

AAA12269

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

(01) ROUGH CLEANED
(01a) BURRS REMOVED
(18) CHAMFERED

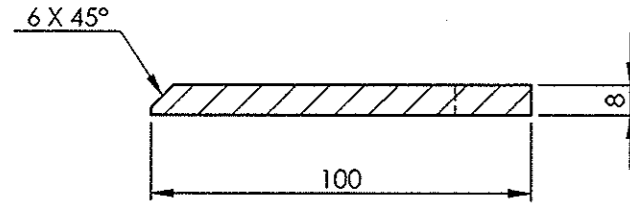
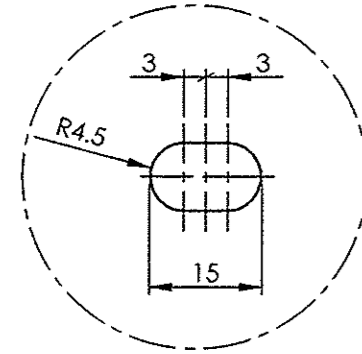
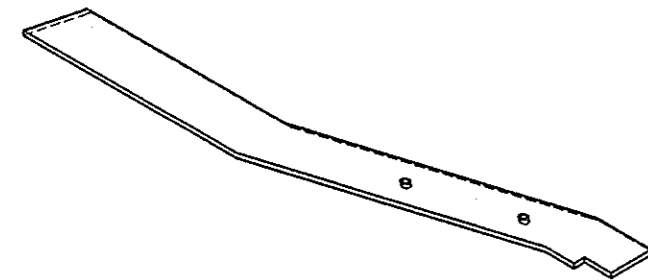
ALT.
a

ZONE

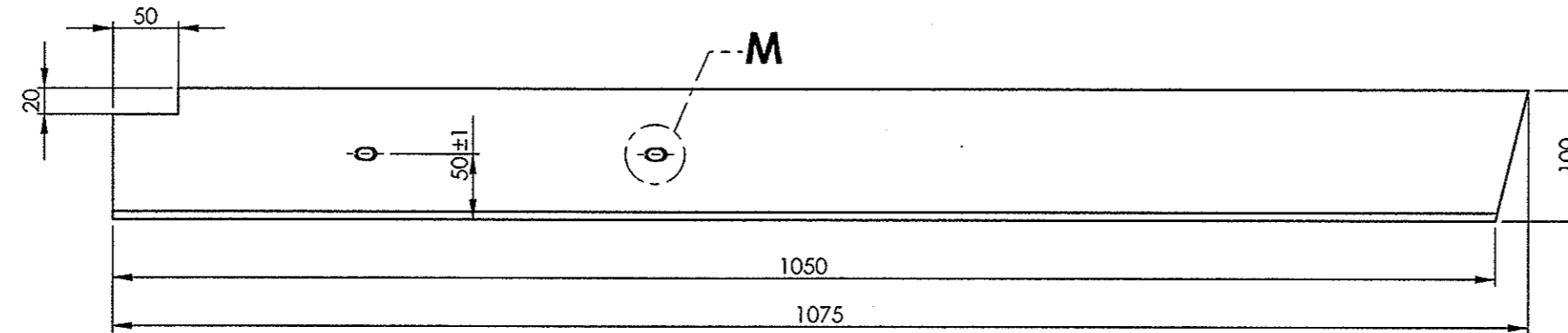
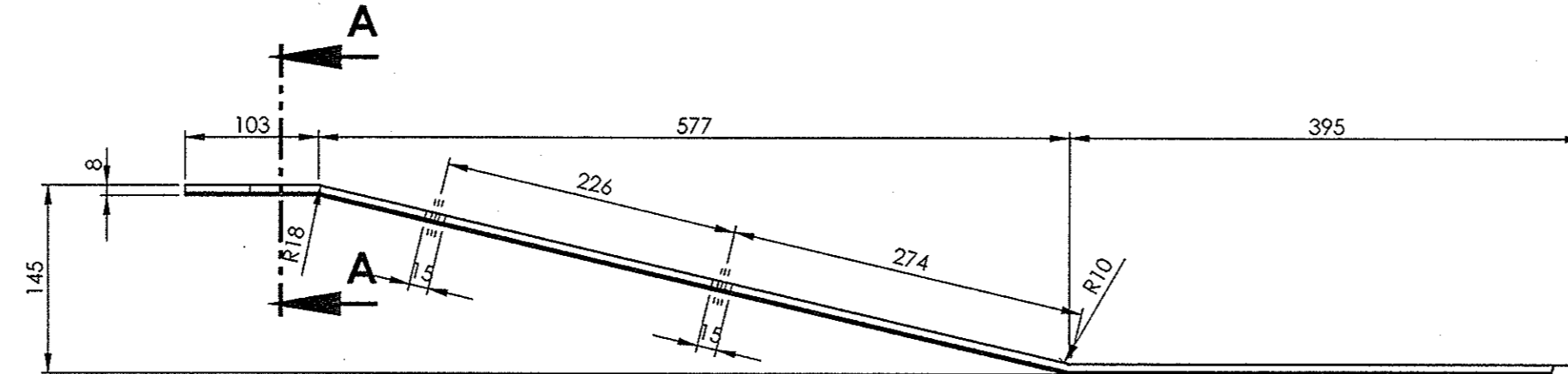
REVISIONS

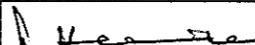
DESCRIPTION

LOCATING DIMENSION FOR ELONGATED HOLES REVISED.

APPROVED &
DATESECTION A-A
SCALE 1 : 2DETAIL M
SCALE 1 : 1

ISOMETRIC VIEW



1	BOTTOM FLANGE	8x100x1091	1		IRS M-41-1997	6.545	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: HEADSTOCK			SURFACE AREA IN Sq.m.:0.229			WT/ASSY IN Kgs:	
BOTTOM FLANGE					SCALE 1:5	SSE/D CHD	
					ALT. a	ALTD	A.V.V.Srinivas
						DRN	A.V.V.Srinivas
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
						A3	

23-05-2016

-04-2016

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

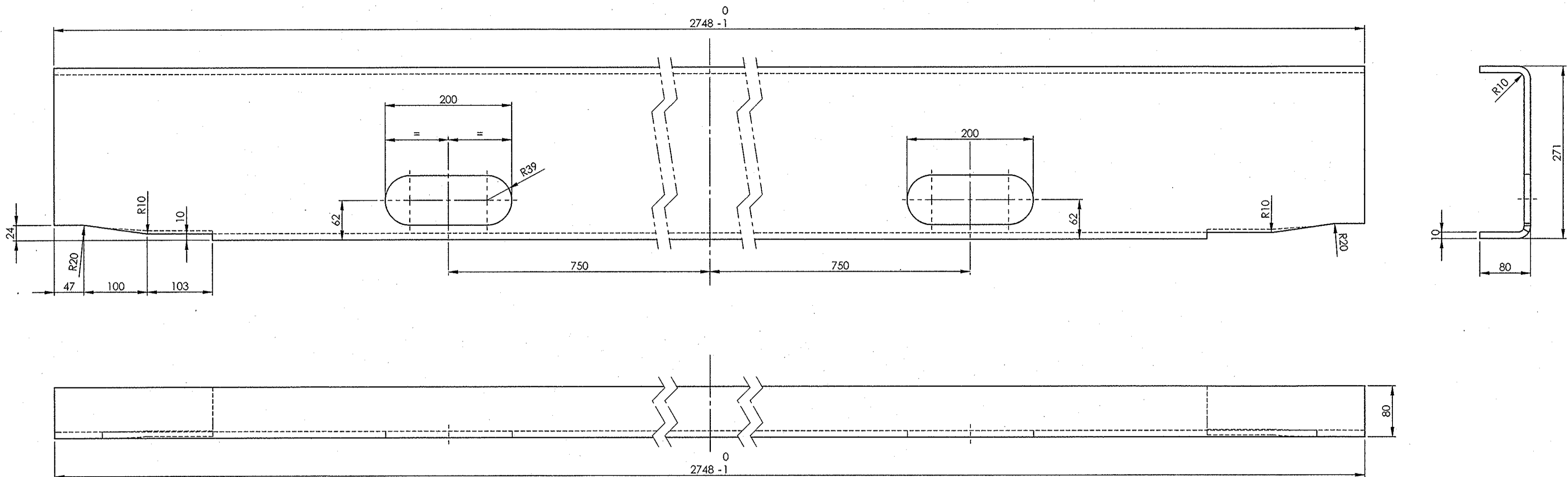
REF.DRG.NO.53112004 - ITEM-2


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 IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAA12270

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

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



1	INNER HEADSTOCK BEAM	10x399x2748	1		IRS M-41-1997	80.490	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: HEADSTOCK		SURFACE AREA IN Sq.m.: 2.123			WT/ASSY IN Kgs:		
INNER HEADSTOCK BEAM					SCALE 1:5	SSE/D	1. Head
						CHD	
					ALT	ALTD	
						DRN	A.V.V.Srinivas
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		
					AAA12270		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.

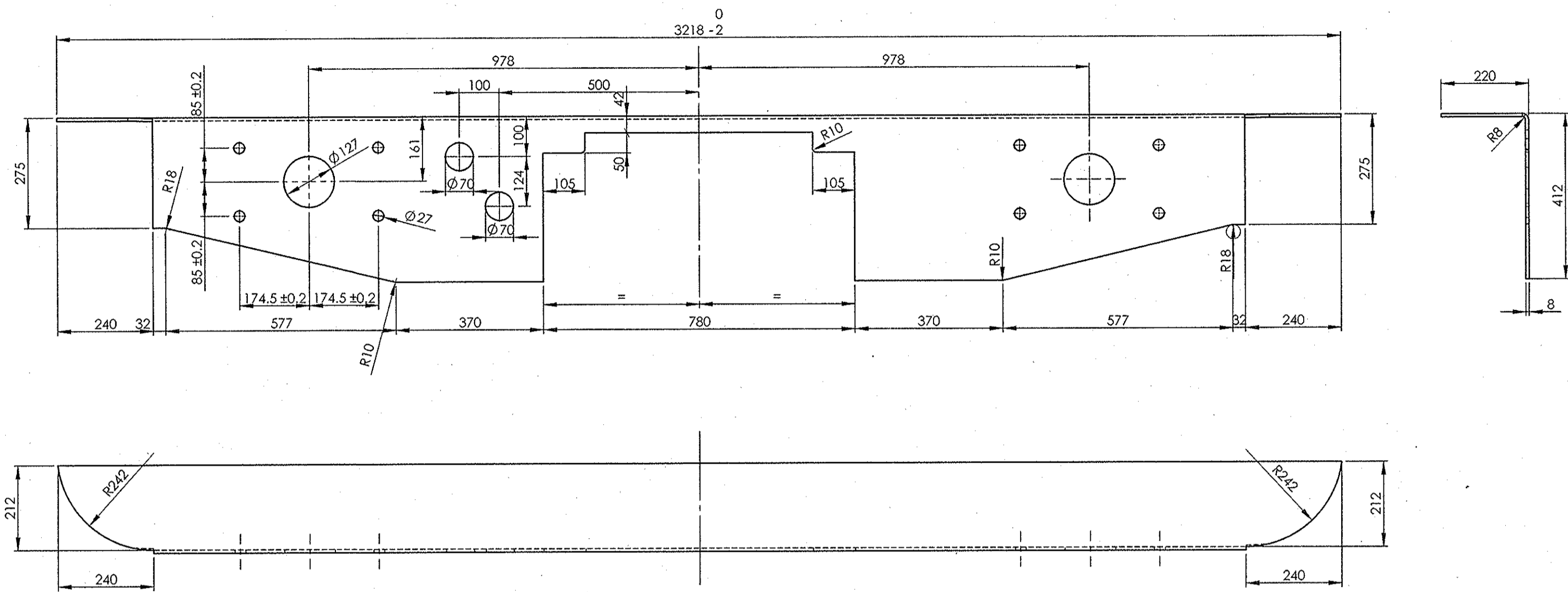
REF.DRG.NO.

29-04-2016	29-04-2016	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA12271

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b 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. CF/STD-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.

REF.DRG.NO.53112006 ITEM-1

DATE OF LATEST ALT.	29-04-2016	DATE OF FIRST ISSUE	AME/SME
---------------------	------------	---------------------	---------

1	OUTER HEADSTOCK (DRIVING END)	8x619x3218	1		IRS M-41-1997	85.918	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: HEADSTOCK			SURFACE AREA IN Sq.m.: 2.815			WT/ASSY IN Kgs:	
OUTER HEADSTOCK (DRIVING END)					SCALE 1:10	SSE/D	<i>A.V.V. Srinivas</i>
						CHD	
					ALT	ALTD	
						DRN	A.V.V.Srinivas
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1	AAA12271	A2

1		2		3		4		5		6		7		8																																																																													
AAA12272				▽ ROUGH MACHINED		(01) ROUGH CLEANED		REVISIONS																																																																																			
				▽▽ FINISH MACHINED		(01b) BURRS REMOVED		ALT.		ZONE		DESCRIPTION																																																																															
				▽▽▽ FINE FINISH MACHINED		(02) CHAMFERED						APPROVED & DATE																																																																															
<div>6 X 45° 100 8 SECTION A-A SCALE 1 : 2</div> <div>145 8 133 577 400 R10 R10</div> <div>1080 1110 100</div>																																																																																											
<table><tr><td>1</td><td>BOTTOM FLANGE</td><td>8x100x1126</td><td>1</td><td></td><td>IRS M-41-1997</td><td>6.822</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: HEADSTOCK</td><td colspan="2">SURFACE AREA IN Sq.m.:0.238</td><td colspan="4">WT/ASSY IN Kgs:</td></tr><tr><td colspan="4" rowspan="4">BOTTOM FLANGE</td><td>SCALE</td><td>SSE/D</td><td colspan="2">1:5</td></tr><tr><td>CHD</td><td colspan="2">A.V.V.Srinivas</td></tr><tr><td>ALT.</td><td>ALTD</td><td colspan="2"></td></tr><tr><td>DRN</td><td colspan="2"></td></tr><tr><td colspan="4">INDIAN RAILWAY STANDARDS</td><td>SHEET 1 OF 1</td><td colspan="2">AAA12272</td><td>A3</td></tr><tr><td colspan="4">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="4"></td><td></td></tr><tr><td colspan="2">REF.DRG.NO.</td><td>29-04-2016</td><td>AME/SME</td><td colspan="4"></td><td></td></tr><tr><td>DATE OF LATEST ALT.</td><td>DATE OF FIRST ISSUE</td><td colspan="6"></td><td></td></tr></table>															1	BOTTOM FLANGE	8x100x1126	1		IRS M-41-1997	6.822		QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: HEADSTOCK		SURFACE AREA IN Sq.m.:0.238		WT/ASSY IN Kgs:				BOTTOM FLANGE				SCALE	SSE/D	1:5		CHD	A.V.V.Srinivas		ALT.	ALTD			DRN			INDIAN RAILWAY STANDARDS				SHEET 1 OF 1	AAA12272		A3	INTEGRAL COACH FACTORY, CHENNAI - 600038									REF.DRG.NO.		29-04-2016	AME/SME						DATE OF LATEST ALT.	DATE OF FIRST ISSUE							
1	BOTTOM FLANGE	8x100x1126	1		IRS M-41-1997	6.822																																																																																					
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																																																				
GROUP: HEADSTOCK		SURFACE AREA IN Sq.m.:0.238		WT/ASSY IN Kgs:																																																																																							
BOTTOM FLANGE				SCALE	SSE/D	1:5																																																																																					
				CHD	A.V.V.Srinivas																																																																																						
				ALT.	ALTD																																																																																						
				DRN																																																																																							
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1	AAA12272		A3																																																																																				
INTEGRAL COACH FACTORY, CHENNAI - 600038																																																																																											
REF.DRG.NO.		29-04-2016	AME/SME																																																																																								
DATE OF LATEST ALT.	DATE OF FIRST ISSUE																																																																																										
1		2		3		4		5		6		7		8																																																																													

AAA12273

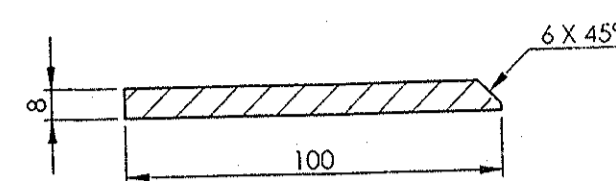
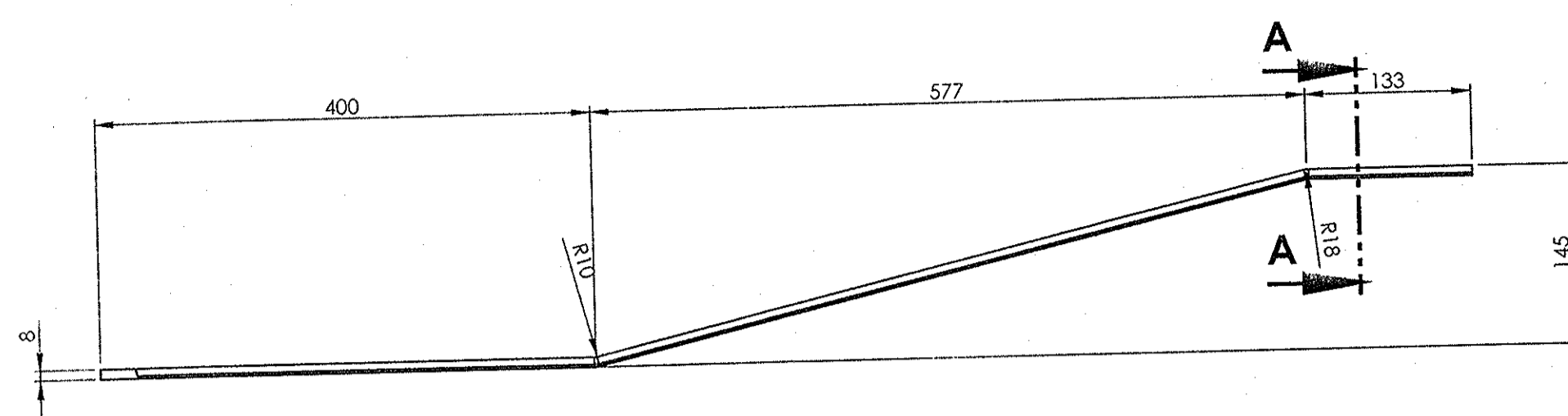
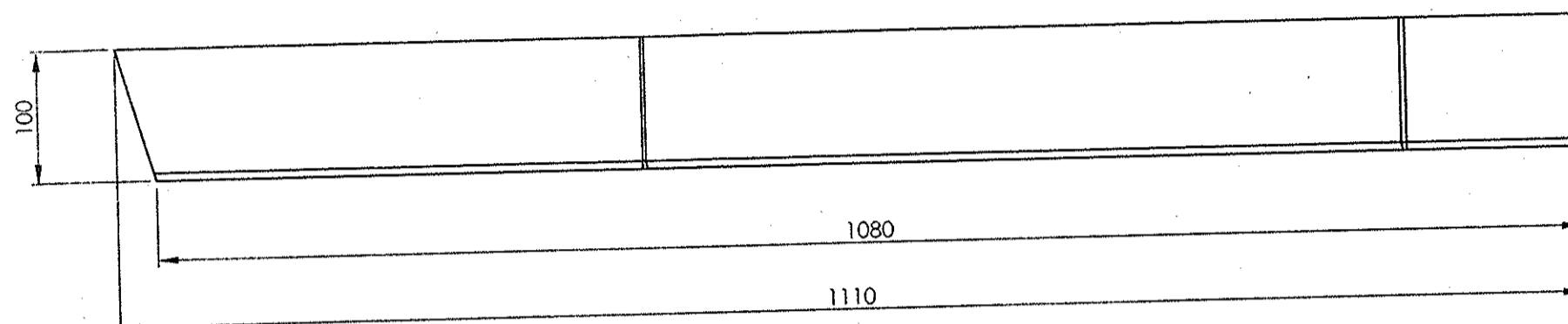
▽ ROUGH MACHINED	(01) ROUGH CLEANED
▽▽ FINISH MACHINED	(015) BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	(18) CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

