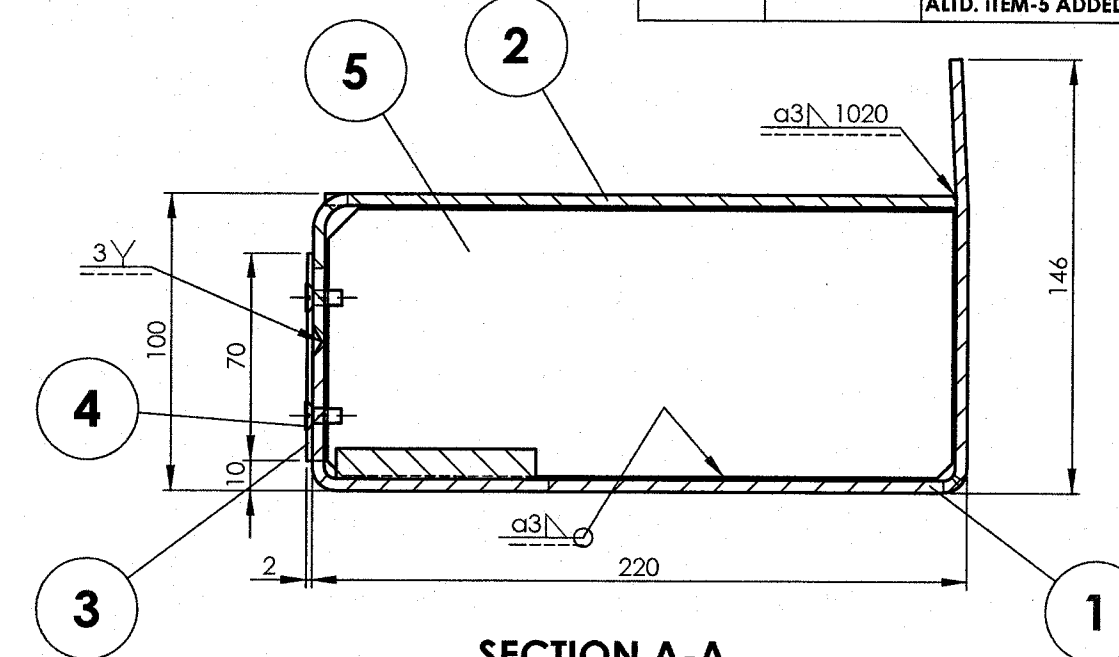
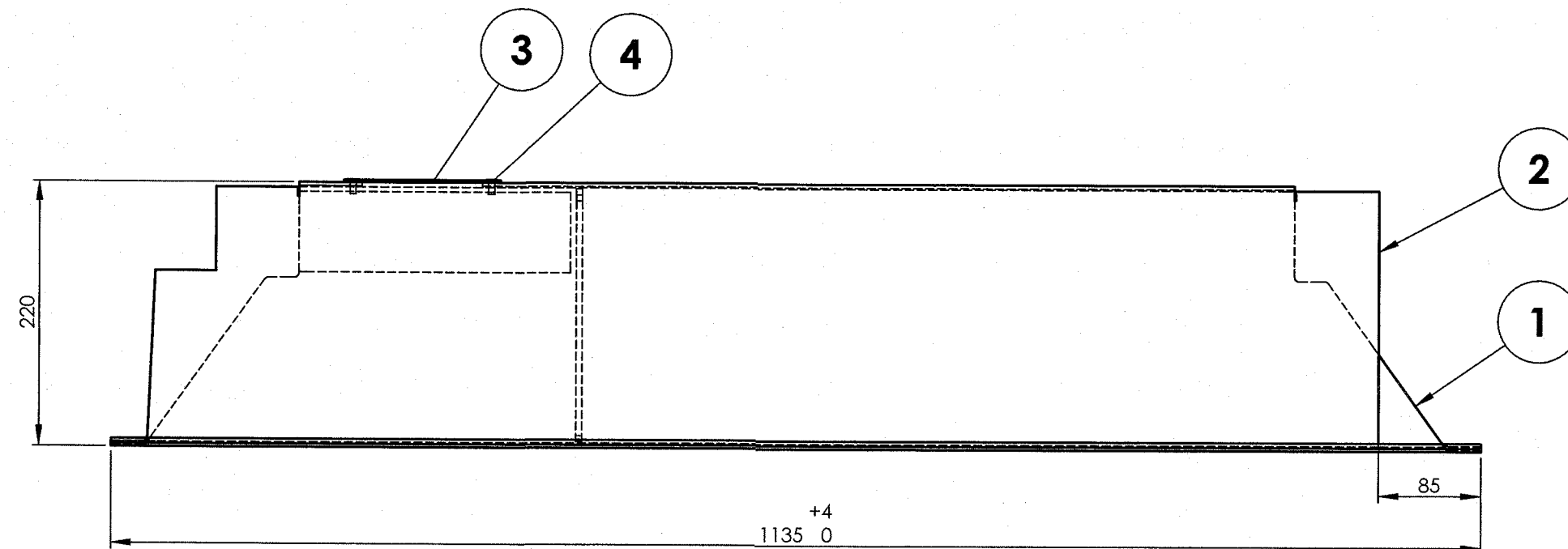
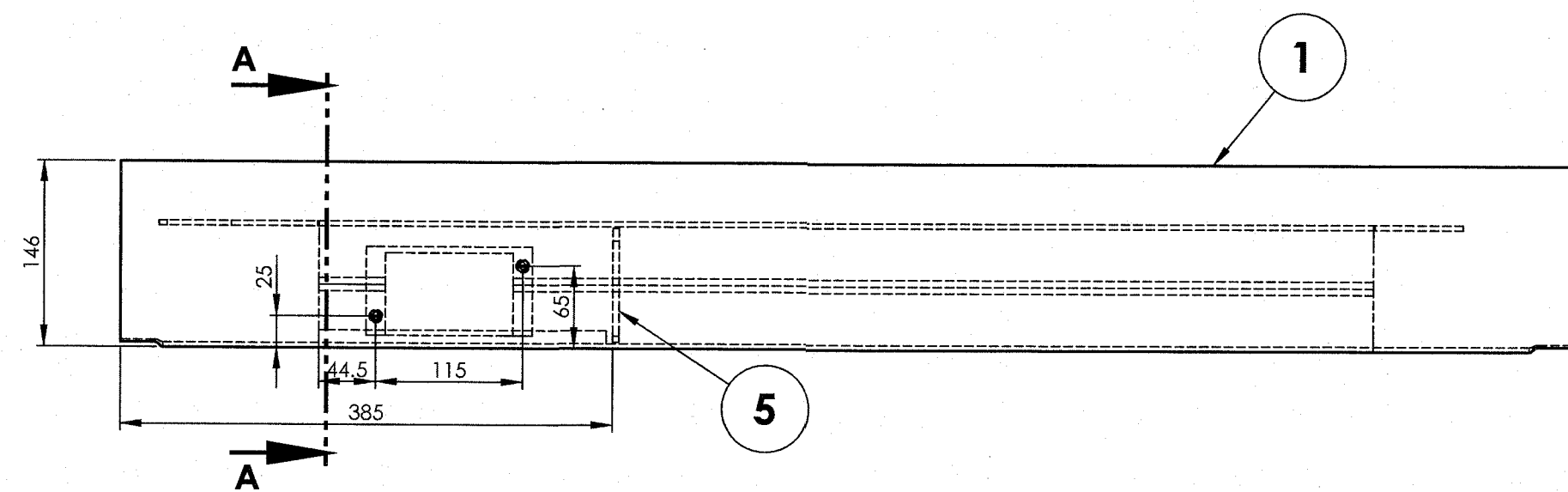


SSA14031

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		REF DRG OF ITEM-1 REVISED.	-sd-
b		ITEMS-3,4 & WELDING NOTE ADDED.VIEWS UPDATED.	-sd-
c		ITEM-2 ALTERED. ITEM-3 RM SIZE ALTD. M5 CSK SCREW PITCH ALTD. ITEM-5 ADDED AND VIEWS UPDATED.	

SECTION A-A
SCALE 1 : 2.5

NOTE:

1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. 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.

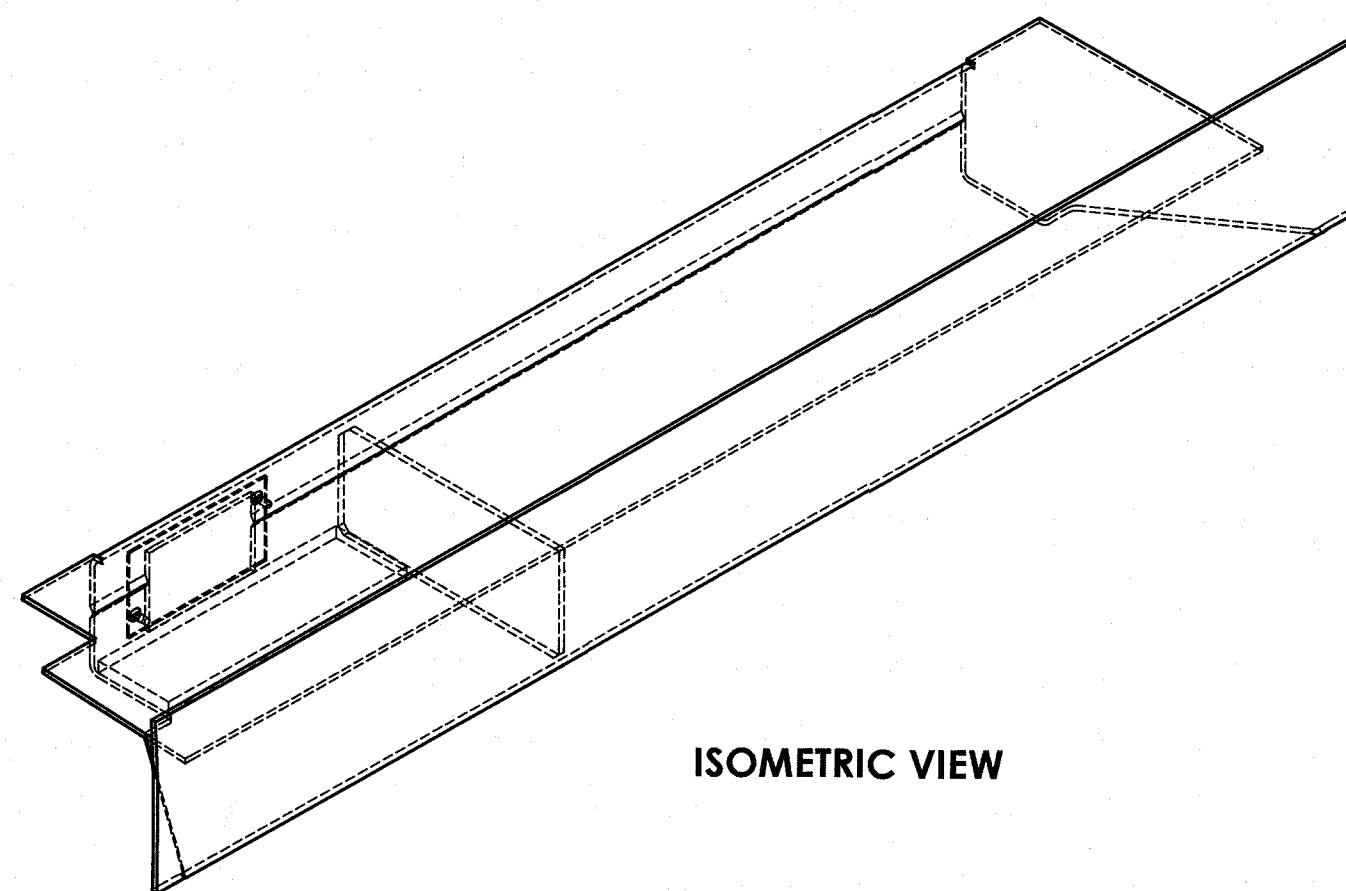
ALL NDT (RT/UT/MPT/DPT) SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712/ASNT/ISNT LEVEL-2 AND SHALL BE DOCUMENTED.

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

* THE PERCENTAGES EXPRESSED, REFER TO THE TOTAL LENGTH TO BE EXAMINED FOR ONE GIVEN WELD. THUS: -100% MEANS: TESTING THE ENTIRE LENGTH OF THE WELD AND ON ALL THE PIECES BUILT.

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

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


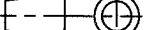


ISOMETRIC VIEW

REF.DRG.NO.LP101119-'a'

02-02-2019	13-12-2012	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

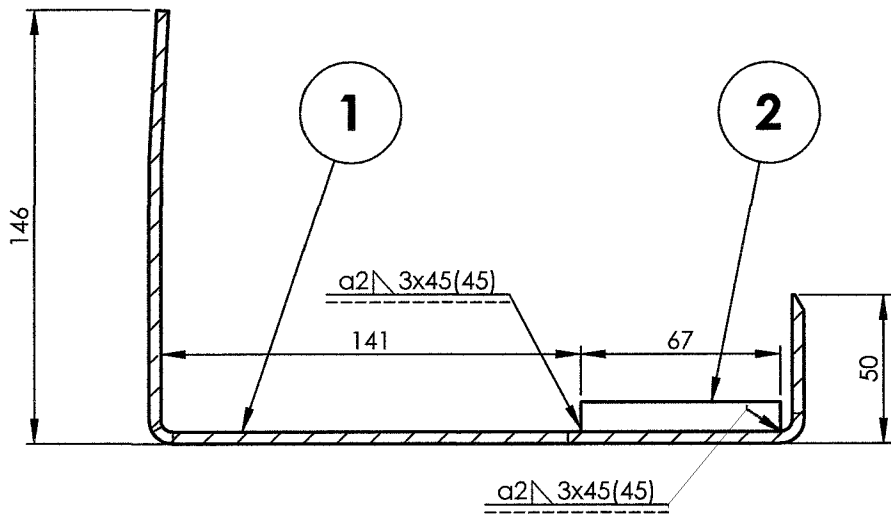
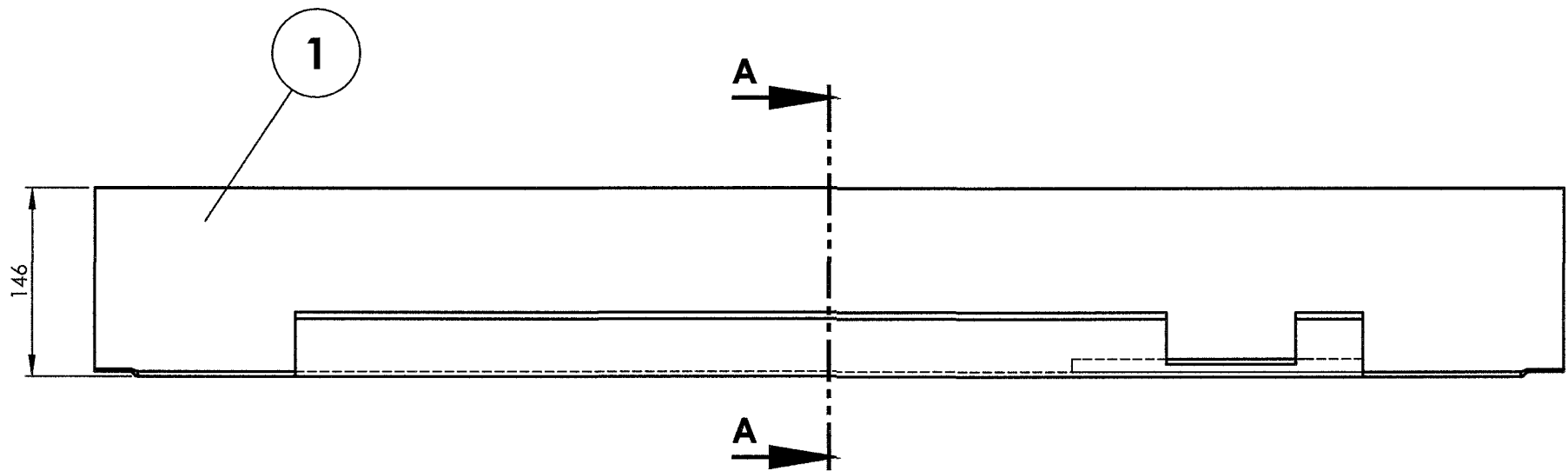
1	RIB		5	AAE14185	RDSO/SPEC C-K201 X2CrNi12	0.75	
2	COUNTER SUNK FLAT HEAD SCREW	M5x12- A2-70	4	IS: 1365			
1	CLOSING PLATE	2x70x130	3			0.15	
1	UPPER FRAME PART		2	AAA14404		7.860	
1	UPPER FRAME PART		1	SSA14033		13.749	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL. SPEC	WT/UNIT IN KGS	REMARKS

GROUP: 14		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
UPPER FRAME COMPLETE				SCALE 1:5	SSE/D		
					CHD		
				ALT c	ALTD	T.UKKIRAPANDIAN	
					DRN	K.Sethuraman	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
				SHEET 1 OF 1		SSA14031	A2

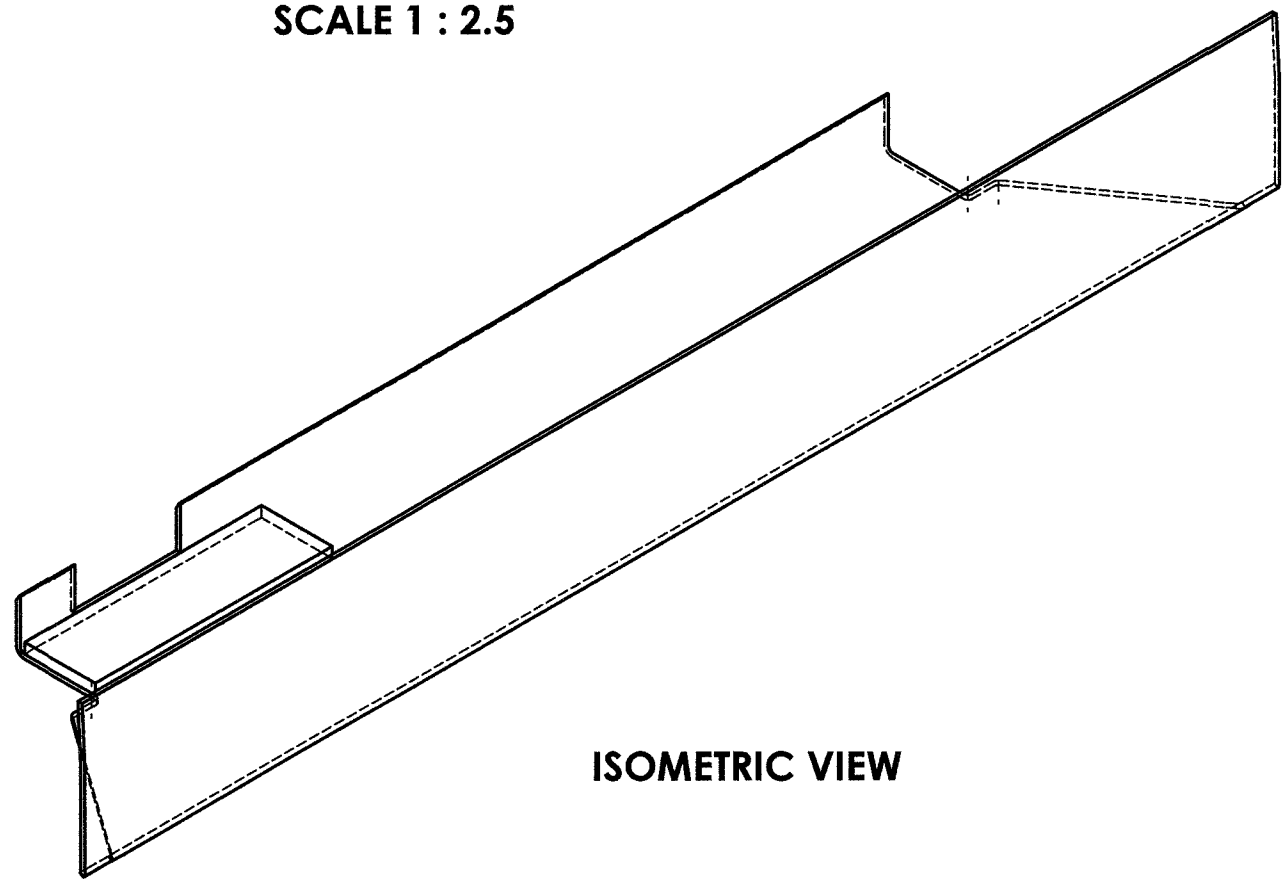
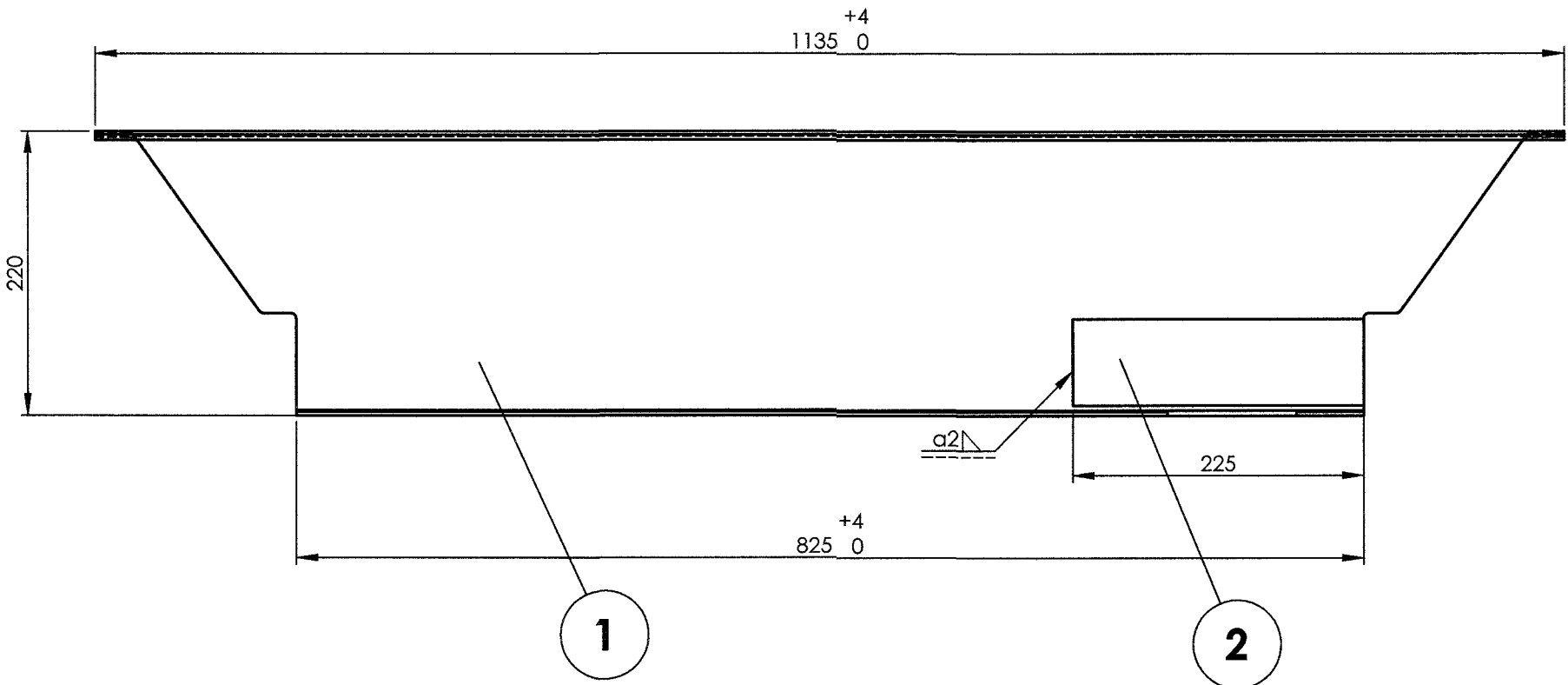
SSA14033

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		VIEWS UPDATED.	-sd-
b		ITEM-1 ALTERED. VIEWS UPDATED.	



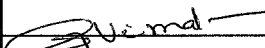
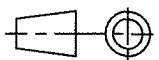
SECTION A-A
SCALE 1 : 2.5



ISOMETRIC VIEW

NOTE:

1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.

1	BACK PIECE		2	AAA14396		1.206								
1	UPPER FRAME PART		1	AAD14184		12.54								
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS							
GROUP: 1-4			SURFACE AREA IN Sq.m.: 0.833			WT/ASSY IN Kgs:								
UPPER FRAME PART COMPLETE						SCALE 1:5	SSE/D CHD							
						ALT b	ALTD DRN		T.UKKIRAPANDIAN Aswin R					
						INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							SSA14033	

02-02-2018	15-03-2018	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.LP10120-'b'

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.

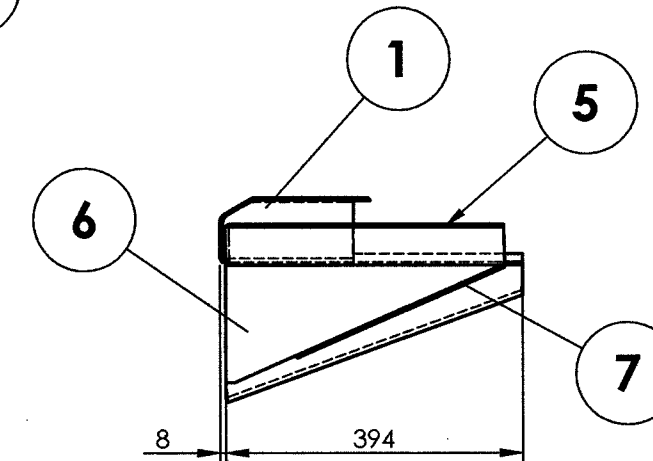
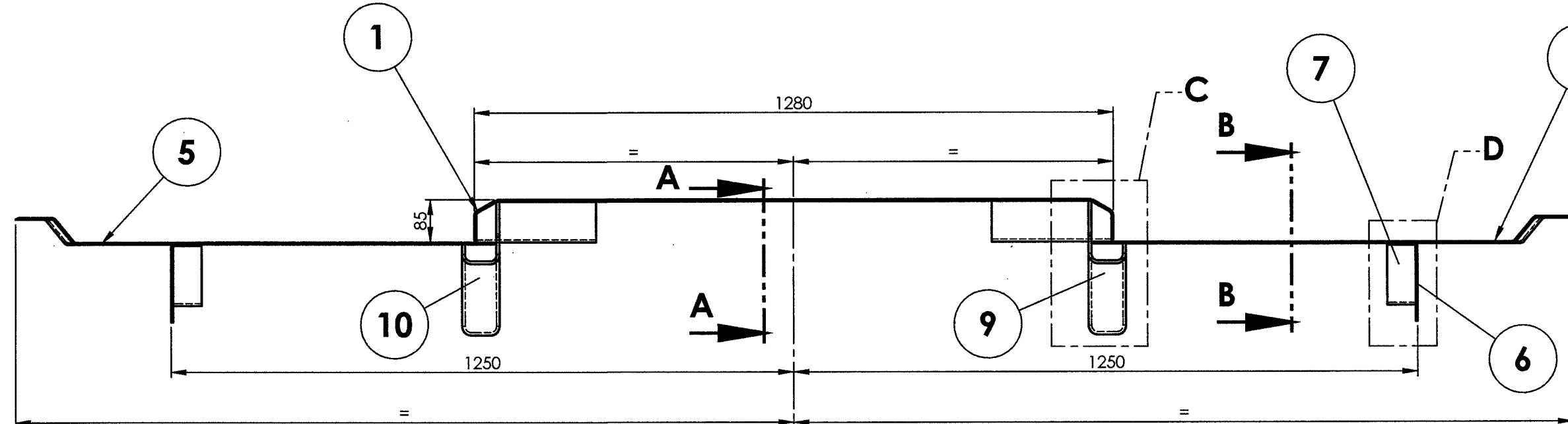
49515003

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

01 ROUGH CLEANED
01b BURRS REMOVED
018 CHAMFERED

REVISIONS

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



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

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

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

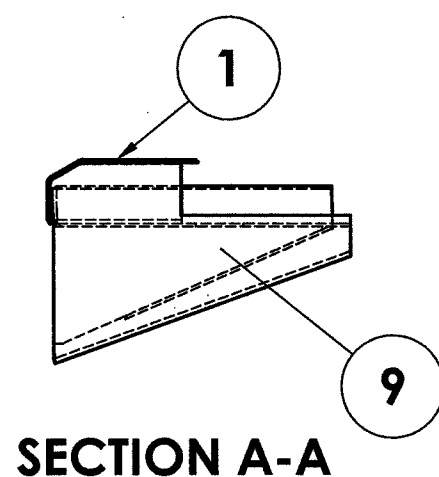
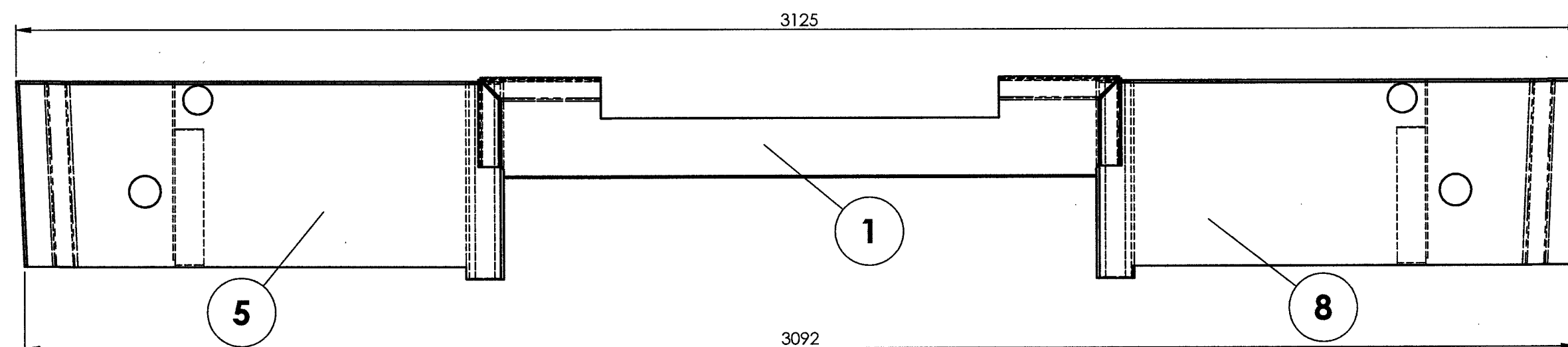
§ FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.

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

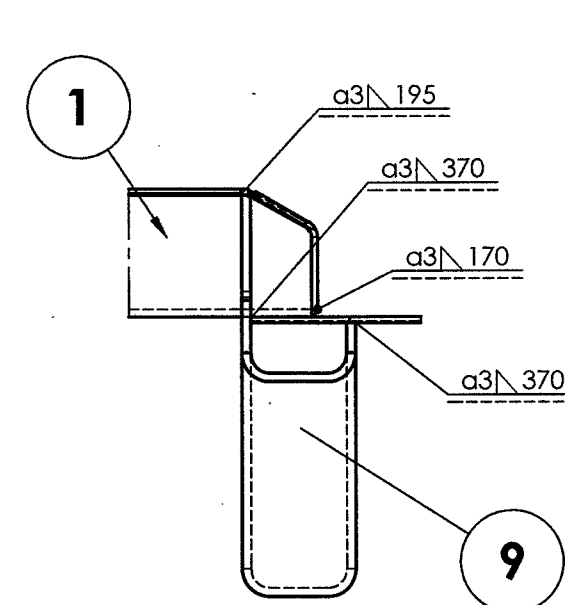
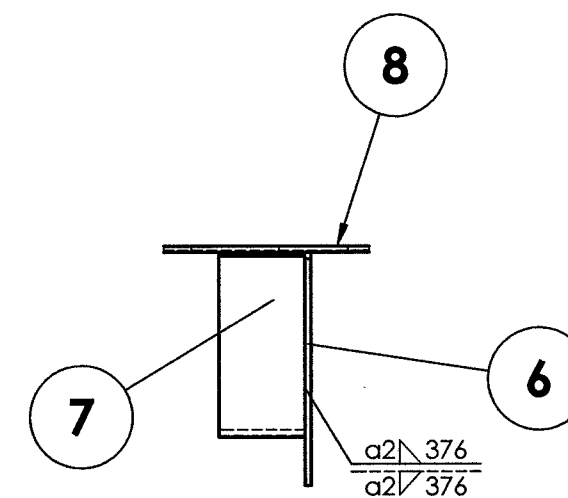
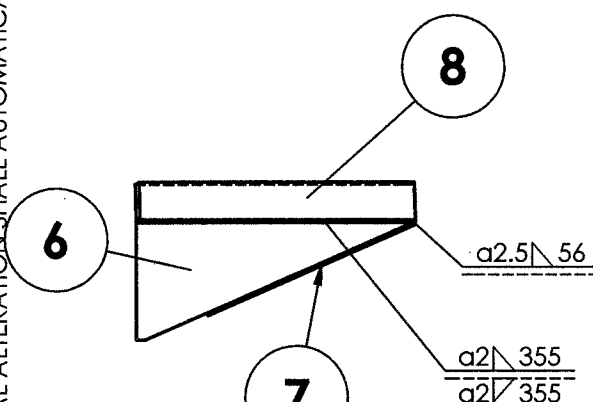
FOR APPLICABLE WELDING PROCEDURE SPECIFICATION (WPS) REFER DRAWING NO ICF/STD-9-0-999

NOTE:

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



SECTION A-A

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

SECTION B-B

1	CONSOLE		10	AAA15250		0.75	
1	CONSOLE		9	AAA15249		5.906	
1	FLANGE L.H		8	AAA15412		11.391	
2	SHEET		7	AAA15264		0.543	
2	WEB		6	AAA15263		0.935	
1	FLANGE R.H		5	AAA15244		11.394	
1	FLANGE L.H		4	AAA15243		11.403	
1	CONSOLE COMPLETE		3	49515005		0.877	
1	CONSOLE COMPLETE		2	49515004		6.031	
1	SILL COMPLETE		1	49515006		7.542	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION				SURFACE AREA IN Sq.m.: 2.706		WT/ASSY IN Kgs:	
SILL ARRANGEMENT				SCALE 1:10	SSE/D CHD	Sd..Pandurangas	
				ALT b	ALTD DRN	H. Irshath Ahamed	
						A.Palanichamy	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		LWGSCWAC2	
INTEGRAL COACH FACTORY, CHENNAI - 600038				49515003		A2	

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

REF.DRG.NO.

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

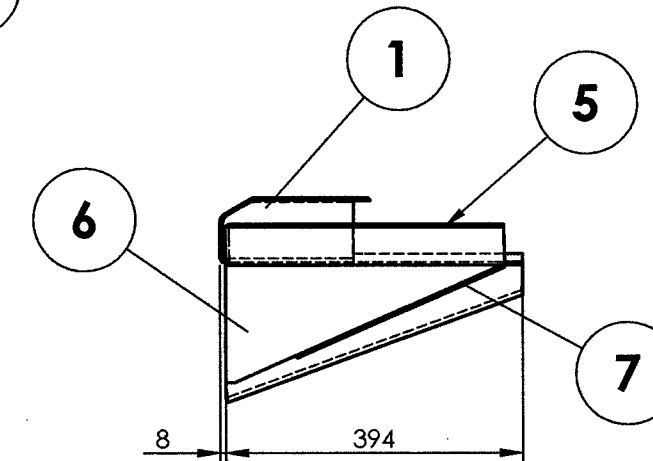
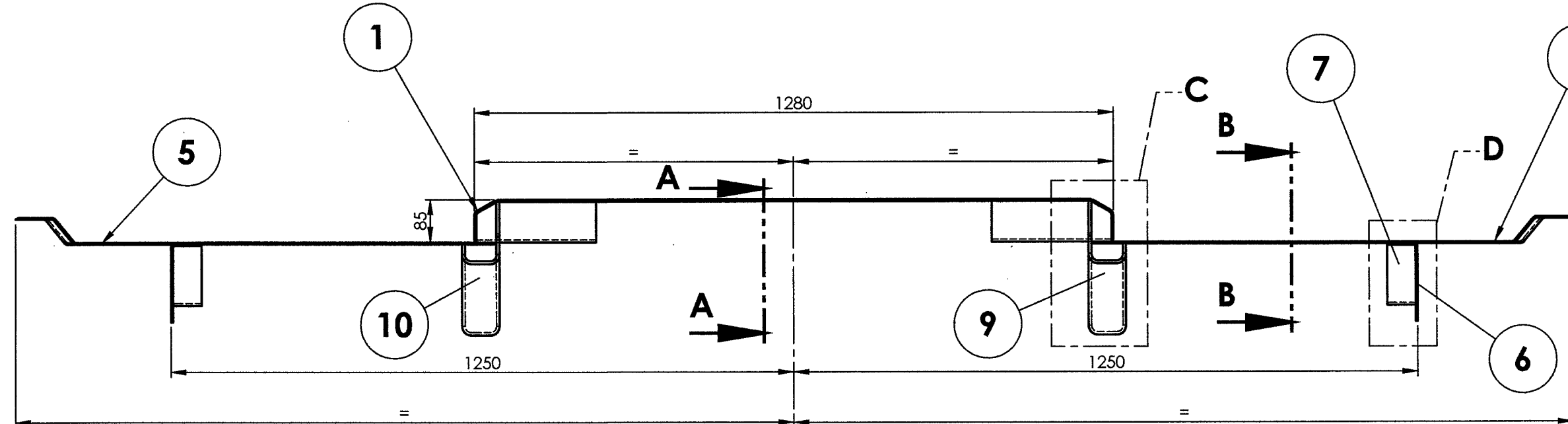
49515003

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

01 ROUGH CLEANED
01b BURRS REMOVED
018 CHAMFERED

REVISIONS

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



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

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

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

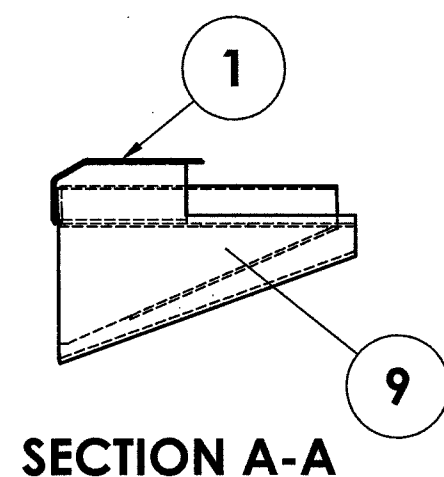
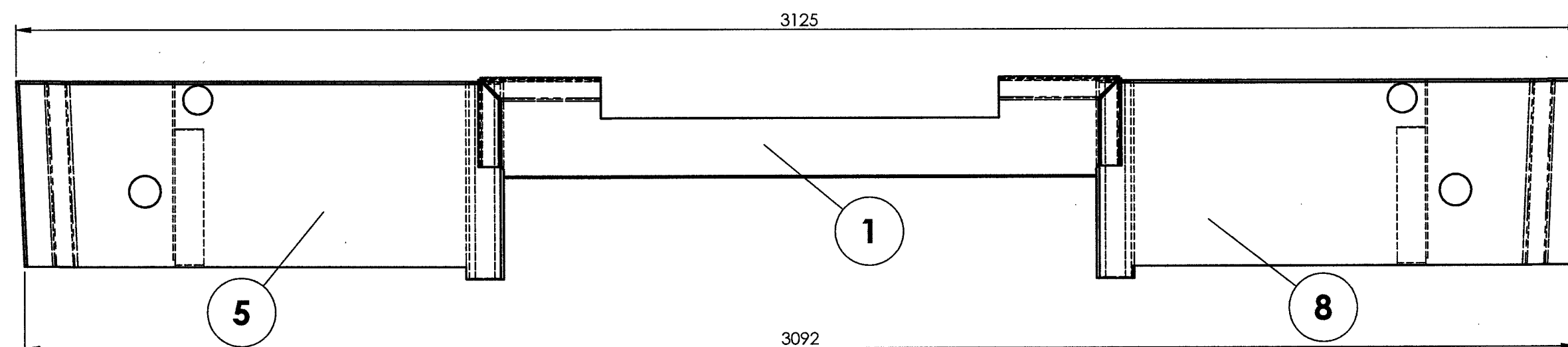
§ FOR INSPECTION CLASS CT2, THE VISUAL EXAMINATION SHALL BE PERFORMED BY PERSONNEL CERTIFIED ACCORDING TO ISO-9712 AND SHALL BE DOCUMENTED.

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

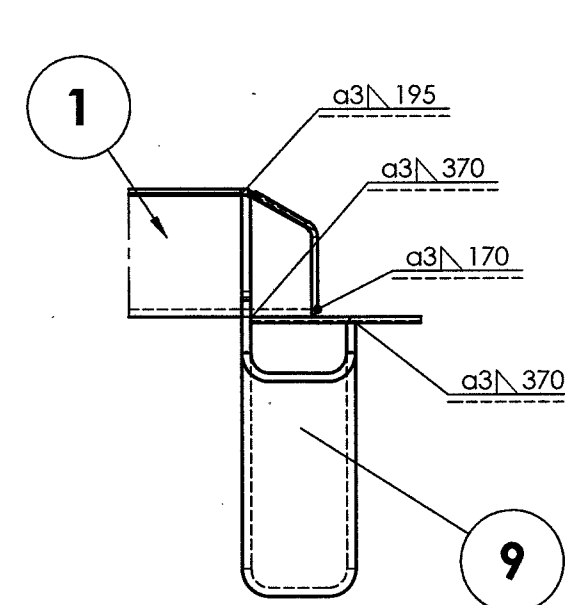
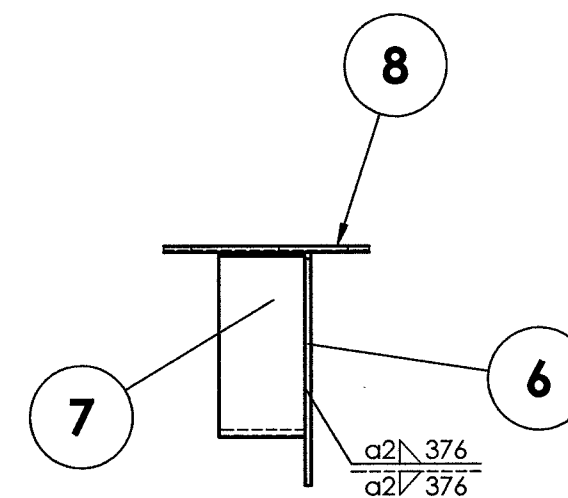
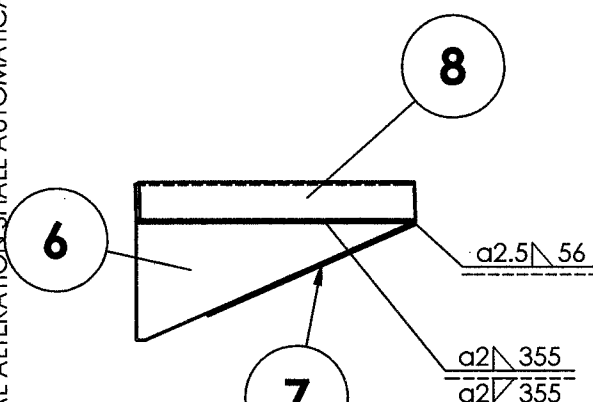
FOR APPLICABLE WELDING PROCEDURE SPECIFICATION (WPS) REFER DRAWING NO ICF/STD-9-0-999

NOTE:

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



SECTION A-A

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

SECTION B-B

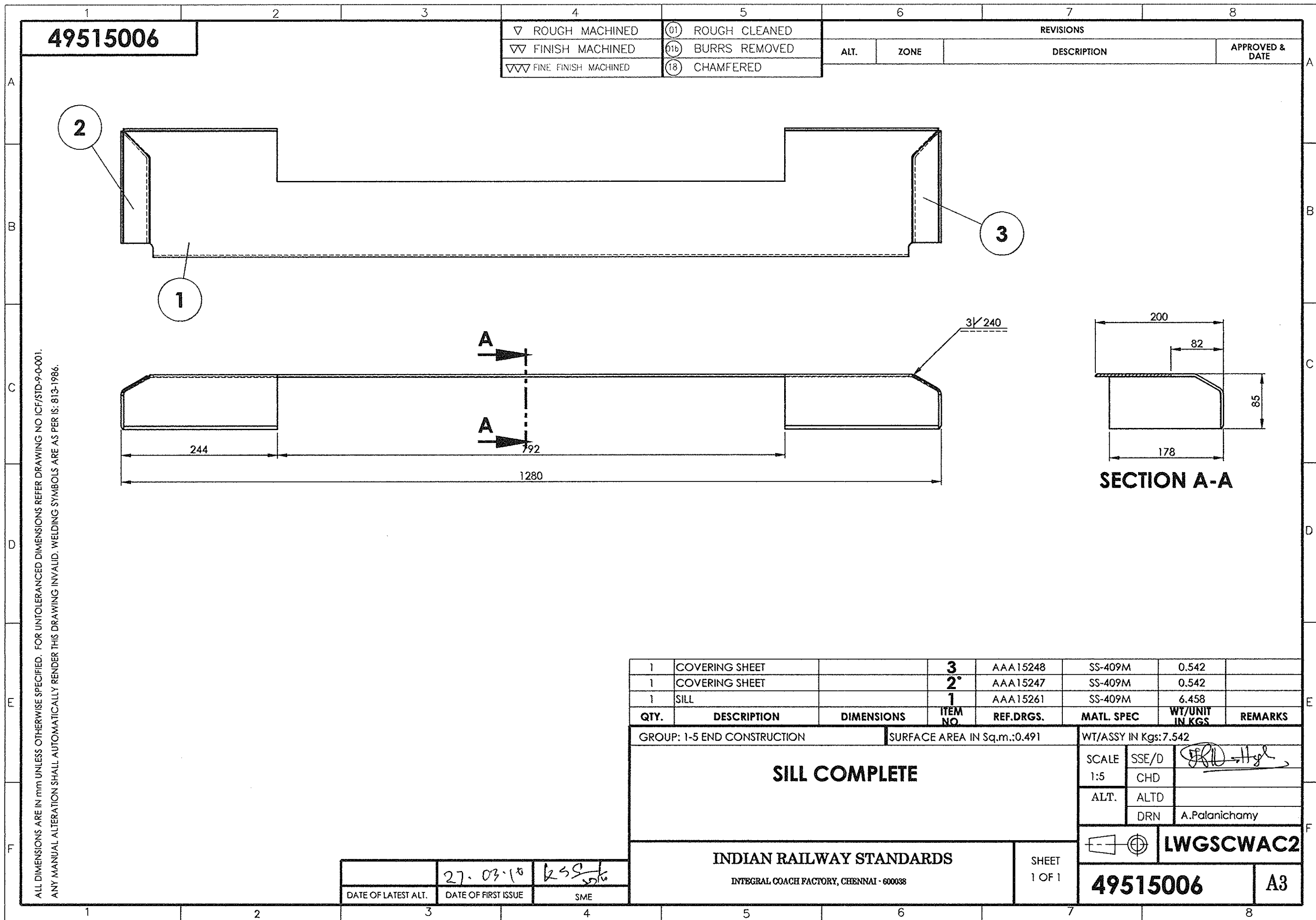
1	CONSOLE		10	AAA15250		0.75	
1	CONSOLE		9	AAA15249		5.906	
1	FLANGE L.H		8	AAA15412		11.391	
2	SHEET		7	AAA15264		0.543	
2	WEB		6	AAA15263		0.935	
1	FLANGE R.H		5	AAA15244		11.394	
1	FLANGE L.H		4	AAA15243		11.403	
1	CONSOLE COMPLETE		3	49515005		0.877	
1	CONSOLE COMPLETE		2	49515004		6.031	
1	SILL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

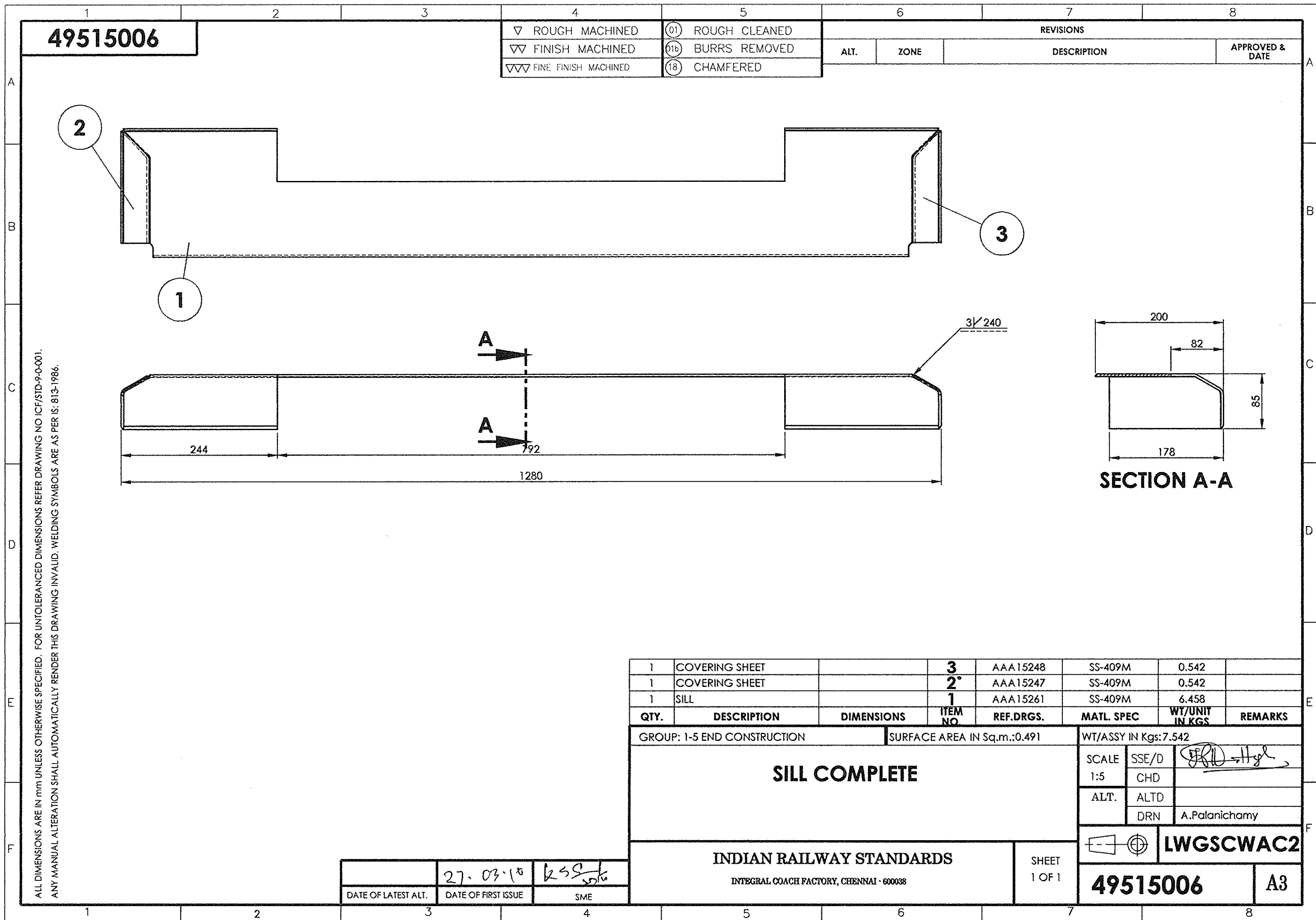
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 END CONSTRUCTION				SURFACE AREA IN Sq.m.: 2.706		WT/ASSY IN Kgs:	
SILL ARRANGEMENT				SCALE 1:10	SSE/D CHD	Sd..Pandurangas	
				ALT b	ALTD DRN	H. Irshath Ahamed	
						A.Palanichamy	
INDIAN RAILWAY STANDARDS				SHEET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

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

REF.DRG.NO.

