

**GIBELA**

**PRASA PROJECT**


APPLICABLE FROM TRAINSET 100+ 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 ? 
				YC1	M4	M1	M2	M3	YC2		
<input type="checkbox"/> DTR30225407/3	AAD0001270566	CARBODYSHELL M1 ASSEMBLY	CB1210			(X)				PRA.CB1210.DTR30225407/3.V25	YES
<input type="checkbox"/>											

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 CB1210	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	
27	27/07/2023	Added verification of loaded parts	APPROVER	Ngobeni Tyson	27/07/2023
			CHECKER	Zwane Ntokozo	
			REVISED BY	Mohlampe Amogelang	
28	07/11/2023	Addition of welding traceability	APPROVER	Ngobeni Tyson	07/11/2023
			CHECKER	Andani Muthelo	
			REVISED BY	Ntokozo Zwane	
TRAINSET	CAR	OPERATOR NAME& ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES
224	M1	WUGA471497	22/04/24	SI.CB1210.254.V28	17

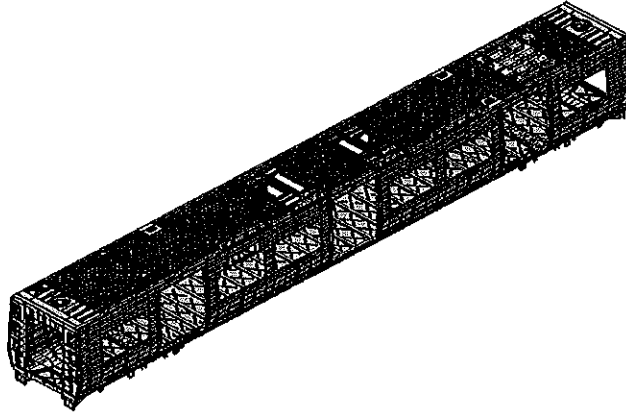
2024-05-17  
INDUSTRIAL QUALITY  
MANUAL

	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB1210.254.V28
		Date 07/11/2023	

Car: M1	NCR:	Work station: CB1210
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Safety Related



## I - Documentation and Instruments Control

### I.1 - Documentation Control

Document	Type of car						Revision	Observation	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
	P	D	M	L	X	P						
QTR30225487/3		X							✓		10/10	22/04/24

### I.2 - Instruments Control













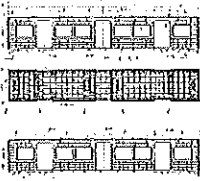





#### Monitoring and Measuring Instrument Control - Used for Special Process


Instruments	Serial number	Calibration or Verification Validation Date	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
TUBULAR	32823-2	15/03/24	✓		10/10 22/04/24	22/04/24
SOMTAPK	GIBTP0084	14/03/24	✓		10/10 22/04/24	22/04/24
LASER TAPE	125425924	08/01/24	✓		10/10 22/04/24	22/04/24

### 1.3 Consumables

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

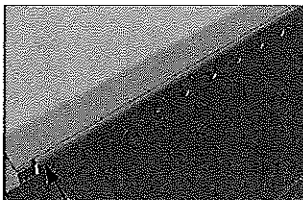
Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
AUTROD 308 LSI	E221880	MIG	✓		10/10 22/04/24	22/04/24
E.R 309 LSI	318594	MIG	✓		10/10 22/04/24	22/04/24

		<b>CARBODYSHELL M1 ASSEMBLY DTR30225487/3</b>		Rev. 28 Date 07/11/2023	<b>Project: PRA3A</b> <b>SI.CB1210.254.V28</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	Verification of correct parts loaded (Sidewalls, Endframes, Roof and Underframe)	DT00000311225	✓		 22/04/24	 22/04/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓		 22/04/24	 22/04/24
03	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 e DTD0000210675	✓		 22/04/24	 22/04/24
04	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		 22/04/24	 22/04/24
05		Cleaning of oil Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		 22/04/24	 22/04/24
06		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document	Approved according specified on pages below.	✓		 22/04/24	 22/04/24
07	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.	✓		 22/04/24	 22/04/24

	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB1210.254.V28
		Date 07/11/2023	

Welder Traceability

Roof ring welds



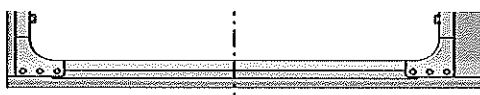
<u>LHS</u>	
Boiler maker (Name & Sign): <u>Lunga [Signature]</u>	Welder (Name & Sign): <u>Mthokozisi [Signature]</u>
<u>RHS</u>	
Boiler maker (Name & Sign): <u>LAURENCE [Signature]</u>	Welder (Name & Sign): <u>Keitumetsi [Signature]</u>

END 1

<u>LHS</u>	
Boiler maker (Name & Sign): <u>Lunga [Signature]</u>	Welder (Name & Sign): <u>Mthokozisi [Signature]</u>
<u>RHS</u>	
Boiler maker (Name & Sign): <u>LAURENCE [Signature]</u>	Welder (Name & Sign): <u>Keitumetsi [Signature]</u>

END 2

Door ring welds

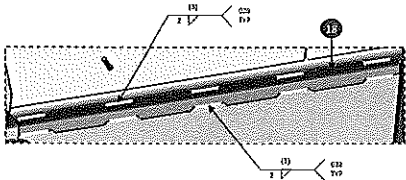
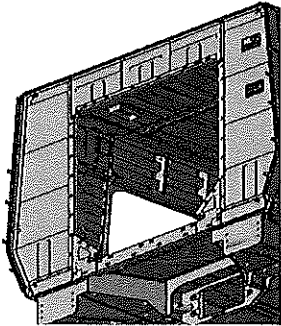


<u>LHS</u>	
Boiler maker (Name & Sign): <u>Tim [Signature]</u>	
Welder (Name & Sign): <u>BURRER, Buba</u>	

<u>RHS</u>	
Boiler maker (Name & Sign): <u>Lunga [Signature]</u>	
Welder (Name & Sign): <u>BURRER, Buba</u>	

	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB1210.254.V28
		Date 07/11/2023	

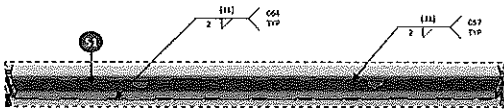
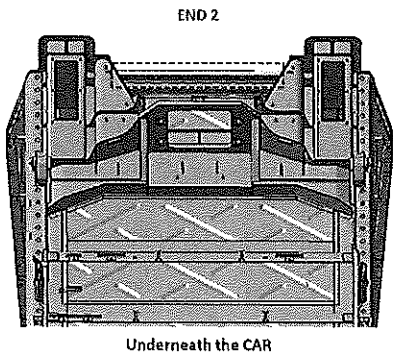
EUF Reinforcement Plates



END 1

Boiler maker (Name & Sign):

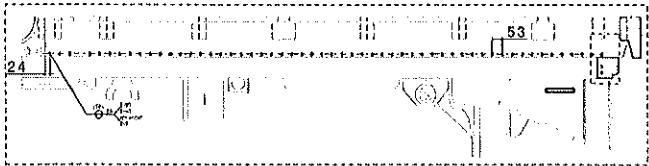
Welder (Name & Sign):



END 2

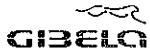
Boiler maker (Name & Sign):

Welder (Name & Sign):



FEDOLI

OPERATOR:



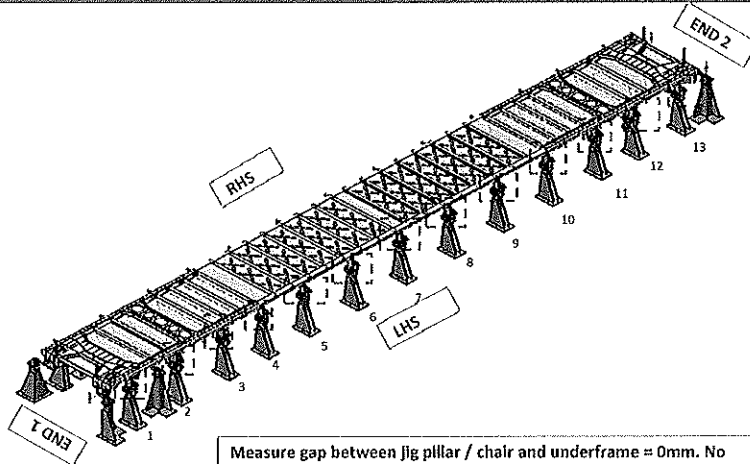
CARBODYSHELL M1 ASSEMBLY DTR30225487/3

Rev.  
28

Date  
07/11/2023

Project: PRASA  
SI.CB1210.254.V28

### Specifications of Details for CBS measurement



After loading and clamping

Fill in the gap found on 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right Hand Side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature Operations:

Date:

After Welding.

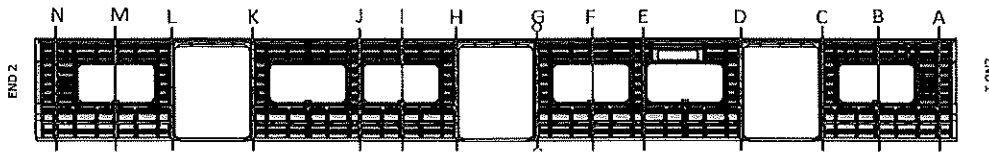
Fill in the gap found on each jig pillars / chair and underframe should be 0mm.

	1	2	3	4	5	6	7	8	9	10	11	12	13
Left Hand Side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Right Hand Side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

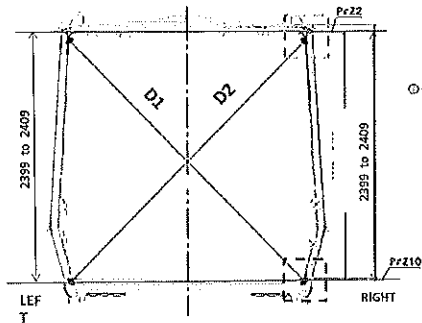
Signature Industrial Quality:

Date:

**Specifications of Details for CBS measurement**



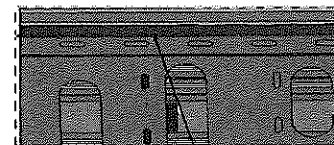
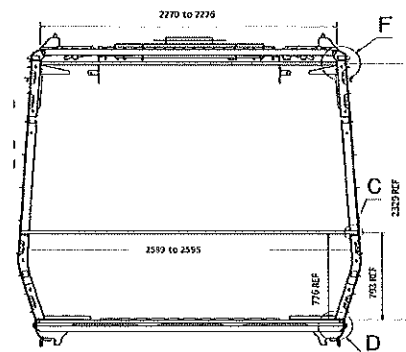
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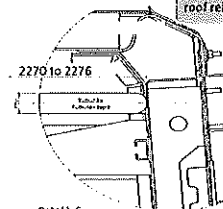
Measurement positions on roof rail and sidewall omega corner



Measurement positions on sidewall and side sill corner

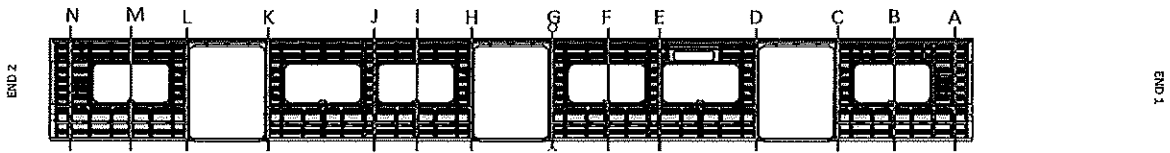


Reinforcement area measurement positions on roof reinforcement area



Detail F  
Don't considering the reinforcement

### Specifications of Details for CBS measurement



PME Column LHS - RHS should be  $\leq 2\text{MM}$  on each point.

## BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 $\leq 5$ mm	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS $\leq 2$
A	5269	5269	0	2408	2407	1
B	5266	5268	2	2406	2406	0
C	5268	5268	0	2405	2406	1
D	5269	5267	2	2406	2407	2
E	5266	5266	0	2405	2405	0
F	5266	5264	2	2407	2406	1
G	5268	5267	1	2405	2404	1
H	5269	5269	0	2406	2406	0
I	5264	5265	1	2405	2407	2
J	5266	5266	0	2406	2405	1
K	5268	5269	1	2404	2406	2
L	5269	5267	2	2406	2405	1
M	5266	5267	1	2407	2406	1
N	5268	5268	0	2408	2408	0

22/04/22



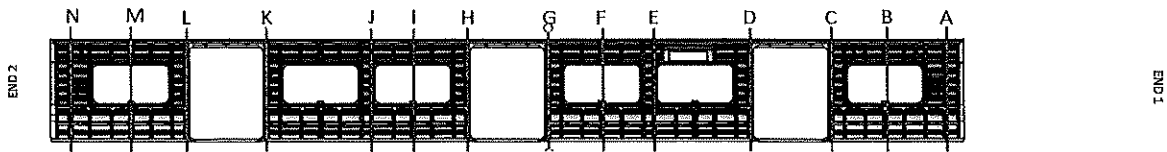


CARBODYSHELL M1 ASSEMBLY DTR30226487/3

Rev.  
28  
Date  
07/11/2023

Project: PRASA  
SI.CB1210.254.V28

Specifications of Details for CBS measurement



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

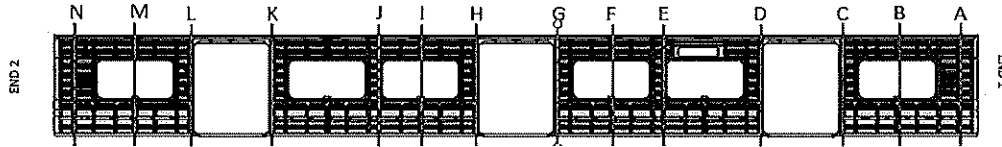
AFTER WELDING

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

NO/0  
22/04/24

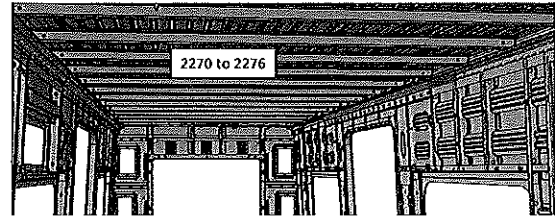
CBS measurement

BEFORE WELDING

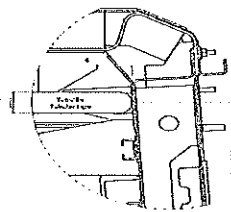
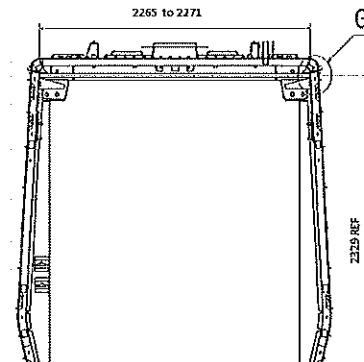


	2270 to 2276
A	2271
B	2274
C	2272
D	2274
E	2278
F	2276
G	2275
H	2271
I	2275
J	2271
K	2272
L	2270
M	2274
N	2271

1990 to



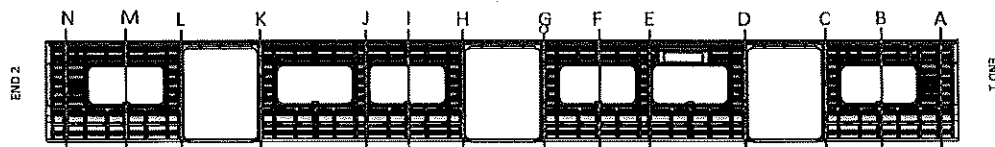
Do not consider reinforcement ( Take measurements top area of zee profile



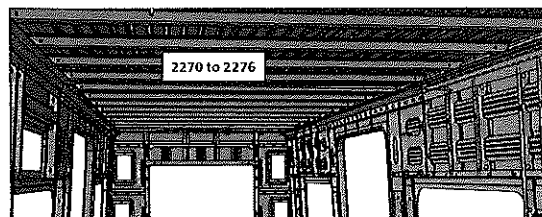
Detail G  
Consider reinforcement in measurement plate

10/10  
22/08/24

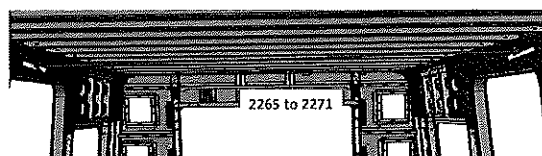
AFTER WELDING



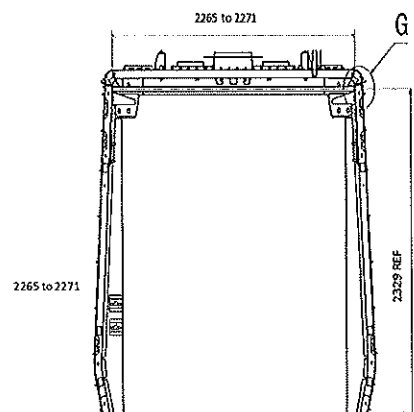
	2265 to 2271	2270 to 2276
A	2268	N/A
B	N/A	2274
C	2265	N/A
D	2266	N/A
E	N/A	2276
F	N/A	2276
G	2269	N/A
H	2266	N/A
I	N/A	2274
J	N/A	2276
K	2271	N/A
L	2268	N/A
M	N/A	2273
N	2268	N/A



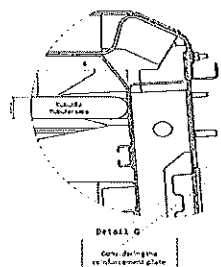
Do not consider reinforcement (Take measurements top area of zee profile)



Take measurement close to radius (considering reinforcement)



2265 to 2271



22/sep/23



CARBODYSHELL M1 ASSEMBLY DTR30225487/3

Rev.

28

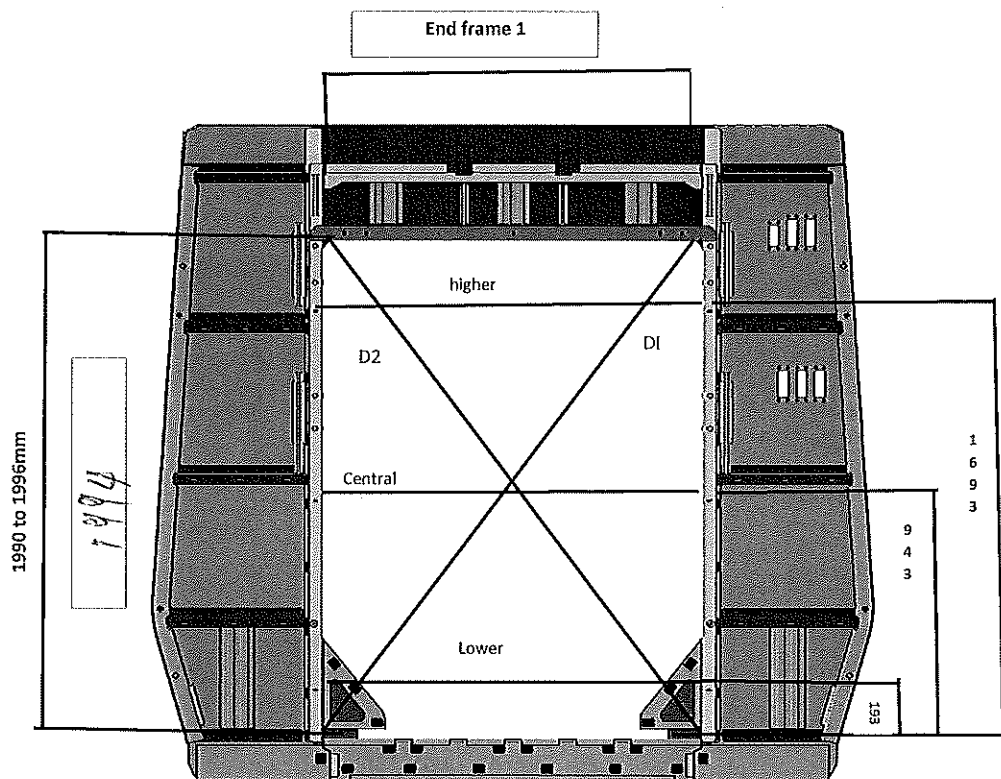
Date

07/11/2023

Project: PRA5A

SI.CB1210.254.V28

Specifications of Details (for CBS measurement)



1380 to 1382 mm

DIAGONAL DIFFERENCE  $D1-D2 \leq 3\text{mm}$

Higher Dimension

1382

D1

2414

Central Dimension

1381

D2

2414

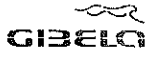
Lower Dimension

1381

D1-D2

0

22/04/24



CARBODYSHELL M1 ASSEMBLY DTR30226487/3

Rev.

