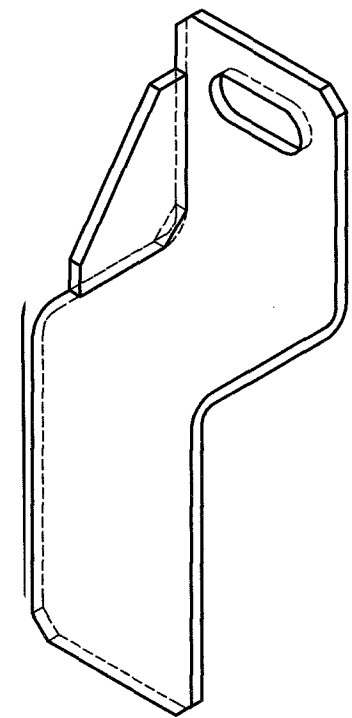
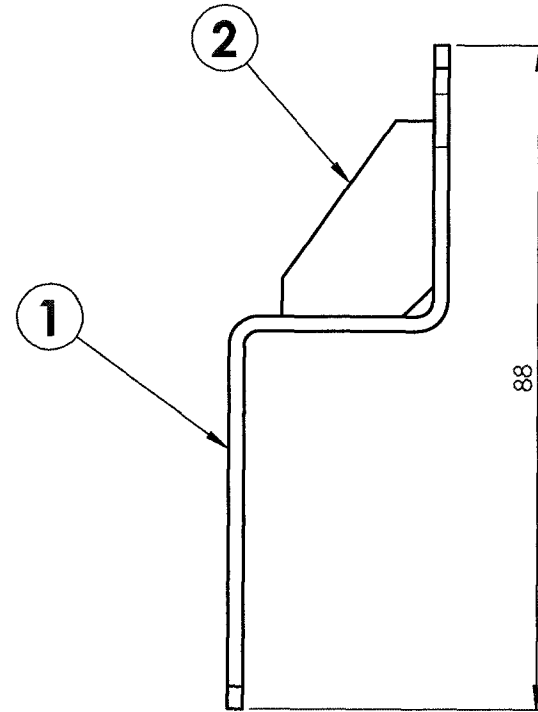
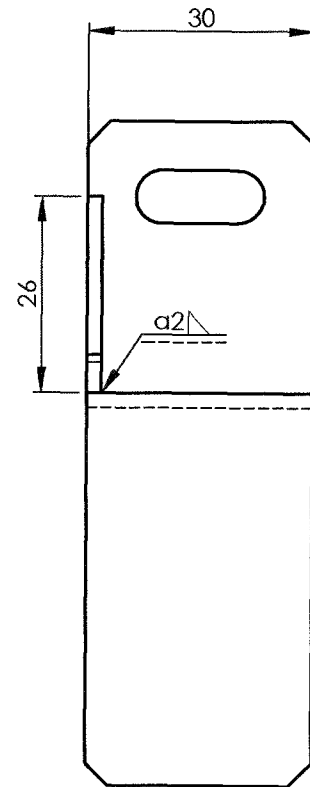


72614100

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

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

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


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

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

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

NOTE:

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

1	RIB		2	AAD14924		0.01	
1	BRACKET		1	AAD14923		0.05	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.: 0.008		WT/ASSY IN Kgs:		
BRACKET ASSEMBLY					SCALE 1:1	SSE/D	<i>dr. Pandurang Rao</i>
						CHD	
					ALT	ALTD	
						DRN	THULASIDASS.P
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		TRAIN18/DTC/	
						72614100	

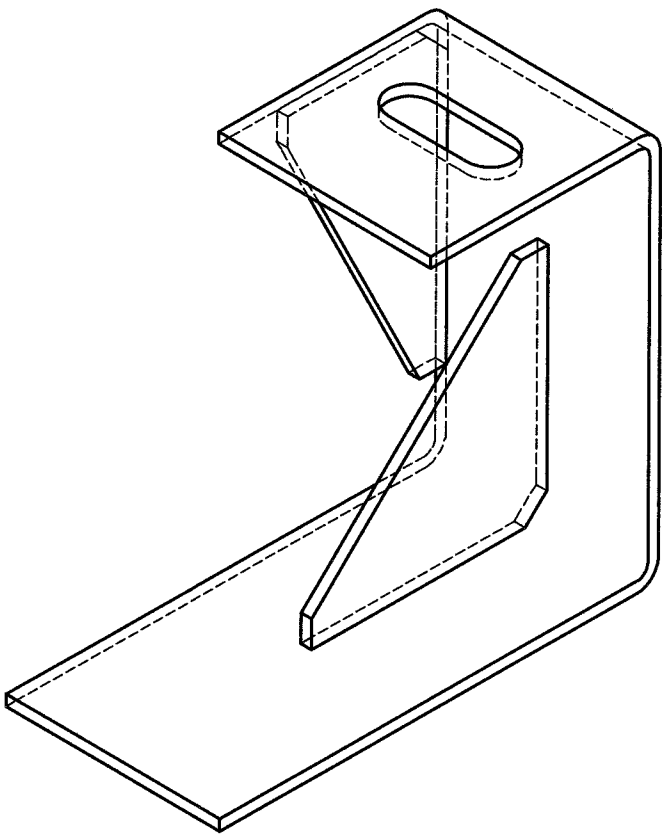
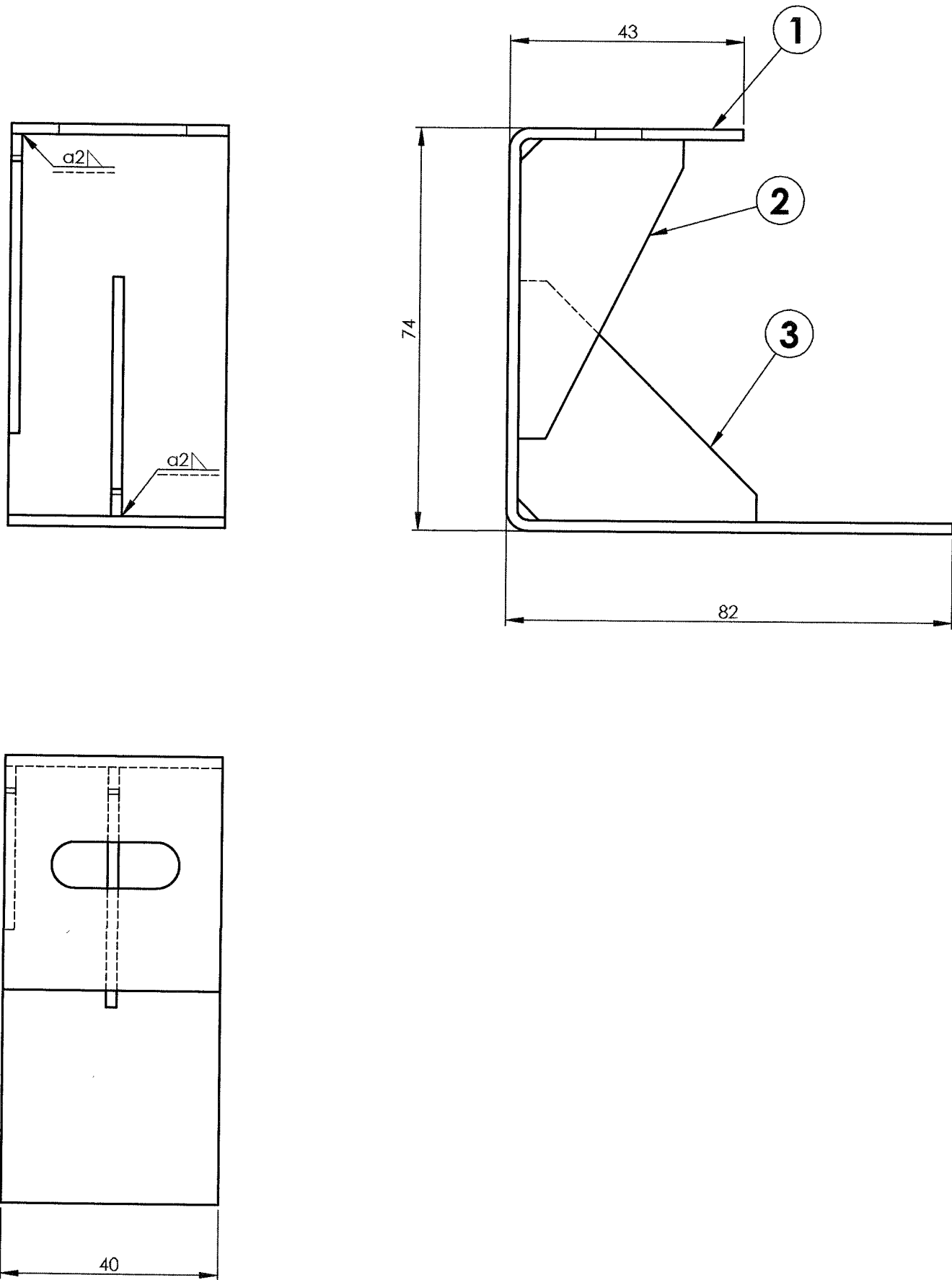
25/06/2018		
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

72614101

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

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

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

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

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

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

NOTE:

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

1	RIB		3	AAD14929		0.02	
1	RIB		2	AAD14928		0.02	
1	BRACKET		1	AAD14927		0.12	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.: 0.021		WT/ASSY IN Kgs:		
BRACKET ASSEMBLY					SCALE 2:1	SSE/D	L. Pandiwanga Rao
						CHD	
					ALT	ALTD	
						DRN	THULASIDASS.P
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	TRAIN18/DTC/		
					72614101		
							A2

	25/06/2018	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

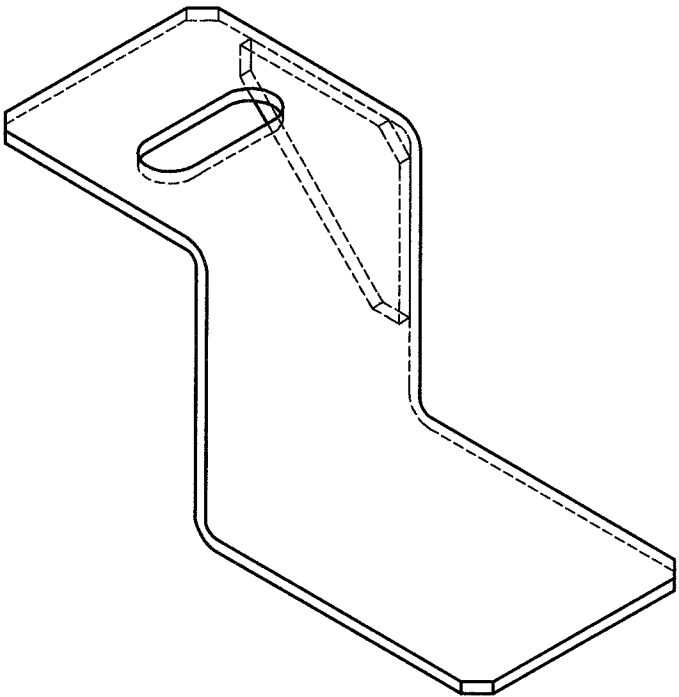
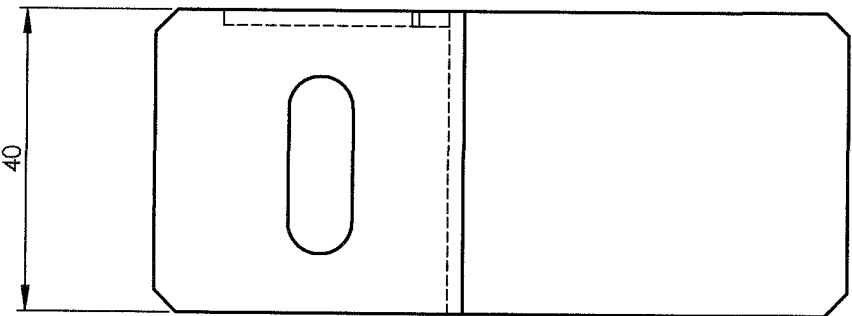
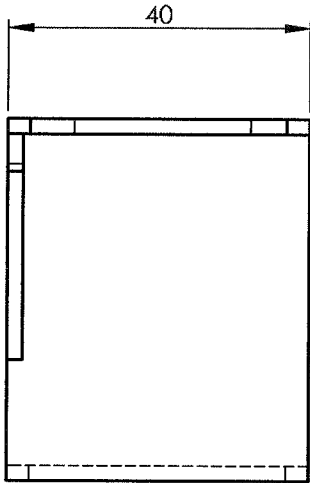
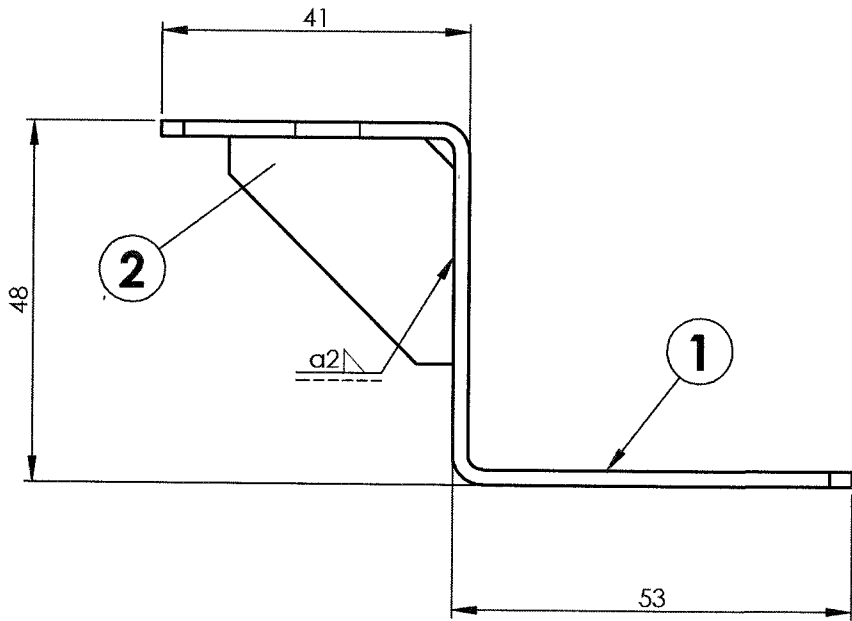
72614102

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

① ROUGH CLEANED  
①b BURRS REMOVED  
①8 CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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WELD TESTING PREFERENCES AS PER EN 15085-3:2007(E) TABLE-4

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

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

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


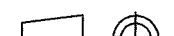
€ ALL APPLICABLE CLAUSES FOR VISUAL INSPECTION SHALL BE CARRIED OUT.

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

NOTE:

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

1	RIB		2	AAD14926		0.01	
1	BRACKET		1	AAD14925		0.08	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

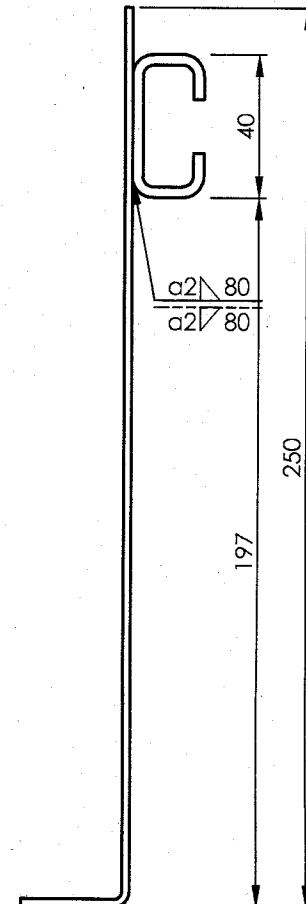
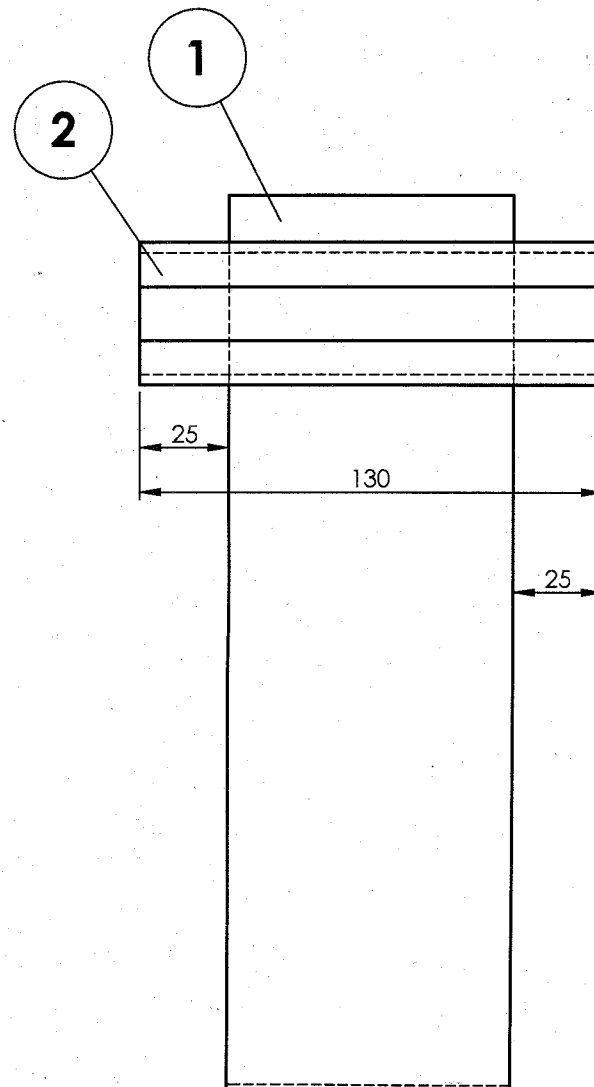
GROUP: 1-4		SURFACE AREA IN Sq.m.: 0.013		WT/ASSY IN Kgs:		
BRACKET ASSEMBLY				SCALE 2:1	SSE/D	
					CHD	
				ALT	ALTD	
					DRN	THULASIDASS.P
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			SHEET 1 OF 1			TRAIN18/DTC
				72614102		A2

	25/06/2018	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

72614103

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		LOCATION OF ITEM 2 REVISED.	

**NOTE:**

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

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

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

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

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

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

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

1	CHANNEL		2	AAD14183		0.27	
1	CHANNEL		1	AAD14544		0.35	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4

SURFACE AREA IN Sq.m.:0.069

WT/ASSY IN Kgs:

**CHANNEL ASSY**

SCALE 1:1

SSE/D

CHD

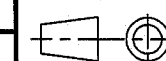
ALT. a

ALTD

DRN

A.Muthukumar

A.Muthukumar

**TRAIN18/MC/AC****INDIAN RAILWAY STANDARDS**

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

**72614103****A3**

27-7-18

28-6-18

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

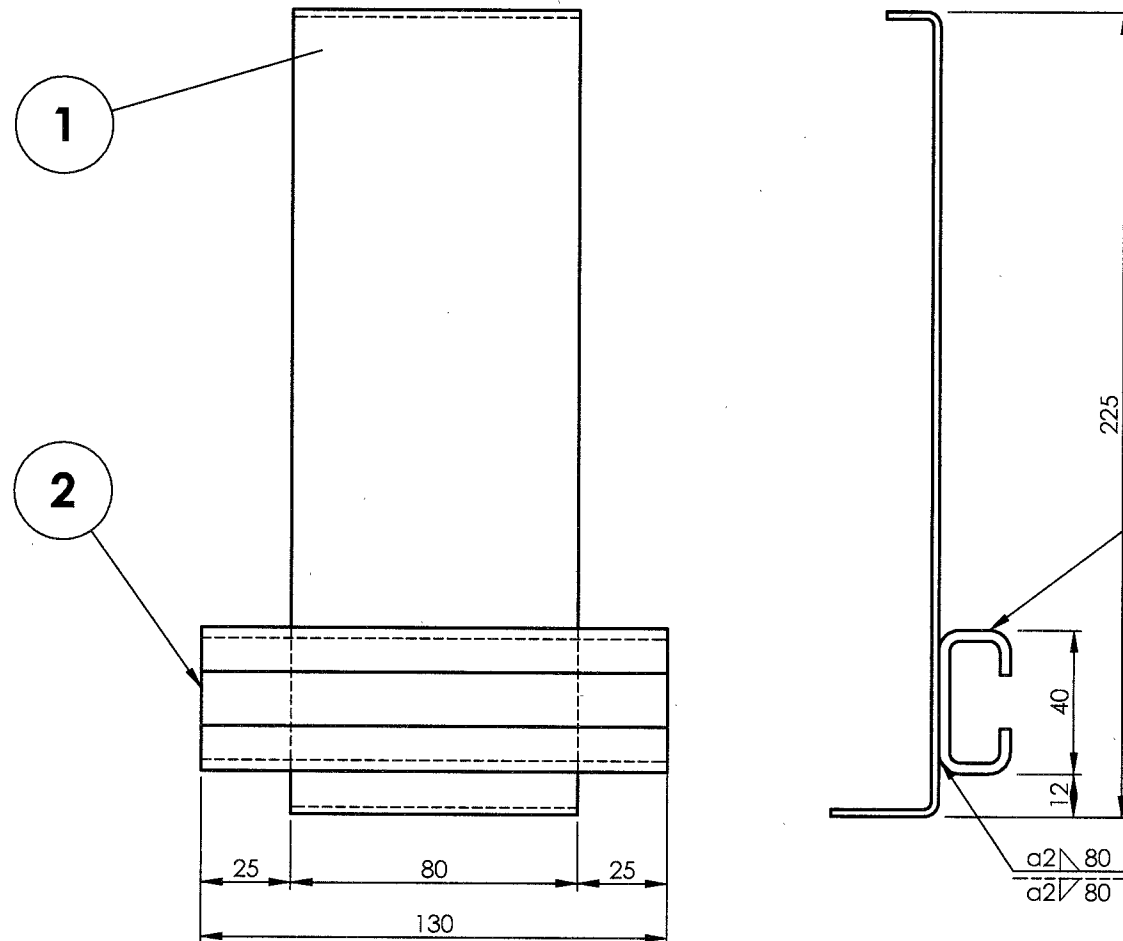
AME/SME

REF.DRG.NO.-

72614104

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

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

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

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

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

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

**NOTE:**

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

1	CHANNEL		2	AAD14183		0.27	
1	CHANNEL		1	AAD14185		0.34	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:0.067			WT/ASSY IN Kgs:		
CHANNEL ASSY					SCALE	SSE/D	A. Panduranga Rao
					1:5	CHD	
					ALT.	ALTD	
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	TRAIN18/MC/AC		
					72614104		
					A3		

REF.DRG.NO.-

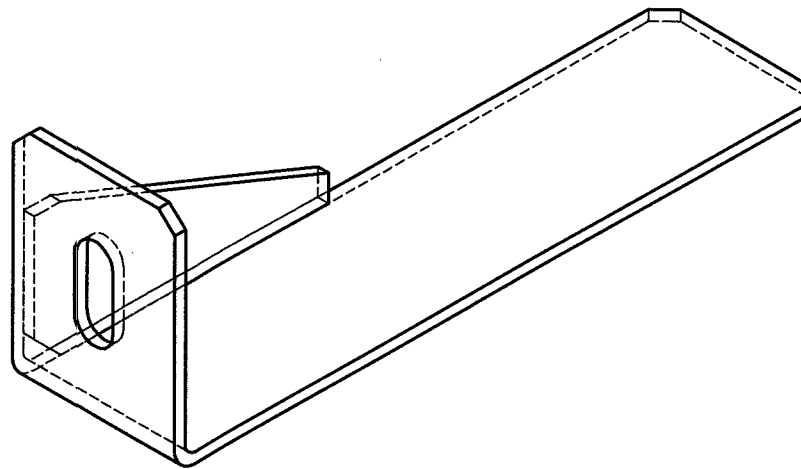
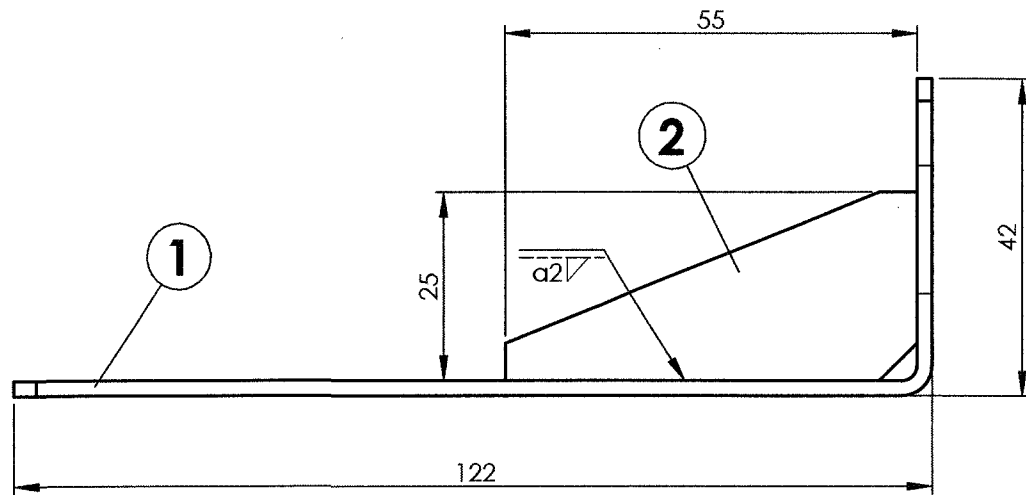
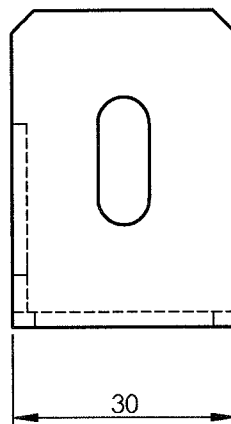
	28-6-18	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

72614106

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

01	ROUGH CLEANED
01b	BURRS REMOVED
18	CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

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

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

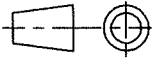
FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.