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

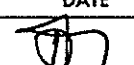




49515012

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

REVISIONS

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

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

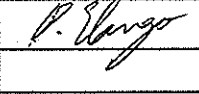
10	BACK PIECE		5	AAA15278		0.011	
1	SHEET		4	AAA15277		0.130	
1	FLANGE		3	AAA15199		0.980	
1	WEB		2	AAA15197		0.545	
1	FLANGE		1	AAA15198		1.099	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL.SPEC.	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 END CONSTRUCTION

SURFACE AREA IN Sq.m.: 0.294

WT/ASSY IN Kgs:

FRAME COMPLETE

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

 LWGSCWAC2

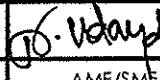
INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

49515012

A3

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

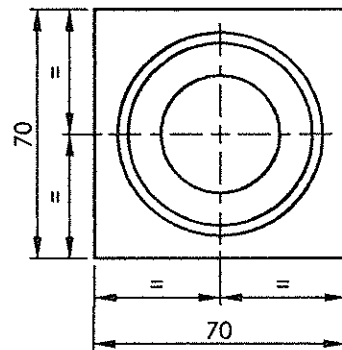
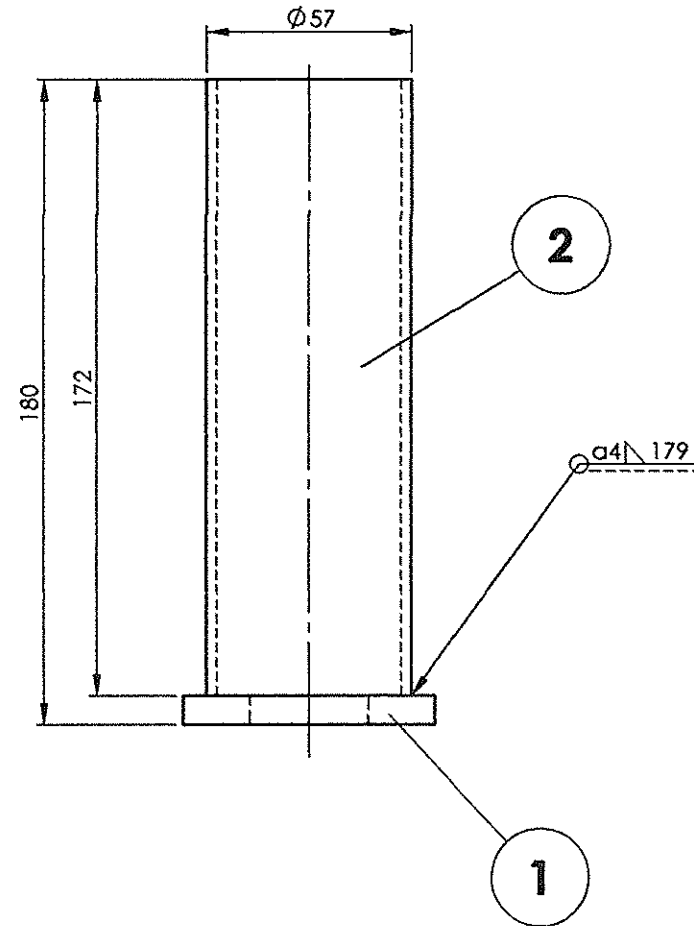
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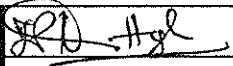

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

49515018

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



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

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

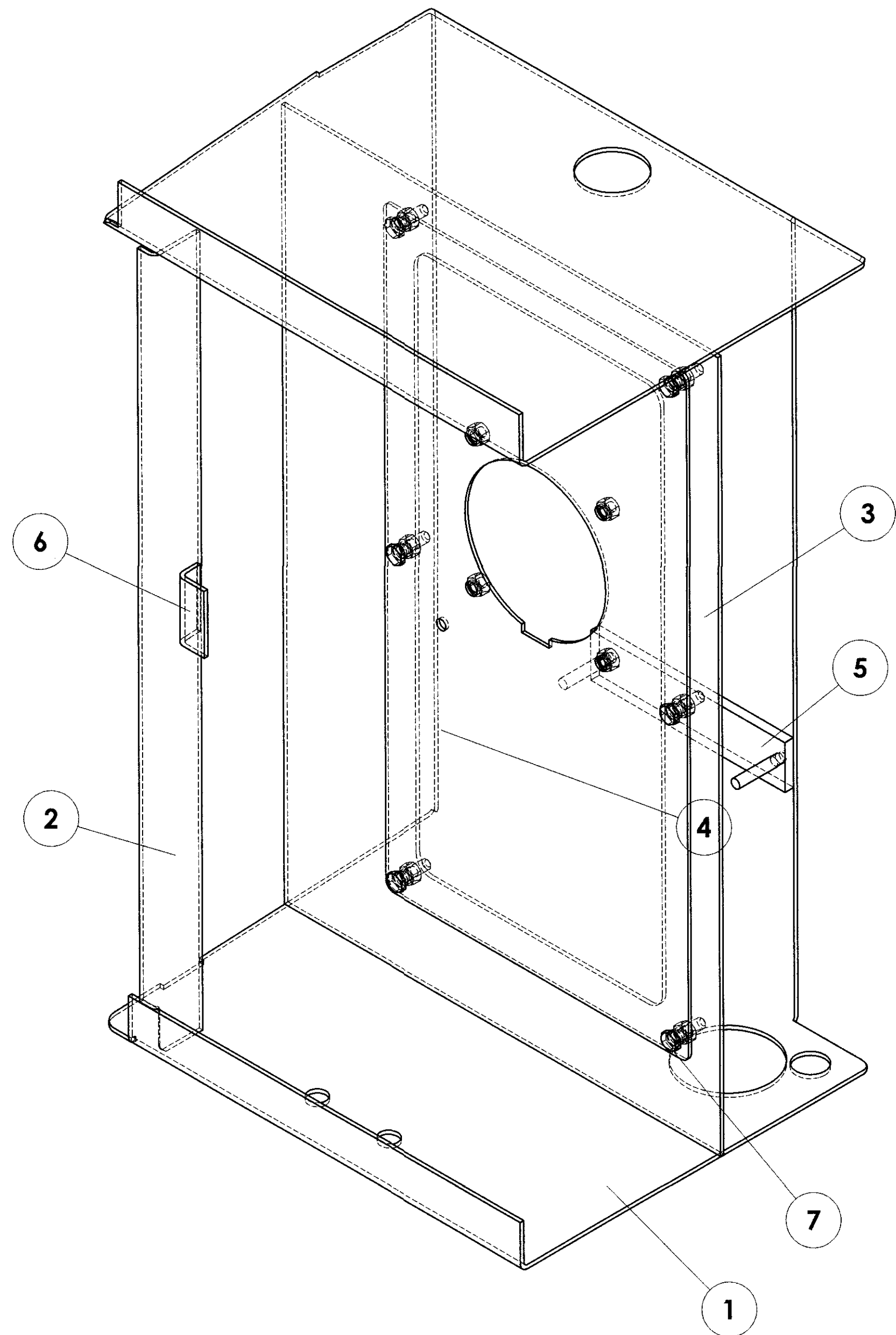
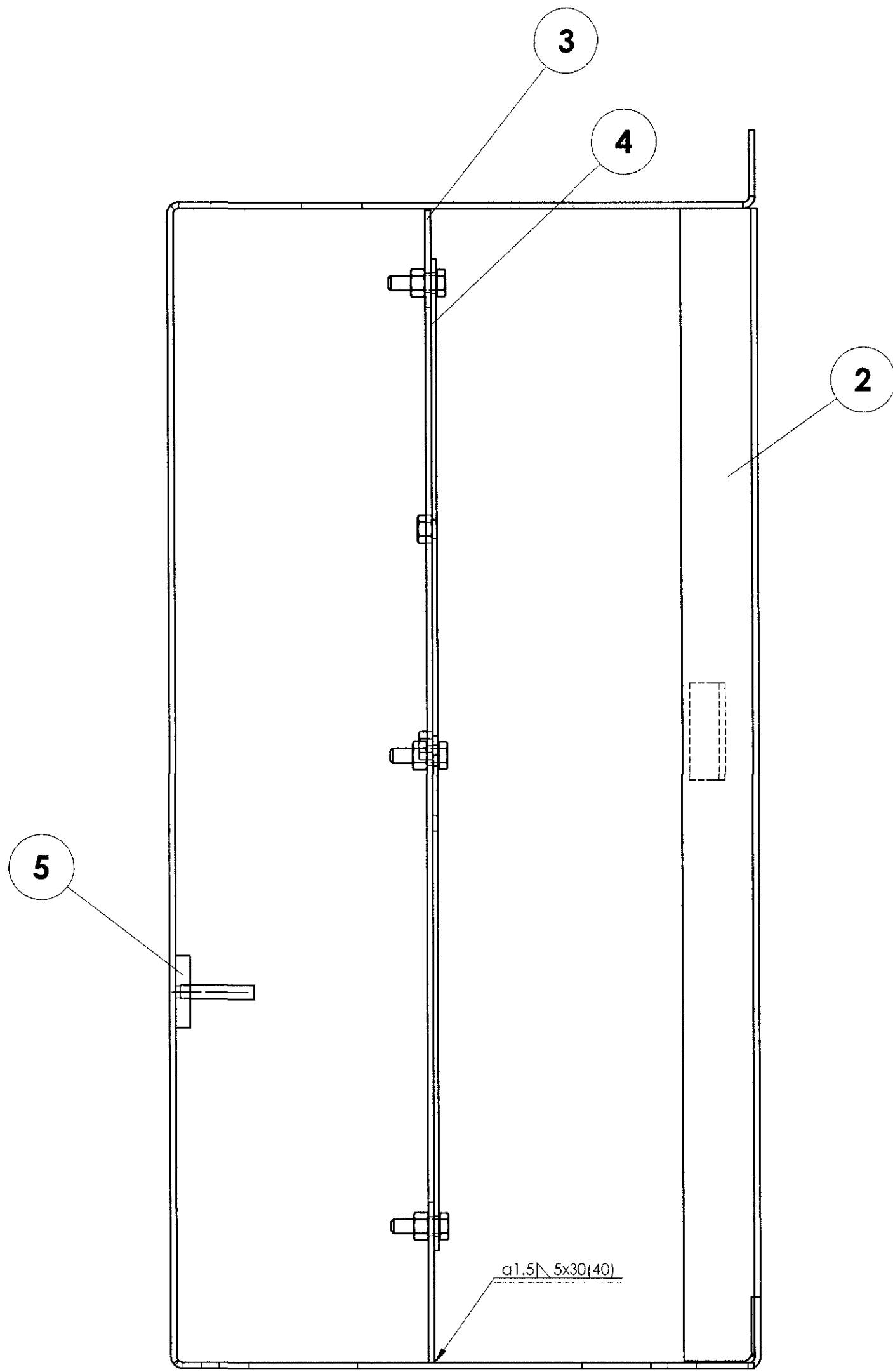
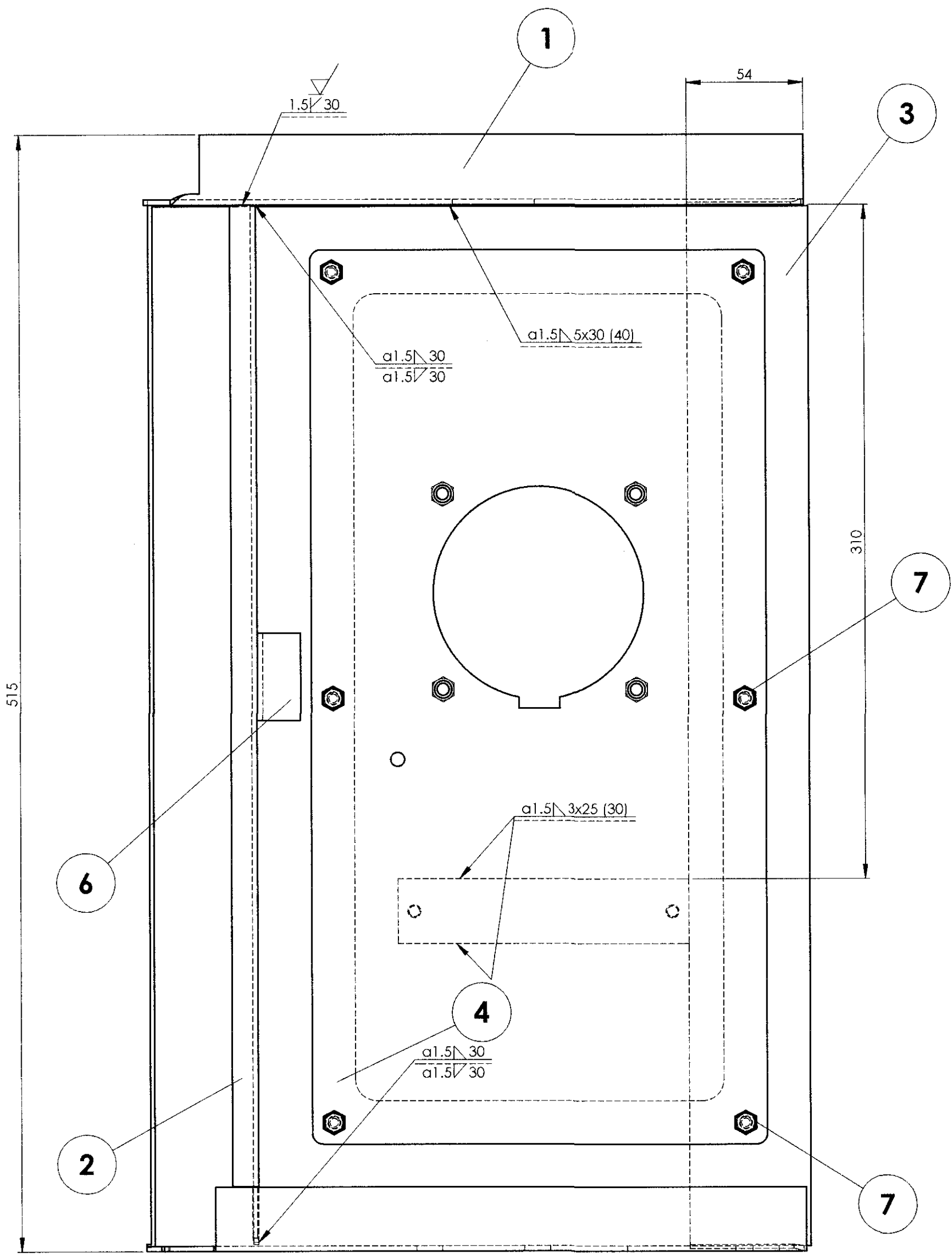
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

58115004

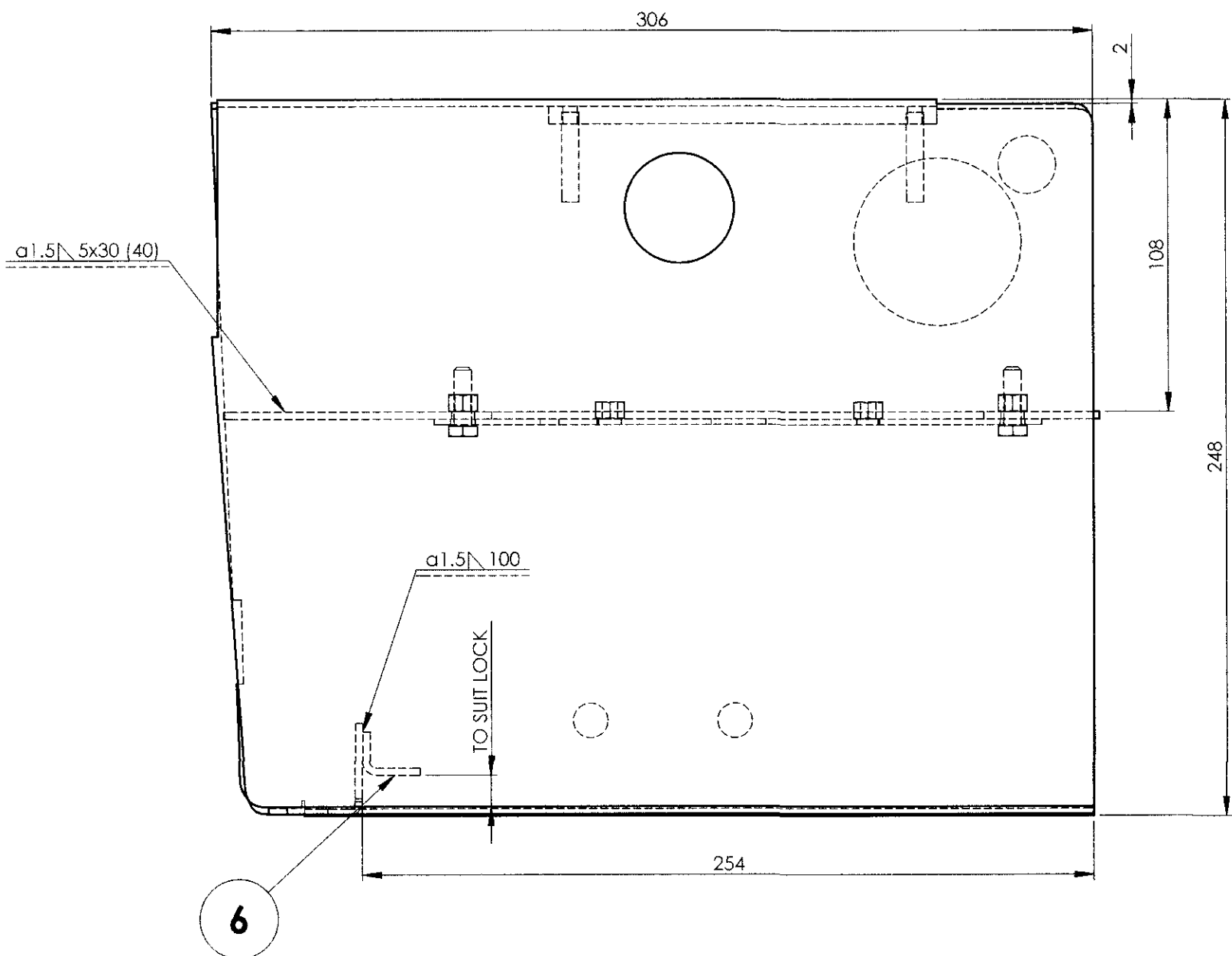
▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

①① ROUGH CLEANED
①①① BJRRS REMOVED
①⑤ CHAMFERED

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

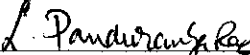



ISOMETRIC VIEW



NOTE:

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

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

58115005

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

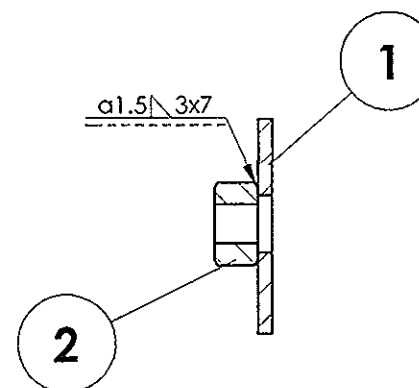
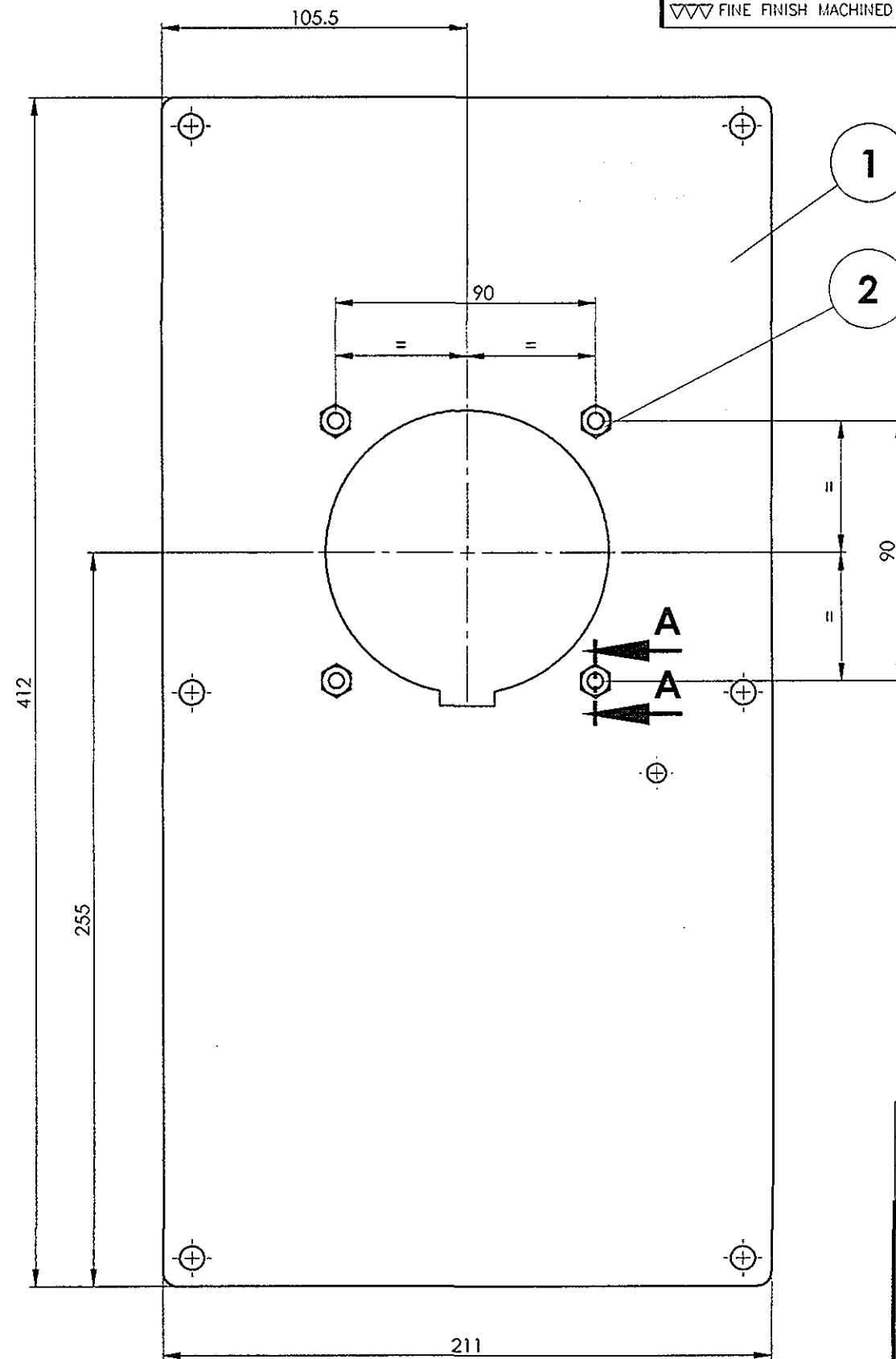
① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

REVISIONS

ALT.

ZONE

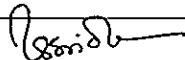

DESCRIPTION

APPROVED &
DATE

SECTION A-A
SCALE 1 : 1

NOTE:

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

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

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

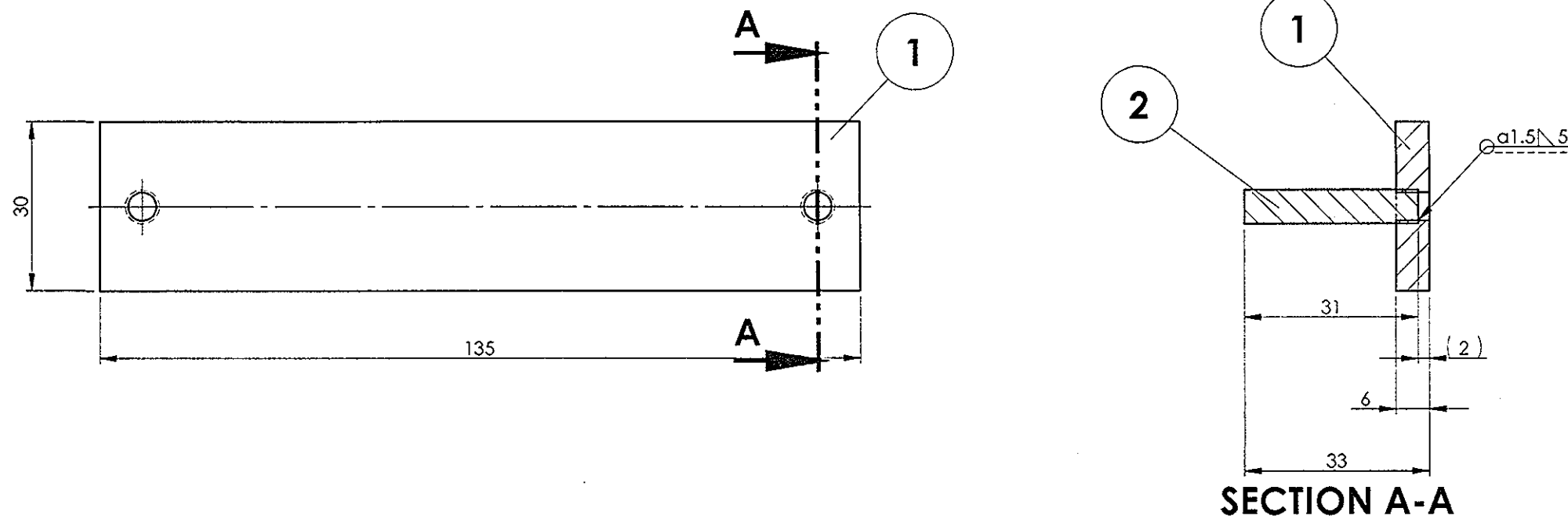
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	28 -03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

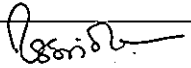
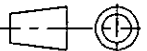
58115006

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

**NOTE:**

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

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

REF.DRG.NO. 3 10113.0.20.120.035

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

58115014

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

1

2

30

196 ±0.2

196 ±0.2

83

191 ±0.2

A

A

1

2

α1.5 3x7

SECTION A-A
SCALE 1 : 2

NOTE:

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

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

REF.DRG.NO.3 10113.0.20.120.032_A

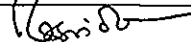
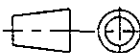
28 -03-2013

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

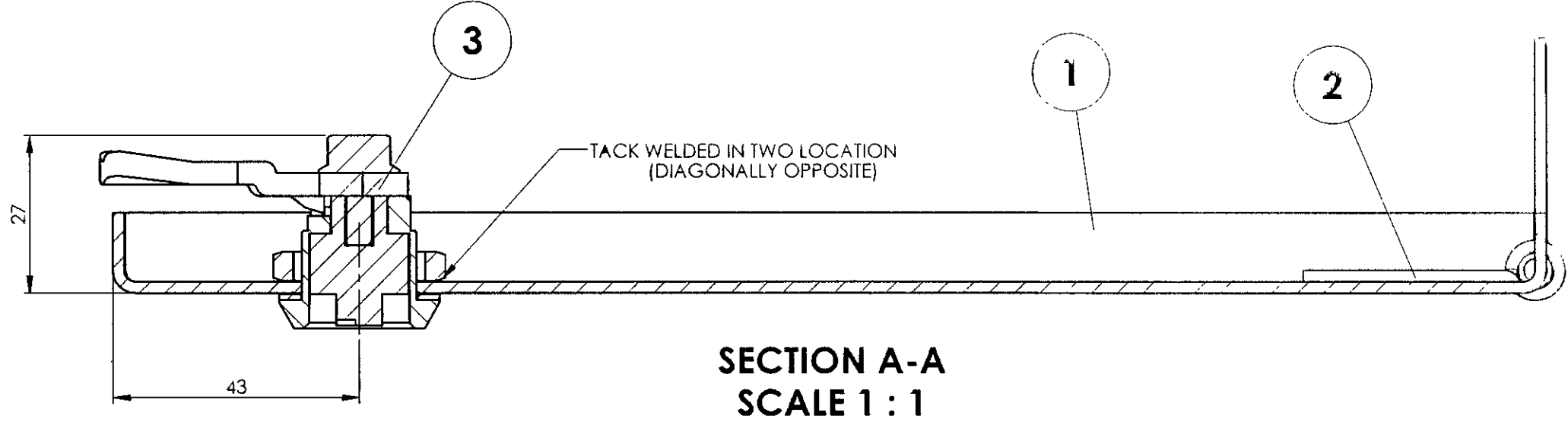
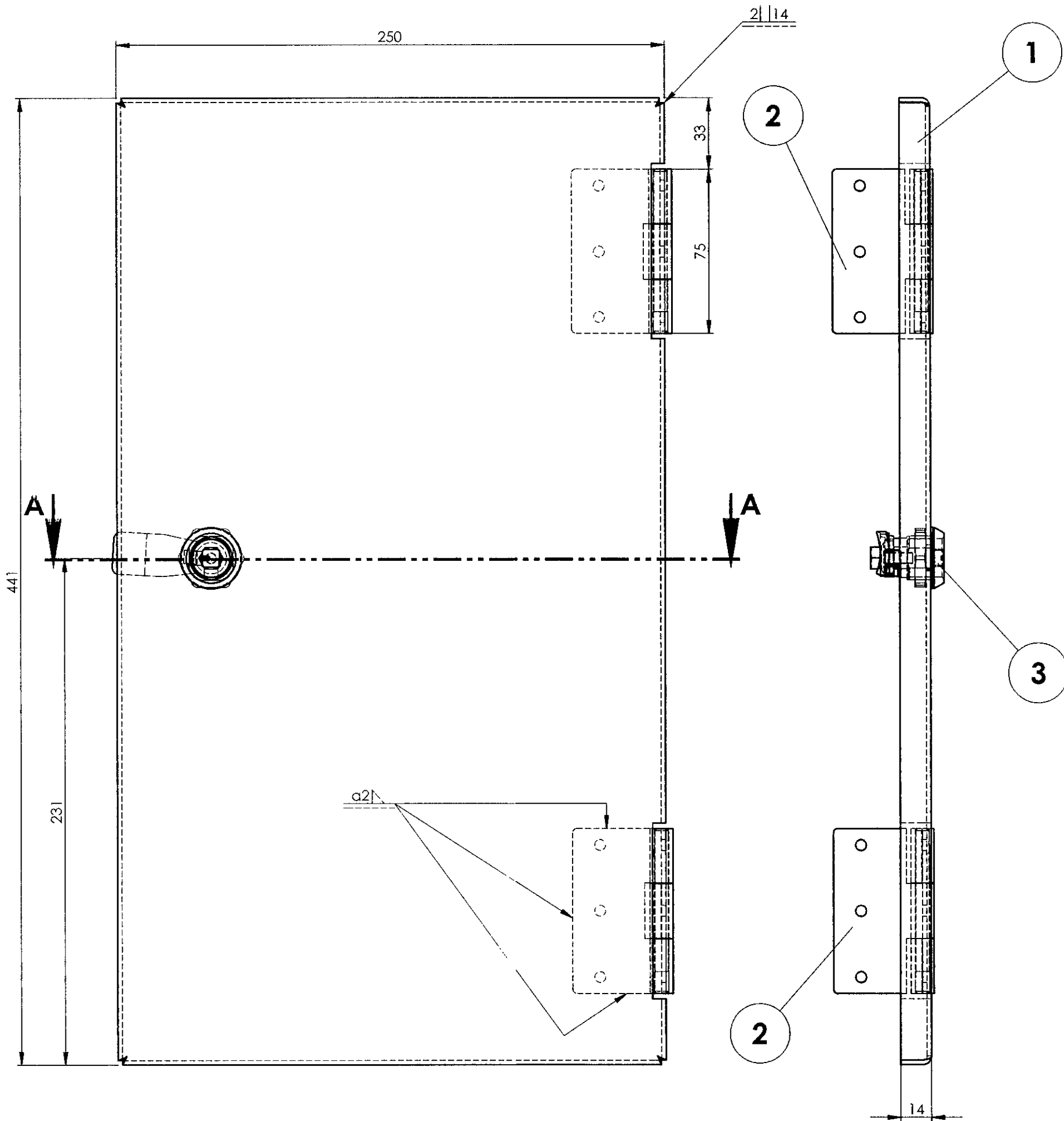
1. ALL WELD SPATTERS SHALL BE GROUND.
2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER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

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

58115015

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

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



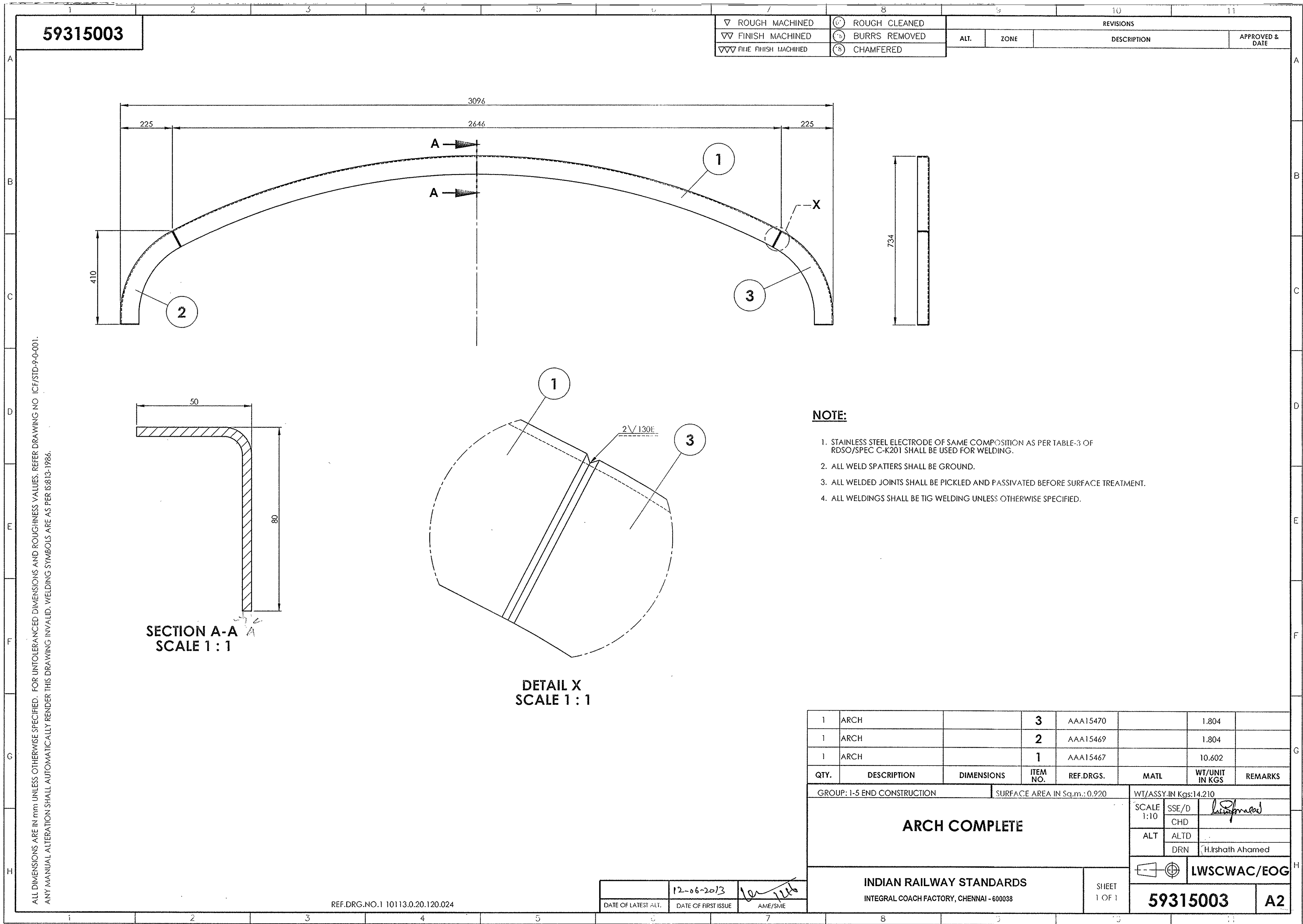
- NOTE:**
1. ALL WELD SPATTERS SHALL BE GROUND.
 2. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT
 3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 4. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
 5. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO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

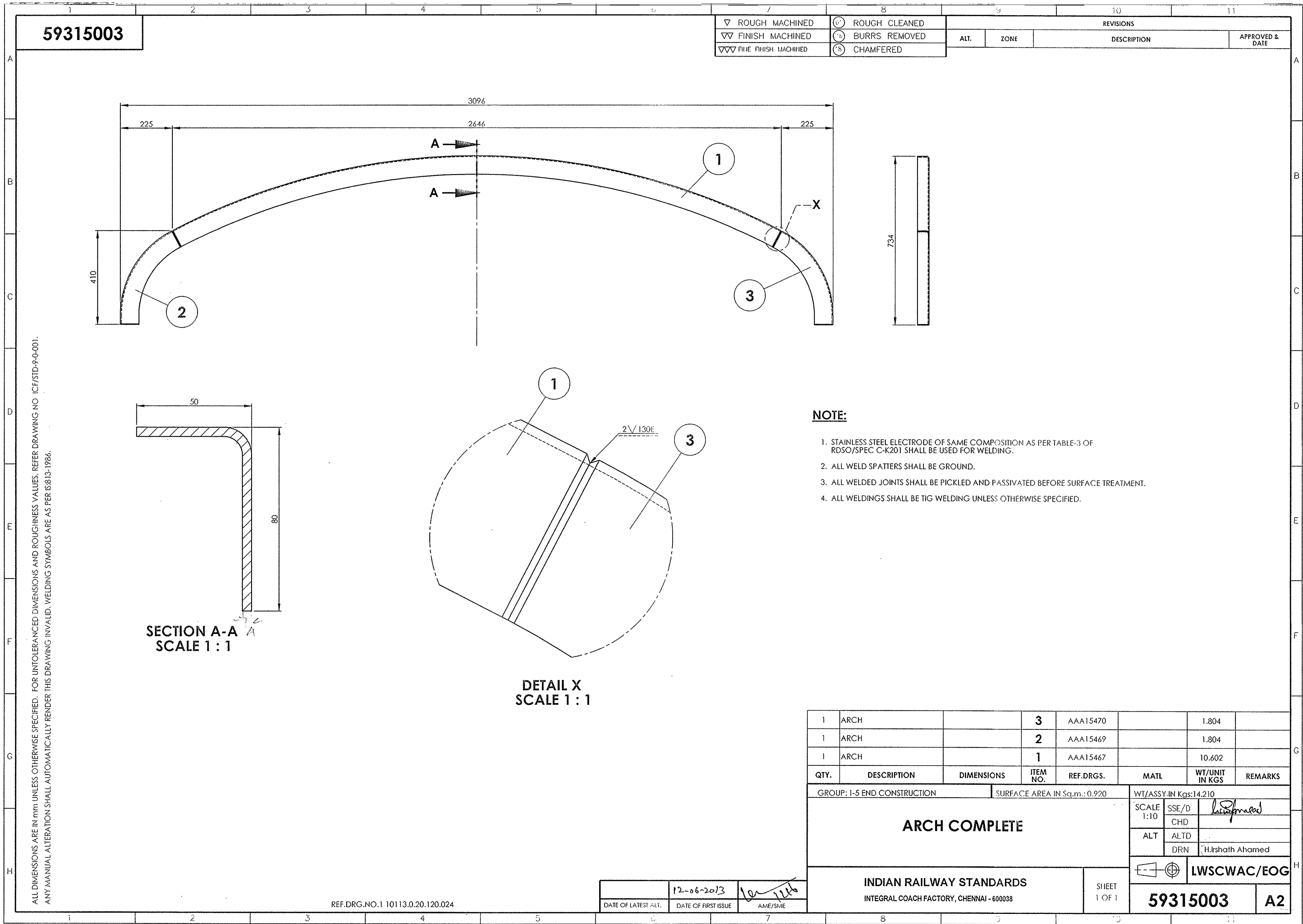
1	LATCH-NUT(WELDABLE)		4	-		0.00	@
1	LOCK ASSEMBLY		3			0.009	#
2	HINGE		2			0.02	\$
1	SHUTTER		1	AAA15432		1.949	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: (1-5) END CONSTRUCTI			SURFACE AREA IN Sq.m: 0.293			WT/ASSY IN Kgs:	
SHUTTER ASSEMBLY FOR EFT SOCKET						SCALE 1:2	SSE/Li
							CHD
						ALT c	ALTD
						DPII	B.SARAVATHI
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038						E7	LGS/ECG
						58115015	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.