28

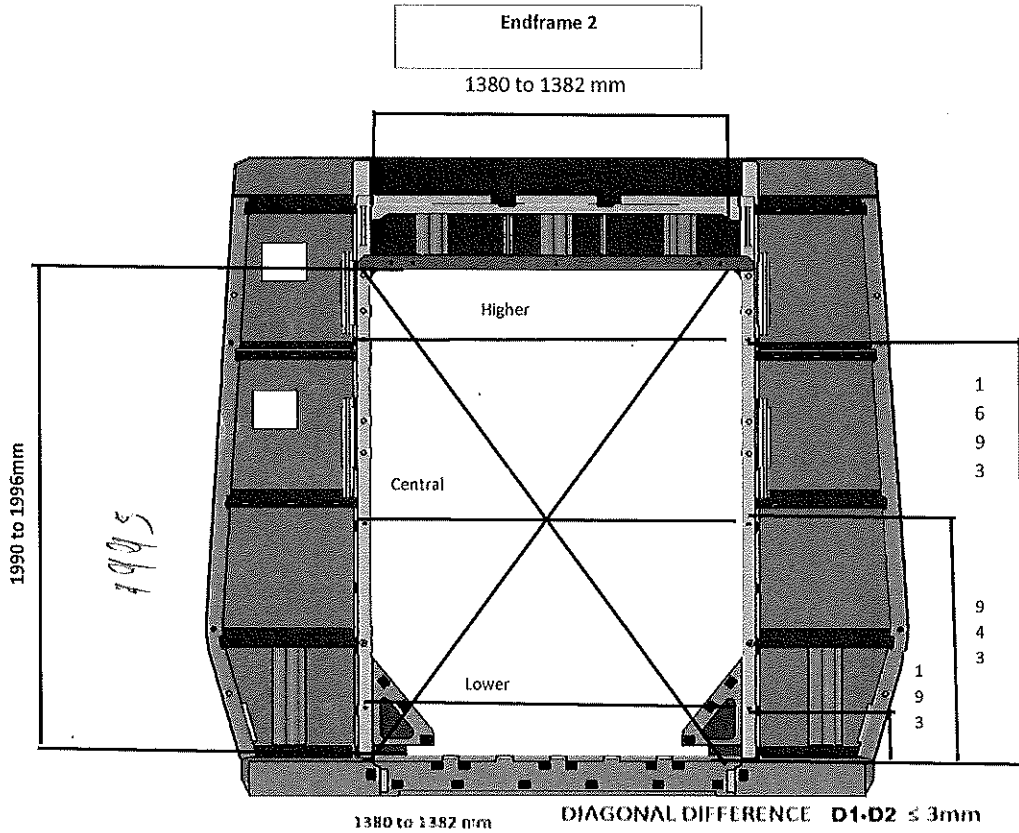
Date

07/11/2023

Project: PRASA

SI.CB1210.254.V28

Specifications of Details for CBS measurement



Higher Dimension

1381

D1

2414

Central Dimension

1381

D2

2413

Lower Dimension

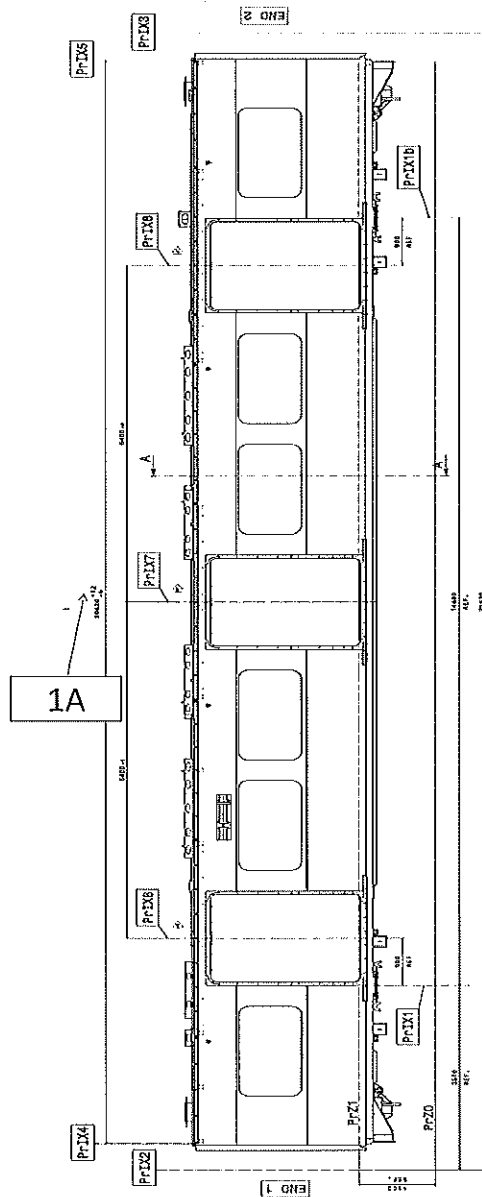
1380

D1-D2

1

24/04/2023

### Specifications of Details for CBS measurement



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


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

### Dye penetrant test

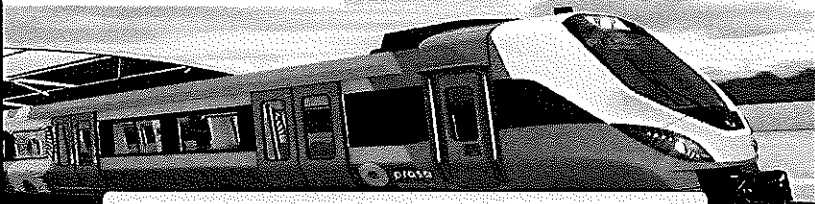
### Dye-penetration test to be performed by quality personnel






		CARBODYSHELL M1 ASSEMBLY DTR30225487/3		Rev. 28 Date 07/11/2023	Project: PRA5A SI.CB1210.254.V28	
Self Inspection - Final Result						
			DATE	NAME	SIGNATURE	
HOLD POINT	GO	(If activities are not complete, the missing activities must not impact the next stage)	22/04/24	hinga	[Signature]	
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	22/04/24	Andani	[Signature]	
	NO GO	There are activities pending that impact/stop the activities of the next process Obs: (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			9



GIBELA		PRASA PROJECT									
											
APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1 <b>SELF INSPECTION SHEET</b>											
<b>CONFIDENTIAL INFORMATION</b> 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	MS	MT	MD	TG		
<input type="checkbox"/>	DTR30225497/2	AID0001278556	CARBODYSHELL HL,MS,MT ASSEMBLY	CB1220		X	X		X	PRA.CB1220.DTR30225497/2.V21	YES
<input type="checkbox"/>											
<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					
				COMPILER	Thanyani Mathegu	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	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 Remove		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	Timothy Maimela						
				CHECKER	Bongane Masina	19/04/2021					
				REVISED BY	Bongane Masina						
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING		APPROVER	Mbhombhi Collins						
				CHECKER	Mpho Mulaudzi	17/08/2021					
				REVISED BY	Mpho Mulaudzi						
25	20/02/2022	New Baseline change 10.3.1		APPROVER	Mbhombhi Collins						
				CHECKER	Andani Muthelo	19/02/2022					
				REVISED BY	Andani Muthelo						
26	14/06/2022	Update minimum temperature requirement for sealant application		APPROVER	Mbhombhi Collins						
				CHECKER	Andani Muthelo	14/06/2022					
				REVISED BY	Andani Muthelo						
27	17/10/2022	Addition of traceability for sealant application and welding		APPROVER	Mbhombhi Collins						
				CHECKER	Nitoko Zwane	17/10/2022					
				REVISED BY	Amogelang Mohlampe						
28	14/04/2023	Added sealant batch number & welding consumables traceability		APPROVER	Vanessa Ntuli						
				CHECKER	Nitoko Zwane	14/04/2023					
				REVISED BY	Amogelang Mohlampe						
29	28/10/2023	Addition of bracket quantity		APPROVER	Ngobeni Tyson						
				CHECKER	Nitoko Zwane	28/10/2023					
				REVISED BY	Amogelang Mohlampe						
TRAINSET	CAR	OPERATOR NAME & ALPS NO		DATE	SELF INSPECTION NUMBER		PAGES				
224	Mo1	Tetelo		23/04/24	SI.CB1220.250.V29		14				

  
 2024-04-22  
 INDUSTRIAL QUALITY  
 MAINLINE

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30225487/2		Rev. 29	<b>Project: PRASA</b>  <b>SI.CB1220.250.V29</b>	
			Date 28/10/2023		
Car: M1,M3&M4		NCR:	Work station:		CB1220

Safety Related

**I - Documentation and Instruments Control**

**1.1 - Documentation Control**

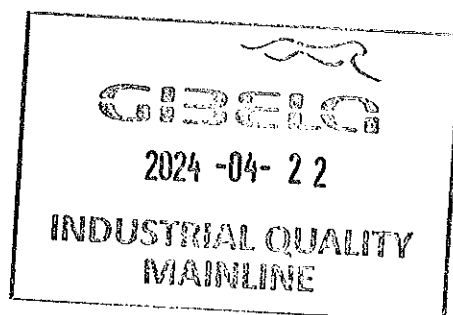
Document	Type of car					Revision	Observation	OK	NOK	Closed	Signature/Date (Manufacturing)	Signature/Date (Quality)
	M1	M3	M4	M5	M6							
DTR30225487/2						29	23/04/24	✓		N/A	<i>[Signature]</i> 23/04/24	<i>[Signature]</i> 23/04/24







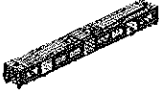


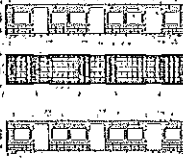


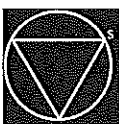









**1.2 - Instruments Control**

Monitoring and Measuring Instrument Control - Used for Special Process						
Instruments	Serial number	Calibration or Verification Validation Date	OK	NOK	Closed	Signature/Date (Quality)
Turbular	3023-2	15/03/2024	✓			<i>[Signature]</i> 23/04/24
Measuring Tape	GIBTA0896	12/04/2025	✓			<i>[Signature]</i> 23/04/24

**1.3 Consumables**


Welding Consumable Control - Used for Special Process						
Filler Material	Heat Number	Welding Process	OK	NOK	Closed	Signature/Date (Quality)
Welding wire	E231067	MIG welding	✓			<i>[Signature]</i> 23/04/24



GIBELQ		CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2		Rev. 29 Date 28/10/2023	Project: PRASA SI.CB1220.250.V29	
<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	Assembly according to Instruction Engineering n° PRA CB1220.DTR30225487/2 Verification of fitment for all reinforcement brackets.	PRA CB1220.DTR30225487/2	✓	 23/04/24	 23/04/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓	 23/04/24	 23/04/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓	 23/04/24	 23/04/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓	 23/04/24	 23/04/24
05		Functional dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓	 23/04/24	 23/04/24
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.	✓	 23/04/24	 23/04/24
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 (°C) Min-Max 10°C - 35°C Relative humidity Min-Max 25% - 60%	Sealant Batch No: 401934P Exp Date: 08/08/24 Actuals Temperature: 20 Humidity: 40	✓	 23/04/24	 23/04/24
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0001278566	✓	 23/04/24	 23/04/24
09		Verification of safety welds	Approved according to DTD000210658 reference and Self inspection	✓	 23/04/24	 23/04/24

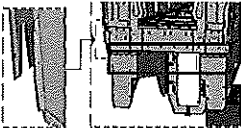

2024-04-22

INDUSTRIAL QUALITY  
MAINLINE

	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA  SI.CB1220.250.V29
		29	
		Date	
		28/10/2023	


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

**SEALANT APPLICATION**

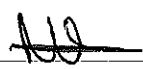



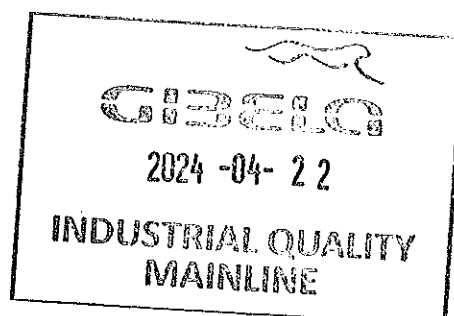
AREA 1 & 2 END 1


Operator (Name & sign):

