

APPLICABLE FROM TRAINSET 190+ AS PER BASELINE 10.4

## SELF INSPECTION SHEET

## CONFIDENTIAL INFORMATION

This document and the information contemplated therein have to be considered as Confidential information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

APPLICATION REFERENCE											
MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE					WORK INSTRUCTION	SAFETY ?	
				TCL	MA	MA	MC	MS			TCZ
OTR3025487/3	A400001278566	CARBODYSHELL M3/M4 ASSEMBLY	CB2210						X	PR3.CB2210.DTR30225 487/3.V30	YES
REV	DATE	MODIFICATION CONTENT			RESPONSIBLE			NAME	DATE		
0	10/01/2018	GIBELA NEW CREATION			APPROVER			Itumeleng Modiba	10/04/2018		
					CHECKER			Nosiso Pindela	10/04/2018		
					COMPIER			Thangeni Mathagu	10/01/2018		
1	2018/05/18	Team leader and Quality Technician to sign Change final signature from PVE Manager to Quality manager			APPROVER			Itumeleng Modiba	2018/05/18		
					CHECKER			Nosiso Pindela	2018/05/18		
2	2018/07/04	Certain dimensional checks moved to CB1220 and CB1230			APPROVER			Itumeleng Modiba	2018/07/04		
					CHECKER			Nosiso Pindela	2018/07/04		
3	2018/12/12	Added dimensional check points to CB2210			APPROVER			Itumeleng Modiba	2018/12/12		
					CHECKER			Ramokone Motama	2018/12/12		
5	22/01/2019	As per Baseline 10.2			APPROVER			Itumeleng Modiba	22/01/2019		
					CHECKER			Nosiso Pindela	22/01/2019		
6	13/03/2019	Added D1 and D2 on Self - Inspection			APPROVER			Itumeleng Modiba	13/03/2019		
					CHECKER			Nosiso Pindela	13/03/2019		
10	21/08/2019	New Baseline 10.2.5			APPROVER			Itumeleng Modiba	21/08/2019		
					CHECKER			Nosiso Pindela	21/08/2019		
15	06/08/2020	New Baseline 10.2.6			APPROVER			Itumeleng Modiba	06/08/2020		
					CHECKER			Nosiso Pindela	06/08/2020		
20	19/04/2021	New Baseline change 10.3			APPROVER			Itumeleng Modiba	19/04/2021		
					CHECKER			Nosiso Pindela	19/04/2021		
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING			APPROVER			Itumeleng Modiba	17/08/2021		
					CHECKER			Nosiso Pindela	17/08/2021		
25	19/02/2022	New Baseline change 10.3.1			APPROVER			Itumeleng Modiba	19/02/2022		
					CHECKER			Nosiso Pindela	19/02/2022		
26	14/04/2023	Addition of welding consumable traceability			APPROVER			Itumeleng Modiba	14/04/2023		
					CHECKER			Nosiso Pindela	14/04/2023		
30	20/07/2023	New Baseline change 10.4			APPROVER			Itumeleng Modiba	20/07/2023		
					CHECKER			Nosiso Pindela	20/07/2023		
31	07/11/2023	Added traceability for welding sections			APPROVER			Itumeleng Modiba	07/11/2023		
					CHECKER			Nosiso Pindela	07/11/2023		
TRAINSET	CAR	OPERATOR NAME	ALPS/NO	DATE	SELF INSPECTION NUMBER			PAGES			
213	M4	Wahid 471497	20102/24	SI.CB2210.254.V30				17			

INDUSTRIAL QUALITY



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023  
Project: PRASA  
SI.CB2210.254.V30

Conf: M3 & M4

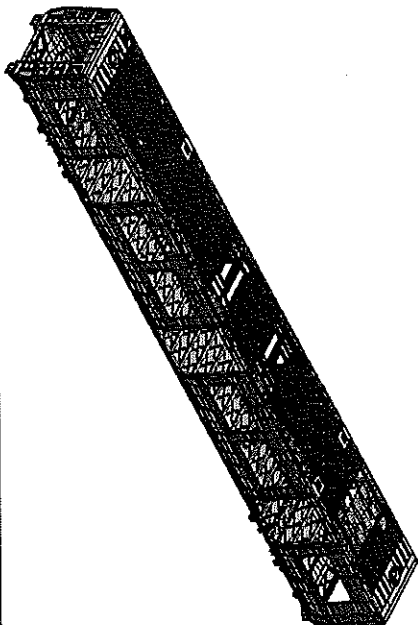
NCR:

Work station:

CB2210



Safety Related



### I - Documentation and Instruments Control

#### 1.1 - Documentation Control

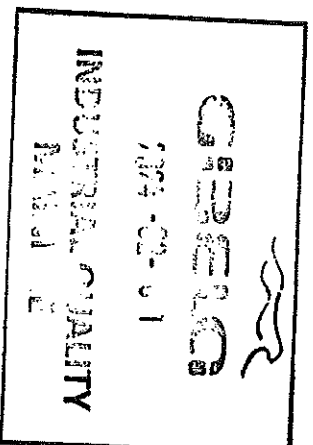
Document	Type of car					Revision	Observation	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
	101	102	103	104	105					
DTR30225487/3					X			✓		


#### 1.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process									
Instruments	Sold number	Calibration or Verification Validation Date	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)				
TV804112	22713	04/10/23	✓						
30M TAP	6187P0084	23/03/31	✓						
30M TAP	125423924	08/01/24	✓						

#### 1.3 Consumables


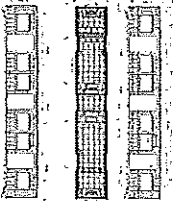
Welding Consumable Control - Used for Special Process									
Filler Material	Heat Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)				
AUS700 508LS1	E 231061	MIG	✓						
ER 509LS1	318394	MIG	✓						

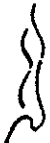


	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3		Rev. 31 Date 07/11/2023	Project: PRASA SI-CB2210.254.V30

**II - Self Inspection - Items to Check**

**II.1 - Items to check**

Item	Pictures/Drawing	Description	Acceptance criteria / Record	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD00000210675	<input checked="" type="checkbox"/>	W/le 20/02/24	my/02/24
02	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 e DTD00000210675	<input checked="" type="checkbox"/>	W/le 20/02/24	my/02/24
03	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TP/DEF - ARC - 0000	<input checked="" type="checkbox"/>	W/le 20/02/24	my/02/24
04		Cleaning of all Stainless Steel Surface	According to GIB-WEL - PROC-0002	<input checked="" type="checkbox"/>	W/le 20/02/24	my/02/24
05		Functional dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document	Approved according specified on pages below.	<input checked="" type="checkbox"/>	W/le 20/02/24	my/02/24
06	N/A	Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and filler sampling as described in DTD00000210658.	As the welding procedure IND-SAL-WMS-018 and DTD00000210658.	<input checked="" type="checkbox"/>	W/le 20/02/24	my/02/24



**GIBELCO**  
 2024-02-01  
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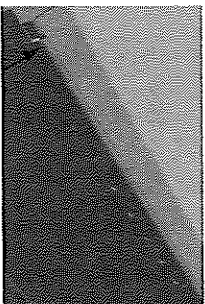


CARBODYSHELL M3,M4 ASSEMBLY DTR30225467/3

Rev.	31	Project: PRASA SI.CB2210.254.V30
Date	07/11/2023	

Welding Traceability

Roof ring welds



LHS

Boiler maker (Name & Sign): Steven Glib Welder (Name & Sign): Robert O'Neil

END 1

RHS

Boiler maker (Name & Sign): Lawrence Glib Welder (Name & Sign): Nickolas Glib

LHS

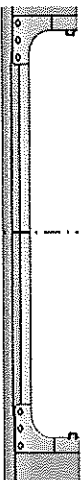
Boiler maker (Name & Sign): Steven Glib Welder (Name & Sign): Robert O'Neil

END 2

RHS

Boiler maker (Name & Sign): Lawrence Glib Welder (Name & Sign): Nickolas Glib

Door ring welds



LHS

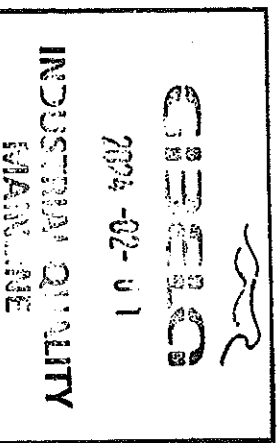
Boiler maker (Name & Sign): Timothy Bickel

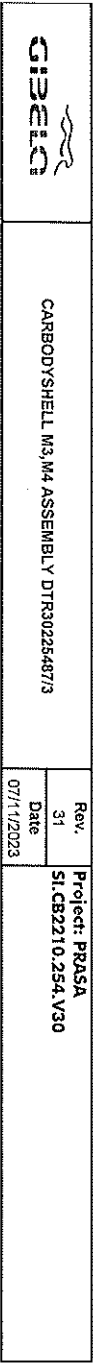
Welder (Name & Sign): Nickolas Glib

RHS

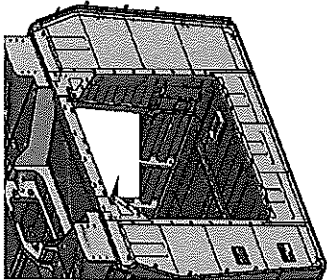
Boiler maker (Name & Sign): Steven Glib

Welder (Name & Sign): Nickolas Glib



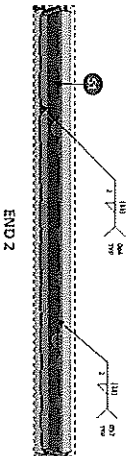


Rev. 31	Project: PRASA SI.CB2210.254.V30
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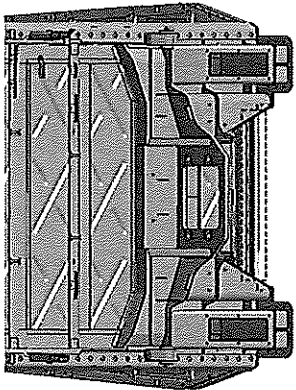


Boiler maker (Name & Sign): 1. matty - lead

Welder (Name & Sign): Mitko's



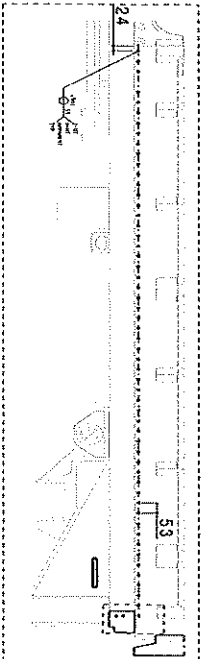
Boiler maker (Name & Sign): Shaw - [Signature]  
Welder (Name & Sign): [Signature] 11/15/2012



## Underneath the CAR

FED011

Operator: 12009 [Signature]

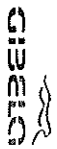


2

המשפחה

2024-02-01

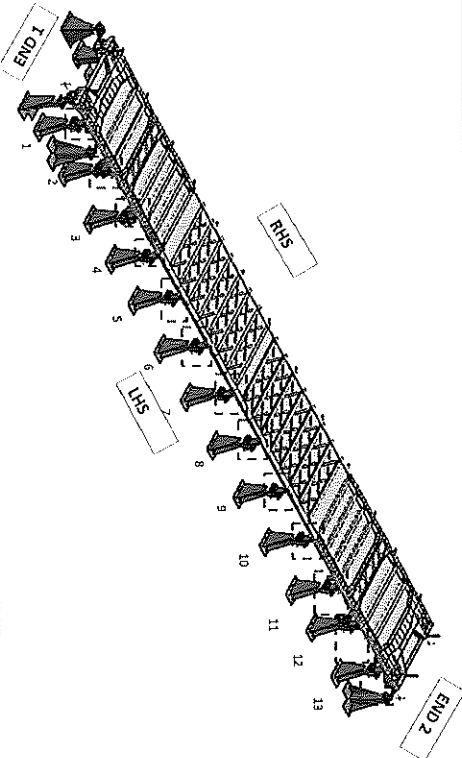
# INDUSTRIAL QUALITY MAINTENANCE



CARBODYSHELL M3,M4 ASSEMBLY DTR3025487/3

Rev. 31  
Date 07/11/2023  
Project: PRASA  
SI.CB2210.254.V30

Specifications of Details for CBS measurement



Measure gap between jig pillar / chair and underframe = 0mm. No gap.

After loading and clamping

Fill in the gap foundon each jig pillars / chair and underframe should be 0mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13
Left Hand Side													
Right Hand Side													

Signature Operators:

*[Signature]* Date: 20/07/24

After Welding.

