
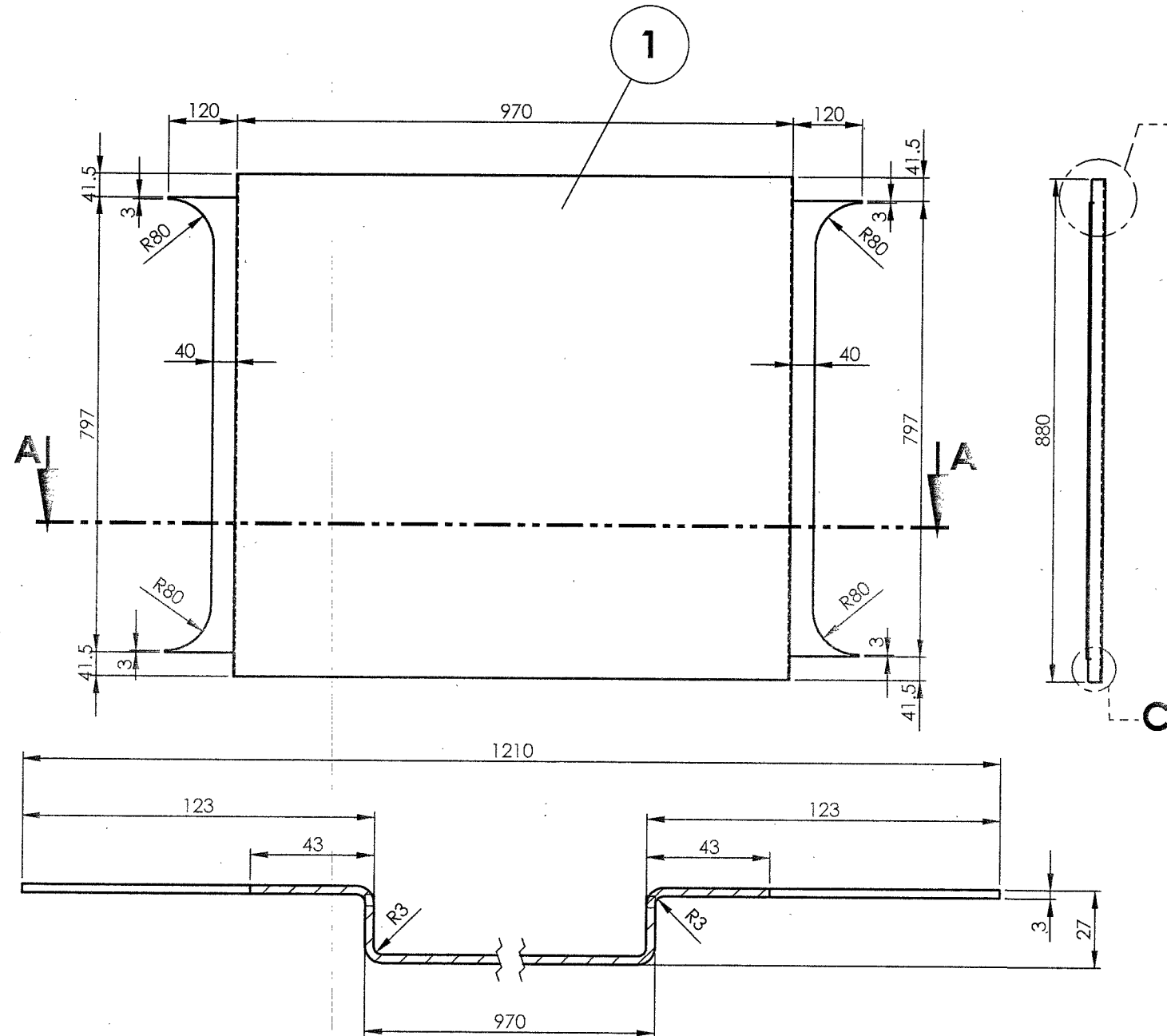
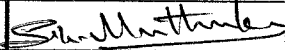
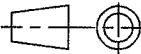



AAC14551

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		CUTAWAY DIMENSION REVISED.	

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

1	BRACKET	3x880x1246	1		RDSO/SPEC C- K201 X2CrNi12	23.02	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
BRACKET					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	A.Muthukumar
					a	DRN	A.Muthukumar
							
INDIAN RAILWAY STANDARDS				SHEET		AAC14551	
INTEGRAL COACH FACTORY, CHENNAI · 600038				1 OF 1			
						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.-

- 8.6.18	-	<i>(Signature)</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

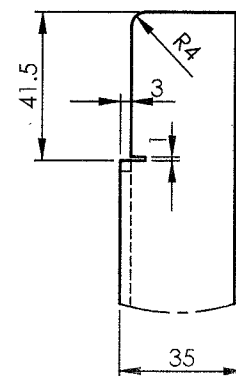
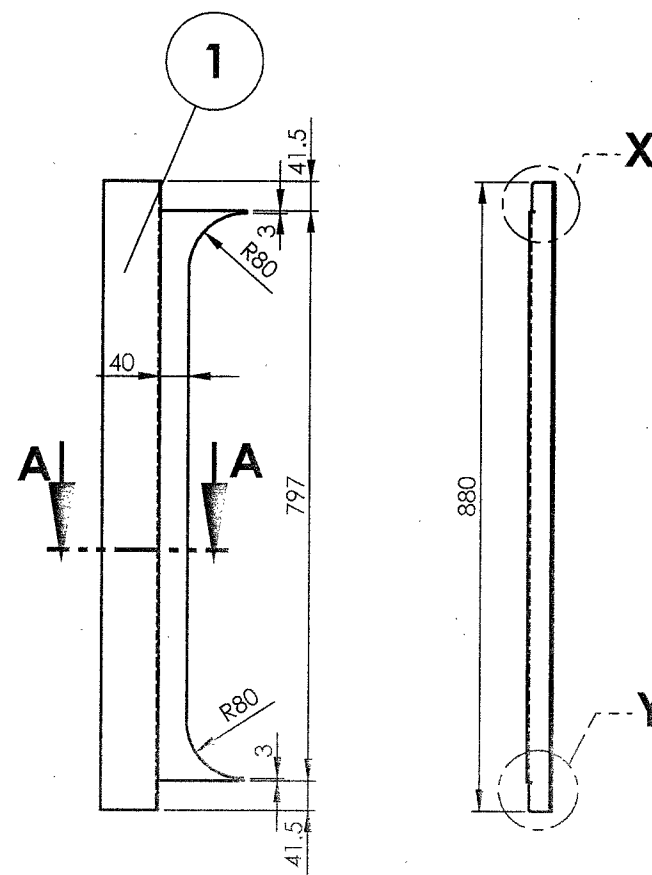
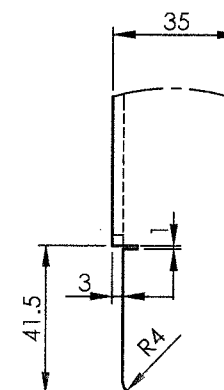
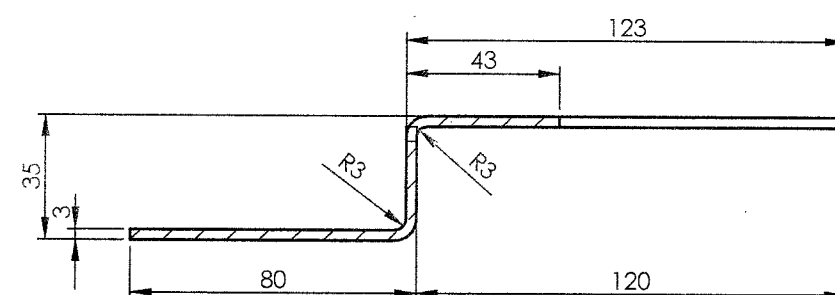
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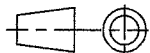
▽ ROUGH MACHINED  
▽▽ FINISH MACHINED  
▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED  
①b BURRS REMOVED  
①8 CHAMFERED

## REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	
b		CUTAWAY DIMENSION REVISED.	

DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 1 : 2SECTION A-A  
SCALE 1 : 2

1	BRACKET	3x226x880	1		RDSO/SPEC C-K201 X2CrNi12	3.12	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
BRACKET					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	A.Muthukumar
					b	DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAC14552		A3

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.  
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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

**AAC14553**

SURFACE FINISH		TOLERANCES	
▽ ROUGH MACHINED	01 ROUGH CLEANED	±0.15	±0.15
▽▽ FINISH MACHINED	01B BURRS REMOVED	±0.10	±0.10
▽▽▽ FINE FINISH MACHINED	01B CHAMFERED	±0.05	±0.05

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	-sc-
b		HOLE ADDED	-sc-
c		HOLE SIZE, LOCATION AND NUMBER OF HOLE REVISED	-sc-
d		DIA 32 & DIA 7 HOLES ADDED	<i>[Signature]</i>

**SECTION A-A SCALE 1 : 2**

**DETAIL X SCALE 1 : 2**

**DETAIL Y SCALE 1 : 2**

QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATLSPEC.	WT/UNIT IN KGS	REMARKS
1	HORIZONTAL MEMBER	3x198x2312	1		RDSO/SPEC C-K201 X2CrNi12	9.99	

GROUP: 1-4 SURFACE AREA IN Sq.m.: WT/ASSY IN Kgs:

**HORIZONTAL MEMBER**

SCALE 1:5 SSE/D CHD *[Signature]*

ALT d ALT D A Muthukumar  
DRN A Muthukumar/ANU C

INDIAN RAILWAY STANDARDS  
INTEGRAL COACH FACTORY, CHENNAI - 600038

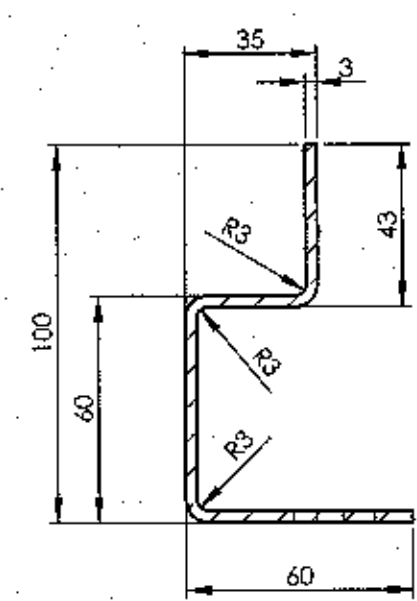
SHEET 1 OF 1

**AAC14553** **A2**

DATE OF LATEST ALT. 11-4-19 DATE OF FIRST ISSUE 12-10-2012 AME/SME *[Signature]*

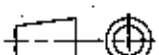
REF.DRG.NO.

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	-sc-
b		HOLE ADDED	-sc-
c		HOLE SIZE, LOCATION AND NUMBER OF HOLE REVISED.	-sc-
d		DIA 32 & DIA 7 HOLES ADDED.	<i>[Signature]</i>



Technical drawing of a mechanical part. The part has a total height of 30 and a base thickness of 10. It features a semi-circular top with a radius of R5. A vertical slot is cut into the left side, with a fillet of R1.75 at the top-left corner and a fillet of R5 at the bottom-left corner. Another fillet of R5 is shown at the bottom-right corner of the part.

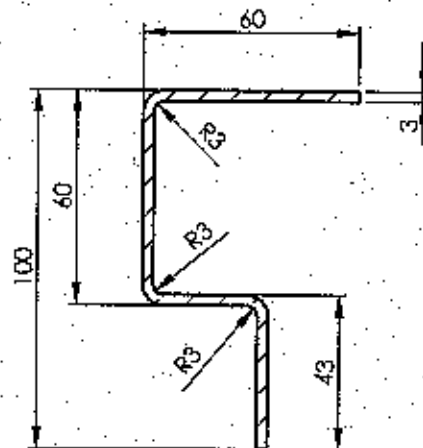
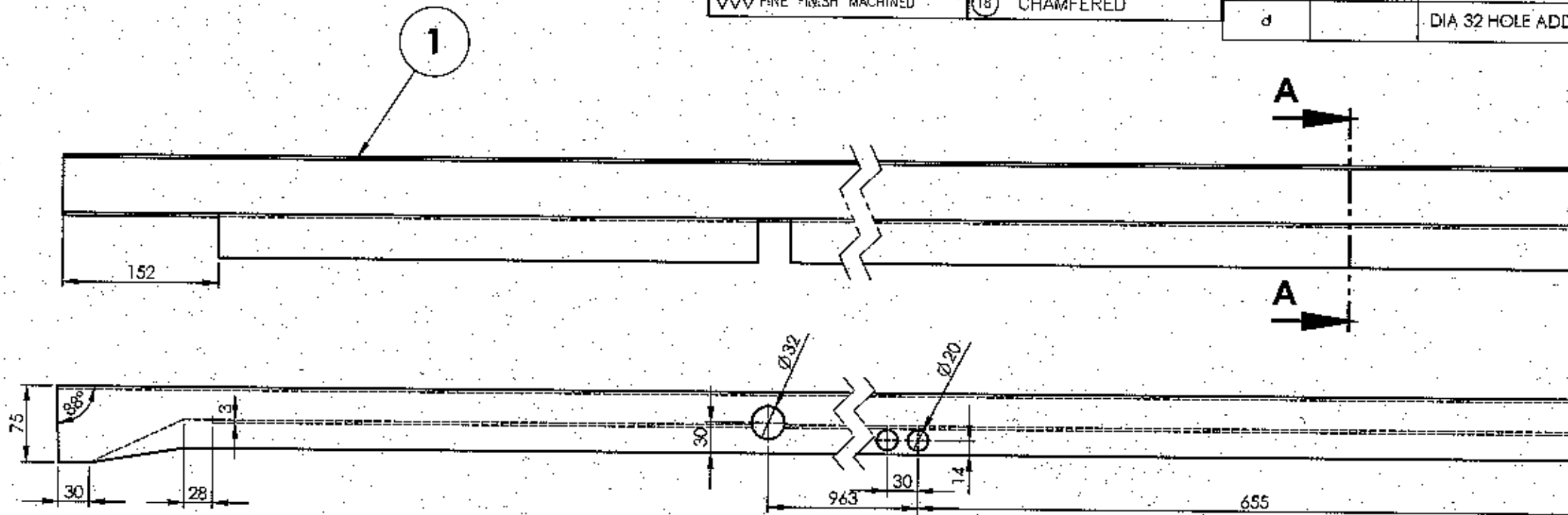
**DETAIL Y**  
**SCALE 1 : 2**

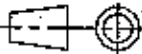
1	HORIZONTAL MEMBER	3x198x2312	1		RDSO/SPEC C- K201 X2CrNi12	9.99	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATLS SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE 1:5	SSE/D CHD	L. Pandirangala
					ALT d	ALTD DRN	A Muthukumar A Muthukumar/ANU C
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAC14553		A2

AAC14554

▽ ROUGH MACHINED	①1 ROUGH CLEANED
▽▽ FINISH MACHINED	①1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①18 CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
d		DIA 32 HOLE ADDED.		<i>For</i>

SECTION A-A  
SCALE 1:2

1	HORIZONTAL MEMBER	3x198x2312	1		RDSO/SPEC C-K201 X2CrNi12	10.04	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	<i>A. Panduranga Rao</i>
					1:5	CHD	
					ALT. d	ALT.D	A Muthukumar
						DRN	A Muthukumar/ANU C
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600088				SHEET 1 OF 1			
					AAC14554		
					A3		

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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

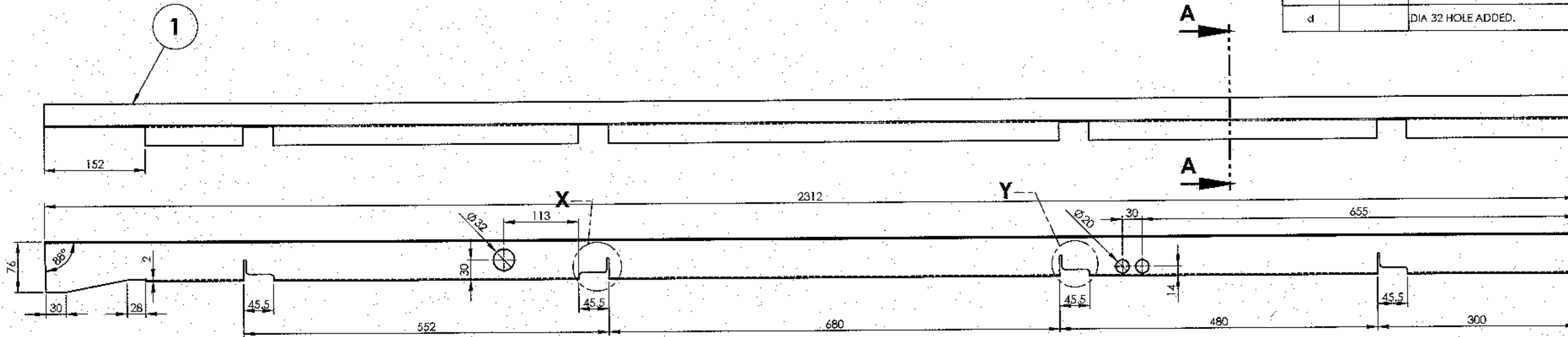
1-4-19	12-10-17	<i>For</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME.

