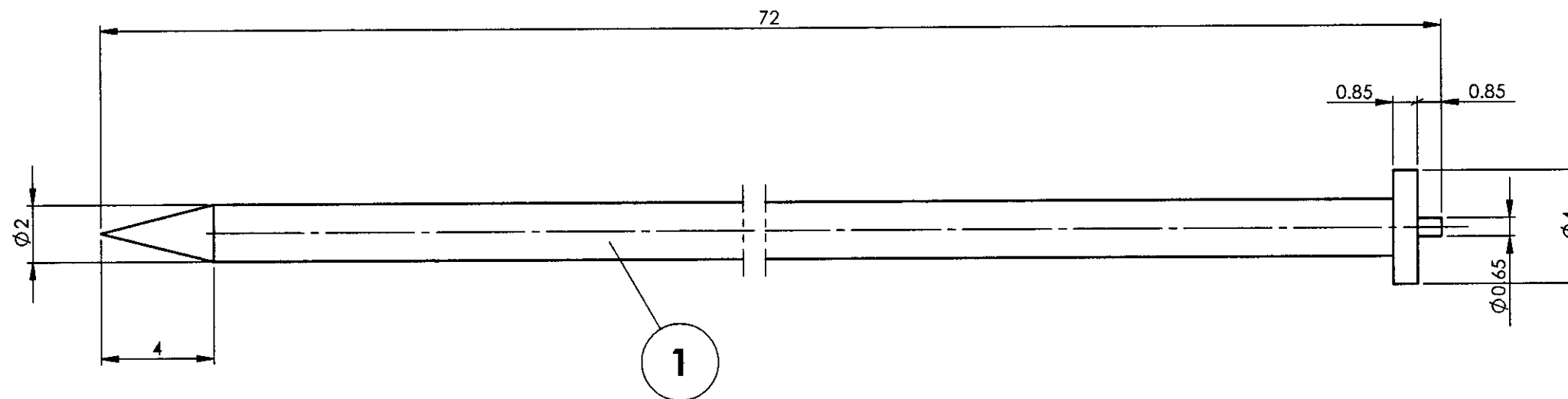
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

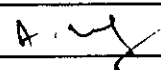
AAA16493

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING REVISED.	



1	WELDING PIN	Ø 4 x 72	1		IS:6528 X04Cr18Ni10	0.002	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION				SURFACE AREA IN Sq.m.: 0.000		WT/ASSY IN Kgs:	
WELDING PIN					SCALE 5:1	SSE/D	
						CHD	
					ALT. a	ALTD	A.Palanichamy
						DRN	3D: A.Palanichamy 2D: P.Murugan
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAA16493		
					A3		

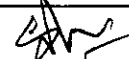
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

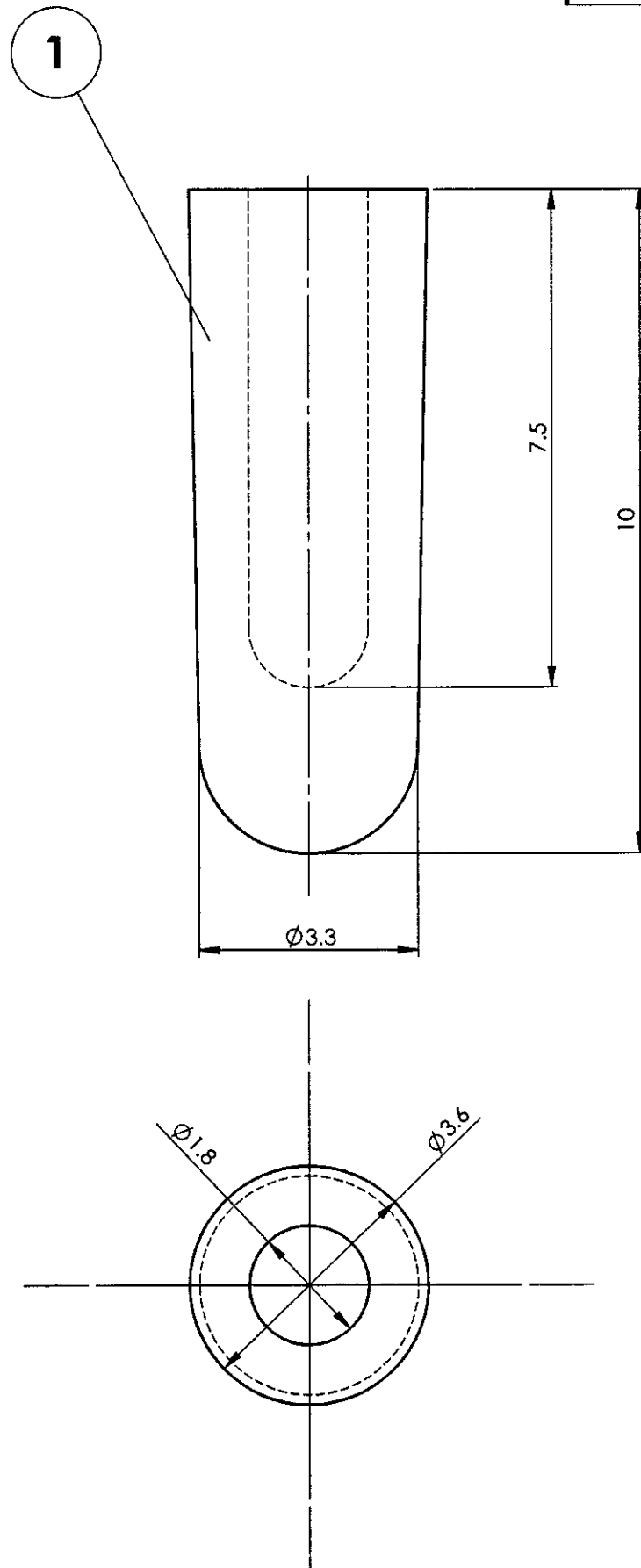
REF.DRG.NO.mi001576, ITEM-1

06-02-2024	19-07-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME


AAA16494

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

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
a		DRAWING REVISED.		



1	CAP	Ø3.6x10	1		IS:5831	0.000	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION		SURFACE AREA IN Sq.m.:0.000			WT/ASSY IN Kgs:		
CAP					SCALE	SSE/D	
					10:1	CHD	
					ALT.	ALTD	A.Palanichamy
					a	DRN	3D:A.Palanichamy 2D:P.Murugan
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600036				SHEET 1 OF 1			
					AAA16494		A3

06-02-2024	19-07-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME


REF.DRG.NO.mi001576, ITEM-2

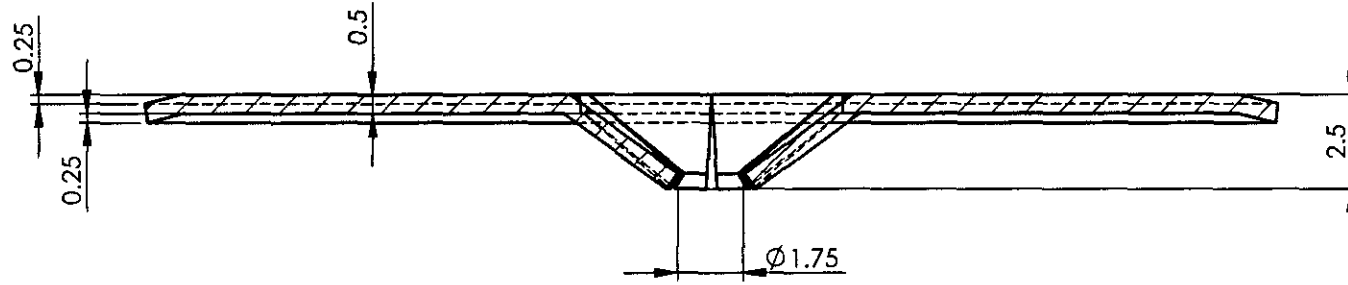
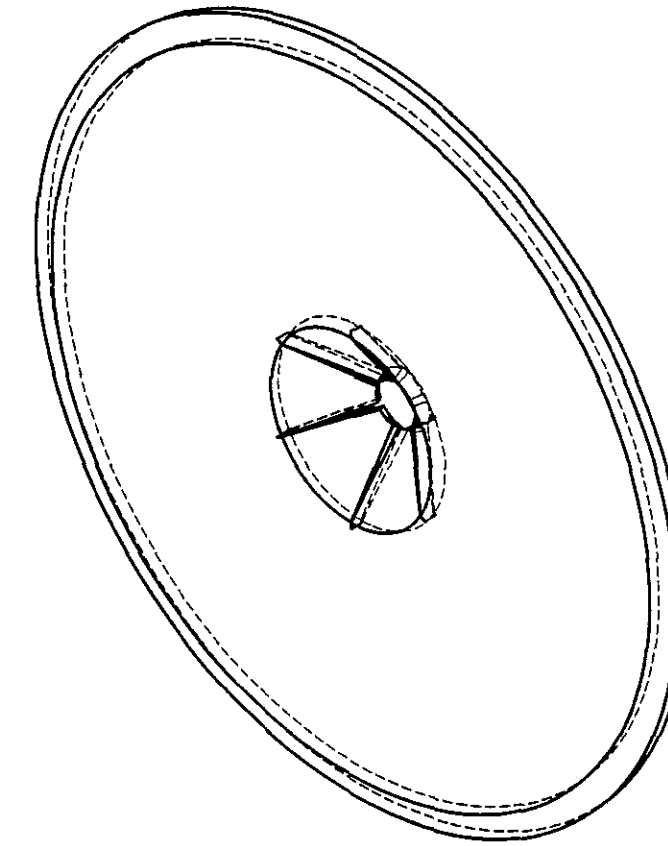
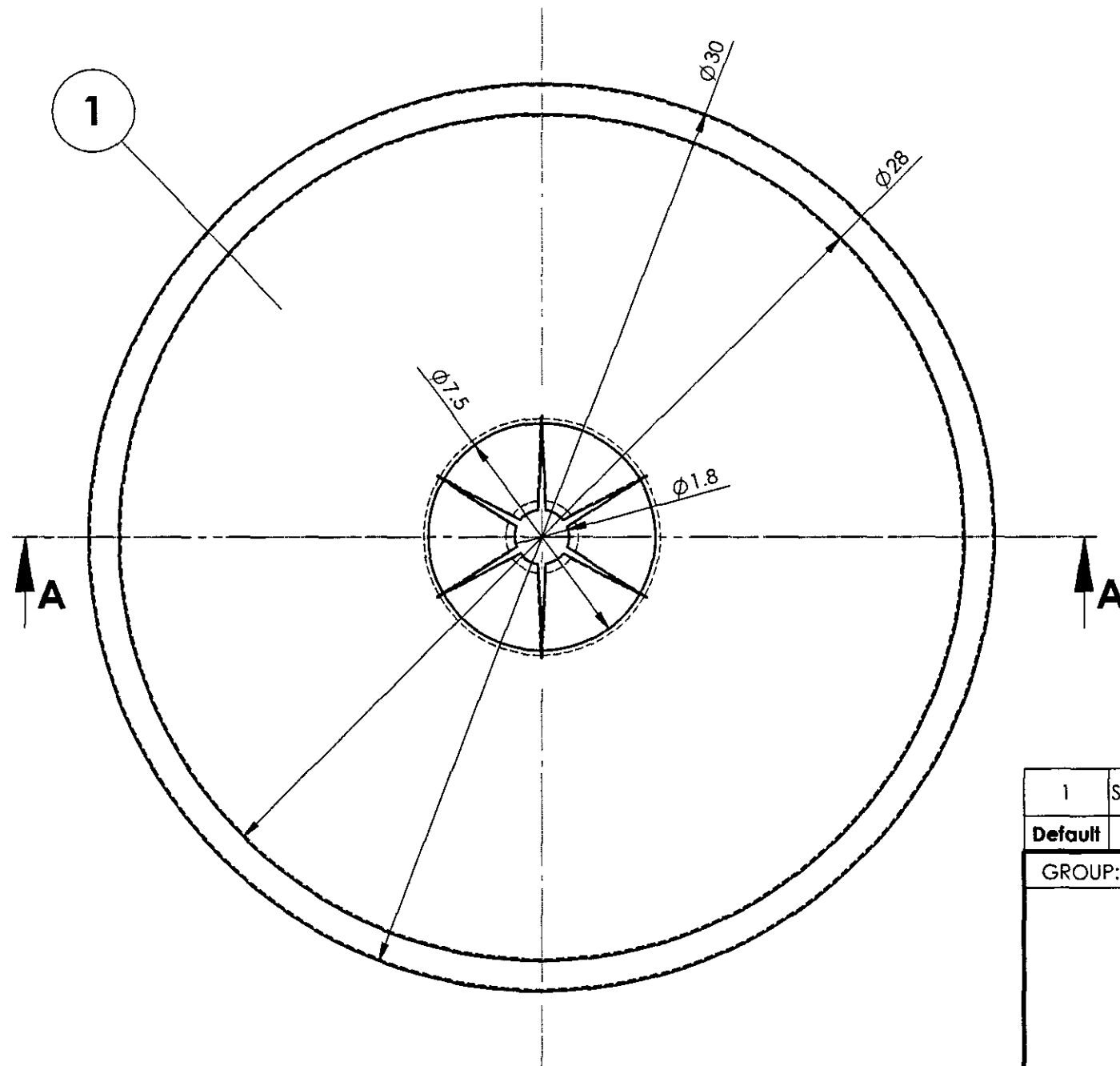
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAA16495


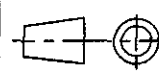
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①B CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING REVISED.	