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

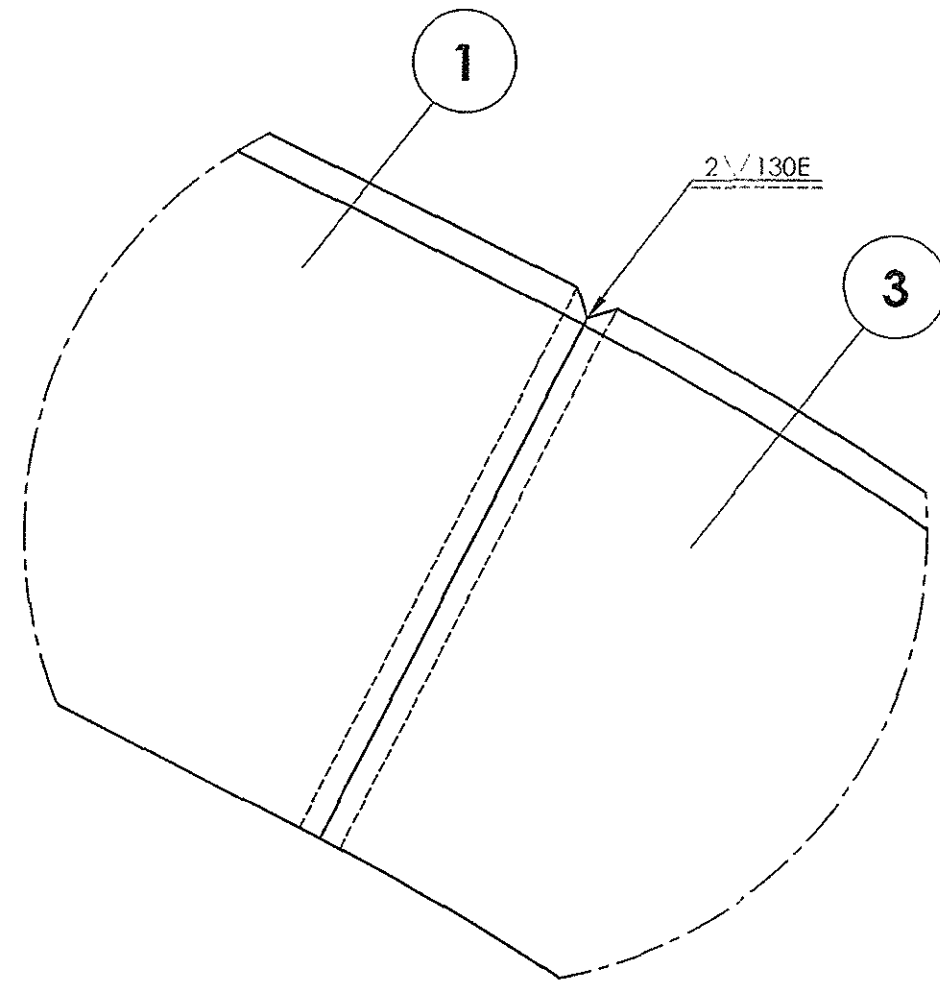
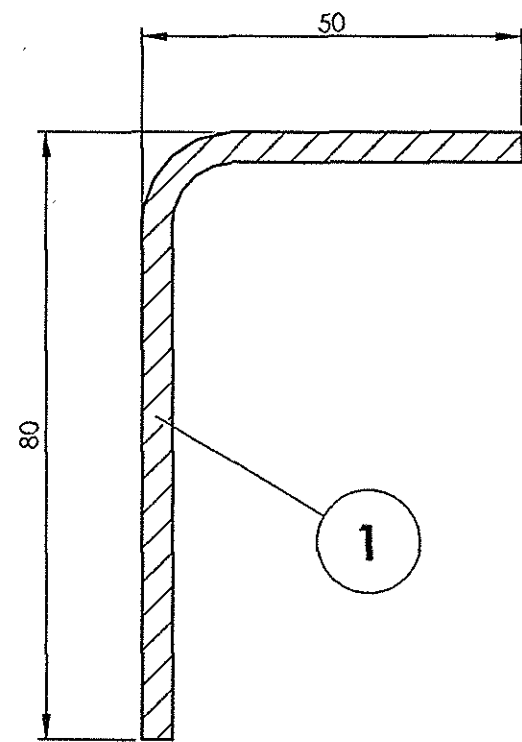
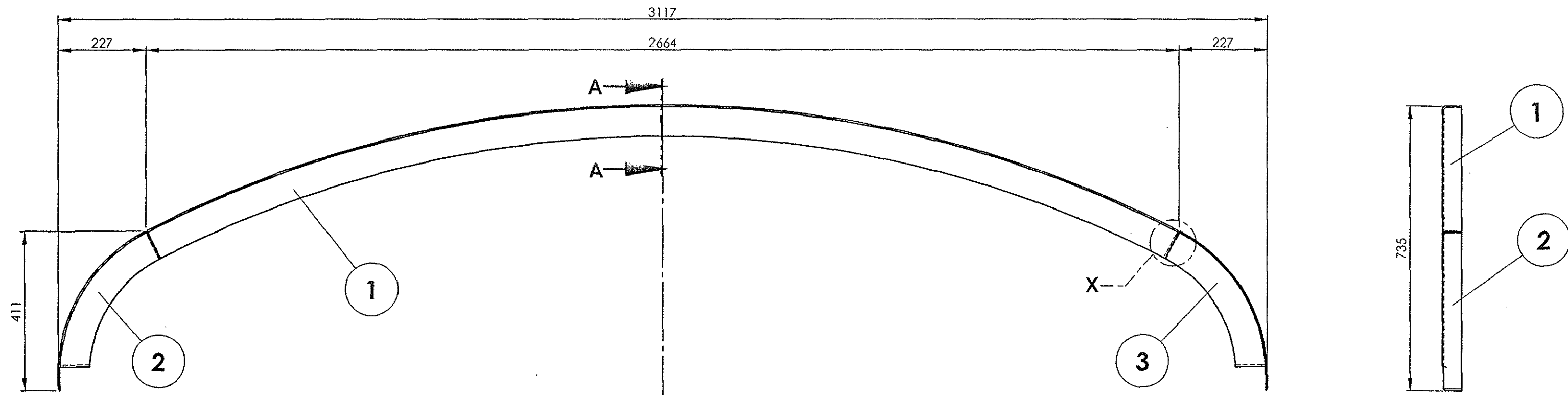




59315004

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



NOTE:

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

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

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

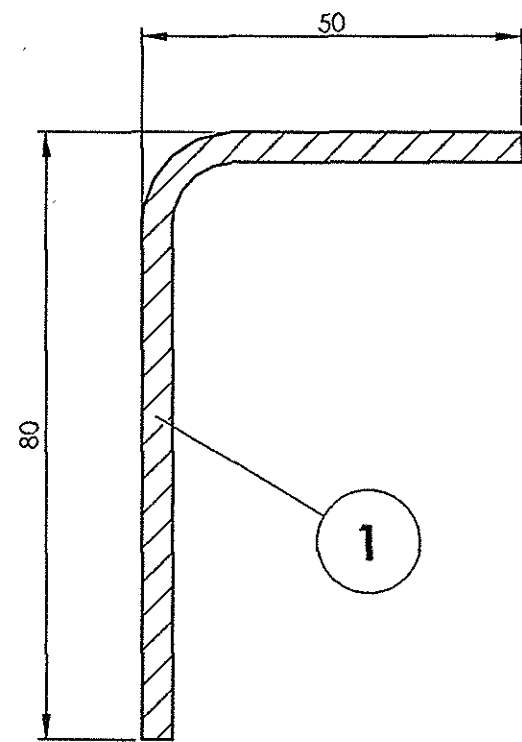
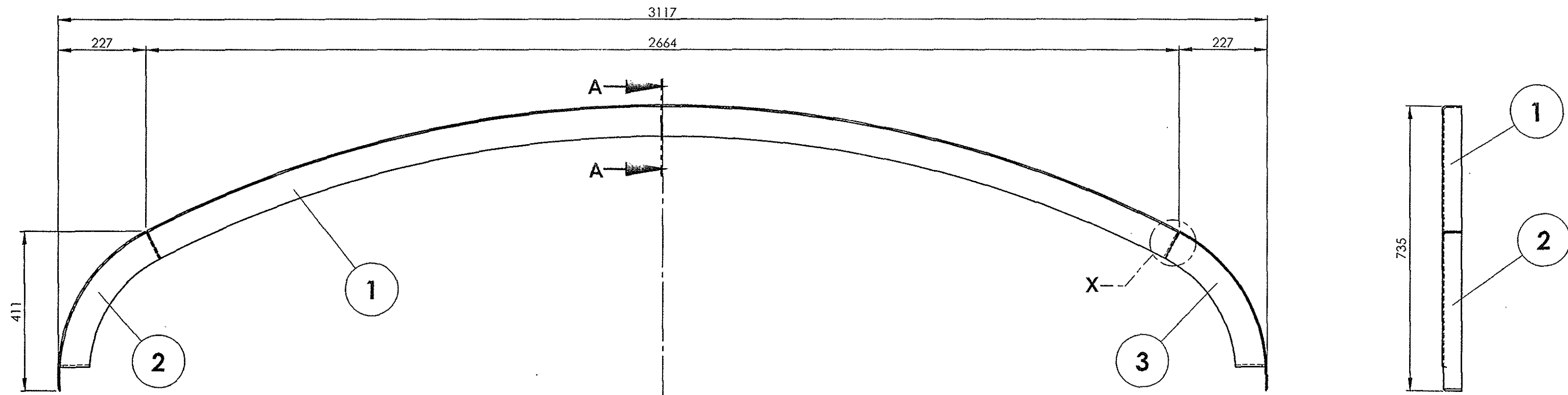
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS813:1986.

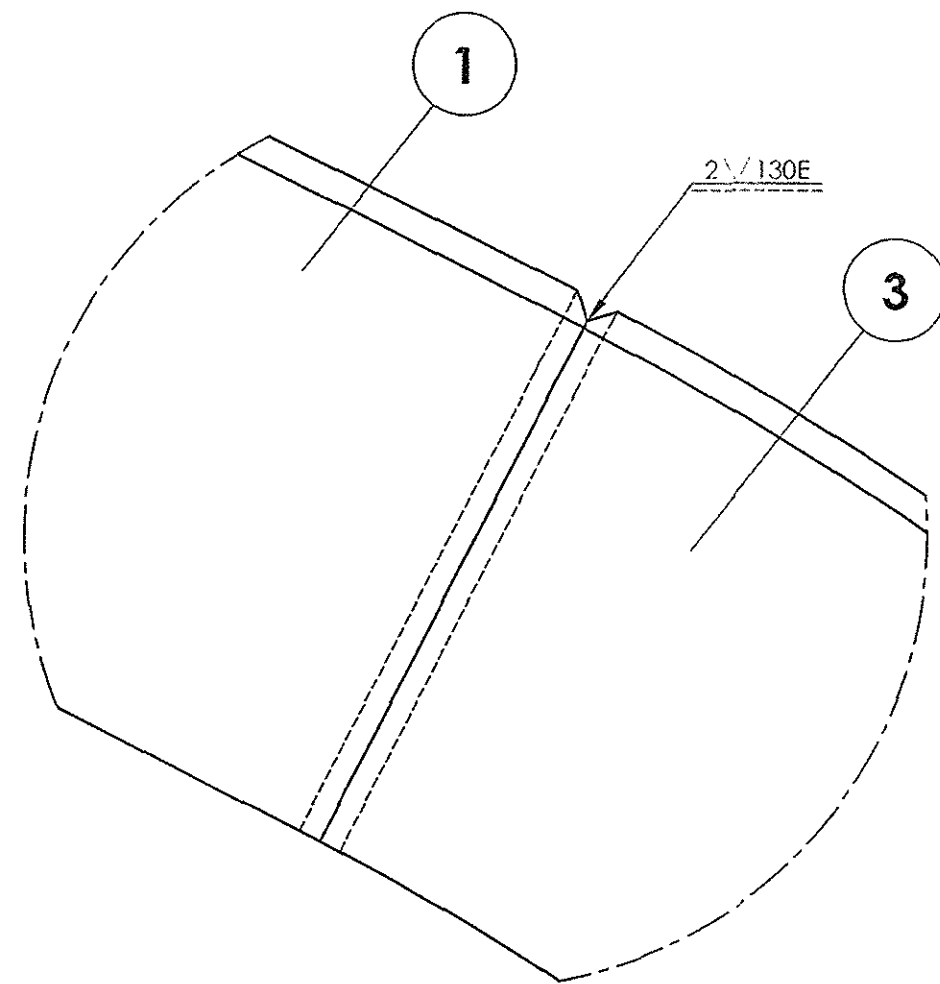
59315004

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE




SECTION A-A
SCALE 1 : 1



DETAIL X
SCALE 1 : 1

NOTE:

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

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

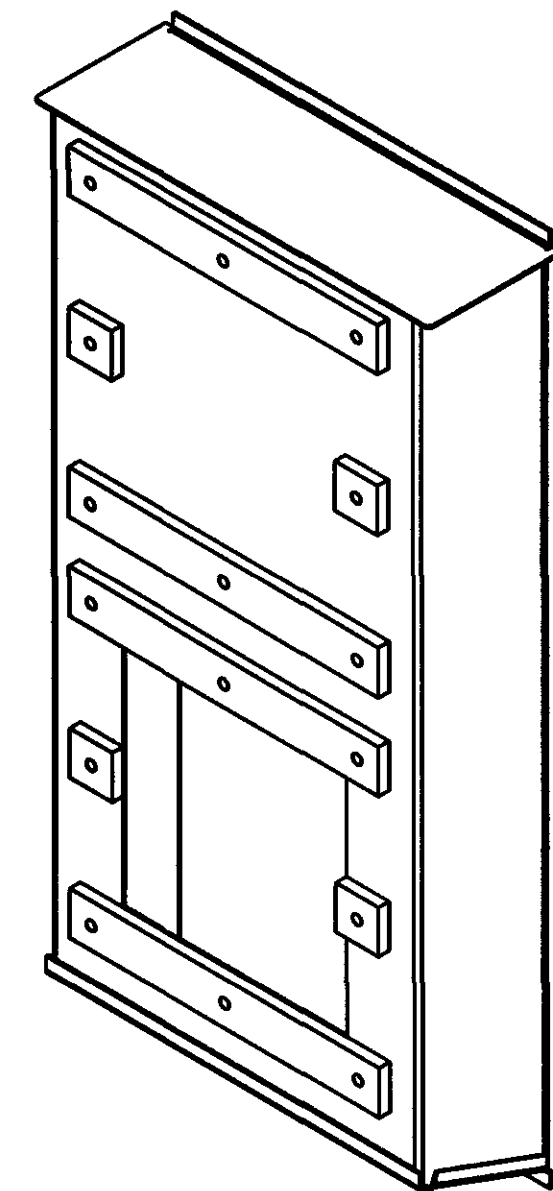
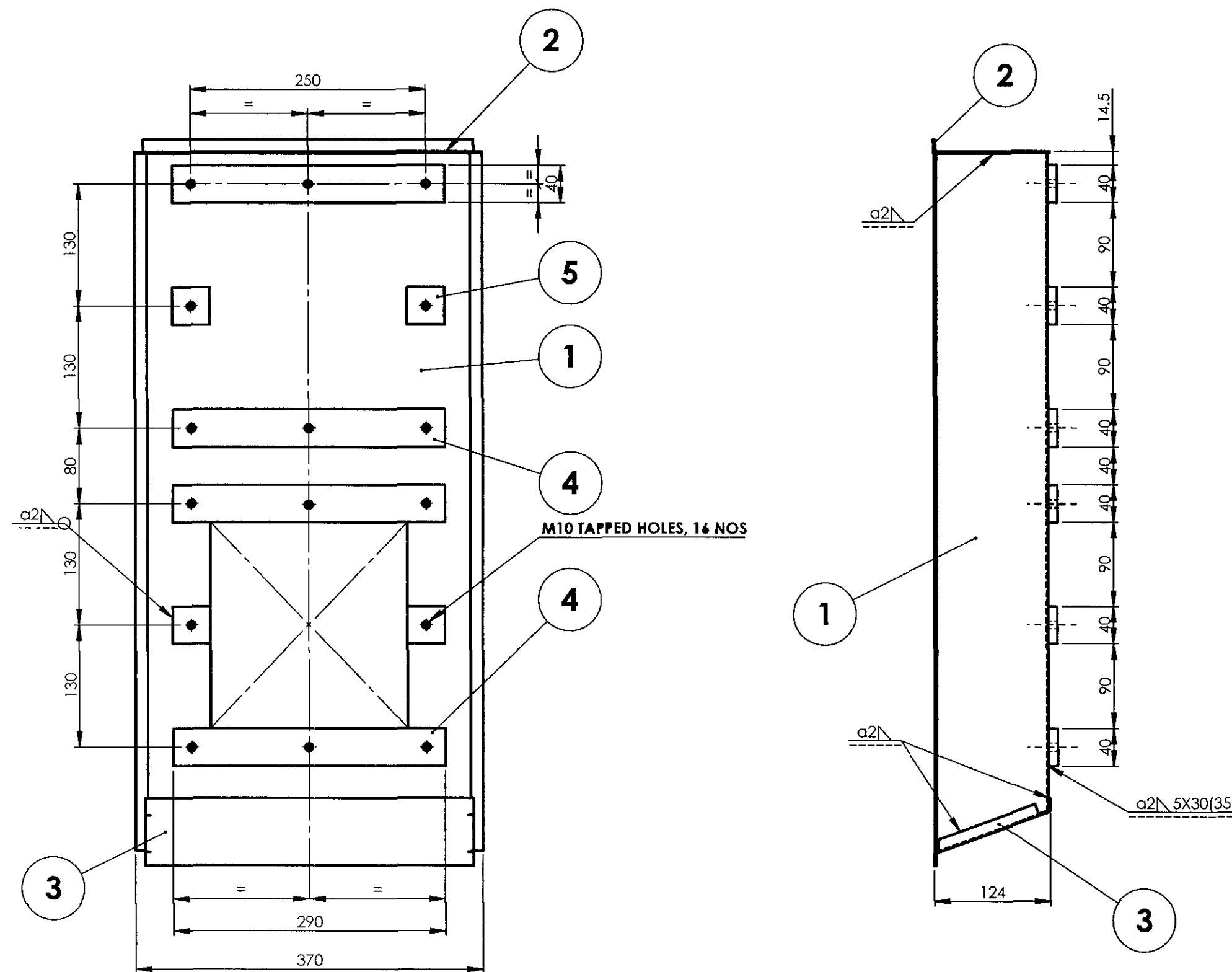
REF.DRG.NO.1 10113.0.20.120.025

	12-06-2013	<i>12/26</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

75415006

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

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



ISOMETRIC VIEW

NOTE:-

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

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

GROUP: 1-5 End Construction			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
BRACKET ASSEMBLY FOR EFT AND PARKING			SCALE 1:5	SSE/D CHD			
			ALT	ALTD			
			DRN				

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

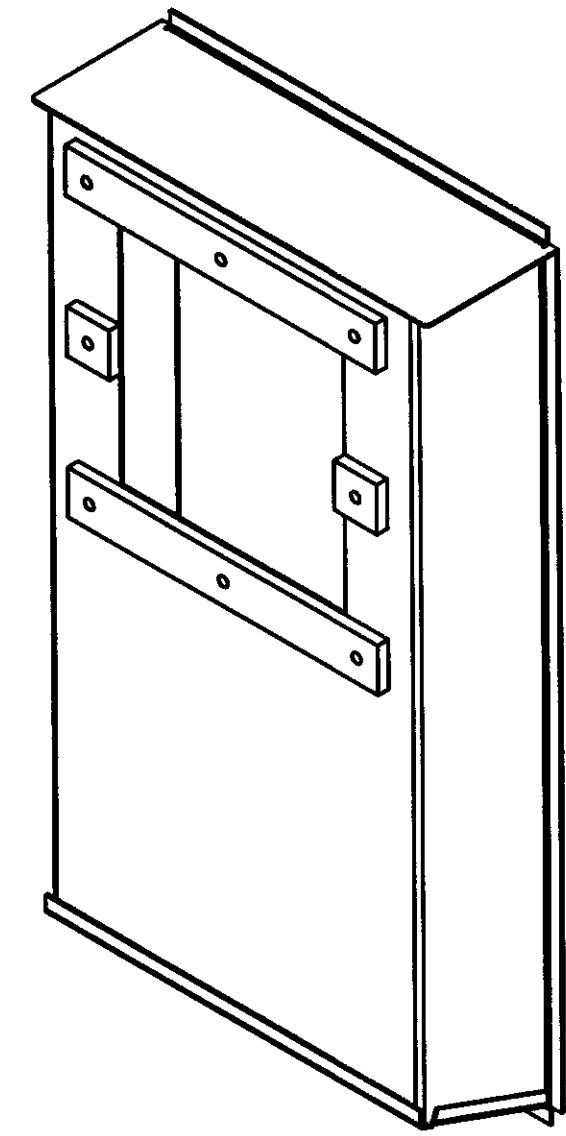
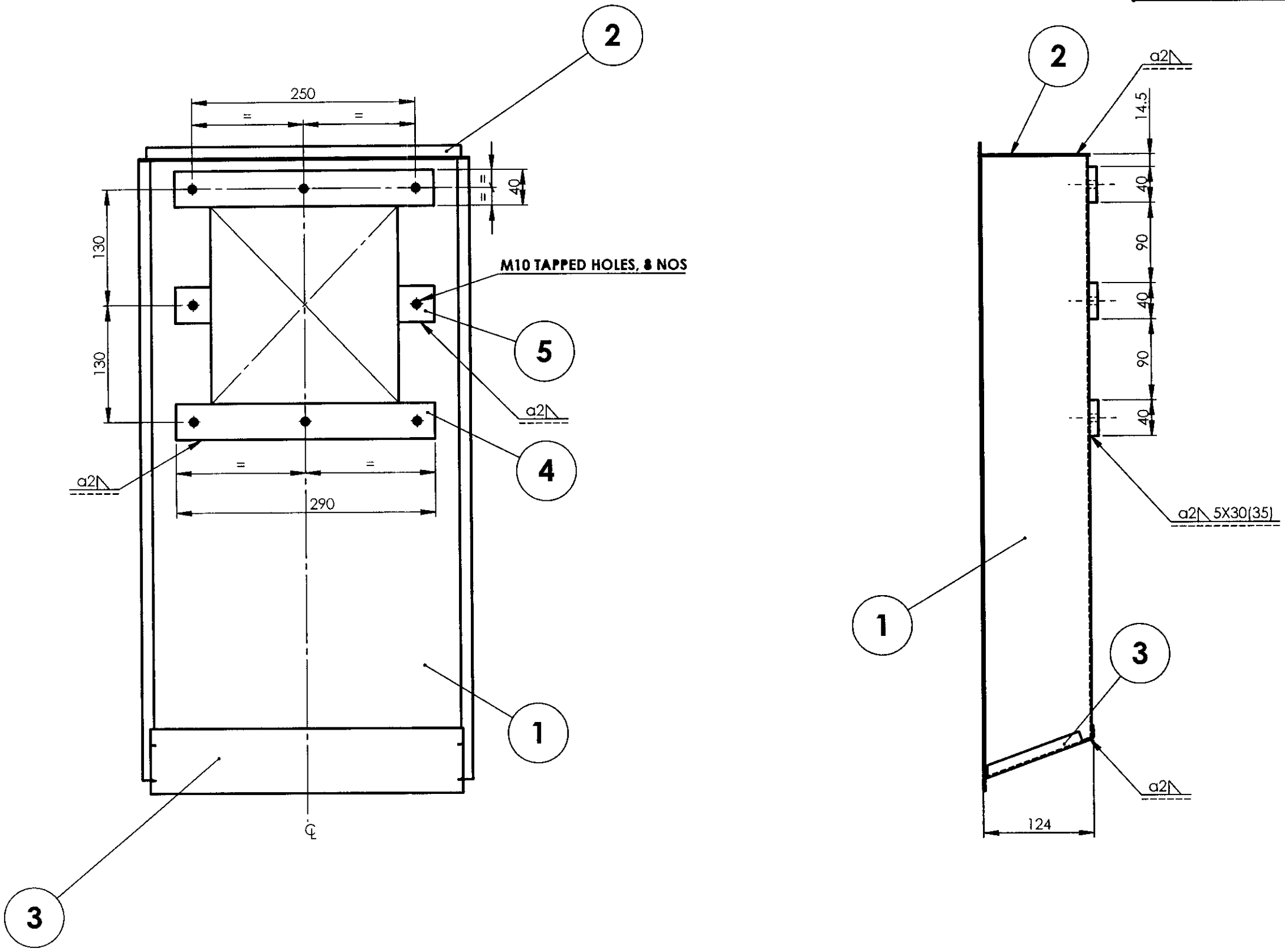
75415006

A2

75415007

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:-

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

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

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

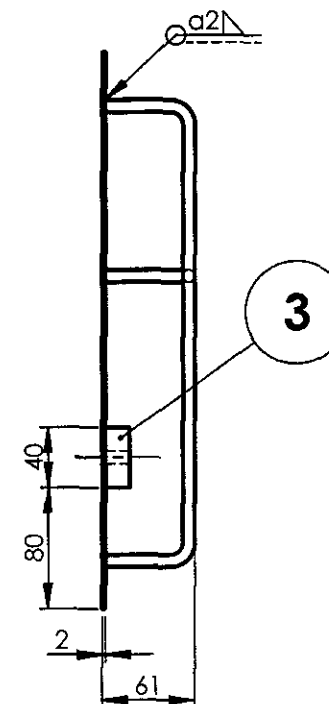
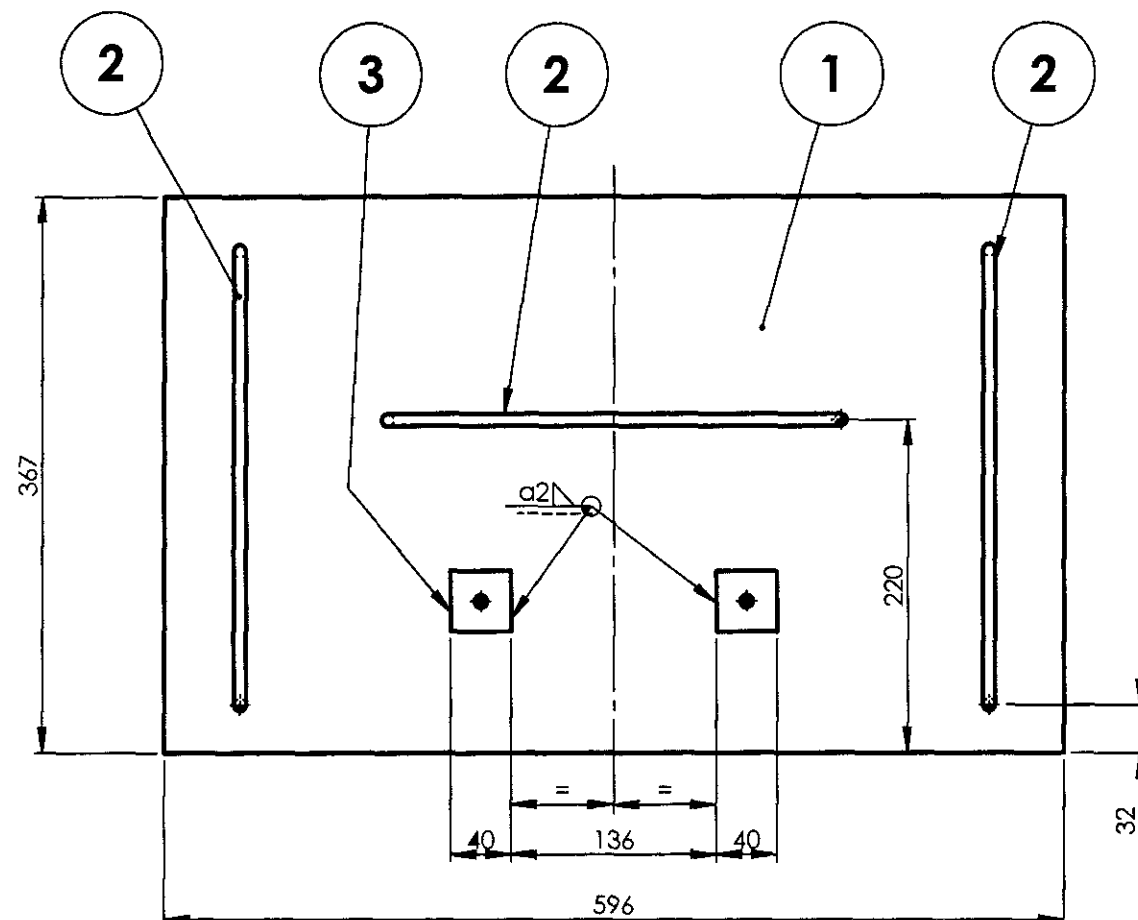
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DATE OF LATEST ALT.	17-05-2024	AME/SME
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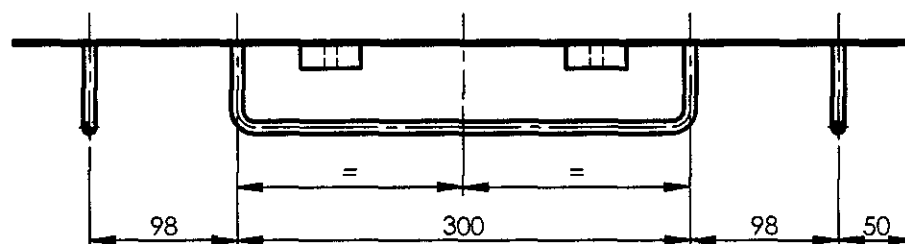
75415010

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

**NOTE:-**

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



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

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

ELEC COUPLER CLOSING PLATE

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

LWS/PP2

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

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

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

REF.DRG.NO.

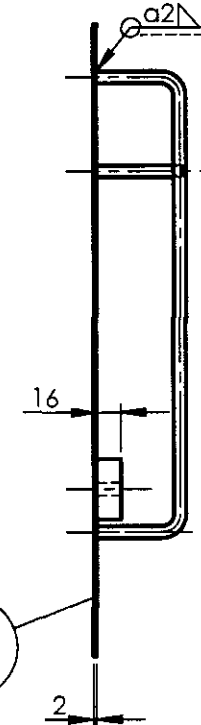
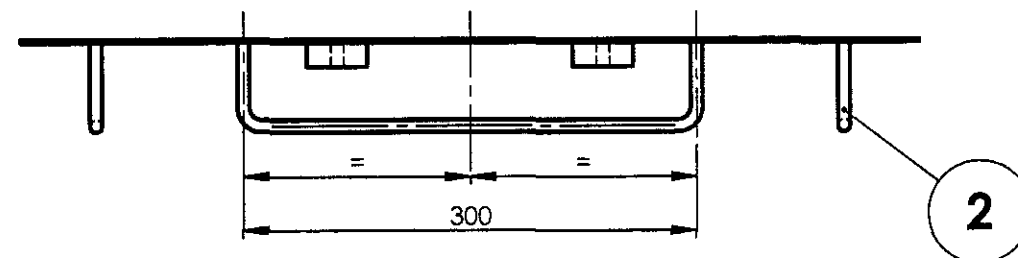
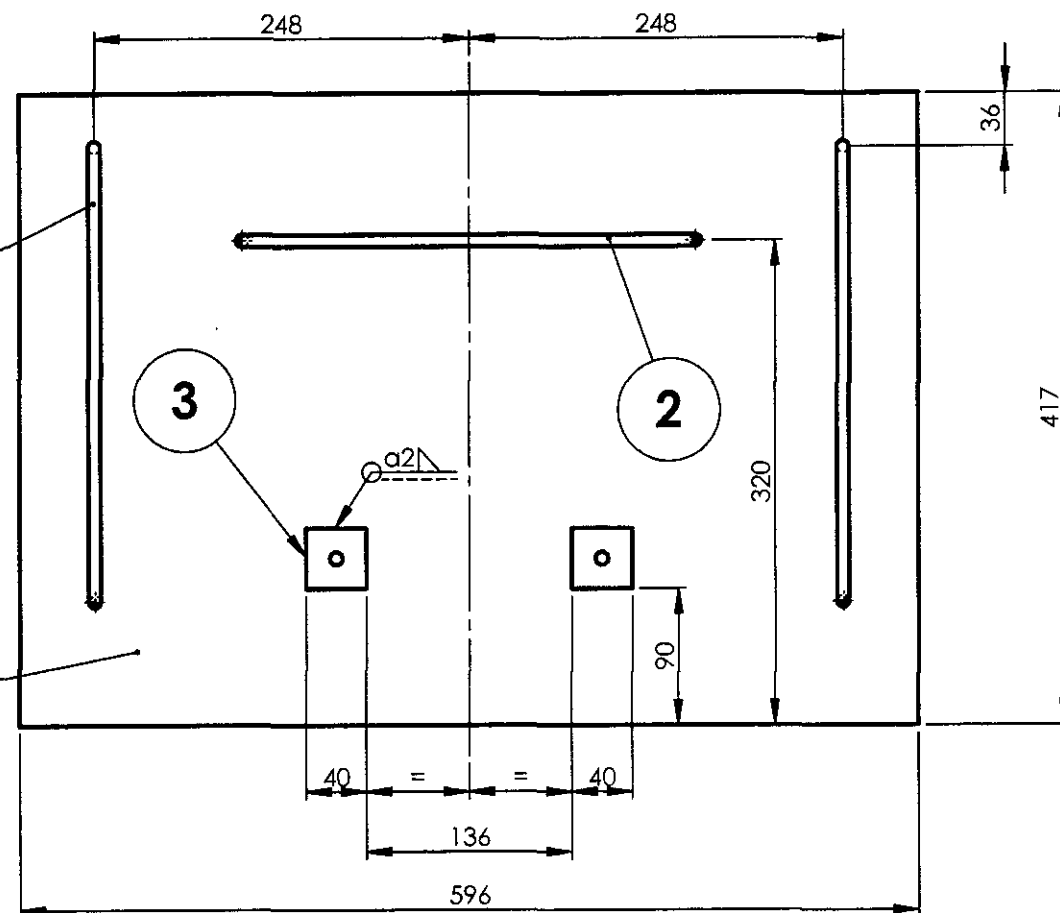
	17 -05-2024	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

75415011

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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**NOTE:-**

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

2	EARTHING BLOCK		3	AAD15485		0.20	
3	ELEC CABLE TIE ROD		2	AAB15177		0.16	
1	ELEC COUPLER COVER SHEET	2x417 x596	1		RDSO SPEC C-K201 X2 Cr Ni 12	3.98	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
ELEC COUPLER CLOSING PLATE					SCALE	SSE/D	1:5
					ALT.	CHD	
					DRN	3D: MAHESH 2D: KUNTI THAKUR	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					LWS/PP2		
					75415011		
					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.

17-05-2024

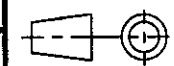
DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

LWS/PP2

75415011

A3

75415013

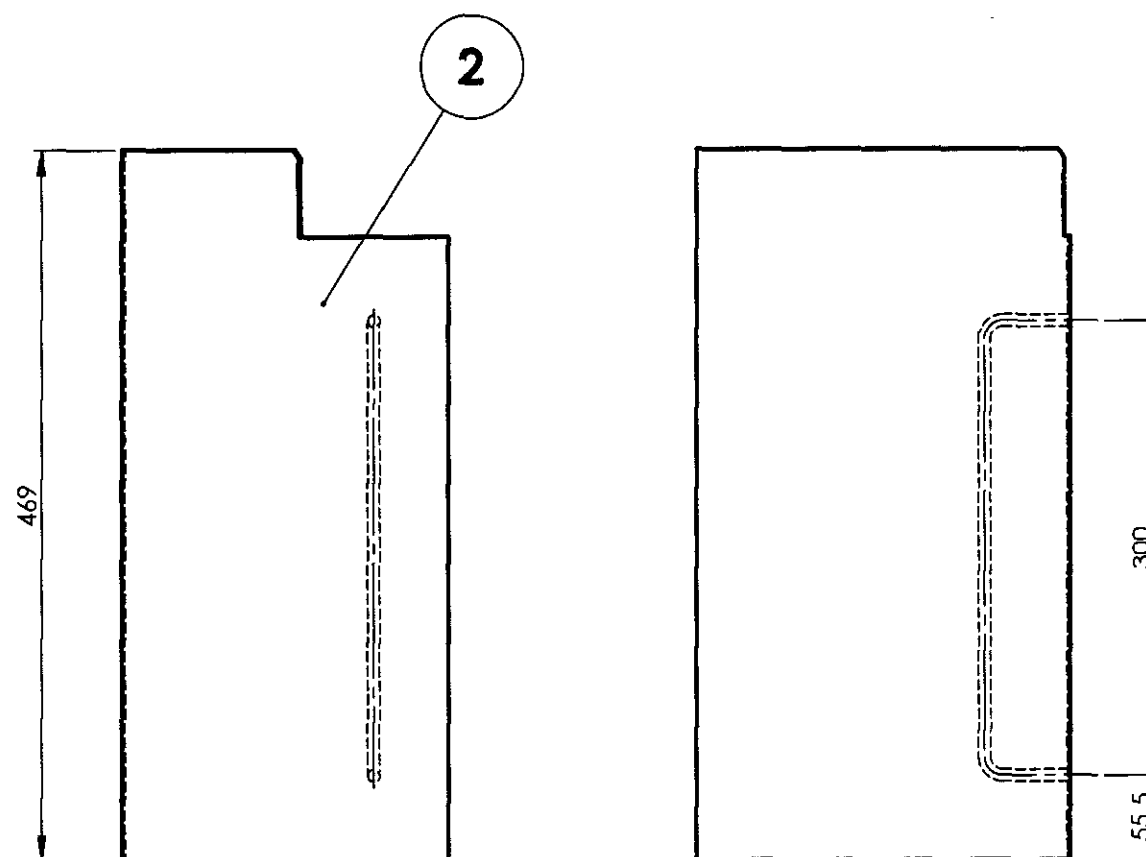
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS

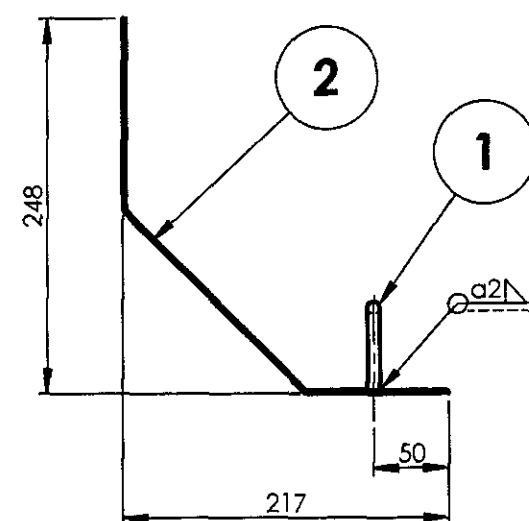
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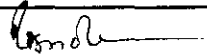
ZONE

DESCRIPTION

APPROVED &
DATE**NOTE:-**

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



1	ELEC COUPLER COVER		2	AAD15876		2.85		
1	ELEC CABLE TIE ROD		1	AAB15177		0.16		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: 1-5 End Construction			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
ELEC COUPLER COVER COMPLETE					SCALE	SSE/D		
					1:5	CHD		
					ALT.	ALTD	3D: MAHESH 2D: KUNTI THAKUR	
						DRN		
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			
SHEET 1 OF 1		75415013	A3					

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REF.DRG.NO.

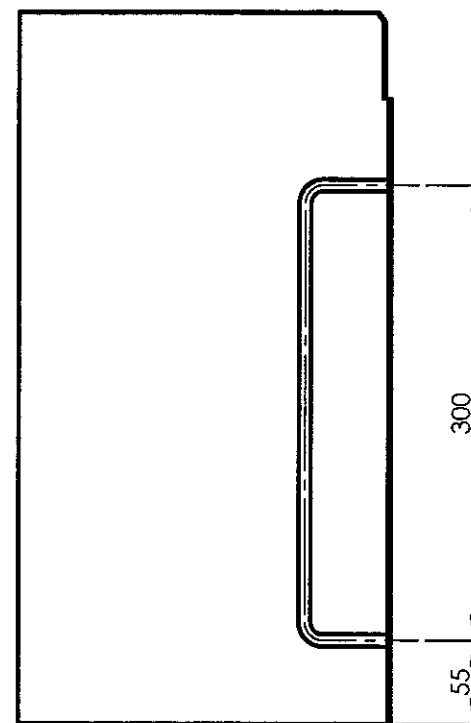
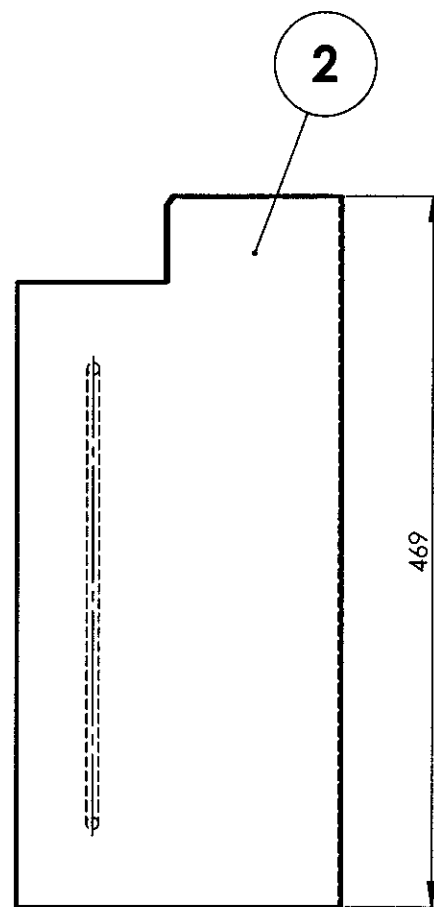
17-05-2024

AME/SME

75415014

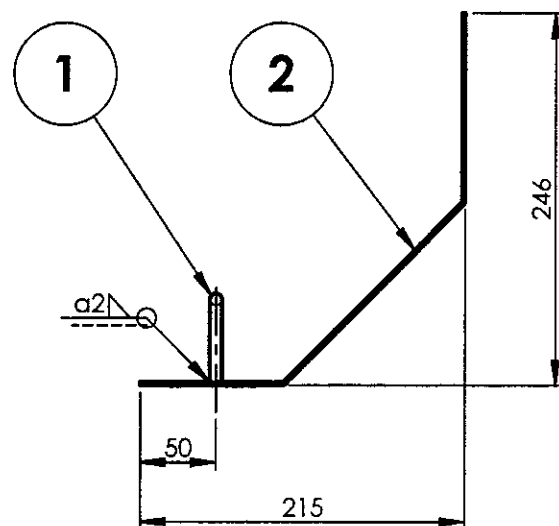
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

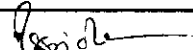
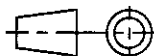


NOTE:-

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3. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



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


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

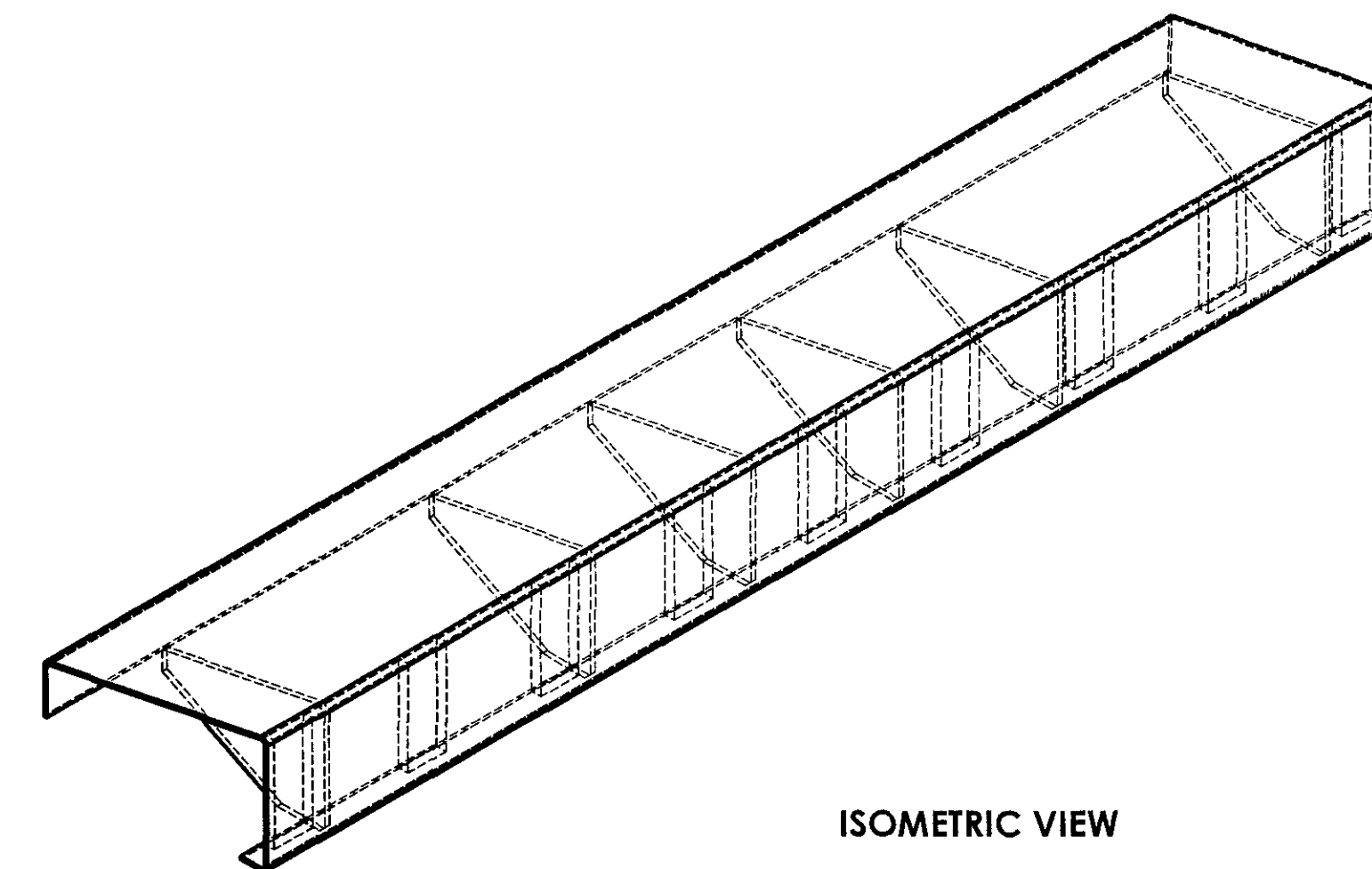
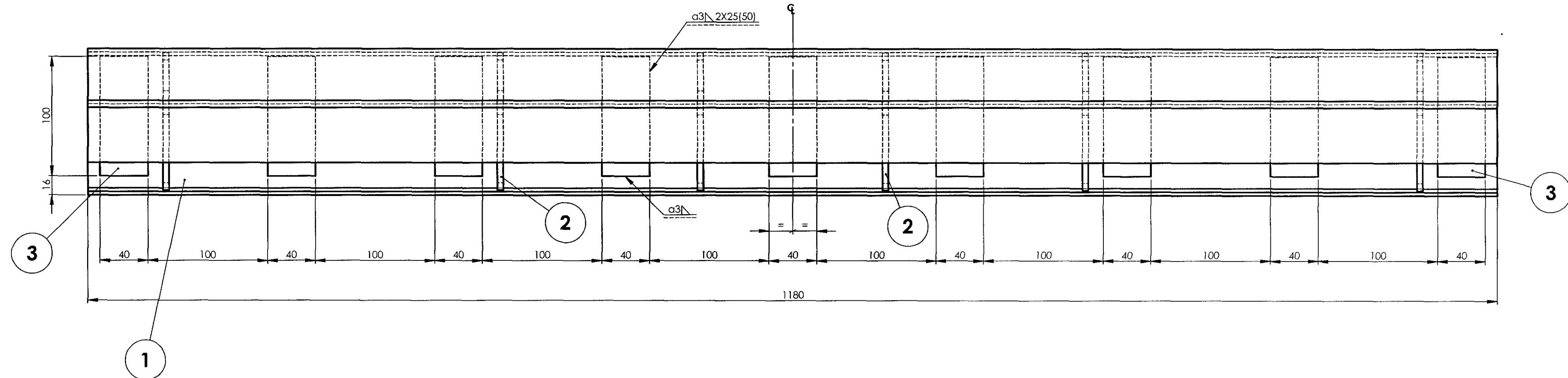
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REF.DRG.NO.

