

GIBELA

PRASA PROJECT

APPLICABLE FROM TRAINSET 190+ AS PER BASELINE 10.4


## SELF INSPECTION SHEET

## CONFIDENTIAL INFORMATION

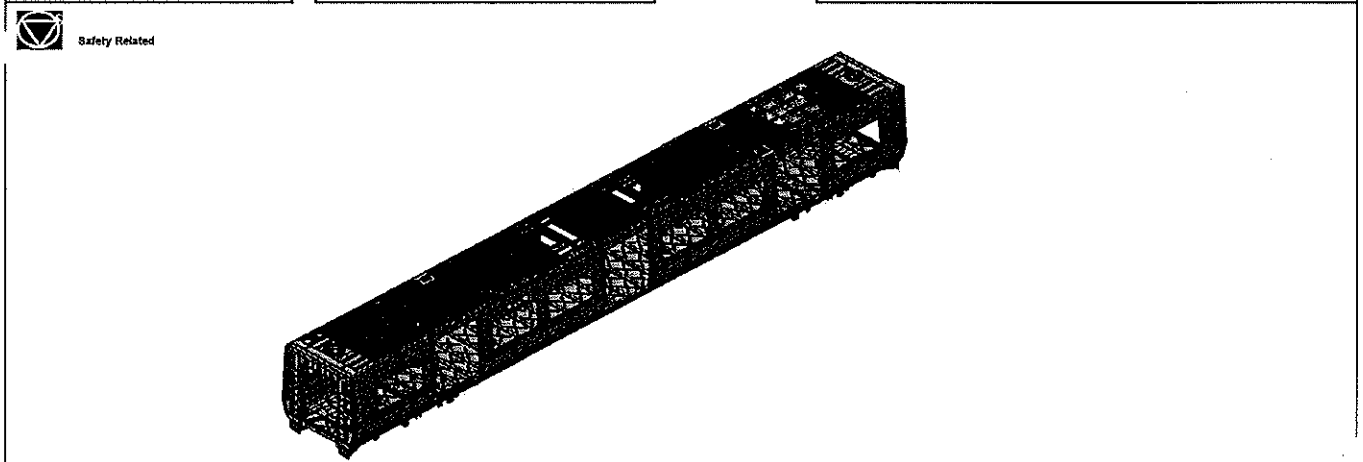
This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

## APPLICATION REFERENCE

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ?	
				TC	MA	MA	MA	MA	TC			
DTR3000152644	AAD0001278566	CARBODY SHELL M3, M4 ASSEMBLY	CB2210		X				X		PRA.CB2210.DTR30225 487/3.V30	YES
REV	DATE	MODIFICATION CONTENT			RESPONSIBLE			NAME		DATE		
0	10/01/2018	GIBELA NEW CREATION			APPROVER			Itumeleng Modiba		10/01/2018		
					CHECKER			Nosizo Pindela		10/01/2018		
					COMPILER			Thanyani Mathegu		10/01/2018		
1	2018/05/18	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager			APPROVER			Itumeleng Modiba		2018/05/18		
					CHECKER			Nosizo Pindela		2018/05/18		
					REVISED BY			Ramokone Motama		2018/05/18		
2	2018/07/04	Certain dimensional checks moved to CB1220 and CB1230			APPROVER			Itumeleng Modiba		2018/07/04		
					CHECKER			Nosizo Pindela		2018/07/04		
					REVISED BY			Ramokone Motama		2018/07/04		
3	2018/12/12	Added dimensional check points to CB2210			APPROVER			Itumeleng Modiba		2018/12/12		
					CHECKER			Nosizo Pindela		2018/12/12		
					REVISED BY			Ramokone Motama		2018/12/12		
5	22/01/2019	As per Baseline 10.2			APPROVER			Itumeleng Modiba		22/01/2019		
					CHECKER			Nosizo Pindela		22/01/2019		
					REVISED BY			Vanessa Ntuli		22/01/2019		
6	13/03/2019	Added D1 and D2 on Self - Inspection			APPROVER			Itumeleng Modiba		13/03/2019		
					CHECKER			Nosizo Pindela		13/03/2019		
					REVISED BY			Nosizo Pindela		13/03/2019		
10	21/08/2019	New Baseline 10.2.5			APPROVER			Itumeleng Modiba		21/08/2019		
					CHECKER			Nosizo Pindela		21/08/2019		
					REVISED BY			Nosizo Pindela		21/08/2019		
15	06/08/2020	New Baseline 10.2.6			APPROVER			Timothy Maimela		06/08/2020		
					CHECKER			Bongane Masina				
					REVISED BY			Bongane Masina				
20	19/04/2021	New Baseline change 10.3			APPROVER			Timothy Maimela		19/04/2021		
					CHECKER			Bongane Masina				
					REVISED BY			Bongane Masina				
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING			APPROVER			Mbhombi collins		17/08/2021		
					CHECKER			Mpho Mulaudzi				
					REVISED BY			Mpho Mulaudzi				
25	19/02/2022	New Baseline change 10.3.1			APPROVER			Mbhombi collins		19/02/2022		
					CHECKER			Andani Muthelo				
					REVISED BY			Andani Muthelo				
26	14/04/2023	Addition of welding consumable traceability			APPROVER			Ntuli Vanessa		14/04/2023		
					CHECKER			Mohlampe Amogelang				
					REVISED BY			Mohlampe Amogelang				
30	20/07/2023	New Baseline change 10.4			APPROVER			Ngobeni Tyson		28/07/2023		
					CHECKER			Mohlampe Amogelang				
					REVISED BY			Mohlampe Amogelang				
31	07/11/2023	Added traceability for welding sections			APPROVER			Ngobeni Tyson		07/11/2023		
					CHECKER			Mohlampe Amogelang				
					REVISED BY			Ntokozo Zwane				
TRAINSET	CAR	OPERATOR NAME & ALPS NO		DATE	SELF INSPECTION NUMBER		PAGES					
B2207	M4	P. MALATJI 4004164		13/05/24	SI.CB2210.254.V30		17					

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

Car: M3 & M4	NCR:	Work station: CB2210
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# I - Documentation and Instruments Control

I.1 - Documentation Control

Document	Type of car						Revision	Observation	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
	M3	M4	M5	M6	M7	M8					
DTR30225487/3					X		V31		✓	13/05/24	13/05/24

I.2 - Instruments Control

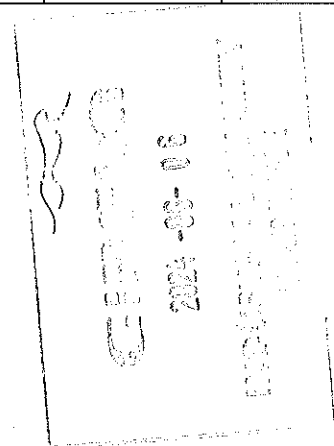
Monitoring and Measuring Instrument Control - Used for Special Process





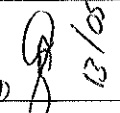


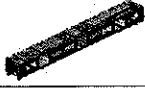
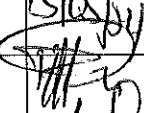
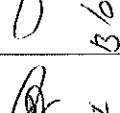
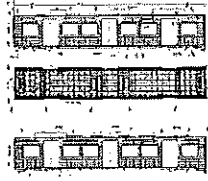
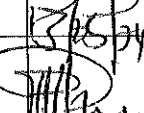
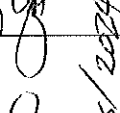

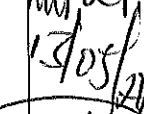

Instruments	Serial number	Calibration or Verification Validation Date	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
LUBRICANT	30823-2	15/03/23	✓	13/05/24	13/05/24
LASER TAPE	1257145024	08/10/23	✓	13/05/24	13/05/24
3DM TAPE	GIBELQ 0102	18/11/24	✓	13/05/24	13/05/24

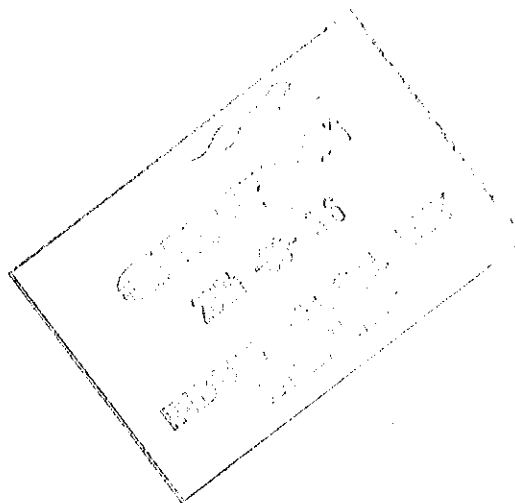
1.3 Consumables


Welding Consumable Control - Used for Special Process

Weld Material	Head Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
ER 308 LSI	314018-74097	MIG	✓	13/05/24	13/05/24
ER 308 L	29916 87-70332	TIG	✓	13/05/24	13/05/24

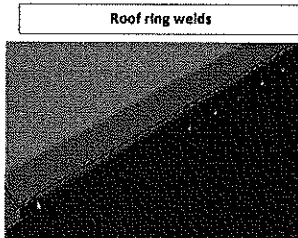


		<b>CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3</b>		Rev. 31 Date 07/11/2023	<b>Project: PRASA SI.CB2210.254.V30</b>		
<b>II - Self Inspection - Items to Check</b>							
<b>II.1 - Items to check</b>							
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK		Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Corshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓		 13/05/24	 13/05/24
02	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 • DTD0000210675	✓		 13/05/24	 13/05/24
03	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		 13/05/24	 13/05/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		 13/05/24	 13/05/2024
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document	Approved according specified on pages below.	✓		 13/05/24	 13/05/2024
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 fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-018 and DTD0000210658.	✓		 13/05/24	 13/05/24

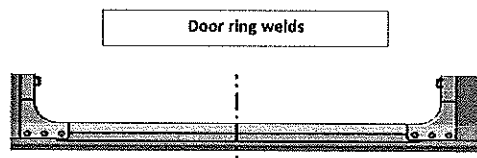


	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 31	Project: PRASA SI.CB2210.254.V30
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Welding Traceability



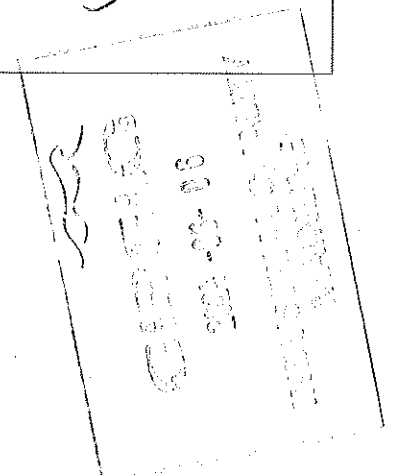
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<div style="text-align: center; margin-bottom: 10px;"><u>RHS</u></div> Boiler maker (Name & Sign): <u>WINGA [Signature]</u>	<div style="text-align: center; margin-bottom: 10px;"><u>RHS</u></div> Welder (Name & Sign): <u>Thabang [Signature]</u>



LHS

Boiler maker (Name & Sign): GERALD [Signature]
  
  
Welder (Name & Sign): SIPB [Signature]

RHS

Boiler maker (Name & Sign): GERALD [Signature]
  
  
Welder (Name & Sign): SIPB [Signature]




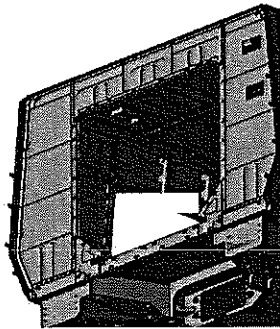
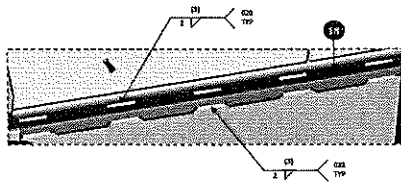
CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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31

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07/11/2023

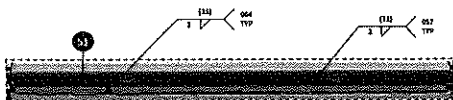
EUF Reinforcement Plates



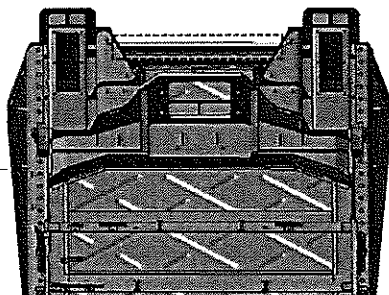
END 1

Boiler maker (Name & Sign): Laurence [Signature]

Welder (Name & Sign): SIPHOKAZI [Signature]



END 2

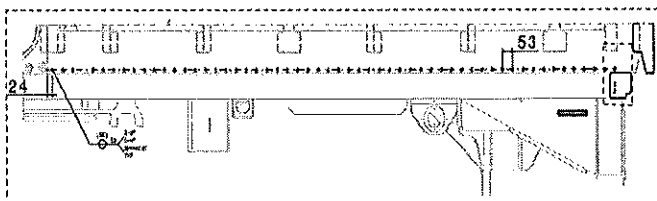


Underneath the CAR

END 2

Boiler maker (Name & Sign): Tebogo [Signature]