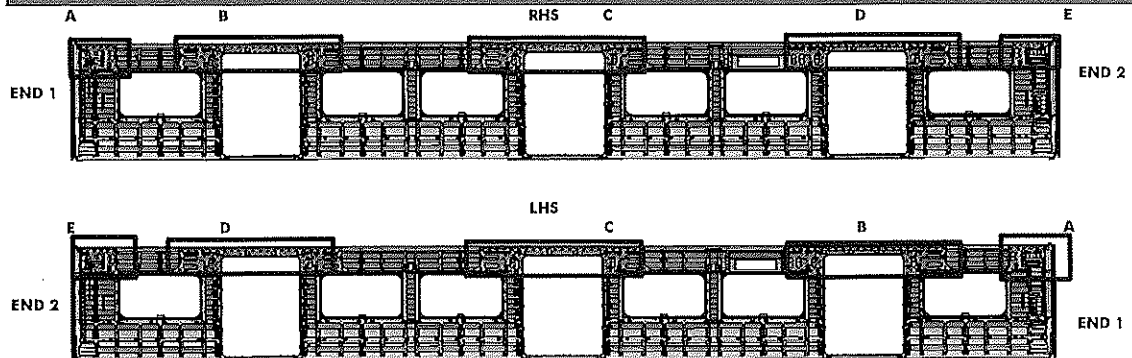
Mthokozi 

Operator (Name & sign):

Mthokozi 

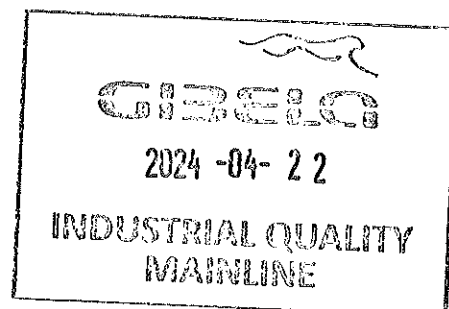


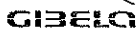
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA SI.CB1220.250.V29
		29	
		Date 28/10/2023	
II - Self Inspection - Items to Check			



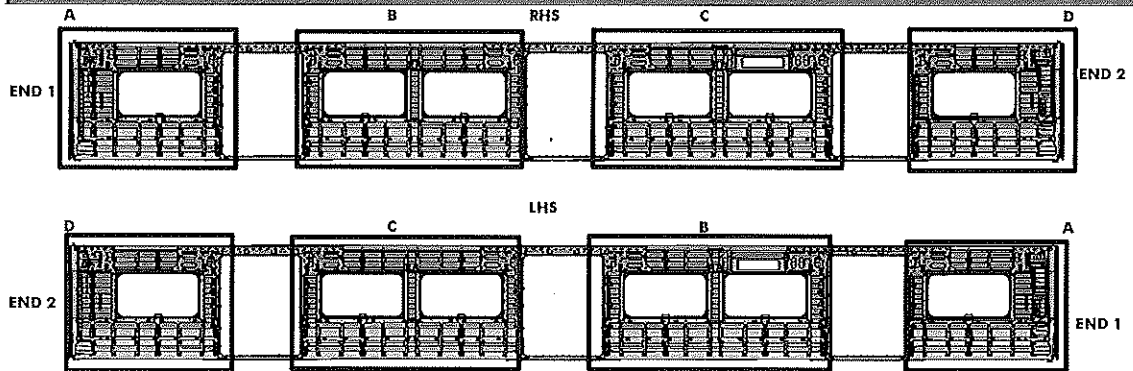
REINFORCEMENT WELDING

AREA	LHS	RHS
A	Operator (Name&sign): <u>Nokulungck Djele</u>	<u>[Signature]</u>
B	Operator (Name&sign): <u>Nokulungck Djele</u>	<u>[Signature]</u>
C	Operator (Name&sign): <u>[Signature]</u>	<u>[Signature]</u>
D	Operator (Name&sign): <u>Sibiga</u>	<u>Sibiga</u>
E	Operator (Name&sign): <u>THULANI</u>	<u>THULANI</u>



	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA
		29	
		Date	SI.CB1220.250.V29
		28/10/2023	

### II - Self Inspection - Items to Check

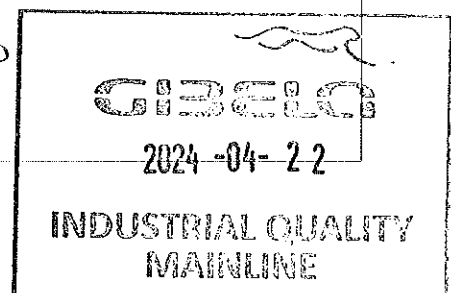



### BRACKETING

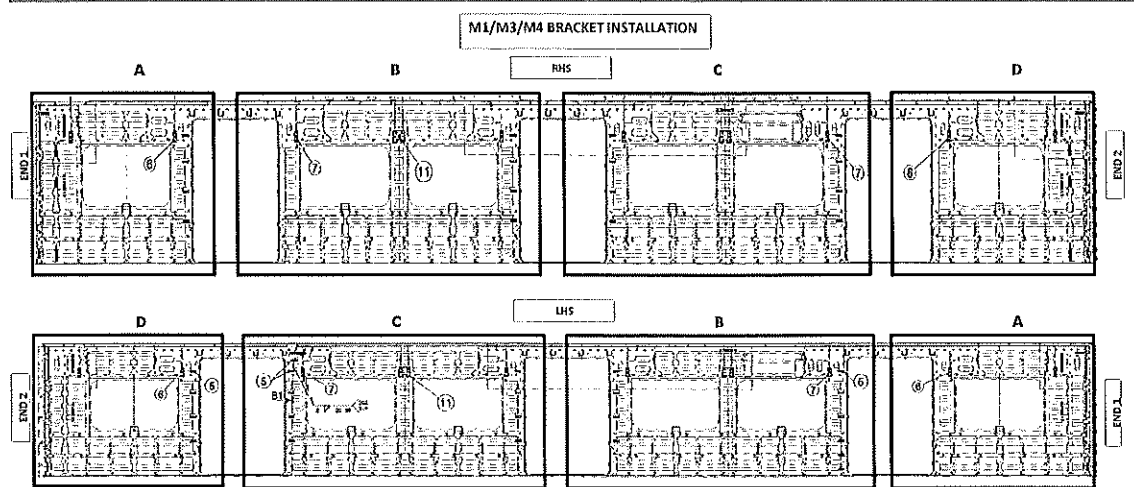
INSTALLATION	
C-RAILS:	Operator: <u>Asanda</u>
	Operator: <u>Tetelo</u>
DOOR MECHANISMS:	Operator: <u>Leni</u>
	Operator: <u>Leni</u>
TAPPING PADS	Operator: <u>Leni</u>
	Operator: <u>Leni</u>
INSTALLATION & VERIFICATION	
SEAT & LUGGAGE BRACKETS:	Operator: <u>Asanda</u>
	Operator: <u>Asanda</u>
SEAT BRACKETS VERIFICATION:	Operator: <u>Asanda</u>
	Operator: <u>Asanda</u>

### WELDING

AREA	LHS	RHS
A (Seat brackets)	: Operator (Name&sign): <u>Tetelo</u>	<u>Tetelo</u>
(C-rails, Luggage and earth bushes)	: Operator (Name&sign): <u>Tetelo</u>	<u>Tetelo</u>
B (Seat brackets)	: Operator (Name&sign): <u>Tetelo</u>	<u>Tetelo</u>
(C-rails, Luggage and earth bushes)	: Operator (Name&sign): <u>Tetelo</u>	<u>Tetelo</u>
C (Seat brackets)	: Operator (Name&sign): <u>Mmatshelo Mael</u>	<u>Mmatshelo Mael</u>
(C-rails, Luggage and earth bushes)	: Operator (Name&sign): <u>Mmatshelo Mael</u>	<u>Mmatshelo Mael</u>
D (Seat brackets)	Operator (Name&sign): <u>Mmatshelo Mael</u>	<u>Mmatshelo Mael</u>
(C-rails, Luggage and earth bushes)	: Operator (Name&sign): <u>Mmatshelo Mael</u>	<u>Mmatshelo Mael</u>
ENDS		
END 1 TAPPING PADS WELDING:	Operator (Name&sign): <u>Tetelo</u>	
END 2 TAPPING PADS WELDING:	Operator (Name&sign): <u>Mmatshelo Mael</u>	



	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30225487/2	Rev.	<b>Project: PRASA</b>  <b>SI.CB1220.250.V29</b>
		29	
		Date	
		28/10/2023	
<b>II - Self Inspection - Items to Check</b>			

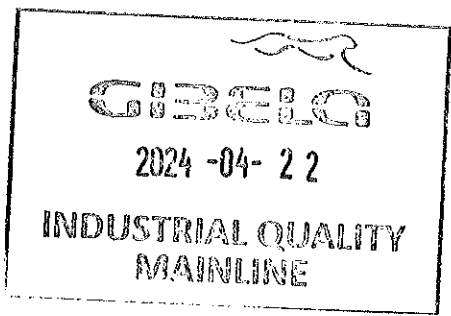


QUANTITIES (M3/M4)				
RHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	7		
	B	4		
	C	8		
	D	6		
SEAT BRACKETS	A	13		
	B	21		
	C	21		
	D	13		
EARTH BUSH	A	3		
	B	5		
	C	4		
	D	3		
<b>ROOF ENDS:</b> CAILS 2 OFF EACH END EARTH BUSH 6 OFF EACH END  VERIFICATION BY: _____				

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		
<b>ROOF ENDS:</b> CAILS 2 OFF EACH END EARTH BUSH 6 OFF EACH END  VERIFICATION BY: _____				

QUANTITIES (M1)				
RHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	7	✓	
	B	4	✓	
	C	8	✓	
	D	6	✓	
SEAT BRACKETS	A	13	✓	
	B	21	✓	
	C	21	✓	
	D	13	✓	
EARTH BUSH	A	3	✓	
	B	5	✓	
	C	4	✓	
	D	3	✓	
<b>ROOF ENDS:</b> CAILS 2 OFF EACH END EARTH BUSH 6 OFF EACH END  VERIFICATION BY: <u>Tebelo</u>				

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	✓	
<b>ROOF ENDS:</b> CAILS 2 OFF EACH END EARTH BUSH 6 OFF EACH END  VERIFICATION BY: <u>Tebeb</u>				



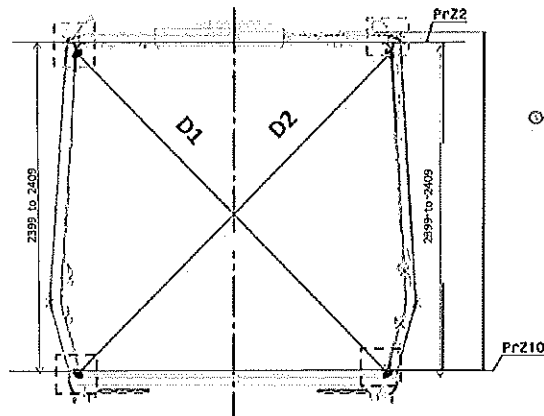


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

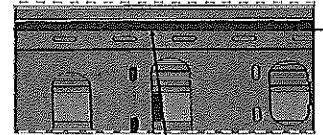
Rev.	29
Date	28/10/2023

Project: PRASA  
SI.CB1220.250.V29

Specifications of Details for CBS measurement



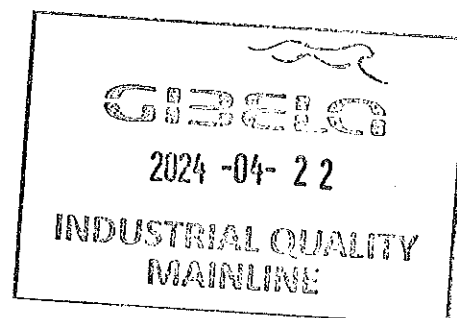
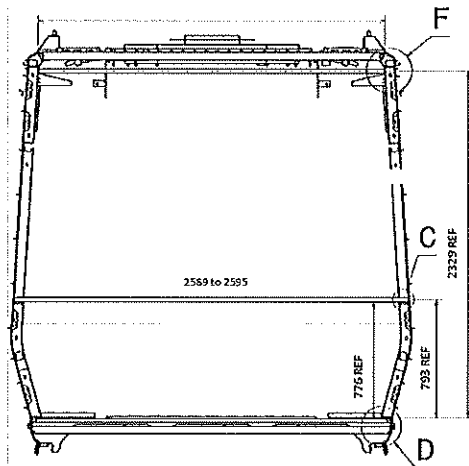
Measurement positions on roof rail and sidewall omega corner.