ALL APPLICABLE CLAUSES FOR VISUAL INSPECTION SHALL BE CARRIED OUT.

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

NOTE:

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

1	RIB		2	AAD14956		0.01	
1	ANGLE		1	AAD14957		0.08	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.: 0.012		WT/ASSY IN Kgs:		
BRACKET COMPLETE					SCALE 2:1	SSE/D	L. Pandirangal
						CHD	
					ALT	ALTD	
						DRN	THULASIDASS.P
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						TRAIN18/DTC/	
						72614106	
					SHEET 1 OF 1		

	17/07/2018	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

72614112

▽ ROUGH MACHINED

▽▽ FINISH MACHINED

▽▽▽ FINE FINISH MACHINED

01 ROUGH CLEANED

01b BURRS REMOVED

18 CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED & DATE

170

5

5

1

2

1

50

50

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.

2. ALL WELD SPATTERS SHALL BE GROUND.

3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.

4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.

5. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.

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

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

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

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

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

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

2 RIB

1 ANGLE

QTY. DESCRIPTION DIMENSIONS ITEM NO. REF.DRGS. MATL WT/UNIT IN KGS REMARKS

GROUP: 1-4 SURFACE AREA IN Sq.m.:0.039 WT/ASSY IN Kgs:

ANGLE ASSY

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

INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

TRAIN18/DTC/AC

72614112 A3

REF.DRG.NO.-

DATE OF LATEST ALT. 02-01-19

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

72614113

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

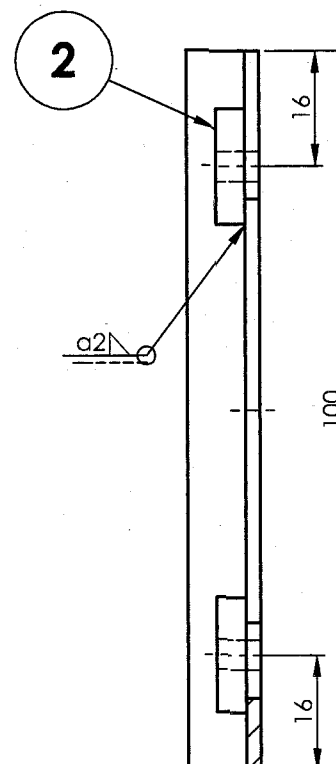
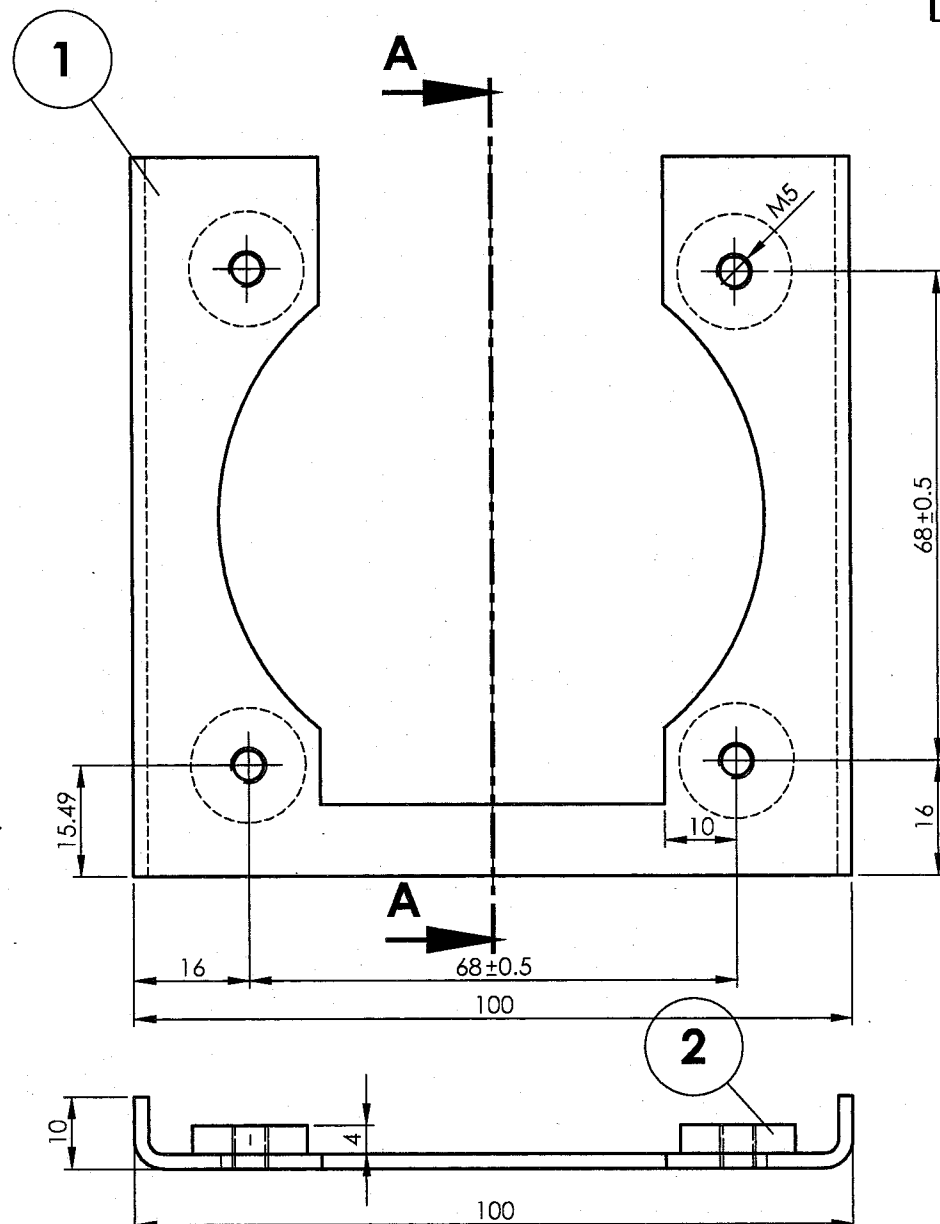
① ROUGH CLEANED  
①b BURRS REMOVED  
⑱ CHAMFERED

## REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &  
DATE

## SECTION A-A

## NOTE:

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

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

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

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

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

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

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

REF.DRG.NO.-

07/02/19		
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

4	BACK PIECE	Ø16 x 4	2		RDSO/SPEC C-K201 X2CrNi12	0.01	
1	FIXING BRACKET		1	AAE14248		0.09	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4 SIDE WALL

SURFACE AREA IN Sq.m.:0.016

WT/ASSY IN Kgs:

## FIXING BRACKET ASSY

SCALE	SSE/D	
1:1	CHD	
ALT.	ALTD	
	DRN	A.Muthukumar

## INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET  
1 OF 1

TRAIN18/DTC/AC

72614113

A3



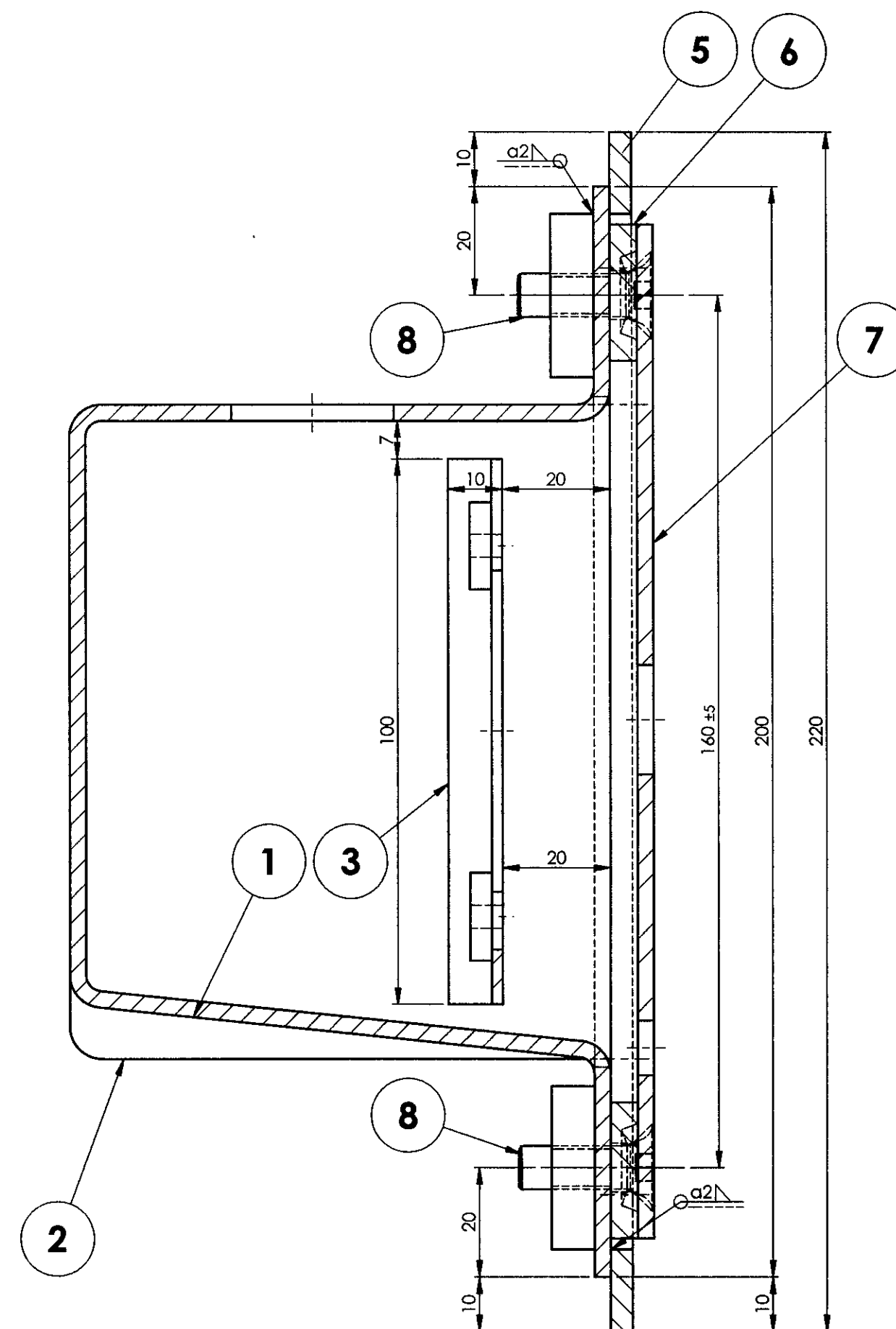
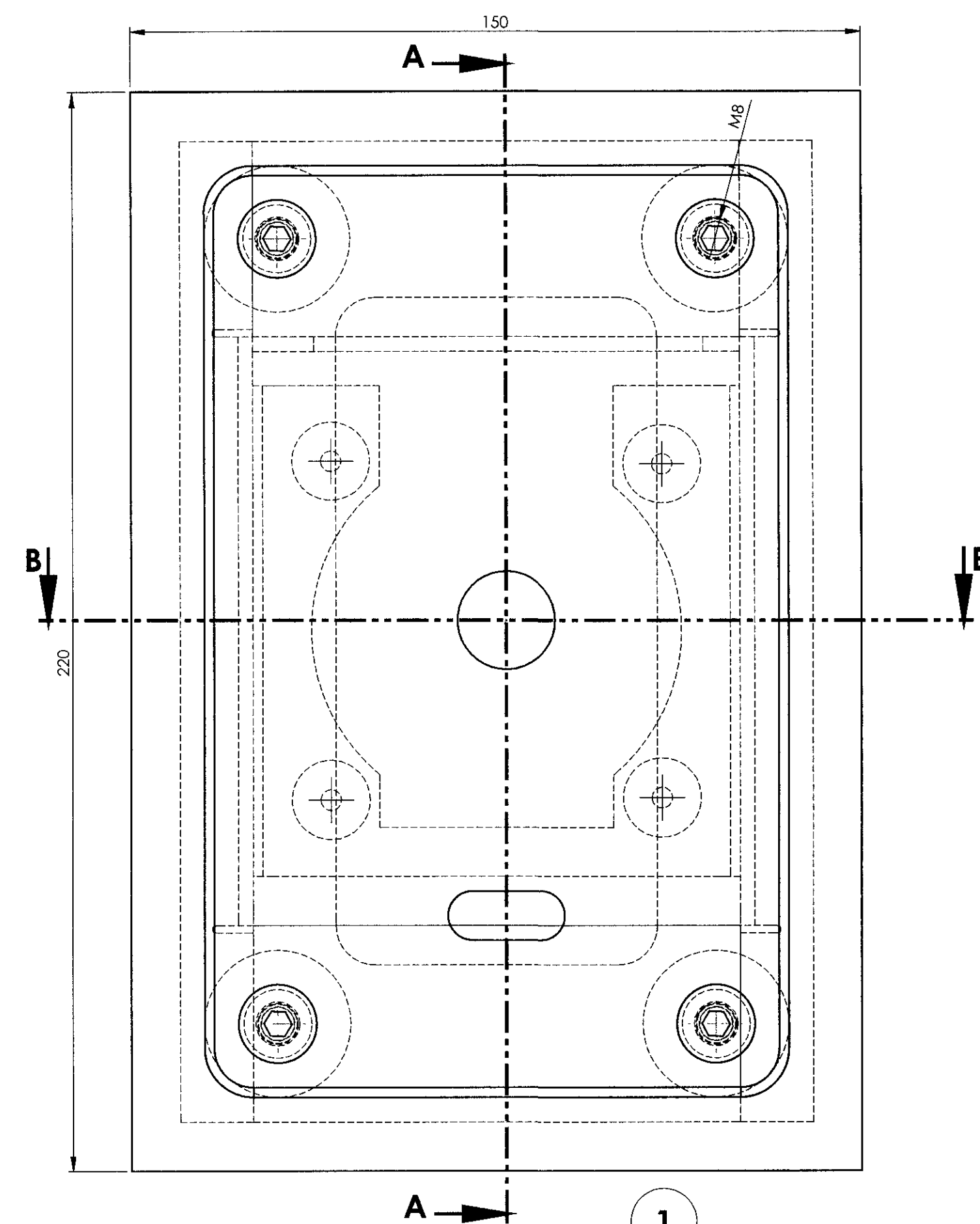
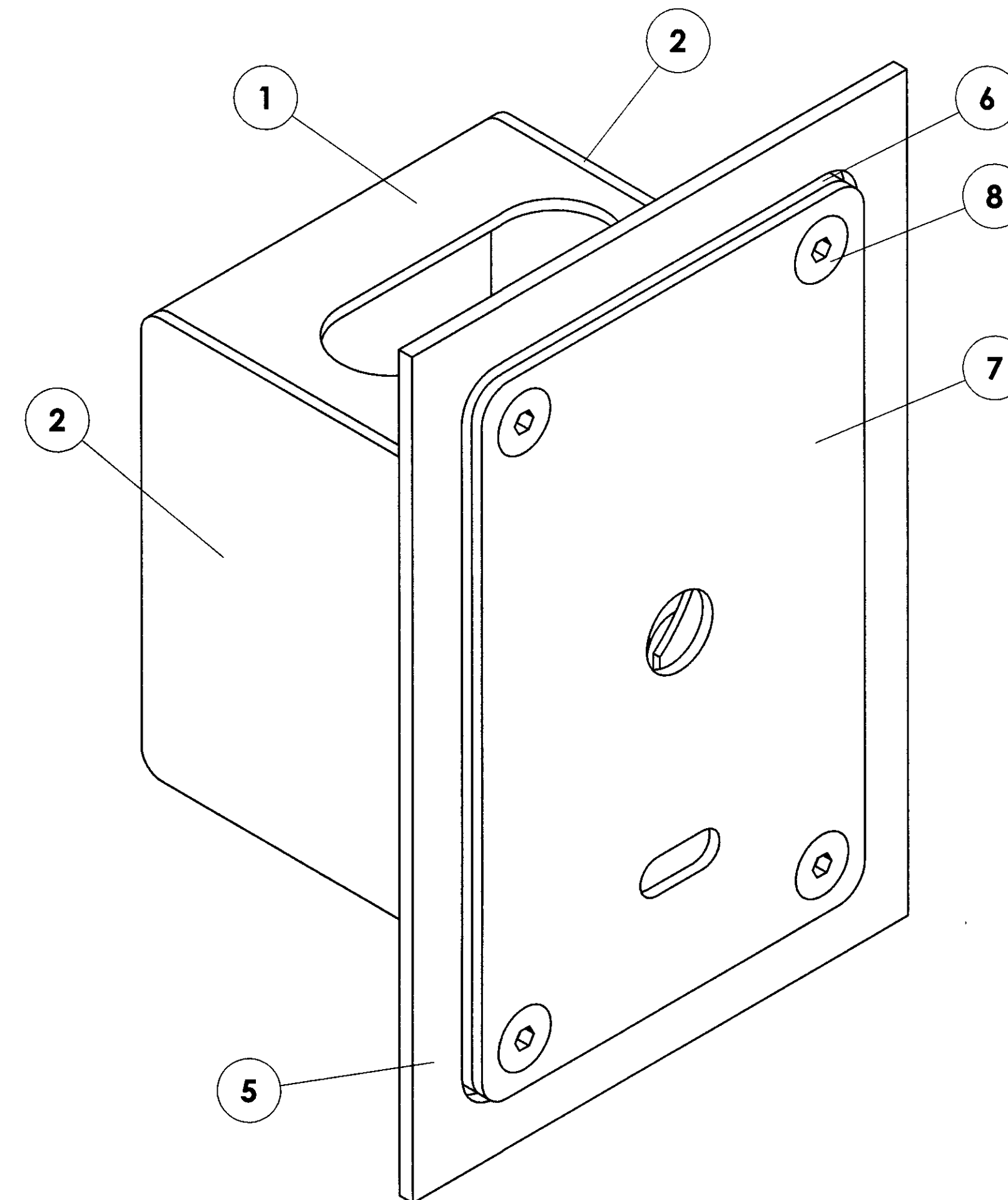
72614114

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

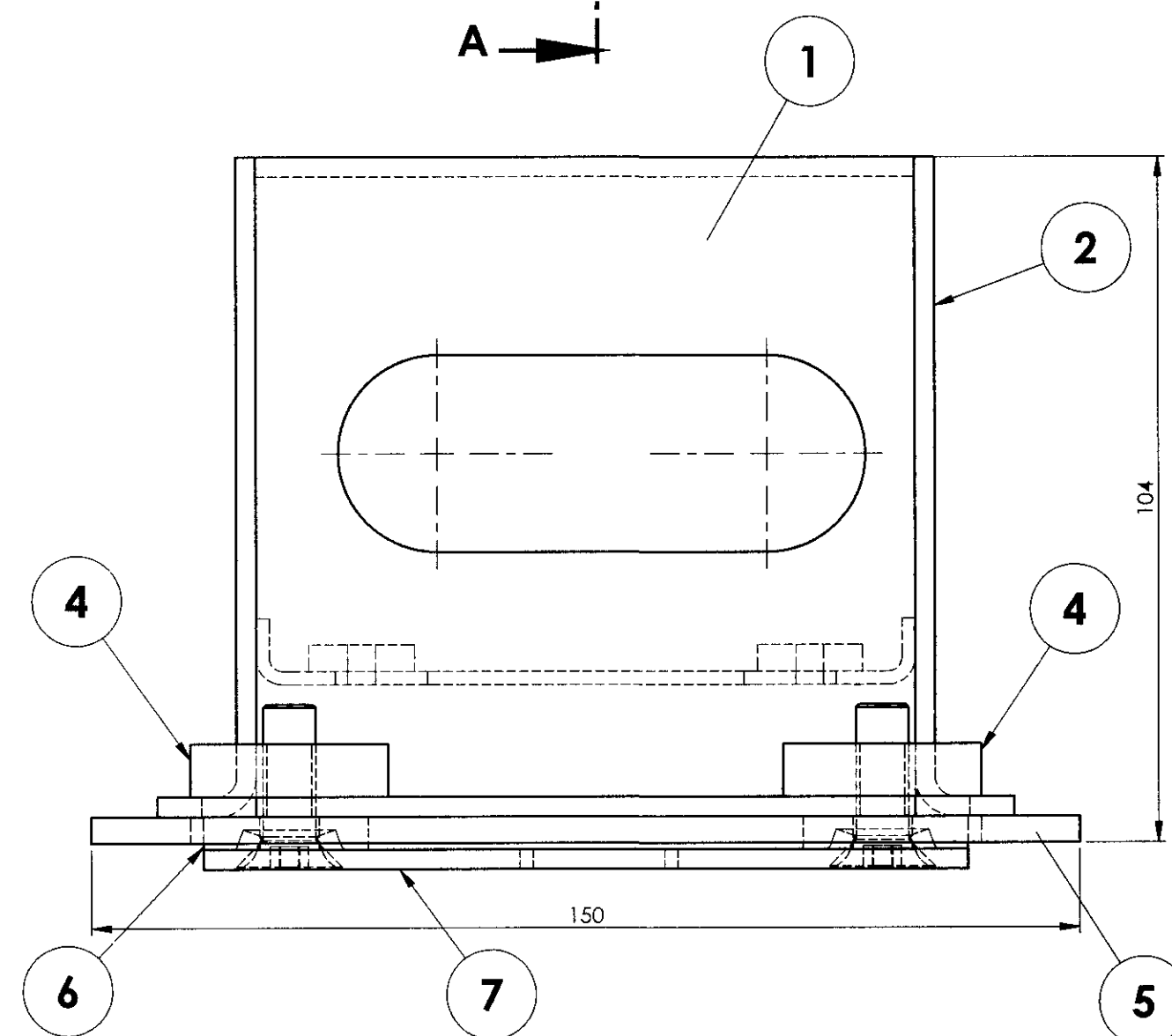
(1) ROUGH CLEANED  
(11) BURRS REMOVED  
(18) CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		NOTE 7 & 8 ADDED. WELD IN SECTION AA AND NOTE-4 REVISED. WELD TABLE DELETED.	