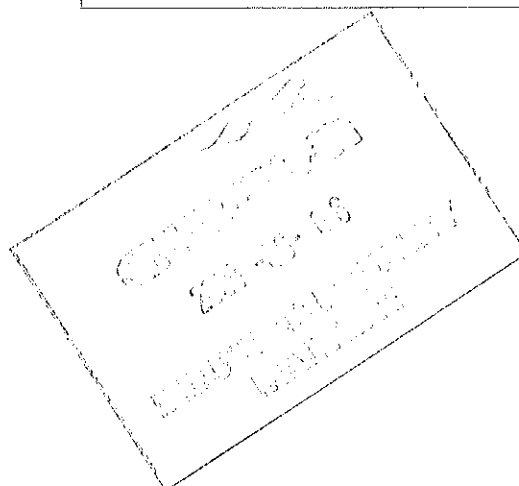
Welder (Name & Sign): SIPHOKAZI [Signature]




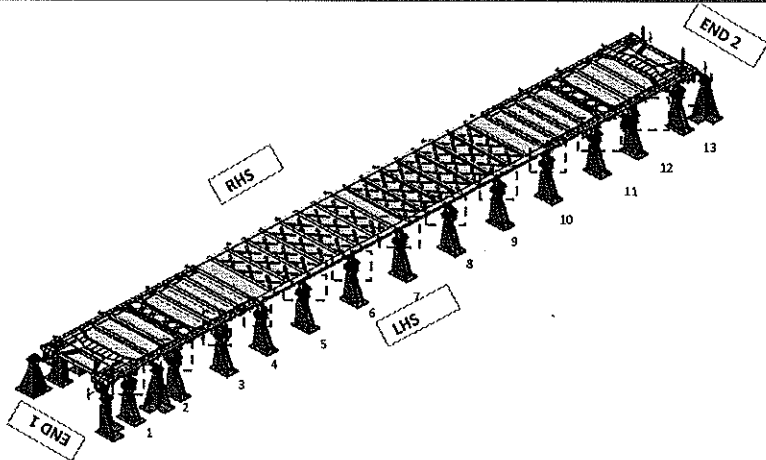
FEDOLI

Operator:

SIPHOKAZI [Signature]



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<b>Specifications of Details for CBS measurement</b>			



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

After loading and clamping

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	00	00	00	00	00	00	00	00	00	00	00	00	00
Right Hand Side	00	00	00	00	00	00	00	00	00	00	00	00	00

Signature Operations

Date:

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	00	00	00	00	00	00	00	00	00	00	00	00	00
Right Hand Side	00	00	00	00	00	00	00	00	00	00	00	00	00

Signature Industrial Quality:

Date:

Handwritten notes and signatures in the bottom right corner, including a large signature and some illegible text.



CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

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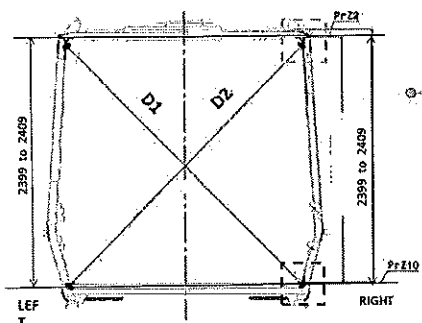
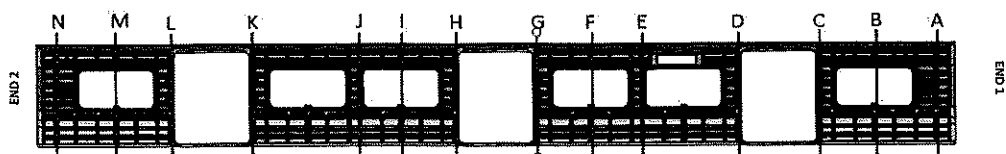
Project: PRASA

SI.CB2210.254.V30

Date

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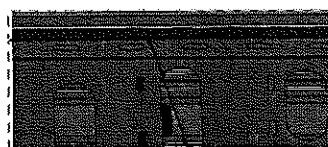
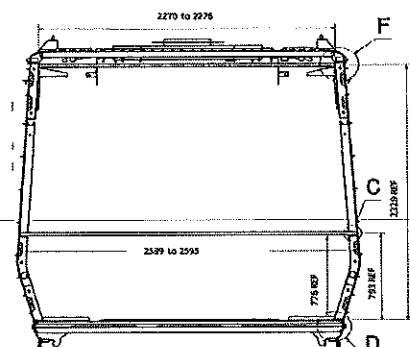
### Specifications of Details for CBS measurement



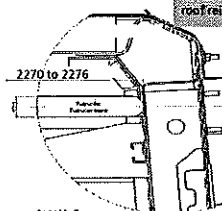
Measurement positions on roof rail and side rail corner.



Measurement positions on side rail and side rail corner.

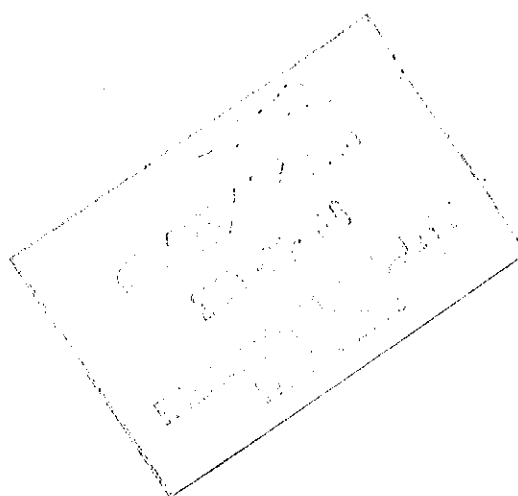


Reinforcement area measurement positions on roof reinforcement area.



Detail F

Reinforcement area measurement positions on roof reinforcement area

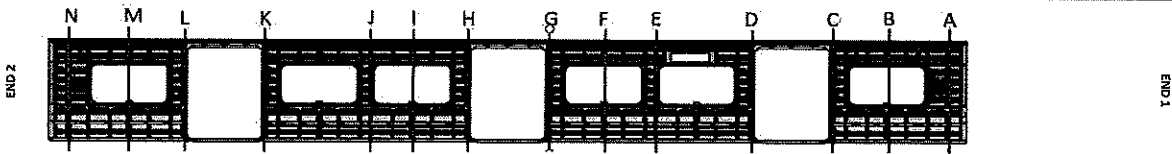




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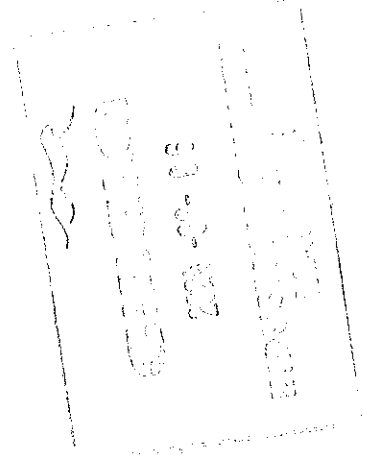
## Specifications of Details for CBS measurement

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	3269	3268	1	2404	2404	0
B	3271	3271	0	2405	2404	1
C	3268	3266	0	2406	2400	2
D	3269	3269	0	2406	2406	0
E	3270	3271	1	2404	2405	1
F	3271	3269	2	2404	2406	2
G	3268	3266	2	2404	2405	1
H	3268	3266	2	2404	2404	0
I	3269	3267	2	2406	2404	2
J	3269	3269	0	2404	2405	1
K	3268	3268	0	2405	2406	1
L	3269	3268	1	2404	2404	0
M	3268	3268	0	2405	2405	0
N	3269	3267	2	2404	2406	2

4009964  
13/05/24



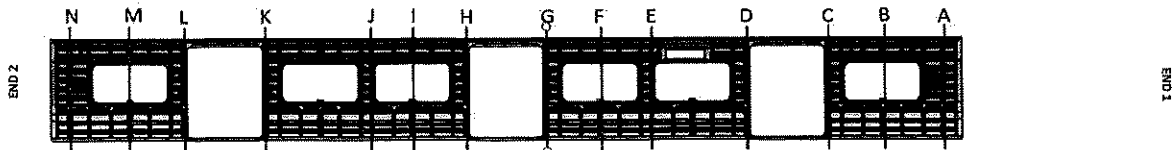




CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

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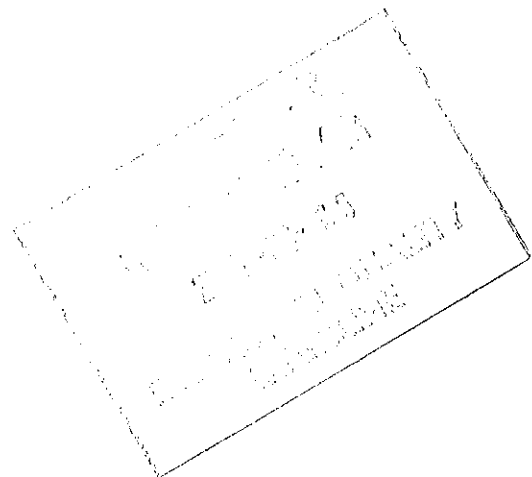
## Specifications of Details for CBS measurement


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	3296	3291	0	2401	2405	1
B	3268	3267	1	2404	2405	1
C	3295	3296	1	2406	2401	2
D	3298	3298	0	2405	2401	1
E	3269	3268	1	2401	2401	0
F	3267	3266	1	2406	2401	2
G	3296	3298	2	2405	2401	1
H	3297	3297	0	2401	2404	0
I	3267	3267	2	2401	2406	2
J	3267	3267	0	2405	2405	0
K	3296	3298	2	2406	2404	2
L	3297	3297	0	2401	2406	2
M	3268	3267	1	2406	2401	2
N	3296	3296	0	2405	2404	1

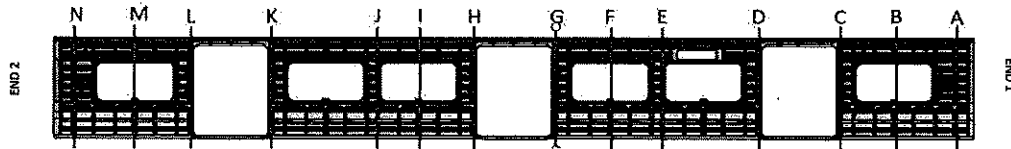
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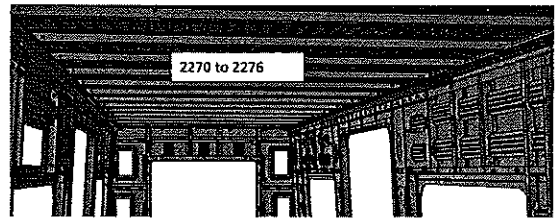
	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 31	Project: PRASA SI.CB2210.254.V30
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**CBS measurement**

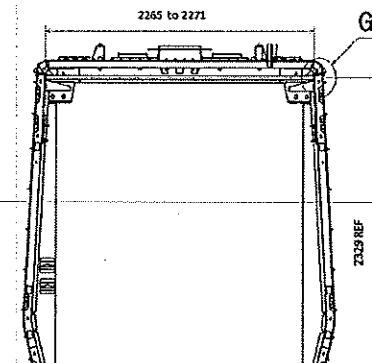
**BEFORE WELDING**



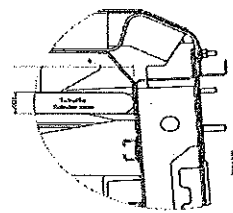
	2270 to 2276
A	2278
B	2274
C	2272
D	2276
E	2275
F	2274
G	2276
H	2274
I	2276
J	2275
K	2274
L	2273
M	2271
N	2275



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




2265 to 2271



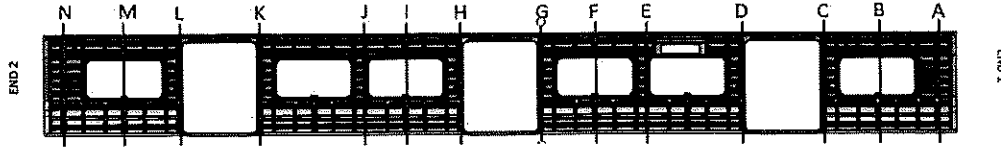
Detail a  
Considering the reinforcement profile

*Handwritten signature and date:*  
13/25/24

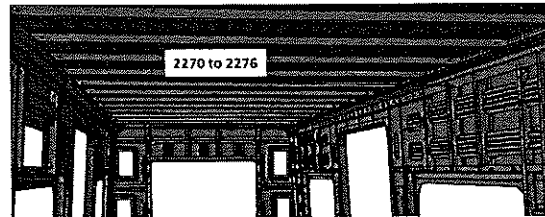
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13/25/24

	CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3	Rev. 31	Project: PRASA SI.CB2210.254.V30
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		CBS measurement	