SECTION A-A
SCALE 5 : 1

ISOMETRIC VIEW

1	SERRATED SPRING WASHER	DIA 30 x 0.5 THICK	1		IS:4072 Gr.65C6	0.003	COATING TO MDT5057
Default	DESCRIPTION	DIMENSIONS	ITEM NO	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION				SURFACE AREA IN Sq.m.:0.001		WT/ASSY IN Kgs:	
SERRATED SPRING WASHER					SCALE 2:1	SSE/D CHD	
					ALT. a	ALTD DRN	A.Palanichamy
					3D:A.Palanichamy 2D:P.Murugan		
							
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAA16495	
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 EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

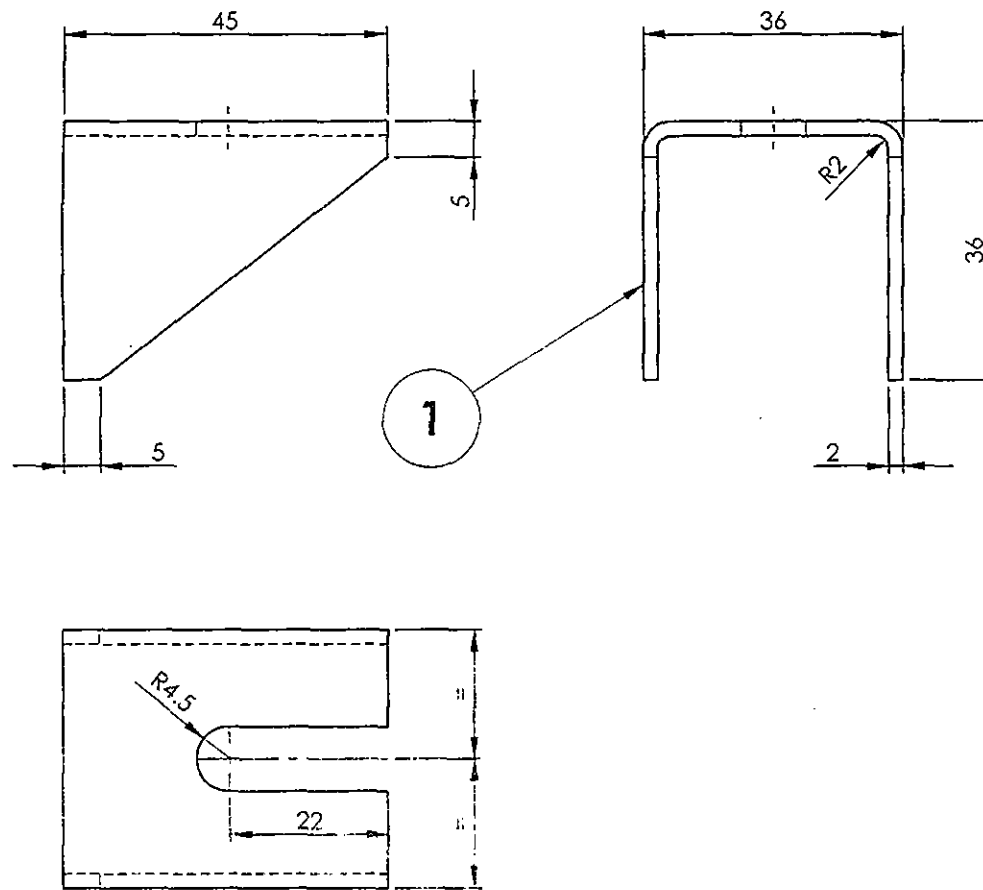
REF.DRG.NO.mi001576, ITEM-3

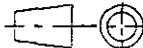
06-02-2024	19-07-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA16896

▽ ROUGH MACHINED	③ ROUGH CLEANED
▽▽ FINISH MACHINED	④ BURRS REMOVED
▽▽▽ FINE FINISH VACUUMED	⑤ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	BRACKET	2 x 45 x 101	1		RDSO/SPEC C- K201 X2 Cr Ni 12	0.050	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.007			WT/ASSY IN Kgs:0.050		
BRACKET					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		AAA16896

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUNDOFFS 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.3.10113.0.20.095.120

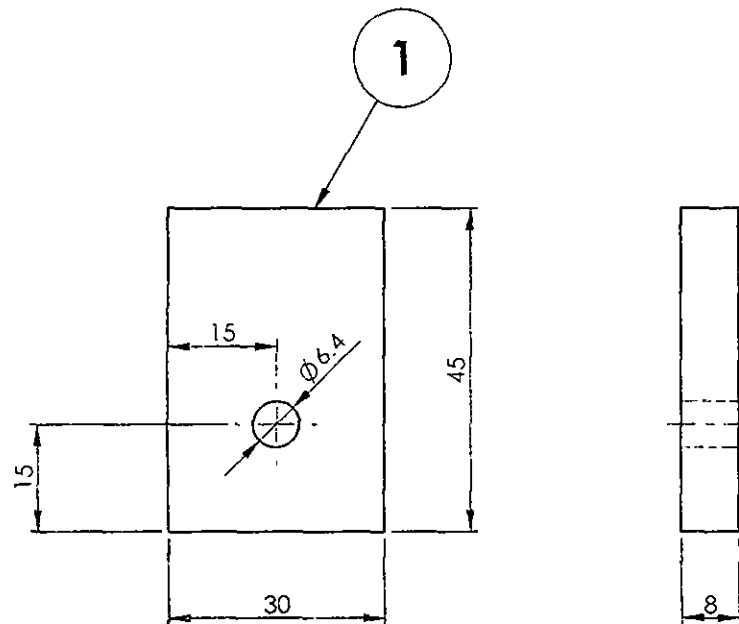
	21-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA16900

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

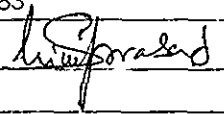
REVISIONS

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



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS ADD TOLERANCES AS 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.

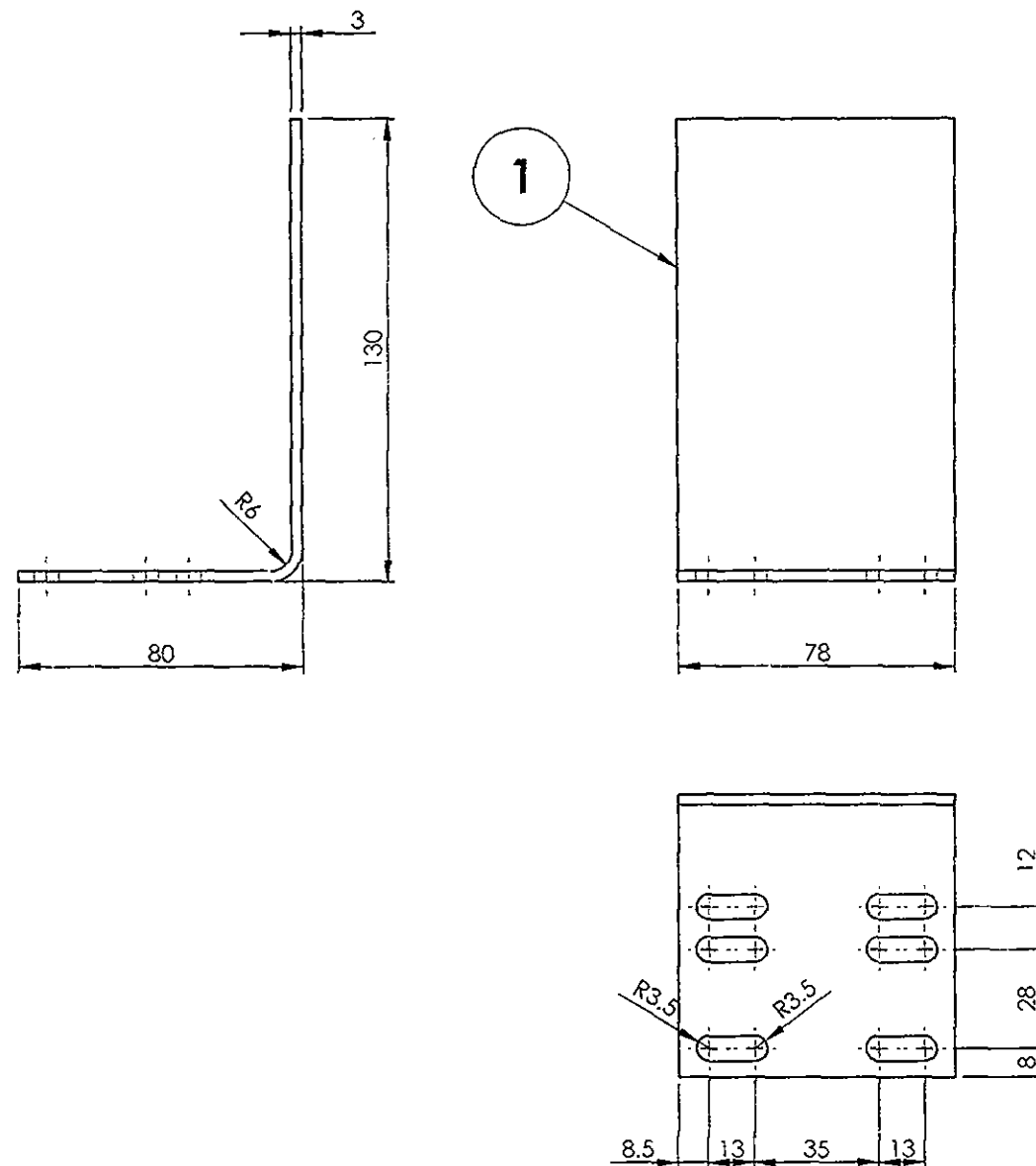
REF.DRG.NO.4.10113.0.20.095.138

—	GROUNDING FLAP	8 x 30 x 45	1		RDSO/SPEC C- K201 X5 Cr Ni 18 10	0.084	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.004			WT/ASSY IN Kgs:0.083		
GROUNDING FLAP					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	K.Sriram
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
AAA16900			A3				

AAA16906

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	ANGLE	3 x 78 x 204	1		RDSO/SPEC C-K201 X2 Cr Ni 12	0.363	
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:0.363	
ANGLE					SCALE 1:2	SSE/D	
						CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAA16906		A3