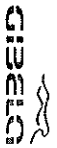
Fill in the gap found each jig pillars / chair and underframe should be 0mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13
Left Hand Side													
Right Hand Side													

Signature Industrial Quality:

Date:

**GIBELCO**  
INDUSTRIAL QUALITY  
MAINTENANCE  
2024-02-01

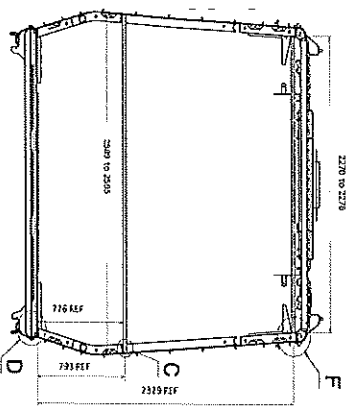
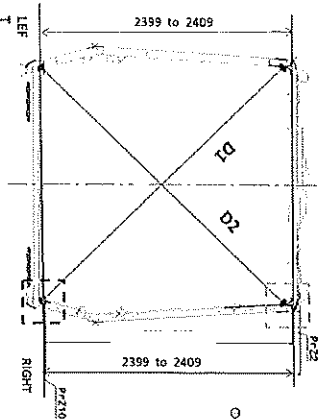
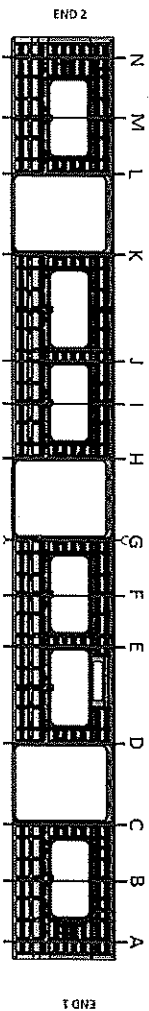


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

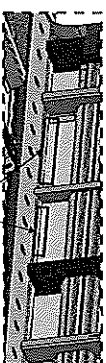
Rev. 31 Project: PRASA  
SL CB2210.254.V30

Date  
07/11/2023

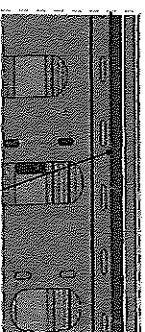
Specifications of Details for CBS measurement



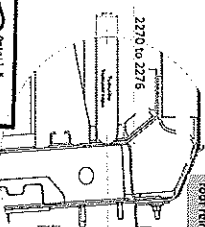
Measurement positions on roof (R) and sidewall (SWS) corner.




Measurement positions on sidewall and side sill corner.



Reinforcement area measurement positions on roof reinforcement area.



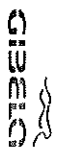
2270 to 2276



Detail F  
CBS Measurement

2024-02-01

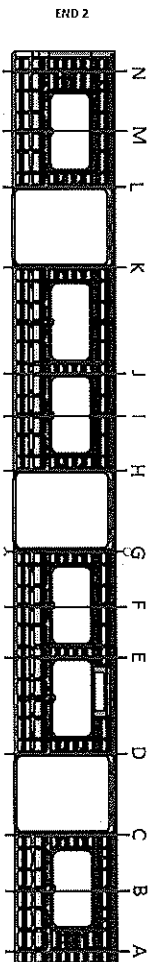
**INDUSTRIAL QUALITY  
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CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.	31	Project: PRASA SI.CB2210.254.V30
Date	07/11/2023	

Specifications of Details for CBS measurement



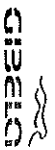
PME Column LHS - RHS should be  
≤ 2MM on each point.

BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3268	3268	0	2404	2406	2
B	3266	3269	3	2405	2405	0
C	3268	3268	0	2406	2404	2
D	3269	3267	2	2405	2405	2
E	3266	3266	0	2404	2405	1
F	3264	3265	1	2406	2404	2
G	3267	3267	0	2405	2406	1
H	3269	3268	1	2406	2406	0
I	3265	3266	1	2405	2404	1
J	3266	3267	1	2405	2407	2
K	3268	3268	0	2406	2405	1
L	3270	3269	1	2405	2407	2
M	3268	3266	2	2406	2406	0
N	3265	3267	2	2408	2407	1

90/02/24

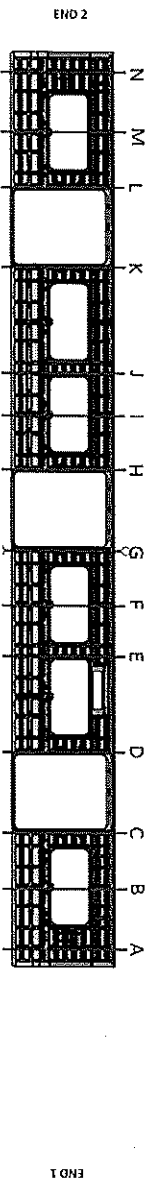




CARBODYSHELL M3,M4 ASSEMBLY DTR302254873

Rev.	Project: PRASA
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07/11/2023	

Specifications of Details for CBS measurement



PME Column LHS - RHS should be  
≤ 2MM on each point.

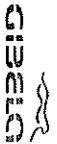
AFTER WELDING

	Record D1 values	Record D2 values		D1-D2 ≤ 5mm	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3298	3297		1	2406	2405	1
B	3266	3267		1	2405	2407	2
C	3297	3298		1	2406	2404	2
D	3296	3298		2	2405	2403	2
E	3265	3265		0	2405	2405	0
F	3266	3265		1	2404	2405	1
G	3296	3295		1	2403	2406	3
H	3295	3297		2	2404	2405	1
I	3264	3265		1	2406	2406	0
J	3266	3266		0	2403	2405	2
K	3296	3296		0	2406	2406	0
L	3297	3296		1	2405	2404	1
M	3266	3269		3	2406	2406	0
N	3294	3295		1	2408	2407	1

**GIBELCO**  
INDUSTRIAL QUALITY  
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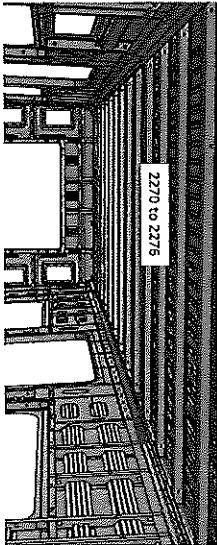
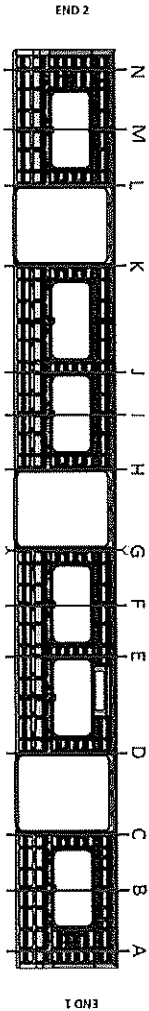
2024-02-01

20/02/24

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		31 Date 07/11/2023	SI.CB2210.254.V30

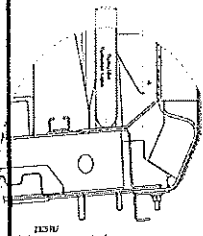
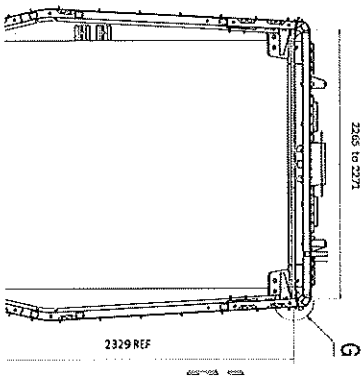
CBS measurement


BEFORE WELDING



Do not consider reinforcement (Take measurements top area of zee profile)

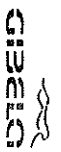
	2270 to 2276
A	2272
B	2275
C	2272
D	2274
E	2278
F	2275
G	2274
H	2273
I	2275
J	2277
K	2271
L	2273
M	2274
N	2273





2024-02-01

INDUSTRIAL QUALITY  
MAINLINE

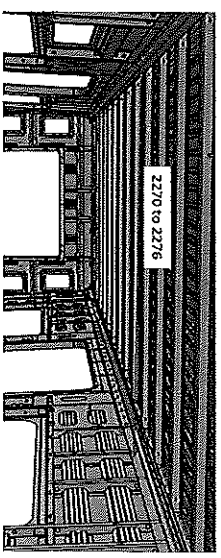
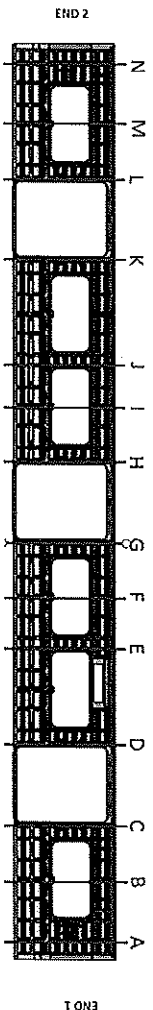


CARBODYSHELL M3,M4 ASSEMBLY DTR302254873

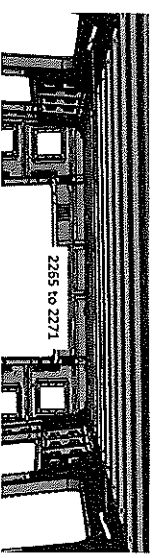
Rev.	Project: PRASA
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07/11/2023	

CBS measurement

AFTER WELDING

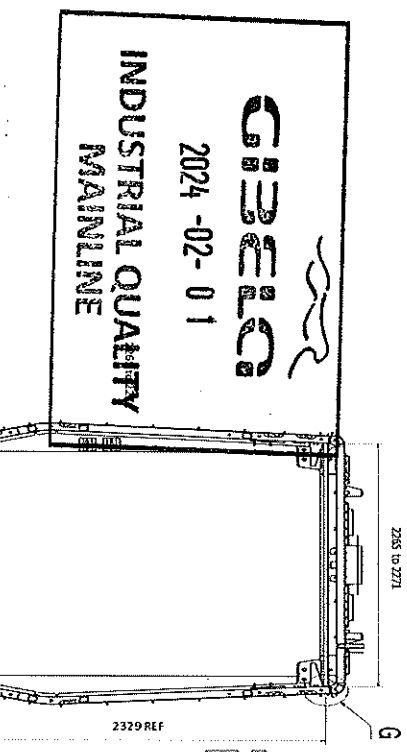


Do not consider reinforcement ( Take measurements top area of zee profile

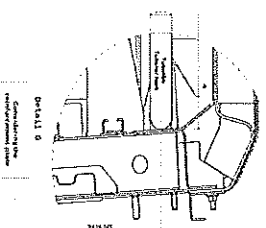


Take measurement close to radius ( considering reinforcement)

A	2265 to 2271	2270 to 2276
B	2268	2274
C	2268	2274
D	2270	2274
E	2271	2274
F	2274	2274
G	2265	2274
H	2266	2274
I	2276	2276
J	2276	2276
K	2269	2276
L	2265	2276
M	2273	2273
N	2268	2273



2265 to 2271



20/02/24

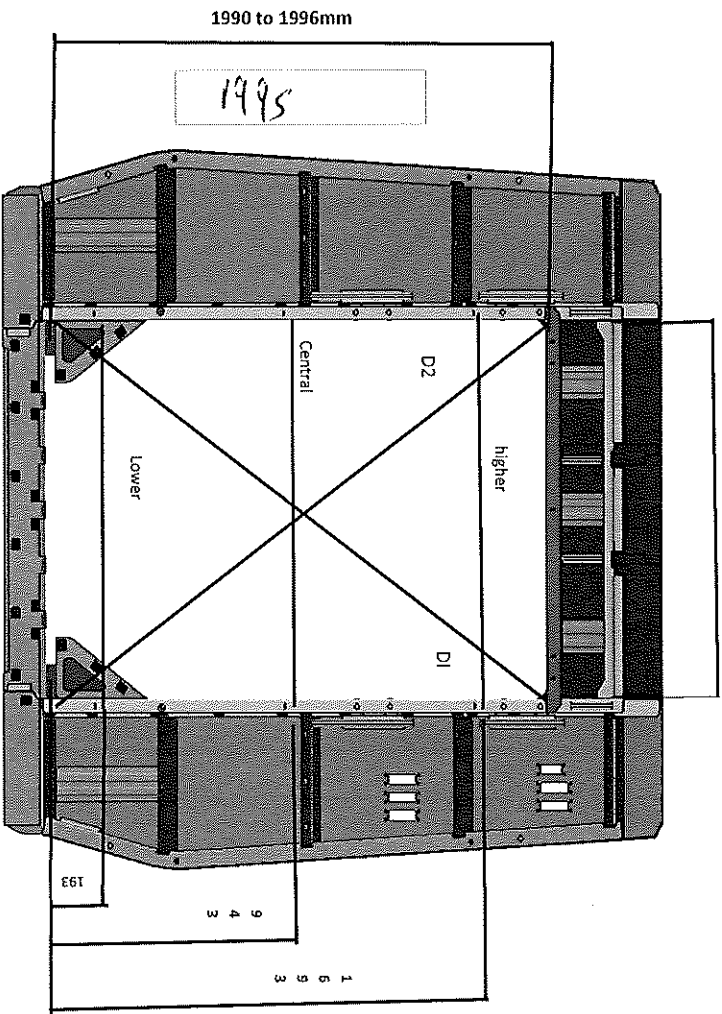


CARBODYSHELL M3,M4 ASSEMBLY DTR3022487/3

Rev.	Project: PRASA
31	SI.CB2210.254.V30
Date	
07/11/2023	

Specifications of Details for CBS measurement

End frame 1



1380 to 1382 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

Higher Dimension

1382

D1

2414

Central Dimension

1382

D2

2415

Lower Dimension

1381

D1-D2

1

20/02/24

**INDUSTRIAL QUALITY**  
**MAINLINE**



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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07/11/2023	

