

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	CART TYPE				WORK INSTRUCTION	SAFETY ?	
				TC1	M1	M2	M3			TC2
<input type="checkbox"/>	DIR3025487/3	AAD0001278666	CARBODYSHELL M3 M4 ASSEMBLY	CB2210				X	PRACB2210.DIR30225 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 Mathengu	10/01/2018		
						APPROVER	Itumeleng Modiba	2018/05/18		
1	2018/05/18	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager				CHECKER	Nosizo Pindela	2018/05/18		
						REVISD BY	Ramokone Motama	2018/05/18		
						APPROVER	Itumeleng Modiba	2018/07/04		
2	2018/07/04	Certain dimensional checks moved to CB2220 and CB230				CHECKER	Nosizo Pindela	2018/07/04		
						REVISD BY	Ramokone Motama	2018/07/04		
3	2018/12/12	Added dimensional check joints to CB2210				APPROVER	Itumeleng Modiba	2018/12/12		
						CHECKER	Nosizo Pindela	2018/12/12		
						REVISD 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		
						REVISD BY	Vanessa Ntuli	22/01/2019		
6	13/03/2019	Added O1 and O2 on Self-Inspection				APPROVER	Itumeleng Modiba	13/03/2019		
						CHECKER	Nosizo Pindela	13/03/2019		
						REVISD 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		
						REVISD BY	Nosizo Pindela	21/08/2019		
15	06/08/2020	New Baseline 10.2.6				APPROVER	Timothy Mairiela	06/08/2020		
						CHECKER	Bongane Masina	06/08/2020		
						REVISD BY	Bongane Masina	06/08/2020		
20	19/04/2021	New Baseline change 10.3				APPROVER	Timothy Mairiela	19/04/2021		
						CHECKER	Bongane Masina	19/04/2021		
						REVISD 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		
						REVISD BY	Mpho Mulaudzi	17/08/2021		
25	19/02/2022	New Baseline change 10.3.1				APPROVER	Mbhombi Collins	19/02/2022		
						CHECKER	Andani Muthelo	19/02/2022		
						REVISD 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		
						REVISD BY	Mohlame Amogelang	14/04/2023		
30	20/07/2023	New Baseline change 10.4				APPROVER	Ngobeni Tyson	28/07/2023		
						CHECKER	Mohlame Amogelang	28/07/2023		
						REVISD BY	Mohlame Amogelang	28/07/2023		
31	07/11/2023	Added traceability for welding sections				APPROVER	Ngobeni Tyson	07/11/2023		
						CHECKER	Mohlame Amogelang	07/11/2023		
						REVISD BY	Ntokoza Zwane	07/11/2023		
TRAINSET		CAR	OPERATOR NAME	ALPS NO	DATE	SELF INSPECTION NUMBER			PAGES	
15219 M4		PAN13	449964	18/03/24	SI.CB2210.254.V30			17		



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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

Date
07/11/2023

Car: M3 & M4

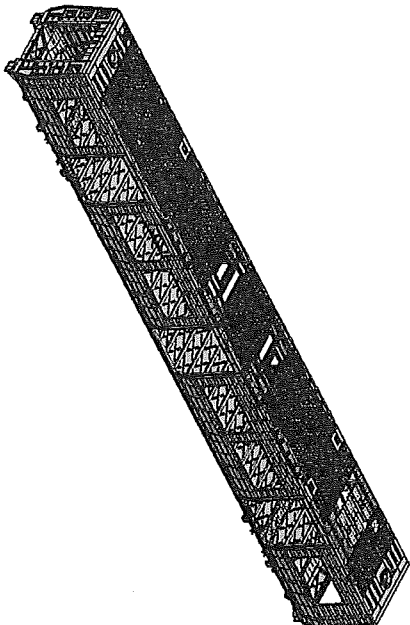
NCR:

Work station:

CB2210




Safety Related

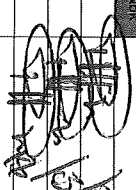
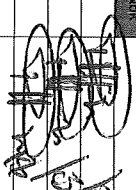


I - Documentation and Instruments Control

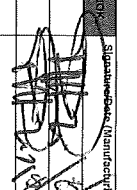
1.1 - Documentation Control

Document	Type of car				Revision	Observation	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
	TC1	M1	M2	M3	M4	TC2				
DTR30225487/3					X		✓		 13/03/24	13/03/24

1.2 - 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)		
UBIWAKI	39833-2	15/03/25	✓		 13/03/24	13/03/24		
LAST TAPE	135435924	08/01/25	✓					
3M TAPE	GIBBIO2	18/11/24	✓		 13/03/24	13/03/24		


1.3 Consumables

Welding Consumable Control - Used for Special Process							
Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)	
ER 308 LS1	314018-7007	MIG	✓		 13/03/24	13/03/24	
ER 308 L	37687-7055	MIG	✓				

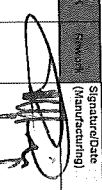
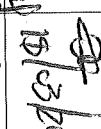



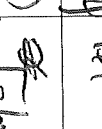



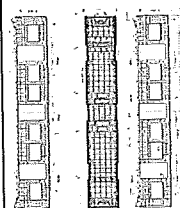




Signature

2024-02-15

PRASA EMBROIDERY CONSORCIO
GIBELCO LTD

	CARBODYSHELL M3/M4 ASSEMBLY DTR302254873		Rev. 31	Project: PRA5A
			Date 07/11/2023	SI:CB2210.254.V30

II - Self Inspection - Items to Check

II.1 - Items to check							
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	NOT OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Corshell free of significant flaws which compromise the appearance or functionality	DTD00000210675	✓		 15/03/24	 15/03/24
02	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 e DTD00000210675	✓		 15/03/24	 15/03/24
03	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		 15/03/24	 15/03/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		 15/03/24	 15/03/24
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document	Approved according specified on pages below.	✓		 15/03/24	 15/03/24
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 DTD00000210658.	As the welding procedure IND-SAL-WMS-018 and DTD00000210658.	✓		 15/03/24	 15/03/24

Signature
 2024-02-15
 11/02/2024
 11/02/2024



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

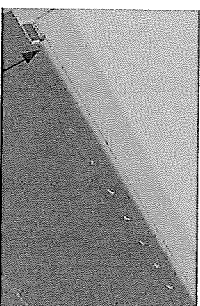
Rev.
31

Project: PRASA
SI.CB2210.254.V30

Date
07/11/2023

Welding Traceability

Roof ring welds



Boiler maker (Name & Sign): SEA B LHS Welder (Name & Sign): Gopa R

END 1

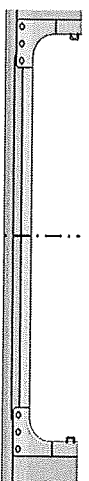
Boiler maker (Name & Sign): SEA B RHS Welder (Name & Sign): Gopa R

Boiler maker (Name & Sign): SEA B LHS Welder (Name & Sign): Gopa R

END 2

Boiler maker (Name & Sign): SEA B RHS Welder (Name & Sign): Gopa R

Door ring welds



Boiler maker (Name & Sign): SEA B LHS

Welder (Name & Sign): Keiru K. Mof

Boiler maker (Name & Sign): SEA B RHS

Welder (Name & Sign): Thabang K. Mof

SIGELA RAIL TRANSPORT CONCORP (Pty) LTD
IMPOUNDED FOR FITTING QUALITY

Signature
2024-02-15

Signature.....

2024-02-15

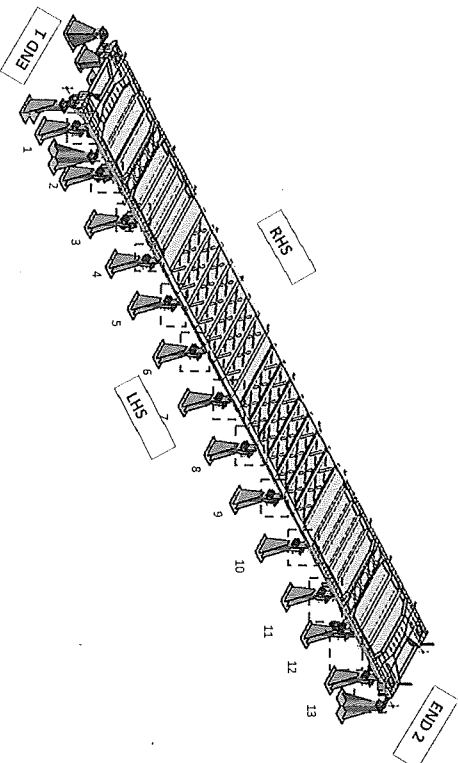
THIRD COUNTY
JAIL AND DETENTION
FACILITY



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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

Specifications of Details for GBS measurement



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

After loading and clamping

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

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

Signature Operations:  Date: 18/03/24

After Welding.

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

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

Signature Industrial Quality:  Date: 18/03/24

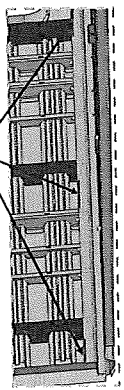
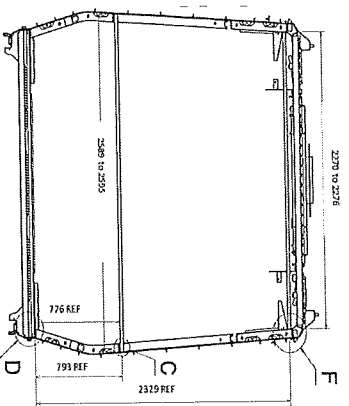
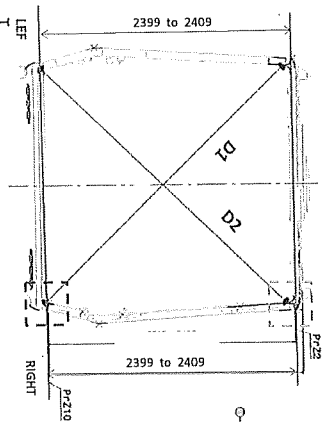
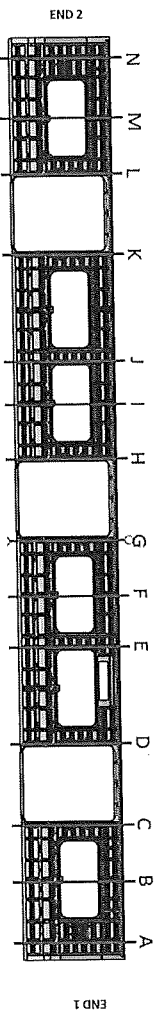
GIBELCO TRANSCONT CONSORTIUM PTE. LTD
MIPROTECH (SINGAPORE)
FITTING QUALITY
2024-02-15
Signature



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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

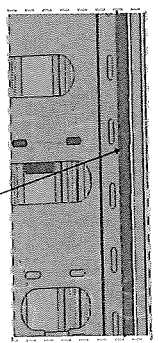
Specifications of Details for CBS measurement



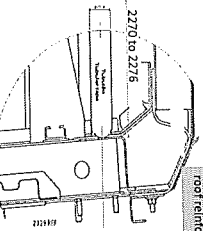
Measurement positions on roof rail and sidewall omega corner.



Measurement positions on sidewall and side sill corner.



Reinforcement area measurement positions on roof reinforcement area.



Detail F
Reinforcement area measurement positions on roof reinforcement area.

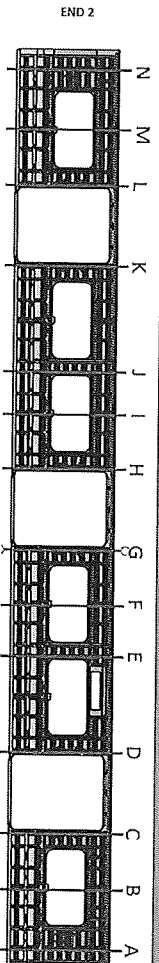
Signature
2024-02-15
GIBELCO ENGINEERING PVT. LTD.
FITTING QUALITY
MILWAUKEE ENGINEERING



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev. 31
Date 07/11/2023
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Specifications of Details for GBS measurement



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

BEFORE WELDING

Record D1 values		Record D2 values		D1-D2 $\leq 5mm$		2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3069	3069	0	0	0	2404	2404	0
B	3068	3063	1	1	0	2405	2404	1
C	3069	3061	2	2	0	2404	2405	1
D	3068	3070	2	2	0	2404	2404	0
E	3070	3070	0	0	0	2404	2406	2
F	3069	3069	0	0	0	2404	2405	1
G	3066	3068	2	2	0	2406	2404	2
H	3071	3070	1	1	0	2403	2404	1
I	3070	3071	1	1	0	2406	2404	2
J	3071	3071	0	0	0	2404	2406	2
K	3069	3071	2	2	0	2404	2404	0
L	3071	3069	2	2	0	2406	2405	1
M	3069	3069	0	0	0	2406	2406	0
N	3066	3067	1	1	0	2404	2403	1

18/03/24
18/03/24
18/03/24
18/03/24

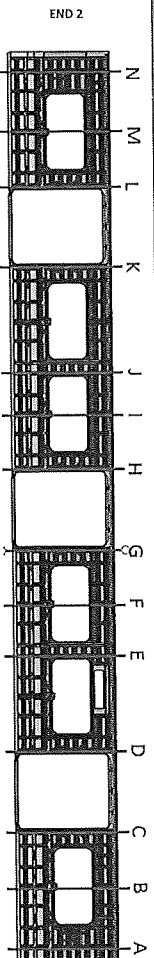
Signature:
Date: 2024-02-15



CARBODYSHELL M3, M4 ASSEMBLY DTR30225487/3

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

Specifications of Details for GBS measurement



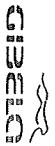
PME Column LHS - RHS should be
≤ 2MM on each point.