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

REF.DRG.NO.2.10113.0.20.095.115

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

AAA16907

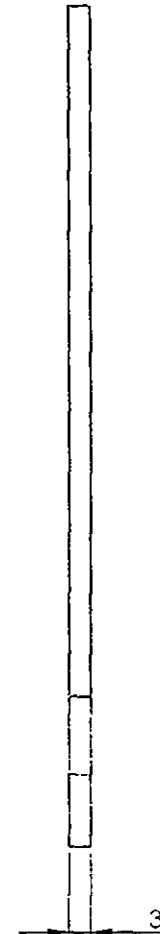
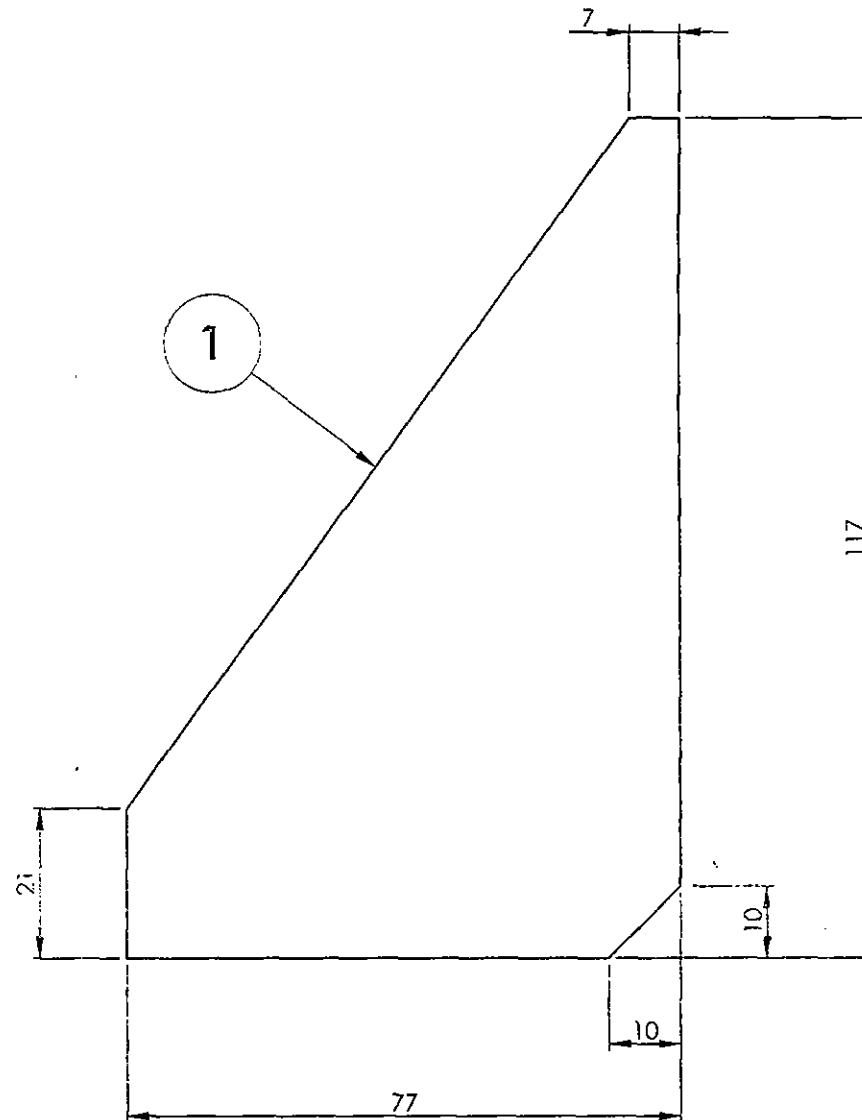
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED


REVISIONS

ALT.

ZONE

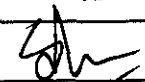
DESCRIPTION

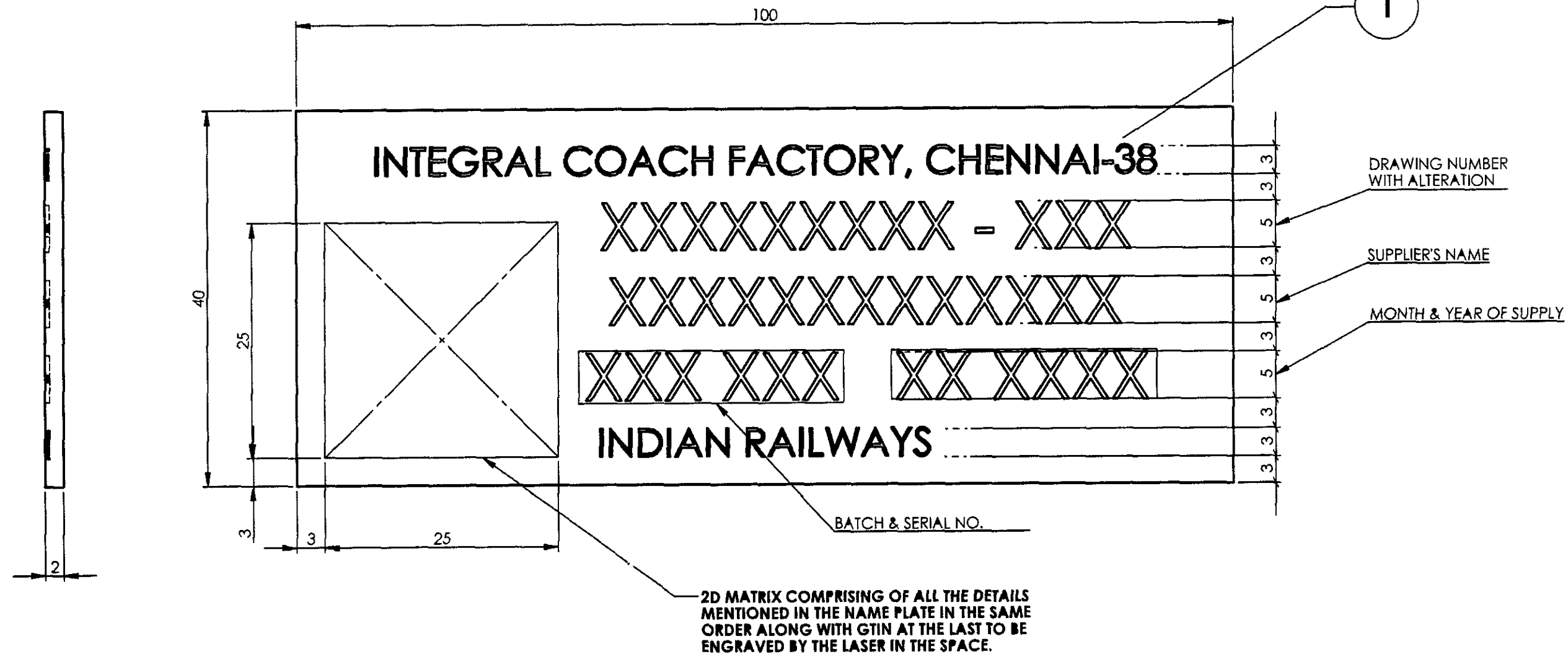
APPROVED &
DATE

1	WEB	3 x 77 x 117	1		RDSO/SPEC C- K201 X2 Cr Ni 12	0.134	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.012			WT/ASSY IN Kgs:0.134		
WEB					SCALE	SSE/D	<i>K. Srirom</i>
					1:1	CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16907

AAA51072

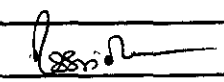
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①① BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①①① CHAMFERED


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.	



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	
					ALT. d	CHD	
						ALTD	KUNTI THAKUR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						DRN	G. NAGESWARAN
					SHEET 1 OF 1	AAA51072	
						A3	

06-07-2024	02.06.2010	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.

1		2		3		4		5		6		7		8	
AAB16026				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		①8 CHAMFERED		a				Ø7 mm ELONGATED HOLE INTRODUCED TO REPLACE THE Ø7 mm HOLES. RM SIZE OF ITEM-1 REVISED. VIEWS UPDATED.		[Signature]	
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 EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

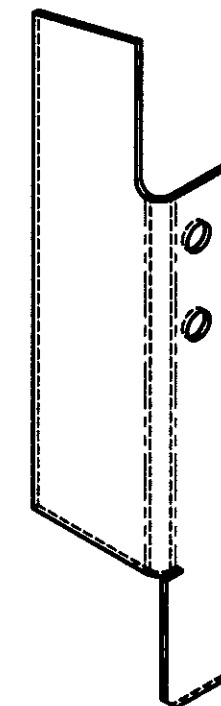
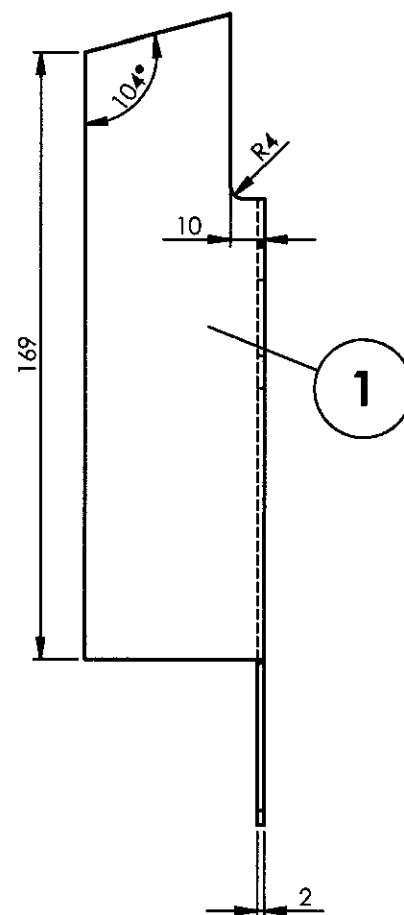
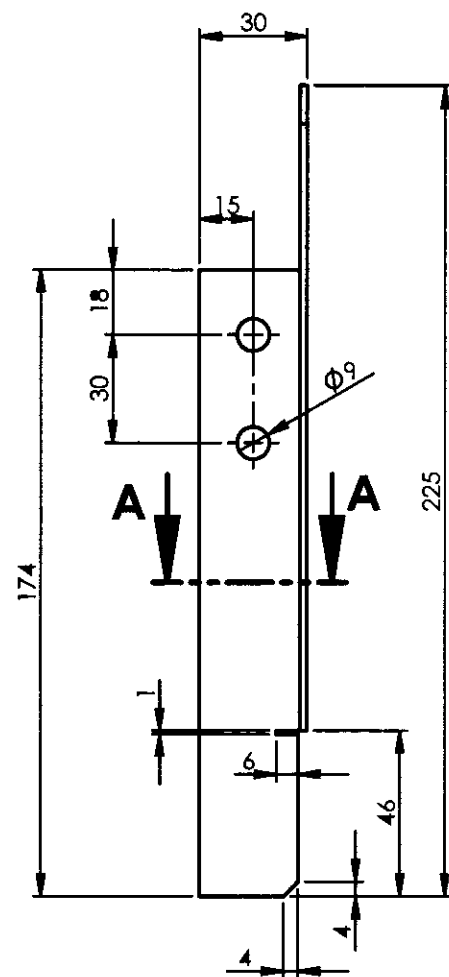
ISOMETRIC VIEW

1	BRACKET FOR CONDUIT FIXING	2 x 20 x 121	1		RDSO/SPEC C-K201 X2CrNi12	0.034	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6		SURFACE AREA IN Sq.m.:0.005		WT/ASSY IN Kgs:			
BRACKET FOR CONDUIT FIXING				SCALE	SSE/D	[Signature]	
				2:1	CHD		
				ALT. a	ALTD	AMAL GEORGE	
				DRN	S.Bala V.Subramani.		
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAB16026 A3	
INTEGRAL COACH FACTORY, CHENNAI - 600034							
22-05-2023	30-08-2013	[Signature]					
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME					

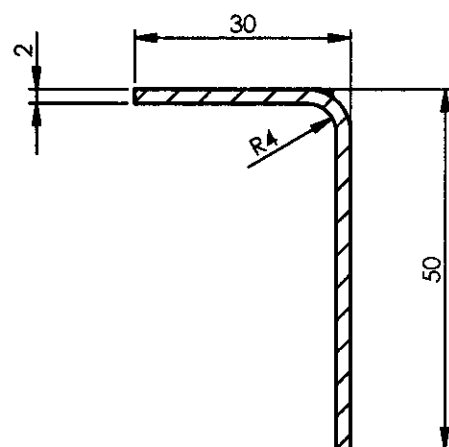
REF.DRG.NO.lg16127

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

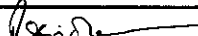

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
•		LOCATION OF Ø9 HOLE ALTD FROM 11 TO 18	



