

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 ?
				TC1	M4	M1	M2	M3	TC2		
<input type="checkbox"/>	DTR3000152644	AAD0001278566	CARBODYSHELL M3,M4 ASSEMBLY	CB1210		X			X	PRA,CB1210.DTR30225 487/3.V30	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	05/08/2020	New Baseline 10.2.6	APPROVER	Timothy Maimela	05/08/2020
			CHECKER	Bongane Masina	05/08/2020
			REVISED BY	Bongane Masina	05/08/2020
20	19/04/2021	New Baseline change 10.3	APPROVER	Timothy Maimela	19/04/2021
			CHECKER	Bongane Masina	19/04/2021
			REVISED BY	Bongane Masina	19/04/2021
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	19/02/2022	New Baseline change 10.3.1	APPROVER	Mpho Mulaudzi	19/02/2022
			CHECKER	Andani Muthelo	19/02/2022
			REVISED BY	Andani Muthelo	19/02/2022
26	14/04/2023	Addition of welding consumable traceability	APPROVER	Ntuli Vanessa	14/04/2023
			CHECKER	Mohlame Amogelang	14/04/2023
			REVISED BY	Mohlame Amogelang	14/04/2023
28	07/11/2023	Added traceability for welding sections	APPROVER	Ngobeni Tyson	07/11/2023
			CHECKER	Mohlame Amogelang	07/11/2023
			REVISED BY	Ntokoze Zwane	07/11/2023

TRAINSET	CAR	OPERATOR NAME & ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES
T/S 229	M3	Justice 410085	23/05/24	SI.CB1210.254.V30	17

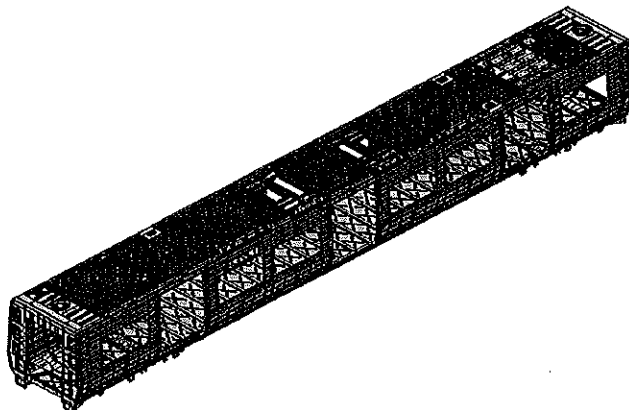
INTERNAL QUALITY

	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB1210.254.V30
		Date 07/11/2023	

Car: M3 & M4	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	Signature/Date (Manufacturing)	Signature/Date (Quality)
	M3	M4	M2	M1	M0	M5					
DTR30225487/3				X			28		X	23/05/24	23/05/24

#### 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)
TUBULAR	32823-2	15/03/25	X	23/05/24	23/05/24
LASER TAPE	125425984	08/01/25	X	23/05/24	23/05/24
SUN TAPE	61810102	18/11/24	X	23/05/24	23/05/24

#### 1.3 Consumables


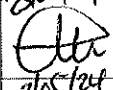
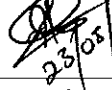
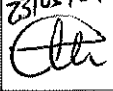

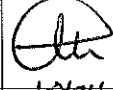
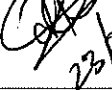

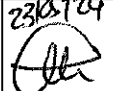

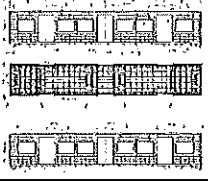
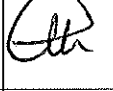
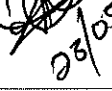

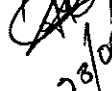
##### Welding Consumable Control - Used for Special Process

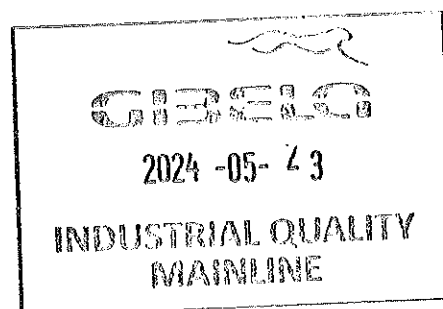
Filler Material	Heat Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
ER 308 LCI	314018-74077	MIG	X	23/05/24	23/05/24
ER 308 L	299687-76822	MIG	X	23/05/24	23/05/24




2024-05-23

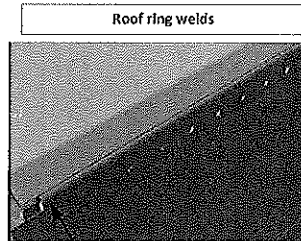
INDUSTRIAL QUALITY  
MAINLINE

		Rev. 28 Date 07/11/2023	Project: PRA5A SI.CB1210.254.V30				
<b>II - Self Inspection - Items to Check</b>							
II.1 - Items to check							
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK		Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓		23/05/24 	23/05/24 
02	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 e DTD0000210675	✓		23/05/24 	23/05/24 
03	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		23/05/24 	23/05/24 
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		23/05/24 	23/05/24 
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document	Approved according specified on pages below.	✓		23/04/24 	23/05/24 
06	N/A	Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-018 and DTD0000210658.	✓		23/05/24 	23/05/24 

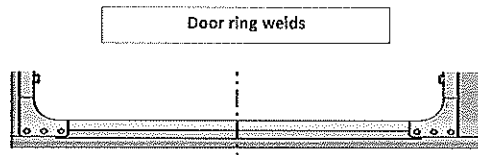


	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB1210.254.V30
		Date 07/11/2023	

**Welding Traceability**

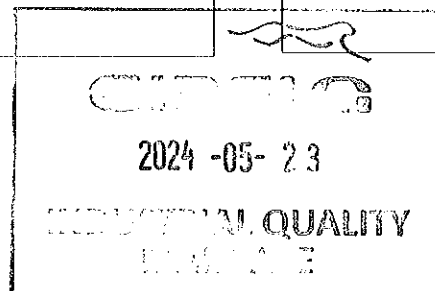



<u>LHS</u>	
Boiler maker (Name & Sign): <u>Innocent [Signature]</u>	Welder (Name & Sign): <u>Keru K.M.B</u>
<u>RHS</u>	
Boiler maker (Name & Sign): <u>Lawrence [Signature]</u>	Welder (Name & Sign): <u>Thabang [Signature]</u>

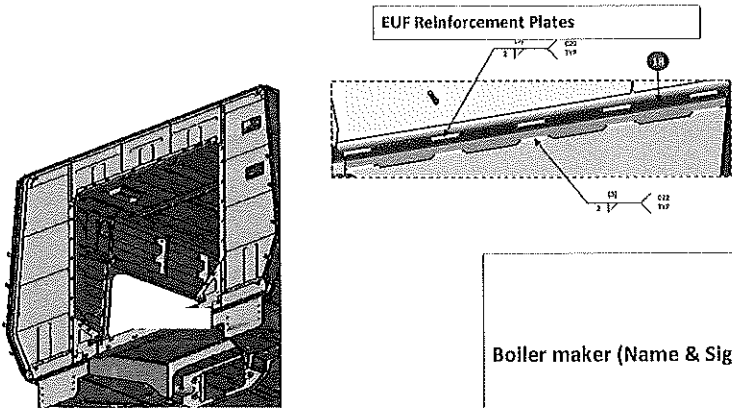


<u>LHS</u>	
Boiler maker (Name & Sign): <u>SEA [Signature]</u>	
Welder (Name & Sign): <u>Keru K.M.B</u>	

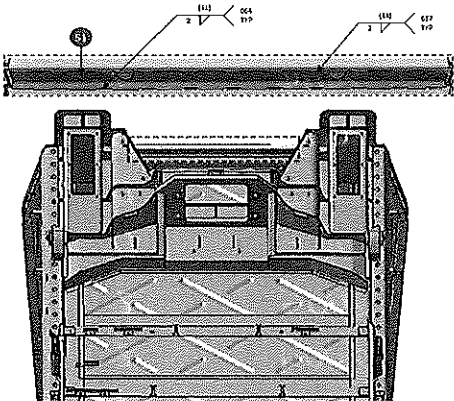
<u>RHS</u>	
Boiler maker (Name & Sign): <u>SEA [Signature]</u>	
Welder (Name & Sign): <u>Keru K.M.B</u>	



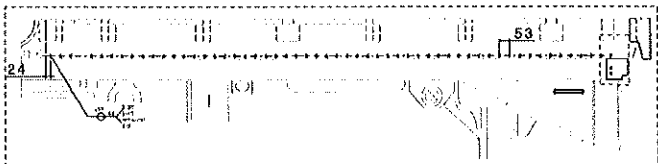
	CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3	Rev. 28	Project: PRASA SI.CB1210.254.V30
		Date 07/11/2023	



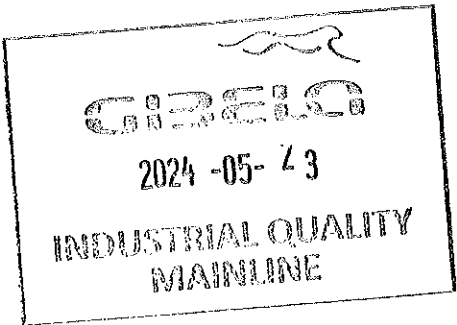
END 1 Boiler maker (Name & Sign): <u>SEAN</u>
Welder (Name & Sign): <u>Keru K. M.</u>




END 2 Boiler maker (Name & Sign): <u>Paulo</u>
Welder (Name & Sign): <u>Thiago</u>

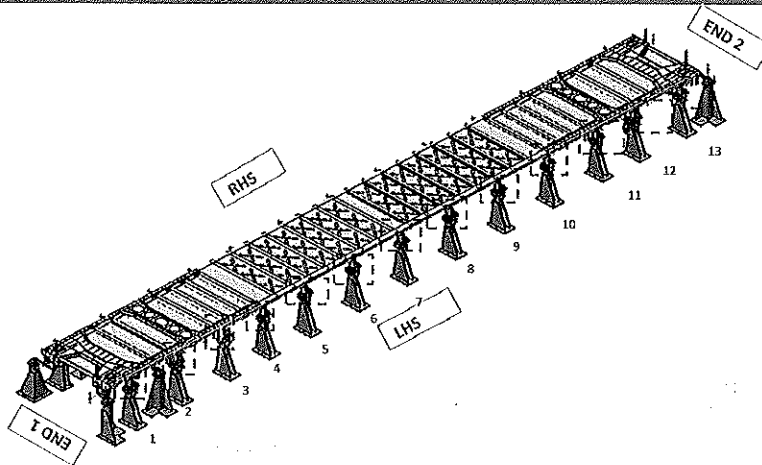


FEDOLI Operator: <u>Lawrence V. V.</u>
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	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 28 Date 07/11/2023	Project: PRASA SI.CB1210.254.V30
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Specifications of Details for CBS measurement



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

After loading and clamping

Fill in the gap 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	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Hand Side	0	0	0	0	0	0	0	0	0	0	0	0	0

Signature Operations:

Date: 23/05/24

After Welding.