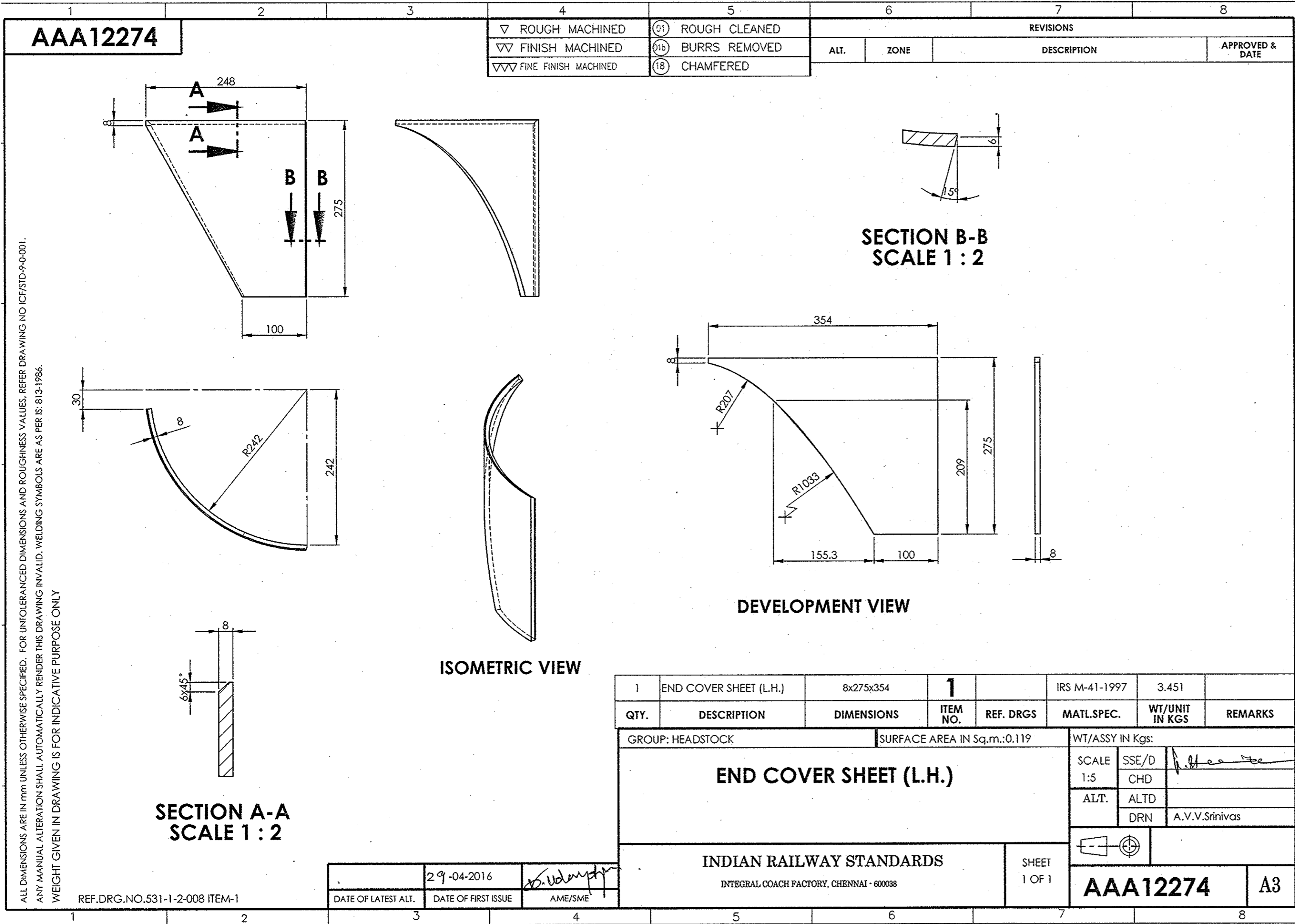
APPROVED &
DATESECTION A-A
SCALE 1 : 2

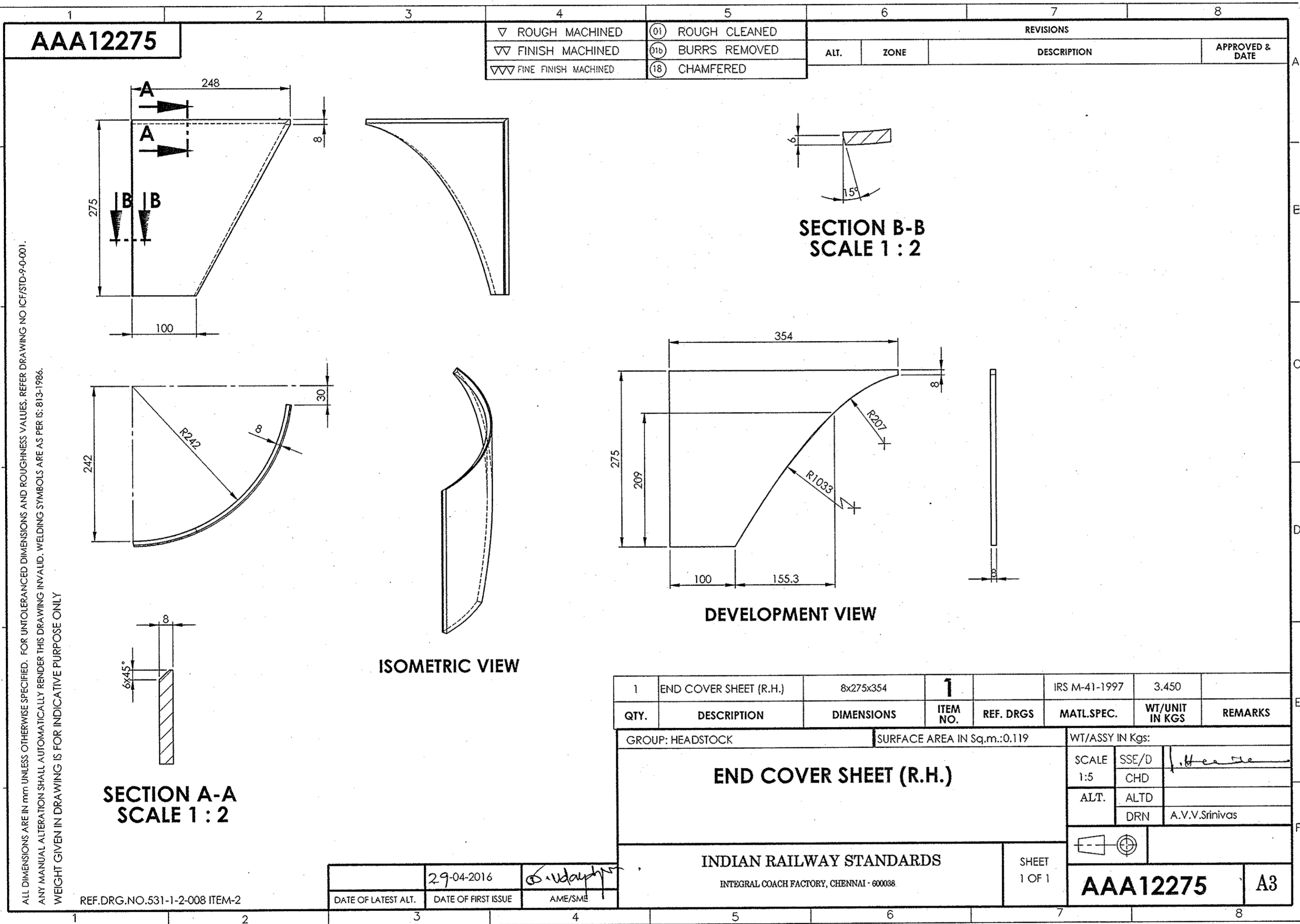
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

DATE OF LATEST ALT.	29-04-16	AME/AME
---------------------	----------	---------

1	BOTTOM FLANGE	8x100x1126	1		IRS M-41-1997	6.822	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: HEADSTOCK		SURFACE AREA IN Sq.m.: 0.238		WT/ASSY IN Kgs:			
BOTTOM FLANGE		INDIAN RAILWAY STANDARDS		SCALE		SSE/D	
				1:5		CHD	
				ALT.		ALTD	
				DRN		A.V.V. Srinivas	
		INDIAN RAILWAY STANDARDS		SHEET 1 OF 1		AAA12273	
		INTEGRAL COACH FACTORY, CHENNAI - 600038				A3	





AAA13031

▽ ROUGH MACHINED

▽▽ FINISH MACHINED

▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED

①b BURRS REMOVED

①8 CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED & DATE

1

156

156

156

1.7

1

CLOSING PIECE

1.7x156x156

1

ISI-301

330.97

-

QTY

DESCRIPTION

DIMENSIONS

ITEM NO.

REF. DRGS

MATL.SPEC.

WT/UNIT IN KGS

REMARKS

GROUP: TROUGH FLOOR

SURFACE AREA IN Sq.m.: 0.05

WT/ASSY IN Kgs: 330.97

CLOSING PIECE

SCALE 1:2

SSE/D

CHD

ALT. -

ALTD

DRN

G.M.LAKSHMINARAYANA

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

AAA13031

A3

DATE OF LATEST ISSUE

DATE OF FIRST ISSUE

DY.CME/D

SME

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

1

156

156

156

1.7

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

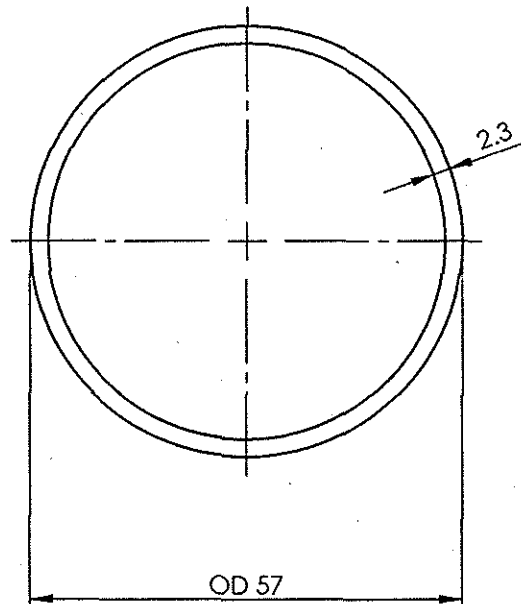
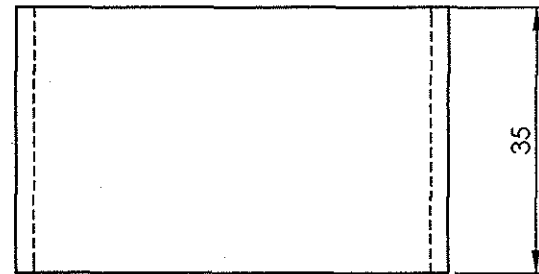
AAA13031

A3

AAA13175

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

**NOTE:**

1. THE PIPE SHALL BE MADE OF WELDED PROCESS.

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.20113601 ITEM-10

	14-05-2016	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	PIPE	OD 57x2.3x35	1		AIISI-304	0.11	-
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: TROUGH FLOOR		SURFACE AREA IN Sq.m.:0.01			WT/ASSY IN Kgs:		
PIPE					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	-
						DRN	A.V.V.Srinivas
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAA13175		A3

AAA13176

▽ ROUGH MACHINED

▽▽ FINISH MACHINED

▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED

①b BURRS REMOVED

①8 CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

32

352

145

R5

5

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

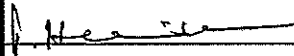
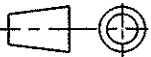
REF.DRG.NO.20113601 ITEM-33

DATE OF LATEST ALT.

14-05-2016

DATE OF FIRST ISSUE

AME/SME

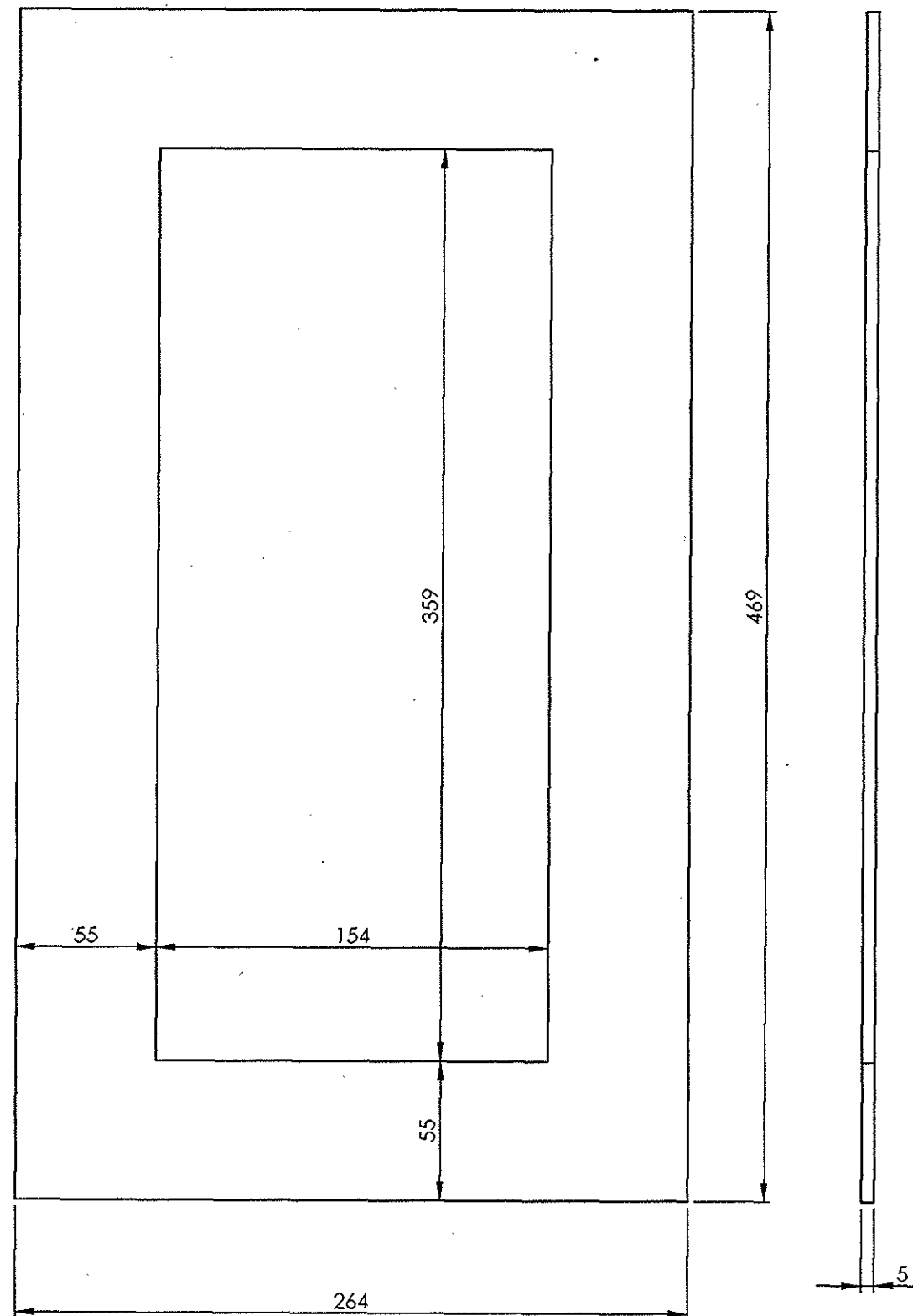
1	ANGLE FOR HOUSING	5x32x487	1		RDSO/SPEC C- K201 X2 Cr Ni N 18.7	0.626	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: TROUGH FLOOR		SURFACE AREA IN Sq.m.:0.036			WT/ASSY IN Kgs:		
ANGLE FOR HOUSING					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	A.V.V.Srinivas
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA13176

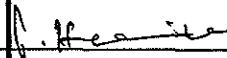
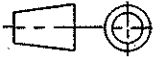
AAA13178

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

REVISIONS

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

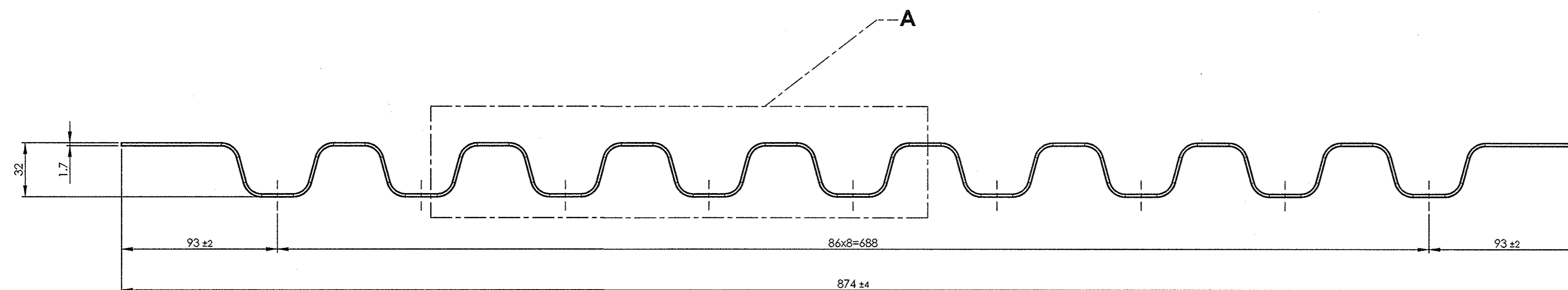


1	PLATE	5x264x469	1		SS-409M	2.741	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: TROUGH FLOOR		SURFACE AREA IN Sq.m.:0.150			WT/ASSY IN Kgs:		
PLATE					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	A.V.V.Srinivas
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA13178

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.19913502 ITEM-18


	14-05-2016	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SMB

[illegible]

93 ±2

ISOMETRIC VIEW

	-10-2017	<i>S. Vachon</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	ROUGH FLOOR PART (CRF)	1.7x1180x6480.5	1		RDS O/SPEC CK-201 X2 Cr Ni N 18.7 (301)	106.316	2B FINISH
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: TROUGH FLOOR		SURFACE AREA IN Sq.m.: 15.663			WT/ASSY IN KGS:		
TROUGH FLOOR PART (CRF)				SCALE		SSE/D	
				1:10		CHD	
				ALT.		ALTD	
				DRN		K.SETHURAMAN	
INDIAN RAILWAY STANDARDS				SHEET			
INTEGRAL COACH FACTORY, CHENNAI - 600038				1 OF 1		AAA13197	
						A1	

AAA13198

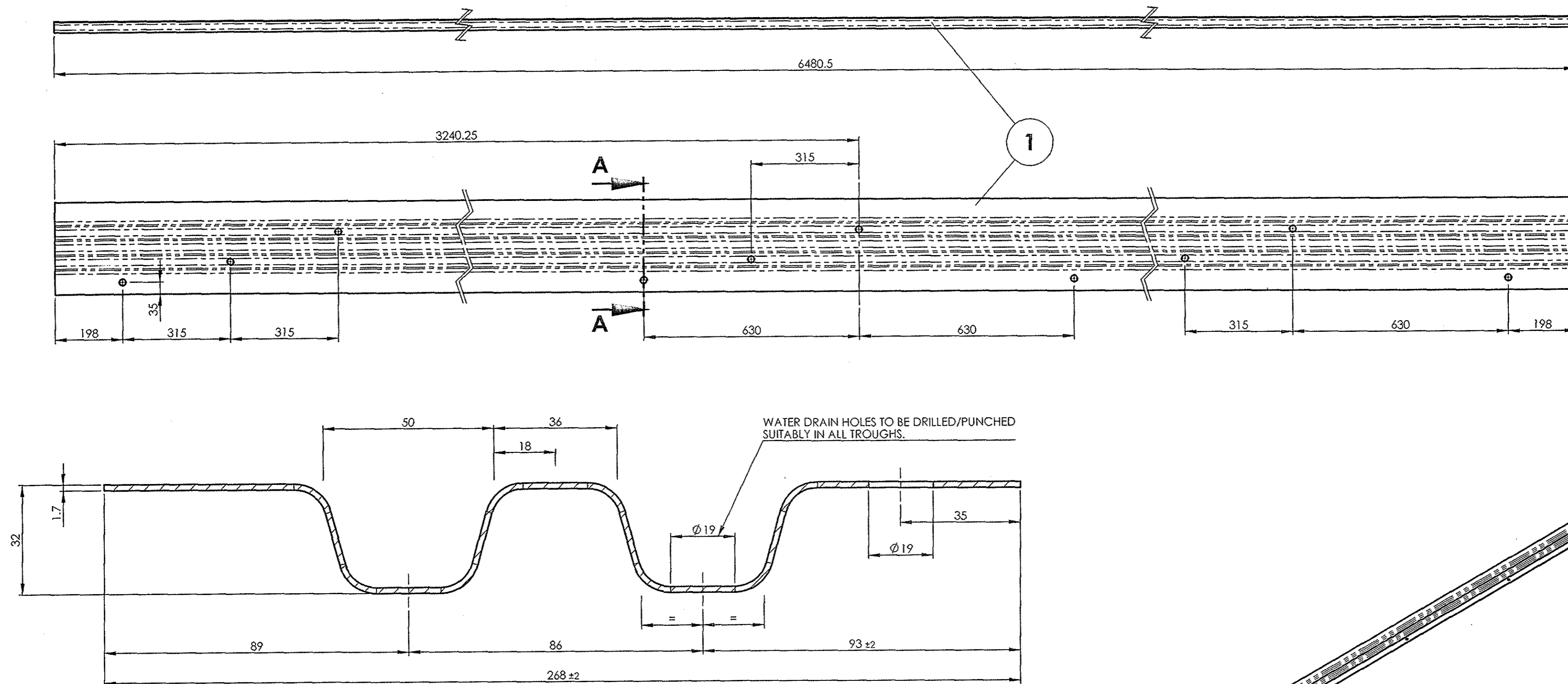
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

NOTE:

1. TOLERANCES:


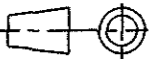
1. LENGTH TOLERANCE : +3 mm
2. SECTION BOW : MAX 8 mm
3. LONGITUDINAL BOW : MAX 1mm/MTR
4. TWIST : 1° PER METRE
5. WAVINESS/FLATNESS : MAX 4 mm
6. DIAGONAL DISTANCE : 6mm MAX
7. WIDTH OF THE COMPONENT : 874 ± 4 mm
8. DEPTH OF CORRUGATION : 32 ± 0.5
9. THICKNESS OF MATERIAL : 1.7 ± 0.08 mm
10. DRAIN HOLES LOCATION : ± 5 mm

@ 2. SUPPLIER'S NAME, S.No. MONTH & YEAR OF MANUFACTURE TO BE PUNCHED IN 6mm HEIGHT.

