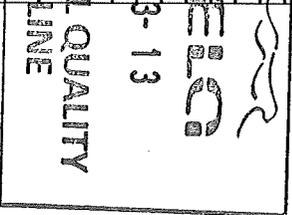


**CONFIDENTIAL INFORMATION**  
 This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

APPLICATION REFERENCE											
MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE					WORK INSTRUCTION	SAFETY	
				TCS	MA	MS	MR	TC			
<input type="checkbox"/>	DTB20225487/3	CARBONSTEEL MS/MK ASSEMBLY	CB2210					<input checked="" type="checkbox"/>		PRG CB2210.DTR30225 487/3.V30	YES

REV	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
1	2018/05/18	Team leader and Quality Technician to sign Change final signature from PIME Manager to Quality manager	APPROVER	Iturneleng Modiba	2018/07/04
			CHECKER	Nosizo Pindela	2018/05/18
2	2018/07/04	Certain dimensional checks moved to CB1220 and CB1230	APPROVER	Ramokone Modama	2018/07/04
			CHECKER	Nosizo Pindela	2018/12/12
3	2018/12/12	Added dimensional check points to CB2210	APPROVER	Iturneleng Modiba	22/01/2019
			CHECKER	Nosizo Pindela	2018/12/12
5	22/01/2019	As per Baseline 10.2	APPROVER	Yanesa Ntuli	22/01/2019
			CHECKER	Iturneleng Modiba	13/03/2019
6	13/03/2019	Added D1 and D2 on Self - Inspection	APPROVER	Nosizo Pindela	13/03/2019
			CHECKER	Iturneleng Modiba	21/08/2019
10	21/08/2019	New Baseline 10.2.5	APPROVER	Nosizo Pindela	21/08/2019
			CHECKER	Iturneleng Modiba	21/08/2019
15	06/08/2020	New Baseline 10.2.6	APPROVER	Tshobani Makhela	06/08/2020
			CHECKER	Bongani Masina	06/08/2020
20	19/04/2021	New Baseline change 10.3	APPROVER	Tshobani Makhela	19/04/2021
			CHECKER	Bongani Masina	19/04/2021
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING	APPROVER	Mphombi collins	17/08/2021
			CHECKER	Mpho Mulaudzi	17/08/2021
25	19/02/2022	New Baseline change 10.3.1	APPROVER	Mphombi collins	19/02/2022
			CHECKER	Ardani Muthelo	19/02/2022
26	14/04/2023	Addition of welding consumable traceability	APPROVER	Ntuli Vanessa	14/04/2023
			CHECKER	Mohlamphe Amogelang	14/04/2023
30	20/07/2023	New Baseline change 10.4	APPROVER	Ngozeni Tyson	28/07/2023
			CHECKER	Mohlamphe Amogelang	28/07/2023
31	07/11/2023	Added traceability for welding sections	APPROVER	Ngozeni Tyson	07/11/2023
			CHECKER	Mohlamphe Amogelang	07/11/2023

TRAINSET	CAR	OPERATOR NAME/ALPS NO	DATE	SELF INSPECTION NUMBER	PAGES
152719	M3	PANTSO	20/05/2024	SI.CB2210.254.V30	17





CARBODYSHELL M3, M4 ASSEMBLY DTR30225487/3

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

Code: M3 & M4

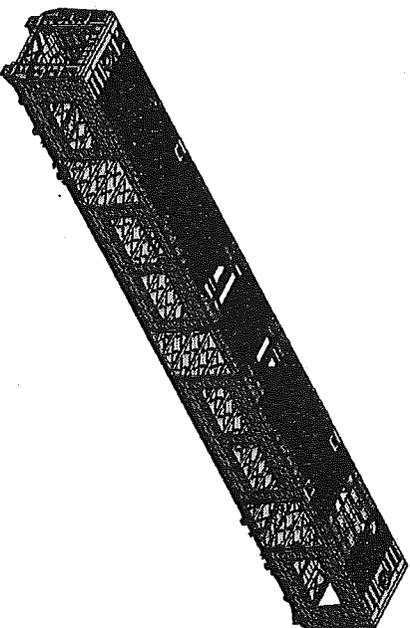
NGR:

Work station:

CB2210



Safety Rated



1 - Documentation and Instruments Control

L1 - Documentation Control

Document	Type of car					Revision	Observation	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
	M1	M2	M3	M4	T02					
DTR30225487/3			Y			1231		<input checked="" type="checkbox"/>	<i>[Signature]</i>	<i>[Signature]</i>

L2 - Instruments Control

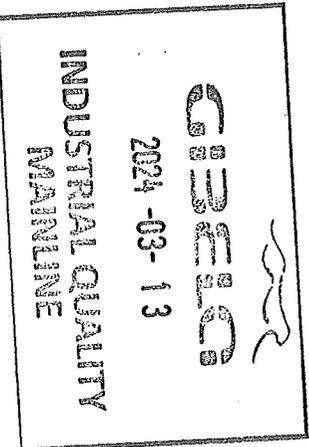
Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Serial number	Calibrator or Verification (Validation date)	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
WELSWAK LASER APP	30823-2	15/05/25	<input checked="" type="checkbox"/>	<i>[Signature]</i>	<i>[Signature]</i>
SDM APP	12542934	08/12/25	<input checked="" type="checkbox"/>	<i>[Signature]</i>	<i>[Signature]</i>
SDM APP	EMB D102	18/11/24	<input checked="" type="checkbox"/>	<i>[Signature]</i>	<i>[Signature]</i>

1.3 Consumables

Welding Consumable Control - Used for Special Process

Fiber Material	Heat Number	Welding Process	OK	Signature/Date (Manufacturing)	Signature/Date (Quality)
EP 508 LS1	314013-74007	MIG	<input checked="" type="checkbox"/>	<i>[Signature]</i>	<i>[Signature]</i>
EP 505 L	297604-7032	MIG	<input checked="" type="checkbox"/>	<i>[Signature]</i>	<i>[Signature]</i>





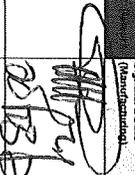
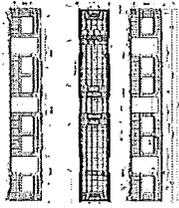
CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023

Project: PRASA  
SI CB2210.254.V30

II - Self Inspection - Items to Check

II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria/ Record	OK	Signature/Date (Manufacturer)	Signature/Date (Quality)
01	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD00000210675	✓	 20/03/24	 20/03/24
02	REFER TO ANNEXURE A	Spot welding inspected and approved according to procedure	IND-SAL-WMS-016 e DTD00000210675	✓	 20/03/24	 20/03/24
03	REFER TO ANNEXURE B	Arc welding inspected and approved according to procedure	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓	 20/03/24	 20/03/24
4		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓	 20/03/24	 20/03/24
05		Functional dimensions approved according drawing or complementary document approved by Astion engineering and registered in this document	Approved according specified on pages below.	✓	 20/03/24	 20/03/24
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 filler sampling as described in DTD00000210658.	As the welding procedure IND-SAL-WMS-018 and DTD00000210658.	✓	 20/03/24	 20/03/24

  
**GIBELCO**  
2024-03-13  
**INDUSTRIAL QUALITY**  
MANLINE



CARBODYSHELL M3, M4 ASSEMBLY DTR30225487/3

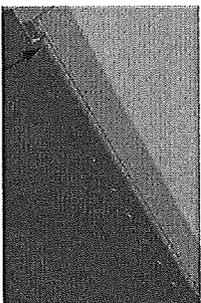
Rev.  
31

Project: PRA5A  
SI.CB2210.254.V30

Date  
07/11/2023

Welding Traceability

Roof ring welds



Boiler maker (Name & Sign): Justice LHS Welder (Name & Sign): Barber Blair

END 1

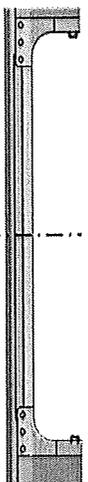
Boiler maker (Name & Sign): Justice RHS Welder (Name & Sign): Barber Blair

Boiler maker (Name & Sign): Justice LHS Welder (Name & Sign): Barber Blair

END 2

Boiler maker (Name & Sign): Justice RHS Welder (Name & Sign): Barber Blair

Door ring welds

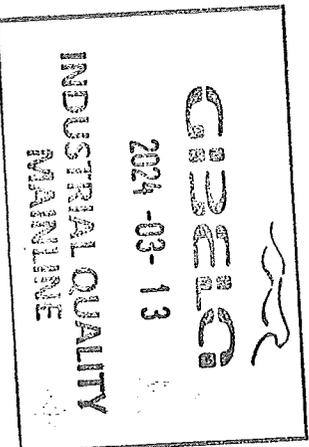


Boiler maker (Name & Sign): Lawrence Julys LHS

Welder (Name & Sign): Thoberg Blair

Boiler maker (Name & Sign): Lawrence Julys RHS

Welder (Name & Sign): Thoberg Blair



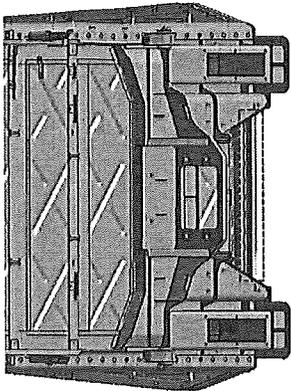
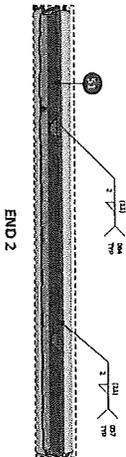
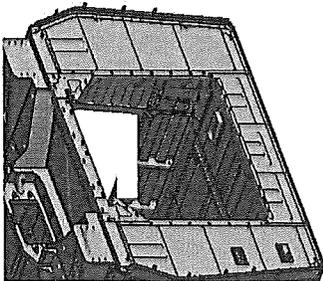
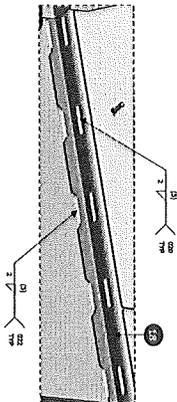


CARBOOYSHELL M3, M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023

Project: PRA5A  
SI.CB2210.254.V30

EUF Reinforcement Plates



Underneath the CAR

**END 1**

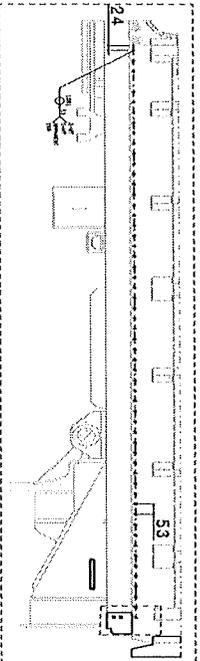
Boiler maker (Name & sign): Lawrence Angles

Welder (Name & sign): Tobias RDB

**END 2**

Boiler maker (Name & sign): Francesco M...

Welder (Name & sign): Keith R...