AFTER WELDING

Record D1 values		Record D2 values		D1-D2 ≤ 5mm		2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3396	3397		1		2404	2404	0
B	3369	3371		2		2405	2404	1
C	3396	3398		2		2404	2404	0
D	3399	3399		0		2404	2404	0
E	3370	3370		0		2405	2405	0
F	3371	3370		1		2405	2404	1
G	3398	3399		1		2404	2406	2
H	3398	3398		0		2404	2405	1
I	3368	3366		2		2404	2404	0
J	3369	3368		1		2405	2406	1
K	3396	3397		1		2405	2405	0
L	3398	3399		1		2404	2405	1
M	3369	3369		0		2404	2404	0
N	3395	3396		1		2406	2404	2

439969
140864

Signature
2024-02-15
FITTING QUALITY
Mphahina Khranyiso
GIBELCO INDUSTRIAL CONSULTING (PTY) LTD

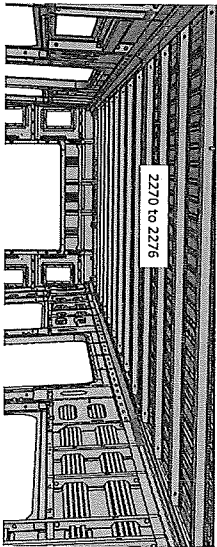
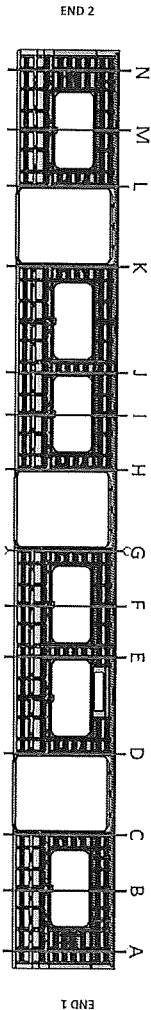


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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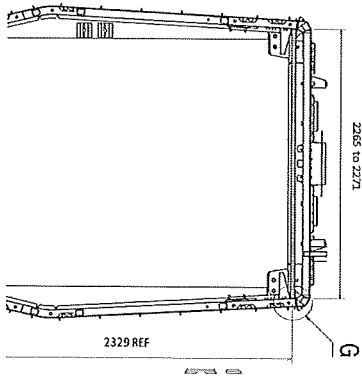
G3S measurement

BEFORE WELDING

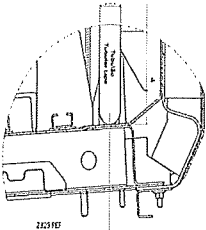


- A 2274
- B 2276
- C 2273
- D 2276
- E 2276
- F 2274
- G 2273
- H 2274
- I 2276
- J 2276
- K 2275
- L 2275
- M 2272
- N 2275

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



2265 to 2271



Detail G

4509964
15603124

GIBELCO
MOISEN
FITTING
2024-02-15
Signature

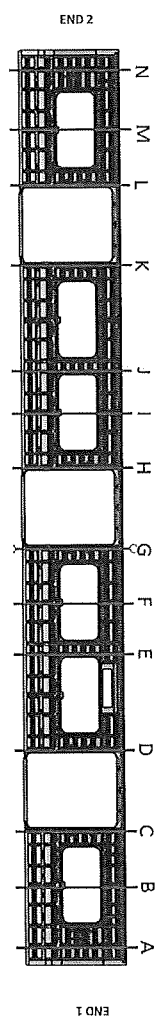


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.	Project: PRASA
31	SI_CB2210.254.V30
Date	
07/11/2023	

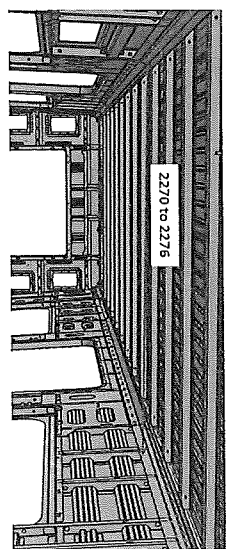
GBS measurement

AFTER WELDING



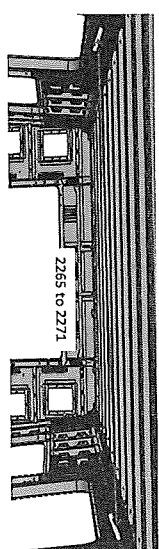
2265 to 2271 2270 to 2276

A	2265	2270
B	2265	2274
C	2265	2274
D	2265	2274
E	2274	2274
F	2275	2275
G	2265	2274
H	2265	2274
I	2274	2274
J	2274	2274
K	2265	2274
L	2270	2274
M	2274	2274
N	2265	2274



2270 to 2276

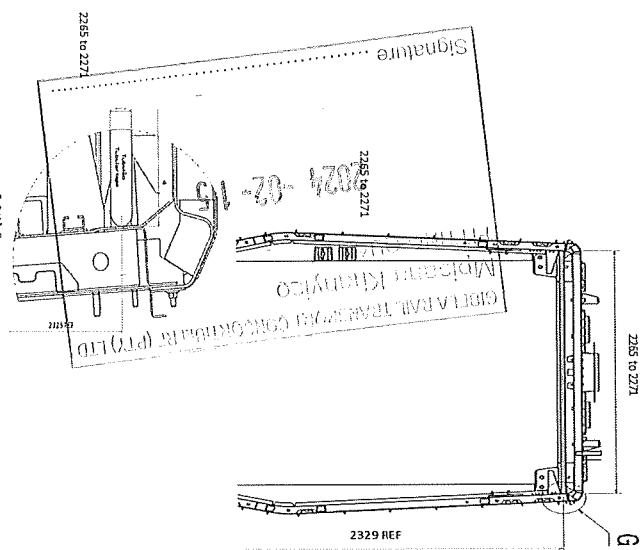
Do not consider reinforcement (Take measurements top area of zee profile)



2265 to 2271

Take measurement close to radius (considering reinforcement)

2265 to 2271



2265 to 2271

2329 REF

Detail G

Carbody Shell

18103 bay



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.

31

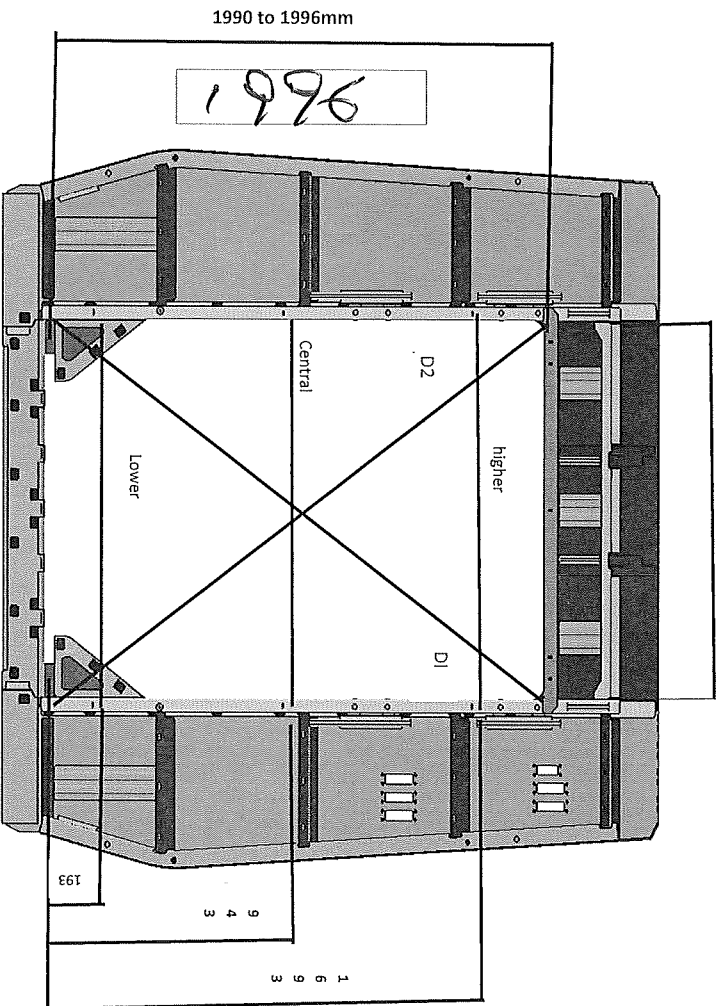
Project: PRASA
SI.CB2210.254.V30

Date

07/11/2023

Specifications of Details for GBS measurement

End frame 1



1380 to 1382 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

Higher Dimension

1383

D1

2415

Central Dimension

1381

D2

2416

Lower Dimension

1380

D1-D2

1

[Handwritten signature]

2024/06/18
18/05/24

GIBEL ENGINEERING AND CONSTRUCTION (PTY) LTD
M14, 14th Floor, 14th Floor
F. 14, 14th Floor, 14th Floor

2024-02-15

Signature



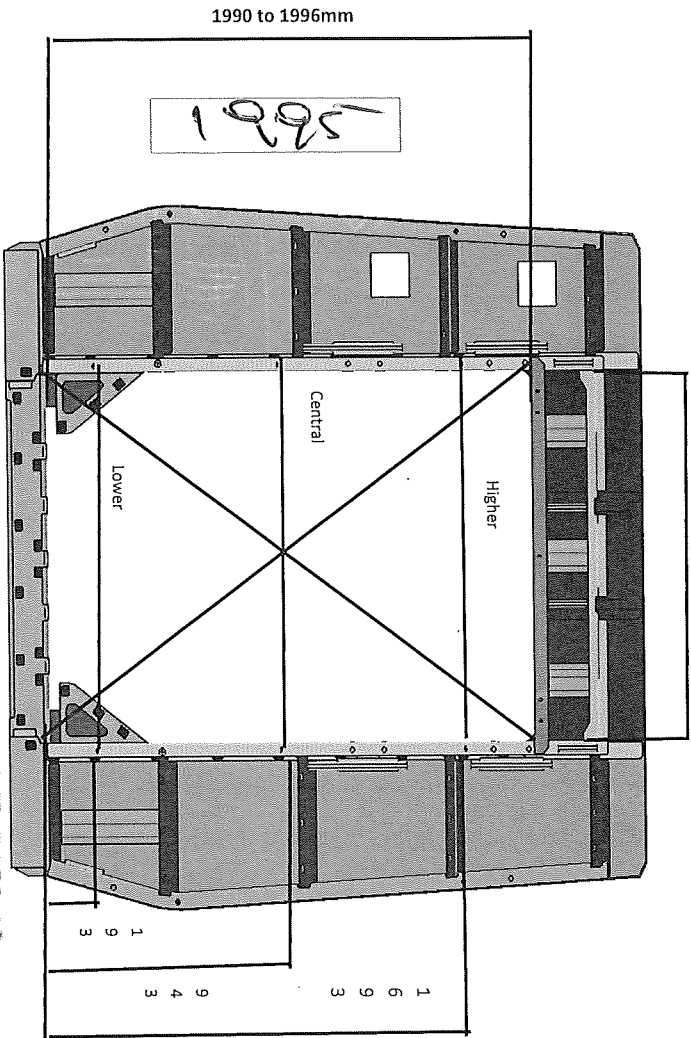
CARBODYSHELL M3,M4 ASSEMBLY DTR3025487/3