3. NECESSARY SHRINKAGE ALLOWANCE 1 mm/METER (APPROX.) MAY BE GIVEN.

REF.DRG.NO.

DATE OF LATEST ALT.	24-10-2017	AME/SME
---------------------	------------	---------

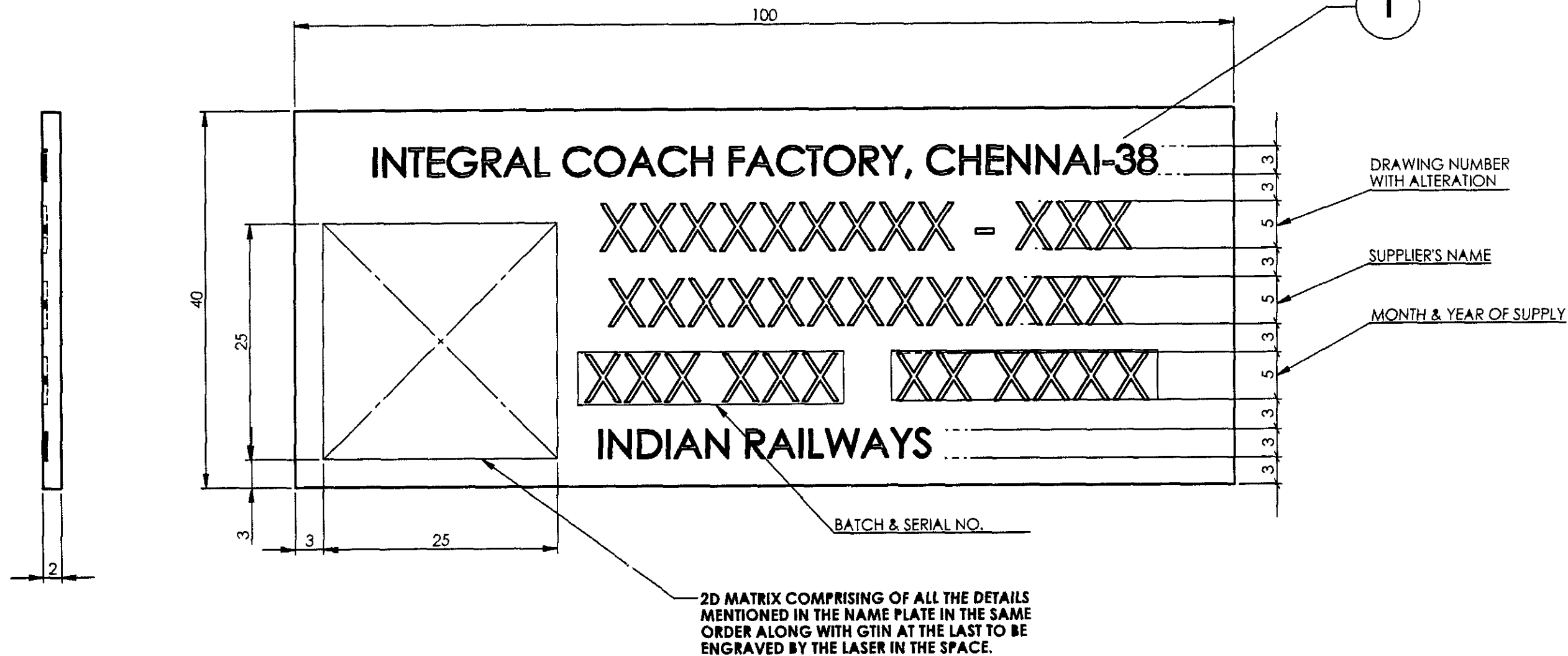
1	TROUGH FLOOR PART (CRF)	1.7x336x6480.5	1		RDSO/SPEC CK-201 X2 Cr Ni N 18.7 (301)	30.108	2B FINISH
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: TROUGH FLOOR			SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:	
TROUGH FLOOR PART (CRF)					SCALE 1:10	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	K.SETHURAMAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAA13198		A2

1		2		3		4		5		6		7		8																	
AAA13200				▽ ROUGH MACHINED		⊖ ROUGH CLEANED		REVISIONS																							
				▽▽ FINISH MACHINED		⊖⊖ BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE																	
				▽▽▽ FINE FINISH MACHINED		⊖⊖⊖ CHAMFERED																									
<div>ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES REFER DRAWING NO ICT/STD 9-0 001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY</div> <div><div>1</div><div>159</div><div>159</div><div>1.7</div><div>159</div></div>																1		CLOSING PIECE		1.7x159x159		1				AISI-301					
																QTY.		DESCRIPTION		DIMENSIONS		ITEM NO.		REF. DRGS		MATL.SPEC.		WT/UNIT IN KGS		REMARKS	
																GROUP: TROUGH FLOOR						SURFACE AREA IN Sq.m.:						WT/ASSY IN Kgs:			
																CLOSING PIECE										SCALE 1:2		SSE/D		CHD	
																										ALT.		ALTD		DRN	
INDIAN RAILWAY STANDARDS		SHEET 1 OF 1		AAA13200		A3																									
REF.DRG.NO.		-09-2017																													
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME																											
1		2		3		4		5		6		7		8																	

AAA51072

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

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

**NOTE:**

1. LETTERS TO BE PUNCHED OR ENGRAVED.


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

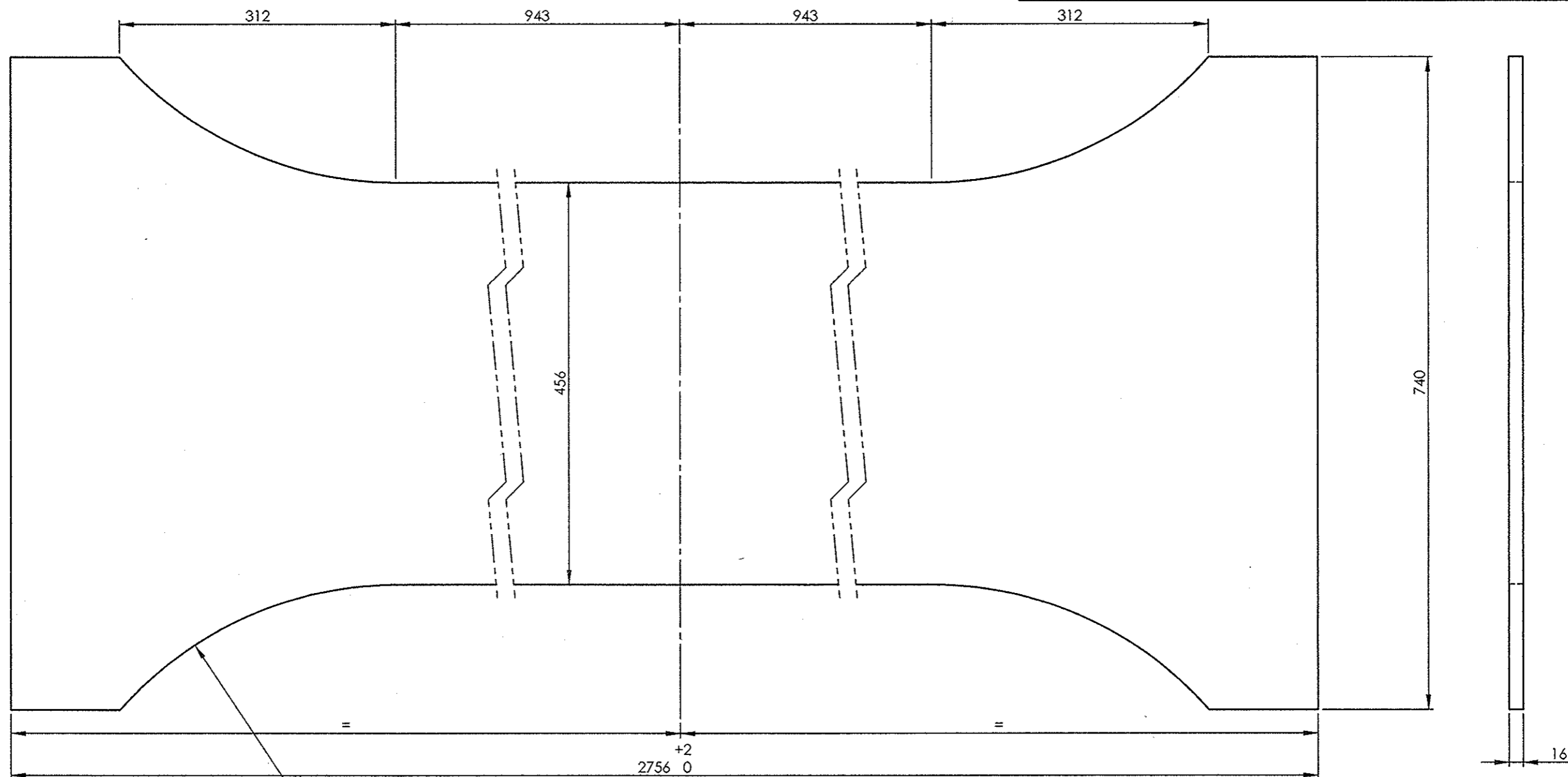
1	NAME PLATE FOR SUPPLIER IDENTIFICATION	2x40x100	1		RDSO/SPEC C-K201 X2 Cr Ni 12	0.063	\$
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 5-1 Body Side Doors		SURFACE AREA IN Sq.m.:0.009		WT/ASSY IN Kgs:			
NAME PLATE FOR SUPPLIER IDENTIFICATION				SCALE 2:1	SSE/D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

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

REF.DRG.NO.

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
a		MATERIAL SPEC. REVISED	



GROUP: BODY BOLSTER	SURFACE AREA IN Sq.m.:2.876		WT/ASSY IN Kgs:		
TOP FLANGE			SCALE	SSE/D	<i>P. Hecine</i>
			1:5	CHD	
			ALT. a	ALTD	G.SURESH BABU
				DRN	S.GANESH KUMAR

INTEGRAL COACH FACTORY, CHENNAI - 600038

AAB11787


A3

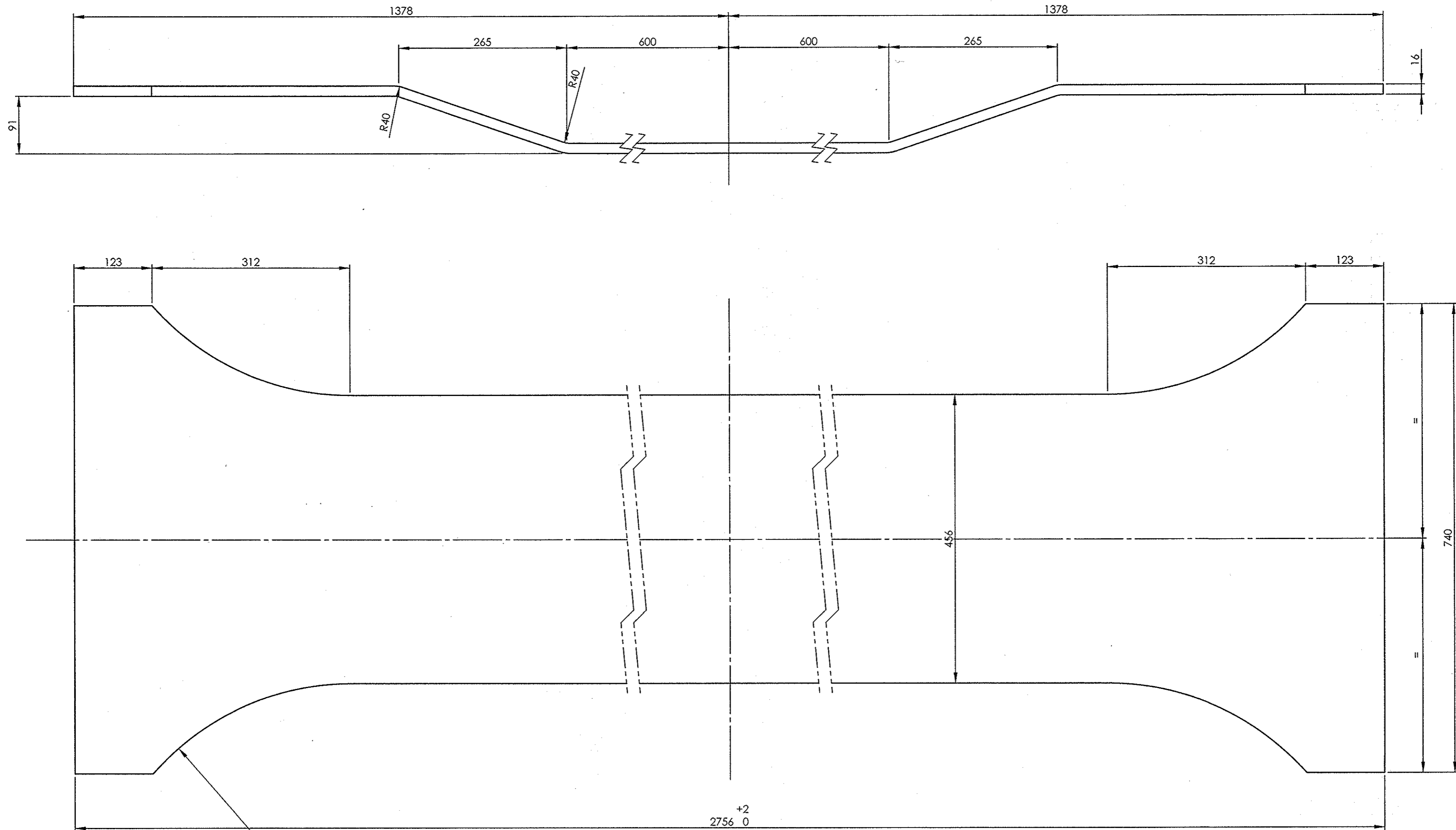
16-12-2017	22-04-2016	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.N.E

AAB11802

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

① ROUGH CLEANED
①b BURRS REMOVED
⑱ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		MATERIAL SPEC. REVISED	



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.32911134 / ITEM-2

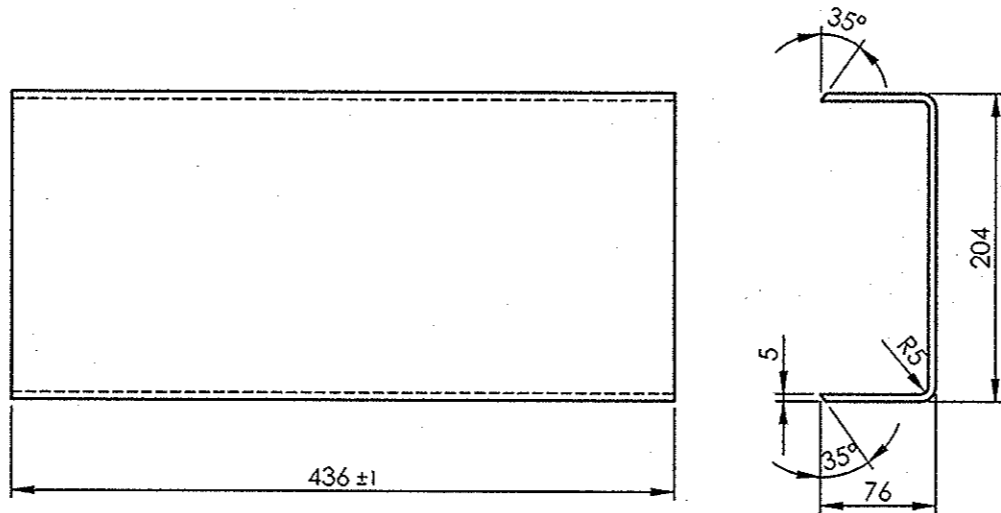
16-12-2017	04-2016	S. Wadhwa
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	BOTTOM FLANGE	16 x 740 x 2788	1		EN10025-5:2004 S355J2W+N	175.16	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: BODY BOLSTER				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
BOTTOM FLANGE				SCALE	SSE/D	S. Wadhwa	
				1:5	CHD		
				ALT	ALTD	G.SURESH BABU	
				a	DRN	S.GANESH KUMAR	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAB11802	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A2	

AAB11835

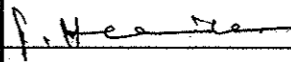
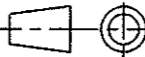
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

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 IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

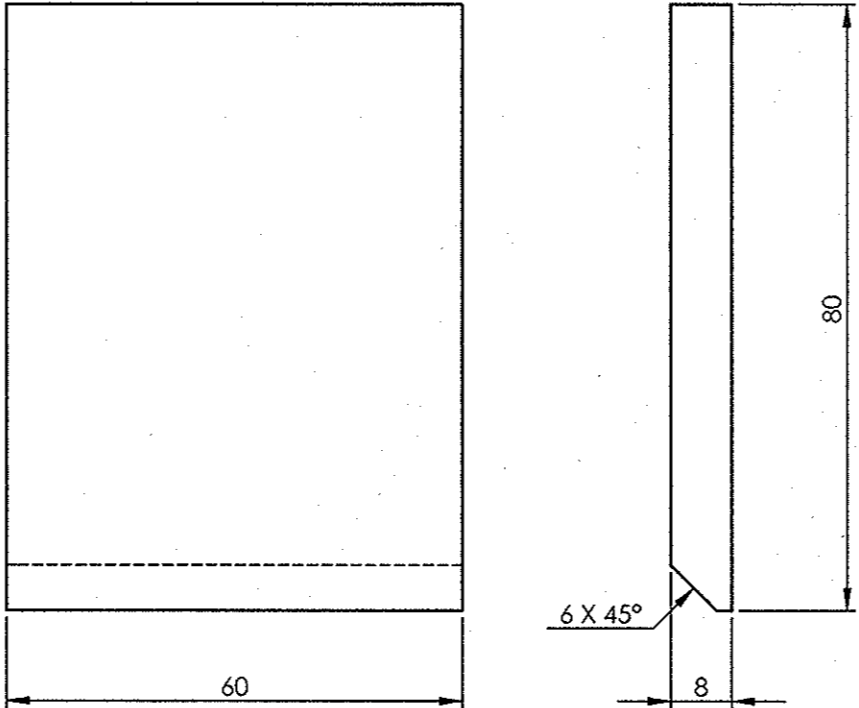
REF.DRG.NO.531-1-1-008 / ITEM-7

1	CHANNEL	5X336X436	1		IRS M-41-1997	5.75	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: UNDER FRAME		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	S.GANESH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
				SHEET 1 OF 1	AAB11835		A3

AAB11864

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

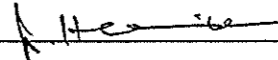
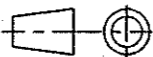
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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 IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.376-1-1-002 / ITEM-24

	22-4-16	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

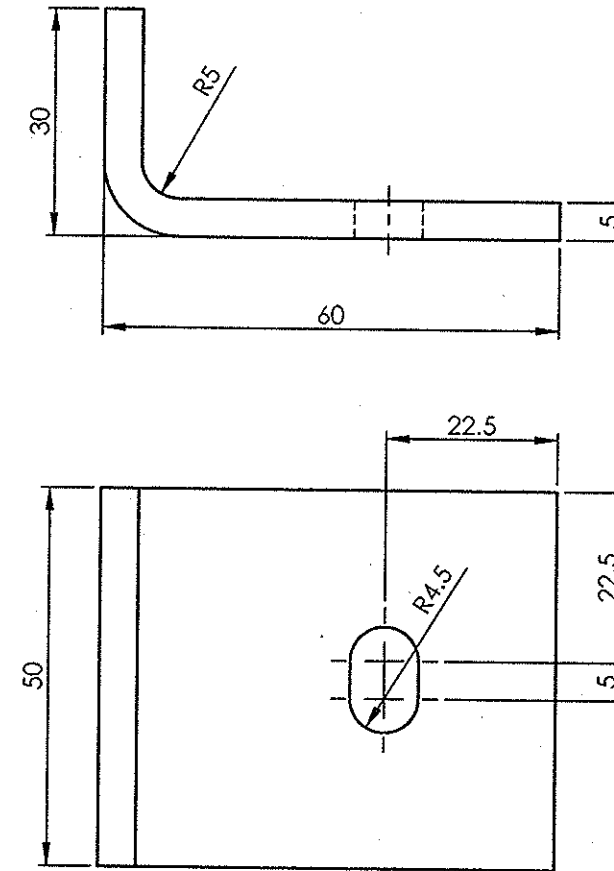
1	SCREWING PIECE	8X60X80	1		IRS M-41-1997	0.29	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: UNDER FRAME		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
SCREWING PIECE					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	S.GANESH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
						AAB11864	A3

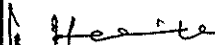
1		2		3		4		5		6		7		8																																																														
AAB11873				▽ ROUGH MACHINED		⑧1 ROUGH CLEANED		REVISIONS																																																																				
				▽▽ FINISH MACHINED		⑧1b BURRS REMOVED		ALT.		ZONE		DESCRIPTION																																																																
				▽▽▽ FINE FINISH MACHINED		⑧18 CHAMFERED		APPROVED & DATE																																																																				
<div>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</div> <div><div></div><div>440</div></div> <div><div>60</div><div>R5</div><div>5</div><div>60</div></div>																																																																												
<table><tr><td>1</td><td>ANGLE</td><td>5X110X440</td><td>1</td><td></td><td>IRS M-41-1997</td><td>1.93</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="3">GROUP: UNDER FRAME</td><td colspan="2">SURFACE AREA IN Sq.m.:</td><td colspan="3">WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="4">ANGLE</td><td>SCALE 1:2</td><td>SSE/D CHD</td><td><div></div></td></tr><tr><td>ALT.</td><td>ALTD</td><td></td></tr><tr><td>DRN</td><td>S.GANESH KUMAR</td><td></td></tr><tr><td colspan="2">INDIAN RAILWAY STANDARDS</td><td>SHEET 1 OF 1</td><td colspan="2">AAB11873</td><td>A3</td></tr><tr><td colspan="2"></td><td colspan="2">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="3"></td><td></td></tr><tr><td colspan="2">REF.DRG.NO.214-1-1-214 / ITEM-22</td><td>DATE OF LATEST ALT.</td><td>29-04-16</td><td>DATE OF FIRST ISSUE</td><td colspan="3">AME/SME</td><td></td></tr></table>																1	ANGLE	5X110X440	1		IRS M-41-1997	1.93		QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: UNDER FRAME			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			ANGLE					SCALE 1:2	SSE/D CHD	<div></div>	ALT.	ALTD		DRN	S.GANESH KUMAR		INDIAN RAILWAY STANDARDS		SHEET 1 OF 1	AAB11873		A3			INTEGRAL COACH FACTORY, CHENNAI - 600038						REF.DRG.NO.214-1-1-214 / ITEM-22		DATE OF LATEST ALT.	29-04-16	DATE OF FIRST ISSUE	AME/SME			
1	ANGLE	5X110X440	1		IRS M-41-1997	1.93																																																																						
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																																					
GROUP: UNDER FRAME			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:																																																																							
ANGLE					SCALE 1:2	SSE/D CHD	<div></div>																																																																					
					ALT.	ALTD																																																																						
					DRN	S.GANESH KUMAR																																																																						
					INDIAN RAILWAY STANDARDS		SHEET 1 OF 1	AAB11873		A3																																																																		
		INTEGRAL COACH FACTORY, CHENNAI - 600038																																																																										
REF.DRG.NO.214-1-1-214 / ITEM-22		DATE OF LATEST ALT.	29-04-16	DATE OF FIRST ISSUE	AME/SME																																																																							
1		2		3		4		5		6		7		8																																																														

AAC11063

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	FIXING ANGLE	5X50X80	1		IRS M-41-1997	0.16	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: UNDER FRAME			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
FIXING ANGLE					SCALE 1:1	SSE/D CHD	
					ALT.	ALTD	
						DRN	S.GANESH KUMAR
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
SHEET 1 OF 1		AAC11063	A3				

	22-4-16	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.531-1-1-014 / ITEM-4

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

AAC11064

▽ ROUGH MACHINED

① ROUGH CLEANED

▽▽ FINISH MACHINED

①b BURRS REMOVED

▽▽▽ FINE FINISH MACHINED

①8 CHAMFERED

REVISIONS

ALT.