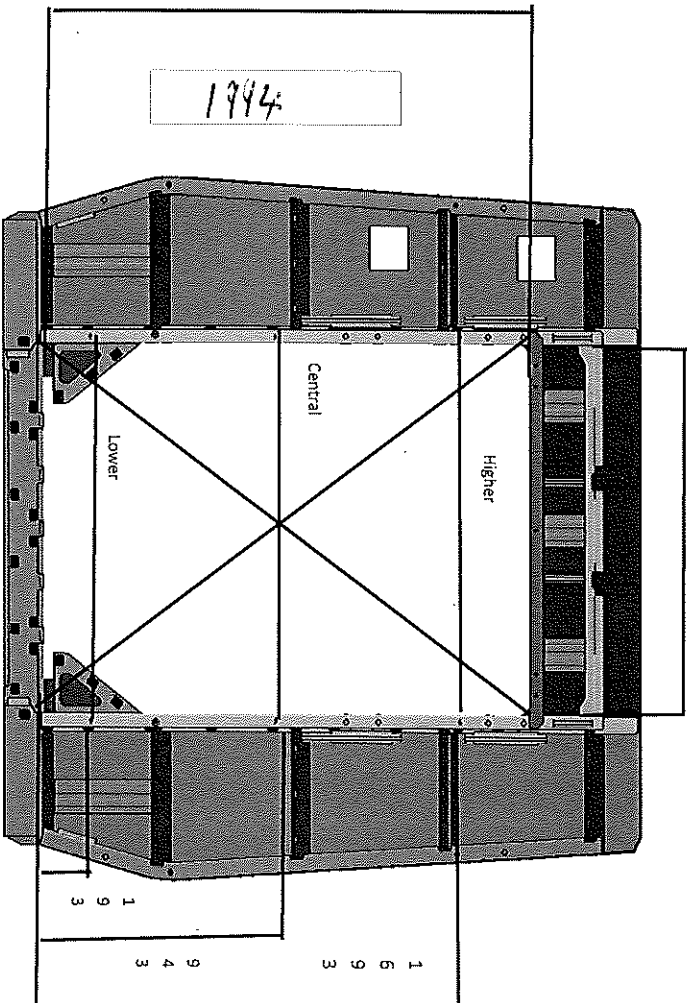
Specifications of Details for GBS measurement

Endframe 2

1380 to 1382 mm

1990 to 1996mm

1944



1380 to 1382 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

HIGHER DIMENSION

1382

D1

2414

CENTRAL DIMENSION

1381

D2

2414

LOWER DIMENSION

1381

D1-D2

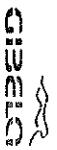
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2024-02-01

INDUSTRIAL QUALITY  
MAINLINE

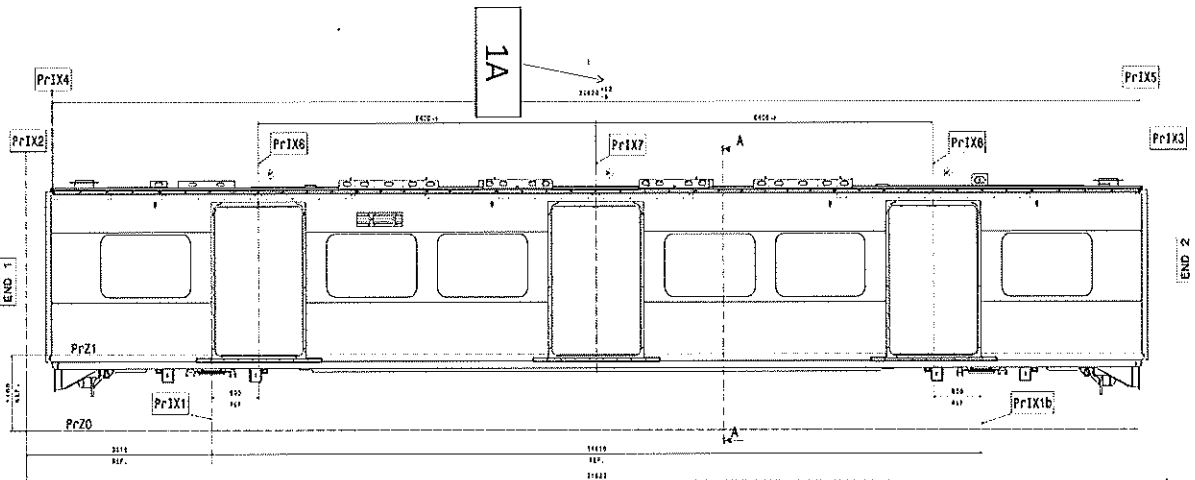
20/02/24



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.	Project: PRASA	
31	SI,CB2210.254.V30	
Date		
07/11/2023		

Specifications of Details for CBS measurement

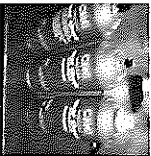


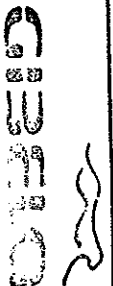
LEFT SIDE	
SPECIFICATION SIZE	ACTUAL SIZE
1A	20632 - 20614
	20616

RIGHT SIDE	
SPECIFICATION SIZE	ACTUAL SIZE
1A	20632 - 20614
	20615

Dye penetrant test

Dye-penetration test to be performed by quality personnel






2024 -02- 01

INDUSTRIAL QUALITY  
MAINLINE



	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev.	Project: PRASA
		31	SI.CB2210.254.V30
		Date	
		07/11/2023	

Self Inspection - Final Result

		DATE	NAME	SIGNATURE
HOLD POINT	GO	20/07/24	Industrial Quality	Industrial Quality
		20/07/24	Operations	Operations
			Industrial Quality	Industrial Quality
			Operations	Operations
NO GO				
If activities are not complete, the missing activities must not impact the next stage)				
Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)				
There are activities pending that impede the activities of the next process. One: (To describe problems below)				
There are non-conformities impact the quality of the product and there is no corrective action defined yet)				

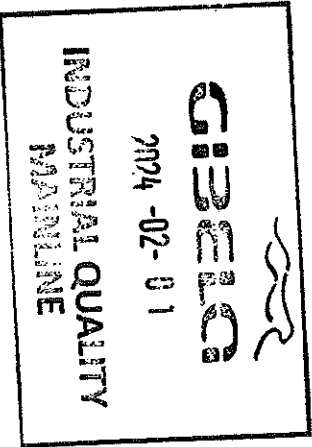
In case of "NO GO", describe blocking problems

In case of "NO GO", the operations manager must define below action plan to ensure "GO":

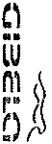
Item	Description	Responsible	Due date	Status

Operations

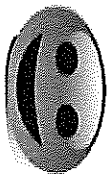
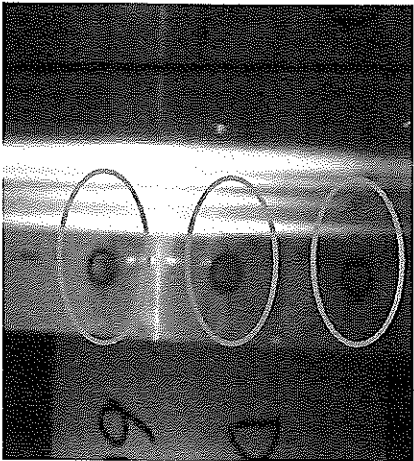
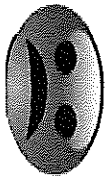
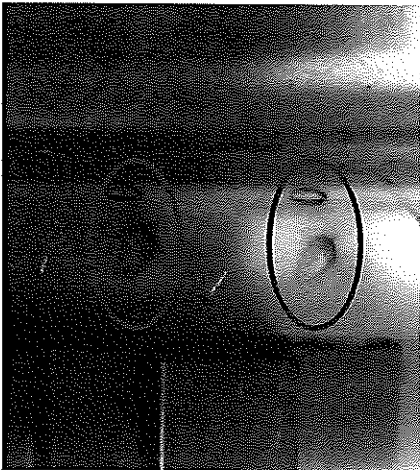
Quality






	CARBOOYSHELL M3/M4 ASSEMBLY DTR30225487/3		Rev. 31	Project: PRASA SI.CB2210.254.V30
			Date 07/11/2023	

ANNEXURE A: Spot Welding Quality Acceptance Standard



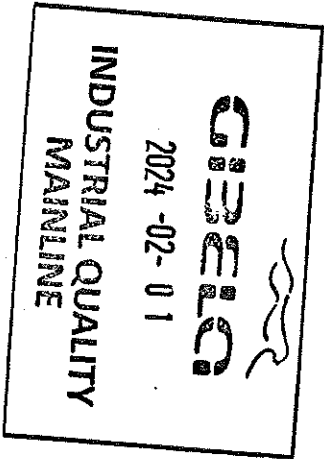
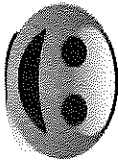
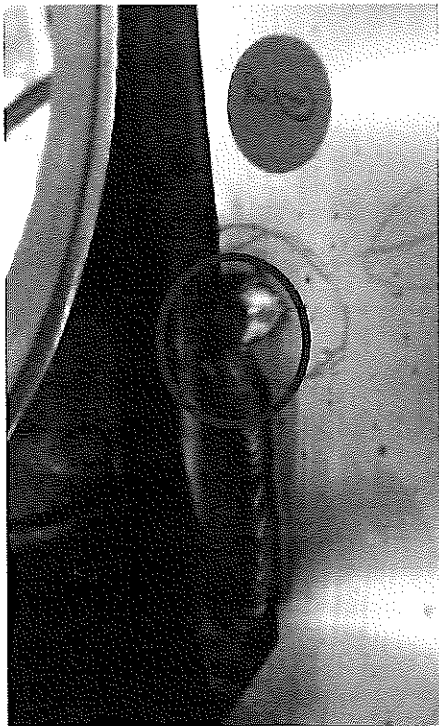


2024 -02- 01

INDUSTRIAL QUALITY  
MAINLINE

		CARBODYSHELL M3,M4 ASSEMBLY DTR3025487/3		Rev. 31 Date 07/11/2023	Project: PRASA SI.CB2210.254.V30
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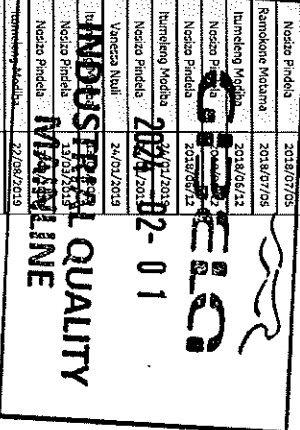
**ANNEXURE B: Arc Welding Quality Acceptance Standard**





**CONFIDENTIAL INFORMATION**  
This document and the information contemplated therein have to be considered as Confidential information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

APPLICATION REFERENCE										
MEASURING	DRAWING	DESCRIPTION	STATION	CAR TYPE					WORK INSTRUCTION	SAFETY
				TC1	MA	ME	MA	TC1		
<input type="checkbox"/>	DIR30225487/2	CARBODY SHELL	DIR3022	X	X	X	X		PR4.CB2220.DIR3022548	YES
<input type="checkbox"/>		MLM/M ASSEMBLY							7/2 V2.1	
<input type="checkbox"/>										
<input type="checkbox"/>										
<input type="checkbox"/>										
<input type="checkbox"/>										
<input type="checkbox"/>										
REV	DATE	MODIFICATION CONTENT		RESPONSIBLE		NAME		DATE		
0	01/02/2018	GIBELA NEW CREATION		APPROVER		Itumeleng Modiba	01/02/2018			
				CHECKER		Nkomo Pineda	01/02/2018			
				COMPLER		Thanyani Mathibane	01/02/2018			
1	18/05/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager		APPROVER		Itumeleng Modiba	18/05/2018			
				CHECKER		Nkomo Pineda	18/05/2018			
				REVISOR BY		Ramokone Modama	18/05/2018			
2	2018/07/05	Certain dimensional checks added and others moved to CB2110		APPROVER		Itumeleng Modiba	2018/07/05			
				CHECKER		Nkomo Pineda	2018/07/05			
				REVISOR BY		Ramokone Modama	2018/07/05			
3	2018/08/12	Width tolerance as per Q1000036600		APPROVER		Itumeleng Modiba	2018/08/12			
				CHECKER		Nkomo Pineda	2018/08/12			
				REVISOR BY		Nkomo Pineda	2018/08/12			
5	24/01/2019	As per Baseline 10.2		APPROVER		Itumeleng Modiba	24/01/2019			
				CHECKER		Nkomo Pineda	24/01/2019			
				REVISOR BY		Vanessa Ntuli	24/01/2019			
6	13/03/2019	Added D1 and D2 on Self - inspection length measurements		APPROVER		Itumeleng Modiba	13/03/2019			
				CHECKER		Nkomo Pineda	13/03/2019			
				REVISOR BY		Nkomo Pineda	13/03/2019			
10	22/08/2019	New Baseline 10.2.5		APPROVER		Itumeleng Modiba	22/08/2019			
				CHECKER		Nkomo Pineda	22/08/2019			
				REVISOR BY		Nkomo Pineda	22/08/2019			
15	06/08/2020	New Baseline 10.2.6		APPROVER		Itumeleng Modiba	06/08/2020			
				CHECKER		Nkomo Pineda	06/08/2020			
				REVISOR BY		Nkomo Pineda	06/08/2020			
20	19/04/2021	New Baseline change 10.3		APPROVER		Itumeleng Modiba	19/04/2021			
				CHECKER		Nkomo Pineda	19/04/2021			
				REVISOR BY		Nkomo Pineda	19/04/2021			
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING		APPROVER		Itumeleng Modiba	17/08/2021			
				CHECKER		Nkomo Pineda	17/08/2021			
				REVISOR BY		Nkomo Pineda	17/08/2021			
25	20/02/2022	New Baseline change 10.3.1		APPROVER		Itumeleng Modiba	19/02/2022			
				CHECKER		Nkomo Pineda	19/02/2022			
				REVISOR BY		Nkomo Pineda	19/02/2022			
26	14/06/2022	Update minimum temperature requirement for sealant application		APPROVER		Itumeleng Modiba	14/06/2022			
				CHECKER		Nkomo Pineda	14/06/2022			
				REVISOR BY		Nkomo Pineda	14/06/2022			
27	19/10/2022	Addition of traceability for sealant application & welding		APPROVER		Itumeleng Modiba	19/10/2022			
				CHECKER		Nkomo Pineda	19/10/2022			
				REVISOR BY		Nkomo Pineda	19/10/2022			
28	14/04/2023	Added sealant batch number & welding consumables traceability		APPROVER		Itumeleng Modiba	14/04/2023			
				CHECKER		Nkomo Pineda	14/04/2023			
				REVISOR BY		Nkomo Pineda	14/04/2023			
29	28/10/2023	Addition of bracket quantity		APPROVER		Itumeleng Modiba	28/10/2023			
				CHECKER		Nkomo Pineda	28/10/2023			
				REVISOR BY		Nkomo Pineda	28/10/2023			
TRAINSET	CAR	OPERATOR NAME,ALPS NO	DATE	SELF INSPECTION NUMBER		PAGES				
IS 213	M04	18/10/2024	21-02-24	SI.CB2220.250.V29		13				





CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR302254872

Rev. 29  
Date 29/10/2023  
Project: PRASA  
SI.CB2220.250.V29

Car: M1,M3,M4

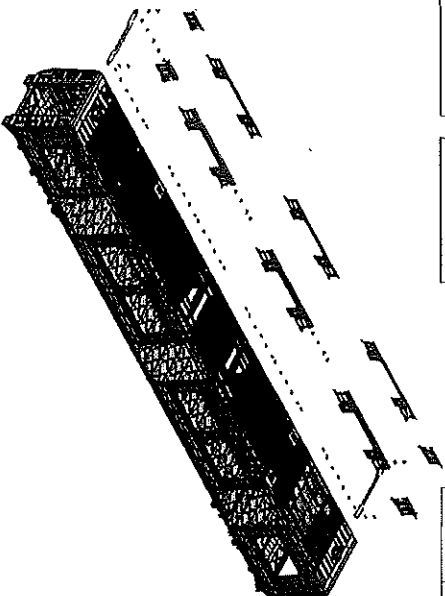
NCR:

Work station:

CB2220



Safety Related



### I - Documentation and Instruments Control

#### I.1 - Documentation Control

Document	Type of car					Revision	Observation	OK	Signature Date (Manufacturing)	Signature Date (Quality)
	101	102	103	104	105					
DTR302254872					X	29	29-10-2023	X	N/A	21/02/24

2-02-24

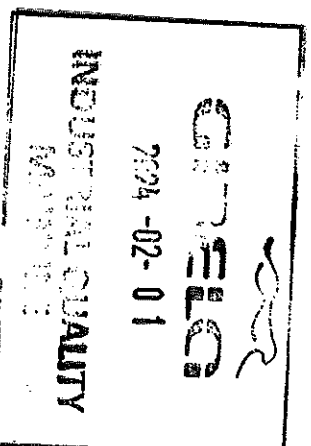
21/02/24

#### I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process						
Instruments	Serial number	Calibration or Verification Validation Date	OK	Signature Date (Manufacturing)	Signature Date (Quality)	
Tubular	251062		Y	21-02-24	21-02-24	
measuring tape			X	21-02-24	21-02-24	
Tubular	22113	03/07/2024	Y	21-02-24	21-02-24	

#### 1.3 Consumables

Welding Consumable Control - Used for Special Process						
Filler Material	Heat Number	Welding Process	OK	Signature Date (Manufacturing)	Signature Date (Quality)	
308	231067	MIG	X	21-02-24	21-02-24	
					</	





CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225467/2

Rev. 29  
Date 28/10/2023  
Project: PRASA  
SI.CB2220.250.V29

II - Self Inspection - Items to Check

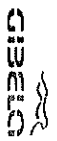
II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	Signature Date (Manufacturing)	Signature Date (Quality)
01	N/A	Assembly according to Instruction Engineering nº PRA.CB2220.DTR30225467/2 Verification of filament for all reinforcement brackets.	PRA.CB2220.DTR30225467/2	✓	21-03-24	21/03/24
02	N/A	Carphil free of significant flaws which compromise the appearance or functionality	DTD0000210575	✓	21-03-24	21/03/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPEDEF - ARC - 0000	✓	21-03-24	21/03/24
04		Cleaning of all Stainless Steel Surfaces	According TO GIB-WEL - PROC-0002	✓	21-03-24	21/03/24
05		Function's dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓	21-03-24	21/03/24
06		Perform visual inspection of welds in 100% of the project. Run by permeant testing in electric arc welding (weld ring) as IND-SAL-WMS-016. Run by permeant testing welds (weld ring) and fillet sampling as described in DTD0000210568.	As the welding procedure IND-SAL-WMS-016 and DTD0000210568.	✓	21-03-24	21/03/24
07	N/A	Before application of sealant record the expiry date and make sure that the room temperature and humidity are within specified values as per Work Instructions Specified: Temperature Min - Max (°) Min-Max 10°C - 35°C Relative humidity Min - Max (%) 25% - 80%	Sealant Batch No: 152 8-03 Exp Date: 1/05/24 Actuals Temperature: 20°C Humidity: 60%	✓	21-03-24	21/03/24
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0001278566	✓	21-03-24	21/03/24
09		Verification of safety welds	Approved according to DTD0000210658 referencio and Self inspection	✓	21-03-24	21/03/24

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2024 -02- 01

INDUSTRIAL QUALITY  
MAINLINE



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR302254872

Rev.	Project: PR65A
29	
Date	
28/02/2023	SI,CB22220.250.V29

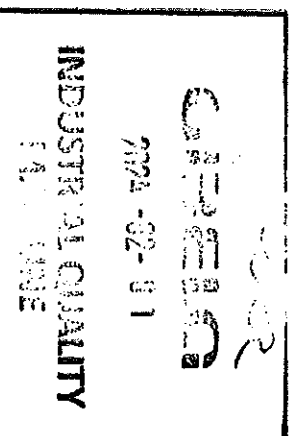
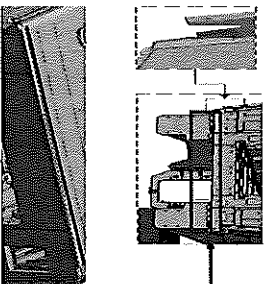
II - Self Inspection - Items to Check


SEALANT APPLICATION

AREA 1 & 2 END 1

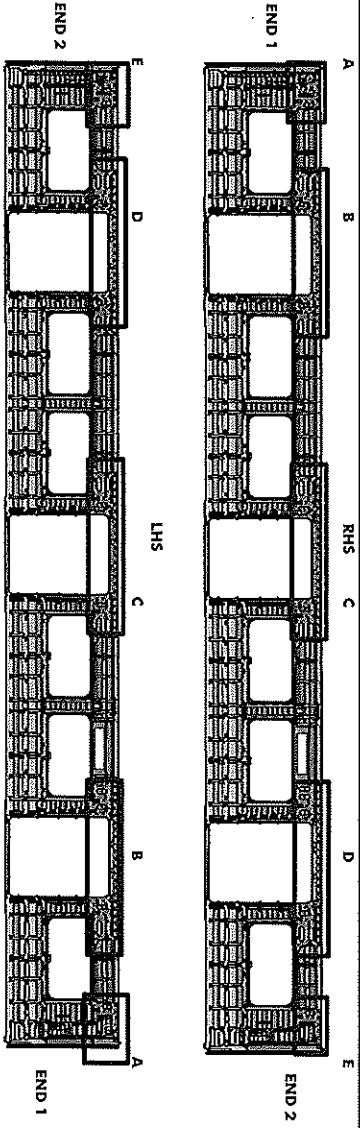
Operator (Name & sign):

Operator (Name & sign):



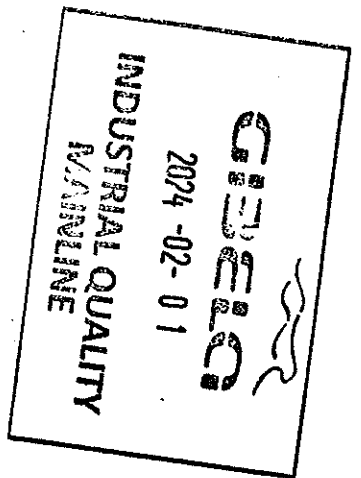
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			Date 28/10/2023	SI.CB2220.250.V29

II - Self Inspection - Items to Check



REINFORCEMENT WELDING

AREA	LHS	RHS
A	Operator (Name&sign): <u>LINDO ME</u>	<u>LINDO ME</u>
B	Operator (Name&sign): <u>LINDO ME</u>	<u>LINDO ME</u>
C	Operator (Name&sign): <u>KERU KNOB</u>	<u>KERU KNOB</u>
D	Operator (Name&sign): <u>SAH SOR</u>	<u>SAH SOR</u>
E	Operator (Name&sign): <u>MARGARET MEAL</u>	<u>MARGARET MEAL</u>

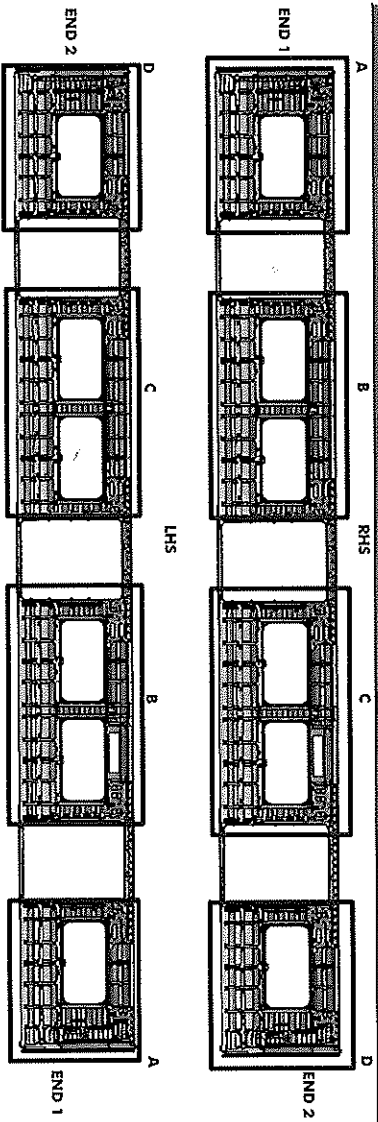




CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR302254872

Rev.	Project: PRASA
29	
Date	
28/02/2023	SI.CB2220.250.V29

II - Self Inspection - Items to Check



BRACKETING

INSTALLATION

C-RAILS:	Operator:	<u>Mpho Keisi</u>
	Operator:	<u>Mpho Keisi</u>
DOOR MECHANISMS:	Operator:	<u>Mpho Keisi</u>
	Operator:	<u>Mpho Keisi</u>
TAPPING PADS	Operator:	<u>LINDA END1</u>
	Operator:	<u>LINDA END2</u>
SEAT & LUGGAGE BRACKETS:		
	Operator:	<u>ASTHIDA Lolo</u>
	Operator:	<u>Schuy Mkhize</u>
SEAT BRACKETS VERIFICATION:	Operator:	<u>ASTHIDA</u>
	Operator:	

INSTALLATION & VERIFICATION

WELDING

AREA

LHS

RHS

A (Seat brackets)	: Operator (Name&sign):	<u>Schuy Mkhize</u>	<u>Schuy Mkhize</u>
(C-rails, Luggage and earth bushes) :	Operator (Name&sign):	<u>Mpho Keisi</u>	<u>Mpho Keisi</u>
B (Seat brackets)	: Operator (Name&sign):	<u>Schuy Mkhize</u>	<u>Schuy Mkhize</u>
(C-rails, Luggage and earth bushes) :	Operator (Name&sign):	<u>Mpho Keisi</u>	<u>Mpho Keisi</u>
C (Seat brackets)	: Operator (Name&sign):	<u>Mpho Keisi</u>	<u>Mpho Keisi</u>
(C-rails, Luggage and earth bushes) :	Operator (Name&sign):	<u>Mpho Keisi</u>	<u>Mpho Keisi</u>
D (Seat brackets)	: Operator (Name&sign):	<u>Mpho Keisi</u>	<u>Mpho Keisi</u>
(C-rails, Luggage and earth bushes) :	Operator (Name&sign):	<u>Mpho Keisi</u>	<u>Mpho Keisi</u>

ENDS

END 1 TAPPING PADS WELDING: Operator (Name&sign): LINDA

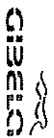
END 1 TAPPING PADS WELDING: Operator (Name&sign): LINDA

INDUSTRIAL QUALITY  
MANUFACTURE

2024-02-01

GIBELCO



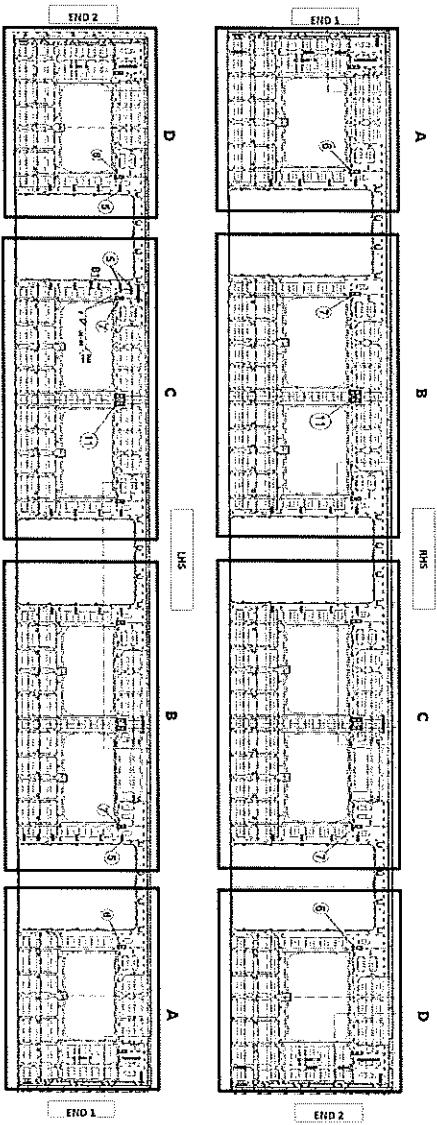


CARBODYSHELL M1.M3.M4 ASSEMBLY  
DTR302254872

Rev. 29  
Date 28/10/2023  
Project: PRASA  
SI.CB2220.250.V29

II - Self Inspection - Items to Check

M1/M3/M4 BRACKET INSTALLATION



QUANTITIES (M3/M4)

