

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.

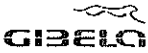
APPLICATION REFERENCE

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ?		
				TC1	M4	M1	M2	M3	TC2				
<input type="checkbox"/>	DTR30223319/3	AAD0001241033	Carshell Assembly TC	CB2210	X						X	PRA.CB2210.DTR30223319/3.V25	YES

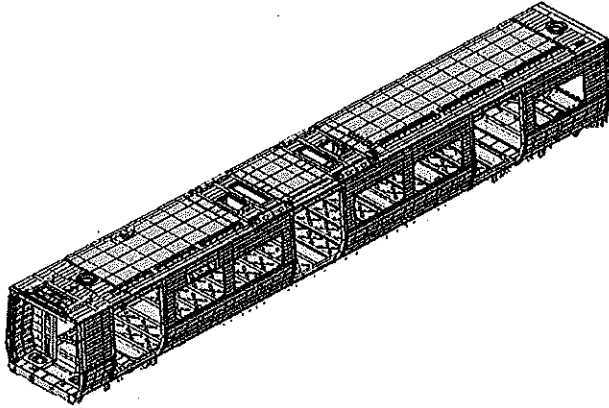
REV	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
0	09/04/2018	GIBELA NEW CREATION	APPROVER	Itumeleng Modiba	09/04/2018
			CHECKER	Nosizo Pindela	09/04/2018
			COMPILER	Thanyani Mathegu	06/04/2018
1	2018/05/18	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager	APPROVER	Itumeleng Modiba	2018/05/18
			CHECKER	Nosizo Pindela	2018/05/18
			REVISED BY	Ramokone Motama	2018/05/18
2	2018/06/18	MODIFICATION CONTENT	APPROVER	Itumeleng Modiba	2018/06/18
			CHECKER	Nosizo Pindela	2018/06/18
			REVISED BY	Ramokone Motama	2018/06/18
3	2018/12/12	Additional checkpoints	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	2019/11/03	Record D1 and D2 on Self - Inspection	APPROVER	Itumeleng Modiba	2019/11/03
			CHECKER	Nosizo Pindela	2019/11/03
			REVISED BY	Nosizo Pindela	2019/11/03
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	Mpho Mulaudzi	06/08/2020
			CHECKER	Bongane Masina	06/08/2020
			REVISED BY	Bongane Masina	06/08/2020
20	19/04/2020	New Baseline change 10.3	APPROVER	Andani Muthelo	19/04/2021
			CHECKER	Andani Muthelo	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	21/02/2022	New Baseline change 10.3.1	APPROVER	Mbhombi Collins	21/02/2022
			CHECKER	Andani Muthelo	21/02/2022
			REVISED BY	Andani Muthelo	21/02/2022
26	14/04/2023	Addition of welding consumable traceability	APPROVER	Ntuli Vanessa	14/04/2023
			CHECKER	Mohlampe Amogelang	14/04/2023
			REVISED BY	Mohlampe Amogelang	14/04/2023
27	27/07/2023	Added verification of loaded parts	APPROVER	Ngobeni Tyson	27/07/2023
			CHECKER	Mathapo Kelebone	27/07/2023
			REVISED BY	Mohlampe Amogelang	27/07/2023
28	07/11/2023	Addition of welding traceability	APPROVER	Ngobeni Tyson	07/11/2023
			CHECKER	Andani Muthelo	07/11/2023
			REVISED BY	Ntokozi Zwane	07/11/2023

INDUSTRIAL QUALITY
PPAP LINE

TRAINSET	CAR	OPERATOR NAME & ALPS NUMBER	DATE	SELF INSPECTION NUMBER	PAGES
223	T22	188050 482833	17/04/24	SI.CB2210.322.V28	16



	DTR30223319/3 Carshell Assembly TC	Rev. V28	Project: PRASA
		Date- 07/11/2023	SI.CB2210.322.V28

Car: TC1 & TC2	NCR:	Work station: CB2210
----------------	------	----------------------



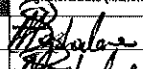

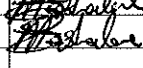
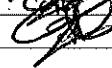
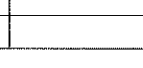
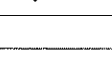
I - Documentation and Instruments

I.1 - Documentation Control

Document	Type of car						Revision	Observation	OK	N/A	Signature/Date (Manufacturing)	Signature/Date (Quality)
	U	E	S	M	3	U						
DTR30223319/3						X			✓		N/A	 

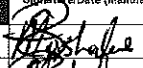
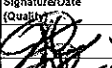
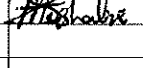
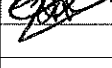
I.2 - Instruments Control

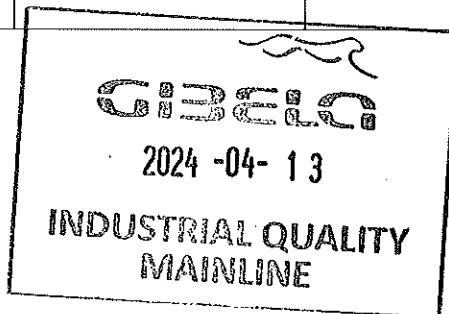
Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Validation	Calibration or Verification Validation Date	OK	N/A	Signature/Date (Manufacturing)	Signature/Date (Quality)
Tubular	32823-2	18/03/25	✓			
Laser tape	125425924	08/01/25	✓			
30m tape	Q18TP0102	18/11/24	✓			

I.3 Consumables

Welding Consumable Control - Used for Special Process


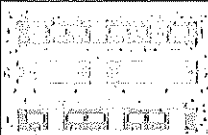

Filler Material	Heat Number	Welding Process	OK	N/A	Signature/Date (Manufacturing)	Signature/Date (Quality)
ER308LSi	314018-74097	Mig	✓			
ER308L	299687-70322	Tig	✓			




17/04/24

17/04/24

17/04/24

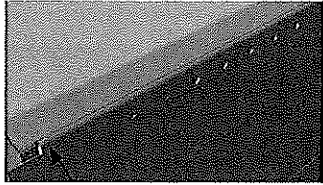
		DTR30223319/3 Carshell Assembly TC		Rev. V28 Date- 07/11/2023		Project: PRASA SI.CB2210.322.V28	
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK		Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Verification of correct parts loaded (Sidowalls, Endframes, Roof and Underframe)	DT000002B4980	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality.	DTD0000210675	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24
03		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24
04	REFER TO ANNEXURE A	Spot Welding inspected and approved according procedure	IND-SAL-WMS-016 e DTD0000210675	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24
05	REFER TO ANNEXURE B	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24
06		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24
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.	As the welding procedure IND-SAL-WMS-018 and DTD0000210658	✓		<i>[Signature]</i> 17/04/24	<i>[Signature]</i> 17/04/24


 2024-04-13
**INDUSTRIAL QUALITY
 MAINLINE**

	DTR30223319/3 Carshell Assembly TC	Rev. V28	Project: PRASA
		Date- 07/11/2023	SI.CB2210.322.V28

Welder traceability

Roof ring welds

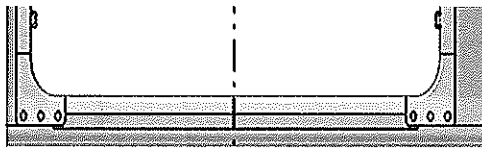


Boiler maker (Name & Sign): <u>Justice ^{LHS} [Signature]</u>	Welder (Name & Sign): <u>Thabang [Signature]</u>
Boiler maker (Name & Sign): <u>Sean ^{RHS} [Signature]</u>	Welder (Name & Sign): <u>Thabang [Signature]</u>

END 1

Boiler maker (Name & Sign): <u>Justice ^{LHS} [Signature]</u>	Welder (Name & Sign): <u>Thabang [Signature]</u>
Boiler maker (Name & Sign): <u>[Signature] Sean ^{RHS}</u>	Welder (Name & Sign): <u>Thabang [Signature]</u>

END 2



Boiler maker (Name & Sign): <u>Sean ^{LHS} [Signature]</u>
Welder (Name & Sign): <u>[Signature]</u>

Boiler maker (Name & Sign): <u>Sean ^{RHS} [Signature]</u>
Welder (Name & Sign): <u>[Signature]</u>

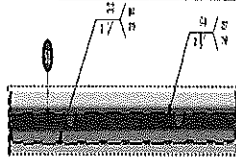
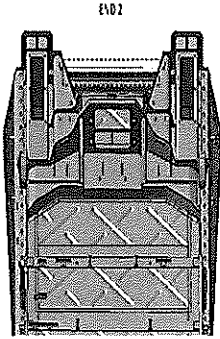


DTR30223319/3 Carshell Assembly TC

Rev.
V28
Date-
07/11/2023

Project: PRASA
SI.CB2210.322.V28

EUF Reinforcement Plates



Boiler maker (Name & Sign):

END 2

Lebego Makhabe

Welder (Name & Sign):

SIPHOKAZI



FEDOLI

Operator:

SIPHOKAZI



2024-04-13

INDUSTRIAL QUALITY
MAINLINE

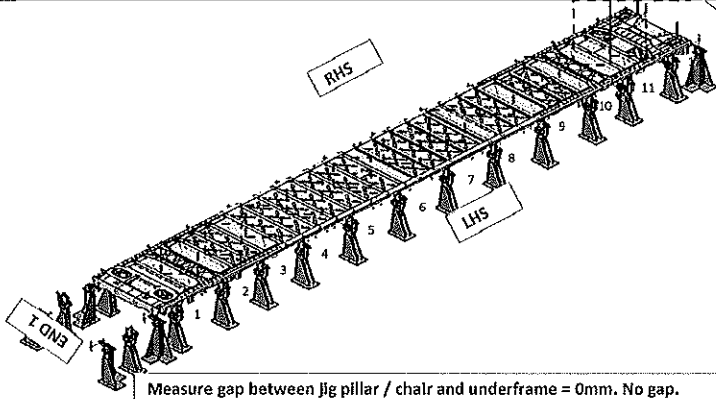


DTR30223319/3 Carshell Assembly TC

Rev. V28
Date- 07/11/2023

Project: PRASA
SI.CB2210.322.V28

Specifications of Details for GBS measurement



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

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

After Loading Underframe and Clamping.

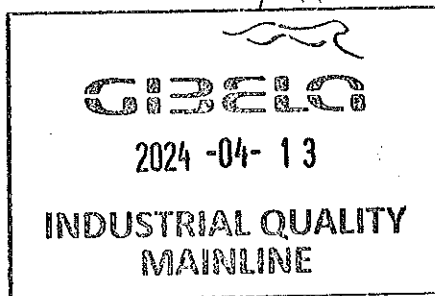
	1	2	3	4	5	6	7	8	9	10	11	12
Left Hand Side	0	0	0	0	0	0	0	0	0	0	0	0
Right Hand Side	0	0	0	0	0	0	0	0	0	0	0	0

Signature Operations: *[Signature]* Date: 17/04/24

After Welding.

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

Signature Industrial Quality: *[Signature]* Date: 17/04/2024



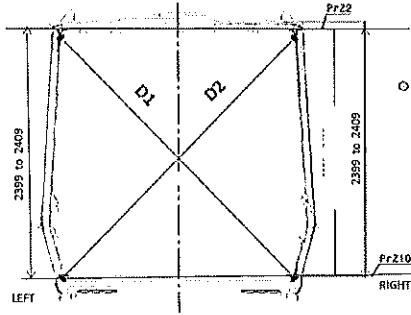
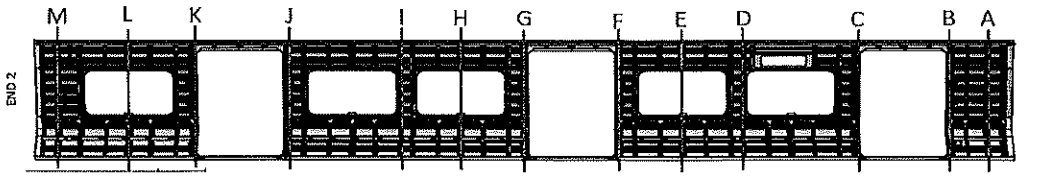


DTR30223319/3 Carshell Assembly TC

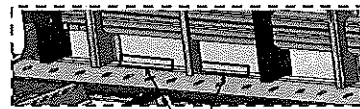
Rev. V28
Date- 07/11/2023

Project: PRASA
SI.CB2210.322.V28

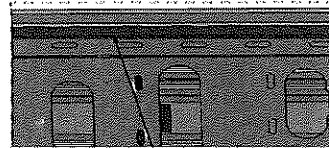
Specifications of Details for CBS measurement



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.

()

()



DTR30223319/3 Carshell Assembly TC

Rev. V28

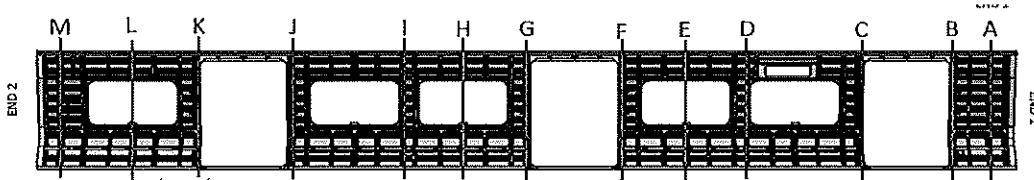
Project: PRASA

Date- 07/11/2023

SI.CB2210.322.V28

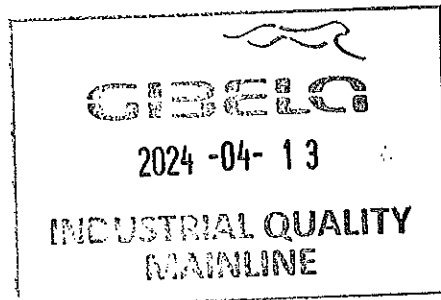
Specifications of Details for CBS measurement

BEFORE WELDING



PME: The difference in Height values measured on the LHS and RHS should be ≤ 2MM on each point.