AAC14555

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

## REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	-sd-
b		HOLE ADDED	-sd-
c		HOLE SIZE, LOCATION & NUMBER REVISED.	-sd-
d		DIA 32 HOLE ADDED.	For

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 1 : 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 IS:13-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

1.	HORIZONTAL MEMBER	2X117X2312	1		RDSO/SPEC C- K201 X2CNI12	4.20		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4			SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER						SCALE 1:1	SSE/D CHD	<i>A. Muthukumar</i>
						ALT d	ALTD	A.Muthukumar
							DRN	A.Muthukumar
						INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
				SHEET 1 OF 1	AAC14555		A2	

REF.DRG.NO.:-

21-4-19	12-10-2017	For
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1		2		3		4		5		6		7		8	
AAC14556				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽ FINE FINISH MACHINED		①8 CHAMFERED		a				DESIGN REVISED		-sd-	
								b				HOLE ADDED		-sd-	
								c				DIA OF THE HOLE REVISED			

1

31

255

77

80

76

65

42

R8

Ø25

60

80

35

3

45

77

1	PART PILLAR L H	3x148x255	1		RDSO/SPEC C-K201 X2CrNi12	0.82	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
PART PILLAR L H					SCALE	SSE/D	A. Muthukumar
					1:5	CHD	
					ALT.	ALTD	A. Muthukumar
c	DRN	A. Muthukumar					
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600088					AAC14556		A3

04.04.2018

12.10.2017

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

REF.DRG.NO.-

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

1		2		3		4		5		6		7		8	
AAC14557				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		①8 CHAMFERED		a				DESIGN REVISED		-sd-	
								b				HOLE ADDED		-sd-	
								c				DIA OF THE HOLE REVISED			

1

255

31

80

76

65

42

R8

Ø25

60

3

35

80

45

77

R3

04-04-2018

12.10.17

*[Signature]*

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

1	PART PILLAR R H	3x148x255	1		RDSO/SPEC C-K201 X2CrNi12	0.82	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
PART PILLAR R H					SCALE	SSE/D	<i>[Signature]</i>
					1:5	CHD	
					ALT.	ALTD	A.Muthukumar
c	DRN.	A.Muthukumar					
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAC14557		A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO (CF/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.-

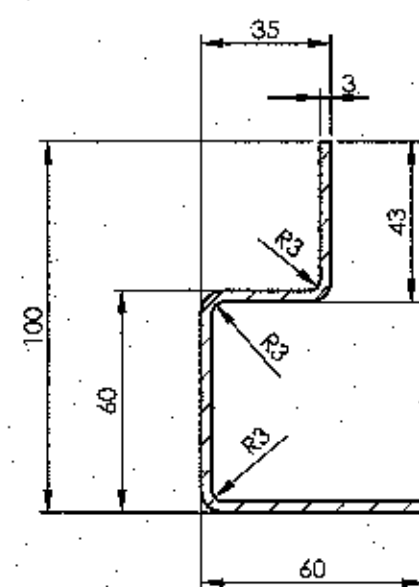
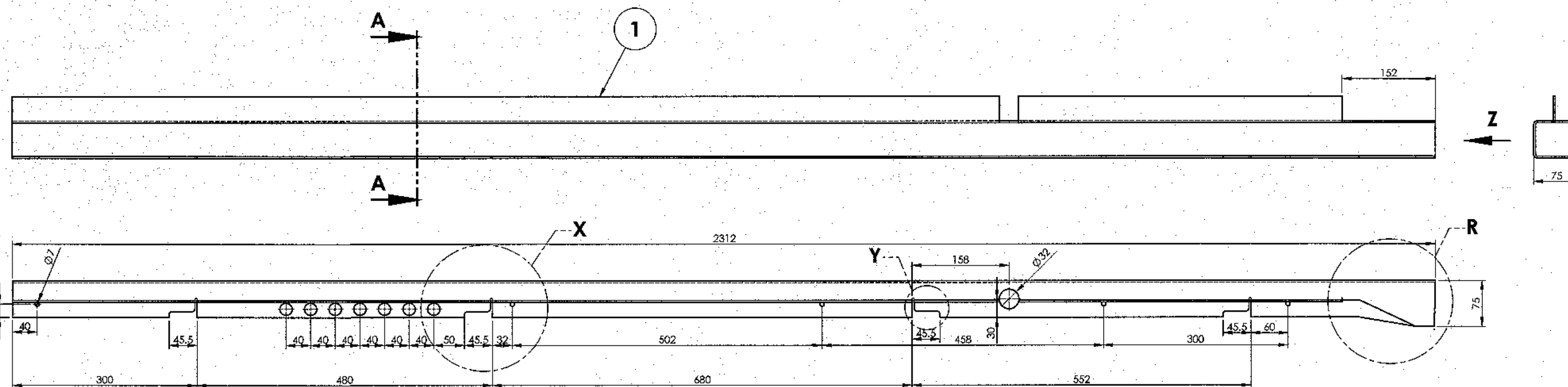
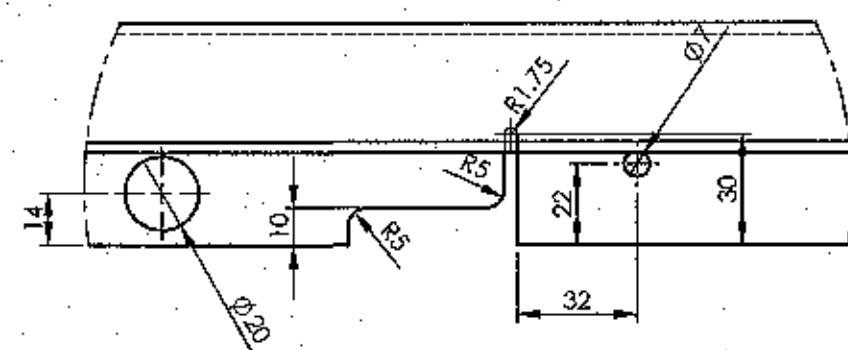
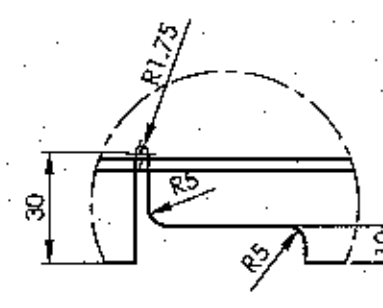
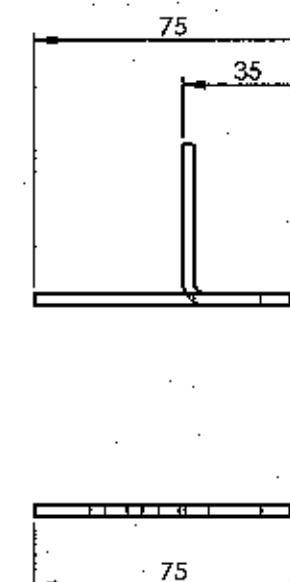
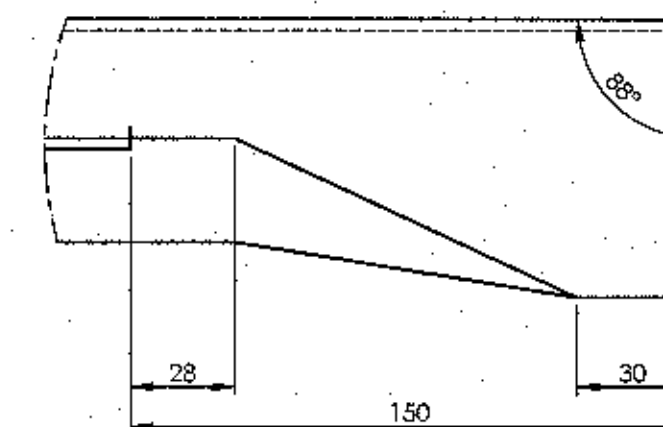
AAC14558

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

① ROUGH CLEANED  
①① BURRS REMOVED  
①① CHAMFERED

REVISIONS

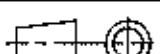
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
g		Ø 32 HOLE ADDED	

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 1 : 2VIEW Z  
SCALE 1 : 2DETAIL R  
SCALE 1 : 2

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. IC/STD-94-001.  
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.:-

11-4-19 12.10.17  
DATE OF LATEST ALT. DATE OF FIRST ISSUE A.ME/SME

1	HORIZONTAL MEMBER	3x198x2312	1		RD50/SPEC C- K201 X2CrNi12	9.95	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE 1:5	SSE/D	<i>A. Muthukumar</i>
						CHD	
					ALT g	ALTD	A. Muthukumar
						DRN	A. Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							AAC14558
					SHEET 1 OF 1		A2



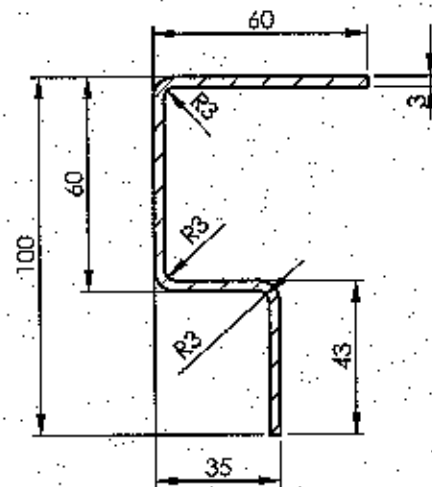
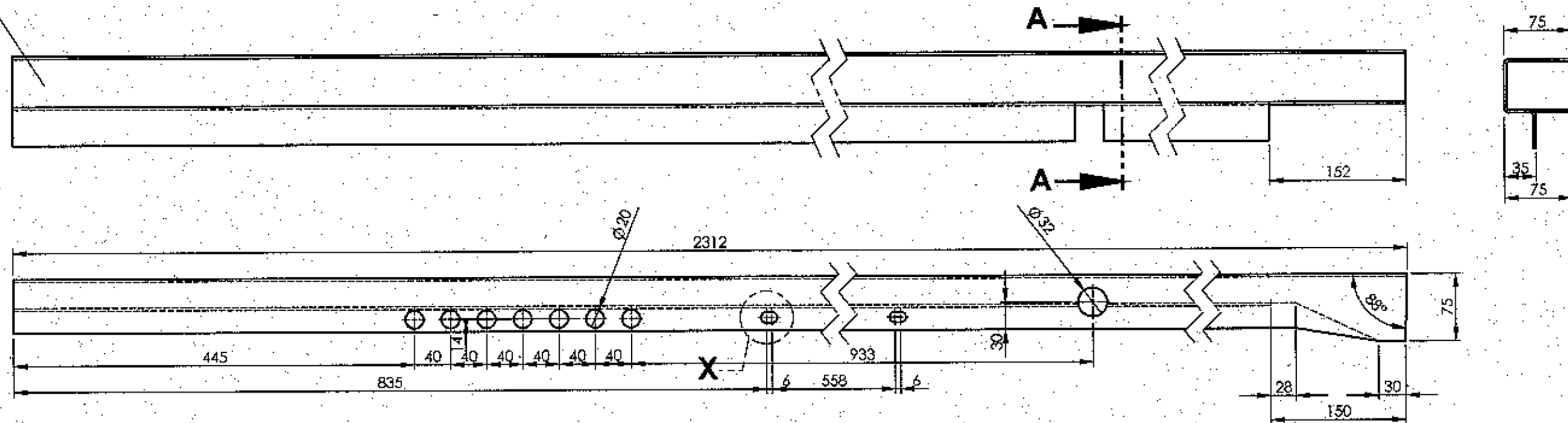
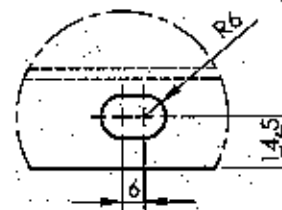
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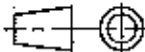
▽ ROUGH MACHINED  
 ▽ FINISH MACHINED  
 ▽ FINE FINISH MACHINED

① ROUGH CLEANED  
 ①b BURRS REMOVED  
 ⑱ CHAMFERED

## REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
g		Ø 32 HOLE ADDED.	<i>For</i>

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2

1	HORIZONTAL MEMBER	3x198x2312	1		RDSO/SPEC-C-K201 X2CrNi12	10.00	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	L. Panduranga Rao
					1:10	CHD	
					ALT.	ALTD	A.Muthukumar
					B	DRN	A.Muthukumar/HAZARUL HAQUE
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600088					SHEET 1 OF 1		
					AAC14559		A3