RHS

SECTION	QUANTITY	OK	NOK
C-RAILS	A 7		
	B 8		
	C 13		
	D 13		
SEAT BRACKETS	A 21		
	B 21		
	C 13		
	D 13		
EARTH BUSH	A 5		
	B 4		
	C 3		
	D 3		

ROOF ENDS:

CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: Tebele

LHS

SECTION	QUANTITY	OK	NOK
C-RAILS	A 2		
	B 1		
	C 8		
	D 13		
SEAT BRACKETS	A 21		
	B 21		
	C 13		
	D 13		
EARTH BUSH	A 5		
	B 4		
	C 3		
	D 2		

ROOF ENDS:

CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: Tebele

QUANTITIES (M1)

RHS

SECTION	QUANTITY	OK	NOK
C-RAILS	A 7		
	B 8		
	C 13		
	D 13		
SEAT BRACKETS	A 21		
	B 21		
	C 13		
	D 13		
EARTH BUSH	A 5		
	B 4		
	C 3		
	D 3		

ROOF ENDS:

CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: N/A

LHS

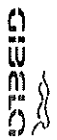
SECTION	QUANTITY	OK	NOK
C-RAILS	A 2		
	B 1		
	C 8		
	D 13		
SEAT BRACKETS	A 21		
	B 21		
	C 13		
	D 13		
EARTH BUSH	A 5		
	B 4		
	C 3		
	D 2		

ROOF ENDS:

CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: N/A

2024-02-01  
INDUSTRIAL QUALITY  
MAINLINE

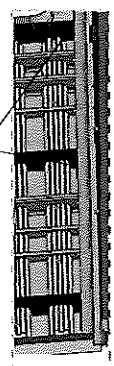
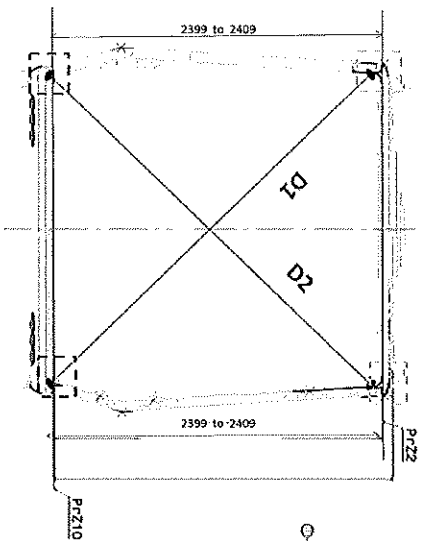


CARBODYSHELL M1 M3 M4 ASSEMBLY  
DTR30225487/2

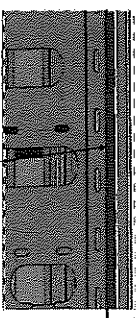
Rev.
29
Date
28/10/2023

Project: PRASA  
SI.CB2220.250.V29

Specifications of Details for CB5 measurement



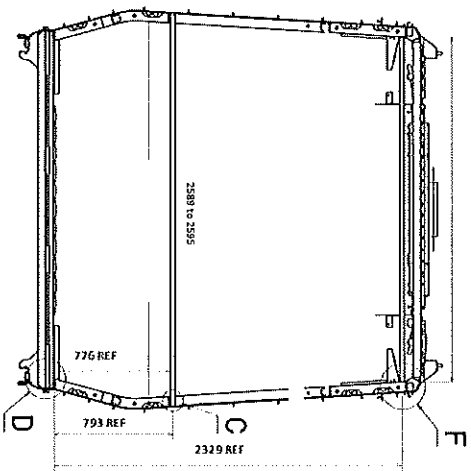
Measurement positions on roof rail and sidewall area corner




Reinforcement area measurement positions on roof reinforcement area

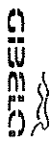


Measurement positions on sidewall and side sill corner





**GIBELCO**  
2024-02-01  
INDUSTRIAL QUALITY  
MAINLINE

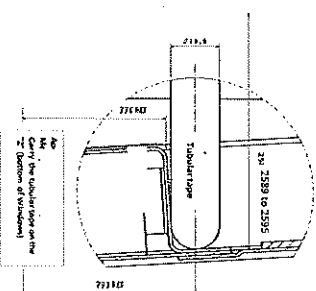
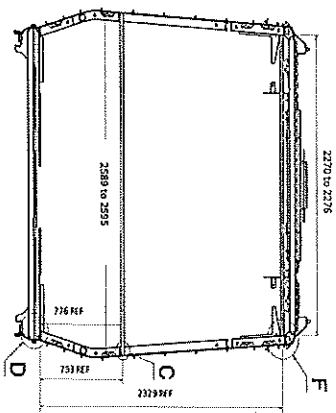


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30228487/2

Rev.
29
Date
28/10/2023

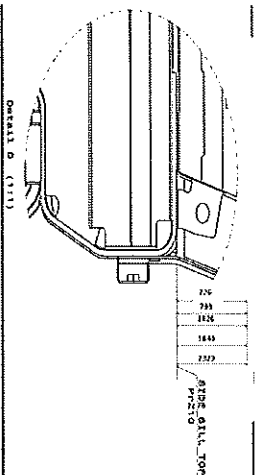
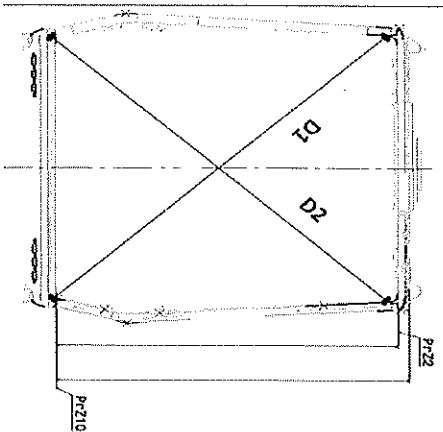
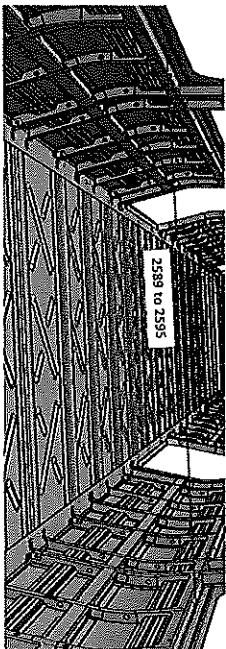
Project: PRASA  
SI.CB2220.250.V29

CBS measurement




Detail C

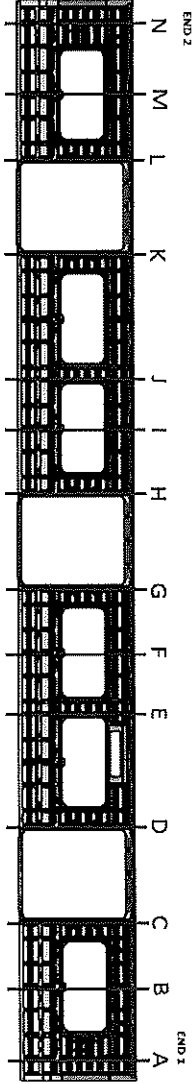
Take measurement close to  
radius



**GIBECO**  
2024 -02- 01  
INDUSTRIAL QUALITY  
MAINLINE

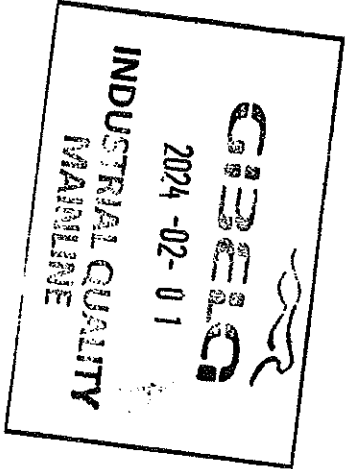
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225467/2		Rev. 29	Project: PRASA
			Date 28/10/2023	SI.CB2220.250.V29

CBS measurement

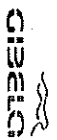


BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3297	3300	3	
B	3266	3270	4	
C	3246	3295	1	
D	3300	3295	5	
E	3270	3266	4	
F	3268	3270	2	
G	3300	3295	5	
H	3299	3293	6	
I	3269	3264	5	
J	3270	3270	0	
K	3300	3294	3	
L	3300	3294	6	
M	3270	3266	4	
N	3300	3300	0	



21-02-2024

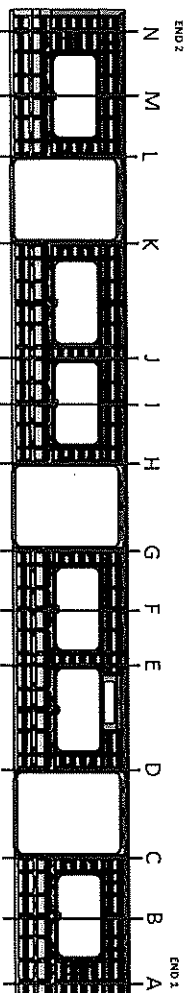


CARBODYSHELL M1, M3, M4 ASSEMBLY  
DTR30226487/2

Rev.  
29  
Date  
29/10/2023

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SI.CB22220.250.V29

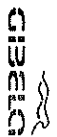
c/s measurement



AFTER WELDING

Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A 3295	3297	2	2595
B 3266	3265	1	2590
C 3294	3297	3	2590
D 3295	3297	2	2590
E 3266	3268	2	2591
F 3267	3265	2	2590
G 3295	3297	2	2591
H 3298	3295	3	2589
I 3270	3269	1	2592
J 3270	3267	3	2591
K 3300	3297	3	2595
L 3300	3298	2	2589
M 3270	3297	3	2595
N 3295	3297	2	2589

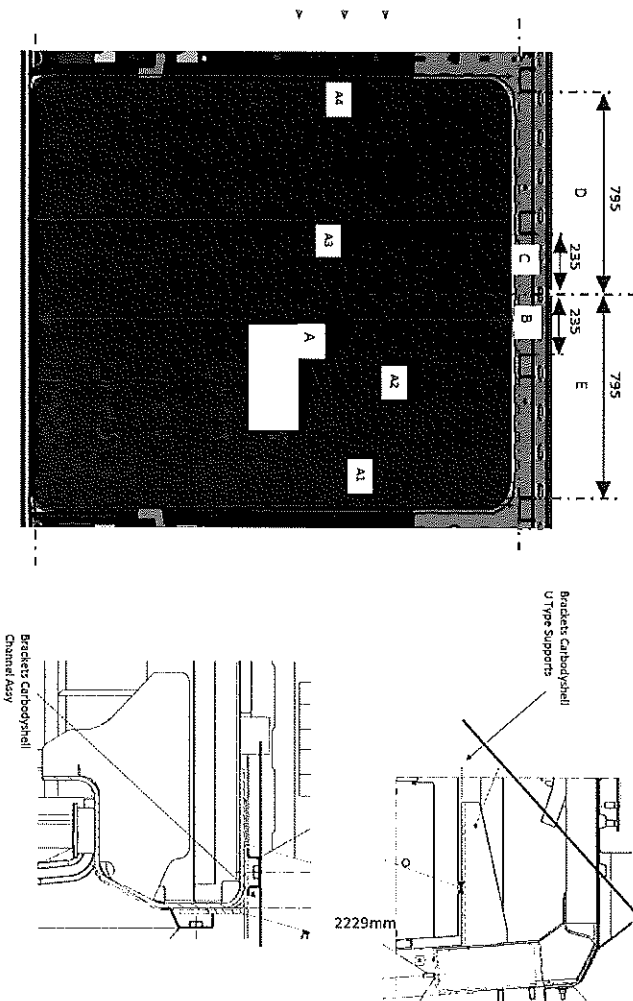
GIBELCO  
2024-02-01  
INDUSTRIAL QUALITY  
MAINLINE



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR302254872

Rev.	Project: PRASA
29	
Date	
29/10/2023	SL,CB2220.250.V29

Specifications of Details for CBS measurement CBI/220



DOOR 1 - LHS

VALUE	ACTUAL
A1 2230 to 2232	22 81
A2 2230 to 2232	22 32
A3 2230 to 2232	22 31
A4 2230 to 2232	22 32
B 234 to 236	23 4
C 234 to 236	23 5
D 794 to 796	79 6
E 794 to 796	79 4

DOOR 2 - LHS

VALUE	ACTUAL
A1 2230 to 2232	22 31
A2 2230 to 2232	22 32
A3 2230 to 2232	22 31
A4 2230 to 2232	22 32
B 234 to 236	22 85
C 234 to 236	23 5
D 794 to 796	79 4
E 794 to 796	79 5

DOOR 2 - RHS

VALUE	ACTUAL
A1 2230 to 2232	22 32
A2 2230 to 2232	22 32
A3 2230 to 2232	22 31
A4 2230 to 2232	22 31
B 234 to 236	23 5
C 234 to 236	23 5
D 794 to 796	79 4
E 794 to 796	79 4

DOOR 1 - RHS

VALUE	ACTUAL
A1 2230 to 2232	22 32
A2 2230 to 2232	22 32
A3 2230 to 2232	22 31
A4 2230 to 2232	22 32
B 234 to 236	23 5
C 234 to 236	23 4
D 794 to 796	79 6
E 794 to 796	79 4