ISOMETRIC VIEW



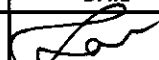
SECTION A-A
SCALE 1 : 1

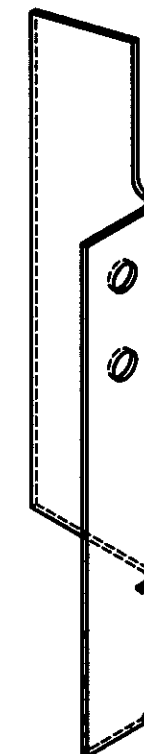
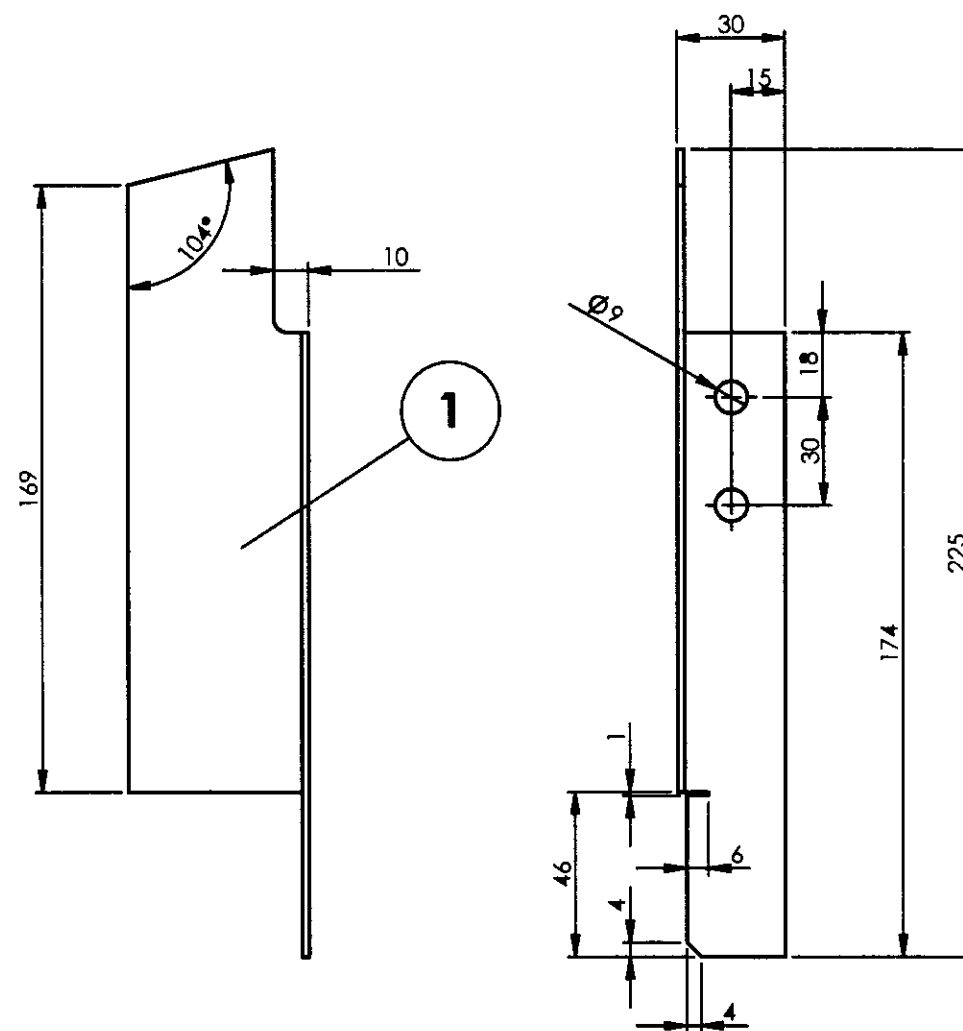
1	SUPPORTING ANGLE R.H.	2x75x225	1		RDSO/SPEC C-K201 X2Cni12	0.203	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF			SURFACE AREA IN Sq.m.:28504.33779				
SUPPORTING ANGLE R.H.					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	Bala V.Subramani.
					a	DRN	S.Bala V.subramani.
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAB16323		A3

AAB16324

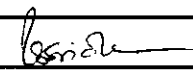
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		LOCATION OF Ø9 HOLE ALTD. FROM 11 TO 18	




ISOMETRIC VIEW

1	SUPPORTING ANGLE L.H.	2x75x225	1		RDSO/SPEC C-K201 X2CRNI12	0.203	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 28504.33779 WT/ASSY IN Kgs:			
SUPPORTING ANGLE R.H.					SCALE 1:2	SSE/D CHD	
					ALT. a	ALTD	Bala V.Subramani.
						DRN	B.Suresh
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAB16324		
					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

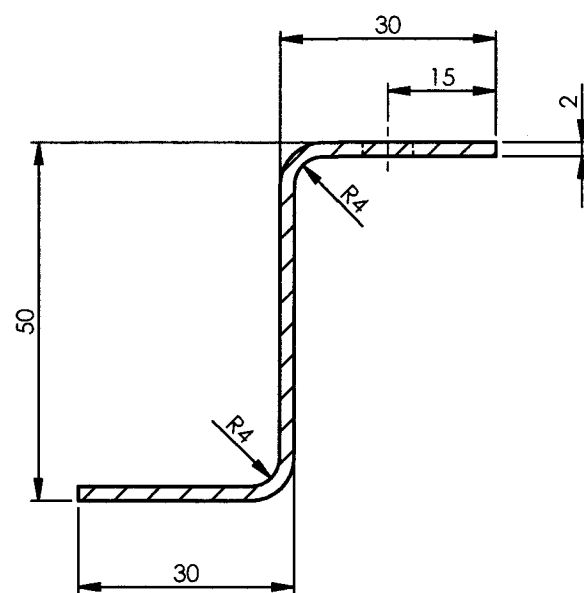
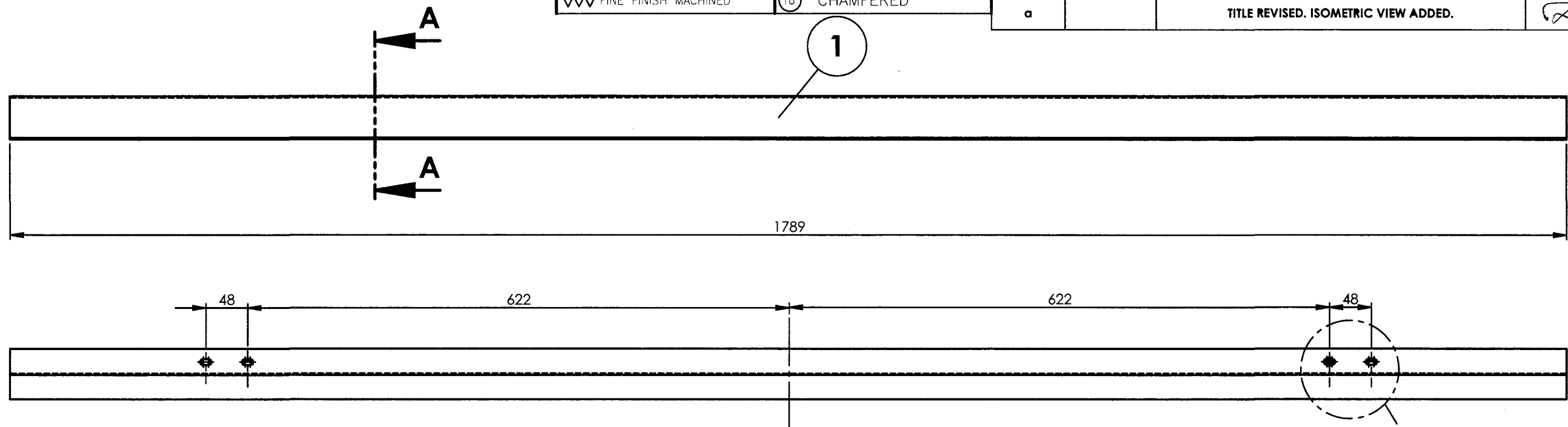
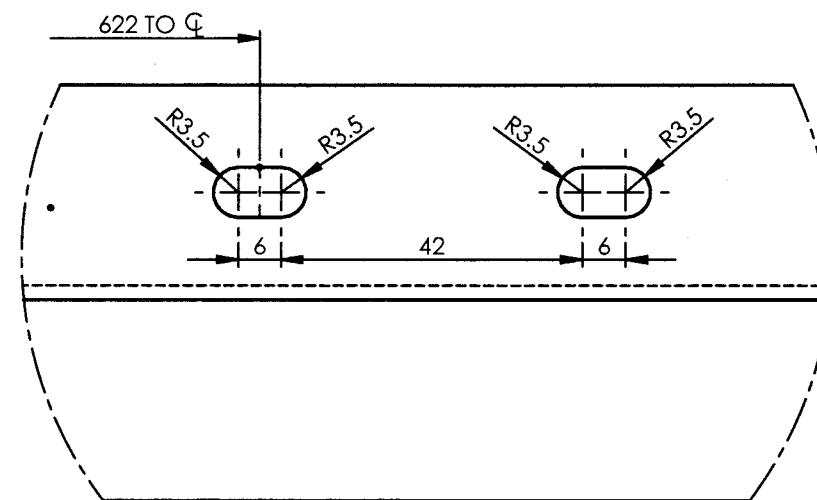
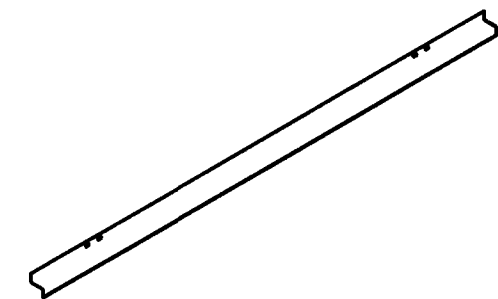
REF.DRG.NO.LE16105 alt-b

27-04-2022	19-09-2020	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

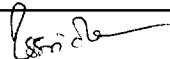
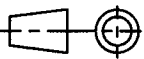
AAB16325

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		TITLE REVISED. ISOMETRIC VIEW ADDED.	

SECTION A-A
SCALE 1 : 1DETAIL C
SCALE 1 : 1

ISOMETRIC VIEW

1	Z- MEMBER	2x101x1789	1		RDSO/SPEC C-K201 X2CrNi12	2.91	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
Z-MEMBER FOR CROSS BRACE					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	AMAL GEORGE
					a	DRN	S.Bala V.subramani.
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		
					AAB16325		A3

REF.DRG.NO.LE16106 alt-a

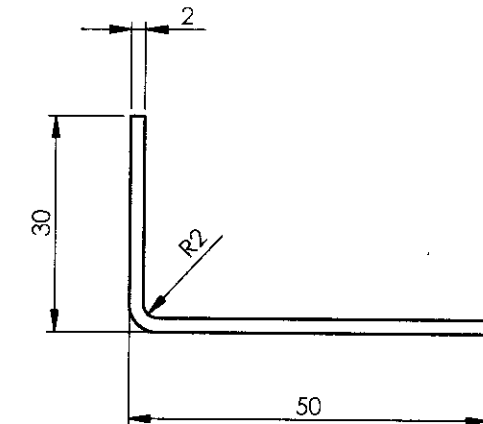
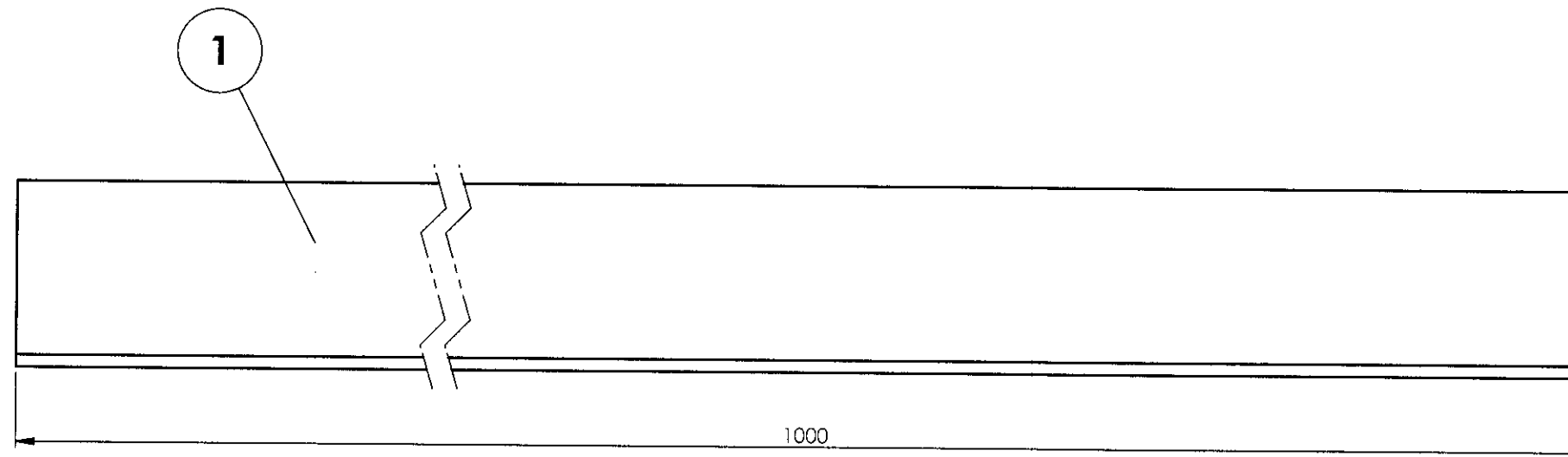
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAB16326