FEDOU

Operator: *[Signature]*

**GIBELCO**

2024-03-13

INDUSTRIAL QUALITY  
MAINLINE

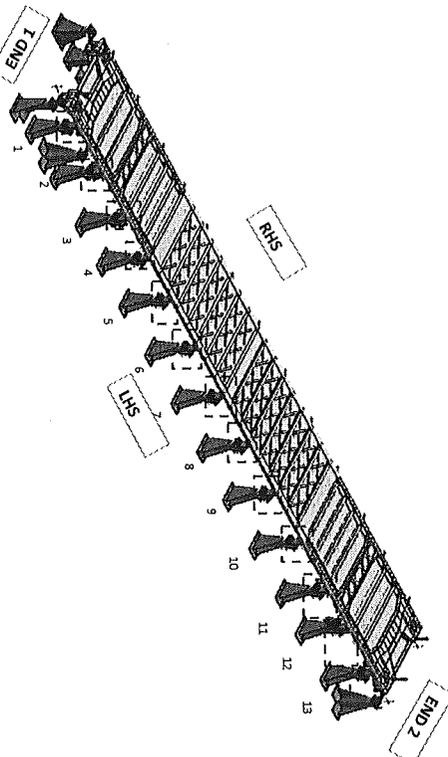


CARBOV-SHELL M3, M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023

Project: PRAASA  
SI.CB2210.254.V30

Specifications of Details for GRS measurement



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

After loading and clamping

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

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

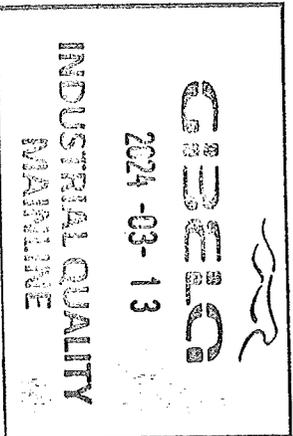
Signature Operator:  Date: 25/05/24

After Welding:

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

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

Signature Industrial Quality:  Date: 28/05/24



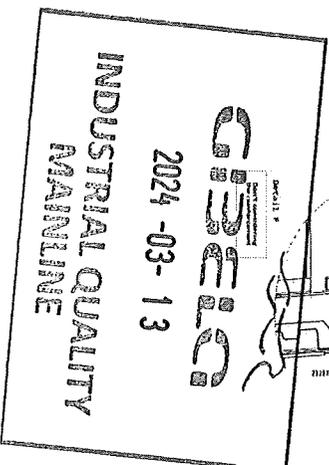
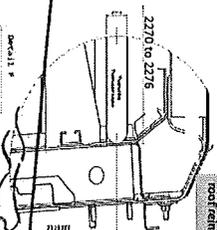
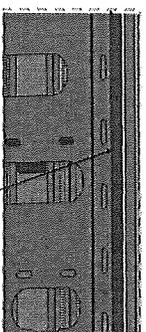
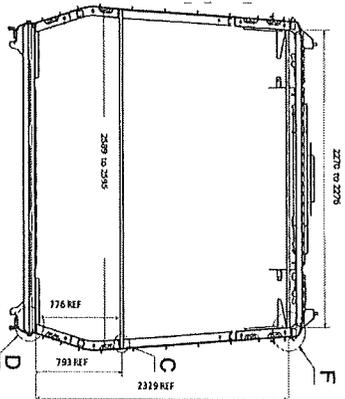
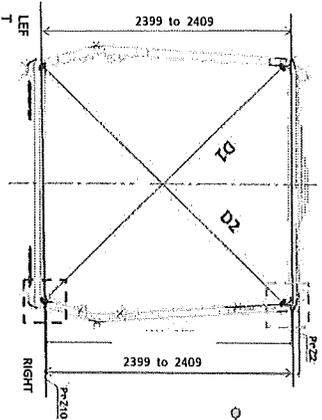
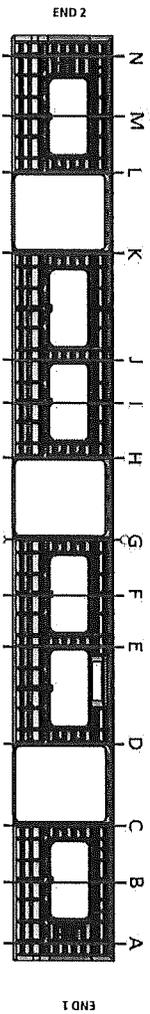


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023

Project: PRASA  
SI.CB2210.25A.V30

Specifications of Details for CBS measurement

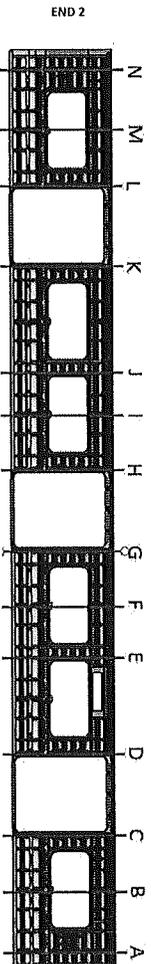




CARBOBODYSHELL M3, M4 ASSEMBLY DTR30225487/3

Rev.	31	Project: PRA5A SI, CB2210.25A, V30
Date	07/11/2023	

Specifications of Details for GBS measurement

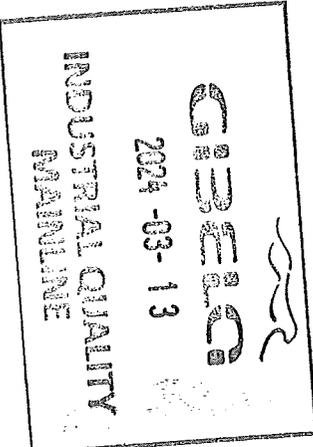


PME Column LHS - RHS should be ≤ 2MM on each point.

BEFORE WELDING

	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2399 to 2409	2399 to 2409 (RHS)	LHS-RHS ≤ 2
A	3269	3269	0	2404	2404	0
B	3268	3267	1	2405	2404	1
C	3270	3271	1	2406	2407	0
D	3269	3268	1	2404	2405	1
E	3268	3265	0	2404	2406	0
F	3269	3270	1	2404	2407	0
G	3268	3266	0	2404	2405	1
H	3269	3268	1	2405	2404	1
I	3271	3272	1	2404	2404	0
J	3270	3270	0	2406	2404	0
K	3269	3268	1	2405	2404	0
L	3268	3266	0	2406	2404	0
M	3266	3266	0	2405	2406	1
N	3271	3270	1	2404	2404	0

*Handwritten signature and notes:*  
 4-5-2023  
 20/05/2023

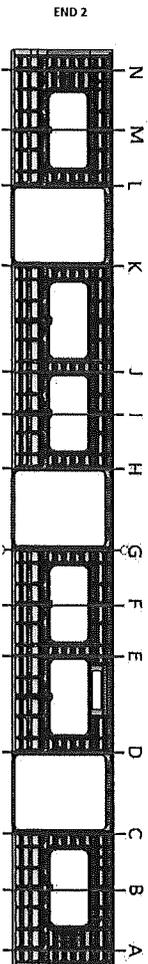




CARBOYSHELL M3, M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/1/2023  
Project: PRASA  
SI:CB2210.254.V30

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	3278	3279	1	2404	2404	2
B	3269	3268	1	2404	2404	0
C	3296	3298	2	2404	2404	0
D	3296	3296	0	2404	2405	1
E	3270	3271	1	2404	2406	2
F	3269	3269	0	2404	2405	1
G	3295	3296	1	2404	2406	2
H	3294	3294	0	2404	2405	2
I	3269	3268	1	2404	2404	0
J	3268	3269	1	2404	2403	1
K	3296	3294	1	2405	2406	1
L	3278	3278	0	2404	2405	1
M	3267	3267	0	2404	2404	0
N	3276	3276	0	2404	2404	2

2024-03-13  
  
 INDUSTRIAL QUALITY  
 MANUFACTURING  
 20230324

**GIBELD**

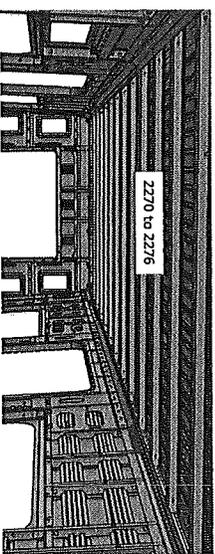
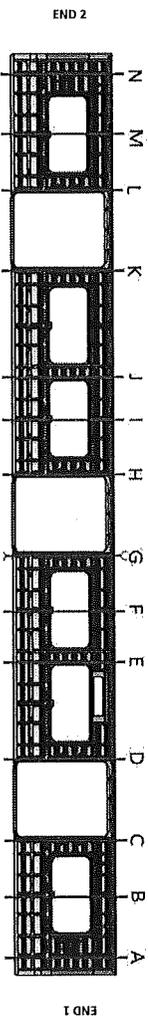
CARBODYSHELL M3, M4 ASSEMBLY DTR30225487/3

Rev.  
31  
Date  
07/11/2023

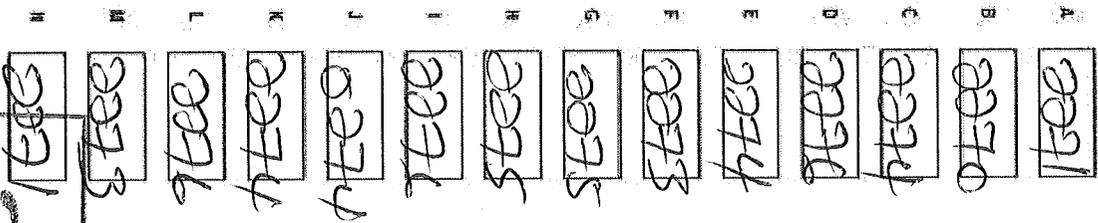
Project: PRASA  
SI, CB2210.254.V30

**CBS Measurement**

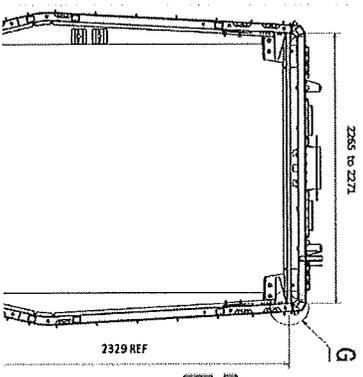
**BEFORE WELDING**



2270 to 2276



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



2265 to 2271

Detail G  
Consulting firm  
GIBELD

**GIBELD**  
2021-2024  
INDUSTRIAL QUALITY  
TRAINING  
20193 B17



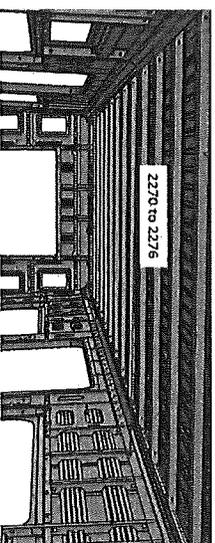
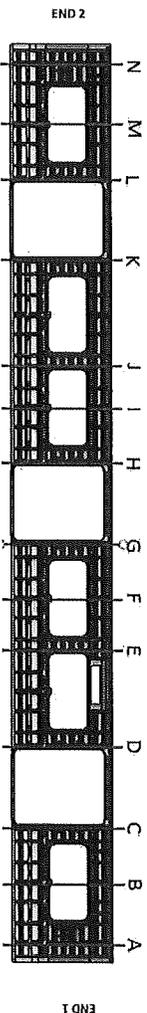
CARBODYSHELL M3, M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023