SECTION A-A  
SCALE 1 : 1

ISOMETRIC VIEW

SECTION B-B  
SCALE 1 : 1

## NOTE:

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

4	HEXAGON SOCKET COUNTERSUNK HEAD SCREW	M8 X 25-A2-70	8	IS:6761	IS:1367 (PART-14) A2-70		
1	COVER		7	AAE14252		0.50	
1	GASKET		6	AAE14251		0.06	
1	RING		5	AAE14246		0.33	
4	BOSS	Ø30 x 8	4		SS-304	0.04	
1	FIXING BRACKET ASSY		3	72614113		0.117	
2	SIDE ANGLE		2	AAE14245		0.34	
1	BRACKET		1	AAE14247		0.85	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4 SIDE WALL		SURFACE AREA IN Sq.m.: 0.265		WT/ASSY IN Kgs:	
SCALE 1:2		SSE/D		CHD	
ALT. a		ALTD DRN		A.Polarichamy A.Muthukumar	
INDIAN RAILWAY STANDARDS		SHEET 1 OF 1		72614114	
INTEGRAL COACH FACTORY, CHENNAI - 600038		A1			

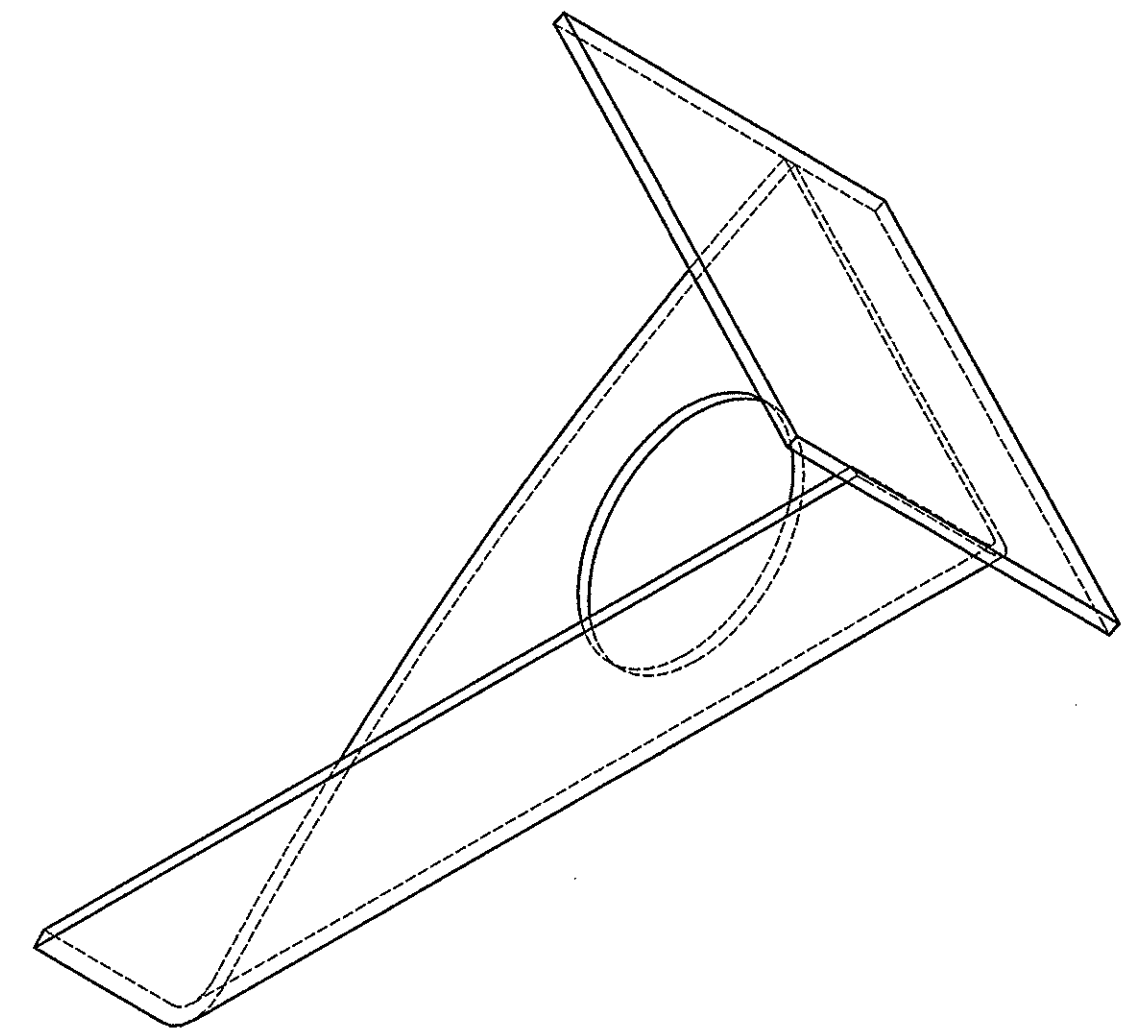
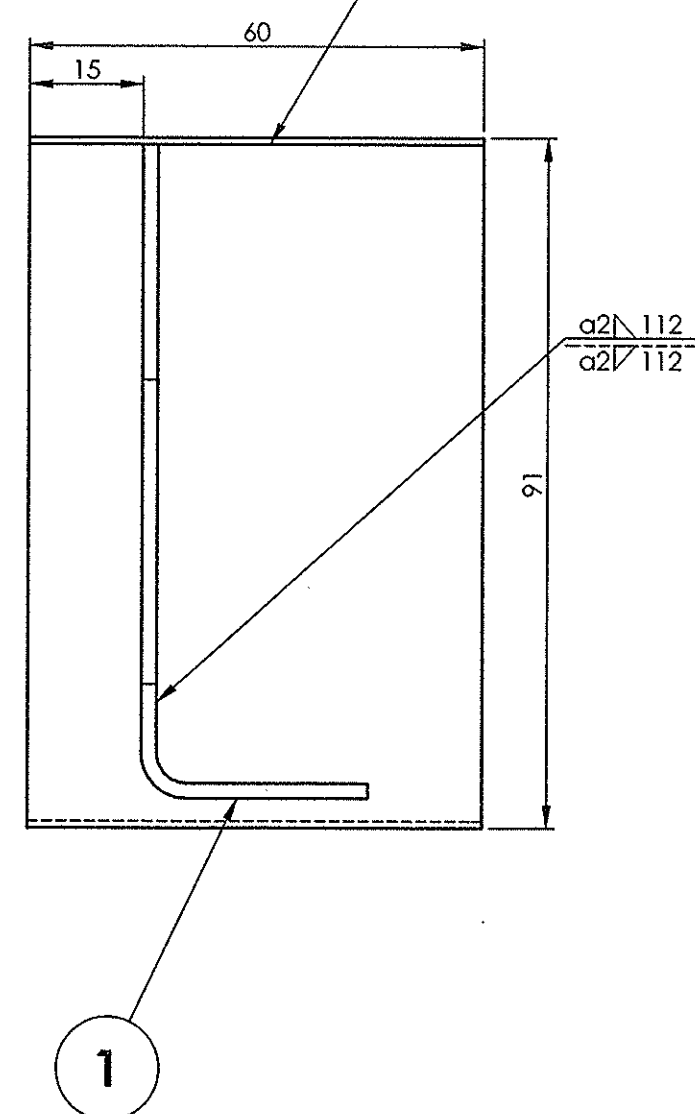
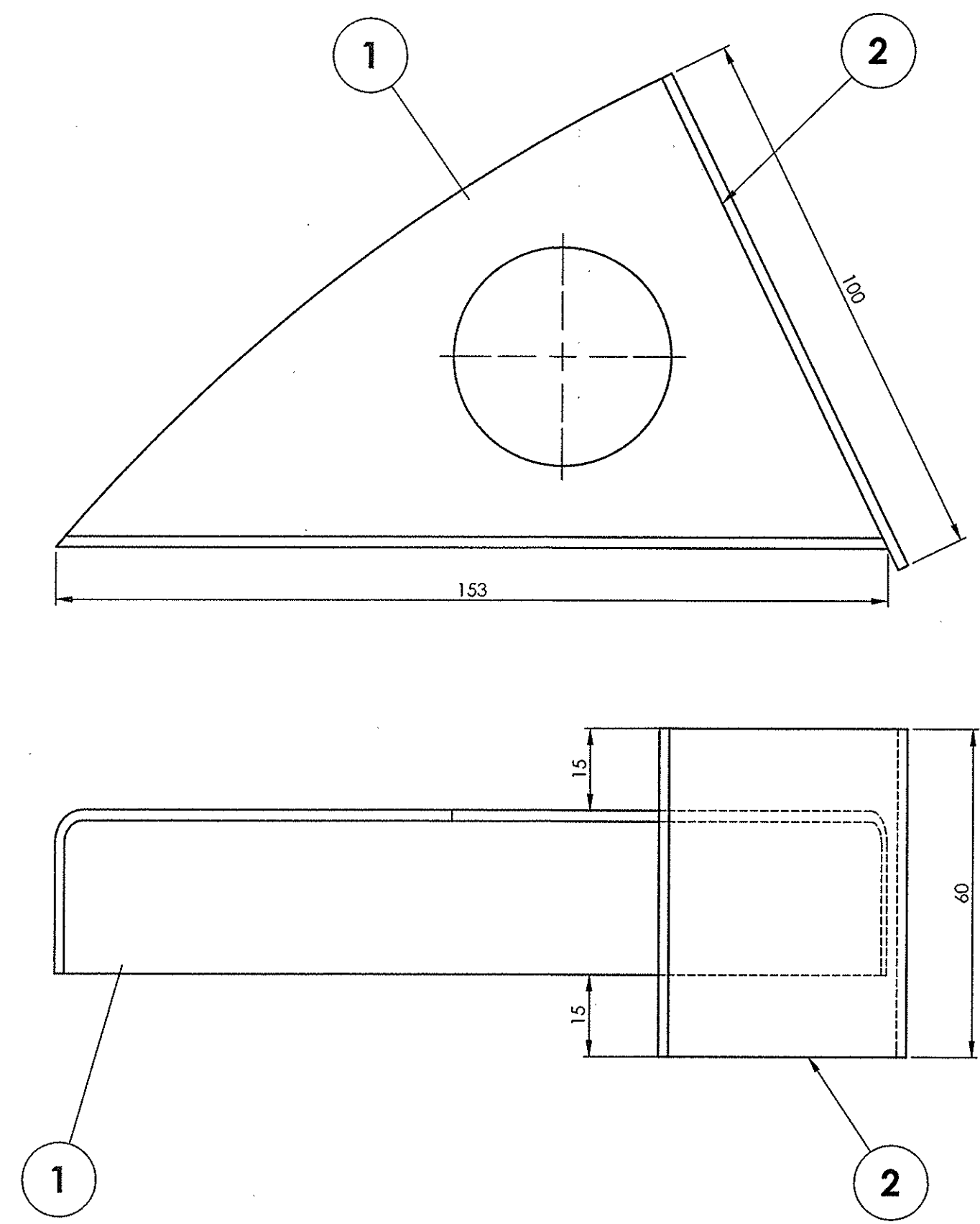
12-10-2022	07-02-2019	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

72714007

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



NOTE:

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

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

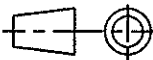
WELD PERFORMANCE CLASS	QUALITY LEVEL FOR IMPERFECTIONS EN ISO 5817 €	INSPECTION CLASS	VOLUMETRIC TEST RT or UT	SURFACE TEST MPT or DPT	VISUAL EXAMINATION VT
CP C2	B	CT2 \$	NOT REQUIRED	NOT REQUIRED	100%

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

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

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


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

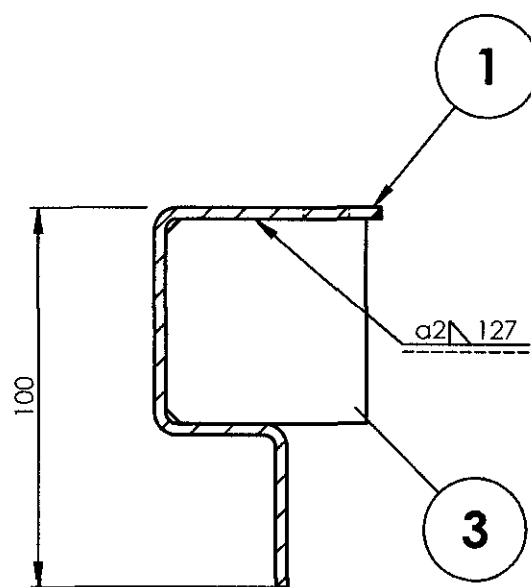
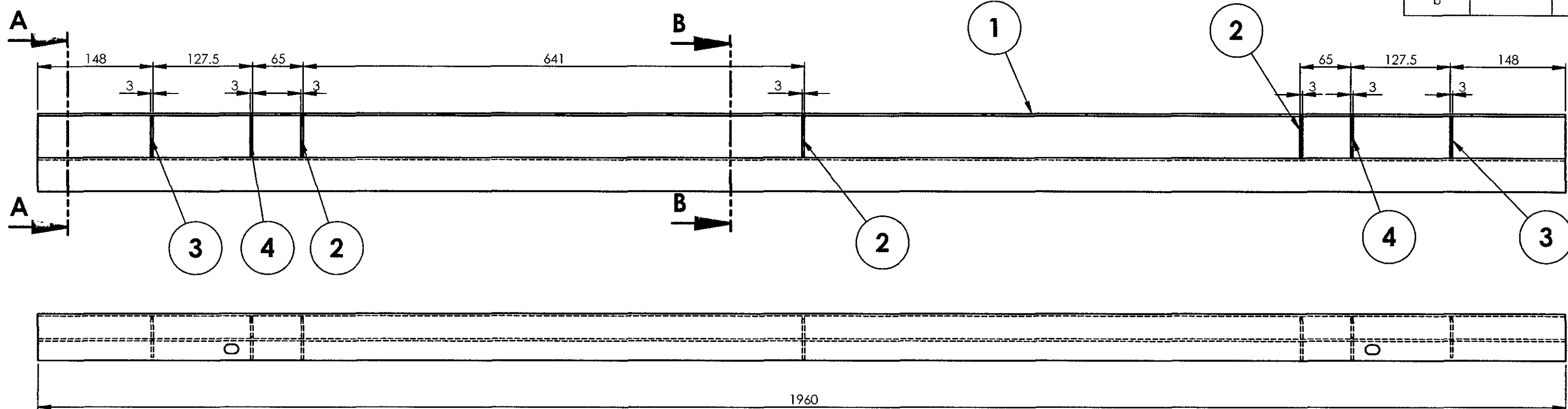
1	FLAT	2x60x100	2		RDSO/SPEC C-K201 X2CrNi12	0.10	
1	ANGLE		1	AAC14884		0.16	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.: 0.034			WT/ASSY IN Kgs:		
ANGLE ASSY					SCALE 1:1	SSE/D	A. Panduranga
						CHD	
					ALT	ALTD	
						DRN	A.Muthukumar
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						TRAIN18/MC/AC	
						72714007	
					SHEET 1 OF 1		A2

DATE OF LATEST ALT.	21-11-2017	AME/SME
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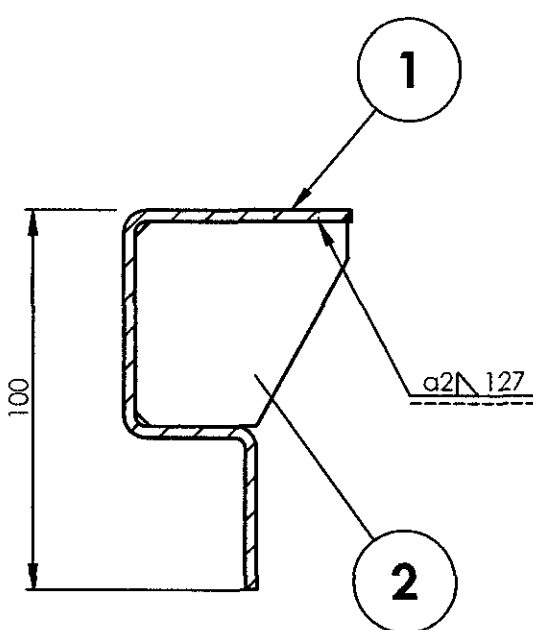
72714008

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM 4 ADDED. QTY OF ITEM 2 ALTD FROM 5 TO 3.	
b		WELDING REVISED.	



SECTION A-A  
SCALE 1 : 2



SECTION B-B  
SCALE 1 : 2

NOTE:

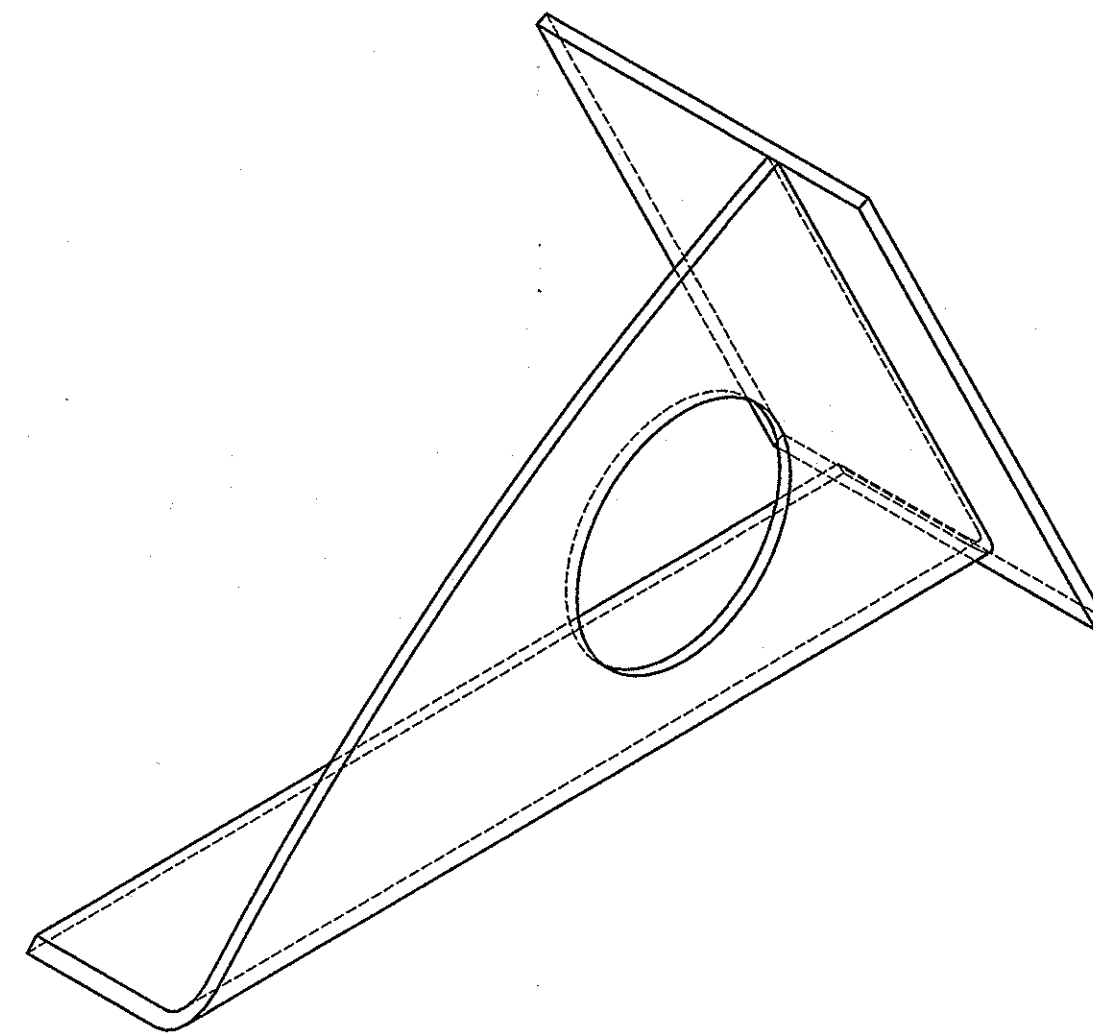
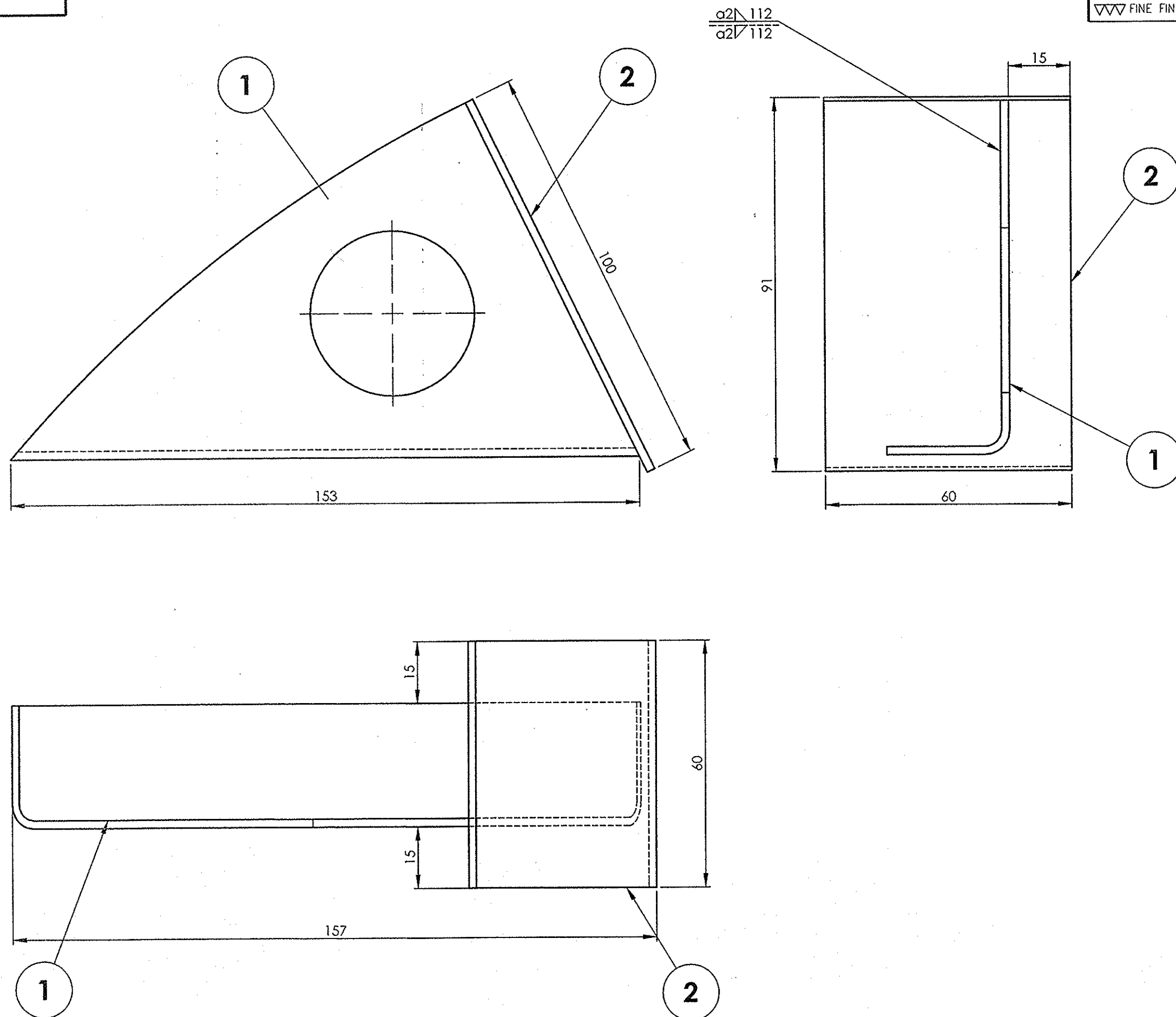
1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED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