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ 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 IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.LE16104 alt-a

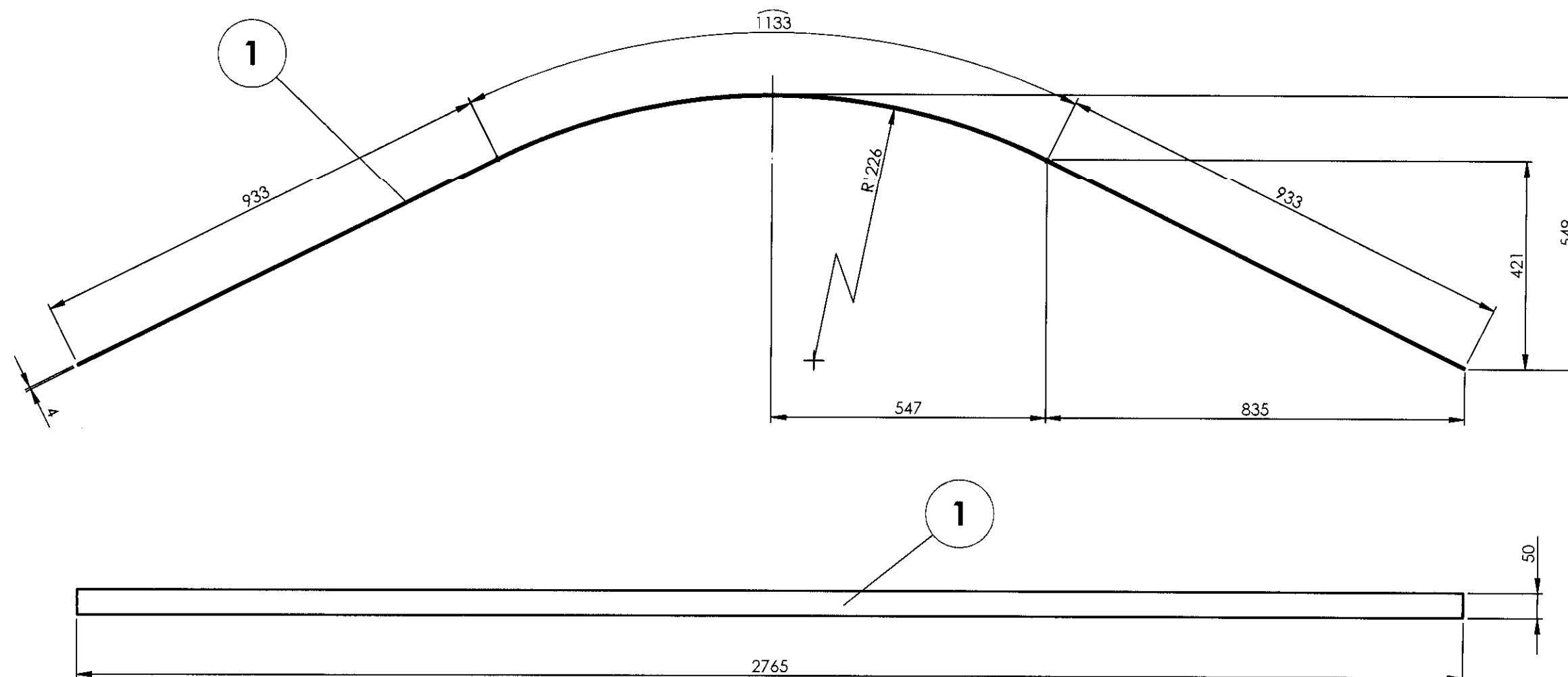
	19-09-2020	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	ANGLE	2x76x1000	1		RDSO/SPEC C-K201 X2CrNi12	1.23	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
ANGLE					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	S.Bala V.subramani.
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAB16326		A3

AAB16333

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	FLANGE FOR FINAL ROOF ARCH.	4x50x3000	1		RDSO/SPEC C-K201 X5 Cr Ni 18 10	4.80	
Default	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:	
FLANGE FOR FINAL ROOF ARCH.					SCALE	SSE/D	
					1:20	CHD	
					ALT.	ALTD	
						DRN	B.Suresh
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAB16333		
					A3		

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-4-001.
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

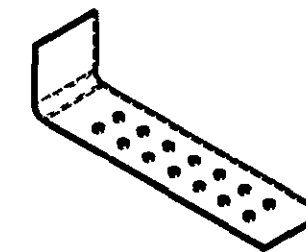
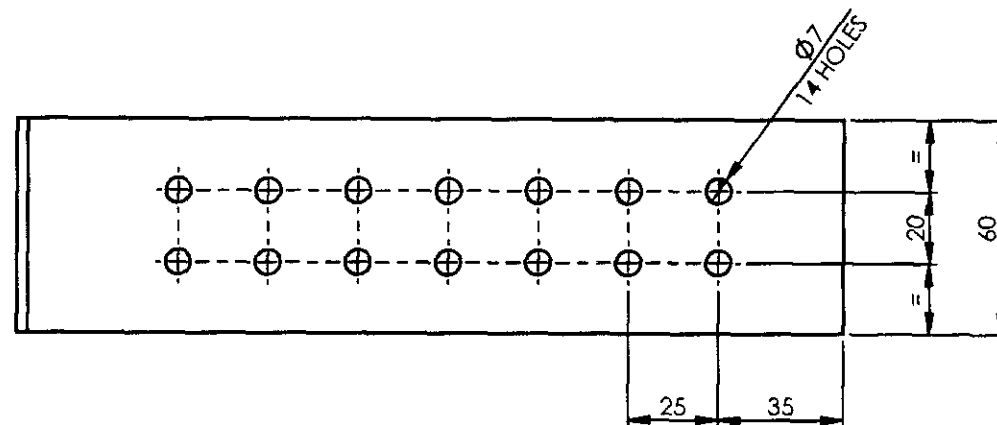
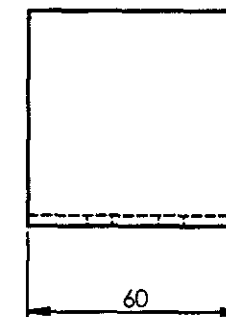
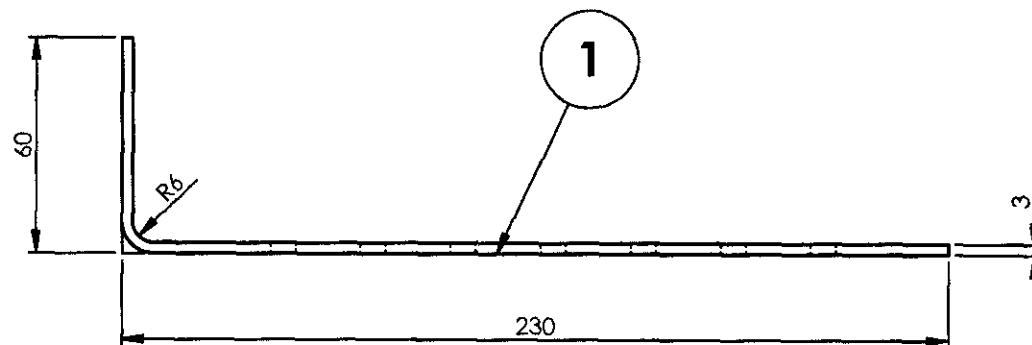
REF.DRG.NO. LE16114

-	19-09-2020	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

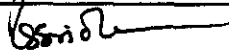

AAE16518

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

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



ISOMETRIC VIEW


1	ANGLE	3 x 60 x 284	1		RDSO/SPEC C- K201 X2 Cr Ni 12	0.396	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.036			WT/ASSY IN Kgs:0.396		
ANGLE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	Amal George
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAE16518		A3

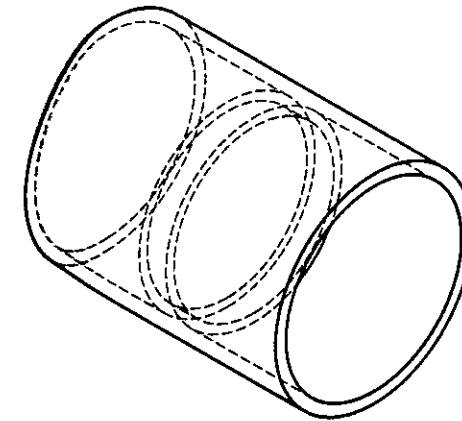
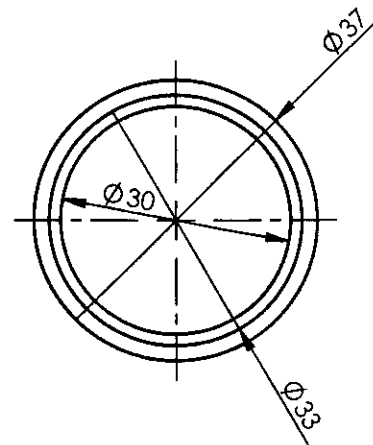
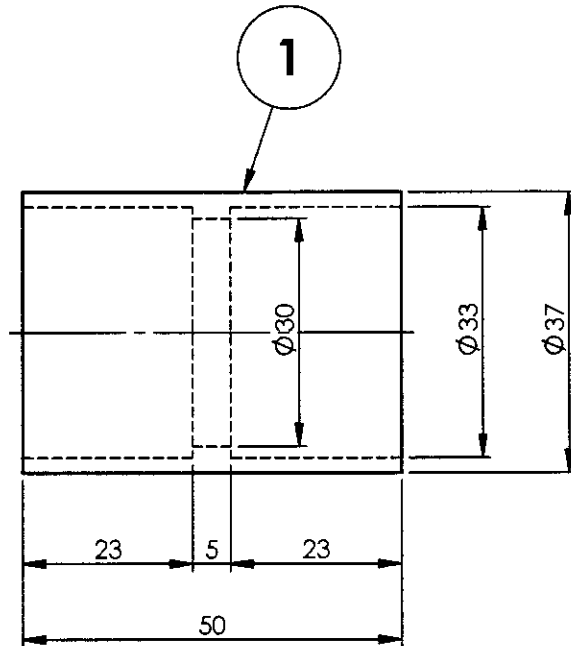
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.3.10113.0.20.095.130

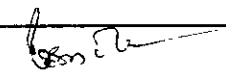
AAE16764


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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIAMETER ALTD FROM Ø27 TO Ø30. VIEWS UPDATED.	