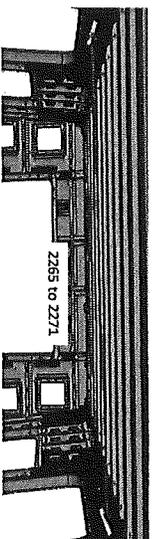
Project: PRA5A  
SI, CB2210.254.V30

GIBCO Measurement

AFTER WELDING

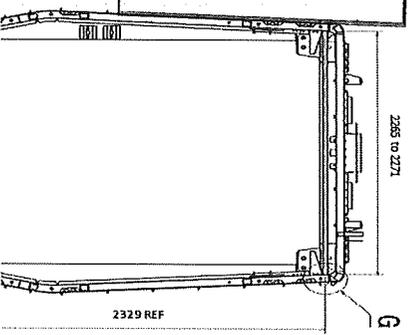
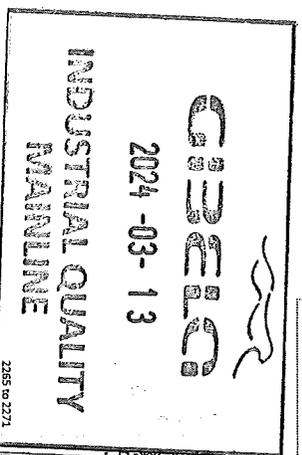


Do not consider reinforcement (Take measurements top area of zee profile)

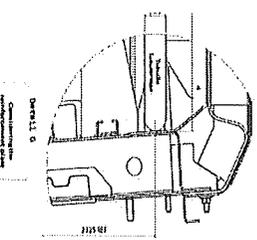


Take measurement close to radius (considering reinforcement)

	2265 to 2271	2270 to 2276
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		
N		



2265 to 2271



*Handwritten notes:*  
 20/03/24  
 20/03/24

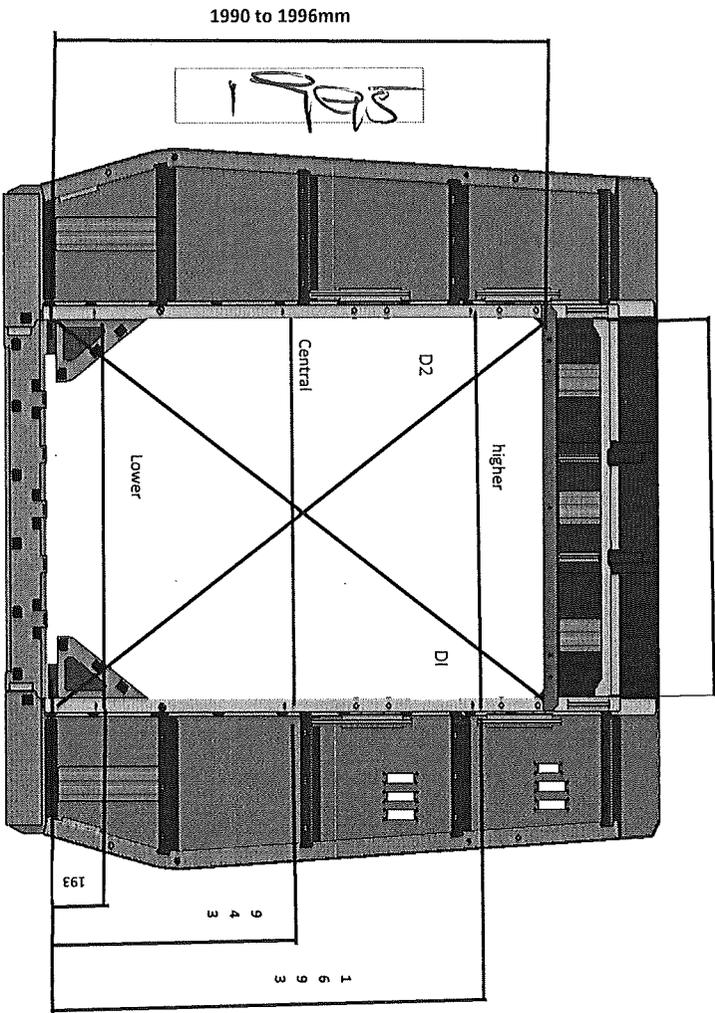


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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

Specifications of Details for CBS measurement

End frame 1



1380 to 1382 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

Higher Dimension

1388

D1

2415

Central Dimension

1381

D2

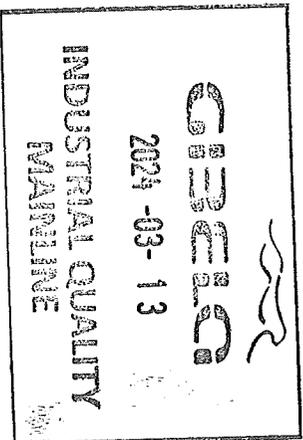
2415

Lower Dimension

1380

D1-D2

0



*Handwritten notes and signatures:*  
 1  
 2024/04  
 25/03/24



CARBODYSHELL M3, M4 ASSEMBLY DTR3025487/3

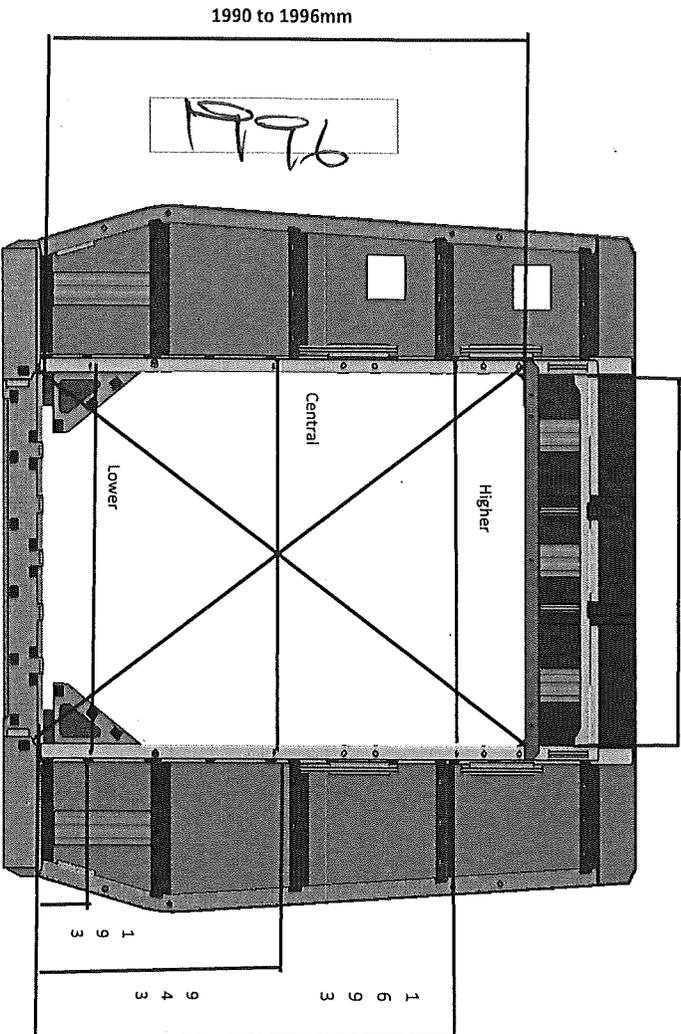
Rev. 31  
Date 07/11/2023

Project: PRASA  
SI, CB2210.254.V30

Specifications of Details for CBS measurement

Endframe 2

1380 to 1382 mm



HIGHER DIMENSION

1881

D1

2416

CENTRAL DIMENSION

1380

D2

2414

LOWER DIMENSION

1380

D1-D2

2

INDUSTRIAL PROPERTY  
 MAINTAINED  
 2011-03-13  
 GIBELCO  
 2011-03-13



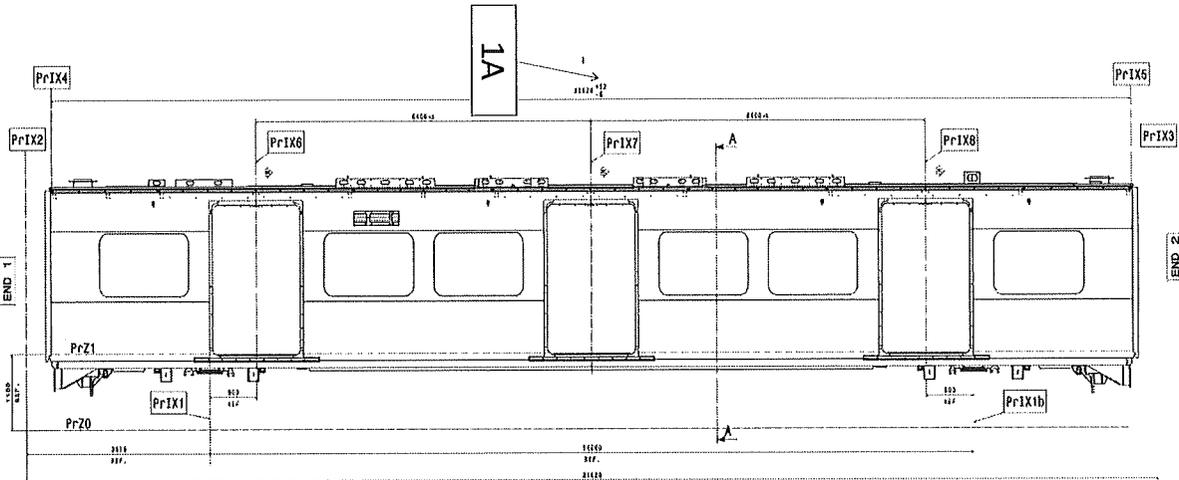
CARBOV-SHELL M3, M4 ASSEMBLY DTR30225487/3

Rev. 31

Project: PRA5A  
SI, CB221 0.254, V30

Date 07/11/2023

Specifications of Details for CFS measurement



	LEFT SIDE	ACTUAL SIZE
1A	20632 - 20614	20615

	RIGHT SIDE	ACTUAL SIZE
1A	20632 - 20614	20615

*[Handwritten signature]*  
 4099169  
 20163179

Dye-penetration test to be performed by quality personnel

Dye penetrant test



GIBELD

2024-03-13

INDUSTRIAL QUALITY  
RAVVA LINE





CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev. 31  
Date 07/11/2023

Project: PRASA  
SI.CB2210.254.V30

Self Inspection - Final Result

		DATE	NAME	SIGNATURE
HOLD POINT	GO		Operations	
	NO GO		Industrial Quality	

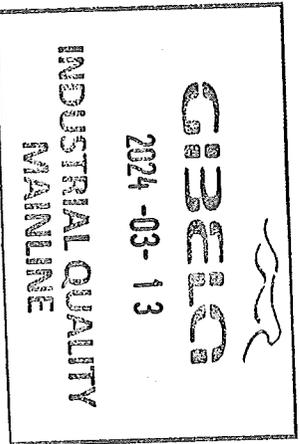
In case of "NO GO", describe blocking problems

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

Item	Description	Responsible	Due date	Status

Operations

Quality



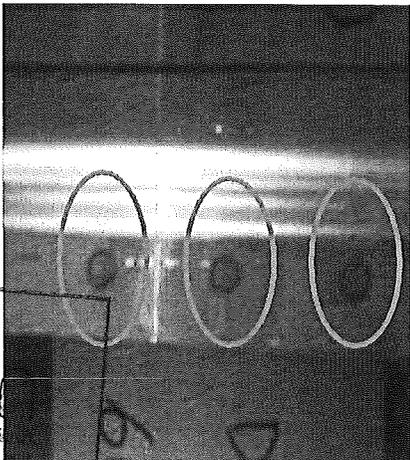
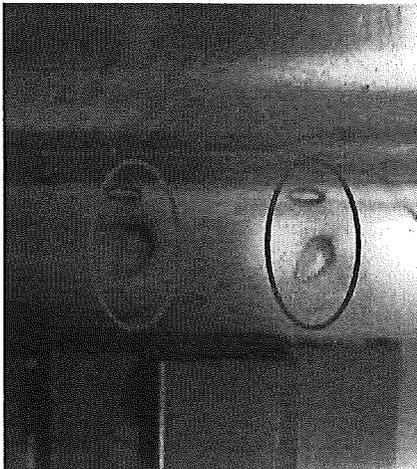