DOOR 2 - RHS

VALUE	ACTUAL
A1 2230 to 2232	22 32
A2 2230 to 2232	22 32
A3 2230 to 2232	22 32
A4 2230 to 2232	22 31
B 234 to 236	23 4
C 234 to 236	23 5
D 794 to 796	79 6
E 794 to 796	79 4

DOOR 3 - RHS

VALUE	ACTUAL
A1 2230 to 2232	22 32
A2 2230 to 2232	22 32
A3 2230 to 2232	22 32
A4 2230 to 2232	22 31
B 234 to 236	23 4
C 234 to 236	23 5
D 794 to 796	79 6
E 794 to 796	79 5

21-02-2024

**GIBBEL**  
2024-02-01  
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CARBODYSHELL M1 M3 M4 ASSEMBLY  
DTR30225487/2

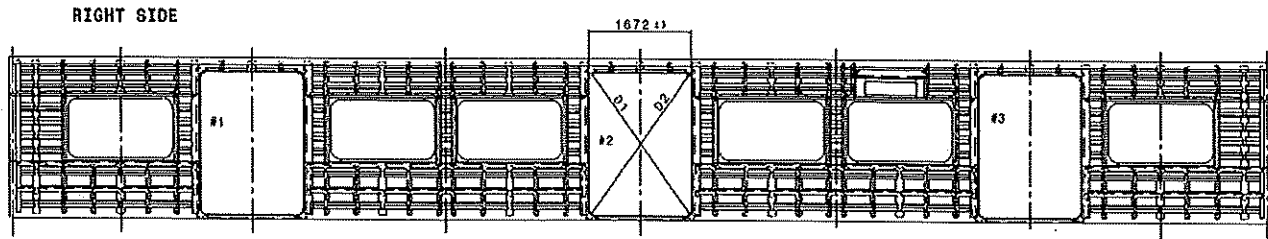
Rev.  
29  
Date  
28/10/2023

Project: PRASA

SI.CB2220.250.V29

Specifications of Details for CBS measurement CB1220

End #2



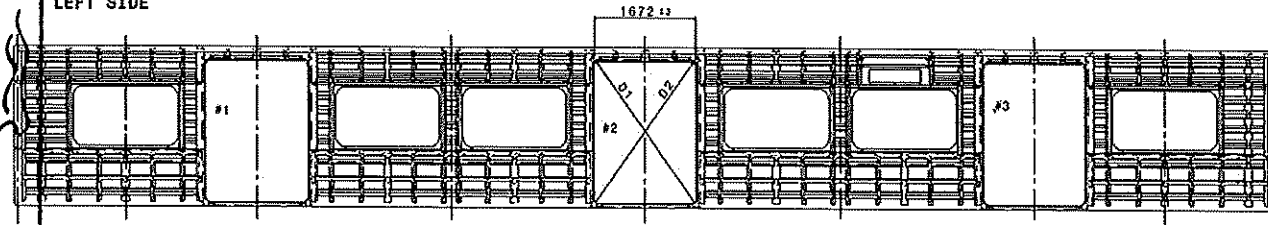
Doors length - 1672 mm

#1	#2	#3	
1674	1673	1673	HIGHER DIMENSION
1672	1672	1672	CENTRAL DIMENSION
1671	1672	1671	LOWER DIMENSION

Doors diagonal D1-D2 maximum difference  $\leq 4$ mm

	#1	#2	#3
D1	2748	2746	2745
D2	2746	2745	2747
D1-D2	2	1	2

LEFT SIDE



Doors length - 1672 mm

#1	#2	#3	
1673	1674	1673	HIGHER DIMENSION
1672	1673	1673	CENTRAL DIMENSION
1671	1671	1671	LOWER DIMENSION

Doors diagonal D1-D2 maximum difference  $\leq 4$ mm

	#1	#2	#3
D1	2746	2744	2746
D2	2747	2746	2748
D1-D2	1	1	2

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
2024-02-01






21-02-2024





	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30223487/2	Rev.	Project: PRASA	
		29		
		Date	28/10/2023	SI.CB22220.250.V29
Self Inspection - Final Result				

Is the car good to advance to the next workstation/process? (Approval of Operations Manager and Industrial Quality)		DATE	NAME	SIGNATURE
HOLD POINT		GO		
			If activities are not complete, the missing activities must not impact the next stage!	
			Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	
		21/02/24	Tebeio Operations	
		21/02/24	hno Industrial Quality	
			Operations	
			Industrial Quality	

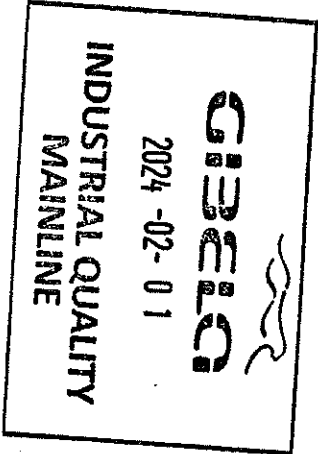
In case of "NO GO", describe blocking problems

In case of "NO GO", the operations manager must define below action plan to ensure "GO":

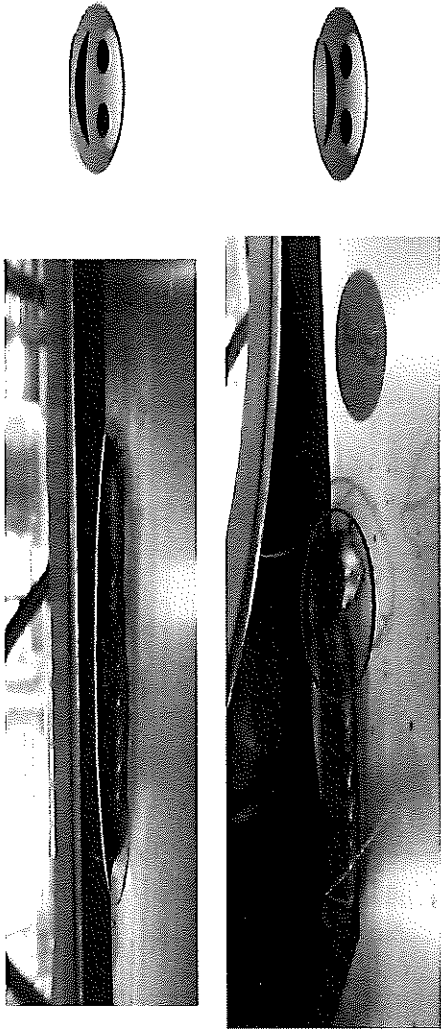
Item	Description	Responsible	Due date	Status

  
Operations

Quality

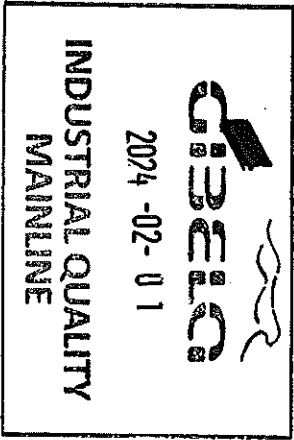
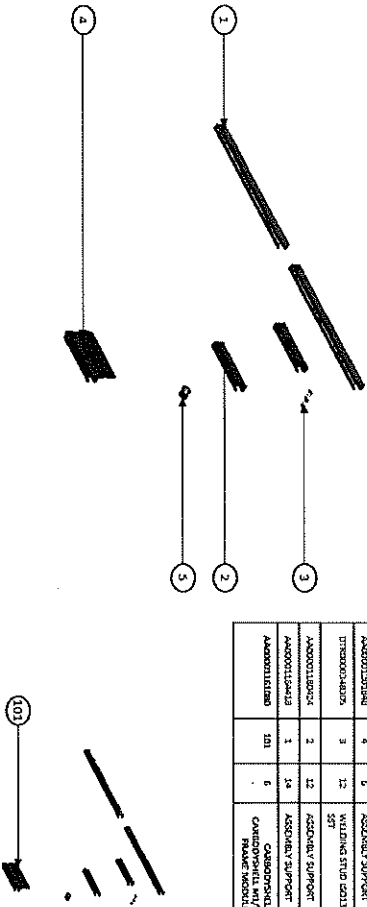


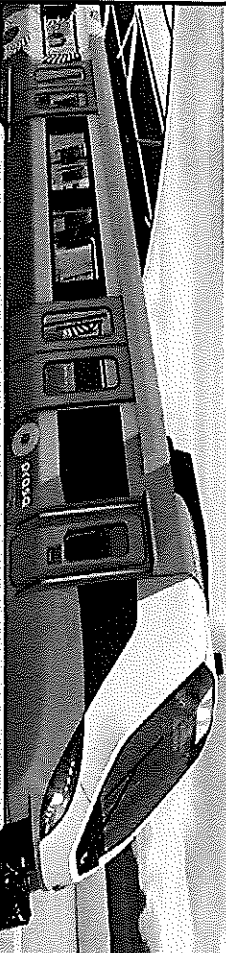
ANNEXURE A: Arc Welding Quality Acceptance Standard



Station: CB1220-004- U108 & U107

PART NO.	ITEM NO.	QTY	DESCRIPTION	MASS [kg]
DTM00207H003	2	6	UPPER STUB 6	0.216
AA00001355B0	4	6	ACCESSORY SUPPORT	0.27
DTM000034B05	3	12	WELDING STUB 201318 PT - WELD - 587	0.007
AA00001180C4	2	12	ACCESSORY SUPPORT	0.293
AA00001154A03	1	14	ACCESSORY SUPPORT	0.222
AA00001161B0	101	6	CARBODYSHELL BRACKETS WELDING STUB 201318 PT - WELD - 587	12.112





APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1

# SELF INSPECTION SHEET

## CONFIDENTIAL INFORMATION

This document and the information contemplated therein have to be considered as Confidential information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

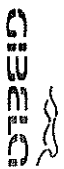
### APPLICATION REFERENCE

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE					WORK INSTRUCTION	SAFETY ?	
				TG	M4	M3	M2	M1			
<input type="checkbox"/>	DT0000224487	AA0000137856	CASBODY SHELL M1,M2,M3 ASSEMBLY	CB2230	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PRA-CB2230.DT000002 25487.V20	YES
<input type="checkbox"/>											
<input type="checkbox"/>											
REF.	DATE	MODIFICATION CONTENT							RESPONSIBLE	NAME	DATE
0	2018/08/02	GIBELA NEW CREATION							APPROVER	Philippe Marques	2018/08/02
									CHECKER	Nosizo Pindela	2018/08/02
									COMPILER	Nosizo Pindela	2018/08/02
1	30/5/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager							APPROVER	Izumeleng Modiba	30/5/2018
									CHECKER	Nosizo Pindela	30/5/2018
									REVISED BY	Nosizo Pindela	2018/05/07
2	2018/05/07	Certain dimensional checks moved to CB1220							APPROVER	Izumeleng Modiba	2018/05/07
									CHECKER	Nosizo Pindela	2018/05/07
									REVISED BY	Ramokone Medema	2018/05/07
5	24/01/2019	As per Baseline 10.2							APPROVER	Izumeleng Modiba	24/01/2019
									CHECKER	Nosizo Pindela	24/01/2019
									REVISED BY	Vanessa Ntuli	24/01/2019
5	13/03/2019	Added Twist and Door Bracket Measurements Remove Door Measurements							APPROVER	Izumeleng Modiba	13/03/2019
									CHECKER	Nosizo Pindela	13/03/2019
									REVISED BY	Nosizo Pindela	13/03/2019
10	23/08/2019	New Baseline 10.2.5							APPROVER	Izumeleng Modiba	23/08/2019
									CHECKER	Nosizo Pindela	23/08/2019
									REVISED BY	Nosizo Pindela	23/08/2019
15	06/08/2020	New Baseline 10.2.6							APPROVER	Timothy Maimela	06/08/2020
									CHECKER	Bongane Masina	06/08/2020
									REVISED BY	Bongane Masina	06/08/2020
20	19/04/2021	New Baseline change 10.3							APPROVER	Timothy Maimela	19/04/2021
									CHECKER	Bongane Masina	19/04/2021
									REVISED BY	Bongane Masina	19/04/2021
25	20/02/2022	New Baseline change 10.3.1							APPROVER	Collins Mkhombhi	20/02/2022
									CHECKER	Andani Muthelo	20/02/2022
									REVISED BY	Andani Muthelo	20/02/2022
26	14/06/2022	Update minimum temperature requirement for sealant application							APPROVER	Collins Mkhombhi	14/06/2022
									CHECKER	Andani Muthelo	14/06/2022
									REVISED BY	Andani Muthelo	14/06/2022
27	26/07/2022	Threshold measurements addition							APPROVER	Collins Mkhombhi	26/07/2022
									CHECKER	Andani Muthelo	26/07/2022
									REVISED BY	Andani Muthelo	26/07/2022
28	17/10/2022	Added traceability of sealant application							APPROVER	Collins Mkhombhi	17/10/2022
									CHECKER	Noboko Zwane	17/10/2022
									REVISED BY	Amogelang Mofhampe	17/10/2022
29	14/04/2023	Added sealant batch number & welding consumables traceability							APPROVER	Vanessa Ntuli	14/04/2023
									CHECKER	Noboko Zwane	14/04/2023
									REVISED BY	Amogelang Mofhampe	14/04/2023
30	06/11/2023	Added threshold traceability for boiler makers and welders							APPROVER	Ngobeni Tyson	06/11/2023
									CHECKER	Andani Muthelo	06/11/2023
									REVISED BY	Noboko Zwane	06/11/2023
TRAINSET	CAR	OPERATOR NAME,ALPS NO		DATE		SELF INSPECTION NUMBER				PAGES	
213	M4	Levy 126959		21/09/2024		SI-CB2230.256.V29				12	



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CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
30  
Date  
06/11/2023

Project: PRASA  
SI.CB2230.256.V29

Cart:

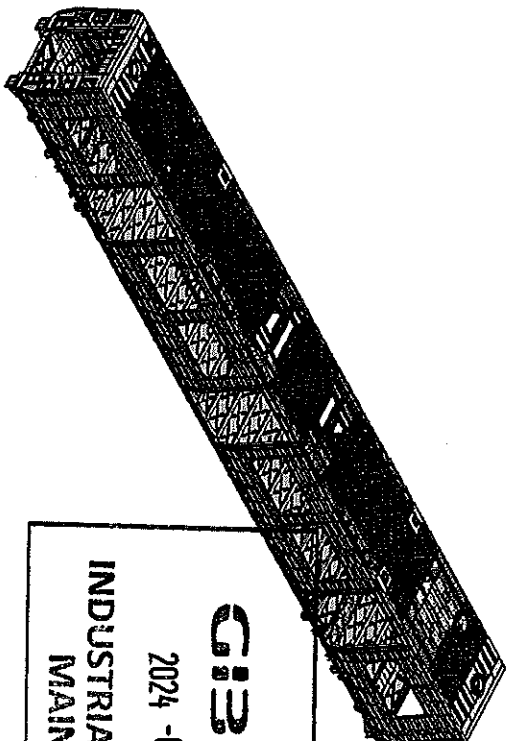
NCB:

Work station:

CB2230



Safety Related



**GIBELCO**  
2024 -02- 01  
**INDUSTRIAL QUALITY**  
**MAINLINE**

### I - Documentation and Instruments Control

#### I.1 - Documentation Control

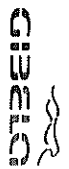
Document	Type of car				Revision	Observation	OK	Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4					
				X					
PRA CB2230 DT00000225487					30		✓	N/A	<i>[Signature]</i> 21/02/24

#### I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process					
Instruments	Serial number	Calibration or Verification Validation Date	OK	Signature/Date (Operations)	Signature/Date (Quality)
Combination Square	C185900578	21/07/2024	✓	<i>[Signature]</i> 21/02/24	<i>[Signature]</i> 21/02/24
Measuring Tape	C18714 03718	2024/04/05	✓	<i>[Signature]</i> 21/02/24	<i>[Signature]</i> 21/02/24
Tubular	22713-1	29/11/2023	✓	<i>[Signature]</i> 21/02/24	<i>[Signature]</i> 21/02/24

#### 1.3 Consumables

Welding Consumable Control - Used for Special Process					
Filler Material	Heat Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
WELDING WIRE	E22580	MIG	✓	<i>[Signature]</i> 21/02/24	<i>[Signature]</i> 21/02/24



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

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Date  
06/11/2023

Project: PRASA

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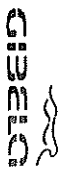
## II - Self Inspection - Items to Check

### II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria/ Record	OK	Signature/Date (Operations)	Signature/Date (Quality)
01	N/A	Assembly according to Instruction Engineering n° PRA.CB1230.DT00000225487 Verification of fitment for all brackets.	PRA.CB1230.DT00000225487	OK	 21/02/24	 21/02/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	OK	 21/02/24	 21/02/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	OK	 21/02/24	 21/02/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	OK	 21/02/24	 21/02/24
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	OK	 21/02/24	 21/02/24
06		Perform VISUAL inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-018 and DTD00000210658.	OK	 21/02/24	 21/02/24
07	N/A	Before application of sealant record the expiry date and make sure that the room temperature and humidity are within specified values as per Works Instructions Specified: Temperature Min - Max (1) Min-Max 10°C - 35°C Relative humidity Min - Max-Max 25% - 80% Max (1)	Sealant Batch No. <del>PR-23389</del> 303 Exp Date: 103 / 24 Actuals Temperature: 25°C Humidity: 49%	OK	 21/02/24	 21/02/24
08	N/A	Verification of sealant application on the roof and sidewall finishers.	Sealant must be: -Applied straight and even -Free of gaps,cracks,damage and debris (flashes, dirt, dust) Refer to Annexure B	OK	 21/02/24	 21/02/24
09	N/A	Verification of sealant application in certain regions in the drawing.	AAD0001278566	OK	 21/02/24	 21/02/24

INDUSTRIAL QUALITY  
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CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

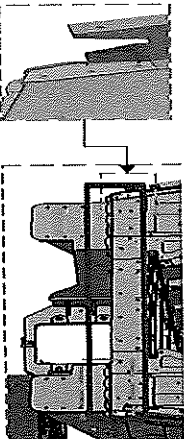
Rev.  
30  
Date  
06/11/2023

Project: PRASA  
SI.CB2230.256.V29

II - Self Inspection - Items to Check

END 2 SEALANT

AREA 1



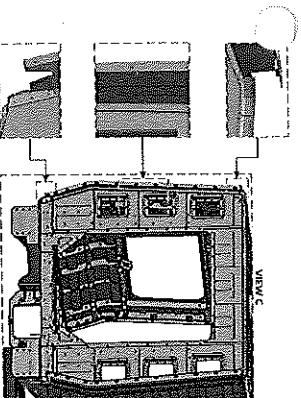
OPERATOR  
(Name & sign):

Lavery

OPERATOR  
(Name & sign):

Lavery

AREA 2 (VIEW C)



OPERATOR  
(Name & sign):

Lavery

2024 -02- 01  
INDUSTRIAL QUALITY  
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Area D,E,F,G,H,I

LHS

Operator (Name & sign): D.E.F.G.H,I

RHS

Operator (Name & sign): Trish Le

Trish Le

Operator (Name & sign): Mark Lamb

Mark Lamb

Operator (Name & sign):

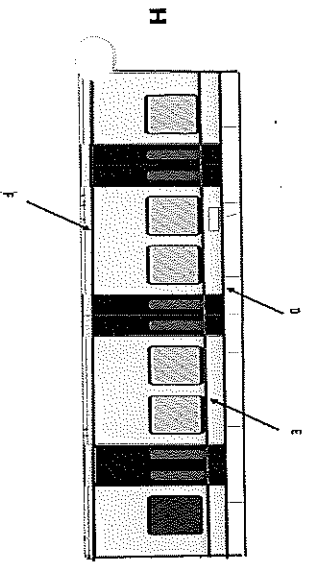
D.E (H,I)

Operator (Name & sign):

Sine

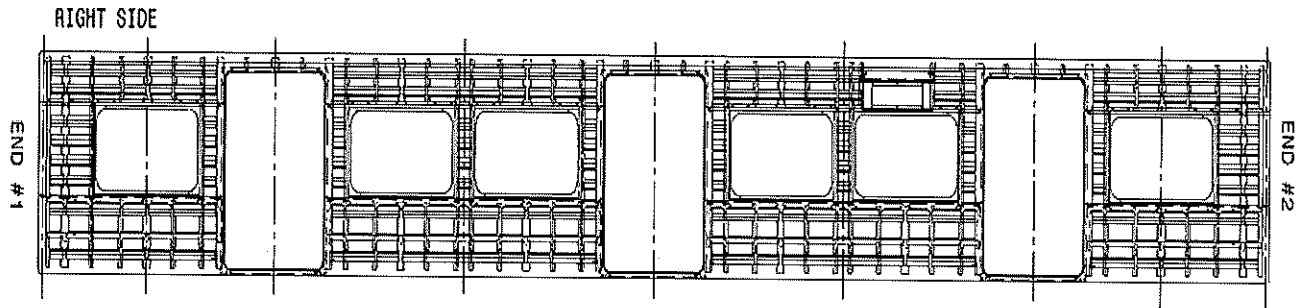
Operator (Name & sign):

Chavito



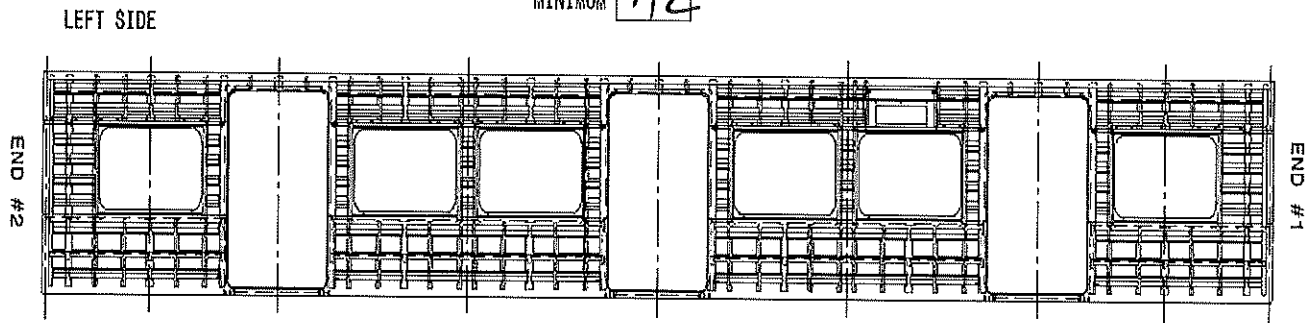
Specifications of Details for CBS measurement CB1230

Flatness side left and right maximum of 2mm in the valley to peak measured in 900mm. Recod the maximum and minimum value found and indicate the corresponding region.



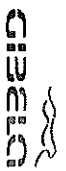
MAXIMUM 1,8

MINIMUM 1,2



MAXIMUM 1,9

MINIMUM 1,4



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

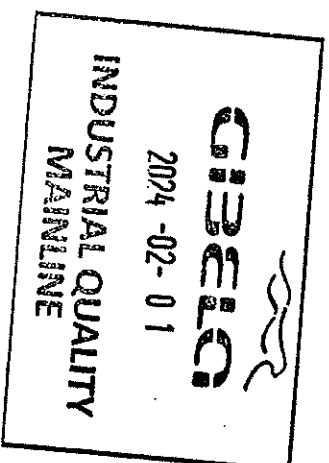
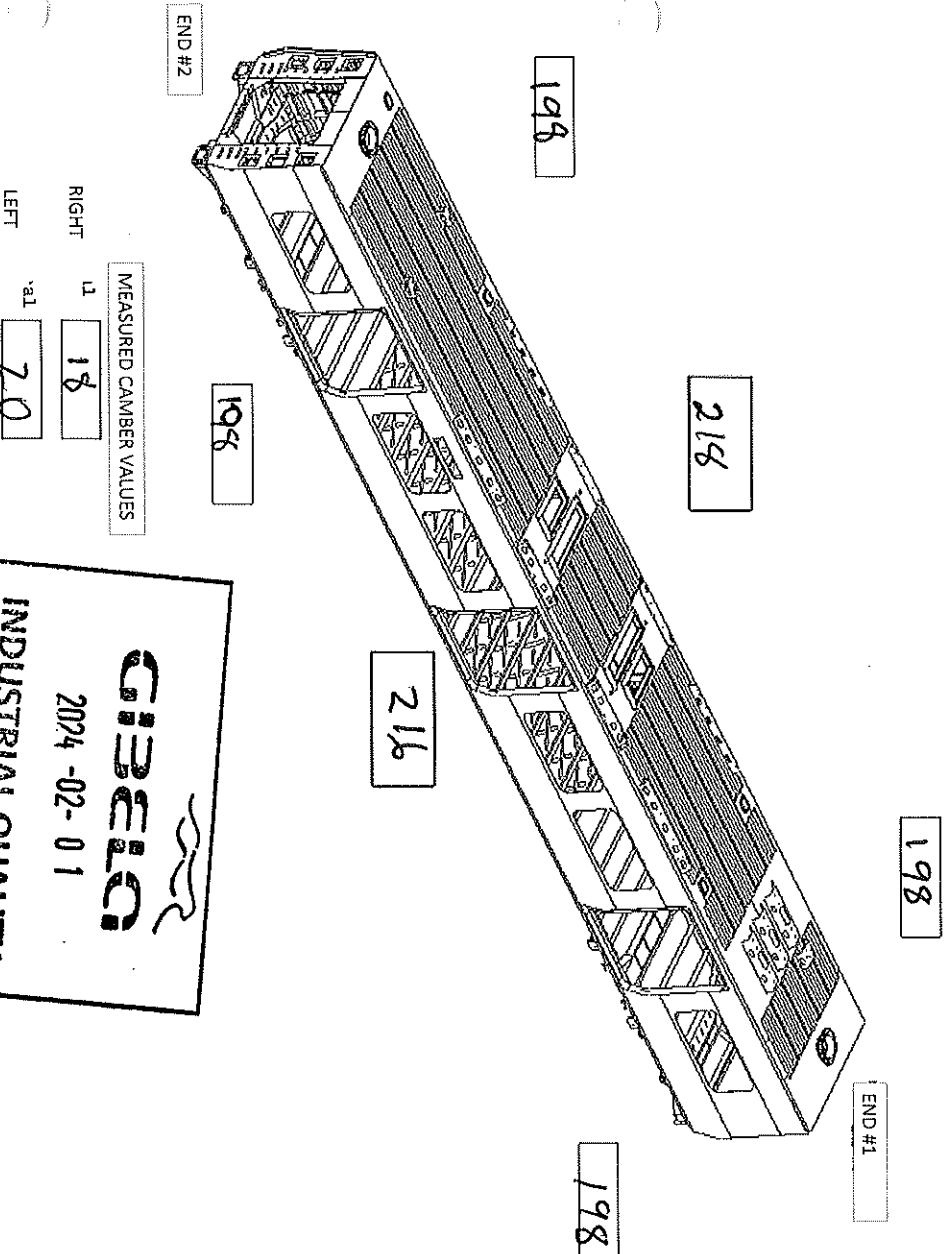
Rev.
30

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06/11/2023

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SI.CB2230.256.V29

Specifications of Details for CBS measurement CB1230

Specified Camber for car out of jig is 18mm(-0mm + 2mm)