2	RIB		4	AAD14289		0.06	
2	RIB		3	AAC14822		0.07	
3	RIB		2	AAC14823		0.06	
1	HORIZONTAL MEMBER		1	AAC14285		8.61	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.: 0.771		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER ASSY				SCALE 1:1	SSE/D		
					CHD		
				ALT b	ALTD	SHABEEB. P	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					DRN	A.Muthukumar	
						TRAIN18/MC/AC	
				SHEET 1 OF 1	72714008		A2

72714009

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



**NOTE:**

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

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


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

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

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

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

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


1	FLAT	2x60x100	2		RDSO/SPEC C-K201 X2CrNi12	0.10	
1	ANGLE		1	AAC14886		0.16	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.: 0.034		WT/ASSY IN Kgs:		
ANGLE ASSY					SCALE 1:1	SSE/D	<i>A. Pandey</i>
						CHD	
					ALT	ALTD	A.Muthukumar
						DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		TRAIN18/MC/AC	
						72714009	
						A2	

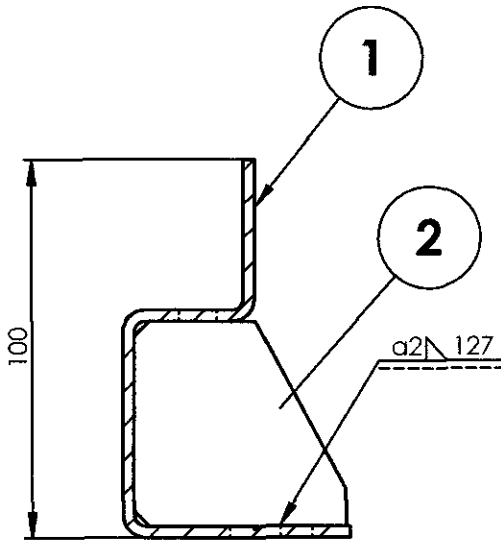
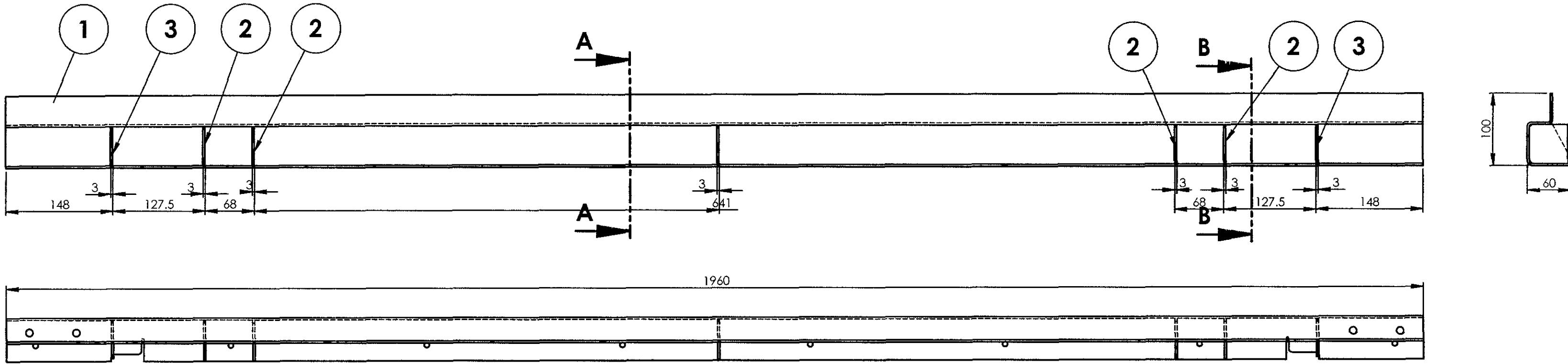
DATE OF LATEST ALT.	21-11-2017	AME/SME
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REF.DRG.NO.-

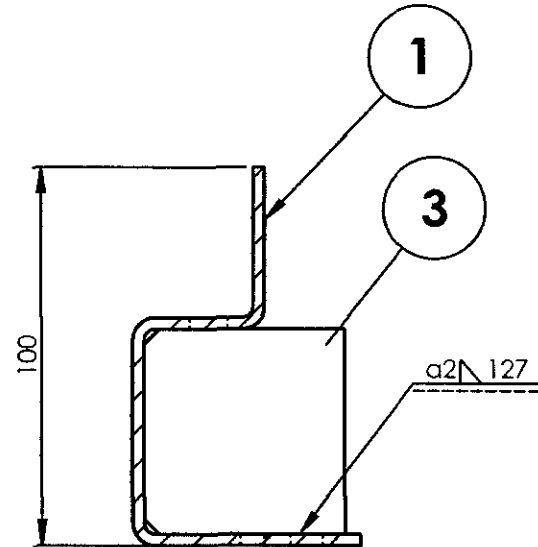
72714010

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

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



SECTION A-A  
SCALE 1 : 2



SECTION B-B  
SCALE 1 : 2

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

2	RIB		3	AAC14822		0.07	
5	RIB		2	AAC14823		0.06	
1	HORIZONTAL MEMBER		1	AAC14284		8.58	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4				SURFACE AREA IN Sq.m.: 0.769		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER ASSY				SCALE 1:1	SSE/D	A. Muthukumar	
					CHD		
				ALT a	ALTD	SHABEEB. P	
					DRN	A.Muthukumar	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		TRAIN18/MC/AC	
						72714010	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.

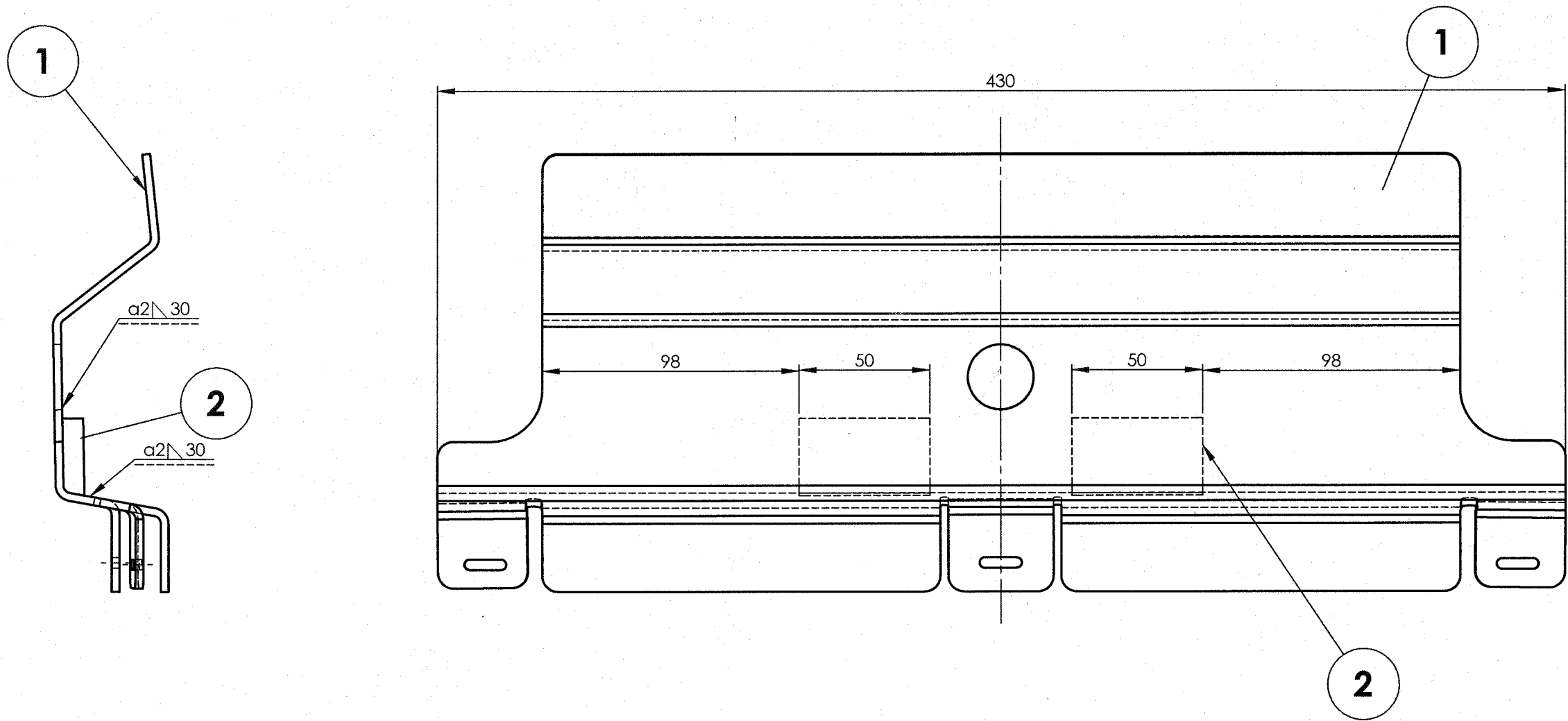
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03.11.23	09.11.2017	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

72714015

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		REF DRG FOR ITEM 2 REVISED. TAPPED HOLE LOCATION REVISED.	-sd-
b		M10 TAPPED HOLE DELETED. LOCATION & SIZE OF ITEM 2 REVISED.	-sd-
c		VIEWS UPDATED AS PER THE REVISED DESIGN OF ITEM 1.	



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

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

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

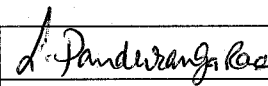
\$ FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.


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

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

NOTE:

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

2	SCREWING PIECE		2	AAD14484		0.09	
1	BRACKET FOR LUGGAGE RACK		1	AAC14960		1.91	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4			SURFACE AREA IN Sq.m.: 0.173		WT/ASSY IN Kgs:		
LUGGAGE RACK BRACKET ASSY					SCALE 1:5	SSE/D CHD	
					ALT c	ALTD DRN	A.Muthukumar
							A.Muthukumar
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038			72714015	A2			

20-12-18	17-03-2018	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

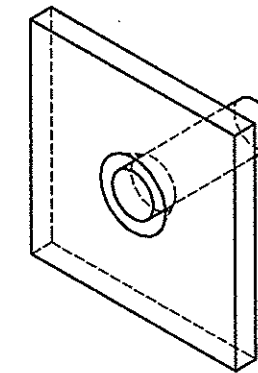
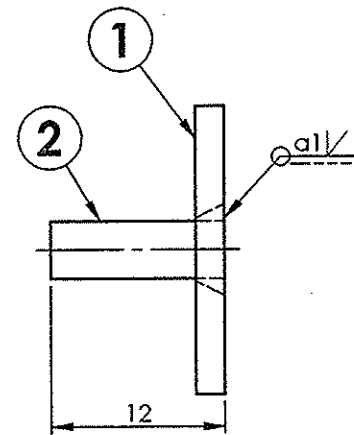
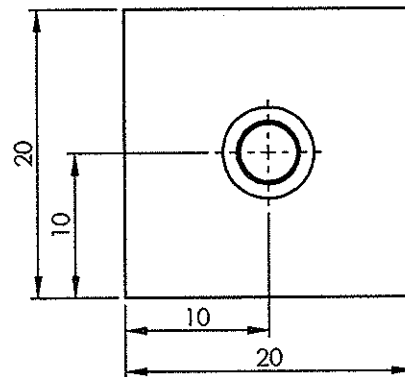
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY



72714019

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

**NOTE:**

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

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

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

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

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

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

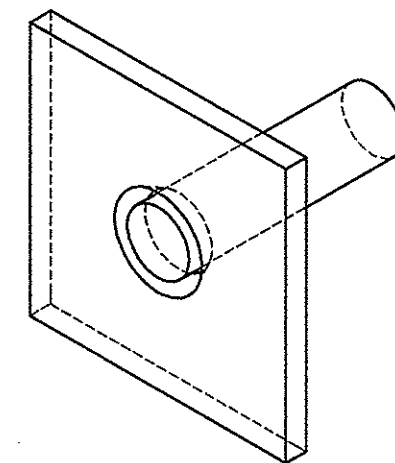
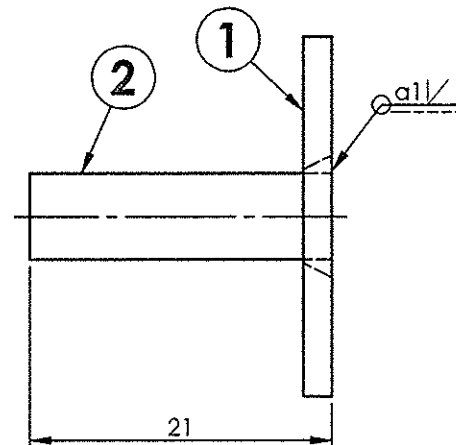
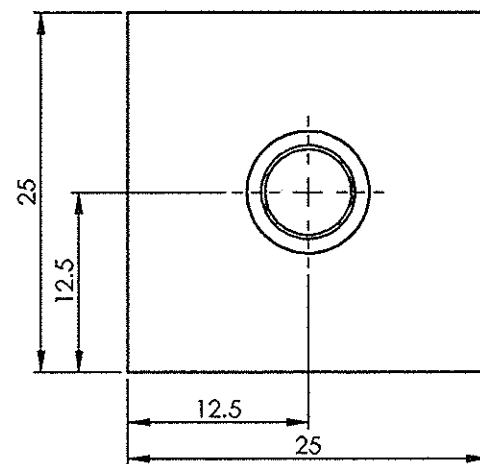
FOR APPLICABLE WELDING PROCEDURE SPECIFICATION (WPS) REFER DRAWING NO ICF/STD-9-0-999

1	STUD	M4x12	2	DIN-976-1 A2-70 TY-B		0.00		
1	PLATE		1	AAD14293		0.01		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4		SURFACE AREA IN Sq.m.:0.001			WT/ASSY IN Kgs:			
STUD PLATE					SCALE	SSE/D	S. Panduranga Rao	
					5:1	CHD		
					ALT.	ALTD		
					DRN	THULASIDASS P		
INDIAN RAILWAY STANDARDS  INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		TRAIN18/MC/AC  72714019	A3

72714020

✓ FINISH MACHINED	✓ BURRS REMOVED
▽▽ FINE FINISH MACHINED	⑮ CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			

**NOTE:**

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

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

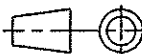
WELD PERFORMANCE CLASS	QUALITY LEVEL FOR IMPERFECTIONS EN ISO 5817 €	INSPECTION CLASS	VOLUMETRIC TEST RT or UT	SURFACE TEST MPT or DPT	VISUAL EXAMINATION VT
CP C2	B	CT2 \$	NOT REQUIRED	NOT REQUIRED	100%

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

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

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

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

1	STUD	M6x21	2	DIN-976-1 A2-70 TY-B		0.00	
1	PLATE		1	AAD14299		0.01	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4		SURFACE AREA IN Sq.m.:0.002			WT/ASSY IN Kgs:		
STUD PLATE					SCALE	SSE/D	<i>L. Pandurangla</i>
					2:1	CHD	
					ALT.	ALTD	
						DRN	THULASIDASS P
INDIAN RAILWAY STANDARDS							TRAIN18/MC/AC
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1	72714020	
							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

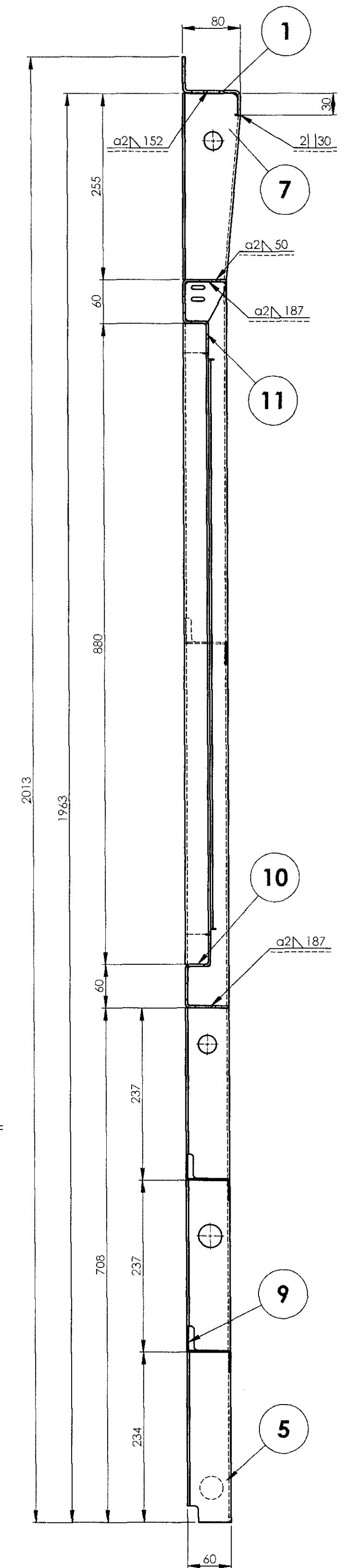
REF.DRG.NO.-

DATE OF LATEST ALT.	17-03-2018	AME/SME
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC7/JTD-900001.  
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.