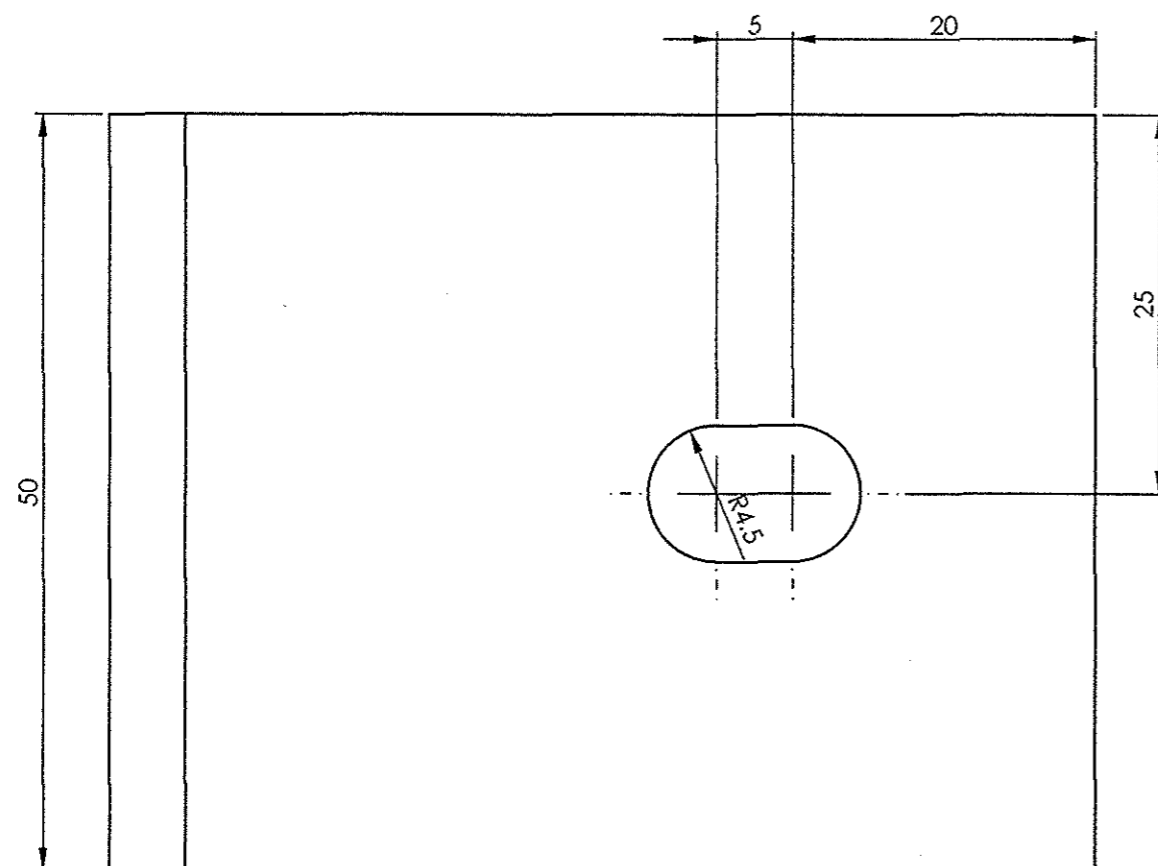
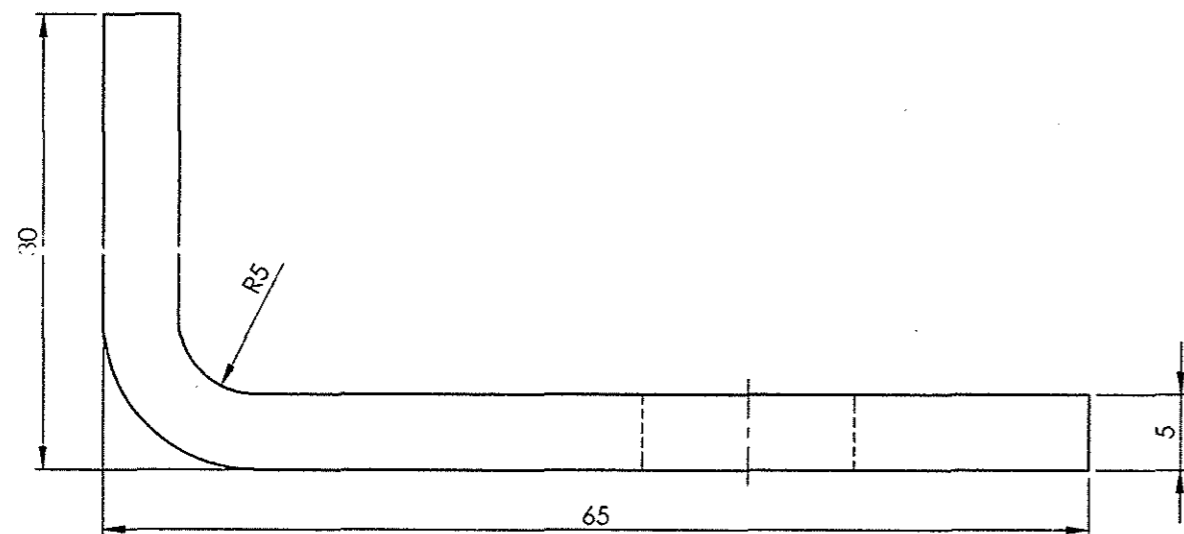
ZONE

DESCRIPTION

APPROVED &
DATE

a

ELONGATED HOLE DIRECTON REVISED.



1	FIXING ANGLE	5X50X85	1		IRS M-41-1997	0.17	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: UNDER FRAME				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
FIXING ANGLE					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	A.V.V. Srinivas
					a	DRN	S.GANESH KUMAR
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
					AAC11064		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.531-1-1-014 / ITEM-5

18-08-2016

22-04-2016

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

AAC11077

▽ ROUGH MACHINED

▽▽ FINISH MACHINED

▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED

①b BURRS REMOVED

⑧ CHAMFERED

ALT.

ZONE

DESCRIPTION

APPROVED & DATE

Ø28 OD

Ø24

60

NOTE:

1. THE TUBE SHALL BE MADE OF WELDED PROCESS.

1

STEEL TUBE

Ø28 (OD)x60

1

AISI-304

0.08

QTY.

DESCRIPTION

DIMENSIONS

ITEM NO.

REF. DRGS

MATL.SPEC.

WT/UNIT IN KGS

REMARKS

GROUP: UNDERFRAME

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

STEEL TUBE

SCALE 1:1

SSE/D CHD

ALT. ALTD

DRN A.V.V.Srinivas

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600088

SHEET 1 OF 1

AAC11077

A3

29-04-2016

29-04-2016

AME/SAE

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SAE

REF.DRG.NO.531-1-1-002 ITEM-23

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

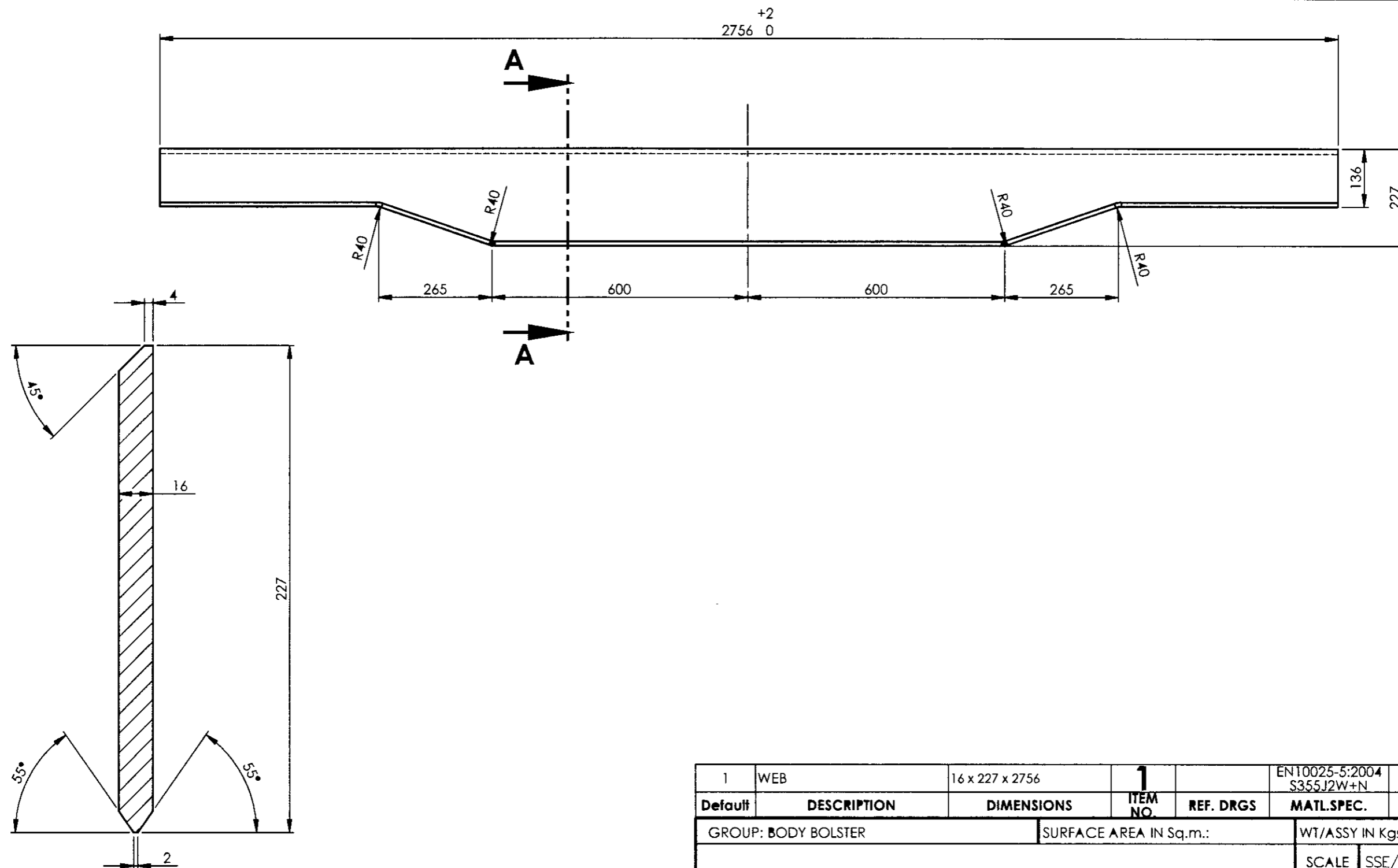
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813:1986.

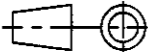
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAC11108

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a	-	EDGE PREPARATION PROVIDED AT BOTTOM END AND CHAMFER REVISED AT TOP END. MAT. SPEC. REVISED. NOTE DELETED.	Sd/- 16-12-2017
b	-	WEB HEIGHT 136mm GIVEN.	

SECTION A-A
SCALE 1 : 2

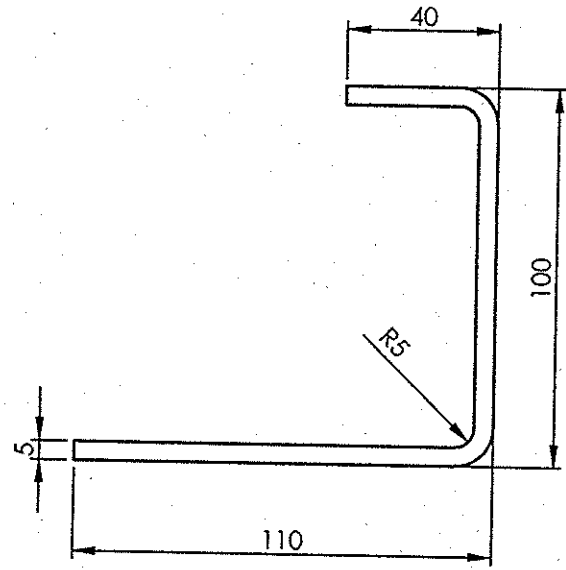
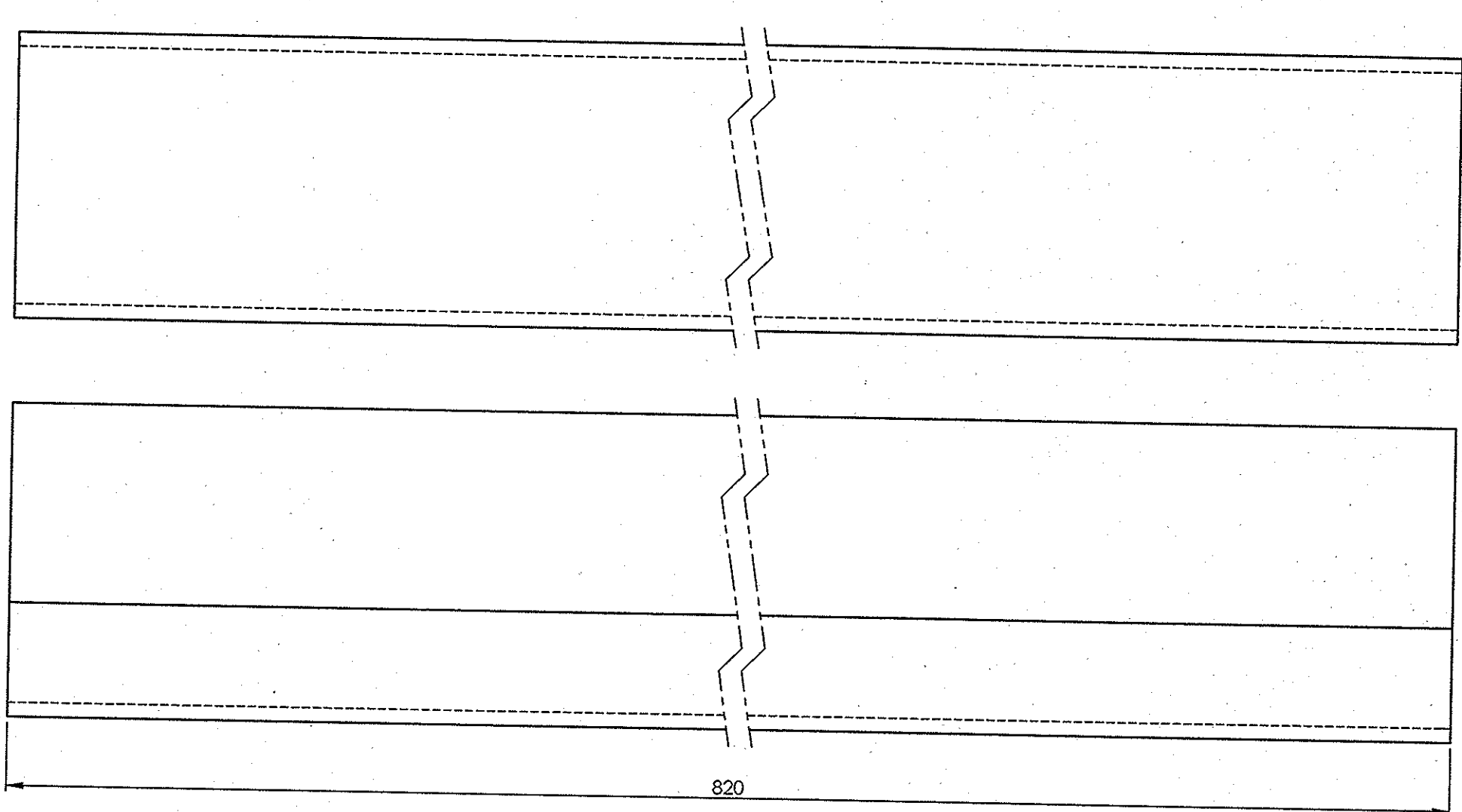
1	WEB	16 x 227 x 2756	1		EN10025-5:2004 S355J2W+N	60.733	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: BODY BOLSTER		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
WEB				SCALE	SSE/D	b.h.c.a.c.	
				1:10	CHD		
				ALT. b	ALTD	SURESH KUMAR S	
				DRN	S.GANESH KUMAR		
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAC11108		A3

REF.DRG.NO.19911509 / ITEM-3

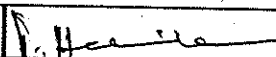
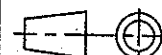
AAC11121

▽ 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 IS: 813-1986.