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

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




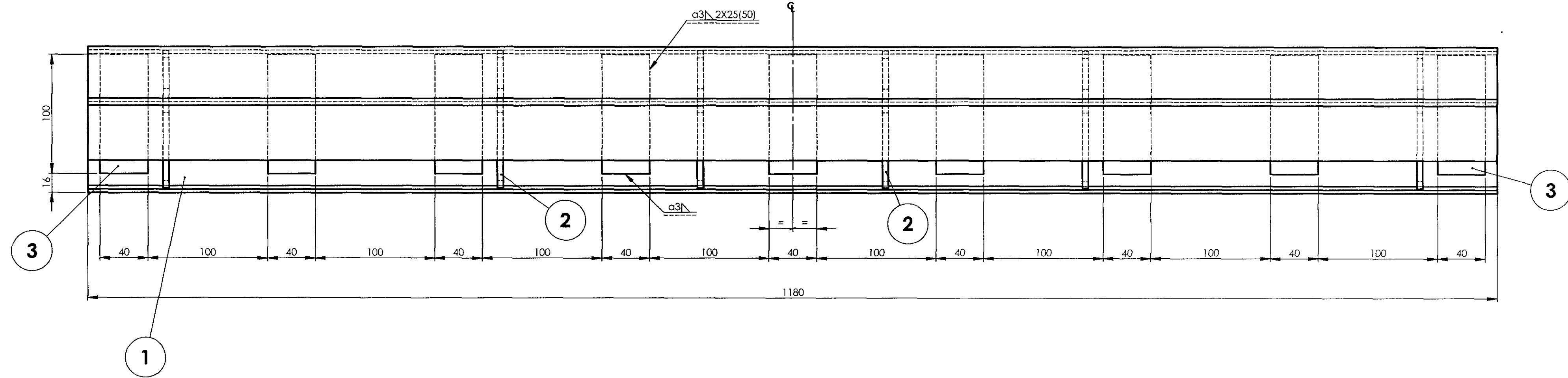
NOTE:

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

REF.DRG.NO.-

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

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



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

RAMP ARRANGEMENT

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

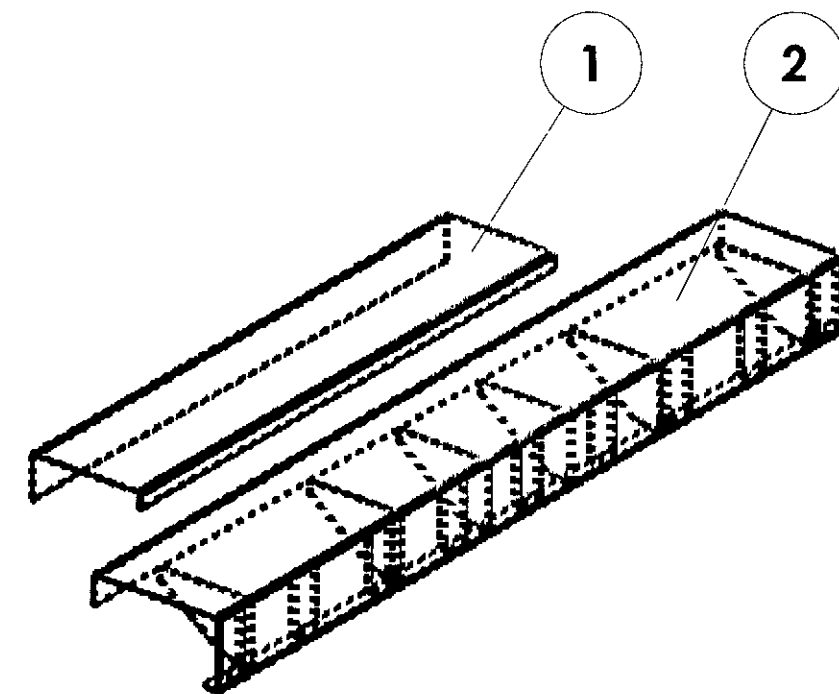
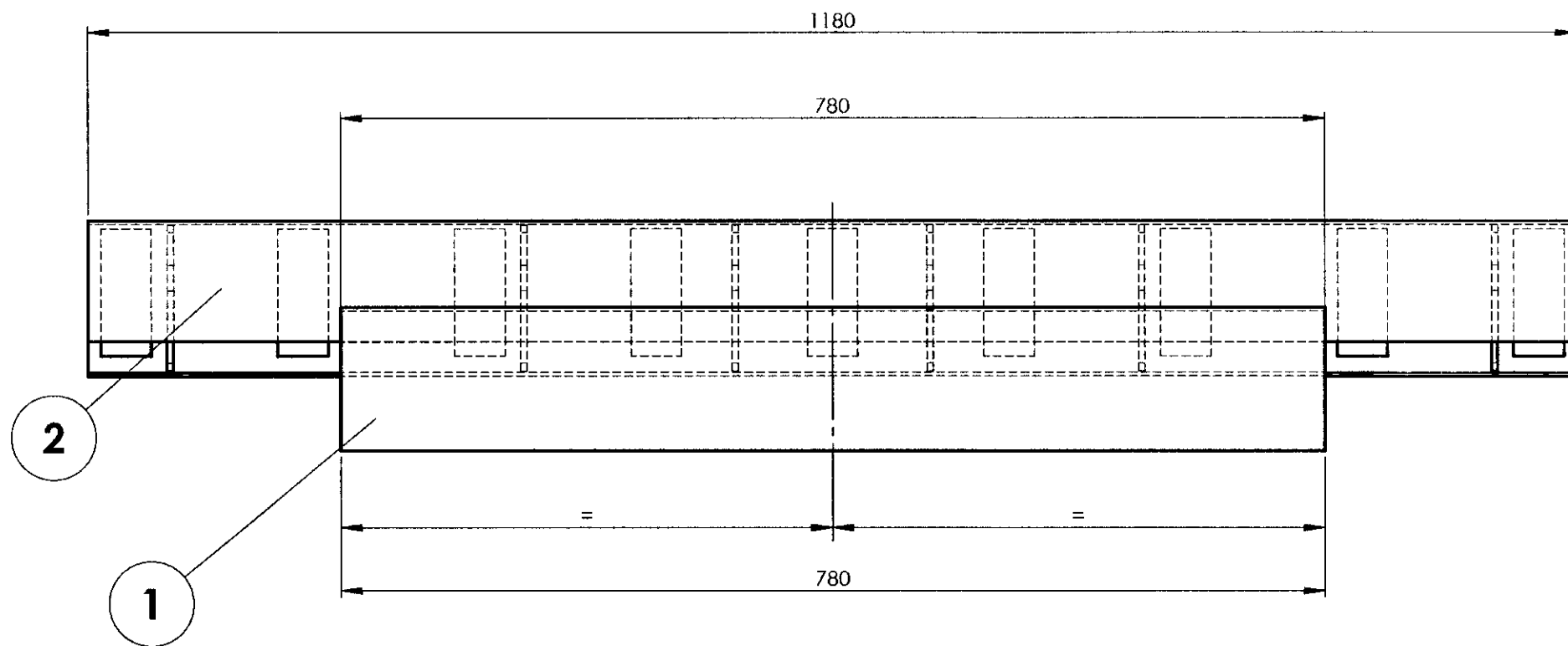
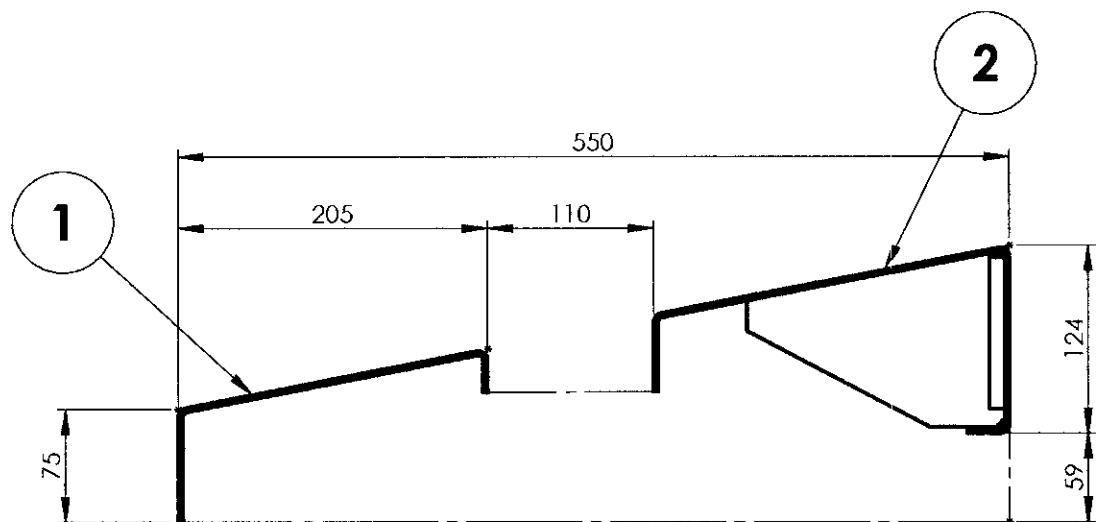
75415015

A1

75415022

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:

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

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

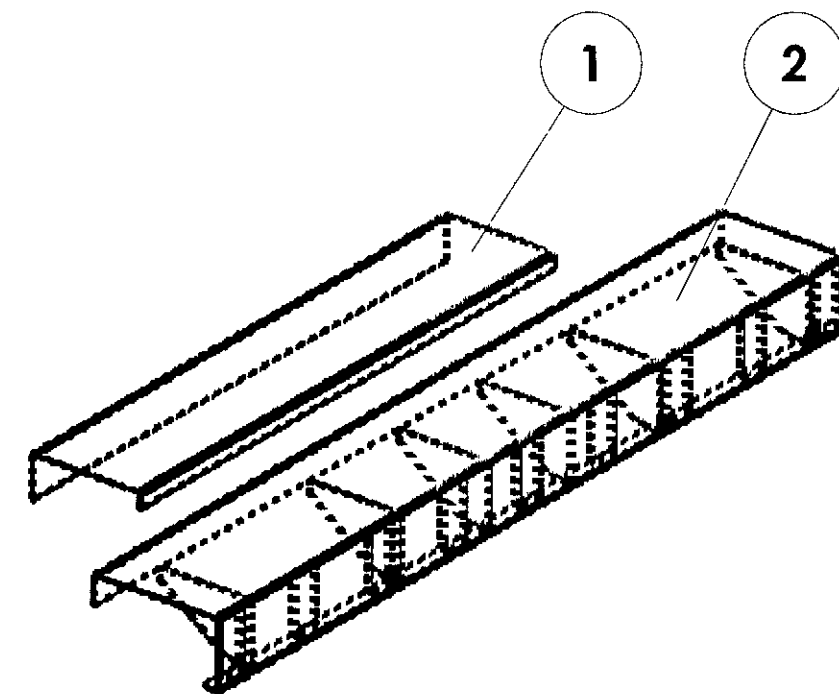
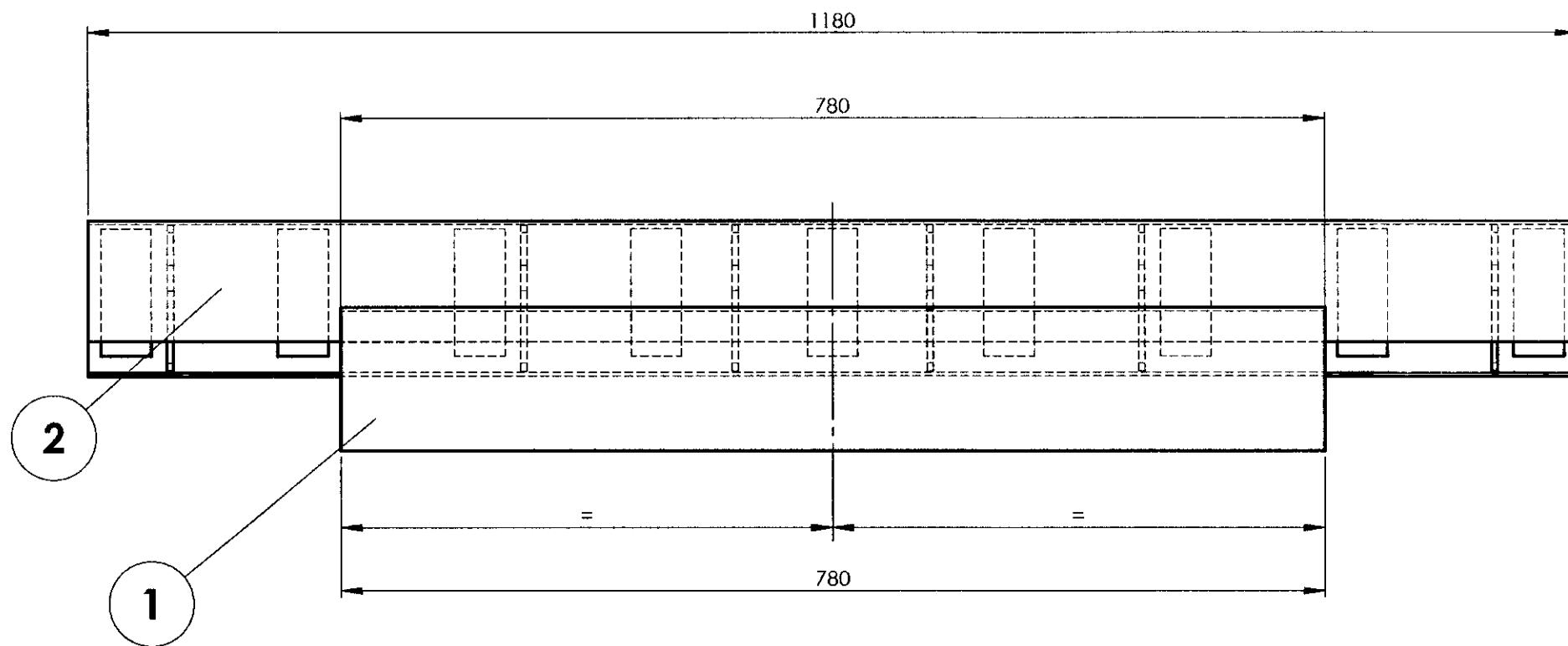
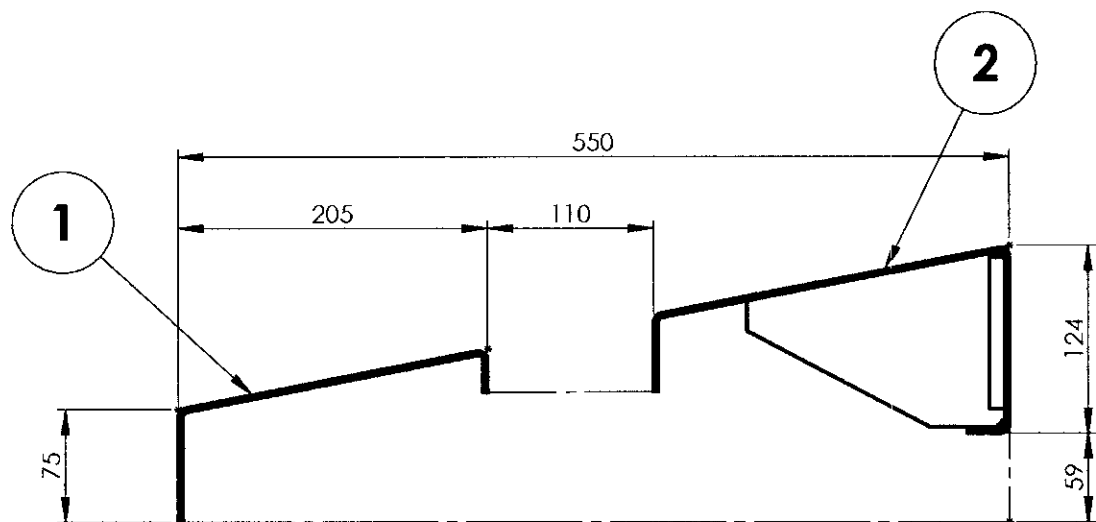
REF.DRG.NO.-

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

75415022

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:

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

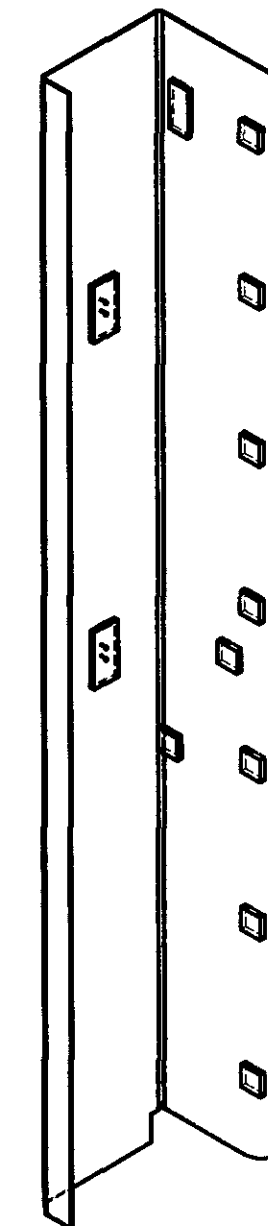
1	RAMP ARRANGEMENT		2	75415015		18.124	
1	CHANNEL		1	AAB15841		5.44	\$
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-5 End Construction				SURFACE AREA IN Sq.m.: 1.765		WT/ASSY IN Kgs:	
RAMP ARRANGEMENT					SCALE 1:10	SSE: CHD	B-Suresh
					ALT	ALTD	
					DRN	DRN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

REF.DRG.NO.-

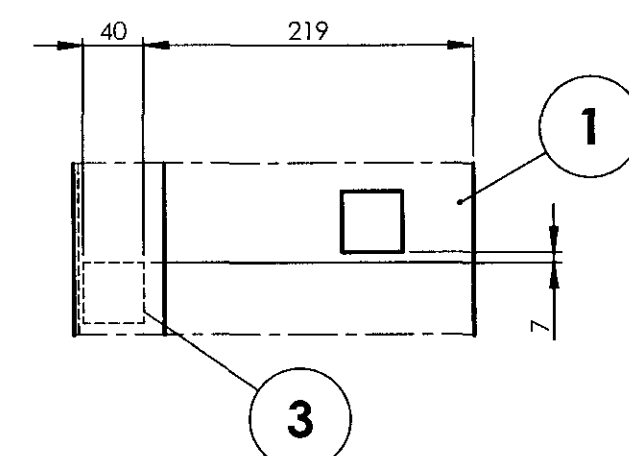
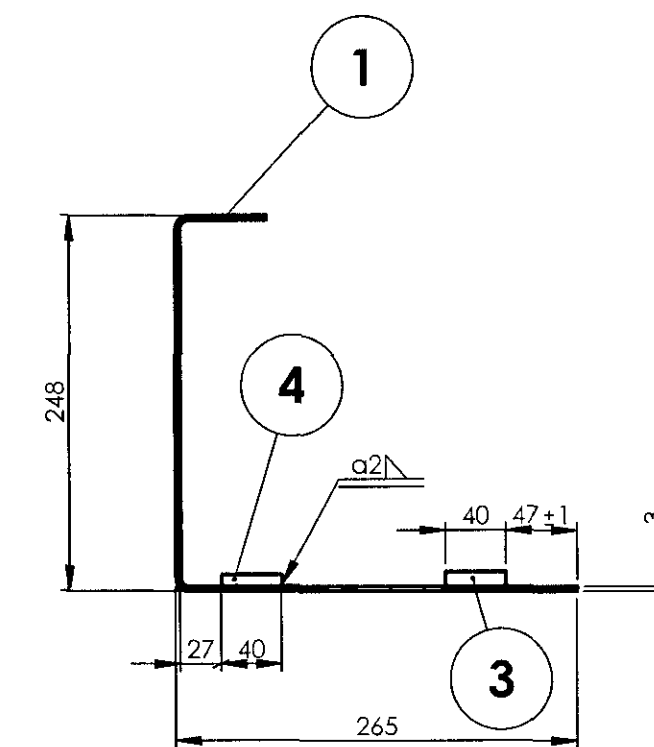
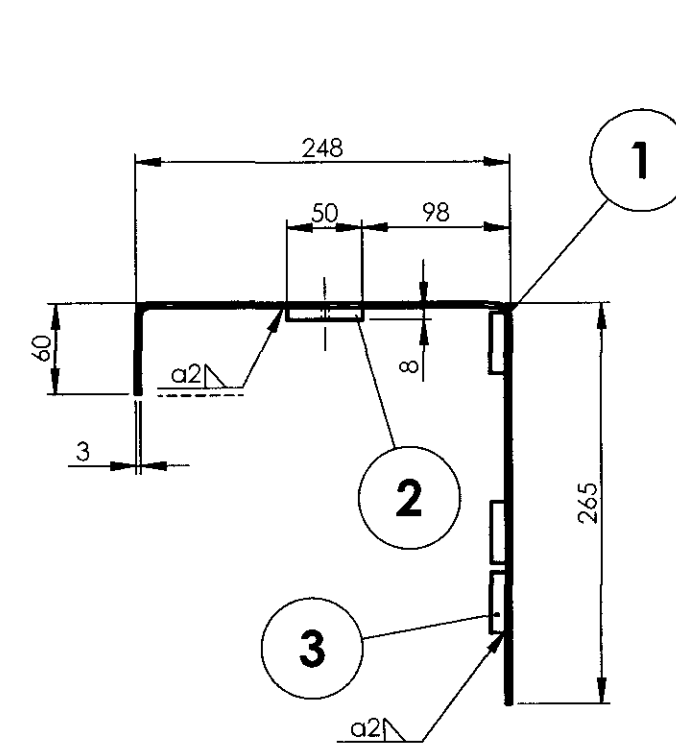
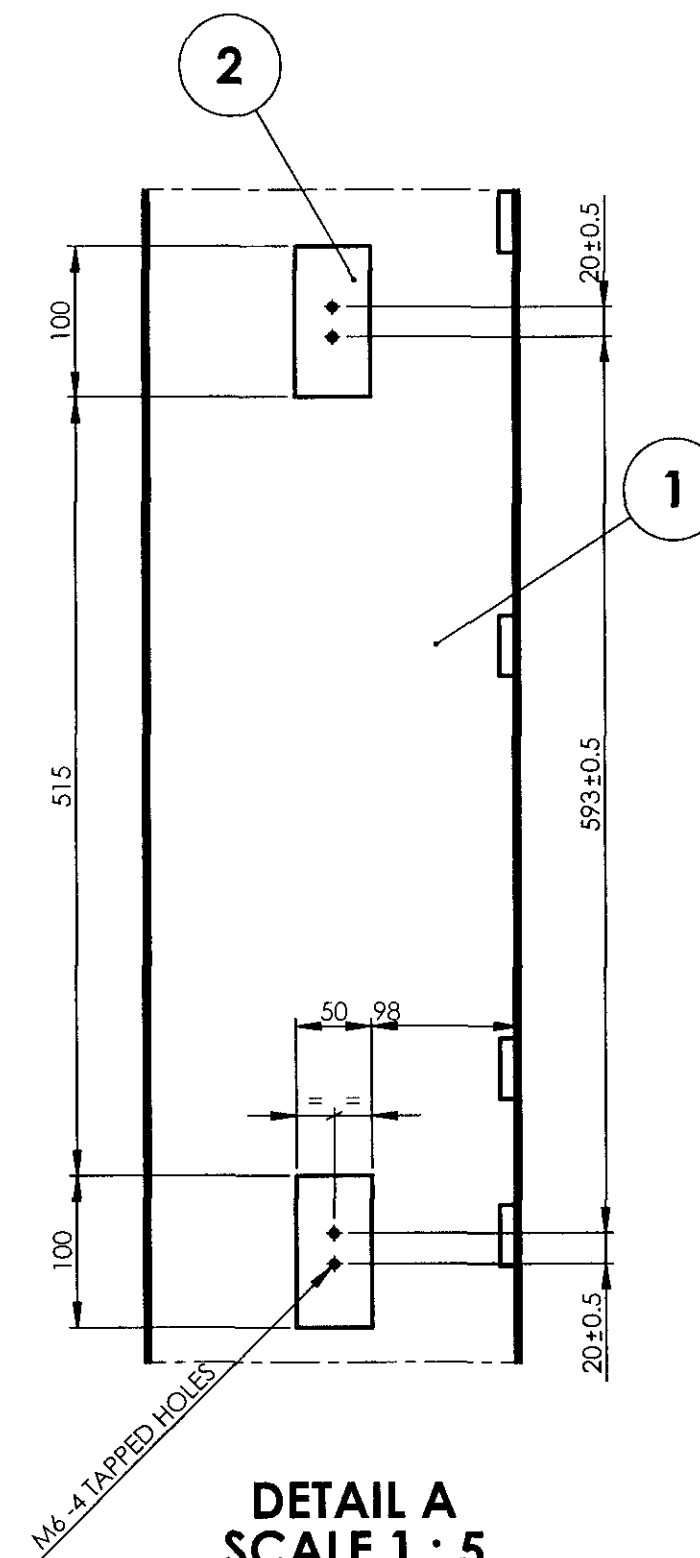
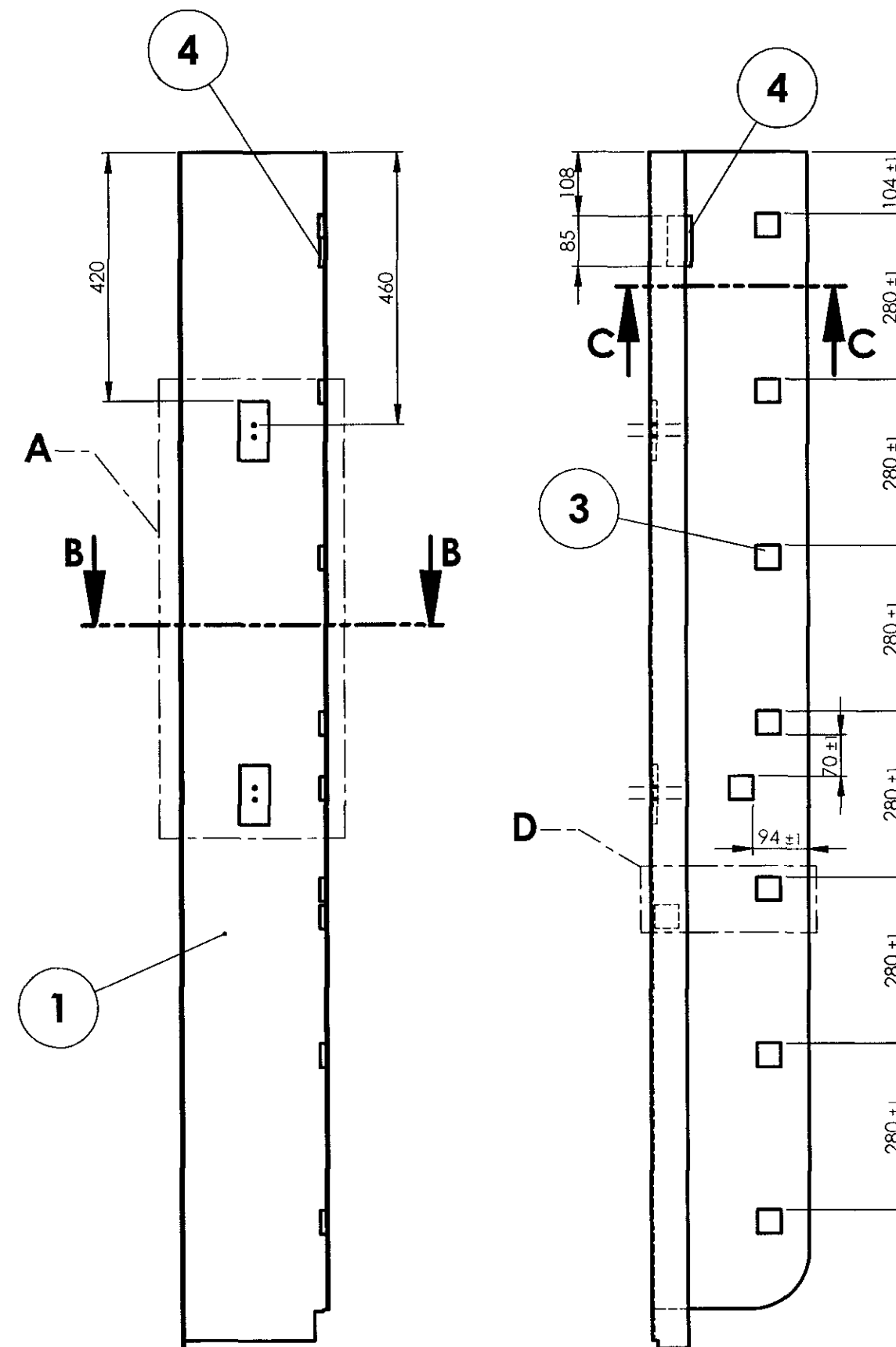
DATE OF LATEST ALT.	30-07-2025	AME/SME
DATE OF FIRST ISSUE		

▽ ROUGH MACHINED	①1	ROUGH CLEANED	REVISIONS			
▽▽ FINISH MACHINED	②10	BURRS REMOVED	ALT.	ZONE	DESCRIPTION	APPROVED & DATE
▽▽▽ FINE FINISH MACHINED	③5	CHAMFERED				


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



ISOMETRIC VIEW




1	BACK PIECE	8x40x85	4		RDSO SPEC C-K201 X2 Cr Ni 12	0.22	
9	BACK PIECE	10x40x40	3		RDSO SPEC C-K201 X2 Cr Ni 12	0.13	
2	BACK PIECE	8 x 50 x 100	2		SS-409M	0.32	
1	PILLAR RH		1	AAE15039		24.56	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
<h1 style="text-align: center;">RAM PILLAR ASSEMBLY</h1>				SCALE 1:20	SSE/D CHD
				ALT	ALTD
				DRN	MAHESH
					
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			SHEET 1 OF 1	75415025	
				A2	

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

REF.DRG.NO.-

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

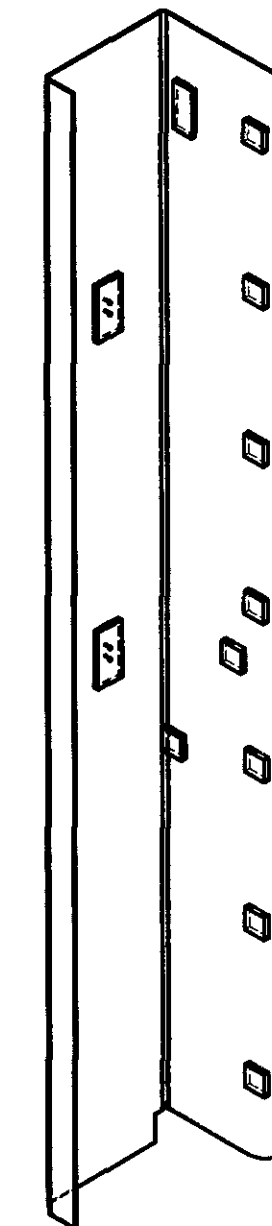
75415025

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

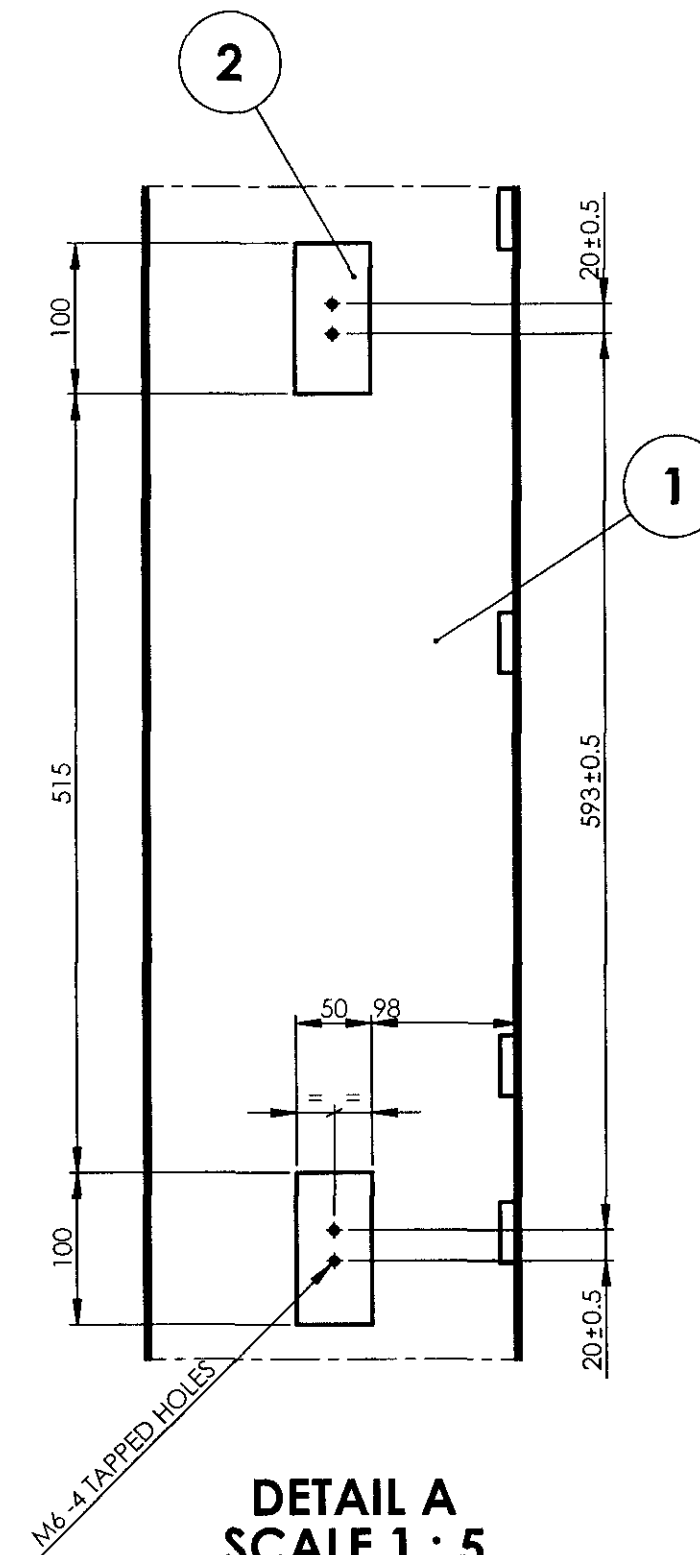
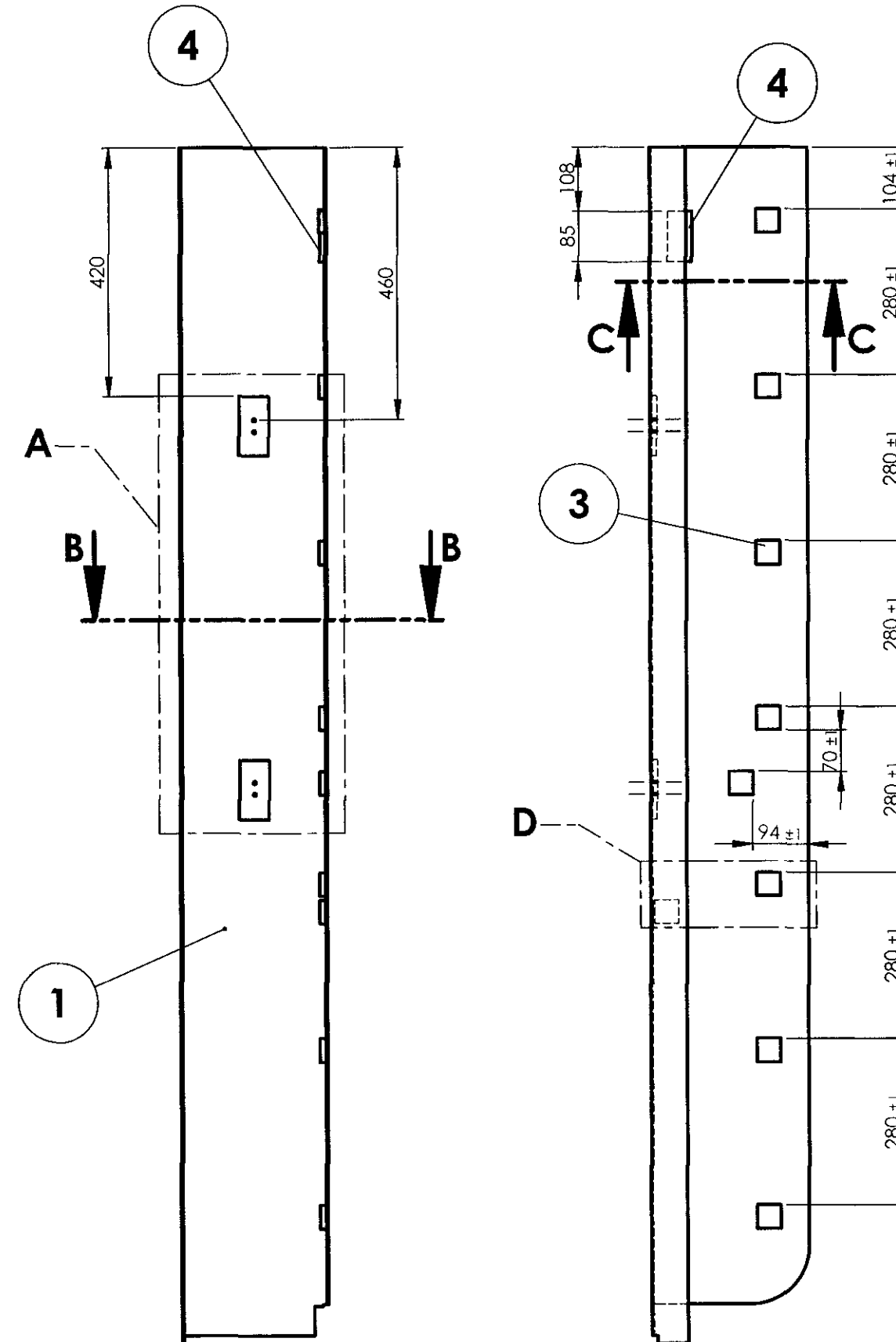
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

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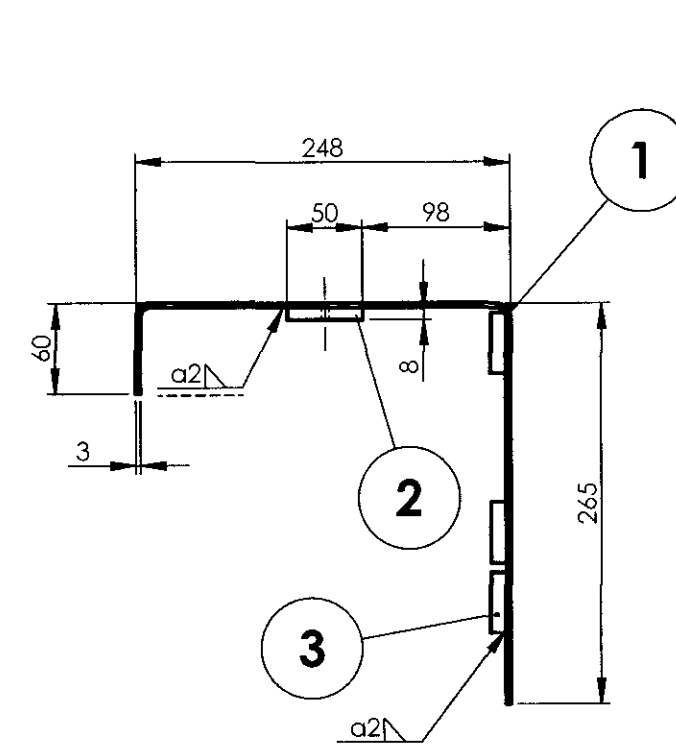
1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP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



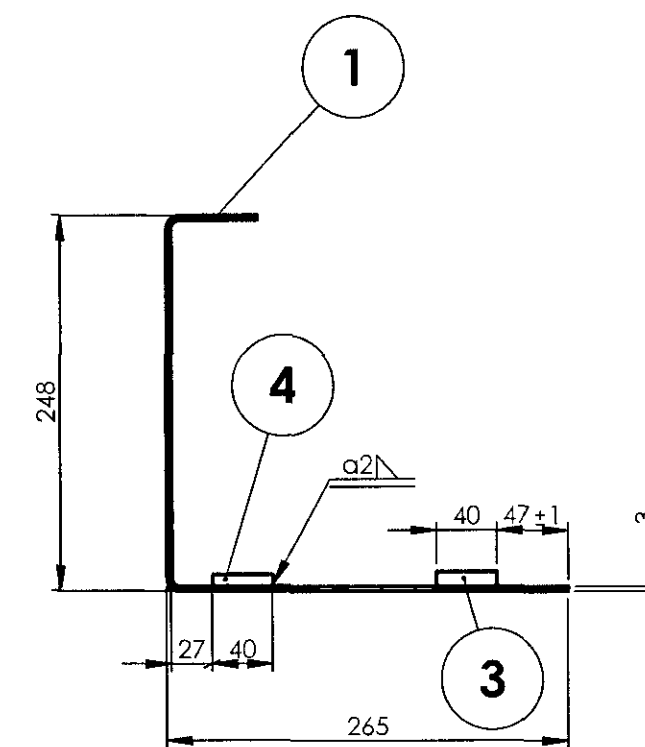
ISOMETRIC VIEW



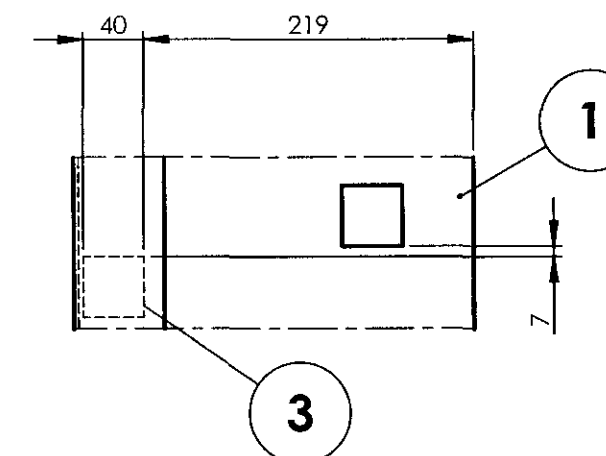
DETAIL A
SCALE 1 : 5



SECTION B-B
SCALE 1 : 5

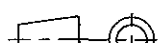


SECTION C-C
SCALE 1 : 5



DETAIL D
SCALE 1 : 5

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

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

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

REF.DRG.NO.-

	30-07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.M.E

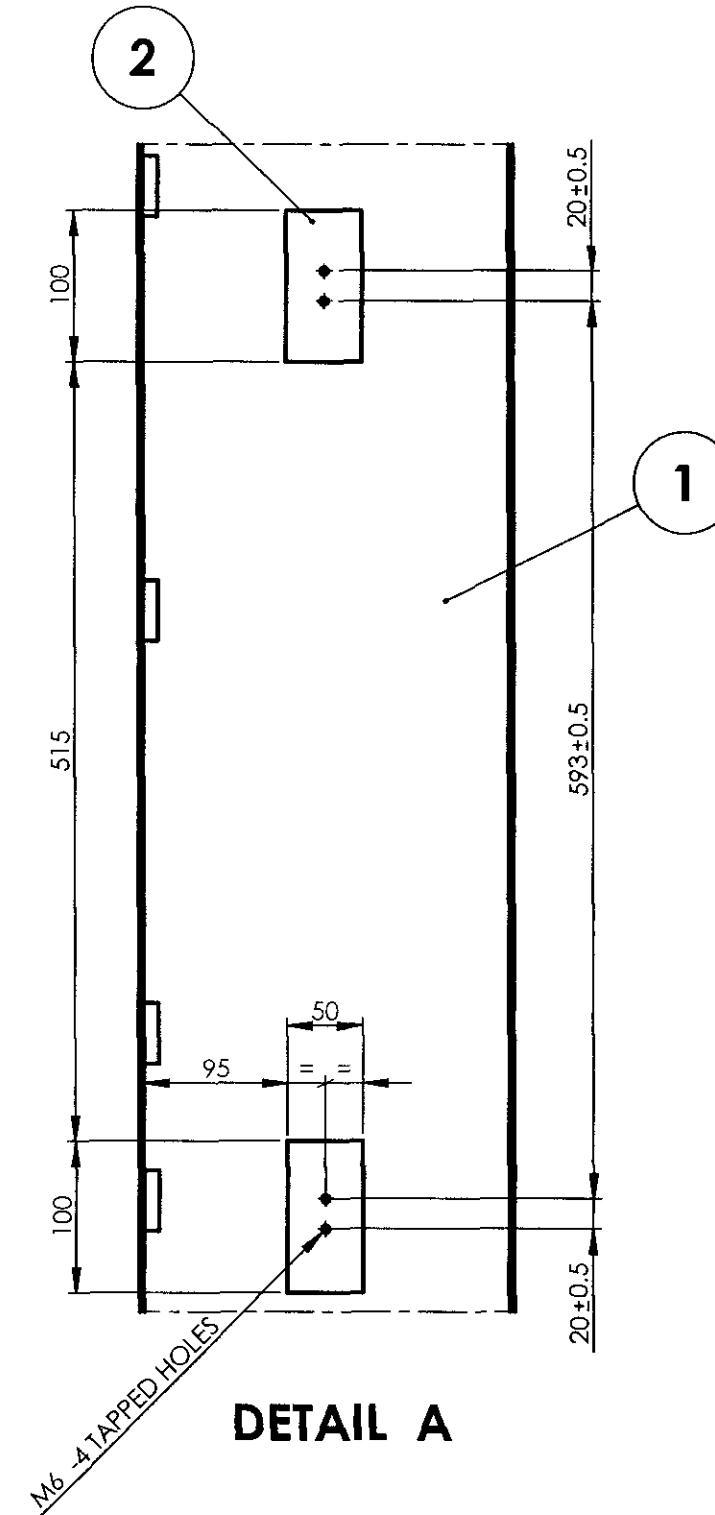
75415026

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

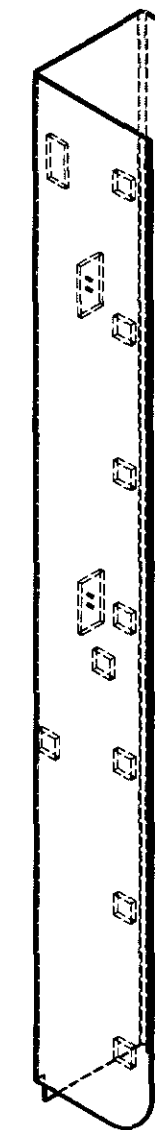
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