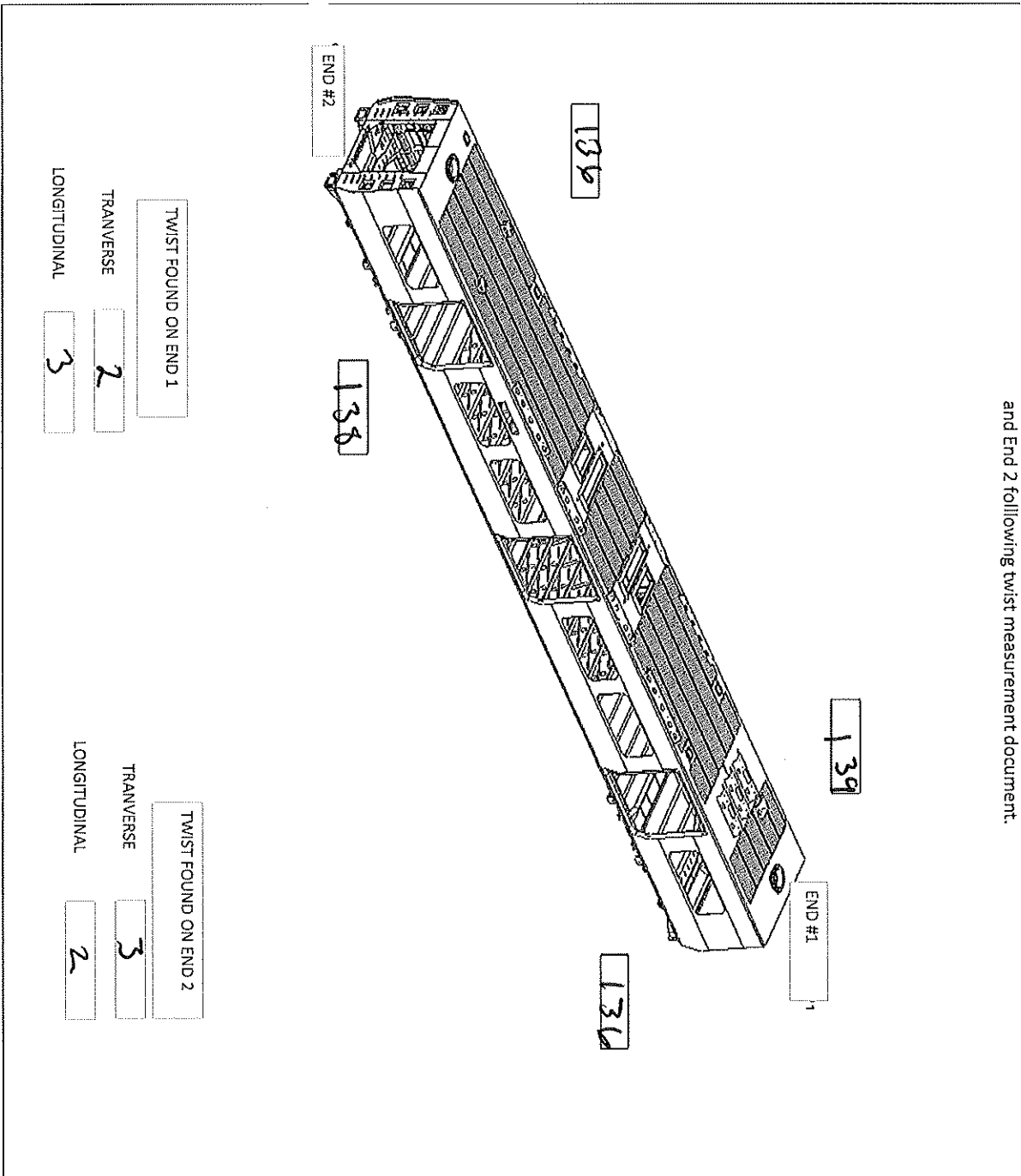




	CARBODYSHELL M1,M3,M4 ASSEMBLY			Project: PRASA
	DT00000225487			
	Rev.	30	Date	
	06/11/2023			
SI.CB2230.256.V29				

Specifications of Details for CB5 measurement
CB1230

Twist measured in transversal and longitudinal = Maximum 3mm. Measure twist on air spring plates (LHS and RHS), both End 1 and End 2 following twist measurement document.



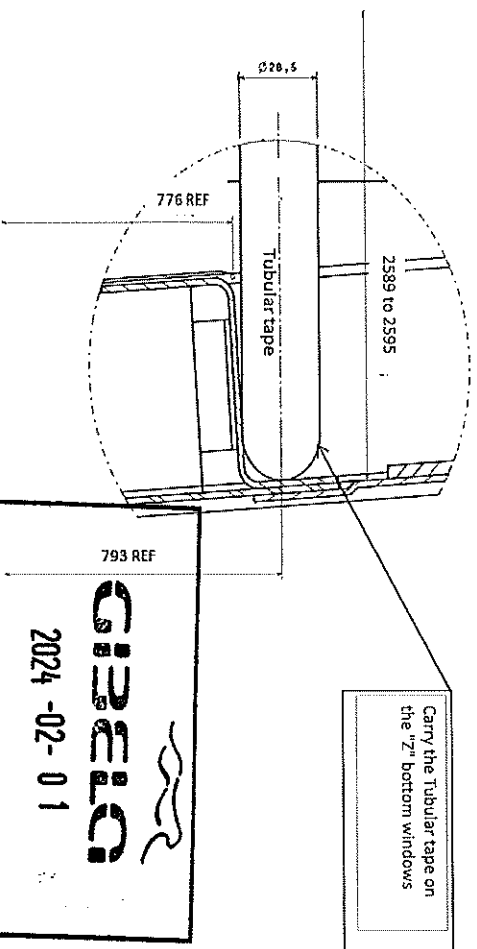


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

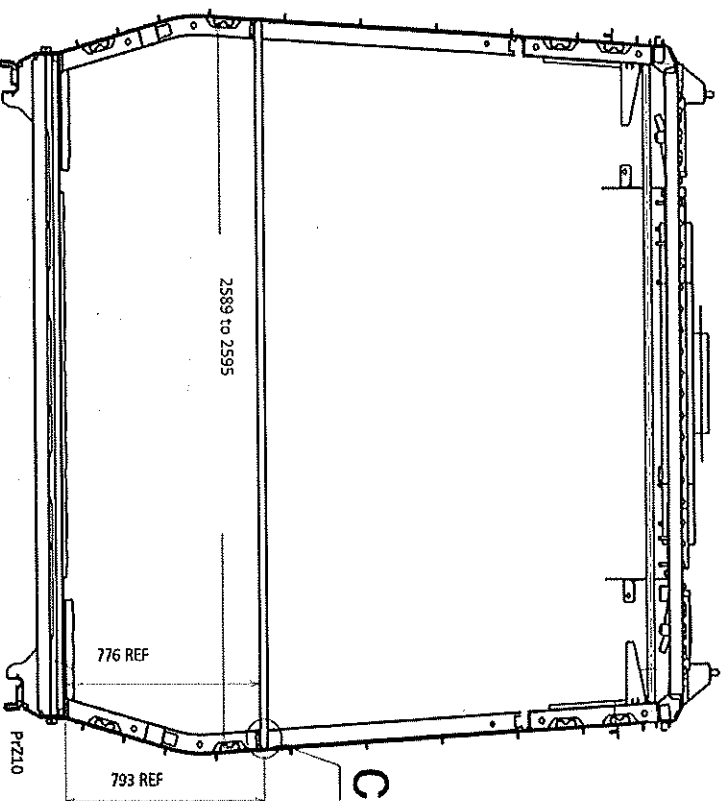
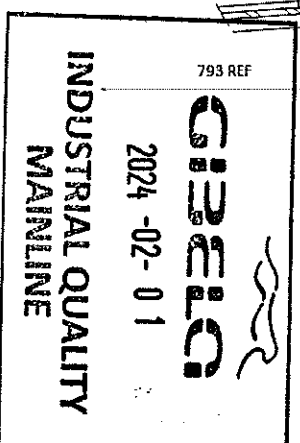
Rev.
30
Date
06/11/2023

Project: PRASA  
SI.CB2230.256.V29

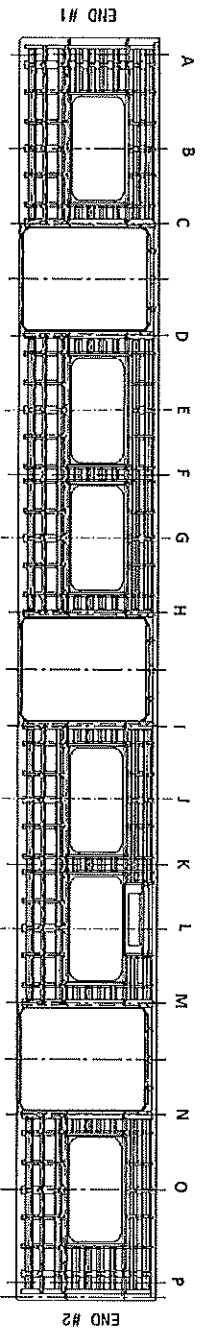
Specifications of Details for CBS measurement CB1230



Detail C

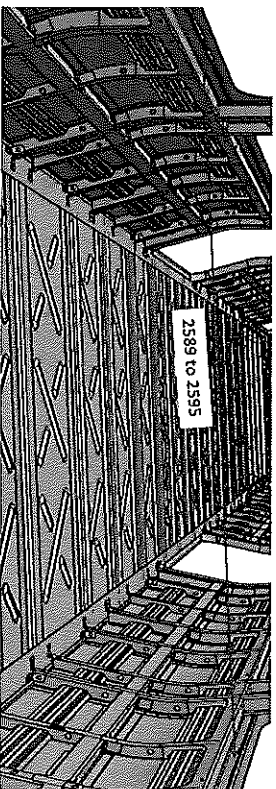


## Specifications of Details for CBS measurement CB1230



2589 to 2595mm

A	25	92
B	25	89
C	25	89
D	25	93
E	25	90
F	25	91
G	25	91
H	25	90
I	25	91
J	25	89
K	25	93
L	25	91
M	25	90
N	25	92
O	25	89
P	25	95



## Threshold verification

Threshold verification				Nominal value :38
Door 1		Door 2		Door 3
L	R	L	R	L R
38	38	39	37	37 39
Door 4		Door 5		Door 6
L	R	L	R	L R
38	37	38	39	39

**BOILER MAKER:**

Amthorpe

五

**WELDER:**

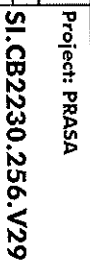
Zanele

**Dye-penetration test to be performed by quality personnel**

## Dye penetrant test

# INDUSTRIAL QUALITY MAINLINE




[illegible]


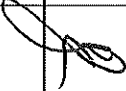
## Check List Items

Item	Picture/Drawing	Description	Criteria Record	OK	Not OK	Signature/Date (Operations)	Signature/Date (Quality)
01	N/A	To complete REX	Refer to REX. New defects must be added on the REX				



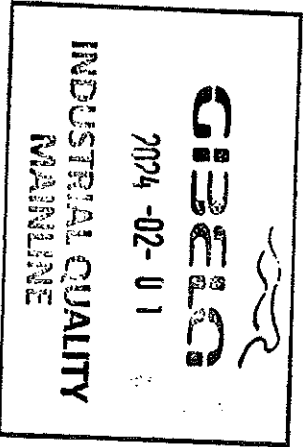
	CARBODYSHELL M1 M3 M4 ASSEMBLY DT00000225487	Rev. 30	Project: PRASA
		Date 06/11/2023	
			SI.CB2230.256.V29

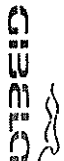
Self Inspection - Find Result

Is the car good to advance to the next workstation/process? (Approval of Operations and Industrial Quality)		DATE	NAME	SIGNATURE
HOLD POINT	GO	21/02/2024	Levy	
		21/02/24	NF0500	
	NO GO			
In case of "NO GO", describe blocking problems				
In case of "NO GO", the operations manager must define below action plan to ensure "GO":				
Item	Description	Responsible	Due date	Status

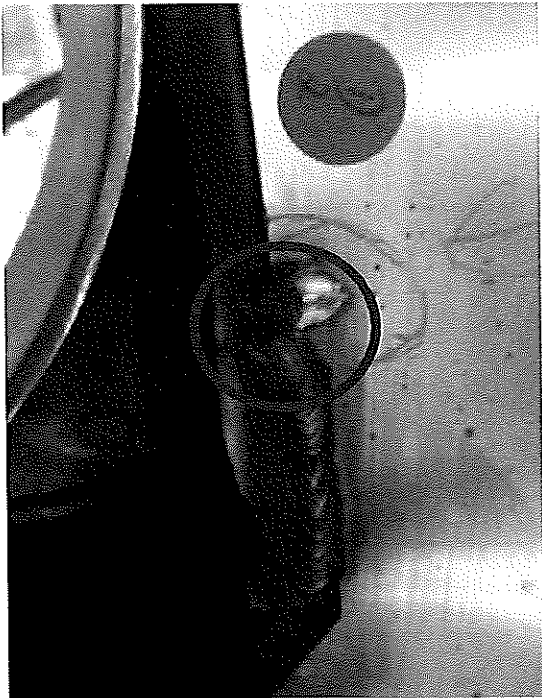
Operations


Quality



	CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487			Rev.	Project: PRASA
				30	
				Date	
				06/11/2023	
SI.CB2230.256.V29					

**ANNEXURE A: Arc Welding Quality Acceptance Standard**



	CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487		Rev. 30 Date 06/11/2023	Project: PRASA SI.CB2230.256.V29
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**ANNEXURE B: Sealant**