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.  
31  
Date  
07/1/2023

Project: PRASA  
SI.CBZ210.254.V30

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



  
2024-03-13  
**INDUSTRIAL QUALITY  
MANLINE**

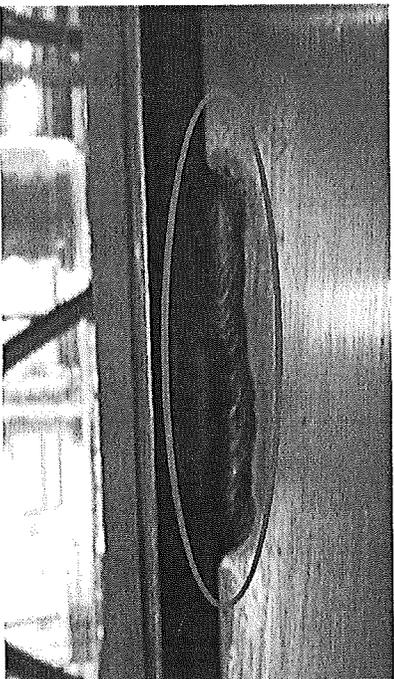
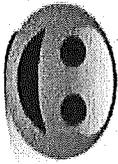
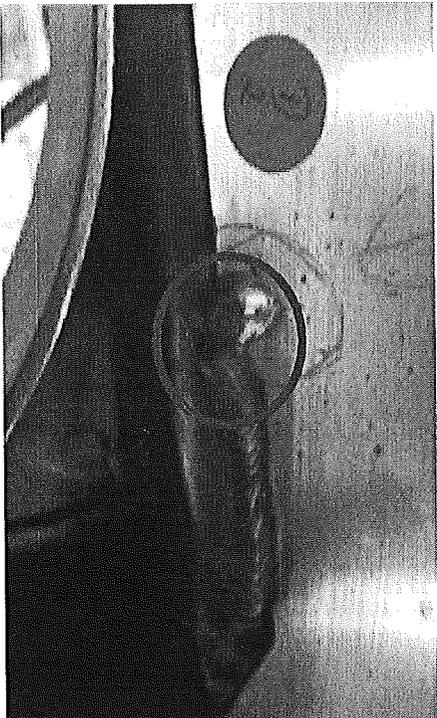


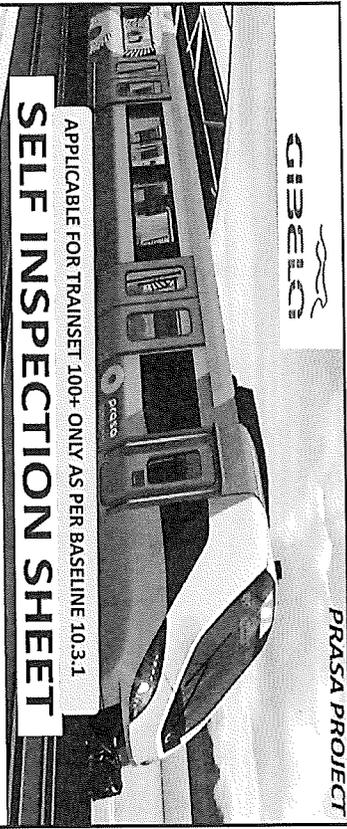
CARBODYSHELL M3,M4 ASSEMBLY DTR3025487/3

Rev.	31
Date	07/11/2023

Project: PRASA  
SI.CB2210.254.V30

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

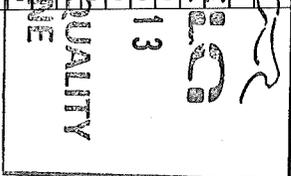




**CONFIDENTIAL INFORMATION**  
 This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

**APPLICATION REFERENCE**

MOUNTING	DRAWING	DESCRIPTION	STATION	CASTLE			WORK INSTRUCTION	SAFETY	
				TG1	M4	M1			TG2
<input type="checkbox"/>	07R023548/72	A40000127866	CARBOD/SHELL M.L.M/J.M. ASSEMBLY	GR230	X	X	X	POLCB2220.07R022548 7/2/V21	YES
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<input type="checkbox"/>									
<b>REV</b>	<b>DATE</b>	<b>MODIFICATION CONTENT</b>	<b>RESPONSIBLE</b>	<b>NAME</b>	<b>DATE</b>				
0	01/02/2018	GIBELA NEW CREATION	APPROVER	Iumeleng Modiba	01/02/2018				
			CHECKER	Nosizo Pindela	01/02/2018				
			COMPLIER	Thangani Mashigu	01/02/2018				
1	18/05/2018	Team leader and Quality Technician to sign Change final signature from PVE Manager to Quality manager	APPROVER	Iumeleng Modiba	18/05/2018				
			CHECKER	Nosizo Pindela	18/05/2018				
			REVISOR BY	Ramokone Mcdama	18/05/2018				
2	2018/07/05	Certain dimensional checks added and others moved to CB1210	APPROVER	Iumeleng Modiba	2018/07/05				
			CHECKER	Nosizo Pindela	2018/07/05				
			REVISOR BY	Ramokone Mcdama	2018/07/05				
3	2018/06/12	Width tolerance as per D10000036600	APPROVER	Iumeleng Modiba	2018/06/12				
			CHECKER	Nosizo Pindela	2018/06/12				
			REVISOR BY	Nosizo Pindela	2018/06/12				
5	24/01/2019	As per Baseline 10.2	APPROVER	Iumeleng Modiba	24/01/2019				
			CHECKER	Nosizo Pindela	24/01/2019				
			REVISOR BY	Vanesa Nkomo	2021-08-13				
6	13/03/2019	Added D1 and D2 on Self - Inspection length measurements	APPROVER	Iumeleng Modiba	13/03/2019				
			CHECKER	Nosizo Pindela	13/03/2019				
			REVISOR BY	Nosizo Pindela	2021-08-13				
10	22/08/2019	New Baseline 10.3.5	APPROVER	Iumeleng Modiba	22/08/2019				
			CHECKER	Nosizo Pindela	22/08/2019				
			REVISOR BY	Nosizo Pindela	22/08/2019				
15	06/08/2020	New Baseline 10.3.6	APPROVER	Timothy Maimela	06/08/2020				
			CHECKER	Bongane Masina	06/08/2020				
			REVISOR 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				
			REVISOR BY	Bongane Masina	19/04/2021				
21	17/08/2021	ADDED DIMENSIONS BEFORE WELDING	APPROVER	Mkhombi Collins	17/08/2021				
			CHECKER	Mpho Mulaudzi	17/08/2021				
			REVISOR BY	Mpho Mulaudzi	17/08/2021				
25	20/02/2022	New Baseline change 10.3.1	APPROVER	Collins Mkhombhi	19/02/2022				
			CHECKER	Andani Muthle	19/02/2022				
			REVISOR BY	Andani Muthle	19/02/2022				
26	14/05/2022	Update minimum temperature requirement for sealant application	APPROVER	Collins Mkhombhi	14/05/2022				
			CHECKER	Andani Muthle	14/05/2022				
			REVISOR BY	Andani Muthle	14/05/2022				
27	19/10/2022	Addition of traceability for sealant application & welding	APPROVER	Collins Mkhombhi	19/10/2022				
			CHECKER	Nickozo Zwane	19/10/2022				
			REVISOR BY	Vanesa Nkomo	19/10/2022				
28	14/04/2023	Added sealant batch number & welding consumables traceability	APPROVER	Vanesa Nkomo	14/04/2023				
			CHECKER	Nickozo Zwane	14/04/2023				
			REVISOR BY	Amogelang Mholamphe	14/04/2023				
29	28/10/2023	Addition of bracket quantity	APPROVER	Ngochani Tyson	28/10/2023				
			CHECKER	Nickozo Zwane	28/10/2023				
			REVISOR BY	Amogelang Mholamphe	28/10/2023				
<b>TRAINSET</b>	<b>GAR</b>	<b>OPERATOR NAME&amp; ALPS NO</b>	<b>DATE</b>	<b>SELF INSPECTION NUMBER</b>	<b>PAGES</b>				
219	Mos	Tebela	22/08/24	51.CB2220.250.V29	13				





CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR302254872

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

Car: M1,M3,M4

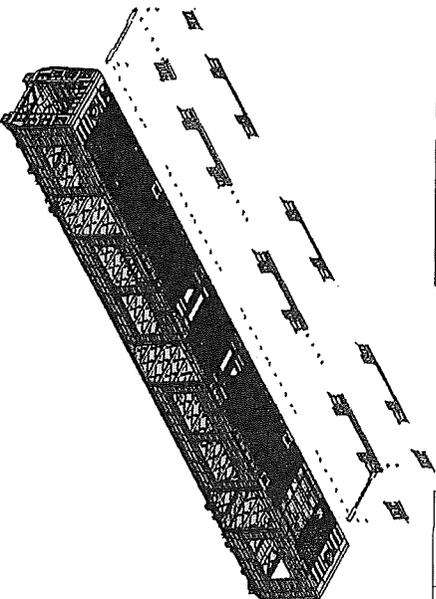
NCR:

Work station:

CB2220



Safety Related



I - Documentation and Instruments Control

I.1 - Documentation Control

Document	Type of car					Revision	Operation	OK	NOK	Signature (Manufacturing)	Signature Date (Quality)
	101	111	211	311	201						
DTR302254872				<input checked="" type="checkbox"/>		29	2210524	<input checked="" type="checkbox"/>		N/A	2210524

I.2 - Instruments Control

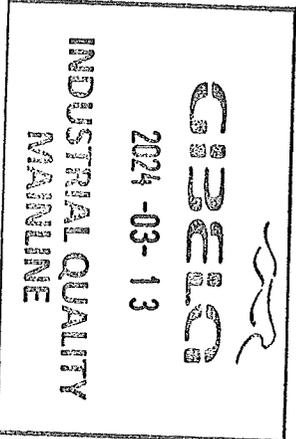
Monitoring and Measuring Instrument Control - Used for Special Process

Instruments	Serial number	Calibration or Verification Validation Date	OK	NOK	Signature Date (Manufacturing)	Signature Date (Quality)
Tubular	22113	08108174	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22105	22105
Measuring tape	08104124	08104124	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22105	22105

1.3 Consumables

Welding Consumable Control - Used for Special Process

Filler Material	Heat Number	Welding Process	OK	NOK	Signature Date (Manufacturing)	Signature Date (Quality)
Welding - wire	E2101	MIG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22105	22105



CIBELQ  
2024-03-13



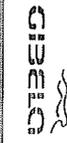
CARBODY SHELL M1 M3 M4 ASSEMBLY  
DTR30225487/2

