


**PRASA PROJECT**

**APPLICABLE FROM TRAINSET 100+ AS PER BASELINE 10.3.1**

# SELF INSPECTION SHEET

**CONFIDENTIAL INFORMATION**

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

**APPLICATION REFERENCE**

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ?
				TC1	M4	M1	M2	M3	TC2		
<input type="checkbox"/>	DTR30225487/3	AAD0001278566	CARBODYSHELL M1 ASSEMBLY	CB2210			X			PRA.CB2210.DTR30225487/3.V25	YES
<input type="checkbox"/>											

REV	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
0	10/01/2018	GIBELA NEW CREATION	APPROVER	Itumeleng Modiba	10/01/2018
			CHECKER	Nosizo Pindela	10/01/2018
			COMPILER	Thanyani Mathegu	10/01/2018
1	2018/05/18	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager	APPROVER	Itumeleng Modiba	2018/05/18
			CHECKER	Nosizo Pindela	2018/05/18
			REVISED BY	Ramokone Motama	2018/05/18
2	2018/07/04	Certain dimensional checks moved to CB1220 and CB1230	APPROVER	Itumeleng Modiba	2018/07/04
			CHECKER	Nosizo Pindela	2018/07/04
			REVISED BY	Ramokone Motama	2018/07/04
3	2018/12/12	Added dimensional check points to CB2210	APPROVER	Itumeleng Modiba	2018/12/12
			CHECKER	Nosizo Pindela	2018/12/12
			REVISED BY	Ramokone Motama	2018/12/12
5	22/01/2019	As per Baseline 10.2	APPROVER	Itumeleng Modiba	22/01/2019
			CHECKER	Nosizo Pindela	22/01/2019
			REVISED BY	Vanessa Ntuli	22/01/2019
6	13/03/2019	Added D1 and D2 on Self - Inspection	APPROVER	Itumeleng Modiba	13/03/2019
			CHECKER	Nosizo Pindela	13/03/2019
			REVISED BY	Nosizo Pindela	13/03/2019
10	21/08/2019	New Baseline 10.2.5	APPROVER	Itumeleng Modiba	21/08/2019
			CHECKER	Nosizo Pindela	21/08/2019
			REVISED BY	Nosizo Pindela	21/08/2019
15	06/08/2020	New Baseline 10.2.6	APPROVER	Timothy Maimela	06/08/2020
			CHECKER	Bongane Masina	06/08/2020
			REVISED BY	Bongane Masina	06/08/2020
20	19/04/2021	New Baseline change 10.3	APPROVER	Timothy Maimela	19/04/2021
			CHECKER	Bongane Masina	19/04/2021
			REVISED BY	Bongane Masina	19/04/2021
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING	APPROVER	Mbhombi collins	17/08/2021
			CHECKER	Mpho Mulaudzi	17/08/2021
			REVISED BY	Mpho Mulaudzi	17/08/2021
25	19/02/2022	New Baseline change 10.3.1	APPROVER	Mbhombi collins	19/02/2022
			CHECKER	Andani Muthelo	19/02/2022
			REVISED BY	Andani Muthelo	19/02/2022
26	14/04/2023	Addition of welding consumable traceability	APPROVER	Ntuli Vanessa	14/04/2023
			CHECKER	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	Zwane Ntokozo	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	Ntokozo Zwane	07/11/2023


TRAINSET	CAR	OPERATOR NAME & ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES
232	M1	Gerald / 420453	08/06/24	SI.CB2210.254.V28	17

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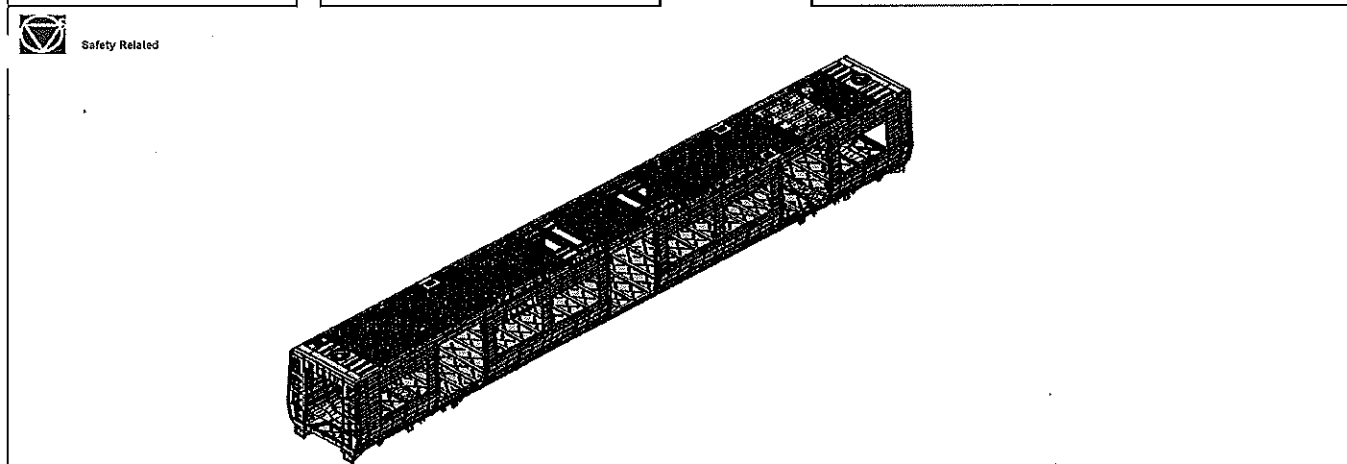
08-06

CONFIDENTIAL

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	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB2210.254.V28
		Date 07/11/2023	

Car: M1	NCR:	Work station: CB2210
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# I - Documentation and Instruments Control

## I.1 - Documentation Control

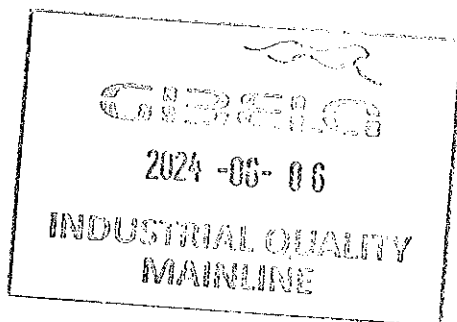
Document	Type of car						Revision	Observation	OK	NOX	Remarks	Signature/Date (Manufacturing)	Signature/Date (Quality)
	D	E	M	S	L	P							
DTR30225487/3		X							✓			08/06/24	08/06/24













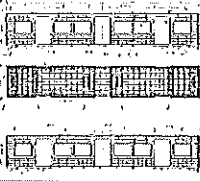




## I.2 - Instruments Control

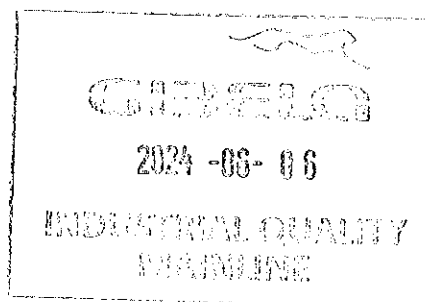
Monitoring and Measuring Instrument Control - Used for Special Process													
Instruments		Serial number		Calibration or Verification Validation Date		OK	NO	Signature/Date (Manufacturing)		Signature/Date (Quality)			
Tubular		32823-2		15/03/20		✓		B. Wasy 08/6/24		OK			
laser tape		125423924		08/01/25		✓		B. Wasy 08/6/24		OK			
30m tape		GIBTP0102		18/11/20		✓		B. Wasy 08/6/24		OK			


## 1.3 Consumables

Welding Consumable Control - Used for Special Process													
Filler Material	Heat Number		Welding Process	OK		Signature/Date (Manufacturing)			Signature/Date (Quality)				
ER 308 LSi	314018-74097		MIG	✓		P. Nash 08/06/24			<del>Signature</del>				
ER 308 L	299687-70322		TIG	✓		P. Nash 08/06/24			<del>Signature</del>				
						P. Nash 08/06/24			<del>Signature</del>				

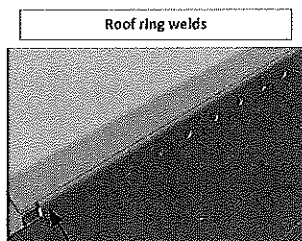




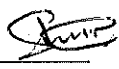
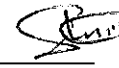
		Rev. 28 Date 07/11/2023		Project: PRASA SI.CB2210.254.V28		
		CARBODYSHELL M1 ASSEMBLY DTR30225487/3				
II - Self Inspection - Items to Check						
II.1 - Items to check						
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Verification of correct parts loaded (Sidewalls, Endframes, Roof and Underframe)	DT00000311225	✓	 08/06/24	 08/06/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓	 08/06/24	 08/06/24
03	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 e DTD0000210675	✓	 08/06/24	 08/06/24
04	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓	 08/06/24	 08/06/24
05		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓	 08/06/24	 08/06/24
06		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document	Approved according specified on pages below.	✓	 08/06/24	 08/06/24
07	N/A	Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-018 and DTD0000210658.	✓	 08/06/24	 08/06/24







	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB2210.254.V28
		Date 07/11/2023	

**Welder Traceability**

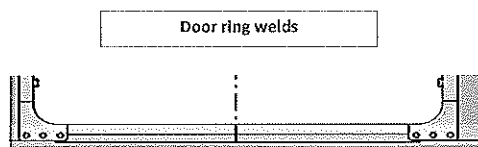


<div style="text-align: right; margin-bottom: 5px;"><u>LHS</u></div> Boiler maker (Name & Sign): <u>GERALD</u> 	<div style="text-align: right; margin-bottom: 5px;"><u>RHS</u></div> Boiler maker (Name & Sign): <u>GERALD</u> 
Welder (Name & Sign): <u>SIPHOKAZI</u> 	Welder (Name & Sign): <u>SIPHOKAZI</u> 

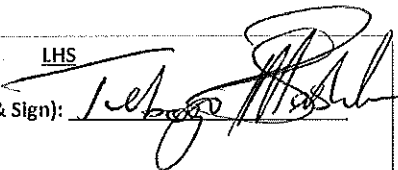

END 1

<div style="text-align: right; margin-bottom: 5px;"><u>LHS</u></div> Boiler maker (Name & Sign): <u>GERALD</u> 	<div style="text-align: right; margin-bottom: 5px;"><u>RHS</u></div> Boiler maker (Name & Sign): <u>GERALD</u> 
Welder (Name & Sign): <u>SIPHOKAZI</u> 	Welder (Name & Sign): <u>SIPHOKAZI</u> 

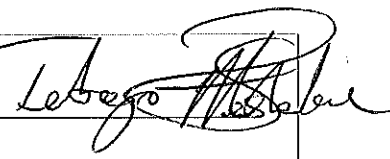
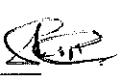
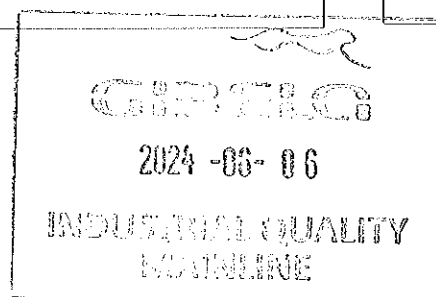
END 2




LHS

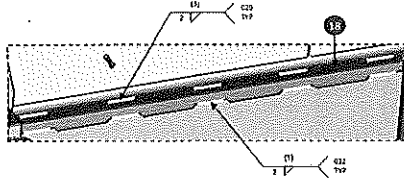
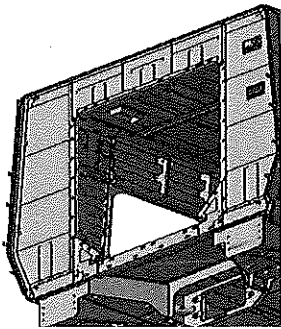
Boiler maker (Name & Sign): Lebege 
  
  
Welder (Name & Sign): SIPHOKAZI 

RHS

Boiler maker (Name & Sign): Lebege 
  
  
Welder (Name & Sign): SIPHOKAZI 


	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB2210.254.V28
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EUFRinforcement Plates

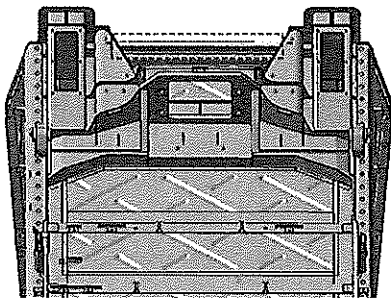


END 1

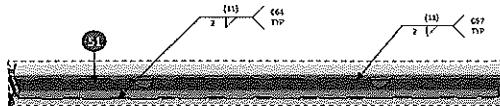
Boiler maker (Name & Sign): Lawrence Jolofa