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

	1	2	3	4	5	6	7	8	9	10	11	12	13
Left Hand Side	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Hand Side	0	0	0	0	0	0	0	0	0	0	0	0	0

Signature Industrial Quality:

Date:

GIBELQ

2024-05-23

INDUSTRIAL QUALITY  
MAINLINE



CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

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28

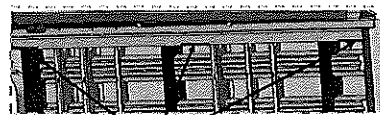
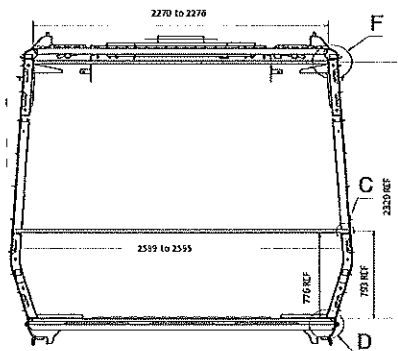
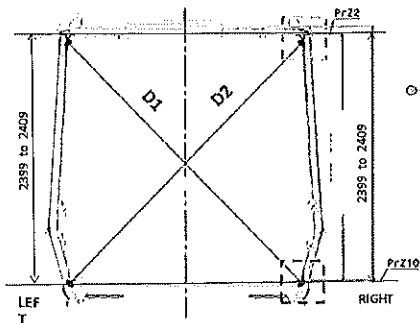
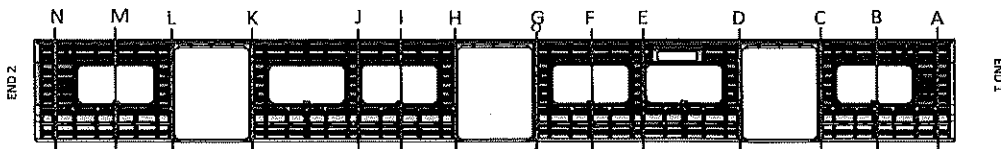
Date

07/11/2023

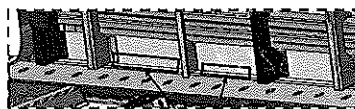
Project: PRASA

SI.CB1210.254.V30

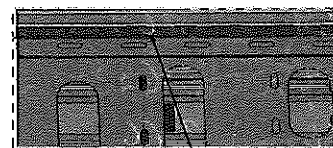
Specifications of Details for CBS measurement



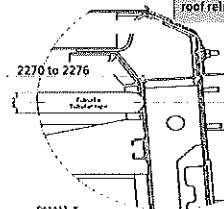
Measurement positions on roof rail and sidewall omega corner.



Measurement positions on sidewall and side sill corner.



Reinforcement area measurement positions on roof reinforcement area.




061051 W  
Don't consider the reinforcement

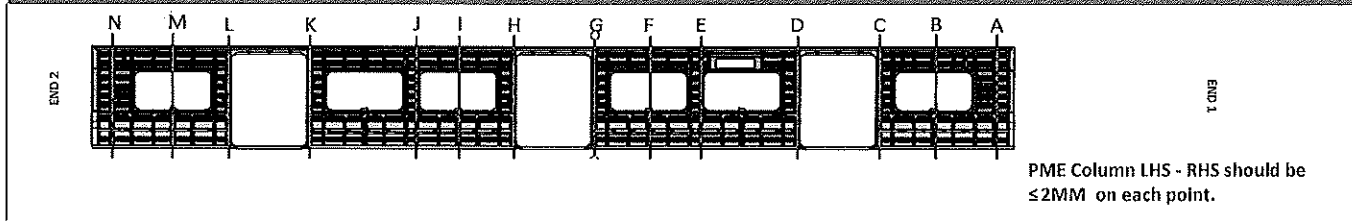
GIBELQ

2024 -05- 23

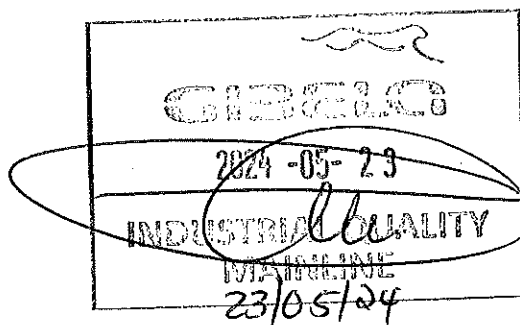
INDUSTRIAL QUALITY  
MAINLINE

	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB1210.254.V30
		Date	
		07/11/2023	

Specifications of Details for CBS measurement



BEFORE WELDING						
	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3267	3265	2	2404	2404	0
B	3266	3266	0	2406	2405	1
C	3270	3268	2	2408	2406	2
D	3269	3267	2	2407	2405	2
E	3265	3264	1	2405	2405	0
F	3266	3264	2	2406	2404	2
G	3269	3269	0	2407	2405	2
H	3270	3268	2	2406	2406	0
I	3266	3266	0	2405	2405	0
J	3263	3263	0	2407	2405	2
K	3267	3268	1	2406	2404	2
L	3266	3266	0	2405	2405	0
M	3264	3263	1	2407	2406	1
N	3270	3268	2	2408	2407	1







CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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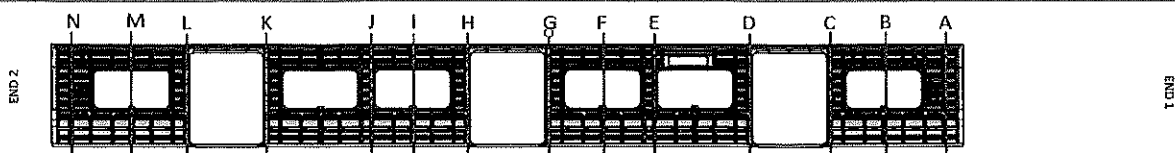
Date

07/11/2023

Project: PRASA

SI.CB1210.254.V30

## Specifications of Details for CBS measurement

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


## AFTER WELDING

	Record D1 values	Record D2 values	D1-D2 $\leq 5\text{mm}$	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS $\leq 2$
A	3296	3295	1	2407	2407	0
B	3267	3265	2	2406	2405	1
C	3297	3295	2	2405	2405	0
D	3295	3295	0	2408	2406	2
E	3266	3264	2	2406	2405	1
F	3265	3265	0	2407	2405	2
G	3297	3297	0	2406	2406	0
H	3295	3294	1	2407	2407	0
I	3263	3263	0	2405	2404	1
J	3264	3262	2	2408	2406	2
K	3298	3296	2	2405	2405	0
L	3296	3296	0	2406	2405	1
M	3267	3265	2	2407	2406	1
N	3295	3294	1	2408	2406	2

23/05/24

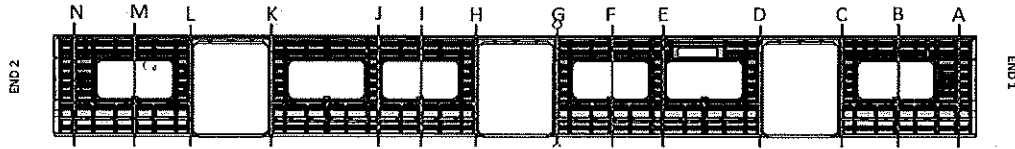
2024-05-23

INDUSTRIAL QUALITY  
MAINLINE

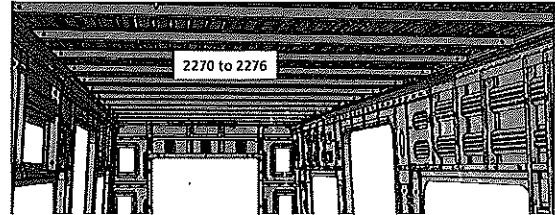
	CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3	Rev. 28	Project: PRASA
		Date 07/11/2023	SI.CB1210.254.V30

### CBS measurement

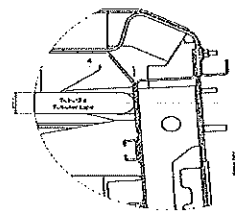
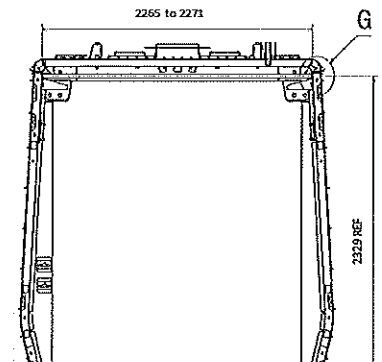
#### BEFORE WELDING



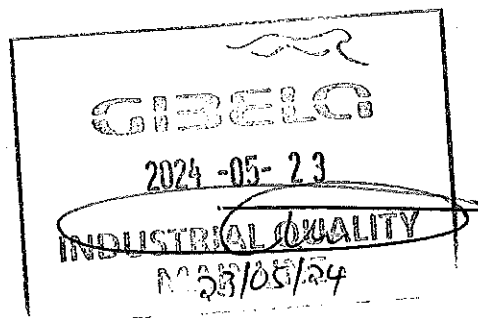
	2270 to 2276
A	2270
B	2273
C	2274
D	2272
E	2271
F	2275
G	2276
H	2272
I	2271
J	2270
K	2274
L	2274
M	2273
N	2271



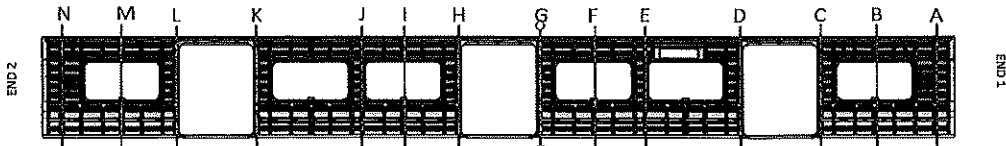
Do not consider reinforcement ( Take measurements top area of zee profile



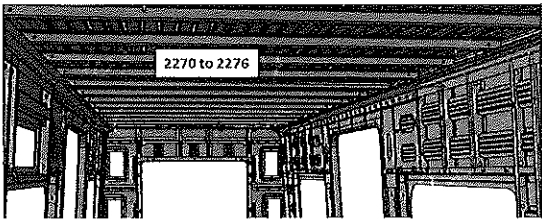
Detail D  
Consider as the reinforcement plate



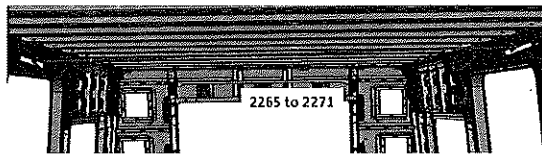
AFTER WELDING



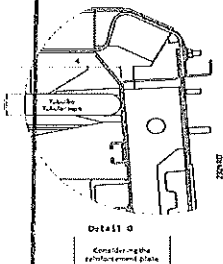
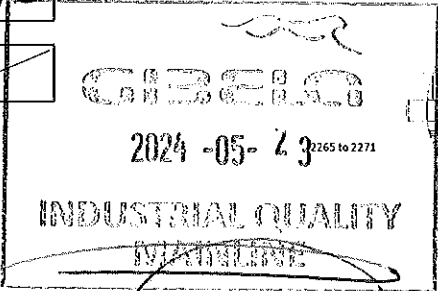
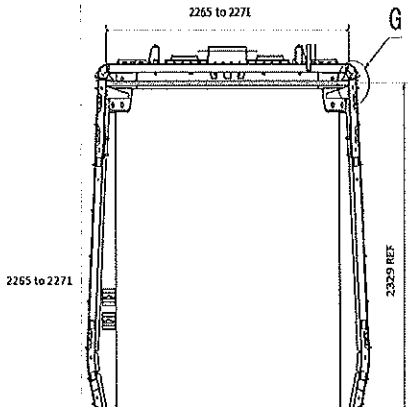
	2265 to 2271	2270 to 2276
A	2270	
B		2274
C	2269	
D	2271	
E		2275
F		2273
G	2270	
H	2267	
I		2273
J		2271
K	2266	
L	2270	
M		2276
N	2268	

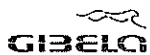


Do not consider reinforcement ( Take measurements top area of zee profile



Take measurement close to radius ( considering reinforcement)