1	CHANNEL	5 x 230 x 820	1		IRS M-41-1997	7.517	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: UNDERFRAME		SURFACE AREA IN Sq.m.:0.300			WT/ASSY IN Kgs: 5.700		
CHANNEL					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	S.GANESH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAC11121
							A3

	3-5-16	<i>S. Ganesh Kumar</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

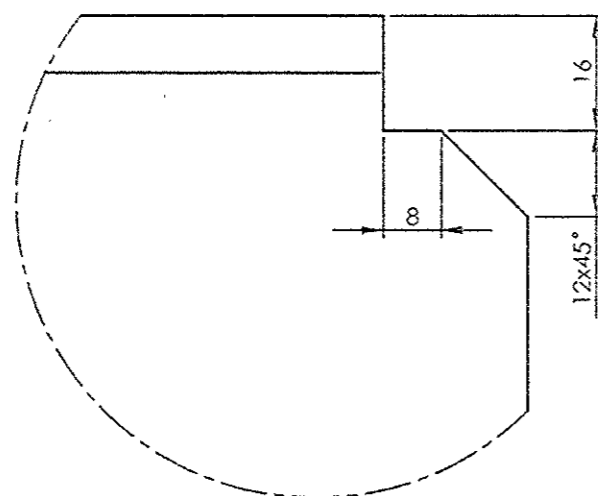
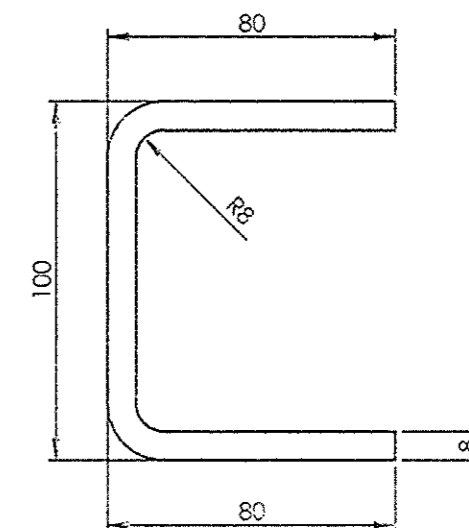
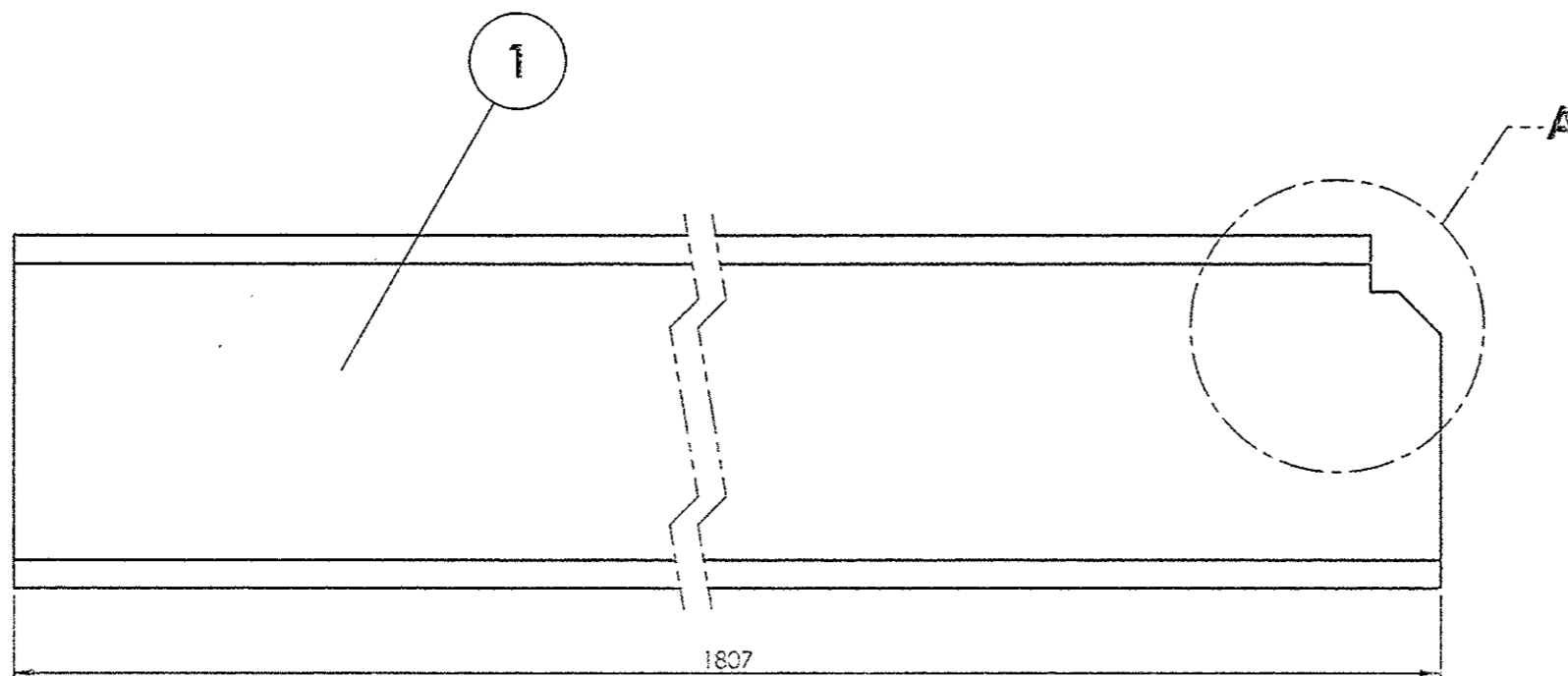
REF.DRG.NO.329-1-1-150 / ITEM-4

1		2		3		4		5		6		7		8																																																																
AAC11122				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																						
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION			APPROVED & DATE																																																															
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED																																																																								
<div><div>5 X 45°</div><div>555</div><div>5 X 45°</div><div>50</div><div>R5</div><div>50</div><div>5</div></div>																																																																														
<table><tr><td>1</td><td>ANGLE</td><td>5 x 90 x 555</td><td>1</td><td></td><td>IRS M-41-1997</td><td>1.990</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: UNDERFRAME</td><td colspan="2">SURFACE AREA IN Sq.m.:0.108</td><td colspan="4">WT/ASSY IN Kgs: 1.990</td></tr><tr><td colspan="5" rowspan="3">ANGLE</td><td>SCALE 1:1</td><td>SSE/D</td><td></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"></td><td>DRN</td><td colspan="2">S.GANESH KUMAR</td></tr><tr><td colspan="5">INDIAN RAILWAY STANDARDS</td><td colspan="3">SHEET 1 OF 1</td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="3">AAC11122</td><td>A3</td></tr></table>																1	ANGLE	5 x 90 x 555	1		IRS M-41-1997	1.990		QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: UNDERFRAME		SURFACE AREA IN Sq.m.:0.108		WT/ASSY IN Kgs: 1.990				ANGLE					SCALE 1:1	SSE/D		ALT.	CHD		ALT.	ALTD							DRN	S.GANESH KUMAR		INDIAN RAILWAY STANDARDS					SHEET 1 OF 1			INTEGRAL COACH FACTORY, CHENNAI - 600038					AAC11122			A3
1	ANGLE	5 x 90 x 555	1		IRS M-41-1997	1.990																																																																								
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS																																																																							
GROUP: UNDERFRAME		SURFACE AREA IN Sq.m.:0.108		WT/ASSY IN Kgs: 1.990																																																																										
ANGLE					SCALE 1:1	SSE/D																																																																								
					ALT.	CHD																																																																								
					ALT.	ALTD																																																																								
					DRN	S.GANESH KUMAR																																																																								
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1																																																																									
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAC11122			A3																																																																						
REF.DRG.NO.329-1-1-150 / ITEM-3		3 -05-2016		SME																																																																										
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME																																																																										

AAD11101

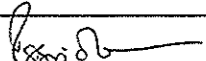
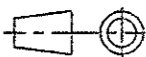
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

DETAIL A
SCALE 1 : 1

REF.DRG.NO.ICF/MRVC/M/BT-1-1-004, ITEM-1

DATE OF LATEST ALT.	10-10-2017	AME/SME
---------------------	------------	---------

1	CHANNEL	8x228x1807	1		IRS M-41-1997	26.41		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
CHANNEL					SCALE	SSE/D		
					1:2	CHD		
					ALT.	ALTD		
						DRN	P.MURUGAN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
					SHEET 1 OF 1		AAD11101	A3

AAD11102

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

REVISIONS

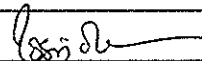
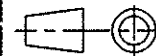
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------

A

1

1

DETAIL A
SCALE 1:1

1	CHANNEL	8x228x1807	1		IRS M-41-1997	26.36	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAD11102		A3

REF.DRG.NO.ICF/MRVC/M-1-1-018, ITEM-23

	03 -10-2017	<i>AS. V. S. S. S.</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

AAD11103

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

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

A

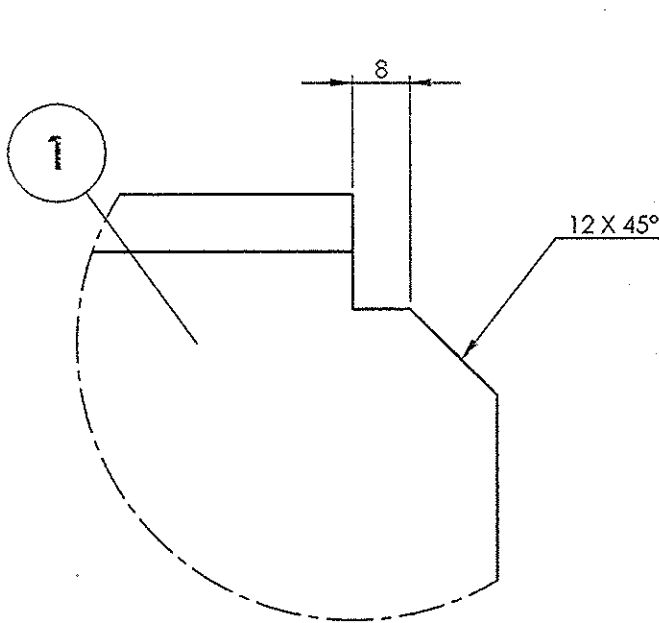
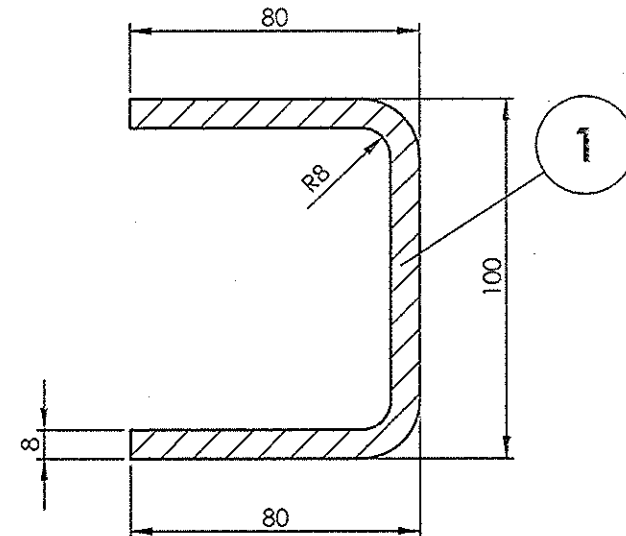
1

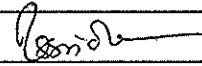
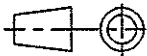
B

B

1807

72

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

1	CHANNEL	5x220x1807	1		IRS M-41-1997	26.41	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAD11103

REF.DRG.NO.ICF/MRVC/M/BT-1-1-004, ITEM-29

	03-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

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

AAD11104

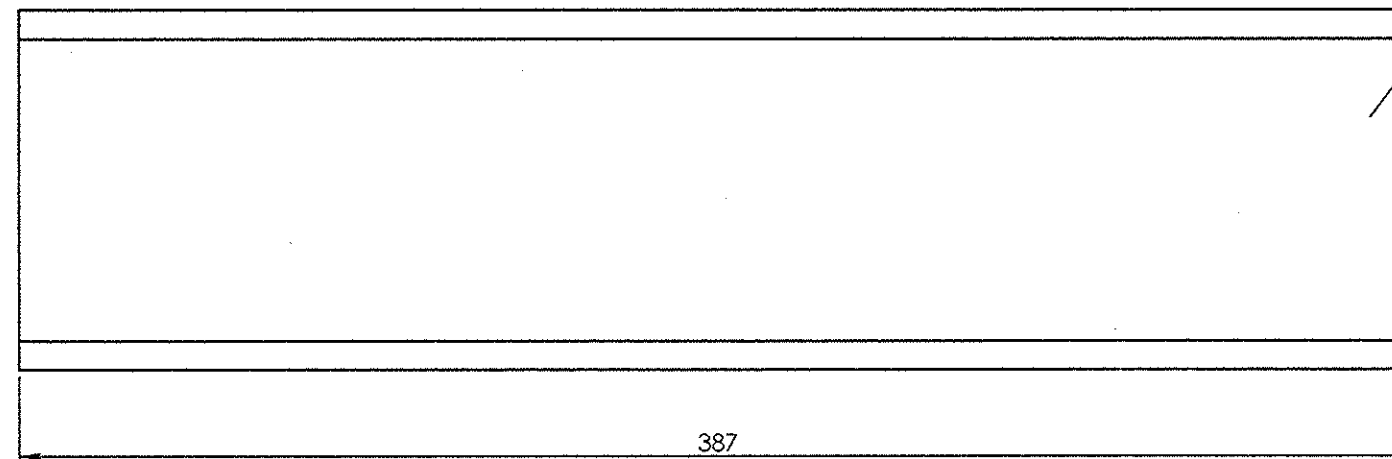
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

ALT.

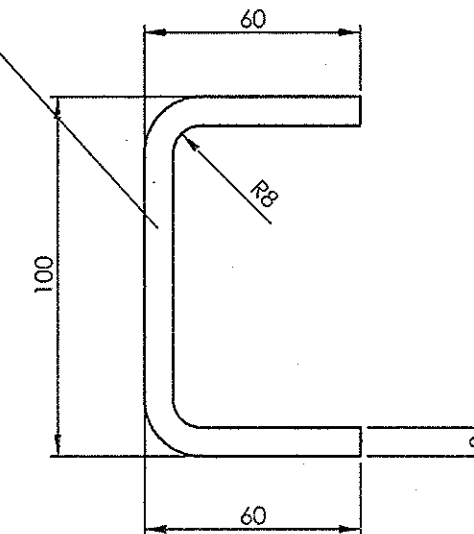
ZONE

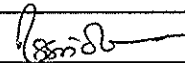
REVISIONS

DESCRIPTION

APPROVED &
DATE

1



1	CHANNEL	8x188x387	1		IRS M-41-1997	4.71	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		SHEET 1 OF 1
AAD11104		A3					

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICE/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.EMU/M/3PH-1-1-005, ITEM-1

	03-10-2017	G. V. V. V.
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAD11105

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

ALT.

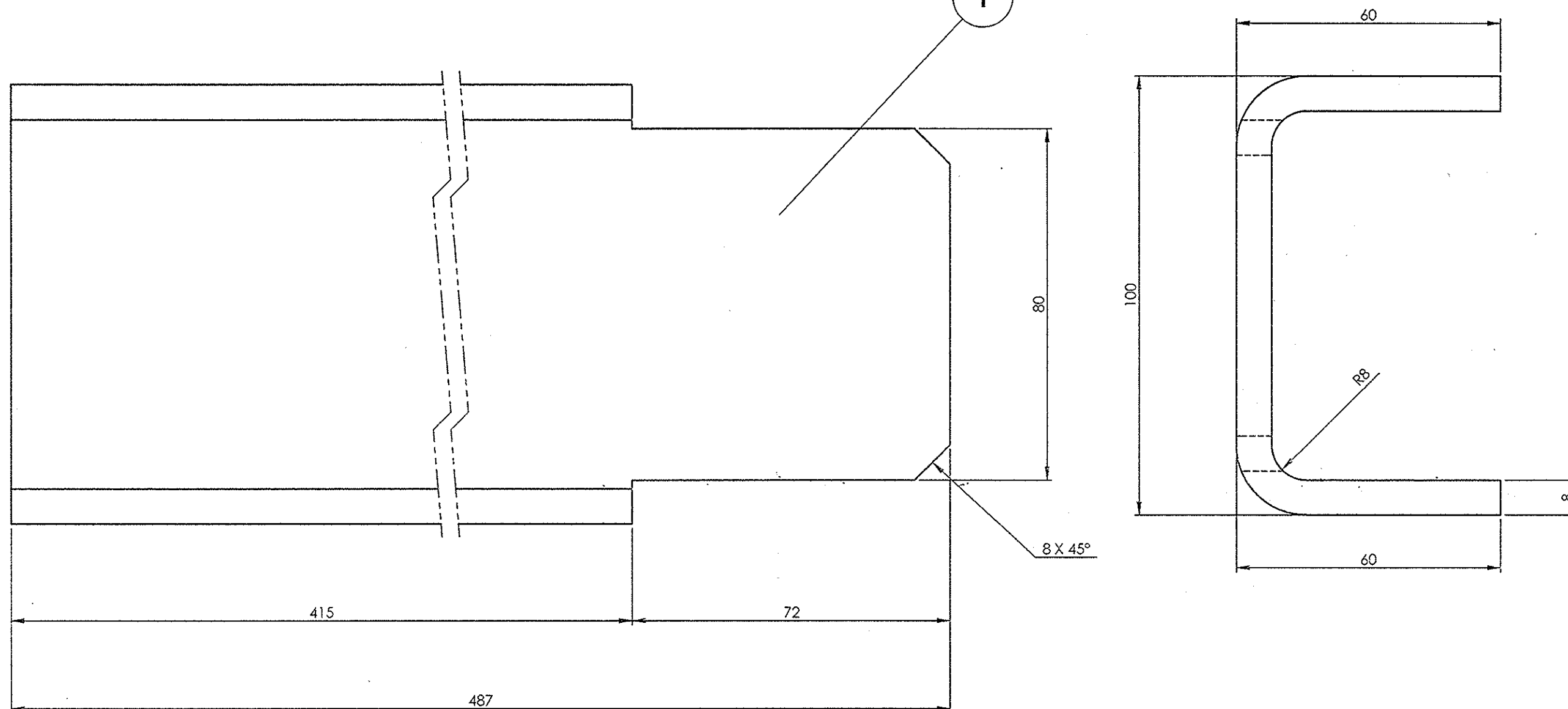
ZONE

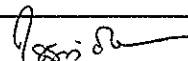
REVISIONS

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 IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY



1	CHANNEL	8x188x487	1		IRS M-41-1997	5.41		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
CHANNEL					SCALE	SSE/D		
					1:1	CHD		
					ALT.	ALTD		
						DRN		P.MURUGAN
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					A3			
					AAD11105			

REF.DRG.NO.EMU/M/3PH-1-1-005, ITEM-2

	03-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAD11106

▽ ROUGH MACHINED

① ROUGH CLEANED

▽▽ FINISH MACHINED

② BURRS REMOVED

▽▽▽ FINE FINISH MACHINED

③ CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

1

533

389

80

72

72

80

8 X 45°

60

R8

100

60

8

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.EMU/M/3P-1-1-005, ITEM-3

03-10-2017

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

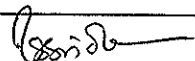

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

AAD11106

A3

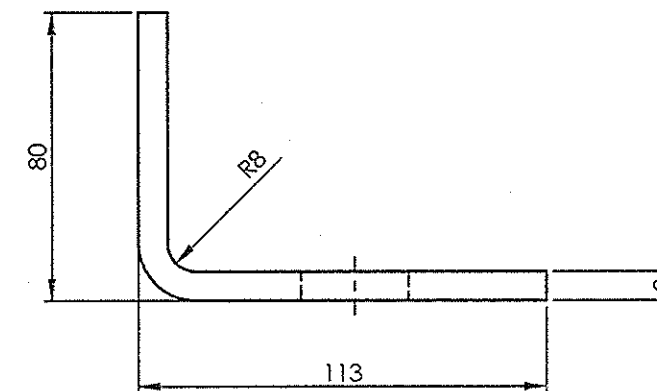
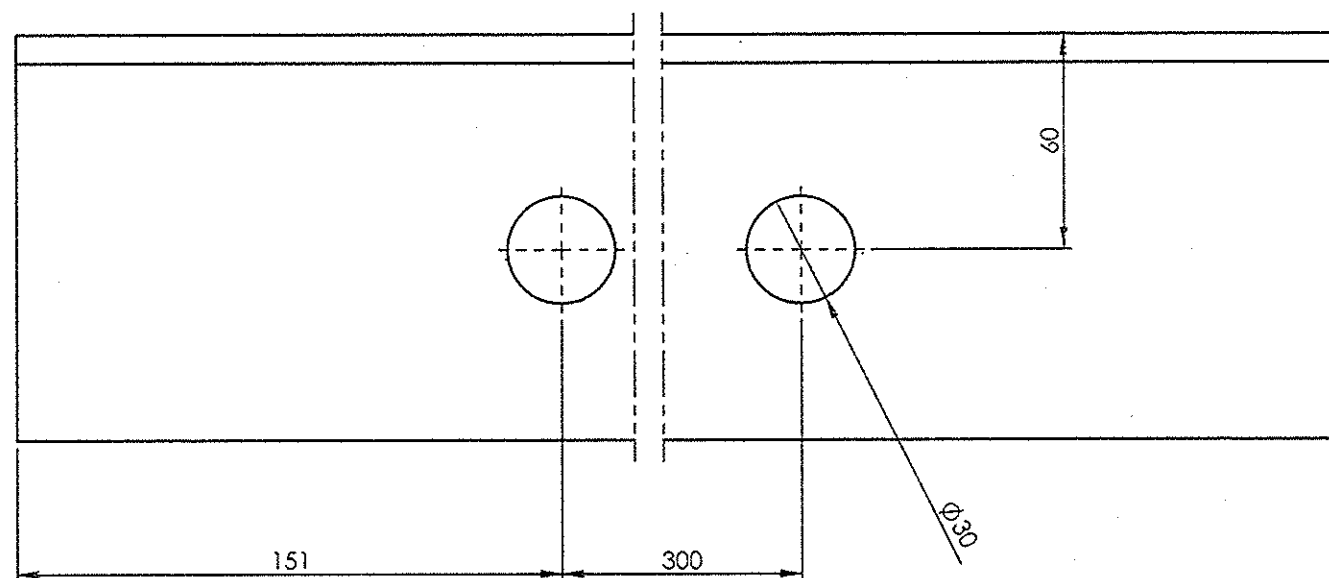
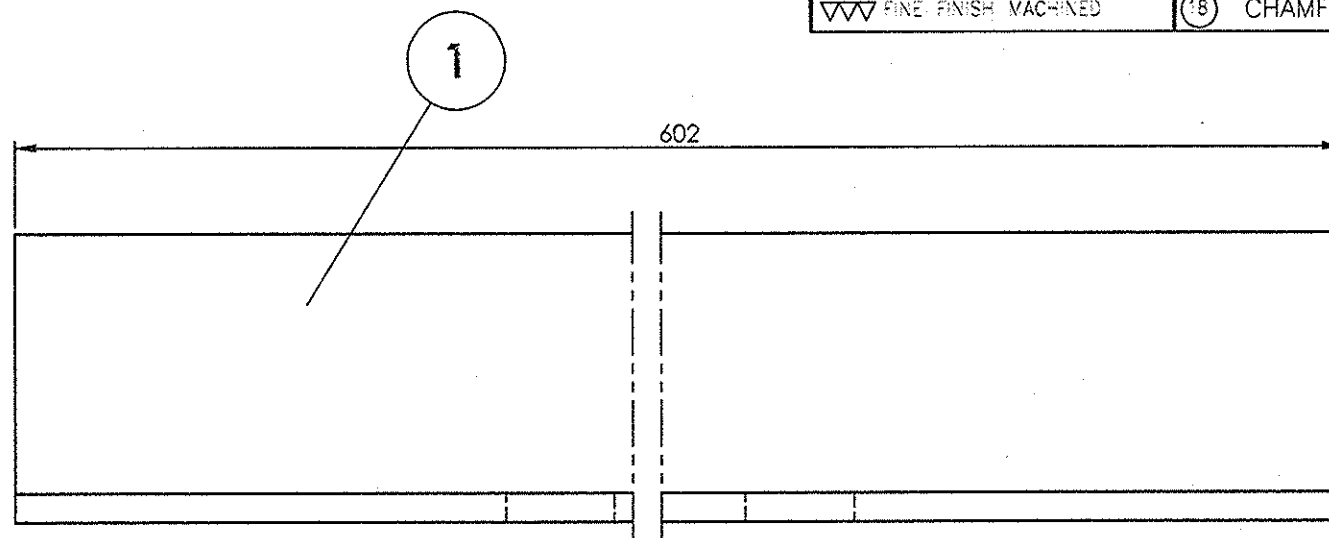
1	CHANNEL	8x188x533	1		IRS M-41-1997	5.45	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAD11106		A3