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

11-11-19	12.10.17	<i>For</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

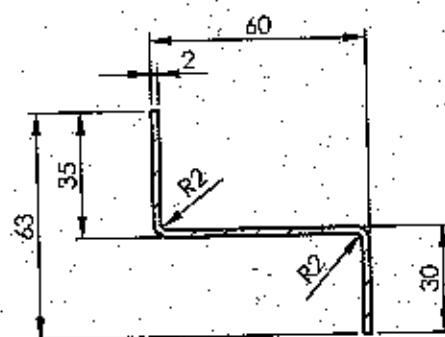
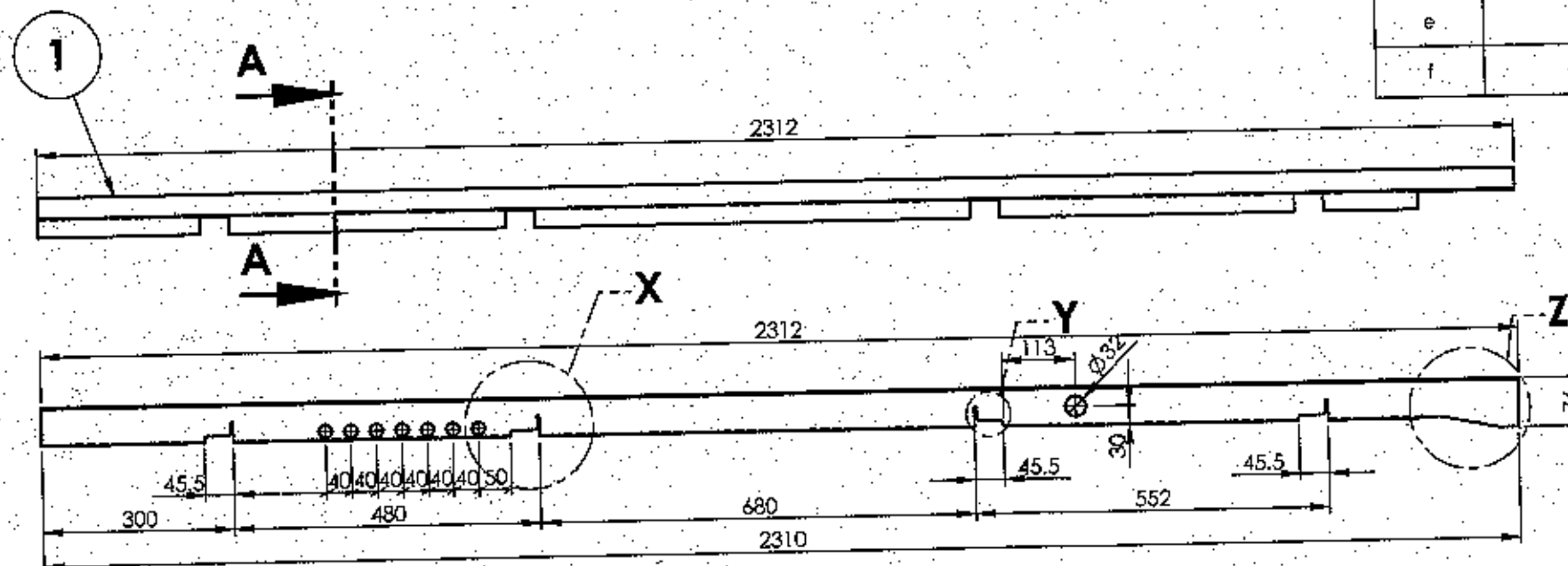
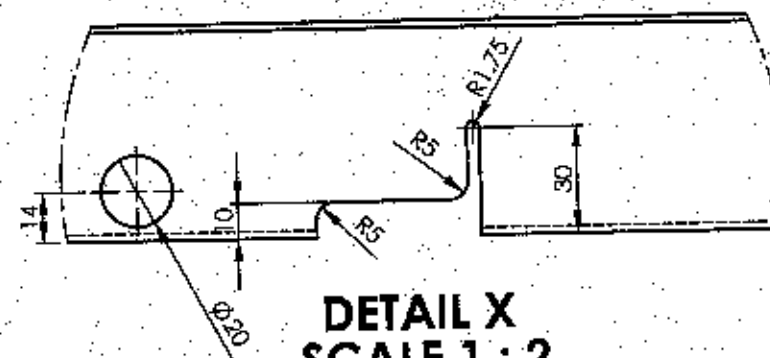
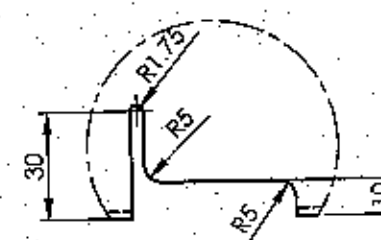
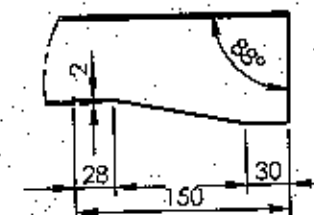
AAC14560

▽ ROUGH MACHINED  
 ▽ FINISH MACHINED  
 ▽▽ FINE FINISH MACHINED

① ROUGH CLEANED  
 ①b BURRS REMOVED  
 ①8 CHAMFERED

## REVISIONS

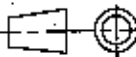
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
c		HOLE ADDED	-sd-
d		HOLE SIZE, LOCATION AND NO. OF HOLES REVISED	-sd-
e		Ø 20 HOLES ADDED.	-sd-
f		Ø 32 HOLES ADDED.	<i>For</i>

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 1 : 2DETAIL Z  
SCALE 1 : 5

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

REF.DRG.NO.:-

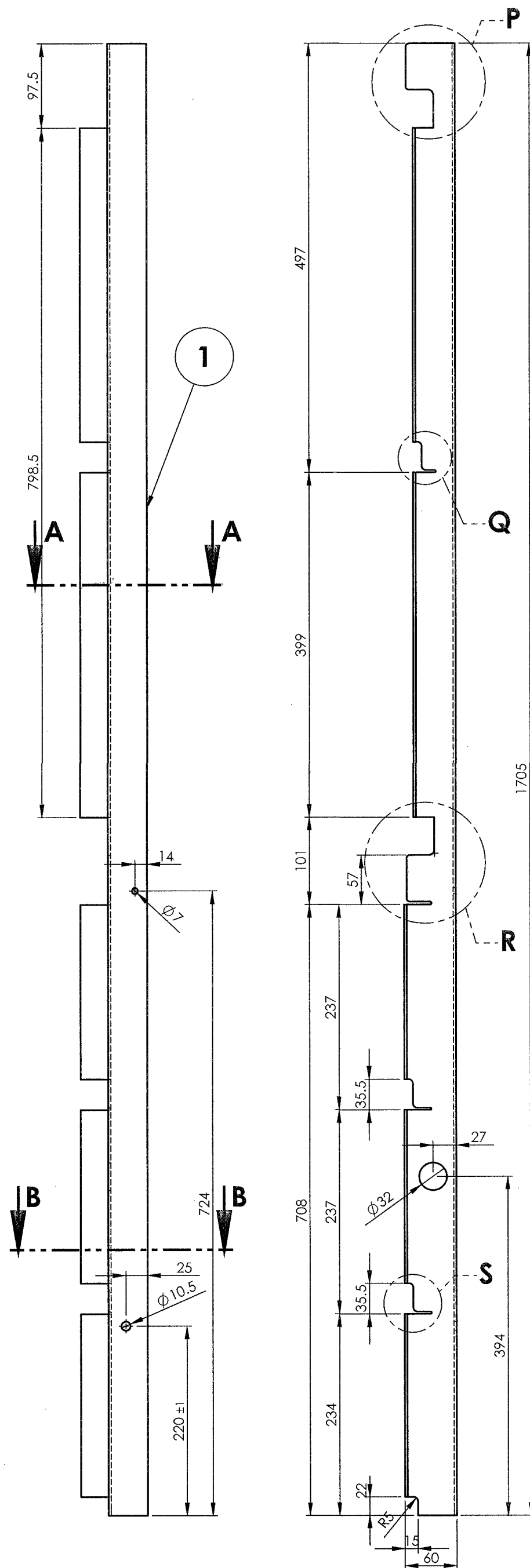
24-4-19	12-10-2017	<i>For</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	HORIZONTAL MEMBER	2x117x2312	1		RDSO/SPEC C-K201 X2CrNi12	4:17	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE 1:10	SSE/D CHD	A. Panduranga Rao
					ALT. f	ALTD	A. Muthukumar
						DRN	A. Muthukumar/NAZARUL HAGU
							
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1	AAC14560		A3
INTEGRAL COACH FACTORY, CHENNAI - 600088							

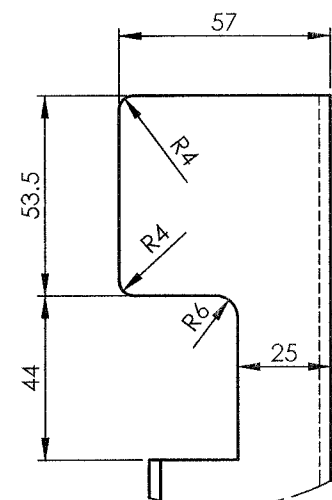
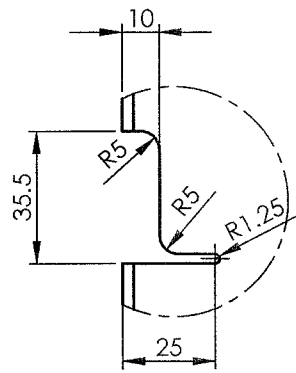
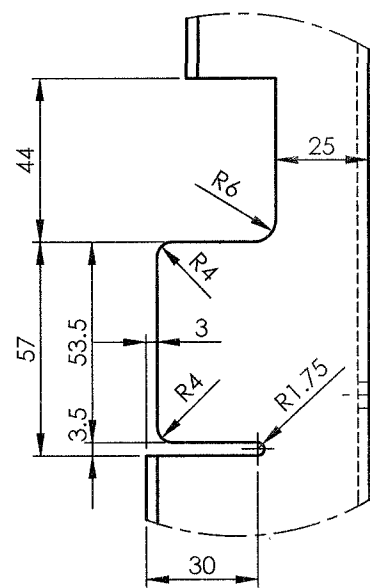
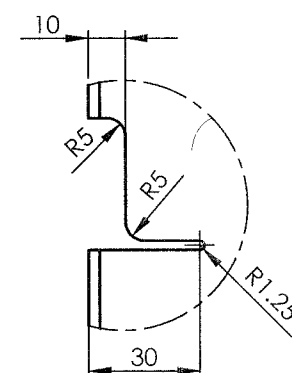
*L. Panduranga Rao*  
 A. Muthukumar  
 A. Muthukumar/NAZARUL HAQUE

AAC14561

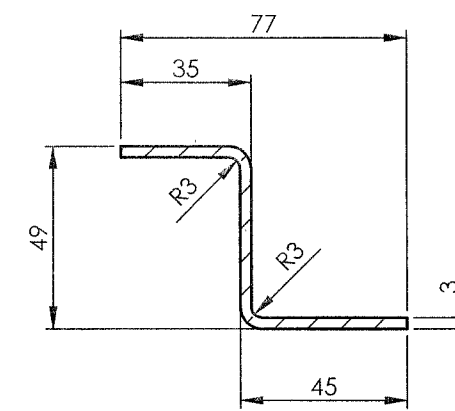
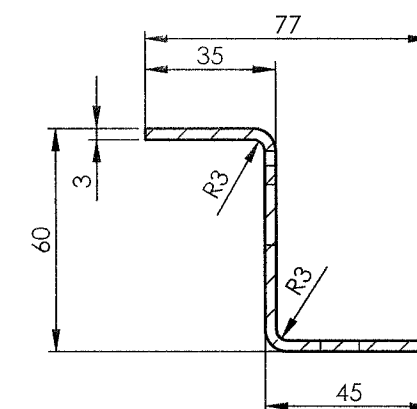
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001.  
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.



REF.DRG.NO.-

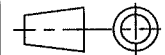
DETAIL P  
SCALE 1 : 2DETAIL Q  
SCALE 1 : 2DETAIL R  
SCALE 1 : 2DETAIL S  
SCALE 1 : 2

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	018 BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

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

## REVISIONS

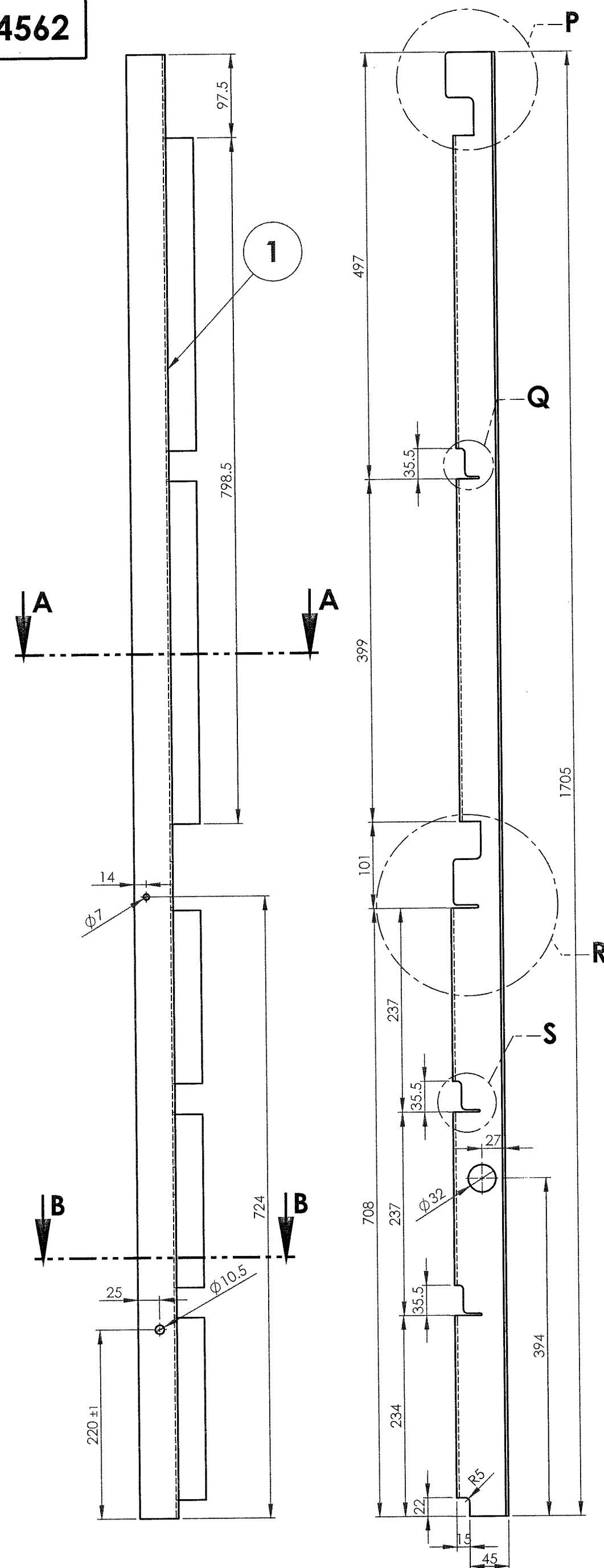
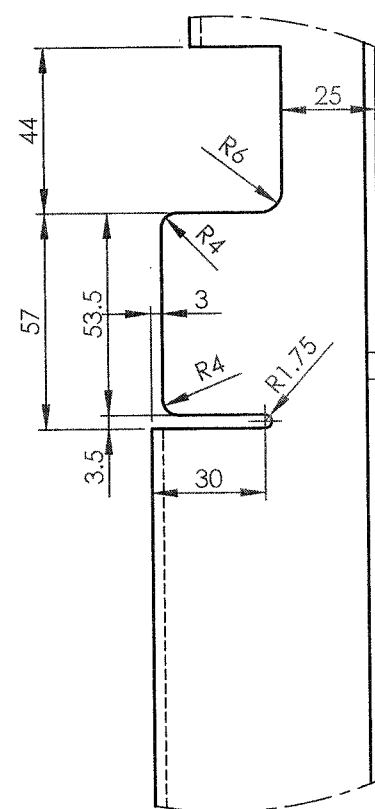
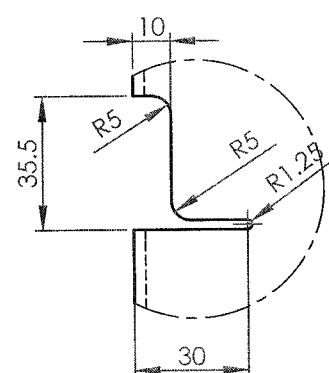
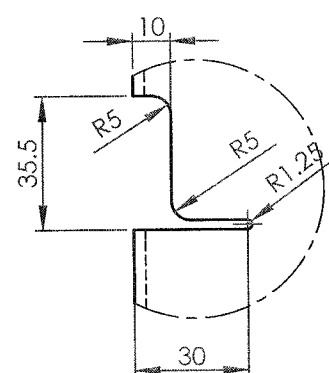
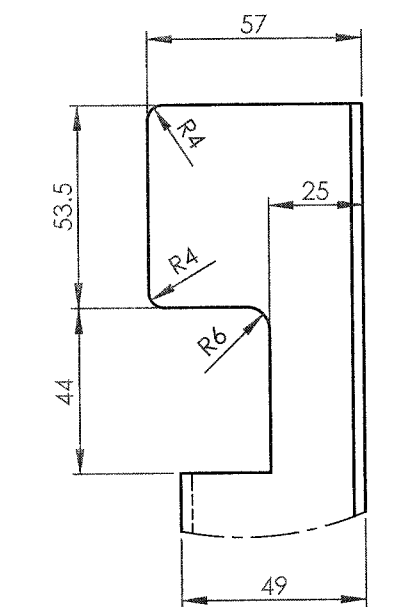
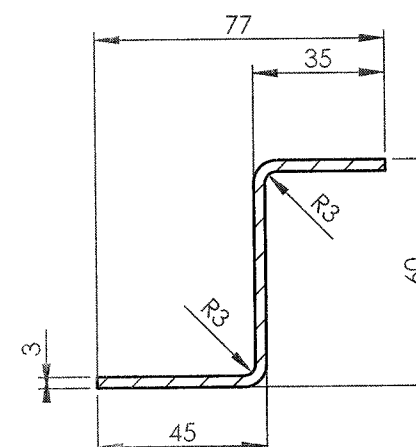
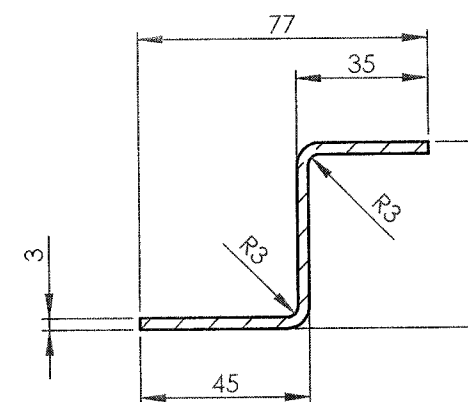
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
b		NO. OF HOLES & HOLE LOCATION REVISED.	-sd-
c		HOLE ADDED	-sd-
d		Ø 32 HOLE ADDED.	