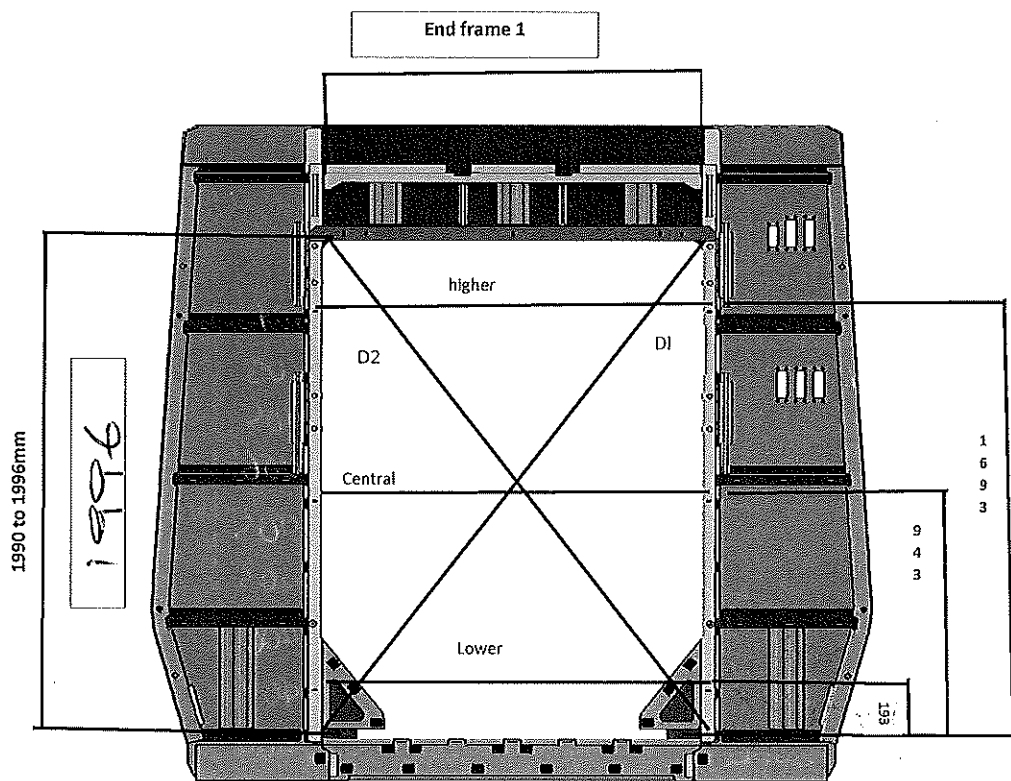


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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Project: PRASA  
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Specifications of Details for CBS measurement



1380 to 1382 mm

DIAGONAL DIFFERENCE  $D1-D2 \leq 3mm$

Higher Dimenision

1381

D1

2416

Central Dimension

1382

D2

2415

Lower Dimension

1380

D1-D2

1

GIBELQ

2024-05-23

INDUSTRIAL QUALITY  
MAINLINE

23/05/24



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.

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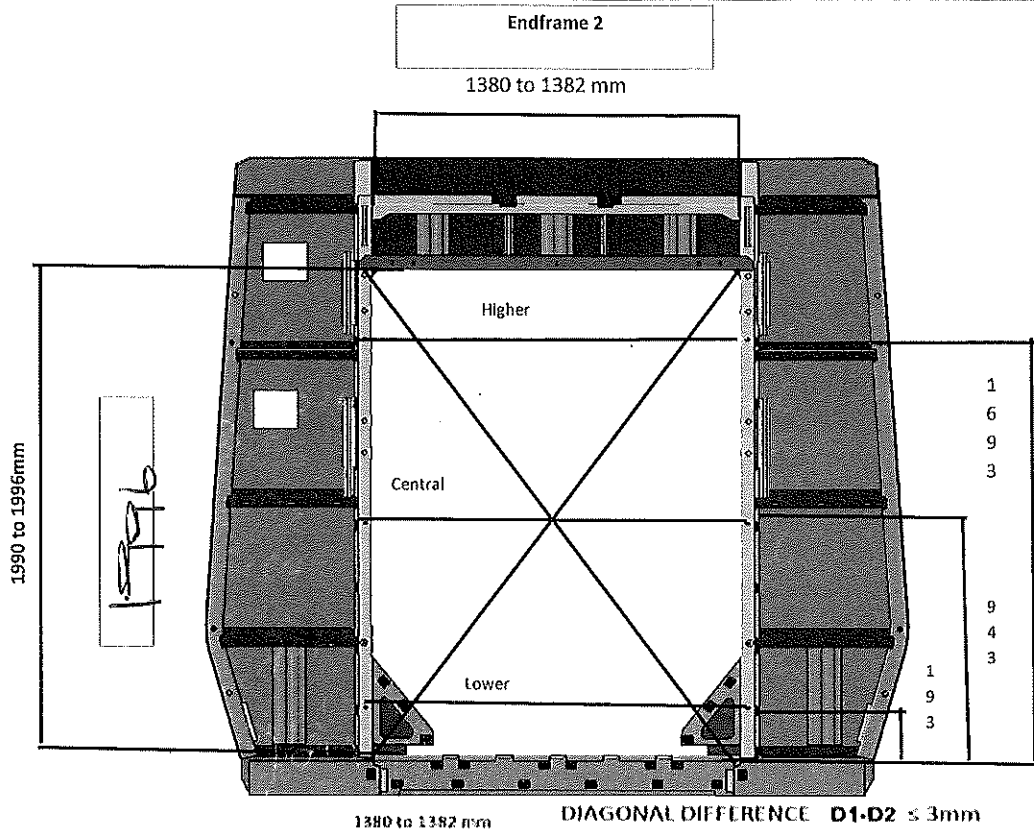
Date

07/11/2023

Project: PRASA

SI.CB1210.254.V30

Specifications of Details for CBS measurement



Higher Dimension

1382

D1

2415

Central Dimension

1381

D2

2415

Lower Dimension

1382

D1-D2

0

DIAGONAL DIFFERENCE  $D1-D2 \leq 3mm$

GIBELQ

2024-05-23

INDUSTRIAL QUALITY

23/05/24



CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

Rev.

28

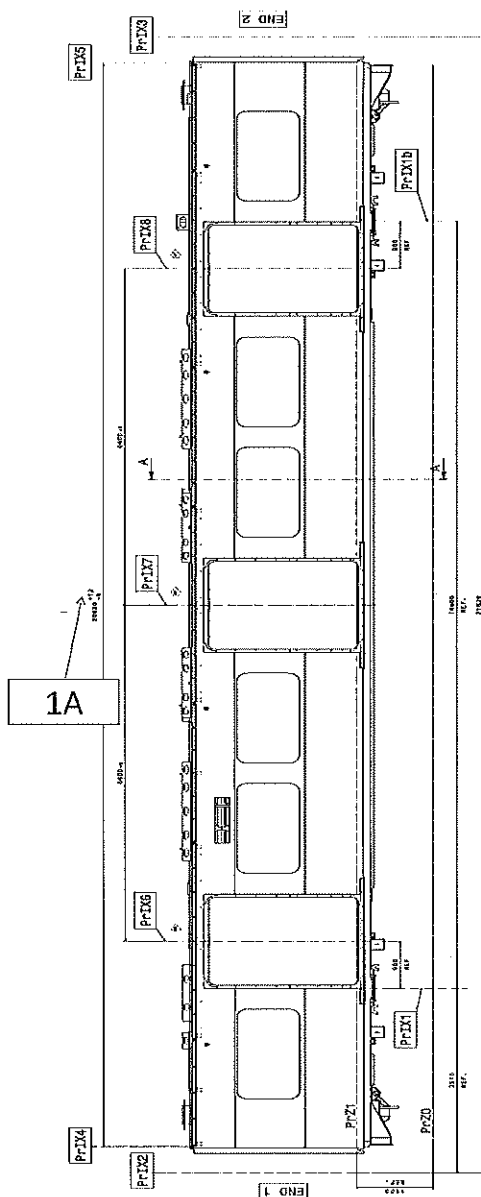
Date

07/11/2023

Project: PRA5A

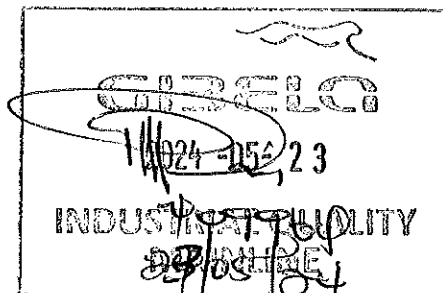
SI.CB1210.254.V30

### Specifications of Details for CBS measurement



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

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




### Dye penetrant test



Dye-penetration test to be performed by quality personnel





	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRA5A SI.CB1210.254.V30
		Date 07/11/2023	

Self Inspection - Final Result

				DATE	NAME	SIGNATURE
HOLD POINT		GO	(If activities are not complete, the missing activities must not impact the next stage)	23/05/24	Justice Operations	
			Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	23/05/24	Amo 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

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


Item	Description	Responsible	Due date	Status

Operations

Quality





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	
				TC1	MA	M1	M2	M3	TC2			
<input type="checkbox"/>	DIR30225487/2	AAD0001274556	CARBODY/SHELL M1,M2,M4 ASSEMBLY	CB2220		X	X		X		PRA.CB22220.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						
				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 DT0000335600		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	Timothy Maimela	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	Mbhombi Collins	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 Mbhombi	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 Mbhombi	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 Mbhombi	19/10/2022						
				CHECKER	Ntokozi 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	Ntokozi 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	Ntokozi Zwane	28/10/2023						
				REVISED BY	Amogelang Mohlampe	28/10/2023						
TRAINSET	CAR	OPERATOR NAME & ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES							
15229	MOD3	ASABWA 409974	24-05-24	SI.CB2220.250.V29	13							

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30225487/2	Rev. 29	<b>Project: PRASA</b>  <b>SI.CB2220.250.V29</b>	
		Date 28/10/2023		
Car: M1,M3&M4		NCR:		Work station: CB2220

Safety Related

**I - Documentation and Instruments Control**

**I.1 - Documentation Control**

Document	Type of car					Revision	Observation	OK	NOK	Remarks	Signature/Date (Manufacturing)	Signature/Date (Quality)
	T21	M1	M3	M4	T22							
DTR30225487/2				X		29	28-10-2023	X		N/A		

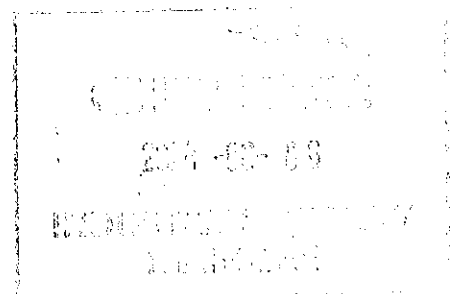
24-08-24



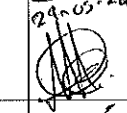



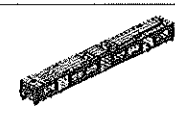
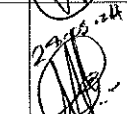

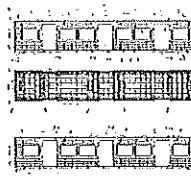
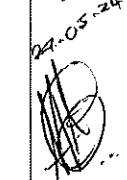

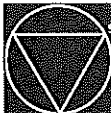
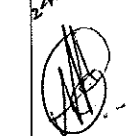

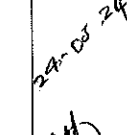

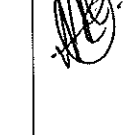


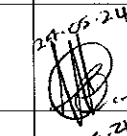

**I.2 - Instruments Control**


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)
measuring tape	GIMARK	06/05/2025	X		24-05-24	
tubular	32823	15/03/2025	X		24-05-24	

**1.3 Consumables**

Welding Consumable Control - Used for Special Process						
Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
308	51579	MIG	X		24-05-24	