ISOMETRIC VIEW

1	COUPLER FOR CONDUITS	50 x 50	1		AISI-304	0.09	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.01		WT/ASSY IN Kgs:	
COUPLER FOR CONDUITS					SCALE 1:1	SSE/D CHD	
					ALT. a	ALTD DRN	AMAL GEORGE 3D: Amal George 2D: Kunti Thakur
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY CHENNAI - 600038					AAE16764		A3

15-10-2024	18-07-2023	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

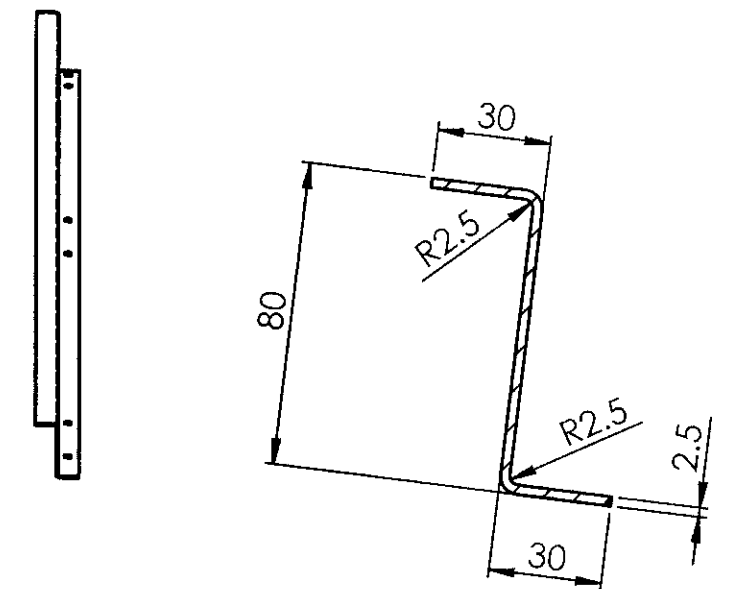
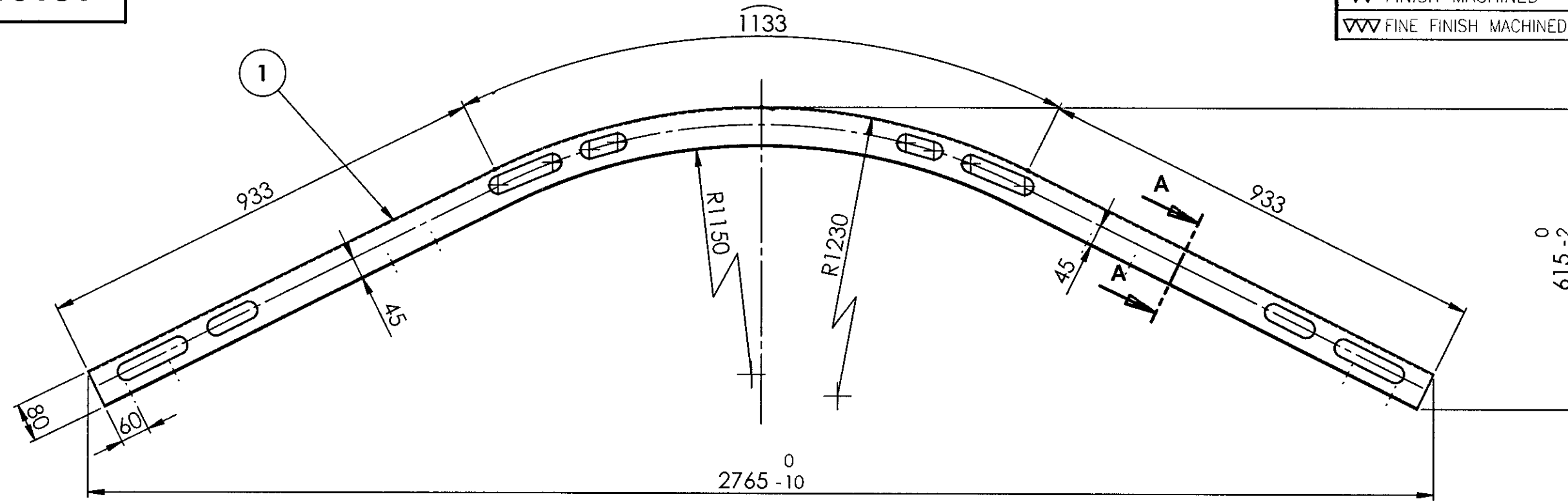
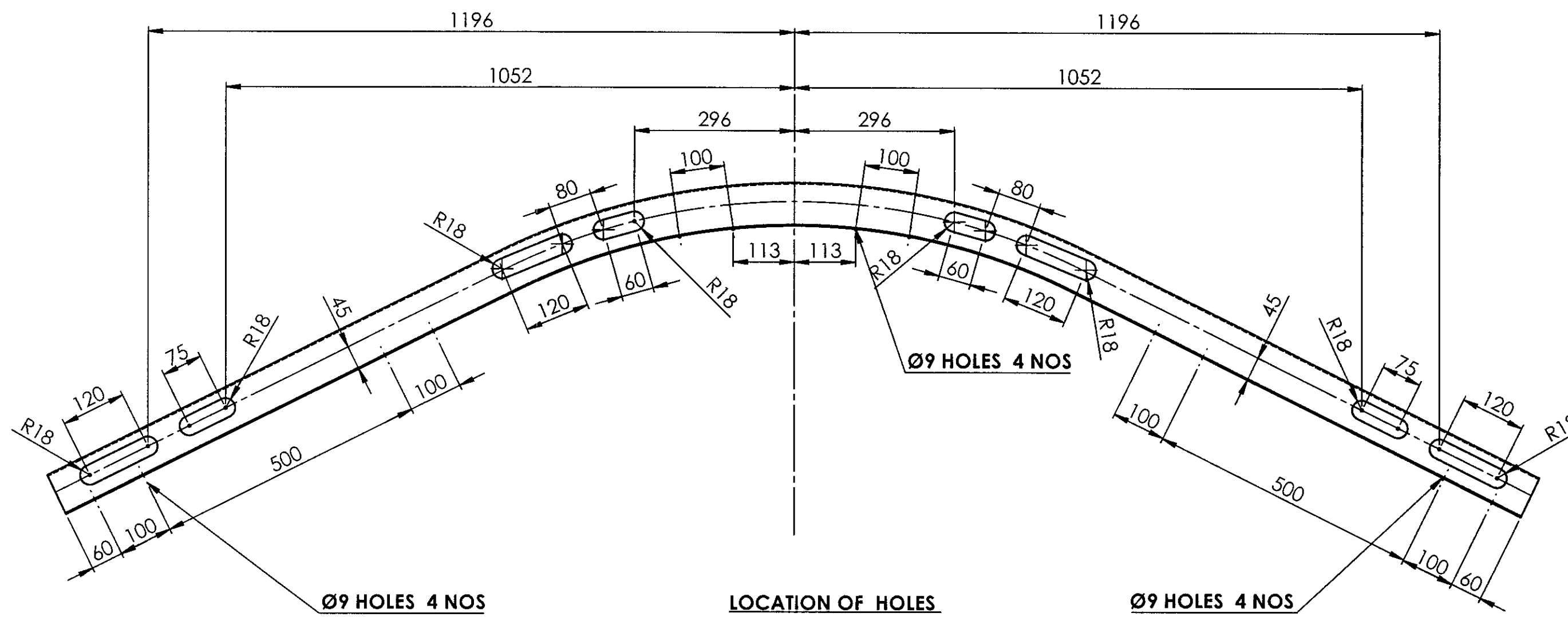
REF.DRG.NO.-

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 EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAF16101

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 2

Ø9 HOLES 4 NOS

LOCATION OF HOLES

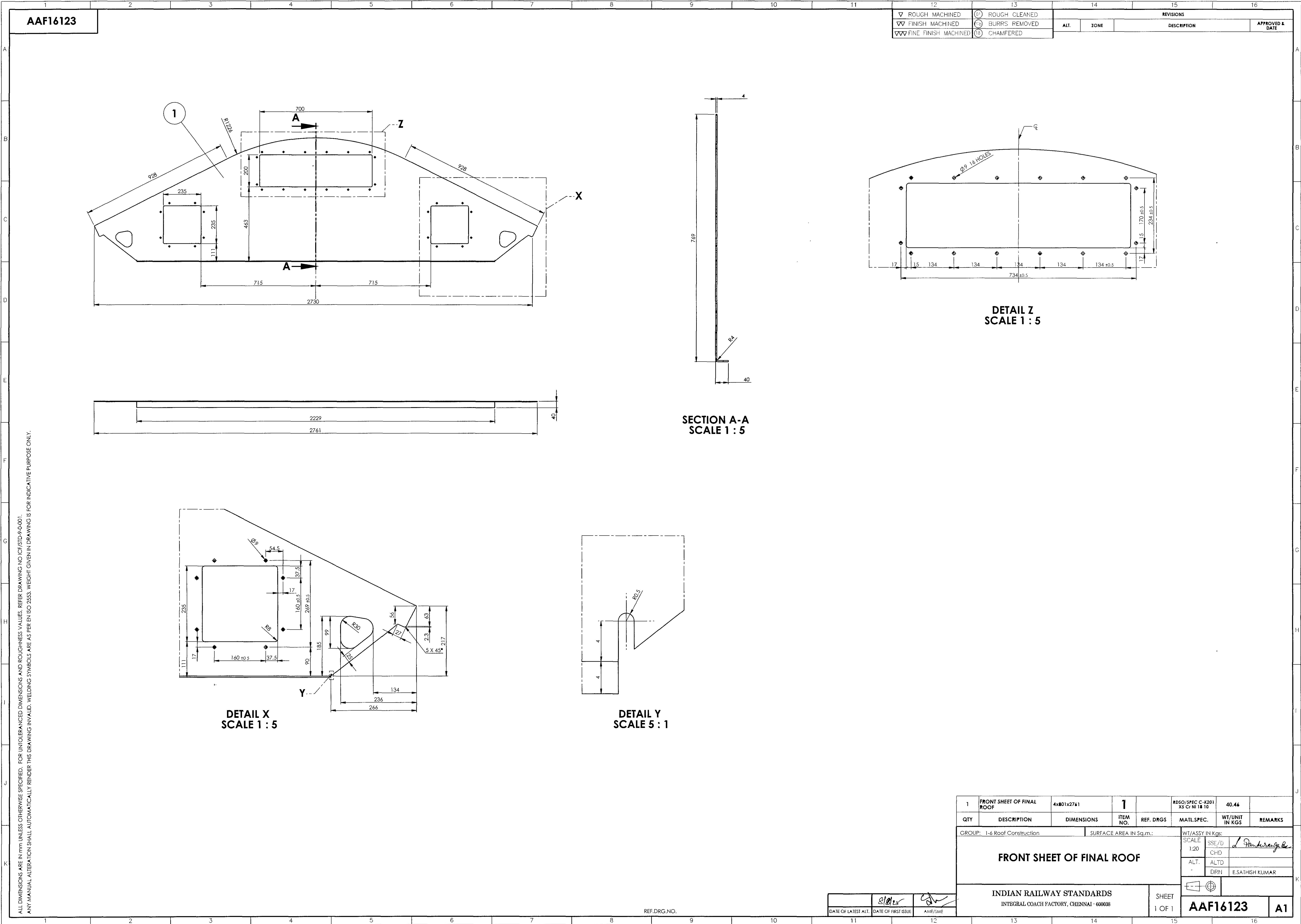
Ø9 HOLES 4 NOS

1	ROOF ARCH COMPLETE	2.5x664x2768	1		RDSO/SPEC C- K201 X2CrNi12	7.09	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 0.73		WT/ASSY IN Kgs: 7.09	
ROOF ARCH COMPLETE					SCALE 1:20	SSE/D	CHD
					ALT	ALTD	-
					DRN	DRN	Amal George
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAF16101	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A2	

REF.DRG.NO.LE16101

DATE OF LATEST ALT.	15-07-2025	AME/SME
---------------------	------------	---------

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.