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





DTR30223319/3 Carshell Assembly TC

Rev. V28

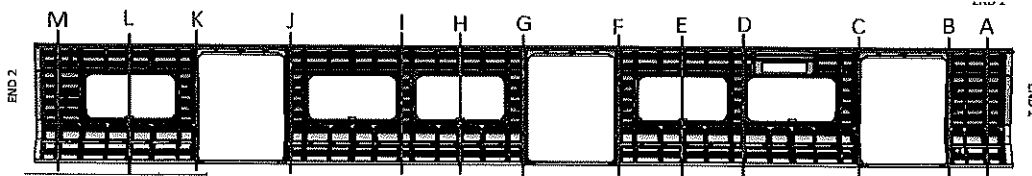
Project: PRASA

Date- 07/11/2023

SI.CB2210.322.V28

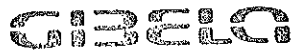
Specifications of Details for CBS measurement

AFTER WELDING



PME: The difference in Height values measured on the LHS and RHS should be ≤ 2MM on each point.

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



2024-04-13

INDUSTRIAL QUALITY MAINLINE



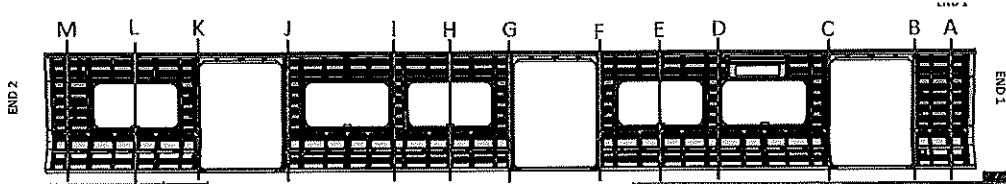
DTR30223319/3 Carshell Assembly TC

Rev. V28
Date- 07/11/2023

Project: PRASA
SI.CB2210.322.V28

GBS measurement

BEFORE WELDING



2270 to 2276

2268 & 2274

A 2270

B 2273

C 2275

D 2276

E 2274

F 2273

G 2271

H 2272

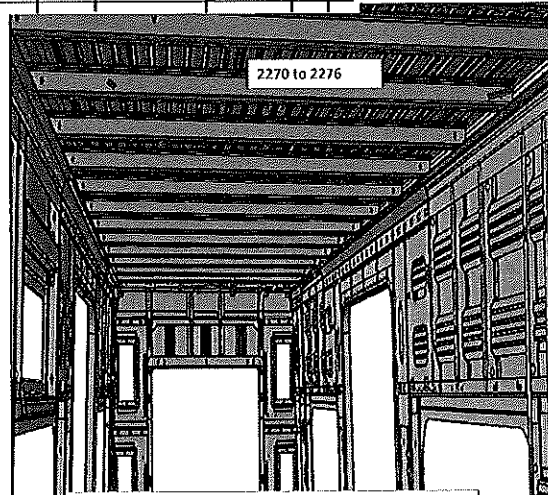
I 2275

J 2271

K 2270

L 2276

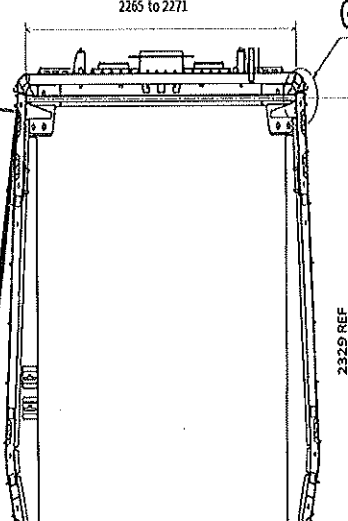
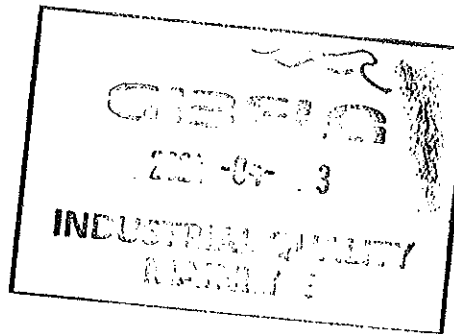
M 2274



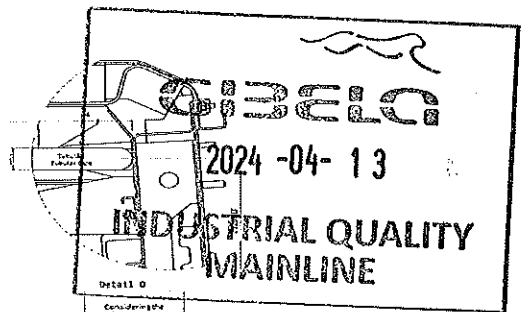
2270 to 2276

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

2265 to 2271



2265 to 2271





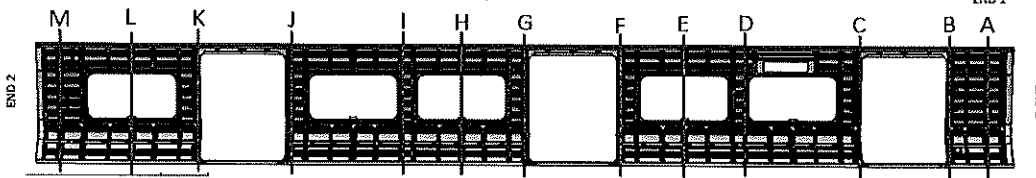
DTR30223310/3 Carshell Assembly TC

Rev. V28
Date- 07/11/2023

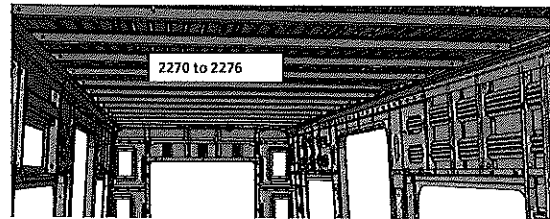
Project: PRASA
SI.CB2210.322.V28

Specifications of Details for CBS measurement

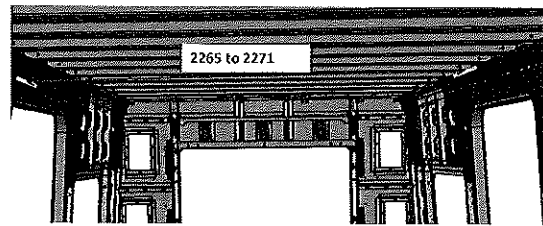
AFTER WELDING



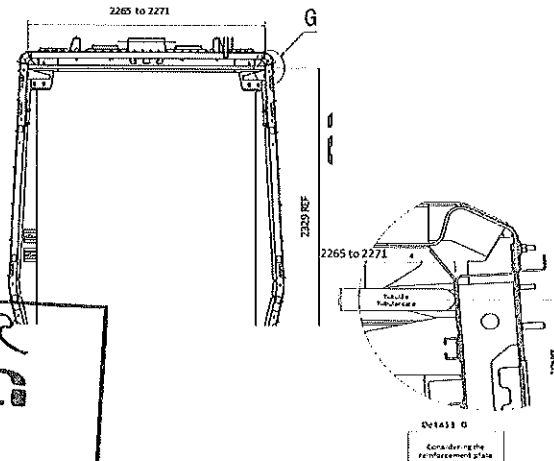
	2265 to 2271	2270 to 2276
A	N/A	2273
B	2269	N/A
C	2267	N/A
D	N/A	2276
E	N/A	2274
F	2270	N/A
G	2271	N/A
H	N/A	2275
I	N/A	2278
J	2268	N/A
K	2270	N/A
L	N/A	2275
M	2269	N/A



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



Take measurement close to radius (considering reinforcement)



GIBELO
2024 -04- 13
INDUSTRIAL QUALITY
MAINLINE



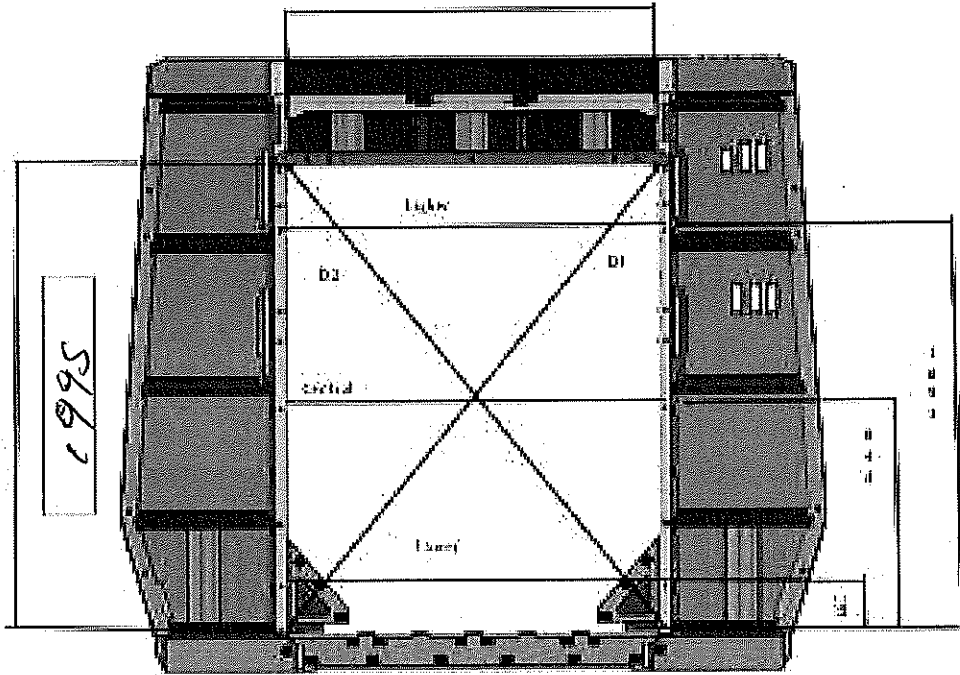
DTR30223319/3 Carshell Assembly TC

Rev. V28
Date- 07/11/2023

Project: PRASA
SI.CB2210.322.V28

Specifications of Details for CBS measurement

Endframe 2



DIAGONAL DIFFERENCE

DIAGONAL DIFFERENCE D1-D2 = 30mm

Upper Diameter

1380

D1

2413

Central Diameter

1380

D2

2415

Lower Diameter

1380

D1-D2

2



2024-04-13

INDUSTRIAL QUALITY
MAINLINE

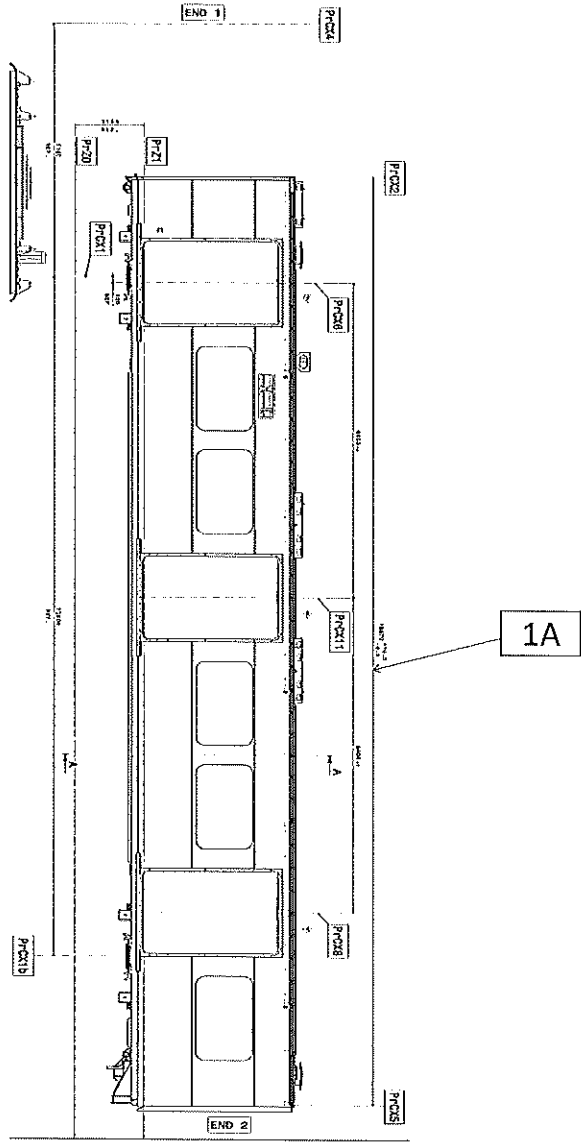


DTR30223319/3 Carshell Assembly TC

Rev. V28
Date- 07/11/2023

Project: PRASA
SI.CB2210.322.V28

Specifications of Details for CBS measurement




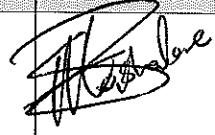

LEFT SIDE		
	SPECIFICATION SIZE	ACTUAL SIZE
1A	18870 $\begin{matrix} +10.5 \\ -9.5 \end{matrix}$	18868

RIGHT SIDE		
	SPECIFICATION SIZE	ACTUAL SIZE
1A	18870 $\begin{matrix} +10.5 \\ -4.5 \end{matrix}$	18868