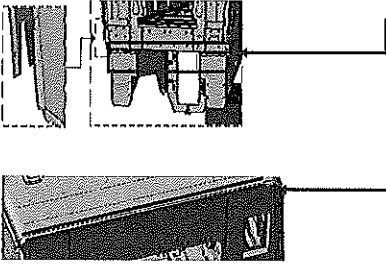


GIBELQ		CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2		Rev. 29 Date 28/10/2023	Project: PRASA SI.CB2220.250.V29	
<b>II - Self Inspection - Items to Check</b>						
<b>II.1 - Items to check</b>						
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Assembly according to Instruction Engineering n° PRA.CB2220.DTR30225487/2 Verification of fitment for all reinforcement brackets.	PRA.CB2220.DTR30225487/2	✓	 24/05/24	 24/05/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓	 24/05/24	 24/05/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓	 24/05/24	 24/05/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓	 24/05/24	 24/05/24
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓	 24/05/24	 24/05/24
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.	✓	 24/05/24	 24/05/24
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 Specified: Temperature Min - Max (°C) Min - Max 10°C - 35°C Relative humidity Min - Max (%) Min - Max 25% - 60%	Sealant Batch No: 63427 Exp Date: 08/06/25 Actuals Temperature: 14°C Humidity: 36%	✓	 24/05/24	 24/05/24
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0001278565	✓	 24/05/24	 24/05/24
09		Verification of safety welds	Approved according to DTD000210658 reference and Self inspection	✓	 24/05/24	 24/05/24


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

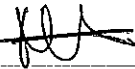
**II - Self Inspection - Items to Check**


**SEALANT APPLICATION**




**AREA 1 & 2 END 1**

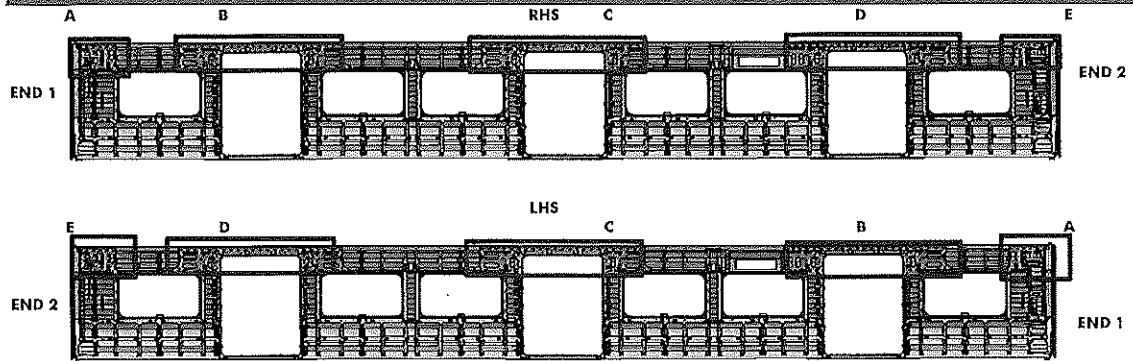
Operator (Name & sign):  
Methochois 

Operator (Name & sign):  
Methochois 

  
244-01-13  
INDUSTRIAL  
MASSACHUSETTS

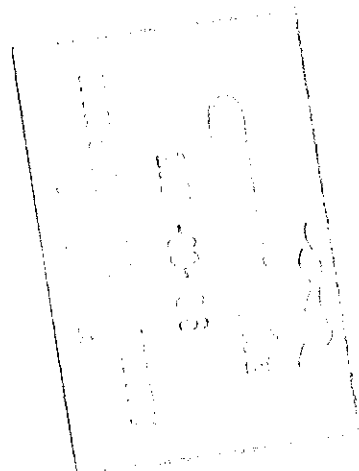
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project PRASA
		29	
		Date	
		28/10/2023	SI.CB2220.250.V29


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

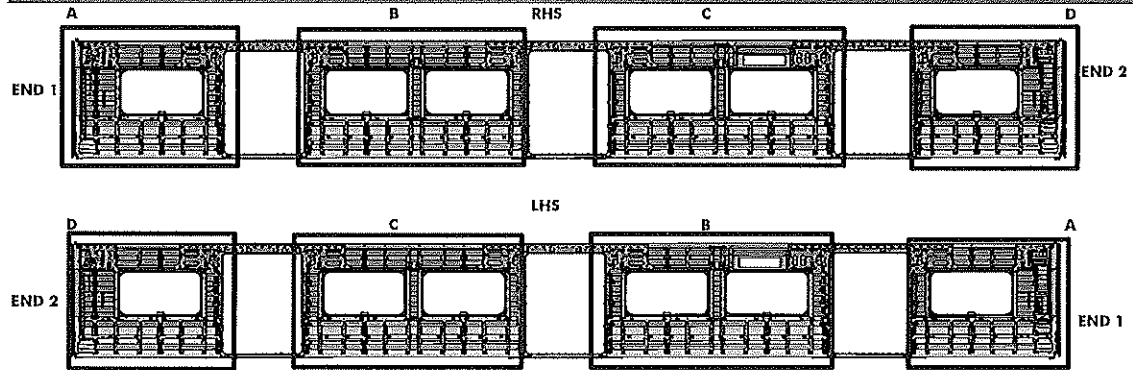


**REINFORCEMENT WELDING**


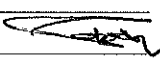















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B	Operator (Name&sign): <u>[Signature]</u>	LINDO <u>[Signature]</u>
C	Operator (Name&sign): <u>[Signature]</u>	LINDO <u>[Signature]</u> / Mmatsukico MMark
D	Operator (Name&sign): <u>[Signature]</u>	Mmatsukico MMark
E	Operator (Name&sign): <u>[Signature]</u>	Mmatsukico MMark

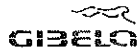


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev. 29	Project: PRASA SI.CB2220.250.V29
		Date 28/10/2023	
		II - Self Inspection - Items to Check	



### BRACKETING

		INSTALLATION	
C-RAILS:	Operator:	Asahidi	
	Operator:		
DOOR MECHANISMS:	Operator:	Pasella	
	Operator:		
TAPPING PADS	Operator:	Mphahlele	
	Operator:		
		INSTALLATION & VERIFICATION	
SEAT & LUGGAGE BRACKETS:	Operator:	hewi	
	Operator:		
SEAT BRACKETS VERIFICATION:	Operator:	hewi	
	Operator:		
WELDING			
AREA	LHS		RHS
A (Seat brackets)	: Operator (Name&sign):	LINDO 	LINDO 
(C-rails, Luggage and earth bushes)	: Operator (Name&sign):	Jelly 	LINDO 
B (Seat brackets)	: Operator (Name&sign):	Jelly 	Jelly 
(C-rails, Luggage and earth bushes)	: Operator (Name&sign):	Jelly 	LINDO 
C (Seat brackets)	: Operator (Name&sign):	Jelly 	MMAATSHILO Maelu
(C-rails, Luggage and earth bushes)	: Operator (Name&sign):	Jelly 	MMAATSHILO Maelu
D (Seat brackets)	Operator (Name&sign):	MMAATSHILO Maelu	MMAATSHILO Maelu
(C-rails, Luggage and earth bushes)	: Operator (Name&sign):	Jelly 	MMAATSHILO Maelu
ENDS			
END 1 TAPPING PADS WELDING:	Operator (Name&sign):	Jelly 	
END 2 TAPPING PADS WELDING:	Operator (Name&sign):	MMAATSHILO Maelu	



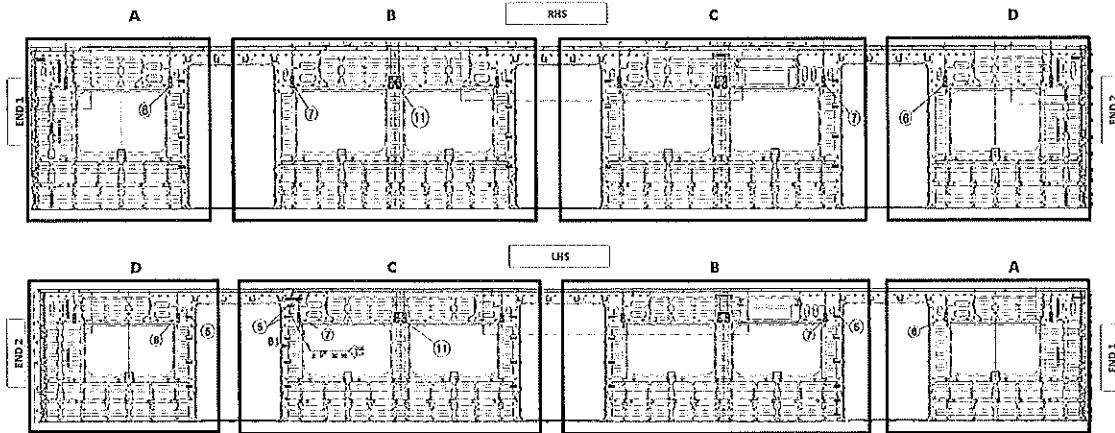
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

Rev.  
29  
Date  
28/10/2023

Project: PRASA  
SI.CB2220.250.V29

II - Self Inspection - Items to Check

M1/M3/M4 BRACKET INSTALLATION



QUANTITIES (M3/M4)

RHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	7		
	B	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		

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: *ASADIA*

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	8		
	D	2		

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: *ASADIA*

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:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: \_\_\_\_\_

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

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: \_\_\_\_\_

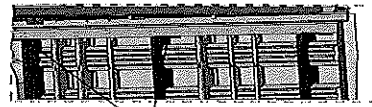
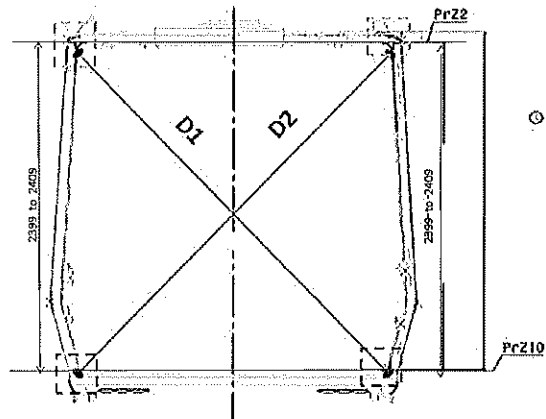


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

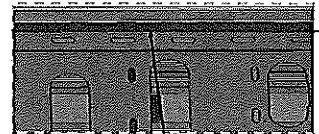
Rev.  
29  
Date  
28/10/2023

Project: PRASA  
SI.CB2220.250.V29

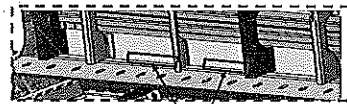
Specifications of Details for CBS measurement



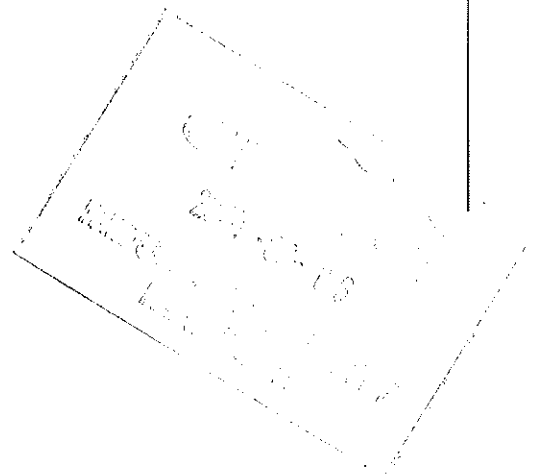
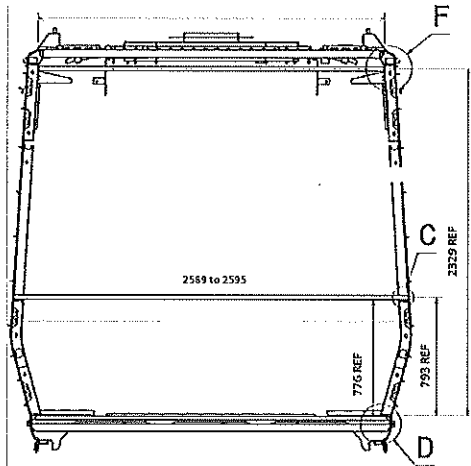
Measurement positions on roof rail and sidewall omega corner.