1	PILLAR R H	3x128x1705	1		RDSO/SPEC C-K201 X2CrNi12	4.74		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
VERTICAL PILLAR					SCALE 1:5	SSE/D	4. 250	
						CHD		
					ALTD	ALTD	A. Muthukumar	
						DRN	A. Muthukumar	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600088				SHEET 1 OF 1			AAC14561	A2

04/06/2018	12-10-2017	
DATE OF LATEST ALL.	DATE OF FIRST ISSUE	AME/SME

AAC14562

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.

DETAIL Q  
SCALE 1 : 2DETAIL R  
SCALE 1 : 2DETAIL S  
SCALE 1 : 2DETAIL P  
SCALE 1 : 2SECTION B-B  
SCALE 1 : 2SECTION A-A  
SCALE 1 : 2

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

① ROUGH CLEANED  
①b BURRS REMOVED  
①8 CHAMFERED

REVISIONS


ALT.	ZONE	DESCRIPTION	APPROVED & DATE
b		NO. OF HOLES & HOLE LOCATION REVISED.	-sd-
c		HOLE ADDED	-sd-
d		Ø 32 HOLE ADDED.	

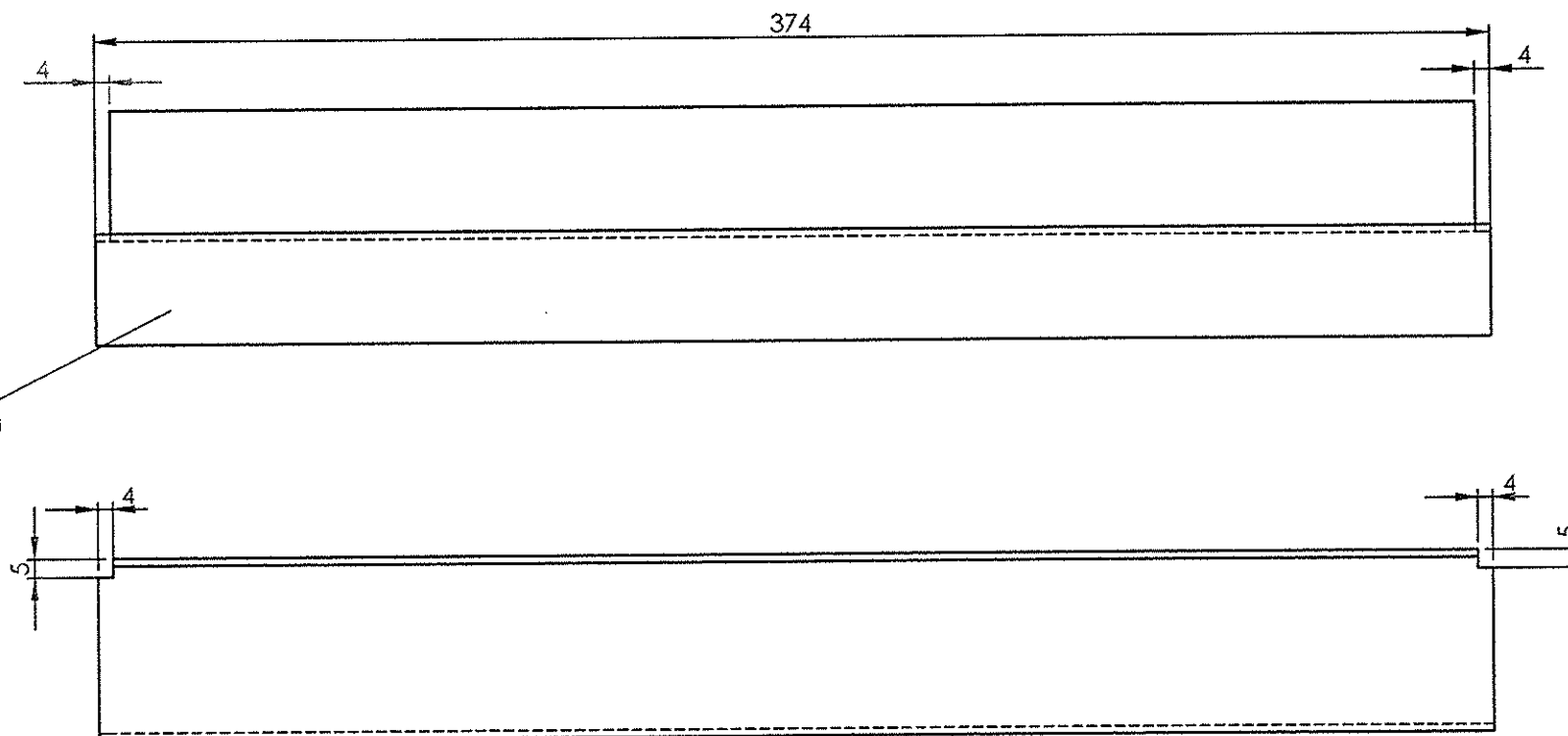
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QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
PILLAR L H				SCALE 1:5	SSE/D	CHD	
				ALT d	ALTD	DRN	A.Muthukumar
							A.Muthukumar/NAZARUL HAQUE
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAC14562	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A2	

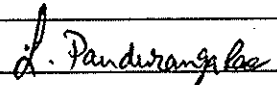
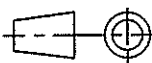
04/06/2016	12-10-2017	00-10-2017
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAC14567

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	




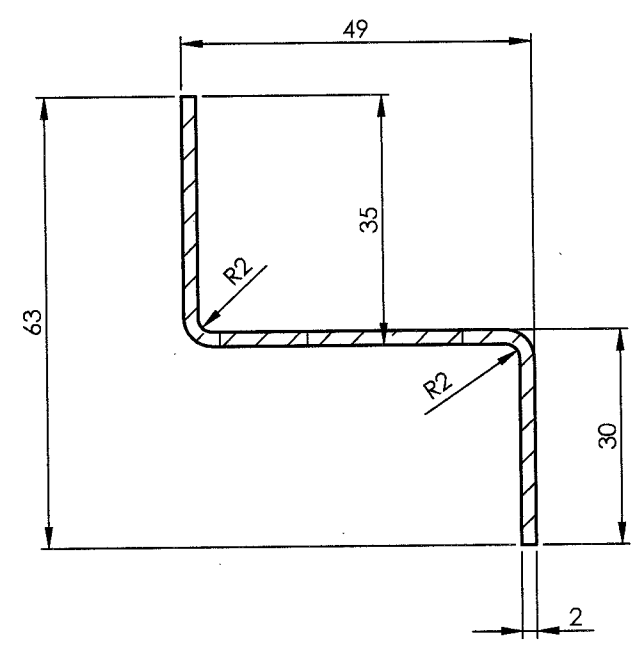
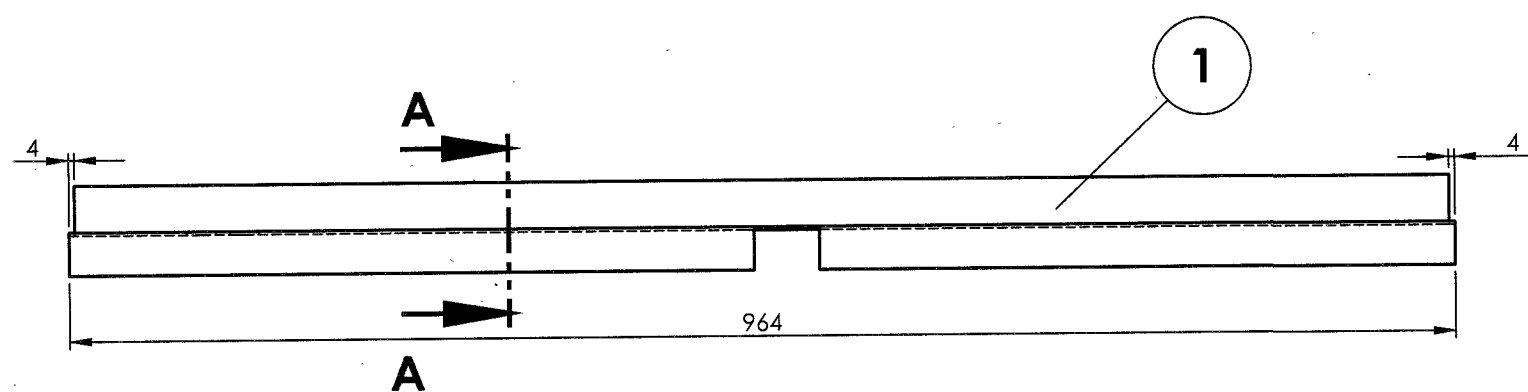
1	HORIZONTAL MEMBER	2x106x374	1		RDSO/SPEC C-K201 X2CrNi12	0.64	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE 1:5	SSE/D	
						CHD	
					ALT. a	ALTD	A.Muthukumar
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAC14567		A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO CF/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

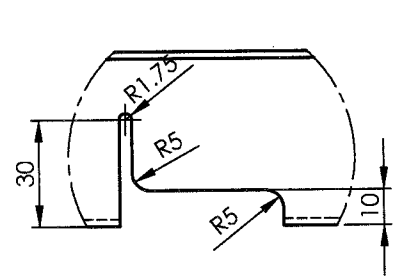
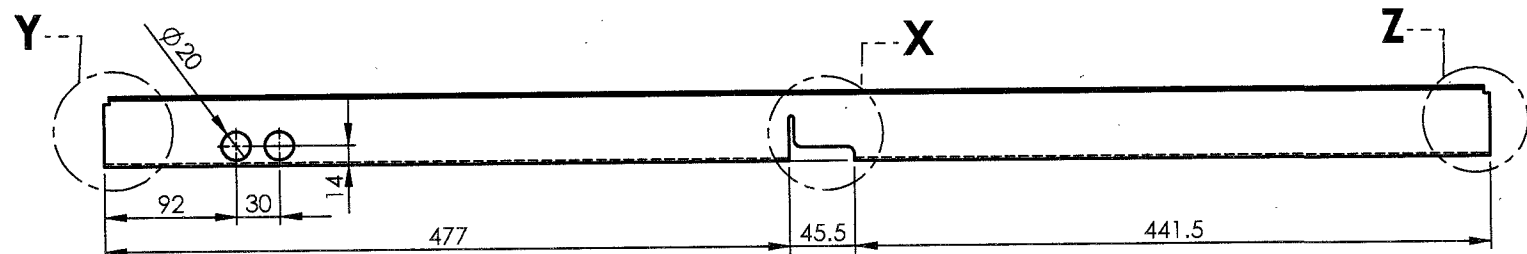
REF.DRG.NO.-

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

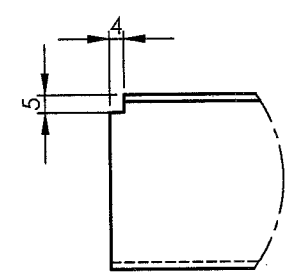
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
C		HOLE SIZE, LOCATION AND NO. OF HOLES REVISED.	