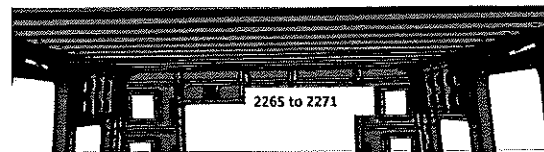
AFTER WELDING



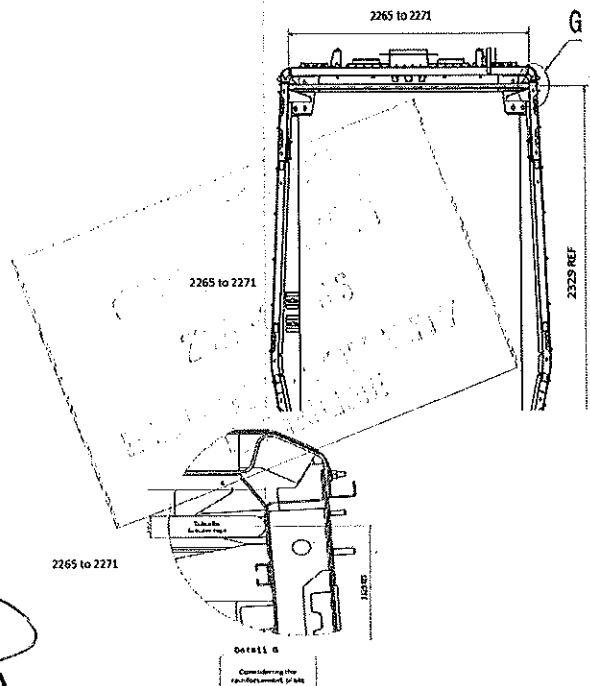
	2265 to 2271	2270 to 2276
A	2269	
B		2274
C	2268	
D	2266	
E		2276
F		2276
G	2267	
H	2266	
I		2278
J		2276
K	2269	
L	2265	
M		2274
N	2269	



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



Take measurement close to radius ( considering reinforcement)



200061  
15/05/24



CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

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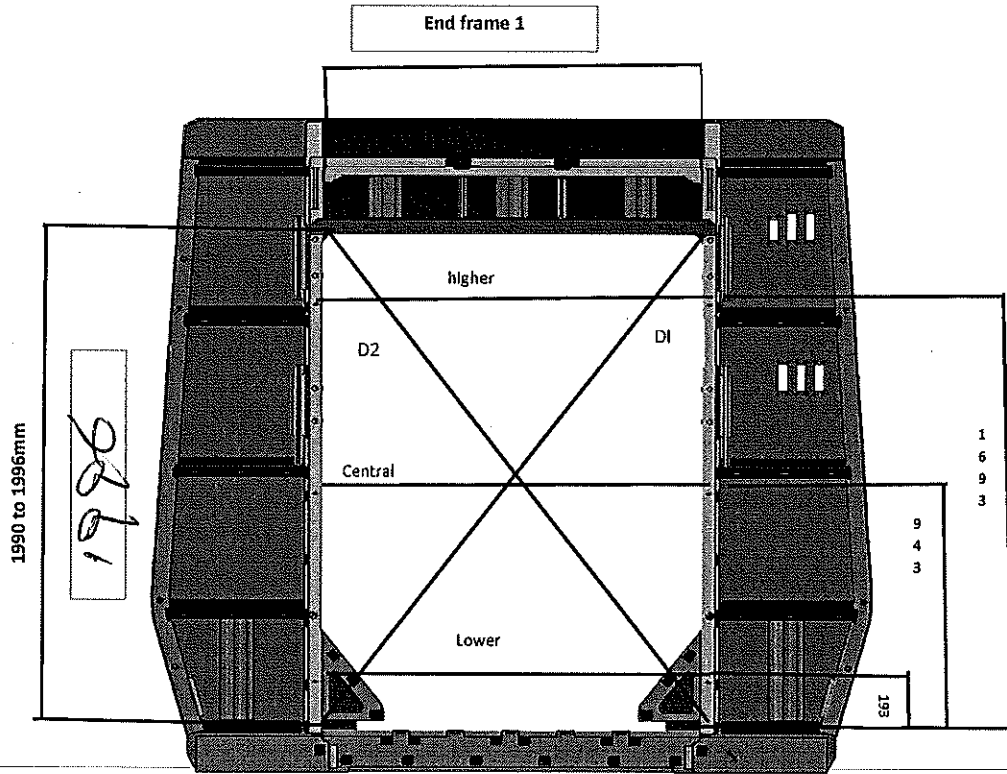
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07/11/2023

Specifications of Details for CBS measurement



1380 to 1382 mm

DIAGONAL DIFFERENCE  $D1-D2 \leq 3mm$

Higher Dimension

1381

D1

2416

Central Dimension

1382

D2

2415

Lower Dimension

1381

D1-D2

1

40 mm typ  
18/05/2024

2024-03-06

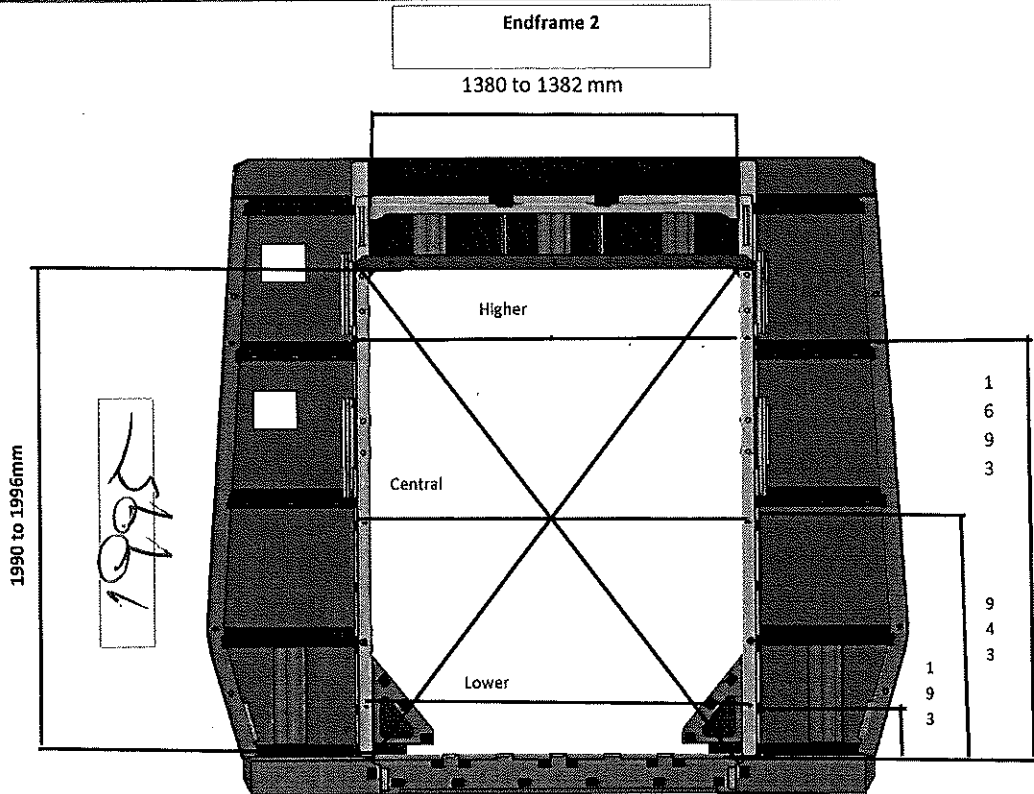


CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

Rev.  
31  
Date  
07/11/2023

Project: PRASA  
SI.CB2210.254.V30

Specifications of Details for CBS measurement

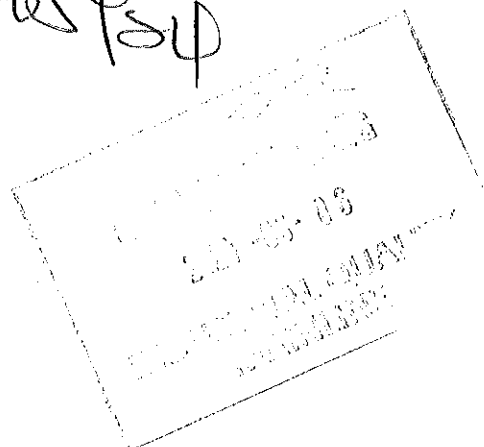


1380 to 1382 mm

Higher Dimension	1381	D1	24/6
Central Dimension	1381	D2	24/6
Lower Dimension	1380	D1-D2	0

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

409968  
15/10/23  
sup





CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.

31

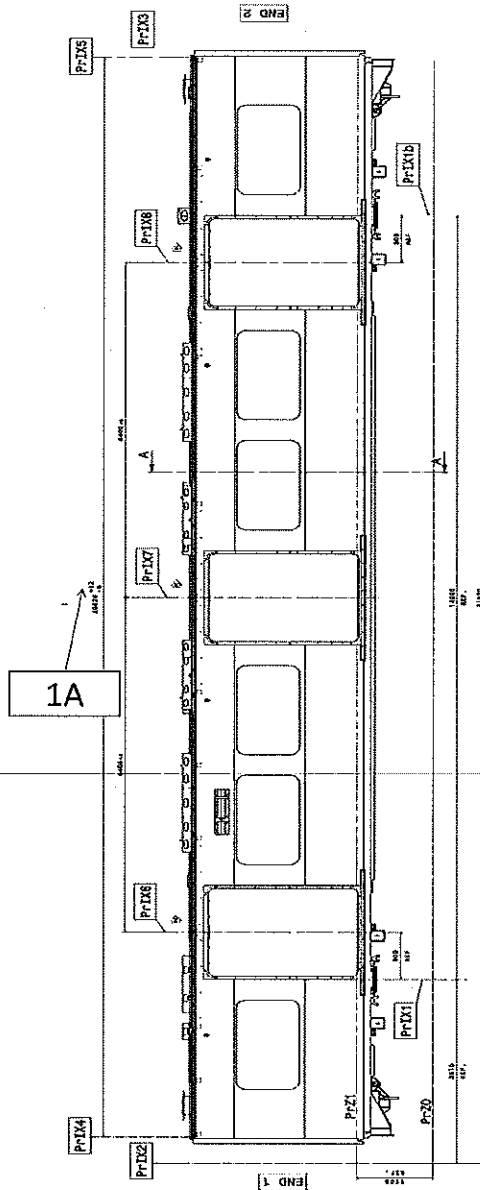
Date

07/11/2023

Project: PRASA

SI.CB2210.254.V30

### Specifications of Details for CBS measurement



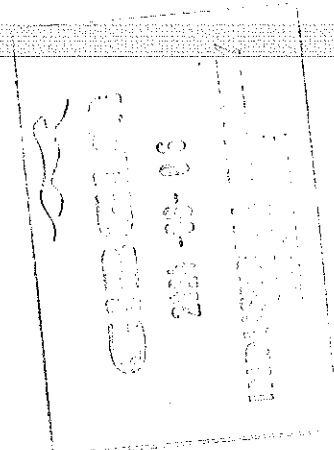
LEFT SIDE		
	SPECIFICATION SIZE	ACTUAL SIZE
1A	20632 - 20614	20618

RIGHT SIDE		
	SPECIFICATION SIZE	ACTUAL SIZE
1A	20632 - 20614	20618


Handwritten signature and date: 20/08/2024

### Dye penetrant test

Dye-penetration test to be performed by quality personnel





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

Self Inspection - Final Result

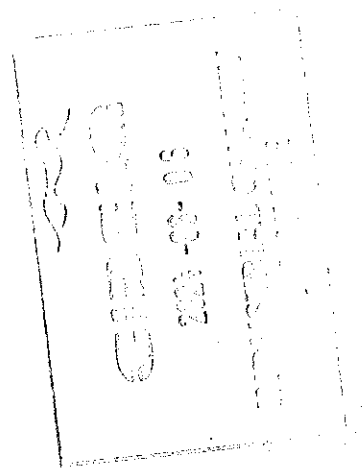
			DATE	NAME	SIGNATURE
HOLD POINT		GO	13/06/24	Operations	
		(If activities are not complete, the missing activities must not impact the next stage)  Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)		Industrial Quality	
		There are activities pendings that Impact/stop the activities of the next process Obs: (To describe problems below)		Operations	
		There are non-conformities impact the quality of the product and there is no corrective action defined yet)		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









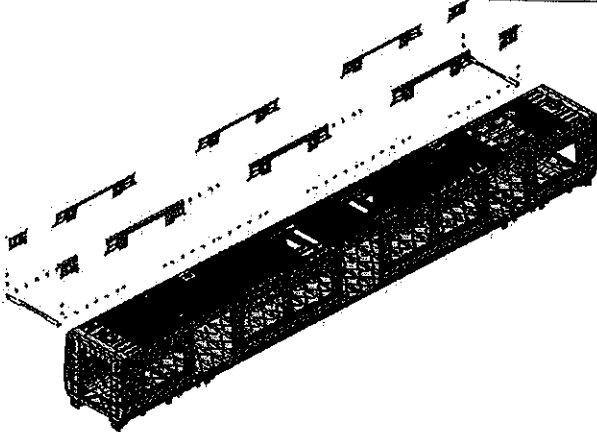
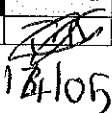
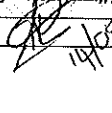

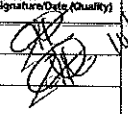
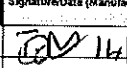
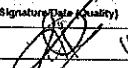
**PRASA PROJECT**