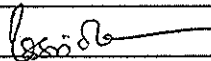
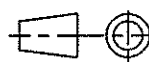
AAD11108

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

REVISIONS

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



1	DOORWAY ANGLE	5x177x602	1		IRS M-41-1997	6.71		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-1,			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
DOORWAY ANGLE					SCALE	SSE/D		
					1:2	CHD		
					ALT.	ALTD		
						DRN	P.MURUGAN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
SHEET 1 OF 1					AAD11108			A3


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

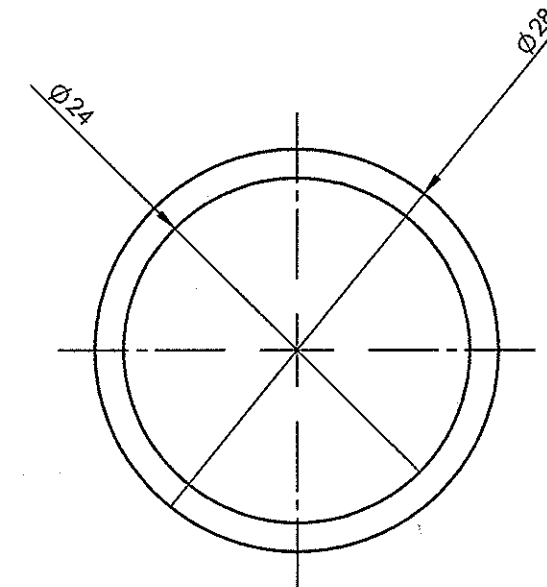
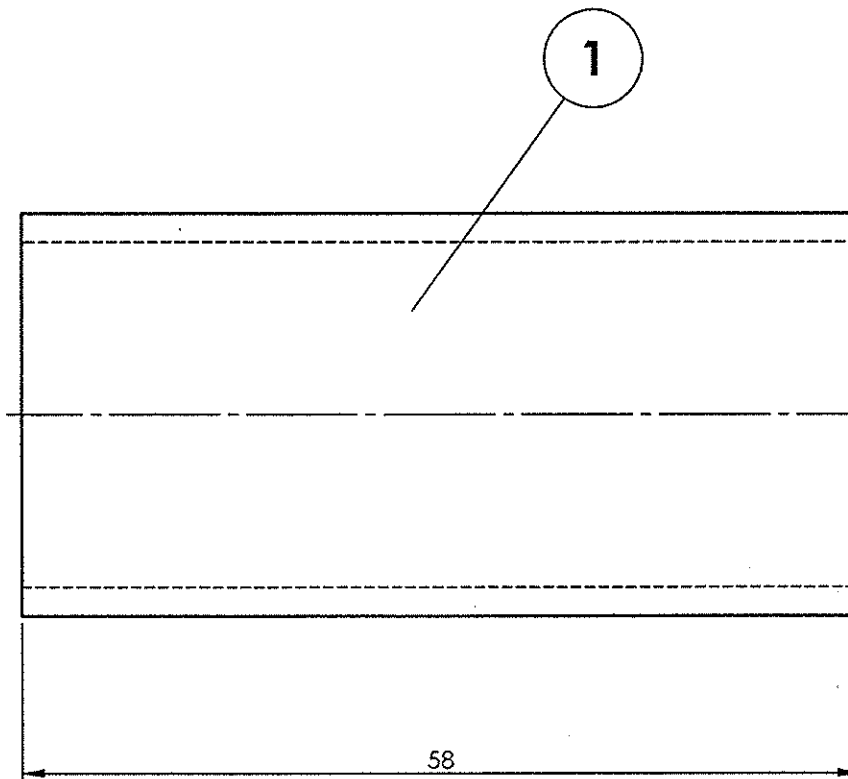
REF.DRG.NO.DMU/DPC/SS-1-1-010, ITEM-13

	03-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.M.E.

AAD11109

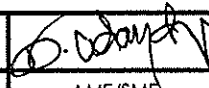
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

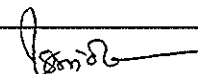
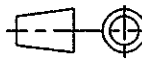
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		R.M SIZE CORRECTED FROM Ø28(OD)x60 TO Ø28(OD)x58.	



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

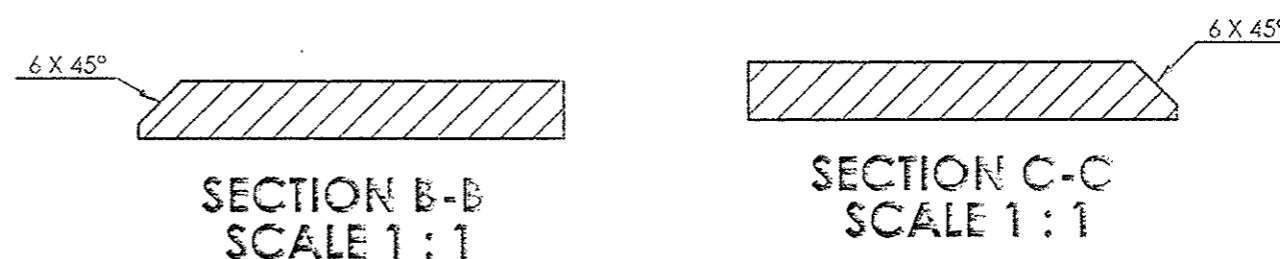
REF.DRG.NO.DMU/DPC/SS-1-1-002, ITEM-23

06-12-2017	03-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	STEEL TUBE	Ø28(OD)x58	1		SS-304	0.07	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1,		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
STEEL TUBE					SCALE	SSE/D	
					2:1	CHD	
					ALT.	ALTD	P.MURUGAN
					a	DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		AAD11109	A3

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



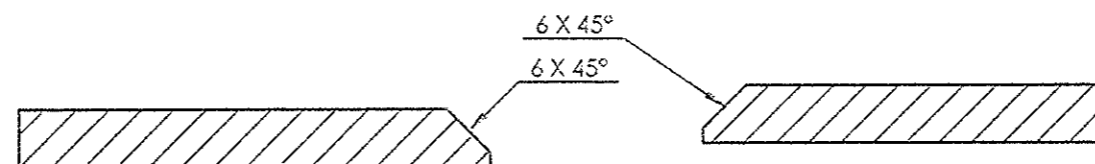
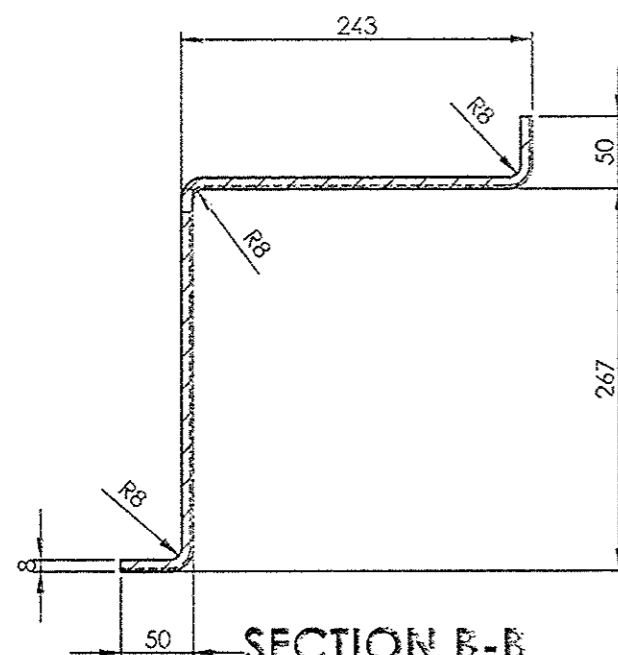
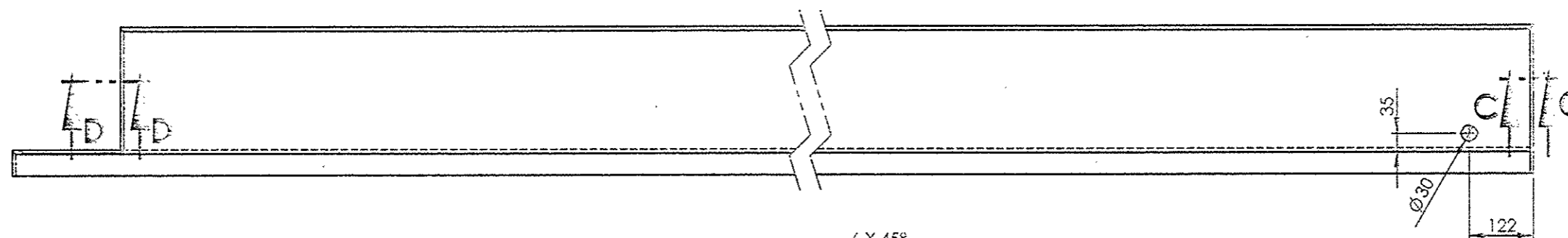
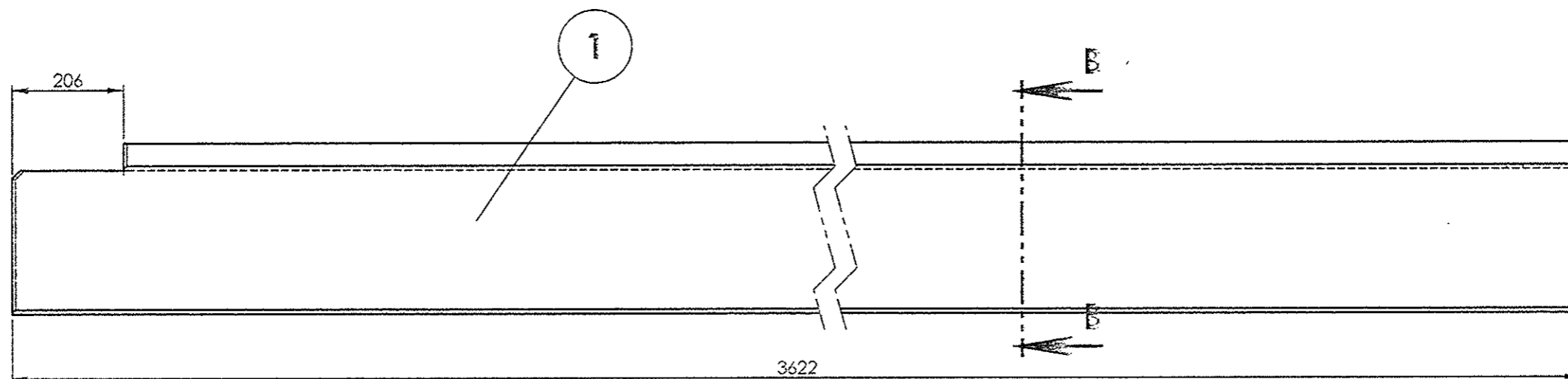
REF.DRG.NO.DMU/DPC/SS-1-1-009, ITEM-1

	10-10-2017	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAD11112

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

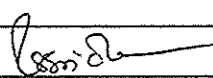
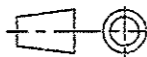
REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		



SECTION C-C
SCALE 1 : 1

SECTION D-D
SCALE 1 : 1

SECTION B-B
SCALE 1 : 5

1	LONGITUDINAL BEAM	8x570x3622	1		IRS M-41-1997	127.82	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
LONGITUDINAL BEAM					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600036				SHEET 1 OF 1		AAD11112	A3

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

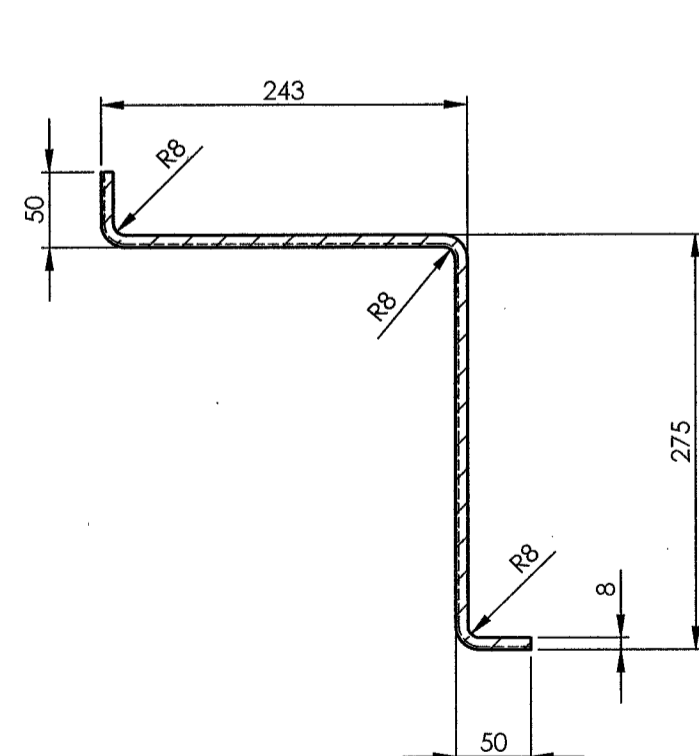
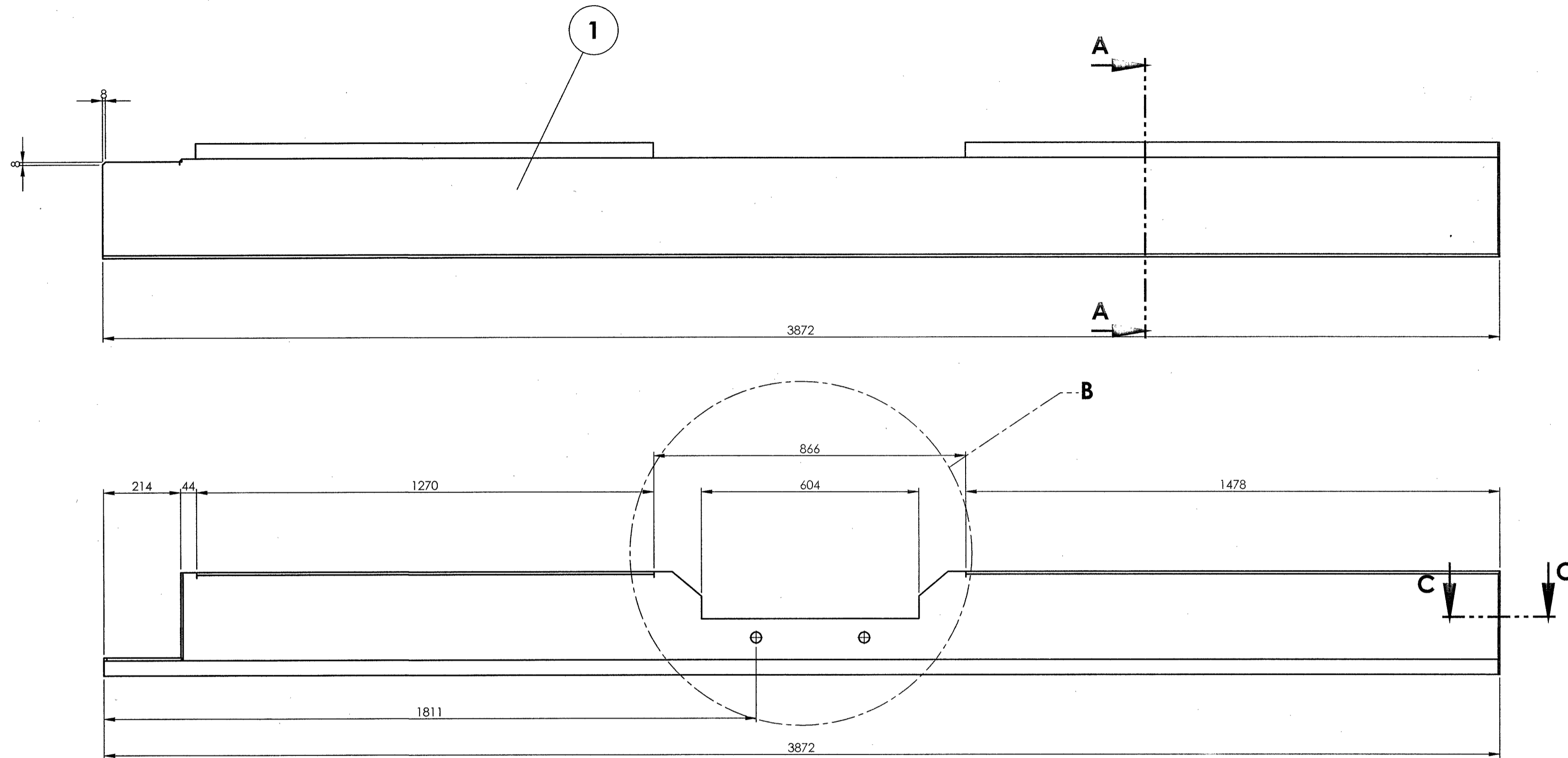
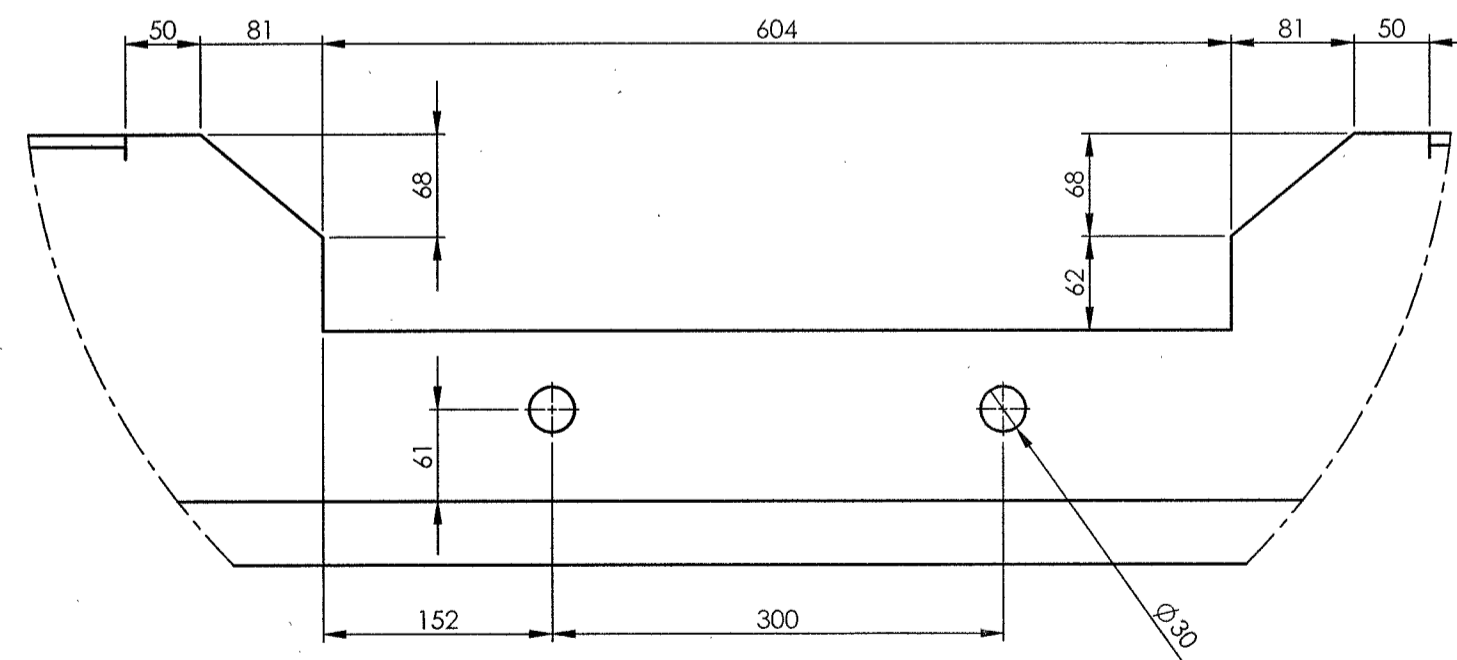
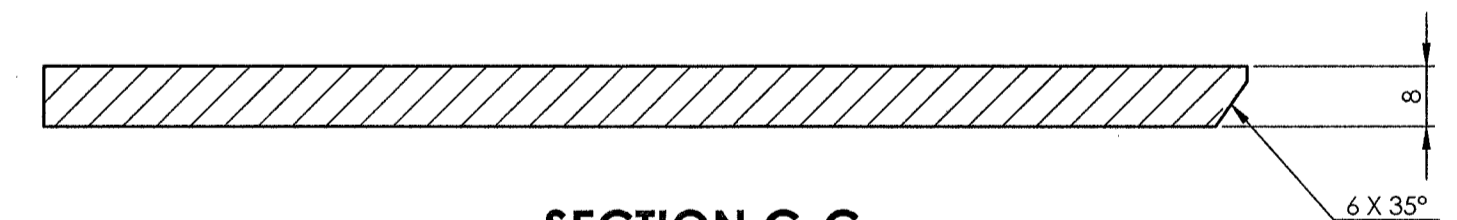
REF.DRG.NO.-


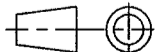
DATE OF LATEST ALT.	10-10-2017	AME/SME
---------------------	------------	---------

AAD11127

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION 62 ADDED IN DETAIL B.	