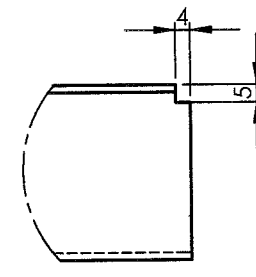
**SECTION A-A**  
**SCALE 1 : 1**



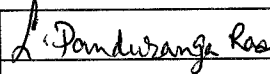
**DETAIL X**  
**SCALE 1 : 2**



**DETAIL Y**  
**SCALE 1 : 2**



**DETAIL Z**  
**SCALE 1 : 2**

1	HORIZONTAL MEMBER	3X106X964	1		RDSO/SPEC C-K201 X2CrNi12	1.61		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
PART PILLAR					SCALE	SSE/D		
					1:10	CHD		
					ALT. c	ALTD	A.Muthukuamr	
						DRN	A.Muthukuamr / Ramanuja rao	
					INDIAN RAILWAY STANDARDS  INTEGRAL COACH FACTORY, CHENNAI - 600038			
SHEET 1 OF 1		AAC14568	A3					

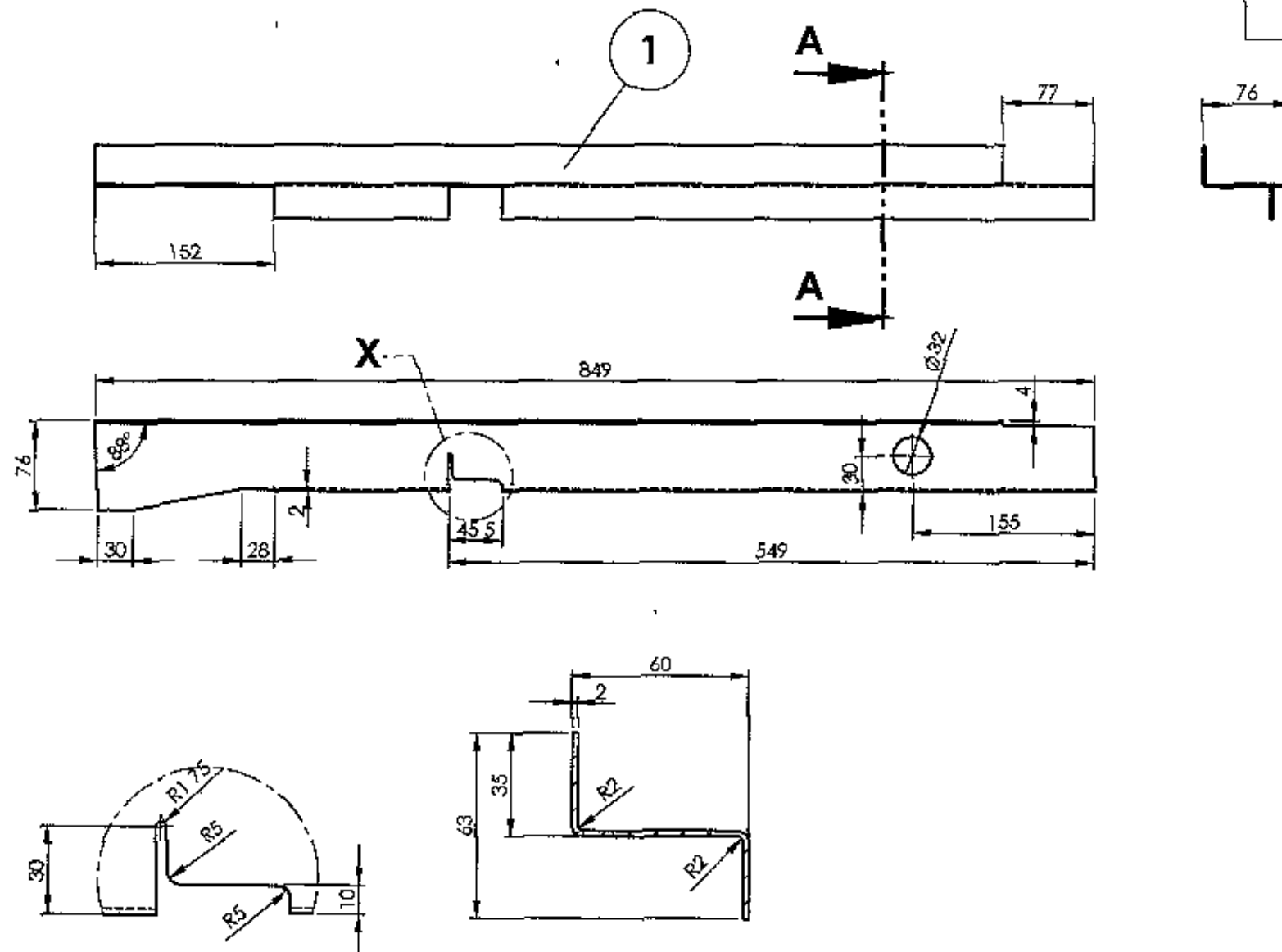
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAC14569

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

REVISIONS			
ALT	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	-sc-
b		DIA 32 HOLE ADDED.	<i>For</i>

DETAIL X  
SCALE 1 : 2SECTION A-A  
SCALE 1 : 2

1	HORIZONTAL MEMBER	2X117X849	1		RDSO/SPEC C- K201 X2CnF12	1.48		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP. 1 4		SURFACE AREA IN Sq m :			WT/ASSY IN Kgs			
HORIZONTAL MEMBER					SCALE	SSE/D	<i>R. Sundaranga Rao</i>	
					1:10	CHD		
					ALT	ALTD	A. Muthukumar	
					b	DRN	A. Muthukumar/RAMANUJA RAO	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY CHENNAI 800088					SHEET 1 OF 1		AAC14569	A3

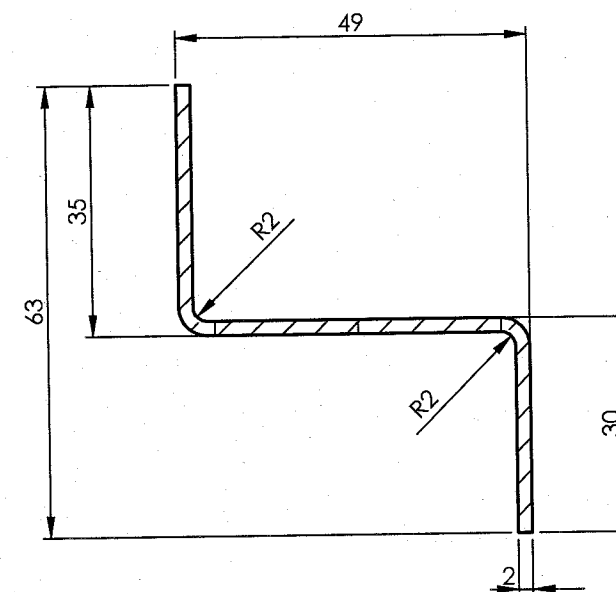
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED. FOR UNTOLEANCED DIMENSIONS AND ROUGHNESS VALUES REFER DRAWING NO IC/F/STD-9-0 001  
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813-1986  
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG NO -

<i>12-4-15</i>	12.10.17	<i>For</i>
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.  
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
c		HOLE SIZE, LOCATION AND NO. OF HOLES REVISED.	Self
d		Ø 20 HOLES ADDED.	CS



**DETAIL Z**  
**SCALE 2 : 5**

5013



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER ASME B3.1-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.




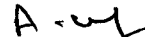
Technical drawing of a mechanical part. The drawing shows a cross-section of a part with a total width of 30. The top flange has a thickness of 10. The vertical section has a height of 35.5. There are two fillets with a radius of R5. A dashed line indicates a fillet with a radius of R1.25 at the bottom right corner.

Technical drawing of a mechanical part (Fig. 1.10) showing dimensions and radii. The part is a cross-section of a shaft with a central hole. The dimensions are as follows:


- Overall height: 44
- Overall width: 57
- Distance from top edge to center of hole: 53.5
- Distance from bottom edge to center of hole: 3.5
- Radius of the top fillet:  $R_3$
- Radius of the bottom fillet:  $R_4$
- Radius of the side fillet:  $R_5$
- Radius of the bottom corner fillet:  $R_{1.75}$
- Distance from center of hole to the right edge: 25
- Distance from center of hole to the left edge: 30

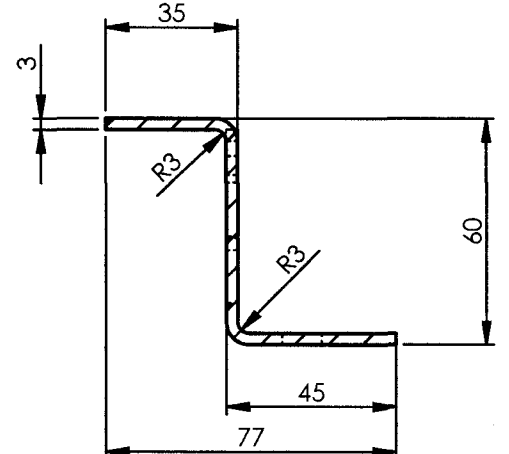
Technical drawing of a stepped profile. The profile consists of a horizontal base of length 45, a vertical section of height 60, and a horizontal top section of length 35. The total length is 77. The corners are rounded with fillets of radius  $R_3$ . The drawing includes dimension lines and labels for the radii.

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
b		NO. OF HOLES & HOLE LOCATION REVISED.	sd/-
c		HOLES ADDED.	

1	PILLAR L H	3X128x1705	1		RDSO/SPEC C-K201 X2CrNi12	4.85	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
PILLAR L H					SCALE 1:20	SSE/D CHD	A - 
					ALT c	ALTD	ARUN S
						DRN	A.Muthukuamr
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
AAC14571							
					SHEET 1 OF 1	A2	

1		2		3		4		5		6		7		8		9		10		11							
AAC14572																											
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.		▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																					
		▽▽ FINISH MACHINED		①① BURRS REMOVED		ALT.		ZONE		DESCRIPTION								APPROVED & DATE									
		▽▽▽ FINE FINISH MACHINED		①①① CHAMFERED		b				NO. OF HOLES & HOLE LOCATION REVISED.								sd/-									
																c				HOLES ADDED.		sd/-					
<p>1</p> <p>97.5</p> <p>798.5</p> <p>1705</p> <p>494.5</p> <p>399</p> <p>101</p> <p>708</p> <p>237</p> <p>234</p> <p>22</p> <p>25</p> <p>35.5</p> <p>35.5</p> <p>35.5</p> <p>47</p> <p>45</p> <p>27</p> <p>32</p> <p>394</p> <p>220</p> <p>10.5</p> <p>15</p> <p>45</p> <p>P</p> <p>Q</p> <p>R</p> <p>57</p> <p>53.5</p> <p>44</p> <p>3</p> <p>25</p> <p>R4</p> <p>R4</p> <p>R6</p> <p>35</p> <p>44</p> <p>101</p> <p>53.5</p> <p>3</p> <p>3.5</p> <p>R6</p> <p>R4</p> <p>R4</p> <p>R1.75</p> <p>35</p> <p>44</p> <p>25</p> <p>R6</p> <p>R4</p> <p>R1.75</p> <p>10</p> <p>30</p> <p>R5</p> <p>R5</p> <p>R1.25</p> <p>SECTION A-A</p> <p>SCALE 1 : 2</p> <p>DETAIL P</p> <p>SCALE 1 : 2</p> <p>DETAIL Q</p> <p>SCALE 1 : 2</p> <p>DETAIL R</p> <p>SCALE 1 : 1</p>																											
		16-09-21		12-10-2017		AME/SME		INDIAN RAILWAY STANDARDS														SHEET 1 OF 1		AAC14572		A2	
		DATE OF LATEST ALT.		DATE OF FIRST ISSUE				INTEGRAL COACH FACTORY, CHENNAI - 600038																			

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
b		NO. OF HOLES & HOLE LOCATION REVISED.	sd/-
C		HOLES ADDED.	



**SECTION A-A**  
**SCALE 1 : 2**

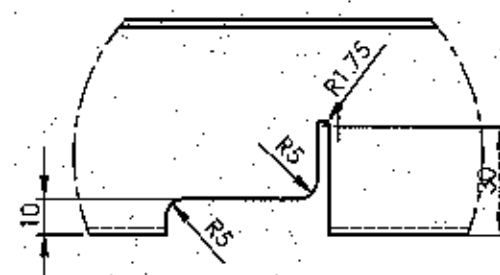
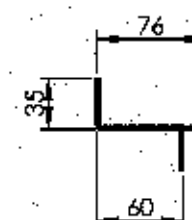
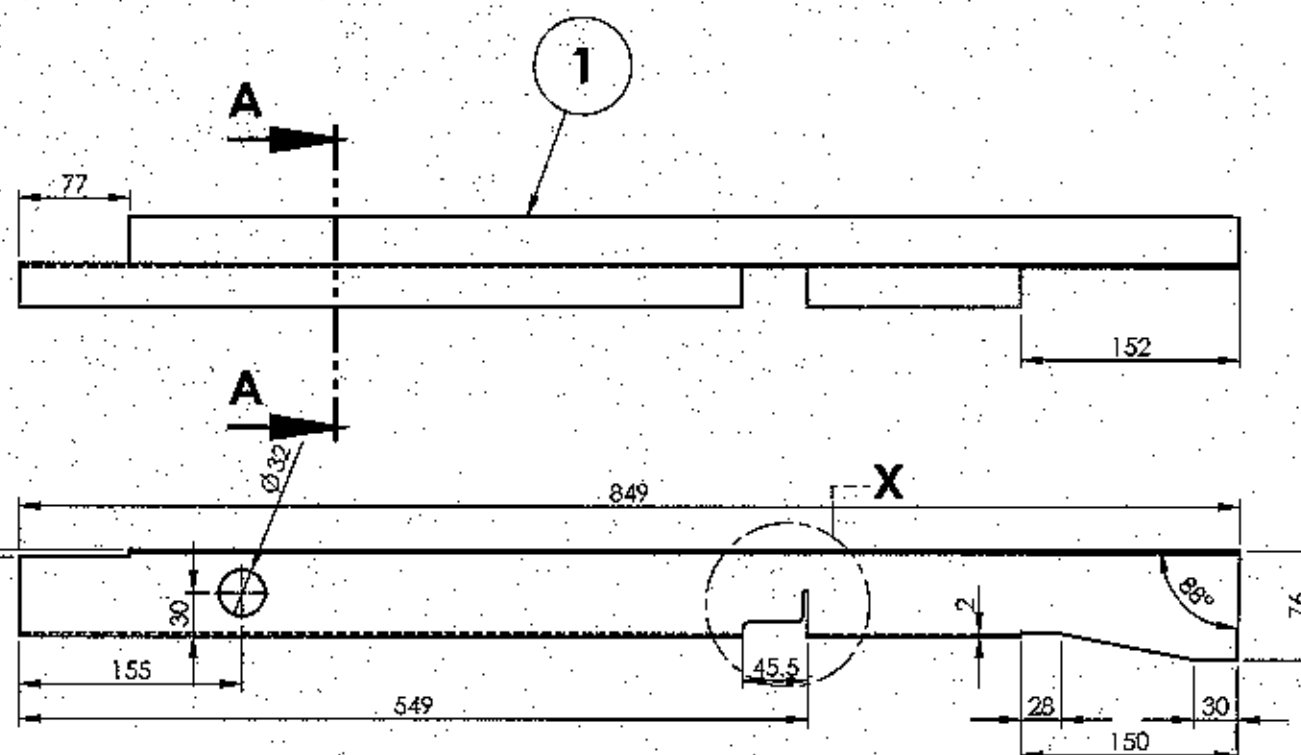
**DETAIL R**  
**SCALE 1 : 1**

1	PILLAR R H	3X128X1705	1			RDSO/SPEC C-K201 X2CrNi12	4.93		
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS		
GROUP: 1-4			SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
PILLAR R H						SCALE 1:20	SSE/D		
							CHD		
						ALT c	ALTD	ARUN S	
							DRN	A.Muthukumar	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1					
					AAC14572		A2		