Welder (Name & Sign): MTHOKOZISI

END 2



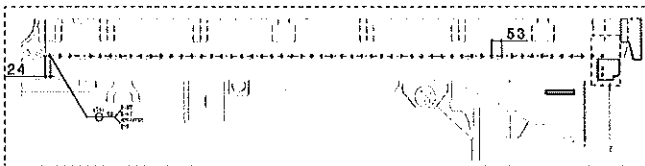
Underneath the CAR

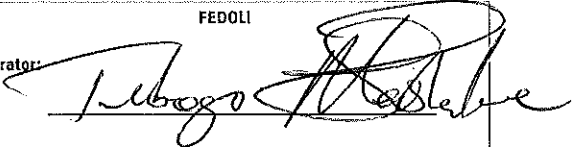


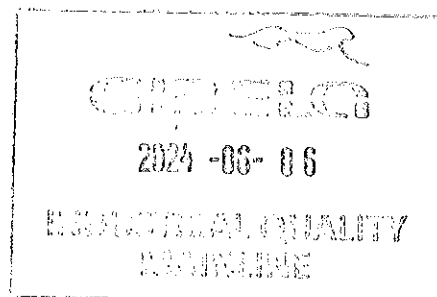
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Boiler maker (Name & Sign): MTHEMBU

Welder (Name & Sign): Thabang

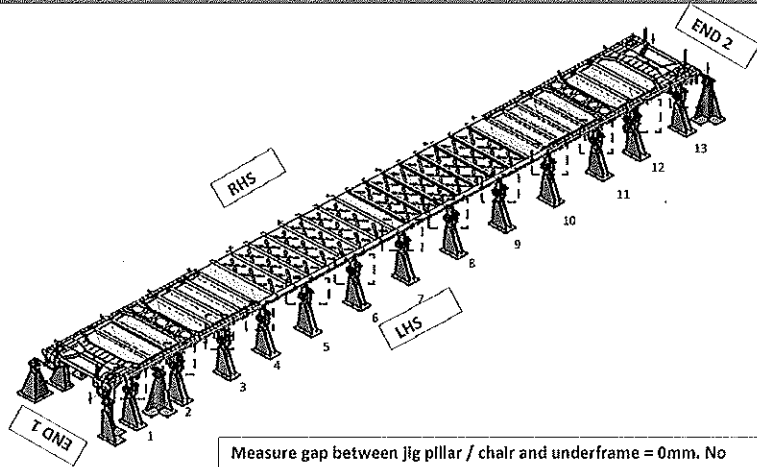


Operator: 



	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB2210.254.V28
		Date 07/11/2023	

**Specifications of Details for CBS measurement**




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

After loading and clamping

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

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


Signature Operations:  Date: 08/06/24

After Welding.

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

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

Signature Industrial Quality:  Date: 08/06/24

  
 2024-06-06  
 INDUSTRIAL QUALITY  
 MAINLINE

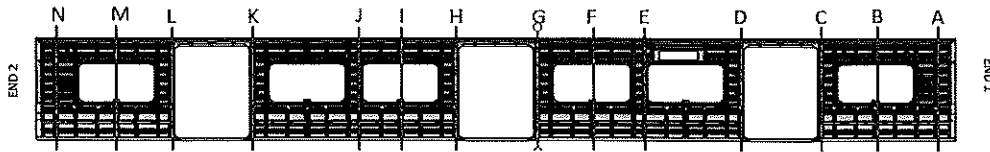


CARBODYSHELL M1 ASSEMBLY DTR30226487/3

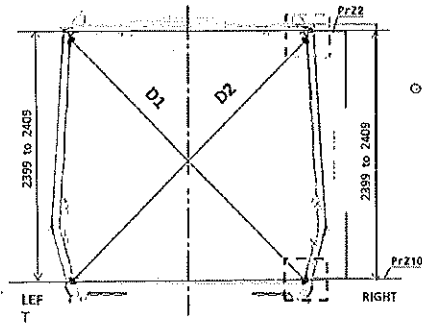
Rev.  
28  
Date  
07/11/2023

Project: PRASA  
SI.CB2210.254.V28

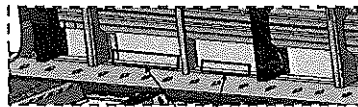
### Specifications of Details for CBS measurement



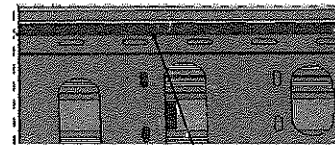
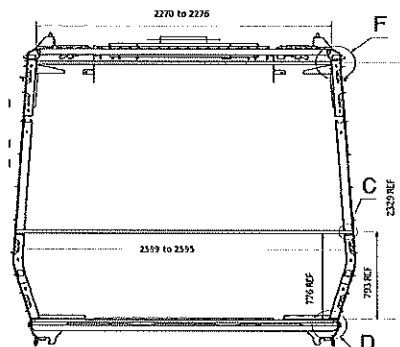
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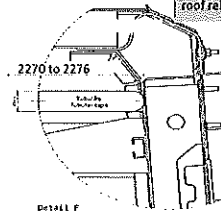
Measurement positions on roof rail and sidewall omega corner.



Measurement positions on sidewall and side sill corner.



Reinforcement area measurement positions on roof reinforcement area.



Detail F  
Don't consider the reinforcement

GIBELQ

2024-06-06

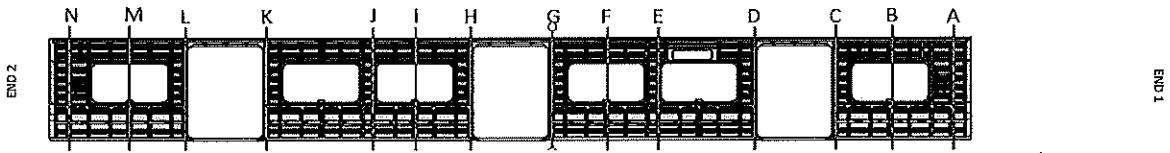
REINFORCEMENT QUALITY  
INSPECTION



CARBODYSHELL M1 ASSEMBLY DTR30225487/3

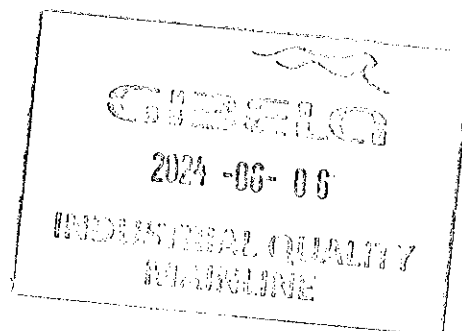
Rev.  
28  
Date  
07/11/2023Project: PRASA  
SI.CB2210.254.V28

## Specifications of Details for CBS measurement

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

## BEFORE WELDING

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







CARBODYSHELL M1 ASSEMBLY DTR30225487/3

Rev.

28

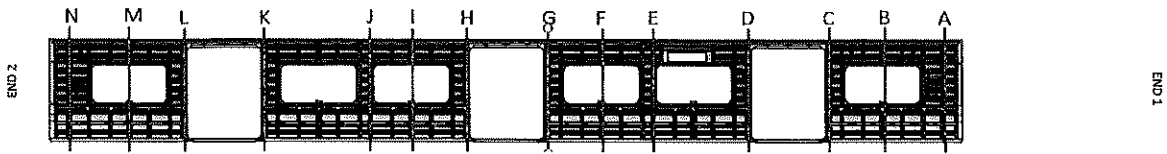
Date

07/11/2023

Project: PRA5A

SI.CB2210.254.V28

## Specifications of Details for CBS measurement

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

## AFTER WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3296	3296	0	2405	2406	0
B	3268	3267	1	2406	2405	1
C	3298	3297	1	2405	2406	0
D	3298	3298	0	2406	2406	1
E	3265	3265	0	2405	2405	0
F	3266	3265	1	2406	2405	1
G	3298	3296	2	2406	2406	0
H	3296	3296	0	2406	2405	1
I	3266	3266	0	2404	2406	0
J	3268	3268	0	2405	2406	1
K	3295	3295	0	2406	2406	0
L	3296	3296	0	2406	2405	1
M	3266	3266	0	2406	2406	0
N	3295	3295	0	2406	2405	1

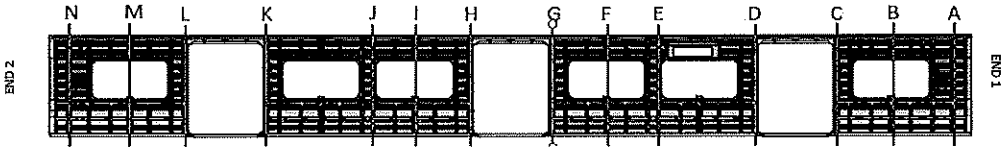
GIBELQ

2024-03-06

INDUSTRIAL QUALITY  
MANUFACTURE

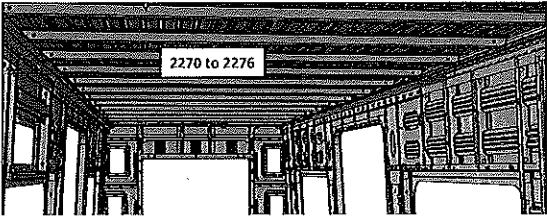
CBS measurement

BEFORE WELDING

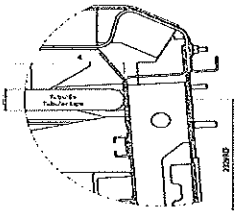
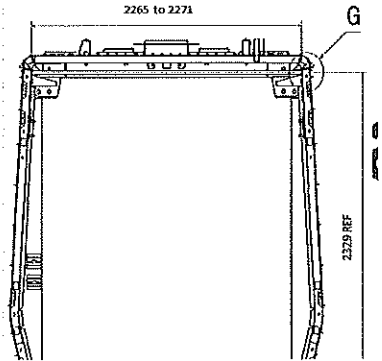


	2270 to 2276
A	2274
B	2272
C	2275
D	2276
E	2273
F	2276
G	2271
H	2274
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J	2275
K	2276
L	2274
M	2273
N	2275

1990 to

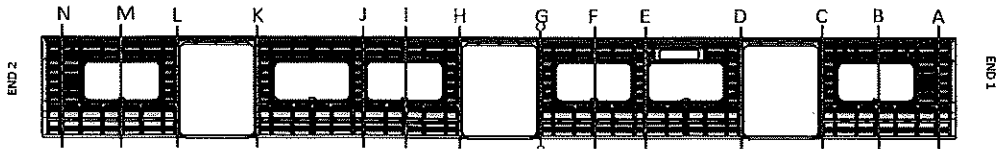


Do not consider reinforcement ( Take measurements top area of zee profile

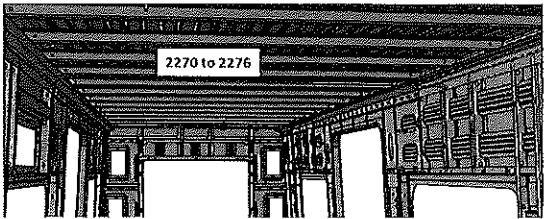


Detail G  
Consider only the top measurement plane

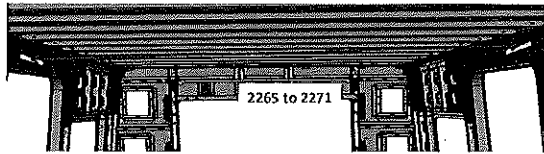
AFTER WELDING



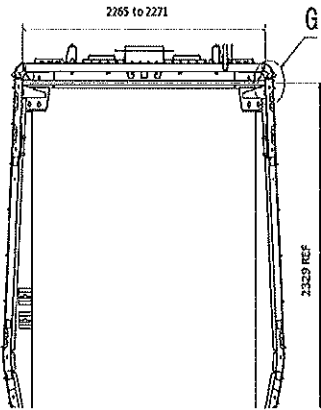
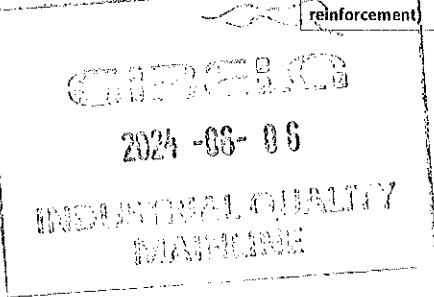
	2265 to 2271	2270 to 2276
A	2269	N/A
B	N/A	2275
C	2270	N/A
D	2271	N/A
E	N/A	2274
F	N/A	2276
G	2270	N/A
H	2270	N/A
I	N/A	2275
J	N/A	2274
K	2271	N/A
L	2269	N/A
M	N/A	2273
N	2276	N/A