**ISOMETRIC VIEW**



NOTE:

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


# 8. ITEM-15 TO BE WELDED AFTER SPOT WELDING WITH SIDEWALL SHEET.

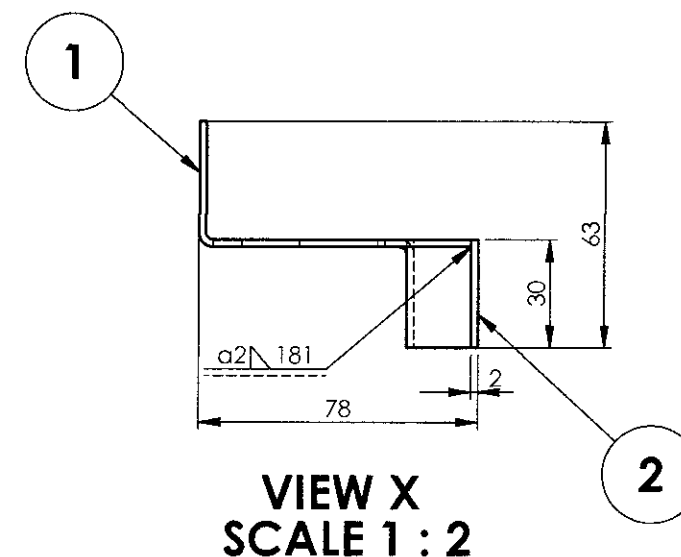
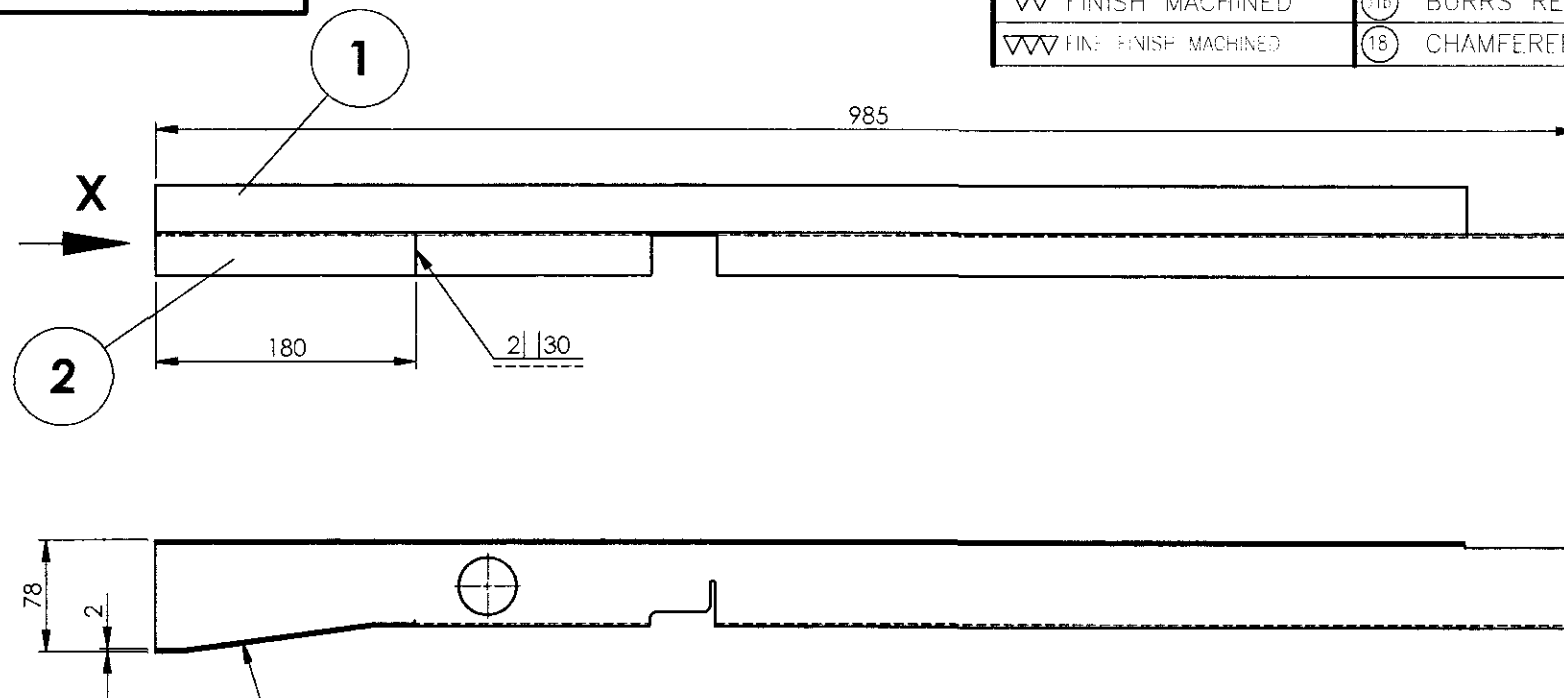
13. -10-2021	14-08-2021	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

88914009

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

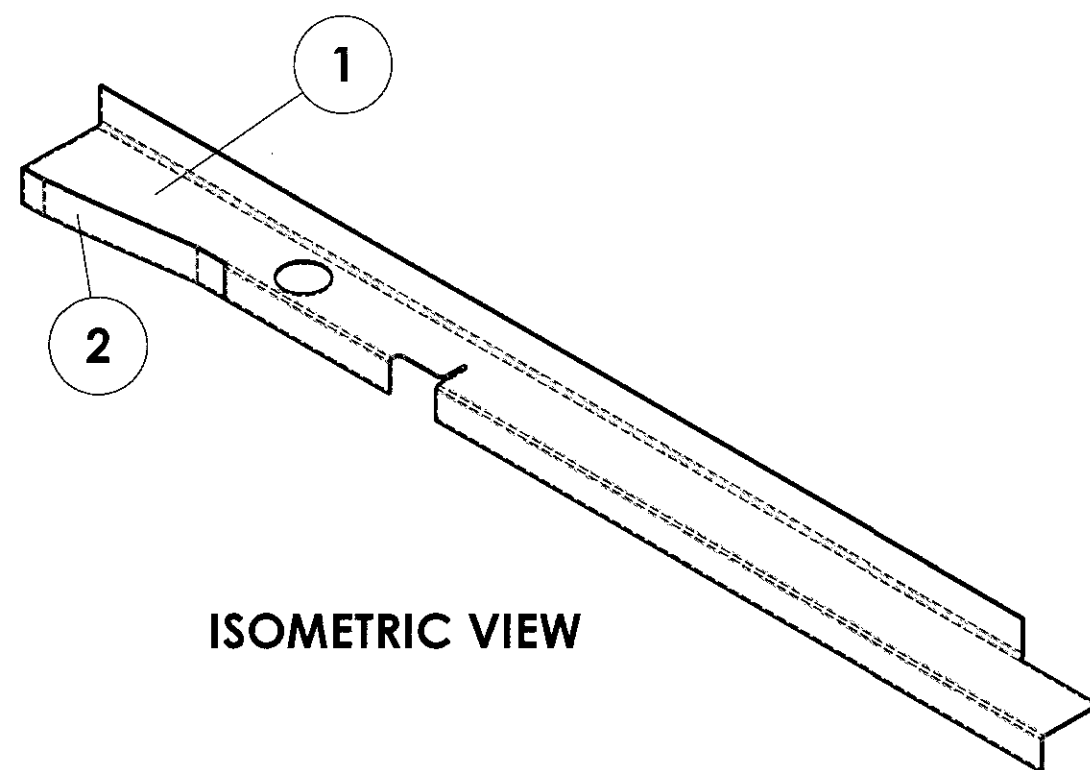
## REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING VIEWS UPDATED AS PER DETAIL	

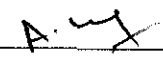
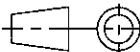
VIEW X  
SCALE 1 : 2

## NOTE:

1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
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4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
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6. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
7. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



ISOMETRIC VIEW

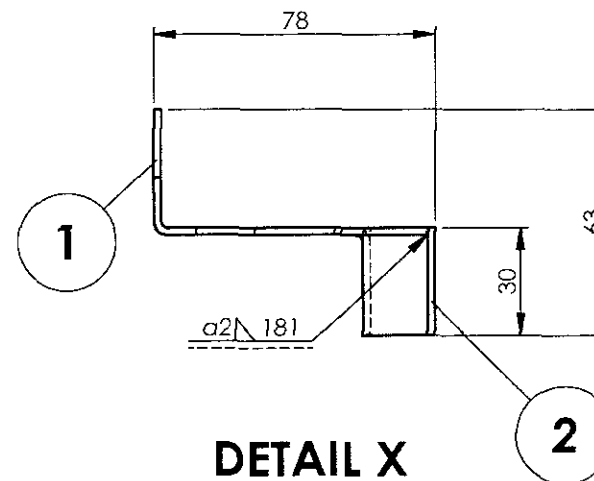
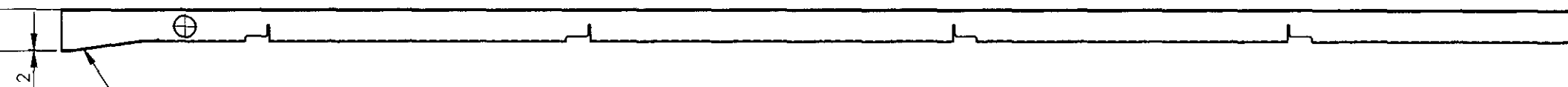
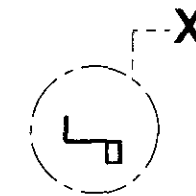
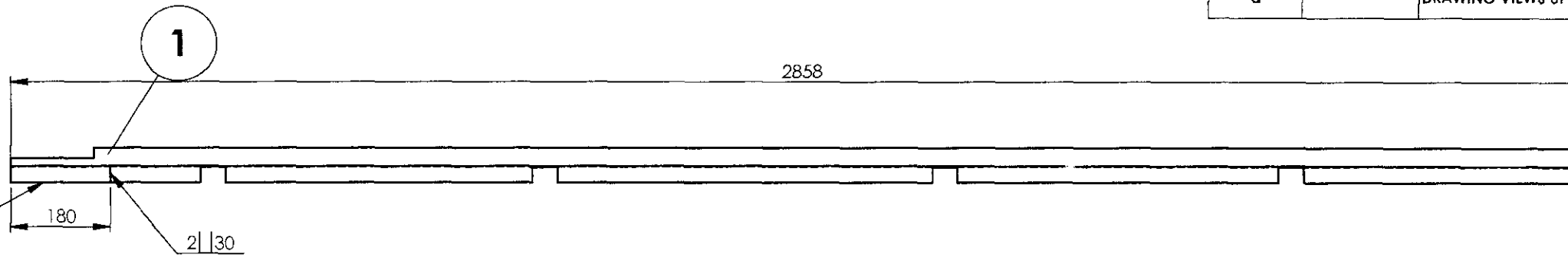
1	BACK PIECE		2	AAC14786		0.09	
1	HORIZONTAL MEMBER		1	AAG14795		1.72	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:0.231			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER ASSEMBLY					SCALE 1:5	SSE/D	
						CHD	
					ALT. a	ALTD	A.Palanichamy
						DRN	A.Palanichamy
INDIAN RAILWAY STANDARDS  INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	 TS/DTC		
					88914009		A3

88914010

▽ ROUGH MACHINED	⊖1 ROUGH CLEANED
▽▽ FINISH MACHINED	⊖1c BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖8 CHAMFERED

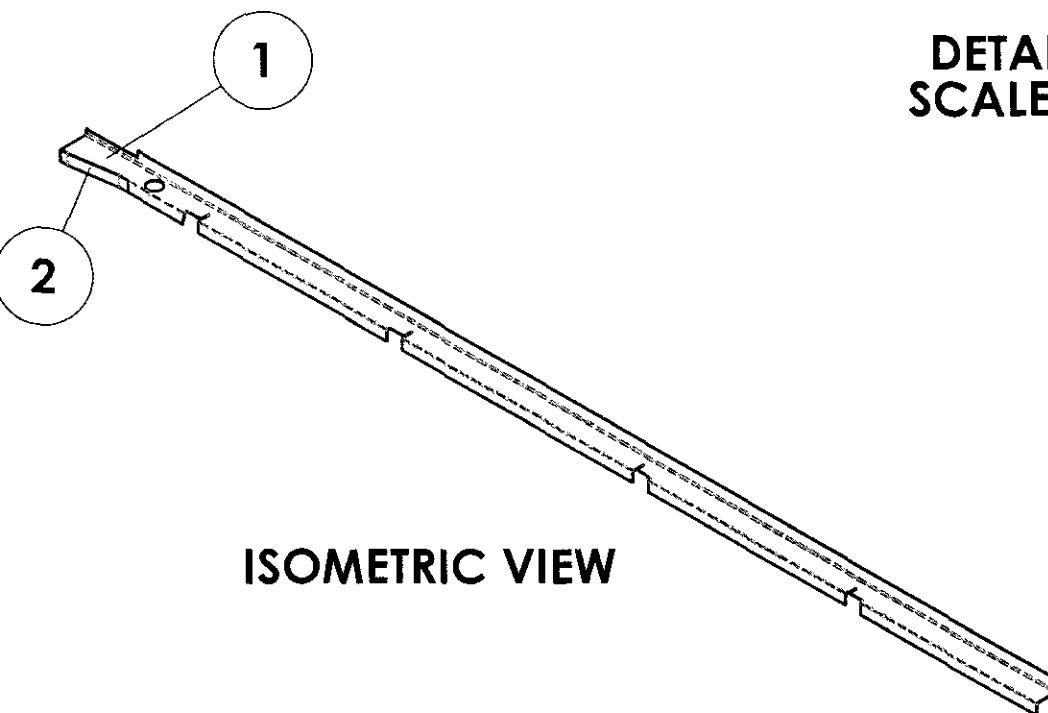
## REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING VIEWS UPDATED AS PER DETAIL.	<i>gh</i>

DETAIL X  
SCALE 1 : 2

## NOTE:

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



ISOMETRIC VIEW

1	BACK PIECE		2	AAC14786		0.09	
1	HORIZONTAL MEMBER		1	AAG14806		5.18	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4 Body Side Walls				SURFACE AREA IN Sq.m.:0.672		WT/ASSY IN Kgs:	
HORIZONTAL MEMBER ASSY					SCALE	SSE/D	<i>gh</i>
					1:10	CHD	
					ALT.	ALTD	A.Palanichamy
INDIAN RAILWAY STANDARDS					a	DRN	A.Palanichamy
					TS/DTC		
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET	88914010	
					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.  
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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

3 -10-2021	14-08-2021	<i>gh</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

88914011

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

① ROUGH CLEANED  
② BURRS REMOVED  
③ CHAMFERED

## REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &  
DATE

a

DRAWING VIEWS UPDATED AS PER DETAIL.

A

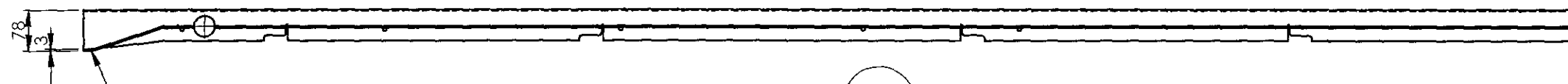
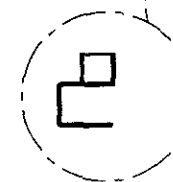
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2858

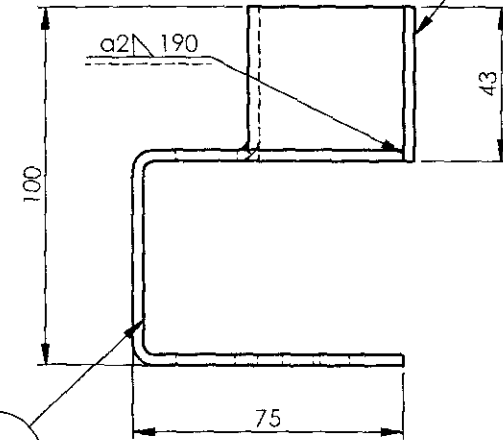
2 | 43

X



2

2

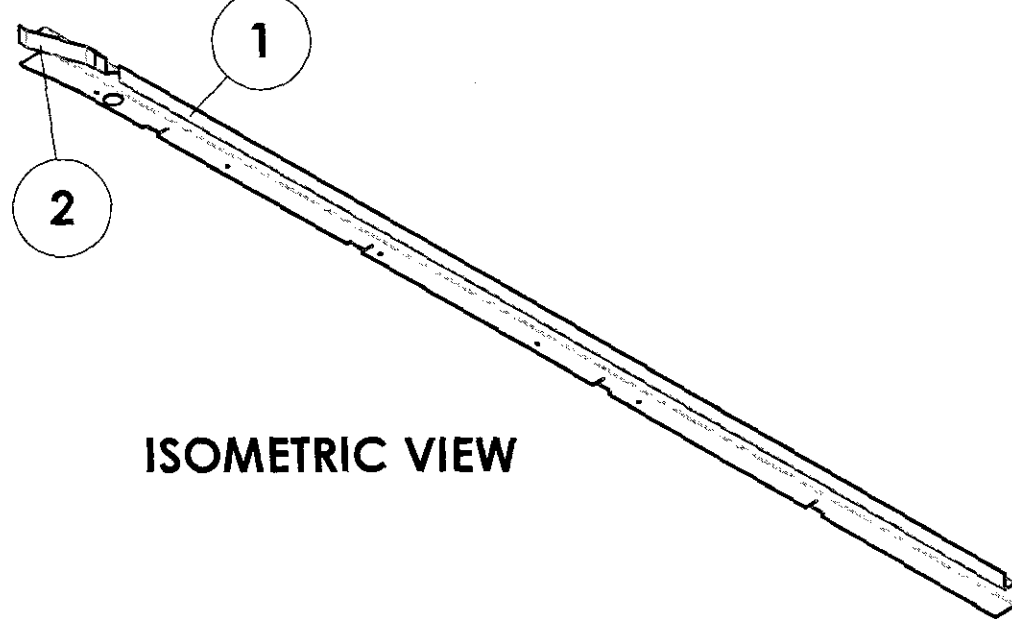


1

DETAIL X  
SCALE 1 : 2

## NOTE:

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



ISOMETRIC VIEW

REF.DRG.NO.

13-10-2021



14-08-2021

A

DATE OF LATEST ALT.


DATE OF FIRST ISSUE

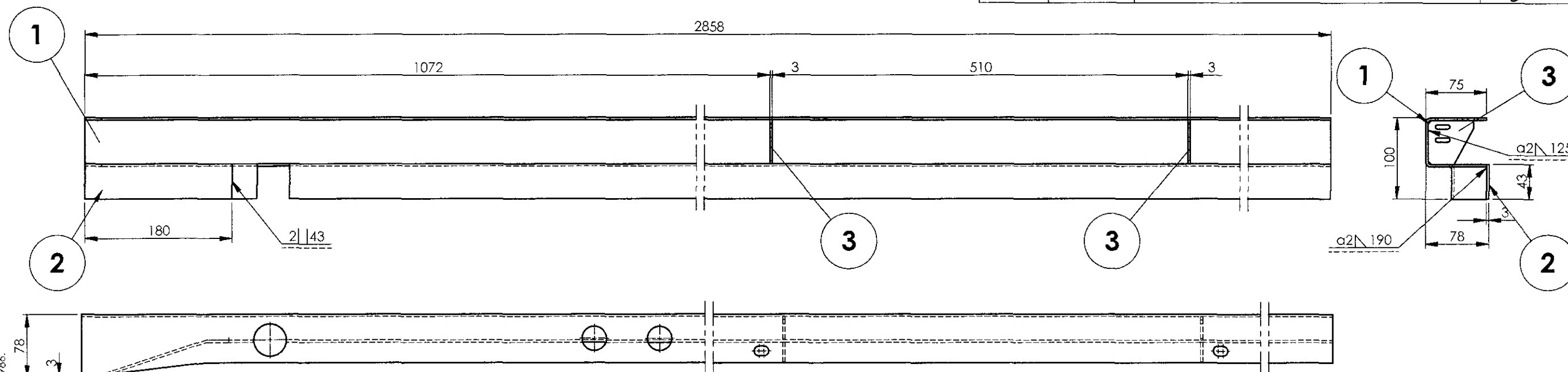
AME/SME

1	BACK PIECE		2	AAC14787		0.02		
1	HORIZONTAL MEMBER		1	AAG14807		12.37		
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
HORIZONTAL MEMBER ASSY					SCALE 1:1	SSE/D		
						CHD		
					ALT. a	ALTD	A.Palanichamy	
						DRN	A.Palanichamy	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			TS/DTC	
					88914011		A3	

88914012

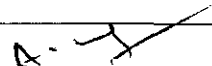
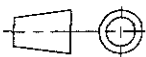
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

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



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

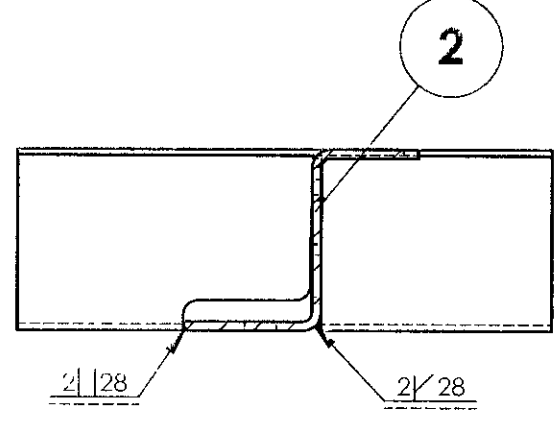
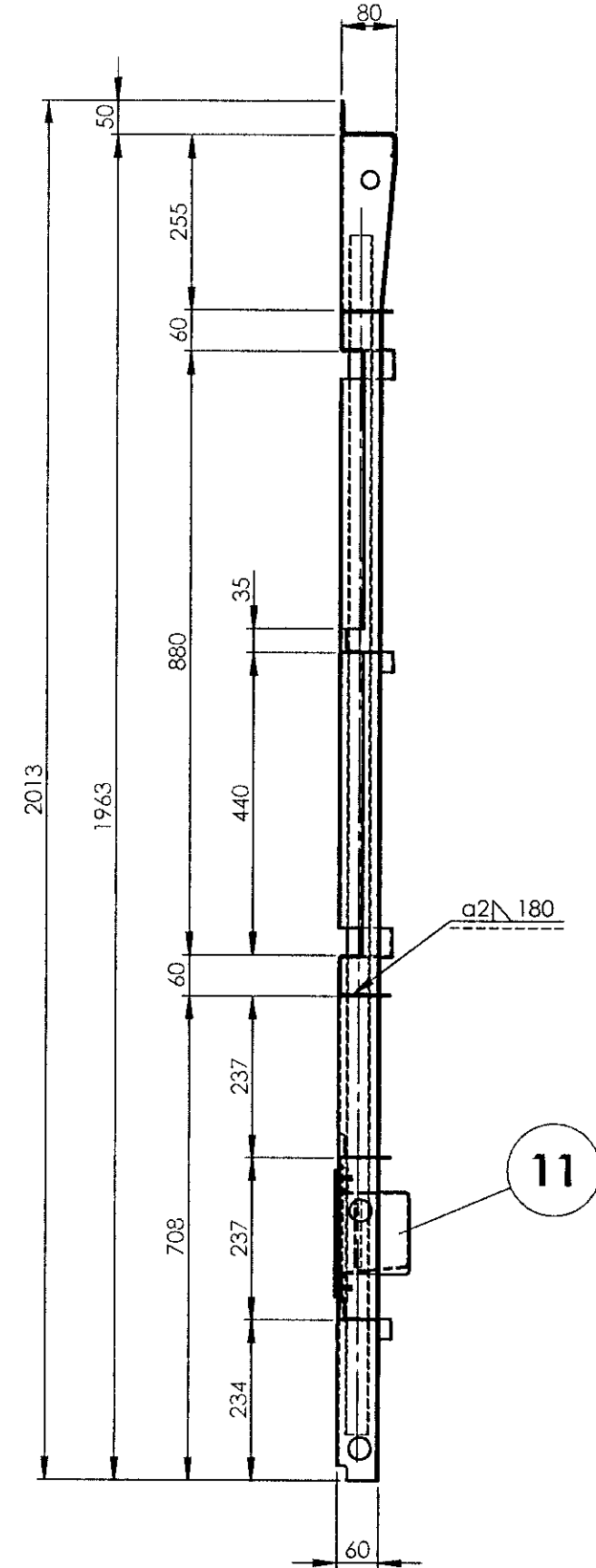
2	RIB		3	AAD14289		0.06		
1	BACK PIECE		2	AAC14787		0.02		
1	HORIZONTAL MEMBER		1	AAG14808		12.38		
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:			
HORIZONTAL MEMBER ASSEMBLY					SCALE	SSE/D		
					1:1	CHD		
					ALT.	ALTD	A.Palanichamy	
					a	DRN	A.Palanichamy	
INDIAN RAILWAY STANDARDS							TS/DTC	
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		88914012	A3

ISOMETRIC VIEW

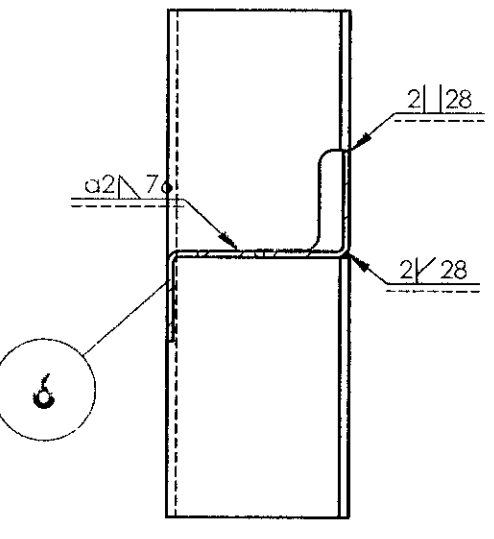
REF.DRG.NO.