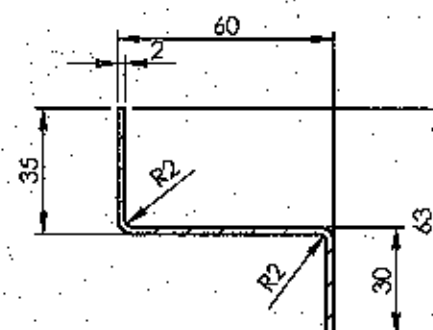
AAC14573

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DESIGN REVISED	-SD-
b		DIA 32 HOLE ADDED.	<i>[Signature]</i>



DETAIL X  
SCALE 1:2

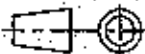


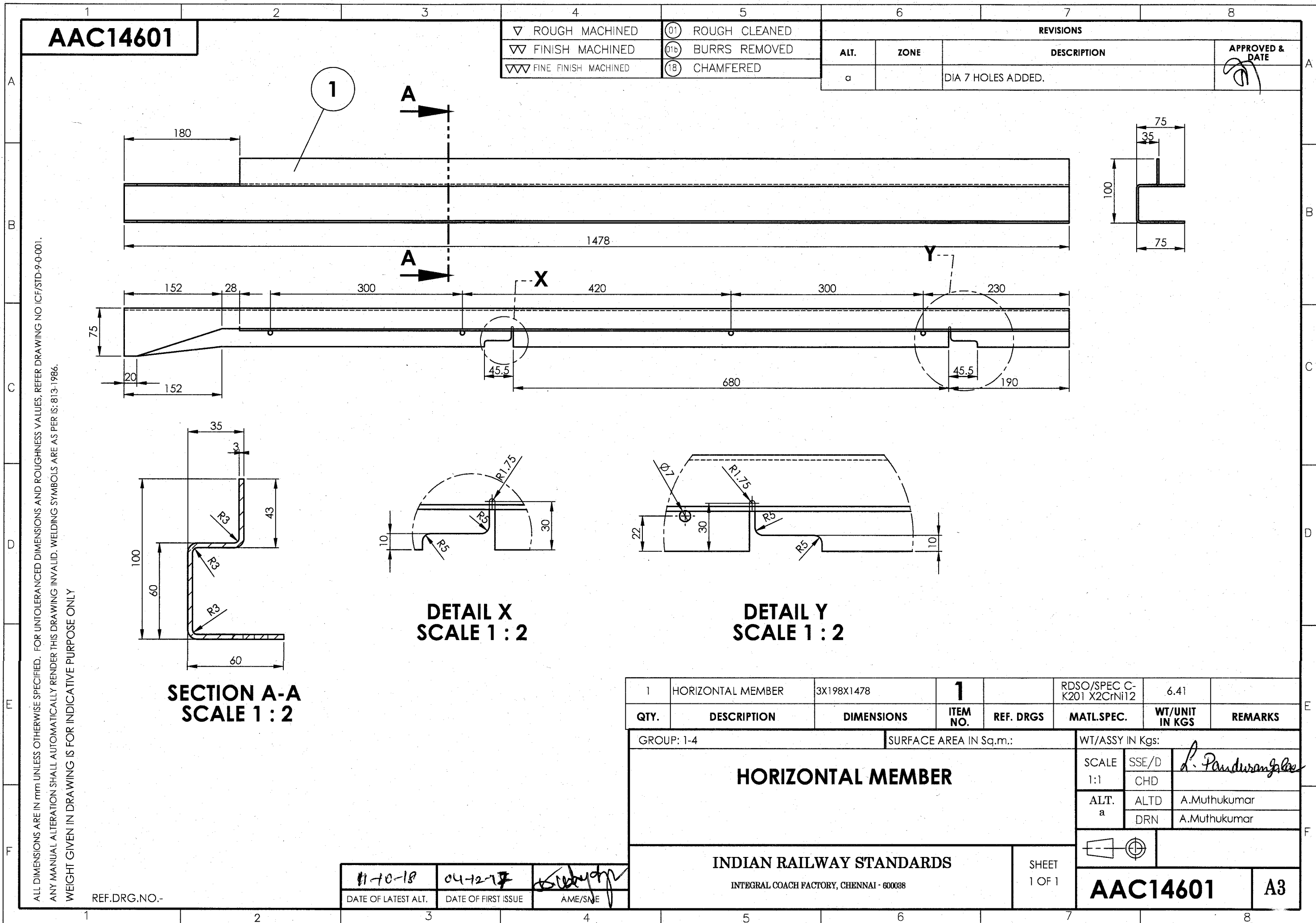
SECTION A-A  
SCALE 1:2

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

<i>H-4-A</i>	12.10.17	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

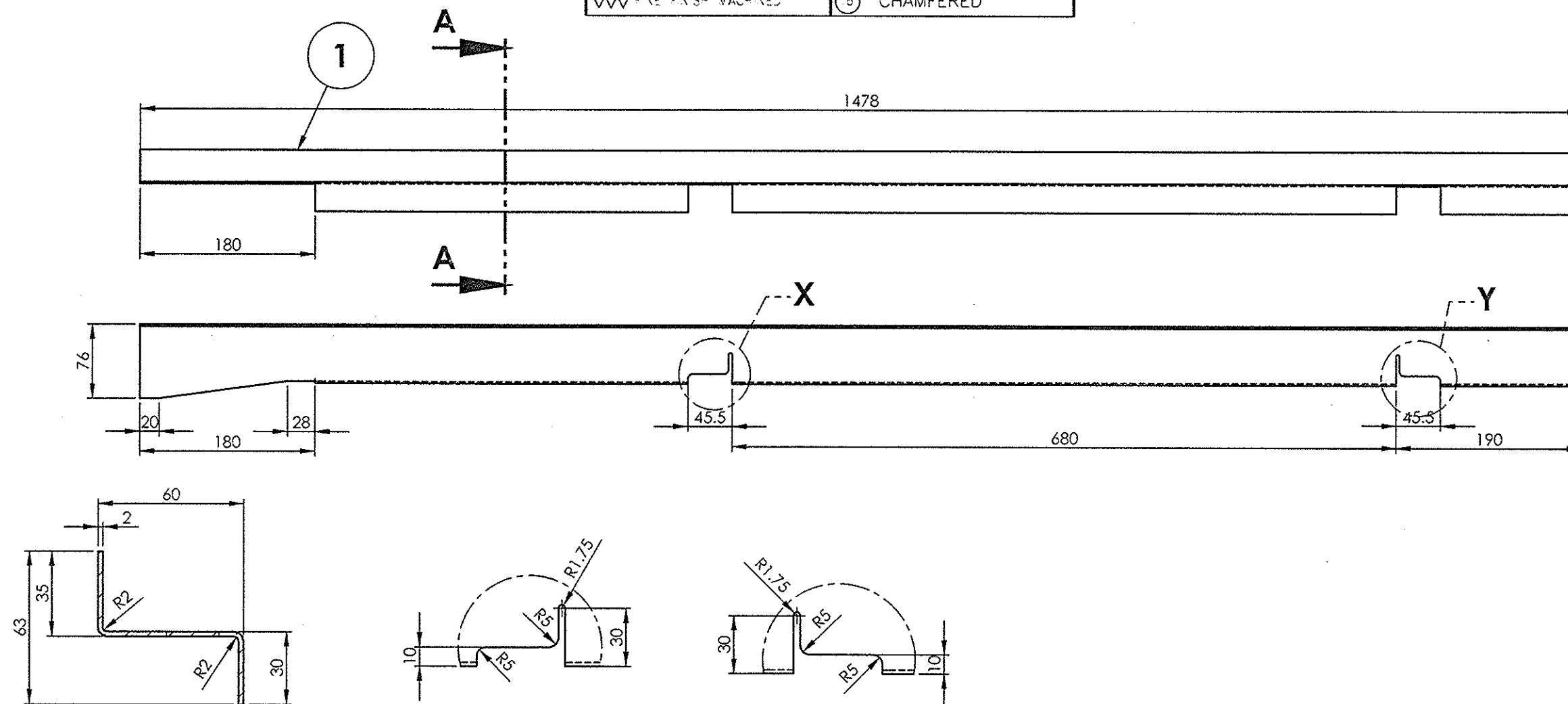
1	HORIZONTAL MEMBER	2X117X849	1		RDSO/SPEC C-K201 X2CrNi12	1.47	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	<i>A. Panduranga</i>
					1:10	CHD	
					ALT.	ALTD	A.Muthukumar
					b	DRN	A.Muthukumar/ramanuja r
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600088					AAC14573		A3

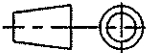


AAC14602

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

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 2 : 5DETAIL Y  
SCALE 2 : 5

1	HORIZONTAL MEMBER	2X117X1478	1		RDSO/SPEC C-K201 X2CrNi12	2.69	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	A. Panduranga Rao
					1:10	CHD	
					ALT.	ALTD	
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAC14602		A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/SID-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.:-

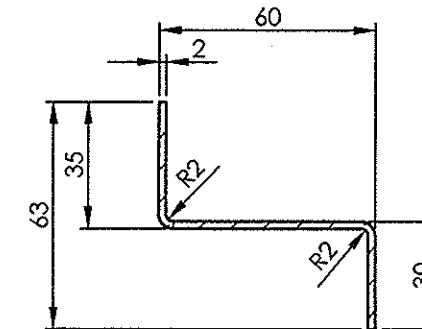
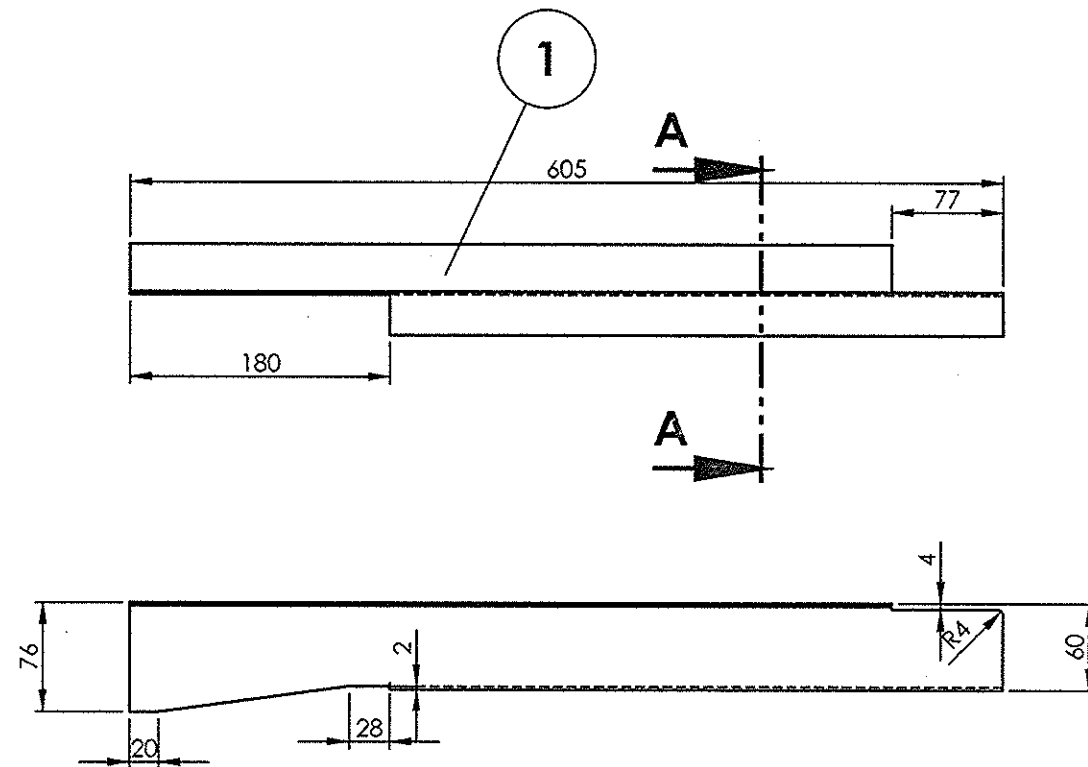
	04-12-2017	D. K. Singh
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAC14606

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


## REVISIONS

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

SECTION A-A  
SCALE 1 : 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 IS: 813-1986.  
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

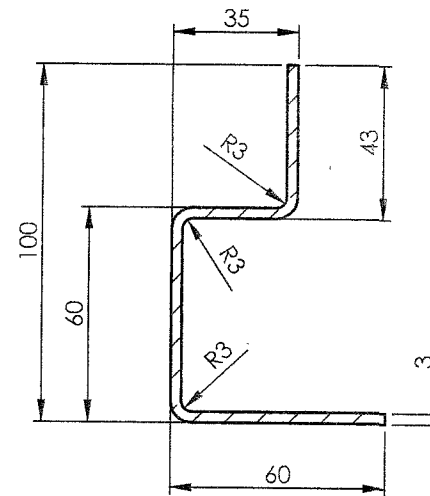
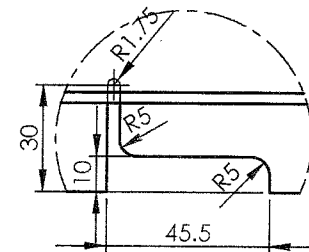
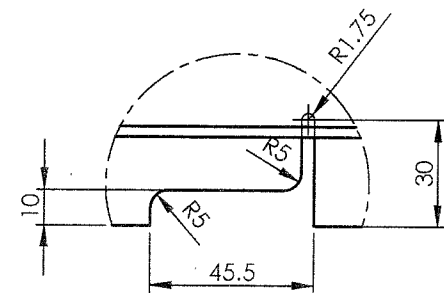
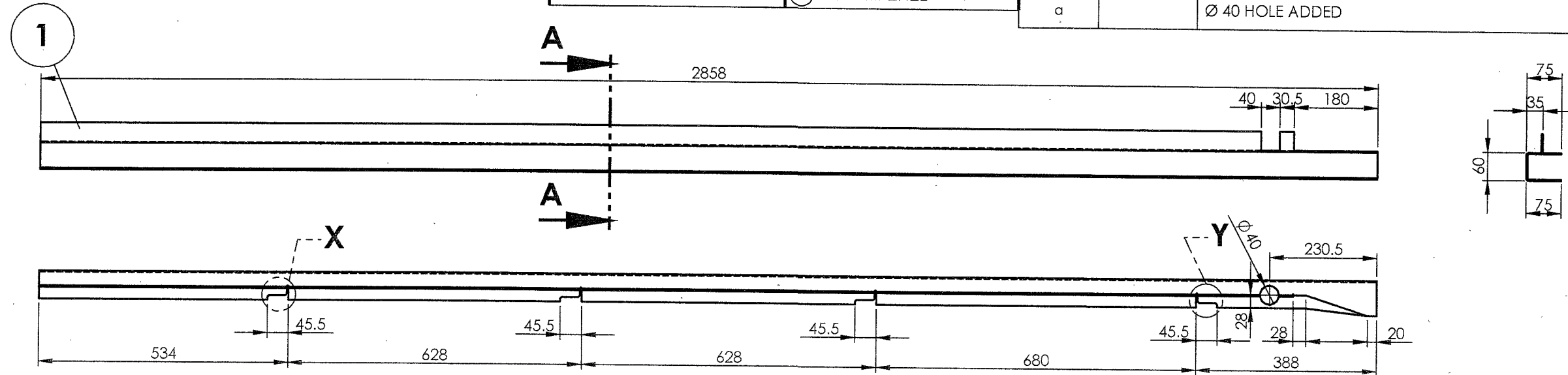
REF.DRG.NO.-

1	HORIZONTAL MEMBER	2X117X605	1		RDSO/SPEC C-K201 X2CrNi12	1.04	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	L. Panduranga Rao
					1:1	CHD	
					ALT.	ALTD	
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		
					AAC14606		A3

AAC14610

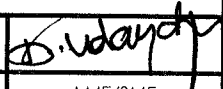
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED


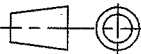
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		Ø 40 HOLE ADDED	



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REF.DRG.NO.