NOTE:

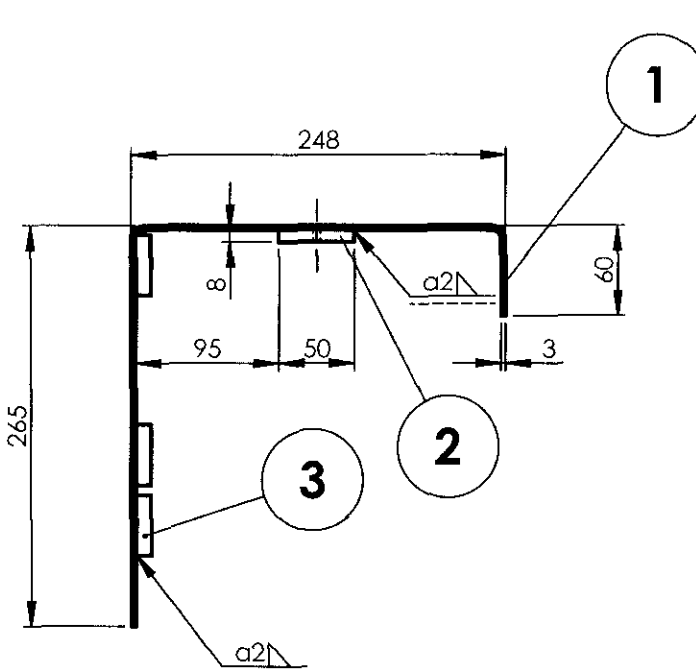
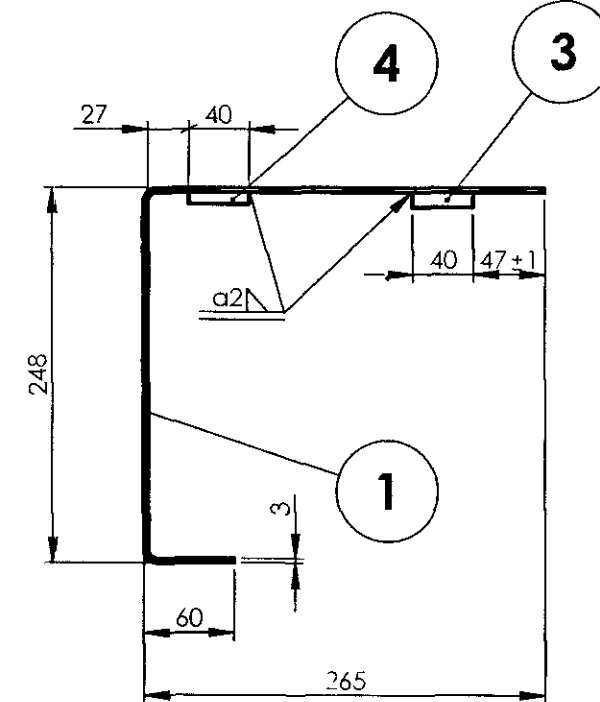
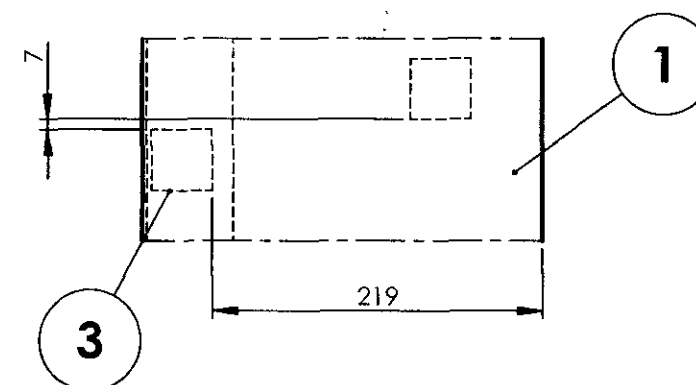
1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP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



DETAIL A



ISOMETRIC VIEW

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

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

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

RAM PILLAR ASSEMBLY

SCALE 1:20	SSE/D	CHD
ALT	ALTD	DRN
		MAHESH

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

LWCB/PP

75415026

A2

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

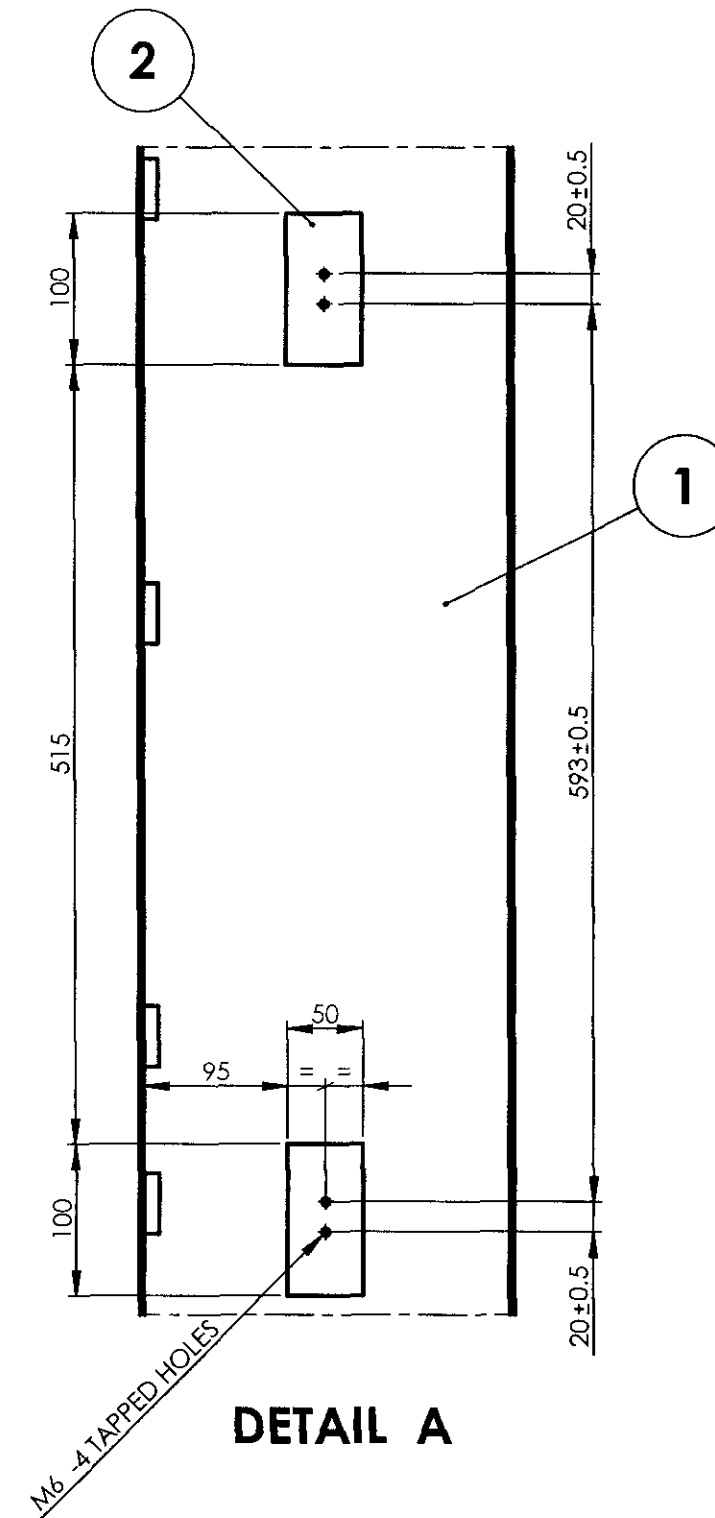
75415026

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

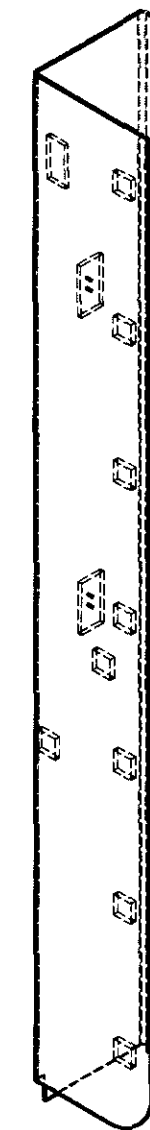
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

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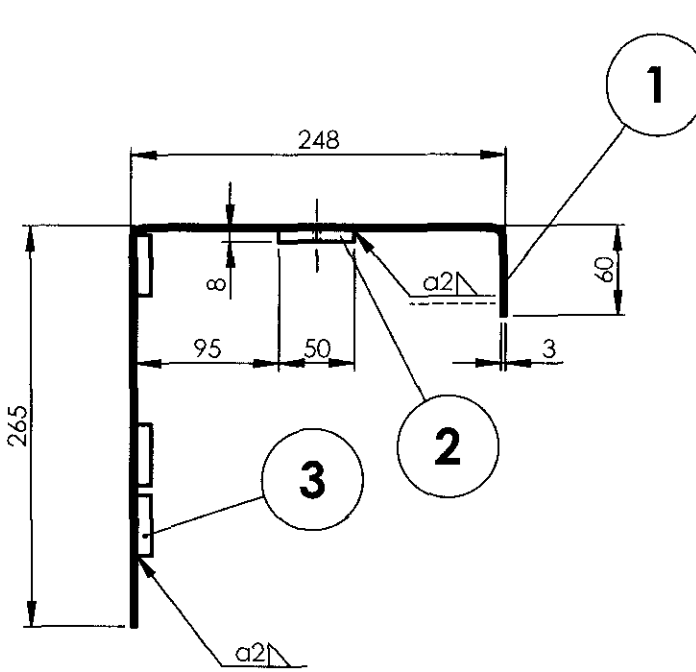
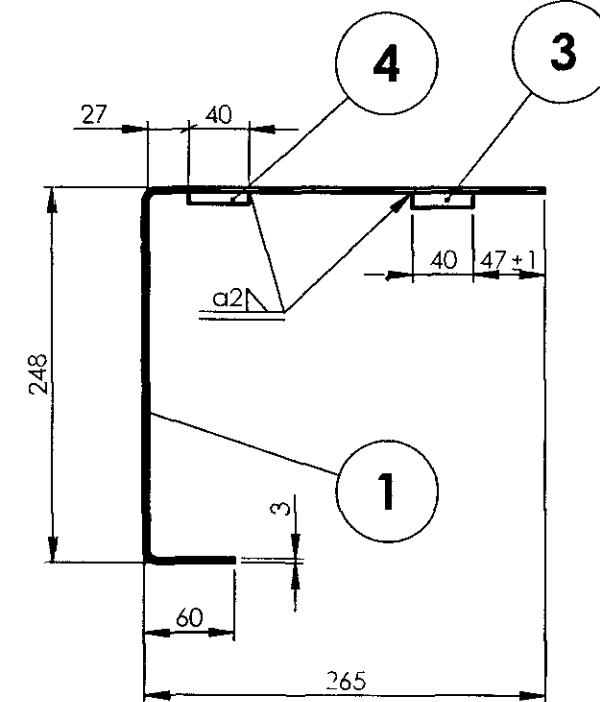
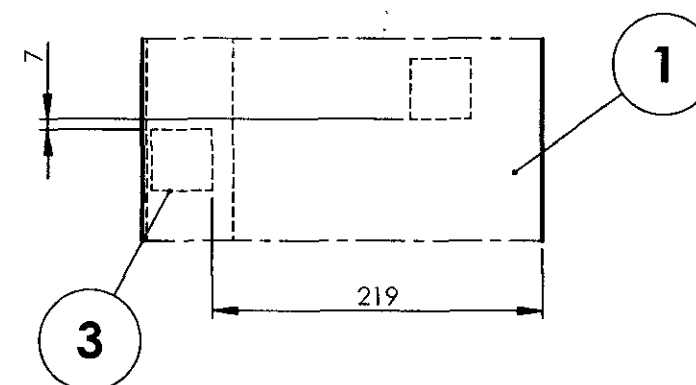
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8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.



DETAIL A



ISOMETRIC VIEW

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

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

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

RAM PILLAR ASSEMBLY

SCALE 1:20

SSE/D

CHD

ALT

ALTD

DRN

MAHESH

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

75415026

A2

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

REF.DRG.NO.:-

DATE OF LATEST ALT.	3007-2025	AME/SME
DATE OF FIRST ISSUE		

75415027

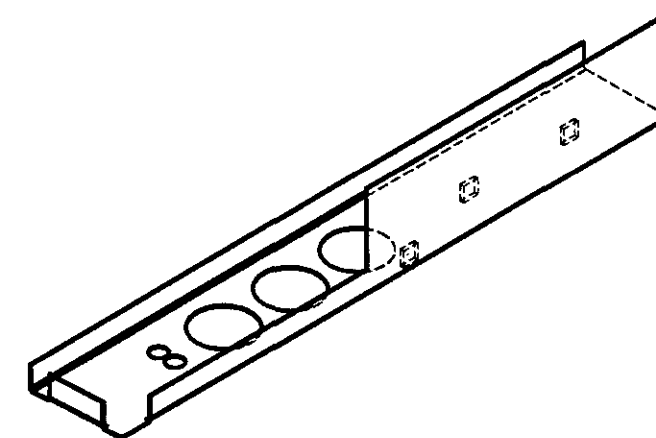
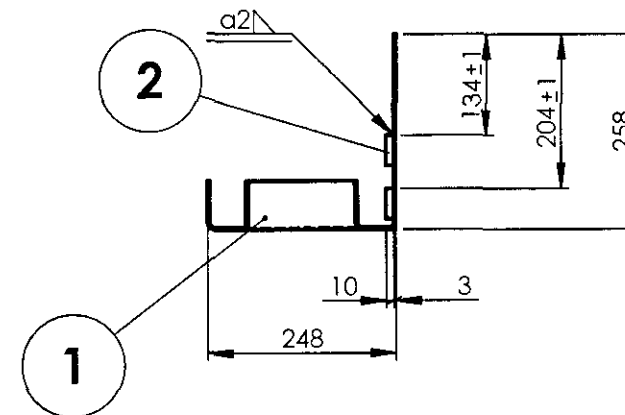
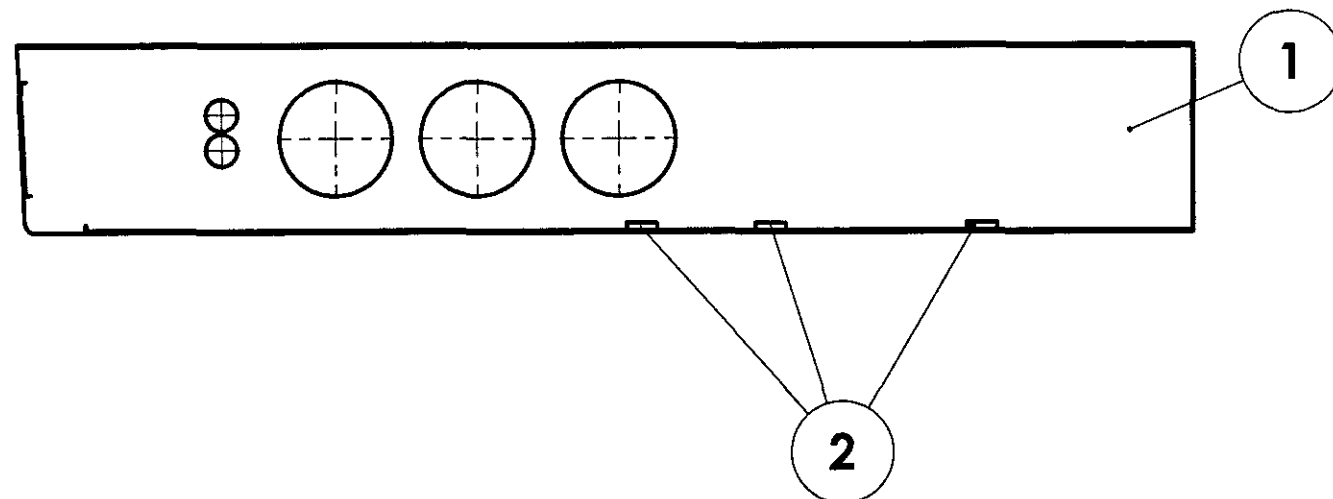
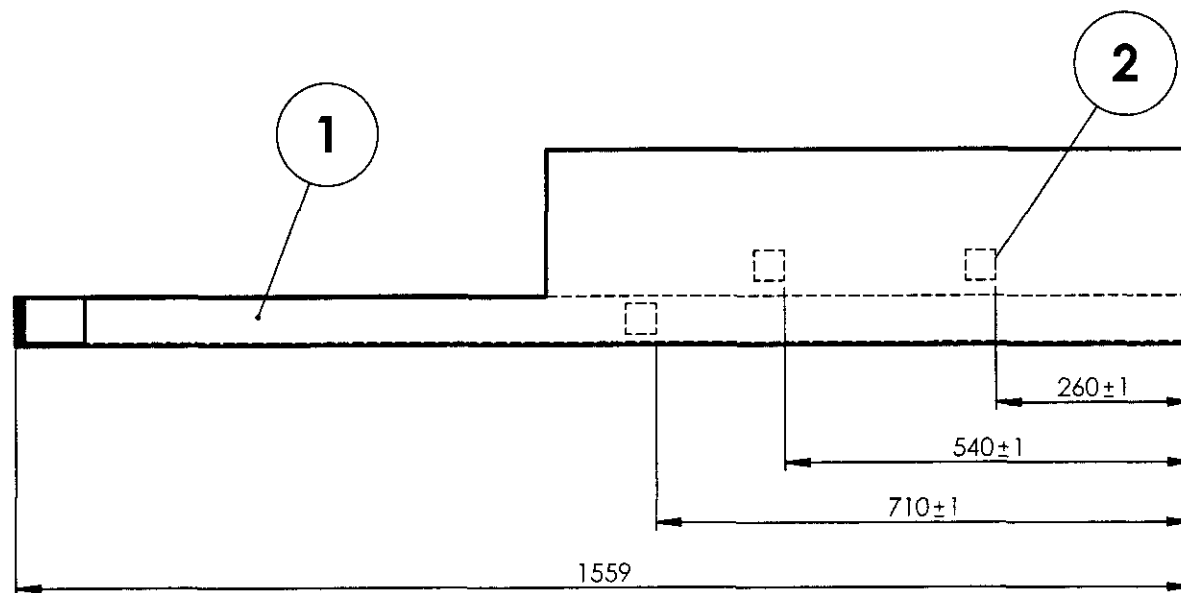
▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

ISOMETRIC VIEW

NOTE:

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

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

REF.DRG.NO.-

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

75415027

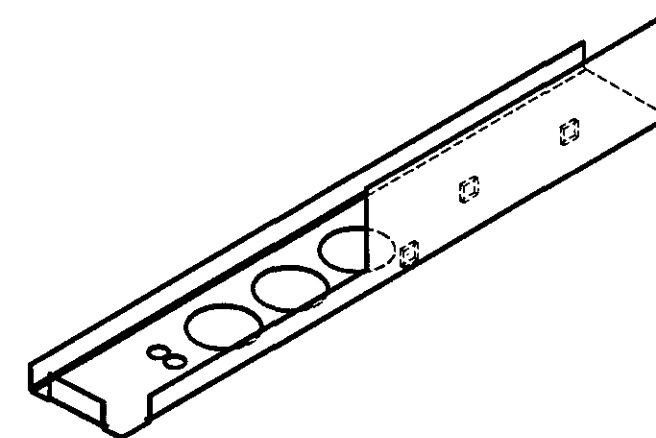
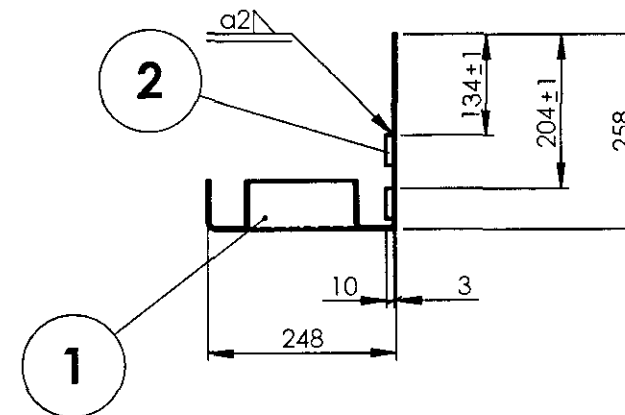
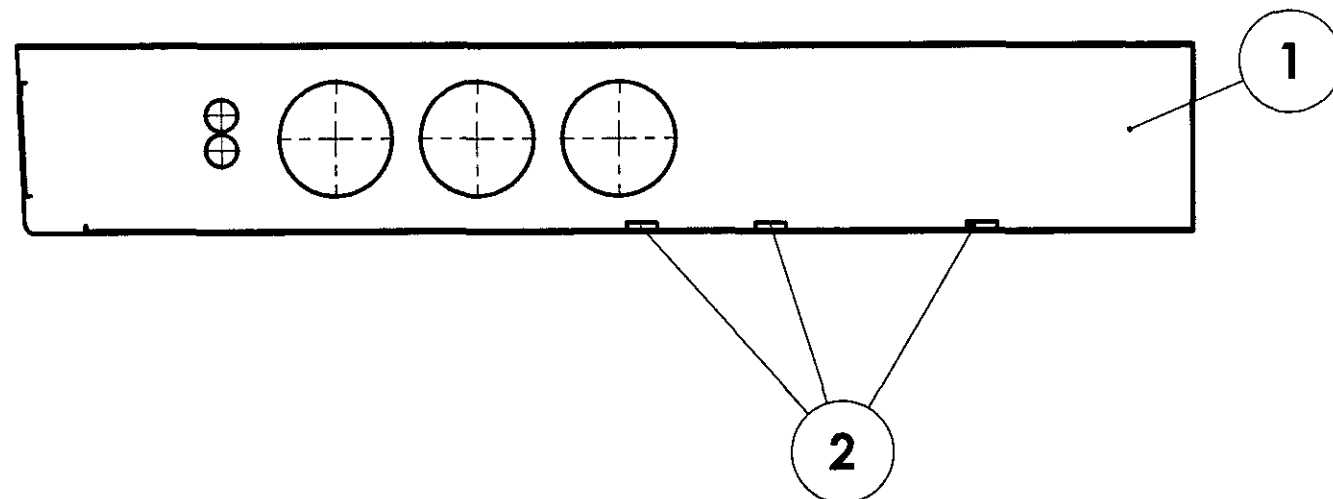
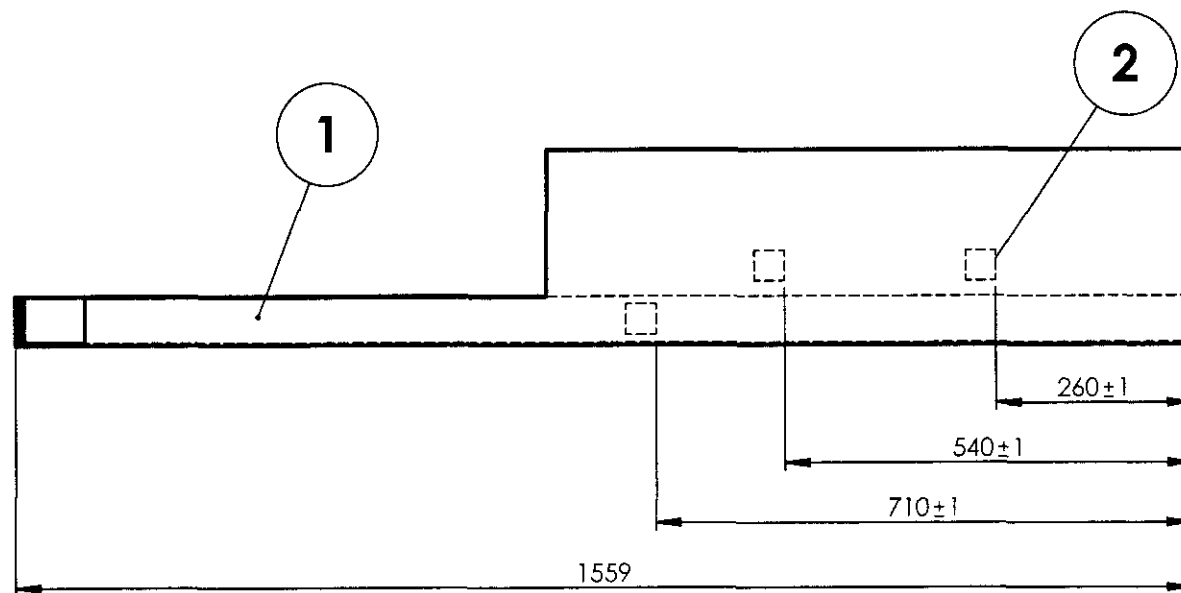
▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

ISOMETRIC VIEW

NOTE:

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

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

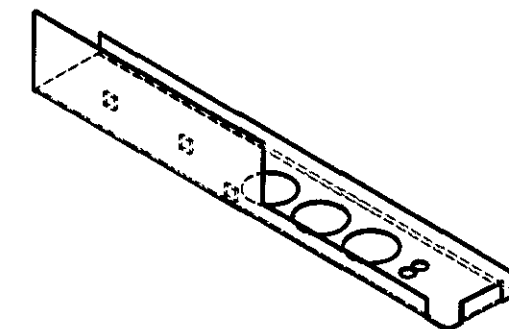
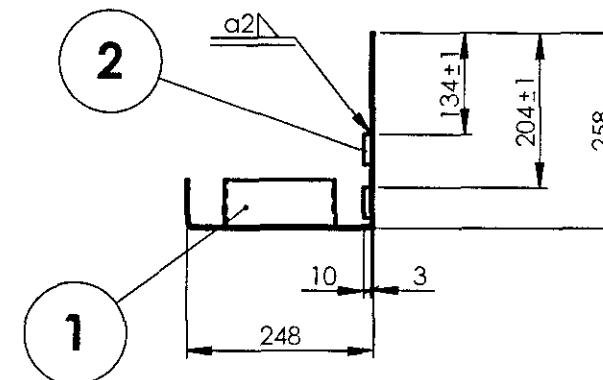
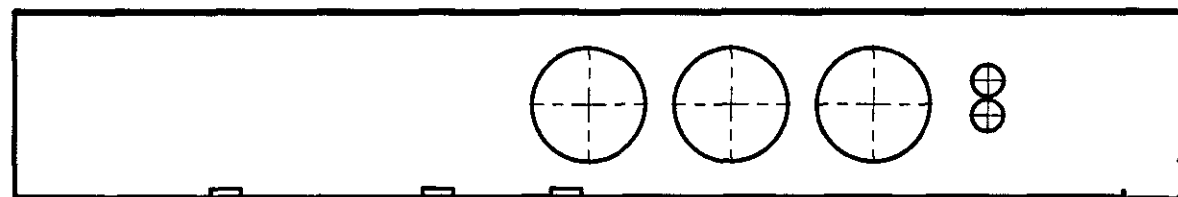
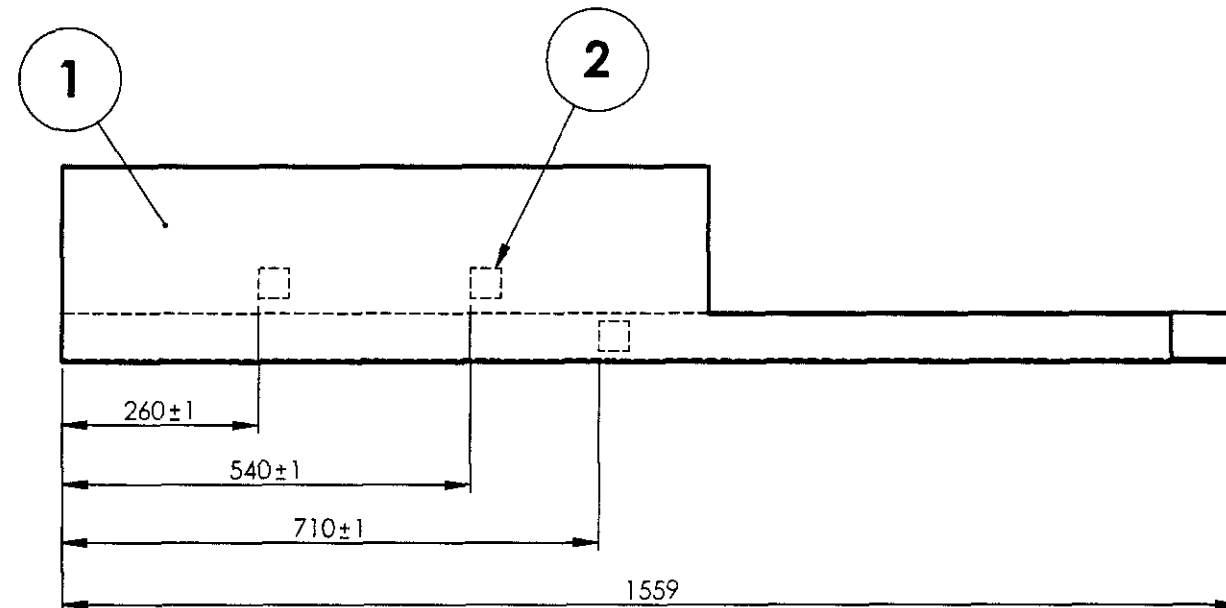
REF.DRG.NO.-

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

75415028

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:

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

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

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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

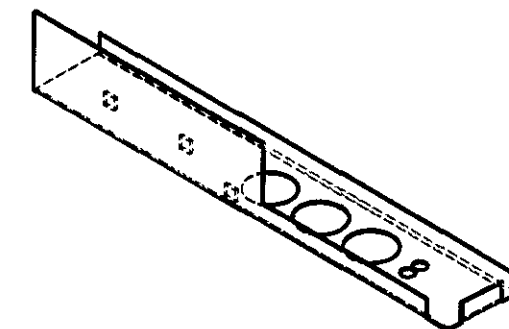
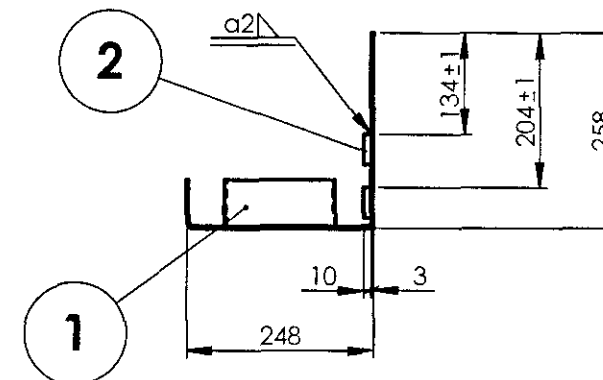
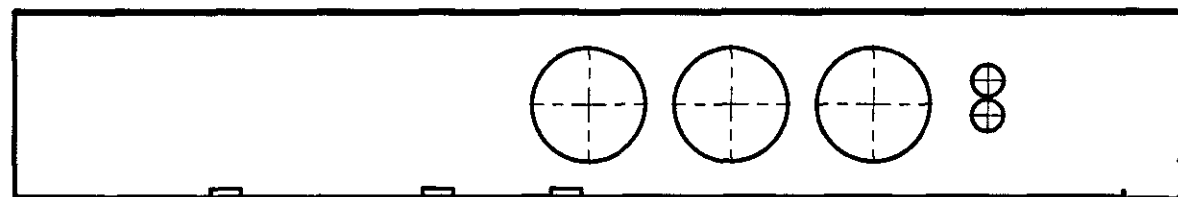
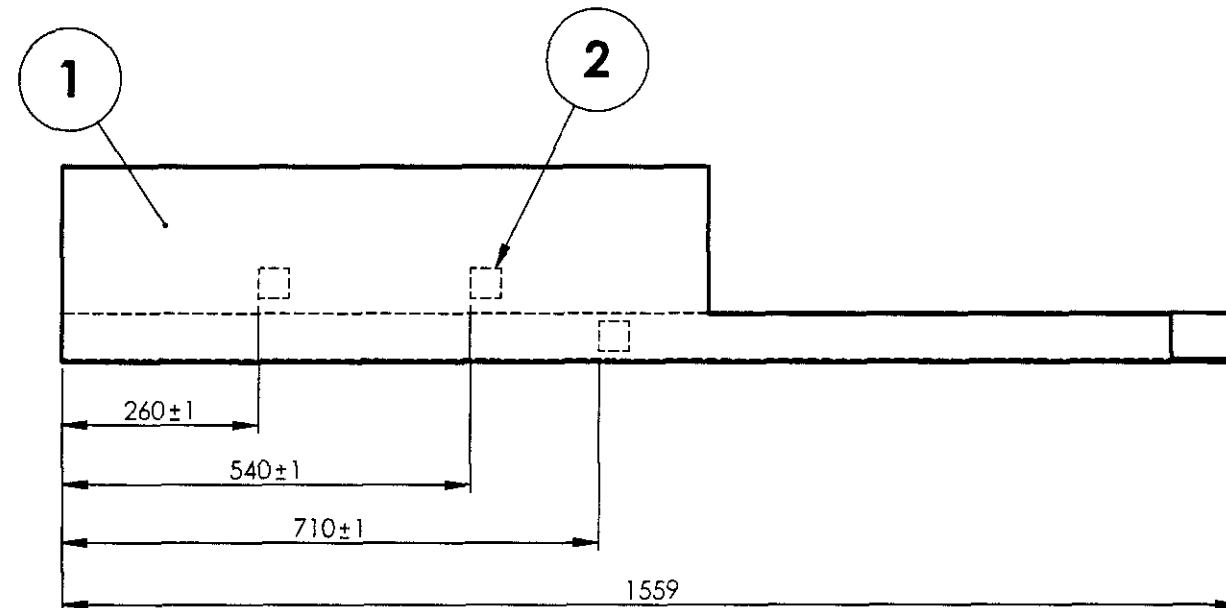
REF.DRG.NO.:-

	30-07-2025	5h
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

75415028

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ISOMETRIC VIEW

NOTE:

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

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

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

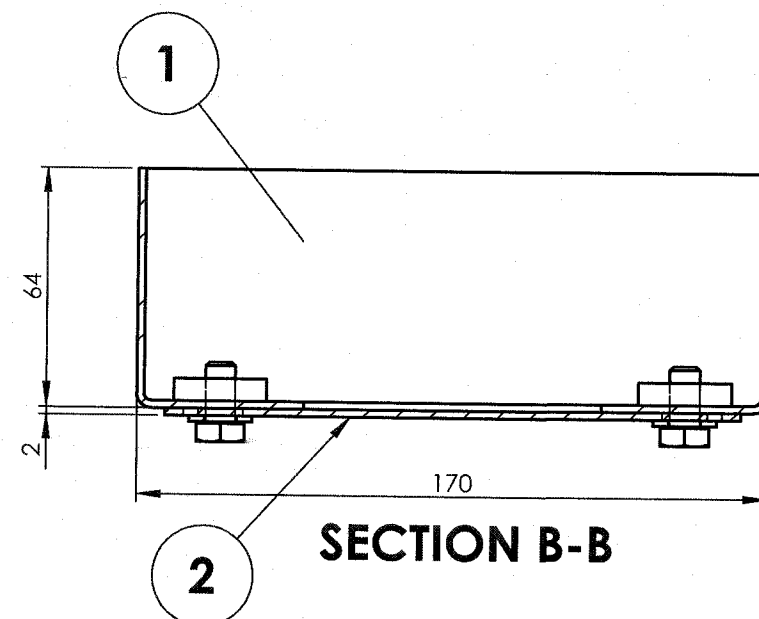
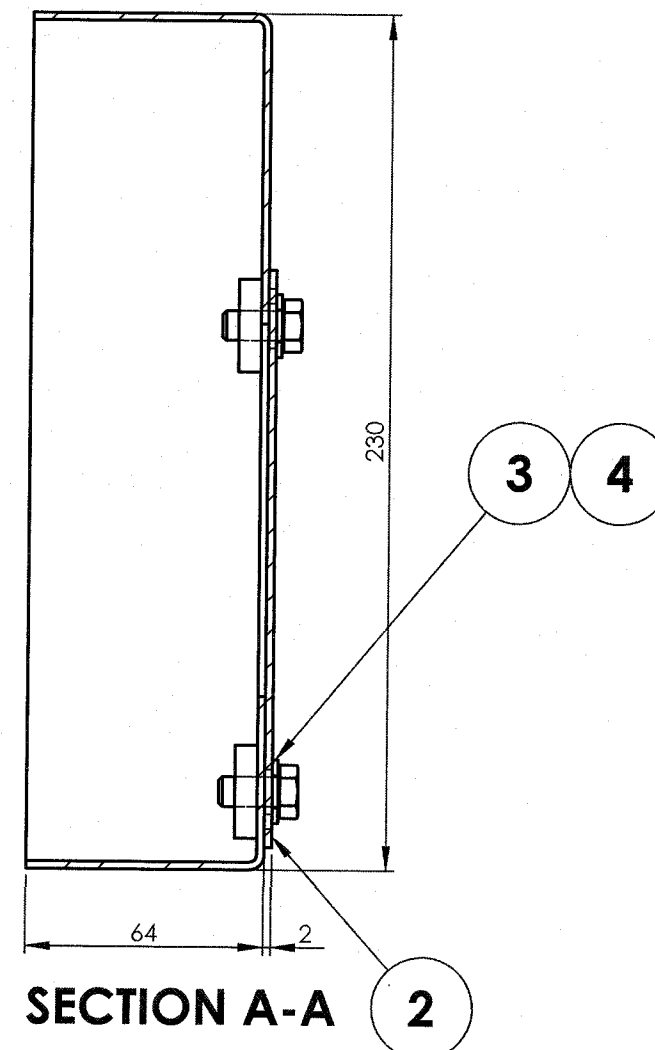
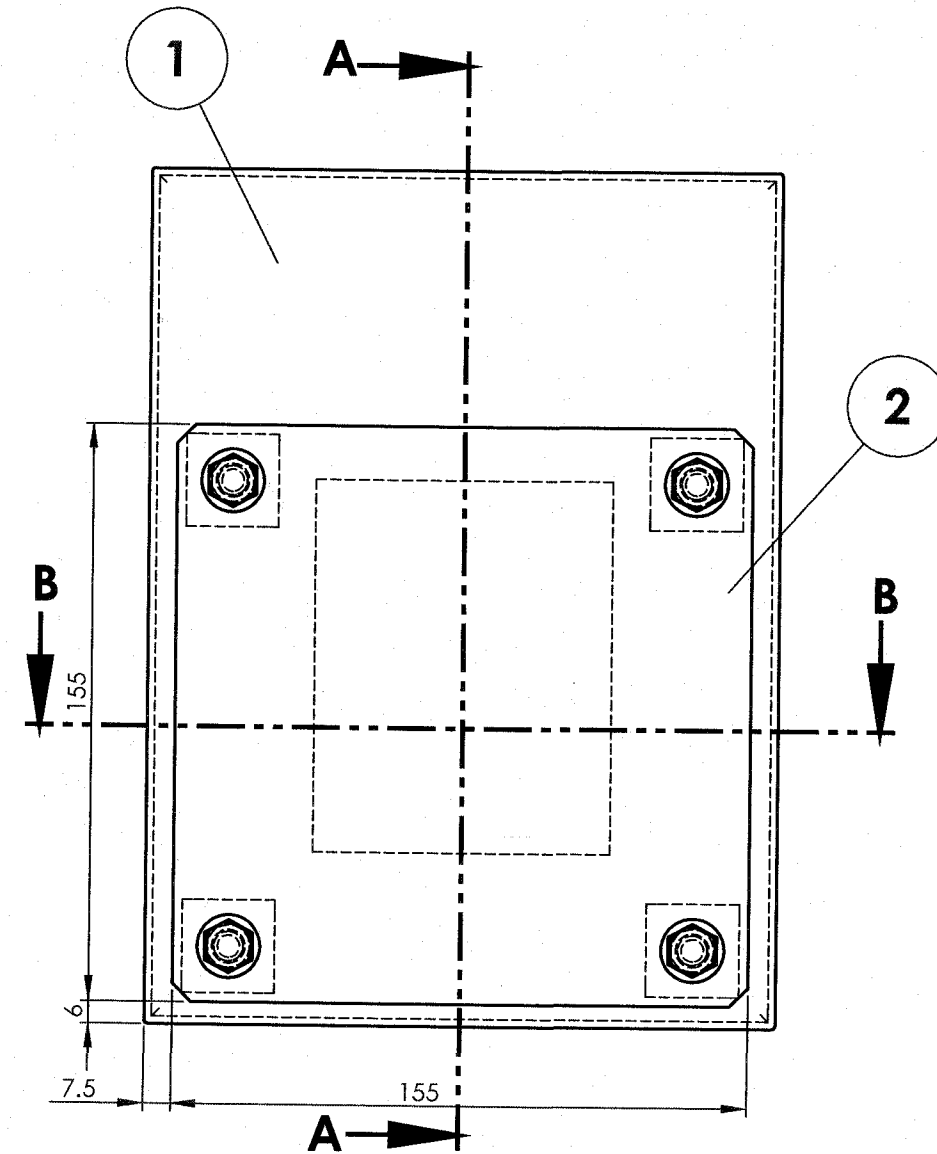
REF.DRG.NO.-

	30-07-2025	5h
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

79115005

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

REVISIONS			
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

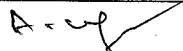
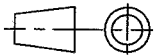
WELD PERFORMANCE CLASS	QUALITY LEVEL FOR IMPERFECTIONS EN ISO 5817 €	INSPECTION CLASS	VOLUMETRIC TEST RT or UT	SURFACE TEST MPT or DPT	VISUAL EXAMINATION VT
CP C2	B	CT2 \$	NOT REQUIRED	NOT REQUIRED	100%

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

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

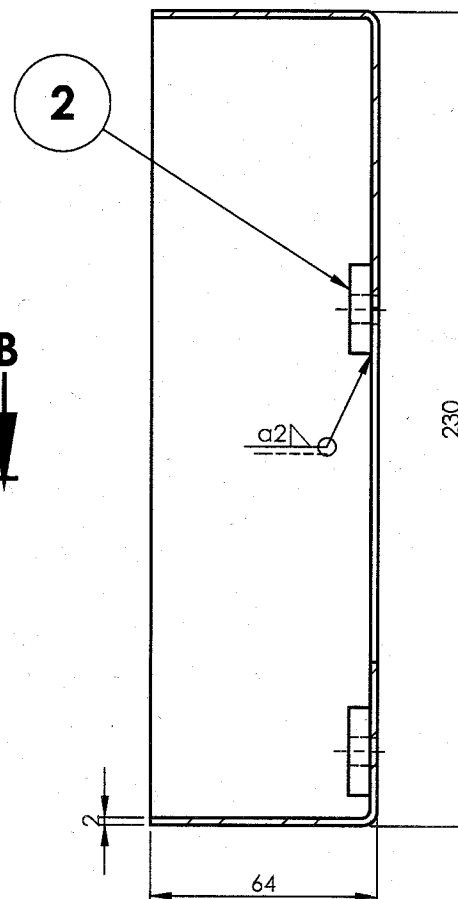
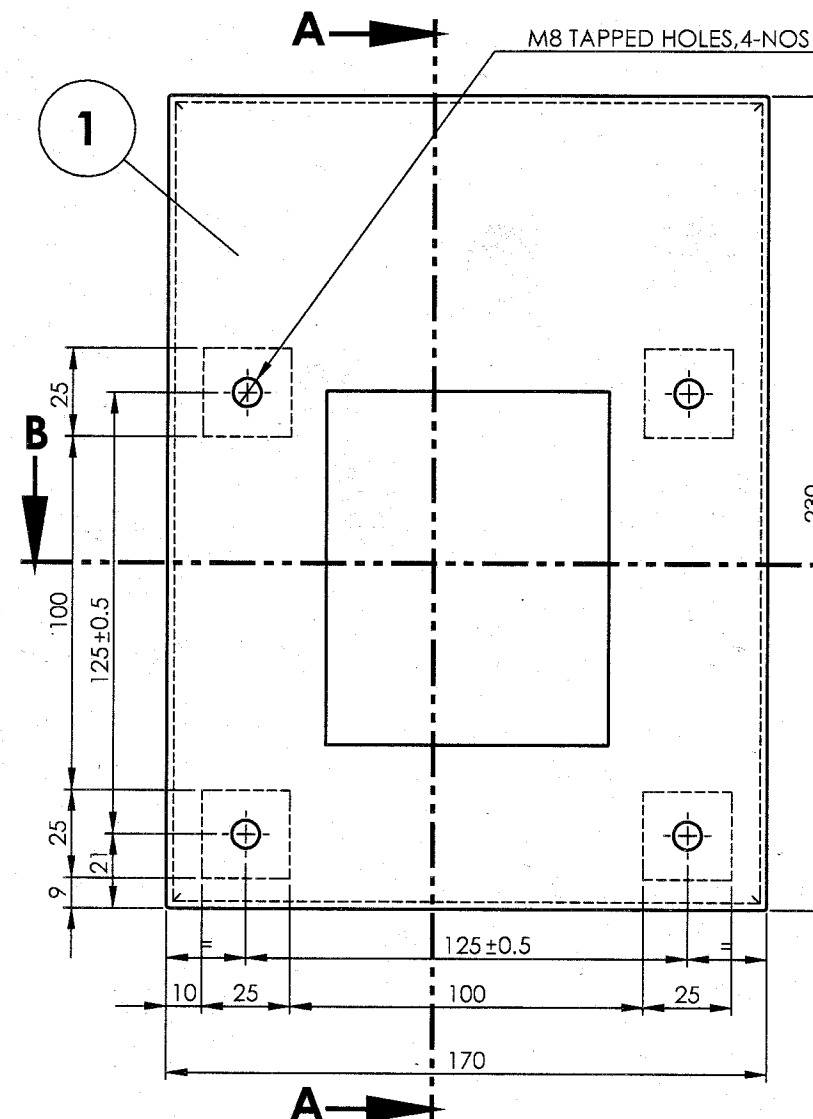
DATE OF LATEST ALT.	11-08-2018	AME/SME
DATE OF FIRST ISSUE		

79115006

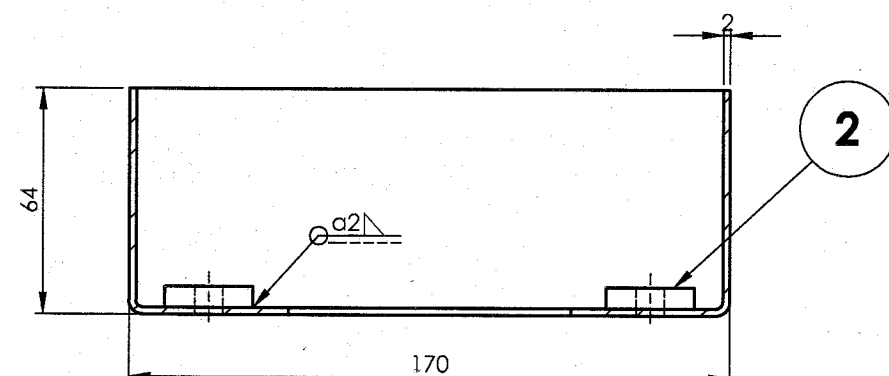
▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	018 CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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SECTION A-A



SECTION B-B

NOTE:

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

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

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

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

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

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

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

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

GROUP: 1-5

SURFACE AREA IN Sq.m.: 0.168

WT/ASSY IN Kgs:

BRACKET ASSY FOR GPS ANTENA

SCALE

1:2

SSE/D

CHD

ALT.