Reinforcement area measurement positions on roof reinforcement area.

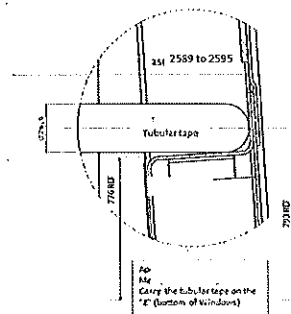


Measurement positions on sidewall and side sill corner.

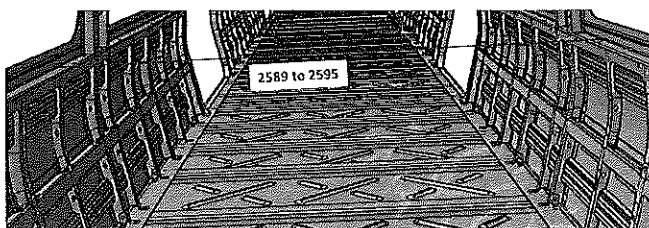




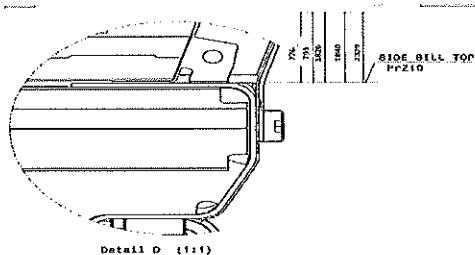
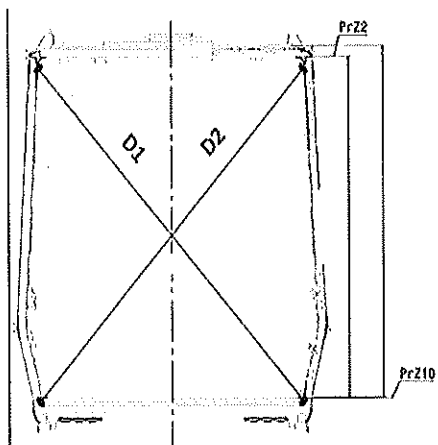
Technical drawing of a rectangular frame. The top horizontal member is labeled "2270 to 2276". The bottom horizontal member is labeled "2589 to 2595". The right vertical member is labeled "2320 to 2326". The left vertical member is labeled "776 to 782". The top right corner is labeled "F". The bottom right corner is labeled "D". The right vertical member is also labeled "C".



Detail C




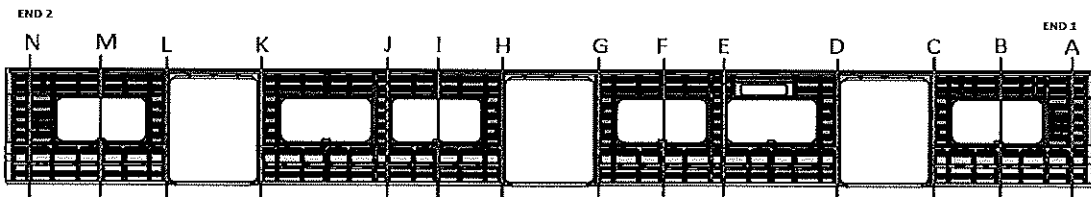
### Take measurement close to radius



Detail D (1:1)

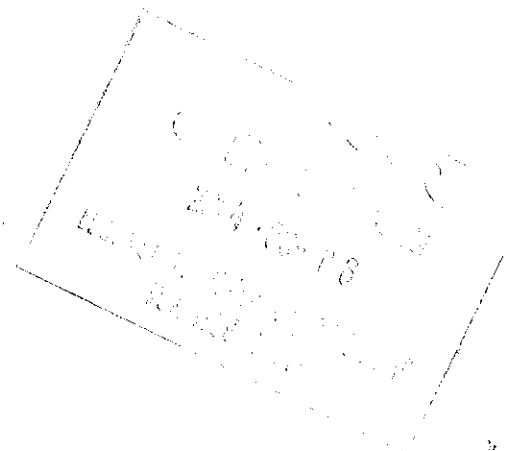



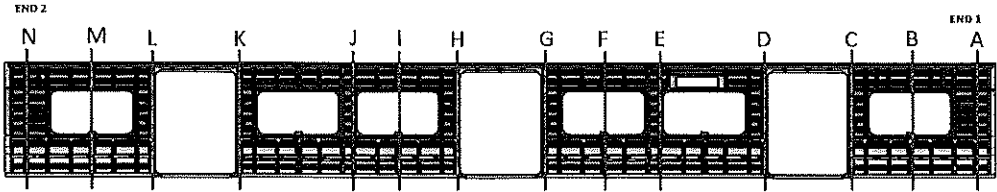
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA
		29	
		Date	
		28/10/2023	
			SI.CB2220.250.V29
CBS measurement			



**BEFORE WELDING**


	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3297	3295	2	—
B	3264	3265	1	—
C	3298	3296	2	—
D	3296	3294	2	—
E	3265	3266	1	—
F	3266	3268	2	—
G	3298	3298	0	—
H	3295	3294	1	—
I	3265	3266	1	—
J	3266	3265	1	—
K	3297	3298	1	—
L	3296	3296	0	—
M	3268	3266	2	—
N	3294	3298	1	—

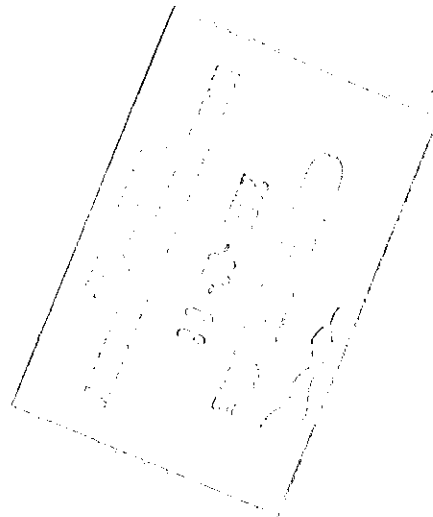


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2	Rev.	Project: PRASA  SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	
CBS measurement			
			

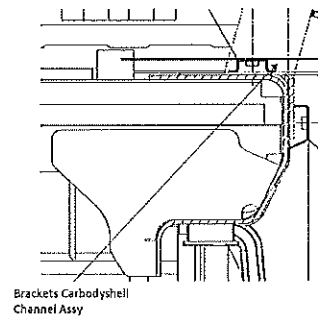
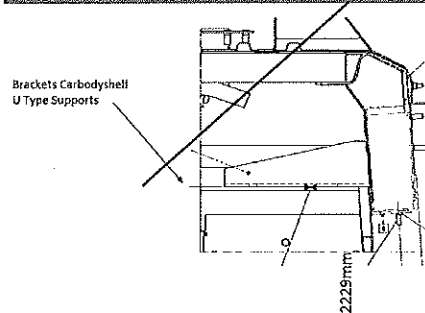
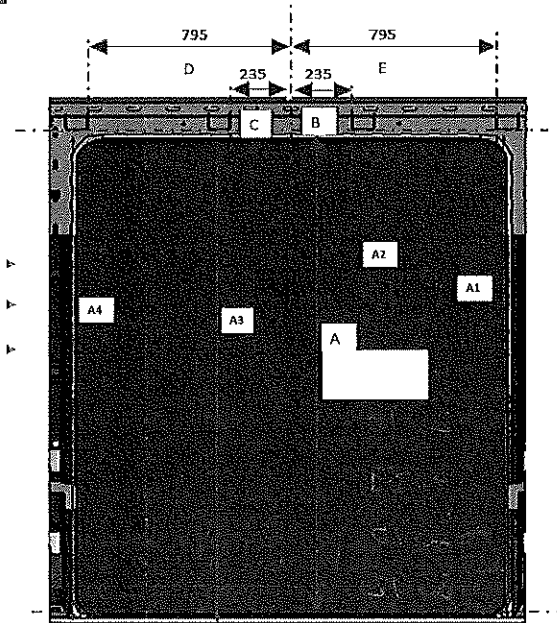
AFTER WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3297	3296	1	2596
B	3267	3265	2	2596
C	3300	3300	0	2589
D	3299	3296	3	2596
E	3267	3263	4	2592
F	3266	3261	5	2590
G	3299	3300	1	2593
H	3299	3293	6	2595
I	3262	3267	5	2594
J	3269	3265	4	2595
K	3299	3299	5	2594
L	3299	3300	6	2590
M	3266	3268	2	2591
N	3296	3295	1	2597

  
27-05-24



Specifications of Details for CBS measurement CB1220



DOOR 1 - LHS

	VALUE	ACTUAL
A1	2230 to 2232	2231
A2	2230 to 2232	2232
A3	2230 to 2232	2232
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 2 - LHS

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

DOOR 3 - RHS

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

24-05-24



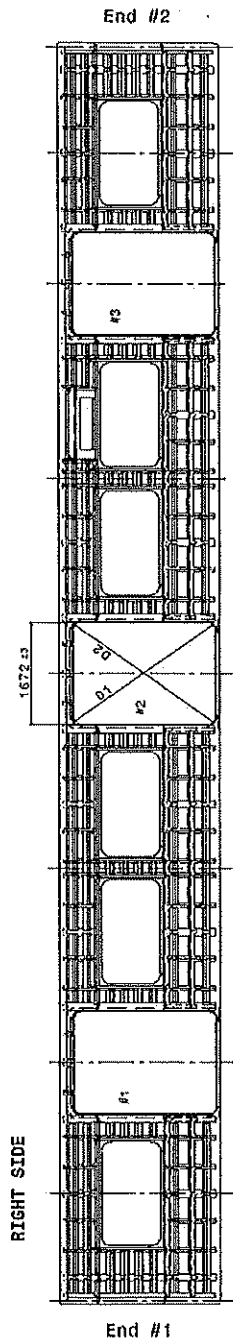
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30226487/2

Rev.  
29  
Date  
28/10/2023

Project: PRASA

SI.CB2220.250.V29

Specifications of Details for CBS measurement CB1220



Doors diagonal D1-D2 maximum difference ≤4mm

#1	#2	#3
D1 2748	D2 2746	D3 2748
D1-D2 1	D2-D3 1	D3-D1 3

HIGHER DIMENSION

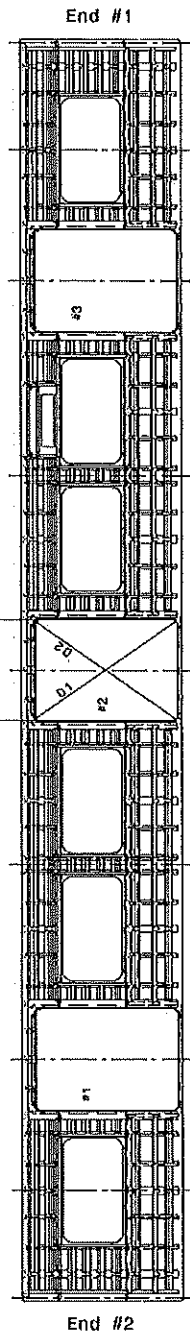
CENTRAL DIMENSION

LOWER DIMENSION

Doors Length - 1672 ±3mm

#1	#2	#3
1674	1673	1674
1672	1672	1672
1671	1671	1672

LEFT SIDE



Doors diagonal D1-D2 maximum difference ≤4mm

#1	#2	#3
D1 2744	D2 2747	D3 2746
D1-D2 2	D2-D3 0	D3-D1 2

HIGHER DIMENSION

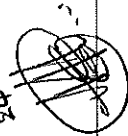
CENTRAL DIMENSION

LOWER DIMENSION




Doors Length - 1672 ±3mm


#1	#2	#3
1672	1674	1673
1672	1671	1672
1672	1670	1671


24-05-24



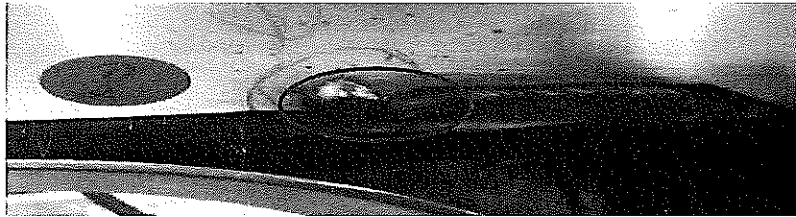
2000

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30226487/2	Rev. 29	Project: PRASA  SI.CB2220.250.V29			
		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		
HOLD POINT	GO	(If activities are not complete, the missing activities must not impact the next stage)	24.05.24	ASAKIWA Operations		
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	24/05/24	Ntokozwa 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			