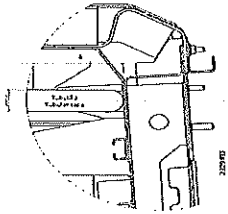
Do not consider reinforcement ( Take measurements top area of zee profile



Take measurement close to radius ( considering reinforcement



2265 to 2271



2265 to 2271

Detail G  
Considering the measurement place



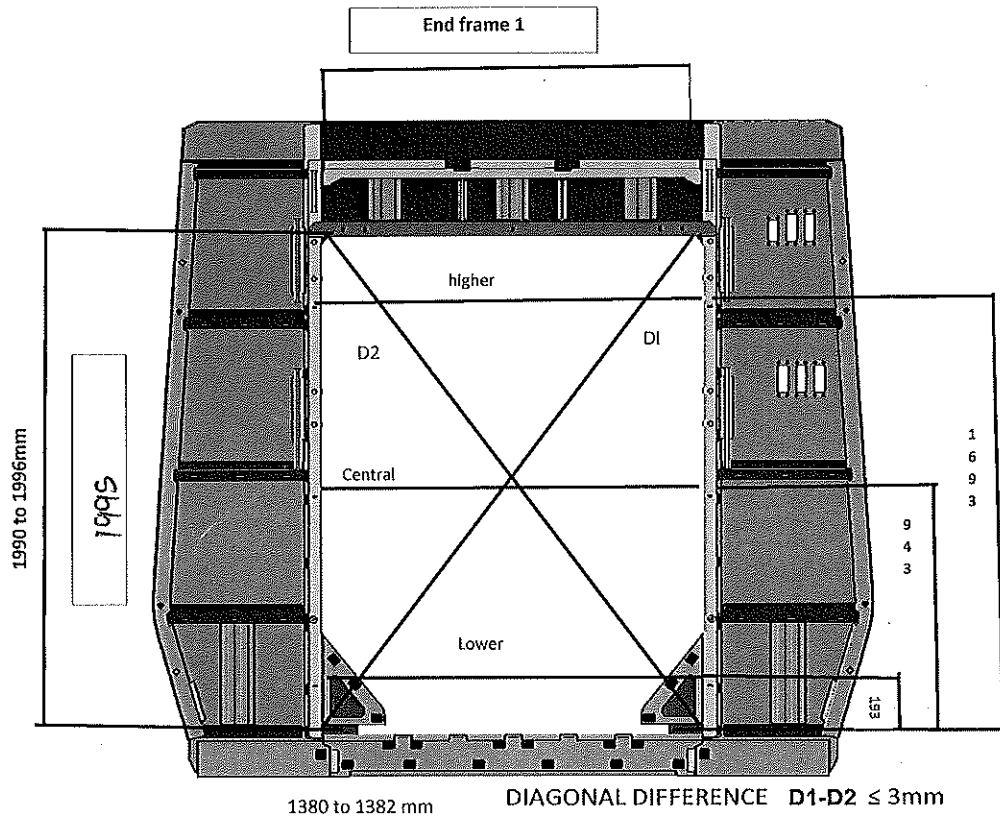
CARBODYSHELL M1 ASSEMBLY DTR30226487/3

Rev.  
28

Project: PRASA  
SI.CB2210.254.V28

Date  
07/11/2023

Specifications of Details for CBS measurement



Higher Dimension

1381

Central Dimension

1381

Lower Dimension

1381

DIAGONAL DIFFERENCE  $D1-D2 \leq 3mm$

D1

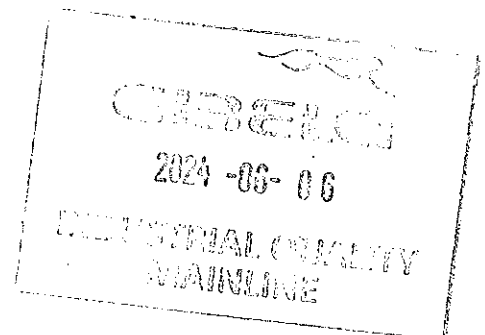
2414

D2

2415

D1-D2

1





CARBODYSHELL M1 ASSEMBLY DTR30226487/3

Rev.

28

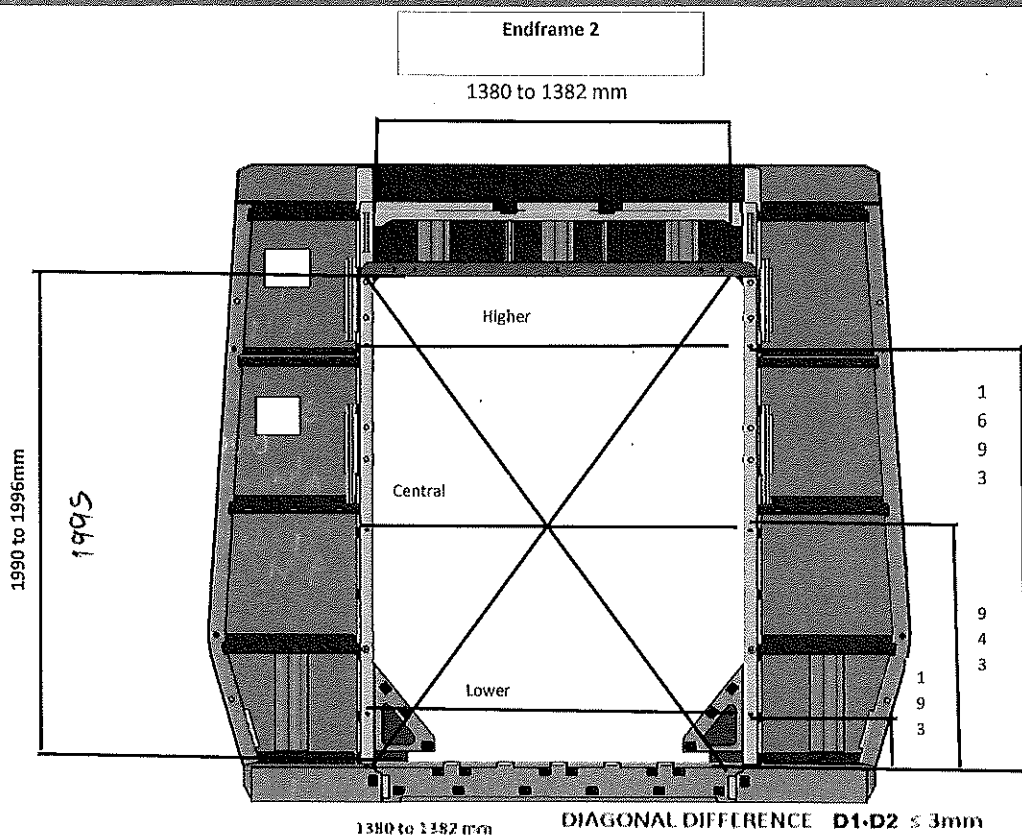
Project: PRASA

SI.CB2210.254.V28

Date

07/11/2023

Specifications of Details for CBS measurement



Higher Dimension

1681

D1

2415

Central Dimension

1380

D2

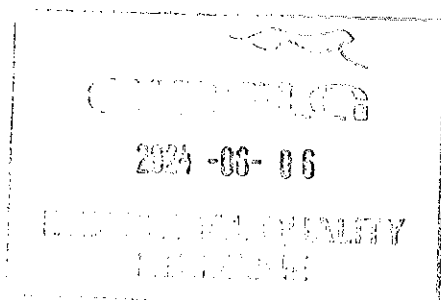
2416

Lower Dimension

1380

D1-D2

0





CARBODYSHELL M1 ASSEMBLY DTR30225487/3

Rev.

28

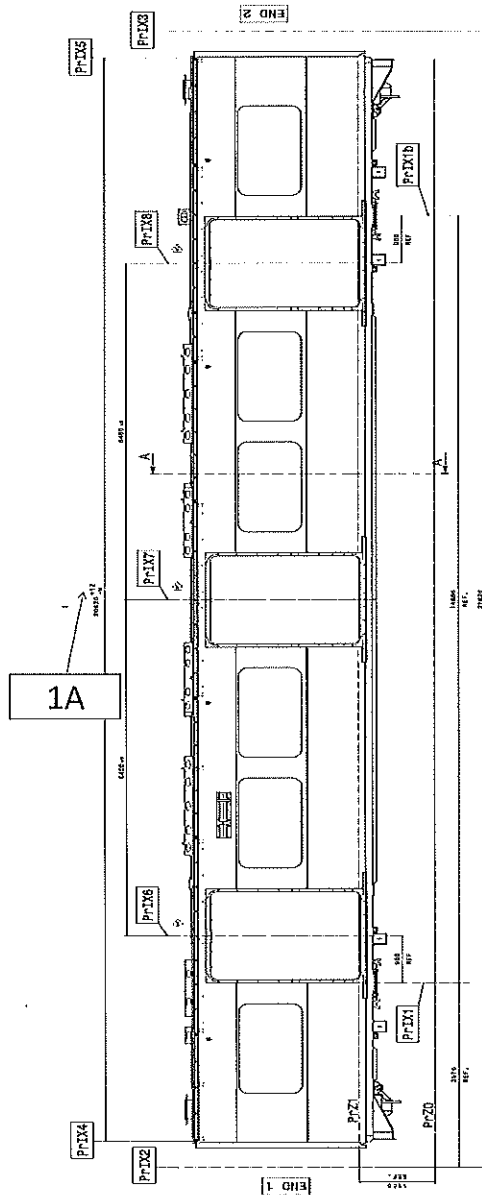
Date

07/11/2023

Project: PRASA

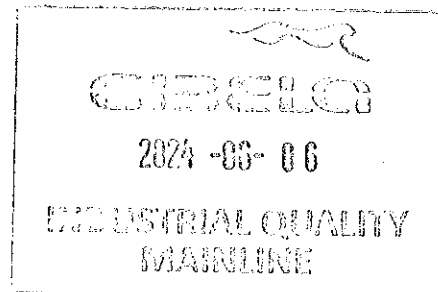
SI.CB2210.254.V28

Specifications of Details for CBS measurement



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

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






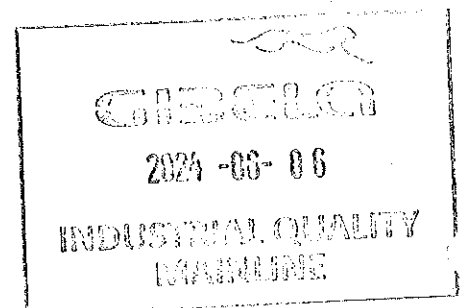
Dye penetrant test

Dye-penetration test to be performed by quality personnel






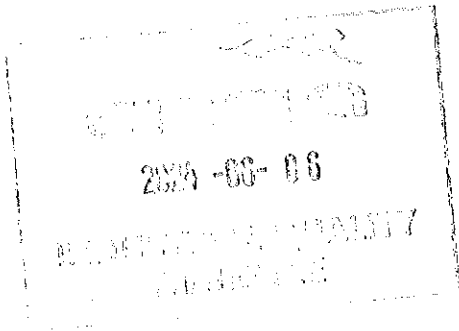
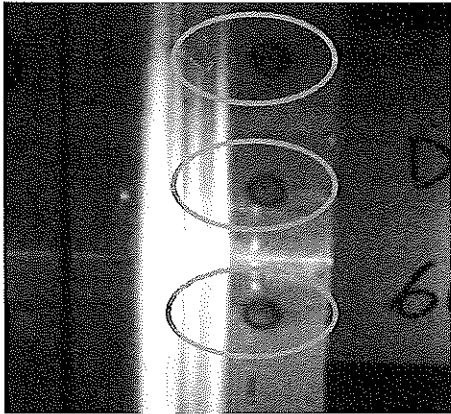
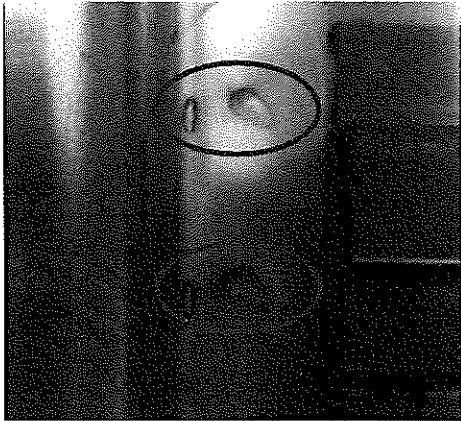
		CARBODYSHELL M1 ASSEMBLY DTR30225487/3		Rev. 28	Project: PRASA SI.CB2210.254.V28	
				Date 07/11/2023		
<b>Self Inspection - Final Result</b>						
				DATE	NAME	SIGNATURE
HOLD POINT		GO	(If activities are not complete, the missing activities must not impact the next stage)	08/06/24	GERALD Operations	
			Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	08/06/24	AMO Industrial Quality	
		NO GO	There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below)			
			There are non-conformities impact the quality of the product and there is no corrective action defined yet)			
In case of "NO GO", describe blocking problems						
In case of "NO GO", the operations manager must define below action plan to ensure "GO":						
Item	Description		Responsible	Due date	Status	
Operations			Quality			