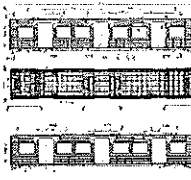












**APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1**  
**SELF INSPECTION SHEET**

**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	
				YES	NO	NA	NA	NA	NA			
<input type="checkbox"/>	DTR300013264	AAD0001278560	CARBODYSHELL M1,M3,M4 ASSEMBLY	CB2220			X			PRA.CB2220.DTR3022548 7/2.V21	YES	
<input type="checkbox"/>	DTR300013264	AAD0001278564	CARBODYSHELL M1,M3,M4 ASSEMBLY	CB2220		X	X		X	PRA.CB2220.DTR3022548 7/2.V21	YES	
<input type="checkbox"/>												
<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	Nosizo Pindela	01/02/2018						
				COMPILED	Thanyani Mathegu	01/02/2018						
1	18/05/2018	Team leader and Quality Technician to sign Change final signature from FME Manager to Quality manager		APPROVER	Itumeleng Modiba	18/05/2018						
				CHECKER	Nosizo Pindela	18/05/2018						
				REVISED BY	Ramokone Motama	18/05/2018						
2	2018/07/05	Certain dimensional checks added and others moved to CB1210		APPROVER	Itumeleng Modiba	2018/07/05						
				CHECKER	Nosizo Pindela	2018/07/05						
				REVISED BY	Ramokone Motama	2018/07/05						
3	2018/06/12	Width tolerance as per DT0000336600		APPROVER	Itumeleng Modiba	2018/06/12						
				CHECKER	Nosizo Pindela	2018/06/12						
				REVISED BY	Nosizo Pindela	2018/06/12						
5	24/01/2019	As per Baseline 10.2		APPROVER	Itumeleng Modiba	24/01/2019						
				CHECKER	Nosizo Pindela	24/01/2019						
				REVISED 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	Nosizo Pindela	13/03/2019						
				REVISED BY	Nosizo Pindela	13/03/2019						
10	22/08/2019	New Baseline 10.2.5		APPROVER	Itumeleng Modiba	22/08/2019						
				CHECKER	Nosizo Pindela	22/08/2019						
				REVISED BY	Nosizo Pindela	22/08/2019						
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	Bongane Masina	19/04/2021						
				CHECKER	Bongane Masina	19/04/2021						
				REVISED BY	Bongane Masina	19/04/2021						
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING		APPROVER	Mpho Mulaudzi	17/08/2021						
				CHECKER	Mpho Mulaudzi	17/08/2021						
				REVISED BY	Mpho Mulaudzi	17/08/2021						
25	20/02/2022	New Baseline change 10.3.1		APPROVER	Collins Mhombhi	19/02/2022						
				CHECKER	Andani Muthelo	19/02/2022						
				REVISED BY	Andani Muthelo	19/02/2022						
26	14/06/2022	Update minimum temperature requirement for sealant application		APPROVER	Collins Mhombhi	14/06/2022						
				CHECKER	Andani Muthelo	14/06/2022						
				REVISED BY	Andani Muthelo	14/06/2022						
27	19/10/2022	Addition of traceability for sealant application & welding		APPROVER	Collins Mhombhi	19/10/2022						
				CHECKER	Ntokozo Zwane	19/10/2022						
				REVISED BY	Amogelang Mohlampe	19/10/2022						
28	14/04/2023	Added sealant batch number & welding consumables traceability		APPROVER	Vanessa Ntuli	14/04/2023						
				CHECKER	Ntokozo Zwane	14/04/2023						
				REVISED BY	Amogelang Mohlampe	14/04/2023						
29	28/10/2023	Addition of bracket quantity		APPROVER	Ngobeni Tyson	28/10/2023						
				CHECKER	Ntokozo Zwane	28/10/2023						
				REVISED BY	Amogelang Mohlampe	28/10/2023						
TRAINSET	CAR	OPERATOR NAME & ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES							
227	Moq	Tebeo	14/05/24	SI.CB2220.250.V29	13							

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30225487/2	Rev.	Project: PRASA														
		29															
		Date	SI.CB2220.250.V29														
Car: M1,M3&M4		NGR:	Work station:	CB2220													
 Safety Related																	
																	
<b>I - Documentation and Instruments Control</b>																	
<b>I.1 - Documentation Control</b>																	
Document	Type of car	Revision	Observation	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)											
DTR30225487/2	<table border="1"> <tr> <td>P</td> <td>E</td> <td>M</td> <td>S</td> <td>P</td> </tr> <tr> <td></td> <td></td> <td></td> <td>✓</td> <td></td> </tr> </table>	P	E	M	S	P				✓		29	14/05/24	✓	N/A	 14/05	 14/05/24
P	E	M	S	P													
			✓														
<b>I.2 - Instruments Control</b>																	
Monitoring and Measuring Instrument Control - Used for Special Process																	
Instrument	Serial number	Calibration or Verification Validation Date	OK		Signature/Date (Manufacturing)	Signature/Date (Quality)											
Measuring Tape	12/04/23	GIZBI A0396	✓		 14/05	 14/05/24											
Turbular	15/03/25	32823-2															
<b>1.3 Consumables</b>																	
Welding Consumable Control - Used for Special Process																	
Filler Material	Heat Number	Welding Process	OK		Signature/Date (Manufacturing)	Signature/Date (Quality)											
Welding wire	E23067	MIG	✓		 14/05	 14/05/24											

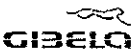
  
2024 -05- 13  
**INDUSTRIAL QUALITY**  
**MAINLINE**

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30225487/2	Rev. 29	Project: PRASA  <b>SI.CB2220.250.V29</b>												
		Date 28/10/2023													
<b>II - Self Inspection - Items to Check</b>															
<b>II.1 - Items to check</b>															
Item	Picture/Drawing	Description	Acceptance criteria / Record	✓	✗	Signature/Date (Manufacturing)	Signature/Date (Quality)								
01	N/A	Assembly according to Instruction Engineering n° PRA.CB2220.DTR30225487/2 Verification of fitment for all reinforcement brackets.	PRA.CB2220.DTR30225487/2	✓		 14/05	 14/05/21								
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓		 14/05	 14/05/21								
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		 14/05	 14/05/21								
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		 14/05	 14/05/21								
05		Functional dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓		 14/05	 14/05/21								
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-010. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-010 and DTD0000210658.	✓		 14/05	 14/05/21								
07	N/A	<p>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</p> <p>Specified:</p> <table border="1"> <tr> <td>Temperature Min - Max (°C)</td> <td>Min-Max</td> </tr> <tr> <td>10°C - 35°C</td> <td></td> </tr> <tr> <td>Relative humidity Min - Max (%)</td> <td>Min-Max</td> </tr> <tr> <td>25% - 80%</td> <td></td> </tr> </table>	Temperature Min - Max (°C)	Min-Max	10°C - 35°C		Relative humidity Min - Max (%)	Min-Max	25% - 80%		<p>Sealant Batch No: <u>20019309</u></p> <p>Exp Date: <u>06/24</u></p> <p>Actuals</p> <p>Temperature: <u>22</u></p> <p>Humidity: <u>54</u></p>	✓		 14/05/24	 14/05/21
Temperature Min - Max (°C)	Min-Max														
10°C - 35°C															
Relative humidity Min - Max (%)	Min-Max														
25% - 80%															
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0001278565	✓		 14/05/24	 14/05/21								
09		Verification of safety welds	Approved according to DTD000210658 reference and Self inspection	✓		 14/05	 14/05/24								

**GIBEL**

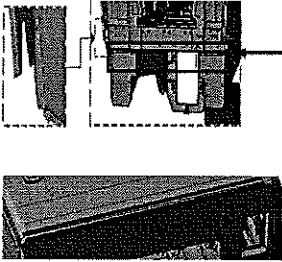
2024 -05- 13

**INDUSTRIAL QUALITY  
MAINLINE**

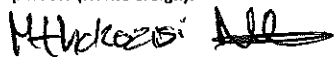
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA
		29	
		Date	
		28/10/2023	SI.CB2220.250.V29

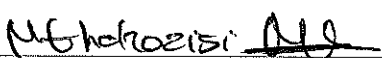
**II - Self Inspection - Items to Check**

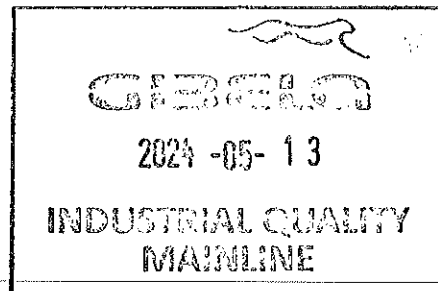
**SEALANT APPLICATION**




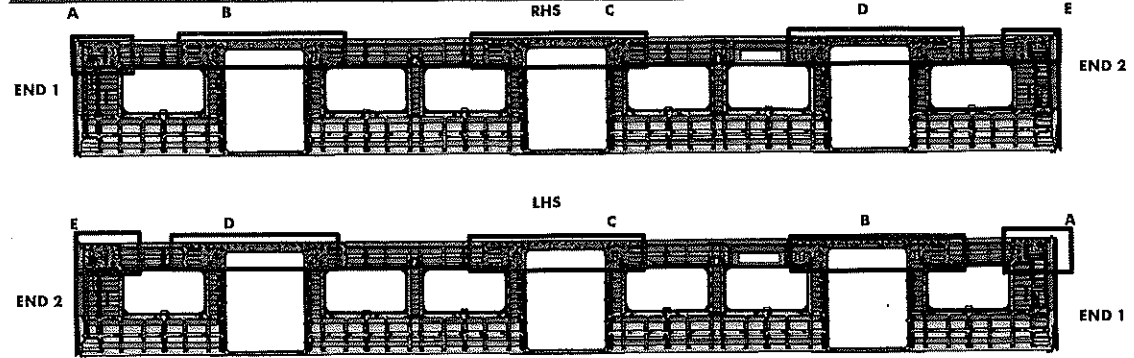
AREA 1 & 2 END 1

Operator (Name & sign):  


Operator (Name & sign):  





	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	

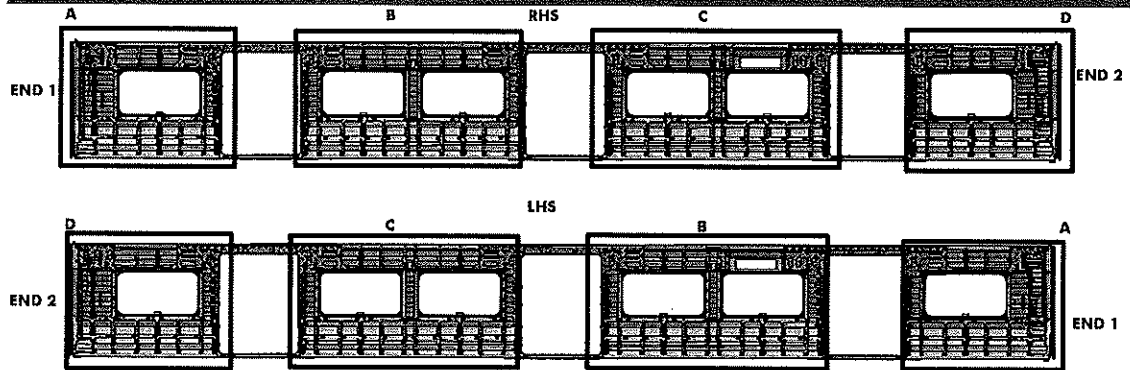


### REINFORCEMENT WELDING

AREA	LHS	RHS
A	Operator (Name&sign): <u>[Signature]</u>	<u>LINDO [Signature]</u>
B	Operator (Name&sign): <u>[Signature]</u>	<u>LINDO [Signature]</u>
C	Operator (Name&sign): <u>[Signature]</u>	<u>LINDO [Signature] Mmatsheni Mhahle</u>
D	Operator (Name&sign): <u>[Signature]</u>	<u>Mmatsheni Mhahle</u>
E	Operator (Name&sign): <u>[Signature]</u>	<u>Mmatsheni Mhahle</u>

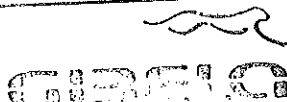


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev. 29	Project: PRASA  SI.CB2220.250.V29
		Date 28/10/2023	
		II - Self Inspection - Items to Check	



### BRACKETING

C-RAILS:	Operator:	<div>INSTALLATION</div> <i>Fiscilla</i>
	Operator:	
DOOR MECHANISMS:	Operator:	<i>Asanda</i>
	Operator:	
TAPPING PADS	Operator:	<i>medini</i>
	Operator:	<i>Sibusiso</i>
SEAT & LUGGAGE BRACKETS:	Operator:	<div>INSTALLATION &amp; VERIFICATION</div> <i>[Signature]</i>
	Operator:	
SEAT BRACKETS VERIFICATION:	Operator:	<i>Mthokozisi</i>
	Operator:	

  
2023-05-13  
INDUSTRIAL QUALITY  
MAINLINE


### WELDING

AREA	LHS	RHS
A (Seat brackets)	Operator (Name&sign): <i>[Signature]</i>	<i>LINDO</i> <i>[Signature]</i>
(C-rails, Luggage and earth bushes)	Operator (Name&sign): <i>[Signature]</i>	<i>LINDO</i> <i>[Signature]</i>
B (Seat brackets)	Operator (Name&sign): <i>[Signature]</i>	<i>LINDO</i> <i>[Signature]</i>
(C-rails, Luggage and earth bushes)	Operator (Name&sign): <i>[Signature]</i>	<i>LINDO</i> <i>[Signature]</i>
C (Seat brackets)	Operator (Name&sign): <i>[Signature]</i>	<i>MATSHUHO</i> <i>[Signature]</i>
(C-rails, Luggage and earth bushes)	Operator (Name&sign): <i>[Signature]</i>	<i>MATSHUHO</i> <i>[Signature]</i>
D (Seat brackets)	Operator (Name&sign): <i>[Signature]</i>	<i>MATSHUHO</i> <i>[Signature]</i>
(C-rails, Luggage and earth bushes)	Operator (Name&sign): <i>[Signature]</i>	<i>MATSHUHO</i> <i>[Signature]</i>