Reinforcement area measurement positions on roof reinforcement area.



Measurement positions on sidewall and side sill corner.





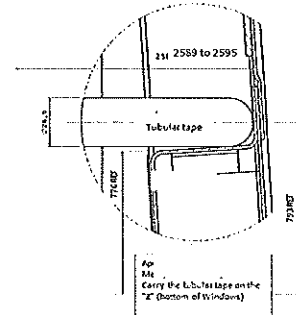
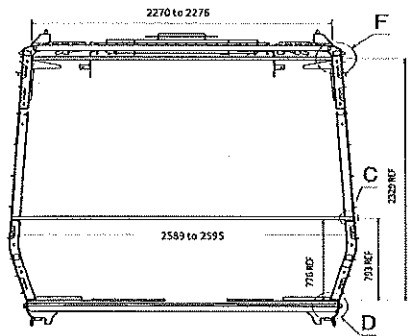


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30226487/2

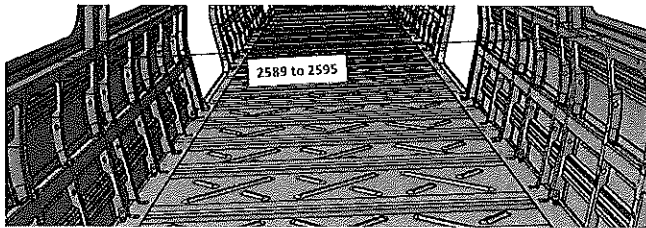
Rev.  
29  
Date  
28/10/2023

Project: PRA5A  
SI.CB1220.250.V29

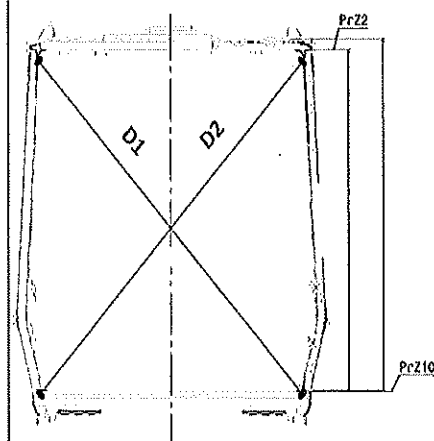
### CBS measurement



Detail C

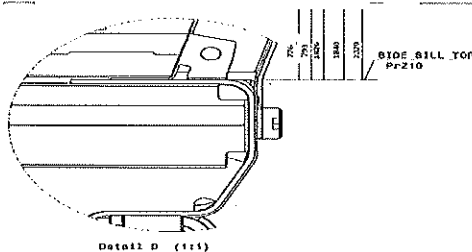


Take measurement close to  
radius




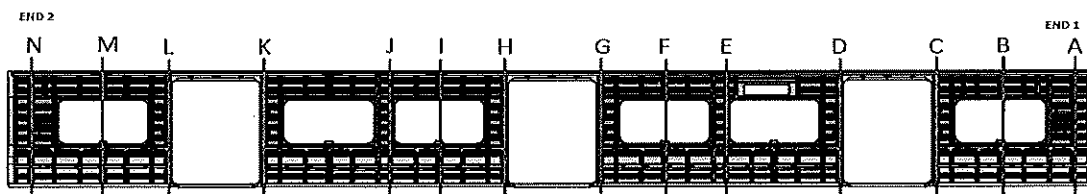
2024-04-22

INDUSTRIAL QUALITY  
MAINLINE



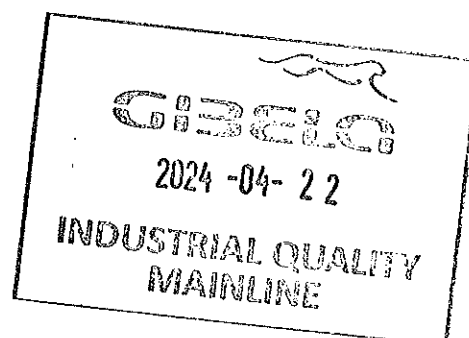
Detail D (1:1)


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA  SI.CB1220.250.V29
		29	
		Date	
		28/10/2023	
CBS measurement			

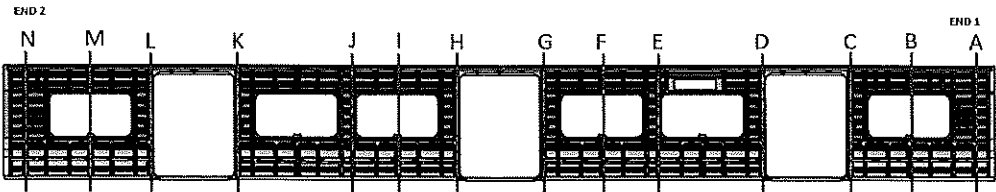


BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3299	3297	2	—
B	3267	3269	2	—
C	3300	3297	3	—
D	3300	3296	4	—
E	3295	3296	1	—
F	3295	3296	1	—
G	3300	3300	0	—
H	3300	3299	1	—
I	3267	3269	2	—
J	3265	3267	2	—
K	3297	3295	2	—
L	3296	3294	2	—
M	3267	3265	2	—
N	3299	3300	1	—

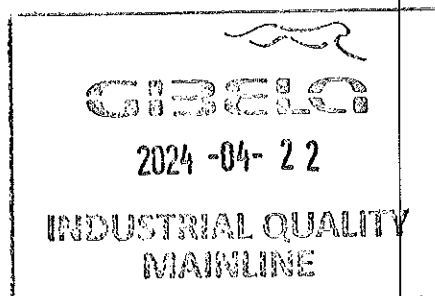


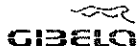
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA  SI.CB1220.250.V29
		29	
		Date	
		28/10/2023	
CBS measurement			

AFTER WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3299	3300	1	2590
B	3267	3268	1	2590
C	3300	3300	0	2595
D	3295	3297	2	2590
E	3267	3268	1	2590
F	3267	3266	1	2590
G	3295	3296	1	2590
H	3296	3297	1	2590
I	3267	3265	2	2590
J	3268	3267	1	2591
K	3299	3300	1	2592
L	3300	3297	3	2593
M	3267	3266	1	2594
N	3300	3297	3	2595



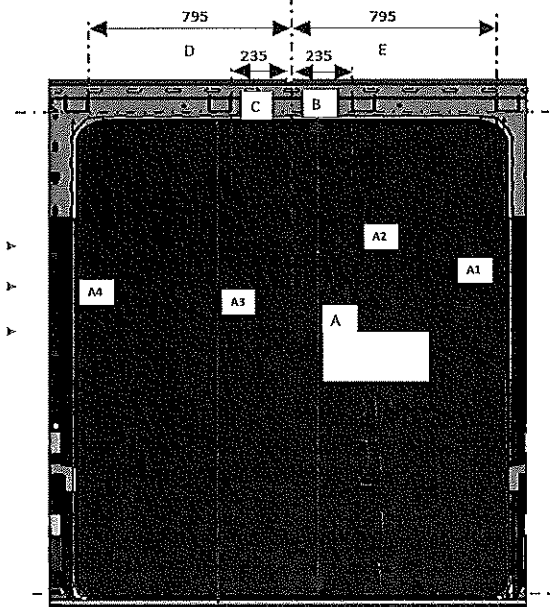


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30226487/2

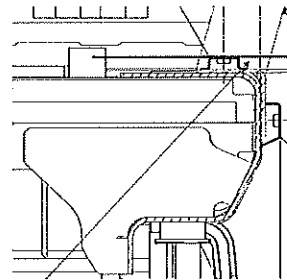
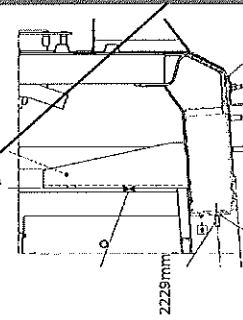
Rev.  
29  
Date  
28/10/2023

Project: PRASA  
SI.CB1220.250.V29

Specifications of Details for CBS measurement CB1220



Brackets Carbodyshell  
U Type Supports



Brackets Carbodyshell  
Channel Assy

DOOR 1 - LHS

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

DOOR 2 - LHS

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

DOOR 2 - RHS

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

DOOR 1 - RHS

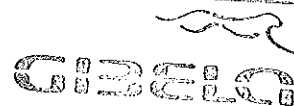
	VALUE	ACTUAL
A1	2230 to 2232	2230
A2	2230 to 2232	2230
A3	2230 to 2232	2232
A4	2230 to 2232	2232
B	234 to 236	235
C	234 to 236	235
D	794 to 796	795
E	794 to 796	795

DOOR 2 - RHS

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

DOOR 3 - RHS

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



2024-04-22

INDUSTRIAL QUALITY  
MAINLINE

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30225487/2	Rev. 29 Date 28/10/2023	Project: PRASA  <b>SI.CB1220.250.V29</b>
	Specifications of Details for CBS measurement CB1220		

**RIGHT SIDE**

1672 ±3

Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2750	2751	2752
D2	2750	2750	2750
D1-D2	0	1	2

Doors Length - 1672 ±3mm

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

1672 ±3

Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2751	2750	2751
D2	2750	2752	2752
D1-D2	1	2	3

Doors Length - 1672 ±3mm

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

1672 ±3

Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2751	2750	2751
D2	2750	2752	2752
D1-D2	1	2	3

**LEFT SIDE**

1672 ±3

Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2750	2751	2752
D2	2750	2750	2750
D1-D2	0	1	2

Doors Length - 1672 ±3mm

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

1672 ±3

Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2751	2750	2751
D2	2750	2752	2752
D1-D2	1	2	3