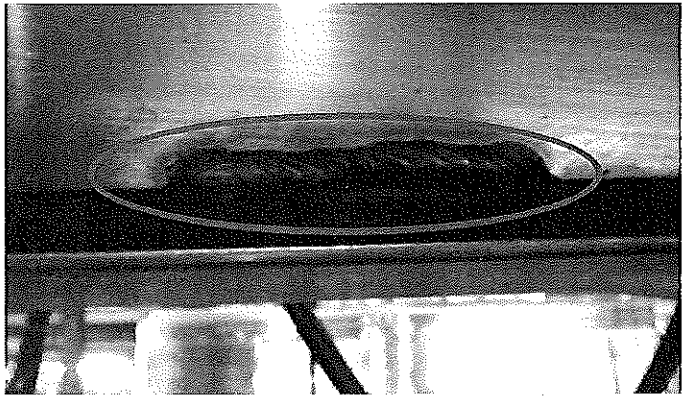
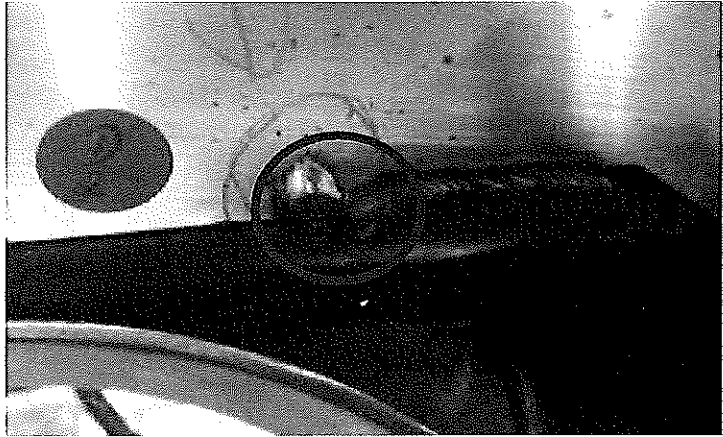
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		Date 07/11/2023	

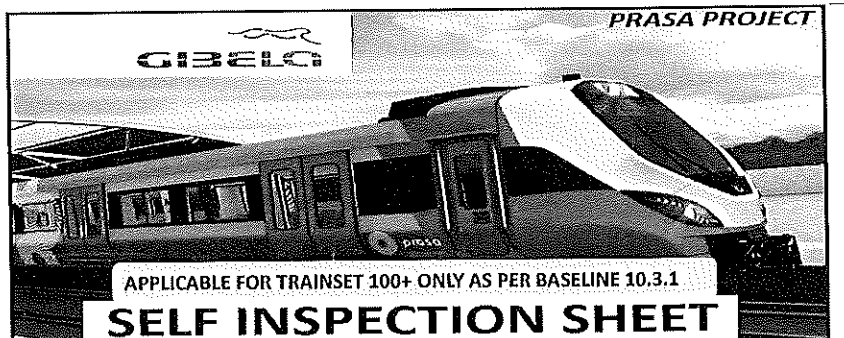
ANNEXURE A: Spot Welding Quality Acceptance Standard



	CARBODYSHELL M1 ASSEMBLY DTR30225487/3	Rev. 28	Project: PRASA SI.CB2210.254.V28
		Date 07/11/2023	

**ANNEXURE B: Arc 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	M1	M2	M3	TC2			
<input type="checkbox"/>	DTR3000152643	AAD0001278565	CARBODYSHELL M1,M3,MA ASSEMBLY	CB2220			X				PRA.CB2220.DTR3022548 7/2.V21	YES
<input type="checkbox"/>	DTR3000152649	AFD0001278566	CARBODYSHELL M1,M3,MA ASSEMBLY	CB2220		X	X	X			PRA.CB2220.DTR3022548 7/2.V21	YES
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
REV	DATE	MODIFICATION CONTENT		RESPONSIBLE	NAME	DATE						
0	01/02/2018	GIBELA NEW CREATION		APPROVER	Itumeleng Modiba	01/02/2018						
				CHECKER	Nosizo Pindela	01/02/2018						
				COMPILER	Thanyani Mathegu	01/02/2018						
1	18/05/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager		APPROVER	Itumeleng Modiba	18/05/2018						
				CHECKER	Nosizo Pindela	18/05/2018						
				REVISED BY	Ramokone Motama	18/05/2018						
2	2018/07/05	Certain dimensional checks added and others moved to CB1210		APPROVER	Itumeleng Modiba	2018/07/05						
				CHECKER	Nosizo Pindela	2018/07/05						
				REVISED BY	Ramokone Motama	2018/07/05						
3	2018/06/12	Width tolerance as per DT0000336600		APPROVER	Itumeleng Modiba	2018/06/12						
				CHECKER	Nosizo Pindela	2018/06/12						
				REVISED BY	Nosizo Pindela	2018/06/12						
5	24/01/2019	As per Baseline 10.2		APPROVER	Itumeleng Modiba	24/01/2019						
				CHECKER	Nosizo Pindela	24/01/2019						
				REVISED BY	Vanessa Ntuli	24/01/2019						
6	13/03/2019	Added D1 and D2 on Self - Inspection length measurements	Remove	APPROVER	Itumeleng Modiba	13/03/2019						
				CHECKER	Nosizo Pindela	13/03/2019						
				REVISED BY	Nosizo Pindela	13/03/2019						
10	22/08/2019	New Baseline 10.2.5		APPROVER	Itumeleng Modiba	22/08/2019						
				CHECKER	Nosizo Pindela	22/08/2019						
				REVISED BY	Nosizo Pindela	22/08/2019						
15	06/08/2020	New Baseline 10.2.5		APPROVER	Timothy Mamele	06/08/2020						
				CHECKER	Bongane Masina	06/08/2020						
				REVISED BY	Bongane Masina	06/08/2020						
20	19/04/2021	New Baseline change 10.3		APPROVER	Timothy Mamele	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	Mbhele Collins	17/08/2021						
				CHECKER	Mpho Mulaudzi	17/08/2021						
				REVISED BY	Mpho Mulaudzi	17/08/2021						
25	20/02/2022	New Baseline change 10.3.1		APPROVER	Collins Mbhele	19/02/2022						
				CHECKER	Andani Muthelo	19/02/2022						
				REVISED BY	Andani Muthelo	19/02/2022						
26	14/06/2022	Update minimum temperature requirement for sealant application		APPROVER	Collins Mbhele	14/06/2022						
				CHECKER	Andani Muthelo	14/06/2022						
				REVISED BY	Andani Muthelo	14/06/2022						
27	19/10/2022	Addition of traceability for sealant application & welding		APPROVER	Collins Mbhele	19/10/2022						
				CHECKER	Ntokozo Zwane	19/10/2022						
				REVISED BY	Amogelang Mohlampe	19/10/2022						
28	14/04/2023	Added sealant batch number & welding consumables traceability		APPROVER	Vanessa Ntuli	14/04/2023						
				CHECKER	Ntokozo Zwane	14/04/2023						
				REVISED BY	Amogelang Mohlampe	14/04/2023						
29	28/10/2023	Addition of bracket quantity		APPROVER	Ngobeni Tyson	28/10/2023						
				CHECKER	Ntokozo Zwane	28/10/2023						
				REVISED BY	Amogelang Mohlampe	28/10/2023						
TRAINSET	CAR	OPERATOR NAME & ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES							
232	Mo1	Tetelo	10/06/24	SI.CB2220.250.V29	13							








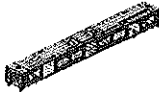


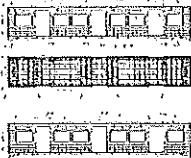












06

QUALITY

BASELINE

471781



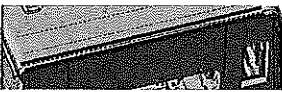
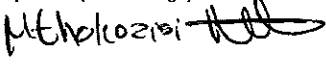
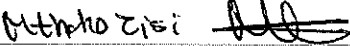


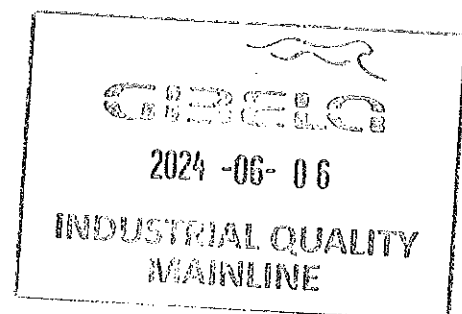
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			Date 28/10/2023			
<b>II - Self Inspection - Items to Check</b>						
II.1 - Items to check						
Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
01	N/A	Assembly according to Instruction Engineering n° PRA.CB2220.DTR30225487/2 Verification of fitment for all reinforcement brackets.	PRA.CB2220.DTR30225487/2	✓	 10/06/24	 10/06/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓	 10/06/24	 10/06/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓	 10/06/24	 10/06/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓	 10/06/24	 10/06/24
05		Functional's dimensions approved according drawing or complementary document approved by A'stom engineering and registered in this document.	Approved according specified on pages below.	✓	 10/06/24	 10/06/24
06		Perform visual inspection of welds in 300% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-016. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-016 and DTD0000210658.	✓	 10/06/24	 10/06/24
07	N/A	Before application of sealant record the expiry date and make sure that the room temperature and humidity are within specified values as per Works Instructions Specified:  Temperature Min - Max (°C) Min - Max 10°C - 35°C Relative humidity Min - Max (%) Min - Max 25% - 80%	Sealant Batch No. <u>03499</u> Exp Date: <u>15/06/24</u>  Actuals Temperature: <u>15</u> Humidity: <u>27</u>	✓	 10/06/24	 10/06/24
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0001278566	✓	 10/06/24	 10/06/24
09		Verification of safety welds	Approved according to DTD000210658 reference and Self inspection	✓	 10/06/24	 10/06/24

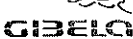
**GIBEL**

2024-06-06

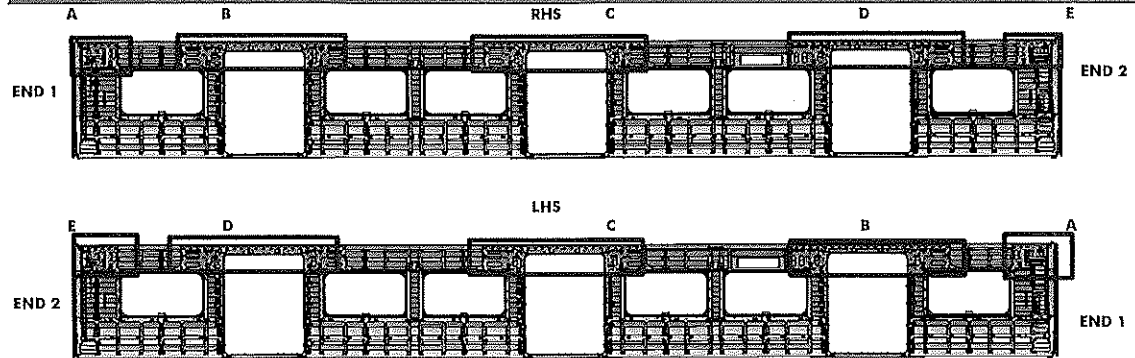
INDUSTRIAL QUALITY  
MAINLINE

	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA  SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	
II - Self Inspection - Items to Check			
<div style="text-align: center;">SEALANT APPLICATION</div> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 40%;">   </div> <div style="width: 55%; border: 1px solid black; padding: 5px;"> <div style="text-align: center;">AREA 1 &amp; 2 END 1</div> <div style="margin-bottom: 10px;"> Operator (Name &amp; sign):   </div> <div> Operator (Name &amp; sign):   </div> </div> </div>			





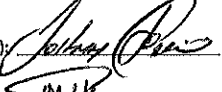
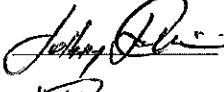

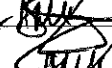
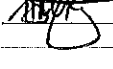
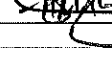


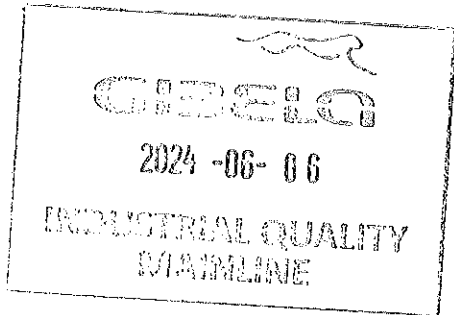
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		29	
		Date	
		28/10/2023	