ALTD

DRN

V.SURESHBABU

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

79115006

A3

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REF.DRG.NO.:-

DATE OF LATEST ALT.

11-08-2018

DATE OF FIRST ISSUE

AME/SME

82815002

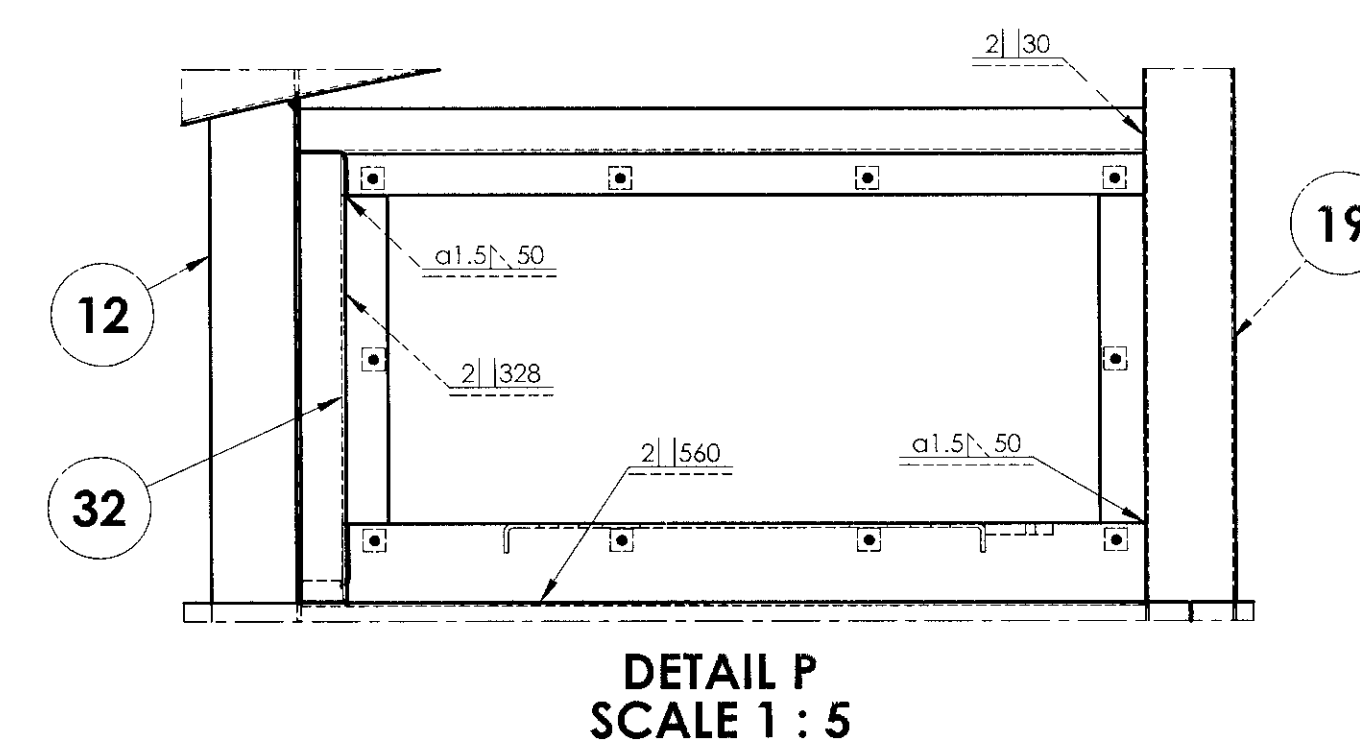
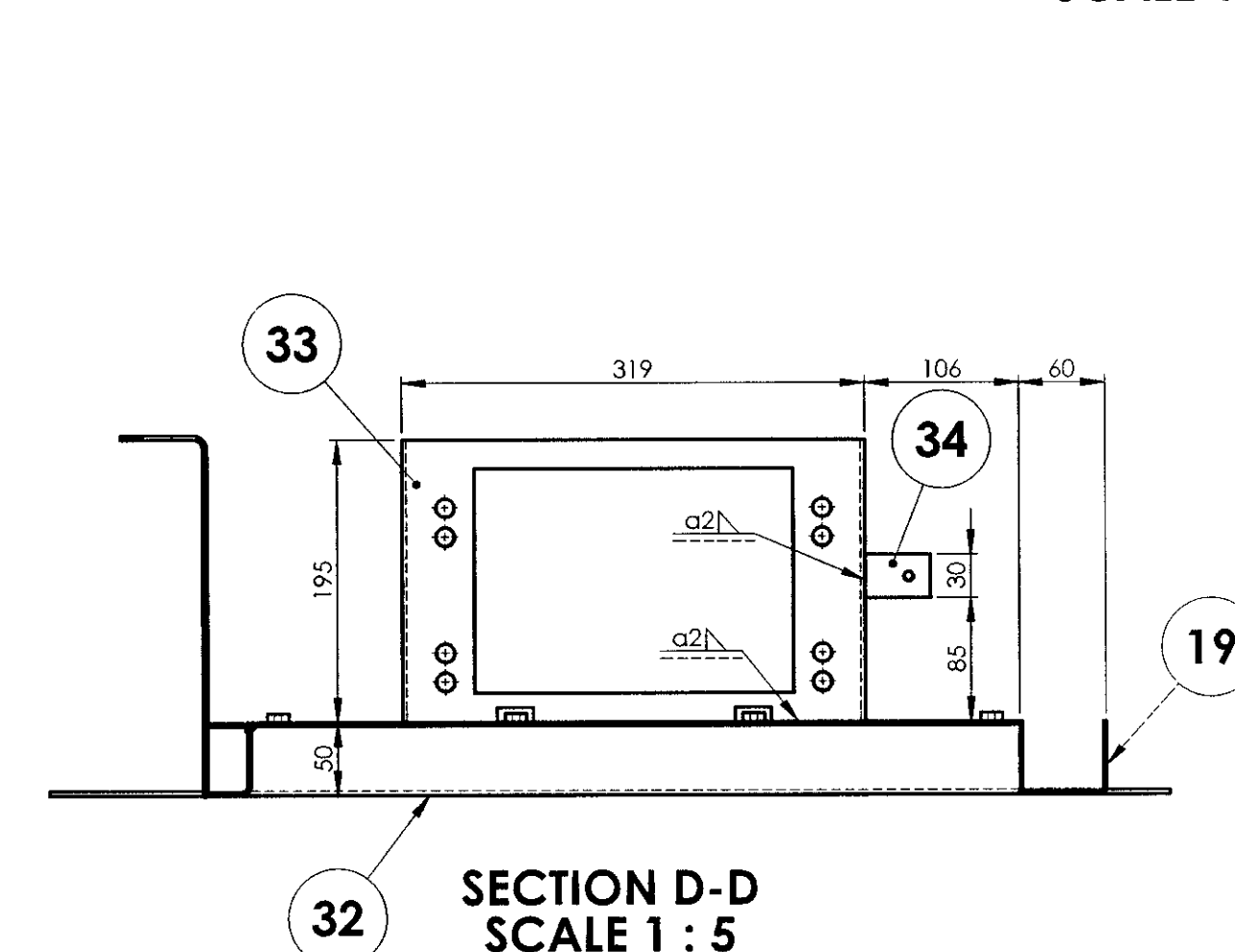
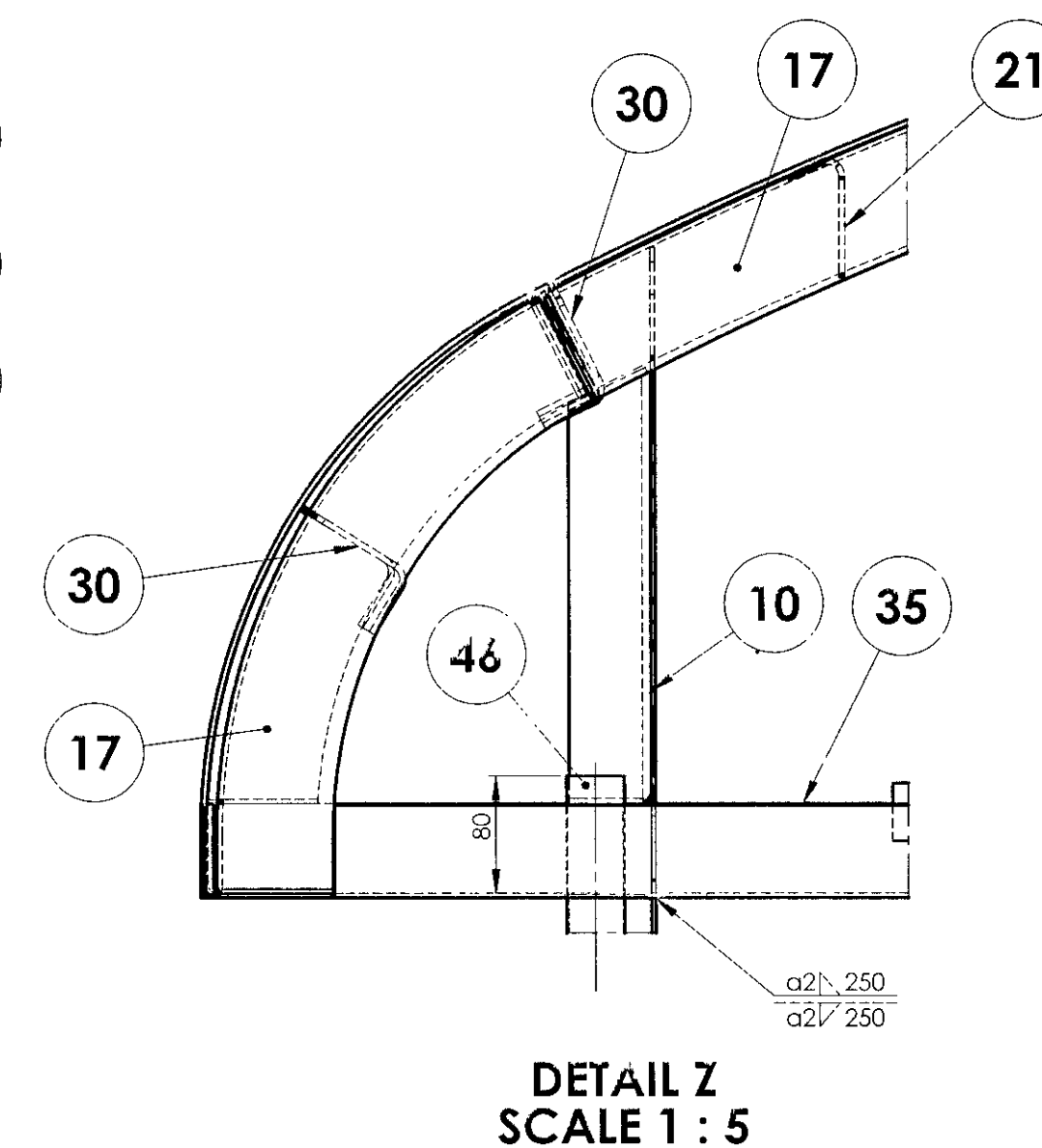
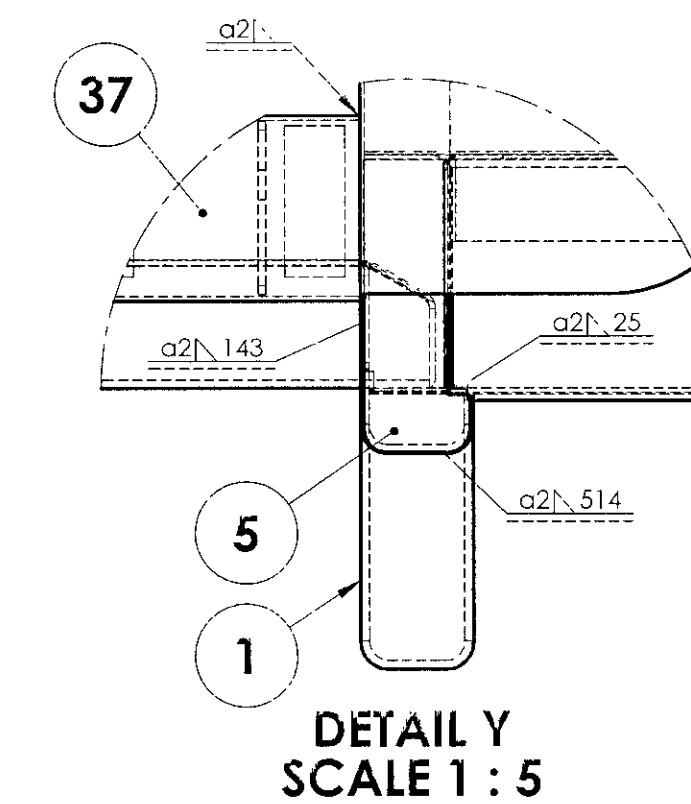
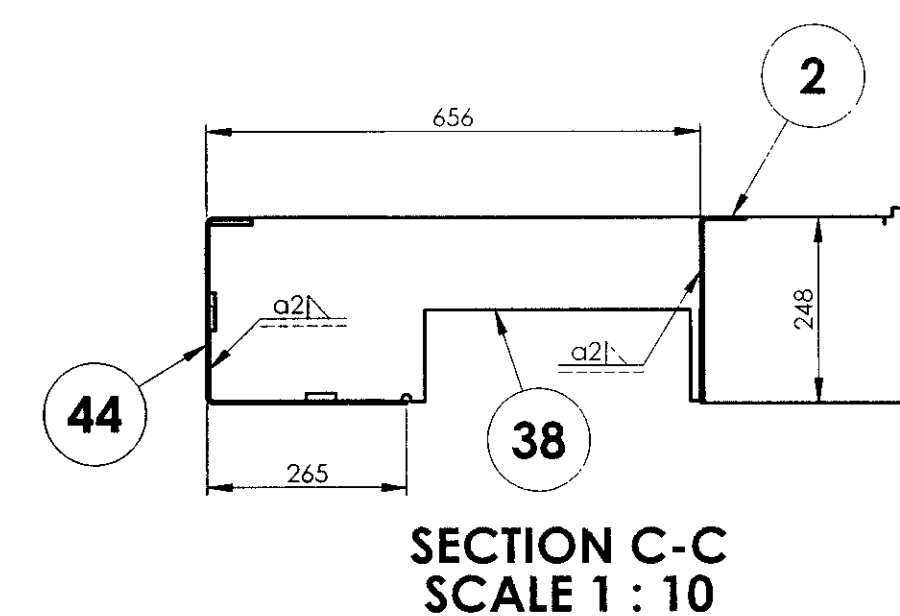
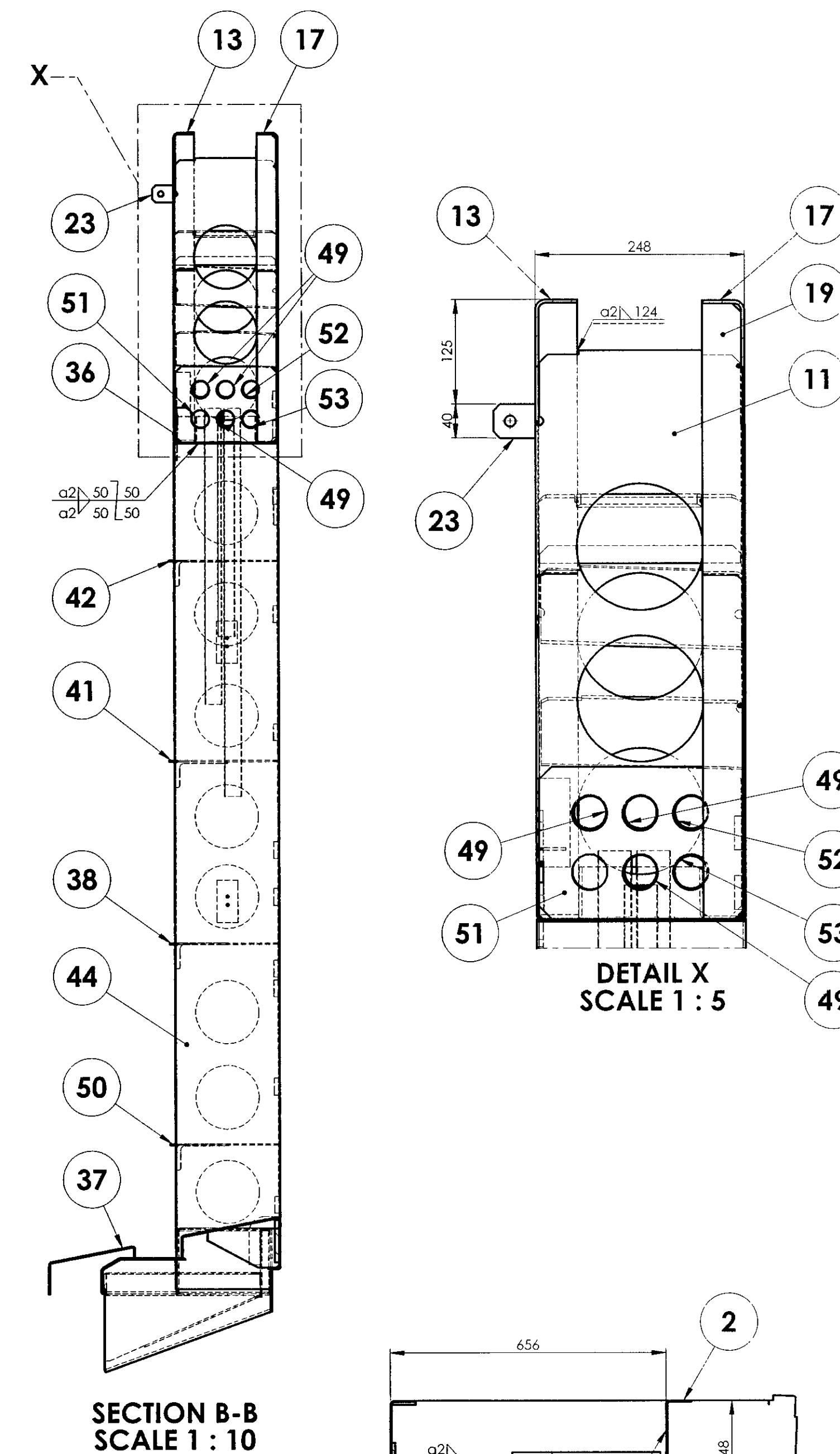
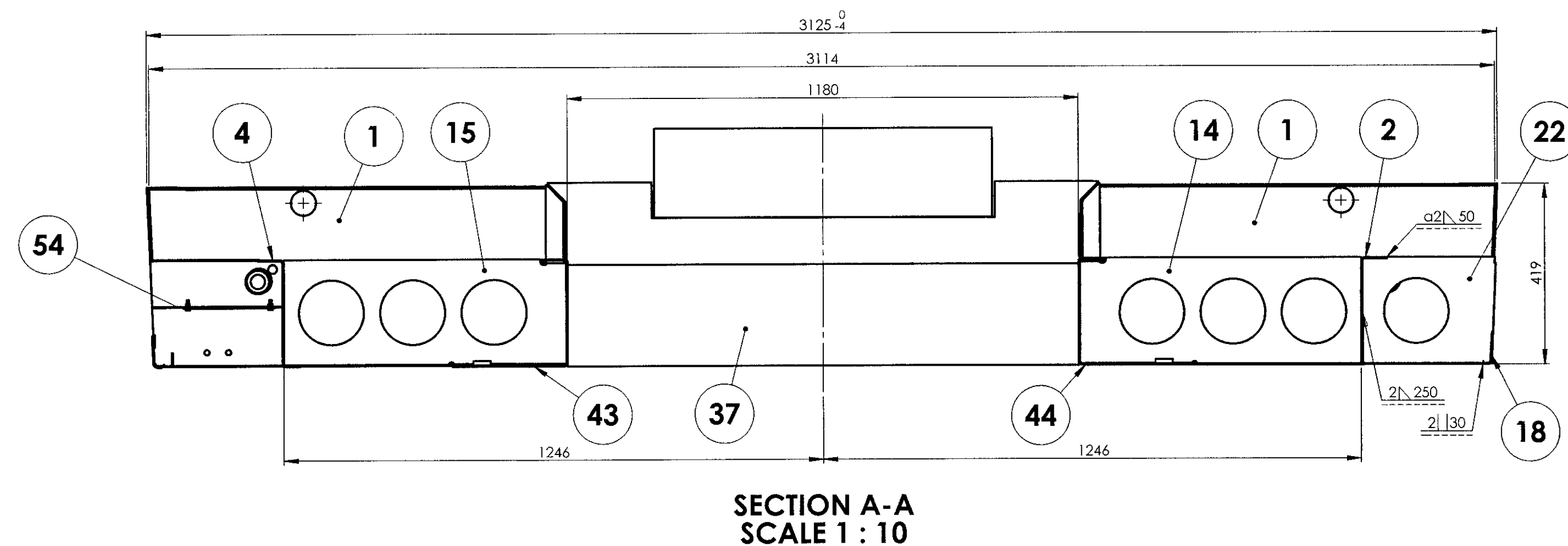
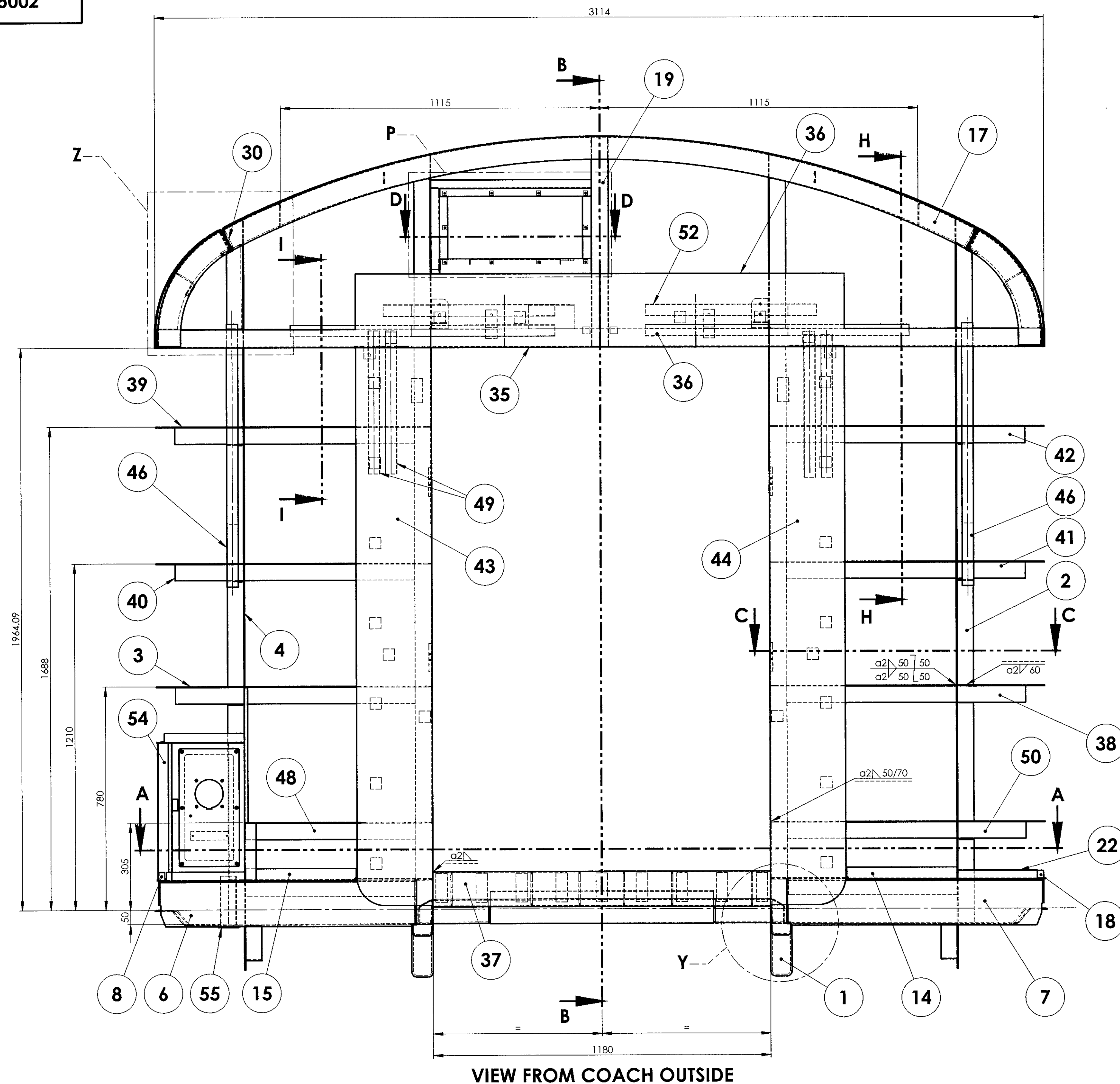
▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

REVISIONS

ALT. ZONE DESCRIPTION

APPROVED & DATE



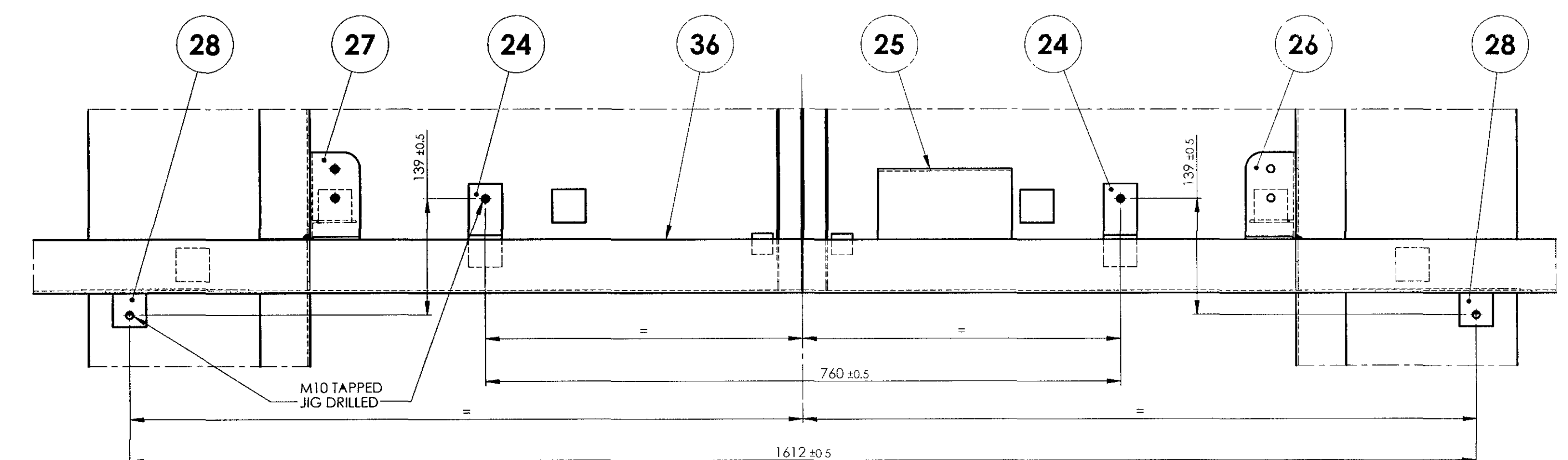
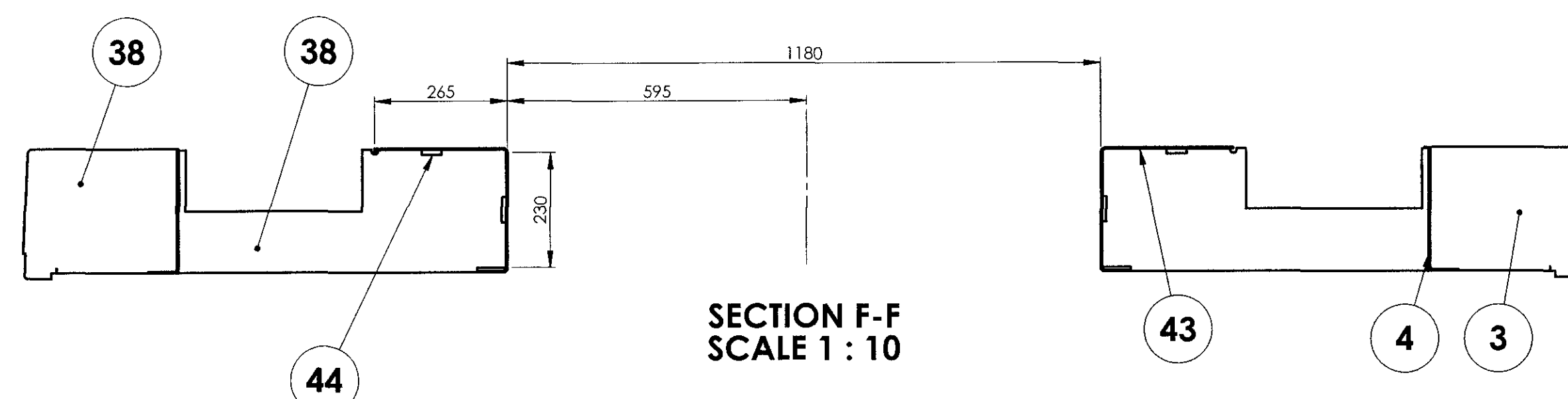
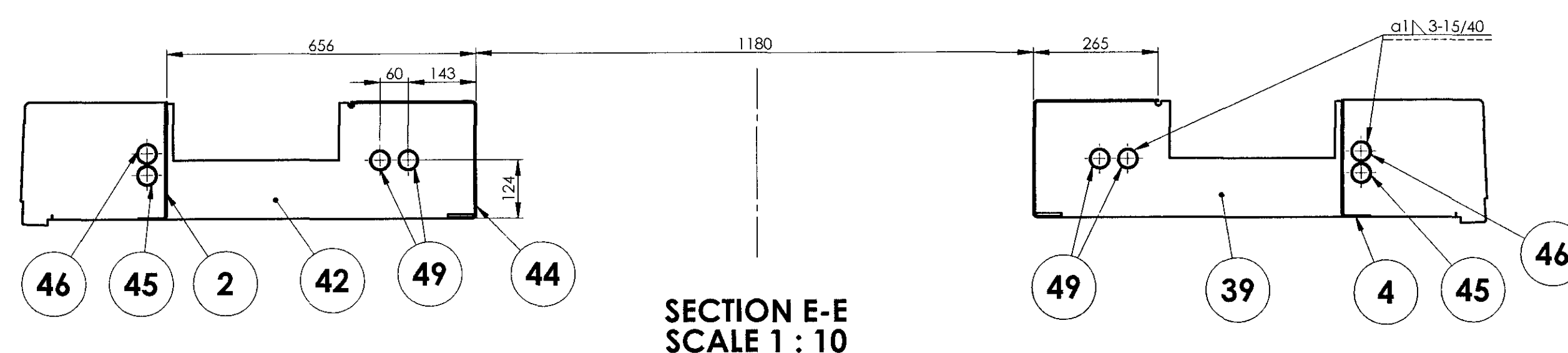
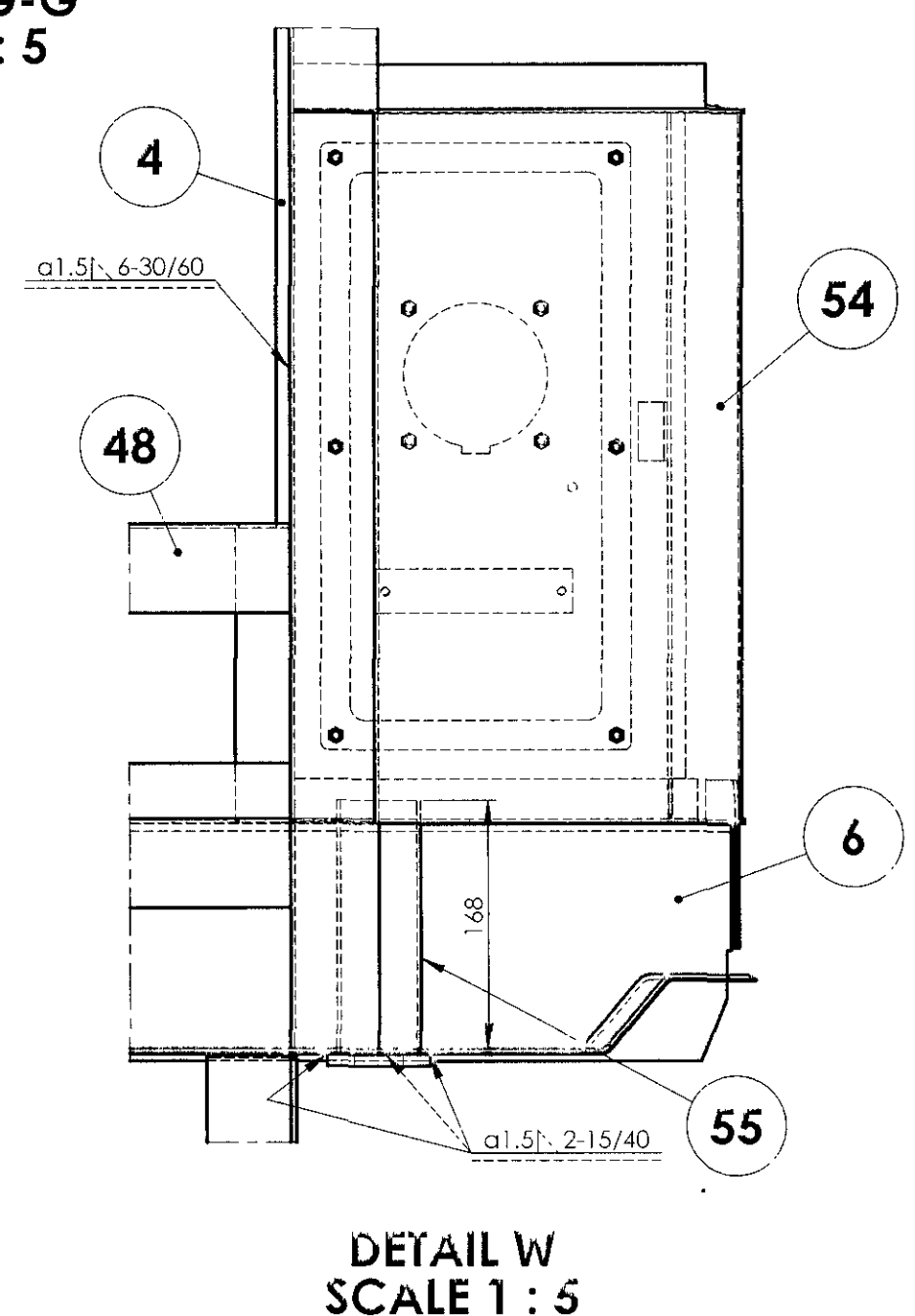
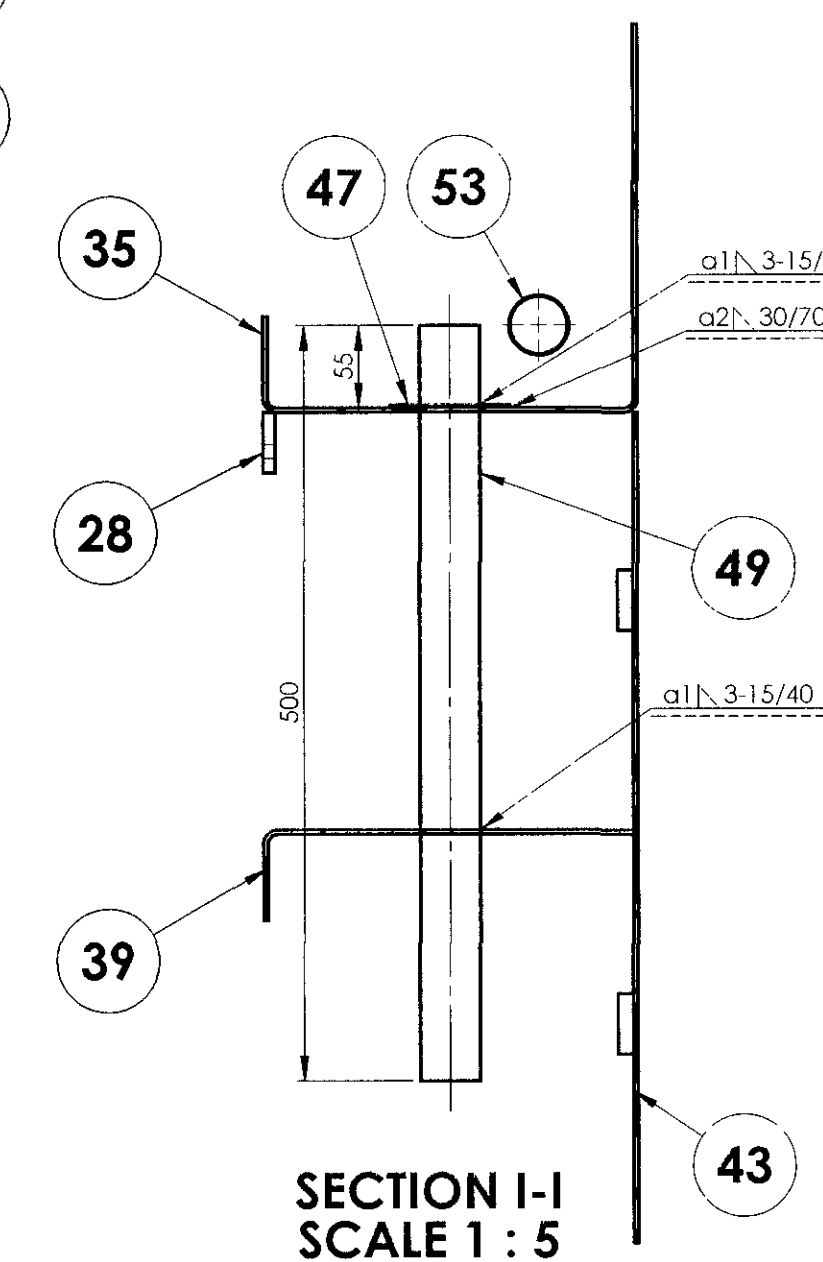
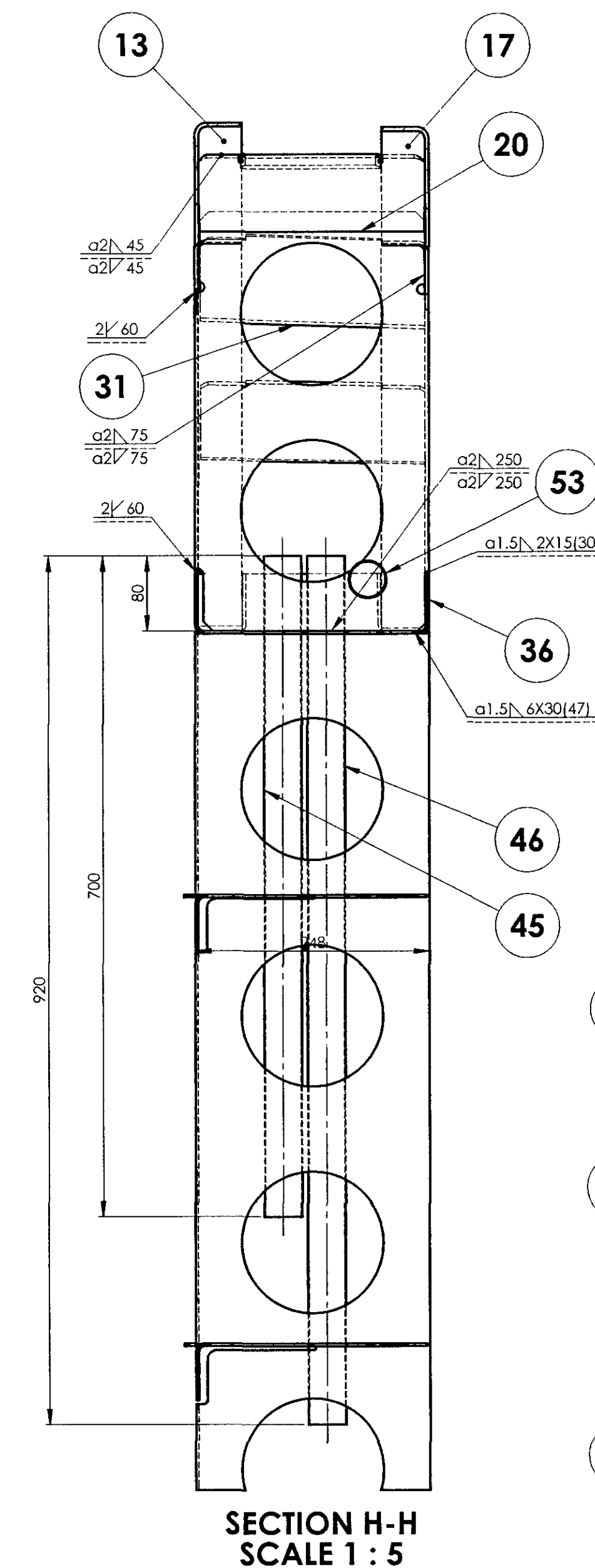
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLOANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0001.
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REF.DRG.NO.

DATE OF LATEST ALT. 22/01/25
DATE OF FIRST ISSUE
AME/SME

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
SCALE 1:10		SSE/D		CHD	
ALT		ALTD		DRN	
INDIAN RAILWAY STANDARDS		SHEET 1 OF 3		LWACCW/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038		82815002		A1	

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



DETAIL V
(LOCATION FOR VESTIBULE SLIDING DOOR FIXING BRACKETS)
SCALE 1 : 5

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
FRAME WORK		SCALE		SSE/D	
		1:10		CHD	
		ALT.		ALTD	
		-		DRN	
				H. Irshath Ahamed	
INDIAN RAILWAY STANDARDS		SHEET		LWACCW/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038		2 OF 3		82815002	
				A1	

REF.DRG.NO

82815002

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

⑪ ROUGH CLEANED
⑫ BURRS REMOVED
⑬ CHAMFERED

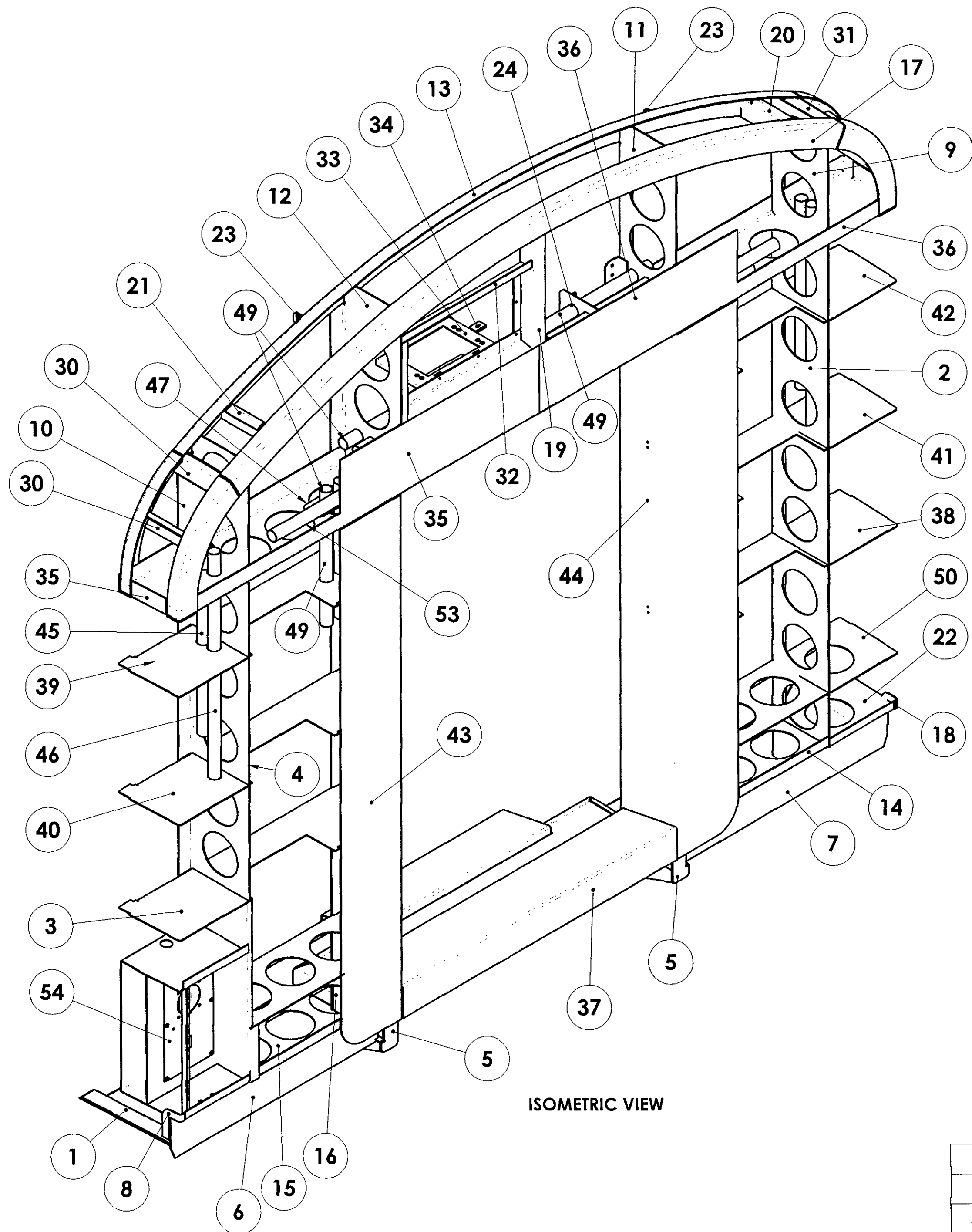
ALT.