Dye penetrant test

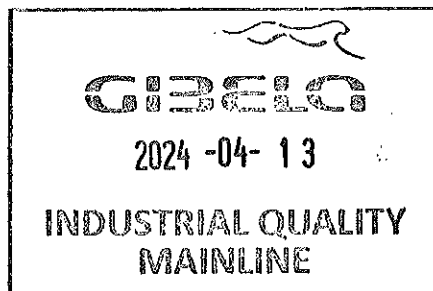
Dye-penetration test to be performed by quality personnel



		DTR30223319/3 Carshell Assembly TC		Rev. V28	Project: PRASA	
				Date- 07/11/2023	SI.CB2210.322.V28	
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!		17/04/24	Telego	
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)		17/04/2024	Amogjalong	
	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	Action	Responsible	Due date	Status	

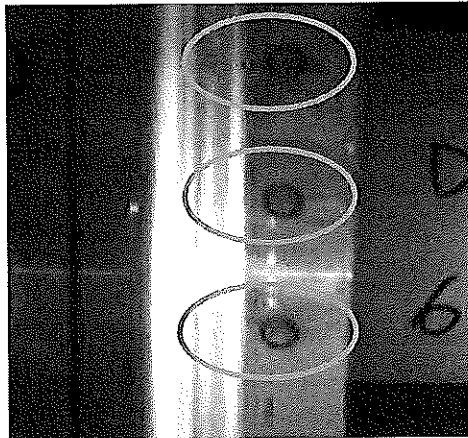
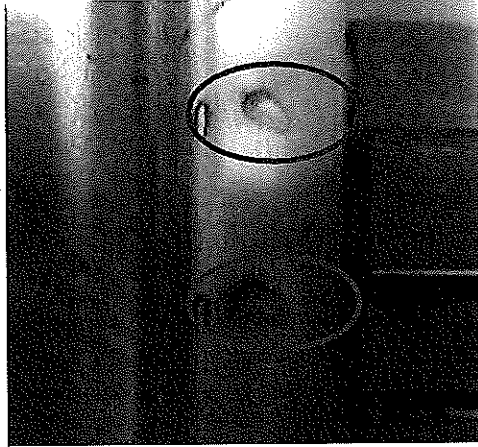
Operations

Quality



	DTR30223319/3 Carshell Assembly TC	Rev. V28	Project: PRASA SI.CB2210.322.V28
		Date- 07/11/2023	

ANNEXURE A: Spot Welding Quality Acceptance Standard





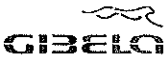
CONFIDENTIAL INFORMATION
 This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

APPLICATION REFERENCE												
MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ?	
				TC1	MA	ML	MS	MS2	TC2			
<input type="checkbox"/>	D1R30223318/2	AD30051211833	Carpal Assembly TC	CB2220	X					X	PRA.CB2220.DTR3022 3318/2.V20	YES
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												

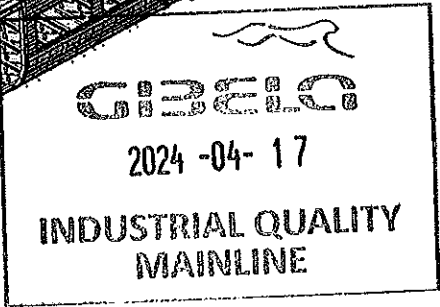
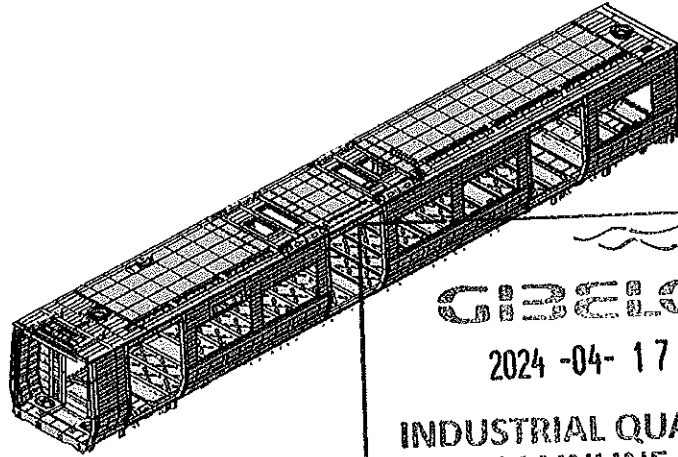
REV	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
0	09/04/2018	GIBELA NEW CREATION	APPROVER	Itumeleng Modiba	09/04/2018
			CHECKER	Nosizo Pindela	09/04/2018
			COMPILER	Thanyani Mathegu	06/04/2018
1	23/05/2018	Team leader and Quality Technician to sign final signature from PME Manager to Quality manager Change	APPROVER	Itumeleng Modiba	23/05/2018
			CHECKER	Nosizo Pindela	23/05/2018
			REVISED BY	Ramokone Motama	23/05/2018
2	05/07/2018	Certain d-mensional checks added and others moved to CB1210 and CB1230	APPROVER	Itumeleng Modiba	05/07/2018
			CHECKER	Nosizo Pindela	05/07/2018
			COMPILER	Ramokone Motama	05/07/2018
3	2018/06/12	Certain d-mensional checks added and others moved to CB1210 and CB1230	APPROVER	Itumeleng Modiba	2018/06/12
			CHECKER	Nosizo Pindela	2018/06/12
			COMPILER	Ramokone Motama	2018/06/12
5	24/01/2019	As per Baseline 10.2	APPROVER	Itumeleng Modiba	24/01/2019
			CHECKER	Nosizo Pindela	24/01/2019
			COMPILER	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
			COMPILER	Nosizo Pindela	13/03/2019
7	20/05/2019	Removed roof width	APPROVER	Itumeleng Modiba	20/05/2019
			CHECKER	Nosizo Pindela	20/05/2019
			REVISED BY	Nosizo Pindela	20/05/2019
10	22/08/2019	New Baseline 10.2.5	APPROVER	Itumeleng Modiba	22/08/2019
			CHECKER	Nosizo Pindela	22/08/2019
			REVISED BY	Itumeleng Modiba	22/08/2019
15	06/08/2020	New Baseline 10.2.6	APPROVER	Itumeleng Modiba	06/08/2020
			CHECKER	Bongane Masina	06/08/2020
			REVISED BY	Bongane Masina	06/08/2020
20	19/04/2021	New Baseline 10.2.6	APPROVER	Timothy Matlisa	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	Mulaudzi Mpho	17/08/2021
			REVISED BY	Mulaudzi Mpho	17/08/2021
25	20/02/2022	New Baseline 10.2.6	APPROVER	Mbhombi Collins	20/02/2022
			CHECKER	Andani Muthelo	20/02/2022
			REVISED BY	Andani Muthelo	20/02/2022
26	14/06/2022	Update minimum temperature requirement for sealant application	APPROVER	Mbhombi Collins	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 and welding	APPROVER	Mbhombi Collins	19/10/2022
			CHECKER	Hlekozo Zwane	19/10/2022
			REVISED BY	Amogelang Moflampe	19/10/2022
28	14/04/2023	Added sealant batch number & welding consumables traceability	APPROVER	Vanessa Ntuli	14/04/2023
			CHECKER	Hlekozo Zwane	14/04/2023
			REVISED BY	Amogelang Moflampe	14/04/2023

2024-04-17
INDUSTRIAL QUALITY MAINLINE

TRAINSET	CAR	OPERATOR NAME & ALPS NUMBER	DATE	SELF INSPECTION NUMBER	PAGES
223	TC2	Mashuda 410041	18/04/24	SI.CB2220.323.V28	17

	DTR30223319/2 Carshell Assembly TC	Rev. 29	Project: PRASA SI, CB2220.323.V29
		Date- 28/10/2023	

Carro / Car: TC1, TC2	NCR:	Work station: CB2220
-----------------------	------	----------------------



I - Documentation and Instruments

1.1 - Documentation Control

Document	Type of car						Revision	Observation	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
	TC1	M1	M2	M3	M4	TC2					
DTR30223319/2						✓			✓	N/A	18/04/24

1.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Validation	Calibration or Verification Validation Date	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
Tubular	31823-3	15/03/2025	✓	18/04/24	18/04/24
Measuring tape	68074	2024/07/27	✓	18/04/24	18/04/24

1.3 Consumables

Welding Consumable Control - Used for Special Process

Filler Material	Heat Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
308 1.0mm	391056	MIG	✓	18/04/24	18/04/24



DTR30223319/2 Carshell Assembly TC

Rev. 29

Project: PRASA

Date-

SI.CB2220.323.V29


28/10/2023

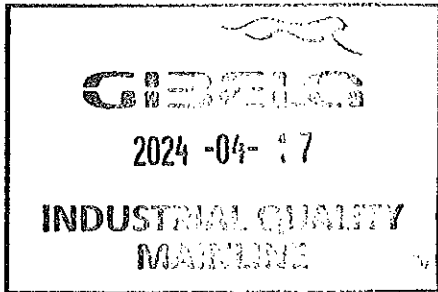
II - Control Activities of Production

II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Assembly according to Instruction Engineering n° PRA.CB2220.DTR30225487/2 Verification of fitment for all reinforcement brackets.	DTR30223319/2	✓	18/04/24	18/04/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality.	DTD0000210675	✓	18/04/24	18/04/24
03	REFER TO ANNEXURE A	Spot Welding inspected and approved according procedure	IND-SAL-WMS-016 e DTD0000210675	✓	18/04/24	18/04/24
04	REFER TO ANNEXURE B	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓	18/04/24	18/04/24
05		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓	18/04/24	18/04/24
06	N/A	Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓	18/04/24	18/04/24
07		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	✓	18/04/24	18/04/24
08	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 (I) Min-Max 10°C - 35°C Relative humidity Min - Max (I) Min-Max 25% - 80%	Sealant Batch No: <u>2000035P</u> Exp Date: <u>1/05/24</u> Actuals Temperature: <u>18°C</u> Humidity: <u>70%</u>	✓	18/04/24	18/04/24

INDUSTRIAL QUALITY MAINLINE

		DTR30223319/2 Carshell Assembly TC		Rev. 29	Project: PRASA		
				Date- 28/10/2023			
09	NA	Verification of sealant application in certain regions in the drawing.	AAD0001241033	✓		18/04/24	18/04/24
10	NA	Verification of sealant application on the roof and sidewall finishers	Sealant must be: -Applied straight and even (1.5mm) -Free of gaps,cracks,damage and debris (flashes, dirt, dust) Refer to Annexure B	✓		18/04/24	18/04/24





DTR30223319/2 Carshell Assembly TC

Rev.
29
Date-
28/10/2023

Project: PRASA
SI.CB2220.323.V29



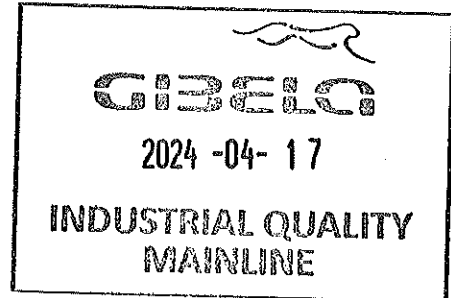
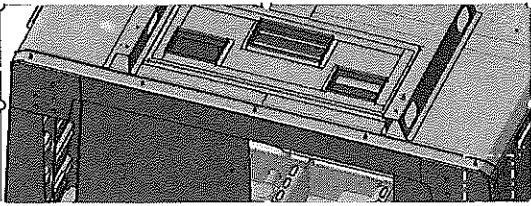
END 1
SEALANT


OPERATOR
(Name & sign):

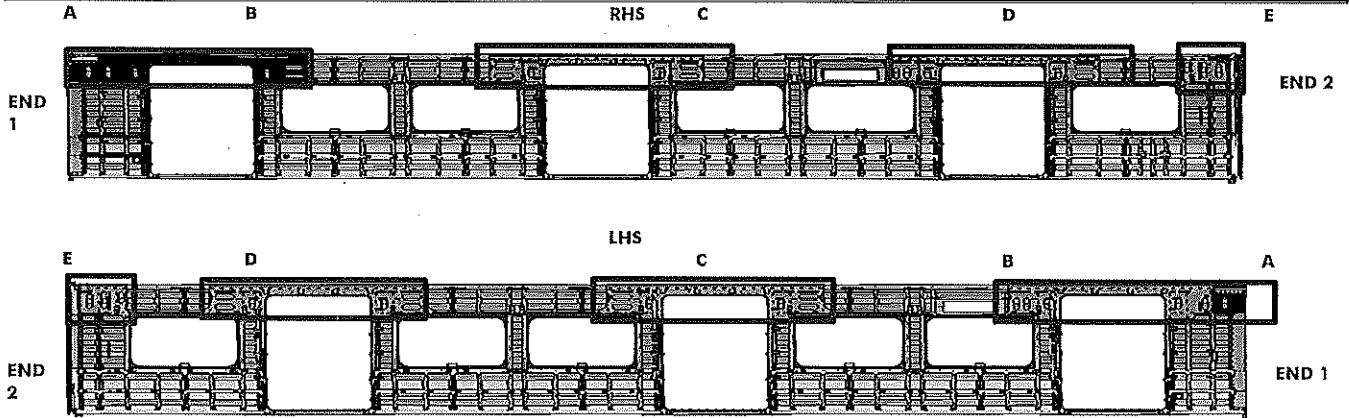
Mthokoziso [Signature]

OPERATOR
(Name & sign):

Mthokoziso [Signature]