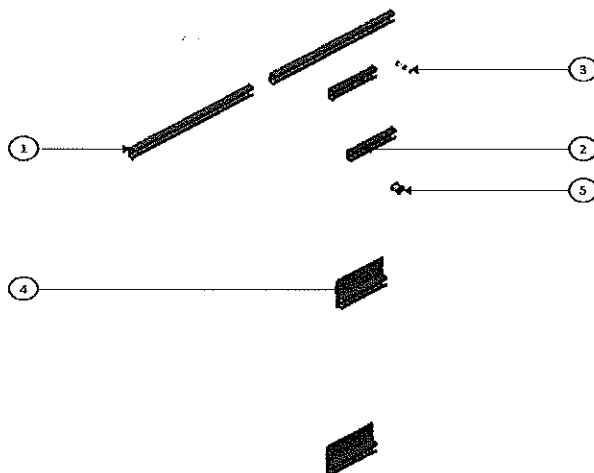


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA SI.CB2220.250.V29
		29	
		Date 28/10/2023	

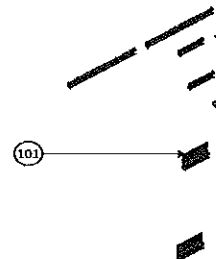
### ANNEXURE A: Arc Welding Quality Acceptance Standard



Station: CB1220-004- U108 & U107



PART NO.	ITEM NO.	QTY	DESCRIPTION	MASS [KG]
DTF0000074003	5	6	EARTH STUD 6	0.036
A/00001201249	4	6	ASSEMBLY SUPPORT	0.271
DTF0000348306	3	12	WELDING STUD ISO13318 PT-A/ISO20-557	0.007
AA00001160424	2	12	ASSEMBLY SUPPORT	0.193
A/00001184418	1	14	ASSEMBLY SUPPORT	0.522
AA00001161080	101	6	CARBODYSHELL BRACKETS CARBODYSHELL M1/M3/M4 CAP(SIDE FRAME MODULE STUD-G19)	12.132






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.

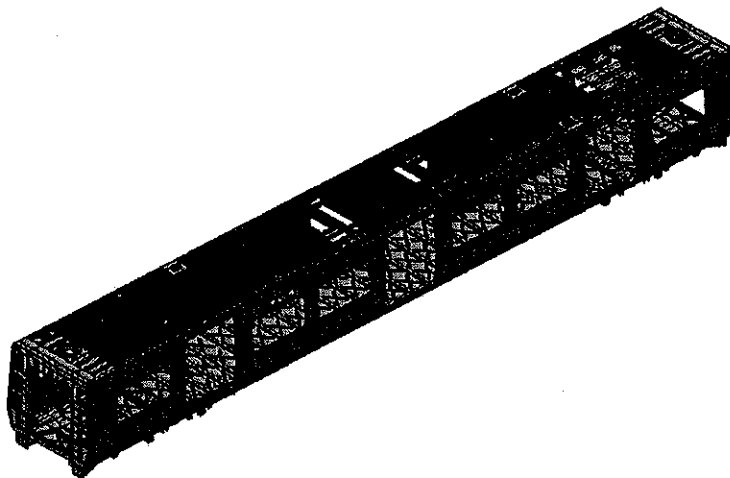
## APPLICATION REFERENCE

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ? 	
				TCS	MA	M1	M2	M3	TCS			
<input type="checkbox"/>	DTR3000152669	AAD0001278566	CARBODYSHELL M1, M3, M4 ASSEMBLY	CB2230			X				PRA.CB2230.DT000002 25487.V20	YES
<input type="checkbox"/>	DTR3000152673	AAD0001278566	CARBODYSHELL M1, M3, M4 ASSEMBLY	CB2230		X			(X)		PRA.CB2230.DT000002 25487.V20	YES
<input type="checkbox"/>												
REV	DATE	MODIFICATION CONTENT			RESPONSIBLE		NAME		DATE			
0	2018/08/02	GIBELA NEW CREATION			APPROVER		Philippe Marques		2018/08/02			
					CHECKER		Nosizo Pindela		2018/08/02			
					COMPILER		Nosizo Pindela		2018/08/02			
1	30/5/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager			APPROVER		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			
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					
25	20/02/2022	New Baseline change 10.3.1			APPROVER		Collins Mbhomphi		20/02/2022			
					CHECKER		Andani Muthelo					
					REVISED BY		Andani Muthelo					
26	14/06/2022	Update minimum temperature requirement for sealant application			APPROVER		Collins Mbhomphi		14/06/2022			
					CHECKER		Andani Muthelo					
					REVISED BY		Andani Muthelo					
27	26/07/2022	Threshold measurements addition			APPROVER		Collins Mbhomphi		26/07/2022			
					CHECKER		Andani Muthelo					
					REVISED BY		Andani Muthelo					
28	17/10/2022	Added traceability of sealant application			APPROVER		Collins Mbhomphi		17/10/2022			
					CHECKER		Ntokozo Zwane					
					REVISED BY		Amogelang Mohlampe					
29	14/04/2023	Added sealant batch number & welding consumables traceability			APPROVER		Vanessa Ntuli		14/04/2023			
					CHECKER		Ntokozo Zwane					
					REVISED BY		Amogelang Mohlampe					
30	06/11/2023	Added threshold traceability for boiler makers and welders			APPROVER		Ngobeni Tyson		06/11/2023			
					CHECKER		Andani Muthelo					
					REVISED BY		Ntokozo Zwane					
TRAINSET	CAR	OPERATOR NAME & ALPS NO		DATE	SELF INSPECTION NUMBER		PAGES					
229	M3	BAMAMEL 440478		27/08/24	SI.CB2230.256.V29		12					

	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DT00000225487	Rev. 30	<b>Project: PRASA</b>  <b>SI.CB2230.256.V29</b>
		Date 06/11/2023	
Car:	NCR:	Work station: CB2230	



Safety Related



### I - Documentation and Instruments Control

#### I.1 - Documentation Control

Document	Type of car					Revision	Observation	OK	Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4	T2					
PRA.CB2230.DT00000225487		X				30		X	N/A	EMMANUEL 21/05/24

#### I.2 - Instruments Control

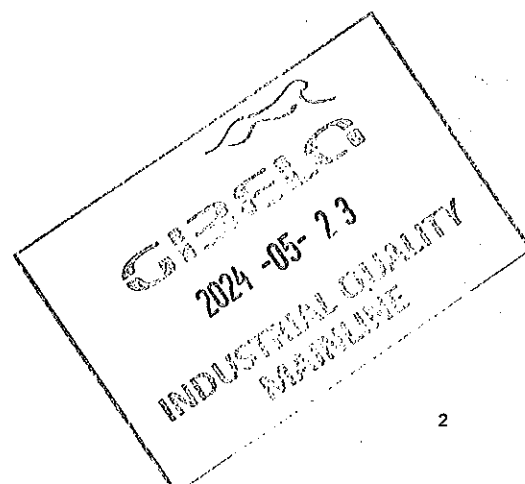
##### Monitoring and Measuring Instrument Control - Used for Special Process

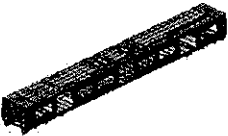
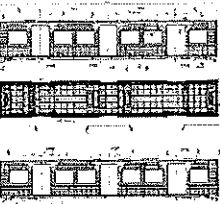
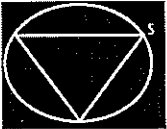
Instruments	Serial number	Calibration or Verification Validation Date	OK	Signature/Date (Operations)	Signature/Date (Quality)
Caliper	22713	26/06/24	X		
Measuring Tape	GIBOT74	25/04/25	X	EMMANUEL 27/05/24	21/05/24
Combination Square	GIB0072	27/07/24	X		

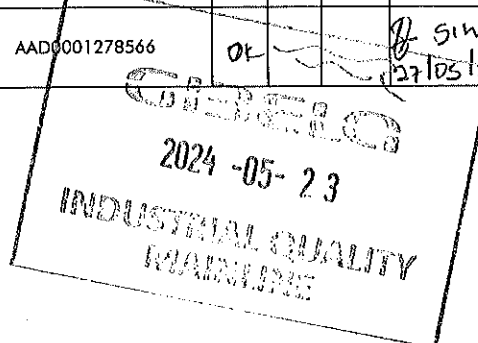
#### 1.3 Consumables


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

Filler Material	Heat Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
308 LSI	2231067	MIG	X	EMMANUEL 28/05/24	21/05/24



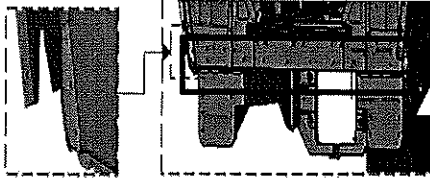
GIBELG		CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487		Rev. 30 Date 06/11/2023	Project: PRASA SI.CB2230.256.V29							
<b>II - Self Inspection - Items to Check</b>												
<b>II.1 - Items to check</b>												
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK		Signature/Date (Operations) Signature/Date (Quality)						
01	N/A	Assembly according to Instruction Engineering n° PRA.CB1230.DT00000225487 Verification of fitment for all brackets.	PRA.CB1230.DT00000225487	OK		Emmanuel 27/05/24 27/05/24						
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	OK		Emmanuel 27/05/24 27/05/24						
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	OK		Emmanuel 27/05/24 27/05/24						
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	OK		Emmanuel 27/05/24 27/05/24						
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	OK		Emmanuel 27/05/24 27/05/24						
06		Perform visual inspection or 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.	OK		Emmanuel 27/05/24 27/05/24						
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 Specified: <table border="1"> <tr> <td>Temperature Min - Max (1)</td> <td>Min-Max</td> <td>10°C - 35°C</td> </tr> <tr> <td>Relative humidity Min - Max (1)</td> <td>Min-Max</td> <td>25% - 80%</td> </tr> </table>	Temperature Min - Max (1)	Min-Max	10°C - 35°C	Relative humidity Min - Max (1)	Min-Max	25% - 80%	Sealant Batch No: <u>ISA 70-30</u> Exp Date: <u>09 / 06 / 24</u>  Actuals Temperature: <u>14°C</u> Humidity: <u>39 %</u>	OK		Emmanuel 27/05/24 Sinté 27/05/24
Temperature Min - Max (1)	Min-Max	10°C - 35°C										
Relative humidity Min - Max (1)	Min-Max	25% - 80%										
08	N/A	Verification of sealant application on the roof and sidewall finishers.	Sealant must be: -Applied straight and even -Free of gaps,cracks,damage and debris (flashes, dirt, dust)  Refer to Annexure B	OK		Emmanuel 27/05/24 Sinté 27/05/24						
09	N/A	Verification of sealant application in certain regions in the drawing.	AAD0001278566	OK		Emmanuel 27/05/24 Sinté 27/05/24						