Doors Length - 1672 ±3mm

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

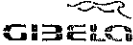
1672 ±3



Doors diagonal D1-D2 maximum difference ≤4mm

	#1	#2	#3
D1	2751	2750	2751
D2	2750	2752	2752
D1-D2	1	2	3

2024-04-22  
 INDUSTRIAL QUALITY  
 MANAGEMENT




	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30226487/2	Rev.	<b>Project: PRASA</b>  <b>SI.CB1220.250.V29</b>
		29	
		Date	
		28/10/2023	
<b>Self Inspection - Final Result</b>			

Is the car good to advance to the next workstation/process? (Approval of Operations Manager and Industrial Quality)			DATE	NAME	SIGNATURE
HOLD POINT	✓	GO <small>(if activities are not complete, the missing activities must not impact the next stage)</small>	23/04/24	Tebelo <small>Operations</small>	
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party)	23/04/24	Andani <small>Industrial Quality</small>	
		There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below)		<small>Operations</small>	
		There are non-conformities impact the quality of the product and there is no corrective action defined yet)		<small>Industrial Quality</small>	

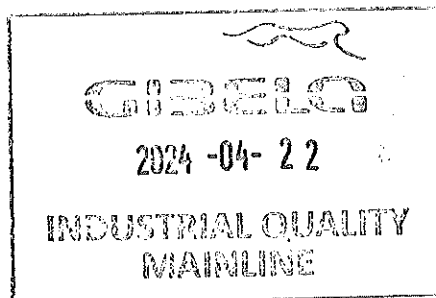
In case of "NO GO", describe blocking problems

In case of "NO GO", the operations manager must define below action plan to ensure "GO":					
Item	Description		Responsible	Due date	Status

Tebelo  
Operations



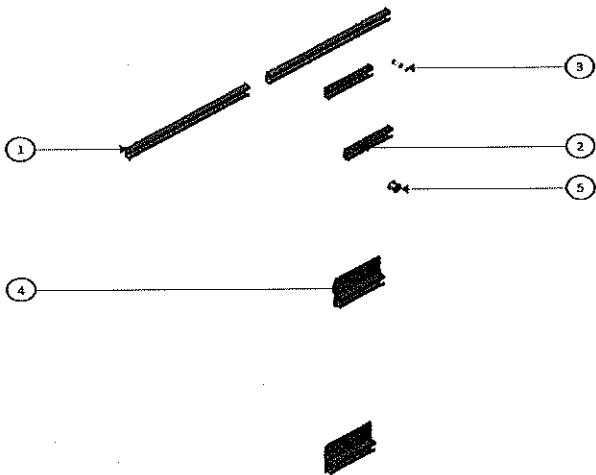
Quality



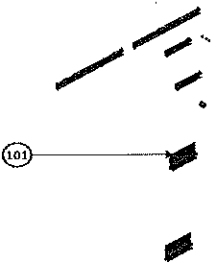
ANNEXURE A: Arc Welding Quality Acceptance Standard

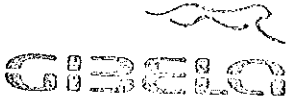


Station: CB1220-004- U108 & U107



PART NO.	ITEM NO.	QTY	DESCRIPTION	MASS [KG]
DTR2020074083	5	6	EARTH STUD 6	0.036
AA00001201843	9	6	ASSEMBLY SUPPORT	0.271
DTR000034305	3	12	WELDING STUD ISO13318 PT - A5000 - S51	0.007
AA00001160424	2	12	ASSEMBLY SUPPORT	0.193
AA00001184418	1	14	ASSEMBLY SUPPORT	0.522
AA00001151090	101	6	CARBODYSHELL BRACKETS (CARBODYSHELL M1/M3/M4 CAP/SIDE FRAME MODULE END - GPP)	11.132





2024 -04- 2 2

INDUSTRIAL QUALITY  
MAINLINE



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"/>	DT00000225497	AAD0001278566	CARBODYSHELL M1,M3,M4 ASSEMBLY	CB1230		X	(X)		X		PRA.CB1230.DT000002 25487.V20	YES
<input type="checkbox"/>												
<input type="checkbox"/>												
	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				
				COMPILED		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						
				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						
25	20/02/2022	New Baseline change 10.3.1		APPROVER		Collins Mbombhni		20/02/2022				
				CHECKER		Andani Muthelo						
				REVISED BY		Andani Muthelo						
26	14/06/2022	Update minimum temperature requirement for sealant application		APPROVER		Collins Mbombhni		14/06/2022				
				CHECKER		Andani Muthelo						
				REVISED BY		Andani Muthelo						
27	19/10/2022	Addition of traceability for sealant application		APPROVER		Collins Mbombhni		19/10/2022				
				CHECKER		Ntokozo Zwane						
				REVISED BY		Amogelang Mohlampe						
28	14/04/2023	Added sealant batch number & welding consumables traceability		APPROVER		Vanessa Ntuli		14/04/2023				
				CHECKER		Ntokozo Zwane						
				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						
				REVISED BY		Ntokozo Zwane						
TRAINSET	CAR	OPERATOR NAME & ALPS NO		DATE	SELF INSPECTION NUMBER		PAGES					
224	1701	mmathapelo 482004		24/04/2024	SI.CB1230.256.V28		11					

GIBELA  
2024-05-17  
INDUSTRIAL QUALITY  
MANLINE



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
29

Project: PRASA

Date

06/11/2023

SI.CB1230.256.V28

Car:

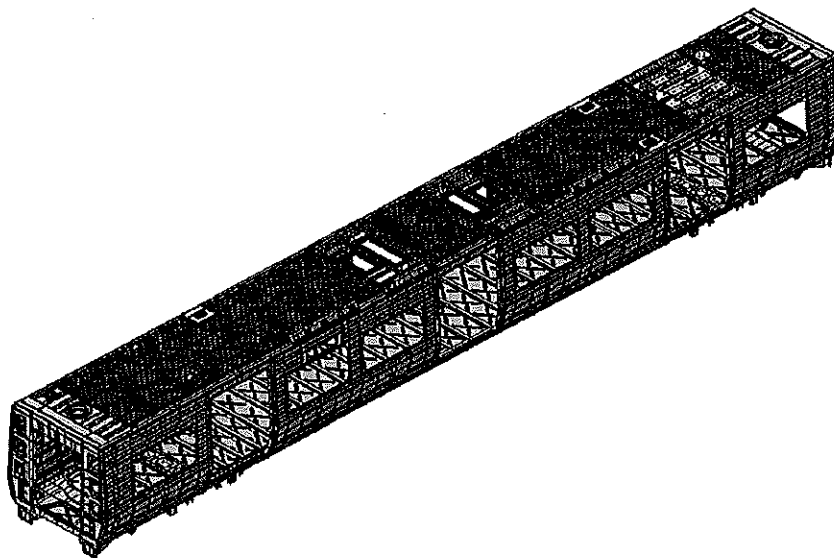
NCR:

Work station:

CB1230



Safety Related



## I - Documentation and Instruments Control

### I.1 - Documentation Control

Document	Type of car					Revision	Observation	OK	NOK	Remarks	Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4	TC2							
PRA.CB1230.DT00000225487	✓							✓		N/A	M. Bello 24/04/24	2024/04/24

### I.2 - Instruments Control

#### Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Serial number	Calibration or Verification Validation Date	OK	NOK	Signature/Date (Operations)	Signature/Date (Quality)
Tubular	12062-2	2025/02/19	✓		M. Bello 24/04/24	2024/04/24
Combination square	413650082	2025/02/20	✓		M. Bello 24/04/24	2024/04/24
measuring Tape	MBTA0306	2024/03/20	✓		M. Bello 24/04/24	2024/04/24

### 1.3 Consumables

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

Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
308Ls	6231067	MIG	✓		M. Bello 24/04/24	2024/04/24



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
29  
Date

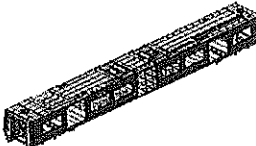
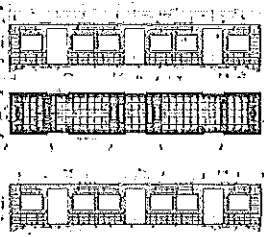
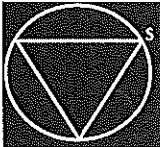
06/11/2023

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	Not OK	Reason	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	✓			M. Costa 24/04/24	24/04/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓			M. Costa 24/04/24	24/04/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓			M. Costa 24/04/24	24/04/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓			M. Costa 24/04/24	24/04/24
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓			M. Costa 24/04/24	24/04/24
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.	✓			M. Costa 24/04/24	24/04/24
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 (°) Min-Max 10°C - 35°C Relative humidity Min - Max (%) Min-Max 25% - 80%	Sealant Batch No: 20091135P Exp Date: 1/05/2024 Actuals Temperature: 16°C Humidity: 66%				M. Costa 24/04/24	24/04/24
08	N/A	Verification of sealant application in regions of roof and sideframe.	Sealant applied in regions of roof and sideframe.				M. Costa 24/04/24	24/04/24

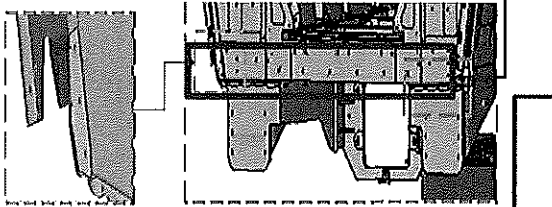


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
29  
Date  
06/11/2023

Project: PRASA  
SI.CB1230.256.V28

AREA 1



END 2 SEALANT

OPERATOR  
(Name & sign):

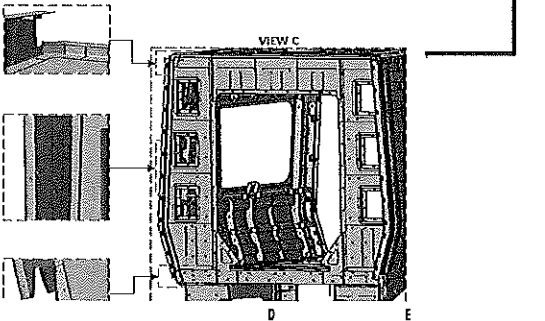
Zanele [Signature]

OPERATOR  
(Name & sign):

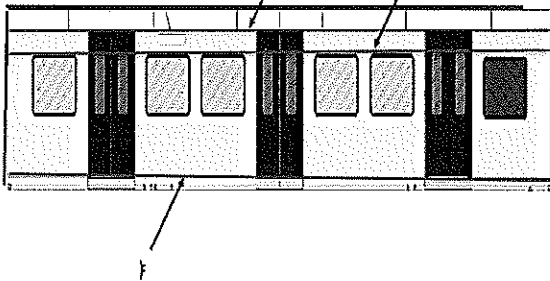
Zanele [Signature]

OPERATOR  
(Name & sign):

Zanele [Signature]



H



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

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

RHS

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

Operator (Name & sign) : Lerato [Signature]

Operator (Name & sign) : Lerato [Signature]

Operator (Name & sign) : donhlanhla [Signature]

Operator (Name & sign) : donhlanhla [Signature]