ZONE

REVISIONS

DESCRIPTION

APPROVED & DATE



ISOMETRIC VIEW

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELD SPATTERS SHALL BE GROUND.
3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
6. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
9. ALL TAPPED HOLES FOR FIXING VESTIBULE SHALL BE DONE BY THE FIRM TO SUIT AT SITE.
10. ALTERNATIVELY SS WELDED TUBES TO SPEC. ASTM A554 GRADE MI 304 (OR) ASTM A269/A269M GRADE TP 304 CAN ALSO BE USED FOR CONDUITS.

1	PIPE COMPLETE		55	49515018		0.859	
1	BRACKET COMPLETE		54	58115004		9.130	
2	CONDUIT	1mm THK x Ø40 x 925	53		IS:17874 X04C19NI9	0.90	
2	CONDUIT	1mm THK x Ø40 x 400	52		IS:17874 X04C19NI9	0.58	
2	SUPPORT FOR CONDUITS		51	AAE15019		0.55	
1	FLANGE		50	AAE15049		5.044	
10	CONDUIT	1mm THK x Ø40 x 500	49		IS:17874 X04C19NI9	0.49	
1	FLANGE		48	AAD15905		3.354	
2	SUPPORT FOR CONDUIT		47	AAD15711		0.21	
2	CONDUIT		46	AAD15858		0.89	
2	CONDUIT		45	AAD15859		0.48	
1	RAM PILLAR ASSEMBLY		44	75415024		28.57	
1	RAM PILLAR ASSEMBLY		43	75415025		28.57	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

1	FLANGE		42	AAE15047		5.581	
1	FLANGE		41	AAE15046		5.481	
1	FLANGE		40	AAE15045		5.484	
1	FLANGE		39	AAE15043		5.584	
1	FLANGE		38	AAE15048		5.702	
1	RAMP ARRANGEMENT		37	75415022		23.787	
1	FLANGE		36	75415028		14.45	
1	FLANGE		35	75415027		14.45	
1	GROUNDING FLAP		34	AAA10972		0.084	
1	BRACKET		33	AAA15181		0.774	
1	FRAME COMPLETE		32	49515012		2.849	
2	REINFORCEMENT		31	AAA15474		0.911	
2	REINFORCEMENT		30	AAA15473		0.911	
2	FLAT		29	AAA10971		0.025	
2	BACK PIECE		28	AAA10969		0.102	
1	BRACKET COMPLETE		27	SSA10020		0.257	
1	BRACKET COMPLETE		26	SSA10019		0.257	
1	BRACKET		25	AAA10964		0.497	
2	BRACKET		24	AAA10961		0.222	
2	GROUNDING FLAP		23	AAA15445		0.087	
1	FLANGE		22	AAA15414		1.294	
1	REINFORCEMENT		21	AAA15205		0.741	
1	REINFORCEMENT		20	AAA15204		0.780	
1	REINFORCEMENT		19	AAA15210		1.458	
1	REINFORCEMENT		18	AAA15232		0.088	
1	ARCH COMPLETE		17	59315003		14.208	
2	WEB		16	AAA15208		0.782	
1	FLANGE LH		15	AAE15044		3.44	
1	FLANGE RH		14	AAE15050		3.45	
1	ARCH COMPLETE		13	59315004		13.994	
1	PILLAR		12	AAE15018		3.545	
1	PILLAR		11	AAE15017		3.545	
1	PILLAR		10	AAA15237		2.101	
1	PILLAR		9	AAA15238		2.101	
1	REINFORCEMENT		8	AAA15252		0.089	
1	FRAMEWORK PART		7	AAA15253		4.519	
1	FRAMEWORK PART		6	AAA15254		4.520	
2	REINFORCEMENT		5	AAA15257		0.342	
1	RAM PILLAR		4	AAE15430		12.184	
1	FLANGE		3	AAE15044		5.719	
1	RAM PILLAR		2	AAE15431		10.583	
1	SILL ARRANGEMENT		1	49515003		39.942	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

FRAME WORK

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
3 OF 3

82815002

A1

REF.DRG.NO.

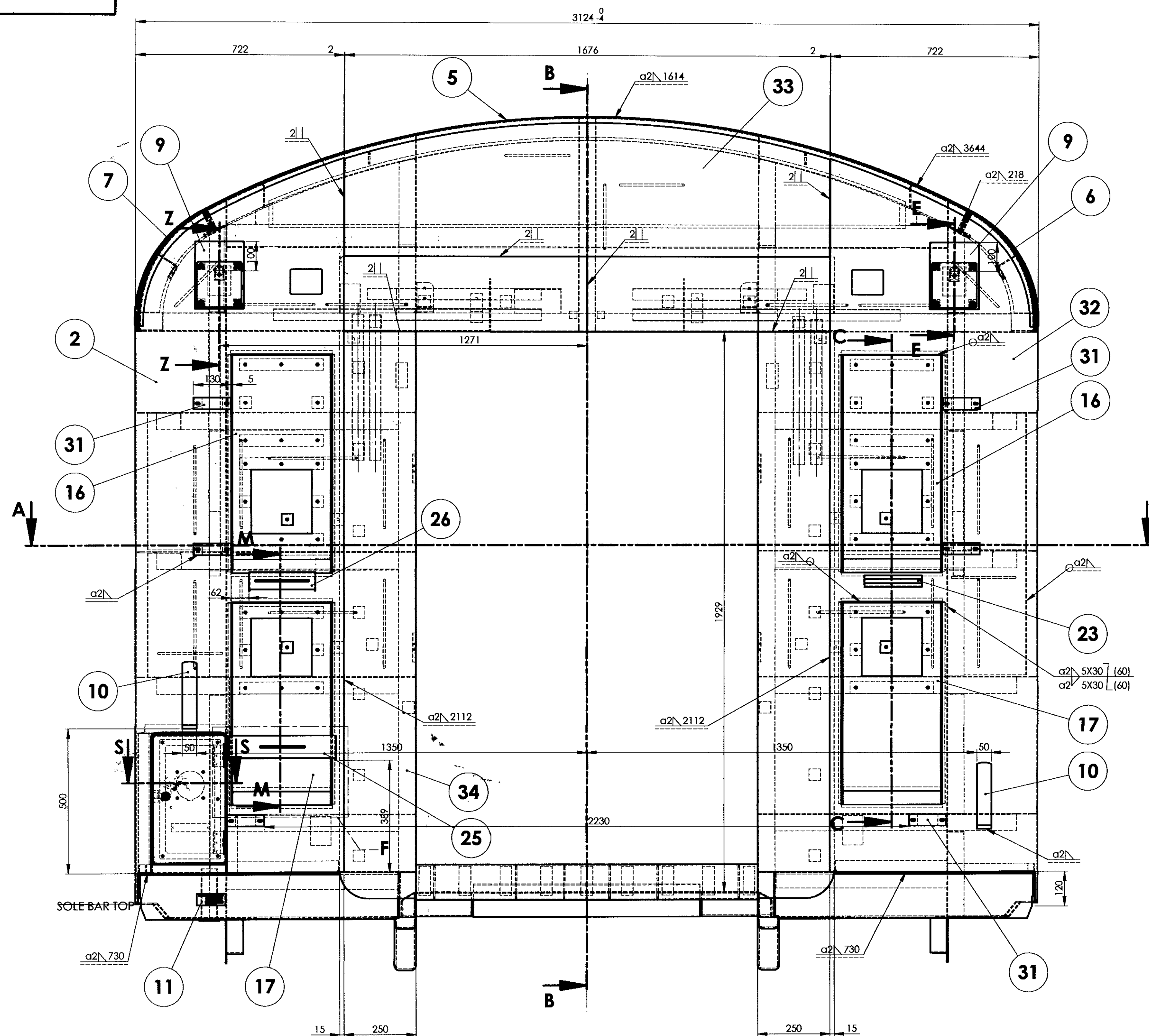
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DATE OF FIRST ISSUE
AME/SME

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED. FOR UNTOOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO CF/STD-9-0-001.
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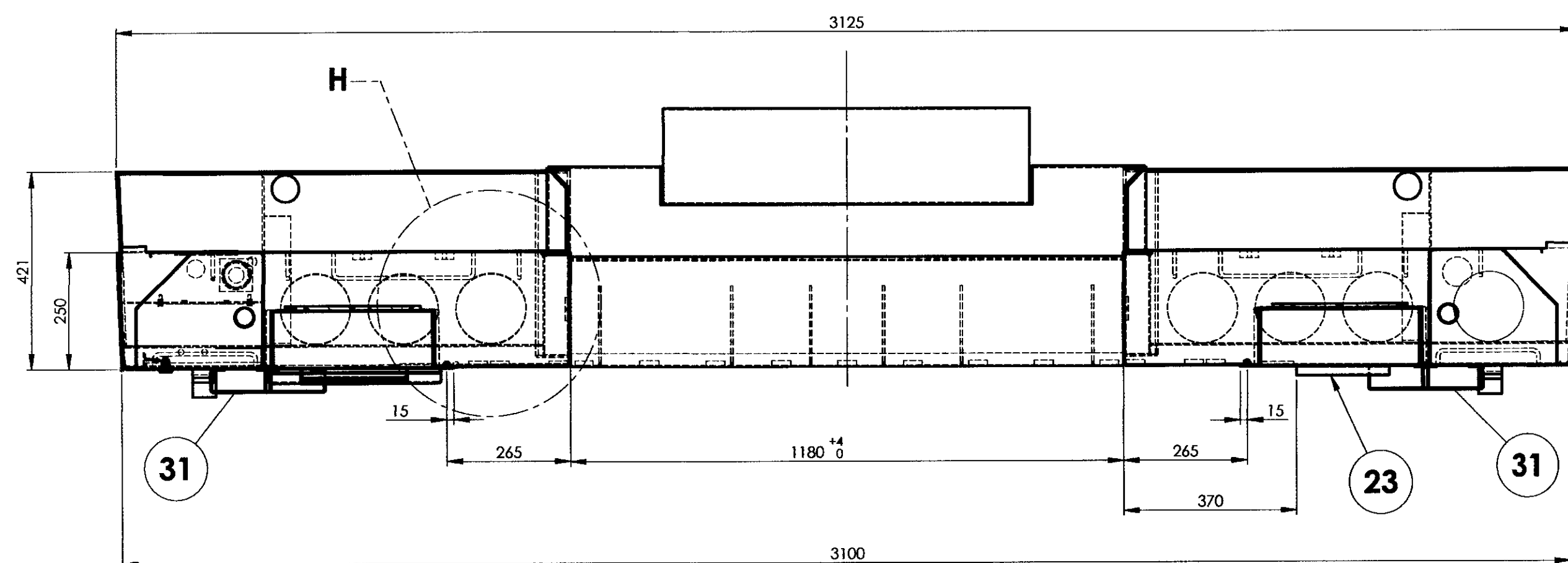
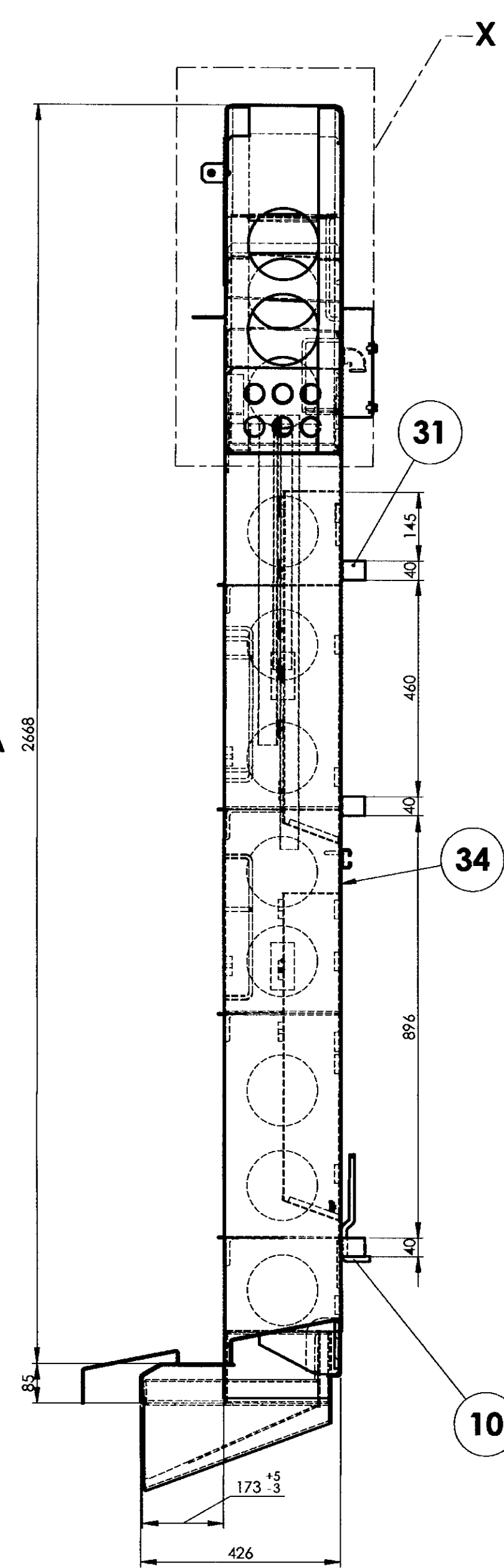
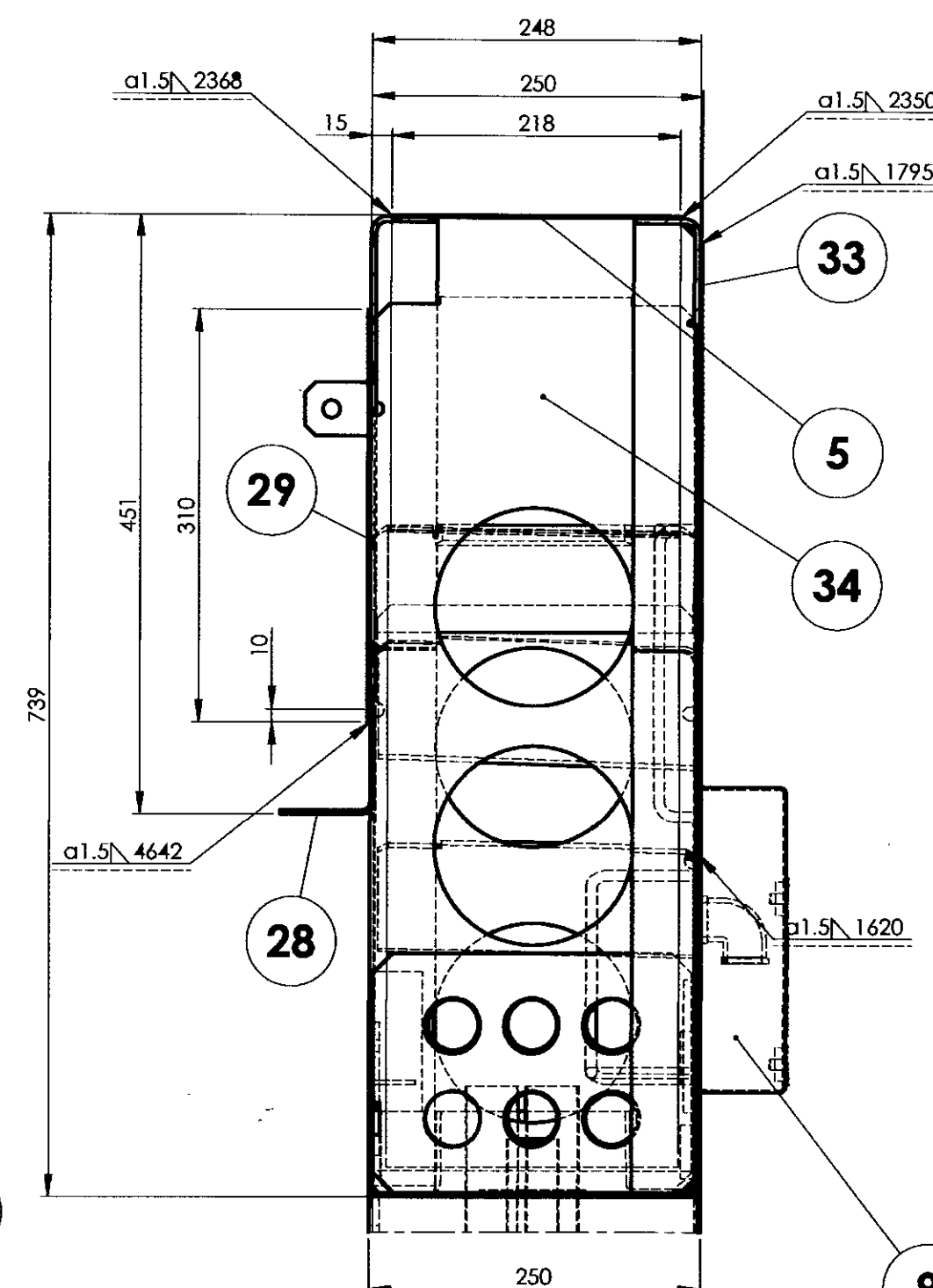
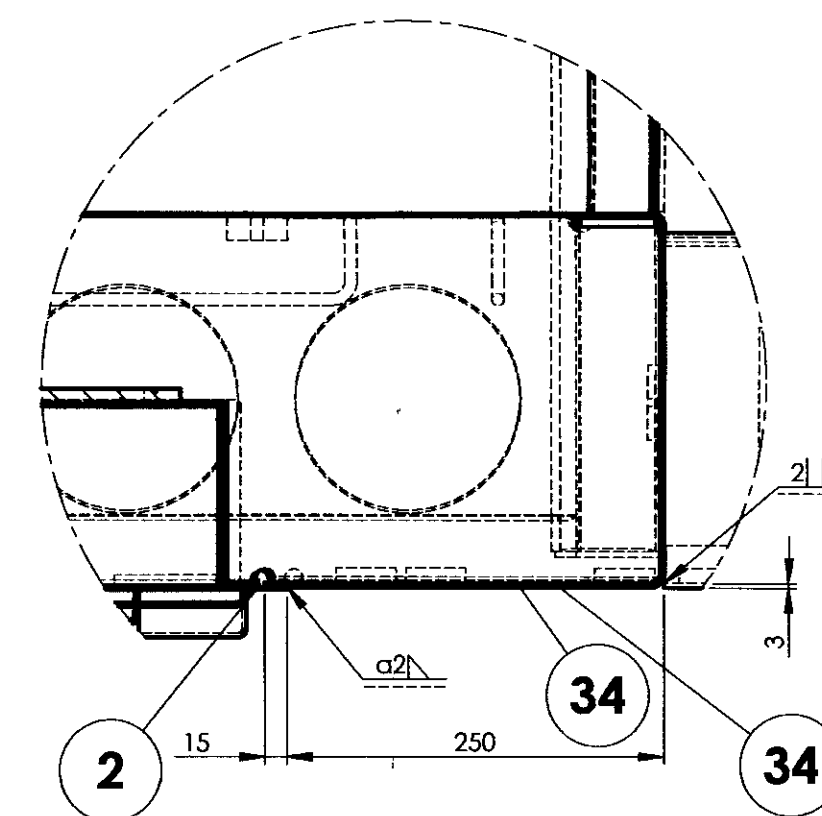
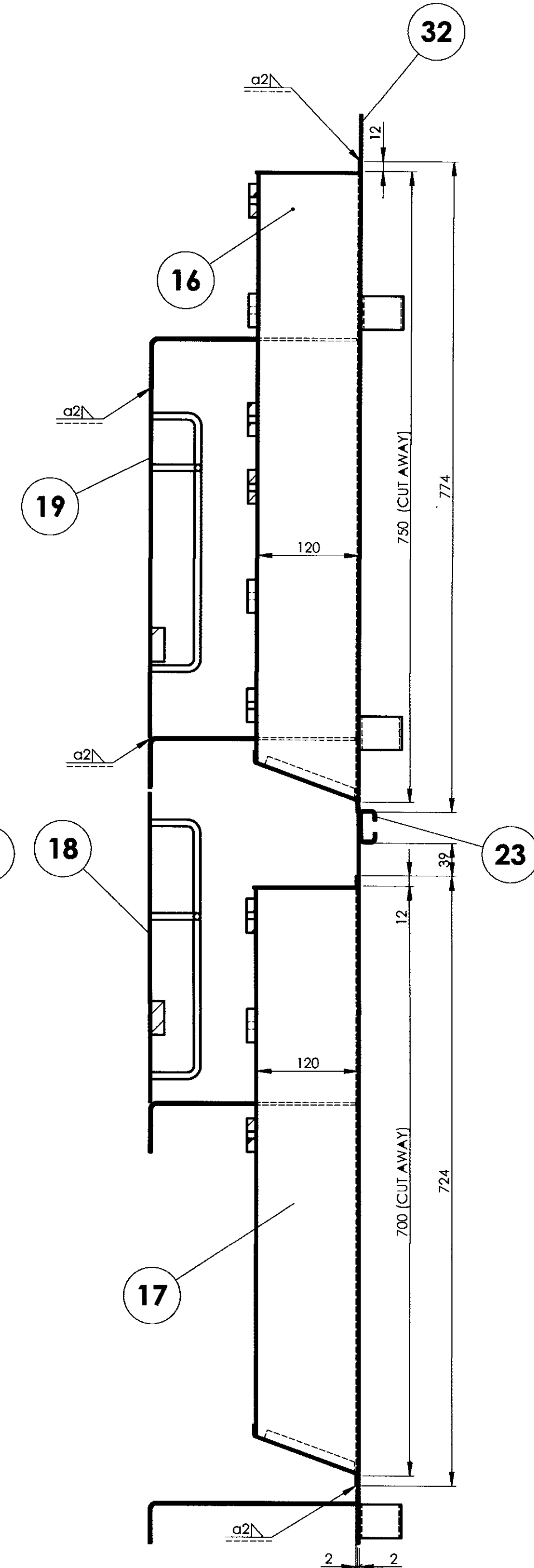
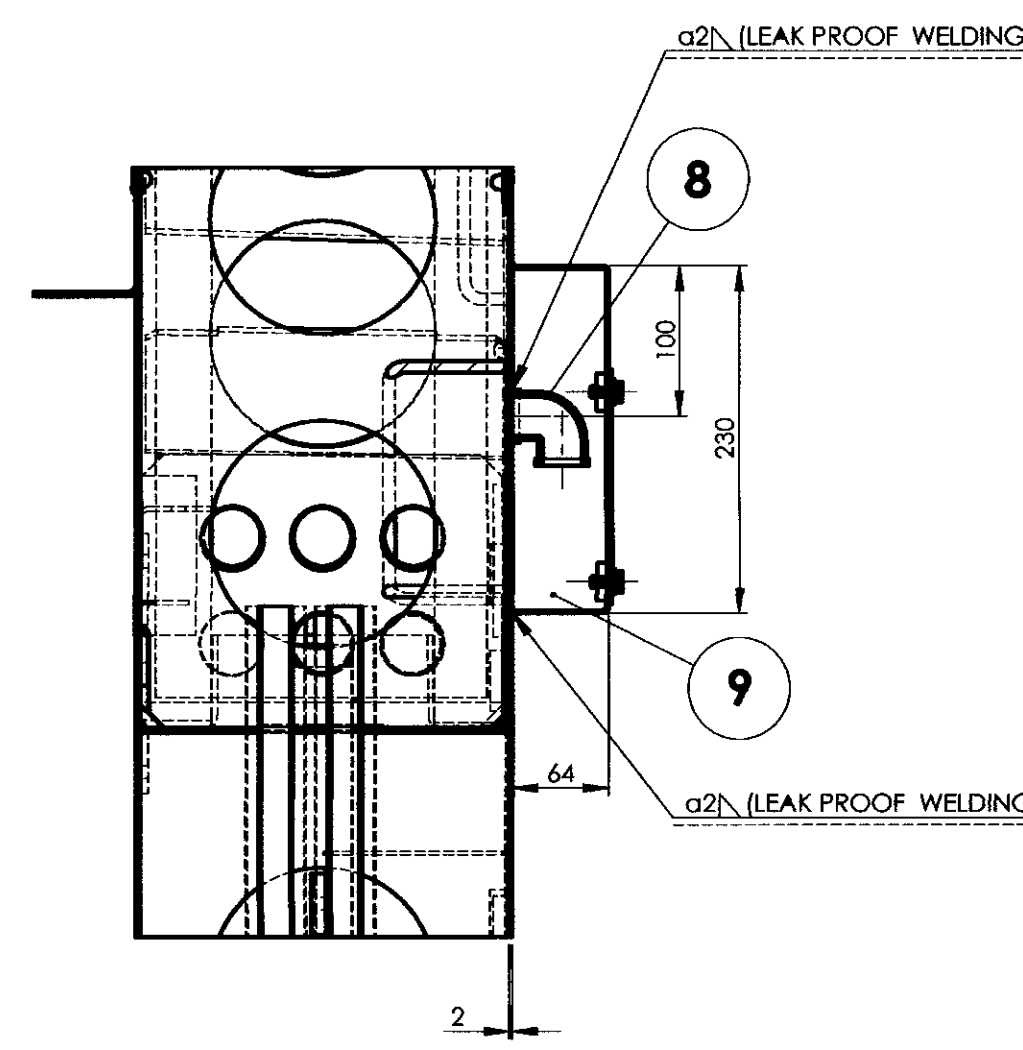
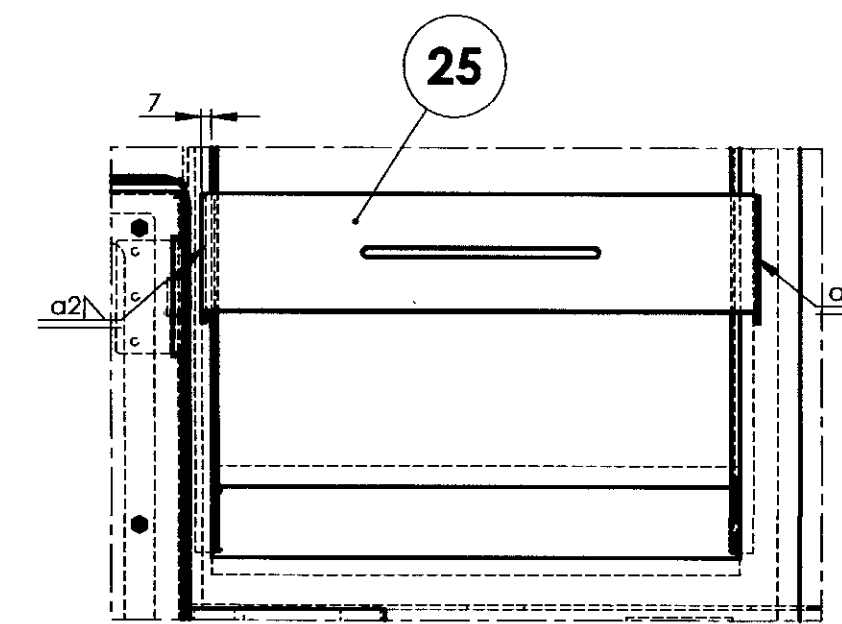
83115001

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

REVISIONS				APPROVED DATE
ALT.	ZONE	DESCRIPTION		



VIEW FROM COACH OUTSIDE

SECTION A-A
SCALE 1:10SECTION B-B
SCALE 1:10DETAIL X
SCALE 1:5DETAIL H
SCALE 1:5SECTION C-C
SCALE 1:5SECTION Z-Z
SCALE 1:5DETAIL F
SCALE 1:5

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REF.DRG.NO.

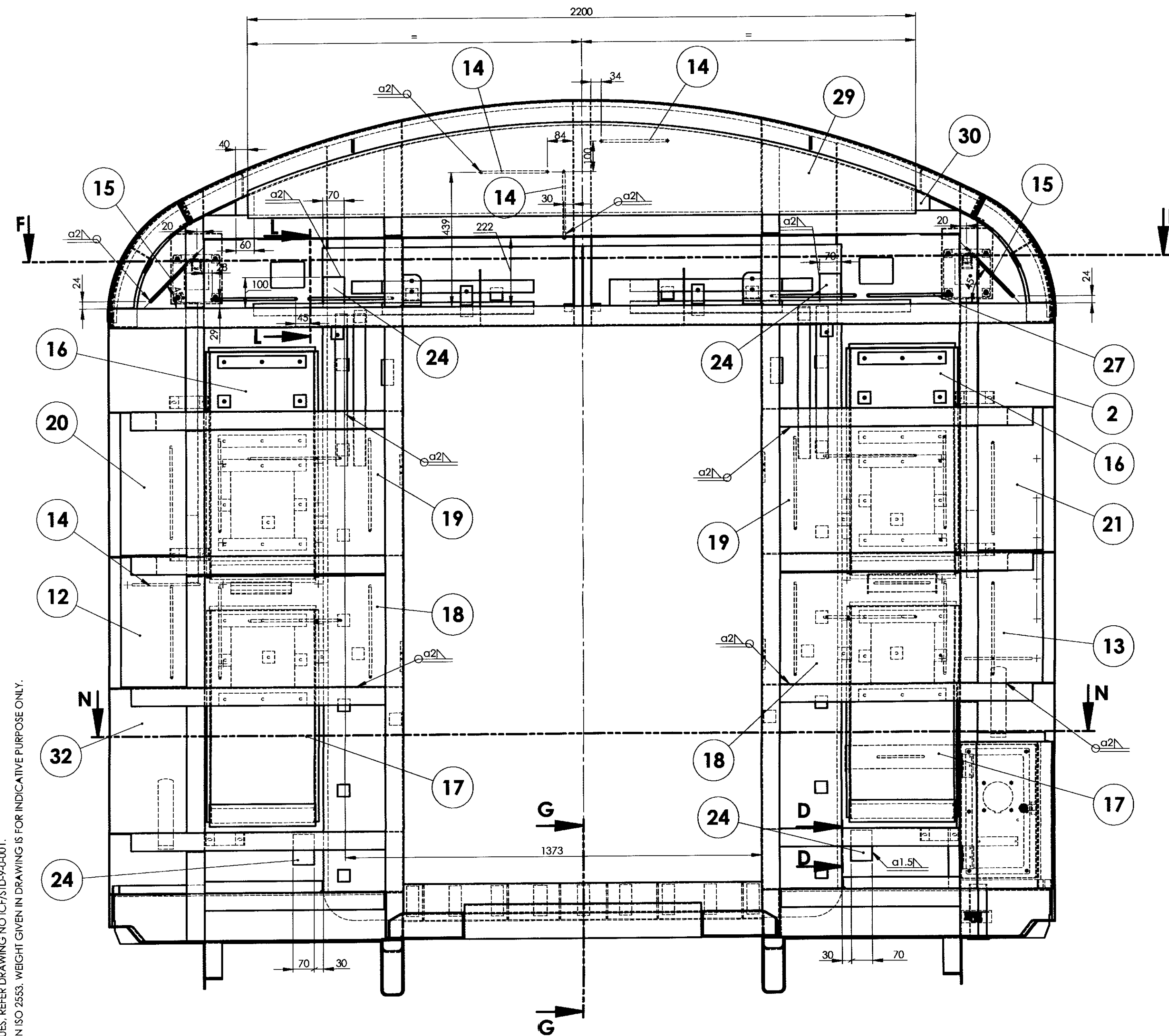
B -03-2026	06-08-2025	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
SCALE 1:20		SSE/D CHD		B. Suresh	
ALT. b		ALTD DRN		3D B. Suresh	
				2D Mahesh	
				LWLRRM/PP2	
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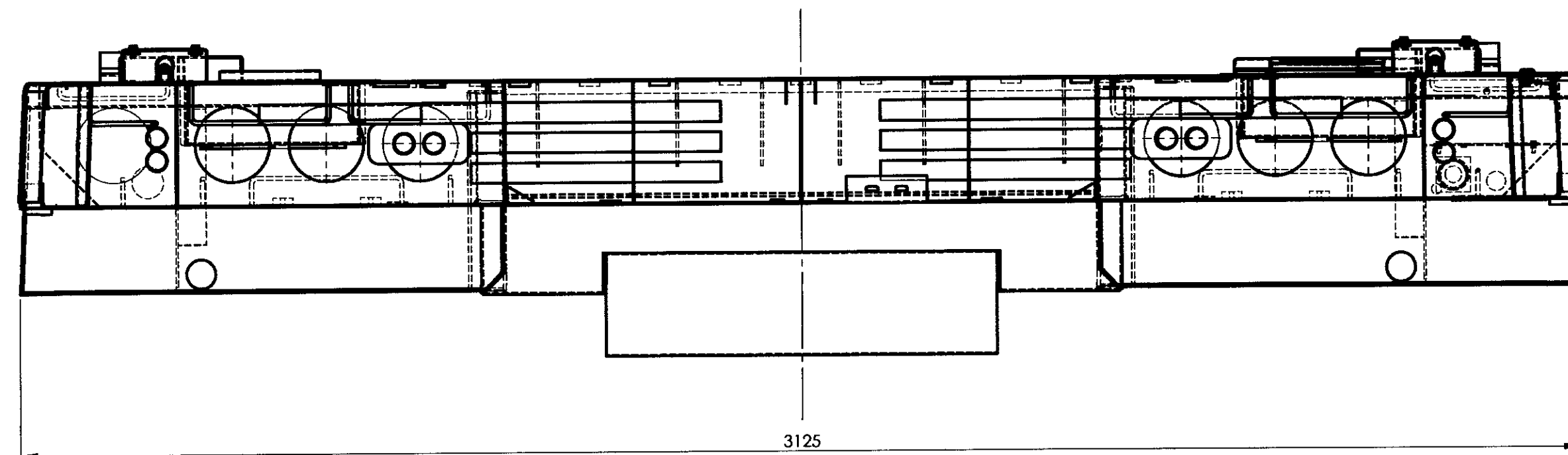
16897

83115001

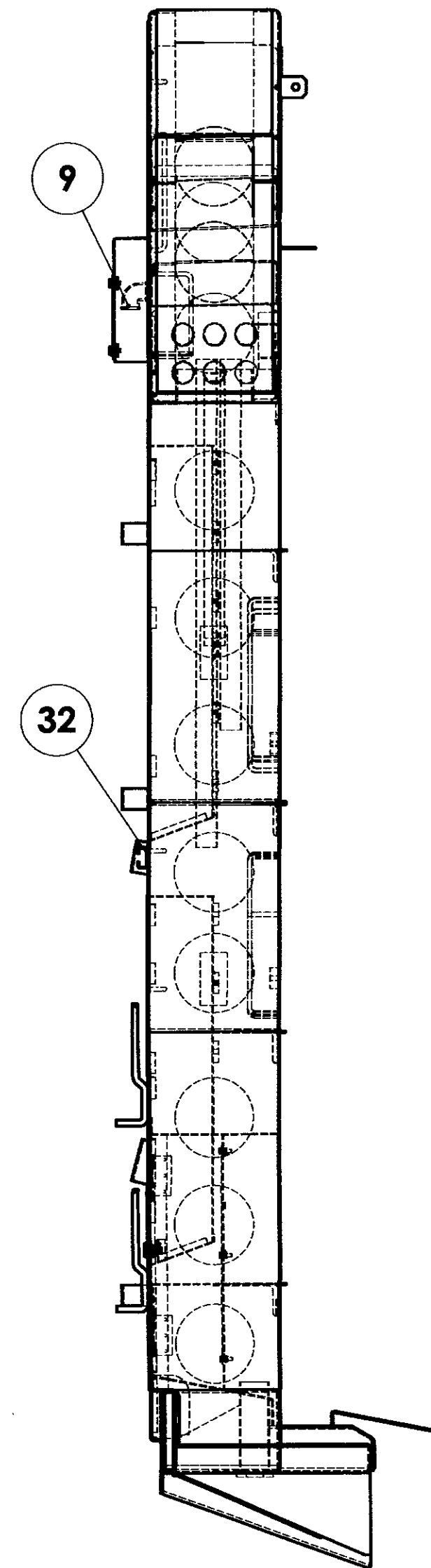
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▽▽ FINISH MACHINED	(02) BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	(03) CHAMFERED



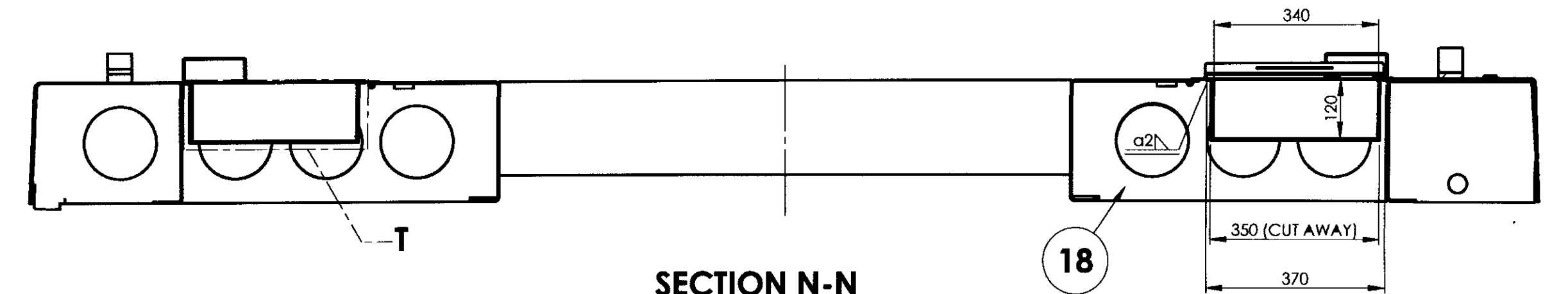
VIEW FROM COACH INSIDE



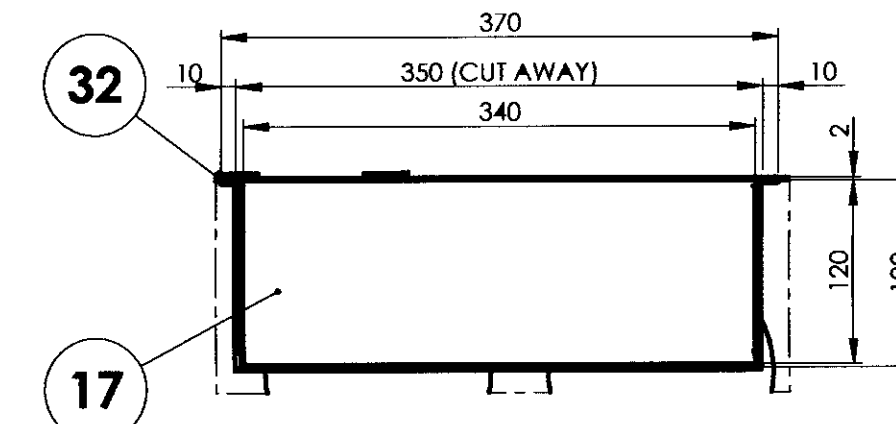
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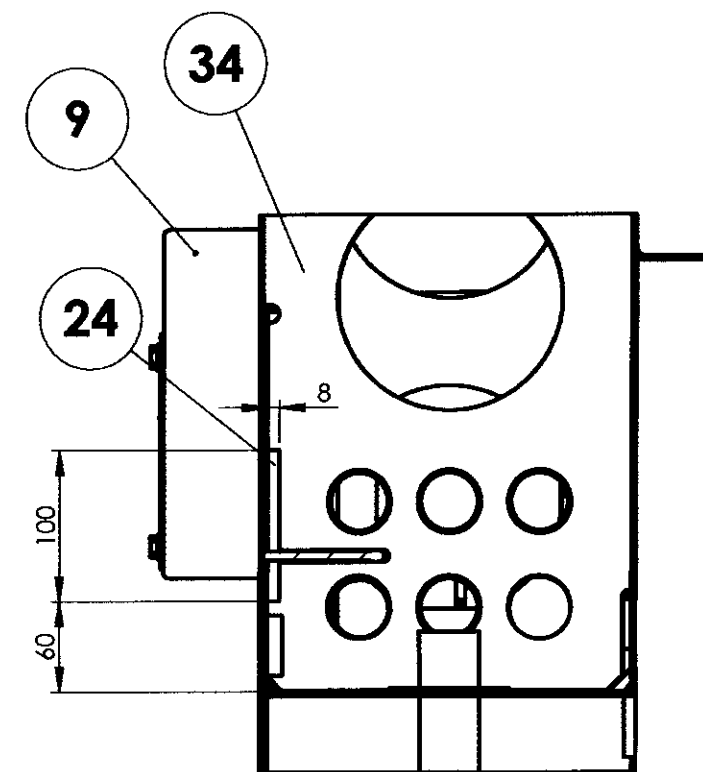
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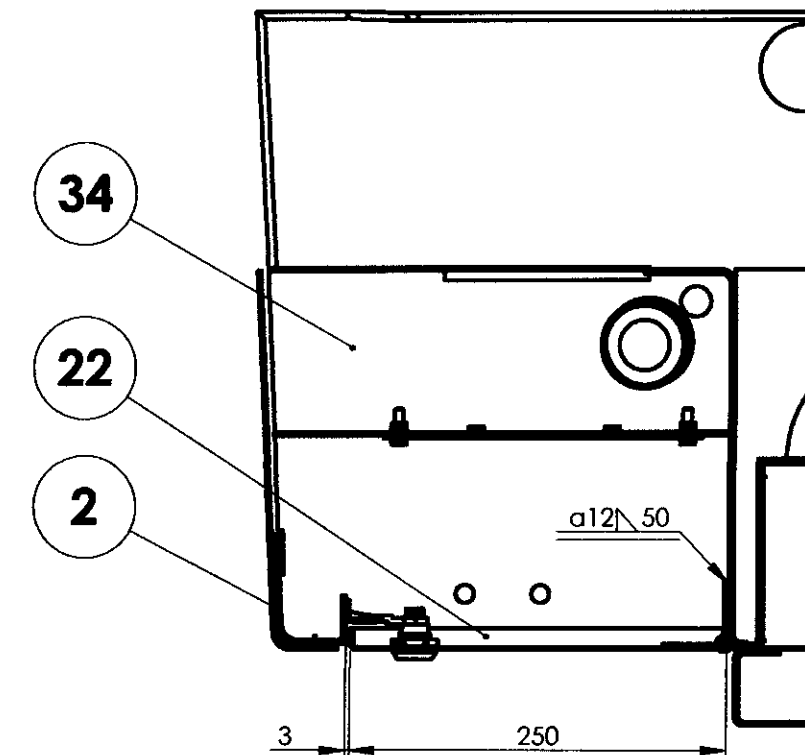
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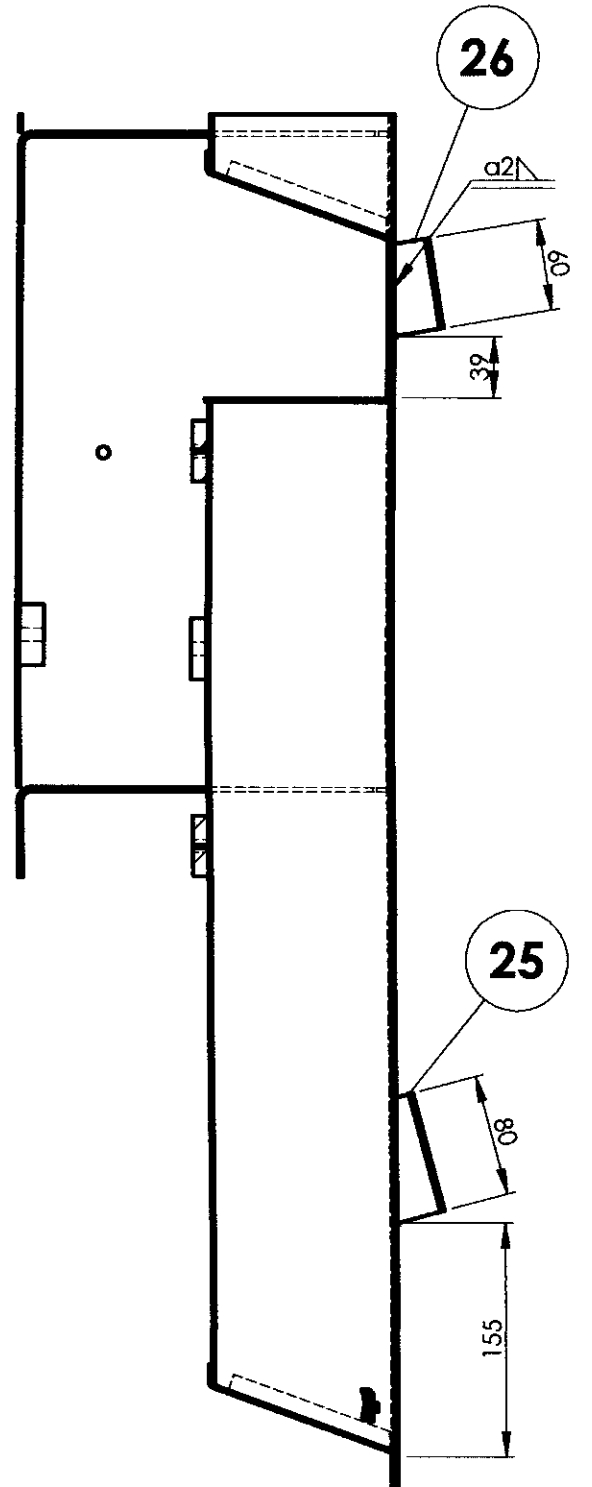
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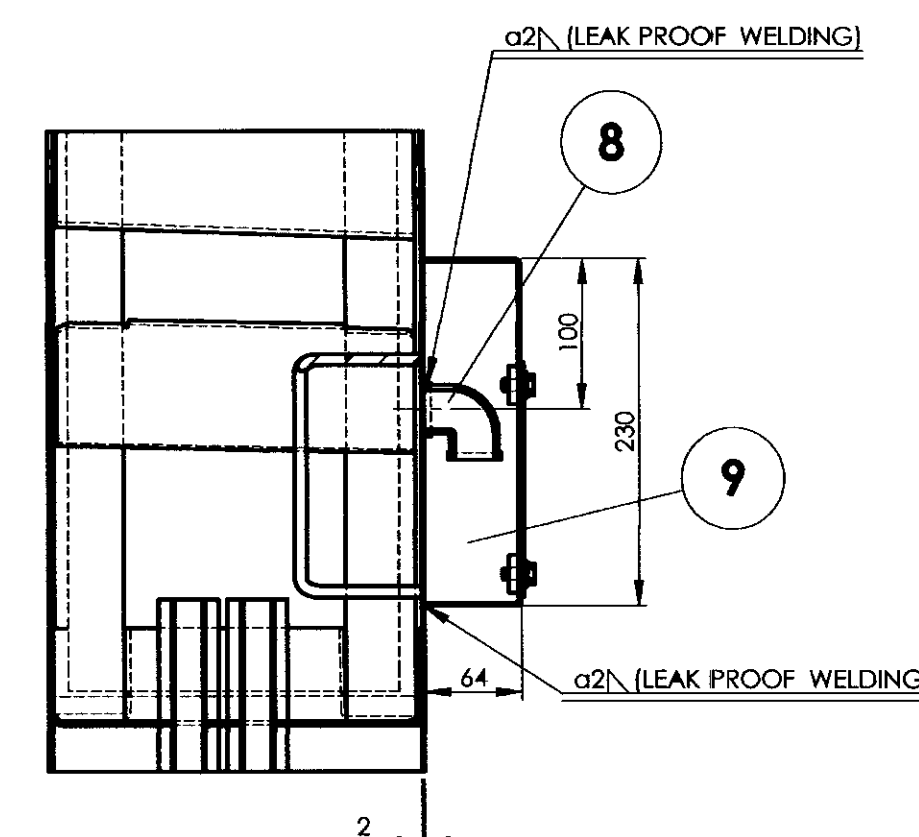
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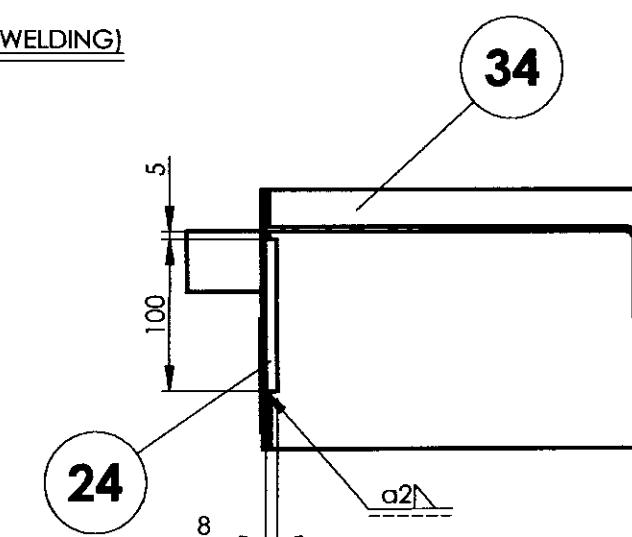
SECTION S-S
SCALE 1 : 5



SECTION M-M
SCALE 1 : 5



SECTION E-E
SCALE 1 : 5



SECTION D-D
SCALE 1 : 5

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REF.DRG.NO.