13-10-2021	14-08-2021	shw
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

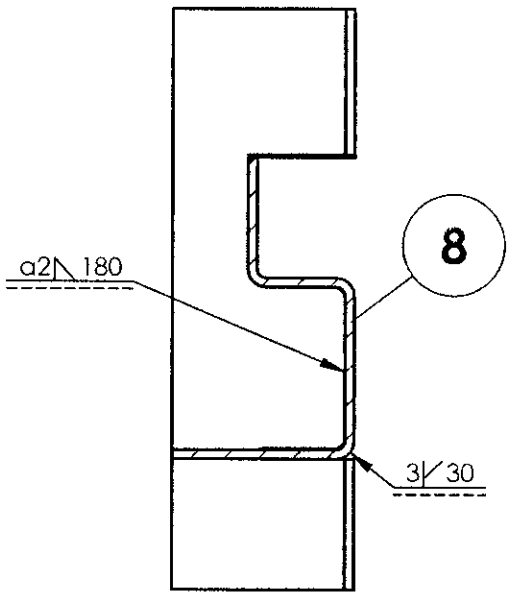
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.  
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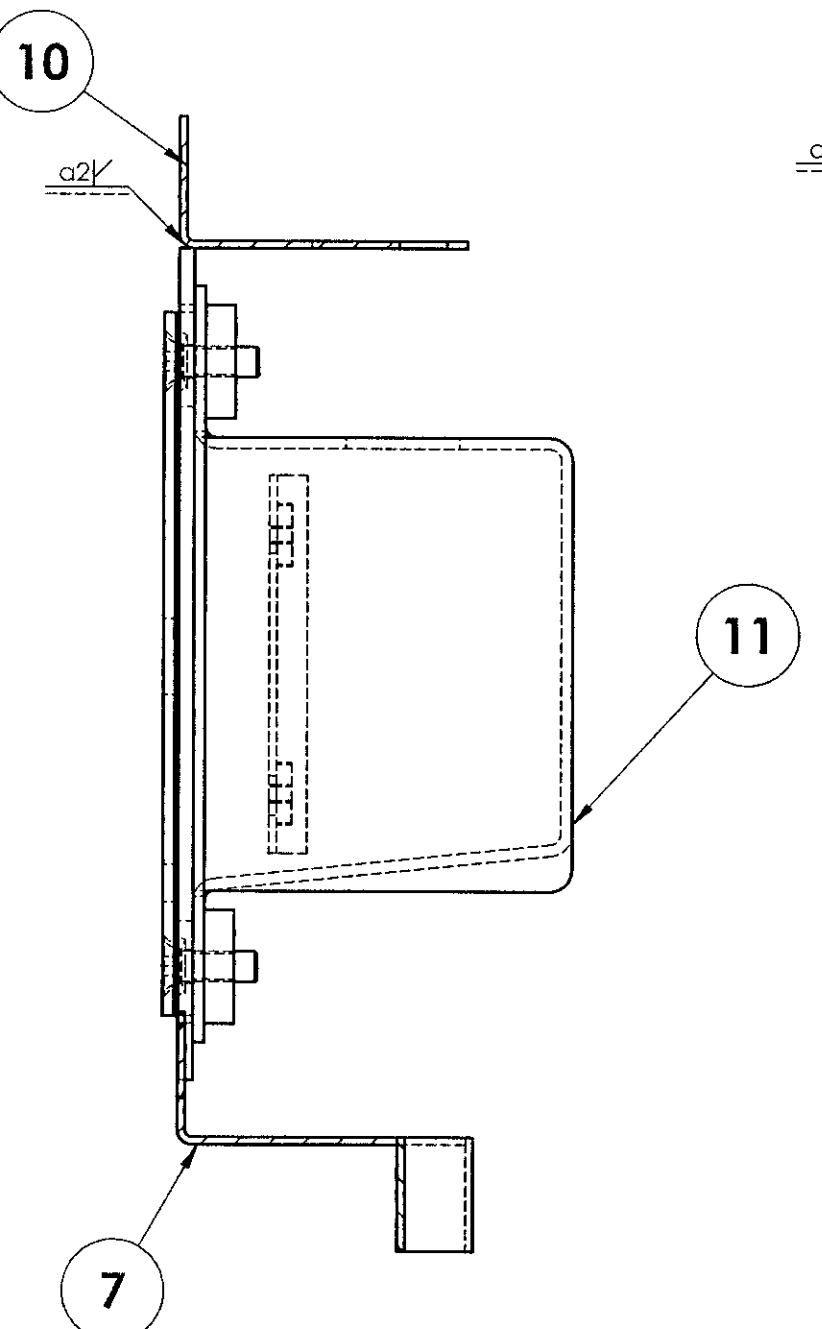
SECTION E-E  
SCALE 1 : 2.5



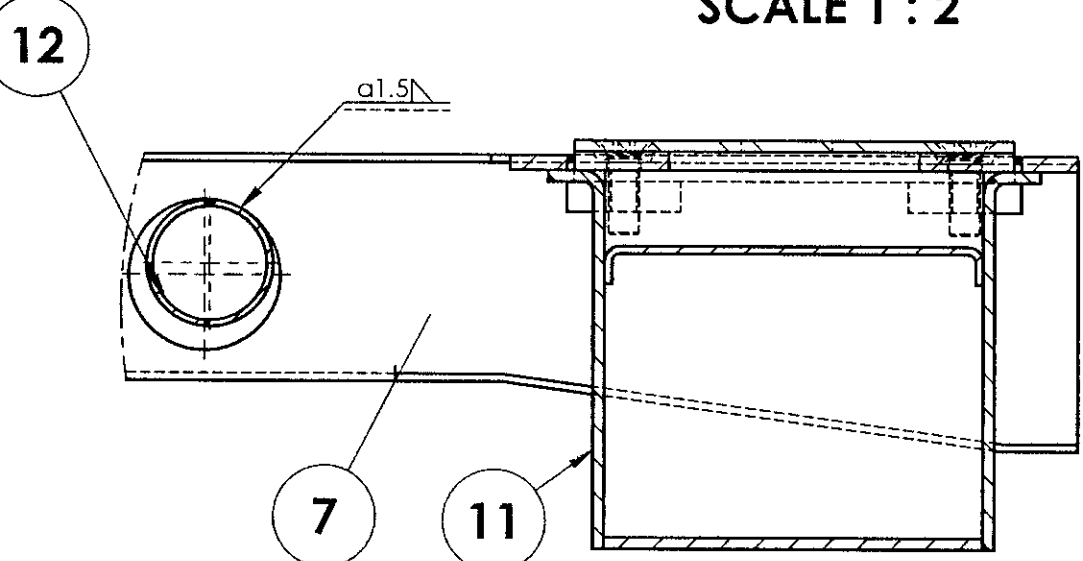
SECTION B-B  
SCALE 1 : 2.5



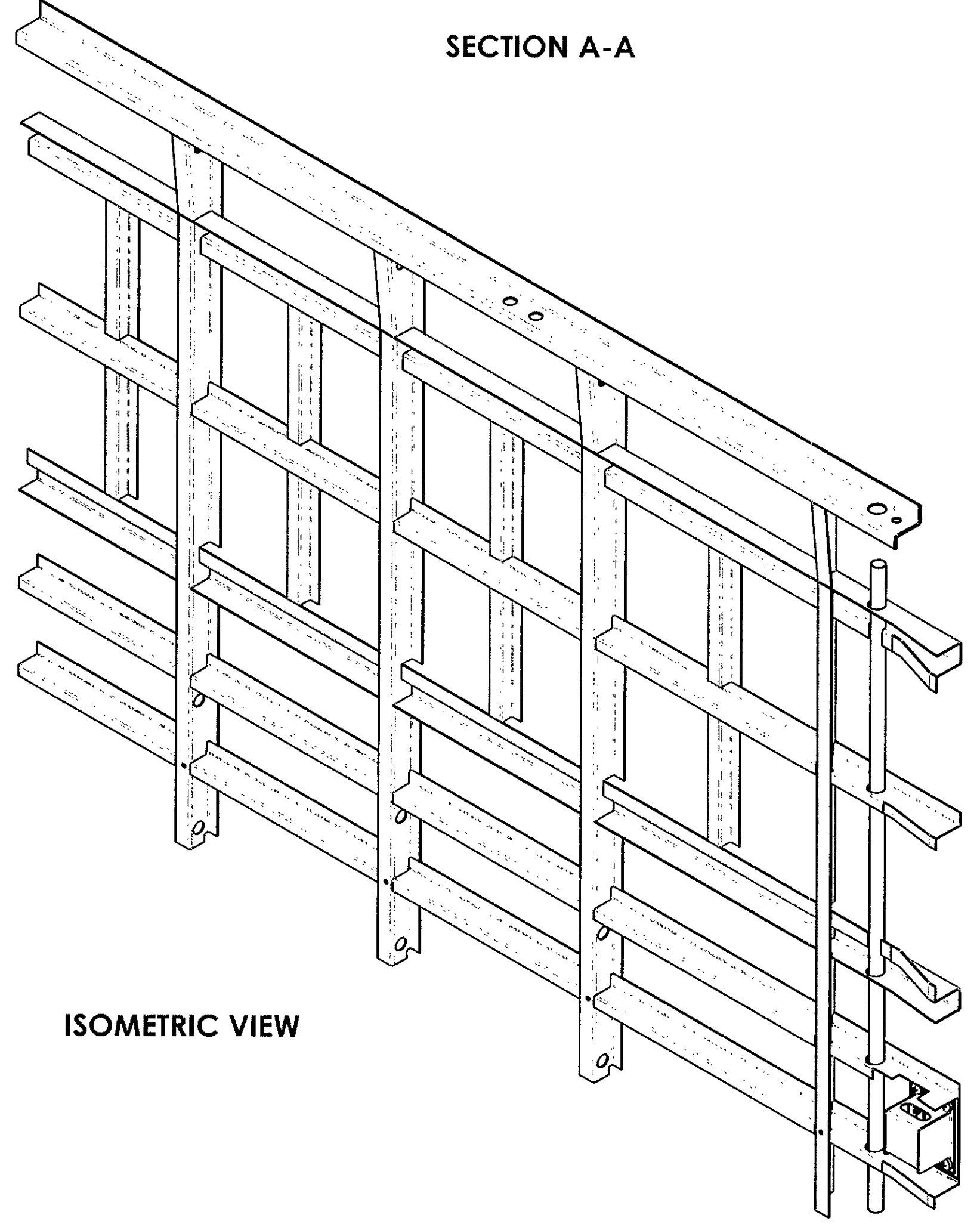
SECTION D-D  
SCALE 1 : 2.5



SECTION F-F  
SCALE 1 : 2



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



### ISOMETRIC VIEW

1. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RD50/SPEC. CK-201 SHALL BE USED FOR WELDING.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-99B.
7. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

4	HAT SUPPORT		<b>14</b>	AAJ14078		0.93
4	HAT SUPPORT		<b>13</b>	AAJ14077		1.00
1	PIPE	OD 33.4 x1.65t x 1750	<b>12</b>		AlSi-304	2.30
1	DOOR ASSEMBLY FOR EED		<b>11</b>	72614114		2.726
1	HORIZONTAL MEMBER		<b>10</b>	AAD14176		5.17
1	HORIZONTAL MEMBER ASSY		<b>9</b>	72614048		12.448
1	HORIZONTAL MEMBER ASSY		<b>8</b>	72614047		12.397
1	HORIZONTAL MEMBER ASSY		<b>7</b>	72614045		5.256
1	HORIZONTAL MEMBER ASSEMBLY		<b>6</b>	88914015		5.313
3	PART PILLAR L H		<b>5</b>	AAC14556		0.82
1	PART PILLAR R H		<b>4</b>	AAC14557		0.82
1	PILLAR R H		<b>3</b>	AAC14572		4.93
3	PILLAR L H		<b>2</b>	AAC14571		4.85
1	ROOF FLANGE		<b>1</b>	AAC14616		13.08

GROUP: 1-4 Body Side Walls		SURFACE AREA IN sq.m.		WT/ASSY IN Kgs.	
FRAME WORK COMPLETE		SCALE		SCALE 1:10 SSE/D CHD ALTD ARUN S DRN A.Palanichamy	
		1:10		A-✓	
		CHD			
		ALTD		ARUN S	
ALT.		a		DRN	
INDIAN RAILWAY STANDARDS		SHEET		TS/DTC	
INTEGRAL COACH FACTORY, CHENNAI - 600038		1 OF 1		88914013	
				A1	



88914015

▽ ROUGH MACHINED

▽▽ FINISH MACHINED

▽▽▽ FINE FINISH MACHINED

(01) ROUGH CLEANED

(01b) BURRS REMOVED

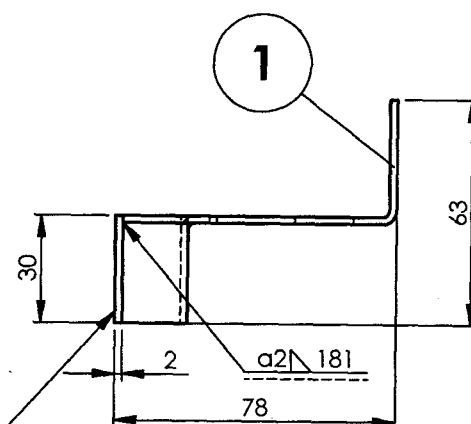
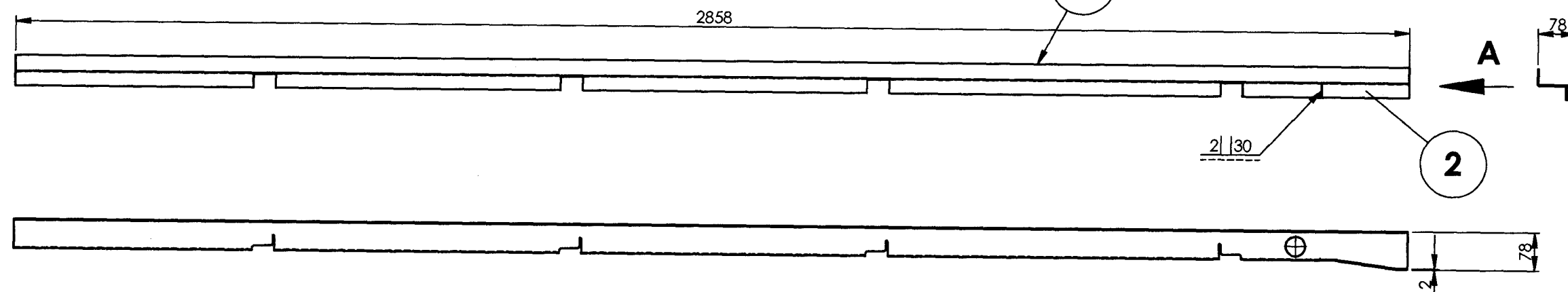
(18) CHAMFERED

## REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &  
DATEVIEW A  
SCALE 1 : 2

ISOMETRIC VIEW

REF.DRG.NO.


DATE OF LATEST ALT.

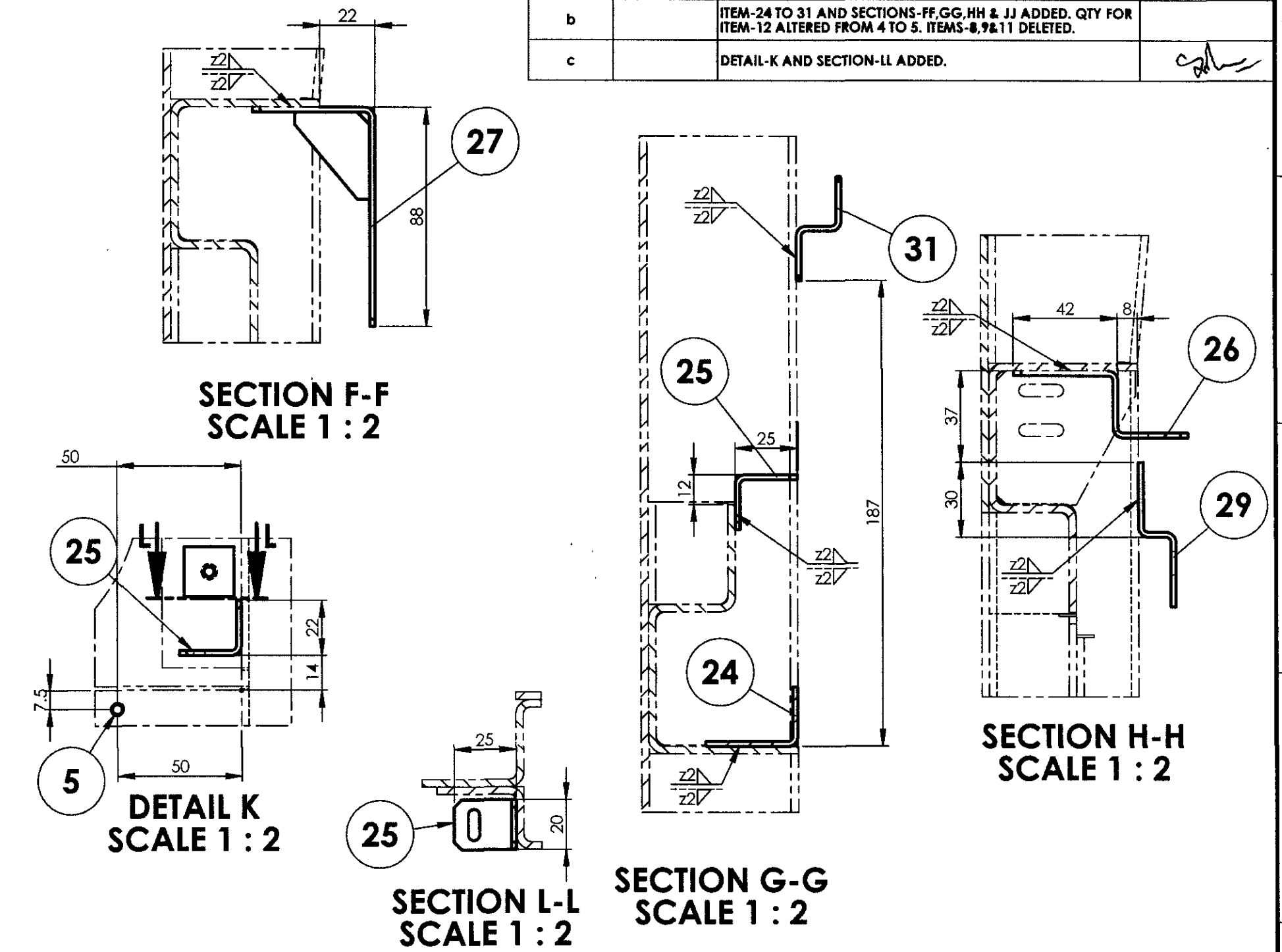
DATE OF FIRST ISSUE

AME/SME



1	BACK PIECE		2	AAC14786		0.09	
1	HORIZONTAL MEMBER		1	AAG14813		5.23	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
HORIZONTAL MEMBER ASSY					SCALE	SSE/D	A. w
					1:1	CHD	
					ALT.	ALTD	
						DRN	A.Palanichamy
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	TS/DTC		
					88914015		A3

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

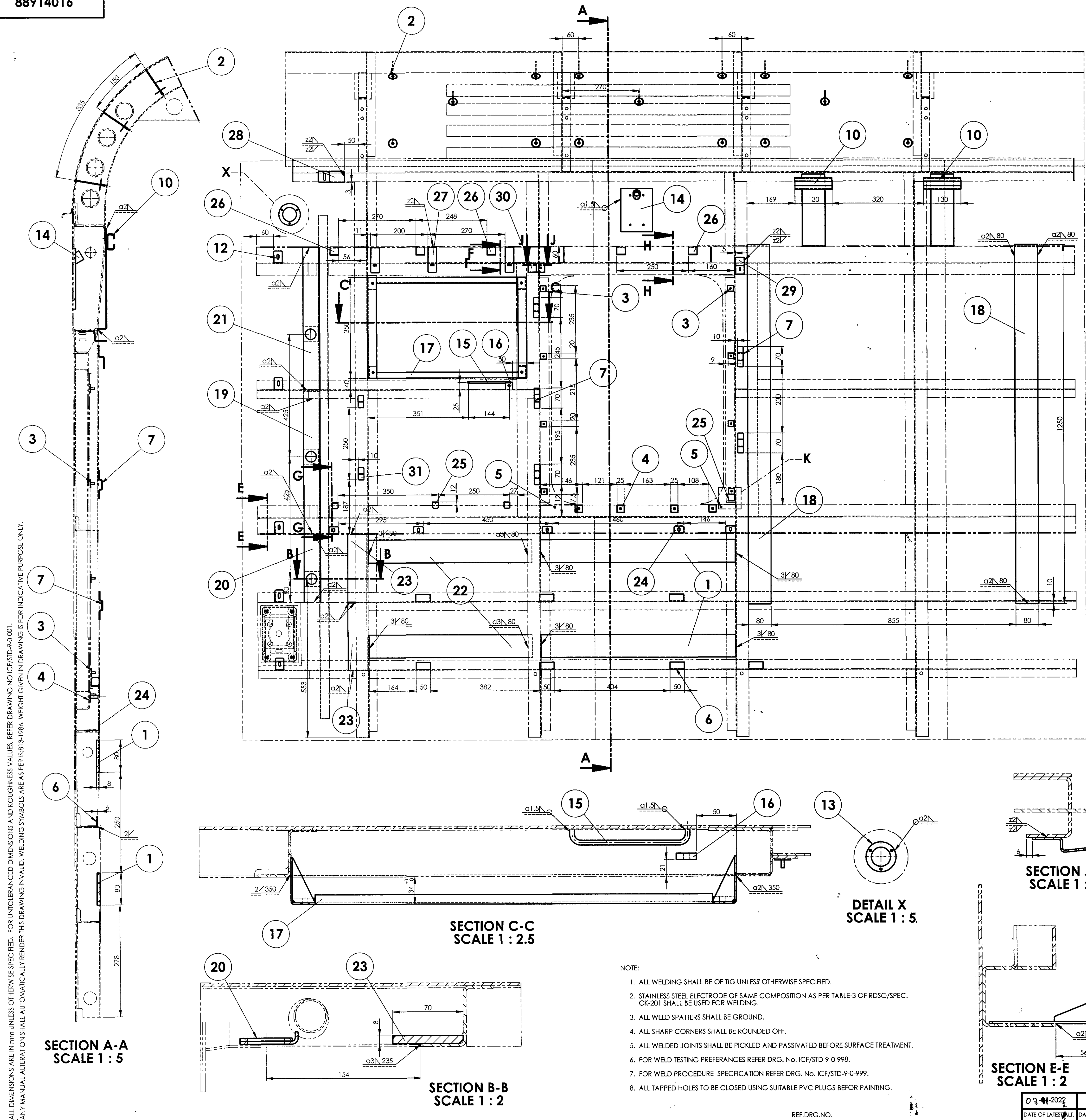
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEMS-19 TO 23 AND SECTION-BB ADDED. QTY OF ITEM-18 ALTERED FROM 3 TO 2.	sd/-
b		ITEM-24 TO 31 AND SECTIONS-FF,GG,HH & JJ ADDED. QTY FOR ITEM-12 ALTERED FROM 4 TO 5. ITEMS-B,8,&11 DELETED.	
c		DETAIL-K AND SECTION-LI ADDED.	