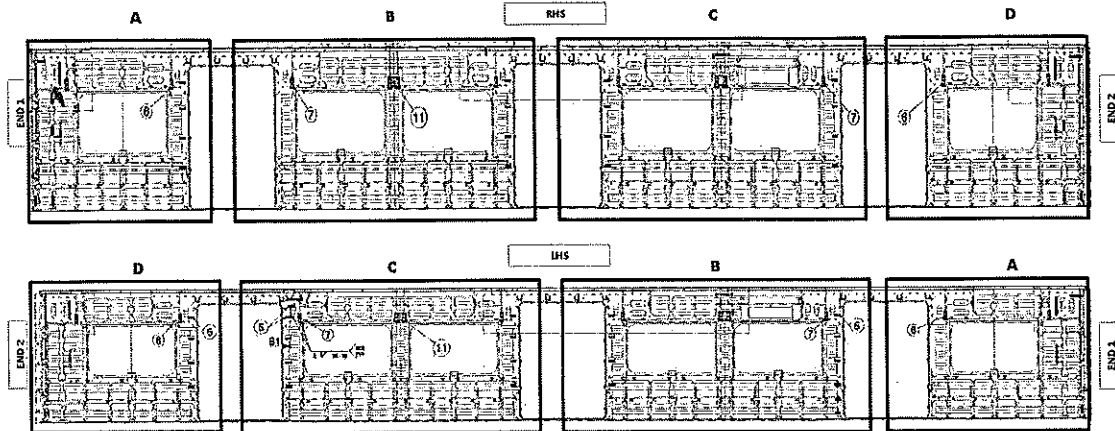
**ENDS**

END 1 TAPPING PADS WELDING: Operator (Name&sign): *[Signature]*

END 1 TAPPING PADS WELDING: Operator (Name&sign): *[Signature]*

	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev. 29	Project: PRASA  SI.CB2220.250.V29
		Date 28/10/2023	
		II - Self Inspection - Items to Check	

M1/M3/M4 BRACKET INSTALLATION



QUANTITIES (M3/M4)

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

ROOF ENDS:  
 C-RAILS 2 OFF EACH END  
 EARTH BUSH 6 OFF EACH END

VERIFICATION BY: Tetelo

LHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	2	✓	
	B	8	✓	
	C	11	✓	
	D	8	✓	
SEAT BRACKETS	A	13	✓	
	B	21	✓	
	C	21	✓	
	D	13	✓	
EARTH BUSH	A	3	✓	
	B	5	✓	
	C	6	✓	
	D	2	✓	

ROOF ENDS:  
 C-RAILS 2 OFF EACH END  
 EARTH BUSH 6 OFF EACH END

VERIFICATION BY: Tetelo

QUANTITIES (M1)

RHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	7		
	B	8		
	C	8		
	D	8		
SEAT BRACKETS	A	13		
	B	21		
	C	21		
	D	13		
EARTH BUSH	A	2		
	B	4		
	C	5		
	D	3		

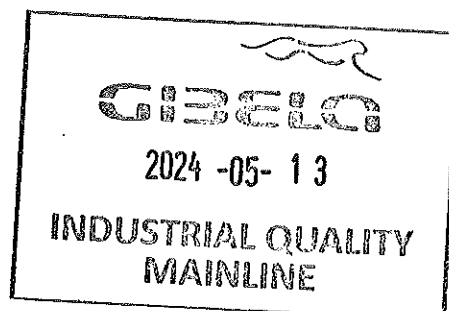
ROOF ENDS:  
 C-RAILS 2 OFF EACH END  
 EARTH BUSH 6 OFF EACH END


VERIFICATION BY: N/A

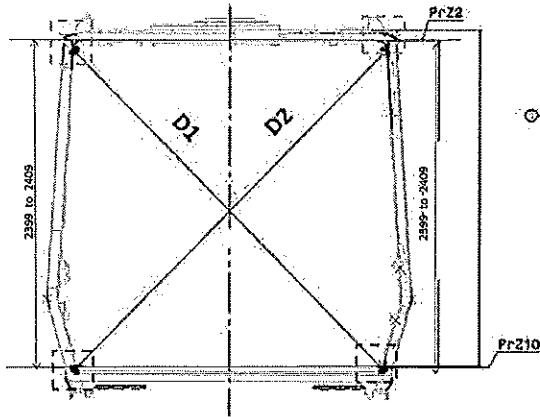
LHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	2		
	B	10		
	C	11		
	D	8		
SEAT BRACKETS	A	13		
	B	21		
	C	21		
	D	13		
EARTH BUSH	A	3		
	B	7		
	C	6		
	D	2		

ROOF ENDS:  
 C-RAILS 2 OFF EACH END  
 EARTH BUSH 6 OFF EACH END

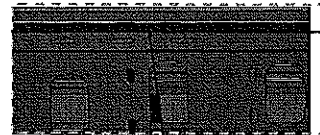
VERIFICATION BY: N/A



	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA
		29	
		Date	SI.CB2220.250.V29
		28/10/2023	
Specifications of Details for CBS measurement			



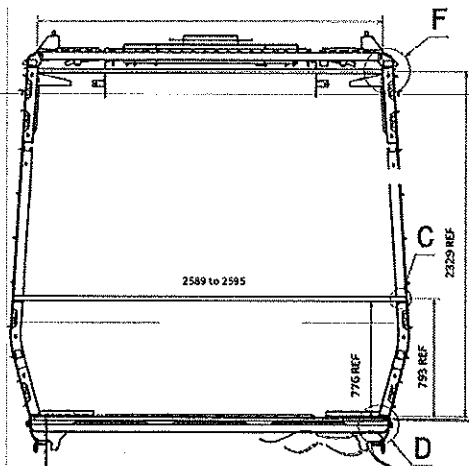
Measurement positions on roof and side wall corner



Reinforcement area measurement positions on roof reinforcement area



Measurement positions on side wall and side wall corner



GIBELQ

2024 -05- 13

INDUSTRIAL QUALITY  
MAINLINE



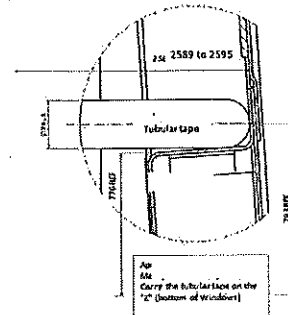
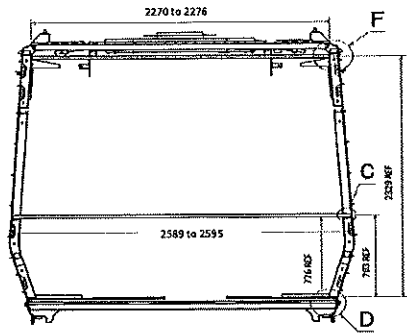


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

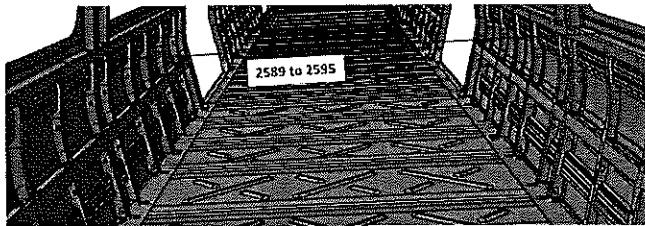
Rev.  
29  
Date  
28/10/2023

Project: PRASA  
SI.CB2220.250.V29

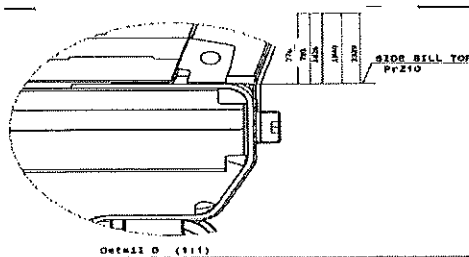
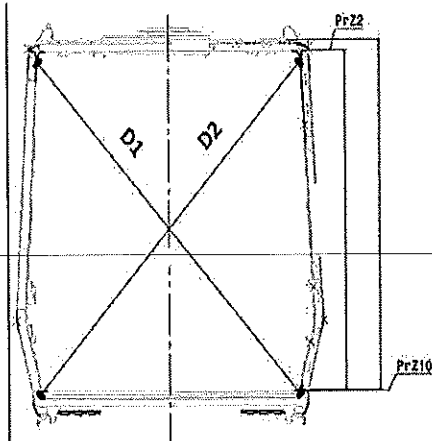
### CBS measurement



Detail C




Take measurement close to  
radius

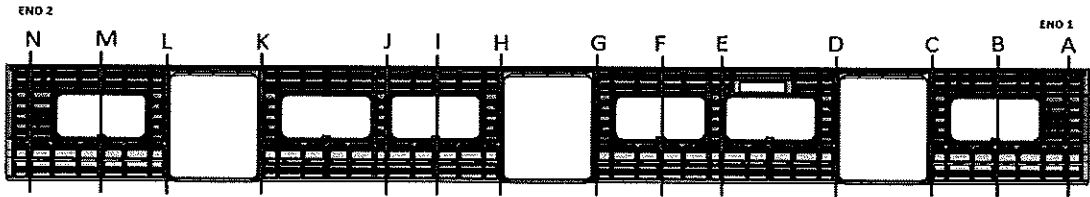


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2024 -05- 13

INDUSTRIAL QUALITY  
MAINLINE

	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA  SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	
CBS measurement			



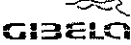
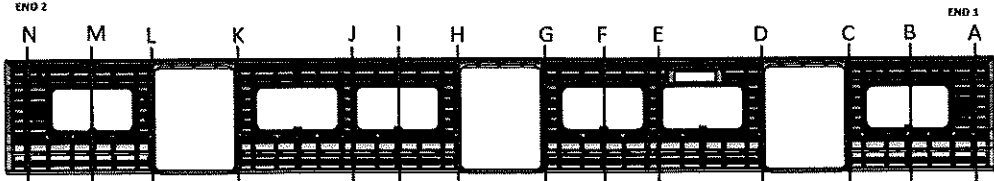
BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3299	3296	3	
B	3269	3267	2	
C	3297	3295	2	
D	3295	3297	2	
E	3265	3267	2	
F	3267	3269	2	
G	3299	3297	2	
H	3297	3295	2	
I	3265	3267	2	
J	3267	3268	1	
K	3297	3298	1	
L	3299	3298	1	
M	3265	3267	2	
N	3299	3300	1	

GIBELO

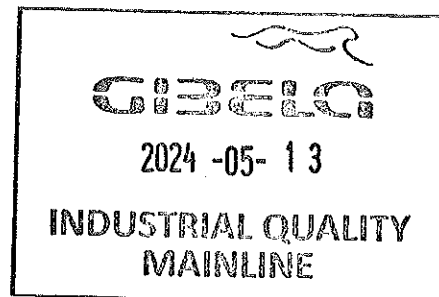
2024 -05- 13

INDUSTRIAL QUALITY  
MAINLINE

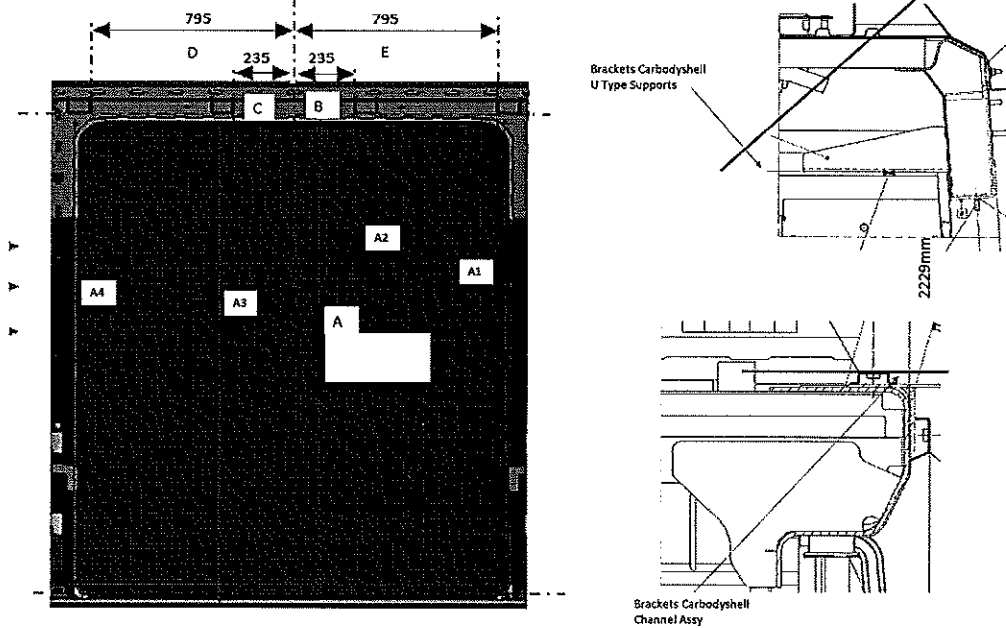
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA  SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	
CBS measurement			
			