**(I) - Self Inspection - Items to Check**



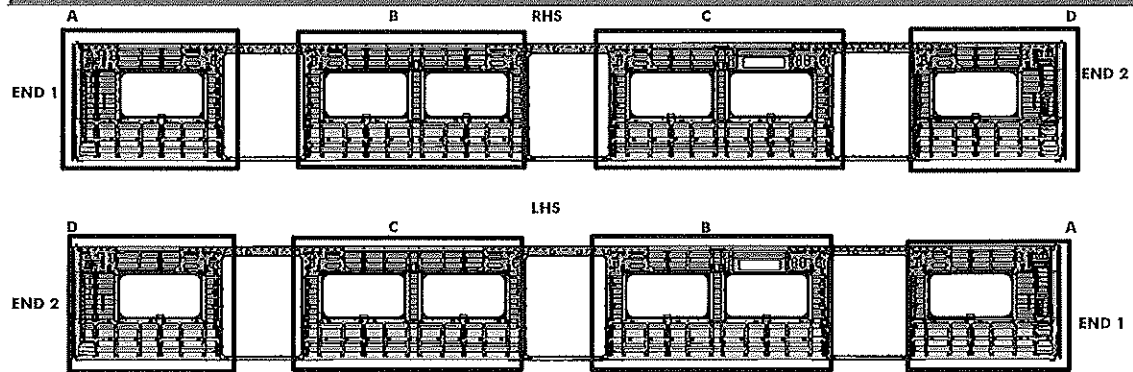
**REINFORCEMENT WELDING**

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

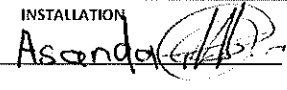
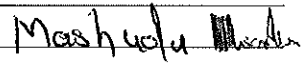
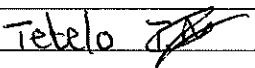
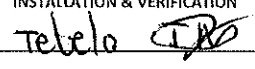
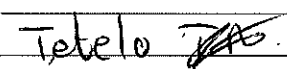



	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA
		29	
		Date	SI.CB2220.250.V29
		28/10/2023	

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



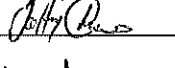
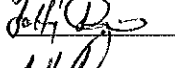
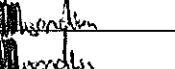
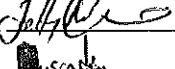
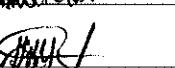
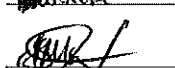

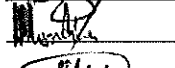



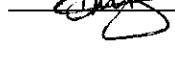
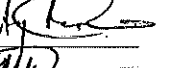


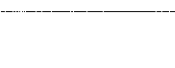


**BRACKETING**


		<b>INSTALLATION</b>
C-RAILS:	Operator:	Ascenda 
	Operator:	
DOOR MECHANISMS:	Operator:	Mashuda 
	Operator:	
TAPPING PADS	Operator:	Tebelo 
	Operator:	
		<b>INSTALLATION &amp; VERIFICATION</b>
SEAT & LUGGAGE BRACKETS:	Operator:	Tebelo 
	Operator:	
SEAT BRACKETS VERIFICATION:	Operator:	Tebelo 
	Operator:	

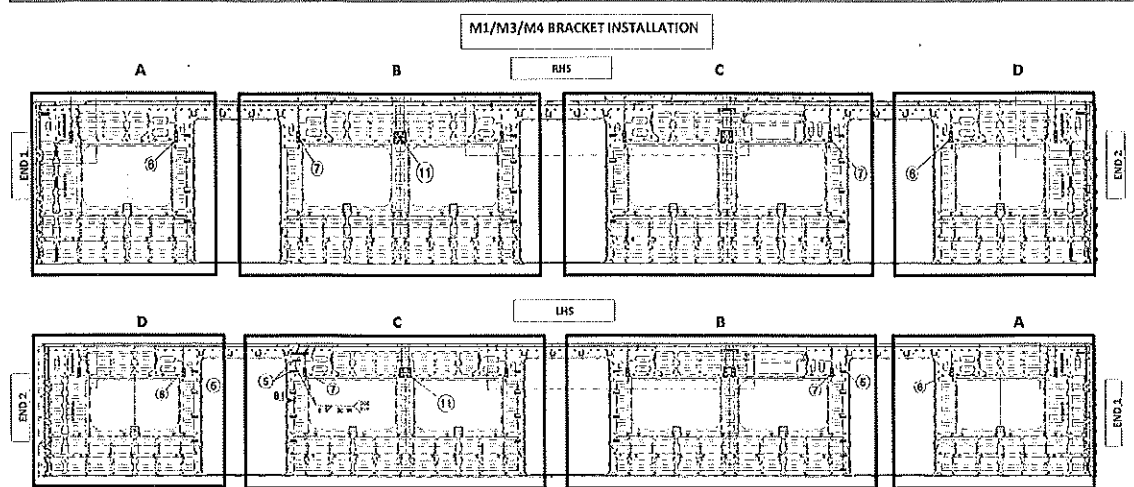
  
2024-06-06  
**INDUSTRIAL QUALITY MAINLINE**

**WELDING**

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



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



**QUANTITIES (M3/M4)**

**RHS**

	SECTION	QUANTITY	OK	NOK
C-RAILS	A	7		
	B	4		
	C	8		
	D	8		
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: N/A

**LHS**

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

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

VERIFICATION BY: N/A

**QUANTITIES (M1)**

**RHS**

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

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

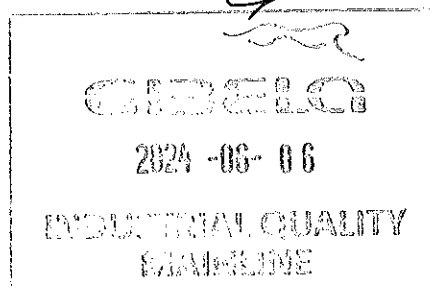
VERIFICATION BY: Tetelo

**LHS**

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

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

VERIFICATION BY: Tetelo



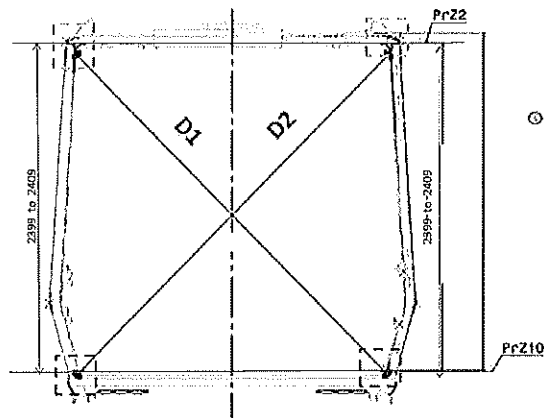


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30226487/2

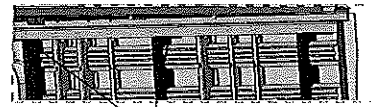
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29  
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28/10/2023

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Specifications of Details for CBS measurement



③



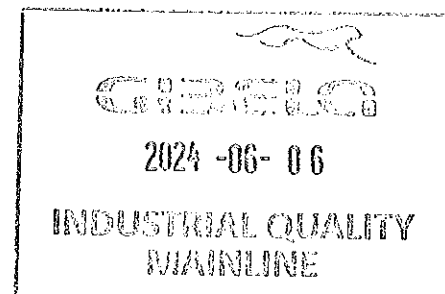
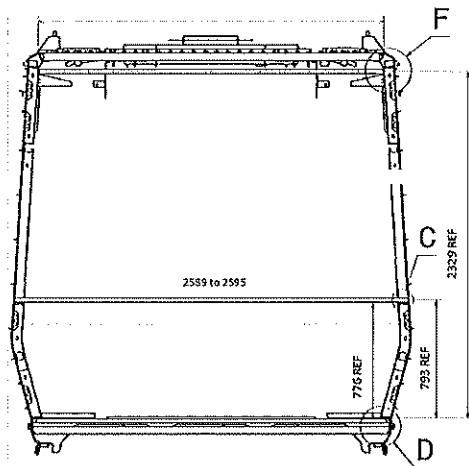
Measurement positions on roof rail and sidewall omega corner.

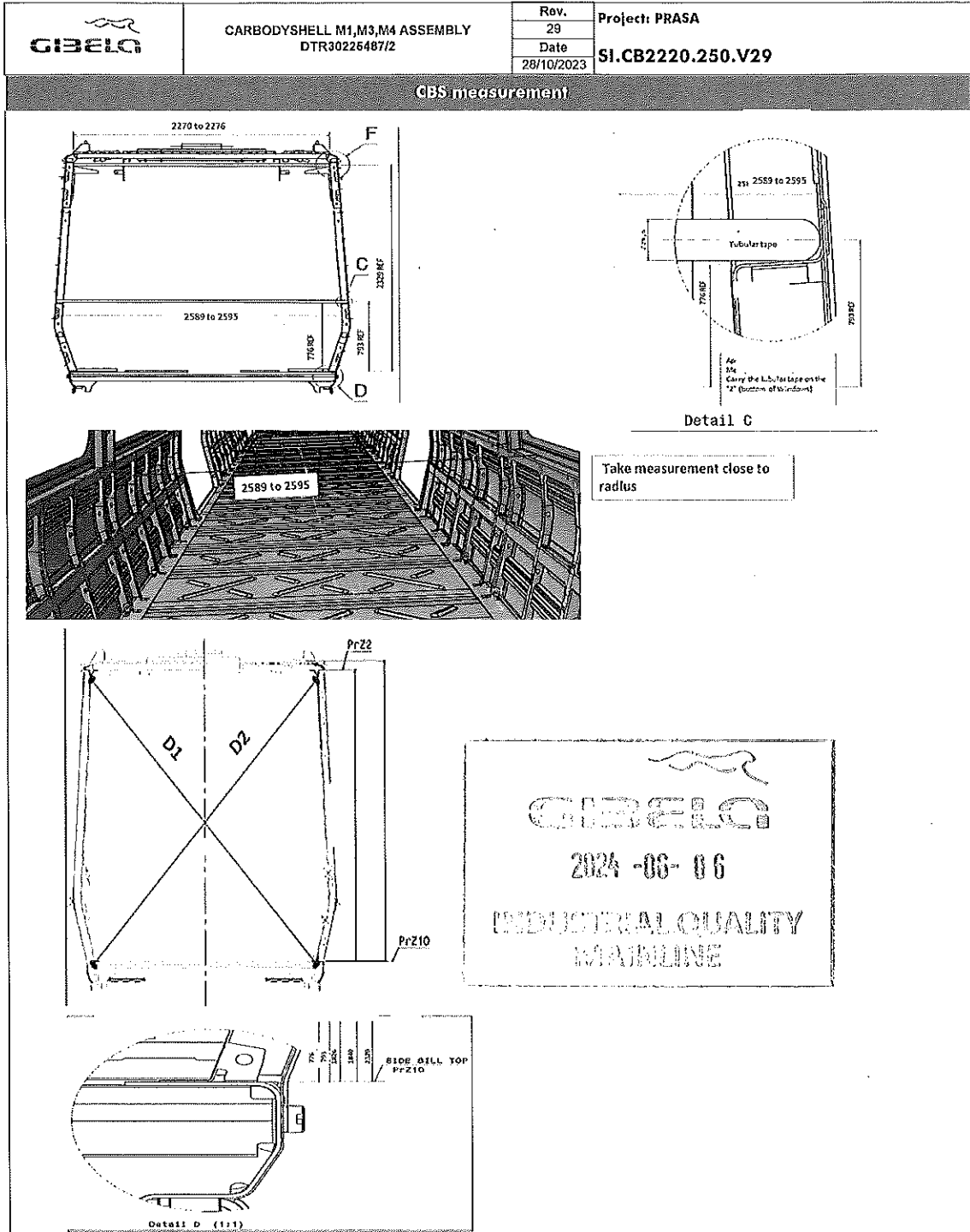



Reinforcement area measurement positions on roof reinforcement area.

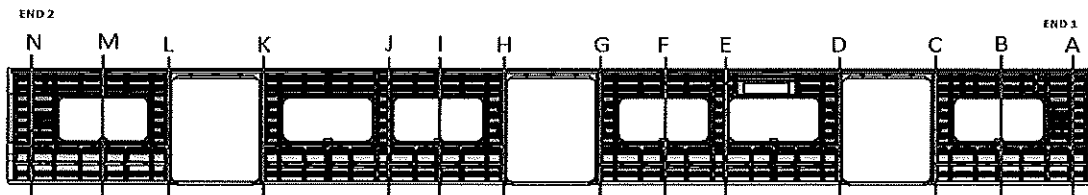


Measurement positions on sidewall and side sill corner.