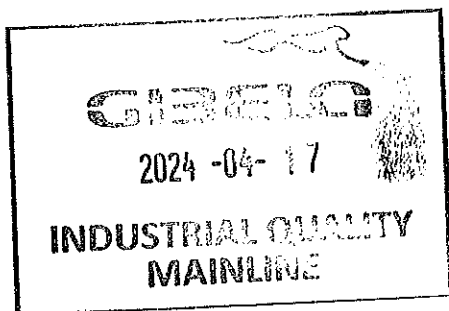


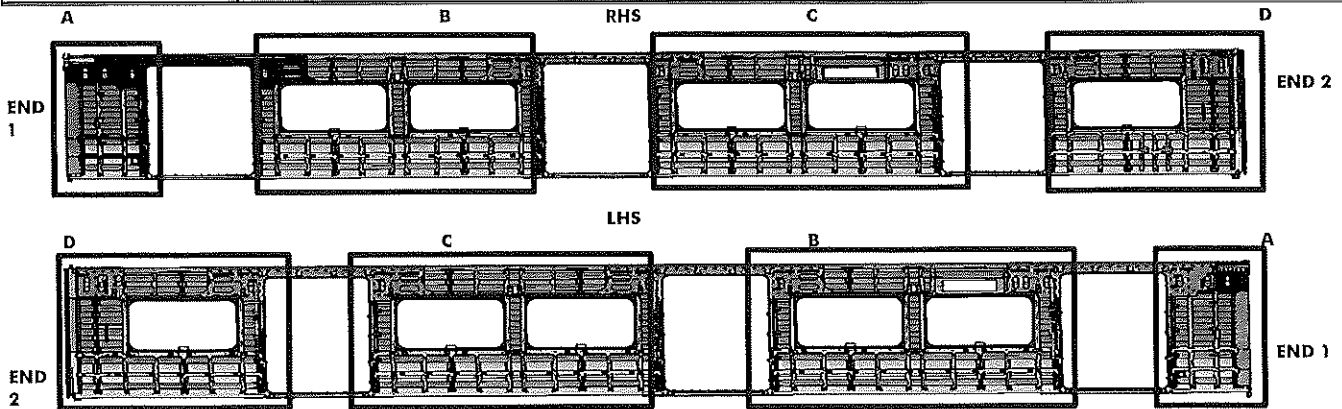
	DTR30223319/2 Carshell Assembly TC	Rev. 29	Project: PRASA SI.CB2220.323.V29
		Date- 28/10/2023	



REINFORCEMENT WELDING

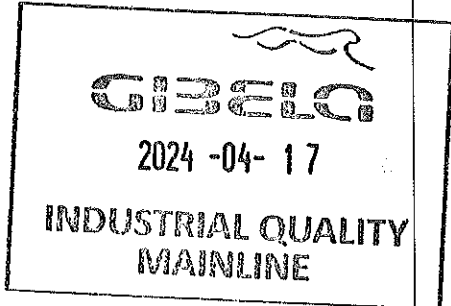
AREA	LHS	RHS
A	Operator (Name&sign): <i>Johany Pina</i>	<i>Johany Pina</i>
B	Operator (Name&sign): <i>Johany Pina</i>	<i>Johany Pina</i>
C	Operator (Name&sign): <i>LINDO</i>	<i>[Signature]</i>
D	Operator (Name&sign): <i>[Signature]</i>	<i>MARSHICO</i>
E	Operator (Name&sign): <i>[Signature]</i>	<i>MARSHICO</i>






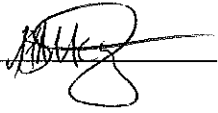
BRACKETING

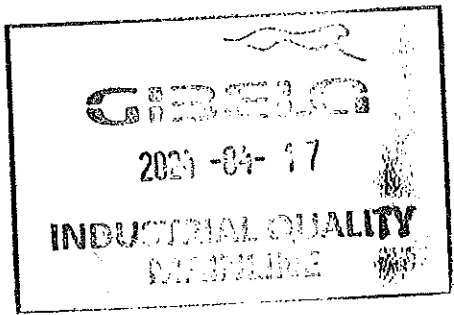
C-RAILS:	Operator:	<p>INSTALLATION</p> <i>Priscilla</i>
	Operator:	_____
DOOR MECHANISMS:	Operator:	<i>Levi</i>
	Operator:	_____
TAPPING PADS	Operator:	<i>[Signature]</i>
	Operator:	_____
SEAT & LUGGAGE BRACKETS:	Operator:	<p>INSTALLATION & VERIFICATION</p> <i>[Signature]</i>
	Operator:	_____
SEAT BRACKETS VERIFICATION:	Operator:	<i>[Signature]</i>
	Operator:	_____
WELDING		
AREA	LHS	
A	(C-rails, Luggage and earth bushes) :	Operator (Name&sign): <i>[Signature]</i>
B	(Seat brackets)	: Operator (Name&sign): <i>LINDO</i>
	(C-rails, Luggage and earth bushes) :	Operator (Name&sign): <i>LINDO</i>
C	(Seat brackets)	: Operator (Name&sign): <i>[Signature]</i>
	(C-rails, Luggage and earth bushes) :	Operator (Name&sign): <i>[Signature]</i>
D	(Seat brackets)	: Operator (Name&sign): <i>[Signature]</i>
	(C-rails, Luggage and earth bushes) :	Operator (Name&sign): <i>[Signature]</i>
ENDS		



[Handwritten signatures and initials]

	DTR30223319/2 Carshell Assembly TC	Rev. 29	Project: PRASA SI.CB2220.323.V29
		Date-	
		28/10/2023	

END 2 TAPPING PADS WELDING: Operator (Name&sign): 





DTR30223319/2 Carshell Assembly TC

Rev. 29

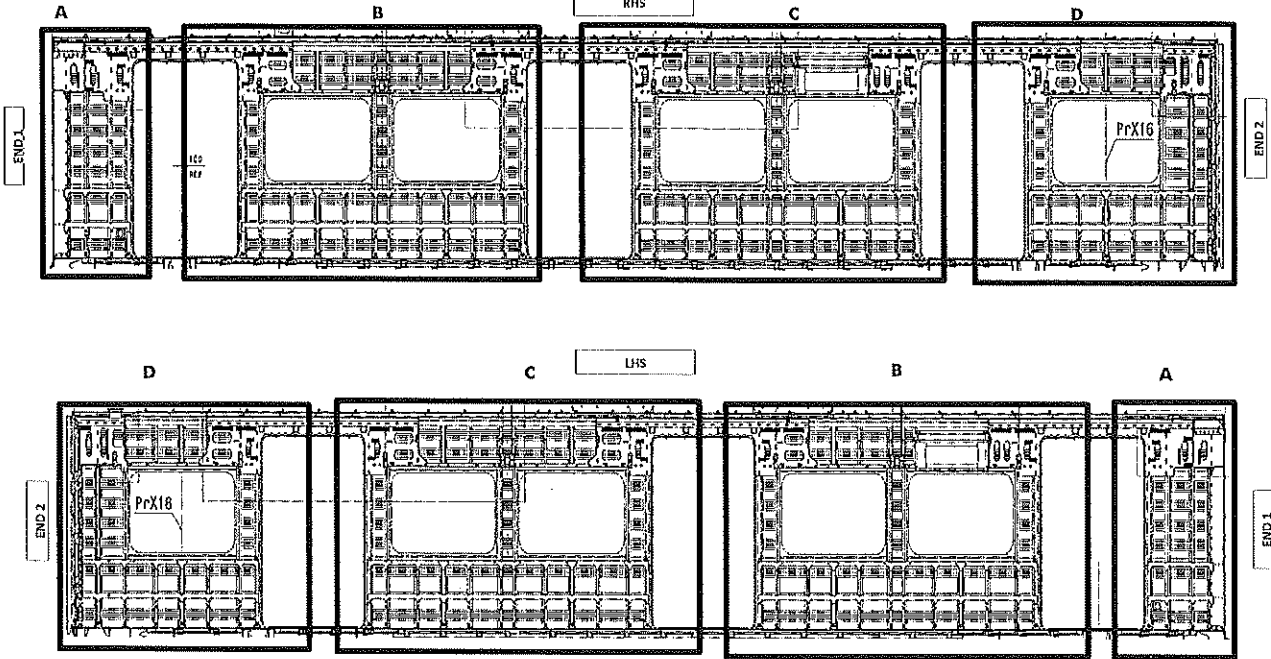
Project: PRASA

Date-

SI.CB2220.323.V29

28/10/2023

TC BRACKET INSTALLATION



QUANTITIES (TC)

RHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	4	✓	
	B	4	✓	
	C	8	✓	
	D	12	✓	
SEAT BRACKETS	A	0	✓	
	B	21	✓	
	C	21	✓	
	D	13	✓	
EARTH BUSH	A	1	✓	
	B	4	✓	
	C	5	✓	
	D	4	✓	

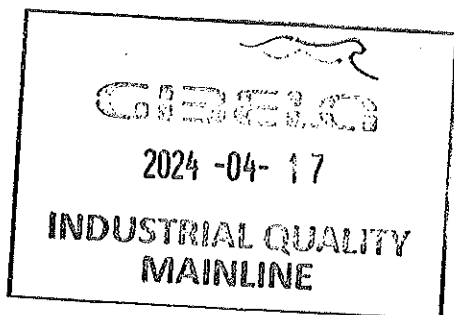
ROOF ENDS:
 C-RAILS 2 OFF END 2
 EARTH BUSH 4 OFF END 2

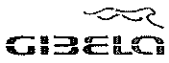
VERIFICATION BY: Mashuch

LHS				
	SECTION	QUANTITY	OK	NOK
C-RAILS	A	4	✓	
	B	8	✓	
	C	4	✓	
	D	6	✓	
SEAT BRACKETS	A	0	✓	
	B	21	✓	
	C	21	✓	
	D	13	✓	
EARTH BUSH	A	1	✓	
	B	4	✓	
	C	4	✓	
	D	2	✓	

ROOF ENDS:
 C-RAILS 2 OFF END 2
 EARTH BUSH 4 OFF END 2

VERIFICATION BY: Mashuch

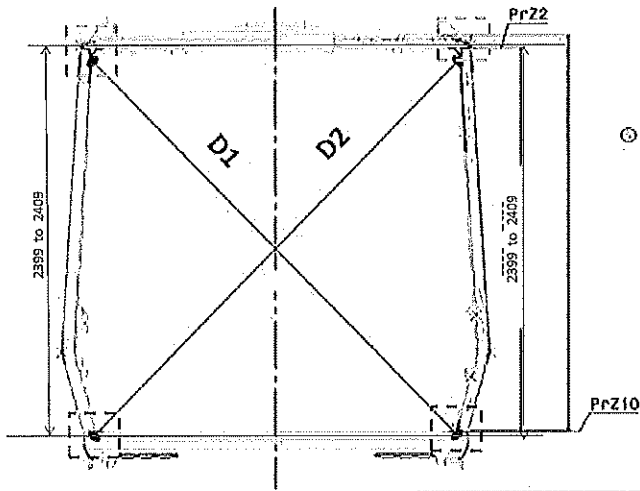




DTR30223319/2 Carshell Assembly TC

Rev.
29
Date-
28/10/2023

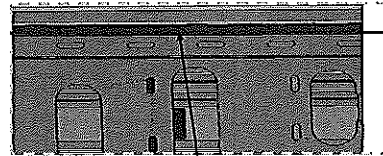
Project: PRASA
SI.CB2220.323.V29



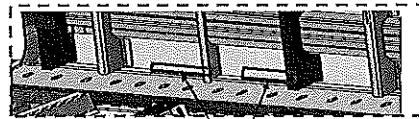
Take measurement close to radius



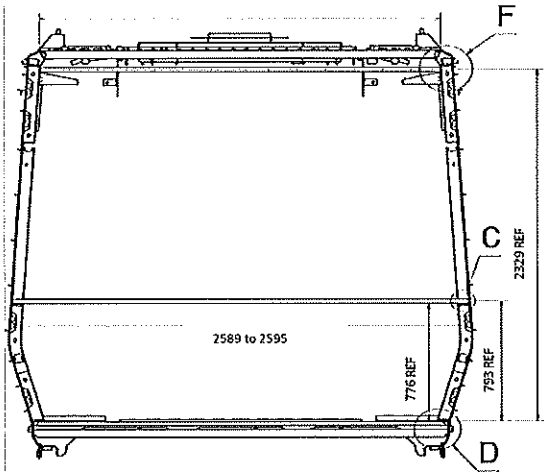
Measurement positions on roof rail and sidewall omega corner



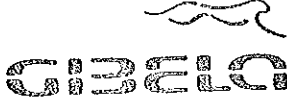
Reinforcement area measurement positions on roof reinforcement area