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

Specifications of Details for GBS measurement

Endframe 2

1380 to 1382 mm



1390 to 1392 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

Higher Dimension

1381

D1

2416

Central Dimension

1381

D2

2416

Lower Dimension

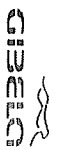
1380

D1-D2

0

Handwritten signature and date: 2024-02-15

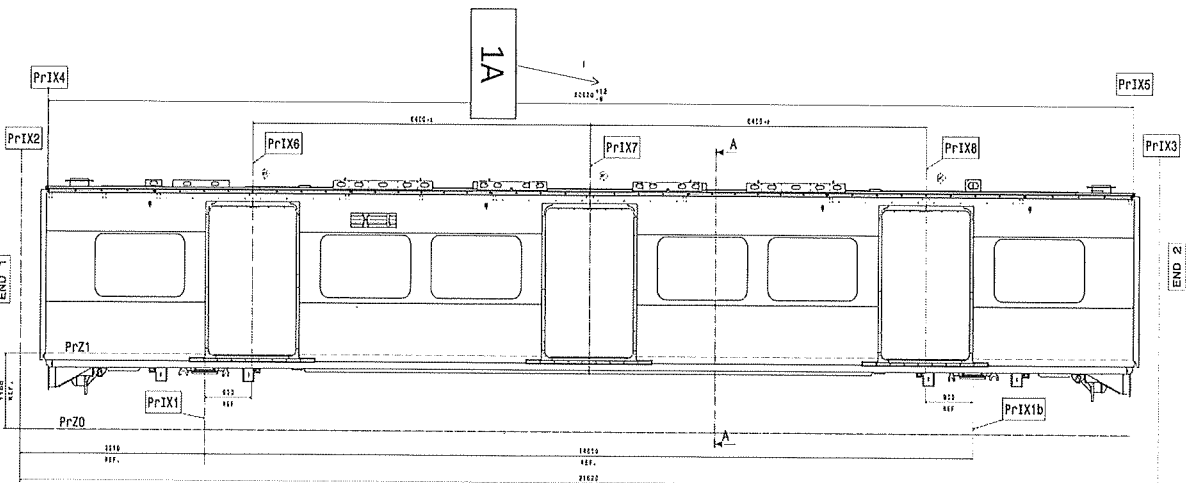
Signature
2024-02-15
GIBELCO TRANSPORT CONSORTIUM (PTY) LTD.
MIDLAND CITY



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.	31	Project: PRASA
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Specifications of Details for GBS measurement



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

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

Handwritten signature and date: 15/08/2024

Dye penetrant test

Dye penetration test to be performed by quality personnel



GIBELCO - PROJECT: PRASA
MPS/SC/10/00000
FITTING QUANTY
2024-02-15
Signature



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.	31	Project: PRASA SI_CB2210.254.V30
Date	07/11/2023	

Self Inspection - Final Result

		DATE	NAME	SIGNATURE
HOLD POINT	GO	18/03/24 Antonio Andoni		
		18/03/24 Andoni		
	NO GO			
		Industrial Quality		
		Operations		
		Industrial Quality		

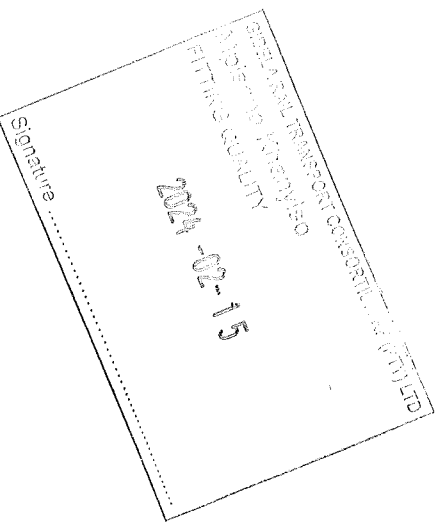
In case of "NO GO", describe blocking problems


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

Item	Description	Responsible	Due date	Status

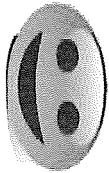
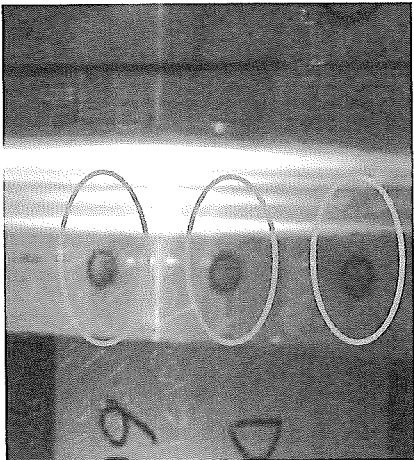
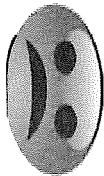
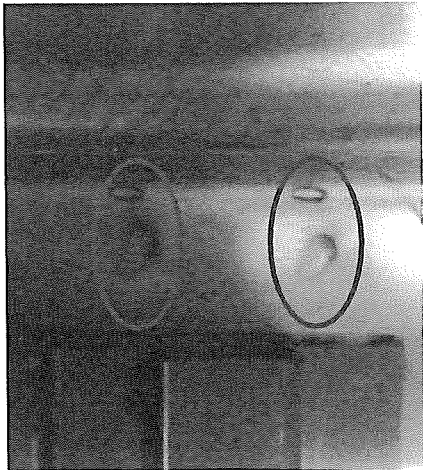
Operations

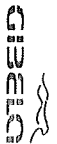
Quality



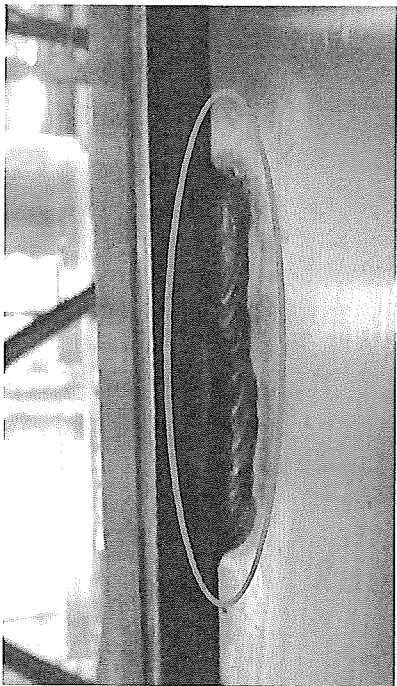
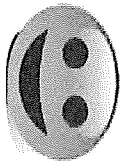
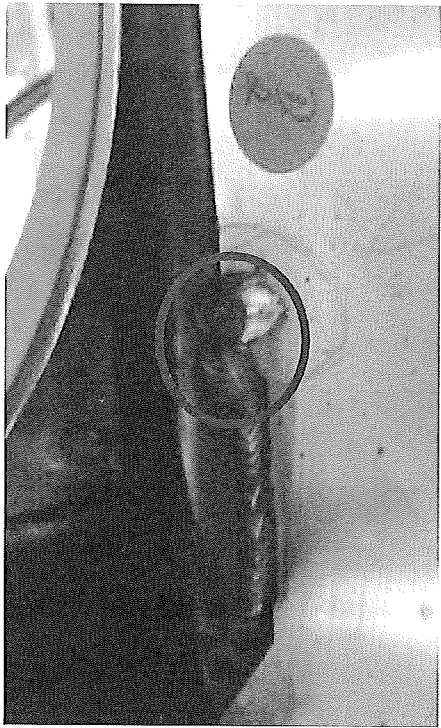
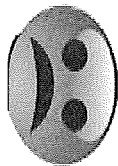
	CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3		Rev.	Project: PRASA SI.CB2210.254.V30
			31 Date	
			07/11/2023	

ANNEXURE A: Spot Welding Quality Acceptance Standard





		CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3		Rev. 31 Date 07/11/2023	Project: PRASA SI,CB2210.254.V30
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ANNEXURE B: Arc Welding Quality Acceptance Standard

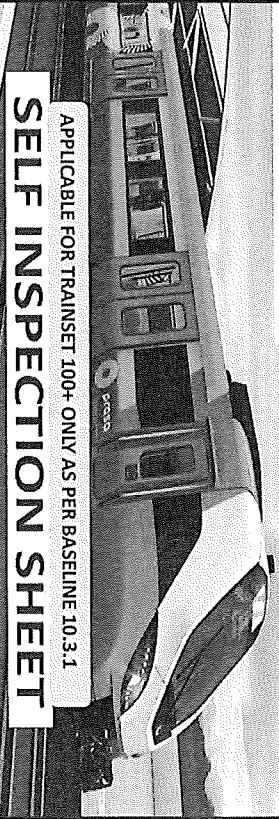


Trial



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	SHEET ?	
			TC2	M1	M2	M3			TC2
<input type="checkbox"/>	07B3023548/2	AAD000178566	PLM3, M4, ASSEMBLY	GB220	<input checked="" type="checkbox"/>	X	X	PRA.CB220.07B3023548	YES
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
REV	DATE	MODIFICATION CONTENT					RESPONSIBLE	NAME	DATE
0	01/02/2018	GIBELA NEW CREATION					APPROVER	Imeleleg Modiba	01/02/2018
							CHECKER	Noszo Pindela	01/02/2018
							COMPLIER	Thanyani Mathlegu	01/02/2018
1	18/05/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager					APPROVER	Imeleleg Modiba	18/05/2018
							CHECKER	Noszo Pindela	18/05/2018
							REVISED BY	Ramokone Mearana	18/05/2018
2	2018/07/05	Certain dimensional checks added and others moved to CB210					APPROVER	Imeleleg Modiba	2018/07/05
							CHECKER	Noszo Pindela	2018/07/05
							REVISED BY	Ramokone Mearana	2018/07/05
3	2018/06/12	Width tolerance as per OT000036600					APPROVER	Imeleleg Modiba	2018/06/12
							CHECKER	Noszo Pindela	2018/06/12
							REVISED BY	Noszo Pindela	2018/06/12
							APPROVER	Imeleleg Modiba	24/01/2019
							CHECKER	Noszo Pindela	24/01/2019
							REVISED BY	Vanessa Ntuli	24/01/2019
5	24/01/2019	As per-Baseline 10.2					APPROVER	Imeleleg Modiba	13/03/2019
							CHECKER	Noszo Pindela	13/03/2019
							REVISED BY	Noszo Pindela	13/03/2019
6	13/03/2019	Added D1 and D2 on Self - Inspection length measurements					APPROVER	Imeleleg Modiba	22/08/2019
							CHECKER	Noszo Pindela	22/08/2019
							REVISED BY	Noszo Pindela	22/08/2019
10	22/08/2019	New Baseline 10.2.5					APPROVER	Timothy Maimela	05/08/2020
							CHECKER	Bongane Masina	06/08/2020
							REVISED BY	Bongane Masina	06/08/2020
15	06/08/2020	New Baseline 10.2.6					APPROVER	Timothy Maimela	19/04/2021
							CHECKER	Bongane Masina	19/04/2021
							REVISED BY	Bongane Masina	19/04/2021
20	19/04/2021	SIGNED BY: NEW Baseline change 10.3					APPROVER	Collins Mkhombhi	17/08/2021
							CHECKER	Mpho Malauzi	17/08/2021
							REVISED BY	Mpho Malauzi	17/08/2021
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING					APPROVER	Collins Mkhombhi	19/02/2022
							CHECKER	Andani Muthelo	19/02/2022
							REVISED BY	Andani Muthelo	19/02/2022
25	20/02/2022	New Baseline change 10.3.1					APPROVER	Collins Mkhombhi	14/06/2022
							CHECKER	Andani Muthelo	14/06/2022
							REVISED BY	Andani Muthelo	14/06/2022
26	14/06/2022	Update minimum temperature requirement for sealant application					APPROVER	Collins Mkhombhi	19/10/2022
							CHECKER	Ntokoza Zwane	19/10/2022
							REVISED BY	Ntokoza Zwane	19/10/2022
27	19/10/2022	Addition of traceability for sealant application & welding					APPROVER	Vanessa Ntuli	14/04/2023
							CHECKER	Ntokoza Zwane	14/04/2023
							REVISED BY	Ntokoza Zwane	14/04/2023
28	14/04/2023	Added sealant batch number & welding consumables traceability					APPROVER	Ntokoza Zwane	28/10/2023
							CHECKER	Ntokoza Zwane	28/10/2023
							REVISED BY	Ntokoza Zwane	28/10/2023
29	28/10/2023	Addition of bracket quantity					APPROVER	Ntokoza Zwane	28/10/2023
							CHECKER	Ntokoza Zwane	28/10/2023
							REVISED BY	Ntokoza Zwane	28/10/2023
TRAINSET	CAR	OPERATOR NAME/ALPS NO	DATE	SELF INSPECTION NUMBER				PAGES	
219	M4	Mashudu 40041	19/03/24	SI.CB220.250.V29				13	



CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

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

Car: M1,M3,M4

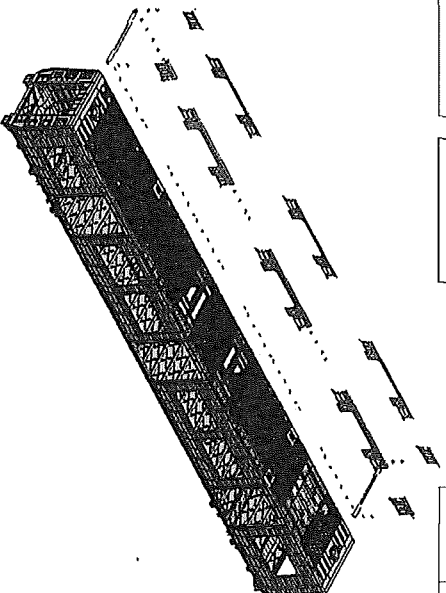
NCR:

Work station:

CB2220





Safety Related






I - Documentation and Instruments Control



I.1 - Documentation Control


Document	Type of car				Revision	Observation	OK	NCR	Review	Signature/Date (Manufacturing)	Signature/Date (Quality)
	TC1	M1	M2	M3							
DTR30225487/2					✓		✓		N/A	 19/03/20	 19/03/20

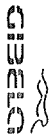
I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process						
Instruments	Serial number	Calibration or Verification Validation Date	OK	NCR	Signature/Date (Manufacturing)	Signature/Date (Quality)
Inductor	32823-3	13/03/2025	✓		 19/03/20	 19/03/20
Resistor	61619381	05/04/2024	✓		 19/03/20	










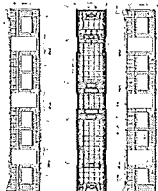


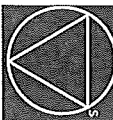









1.3 Consumables

Welding Consumable Control - Used for Special Process						
Filler Material	Heat Number	Welding Process	OK	NCR	Signature/Date (Manufacturing)	Signature/Date (Quality)
308 1.0 mm	314018	MIG	✓		 19/03/20	 19/03/20

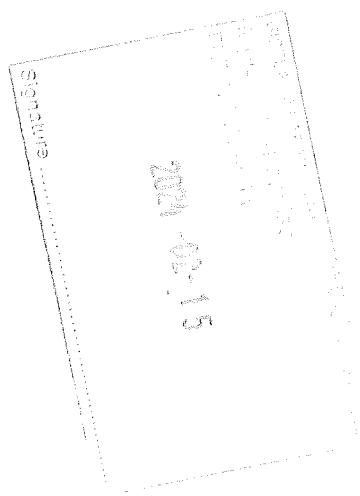
Signature:  2024-02-13

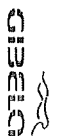
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2		Rev. 29	Project: PRASA
			Date 28/10/2023	SI.CB2220.250.V29

II - Self Inspection - Items to Check

II.1 - Items to check									
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	NG	NA	Signature/Date (Manufacturing)	Signature/Date (Quality)	
01	N/A	Assembly according to Instruction Engineering n° PRA.CB2220.DTR30225487/2 Verification of filament for all reinforcement brackets.	PRA.CB2220.DTR30225487/2	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
02	N/A	Castrell free of significant flaws which compromise the appearance or functionality	DTD0000210875	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
05		Functionals dimensions approved according drawing or complementary document approved by Aldom engineering and registered in this document.	Approved according specified on pages below.	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
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-028. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210888.	As the welding procedure IND-SAL-WMS-028 and DTD0000210888.	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
07	N/A	Before application of sealant record the expiry date and make sure that the room temperature and humidity are within specified values as per Work Instructions Specified: Temperature Min. - Max (1) Min-Max 10°C - 35°C Relative Humidity Min. - Max-Max 35% - 80% Max (1)	Sealant Batch No: <u>138-16-03</u> Exp Date: <u>10/03/24</u> Actuals Temperature: <u>23°C</u> Humidity: <u>44%</u>	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0002178586	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	
09		Verification of safety welds	Approved according to DTD0000210658 reference and Self inspection	<input checked="" type="checkbox"/>			 19/03/24	 19/03/24	

COPIA DE: 19/03/2024
 ALMACEN: 19/03/2024
 PLANTAS: 19/03/2024
 2024-02-15
 Signature





CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR3022487/2

Rev.	29	Project: PRASA
Date	28/10/2023	

SI.CB2220.250.V29

II - Self Inspection - Items to Check

SEALANT APPLICATION

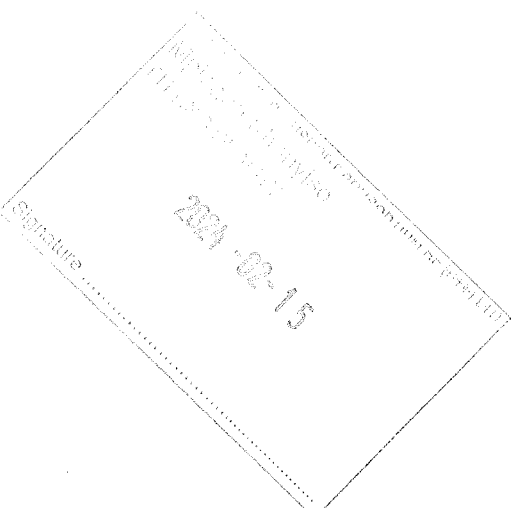
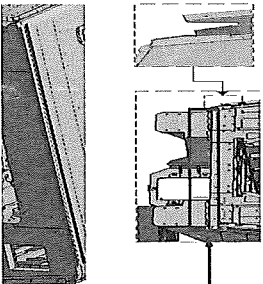
AREA 1 & 2 END 1


Operator (Name & sign):

Levy

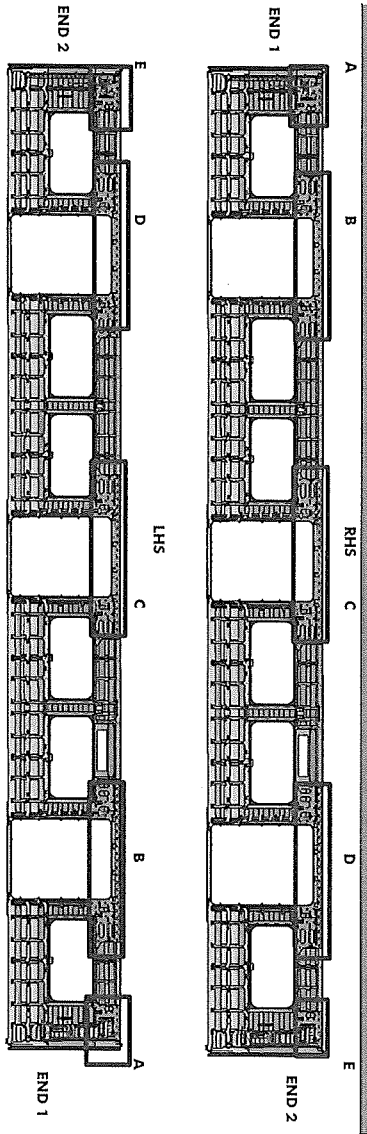
Operator (Name & sign):

Levy



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

II - Self Inspection - Items to Check

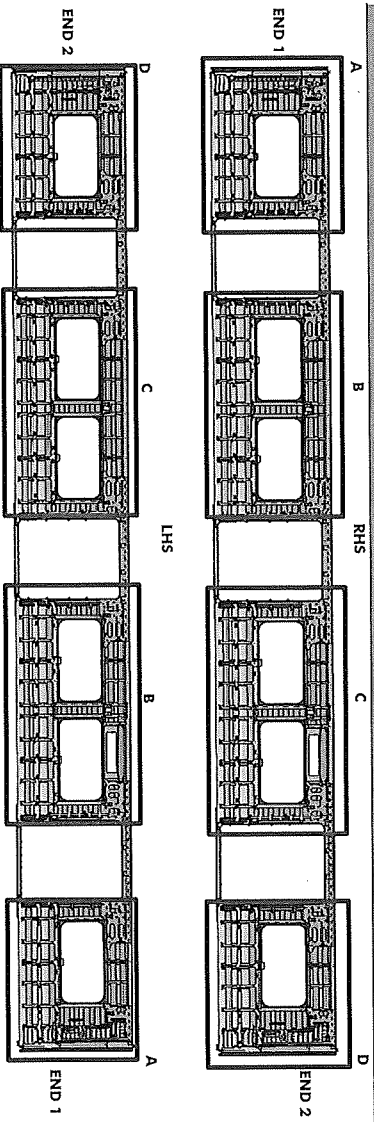


REINFORCEMENT WELDING

AREA	LHS	RHS
A	Operator (Name&sign): <i>S. Pereira</i>	Operator (Name&sign): <i>S. Pereira</i>
B	Operator (Name&sign): <i>Nicholas Pereira</i>	Operator (Name&sign): <i>Nicholas Pereira</i>
C	Operator (Name&sign): <i>Nicholas Pereira</i>	Operator (Name&sign): <i>Nicholas Pereira</i>
D	Operator (Name&sign): <i>Silvia</i>	Operator (Name&sign): <i>Silvia</i>
E	Operator (Name&sign): <i>Silvia</i>	Operator (Name&sign): <i>Silvia</i>

2023-08-15

II - Self Inspection - Items to Check



BRACKETING

C-RAILS: Operator: Levi *[Signature]* **INSTALLATION**

DOOR MECHANISMS: Operator: Tekele

TAPPING PADS: Operator: Atthobers *[Signature]*

Operator:

SEAT & LUGGAGE BRACKETS: Operator: Phiscilla *[Signature]* **INSTALLATION & VERIFICATION**

Operator:

SEAT BRACKETS VERIFICATION: Operator: NO verification (trial car)

Operator:

WELDING

AREA **LHS** **RHS**

A (Seat brackets) : Operator (Name&sign): Neklemu *[Signature]* Neklemu *[Signature]*

(C-rails, Luggage and earth bushes) : Operator (Name&sign): Neklemu *[Signature]*

B (Seat brackets) : Operator (Name&sign): S. Ngata *[Signature]*

(C-rails, Luggage and earth bushes) : Operator (Name&sign): S. Ngata *[Signature]*

C (Seat brackets) : Operator (Name&sign): Thurian *[Signature]*

(C-rails, Luggage and earth bushes) : Operator (Name&sign): Thurian *[Signature]*

D (Seat brackets) Operator (Name&sign): S. Ngata *[Signature]*

(C-rails, Luggage and earth bushes) : Operator (Name&sign): S. Ngata *[Signature]*

ENDS

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

END 2 TAPPING PADS WELDING: Operator (Name&sign): Thurian *[Signature]*

Signature: Thurian *[Signature]*

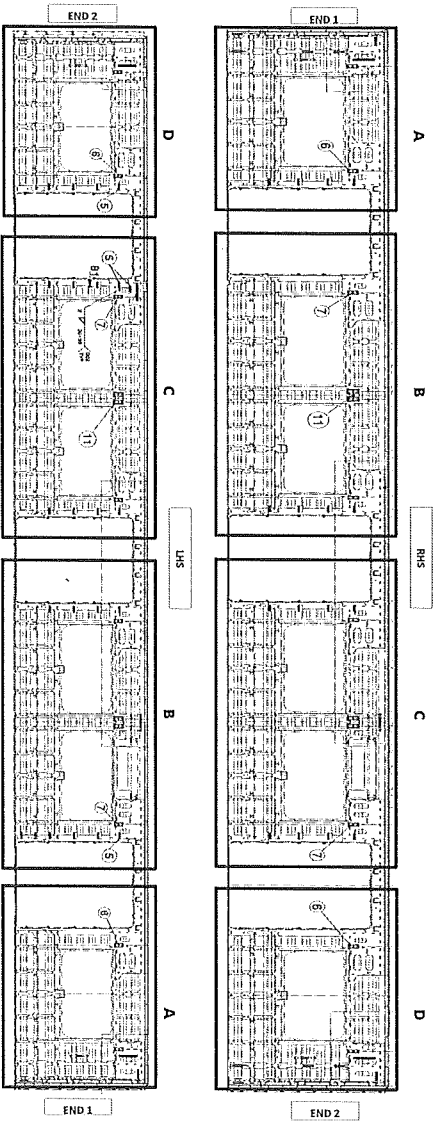


CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

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	4	✓	
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: *Michael*

19/03/20

LHS

SECTION	QUANTITY	OK	NOK
C-RAILS			
A	2	✓	
B	1	✓	
C	11	✓	
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: *Michael*

19/03/24

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	4		
D	3		

ROOF ENDS:

CRAILS 2 OFF EACH END
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: *N/K*

LHS

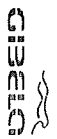
SECTION	QUANTITY	OK	NOK
C-RAILS			
A	2		
B	1		
C	11		
D	6		
SEAT BRACKETS			
A	13		
B	21		
C	21		
D	13		
EARTH BUSH			
A	3		
B	7		
C	6		
D	2		

ROOF ENDS:

CRAILS 2 OFF EACH END
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: *N/K*

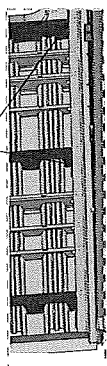
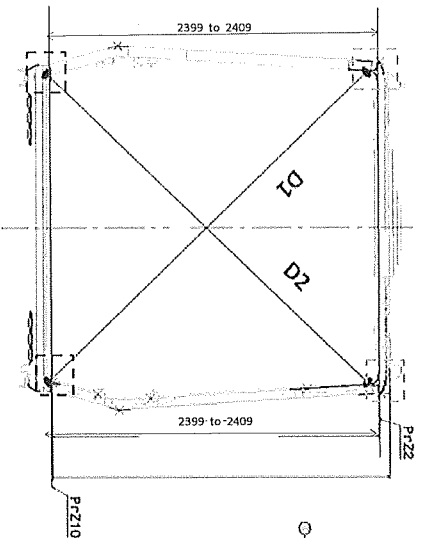
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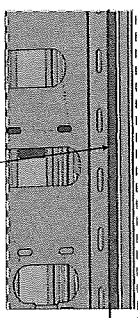
CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

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

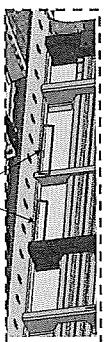
Specifications of Details for GBS measurement



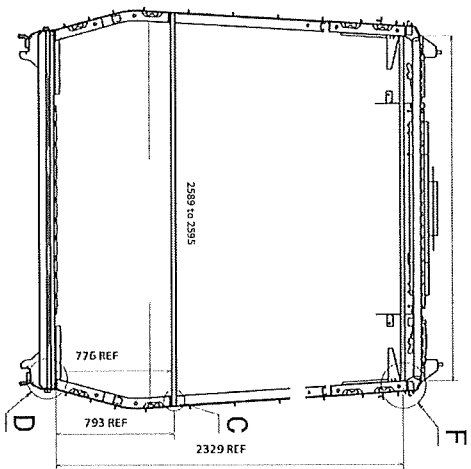
Measurement positions on roof rail and
sidewall omega corner.