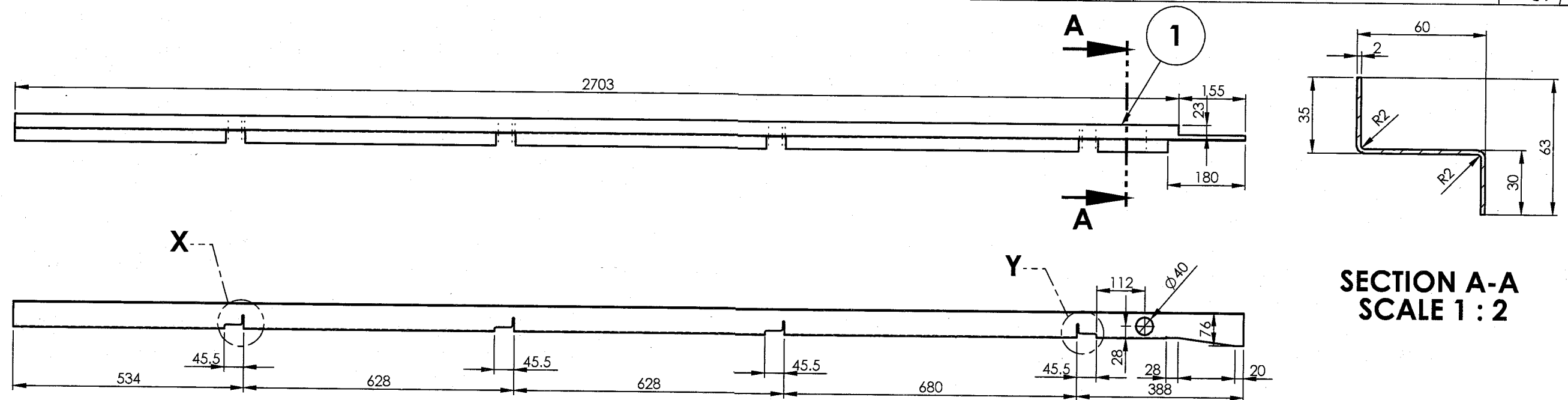
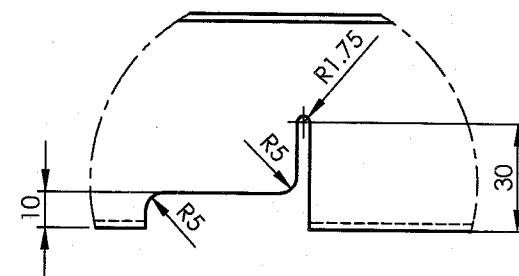
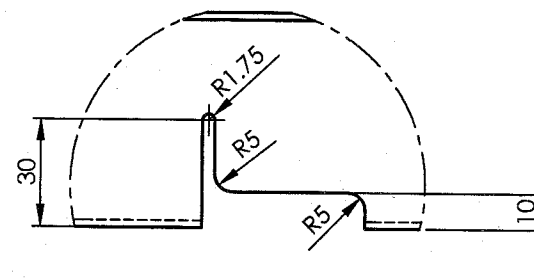
25/5/18	04.12.2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	HORIZONTAL MEMBER	3X198X2858	1		RDSO/SPEC C-K201 X2CrNi12	12.37		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4			SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER						SCALE	SSE/D	
						1:20	CHD	
						ALT. a	ALTD	A.Muthukumar
							DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS  INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1				
					AAC14610		A3	

AAC14611

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

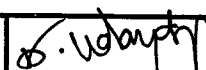
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		Ø 40 HOLE ADDED	-sd-
b		CUTAWAY ADDED.	

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 1 : 2

1	HORIZONTAL MEMBER	2X117X2858	1		RDSO/SPEC C-K201 X2CrNi12	5.17	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER					SCALE 1:20	SSE/D	A-4
					ALT. b	CHD	
						ALTD	A.Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						DRN	A.Muthukumar/M.S.Nethaji
SHEET 1 OF 1					AAC14611		
					A3		

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

07/02/19	04-12-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME



AAC14612

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

① ROUGH CLEANED  
①b BURRS REMOVED  
①B CHAMFERED

## REVISIONS

ALT.

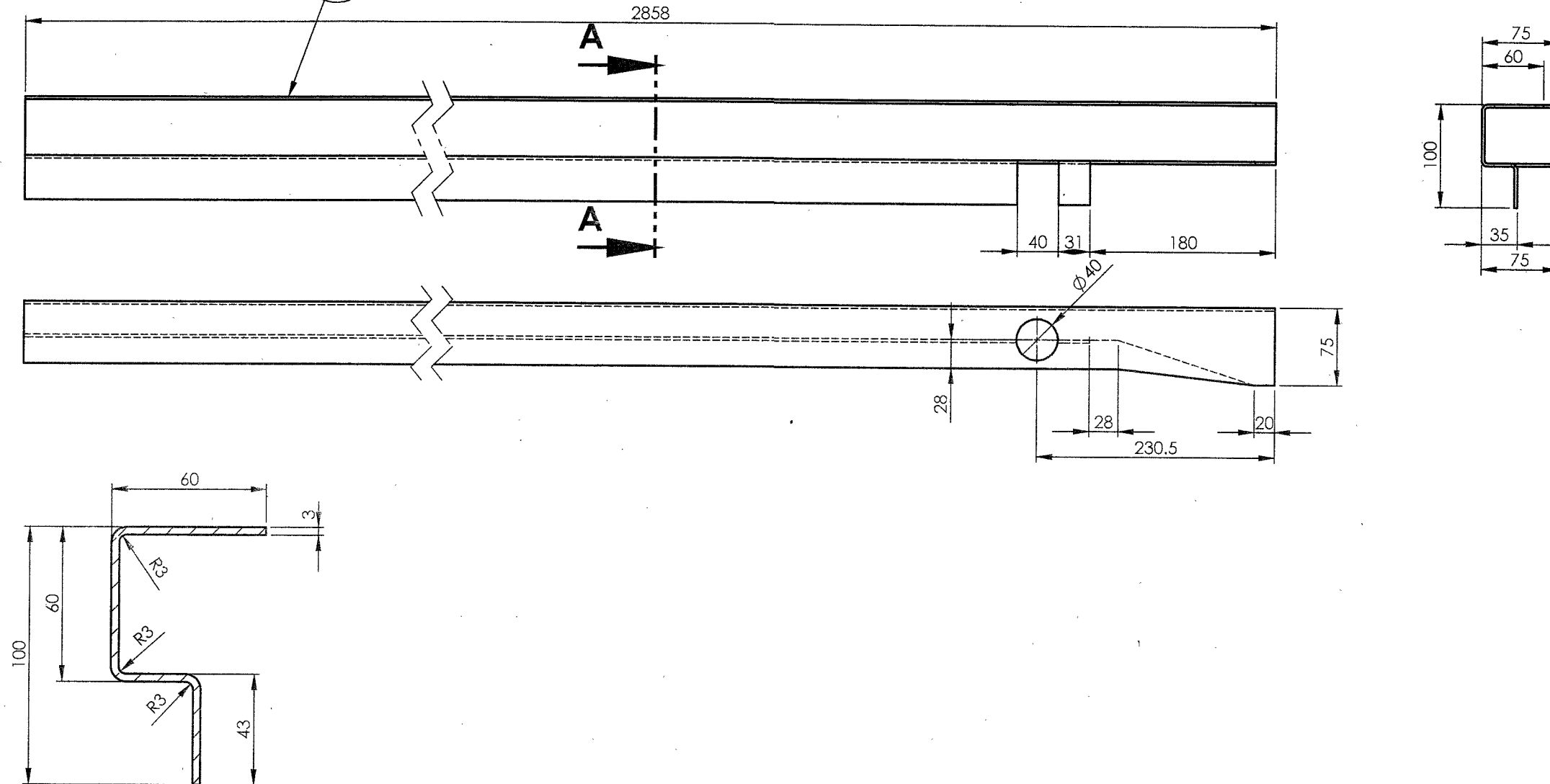
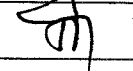
ZONE

DESCRIPTION

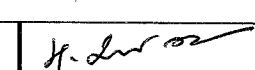
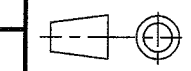
APPROVED &  
DATE

a

Ø 40 HOLE ADDED.



SECTION A-A  
SCALE 1:2

1	HORIZONTAL MEMBER	3X198X2858	1		RDSO/SPEC C-K201 X2CrNi12	12.42	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER					SCALE	SSE/D	
					1:20	CHD	
					ALT.	ALTD	A.Muthukumar
					a	DRN	A.Muthukumar/M.S.Nethaji
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
						AAC14612	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

25/5/18  
DATE OF LATEST ALT.

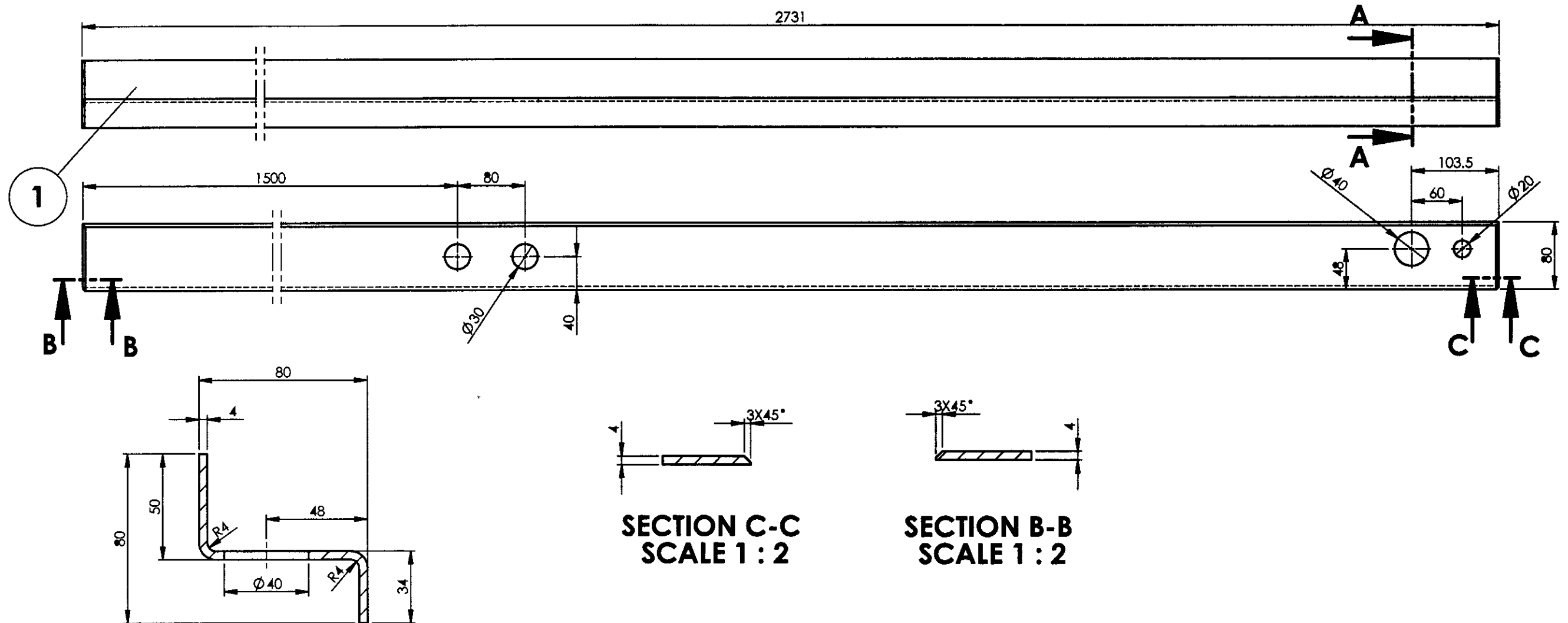
04.12.2017  
DATE OF FIRST ISSUE

AME/SME

AAC14616

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


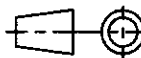
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		Ø40 HOLES ADDED.	sd/-
b		Ø30 HOLES ADDED. BENDING RADIUS ALTERED FROM R8 TO R4.	sd/-
c		Ø20 HOLES ADDED.	sd/-

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

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

REF.DRG.NO.-


26.-04-2022	04-12-17	sd/-
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

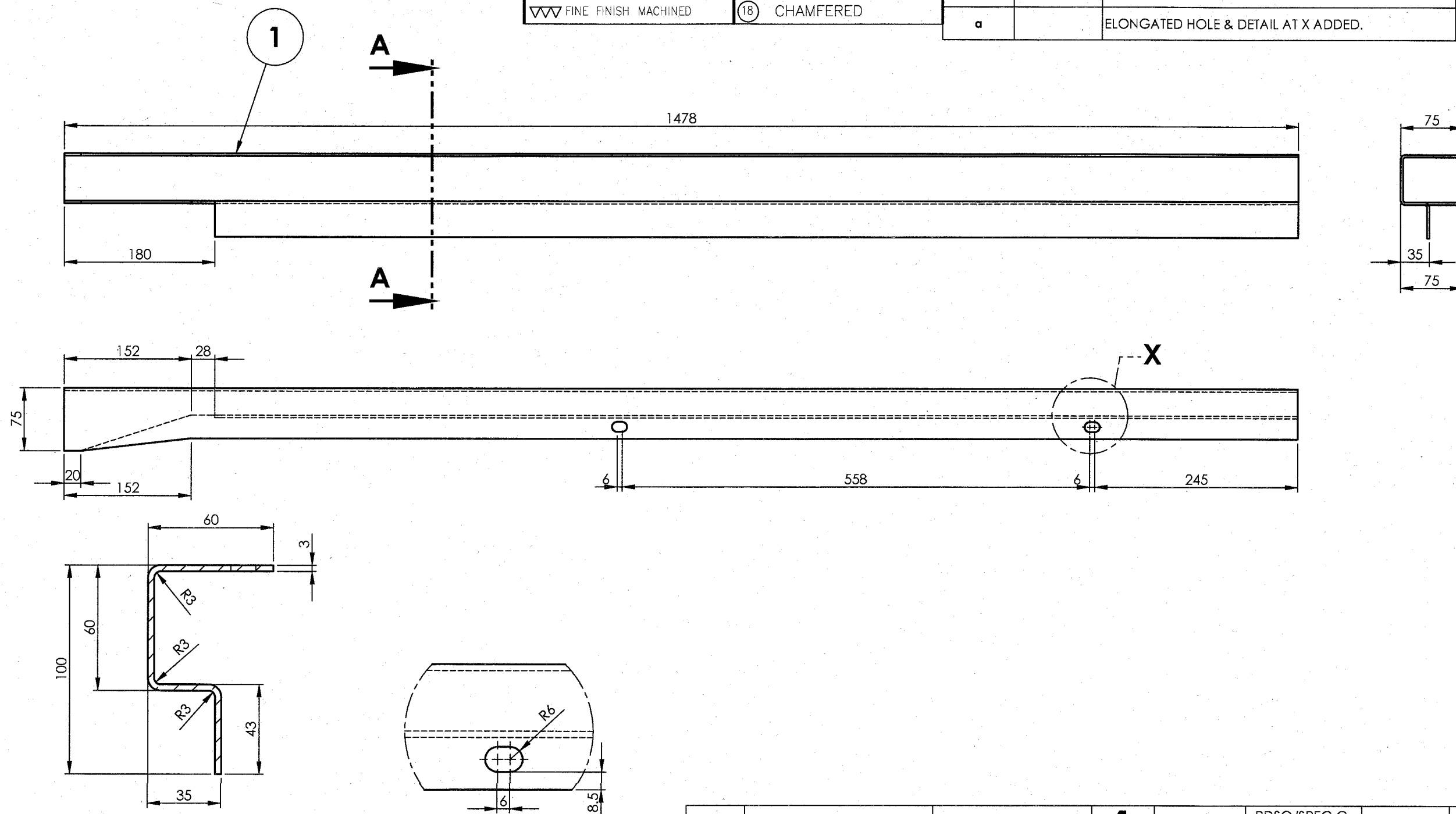
1	ROOF FLANGE	4X147X2731	1		RDSO/SPEC C-K201 X2CrNi12	13.08	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
ROOF FLANGE					SCALE	SSE/D	
					1:20	CHD	
					ALT.	ALTD	A.Palanichamy
					c	DRN	A.Muthukumar/M.S.Nethaji
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		AAC14616	
						A3	

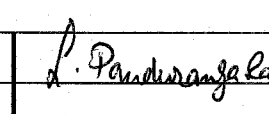
AAC14618

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

## REVISIONS

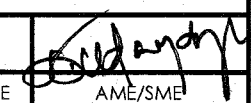
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ELONGATED HOLE & DETAIL AT X ADDED.	