Measurement positions on sidewall and side sill corner



Take measurement close to radius

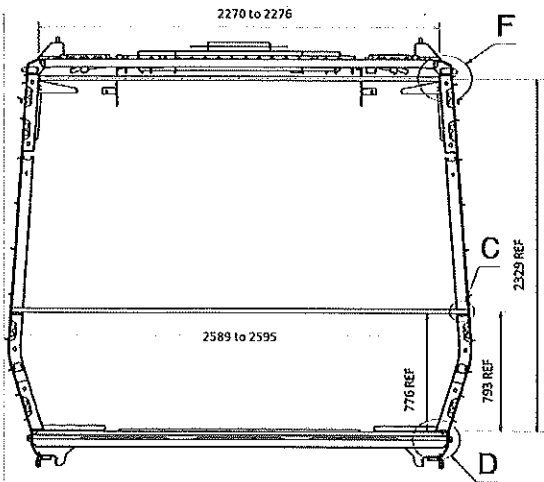

2024-04-17
INDUSTRIAL QUALITY
MAINLINE



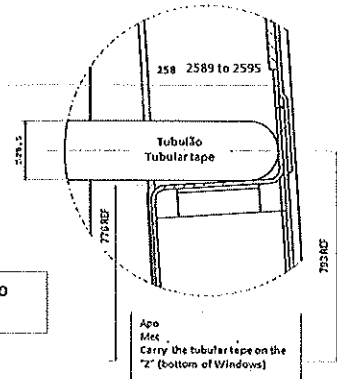
DTR30223319/2 Carshell Assembly TC

Rev.
29
Date-
28/10/2023

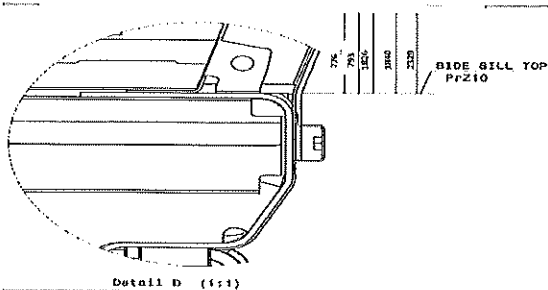
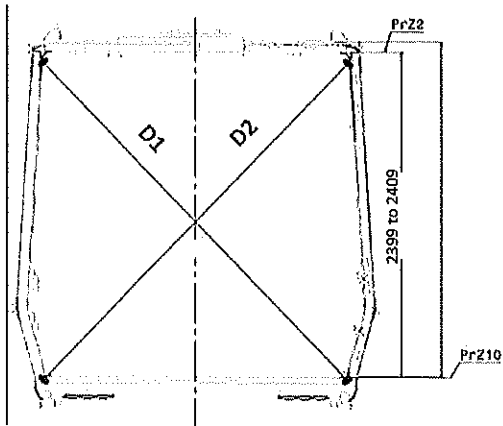
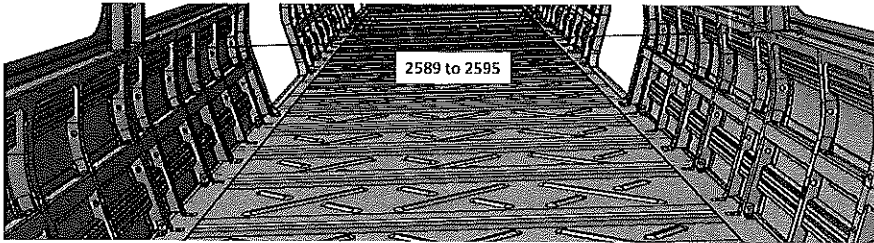
Project: PRASA
SI.CB2220.323.V29



Take measurement close to radius



Detail C

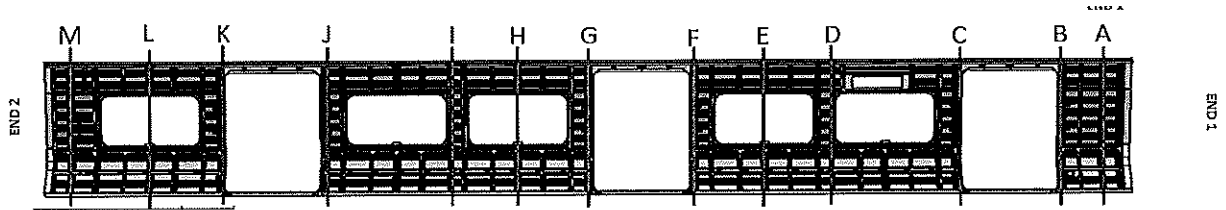




DTR30223319/2 Carshell Assembly TC

Rev. 29
Date- 28/10/2023

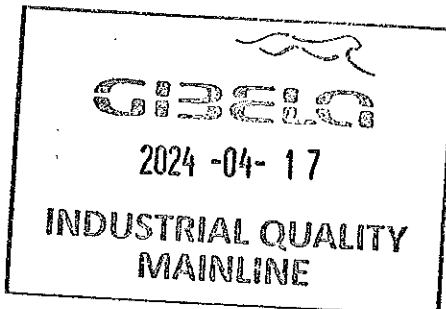
Project: PRASA
SI.CB2220.323.V29



BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3293	3294	1	
B	3292	3293	1	
C	3294	3296	2	
D	3268	3265	2	
E	3265	3265	0	
F	3294	3293	1	
G	3295	3293	2	
H	3265	3268	3	
I	3265	3268	3	
J	3295	3298	3	
K	3297	3293	2	
L	3265	3266	1	
M	3298	3296	2	

Handwritten mark

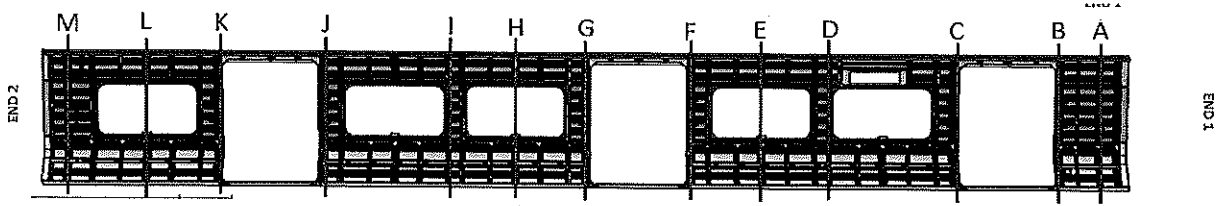




DTR30223319/2 Carshell Assembly TC

Rev.
29
Date-
28/10/2023

Project: PRASA
SI.CB2220.323.V29



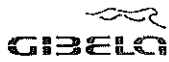
AFTER WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3295	3293	2	2594
B	3292	3294	2	2591
C	3297	3294	3	2592
D	3264	3265	1	2590
E	3265	3265	0	2592
F	3295	3293	2	2594
G	3294	3296	2	2591
H	3267	3266	1	2593
I	3267	3267	0	2592
J	3297	3295	2	2592
K	3298	3299	1	2593
L	3267	3265	2	2591
M	3299	3296	3	2594



2024-04-17

INDUSTRIAL QUALITY
MAINLINE



DTR30223319/2 Carshell Assembly TC

Rev. 29

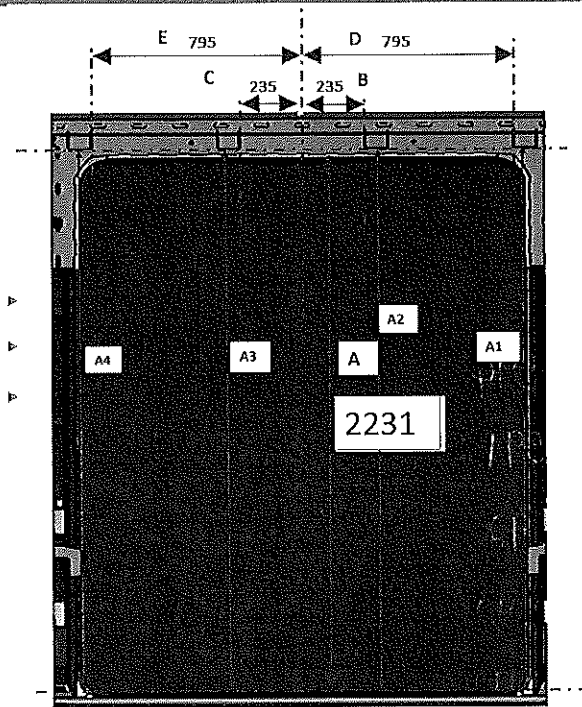
Project: PRASA

Date-

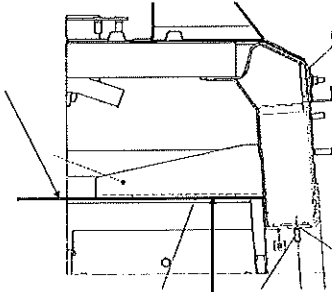
28/10/2023

SI.CB2220.323.V29

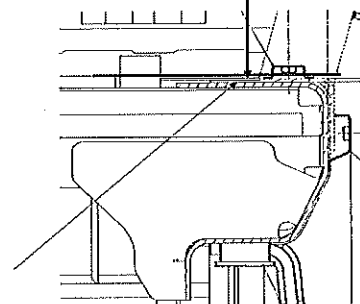
Specifications of Details for CBS measurement



Brackets Carbodyshell
U Type Supports



Brackets Carbodyshell
Channel Assy



DOOR 1 - LHS

	VALUE	ACTUAL
A1	2230 to 2232	2233
A2	2230 to 2232	2232
A3	2230 to 2232	2232
A4	2230 to 2232	2233
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	2232
A2	2230 to 2232	2231
A3	2230 to 2232	2231
A4	2230 to 2232	2232
B	234 to 236	235
C	234 to 236	234
D	794 to 796	795
E	794 to 796	794

DOOR 3 - LHS

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

DOOR 1 - RHS

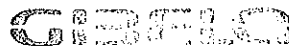
	VALUE	ACTUAL
A1	2230 to 2232	2234
A2	2230 to 2232	2232
A3	2230 to 2232	2232
A4	2230 to 2232	2233
B	234 to 236	235
C	234 to 236	234
D	794 to 796	795
E	794 to 796	796

DOOR 2 - RHS

	VALUE	ACTUAL
A1	2230 to 2232	2233
A2	2230 to 2232	2232
A3	2230 to 2232	2232
A4	2230 to 2232	2233
B	234 to 236	234
C	234 to 236	235
D	794 to 796	796
E	794 to 796	795

DOOR 3 - RHS

	VALUE	ACTUAL
A1	2230 to 2232	2233
A2	2230 to 2232	2232
A3	2230 to 2232	2232
A4	2230 to 2232	2233
B	234 to 236	235
C	234 to 236	235
D	794 to 796	796
E	794 to 796	795



2024-04-17

INDUSTRIAL QUALITY
MAINLINE

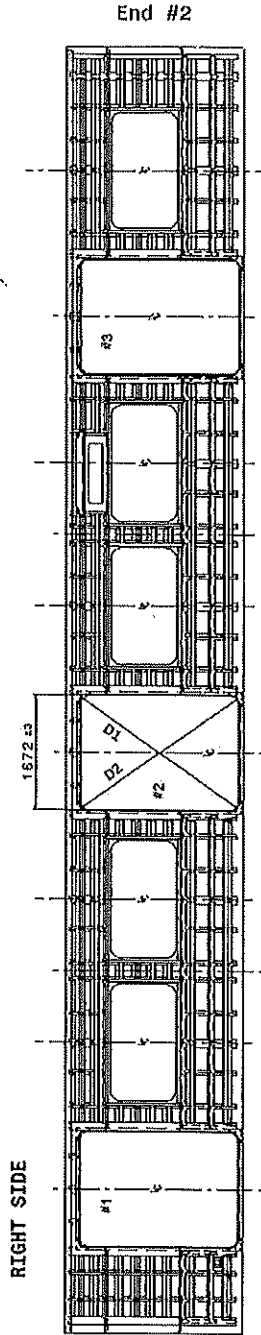


DTR30223319/2 Carshell Assembly TC

Rev. 29
Date- 28/10/2023

Project: PRASA
SI.CB2220.323.V29

Specifications of Details for CBS measurement

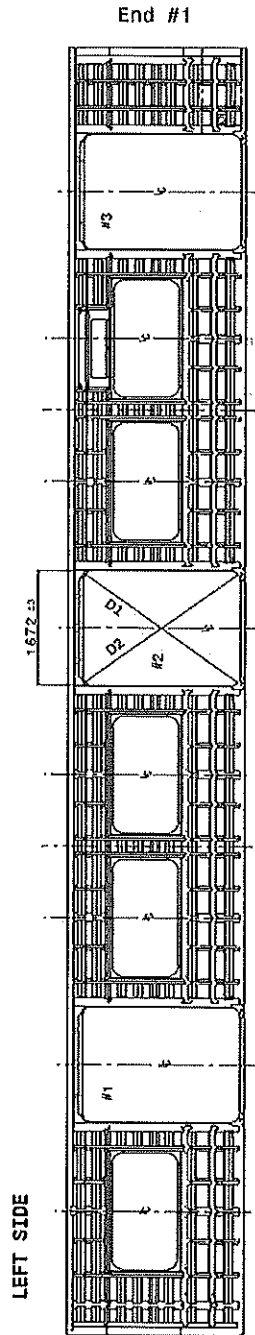


Doors diagonal D1-D2 maximum difference ≤ 4 mm

#1	#2	#3
D1 2150	2148	2148
D2 2149	2149	2147
D1-D2 1	1	1

Doors length - 1672 ± 3 mm

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



Diagonal de portas - diferença D1-D2 ≤ 4 mm

#1	#2	#3
D1 2149	2150	2148
D2 2147	2149	2149
D1-D2 2	1	1

Vão de Portas - 1672 ± 3 mm

#1	#2	#3
1673	1673	1671
1672	1672	1671
1672	1672	1671
DIMENSÃO SUPERIOR		
HIGHER DIMENSION		
CENTRAL DIMENSION		
LOWER DIMENSION		


End #1



2024-04-17

INDUSTRIAL QUALITY
MAINLINE

End #2

	DTR30223319/2 Carshell Assembly TC	Rev. 29	Project: PRASA	
		Date- 28/10/2023	SI.CB2220.323.V29	

Specifications of Details for CBS measurement

Dye penetrant test

Dye-penetration test to be performed by quality personnel

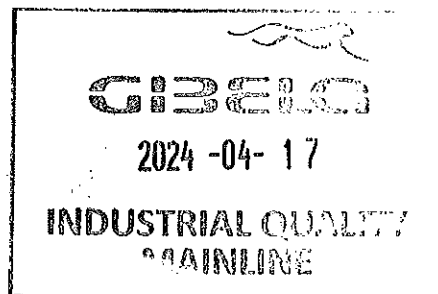


Item	Description of the issue	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)

II.2 - Check List REX

Check List Items

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





DTR30223319/2 Carshell Assembly TC

Rev. 29

Project: PRASA

Date-

SI.CB2220.323.V29

28/10/2023

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!	18/04/24	Mashah	
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	18/04/24	Amo	
	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!			