Reinforcement area measurement positions
on roof reinforcement area.



Measurement positions on sidewall and side
sill corner.



Signature _____
2023-02-15

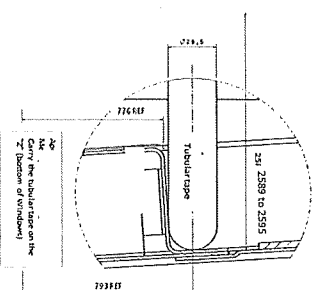
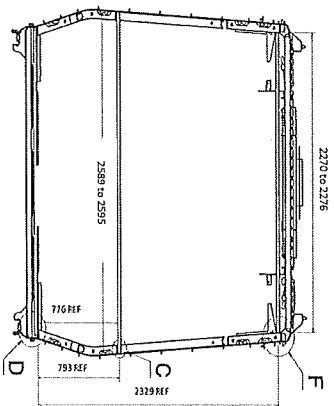


CARBODYSHELL M1,M3,M4 ASSEMBLY
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Rev.
29
Date
28/10/2023

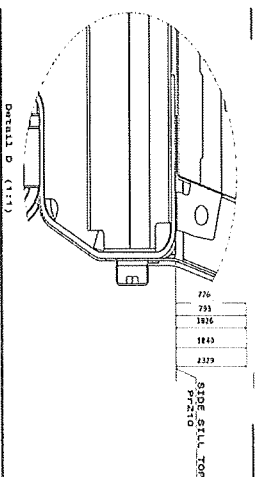
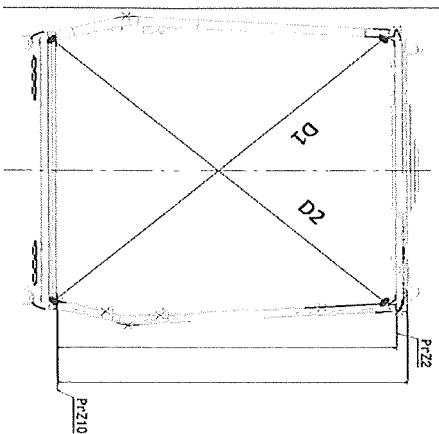
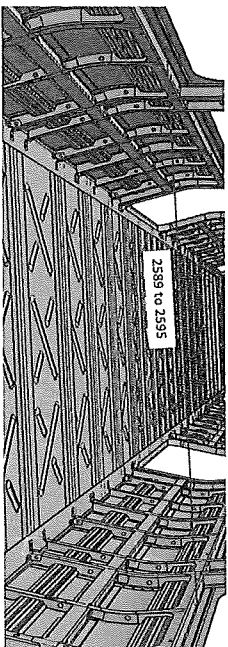
Project: PRASA
SI.CB2220.250.V29

CBS measurement



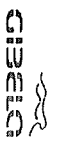
Detail C

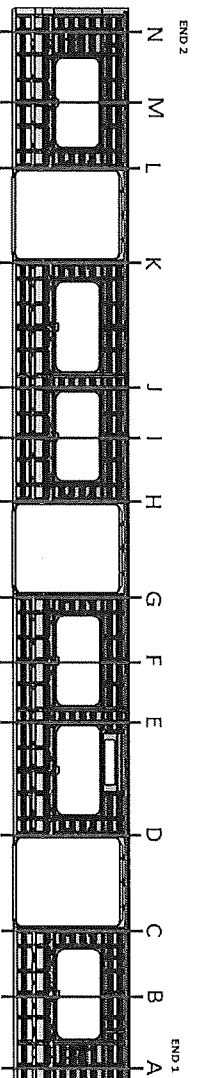
Take measurement close to radius



Detail D (1:1)

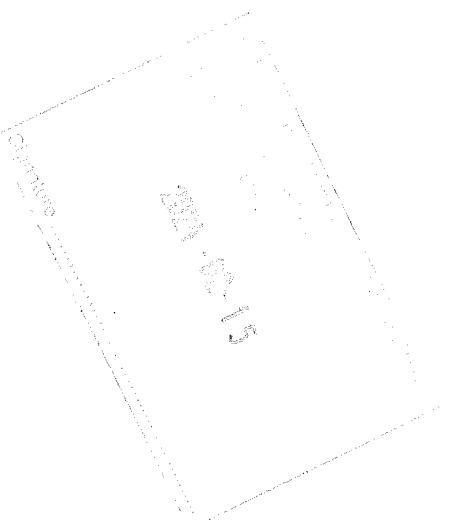
SI.CB2220.250.V29

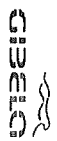
	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2		Rev. 29	Project: PRASA
	GIBS measurement		Date 28/10/2023	SI.CB2220.250.V29



BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3298	3296	2	—
B	3262	3264	2	—
C	3298	3295	3	—
D	3294	3298	4	—
E	3263	3264	1	—
F	3260	3264	4	—
G	3293	3293	0	—
H	3294	3293	1	—
I	3262	3263	1	—
J	3264	3264	0	—
K	3295	3292	3	—
L	3299	3292	7	—
M	3266	3261	5	—
N	3290	3296	6	—

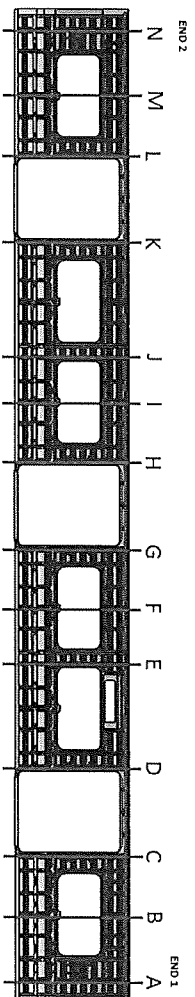




CARBODYSHELL M1,M3,M4 ASSEMBLY
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CBS measurement

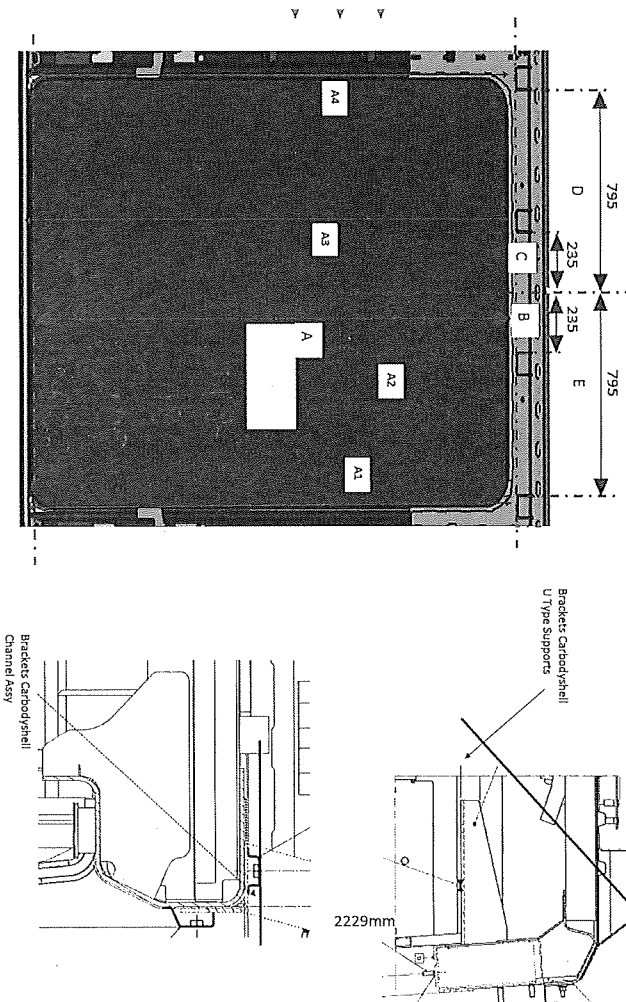


AFTER WELDING

Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A 3299	3297	2	2594
B 3263	3265	2	2590
C 3294	3296	2	2591
D 3299	3295	4	2590
E 3283	3264	1	2590
F 3261	3265	4	2591
G 3293	3292	1	2592
H 3293	3296	3	2589
I 3261	3264	3	2589
J 3265	3265	0	2591
K 3292	3295	3	2591
L 3294	3298	4	2592
M 3262	3264	2	2590
N 3292	3295	3	2591

2023-02-15

Specifications of Details for CBS measurement CB1220



DOOR 1 - 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	235
D 794 to 796	796
E 794 to 796	795

DOOR 2 - 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	234
D 794 to 796	795
E 794 to 796	796

DOOR 2 - LHS

VALUE	ACTUAL
A1 2230 to 2232	2232
A2 2230 to 2232	2232
A3 2230 to 2232	2232
A4 2230 to 2232	2232
B 234 to 236	2235
C 234 to 236	2235
D 794 to 796	795
E 794 to 796	794