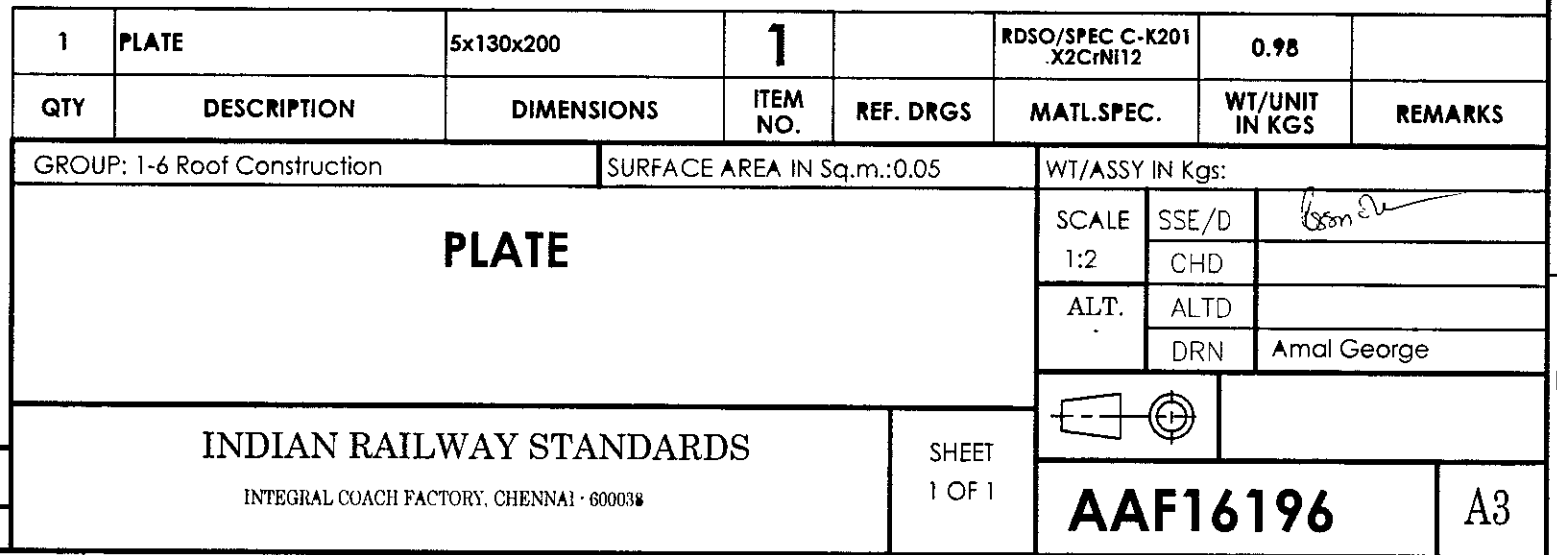


1		2		3		4		5		6		7		8																																																												
AAF16194				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																		
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION			APPROVED & DATE																																																											
				▽▽▽ FINE FINISH MACHINED		①c CHAMFERED																																																																				
<div><div><div>1</div><div><div><div><div>5</div><div>5</div><div>22</div><div>47</div><div>73</div><div>10</div><div>10</div><div>10</div></div></div><div><div>5</div><div>10</div><div>73</div><div>5</div></div></div></div></div> <div><table><tr><td>1</td><td>RIB</td><td>5 x 47 x 73</td><td>1</td><td></td><td>RDSO SPEC C-K201 X2 Cr Ni 12</td><td>0.10</td><td></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>REMARKS</td></tr><tr><td colspan="4">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:0.01</td><td colspan="2">WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="4">RIB</td><td>SCALE</td><td>SSE/D</td><td rowspan="2"></td></tr><tr><td>1:1</td><td>CHD</td></tr><tr><td>ALT.</td><td>ALTD</td><td rowspan="2">Amal George</td></tr><tr><td></td><td>DRN</td></tr><tr><td colspan="5">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td><td rowspan="2">AAF16194</td><td rowspan="2">A3</td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td></tr></table></div> <div><table><tr><td>-</td><td>15-07-2025</td><td></td></tr><tr><td>DATE OF LATEST ALT.</td><td>DATE OF FIRST ISSUE</td><td>AME/SME</td></tr></table></div> <div><div>ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-Q-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</div><div>REF.DRG.NO.-</div></div>																1	RIB	5 x 47 x 73	1		RDSO SPEC C-K201 X2 Cr Ni 12	0.10		QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.01		WT/ASSY IN Kgs:		RIB					SCALE	SSE/D		1:1	CHD	ALT.	ALTD	Amal George		DRN	INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		AAF16194	A3	INTEGRAL COACH FACTORY, CHENNAI - 600038					-	15-07-2025		DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
1	RIB	5 x 47 x 73	1		RDSO SPEC C-K201 X2 Cr Ni 12	0.10																																																																				
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																																			
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.01		WT/ASSY IN Kgs:																																																																				
RIB					SCALE	SSE/D																																																																				
					1:1	CHD																																																																				
					ALT.	ALTD	Amal George																																																																			
						DRN																																																																				
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		AAF16194	A3																																																																		
INTEGRAL COACH FACTORY, CHENNAI - 600038																																																																										
-	15-07-2025																																																																									
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME																																																																								

1		2		3		4		5		6		7		8																																																																
AAf16195				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																						
				▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION																																																																		
				▽▽ FINE FINISH MACHINED		①8 CHAMFERED						APPROVED & DATE																																																																		
<div>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</div> <div><p>1</p></div> <div><table><tr><td>1</td><td>PLATE</td><td>5x130x200</td><td>1</td><td></td><td>RDSO/SPEC C-K201 X2 Cr Ti 12</td><td>0.96</td><td></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>REMARKS</td></tr><tr><td colspan="5">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:0.05</td><td>WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="3">PLATE</td><td>SCALE</td><td>SSE/D</td><td>1:5</td></tr><tr><td>ALT.</td><td>CHD</td><td></td></tr><tr><td>ALT.</td><td>ALTD</td><td></td></tr><tr><td colspan="5" rowspan="2">INDIAN RAILWAY STANDARDS</td><td>DRN</td><td colspan="2">Amal George</td></tr><tr><td colspan="2"></td><td></td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2">SHEET 1 OF 1</td><td>AAf16195</td></tr></table></div> <div><table><tr><td></td><td>15-07-2025</td><td></td></tr><tr><td>DATE OF LATEST ALT.</td><td>DATE OF FIRST ISSUE</td><td>AME/SME</td></tr></table></div>																1	PLATE	5x130x200	1		RDSO/SPEC C-K201 X2 Cr Ti 12	0.96		QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.:0.05		WT/ASSY IN Kgs:	PLATE					SCALE	SSE/D	1:5	ALT.	CHD		ALT.	ALTD		INDIAN RAILWAY STANDARDS					DRN	Amal George					INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		AAf16195		15-07-2025		DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
1	PLATE	5x130x200	1		RDSO/SPEC C-K201 X2 Cr Ti 12	0.96																																																																								
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																																							
GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.:0.05		WT/ASSY IN Kgs:																																																																							
PLATE					SCALE	SSE/D	1:5																																																																							
					ALT.	CHD																																																																								
					ALT.	ALTD																																																																								
INDIAN RAILWAY STANDARDS					DRN	Amal George																																																																								
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		AAf16195																																																																							
	15-07-2025																																																																													
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME																																																																												
1		2		3		4		5		6		7		8																																																																

1		2		3		4		5		6		7		8																																																																								
AAf16196				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																														
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION																																																																										
				▽▽▽ FINE FINISH MACHINED		① CHAMFERED						APPROVED & DATE																																																																										
<div><div>ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-Q-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</div><div><div><div><div><div><div>130</div><div>20</div><div>90</div><div>25</div><div>145</div><div>27.5</div><div>200</div><div>R6.5</div><div>R6.5</div><div>17</div><div>5</div></div></div><div>1</div></div></div></div></div> <table><tr><td>1</td><td>PLATE</td><td>5x130x200</td><td>1</td><td></td><td>RDSO/SPEC C-K201 X2CrNi12</td><td>0.98</td><td></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>REMARKS</td></tr><tr><td colspan="2">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:0.05</td><td colspan="4">WT/ASSY IN Kgs:</td></tr><tr><td colspan="4" rowspan="4">PLATE</td><td>SCALE</td><td>SSE/D</td><td colspan="2">1:2</td></tr><tr><td>ALT.</td><td>CHD</td><td colspan="2"></td></tr><tr><td>ALT.</td><td>ALTD</td><td colspan="2"></td></tr><tr><td>DRN</td><td colspan="2">Amal George</td></tr><tr><td colspan="4">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td><td colspan="2">AAf16196</td></tr><tr><td colspan="4">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2"></td><td colspan="2">A3</td></tr></table> <table><tr><td></td><td>15-07-2025</td><td></td></tr><tr><td>DATE OF LATEST ALT</td><td>DATE OF FIRST ISSUE</td><td>AME/SME</td></tr></table>																1	PLATE	5x130x200	1		RDSO/SPEC C-K201 X2CrNi12	0.98		QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.05		WT/ASSY IN Kgs:				PLATE				SCALE	SSE/D	1:2		ALT.	CHD			ALT.	ALTD			DRN	Amal George		INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAf16196		INTEGRAL COACH FACTORY, CHENNAI - 600038						A3			15-07-2025		DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME	DATE OF LATEST ALT		DATE OF FIRST ISSUE		AME/SME	
																1	PLATE	5x130x200	1		RDSO/SPEC C-K201 X2CrNi12	0.98																																																																
																QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																															
																GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.05		WT/ASSY IN Kgs:																																																																		
																PLATE				SCALE	SSE/D	1:2																																																																
ALT.	CHD																																																																																					
ALT.	ALTD																																																																																					
DRN	Amal George																																																																																					
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAf16196																																																																																
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3																																																																																
	15-07-2025																																																																																					
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME																																																																																				

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

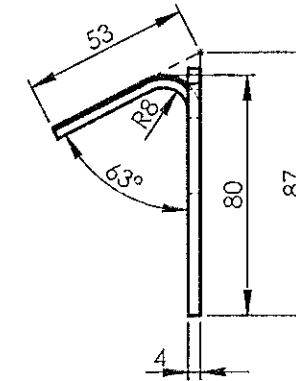
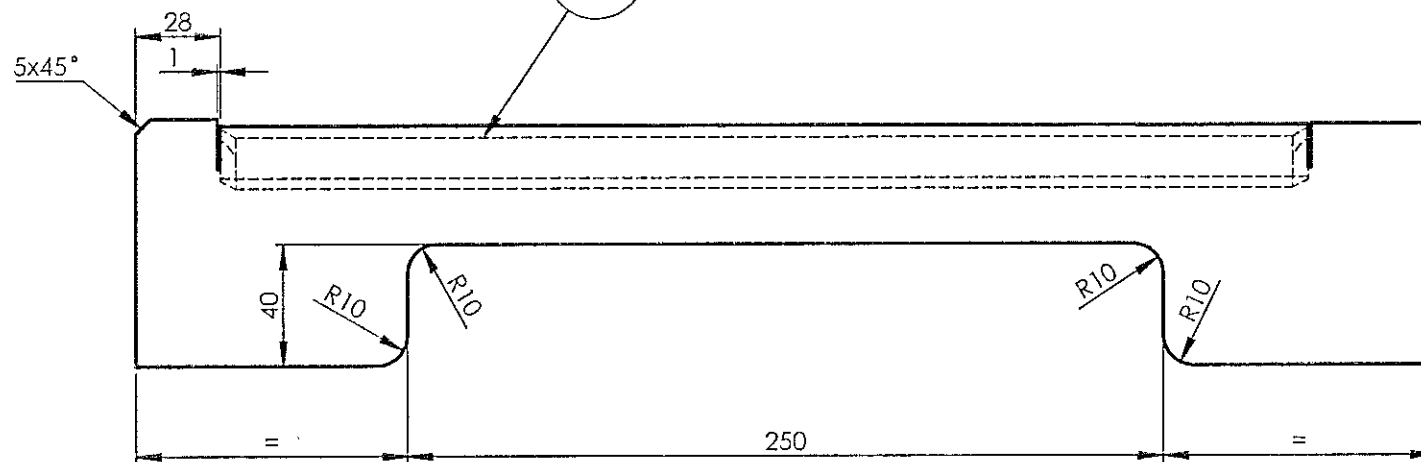


1		2		3		4		5		6		7		8																																																										
AAF16197				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE																																																										
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED																																																																		
<div><div>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</div><div><div><div><div><div><div>1</div><div>5</div><div>10</div><div>10</div><div>73</div><div>77</div><div>22</div><div>5</div></div><div></div></div><div><div>5</div><div>10</div><div>73</div><div>5</div></div></div></div></div><div><table><tr><td>1</td><td>RIB</td><td>5 x 73 x 77</td><td>1</td><td></td><td>RDSO SPEC C-K201 X2 Cr Ni 12</td><td>0.16</td><td></td></tr><tr><td>Default</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>REMARKS</td></tr><tr><td colspan="5">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:0.01</td><td>WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="4">RIB</td><td>SCALE</td><td>SSE/D</td><td rowspan="2"></td></tr><tr><td>1:1</td><td>CHD</td></tr><tr><td>ALT.</td><td>ALTD</td><td rowspan="2">Amal George</td></tr><tr><td></td><td>DRN</td></tr><tr><td colspan="5">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td><td>AAAF16197</td><td>A3</td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2"></td><td></td><td></td></tr></table><div><div>-</div><div>15-07-2025</div><div></div></div><div><div>DATE OF LATEST ALT</div><div>DATE OF FIRST ISSUE</div><div>AME/SME</div></div></div></div>																1	RIB	5 x 73 x 77	1		RDSO SPEC C-K201 X2 Cr Ni 12	0.16		Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.:0.01		WT/ASSY IN Kgs:	RIB					SCALE	SSE/D		1:1	CHD	ALT.	ALTD	Amal George		DRN	INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		AAAF16197	A3	INTEGRAL COACH FACTORY, CHENNAI - 600038								
1	RIB	5 x 73 x 77	1		RDSO SPEC C-K201 X2 Cr Ni 12	0.16																																																																		
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																																	
GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.:0.01		WT/ASSY IN Kgs:																																																																	
RIB					SCALE	SSE/D																																																																		
					1:1	CHD																																																																		
					ALT.	ALTD	Amal George																																																																	
						DRN																																																																		
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		AAAF16197	A3																																																																
INTEGRAL COACH FACTORY, CHENNAI - 600038																																																																								

AAF16229

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

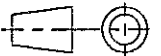
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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 10113.0.20.200.130