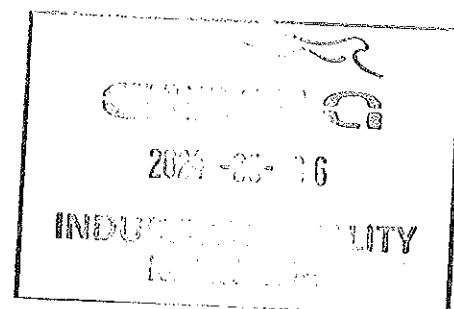



	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA
		29	
		Date	
		28/10/2023	SI.CB2220.250.V29
CBS measurement			

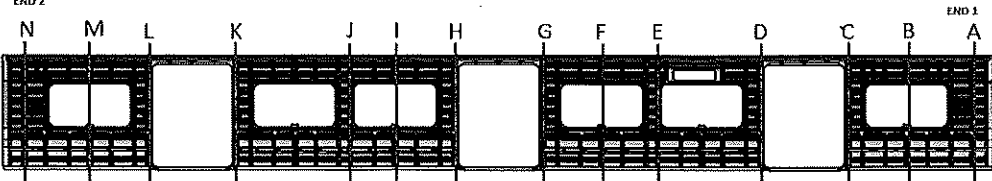


BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3300	3294	3	
B	3265	3266	1	
C	3299	3297	2	
D	3296	3298	2	
E	3265	3266	1	
F	3267	3266	1	
G	3295	3294	1	
H	3295	3293	2	
I	3267	3265	2	
J	3268	3267	1	
K	3298	3299	1	
L	3299	3300	1	
M	3266	3268	2	
N	3298	3299	1	

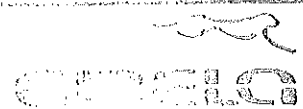


	CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2	Rev.	Project: PRASA  SI.CB2220.250.V29
		29	
		Date	
		28/10/2023	
CBS measurement			



AFTER WELDING

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



2023-06-06

TOP QUALITY  
LINE

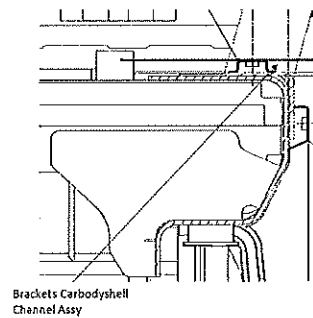
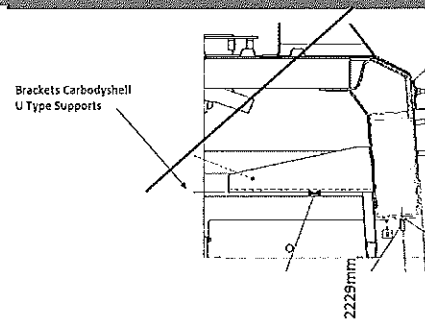
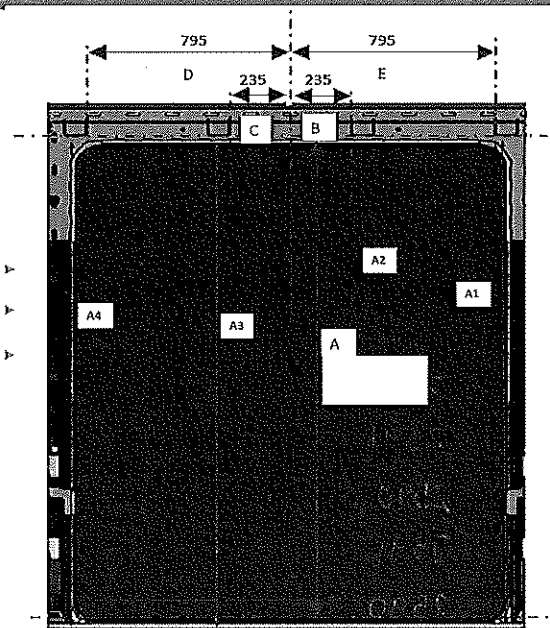


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

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Date  
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Specifications of Details for CBS measurement CB1220



DOOR 1 - LHS		
	VALUE	ACTUAL
A1	2230 to 2232	2230
A2	2230 to 2232	2231
A3	2230 to 2232	2230
A4	2230 to 2232	2232
B	234 to 236	2234
C	234 to 236	234
D	794 to 796	795
E	794 to 796	795

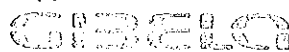
DOOR 2 - LHS		
	VALUE	ACTUAL
A1	2230 to 2232	2230
A2	2230 to 2232	2230
A3	2230 to 2232	2231
A4	2230 to 2232	2230
B	234 to 236	236
C	234 to 236	236
D	794 to 796	794
E	794 to 796	795

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

DOOR 1 - RHS		
	VALUE	ACTUAL
A1	2230 to 2232	2231
A2	2230 to 2232	2230
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	796

DOOR 2 - RHS		
	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	235
C	234 to 236	236
D	794 to 796	795
E	794 to 796	795

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



2024-06-06

INDUSTRIAL QUALITY  
MACHINE



CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30226487/2

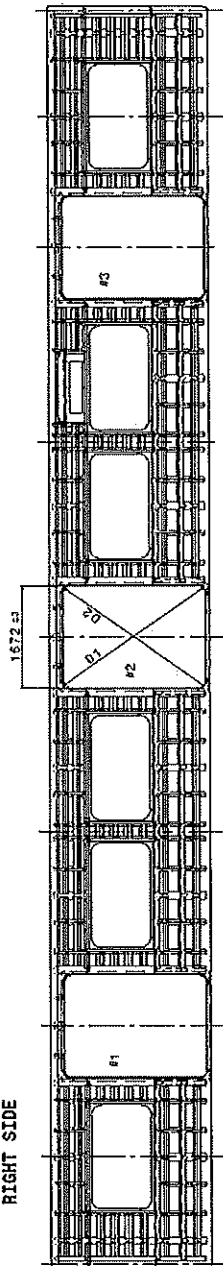
Rev.  
29  
Date  
28/10/2023

Project: PRASA

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Specifications of Details for CBS measurement CB1220

End #2



End #1

Doors diagonal D1-D2 maximum difference  $\leq 4\text{mm}$

	#1	#2	#3
D1	2750	2751	2751
D2	2749	2751	2749
D1-D2		0	2

HIGHER DIMENSION

CENTRAL DIMENSION

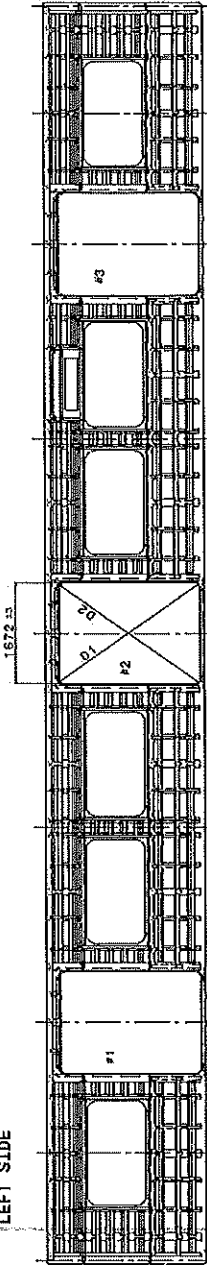
LOWER DIMENSION

Doors Length - 1672  $\pm 3\text{mm}$

	#1	#2	#3
HIGHER DIMENSION	1672	1671	1672
CENTRAL DIMENSION	1671	1676	1673
LOWER DIMENSION	1672	1671	1672

RIGHT SIDE

End #1



LEFT SIDE

Doors diagonal D1-D2 maximum difference  $\leq 4\text{mm}$

	#1	#2	#3
D1	2751	2749	2750
D2	2749	2751	2754
D1-D2	2	2	1

HIGHER DIMENSION

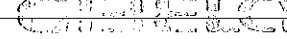
CENTRAL DIMENSION

LOWER DIMENSION

Doors Length - 1672  $\pm 3\text{mm}$

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

End #2





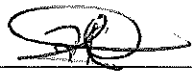
2024-06-06

INDUSTRIAL QUALITY  
MARKLINE





	<b>CARBODYSHELL M1,M3,M4 ASSEMBLY</b> DTR30226487/2	Rev.	<b>Project: PRASA</b>  <b>SI.CB2220.250.V29</b>
		29	
		Date	
		28/10/2023	
<b>Self Inspection - Final Result</b>			

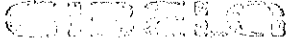
Is the car good to advance to the next workstation/process? (Approval of Operations Manager and Industrial Quality)				DATE	NAME	SIGNATURE
HOLD POINT	✓	GO	(If activities are not complete, the missing activities must not impact the next stage)	10/06/24	Tetelo Operations	
			Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party	10/06/24	Ama Industrial Quality	
			There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below)		Operations	
			There are non-conformities impact the quality of the product and there is no corrective action defined yet)		Industrial Quality	

In case of "NO GO", describe blocking problems


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

Item	Description	Responsible	Due date	Status

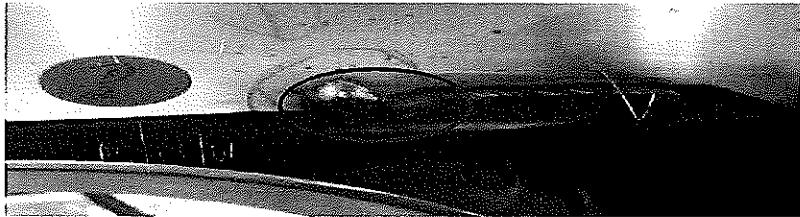
Operations



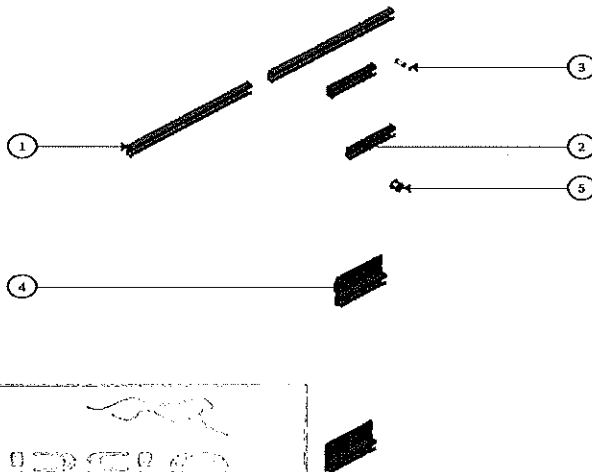
2024-06-06  
INDUSTRIAL QUALITY  
LW/MARNE

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

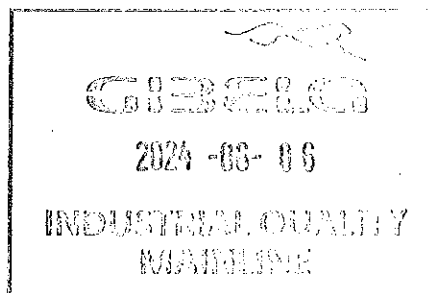
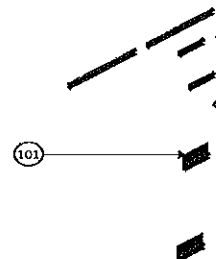
### ANNEXURE A: Arc Welding Quality Acceptance Standard



Station: CB1220-004- U108 & U107



PART NO.	ITEM NO.	QTY	DESCRIPTION	PAKSS [KG]
D7F0C0074203	5	6	EARTH STUD 6	0.035
AA00001201E13	4	6	ASSEMBLY SUPPORT	0.271
D7F0C00145305	3	12	WELDING STUD 45013118 PT - 1/8"X20 - SST	0.037
AA00001150424	2	12	ASSEMBLY SUPPORT	0.193
AA0000115141B	1	14	ASSEMBLY SUPPORT	0.522
AA00001151080	101	6	CARBODYSHELL BRACKETS CARBODYSHELL M1/M3/M4 CAR(SIDE FRAME INCHOLE STUD - 039)	12.132







**PRASA PROJECT**



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

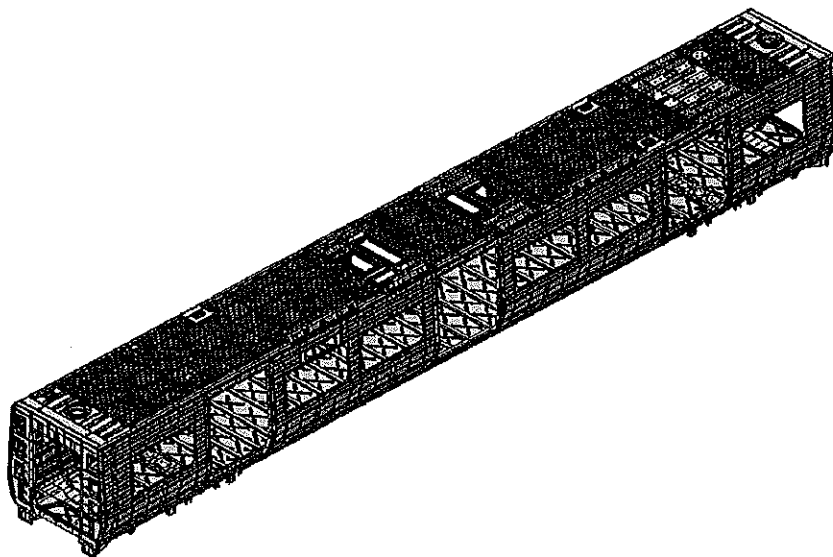
**CONFIDENTIAL INFORMATION**  
 This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