2	Z BRACKET		31	AAH14447		0.02	
1	Z BRACKET		30	AAH14444		0.03	
1	Z BRACKET		29	AAH14445		0.03	
1	BRACKET ASSEMBLY		28	88914039		0.088	
3	BRACKET COMPLETE		27	88914038		0.074	
5	BRACKET		26	AAH14441		0.04	
4	ANGLE		25	AAH14440		0.01	
5	BRACKET		24	AAH14419		0.03	
2	BACK PIECE FOR FIXING SEAT		23	AAH14048		1.04	
2	BACK PIECE FOR FIXING SEAT	8 x 80 x 570	22		SS-409M	2.92	
1	BACK PIECE FOR FUR PARTITION		21	88914035		0.78	
1	BACK PIECE FOR FUR PARTITION		20	88914034		0.38	
1	BACK PIECE FOR FUR PARTITION		19	88914033		0.78	
2	BACK PIECE	3x80x1250	18		RDSO/SPEC C-K201 X2CvN112	2.40	
1	FRAME ARRANGEMENT FOR CCMS		17	88914032		1.49	
1	EARTHING BLOCK		16	AAE14187		0.04	
1	CABLE TIE ROD		15	AAG14822		0.04	
1	BACKPIECE FOR FACIL		14	AAA14904		0.455	
1	BACK PIECE FOR LED INDICATOR		13	AAB15088		0.12	
5	BRACKET COMPLETE		12	72614104		0.089	
1	BRACKET-		11	AAD14964		0.04	
2	CHANNEL ASSY		10	72614103		0.420	
4	BRACKET-		9	AAD14922		0.03	
6	BRACKET-ASSEMBLY-		8	72614100		0.068	
5	BRACKET		7	AAD14921		0.03	
7	ANGLE		6	AAD14291		0.04	
2	STUD	M5x16	5	DIN-976-1 A2-70 TY-B		0.00	
4	STUD PLATE		4	72714020		0.010	
8	STUD PLATE		3	72714019		0.004	
15	WELDING PIN ASSEMBLY		2	49514008		0.005	
2	BACK PIECE	8 x 80 x 480	1		SS-409M	3.48	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:		WT/SSY IN Kgs:		
WELDING PARTS ON SIDEWALL				SCALE 1:7	SSE/D CHD 	
				ALT. C	ALTD DRN ARUN S A.Palanichamy	
						TS/DTC
				INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		SHEET 1 OF 1
				88914016		
				A1		

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO CF/STD-9-001.  
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER S8.3.1-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.



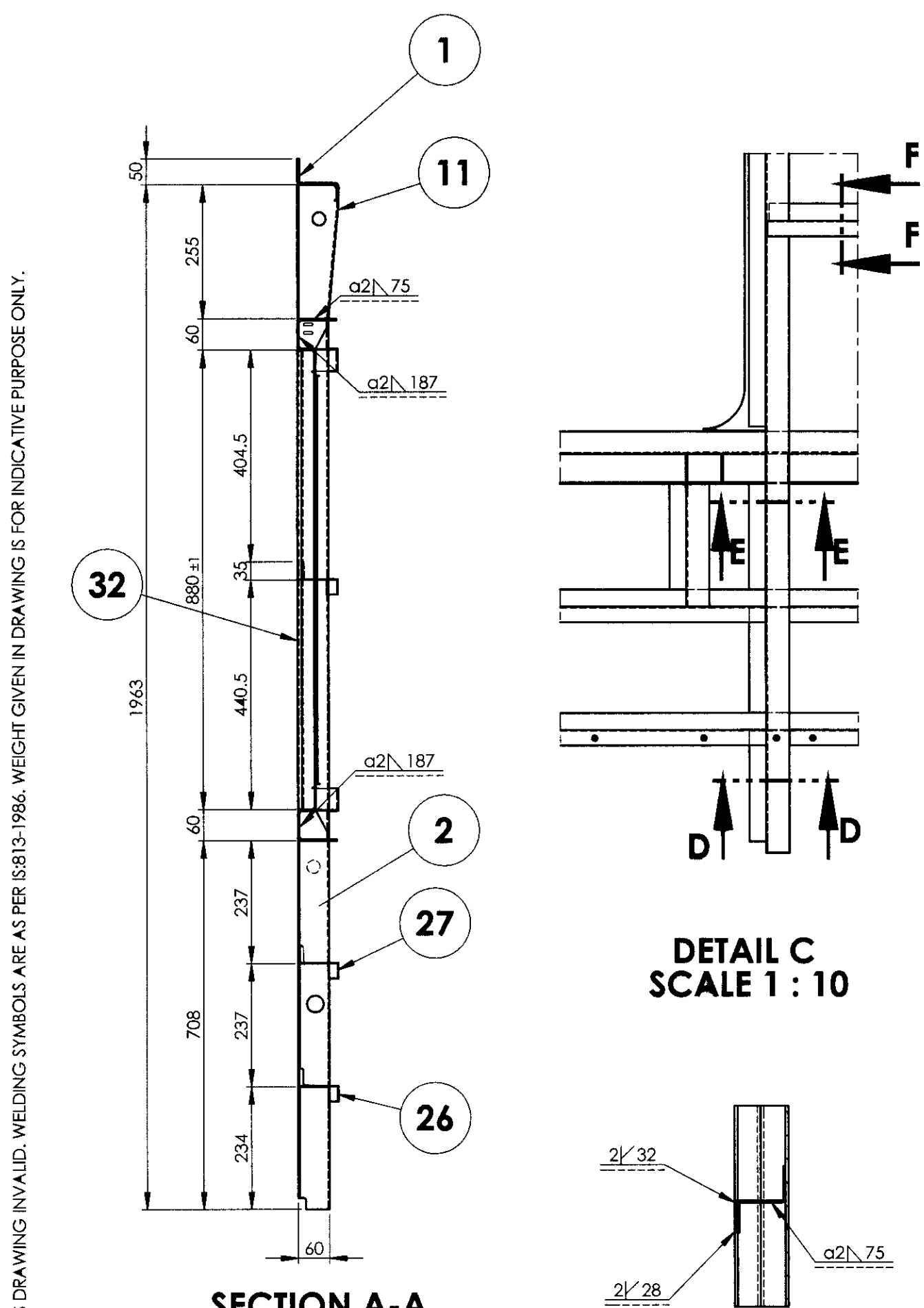
NOTE:

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

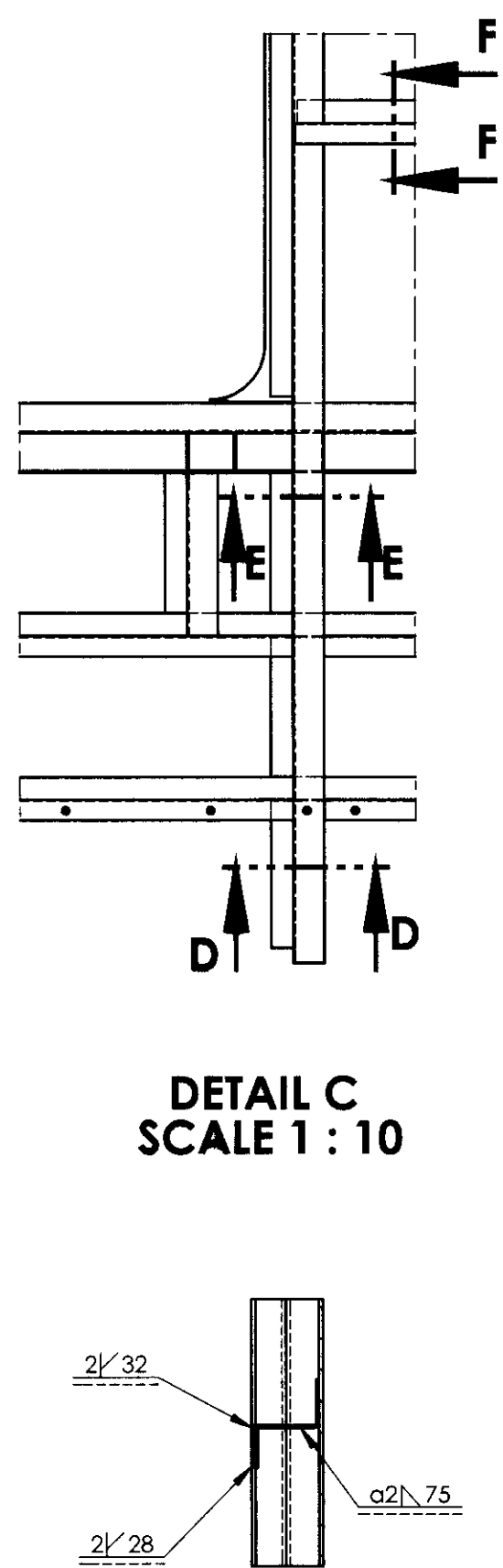
REF.DRG.NO.

03- <del>11</del> -2022	14-08-2021	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME





**DETAIL C**  
**SCALE 1 : 10**



**SECTION D-D**  
SCALE 1 : 5

**SECTION E-E**  
SCALE 1 : 5

**SECTION G-G**  
SCALE 1 : 5

Technical drawings showing three cross-sections of a mechanical part:

- SECTION D-D** and **SECTION E-E** are shown at a scale of 1 : 5. Both sections show a rectangular profile with a central slot. The top surface is dimensioned as  $2\sqrt{28}$  and the bottom surface as  $\phi 2\sqrt{75}$ .
- SECTION G-G** is shown at a scale of 1 : 5. It shows a more complex profile with a central horizontal section of length 460. The total width is 24. The central section has a height of 52. The bottom surface is dimensioned as  $\phi 2\sqrt{75}$ . The drawing includes callouts 3, 31, and 2.

**SECTION E-E**  
**SCALE 1 : 5**

Technical drawing of a vertical assembly. Dimensions and callouts include:

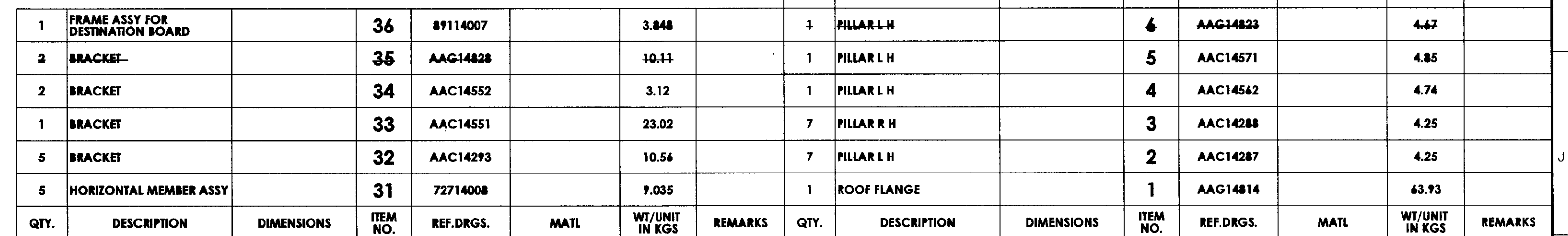
- 10 (top dimension)
- 1 (callout to top flange)
- 2  $\sqrt{1190}$  (dimension for top flange)
- 48.5 (dimension for top flange)
- 35 (callout to top flange)
- 17.5 (dimension for top flange)
- 2  $\sqrt{1190}$  (dimension for top flange)
- 18 (callout to top flange)
- 32 (dimension for top flange)
- 31 (callout to top flange)
- $\alpha 2 \sqrt{3 \times 75(75)}$  (dimension for top flange)
- $\alpha 2 \sqrt{3 \times 75(75)}$  (dimension for top flange)

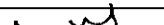

**SECTION H-H**  
**SCALE 1 : 5**

- |      |                                     |            |             |           |      |                   |         |
|------|-------------------------------------|------------|-------------|-----------|------|-------------------|---------|
| 1    | BRACKET                             |            | 36          | AAC14551  |      | 23.02             |         |
| 1    | FRAME ASSY FOR<br>DESTINATION BOARD |            | 35          | 89114007  |      | 3.848             |         |
| 1    | BRACKET                             |            | 34          | AAG14828  |      | 10.11             |         |
| 1    | BRACKET                             |            | 33          | AAG14827  |      | 22.67             |         |
| 2    | BRACKET                             |            | 32          | AAC14552  |      | 3.12              |         |
| QTY. | DESCRIPTION                         | DIMENSIONS | ITEM<br>NO. | REF.DRGs. | MATL | WT/UNIT<br>IN KGS | REMARKS |

5	BRACKET		31	AAC14293		10.56	
1	HORIZONTAL MEMBER ASSY		30	72614044		6.436	
1	HORIZONTAL MEMBER ASSY		29	72614043		6.567	
1	HORIZONTAL MEMBER ASSY		28	72614042		1.130	
1	HORIZONTAL MEMBER ASSY		27	72614041		2.764	
1	HORIZONTAL MEMBER ASSY		26	72614079		2.754	
1	HORIZONTAL MEMBER ASSY		25	72614040		10.209	
1	HORIZONTAL MEMBER ASSY		24	72614039		1.548	
1	HORIZONTAL MEMBER ASSY		23	72614038		10.152	
2	HORIZONTAL MEMBER ASSY		22	72614037		4.270	
4	HORIZONTAL MEMBER ASSY		21	88914031		6.388	
4	HORIZONTAL MEMBER ASSY		20	88914030		6.819	
5	HORIZONTAL MEMBER ASSY		19	72714010		9.012	
5	HORIZONTAL MEMBER ASSY		18	72714008		9.035	
1	HORIZONTAL MEMBER		17	AAC14568		1.41	
5	HORIZONTAL MEMBER		16	AAC14567		0.44	
5	HORIZONTAL MEMBER		15	AAC14292		3.63	
2	HORIZONTAL MEMBER		14	AAD14082		3.61	
3	HORIZONTAL MEMBER		13	AAD14076		3.61	
14	PART PILLAR R H		12	AAC14557		0.82	
11	PART PILLAR L H		11	AAC14556		0.82	
5	PART PILLAR R H		10	AAC14289		2.10	
1	PILLAR R H		9	AAC14572		4.93	
1	PILLAR R H		8	AAC14561		4.74	
5	PART PILLAR R H		7	AAC14826		0.71	
5	PART PILLAR L H		6	AAC14824		0.71	
4	PILLAR R-H		5	AAG14824		4.67	
4	PILLAR L-H		4	AAG14823		4.67	
7	PILLAR R H		3	AAC14288		4.25	
7	PILLAR L H		2	AAC14287		4.25	
1	ROOF FLANGE		1	AAG14815		63.93	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
<b>FRAME WORK COMPLETE</b>		SCALE		SSE/D	
		1:50		CHD	
		ALT.		ALTD	A.Muthukumar
		c		DRN	A.Palanichamy
<b>INDIAN RAILWAY STANDARDS</b> INTEGRAL COACH FACTORY, CHENNAI - 600038		SHEET			
		1 OF 1		<b>TS/DTIC</b>	
				<b>88914020</b>	
				<b>A1</b>	



GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
<b>FRAME WORK COMPLETE</b>				SCALE	
				1:20	SSE/D CHD
				ALT. C	ALTD A.Muthukumar
				DRN	A.Palanichamy
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		SHEET 1 OF 1			<b>TS/DTC</b>
				<b>88914021</b> <b>A1</b>	

88914024

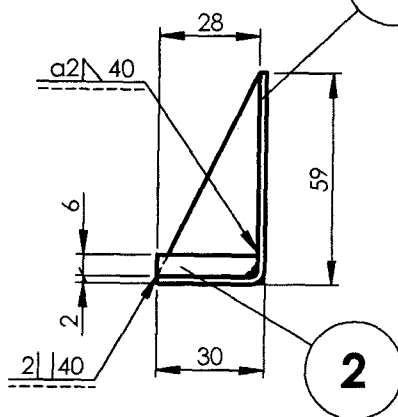
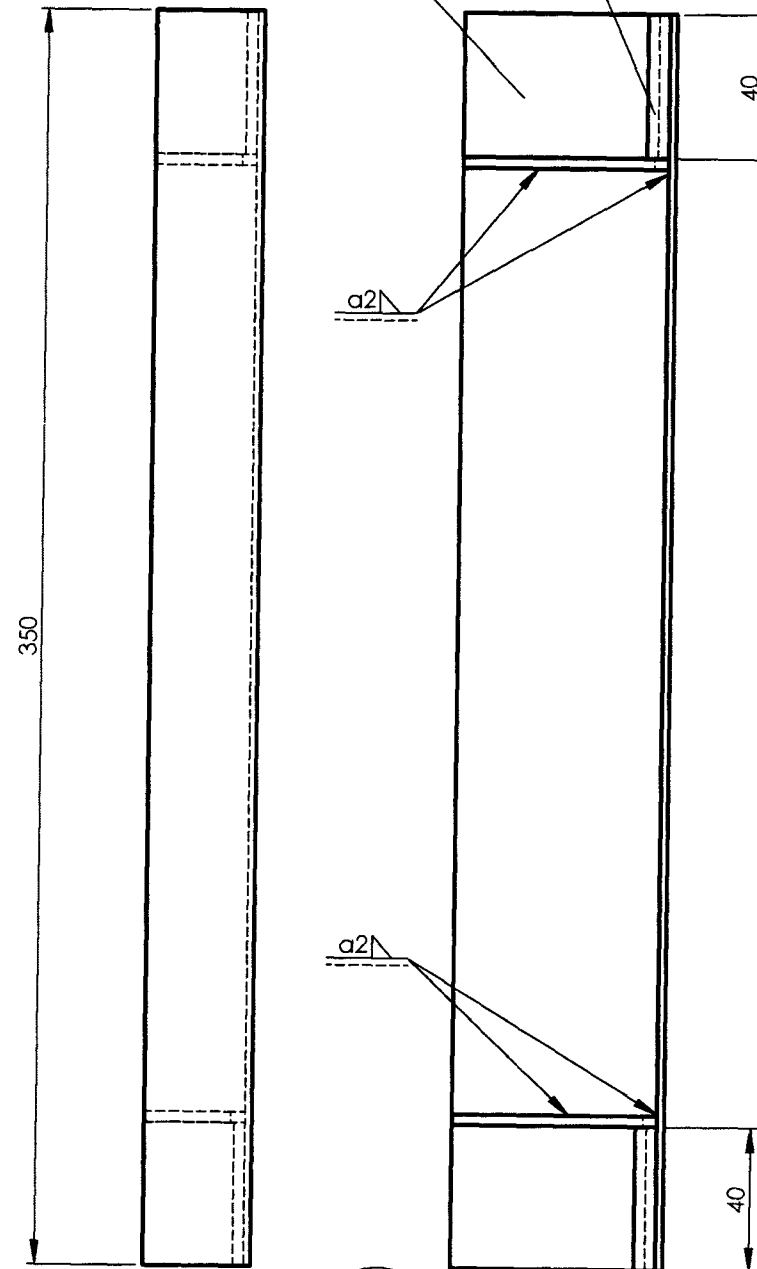
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

## REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &  
DATE

2	RIB	3x27x57	3		RDSO SPEC C-K201 X2 Cr Ni 12	0.02	
2	SCREWING PIECE	6x28x40	2		SS-409M	0.05	
1	ANGLE	2x85x350	1		RDSO SPEC C-K201 X2 Cr Ni 12	0.48	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATERIAL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4 Body Side Walls

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

## ANGLE ASSEMBLY FOR CCMS

SCALE 1:2

SSE/D

CHD

ALT.

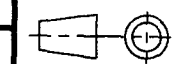
ALTD

DRN

A.Palanichamy

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET  
1 OF 1

TS/DTC

88914024

A3

REF.DRG.NO.-

DATE OF LATEST ALT.