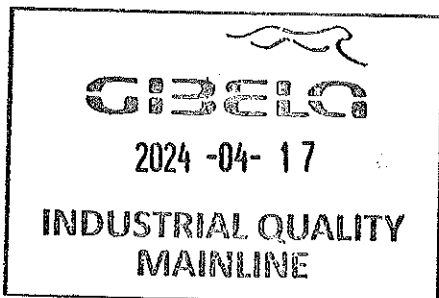
In case of "NO GO", describe blocking problems


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

Item	Description	Action	Responsible	Due date	Status

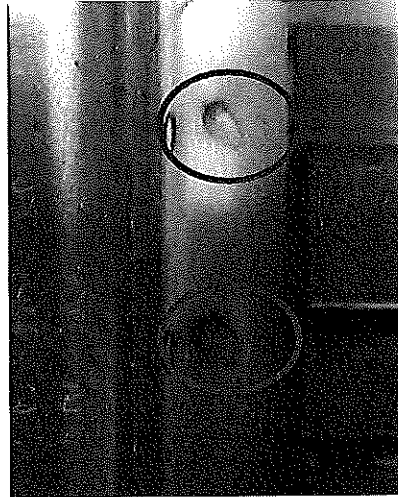
Operations

Quality



	DTR30223319/2 Carshell Assembly TC	Rev. 29	Project: PRASA SI.CB2220.323.V29
		Date- 28/10/2023	

ANNEXURE A: Spot Welding Quality Acceptance Standard





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

DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY	
			TCL	MA	MS	MR	MS	TCA			
DT0000223319	AAD001233953 DT0000223319 Carshell Assembly TC	CB1230	X						X	PRA.CB1230.DT0000012 23319.V20	YES

REV	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
0	06/04/2018	GIBELA NEW CREATION	APPROVER	Itumeleng Modiba	09/04/2018
			CHECKER	Nosizo Pindela	09/04/2018
			COMPILER	Yhanyani Mathegu	09/04/2018
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	05/07/2018	Certain dimensional checks moved to CB1220	APPROVER	Itumeleng Modiba	05/07/2018
			CHECKER	Nosizo Pindela	05/07/2018
			COMPILER	Ramckone Motama	05/07/2018
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
			COMPILER	Nosizo Pindela	13/03/2019
7	17/09/2019	Added Cab Fire Barrier Flatness Measurements	APPROVER	Itumeleng Modiba	17/09/2019
			CHECKER	Nosizo Pindela	17/09/2019
			COMPILER	Nosizo Pindela	17/09/2019
10	20/09/2019	New Baseline 10.2.5	APPROVER	Itumeleng Modiba	20/09/2019
			CHECKER	Nosizo Pindela	20/09/2019
			COMPILER	Nosizo Pindela	20/09/2019
15	28/01/2021	New Baseline 10.2.6	APPROVER	Timothy Maimela	28/01/2021
			CHECKER	Bongane Masina	28/01/2021
			COMPILER	Bongane Masina	28/01/2021
20	19/04/2021	New Baseline change 10.3	APPROVER	Timothy Maimela	19/04/2021
			CHECKER	Bongane Masina	19/04/2021
			COMPILER	Bongane Masina	19/04/2021
25	20/04/2022	New Baseline change 10.3.1	APPROVER	Collins Mhombhni	20/04/2022
			CHECKER	Andani Muthelo	20/04/2022
			COMPILER	Andani Muthelo	20/04/2022
26	14/06/2022	Update minimum temperature requirement for sealant application	APPROVER	Collins Mhombhni	14/06/2022
			CHECKER	Andani Muthelo	14/06/2022
			COMPILER	Andani Muthelo	14/06/2022
27	26/07/2022	Threshold measurements addition	APPROVER	Collins Mhombhni	26/07/2022
			CHECKER	Andani Muthelo	26/07/2022
			COMPILER	Andani Muthelo	26/07/2022
28	17/10/2022	Addition of traceability for sealant application	APPROVER	Collins Mhombhni	17/10/2022
			CHECKER	Ntokozo Zwane	17/10/2022
			COMPILER	Amogelang Mahlampa	17/10/2022
29	14/04/2023	Added sealant batch number & welding consumables traceability	APPROVER	Vanessa Ntuli	14/04/2023
			CHECKER	Ntokozo Zwane	14/04/2023
			COMPILER	Amogelang Mahlampa	14/04/2023
30	06/11/2023	Added traceability for thresholds for boiler makers and welders	APPROVER	Tyson Ngobeni	06/11/2023
			CHECKER	Andani Muthelo	06/11/2023
			COMPILER	Ntokozo Zwane	06/11/2023

2024-05-17
 SYSTEMS QUALITY
 12/12/2023

TRAINSET	CAR	OPERATOR NAME & ALPS NUMBER	DATE	SELF INSPECTION NUMBER	PAGES
223	T02	482114 Lorele	19/04/2024	SI.CB1230.324.V28	14



DT00000223319 Carshell Assembly TC

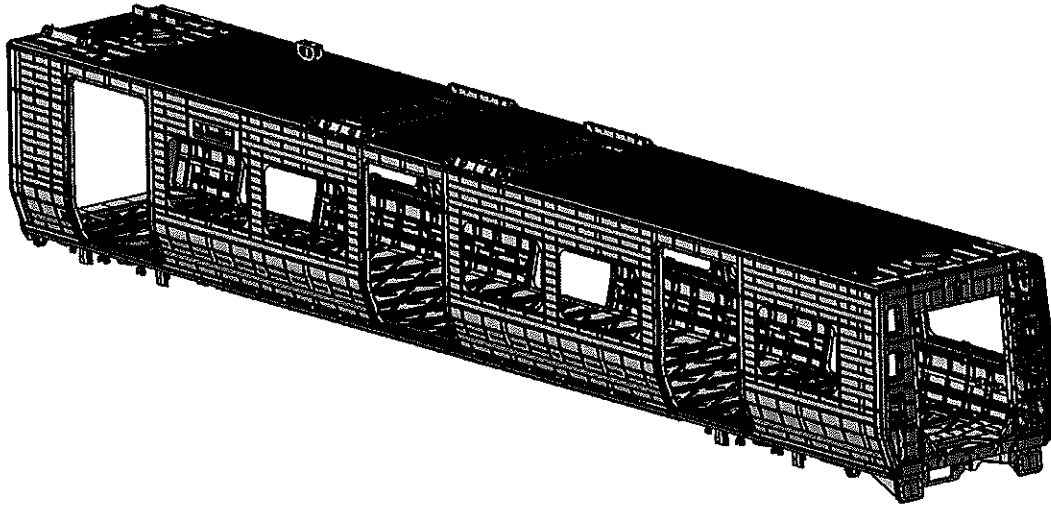
Rev. 30
Date- 06/11/2023

Project: PRASA
SI.CB1230.324.V29

Carro Car:

NCR:

Work station: CB1230



I - Documentation and Instruments

I.1 - Documentation Control

Document	Type of car						Revision	Obsevation	OK	NOK	Rework	Signature/Date (Operations)	Signature/Date (Quality)
	TC1	M1	M2	M3	M4	TC2							
DT00000223319							30		X		N/A	R 19/04/24	R 19/04/24

I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Validation	Calibration or Verification Validation Date	OK	NOK	Signature/Date (Operations)	Signature/Date (Quality)
Tubular	22615	2024/10/11	X		R 19/04/24	R 19/04/24
Combination square	GIBLS007	2024/11/10	X		R 19/04/24	R 19/04/24
Tape Measurement	QIBTA0014	2024/11/10	X		R 19/04/24	R 19/04/24

1.3 Consumables

Welding Consumable Control - Used for Special Process

Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
308 CSI		Mig Tg	X		R 19/04/24	R 19/04/24
			X		R 19/04/24	R 19/04/24



DT00000223319 Carshell Assembly TC

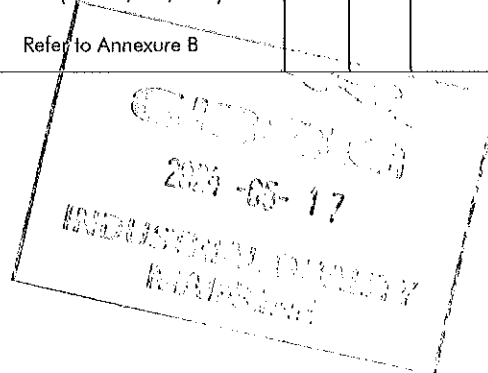
Rev.
30
Date-
06/11/2023

Project: PRASA
SI.CB1230.324.V29

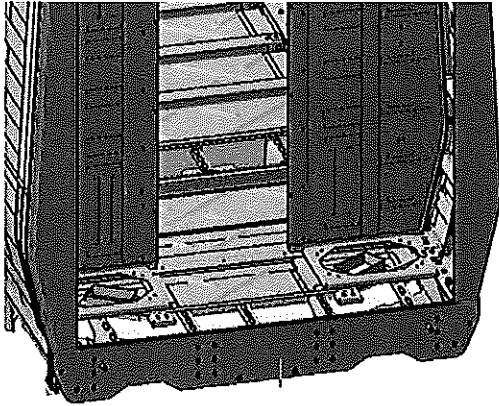
II - Control Activities of Production

II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	NGK	Rework	Signature/Date (Operations)	Signature/Date (Quality)
01	N/A	Assembly according to Instruction Engineering nº DT00000223319	DT00000223319	X			[Signature] 19/04/24	[Signature] 19/04/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality.	DTD0000210675	X			[Signature] 19/04/24	[Signature] 19/04/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 DTD0000210675	X			[Signature] 19/04/24	[Signature] 19/04/24
04	N/A	Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	X			[Signature] 19/04/24	[Signature] 19/04/24
05	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	X			[Signature] 19/04/24	[Signature] 19/04/24
06	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 (I) Min-Max 10°C - 35°C Relative humidity Min - Max (I) 25% - 80%	Sealant Batch No: Exp Date: <u>18/12/24</u> Actuals Temperature: <u>19°C</u> Humidity: <u>35%</u>	X			[Signature] 19/04/24	[Signature] 19/04/24
07	N/A	Verification of sealant application in regions of roof and sideframe finishers.	Sealant must be: -Applied straight and even (1.5mm) -Free of gaps,cracks,damage and debris (flashes, dirt, dust) Refer to Annexure B	X			[Signature] 19/04/24	[Signature] 19/04/24



VIEW A



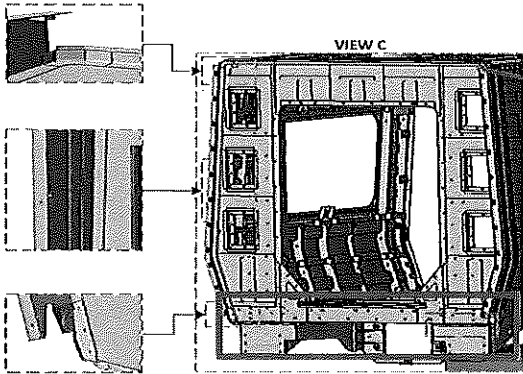
END 1 SEALANT

OPERATOR (Name & sign):

Lerato (signature)...