**AFTER WELDING**

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3299	3297	2	2591
B	3265	3267	2	2590
C	3295	3297	2	2592
D	3297	3296	1	2593
E	3268	3268	0	2592
F	3267	3265	2	2591
G	3297	3299	2	2590
H	3300	3299	1	2589
I	3265	3267	2	2590
J	3268	3266	2	2591
K	3299	3298	1	2589
L	3297	3300	3	2590
M	3265	3267	2	2592
N	3299	3297	2	2591



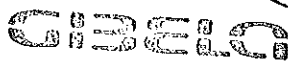
**Specifications of Details for CBS measurement CB1220**



DOOR 1 - LHS			DOOR 2 - LHS			DOOR 2 - LHS		
	VALUE	ACTUAL		VALUE	ACTUAL		VALUE	ACTUAL
A1	2230 to 2232	2231	A1	2230 to 2232	2231	A1	2230 to 2232	2231
A2	2230 to 2232	2230	A2	2230 to 2232	2230	A2	2230 to 2232	2230
A3	2230 to 2232	2232	A3	2230 to 2232	2230	A3	2230 to 2232	2232
A4	2230 to 2232	2231	A4	2230 to 2232	2232	A4	2230 to 2232	2231
B	234 to 236	235	B	234 to 236	234	B	234 to 236	234
C	234 to 236	235	C	234 to 236	234	C	234 to 236	234
D	794 to 796	795	D	794 to 796	795	D	794 to 796	794
E	794 to 796	795	E	794 to 796	795	E	794 to 796	795

DOOR 1 - RHS			DOOR 2 - RHS			DOOR 3 - RHS		
	VALUE	ACTUAL		VALUE	ACTUAL		VALUE	ACTUAL
A1	2230 to 2232	2231	A1	2230 to 2232	2231	A1	2230 to 2232	2231
A2	2230 to 2232	2230	A2	2230 to 2232	2230	A2	2230 to 2232	2230
A3	2230 to 2232	2230	A3	2230 to 2232	2232	A3	2230 to 2232	2230
A4	2230 to 2232	2231	A4	2230 to 2232	2231	A4	2230 to 2232	2231
B	234 to 236	235	B	234 to 236	235	B	234 to 236	235
C	234 to 236	235	C	234 to 236	235	C	234 to 236	236
D	794 to 796	794	D	794 to 796	795	D	794 to 796	795
E	794 to 796	795	E	794 to 796	794	E	794 to 796	794

  
2024 -05- 13  
INDUSTRIAL QUALITY  
WARRANTY



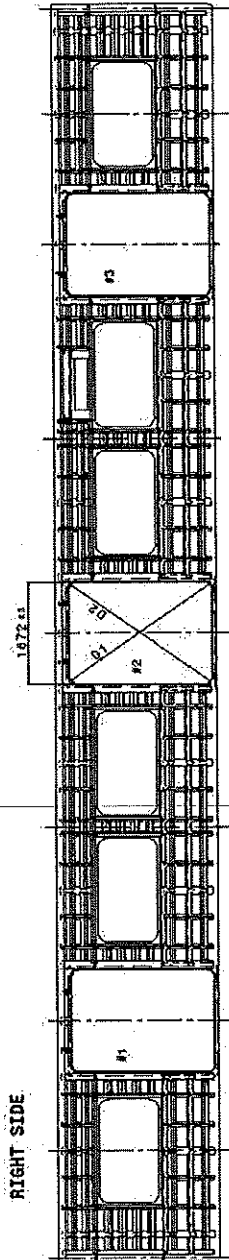
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

Rev.  
29  
Date  
28/10/2023

Project: PRA5A  
SI.CB2220.250.V29

Specifications of Details for CBS measurement CB1220

End #2



RIGHT SIDE

End #1

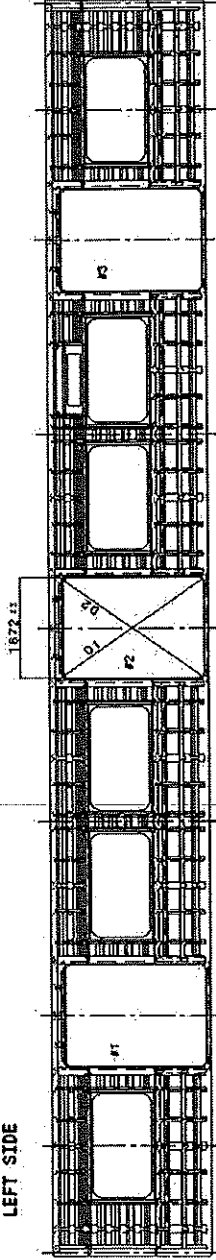
Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2753	2753	2753
D2	2753	2751	2752
D1-D2	1	2	2

	#1	#2	#3
HIGHER DIMENSION	1672	1673	1672
CENTRAL DIMENSION	1671	1671	1671
LOWER DIMENSION	1673	1670	1670

Doors length - 1672 ±3mm

End #1



LEFT SIDE

End #2

Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2753	2752	2754
D2	2751	2753	2751
D1-D2	1	1	3

	#1	#2	#3
HIGHER DIMENSION	1672	1673	1672
CENTRAL DIMENSION	1671	1671	1671
LOWER DIMENSION	1673	1670	1670




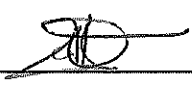
Doors length - 1672 ±3mm

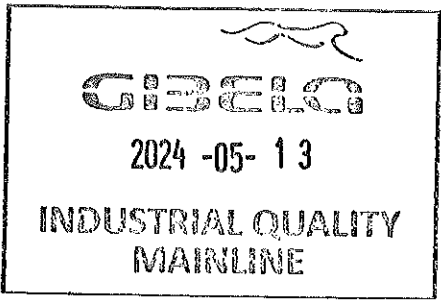



2024 -05- 13

INDUSTRIAL QUALITY  
MAINLINE

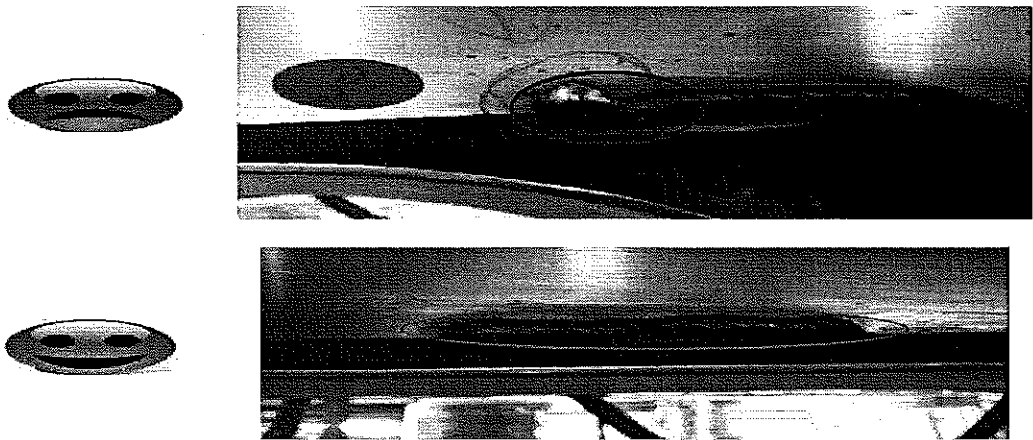


	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR302254872		Rev.	<b>Project: PRA5A</b>  <b>SI.CB2220.250.V29</b>		
			29			
			Date			
			28/10/2023			
<b>Self Inspection - Final Result</b>						
<b>Is the car good to advance to the next workstation/process?</b> (Approval of Operations Manager and Industrial Quality)			DATE	NAME	SIGNATURE	
<b>HOLD POINT</b>		GO <small>(if activities are not complete, the missing activities must not impact the next stage)</small>	14/05/24	Tetelo Operations		
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.	14/05/24	Amo Industrial Quality		
		There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below)			Operations	
		There are non-conformities impact the quality of the product and there is no corrective action defined yet			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			

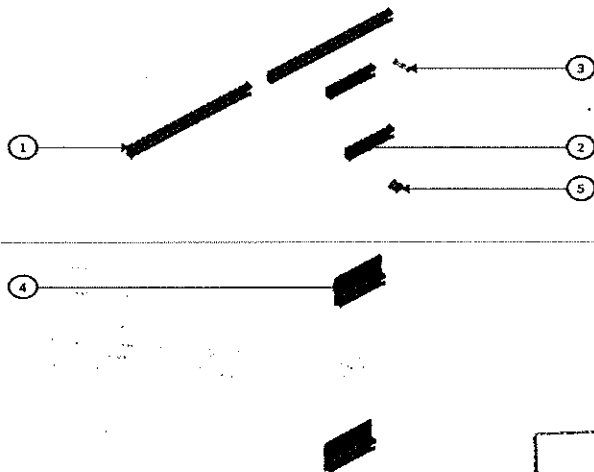


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA  SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	

ANNEXURE A: Arc Welding Quality Acceptance Standard



Station: CB1220-004- U108 & U107



PART NO.	ITEM NO.	QTY	DESCRIPTION	MASS [kg]
DTN0020074088	5	6	EARTH STUD 6	0.036
AA00001201648	4	6	ASSEMBLY SUPPORT	0.271
DTN0000348305	3	12	WELDING STUD ISO13918 PT-A18X20-SS1	0.037
AA00001180424	2	12	ASSEMBLY SUPPORT	0.193
AA00001184418	1	14	ASSEMBLY SUPPORT	0.522
AA00001161000	101	6	CARBODYSHELL BRACKETS CARBODYSHELL M1/M3/M4 CAN/IDE FRAME MODULE END - 0991	12.182





GIBELA

PRASA PROJECT


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 ? 
				TC1	M4	M1	M2	M3	TC2			
<input type="checkbox"/>	DTR1000152659	AAD0001278566	CARBODYSHELL M1,M3,M4 ASSEMBLY	CB1230			X				PRA.CB1230.DT000002 25487.V20	YES
<input type="checkbox"/>	DTR1000152673	AAD0001278566	CARBODYSHELL M1,M3,M4 ASSEMBLY	CB1230		X			X		PRA.CB1230.DT000002 25487.V20	YES
<input type="checkbox"/>												
	DATE	MODIFICATION CONTENT						RESPONSIBLE		NAME	DATE	
0	2018/08/02	GIBELA NEW CREATION						APPROVER		Philipe 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		Itumeleng Modiba	30/5/2018	
								CHECKER		Nosizo Pindela	30/5/2018	
								REVISED BY		Nosizo Pindela	30/5/2018	
2	2018/05/07	Certain dimensional checks moved to CB1220						APPROVER		Itumeleng Modiba	2018/05/07	
								CHECKER		Nosizo Pindela	2018/05/07	
								REVISED BY		Ramokone Motama	2018/05/07	
5	24/01/2019	As per Baseline 10.2						APPROVER		Itumeleng Modiba	24/01/2019	
								CHECKER		Nosizo Pindela	24/01/2019	
								REVISED BY		Vanessa Ntuli	24/01/2019	
6	13/03/2019	Added Twist and Door Bracket Measurements Remove Door Measurements						APPROVER		Itumeleng 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		Itumeleng Modiba	23/08/2019	
								CHECKER		Nosizo Pindela	23/08/2019	
								REVISED BY		Nosizo Pindela	23/08/2019	
	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		
25	20/02/2022	New Baseline change 10.3.1						APPROVER		Collins Mbhombhi	20/02/2022	
								CHECKER		Andani Muthelo	20/02/2022	
								REVISED BY		Andani Muthelo		
26	14/06/2022	Update minimum temperature requirement for sealant application						APPROVER		Collins Mbhombhi	14/06/2022	
								CHECKER		Andani Muthelo	14/06/2022	
								REVISED BY		Andani Muthelo		
27	19/10/2022	Addition of traceability for sealant application						APPROVER		Collins Mbhombhi	19/10/2022	
								CHECKER		Ntokozo Zwane	19/10/2022	
								REVISED BY		Amogelang Mohlampe		
28	14/04/2023	Added sealant batch number & welding consumables traceability						APPROVER		Vanessa Ntuli	14/04/2023	
								CHECKER		Ntokozo Zwane	14/04/2023	
								REVISED BY		Amogelang Mohlampe		
29	06/11/2023	Added thresholds traceability for boiler makers and welders						APPROVER		Tyson Ngobeni	06/11/2023	
								CHECKER		Andani Muthelo	06/11/2023	
								REVISED BY		Ntokozo Zwane		
TRAINSET	CAR	OPERATOR NAME & ALPS NO		DATE		SELF INSPECTION NUMBER		PAGES				
227	M4	Zanele 482774		15/06/24		SI.CB1230.256.V28		11				