DATE OF FIRST ISSUE


AME/SME

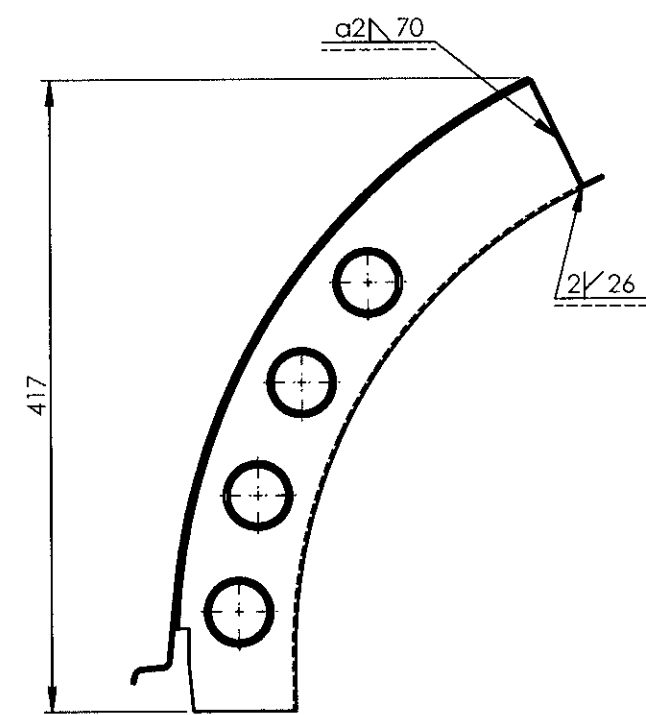
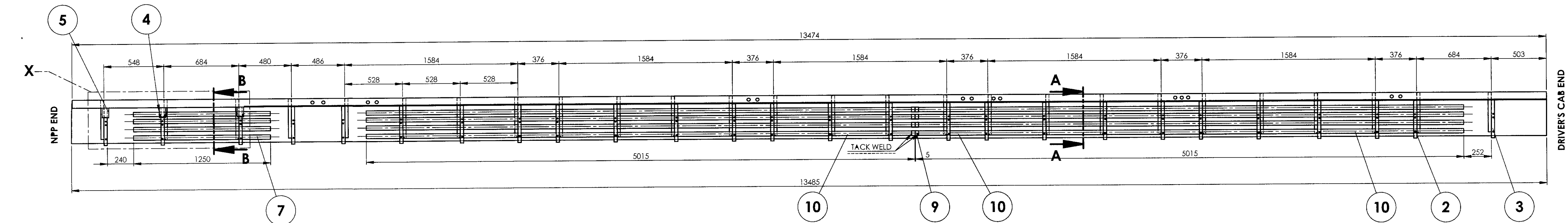
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.  
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.  
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE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

88914025

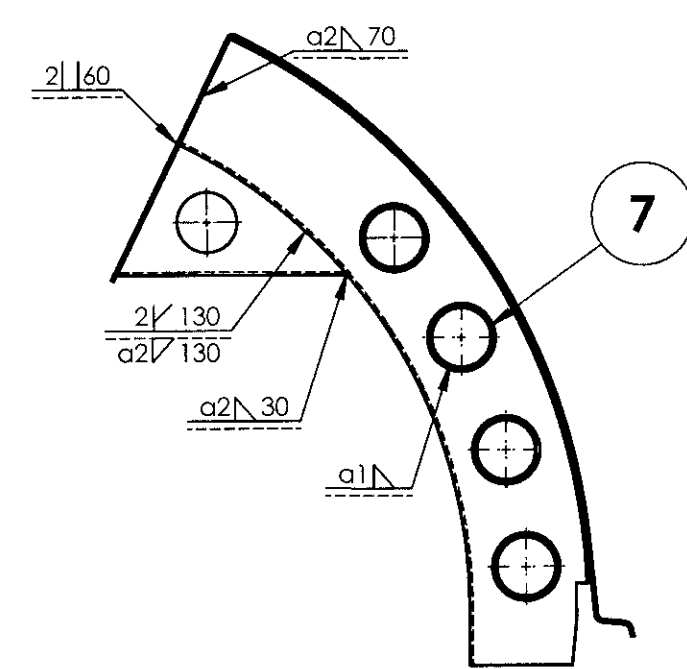
▽ ROUGH MACHINED  
▽▽ FINISH MACHINED  
▽▽▽ FINE FINISH MACHINED

⑩ ROUGH CLEANED  
⑩⑪ BURRS REMOVED  
⑩⑫ CHAMFERED

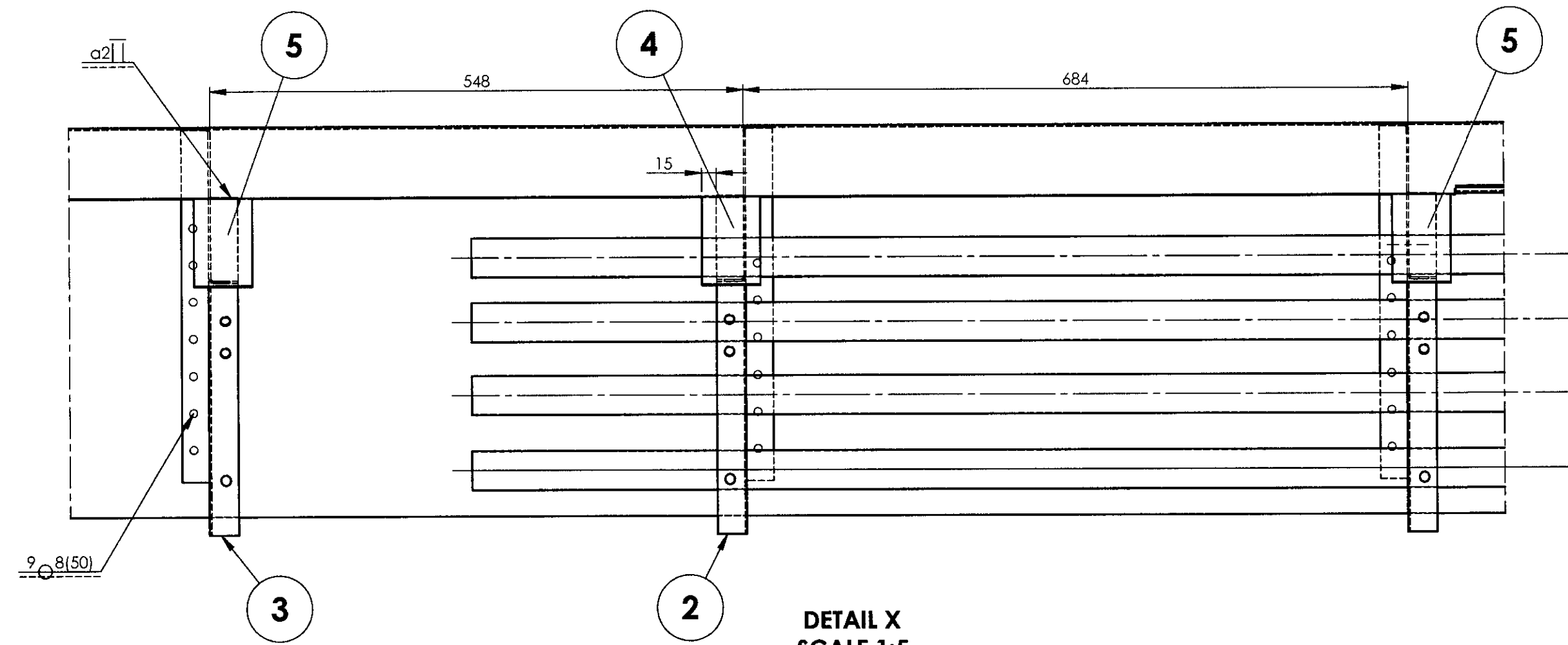
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM-9,10 & NOTE-8 ADDED AND ITEMS-4 & 8 DELETED.	



SECTION A-A  
SCALE 1 : 5



SECTION B-B  
SCALE 1 : 5



DETAIL X  
SCALE 1:5

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


8	CONDUIT	1x OD40x5015	10		AISI 304	4.92	\$
4	COUPLER FOR CONDUITS		9	AAC16245		0.15	
4	CONDUIT	1x OD40x5850	8	-	AISI 304	2.90	
4	CONDUIT	1 x OD40 x 1250	7		AISI 304	0.62	\$
4	CONDUIT	1x OD40x4180	6	-	AISI 304	2.67	
2	ANGLE ASSY		5	72714009		0.254	
1	ANGLE ASSY		4	72714007		0.254	
14	ARCH R H		3	AAC14831		0.850	
12	ARCH L H		2	AAC14830		0.849	
1	CARLINE		1	AAG14819		129.237	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-4 Body Side Walls				SURFACE AREA IN Sq.m.: 30.322		WT/ASSY IN Kgs:	
CARLINE COMPLETE				SCALE 1:20	SSE/D CHD		
				ALT. a	ALTD DRN	A.Palanichamy	
				TS/DTC			
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		88914025	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A1	

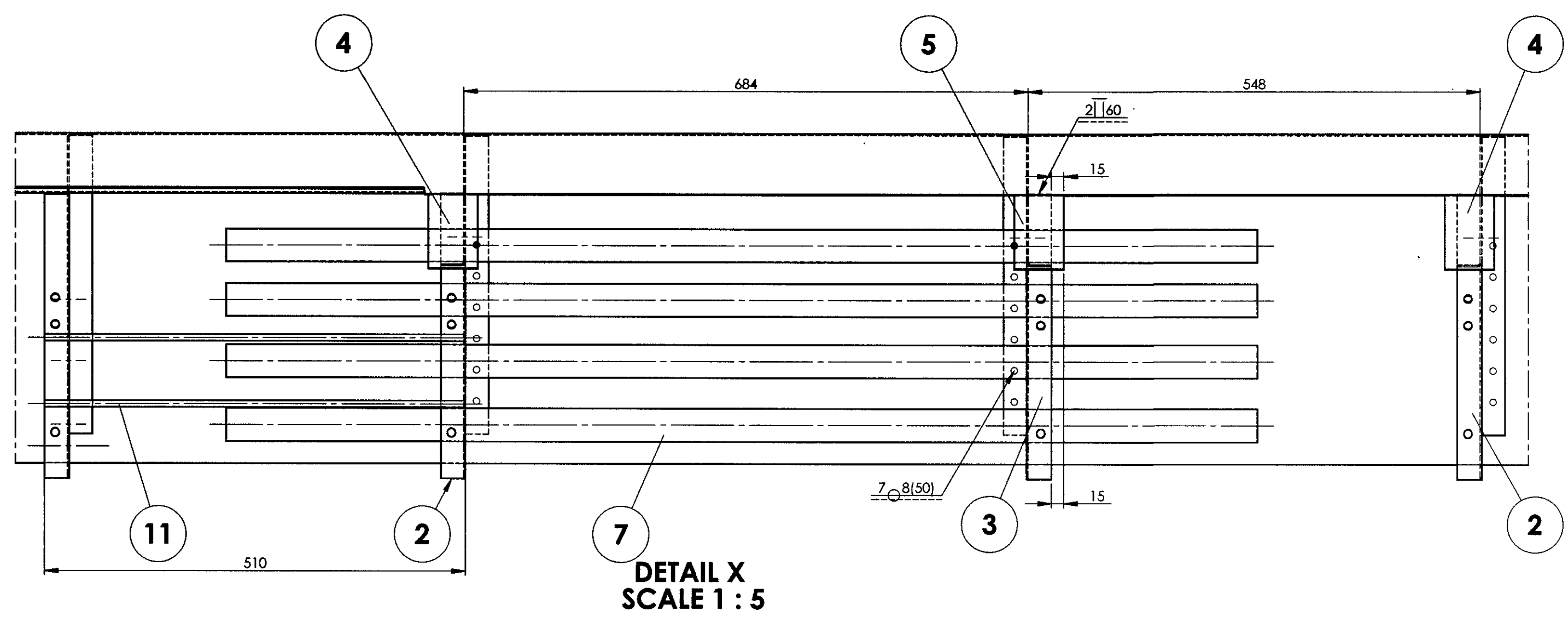
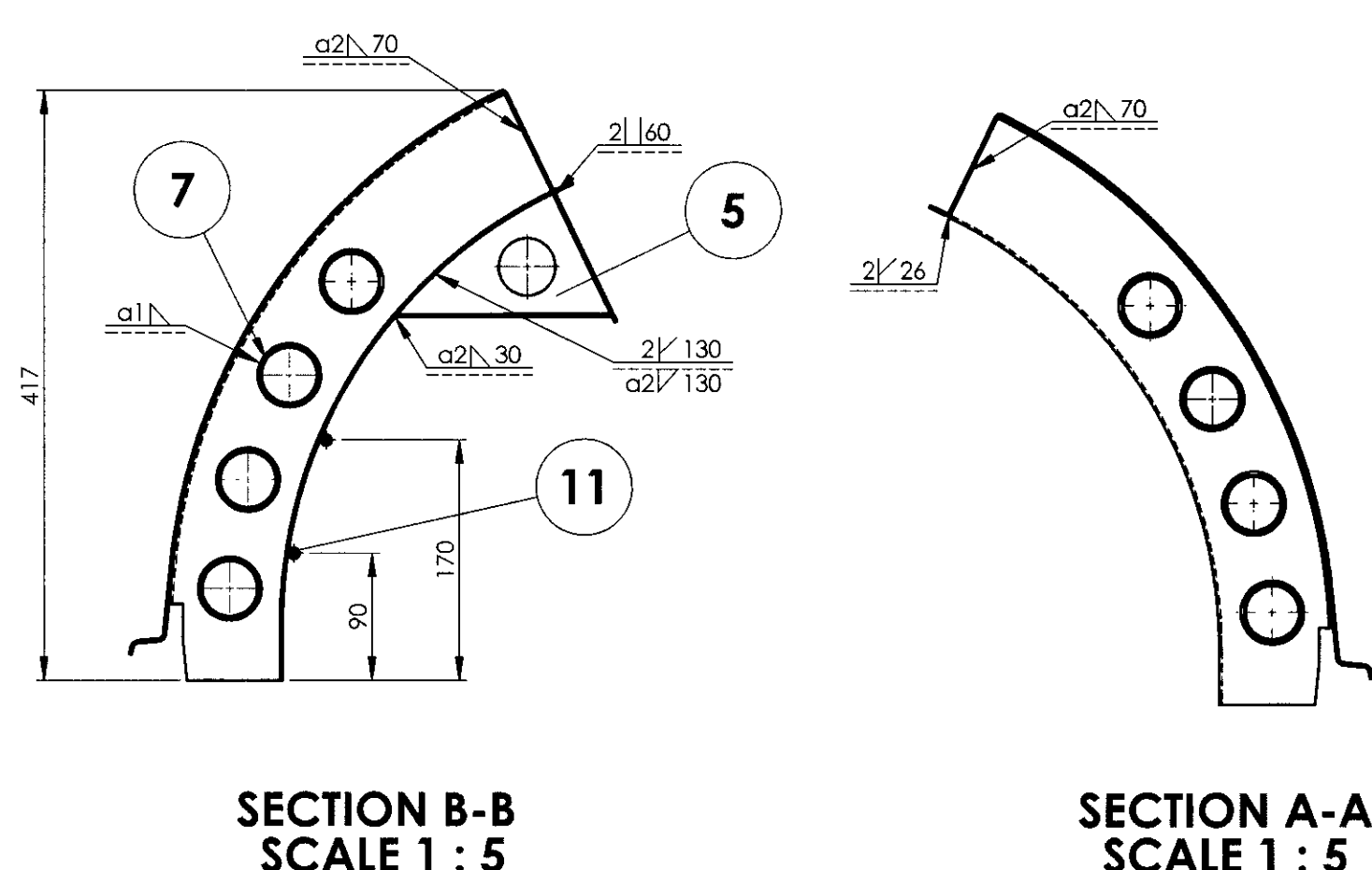
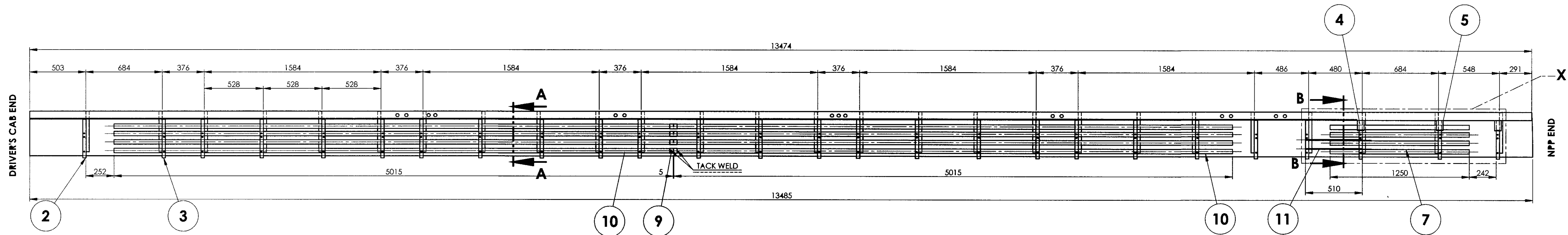
REF.DRG.NO.:-

17-02-2022 14-08-2021  
DATE OF LATEST ALT. DATE OF FIRST ISSUE  
AME/SME

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

①	ROUGH CLEANED
⑥	BURRS REMOVED
⑯	CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM-9,10 & NOTE-8 ADDED AND ITEMS-6 & 8 DELETED.	sd/-
b		ITEM-11 ADDED.	



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

2	TIE ROD	$\varnothing 8 \times 510$	11		AISI 304	0.21	
8	CONDUIT	1x OD40x5015	10		AISI 304	4.92	\$
4	COUPLER FOR CONDUITS		9	AAC16245		0.15	
4	CONDUIT	1x OD40 x 4180	8	-	AISI-304	2.07	
4	CONDUIT	1 x OD40 x 1250	7		AISI 304	0.42	\$
4	CONDUIT	1x OD40 x 6860	6	-	AISI-304	2.90	
1	ANGLE ASSY		5	72714009		0.254	
2	ANGLE ASSY		4	72714007		0.254	
12	ARCH R H		3	AAC14831		0.850	
14	ARCH L H		2	AAC14830		0.849	
1	CARLINE		1	AAG14820		129.234	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGs.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-4 Body Side Walls SURFACE AREA IN Sq.m.: 30.347 WT/ASSY IN Kgs:

CARLINE COMPLETE		SCALE 1:20	SSE/D CHD	A. Palanichamy
		ALT. b	ALTD DRN	A. Palanichamy

INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

TS/DTC

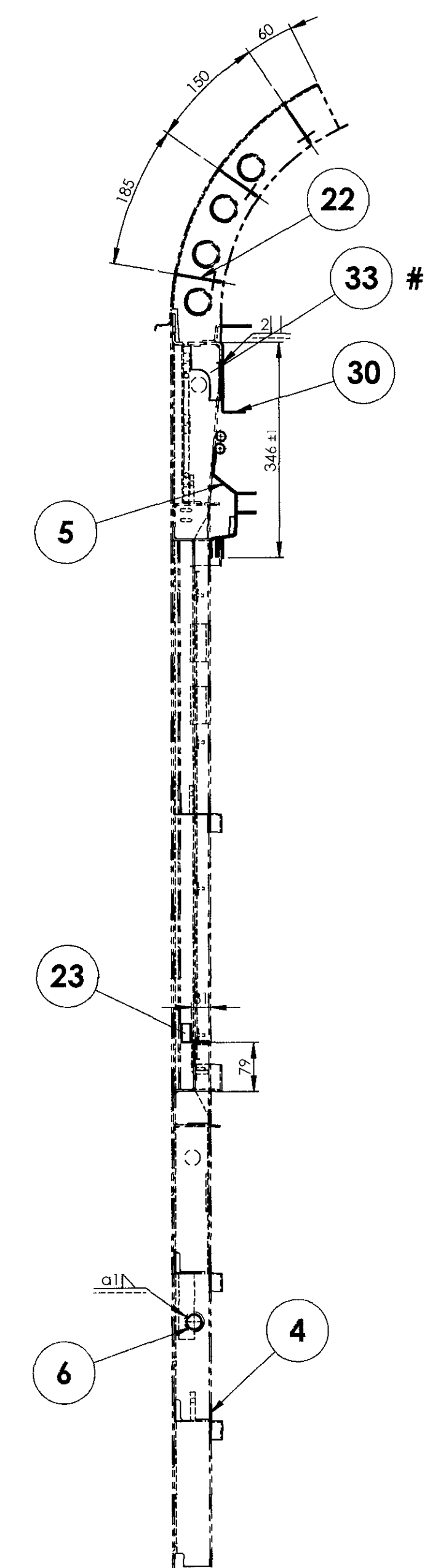
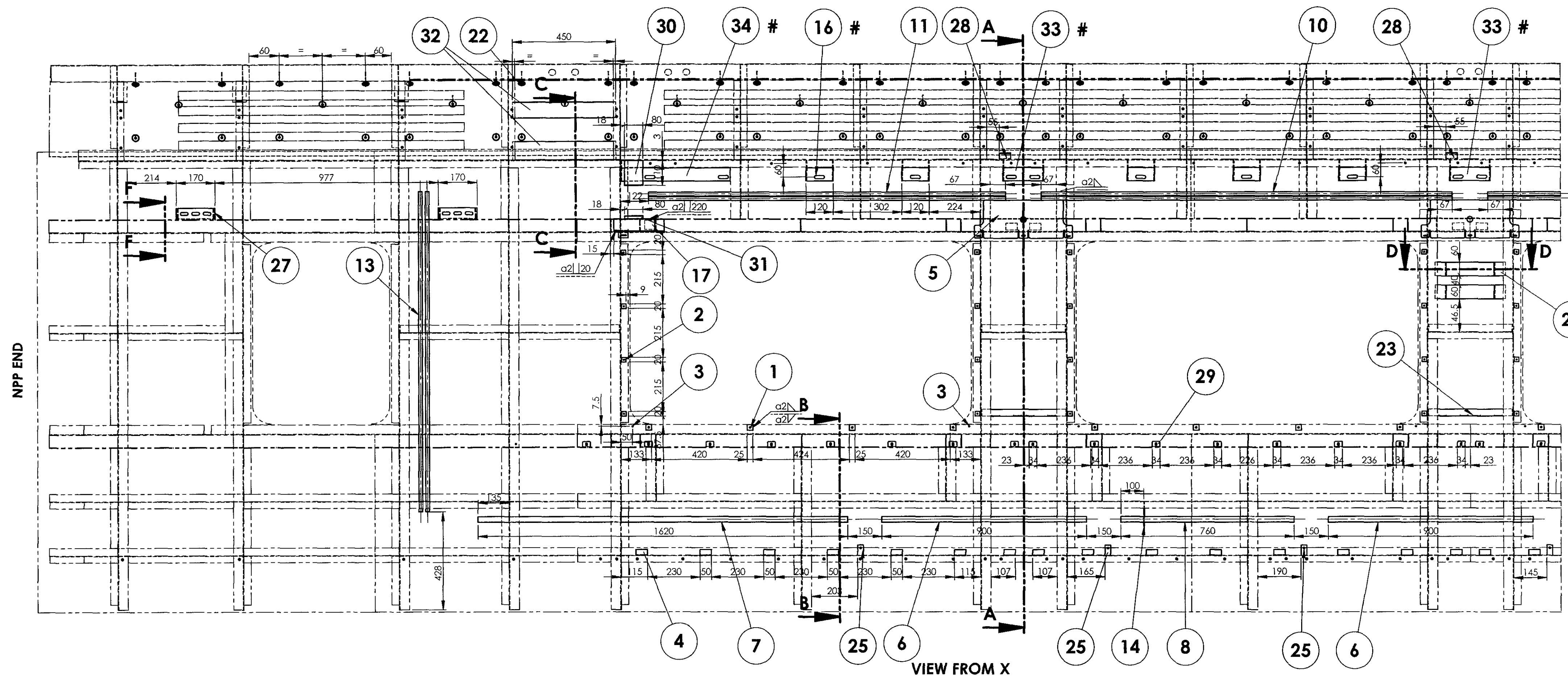
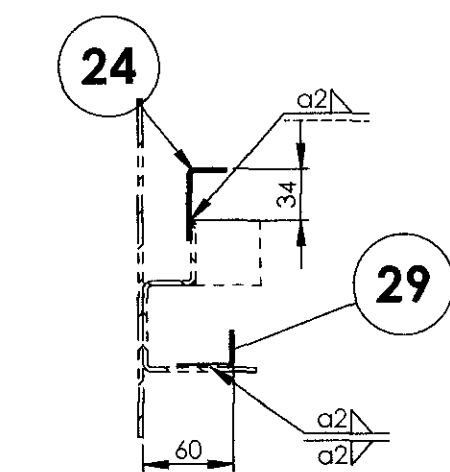
88914026 A1

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88914027

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

SECTION A-A  
SCALE 1 : 7.5SECTION H-H  
SCALE 1 : 5

GROUP: 1-4 Body Side Walls		SURFACE AREA IN Sq.m.: 109.164		WT/ASSY IN Kgs:	
SCALE 1:50		SSE/D		CHD	
ALT. g		ALTD		P.NAVEEN	
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		A.Palanichamy	
INDIAN RAILWAY STANDARDS		SHEET 1 OF 2		TS/DTC	
INTEGRAL COACH FACTORY, CHENNAI - 600038		88914027		A1	

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REF.DRG.NO.