	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DT00000225487	Rev. 30	<b>Project: PRASA</b>  <b>SI.CB2230.256.V29</b>
		Date	
		06/11/2023	
<b>II - Self Inspection - Items to Check</b>			

**END 2 SEALANT**

**AREA 1**



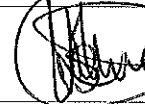
OPERATOR  
(Name & sign):

LERDY 

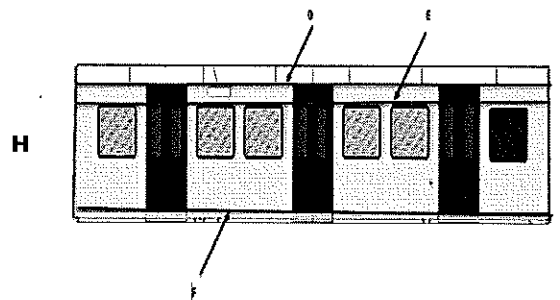
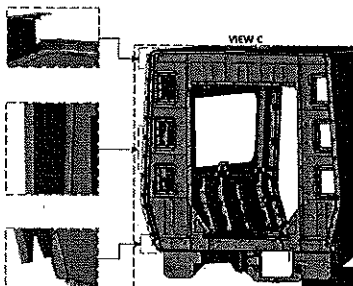
OPERATOR  
(Name & sign):

LERDY 

OPERATOR  
(Name & sign):

LERDY 

**AREA 2 (VIEW C)**



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

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


LHS


RHS

D.E.P.G.H.I

Operator (Name & sign): Sinie

Sinie

Operator (Name & sign): 




Operator (Name & sign): Tshenolo

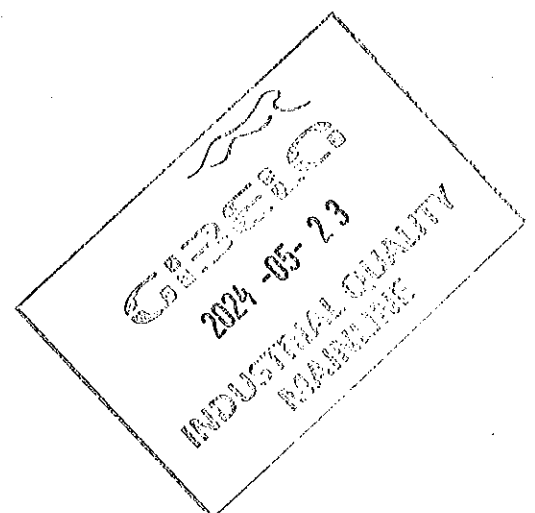
Tshenolo

Operator (Name & sign): Tshetab

Tshetab

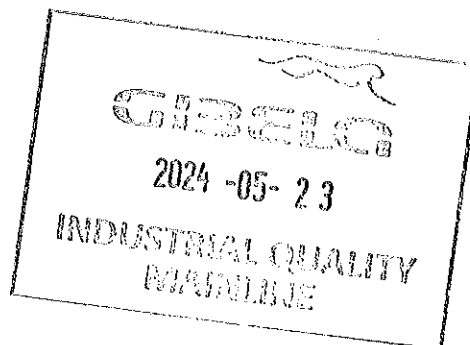
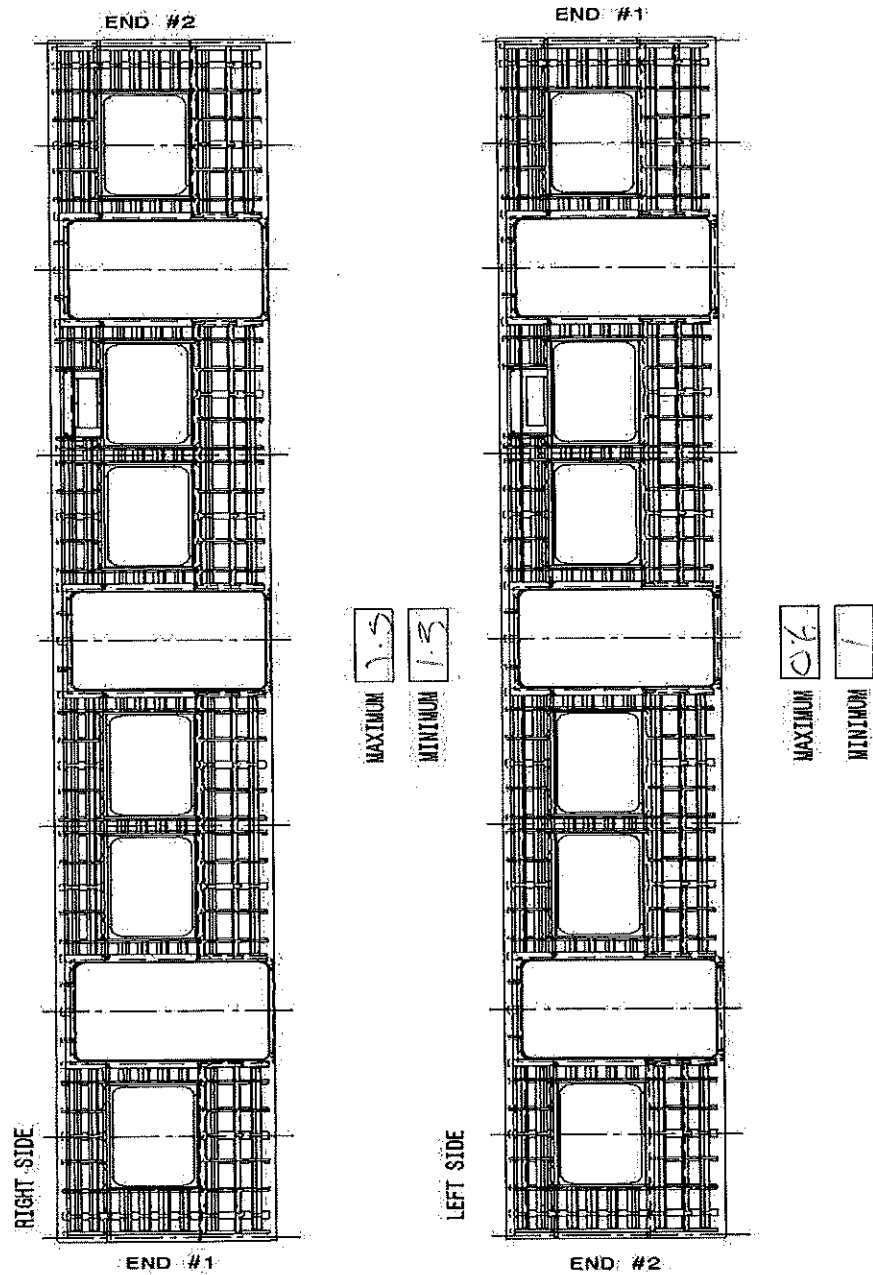
Operator (Name & sign): 





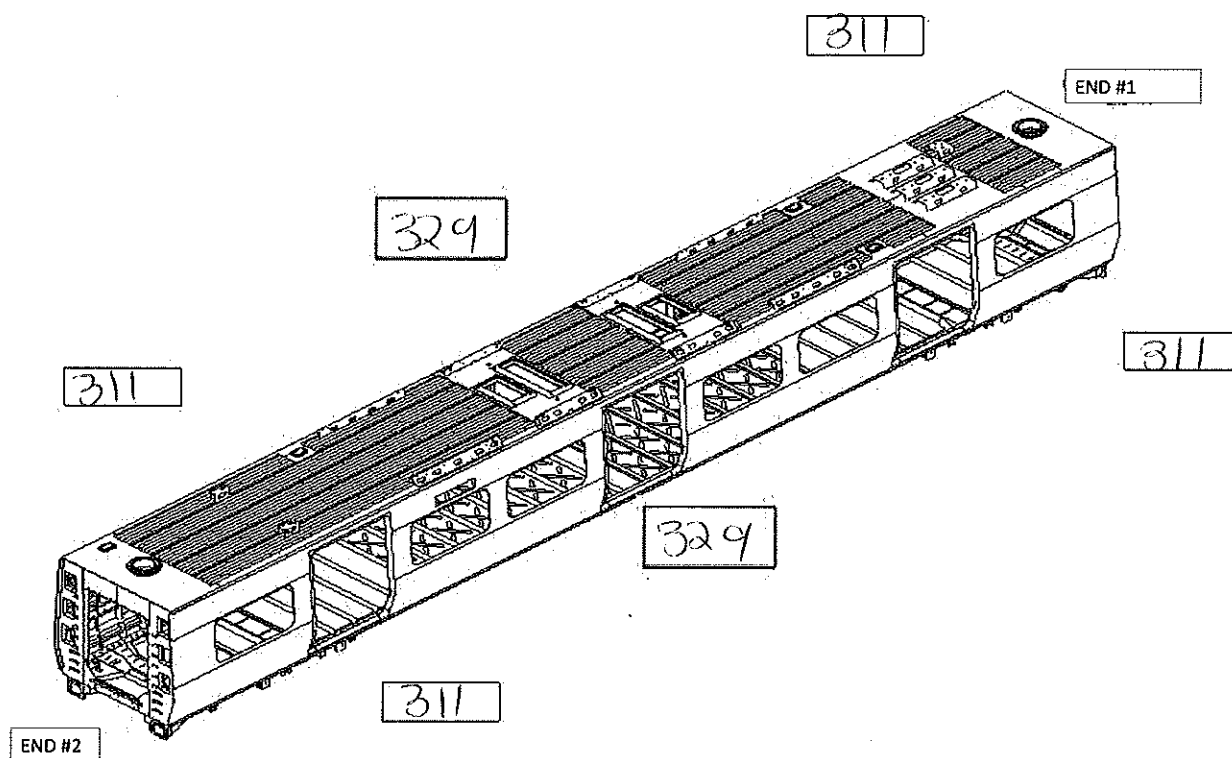
Specifications of Details for CB5 measurement CB1230

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.