APPLICATION REFERENCE												
MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE						WORK INSTRUCTION	SAFETY ? 	
				TC1	M4	M1	M2	M3	TC2			
<input type="checkbox"/>	DT00000225487	AAD0003278566	CARBODYSHELL M1,M3,M4 ASSEMBLY	CB1230		X	X			X	PRA.CB1230.DT000002 25487.V20	YES
<input type="checkbox"/>												
<input type="checkbox"/>												
REV	DATE	MODIFICATION CONTENT			RESPONSIBLE		NAME		DATE			
0	2018/08/02	GIBELA NEW CREATION			APPROVER		Philippe Marques		2018/08/02			
					CHECKER		Nosizo Pindela		2018/08/02			
					COMPILER		Nosizo Pindela		2018/08/02			
1	30/5/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager			APPROVER		Itumeleng Modiba		30/5/2018			
					CHECKER		Nosizo Pindela		30/5/2018			
					REVISED BY		Nosizo Pindela		30/5/2018			
2	2018/05/07	Certain dimensional checks moved to CB1220			APPROVER		Itumeleng Modiba		2018/05/07			
					CHECKER		Nosizo Pindela		2018/05/07			
					REVISED BY		Ramokone Motama		2018/05/07			
5	24/01/2019	As per Baseline 10.2			APPROVER		Itumeleng Modiba		24/01/2019			
					CHECKER		Nosizo Pindela		24/01/2019			
					REVISED BY		Vanessa Ntuli		24/01/2019			
6	13/03/2019	Added Twist and Door Bracket Measurements Remove Door Measurements			APPROVER		Itumeleng Modiba		13/03/2019			
					CHECKER		Nosizo Pindela		13/03/2019			
					REVISED BY		Nosizo Pindela		13/03/2019			
10	23/08/2019	New Baseline 10.2.5			APPROVER		Itumeleng Modiba		23/08/2019			
					CHECKER		Nosizo Pindela		23/08/2019			
					REVISED BY		Nosizo Pindela		23/08/2019			
15	06/08/2020	New Baseline 10.2.6			APPROVER		Timothy Maimela		06/08/2020			
					CHECKER		Bongane Masina					
					REVISED BY		Bongane Masina					
20	19/04/2021	New Baseline change 10.3			APPROVER		Timothy Maimela		19/04/2021			
					CHECKER		Bongane Masina					
					REVISED BY		Bongane Masina					
25	20/02/2022	New Baseline change 10.3.1			APPROVER		Collins Mhombhi		20/02/2022			
					CHECKER		Andani Muthelo					
					REVISED BY		Andani Muthelo					
26	14/06/2022	Update minimum temperature requirement for sealant application			APPROVER		Collins Mhombhi		14/06/2022			
					CHECKER		Andani Muthelo					
					REVISED BY		Andani Muthelo					
27	19/10/2022	Addition of traceability for sealant application			APPROVER		Collins Mhombhi		19/10/2022			
					CHECKER		Ntokozo Zwane					
					REVISED BY		Amogelang Mohlampe					
28	14/04/2023	Added sealant batch number & welding consumables traceability			APPROVER		Vanessa Ntuli		14/04/2023			
					CHECKER		Ntokozo Zwane					
					REVISED BY		Amogelang Mohlampe					
29	06/11/2023	Added thresholds traceability for boiler makers and welders			APPROVER		Tyson Ngobeni		06/11/2023			
					CHECKER		Andani Muthelo					
					REVISED BY		Ntokozo Zwane					
TRAINSET	CAR	OPERATOR NAME & ALPS NO		DATE	SELF INSPECTION NUMBER		PAGES					
032	M1	KHOZI H17409		11.06.24	SI.CB1230.256.V28		11					

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		Date 06/11/2023	
Car:	NCR:	Work station: CB1230	



Safety Related



### I - Documentation and Instruments Control

#### 1.1 - Documentation Control

Document	Type of car					Revision	Observation	OK	NOK	N/A	Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4	TC2							
PRA.CB1230.DT00000225487	X					V01		OK		N/A	11.06.24	11/06/24

#### 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 (Operations)	Signature/Date (Quality)
MEASURING TAPE	C113074	25/04/25	OK		11.06.24	11/06/24
COMBINATION SQUARE	C118007D	27/07/24	OK			
TUBULAR	22713	26/06/25	OK			

#### 1.3 Consumables

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

Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
AUTRO 308 LS.	5321880	MIG WELDING	OK		11.06.24	11/06/24



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## 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 fillet for all brackets.	PRA.CB1230.DT00000225487	OK		 11.06.24	 11/06/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	OK		 11.06.24	 11/06/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	OK		 11.06.24	 11/06/24
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	OK		 11.06.24	 11/06/24
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	OK		 11.06.24	 11/06/24
06		Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658.	As the welding procedure IND-SAL-WMS-018 and DTD0000210658.	OK		 11.06.24	 11/06/24
07	N/A	Before appplication of sealant record the expiry date and make sure that the room temperature and humidity are withion 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>152 70-03</u> Exp Date: <u>09 / 09 / 24</u>  Actuals Temperature: <u>11.5°C</u> Humidity: <u>54%</u>	OK		 11.06.24	 11/06/24
08	N/A	Verification of sealant application in regions of roof and sideframe.	Sealant applied in regions of roof and sideframe.	OK		 11.06.24	 11/06/24



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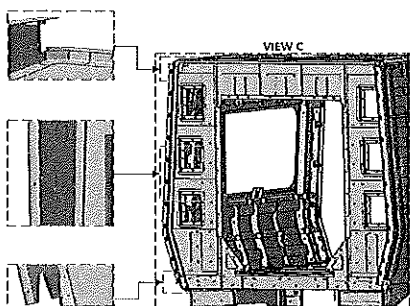
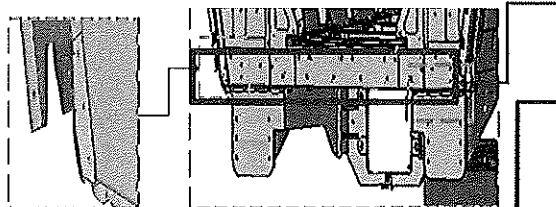
Date

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# AREA 1



H

## END 2 SEALANT

OPERATOR  
(Name & sign):

Khosy

OPERATOR  
(Name & sign):

Khosy

OPERATOR  
(Name & sign):

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) :

Buhle

Sihle

Operator (Name & sign) :

Majola

Operator (Name & sign) :

Operator (Name & sign) :

Operator (Name & sign) :



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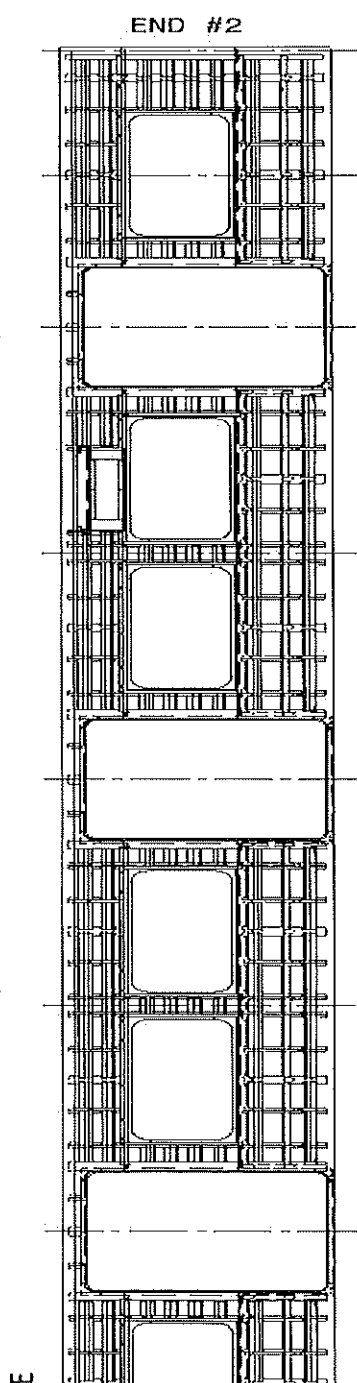
06/11/2023

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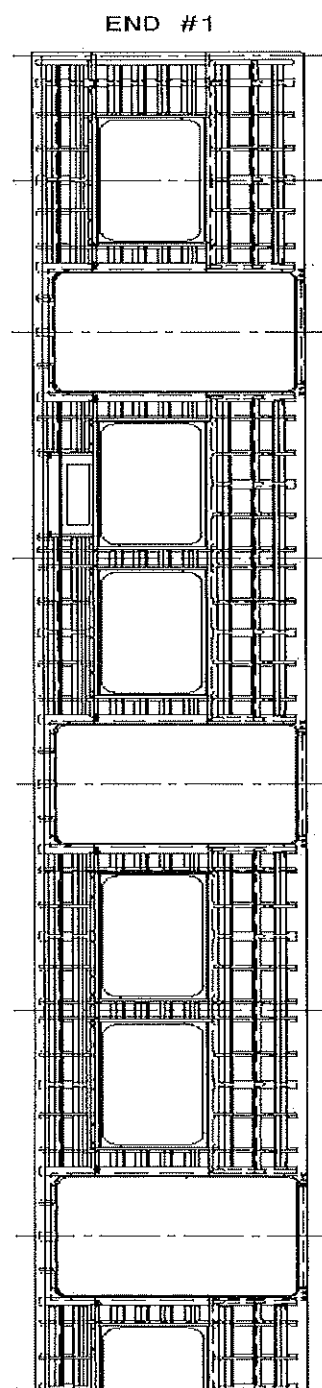
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Specifications of Details for CBS measurement CB1230

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



MAXIMUM  
MINIMUM



MAXIMUM  
MINIMUM



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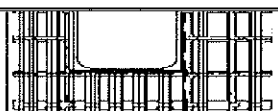
Date

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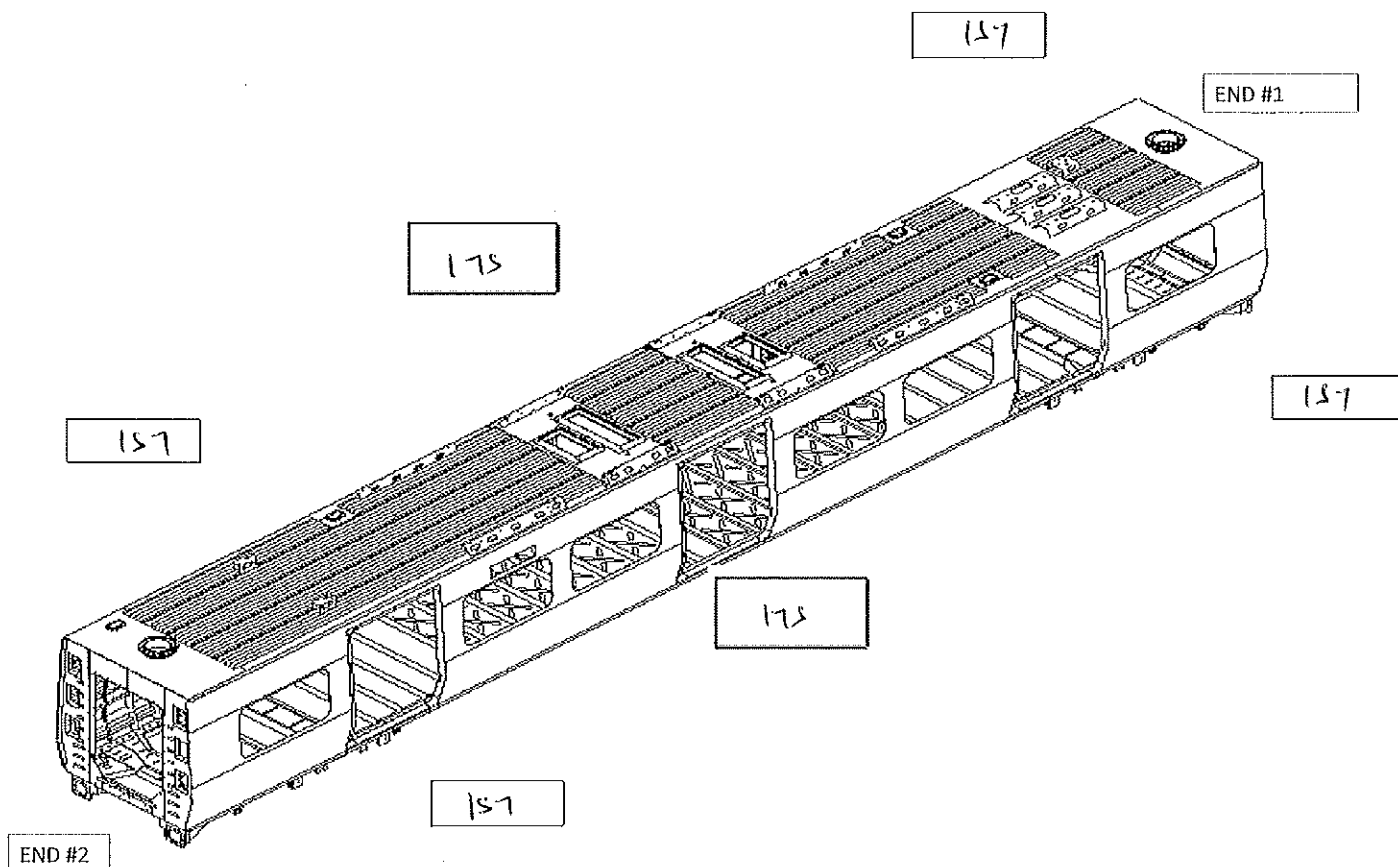
RIGHT SIDE