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

1	LONGITUDINAL BEAM	8x570x3872	1		IRS M-41-1997	129.42	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
LONGITUDINAL BEAM					SCALE 1:10	SSE/D	
						CHD	
					ALT a	ALTD	P.MURUGAN
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
						SHEET 1 OF 1	AAD11127

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.

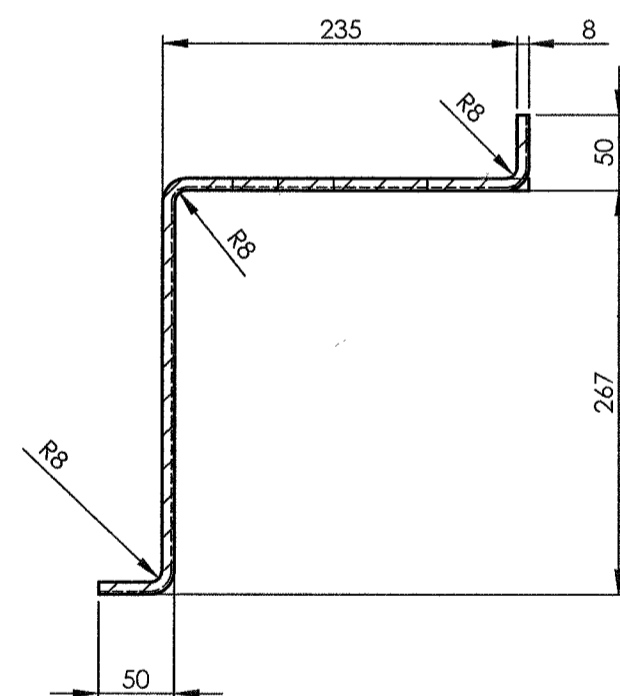
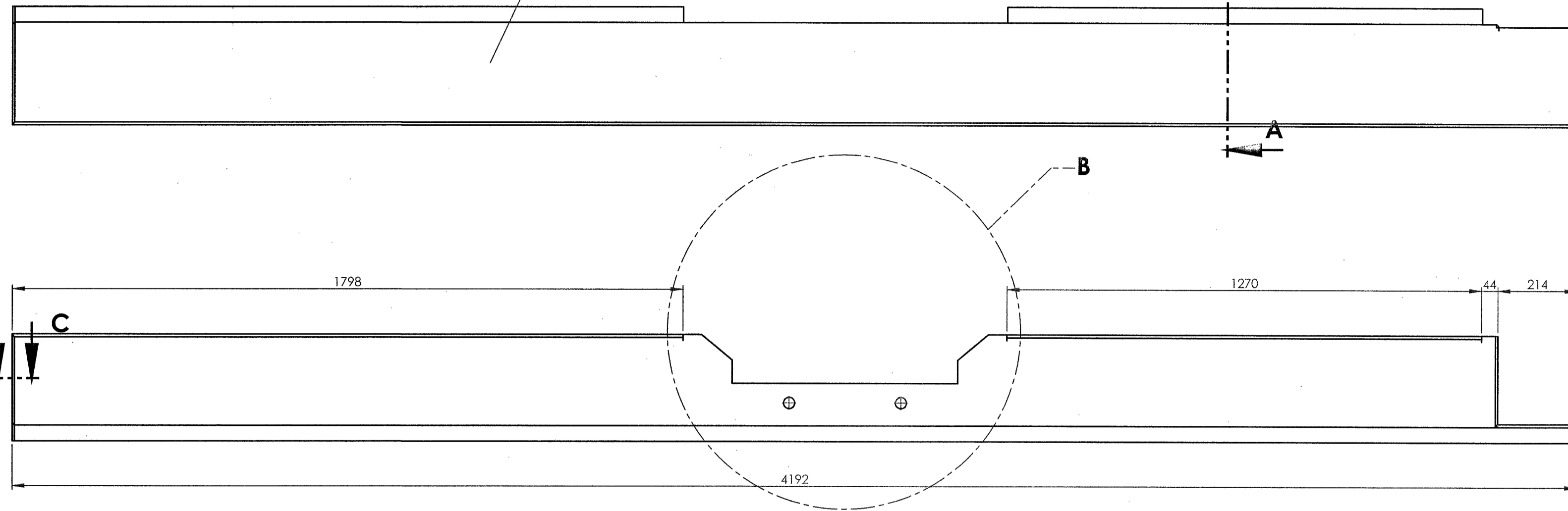
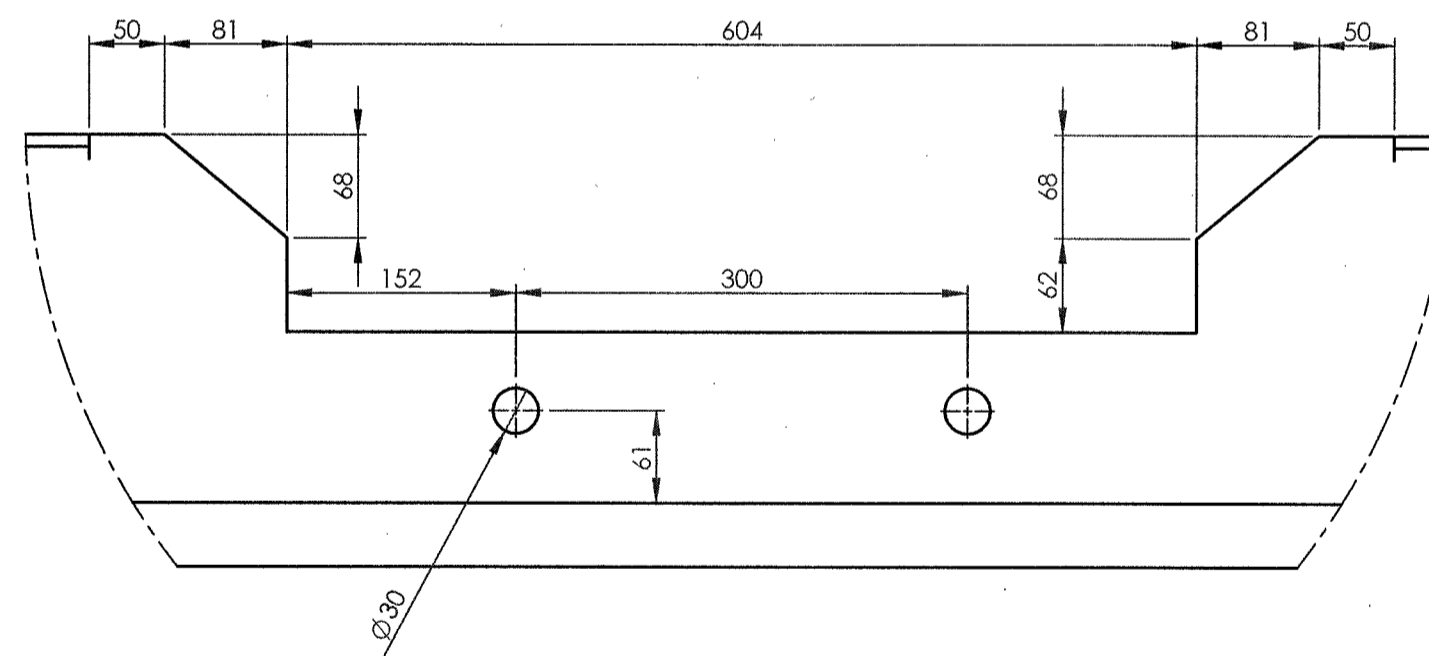
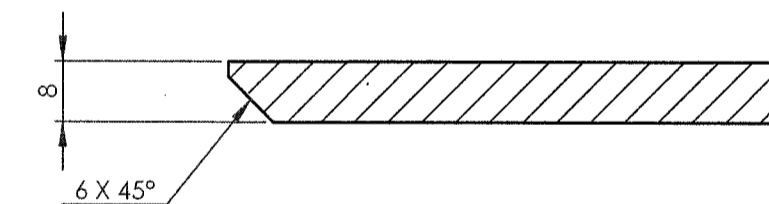
REF.DRG.NO.

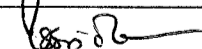
19-04-2018	03-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAD11128

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION 62 ADDED IN DETAIL B.	

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

1	LONGITUDINAL BEAM	8x570x4192	1		IRS M-41-1997	141.03	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1,		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
LONGITUDINAL BEAM					SCALE 1:10	SSE/D	
						CHD	
					ALT a	ALTD	P.MURUGAN
						DRN	P.MURUGAN
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
SHEET 1 OF 1							

REF.DRG.NO.DMU/DPC/SS-1-1-009, ITEM-2

19-04-2018	03-10-2017	
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-9-0001. 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.

AAD11129

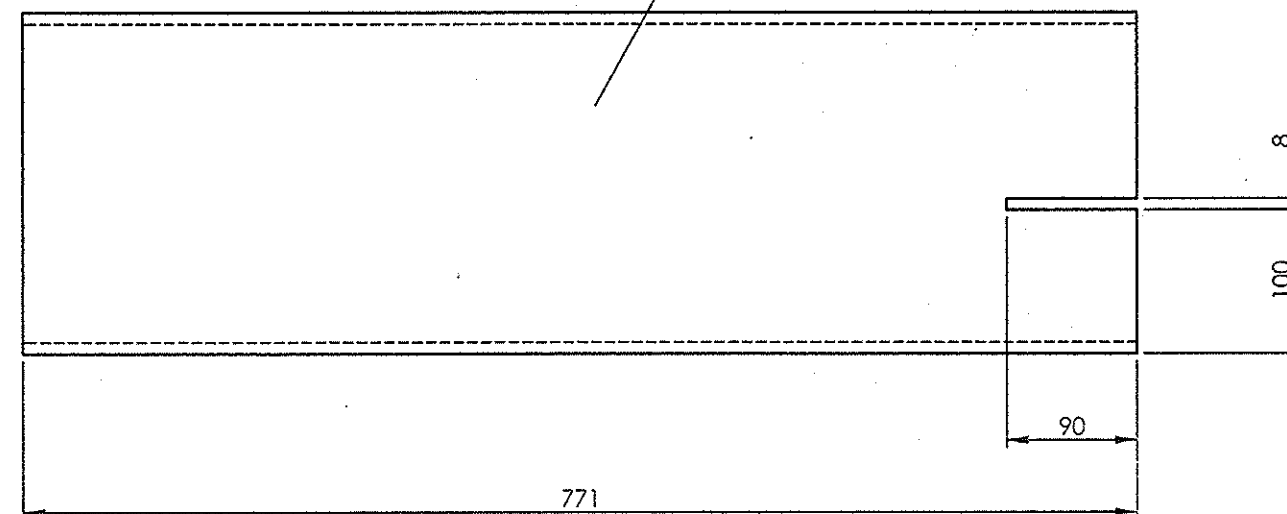
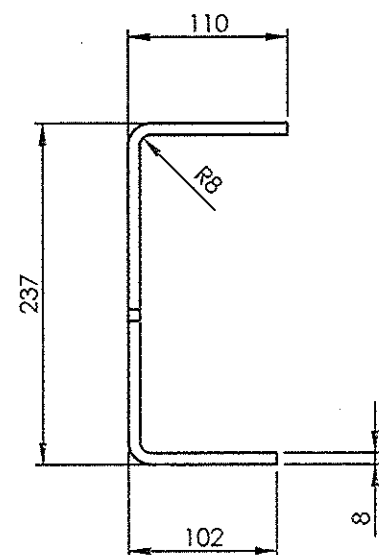
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

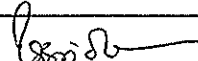
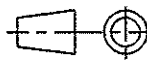
REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

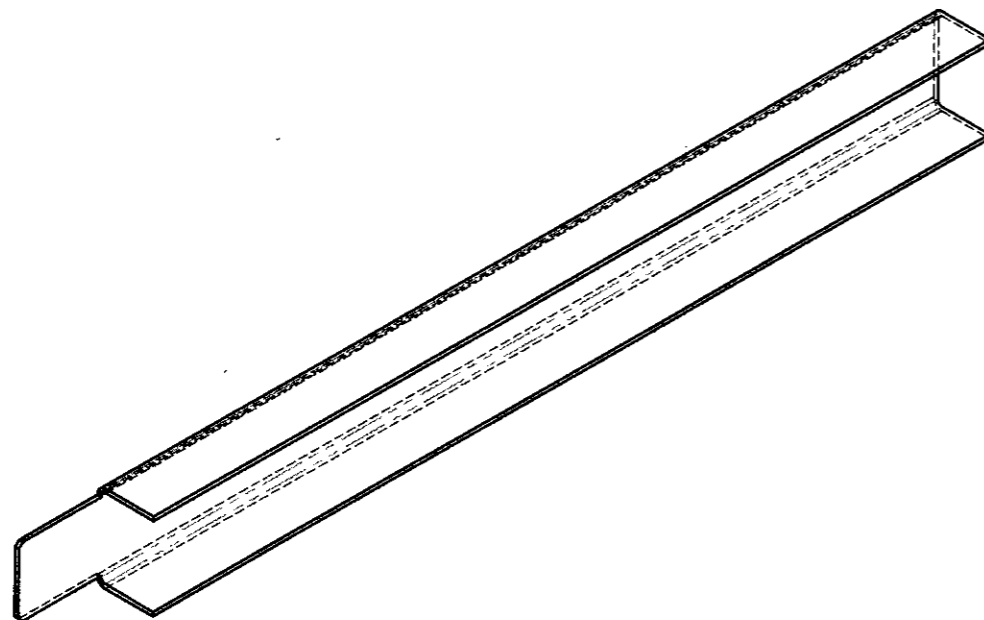
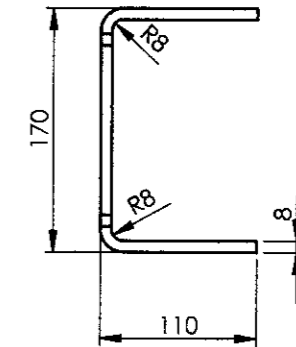
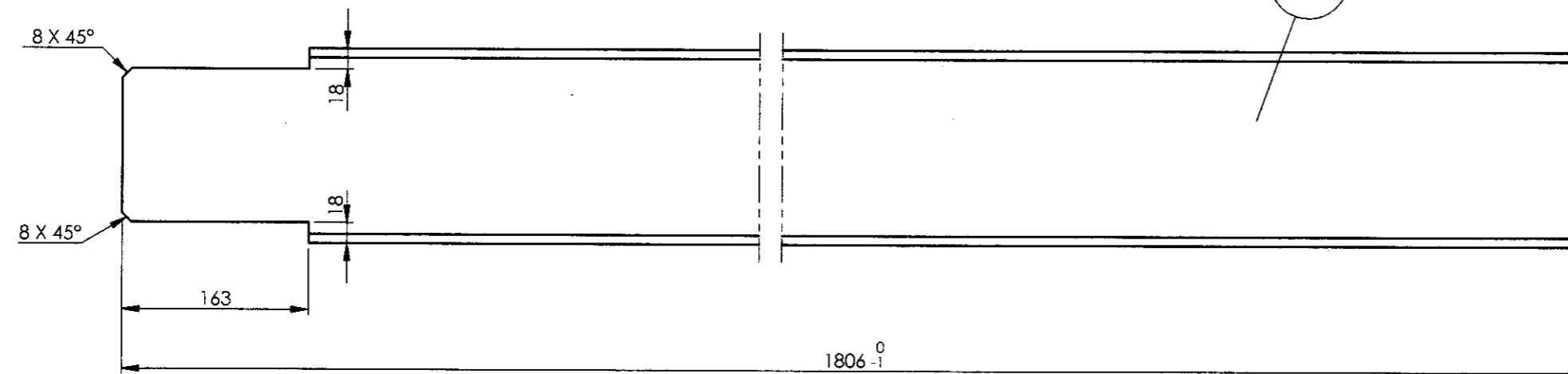
1	CHANNEL	8x417x771	1		IRS M-41-1997	20.42	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1,		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAD11129

REF.DRG.NO.DMU/DPC-1-1-008, ITEM-62

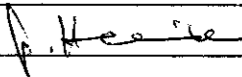

AAD11130

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

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a	-	R.M. SIZE REVISED.	<i>[Signature]</i>



ISOMETRIC VIEW

1	DOORWAY STIFFENER	8x364x1806	1		IRS M-41-1997	38.89	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
DOORWAY STIFFENER					SCALE	SSE/D	
					1:5	CHD	
					ALT. a	ALTD	SURESH KUMAR.S
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	AAD11130		
					A3		

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

REF.DRG.NO.

20-11-2019

03-10-2017

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

AAD11130

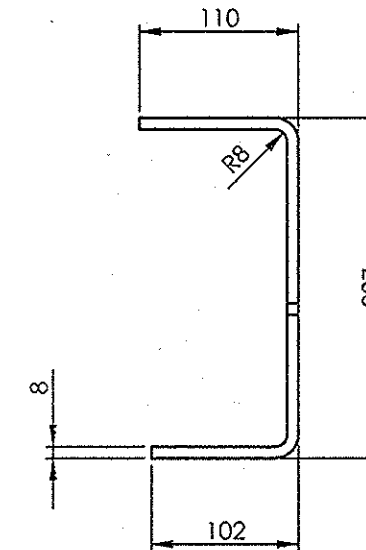
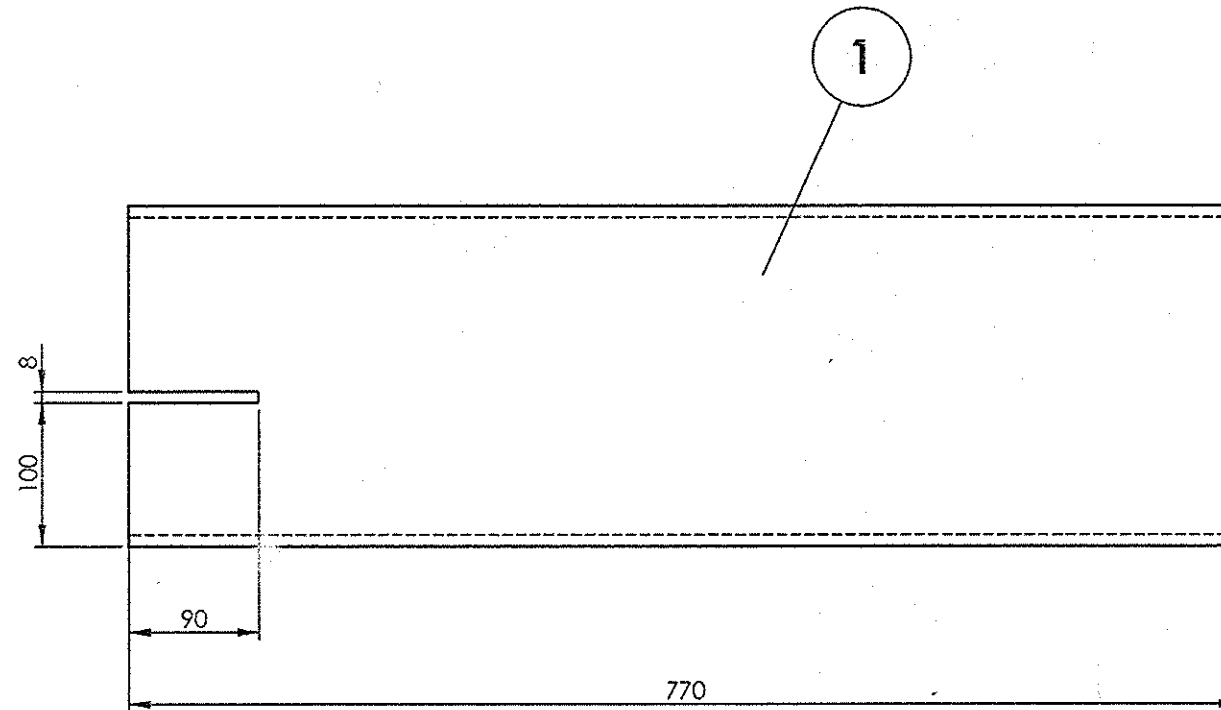
A3

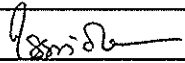
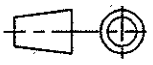
AAD11131