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2

1	HORIZONTAL MEMBER	3X198X1478	1		RDSO/SPEC C-K201 X2CrNi12	6.43	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER					SCALE 1:10	SSE/D CHD	
					ALT. a	ALTDRN	A.Muthukumar
							A.Muthukumar
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAC14618	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

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


11-10-2018	04-12-17	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

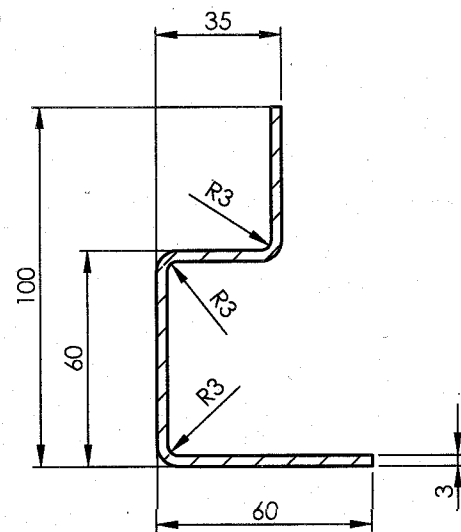
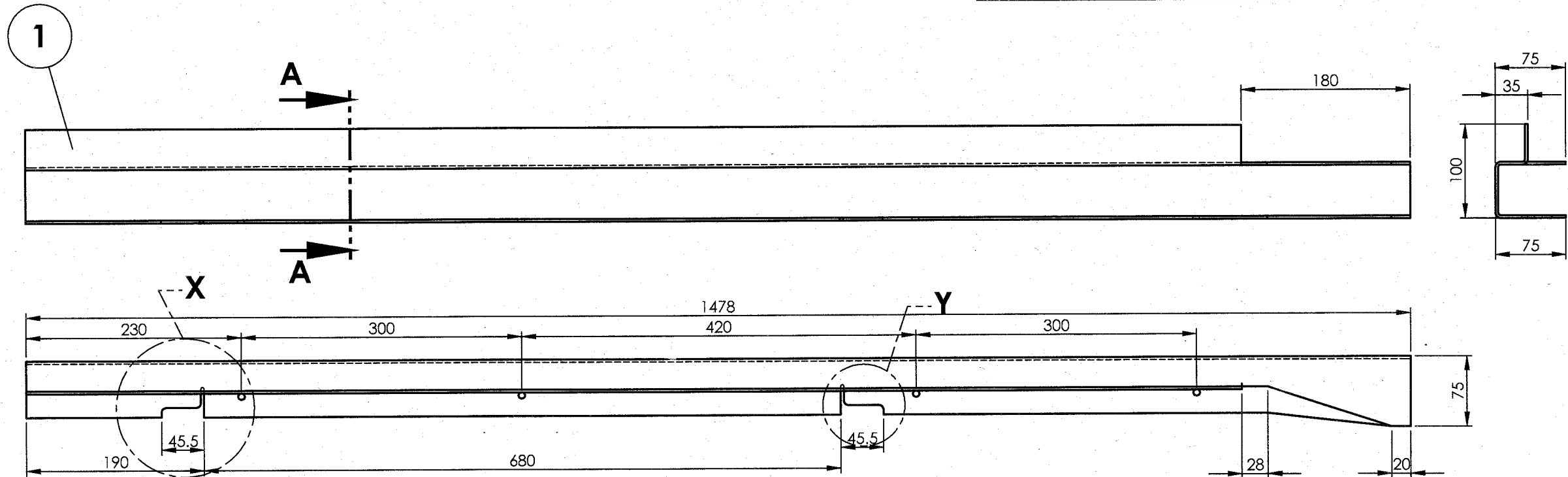
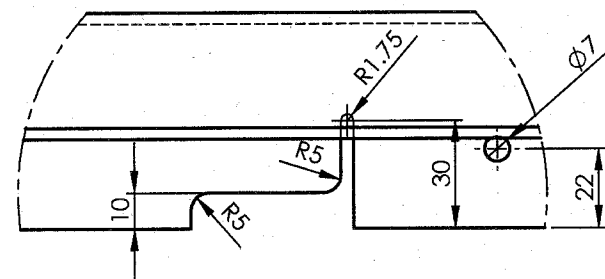
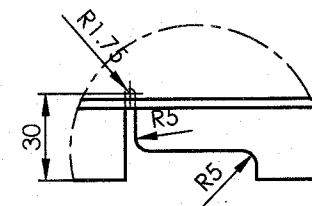
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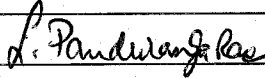
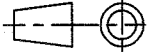
▽ ROUGH MACHINED  
▽▽ FINISH MACHINED  
▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED  
①b BURRS REMOVED  
①8 CHAMFERED

## REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIA 7 HOLES ADDED.	

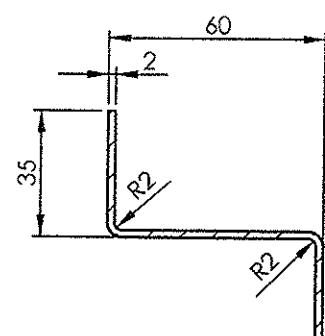
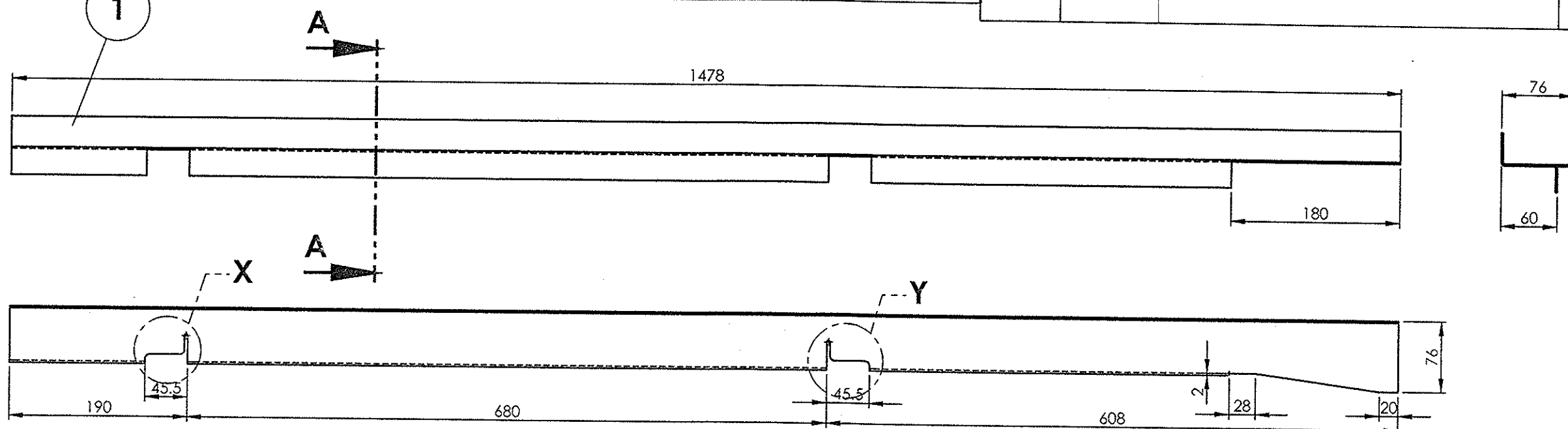
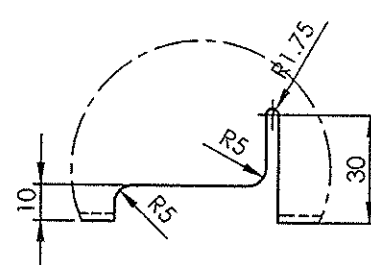
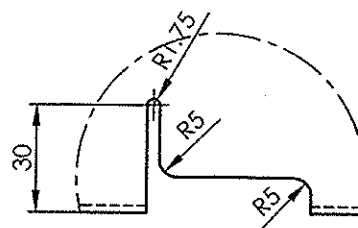
SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 2 : 5

1	HORIZONTAL MEMBER	3X198X1478	1		RDSO/SPEC C-K201 X2CrNi12	6.41	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	A.Muthukumar
					a	DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		
					AAC14620		A3

AAC14621

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

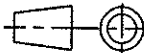
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A  
SCALE 1 : 2DETAIL X  
SCALE 1 : 2DETAIL Y  
SCALE 1 : 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 IS: 813-1986.  
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

DATE OF LATEST ALT.	04-12-2017	AME/SME
DATE OF FIRST ISSUE		

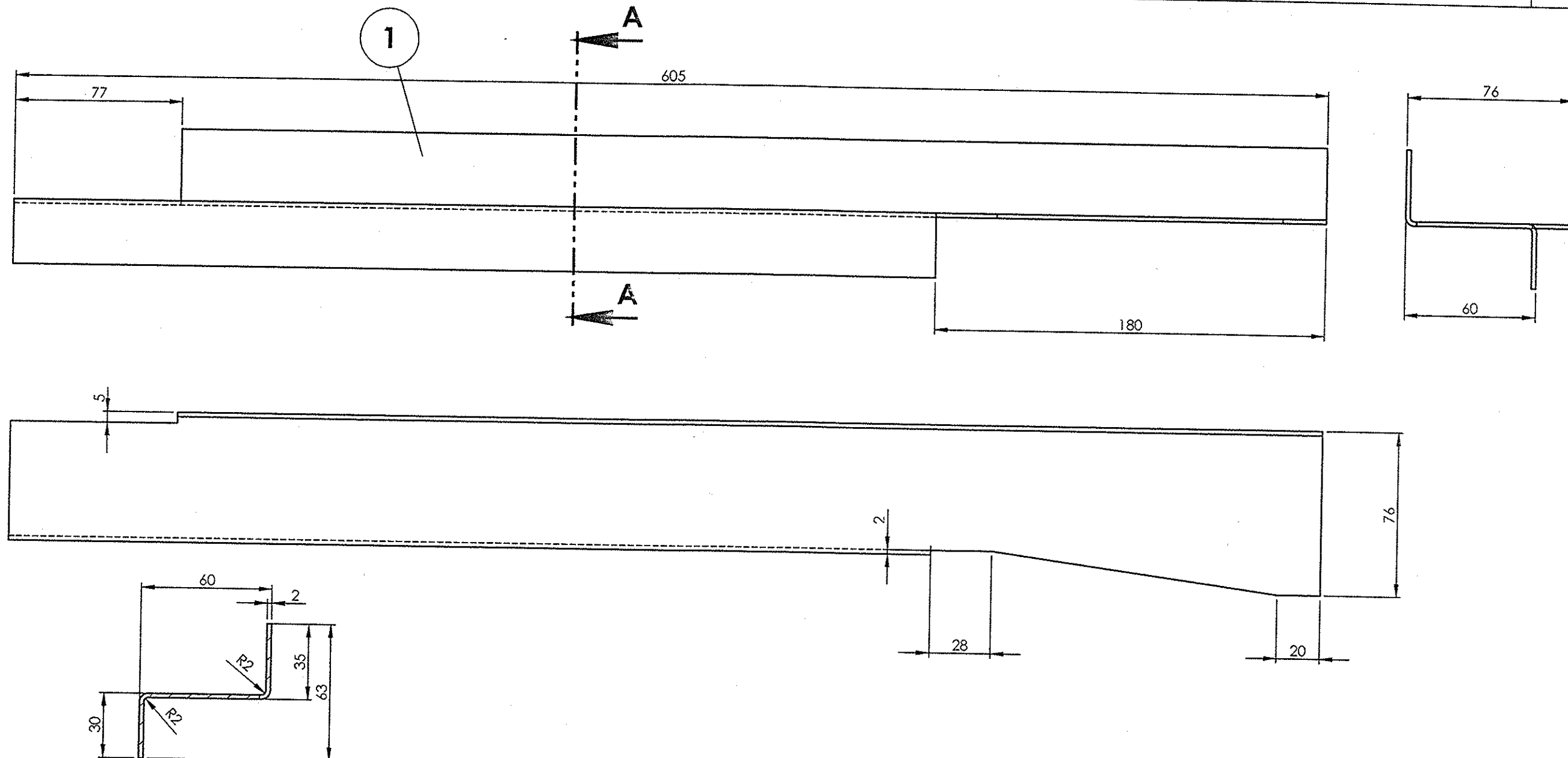
1	HORIZONTAL MEMBER	2X117X1478	1		RDSO/SPEC C-K201 X2CrNi12	2.68	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
HORIZONTAL MEMBER					SCALE	SSE/D	P. Panduranga Rao
					1:1	CHD	
					ALT.	ALTD	
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038							
SHEET 1 OF 1					AAC14621		
					A3		

AAC14622

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A  
SCALE 1 : 2

1	HORIZONTAL MEMBER	2X117X605	1		RDSO/SPEC C-K201 X2CrNi12	1.04	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER					SCALE 1:1	SSE/D CHD	L. Panduranga Rao
					ALT.	ALTD	
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAC14622		
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9.0.001.  
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.  
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

04-12-2017

L. Panduranga Rao

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET  
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