GIBELA

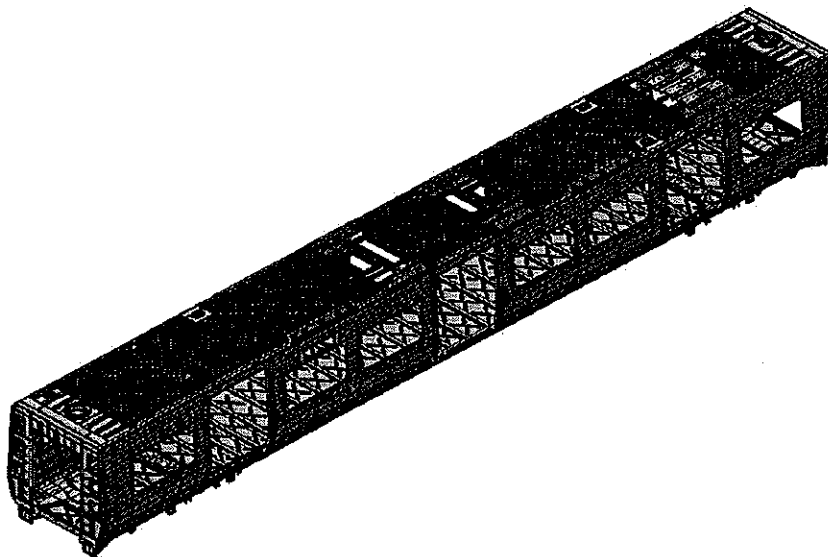
2024-05-13

INDUSTRIAL QUALITY  
MAINLINE

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DT00000225487	Rev. 29	<b>Project: PRASA</b>  <b>SI.CB1230.256.V28</b>
		Date	
		06/11/2023	
Car:	NCR:	Work station: CB1230	



Safety Related



### I - Documentation and Instruments Control

#### I.1 - Documentation Control

Document	Type of car					Revision	Obsevation	OK		Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4	TC2						
PRA.CB1230.DT00000225487						29		y		N/A	15/05/24

#### 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)
Tubular	22713	26/06/24	X		15/05/24	15/05/24
Large measurement	01B0194	25/04/20	X		15/05/24	15/05/24
Combination square	01B0072	27/07/24	X		15/05/24	15/05/24

#### 1.3 Consumables

##### Welding Consumable Control - Used for Special Process

Filler Material	Heat Number	Welding Process	OK		Signature/Date (Manufacturing)	Signature/Date (Quality)
308LSi	310130	mig	X		15/05/24	15/05/24

GIBEL

2024-05-13

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CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.

29

Date

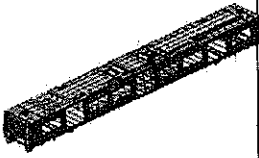
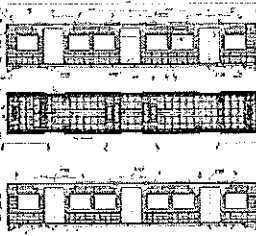
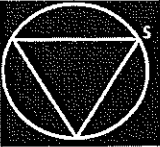
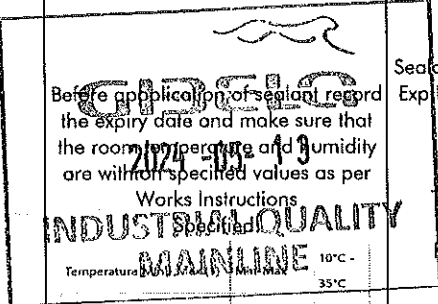
06/11/2023

Project: PRASA

SI.CB1230.256.V28

## 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	X		15/05/24	15/05/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	X		15/05/24	15/05/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	X		15/05/24	15/05/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	X		15/05/24	15/05/24
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	X		15/05/24	15/05/24
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 DTD0000210658.	X		15/05/24	15/05/24
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  Temperature: 10°C - 35°C Relative humidity Min - Max (1) 25% - 80%	Sealant Batch No: 15K70-03 Exp Date: 10/06/24 Actuals Temperature: 20°C Humidity: 49%	X		15/05/24	15/05/24
08	N/A	Verification of sealant application in regions of roof and sideframe.	Sealant applied in regions of roof and sideframe.			15/05/24	15/05/24



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
29

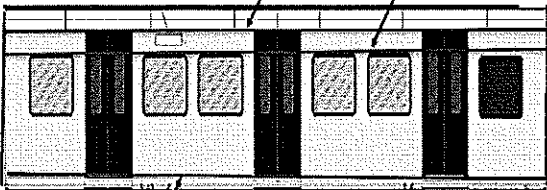
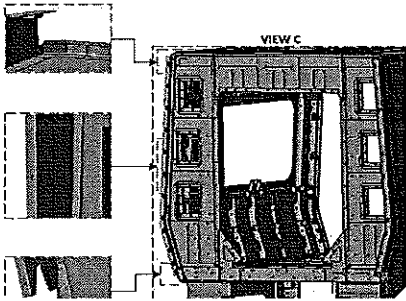
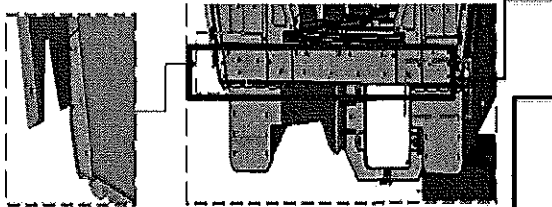
Date

06/11/2023

Project: PRASA

SI.CB1230.256.V28

AREA 1



### END 2 SEALANT

OPERATOR  
(Name & sign):

LEROY

OPERATOR  
(Name & sign):

LEROY

OPERATOR  
(Name & sign):

LEROY

Area D,E,F,G,H,I

Operator (Name & sign) :

LHS

D,E,F,G,H,I

RHS

D,E,F,G,H,I

Operator (Name & sign) :

Sihle

Sihle

Operator (Name & sign) :

Operator (Name & sign) :

Ishenolo

Ishenolo

Operator (Name & sign) :

Operator (Name & sign) :

GIBELCO

2024 -05- 13

INDUSTRIAL QUALITY  
MAINLINE



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
29

Project: PRASA

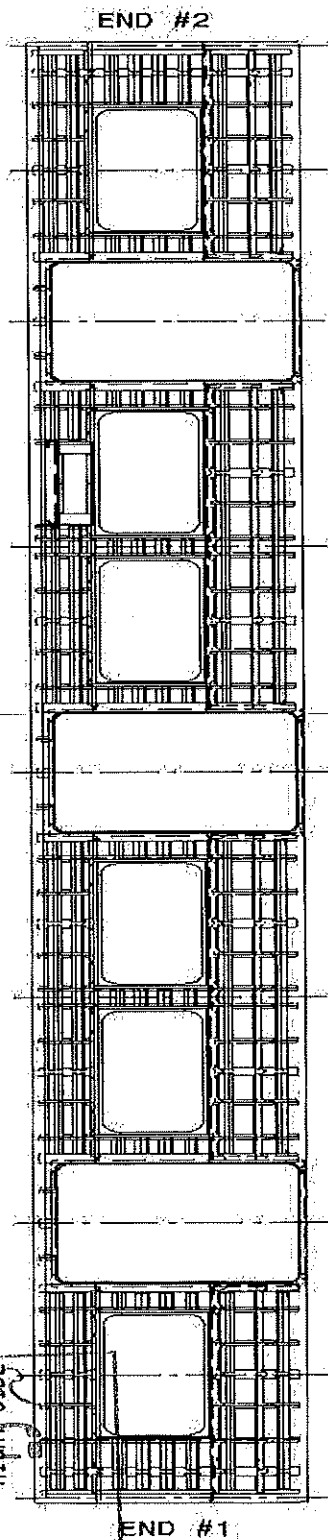
Date

06/11/2023

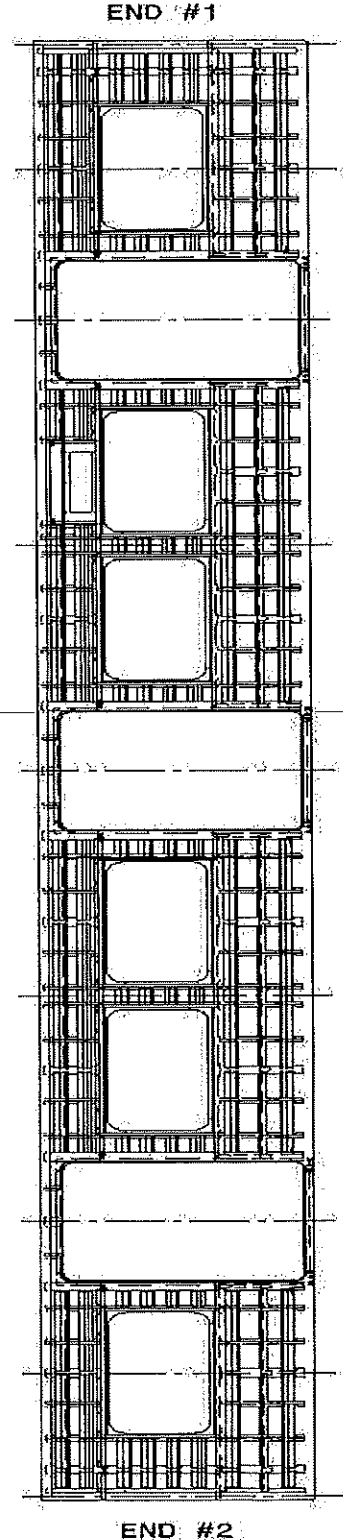
SI.CB1230.256.V28

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 1.4



MAXIMUM 1.5  
MINIMUM 1.1

LEFT SIDE

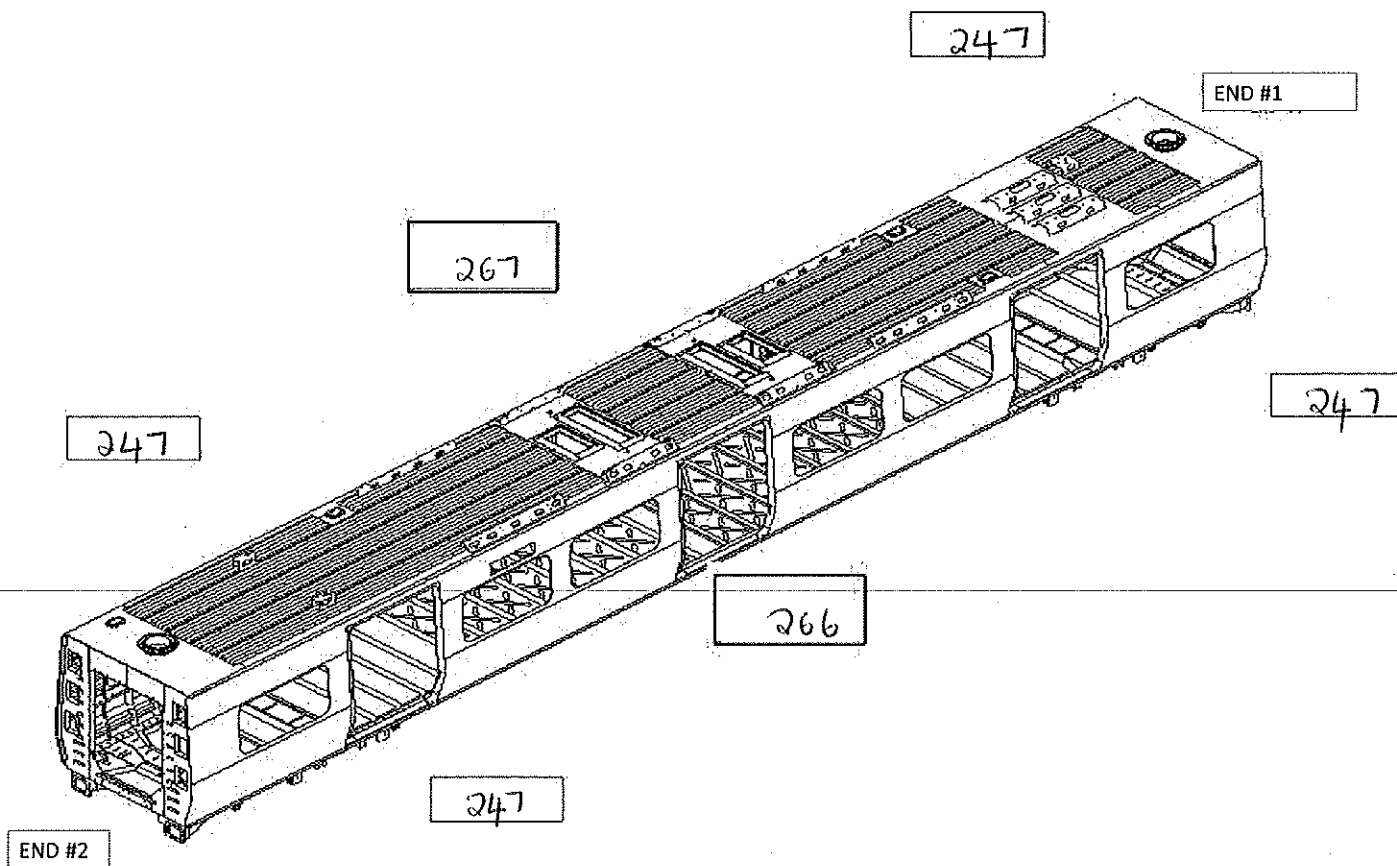
GIBEL

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Specifications of Details for CBS measurement CB1230