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFER D

REVISIONS


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

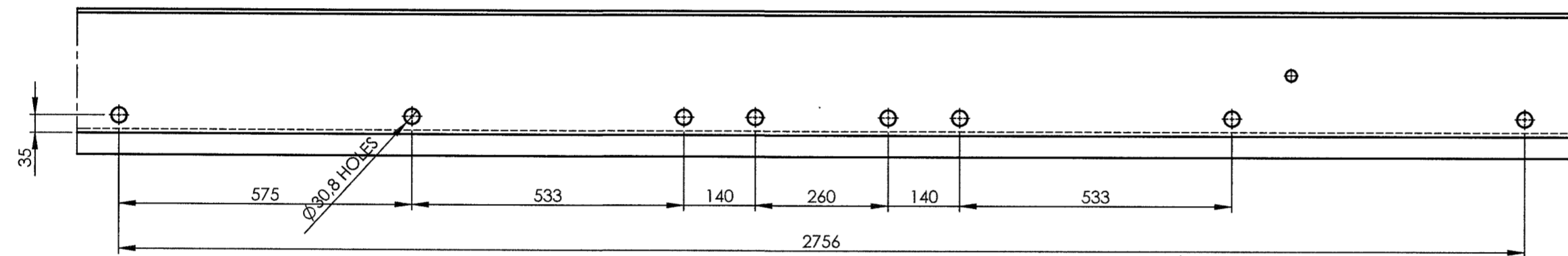
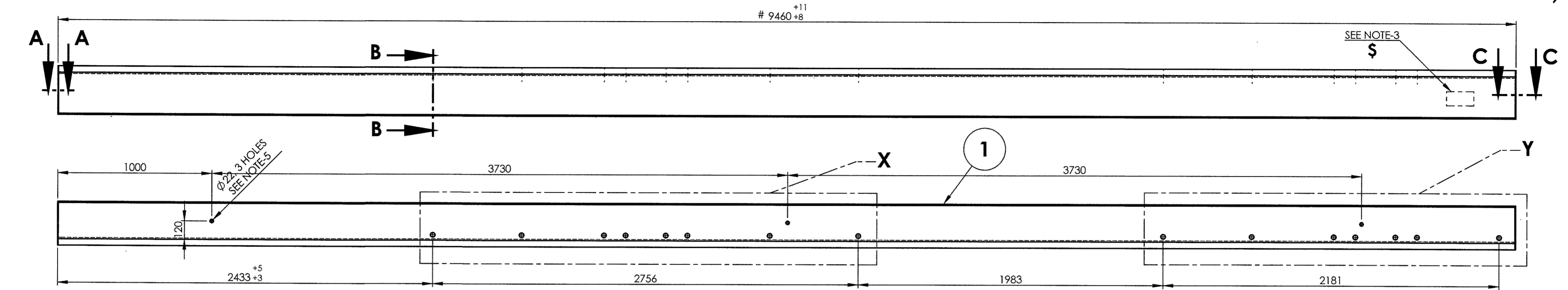
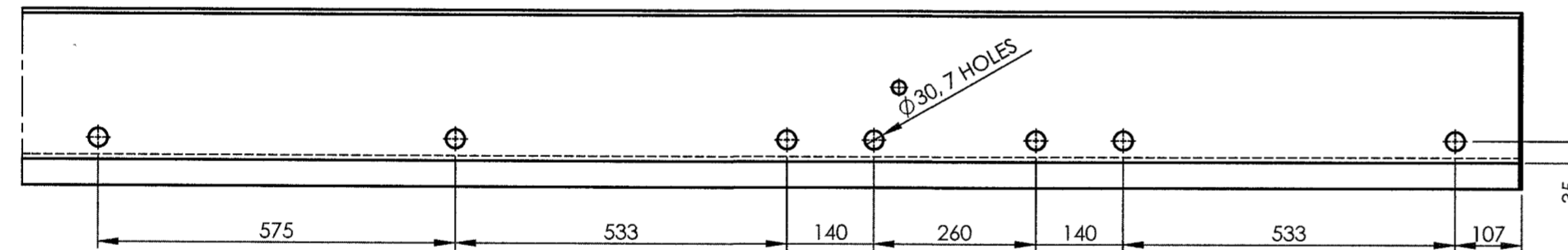
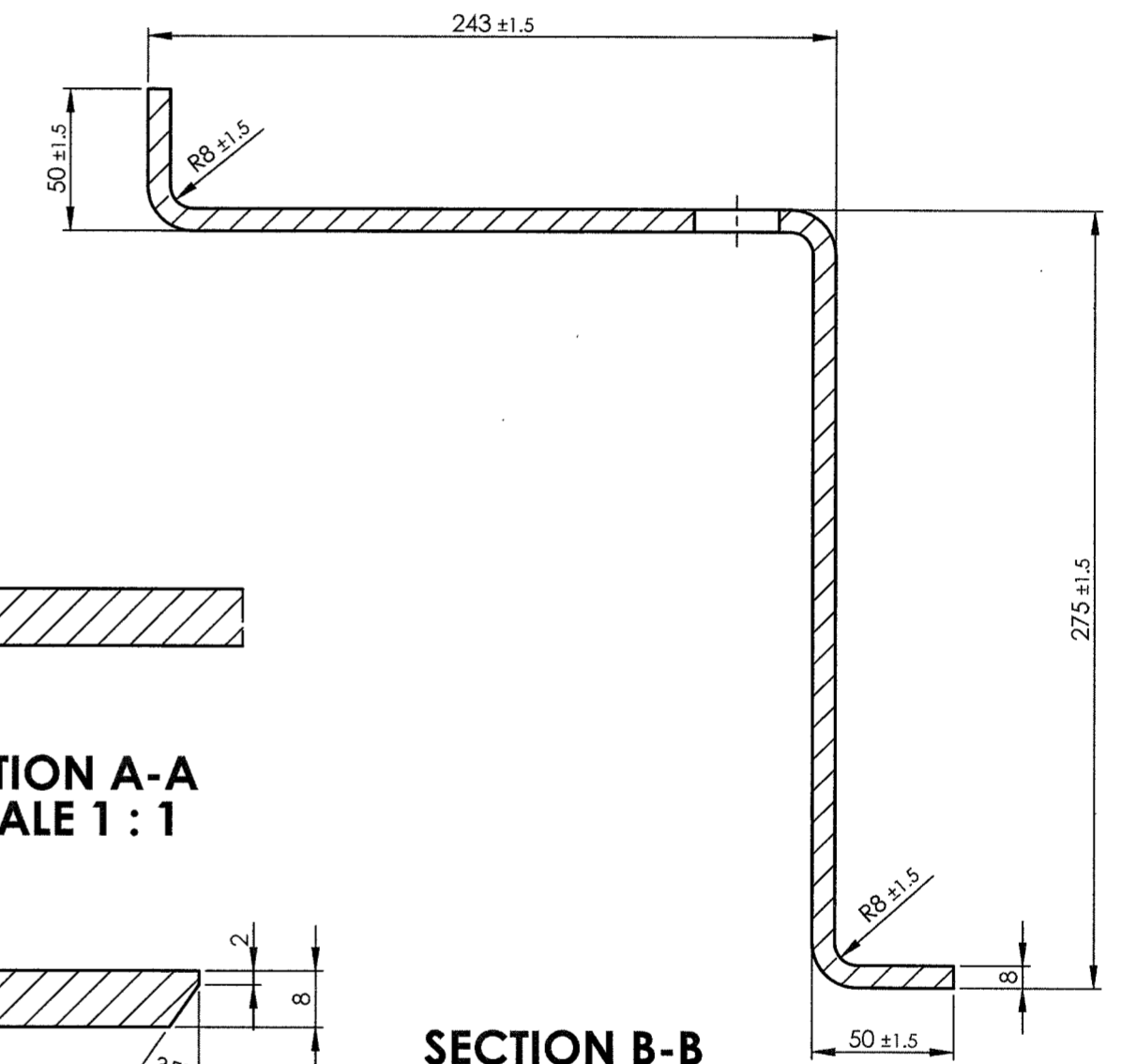
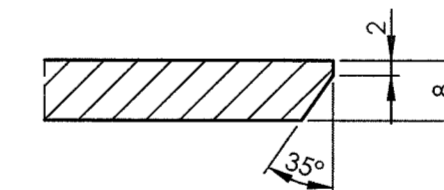


1	CHANNEL	8x417x770	1		IRS M-41-1997	20.39	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
CHANNEL					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
					DRN	P.MURUGAN	
							
INDIAN RAILWAY STANDARDS		SHEET 1 OF 1	AAD11131	A3			
INTEGRAL COACH FACTORY, CHENNAI - 600038							

AAD11151

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		LOCATING DIMENSION OF Ø 30 HOLES REVISED.	

DETAIL X
SCALE 1 : 10DETAIL Y
SCALE 1 : 10SECTION A-A
SCALE 1 : 1SECTION C-C
SCALE 1 : 1SECTION B-B
SCALE 1 : 2.5

NOTE:

- # 1. SHRINKAGE ALLOWANCE HAS BEEN CONSIDERED IN THE TOLERANCE GIVEN FOR LENGTH(L).
2. THE FINISHED PRODUCT SHALL CONFIRM TO IRS M41-1997 MATERIAL SPECIFICATION.
- \$ 3. PUNCHING TO BE DONE IN 6mm HEIGHT AS SHOWN BELOW ON SOLE BAR

xxx -MANUFACTURER'S INITIAL
xx / xx -MONTH & YEAR OF MANUFACTURER.
4. FOR OUTSOURCED LONGITUDINAL BEAMS SUITABLE PLATE TREATMENT (OR) GRIT BLASTING (OR) SAND BLASTING (OR) PICKLING TO BE DONE AND PAINTED WITH TWO COATS OF RED OXIDE ZINC CHROMATE PRIMER ON BOTH SIDES TO SPEC. IS:2074-92 TO A DFT OF MINIMUM 35 MICRONS WITH SMOOTH AND MATT FINISH.
5. 3 NOS. HOLES OF Ø 22 PROVIDED FOR LIFTING THE LONGITUDINAL BEAM USING EYE BOLT.
6. ALL HOLES ARE TO BE JIG DRILLED.

TOLERANCE:

1. BOW / CAMBER : 1.5 mm/METER, SUBJECT TO MAX. OF 15 mm.
2. TWIST : 1° / METRE, SUBJECT TO MAX. OF 25 mm.
3. ANGLE OF BEND : ± 1°
4. WAVINESS/FLATNESS : 2 mm MAX.

REF.DRG.NO.

(I) -02-2019	17-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	LONGITUDINAL BEAM	8x570xL	1		IRS M-41-1997	342.86	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1				SURFACE AREA IN Sq.m.: 11.09		WT/ASSY IN Kgs:	
LONGITUDINAL BEAM					SCALE 1:20	SSE/D	
					CHD		
					ALT a	ALTD	M.SIVAKUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					DRN		K.SETHURAMAN
					SHEET 1 OF 1		
					AAD11151		A2

AAD11152

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

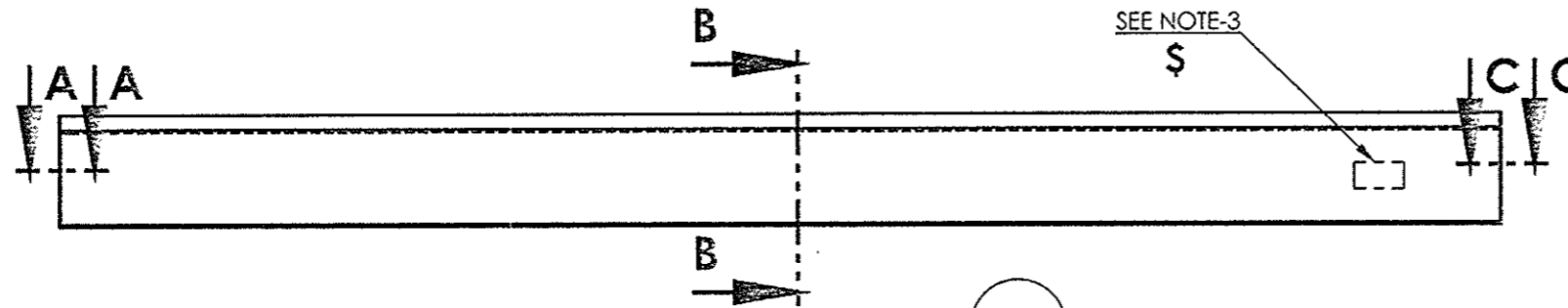
① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

REVISIONS

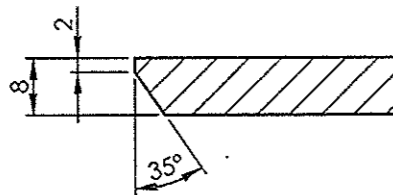
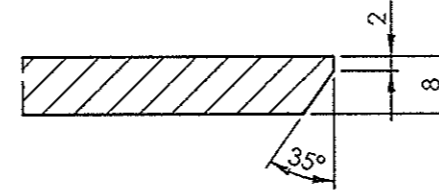
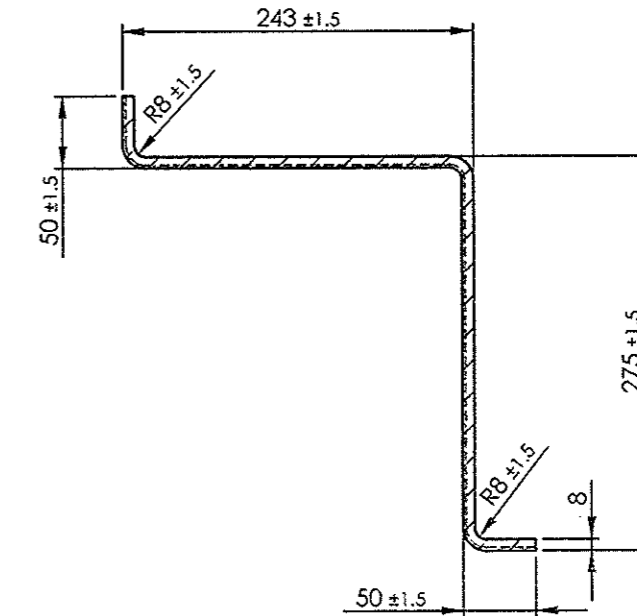
ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

1

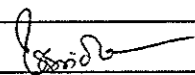
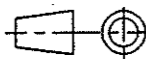
4094⁺⁵/₊₃SECTION A-A
SCALE 1 : 1SECTION C-C
SCALE 1 : 1SECTION B-B
SCALE 1 : 5

TOLERANCE:

- | | |
|----------------------|---|
| 1. BOW / CAMBER | : 1.5 mm/METER, SUBJECT TO MAX. OF 15 mm. |
| 2. TWIST | : 1° / METRE, SUBJECT TO MAX. OF 25 mm. |
| 3. ANGLE OF BEND | : ± 1° |
| 4. WAVINESS/FLATNESS | : 2 mm MAX. |

NOTE:

- # 1. SHRINKAGE ALLOWANCE HAS BEEN CONSIDERED IN THE TOLERANCE GIVEN FOR LENGTH(L).
2. THE FINISHED PRODUCT SHALL CONFIRM TO IRS M41-1997 MATERIAL SPECIFICATION.
- \$ 3. PUNCHING TO BE DONE IN 6mm HEIGHT AS SHOWN BELOW ON SOLE BAR
- xxx -MANUFACTURER'S INITIAL
- xx / xx -MONTH & YEAR OF MANUFACTURER.
4. FOR OUTSOURCED LONGITUDINAL BEAMS SUITABLE PLATE TREATMENT (OR) GRIT BLASTING (OR) SAND BLASTING (OR) PICKLING TO BE DONE AND PAINTED WITH TWO COATS OF RED OXIDE ZINC CHROMATE PRIMER ON BOTH SIDES TO SPEC. IS:2074-92 TO A DFT OF MINIMUM 35 MICRONS WITH SMOOTH AND MATT FINISH.

1	LONGITUDINAL BEAM	8x570xL	1		IRS M-41-1997	143.63	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-1		SURFACE AREA IN Sq.m.:4.81			WT/ASSY IN Kgs:		
LONGITUDINAL BEAM					SCALE	SSE/D	
					1:20	CHD	
					ALT.	ALTD	
						DRN	K.SETHURAMAN
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAD11152

REF.DRG.NO.

17 -10-2017


DATE OF LATEST ALT.

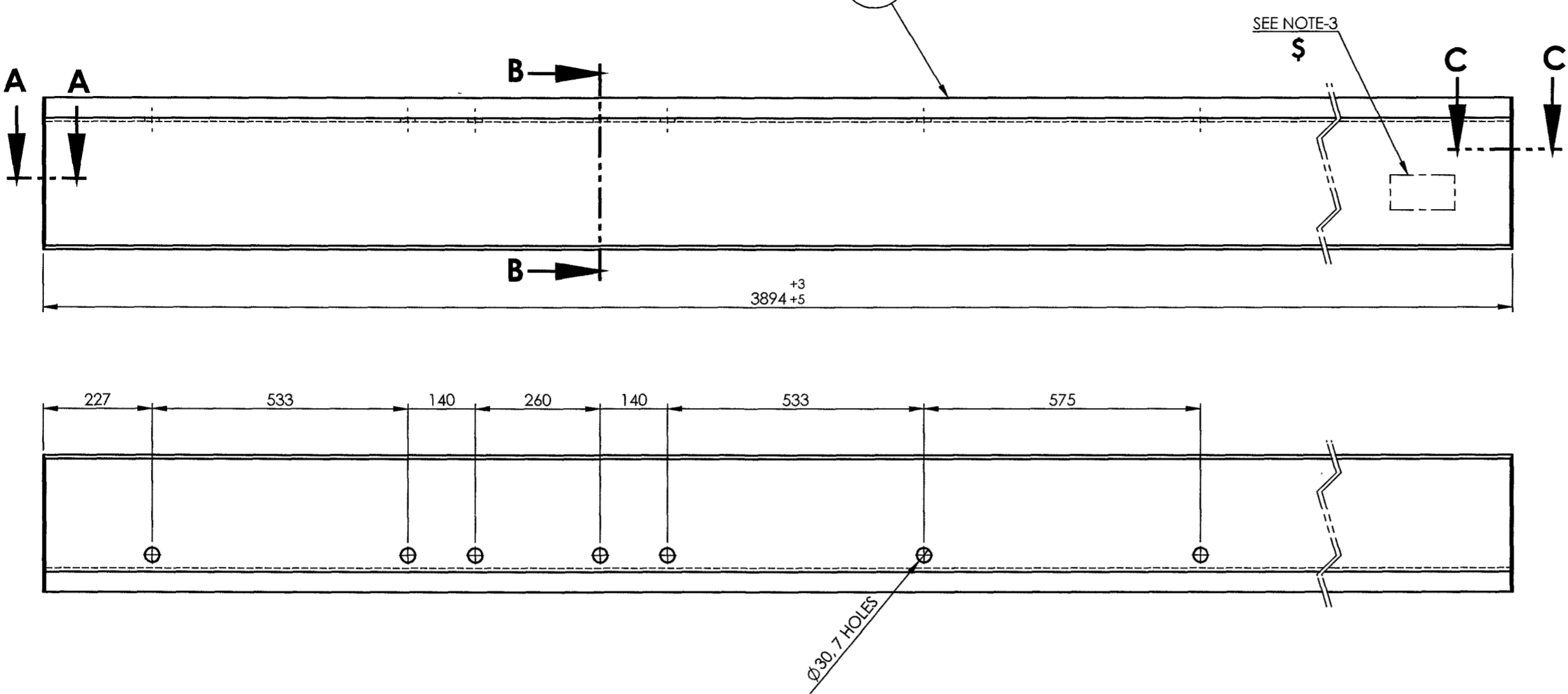
DATE OF FIRST ISSUE

AME/SME

AAD11153

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		LOCATING DIMENSION OF Ø 30 HOLES REVISED.	



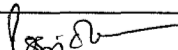
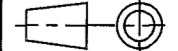
SECTION A-A
SCALE 1 : 1

SECTION C-C
SCALE 1 : 1

SECTION B-B
SCALE 1 : 2.5

- TOLERANCE:**
- 1. BOW / CAMBER : 1.5 mm/METER, SUBJECT TO MAX. OF 15 mm.
 - 2. TWIST : 1° / METRE, SUBJECT TO MAX. OF 25 mm.
 - 3. ANGLE OF BEND : ± 1°
 - 4. WAVINESS/FLATNESS : 2 mm MAX.

- NOTE:**
- SHRINKAGE ALLOWANCE HAS BEEN CONSIDERED IN THE TOLERANCE GIVEN FOR LENGTH(L).
 - THE FINISHED PRODUCT SHALL CONFIRM TO IRS M41-1997 MATERIAL SPECIFICATION.
 - PUNCHING TO BE DONE IN 6mm HEIGHT AS SHOWN BELOW ON SOLE BAR
xxx -MANUFACTURER'S INITIAL
xx / xx -MONTH & YEAR OF MANUFACTURER.
 - FOR OUTSOURCED LONGITUDINAL BEAMS SUITABLE PLATE TREATMENT (OR) GRIT BLASTING (OR) SAND BLASTING (OR) PICKLING TO BE DONE AND PAINTED WITH TWO COATS OF RED OXIDE ZINC CROMATE PRIMER ON BOTH SIDES TO SPEC. IS:2074-92 TO A DFT OF MINIMUM 35 MICRONS WITH SMOOTH AND MATT FINISH.
 - ALL HOLES TO BE JIG DRILLED.

1	LONGITUDINAL BEAM	8x570xL	1	IRS M-41-1997	141.06			
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-1			SURFACE AREA IN Sq.m.: 4.57		WT/ASSY IN Kgs:			
LONGITUDINAL BEAM					SCALE 1:10	SSE/D		
						CHD		
					ALT a	ALTD	M.SIVAKUMAR	
						DRN	K.SETHURAMAN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
					SHEET 1 OF 1	AAD11153	A2	

11-02-2019	17-10-2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.