Operator (Name & sign) : \_\_\_\_\_

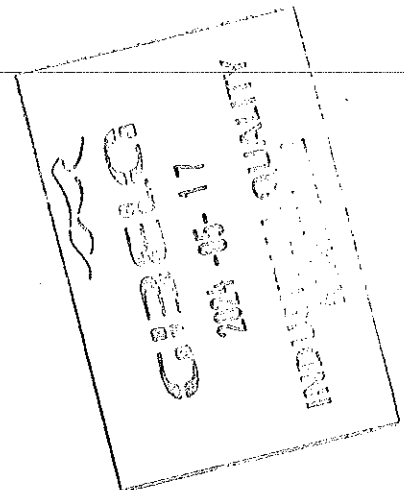
Operator (Name & sign) : \_\_\_\_\_

Operator (Name & sign) : \_\_\_\_\_

Operator (Name & sign) : \_\_\_\_\_

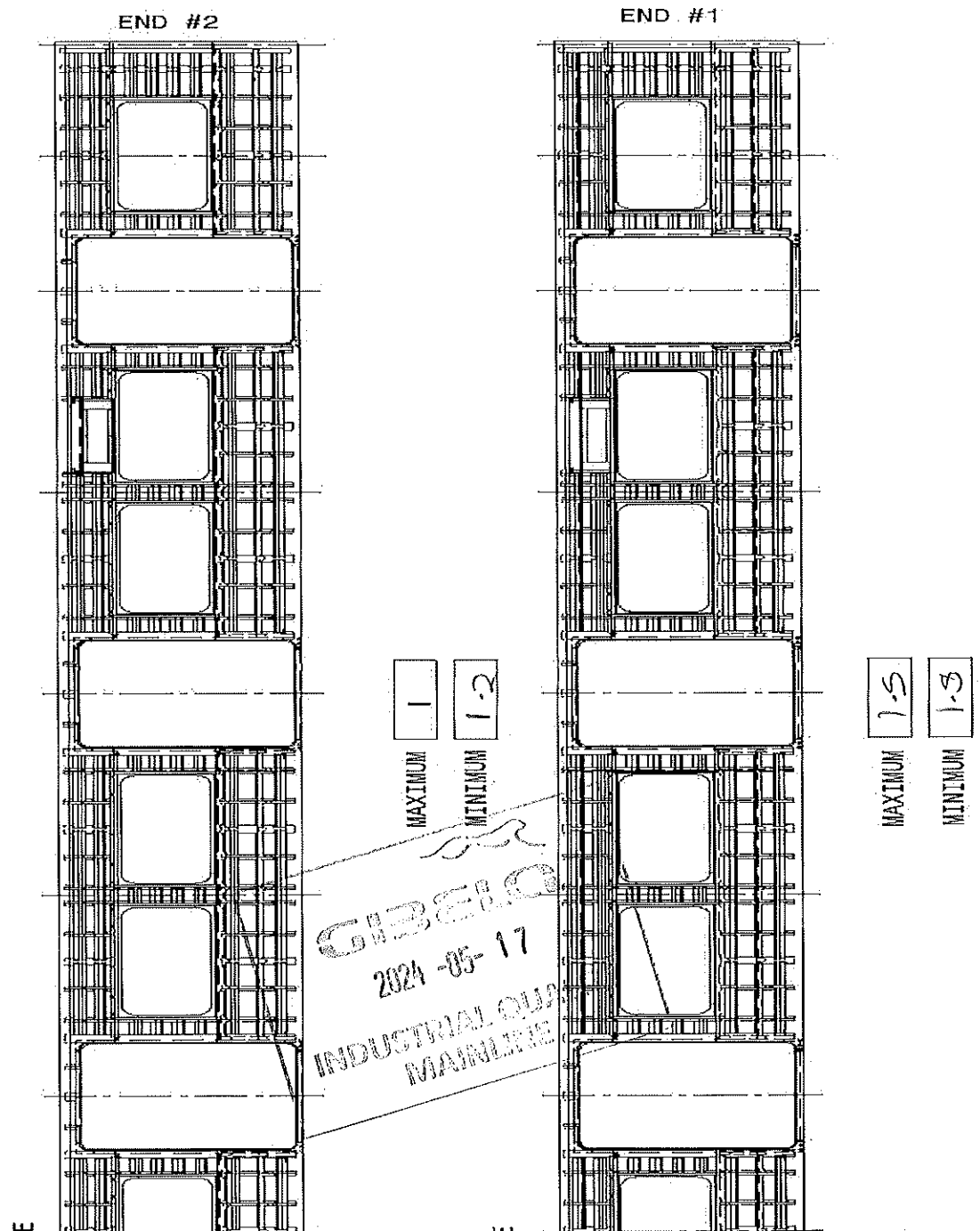
Operator (Name & sign) : \_\_\_\_\_

Operator (Name & sign) : \_\_\_\_\_



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.



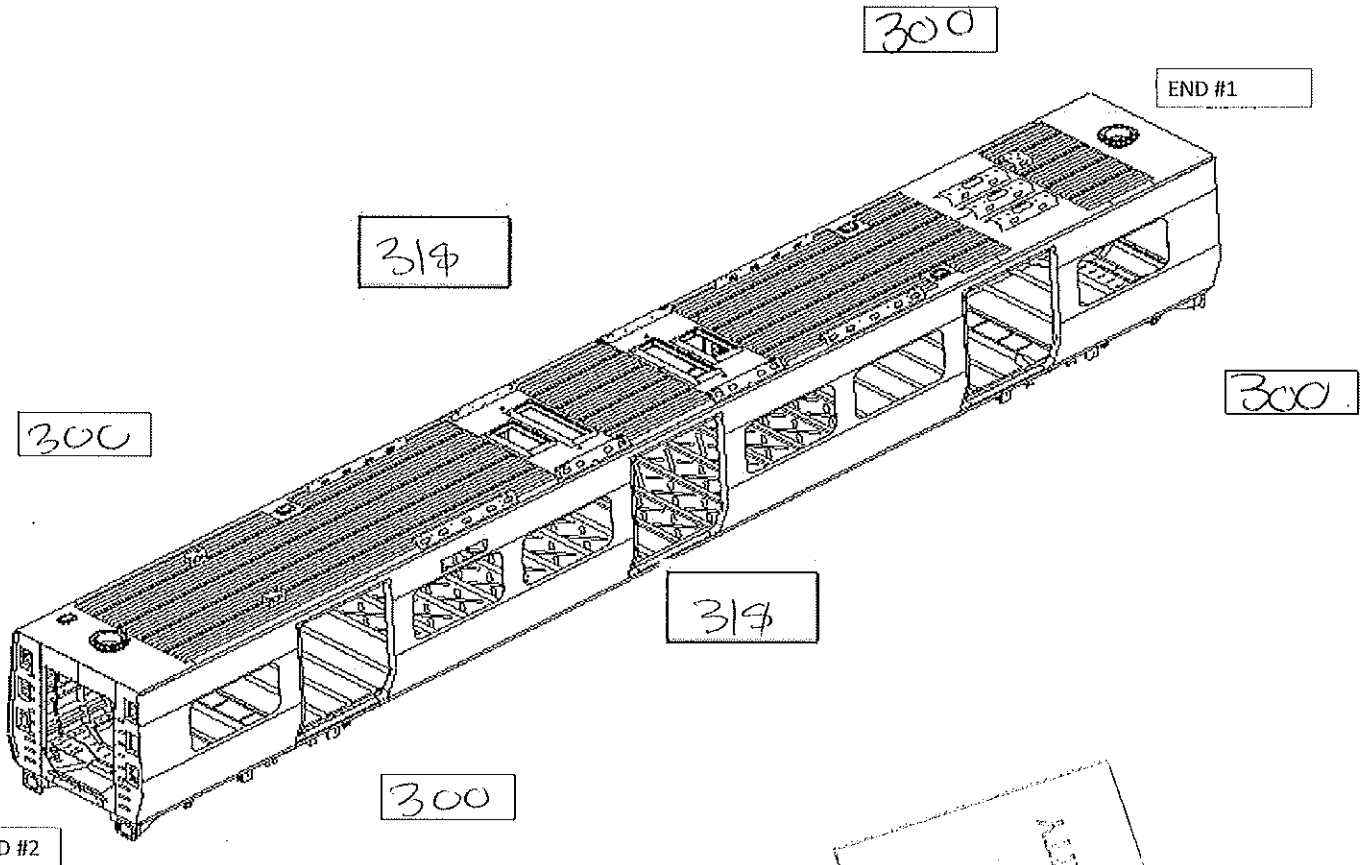
RIGHT SID



LEFT SID

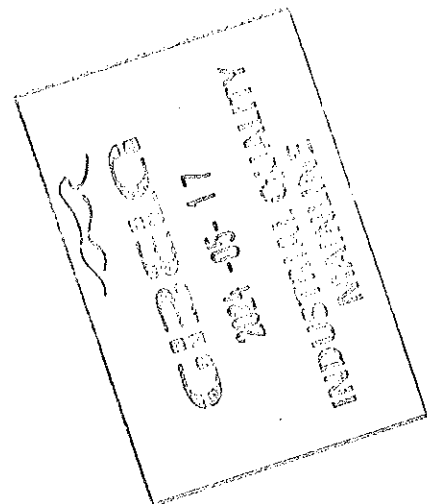


Specified Camber for car out of jig is 18mm(-0mm + 2mm)