Project: PRASA  
Rev. 29  
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	NOS	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	✓		22/03/24	22/03/24
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD0000210675	✓		22/03/24	22/03/24
03	REFER TO ANNEXURE A	Arc Welding inspected and approved according procedure.	IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000	✓		22/03/24	22/03/24
04		Cleaning of oil Stainless Steel Surface	According TO GIB-WEL - PROC-0002	✓		22/03/24	22/03/24
05		Functionals dimensions approved according to drawing or complementary document approved by Alstom engineering and registered in document.		✓		22/03/24	22/03/24
06		Perform visual inspection of welds in the project. Run by penetrant testing in electric arc welding (weld inspection IND-SAL-WMS-016). Run by penetrant testing (welding) and fillet sampling as described in DTD0000210658.		✓		22/03/24	22/03/24
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 Works Instructions Specified: Temperature Min - Max(°) Min-Max 10°C - 35°C Relative humidity Min - Max(%) Min-Max 35% - 65%	Sealant Batch Noted: <u>220324</u> Exp Date: <u>220324</u> Actuals Temperature: <u>24</u> Humidity: <u>60</u>	✓		22/03/24	22/03/24
08	NA	Verification of sealant application in certain regions in the drawing.	AAD0001278556	✓		22/03/24	22/03/24
09		Verification of safety welds	Approved according to DTD000210658 reference and Self inspection	✓		22/03/24	22/03/24



CARBODYSHELL M1 M3 M4 ASSEMBLY  
DTR302244872

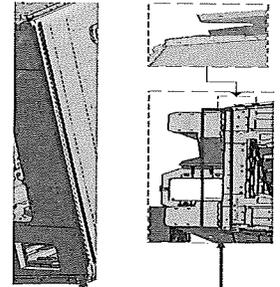
Rev. 29  
Date 28/10/2023

Project: PRASA  
SI.CB2220.250.V29

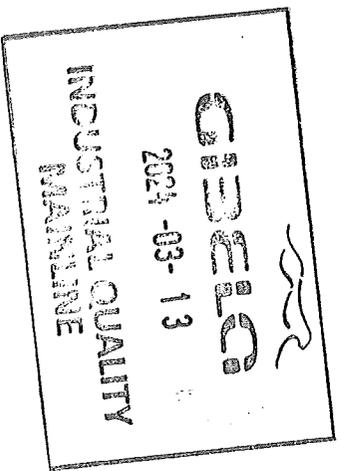
II - Self Inspection - Items to Check

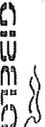
SEALANT APPLICATION

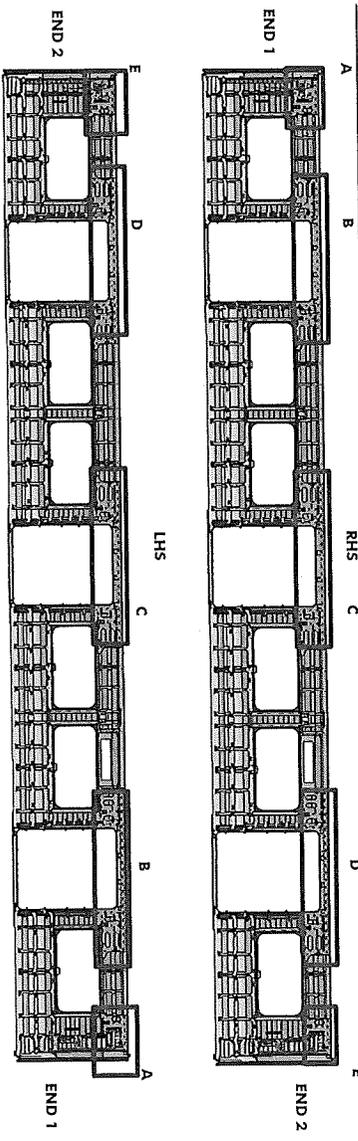
AREA 1 & 2 END 1



Operator (Name & sign):  
*Hthoerz*  
Operator (Name & sign):  
*Hthoerz*

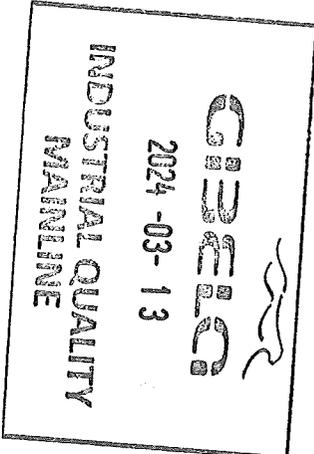


	CARBODY SHELL M1, M3, M4 ASSEMBLY DTR30224872		Rev. 29	Project: PRASA
	II - Self Inspection - Items to Check		Date 28/10/2023	S1.CB2220.250.V29

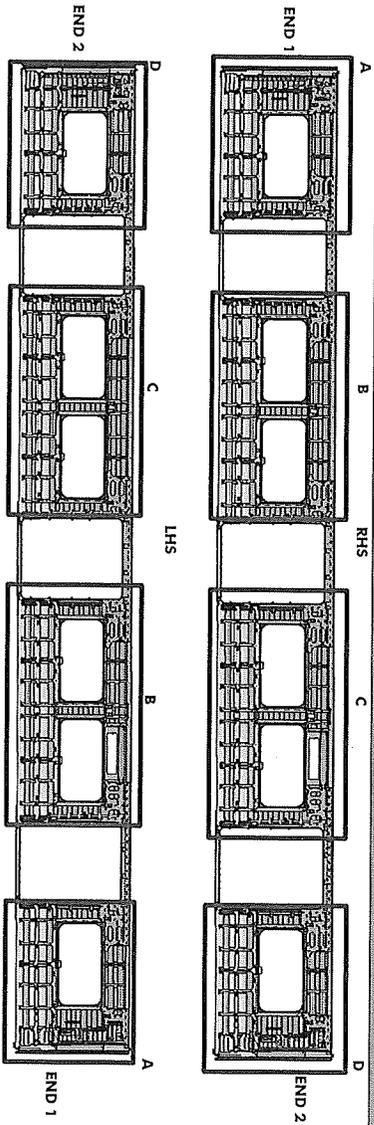


REINFORCEMENT WELDING

AREA	LHS	RHS
A	Operator (Name&sign): <i>S. K. Srinivas</i>	<i>S. K. Srinivas</i>
B	Operator (Name&sign): <i>S. K. Srinivas</i>	<i>S. K. Srinivas</i>
C	Operator (Name&sign): <i>Mangalika Mee</i>	<i>Mangalika Mee</i>
D	Operator (Name&sign): <i>M. Srinivas</i>	<i>M. Srinivas</i>
E	Operator (Name&sign): <i>M. Srinivas</i>	<i>M. Srinivas</i>



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



BRACKETING

C-RAILS:	Operator:	leui	Operator:	SPB
	Operator:			
DOOR MECHANISMS:	Operator:	Wlize	Operator:	SPB
	Operator:		Operator:	Mosini
TAPPING PADS	Operator:	SPB	Operator:	SPB
	Operator:		Operator:	
SEAT & LUGGAGE BRACKETS:	Operator:		INSTALLATION & VERIFICATION	
	Operator:		Mhokozi	
SEAT BRACKETS VERIFICATION:	Operator:	Mhokozi	Operator:	
	Operator:		Operator:	

WELDING

AREA	LHS	RHS
A (Seat brackets)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
(C-rails, Luggage and earth bushes)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
B (Seat brackets)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
(C-rails, Luggage and earth bushes)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
C (Seat brackets)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
(C-rails, Luggage and earth bushes)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
D (Seat brackets)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
(C-rails, Luggage and earth bushes)	Operator (Name&sign): Nokhanya Ngweni	Operator (Name&sign): Nokhanya Ngweni
ENDS		
END 1 TAPPING PADS WELDING	Operator (Name&sign): Thumani D	Operator (Name&sign): Thumani D
END 2 SPRING PARS WELDING	Operator (Name&sign): Thumani D	Operator (Name&sign): Thumani D

**INDUSTRIAL QUALITY  
MANLINE**



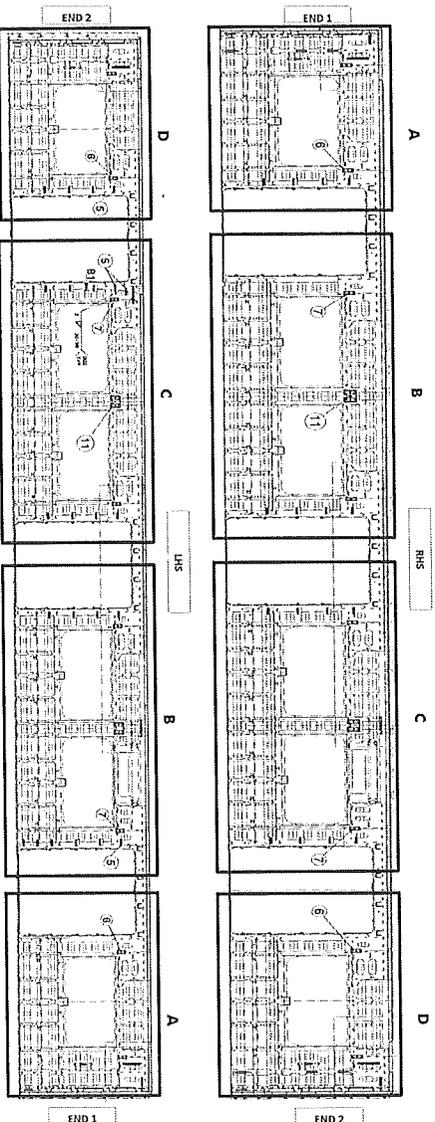
CARBOYSHELL M1/M3/M4 ASSEMBLY  
DTR30225487/2

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
A	7	✓	
B	4	✓	
C	8	✓	
D	8	✓	
A	13	✓	
B	13	✓	
C	21	✓	
D	13	✓	
A	3	✓	
B	5	✓	
C	4	✓	
D	3	✓	

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END  
VERIFICATION BY: Tefelo

QUANTITIES (M1)

RHS

SECTION	QUANTITY	OK	NOK
A	7		
B	8		
C	8		
D	8		
A	13		
B	13		
C	21		
D	13		
A	2		
B	4		
C	5		
D	3		

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END  
VERIFICATION BY: \_\_\_\_\_

LHS

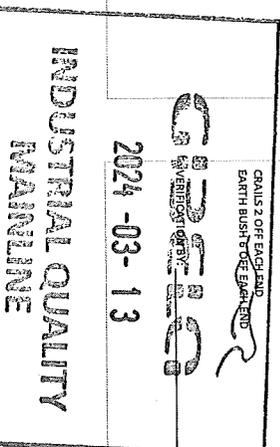
SECTION	QUANTITY	OK	NOK
A	2	✓	
B	8	✓	
C	11	✓	
D	8	✓	
A	13	✓	
B	13	✓	
C	21	✓	
D	13	✓	
A	2	✓	
B	6	✓	
C	6	✓	
D	2	✓	

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END  
VERIFICATION BY: Tefelo

LHS

SECTION	QUANTITY	OK	NOK
A	2		
B	10		
C	11		
D	6		
A	13		
B	21		
C	21		
D	13		
A	3		
B	7		
C	6		
D	2		

ROOF ENDS:  
CRAILS 2 OFF EACH END  
EARTH BUSH 6 OFF EACH END  
VERIFICATION BY: \_\_\_\_\_





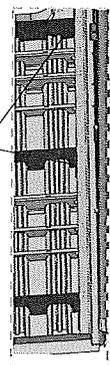
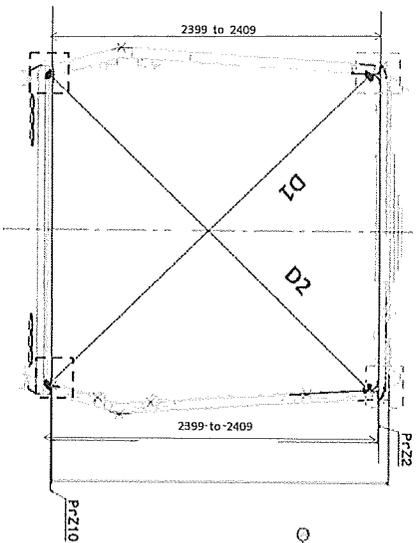
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR30225487/2