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



MEASURED CAMBER VALUES

RIGHT	<sup>1</sup>	19
LEFT	<sup>a1</sup>	20



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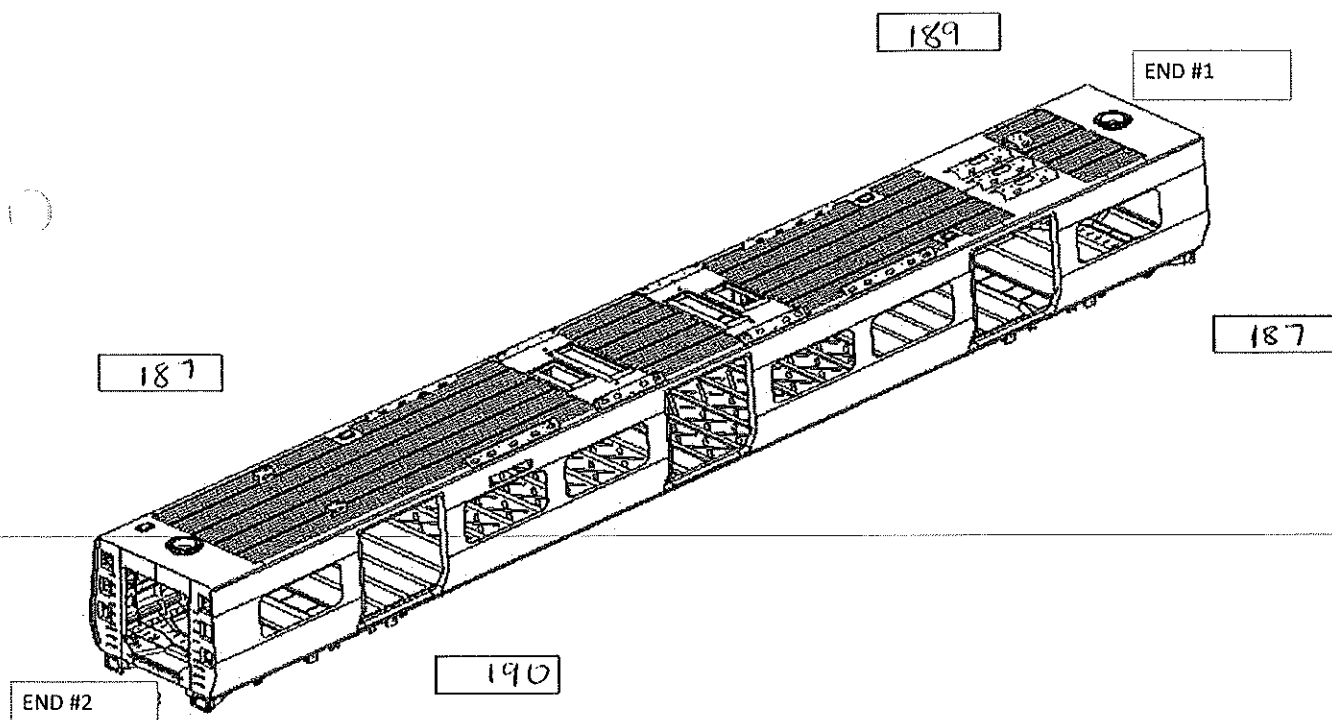
Date

06/11/2023

SI.CB1230.256.V28

### Specifications of Details for CBS 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.



TWIST FOUND ON END 1

TRANVERS

2

LONGITUDIN

3

TWIST FOUND ON END 2

TRANVERSE

3

LONGITUDINAL

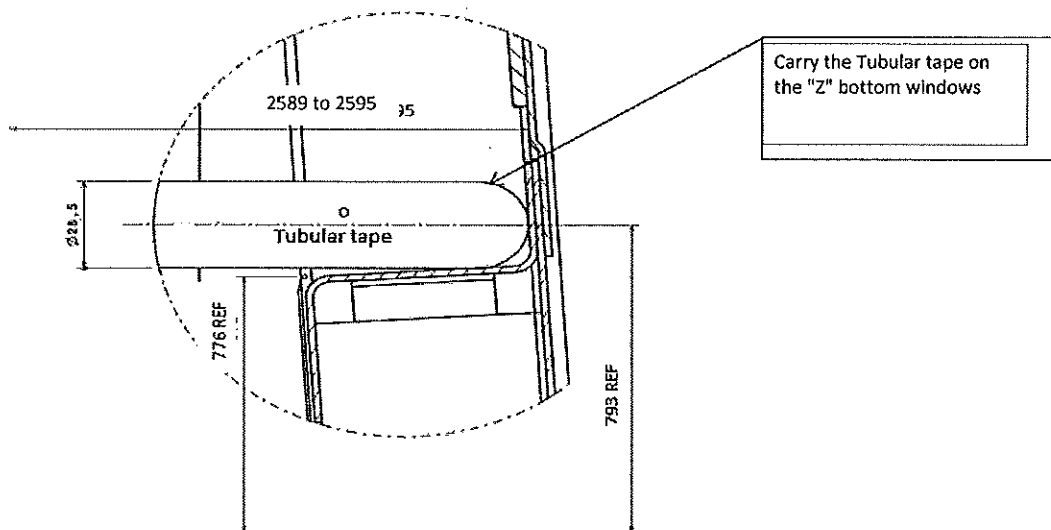
2



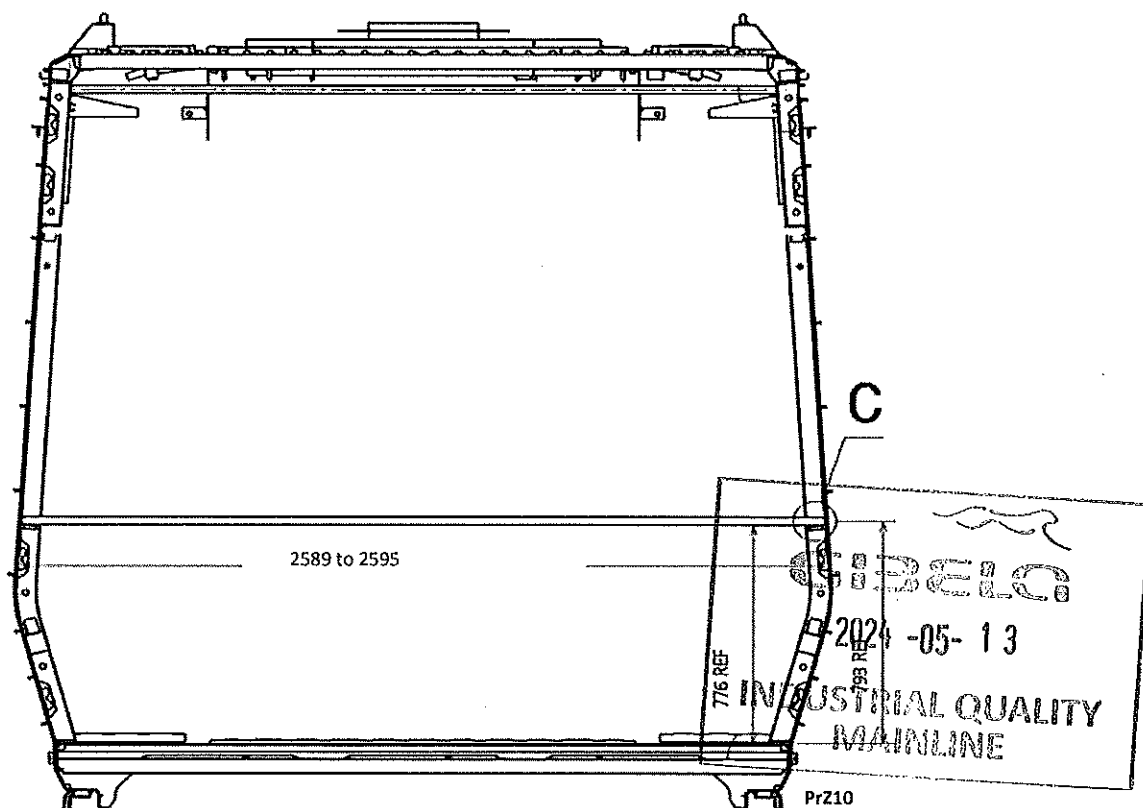
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Specifications of Details for CBS measurement CB1230



Detail C







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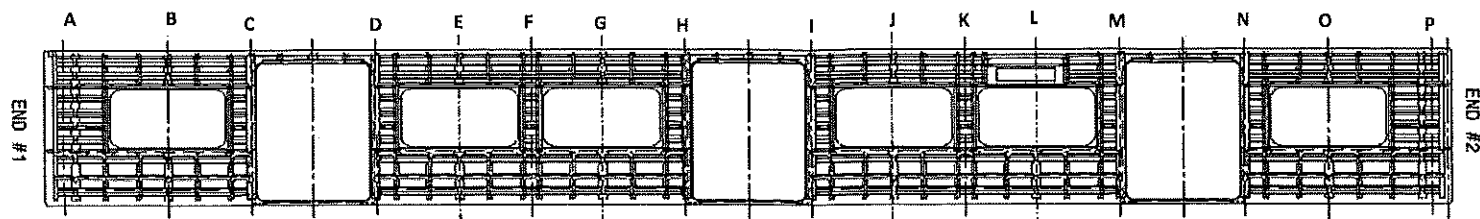
Rev.  
29

Project: PRASA

Date  
06/11/2023

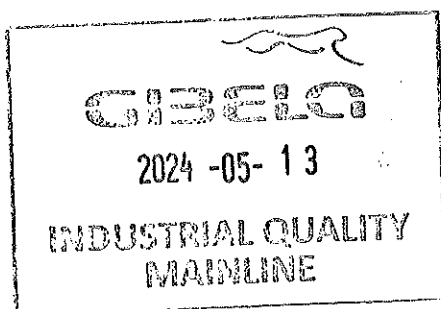
SI.CB1230.256.V28

Specifications of Details for CBS measurement CB1230



2589 to 2595mm

A	2593
B	2591
C	2592
D	2593
E	2594
F	2595
G	2594
H	2595
I	2595
J	2592
K	2595
L	2594
M	2593
N	2592
O	2591
P	2593



Threshold verification

Nominal value :38

Door 1

Door 2

Door 3

Door 4

Door 5

Door 6

BOILER MAKER:

Zanele

Welder:

Zanele

Dye penetrant test

Dye-penetration test to be performed by quality personnel

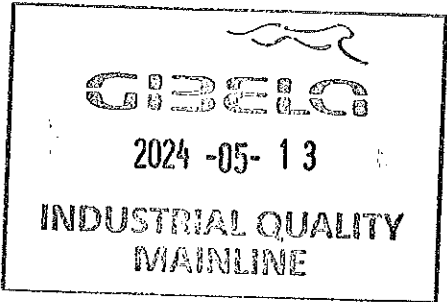


Specifications of Details for CBS measurement

Item	Description of the issue	OK	Signature/Date (Operations)	Signature/Date (Quality)

II.2 - Check List REX

Check List Items							
Item	Picture/Drawing	Description	Criteria /Record	OK		Signature/Date (Operations)	Signature/Date (Quality)
01	N/A	To complete REX	Refer to REX. New defects must be added on the REX				





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Date

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### Self Inspection - Final Result

Is the car good to advance to the next workstation/process? (Approval of Operations and Industrial Quality)			DATE	NAME	SIGNATURE
HOLD POINT	GO	(If activities are not complete, the missing activities must not impact the next stage)	15/05/24	Zanele Mbanga Operations	
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	15/05/24	AMOGELANG Industrial Quality	
		There are activities pendings that impact/stop the activities of the next process Obs: (To describe problems below)		Operations	
		There are non-conformities impact the quality of the product and there is no corrective action defined yet)		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":

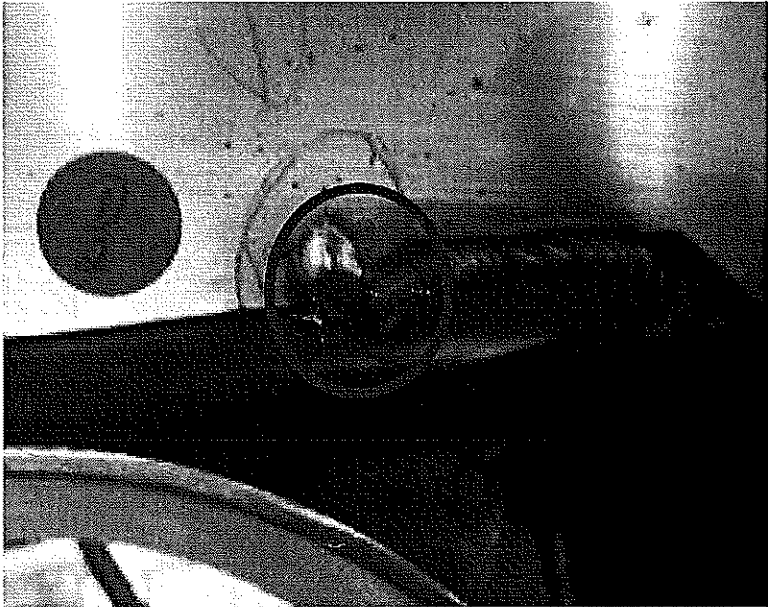
Item	Description	Responsible	Due date	Status

Operations

Quality



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



  
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