OPERATOR (Name & sign):

Nonhlankhla (signature)



OPERATOR (Name&sign):

Leroy (signature)

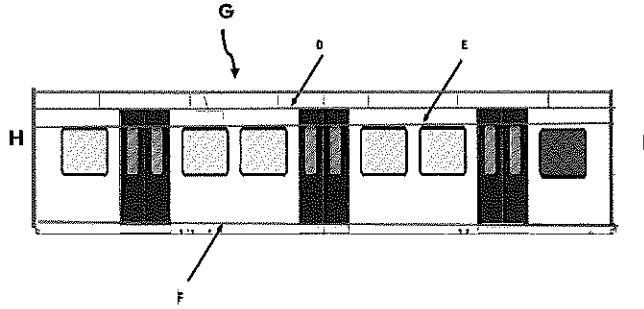
OPERATOR (Name&sign):

Leroy (signature)

OPERATOR (Name&sign):

Leroy (signature)

2024-05-17
LEROY
QUALITY



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

Operator (Name & sign):

LHS
D, E, F, G, H, I

Operator (Name & sign):

Lerako

Operator (Name & sign):

Lerako

Operator (Name & sign):

Nonhlanhla

Operator (Name & sign):

Operator (Name & sign):

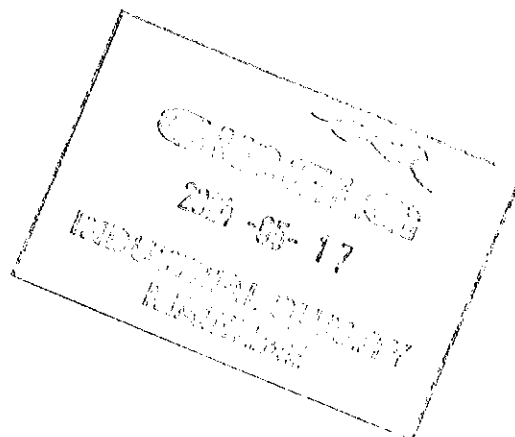
RHS

D, E, F, G, H, I

Lerako

Lerako

Nonhlanhla



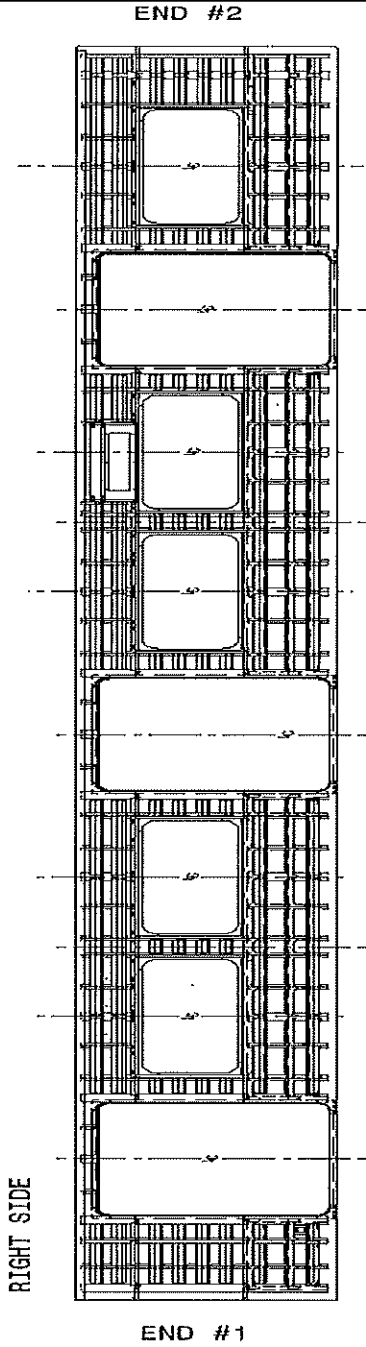


DT00000223319 Carshell Assembly TC

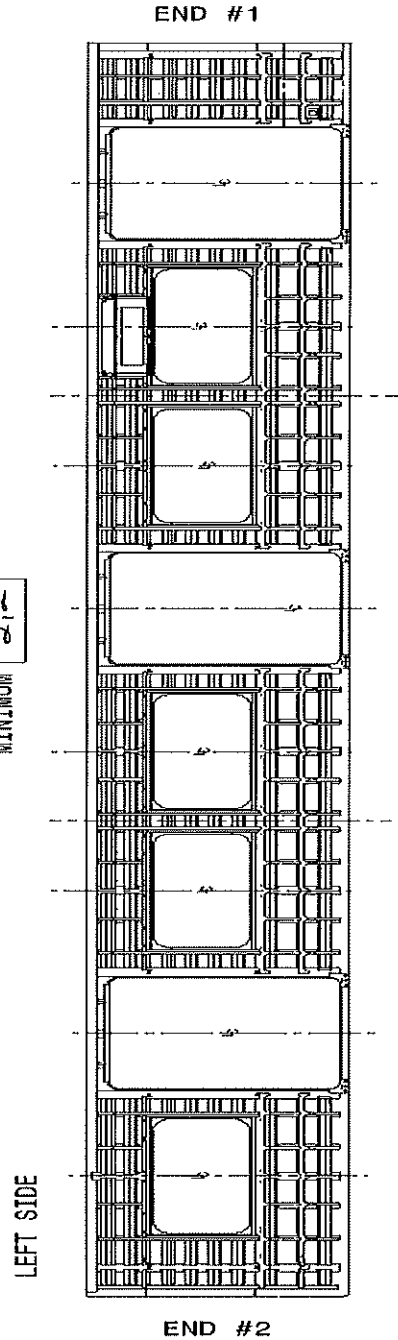
Rev. 30
Date- 06/11/2023

Project: PRASA
SI.CB1230.324.V29

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



MAXIMUM	2,8
MINIMUM	2,2



MAXIMUM	3,2
MINIMUM	2,6

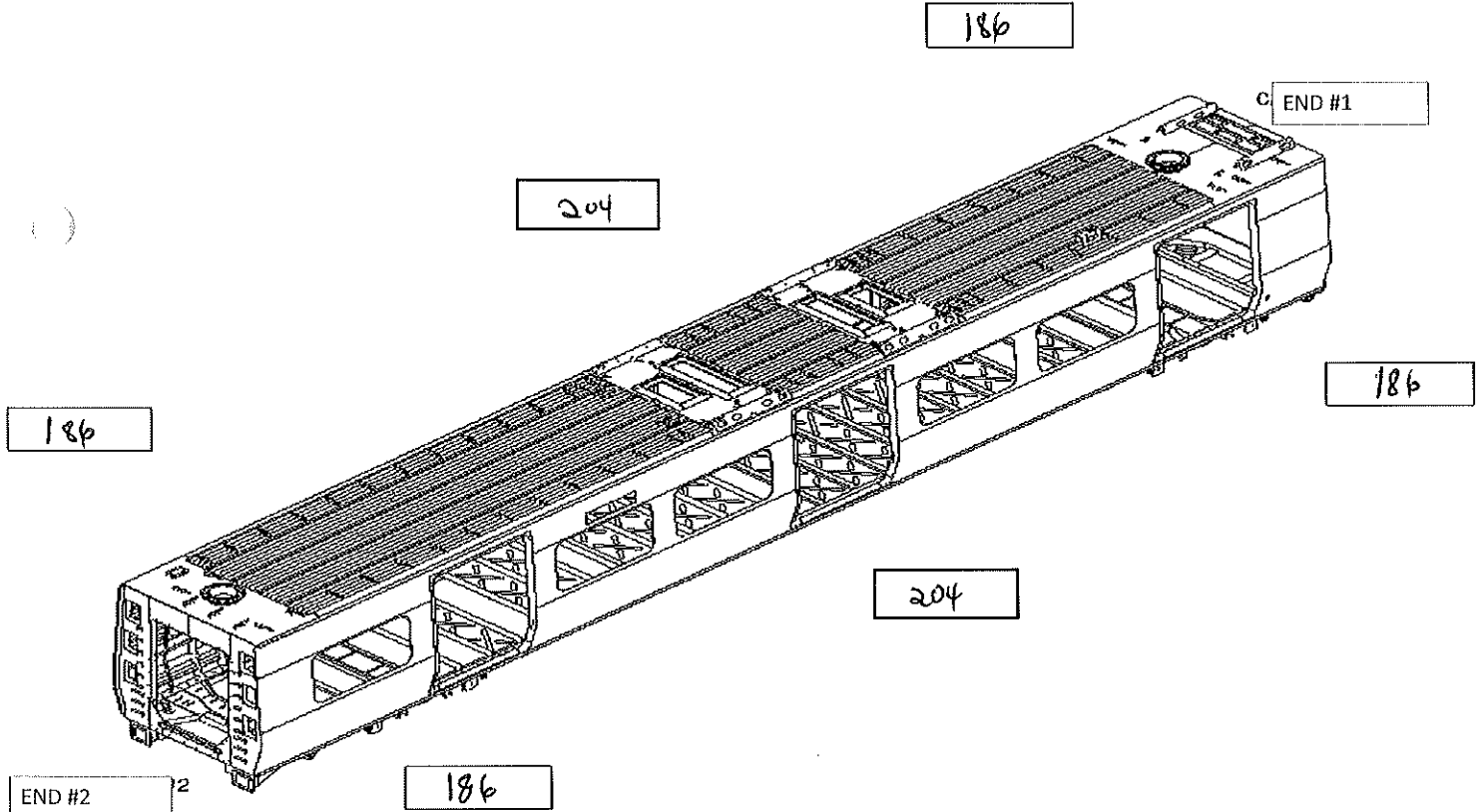
2024-05-17

 ENGINEERING DEPARTMENT

 123456789

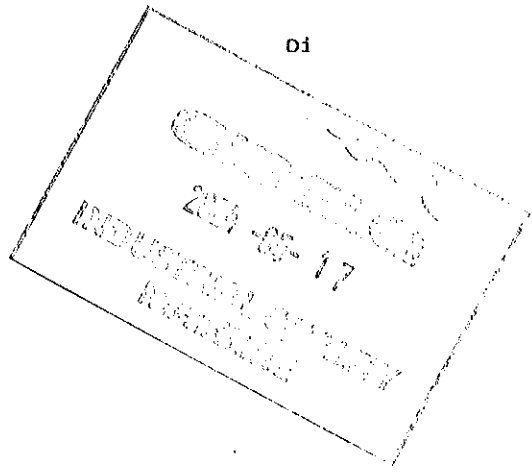
Specifications of Details for CBS measurement CB1230

Specified Camber for car out of jig is 16mm (-0mm + 2mm)



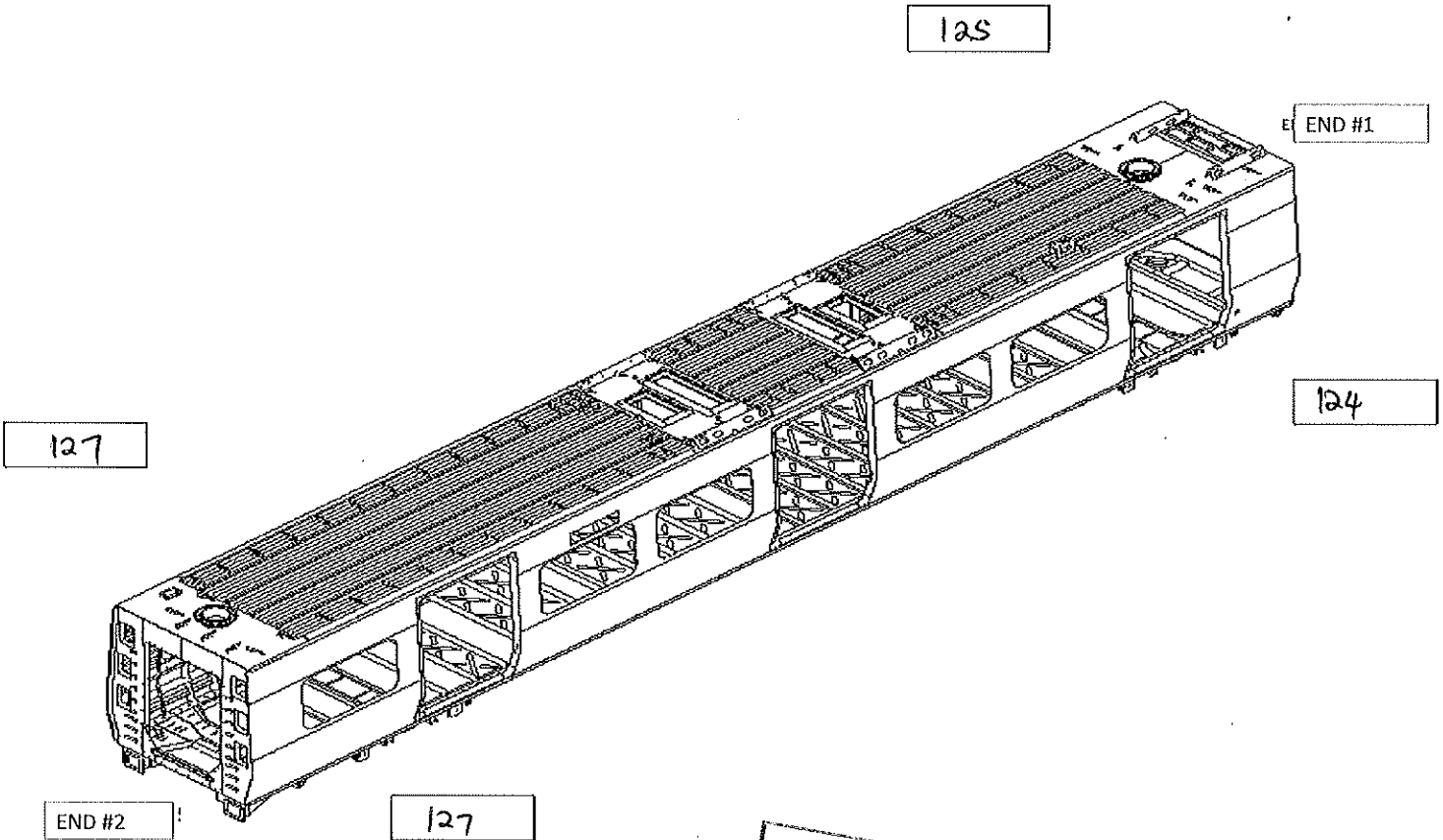
MEASURED CAMBER VALUES

RIGHT	-	18
LEFT	-1	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.