Rev.	29
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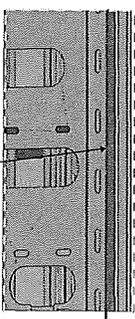
Project: PRASA

S1.CB2220.250.V29

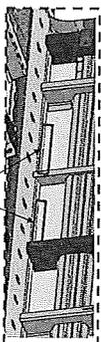
Specifications of Details for GBS measurement



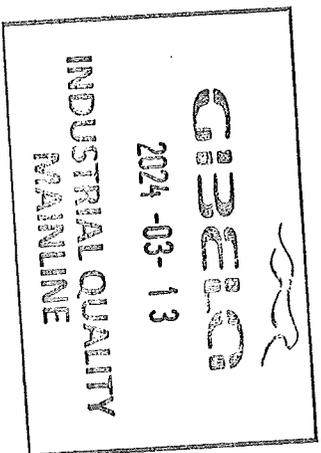
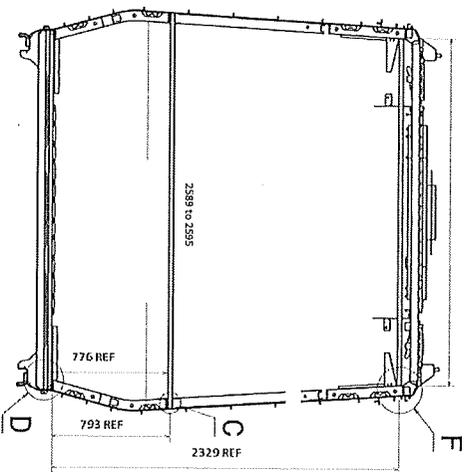
Measurement positions on roof rail end sidewall omega carrier.



Reinforcement area measurement positions on roof reinforcement area.



Measurement positions on sidewall and side sill corner.



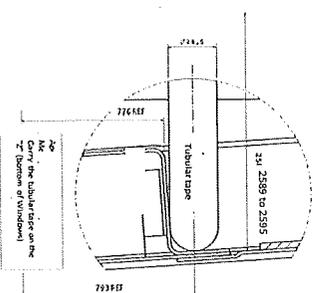
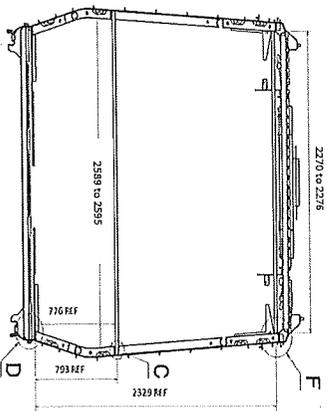


CARBODYSHELL M1 M3 M4 ASSEMBLY  
DIR30ZZ54871Z

Rev.  
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28/10/2023

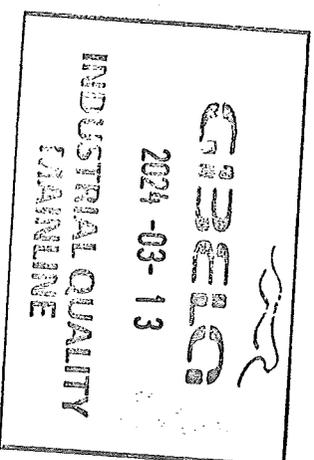
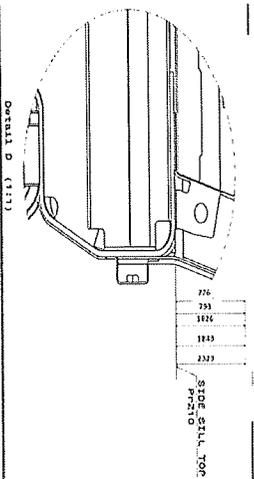
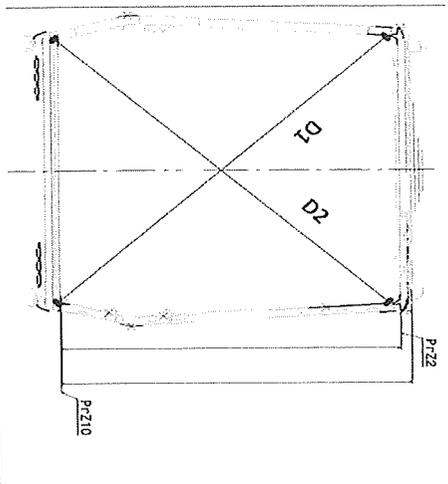
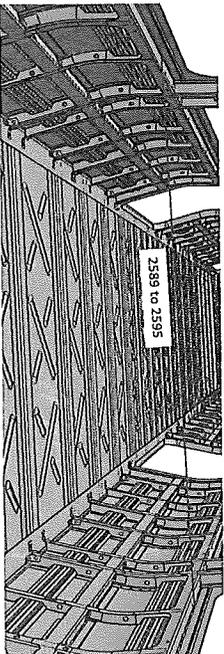
Project: PRASA  
SI\_CB2220.250.V29

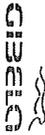
GBS measurement



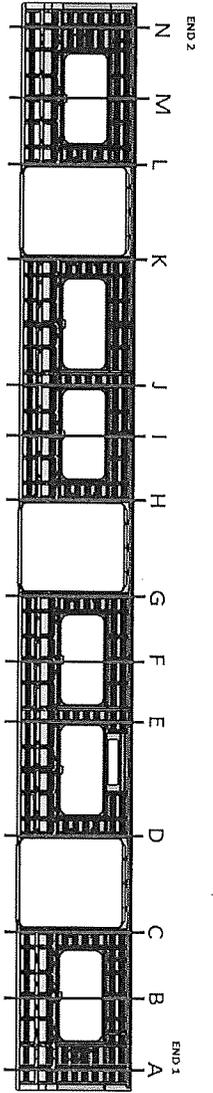
Detail C

Take measurement close to radius



	CARBODYSHELL M1, M3, M4 ASSEMBLY DTR30229487/2		Rev. 29	Project: PRASA
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G351 measurement



	Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3308	3298	2	1
B	3268	3266	2	1
C	3297	3299	2	1
D	3298	3299	1	1
E	3265	3268	3	1
F	3268	3266	2	1
G	3299	3296	3	1
H	3296	3299	3	1
I	3265	3268	3	1
J	3267	3265	2	1
K	3295	3297	2	1
L	3299	3300	1	1
M	3268	3265	3	1
N	3299	3300	1	1

  
**GIBELG**  
 2024-03-13  
**INDUSTRIAL QUALITY**  
**MANLINE**

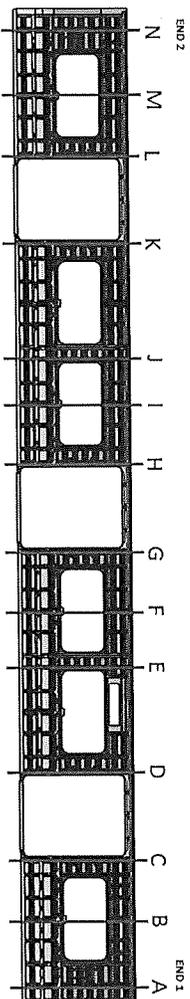


CARBOYSHELL M1, M3, M4 ASSEMBLY  
DTR302254872

Rev. 29  
Date 28/10/2023

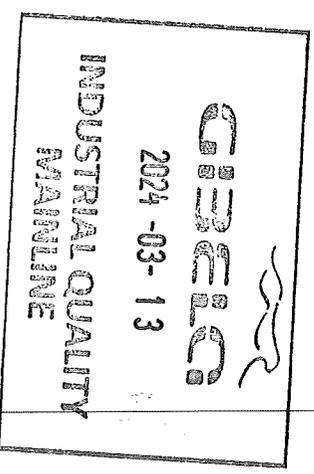
Project: PRASA  
SI, CB2220.250.V29

GBS measurement



AFTER WELDING

Record D1 values	Record D2 values	D1-D2 ≤ 5mm	2589 to 2595
A	3300	1	2594
B	3267	0	2589
C	3300	0	2593
D	3299	1	2589
E	3267	2	2592
F	3268	3	2591
G	3297	2	2593
H	3298	2	2591
I	3268	1	2593
J	3268	1	2591
K	3300	1	2592
L	3297	2	2591
M	3269	2	2590
N	3300	1	2594



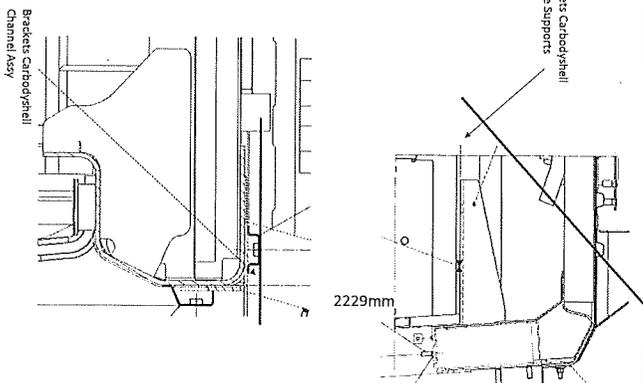
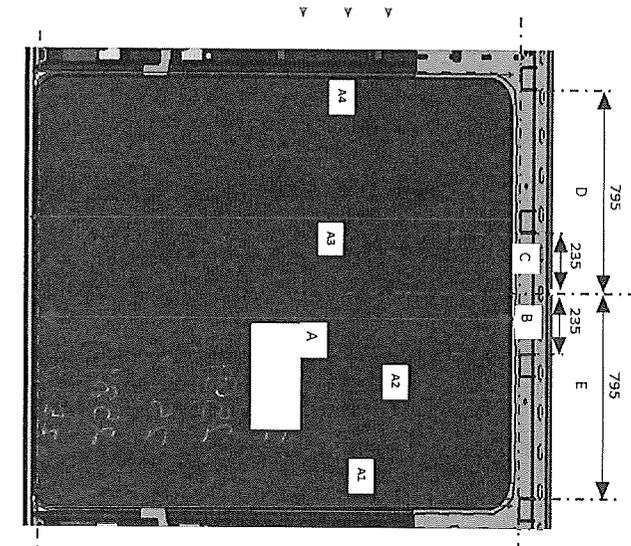