MEASURED CAMBER VALUES

RIGHT	<sup>1</sup>	14
LEFT	<sup>a1</sup>	14





CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
29

Date

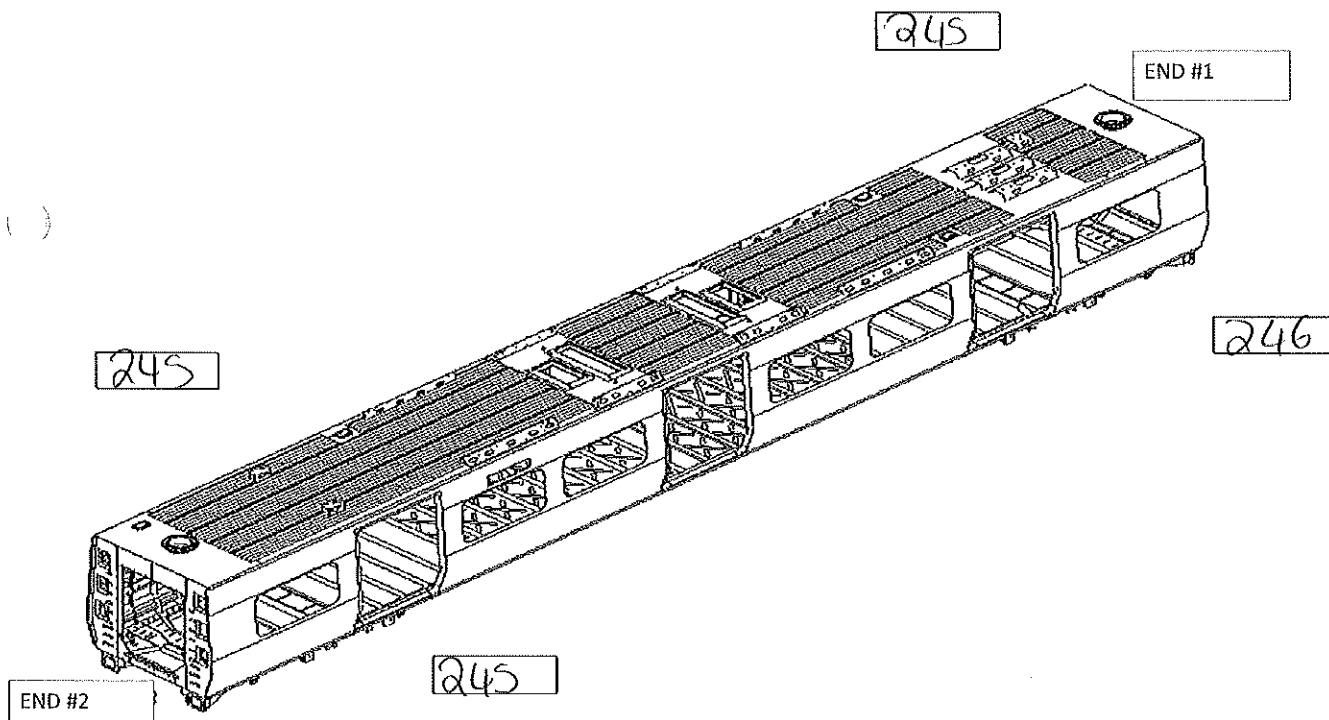
06/11/2023

Project: PRASA

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

1

LONGITUDIN

1

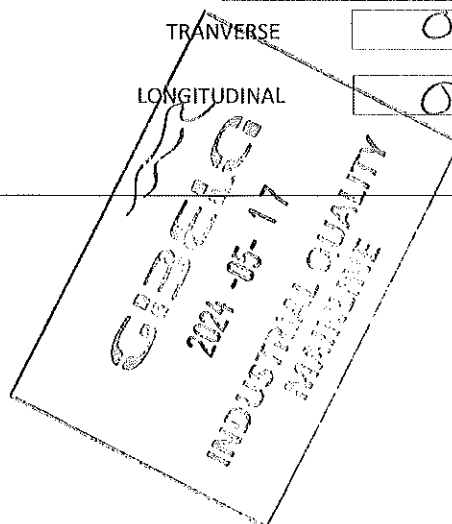
TWIST FOUND ON END 2

TRANVERSE

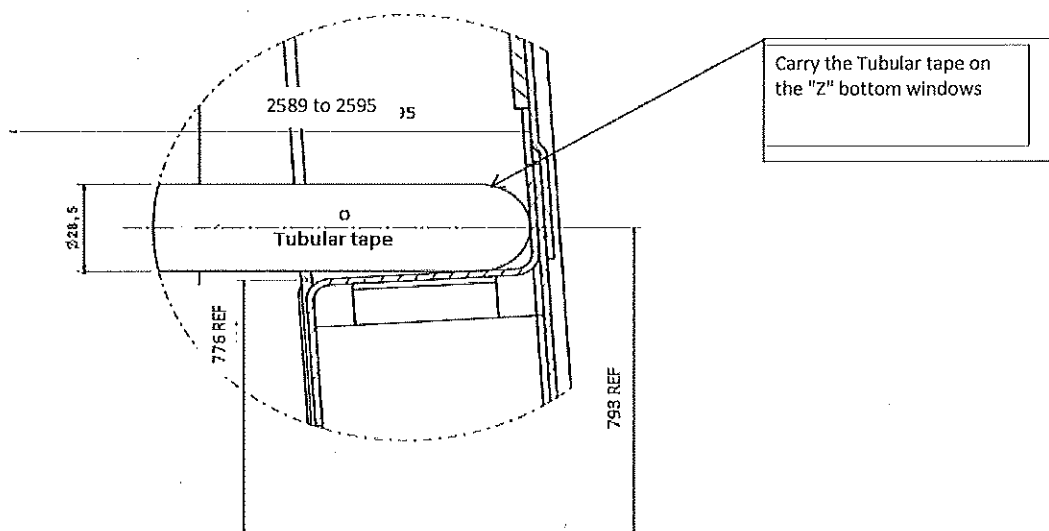
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LONGITUDINAL

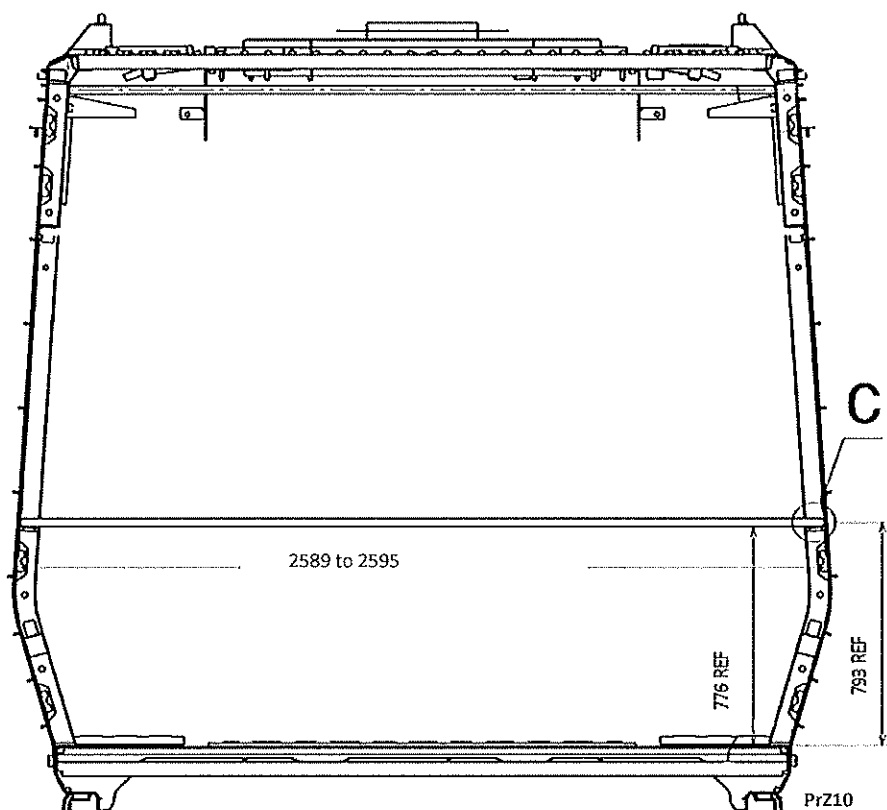
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Specifications of Details for CBS measurement CB1230



Detail C







CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

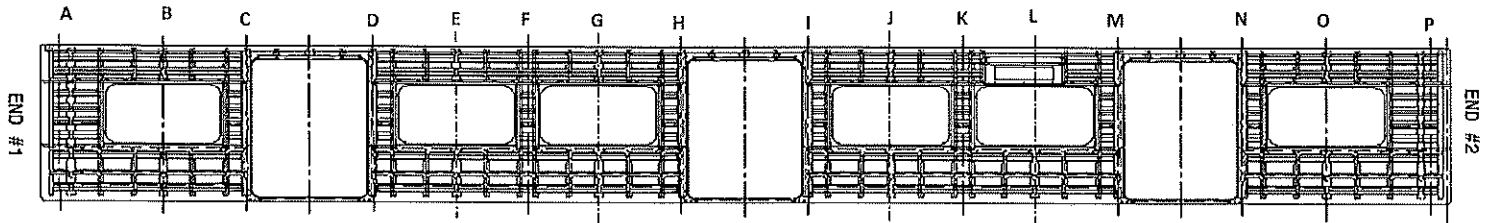
Rev.  
29

Date  
06/11/2023

Project: PRASA

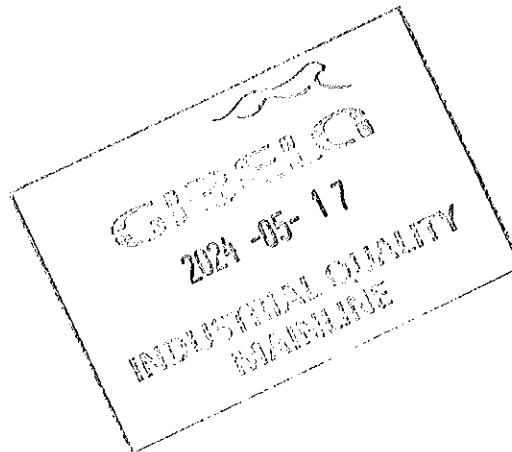
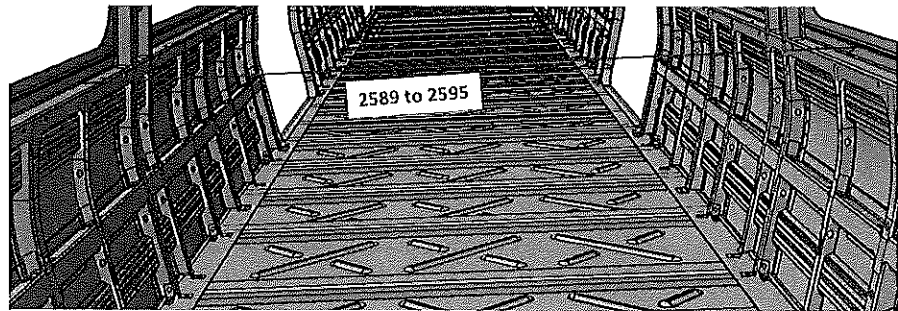
SI.CB1230.256.V28

Specifications of Details for CBS measurement CB1230



2589 to 2595mm

A	2596
B	2589
C	2589
D	2592
E	2592
F	2593
G	2591
H	2590
I	2590
J	2593
K	2594
L	2590
M	2595
N	2594
O	2589
P	2595



Threshold verification

Nominal value :38

Door 1		Door 2		Door 3	
L	R	L	R	L	R
38	38	37	38	37	39
Door 4		Door 5		Door 6	
L	R	L	R	L	R
38	39	39	37	38	38


BOILER MAKER:

Tshendo



WELDER:

mmathapelo



	CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000226487	Rev. 29	Project: PRASA  SI.CB1230.256.V28
		Date	
		06/11/2023	

Self Inspection - Final Result

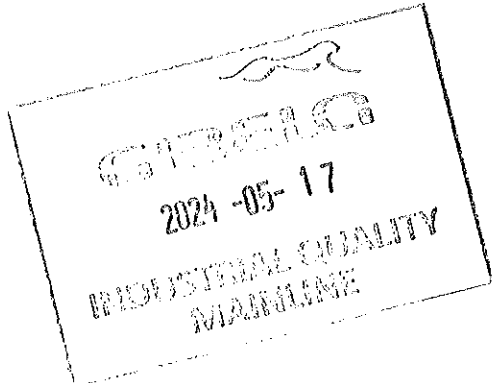
Is the car good to advance to the next workstation/process? (Approval of Operations and Industrial Quality)			DATE	NAME	SIGNATURE
HOLD POINT	GO	(If activities are not complete, the missing activities must not impact the next stage)	24/01/24	mmathapelo 463004 Operations	
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	24/01/24	Andani Industrial Quality	
	NO GO	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  
Push speed on RHS SW

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