MEASURED TWIST VALUES END 1

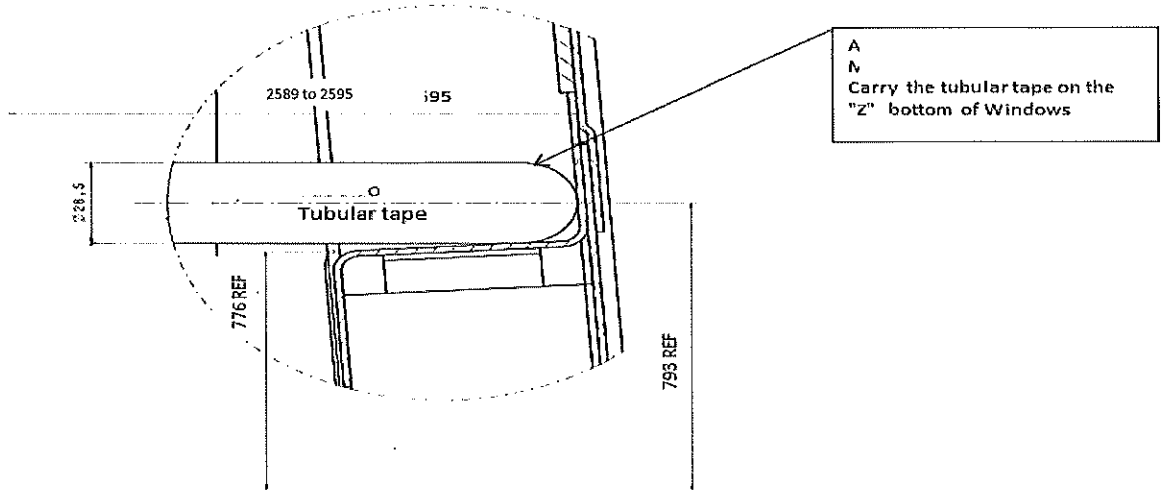
LATERAL	1
LONGITUDINAL	3

MEASURED TWIST VALUES END 2

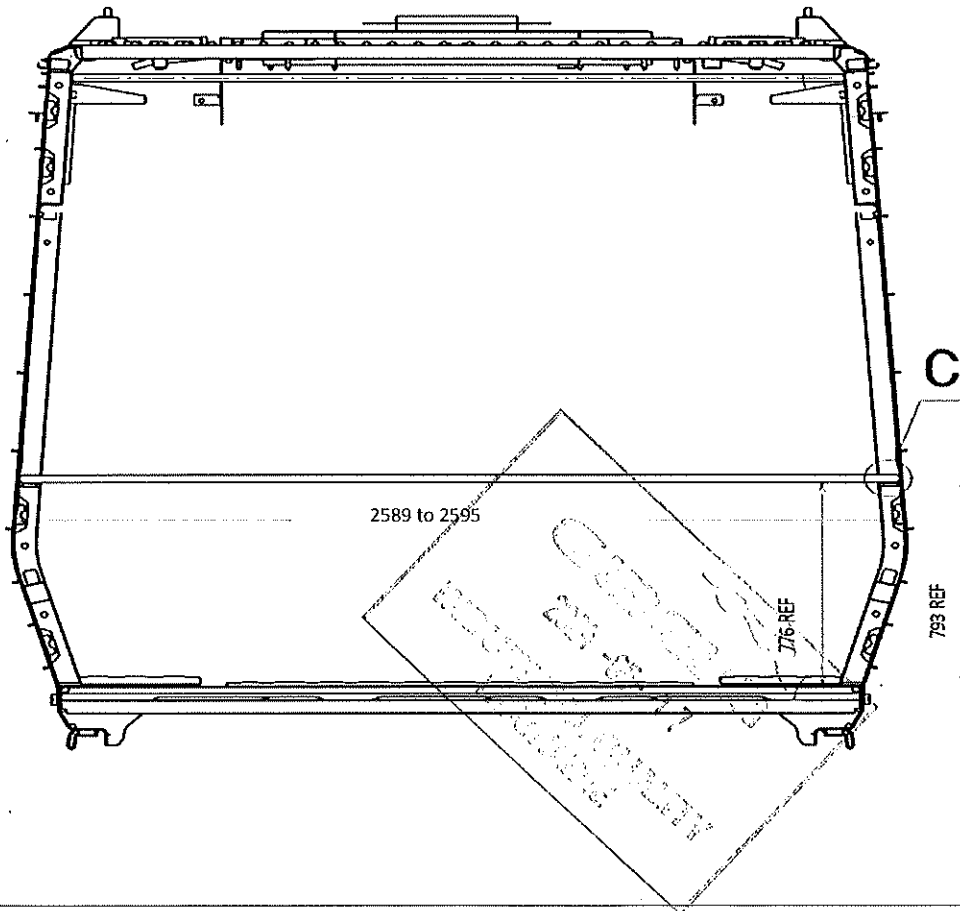
LATERAL	2016-05-17
LONGITUDINAL	2

INDUSTRIAL QUALITY MANUFACTURE

Details for measuring on the CB1230 stage, after completion of activities



Detail C



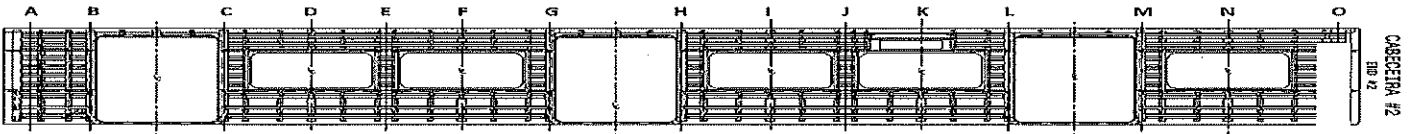


DT00000223319 Carshell Assembly TC

Rev. 30
Date- 06/11/2023

Project: PRASA
SI.CB1230.324.V29

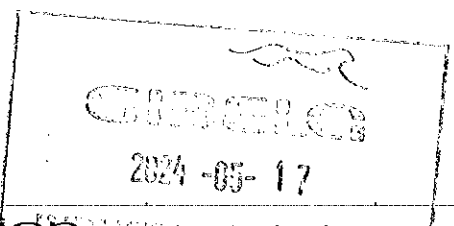
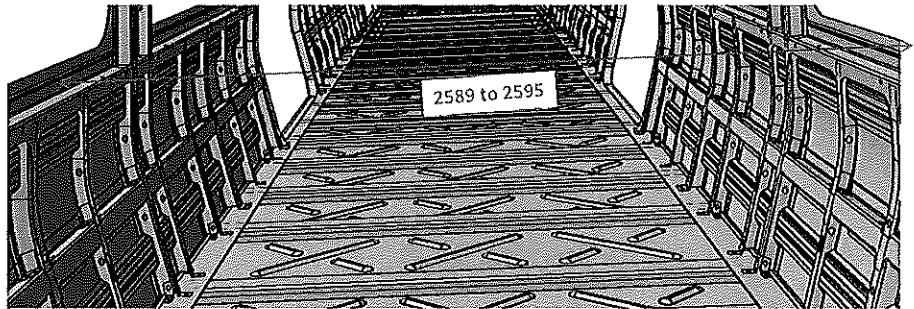
Specifications of Details for CBS measurement



LATERAL DIREITA
Right Side

2589 to 2595mm

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



Threshold verification

Nominal value :38

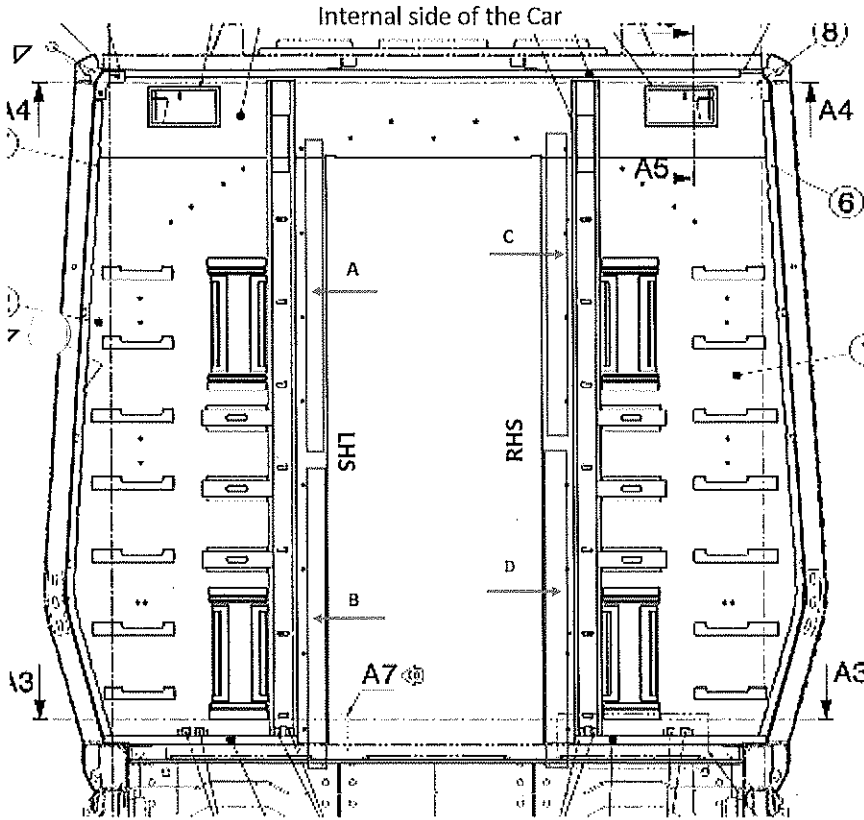
Door 1		Door 2		Door 3	
L	R	L	R	L	R
38	38	39	39	38	38
Door 4		Door 5		Door 6	
L	R	L	R	L	R
38	39	38	39	39	39

BOILER MAKER: Buhle Maseka
 WELDER: Mnathapelo Maseka

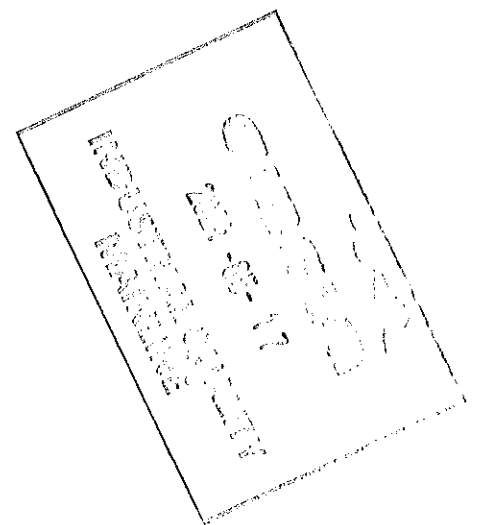
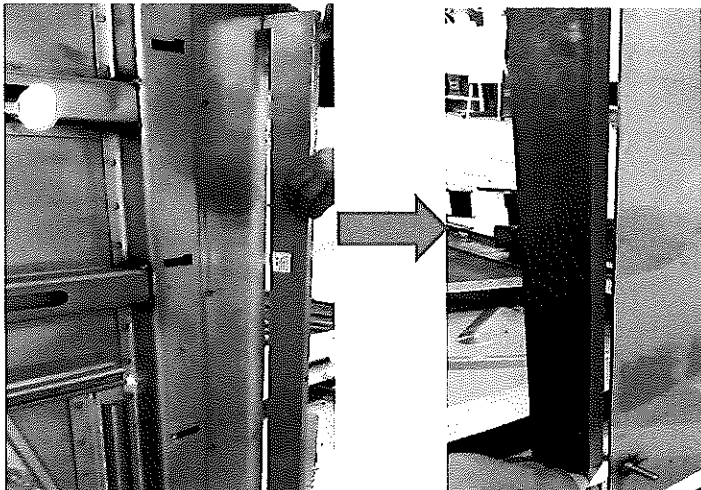
Specifications of Details for CBS measurement

Measure the flatness on the Cab Fire Barrier after installation and welding. Measure positions A, B,C and D using 1000mm flatness ruler and taper gauge.

Specified Maximum Flatness deviation on Cab Fire Barrier = 2mm



Measured Values			
	Minimum	Maximum	Deviation
A	8	10,2	2,2
B	10	12	2
C	9,2	10	1,8
D	11	12	1





DT00000223319 Carshell Assembly TC

Rev.
30
Date-
06/11/2023

Project: PRASA
SI.CB1230.324.V29

Dye penetrant test

Dye-penetration test to be performed by quality personnel

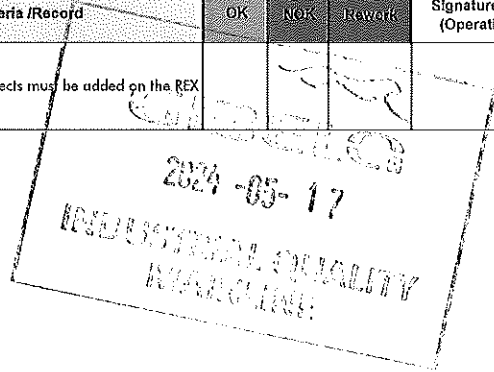


Item	Description of the issue	OK	Signature/Date (Operations)	Signature/Date (Quality)

II.2 - Check List REX

Check List Items

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





DT00000223319 Carshell Assembly TC

Rev.
30

Project: PRASA

Date-

SI.CB1230.324.V29

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)	19/04/24	Zonek Mahlogu Operations		
		Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	19/04/24	Richmond 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	

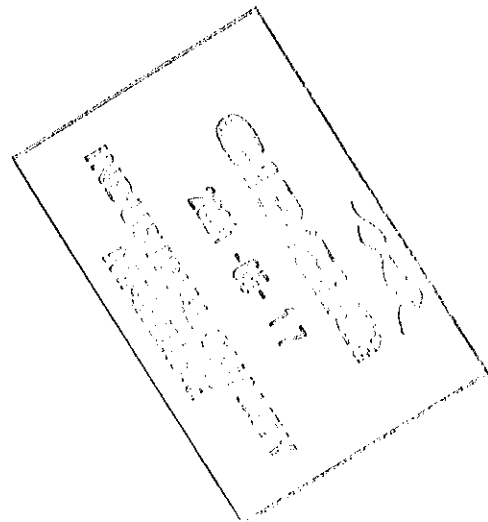
In case of "NO GO", describe blocking problems

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

Item	Description	Action	Responsible	Due date	Status

Operations

Quality



ANNEXURE A: Arc Welding Quality Acceptance Standard