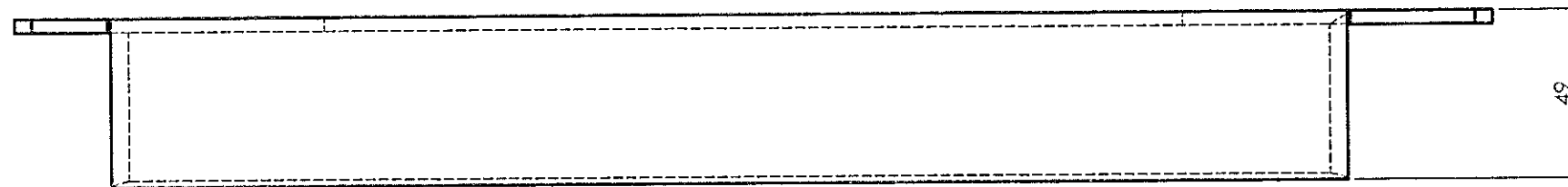
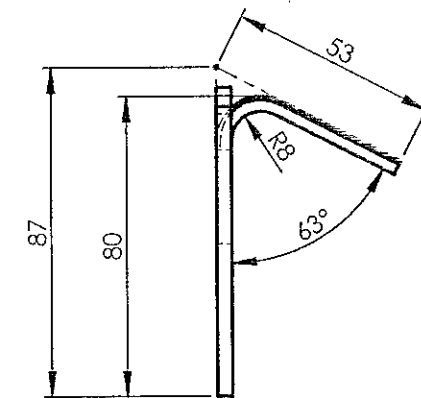
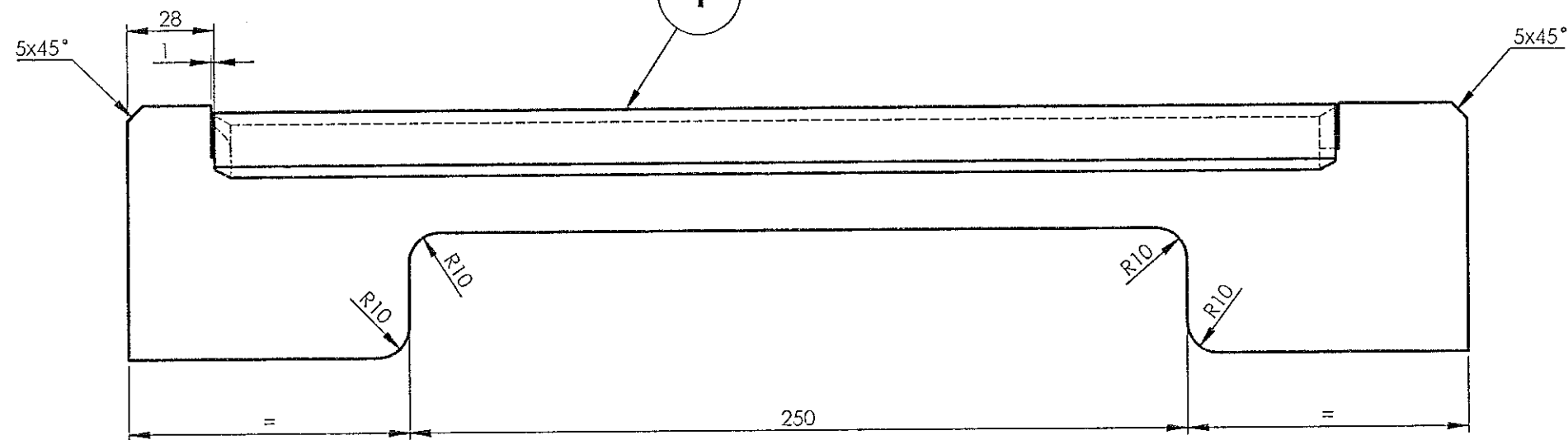
	12/09/2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	STIFFENING ANGLE	4 x 123 x 430	1		RDSO/SPEC C- K201 X2 Cr Ni 12	1.269	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.084			WT/ASSY IN Kgs:		
STIFFENING ANGLE					SCALE	SSE/D	Jf. d. m.
					1:2.5	CHD	
					ALT.	ALTD	3D:E SATHISH KUMAR 2D:VIJAYAKUMAR R
						DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAF16229		A3

AAF16230

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

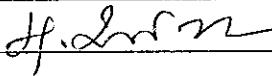

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

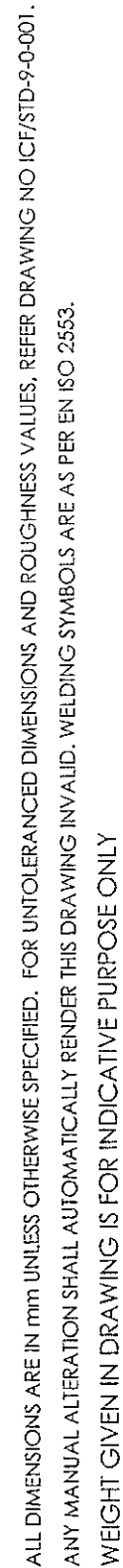
REF.DRG.NO.2 10113.0.20.200.131

	12/09/2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	STIFFENING ANGLE	4 x 123 x 430	1		RDSO/SPEC C-K201 X2 Cr Ni 12	1.268	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.084			WT/ASSY IN Kgs:		
STIFFENING ANGLE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	3D:E SATHISH KUMAR 2D:VIJAYAKUMAR R
						DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAF16230		A3

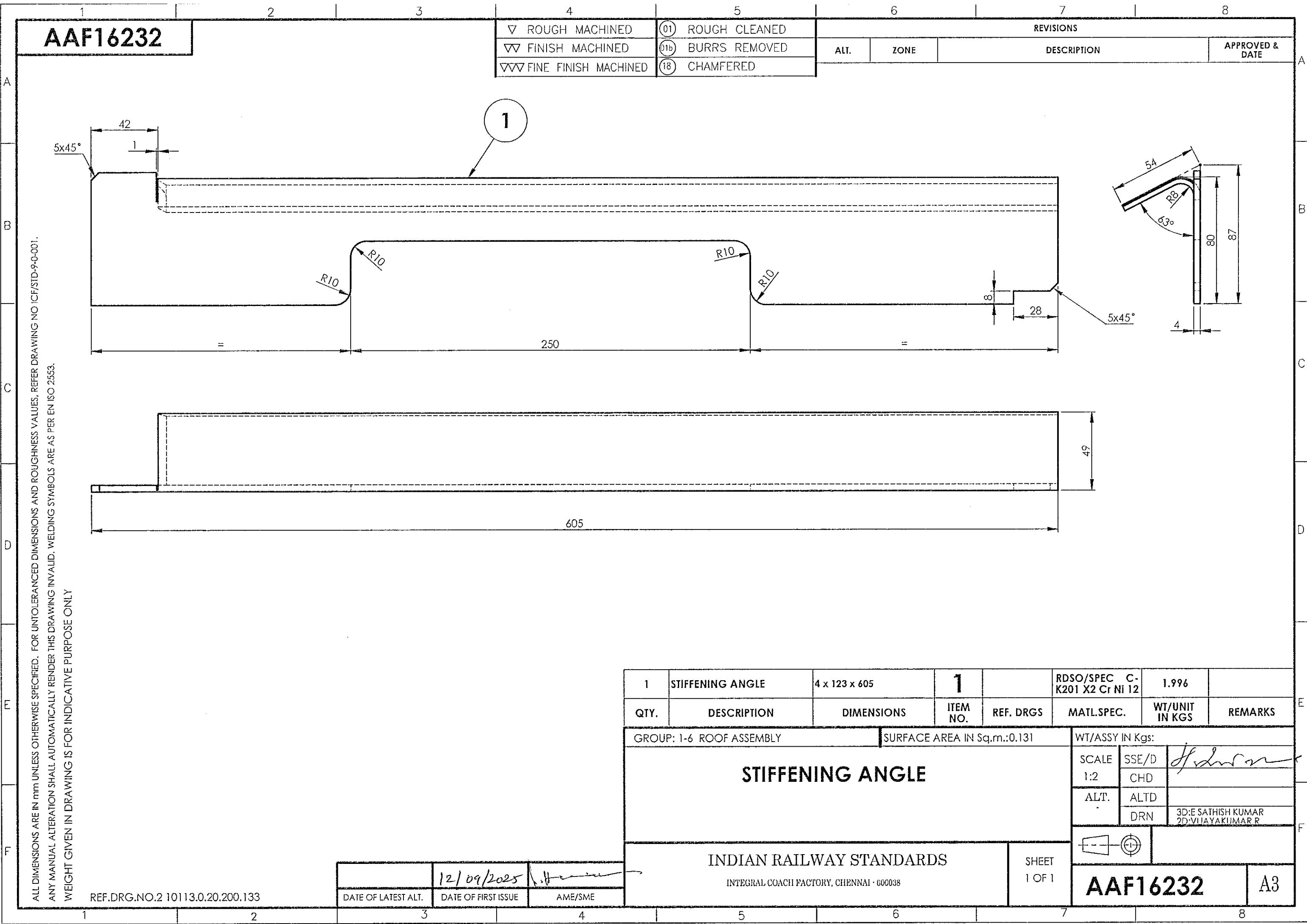
A	
B	
C	
D	
E	
F	

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



REF.DRG.NO.2 10113.0.20.200.132

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
---------------------	---------------------	---------



AA16249

▽ ROUGH MACHINED

▽▽ FINISH MACHINED

▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED

①b BURRS REMOVED

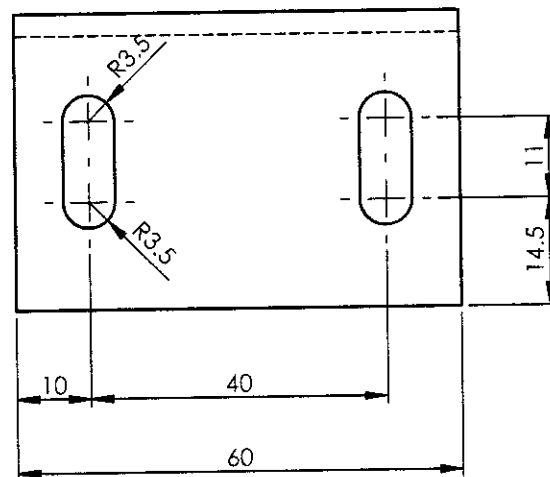
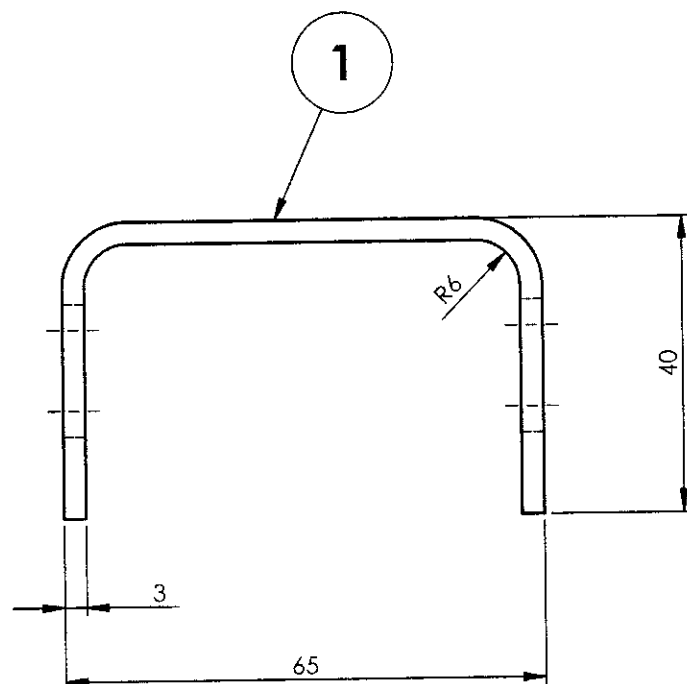
①c CHAMFERED

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 IS: 813-1986.

REF.DRG.NO.2 10113.0.76.095.009

DATE OF LATEST ALT	09-2025	AME/SME
--------------------	---------	---------

1	BRACKET COMPLETE	3 x 40 x 133	1		RDSO/SPEC C-K201 X2 Cr Ni 12	0.180	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 0.017		WT/ASSY IN Kgs: 0.180	
BRACKET COMPLETE					SCALE 1:1	SSE/D CHD	
					ALT.	ALTD	
						DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AA16249	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	