Specifications of Details for CBS measurement CB1230

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



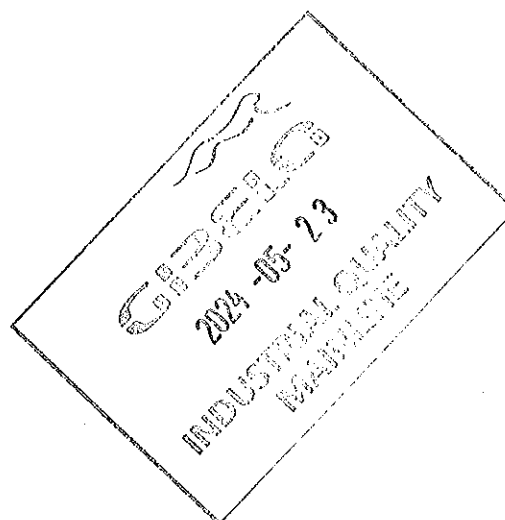
MEASURED CAMBER VALUES

RIGHT

11. 18

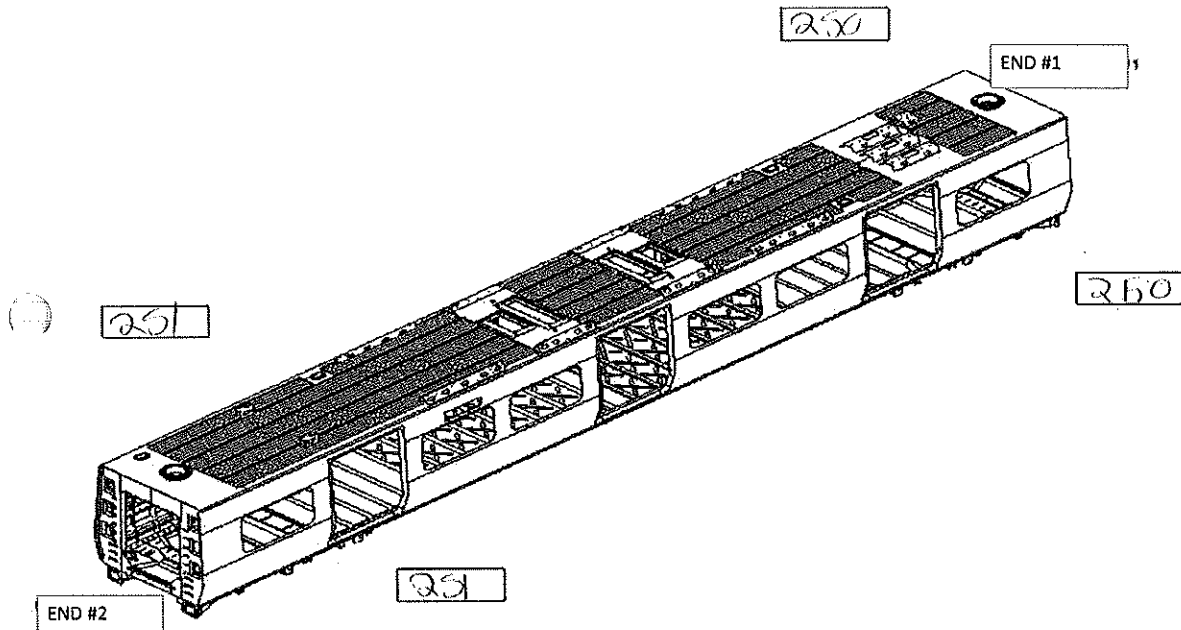
LEFT

18



**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

TRANVERSE

0

LONGITUDINAL

1

TWIST FOUND ON END 2

TRANVERSE

0

LONGITUDINAL

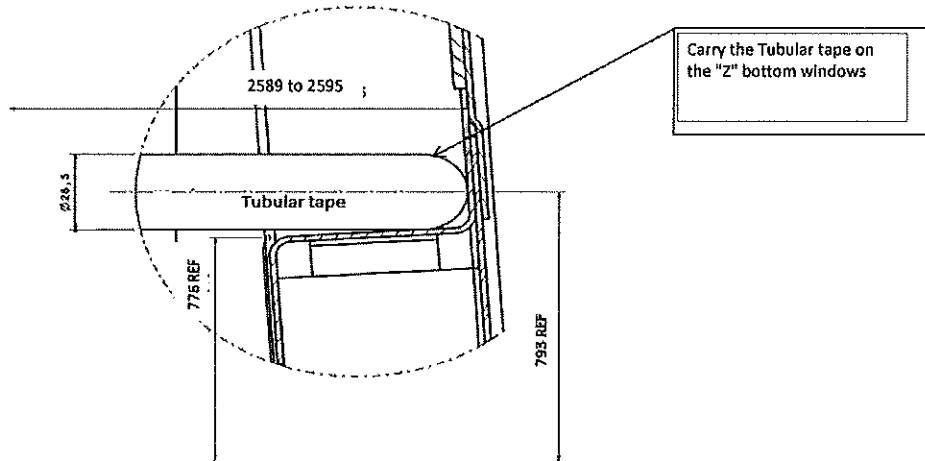
1

**GIBELQ**

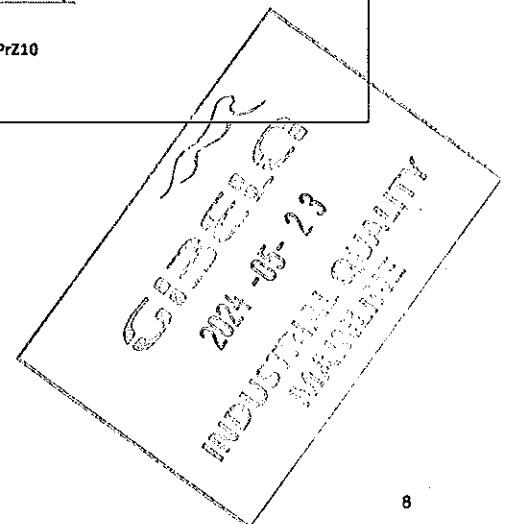
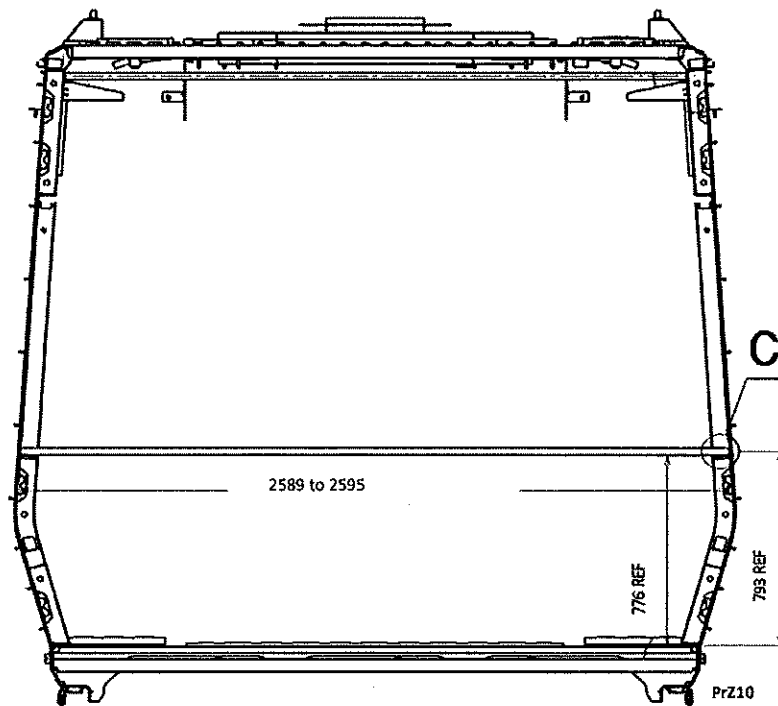
2024-05-23

INDUSTRIAL QUALITY  
ACQUINCE

Specifications of Details for CBS measurement CB1230

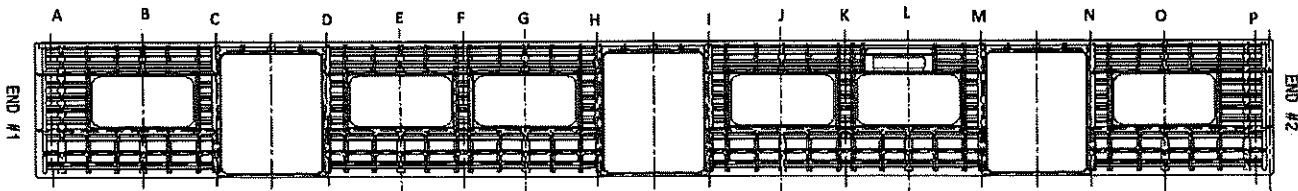


Detail C



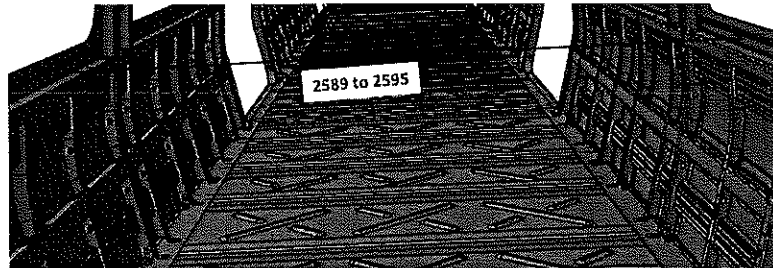


Specifications of Details for CBS measurement CB1230



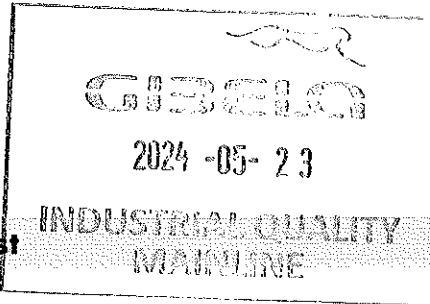
2589 to 2595mm

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



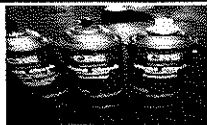
Threshold verification						Nominal value :38	
Door 1		Door 2		Door 3		L	R
L	R	L	R	L	R		
39	38	39	39	38	38		
Door 4		Door 5		Door 6		L	R
L	R	L	R	L	R		
38	38	38	39	38	38		

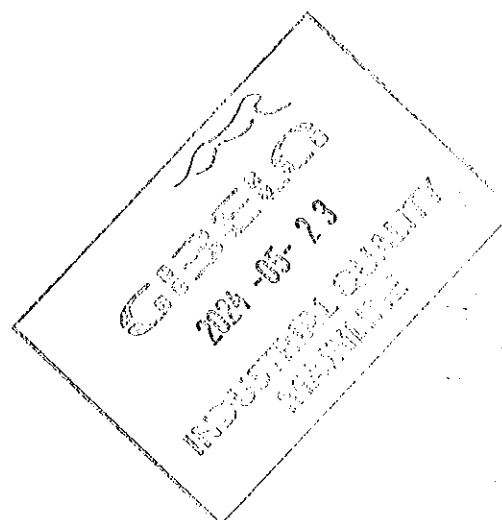
BOILER MAKER: Emmanuel Enopont  
WELDER: Zanele. Hlu




Dye penetrant test

Dye-penetration test to be performed by quality personnel

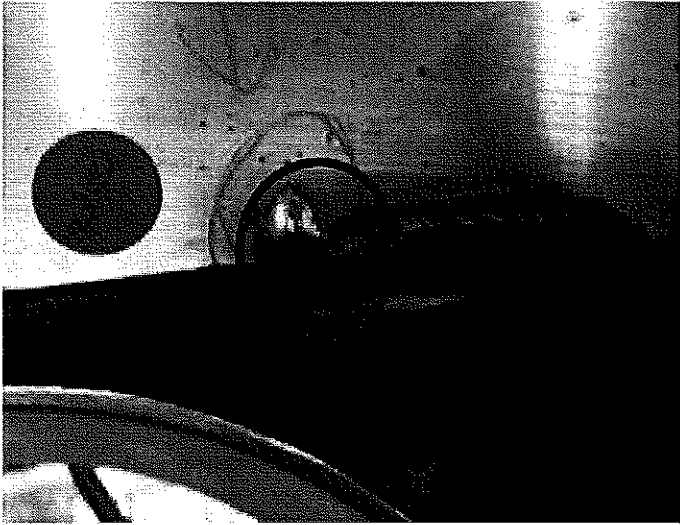


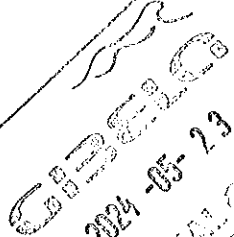


		CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487		Rev. 30 Date 08/11/2023	Project: PRASA SI.CB2230.256.V29	
Self Inspection - Final Result						
Is the car good to advance to the next workstation/process? (Approval of Operations and Industrial Quality)				DATE	NAME	SIGNATURE
HOLD POINT		GO	(If activities are not complete, the missing activities must not impact the next stage)	27/05/24	Enmarud	Enmarud
			Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	27/05/24	Andam	Andam
			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			

GIBEL  
2024-05-23  
INDUSTRIAL QUALITY  
MANAGER

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



  
2024-05-23  
INDUSTRIAL QUALITY  
MANUFACTURE