DOOR 1 - RHS

VALUE	ACTUAL
A1	2232
A2	2232
A3	2232
A4	2232
B	235
C	235
D	794
E	795

DOOR 2 - RHS

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

	ACTUAL
A1	2232
A2	2231
A3	2231
A4	2231
B	235
C	235
D	795
E	796

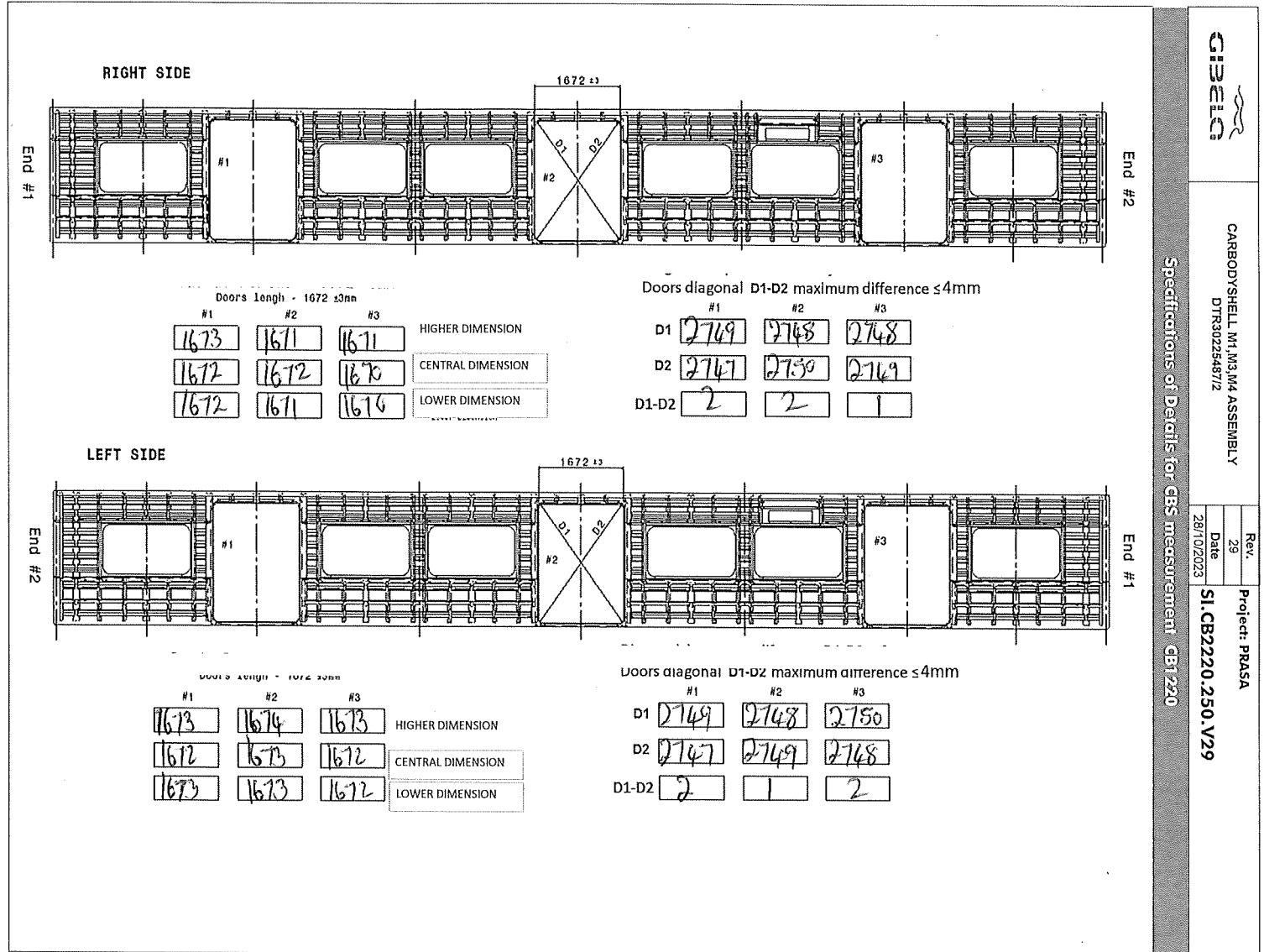
DOOR 3 - RHS

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

	ACTUAL
A1	2231
A2	2232
A3	2232
A4	2232
B	235
C	234
D	796
E	794

ORIGINAL IN CHARGE OF THE PROJECT
DATE: 2023-10-15
SIGNATURE: _____

SI-CB220-250-V20
 2024-08-15
 13



GIBCO

CARBODYSHELL M1,M3,M4 ASSEMBLY

DTR302254872

Rev. Project: PRASA

Date 28/10/2023

SI-CB220-250-V20

Specifications of Details for CBS measurement Cb1220



CARBODY/SHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

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28/10/2023

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Self Inspection - Final Result

Is the car good to advance to the next workstation/process? (Approval of Operations Manager and Industrial Quality)		DATE	NAME	SIGNATURE
HOLD POINT	GO	19/03/24	Macbrady Operations	Macbrady
	NO GO	19/03/24	Ardeni Industrial Quality	Ardeni
			Operations	
			Industrial Quality	

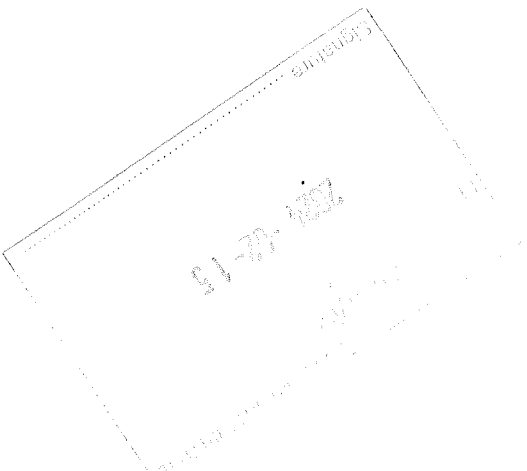
In case of "NO GO", describe blocking problems

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

Item	Description	Responsible	Due date	Status


Operations

Quality

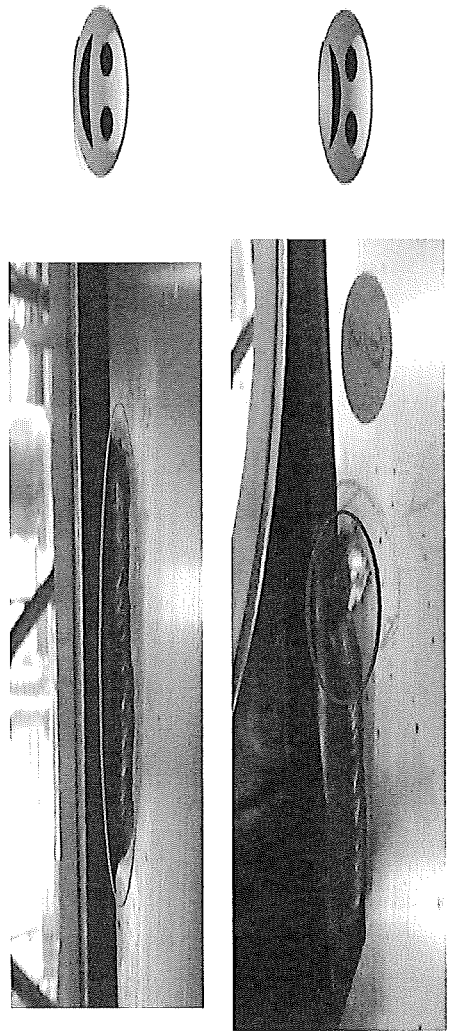


11/10/21

Missing East n bush

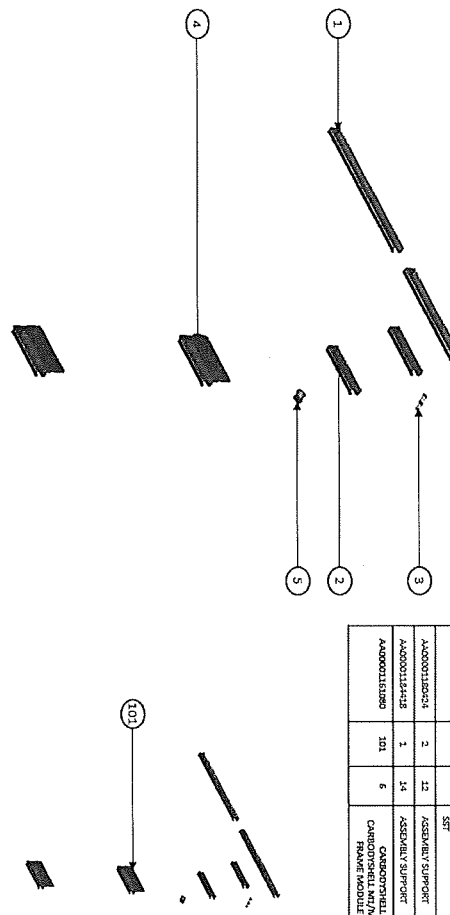
 GIBELD	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2			Rev.	Project: PRASA
				29	
				Date	
				28/10/2023	
				SI.CB2220.250.V29	

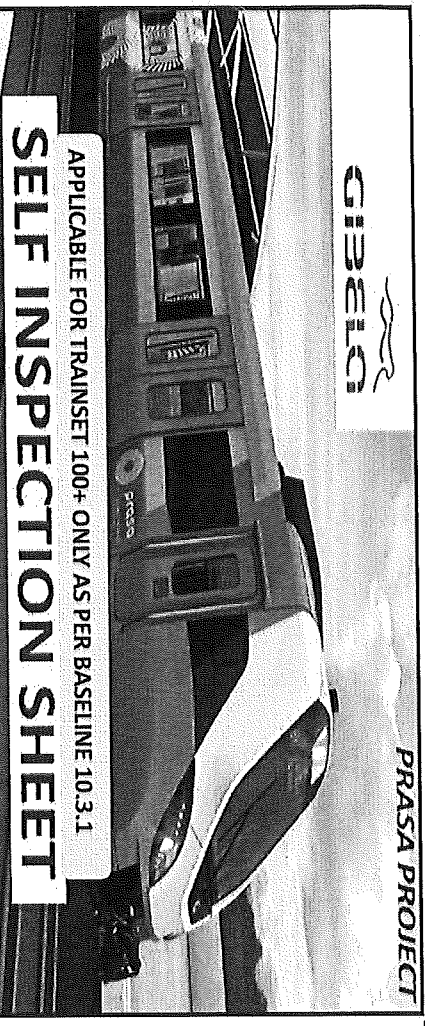
ANNEXURE A: Arc Welding Quality Acceptance Standard



Station: CB1220-004- U108 & U107

PART NO.	ITEM NO.	QTY	DESCRIPTION	MASS (Kg)
0700000704028	5	6	BARRY STUD 5	0.056
A4000012012440	4	6	ASSEMBLY SUPPORT	0.221
0700000348005	3	12	WELDING STUD B023918 PT - WRCO - SET	0.067
A4000011800251	2	12	ASSEMBLY SUPPORT	0.193
A400001194418	1	14	ASSEMBLY SUPPORT	0.522
A400001161290	101	6	CARBODYSHELL BRACKETS CARBODYSHELL BRACKETS FRAME MODULE END - 079	12.112





APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1

SELF INSPECTION SHEET

CONFIDENTIAL INFORMATION

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

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ?
				TCP	MA	MA	MA	MA	TCP		
<input type="checkbox"/>	DT000023447	AAD0002178566	CARBON/SHELL M1,M3,M4,ASSEMBLY	CB1230		X			X	PRA.CB1230.DT000002 25487, V20	YES
<input type="checkbox"/>											
<input type="checkbox"/>											
1		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
									COMPLIER	Nosizo Pindela	2018/08/02
									APPROVER	Izumeleng Modiba	30/5/2018
									CHECKER	Nosizo Pindela	30/5/2018
1	30/5/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager						REVISED BY	Nosizo Pindela	30/5/2018	
									APPROVER	Izumeleng Modiba	2018/05/07
									CHECKER	Nosizo Pindela	2018/05/07
2	2018/05/07	Certain dimensional checks moved to CB1220						REVISED BY	Ramokone Madama	2018/05/07	
									APPROVER	Izumeleng Modiba	24/01/2019
									CHECKER	Nosizo Pindela	24/01/2019
5	24/01/2019	As per Baseline 10.2						REVISED BY	Vanessa Ntuli	24/01/2019	
									APPROVER	Izumeleng Modiba	13/03/2019
									CHECKER	Nosizo Pindela	13/03/2019
6	13/03/2019	Added Twist and Door Bracket Measurements Remove Door Measurements						REVISED BY	Nosizo Pindela	13/03/2019	
									APPROVER	Izumeleng Modiba	23/08/2019
10	23/08/2019	New Baseline 10.2.5						REVISED BY	Nosizo Pindela	23/08/2019	
									APPROVER	Timothy Maimela	06/08/2020
	06/08/2020	New Baseline 10.2.6						REVISED BY	Bongane Masina		
									CHECKER	Bongane Masina	
20	19/04/2021	New Baseline change 10.3						REVISED BY	Bongane Masina	19/04/2021	
									APPROVER	Collins Mkhombhi	
									CHECKER	Andani Muthelo	20/02/2022
25	20/02/2022	New Baseline change 10.3.1						REVISED BY	Andani Muthelo		
									APPROVER	Collins Mkhombhi	
26	14/06/2022	Update minimum temperature requirement for sealant application						REVISED BY	Andani Muthelo	14/06/2022	
									APPROVER	Collins Mkhombhi	
27	19/10/2022	Addition of traceability for sealant application						CHECKER	Nokozo Zwane	19/10/2022	
									REVISED BY	Amogelang Mohlampe	
									APPROVER	Vanessa Ntuli	
28	14/04/2023	Added sealant batch number & welding consumables traceability						CHECKER	Nokozo Zwane	14/04/2023	
									REVISED BY	Amogelang Mohlampe	
									APPROVER	Tyson Ngobeni	
29	06/11/2023	Added thresholds traceability for boiler makers and welders						CHECKER	Andani Muthelo	06/11/2023	
									REVISED BY	Nokozo Zwane	
TRAINSET	CAR	OPERATOR NAME& ALPS NO		DATE		SELF INSPECTION NUMBER			PAGES		
217	MNO A	Bunke A26965		20/03/24		SI.CB1230.256.V28			11		



CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev. 29
Date 06/11/2023
Project: PRASA
SI.CB1230.256.V28

Car:

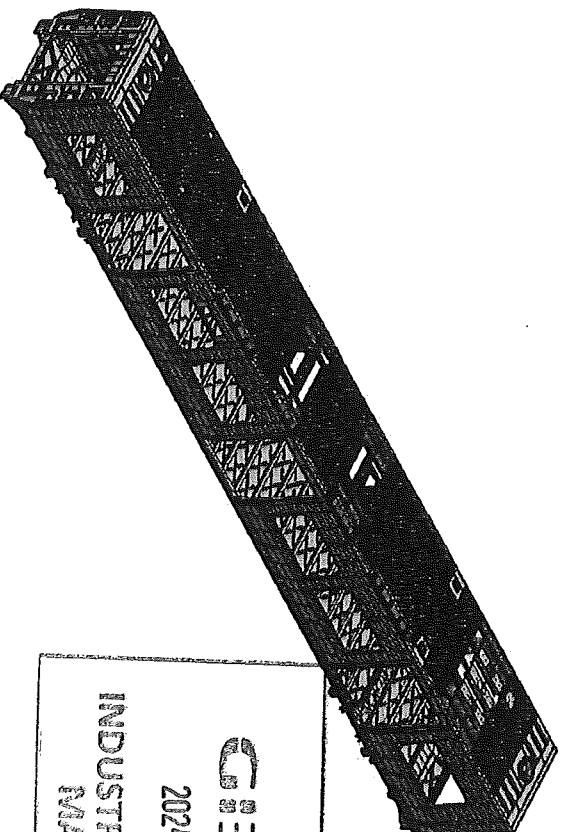
NCR:

Work station:

CB1230



Safety Related



I - Documentation and Instruments Control

I.1 - Documentation Control

Document	Type of car				Revision	Observation	OK	NOK	Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4						
PPA.CB1230.DT00000225487				X	29		X		N/A	20/03/24

I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Serial number	Calibration or Verification Validation Date	OK	NOK	Signature/Date (Operations)	Signature/Date (Quality)
Tubular	2271521	29/11/24	X		20/03/24	20/03/24
Measuring Tape	GIB1A0007	25/03/24	X		20/03/24	20/03/24
Steel Ruler	GIBST3048	14/07/24	X		20/03/24	20/03/24
Combination Square	GIBS04A	26/06/24	X		20/03/24	20/03/24

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 LSi	E231067	Mig Welding	X		20/03/24	20/03/24




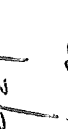




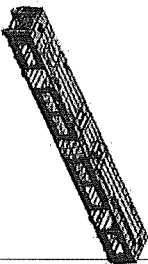


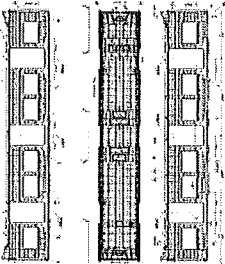

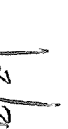
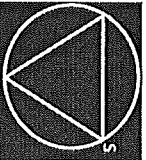




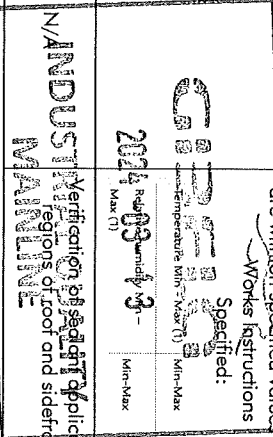


CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

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SI.CB1230.256.V28

II - Self Inspection - Items to check

II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	NOT OK	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	✓		 20/03/24	 20/03/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓		 20/03/24	 20/03/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		 20/03/24	 20/03/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		 20/03/24	 20/03/24
05		Functional's dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	✓		 20/03/24	 20/03/24
06		PERFORM VISUAL INSPECTION OF WELDS IN 100% of the project. Run by penetrant testing in electric arc welding (weld rings) 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.	✓		 20/03/24	 20/03/24
07	N/A	Before application of sedant record the expiry date and make sure that the room temperature and humidity are within specified values as per Works Instructions	Sedant Batch No: F403324251 Exp Date: 10/03/24 Actuals Temperature: 19°C Humidity: 72%	✓		 20/03/24	 20/03/24
08		Verification of sedant application in regions of roof and sideframe.	Sedant applied in regions of roof and sideframe.	✓		 20/03/24	 20/03/24

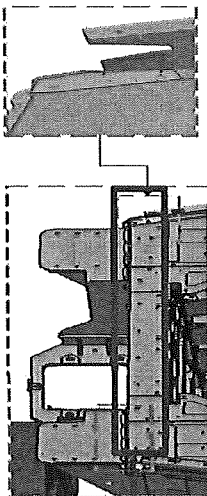


CARBODYSHELL M1,M3,M4 ASSEMBLY
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Project: **PRASA**
SI.CB1230.256.V28

AREA 1



OPERATOR
(Name & sign):

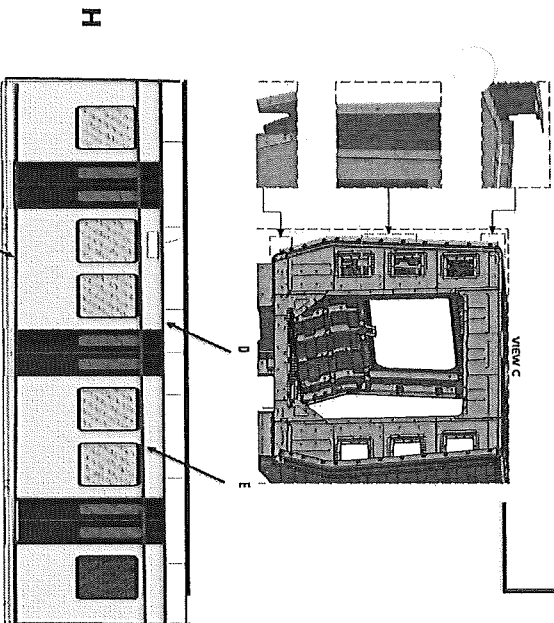
Boitunelo *[Signature]*

OPERATOR
(Name & sign):

Boitunelo *[Signature]*

OPERATOR
(Name & sign):

Boitunelo *[Signature]*



END 2 SEALANT

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

Operator (Name & sign):

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

RHS
D,E,F,G,H,I

Operator (Name & sign):

Butle *[Signature]*

Butle *[Signature]*

Operator (Name & sign):

Lerato *[Signature]*

Lerato *[Signature]*

Operator (Name & sign):

[Signature]

[Signature]

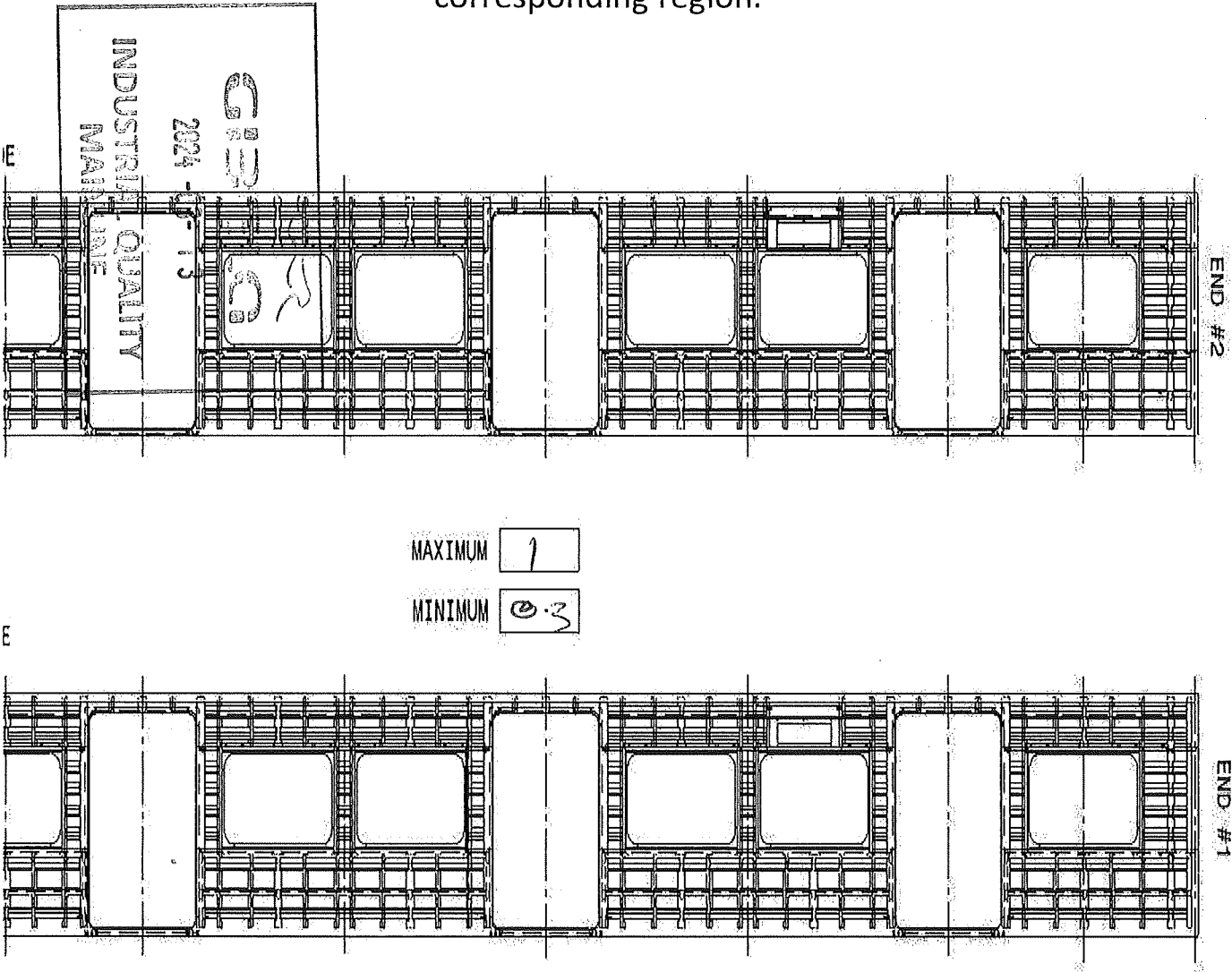
Operator (Name & sign):

Operator (Name & sign):

GIBECO
2024-03-13
INDUSTRIAL QUALITY
MAINLINE

Specifications of Details for CBS measurement CB1230

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



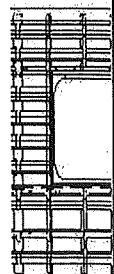


CARBODYSHELL M1,M3,M4 ASSEMBLY
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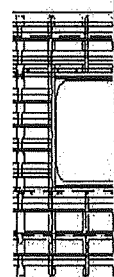
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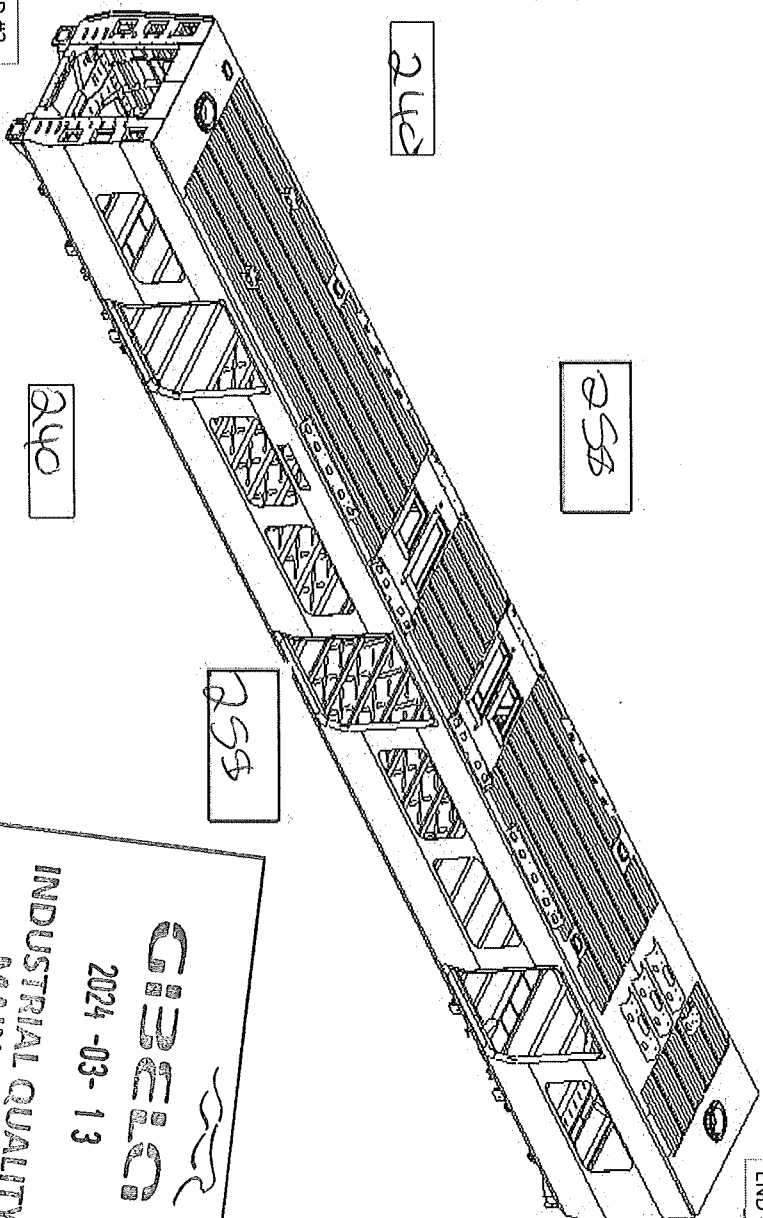
RIGHT SIDE