CARBODYSHELL M1, M3, M4 ASSEMBLY  
DTR30225487/2

Rev: 29  
Date: 28/10/2023

Project: PRASA  
SI.CB2220.250.V29

Specifications of Details for GBS measurement GB1220



DOOR 1 - LHS

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

DOOR 2 - LHS

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

DOOR 2 - LHS

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

DOOR 1 - RHS

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

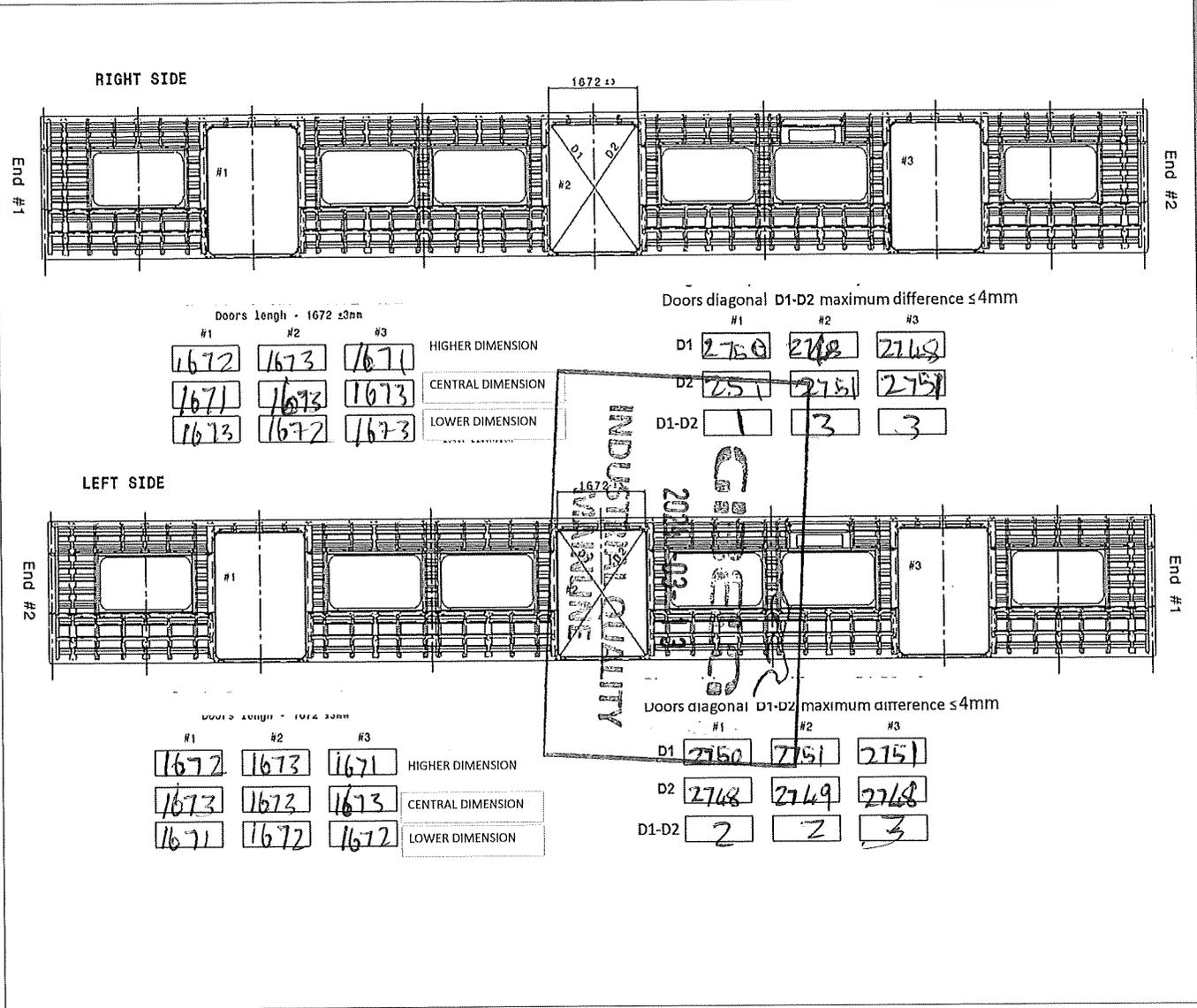
DOOR 2 - RHS

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

DOOR 3 - RHS

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

**CHERCO**  
2024-03-13  
INDUSTRIAL QUALITY  
MANUAL



CARBODY SHELL M1 M3 M4 ASSEMBLY  
DIR30254872

Specifications of Details for CBS measurement GB1220

Rev.	29	Project: PRASA
Date	28/10/2023	
		S1.CB2220.250.V29





CARBODYSHELL M1, M3, M4 ASSEMBLY  
DTR3022548712

Rev. 29  
Date 28/10/2023

Project: PRASA  
SI.CB2220.250.V29

Self Inspection - Final Result

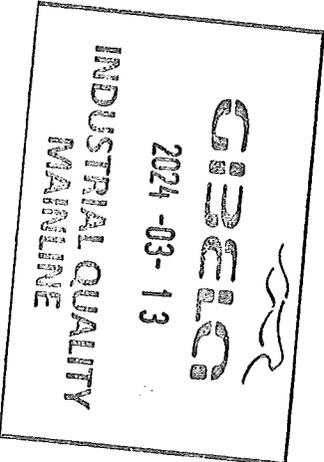
Is the car good to advance to the next workstation/process? (Approval of Operations Manager and Industrial Quality)		DATE	NAME	SIGNATURE
HOLD POINT	GO	22/03/24	Tete10 Operations	
	NO GO	22/03/24	Andoni Industrial Quality	
<small>(If activities are not complete, the missing activities must not impact the next stage)</small> <small>Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party)</small> <small>Then the activities pending that inspection the resolution of the next process Opac: (To describe problems below)</small> <small>Then are non-conformities Impact the quality of the product and there is no corrective action defined yet)</small>			Operations	
In case of "NO GO", describe blocking problems				

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

Item	Description	Responsible	Due date	Status

Operations

\_\_\_\_\_  
Quality



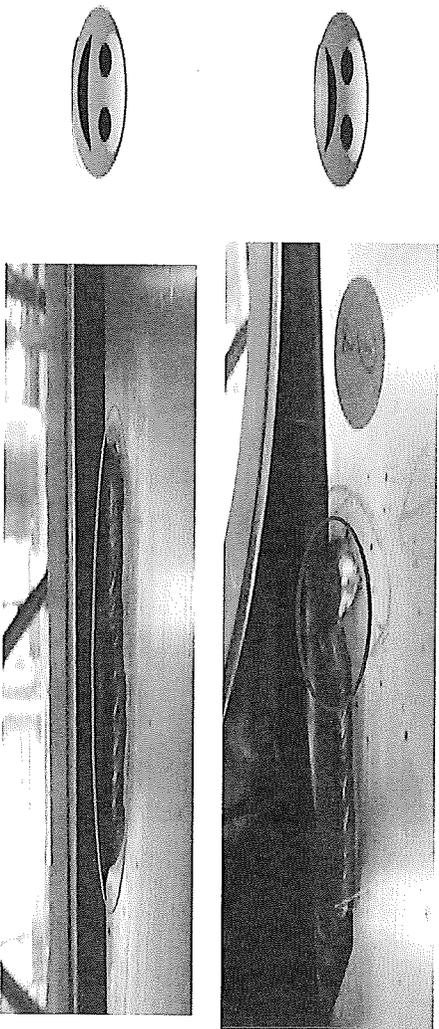


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DTR3022548712

Rev.  
29  
Date  
28/10/2023

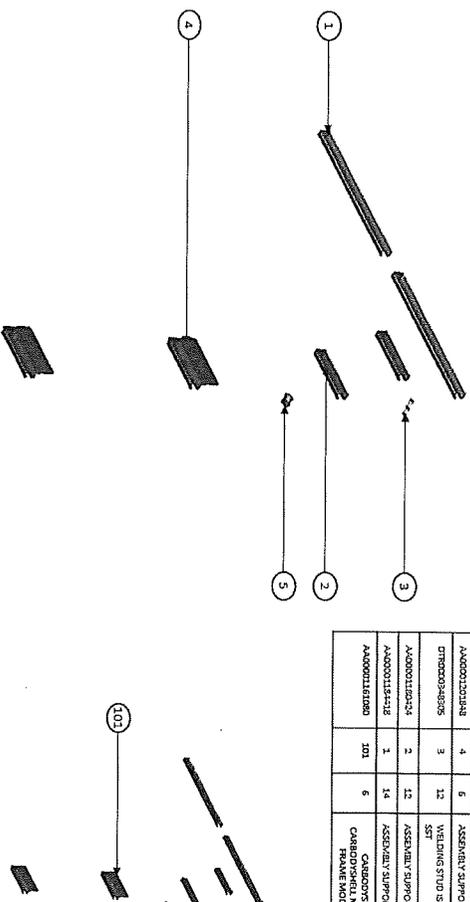
Project: PRASA  
**S1.CB2220.250.V29**

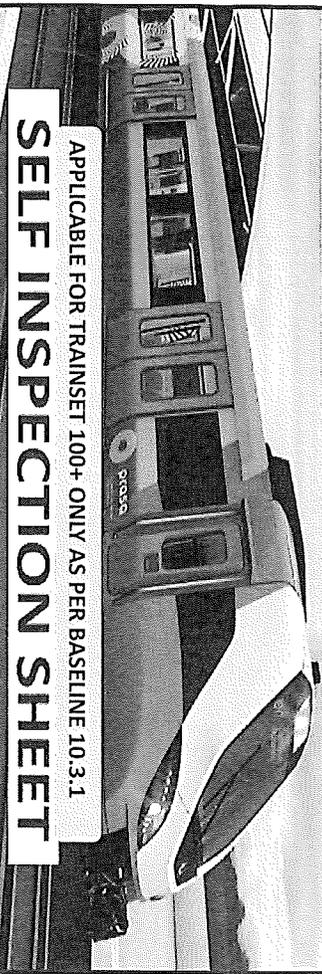
**ANNEXURE A: Arc Welding Quality Acceptance Standard**



Station: CB1220-004- U108 & U107

PART NO.	ITEM NO.	QTY	DESCRIPTION	MASS (KG)
DTR3022548712	5	6	EMPTY STUD 5	0.28
A40000123183	4	6	ASSEMBLY SUPPORT	0.271
DTR3022548712	3	12	WELDING STUD 3023384 FT - M5220-SST	0.007
A400001150124	2	12	ASSEMBLY SUPPORT	0.195
A400001151418	14	14	ASSEMBLY SUPPORT	0.552
A400001151180	101	6	CARBODYSHELL BRACKETS CARBODYSHELL BRACKETS FRAME/MODULE END - DP1	12.112





# APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1

## SELF INSPECTION SHEET

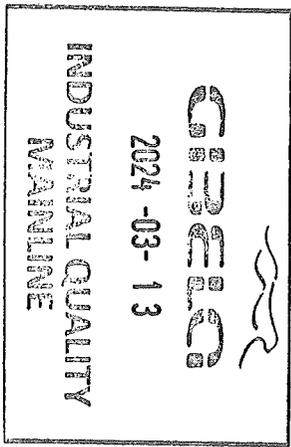
**CONFIDENTIAL INFORMATION**  
 This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

### APPLICATION REFERENCE

MOUNTING	DRAWING	DESCRIPTION	STATION	CAR TYPE				WORK INSTRUCTION	SAFETY ?
				TG1	M4	M2	M3		
<input type="checkbox"/>	DT00000235487	A4D0001278566	CARBOD/SHELL CB2300	X	X			PRR,CB230,DT000002 25487,V20	YES
<input type="checkbox"/>									
<input type="checkbox"/>									

RI	DATE	MODIFICATION CONTENT	RESPONSIBLE	NAME	DATE
1	30/5/2018	Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager	APPROVER	Humeleng Modiba	2018/08/02
			CHECKER	Nosizo Pindela	30/5/2018
			REVISED BY	Nosizo Pindela	30/5/2018
2	2018/05/07	Certain dimensional checks moved to CB1220	APPROVER	Humeleng 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	Humeleng 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	Humeleng 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	Humeleng Modiba	23/08/2019
			CHECKER	Nosizo Pindela	23/08/2019
			REVISED BY	Nosizo Pindela	23/08/2019
15	08/08/2020	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	26/07/2022	Threshold measurements addition	APPROVER	Collins Mhombhi	26/07/2022
			CHECKER	Andani Muthelo	
			REVISED BY	Andani Muthelo	
28	17/10/2022	Added traceability of sealant application	APPROVER	Collins Mhombhi	17/10/2022
			CHECKER	Ntokoza Zwane	
			REVISED BY	Amogelang Mohlamphe	
29	14/04/2023	Added sealant batch number & welding consumables traceability	APPROVER	Vanessa Ntuli	14/04/2023
			CHECKER	Ntokoza Zwane	
			REVISED BY	Amogelang Mohlamphe	
30	06/11/2023	Added threshold traceability for boiler makers and welders	APPROVER	Nobert Tyson	06/11/2023
			CHECKER	Andani Muthelo	
			REVISED BY	Ntokoza Zwane	