13-03-2026	06-08-2025	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
SCALE 1:20		SSE/D		C/D	
ALT. b		ALT.D		DRN	
3D B. Suresh		2D Mahesh			
INDIAN RAILWAY STANDARDS		SHEET 2 OF 3		LWLRRM/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038		83115001		A1	

83115001

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

①	ROUGH CLEANED
①①	BURRS REMOVED
①①①	CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
a		ITEMS - 31,32 & SECTION E-E ADDED. QUANTITY OF ITEMS- 8 & 9 REVISED FROM 1 TO 2. ITEM-3 DELETED & VIEWS UPDATED ACCORDINGLY.		-Sd-
b		ITEMS-33 & 34 ADDED. QUANTITY OF ITEM-31 REVISED FROM 4 TO 6. ITEMS-1, 4 DELETED & VIEWS UPDATED ACCORDINGLY.		

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. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY)ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.
7. ITEM-11 (NAME PLATE) SHALL BE WELDED OR RIVETED AT SUITABLE LOCATION AS SHOWN IN THE DRAWING IF PROCURED FROM TRADE.
8. ALL TAPPED HOLES TO BE CLOSED USING SUITABLE PVC PLUGS BEFORE PAINTING.
9. BEFORE APPLYING PRIMER THE FACES OF THE ANGLE MARKED @ THUS TO BE MASKED ALONG WITH THE SHELL JOINING AREAS OF ENDWALL.
10. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
11. FOR WELD TESTING PREFERANCES REFER DRG.NO.ICF/STD-9-0-998.
12. FOR WELD PROCEDURE SPECIFICATION REFER DRG.NO.ICF/STD-9-0-99913

1	FRAME WORK		34	83115004		309.887	
1	END WALL TOP SHEET		33	AAE15067		11.206	
1	ENDWALL SHEET		32	AAE15199		25.371	
4	BRACKET FOR DRAIN PIPE FIXING		31	AAE15084		0.25	
2	BACK PIECE		30	AAC15745		0.09	
1	FLANGE PLATE		29	AAA15443		8.380	
1	FLANGE		28	AAC15734		8.142	
4	CABLE SUPPORTING ROD		27	AAE15021		0.17	
1	SUPPORTING BRACKET		26	AAD15985		0.37	
1	SUPPORTING BRACKET		25	AAD15978		0.75	
4	BACK PIECE	8x70x100	24		RDSO SPEC C-K201 X2 Cr Ni 12	0.45	
1	MOUNTING RAIL	L=200	23	AAE11737		0.41	
1	SHUTTER ASSEMBLY FOR EFT SOCKET		22	58115015		1.990	
1	ELEC COUPLER COVER COMPLETE		21	75415014		2.99	
1	ELEC COUPLER COVER COMPLETE		20	75415013		3.01	
2	ELEC COUPLER CLOSING PLATE		19	75415011		4.85	
2	ELEC COUPLER CLOSING PLATE		18	75415010		4.37	
2	BRACKET ASSEMBLY FOR EFT AND PARKING		17	75415007		9.50	
2	BRACKET ASSEMBLY FOR EFT AND PARKING		16	75415006		12.04	
2	CABLE SUPPORTING ROD		15	AAE15022		0.15	
5	CABLE TIE ROD		14	AAB15114		0.11	
1	ELEC COUPLER COVER COMPLETE		13	97115005		2.73	
1	ELEC COUPLER COVER COMPLETE		12	97115004		2.75	
1	NAME PLATE FOR SUPPLIER IDENTIFICATION		11	AAA51072		0.043	
2	BRACKET		10	AAA24077		1.284	
2	BRACKET ASSY COMPLETE FOR GPS ANTENA		9	79115005		1.804	
2	ELBOW	¾" A1	8	IS:1879-2010 TAB-4	AISI-304	0.154	
1	COVERING SHEET		7	AAA15259		2.389	
1	COVERING SHEET		6	AAA15219		2.389	
1	COVERING SHEET		5	AAA15180		8.203	
4	END WALL TOP SHEET		4	AAE15038		8.379	
1	ENDWALL SHEET		3	AAE15049		25.379	
1	ENDWALL SHEET		2	AAE15048		23.333	
4	FRAME WORK		1	82815002		313.597	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
SCALE 1:20		SSE/D	CHD		
		ALT. b	ALTD DRN		
END WALL COMPLETE PP END				LWLRRM/PP2	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 3 OF 3	83115001 A1

13 -03-2026	06-08-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.

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COACH INSIDE ISOMETRIC VIEW

COACH OUTSIDE ISOMETRIC VIEW

83115006

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

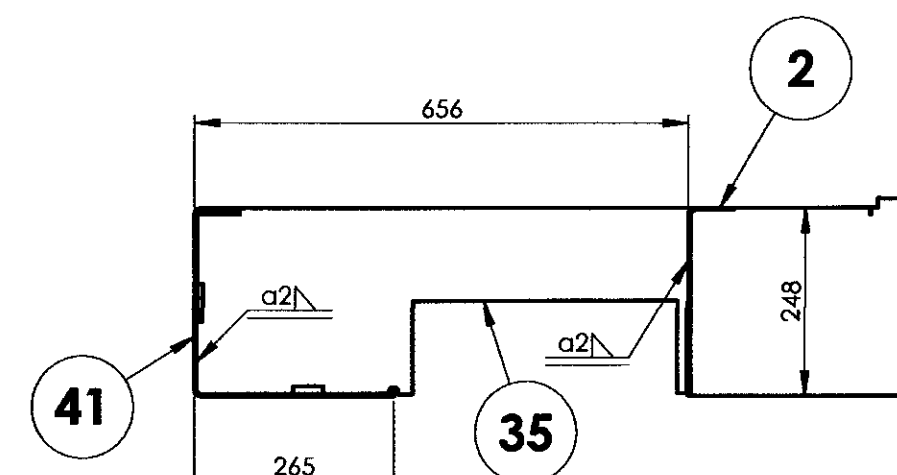
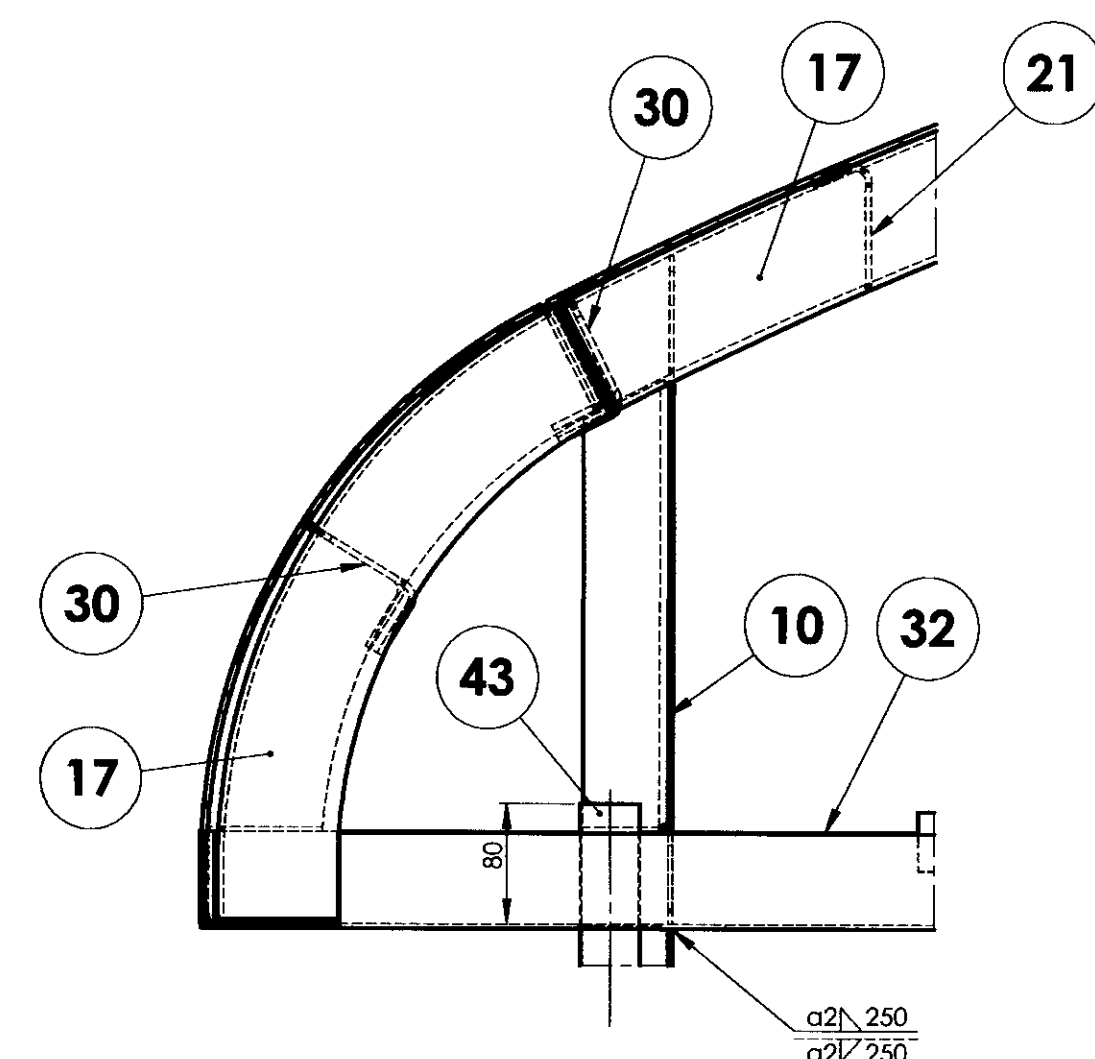
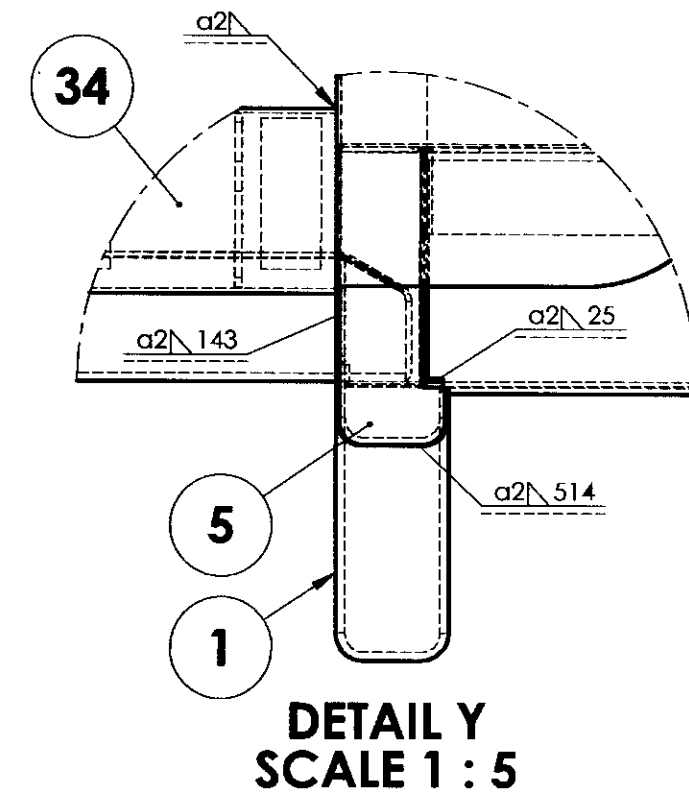
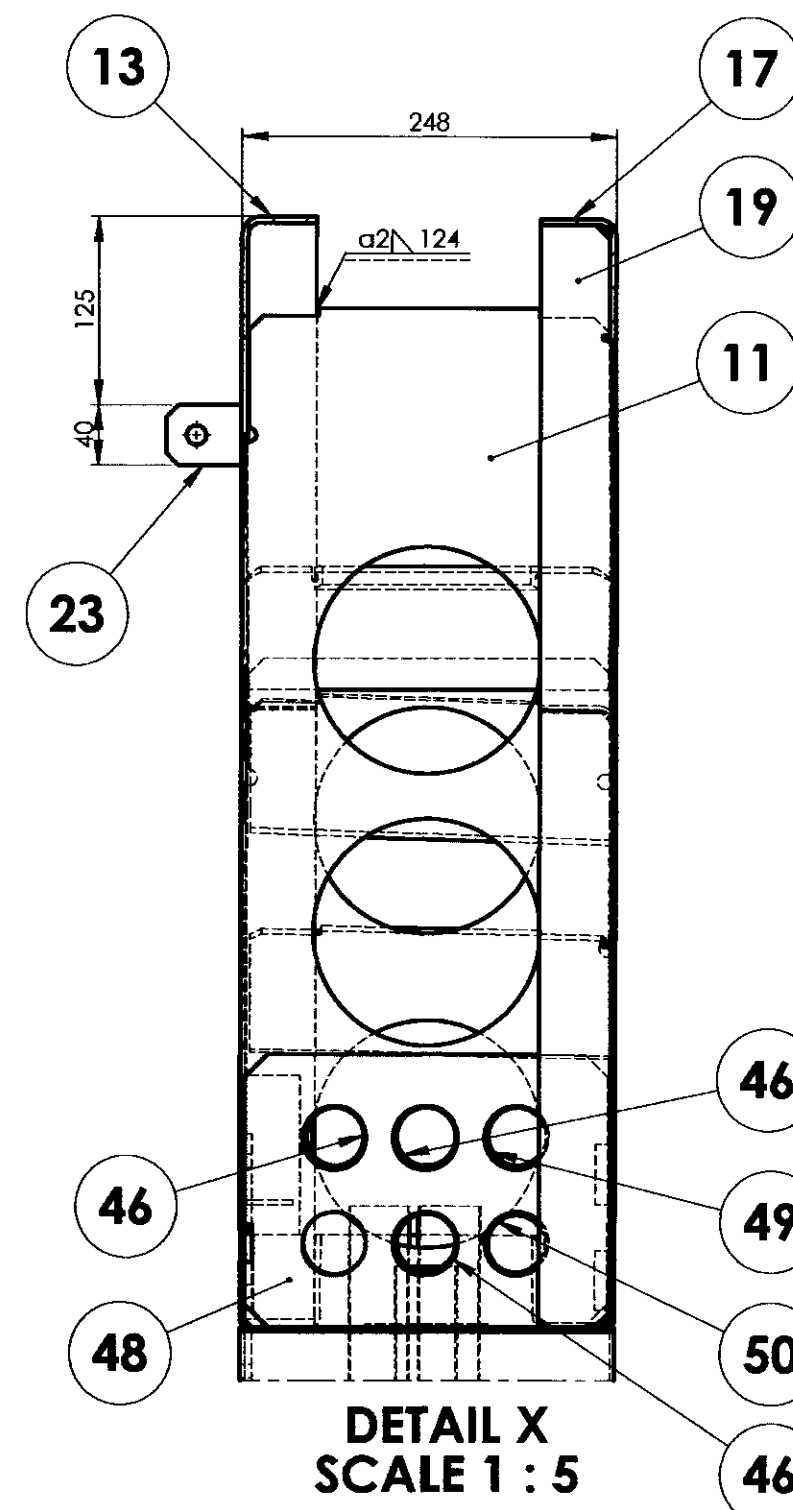
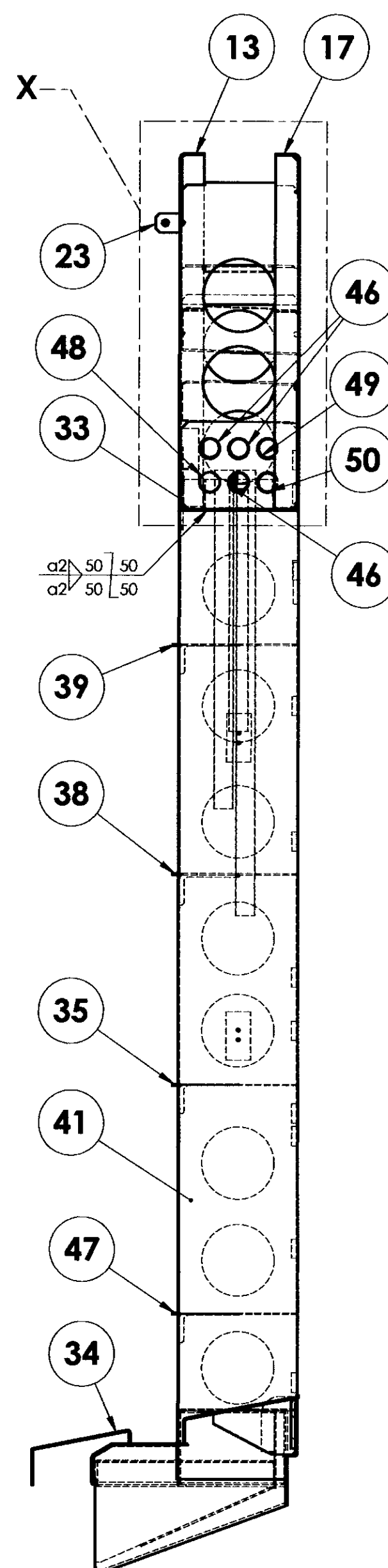
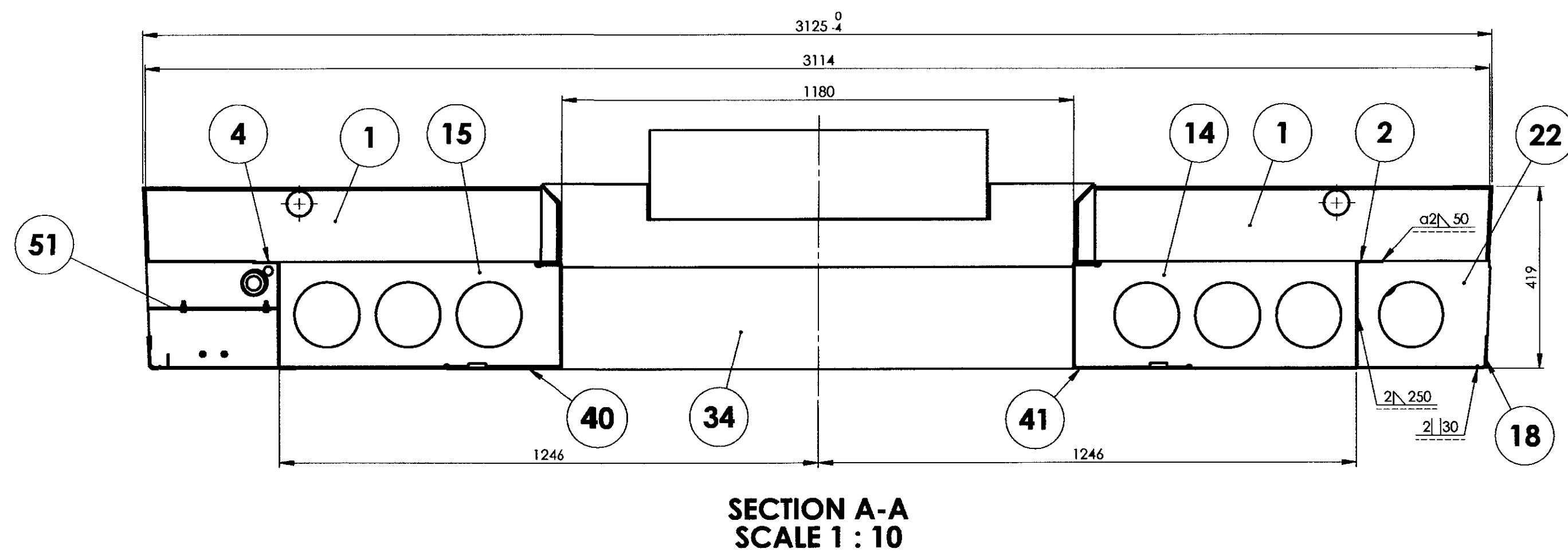
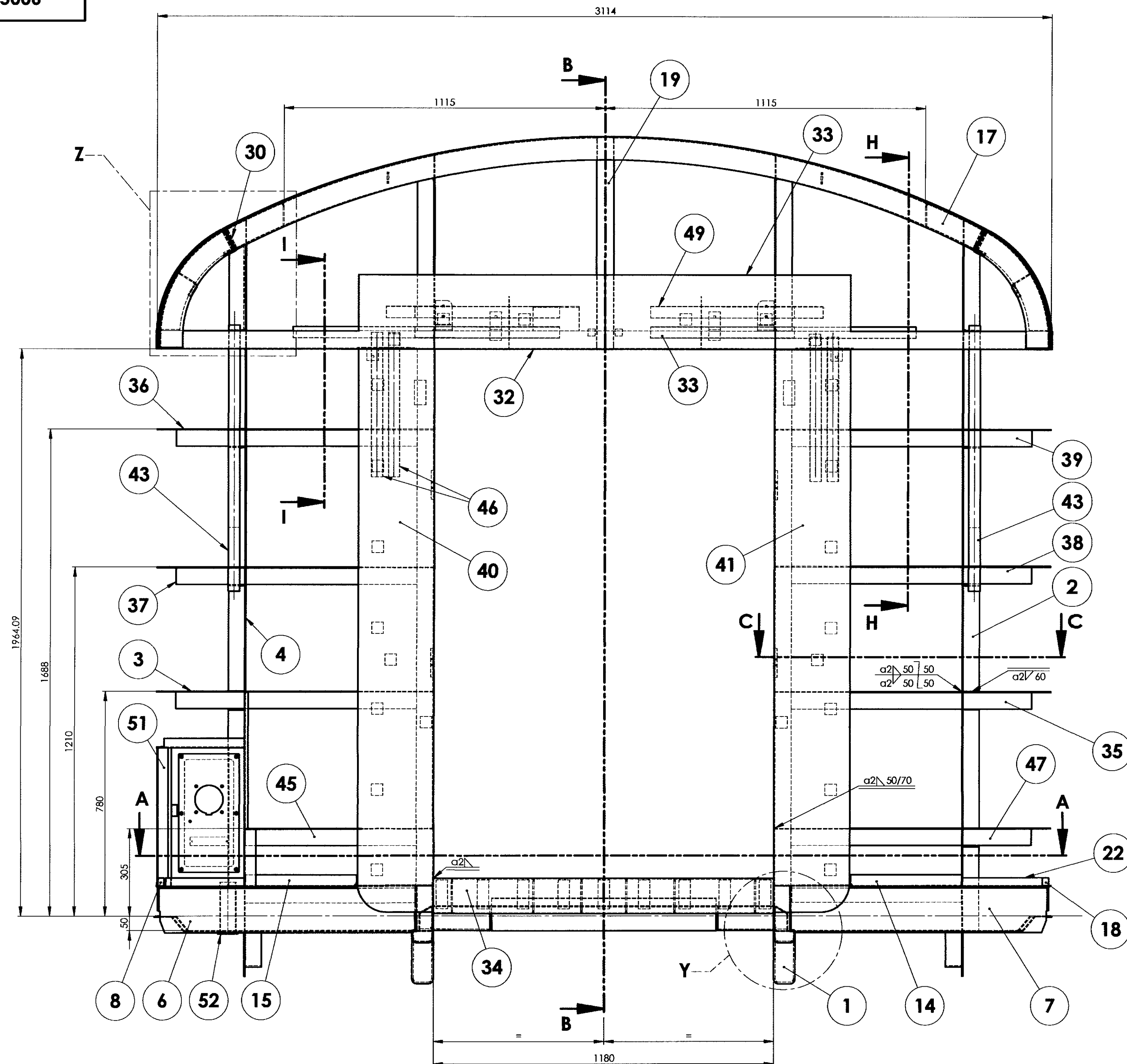
(01) ROUGH CLEANED
(10) BURRS REMOVED
(18) CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
FRAME WORK		SCALE	SSE/D		
		1:10	CHD		
		ALT.	ALTD		
		DRN	MAHESH		
INDIAN RAILWAY STANDARDS		SHEET		LWLRRM/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038		1 OF 3		83115006	
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		A1	
B-03-2026		AME/SME			

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REF.DRG.NO.

83115006

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

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

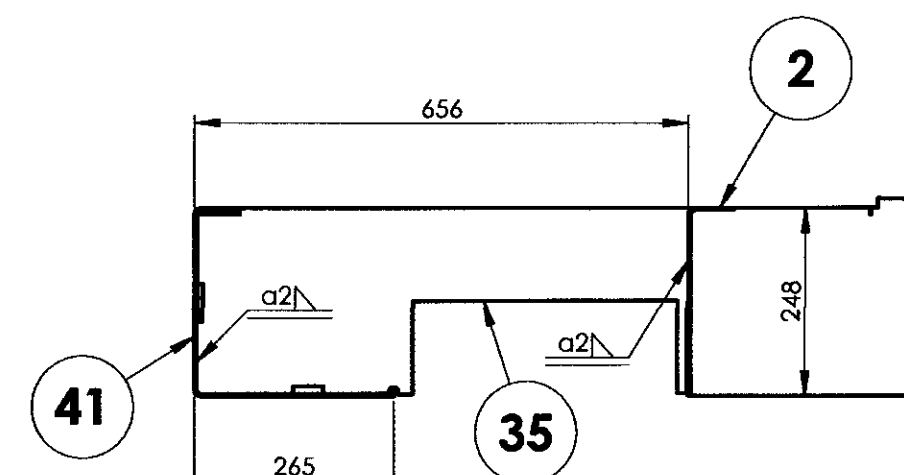
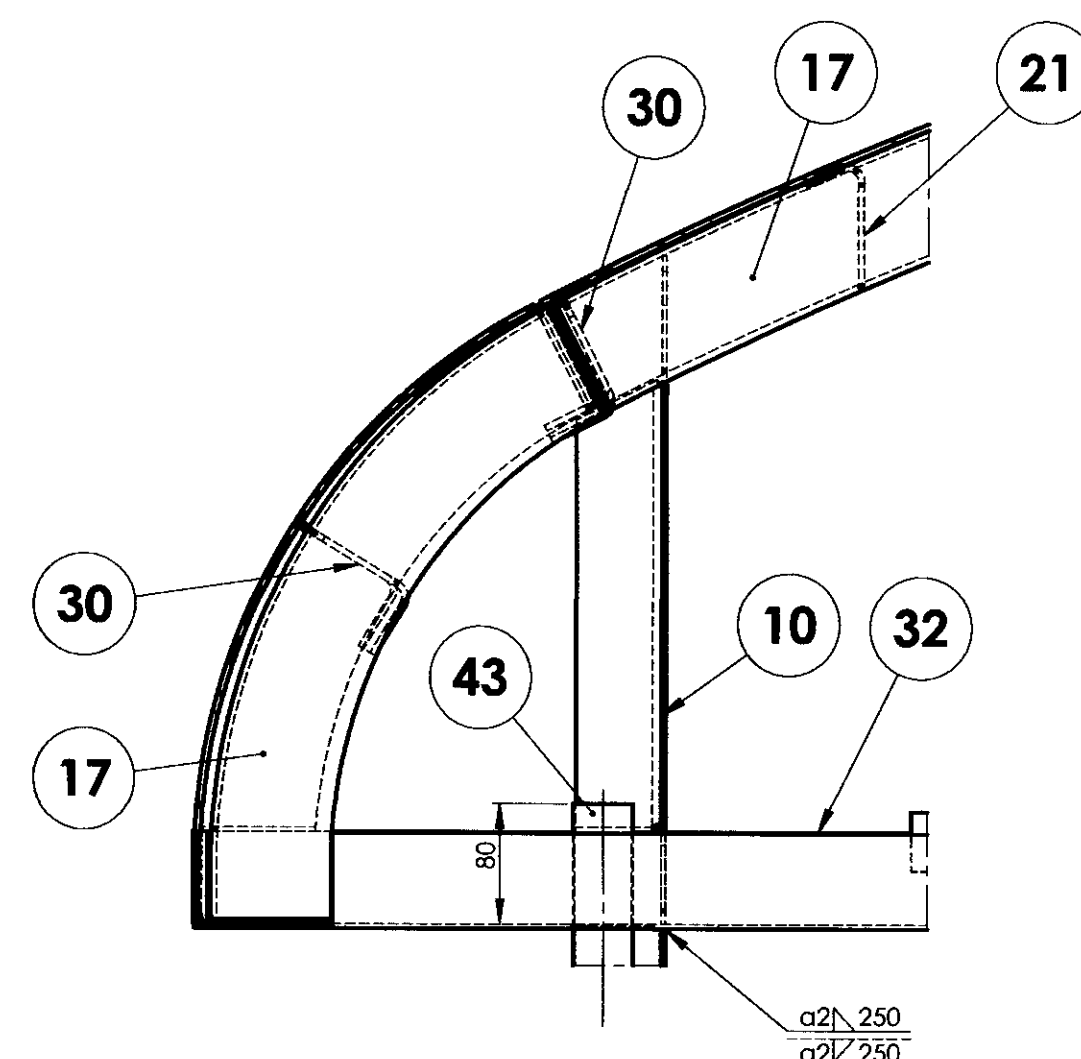
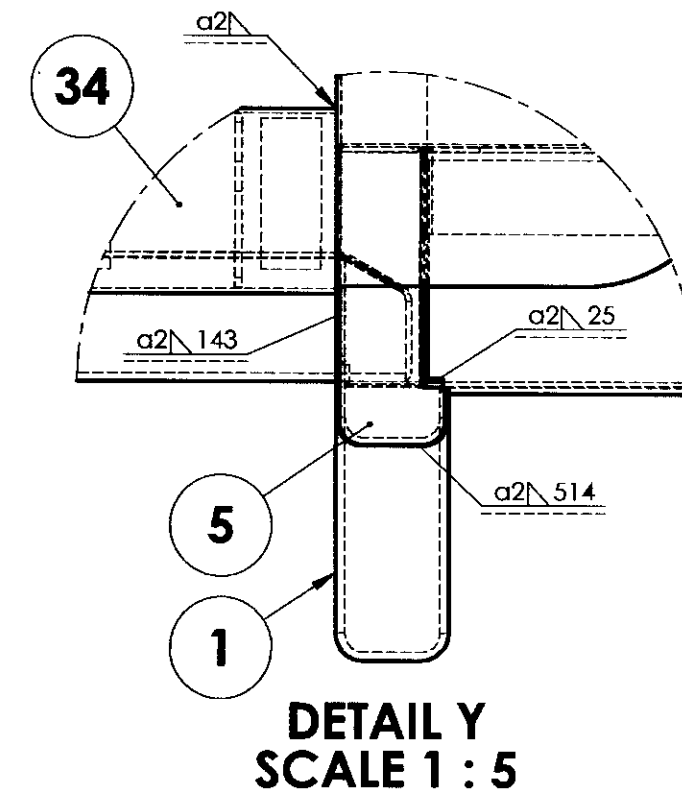
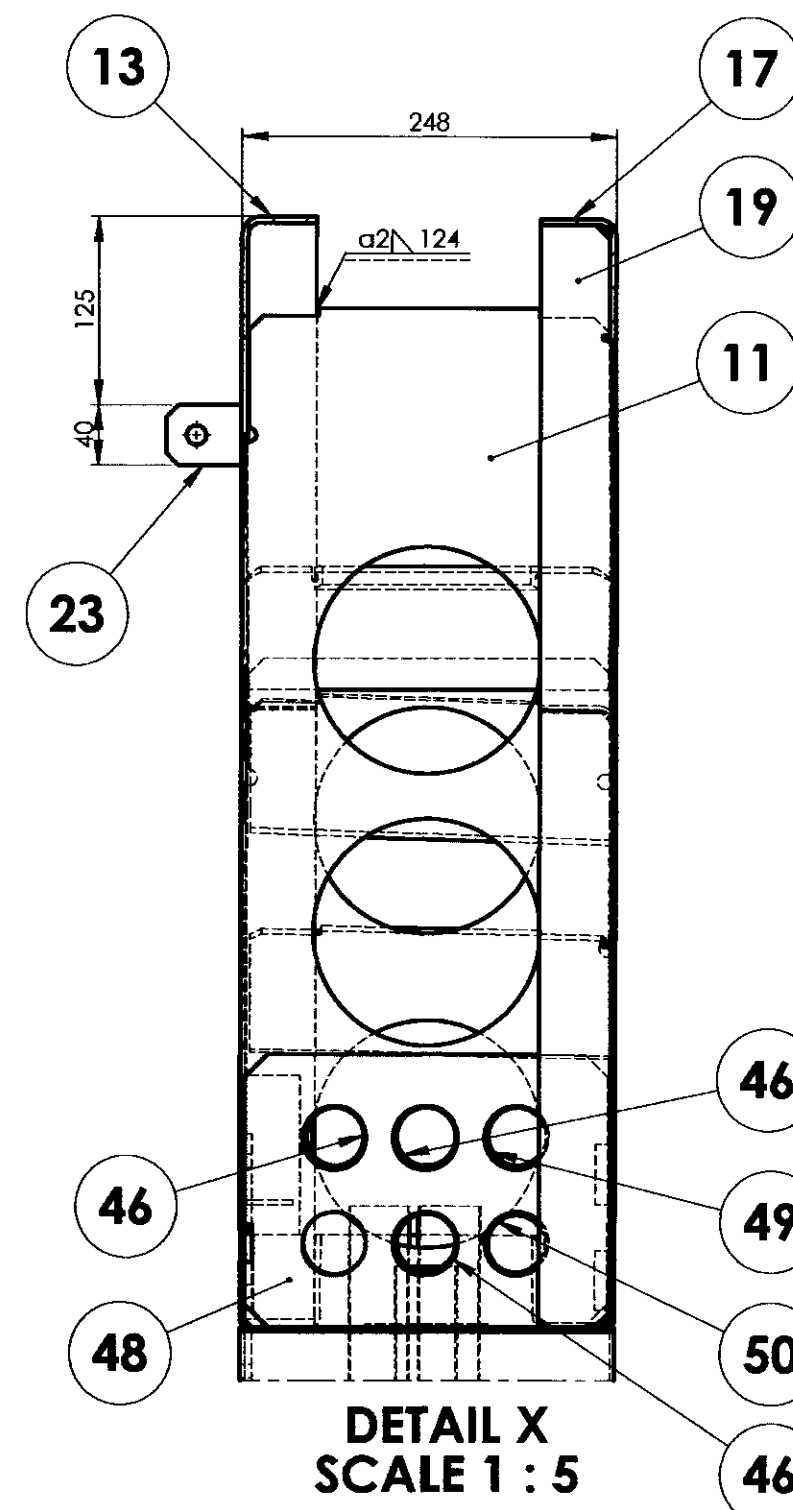
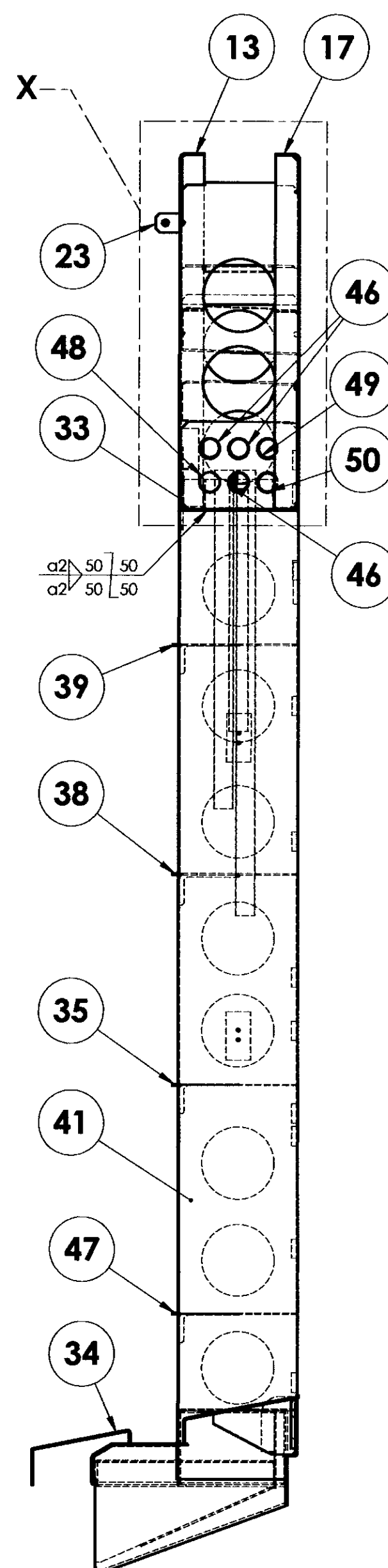
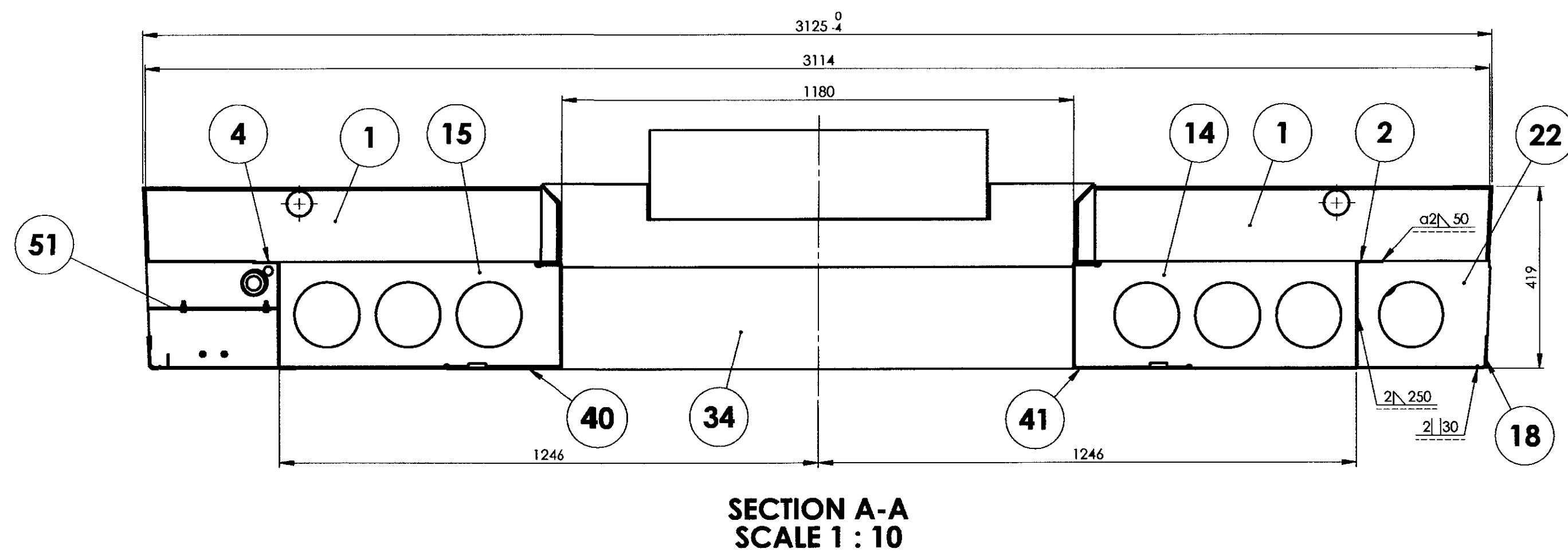
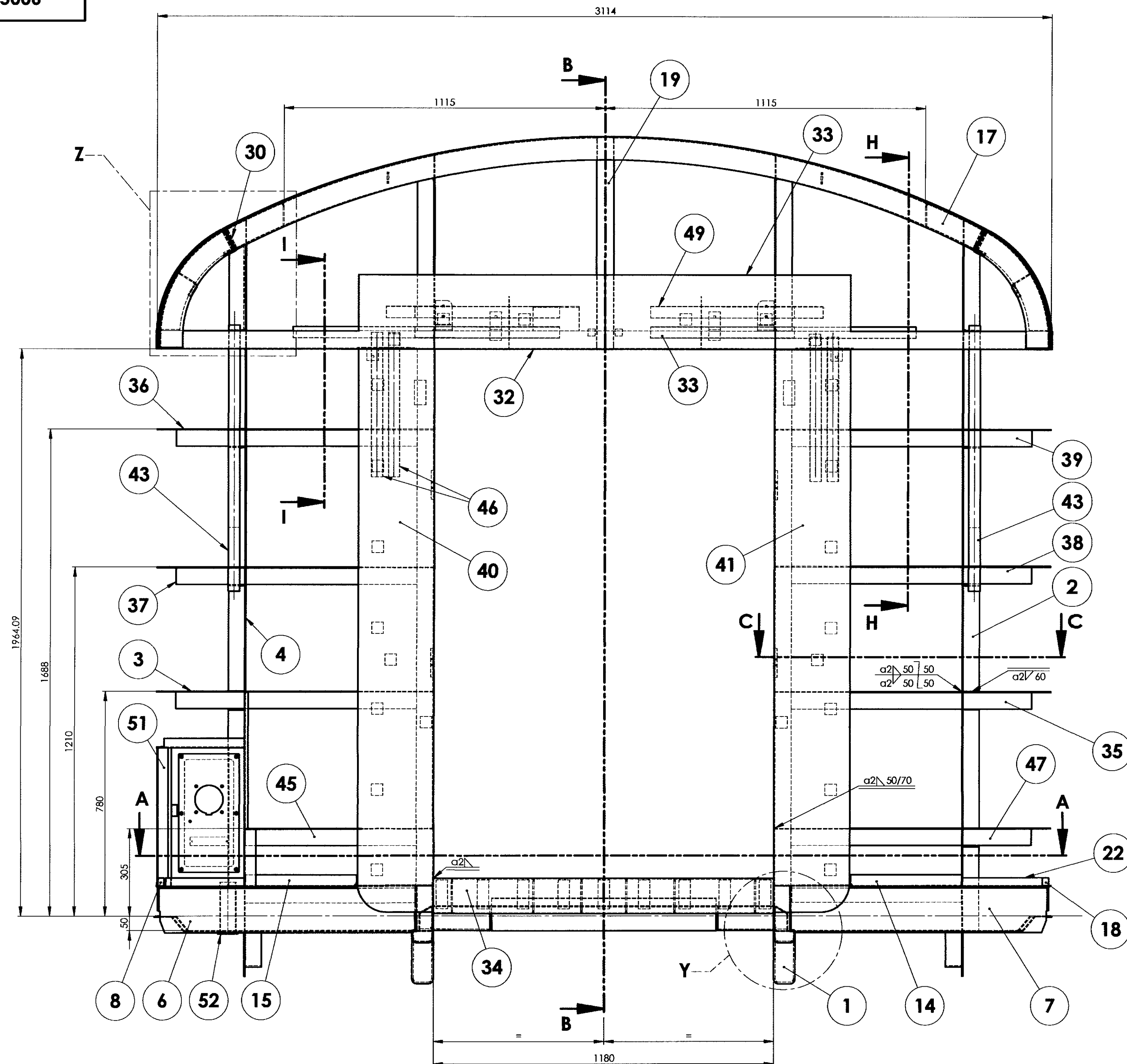
REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED & DATE



GROUP: 1-5 End Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
FRAME WORK		SCALE	SSE/D		
		1:10	CHD		
		ALT.	ALTD		
		DRN	MAHESH		
INDIAN RAILWAY STANDARDS		SHEET		LWLRRM/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038		1 OF 3		83115006	
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		A1	
B-03-2026		AME/SME			

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