LEFT SIDE



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



MEASURED CAMBER VALUES

RIGHT ± 1 13

LEFT ± 1 13

GIBELCO
2024-03-13
INDUSTRIAL QUALITY
MAINLINE



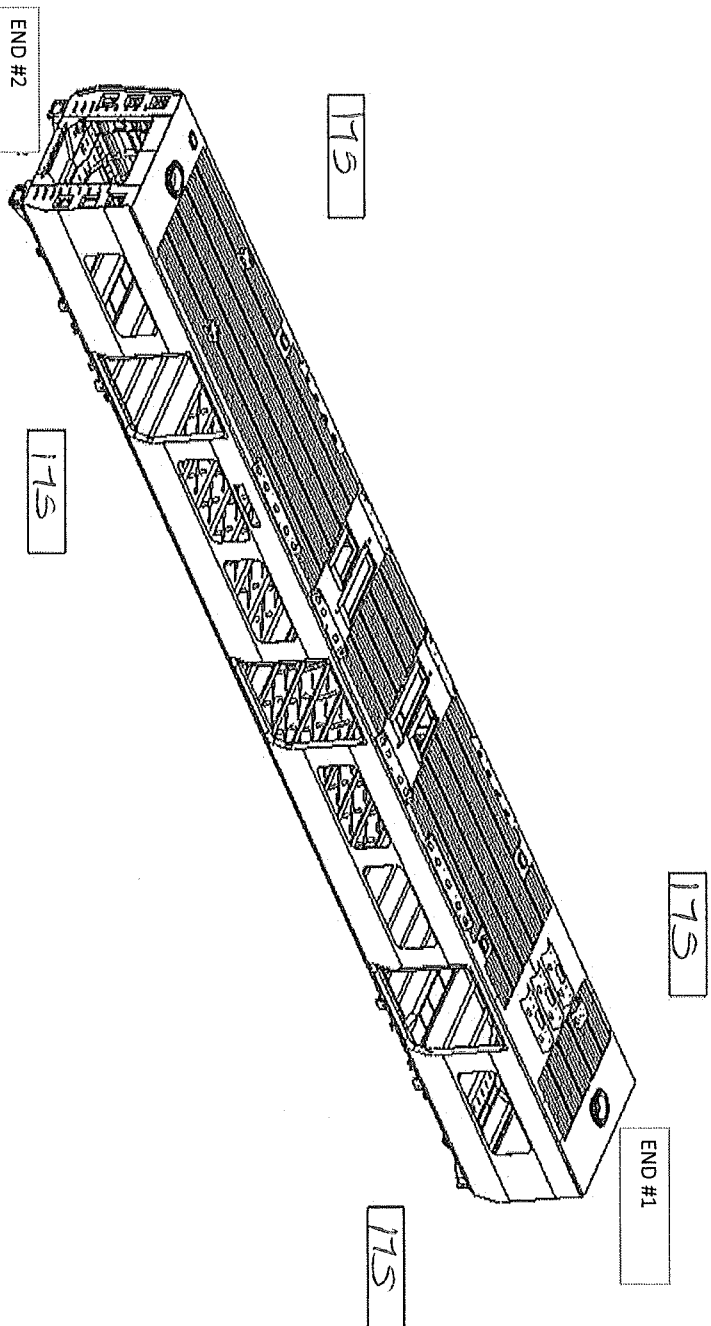
CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

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Specifications of Details for CBS measurement CB1230

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



TWIST FOUND ON END 1

TRANVERS

LONGITUDIN

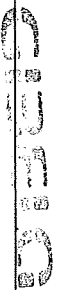
TWIST FOUND ON END 2

TRANVERSE

LONGITUDINAL

INDUSTRIAL QUALITY
NANLINE

2024-03-13





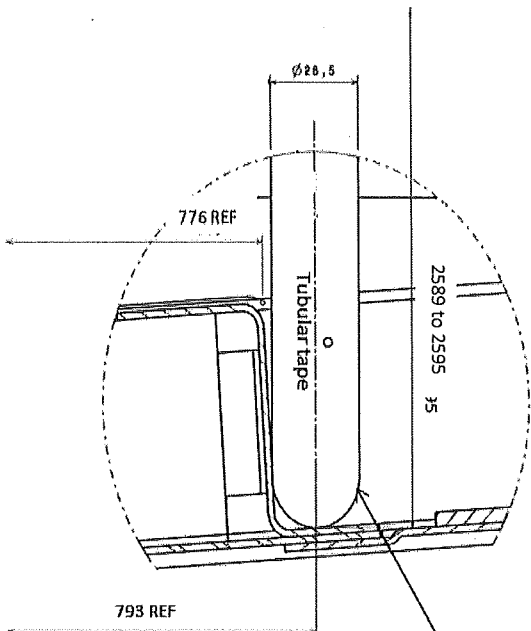
CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev.
29

Date
06/11/2023

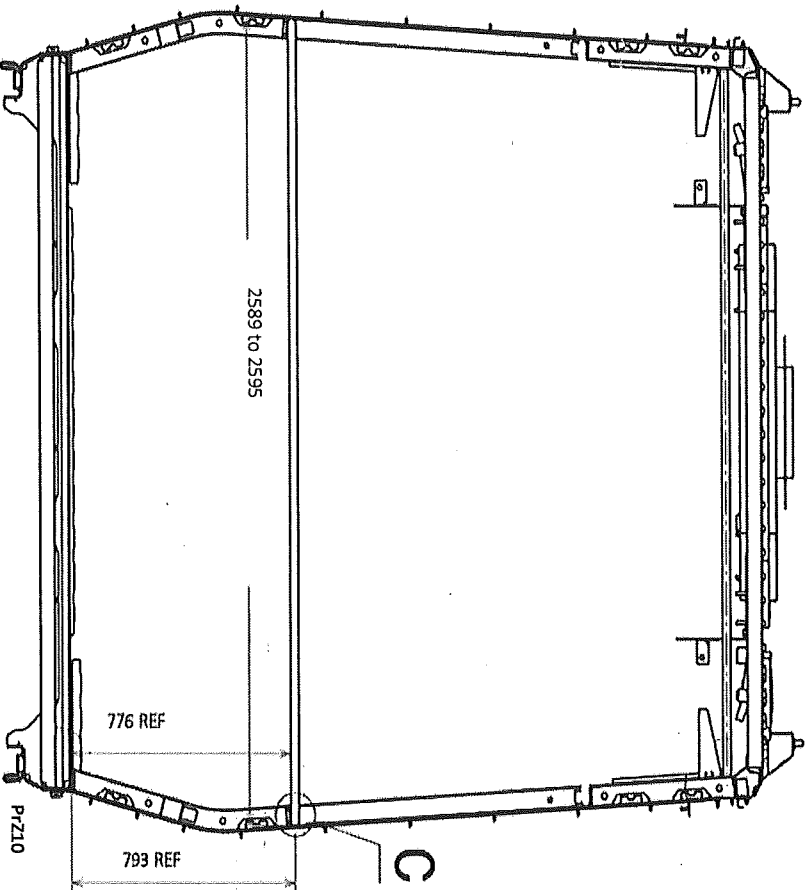
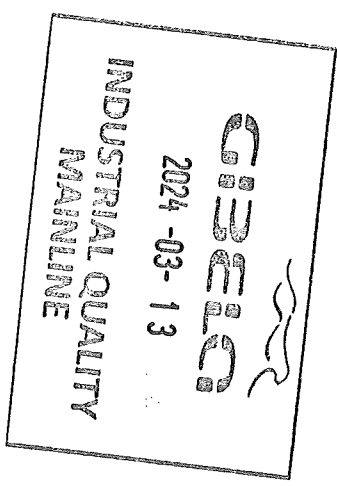
Project: PRASA
SI.CB1230.256.V28

Specifications of Details for CBS measurement CB1230



Carry the Tubular tape on
the "Z" bottom windows

Detail C



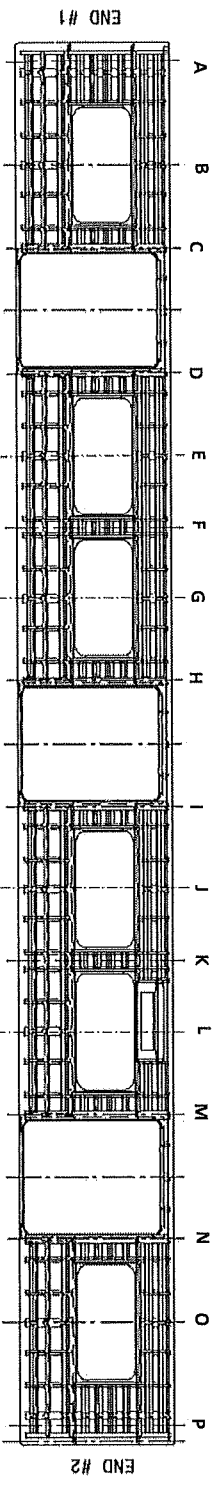


CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev.
29
Date
06/11/2023

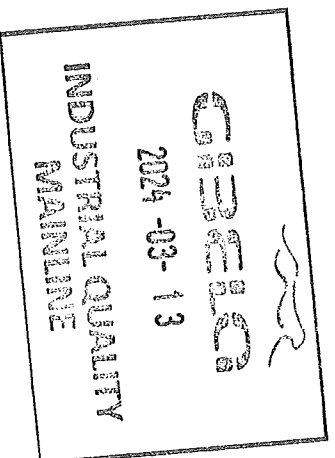
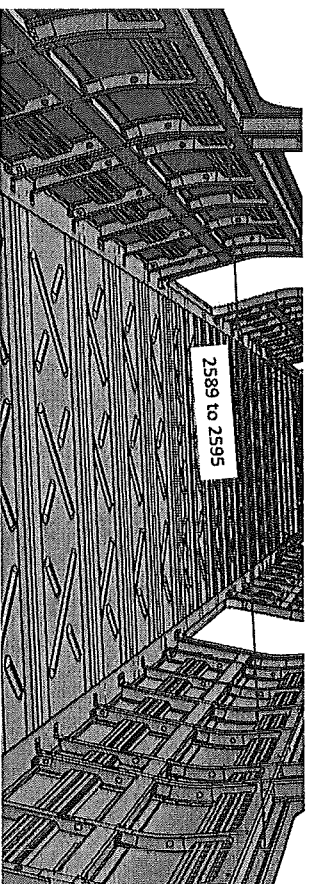
Project: PRASA
SI.CB1230.256.V28

Specifications of Details for CB5 measurement CB1230



2589 to 2595mm

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



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

BOILER MAKER: *Muhammad Ali Mulla*

WELDER: *Muhammad Ali Mulla*



CARBODYSHELL M1,M3,M4 ASSEMBLY
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Dye penetrant test

Dye-penetration test to be performed by quality personnel



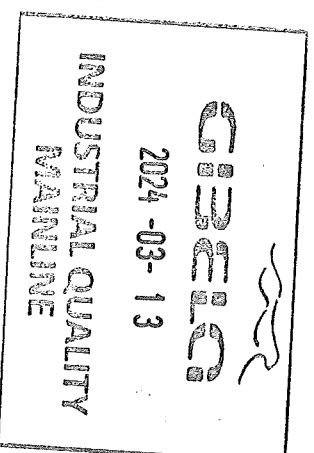
Specifications of Details for CBS measurement

[illegible]

11.2 - Check List REX

Check List Items

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





CARBODYSHELL M1 M3 M4 ASSEMBLY
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SI.CB1230.256.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

(If activities are not complete, the missing activities must not impact the next stage)

GO

Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)

There are activities pendings 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)

HOLD POINT

NO GO

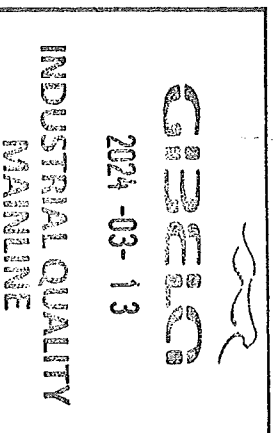
In case of "NO GO", describe blocking problems
Oufe 3pts not decoupled


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

Item	Description	Responsible	Due date	Status

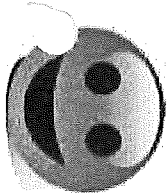
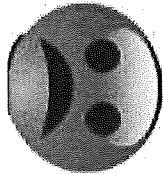
Operations


Quality



	CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487		Rev. 29	Project: PRASA SI.CB1230.256.V28
			Date 06/11/2023	

ANNEXURE A: Arc Welding Quality Acceptance Standard





GIBELCO

2024 -03- 13

INDUSTRIAL QUALITY

MAINLINE