LEFT SIDE



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



MEASURED CAMBER VALUES

RIGHT	$e^1$	18
LEFT	$a1$	18





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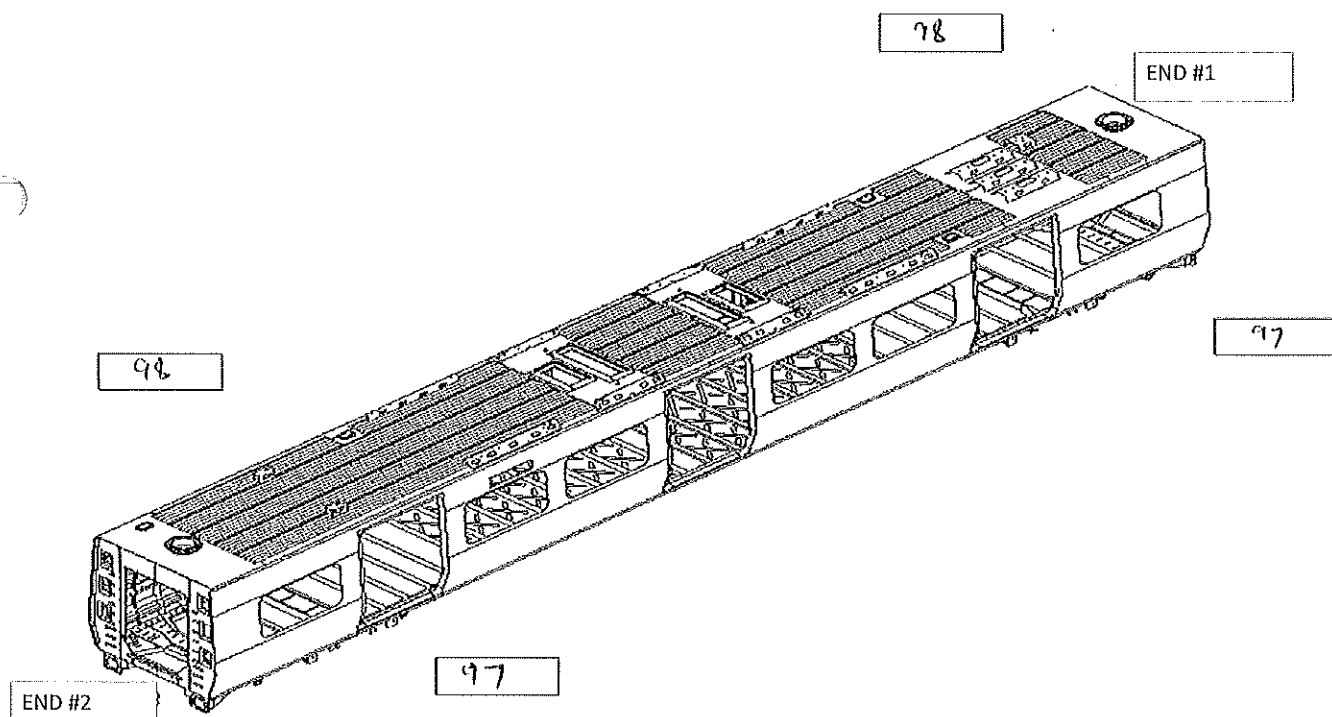
Date  
06/11/2023

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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

1

LONGITUDIN

0

TWIST FOUND ON END 2

TRANVERSE

1

LONGITUDINAL

0



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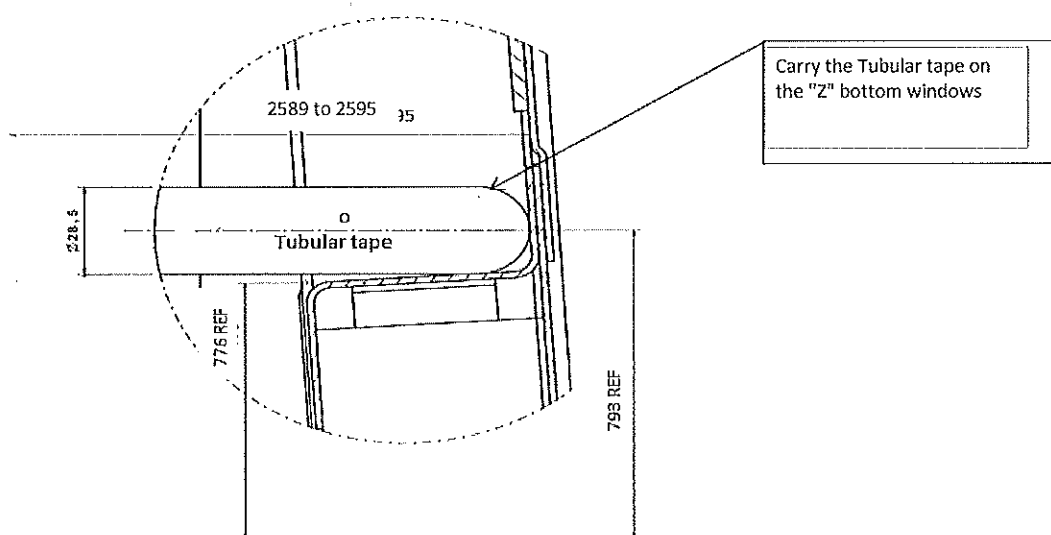
Date

06/11/2023

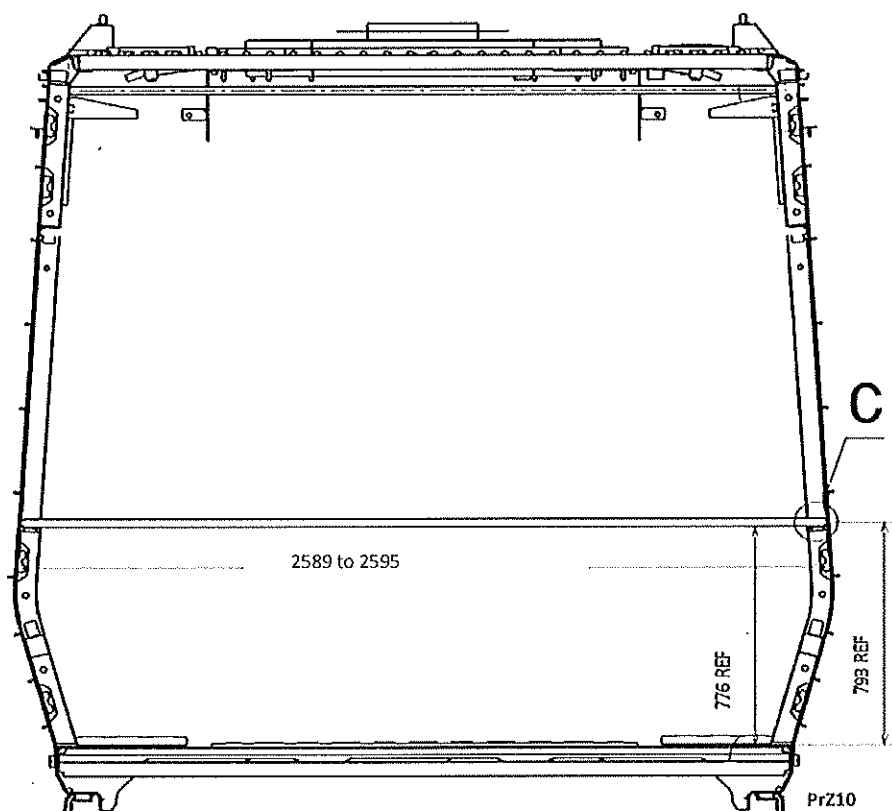
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Specifications of Details for CBS measurement CB1230



Detail C



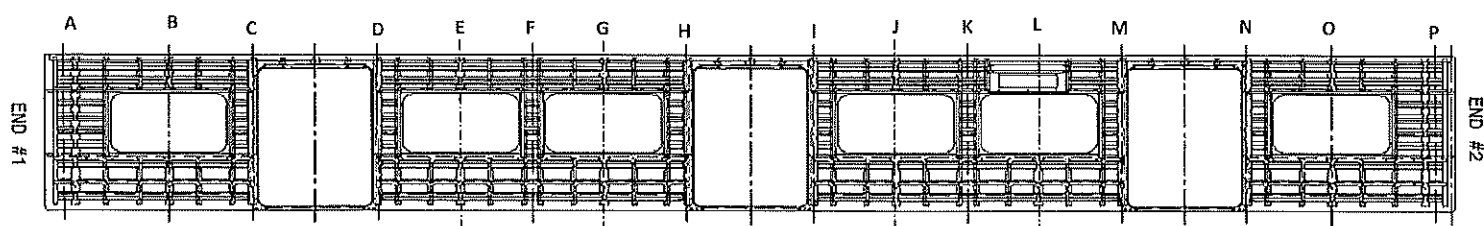
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Date \_\_\_\_\_

06/11/2023

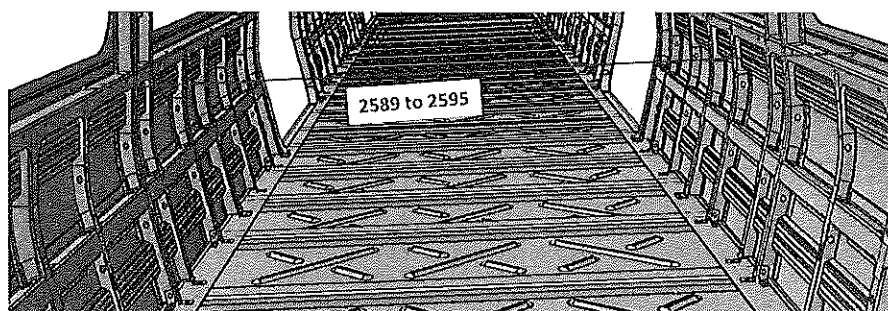
**SI.CB1230.256.V28**

### Specifications of Details for CBS measurement CB1230



2589 to 2595mm

A	25 96
B	25 90
C	25 89
D	25 90
E	25 92
F	25 93
G	25 92
H	25 90
I	25 91
J	25 92
K	25 94
L	25 90
M	25 90
N	25 90
O	25 93
P	25 96



## Threshold verification

Nominal value :38

Door 1		Door 2		Door 3	
L	R	L	R	L	R
38	38	38	38	38	38
Door 4		Door 5		Door 6	
L	R	L	R	L	R
36	36	38	38	38	38

BOILER MAKER:

20  
THERMO KALBY.

WELDER: JYOMHILA-HLA

027,



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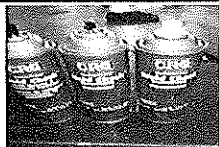
Date

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## Dye penetrant test

Dye-penetration test to be performed by quality personnel



### Specifications of Details for CBS measurement

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

### II.2 - Check List REX

#### Check List Items

Item	Picture/Drawing	Description	Criteria /Record	OK	Not 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					



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## Self Inspection - Final Result

Is the car good to advance to the next workstation/process?  
(Approval of Operations and Industrial Quality)

DATE

NAME

SIGNATURE

GO

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

11.06.24

KHOSE

Operations

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

11/06/24

Richardson

Industrial Quality

There are activities pending that impact/stop the activities of the next process  
Obs: (To describe problems below)

Operations

There are non-conformities impact the quality of the product and there is no corrective action defined yet)

Industrial Quality

HOLD POINT

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



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### ANNEXURE A: Arc Welding Quality Acceptance Standard