TRAINSET	CAR	OPERATOR NAME, MMS NO	DATE	SELF INSPECTION NUMBER	PAGES
219	M03	Amogelang M03004	28/10/2024	SI.CB2230.256.V29	12





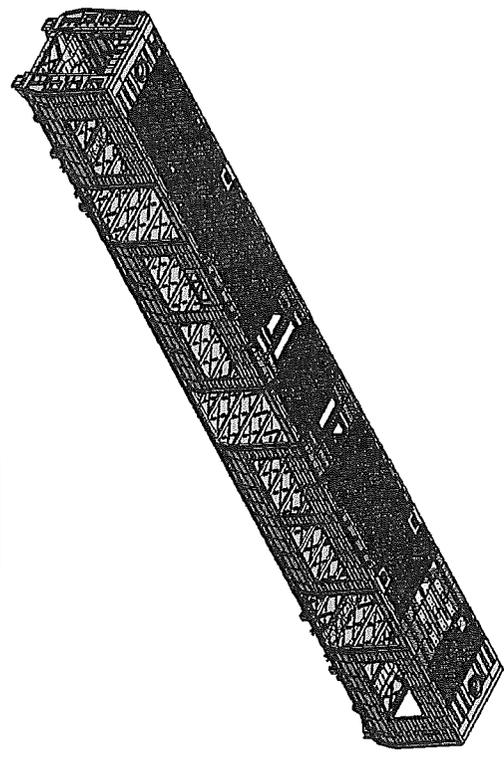
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev. 30  
Date 06/11/2023

Project: PRASA  
SI.CB2230.256.V29

Car: NCR:

Work station: CB2230



**1 - Documentation and Instruments Control**

1.1 - Documentation Control

Document	Type of car				Revision	Observation	OK	NOK	Rework	Signature/Date (Operations)	Signature/Date (Quality)
	M1	M2	M3	M4							
PRA.CB2230.DT00000225487					30		<input checked="" type="checkbox"/>		N/A	<i>[Signature]</i> 23/03/24	<i>[Signature]</i> 23/03/24

1.2 - Instruments Control

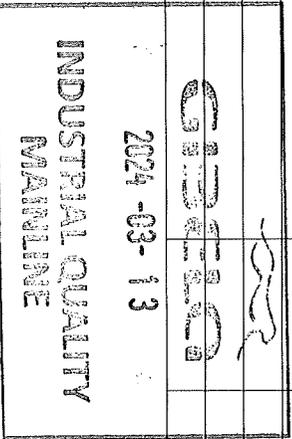
Monitoring and Measuring Instrument Control - Used for Special Process

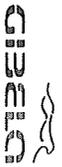
Instruments	Serial number	Calibration or Verification Validation Date	OK	NOK	Signature/Date (Operations)	Signature/Date (Quality)
Tubular measuring tape	12066-2	2025/02/19	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>[Signature]</i> 23/03/24	<i>[Signature]</i> 23/03/24
Combination square	907110 396	2024/06/105	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>[Signature]</i> 23/03/24	<i>[Signature]</i> 23/03/24
	9059 0079	2025/02/13	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>[Signature]</i> 23/03/24	<i>[Signature]</i> 23/03/24

1.3 Consumables

Welding Consumable Control - Used for Special Process

Filler Material	Heat Number	Welding Process	OK	NOK	Signature/Date (Manufacturing)	Signature/Date (Quality)
308LSi	E21007	MIG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>[Signature]</i> 23/03/24	<i>[Signature]</i> 23/03/24





CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
30  
Date  
06/11/2023

Project: PRASA  
SI.CB2230.256.V29

II - Self Inspection - Items to Check

II.1 - Items to check

Item	Picture/Drawing	Description	Acceptance criteria / Record	OK	NOV	Retort	Signature/Date (Operations)	Signature/Date (Quality)
01	N/A	Assembly according to Instruction Engineering n° PRA.CB1 230.DT00000225487 Verification of fitment for all brackets.	PRA.CB1 230 DT00000225487	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
02	N/A	Carshell free of significant flaws which compromise the appearance or functionality	DTD00000210675	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
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"/>			23/03/24 M. P. A.	23/03/24 P.
04		Cleaning of all Stainless Steel Surface	According TO GIB-WEL - PROC-0002	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
05		Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document.	Approved according specified on pages below.	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
06		Perform VISUAL inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) of IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and filler sampling as described in DTD00000225487	 IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000 DT00000210658	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
07	N/A	Before application of sealant record the expiry date and make sure that the room temperature and humidity are within specified values as per Works Instructions Specified:  Temperature Min - Max (°) Min-Max 10°C - 35°C Relative humidity Min - Max (%) 25% - 80%	Sealant Batch No: 20164257 Exp Date: 03/24  Actuals Temperature: 17°C Humidity: 75%	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
08	N/A	Verification of sealant application on the roof and sidewall finishers.	Sealant must be: -Applied straight and even -Free of gaps, cracks, damage and debris (flashes, dirt, dust)  Refer to Annexure B	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.
09	N/A	Verification of sealant application in certain regions in the drawing.	AADD0001278566	<input checked="" type="checkbox"/>			23/03/24 M. P. A.	23/03/24 P.



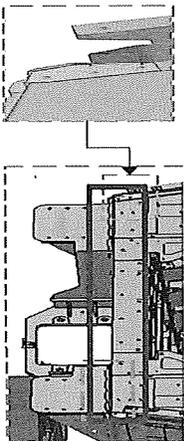
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
30  
Date  
06/11/2023

Project: PRASA  
SI.CB2230.256.V29

II - Self Inspection - Items to Check

AREA 1



OPERATOR  
(Name & sign):

Lenny

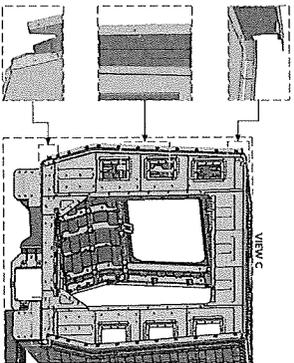
OPERATOR  
(Name & sign):

Lenny

OPERATOR  
(Name & sign):

Lenny

AREA 2 (VIEW C)



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

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

**D,E,F,G,H,I**

Operator (Name & sign): **Simie**

**Simie**

Operator (Name & sign):

Operator (Name & sign): **ISHENOLO**

**ISHENOLO**

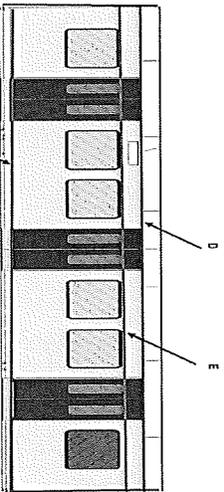
Operator (Name & sign): **ISHENOLO**

**ISHENOLO**

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

\_\_\_\_\_

H



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

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

**D,E,F,G,H,I**

Operator (Name & sign): **Simie**

**Simie**

Operator (Name & sign):

Operator (Name & sign): **ISHENOLO**

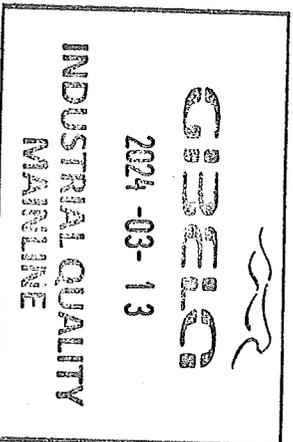
**ISHENOLO**

Operator (Name & sign): **ISHENOLO**

**ISHENOLO**

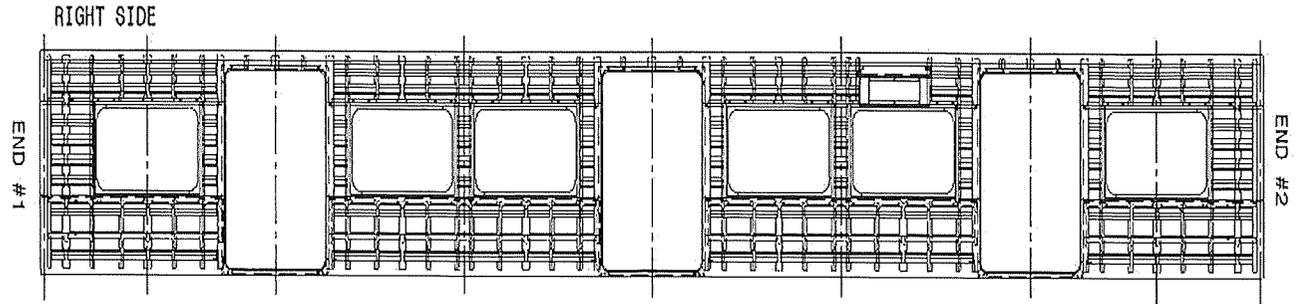
Operator (Name & sign): \_\_\_\_\_

\_\_\_\_\_



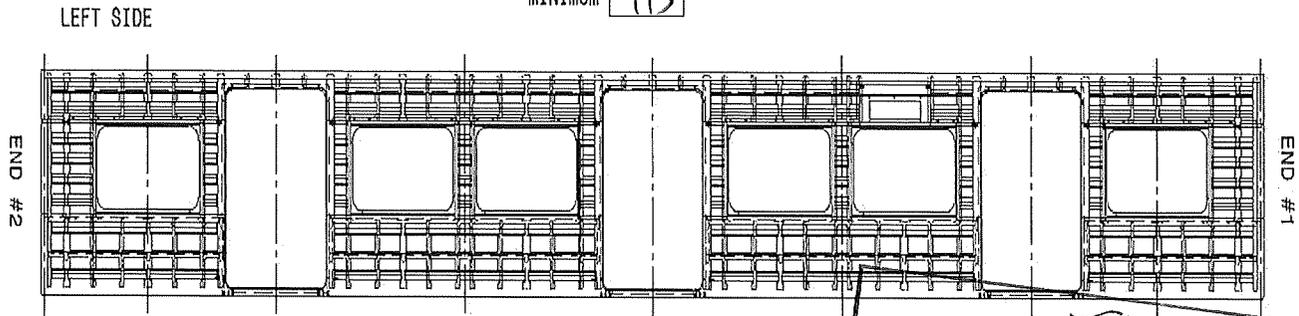
Specifications of Details for CBS measurement CB1230

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



MAXIMUM 1.6

MINIMUM 1.3



MAXIMUM 1.7

MINIMUM 1.2





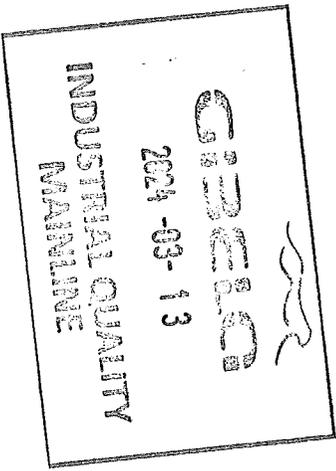
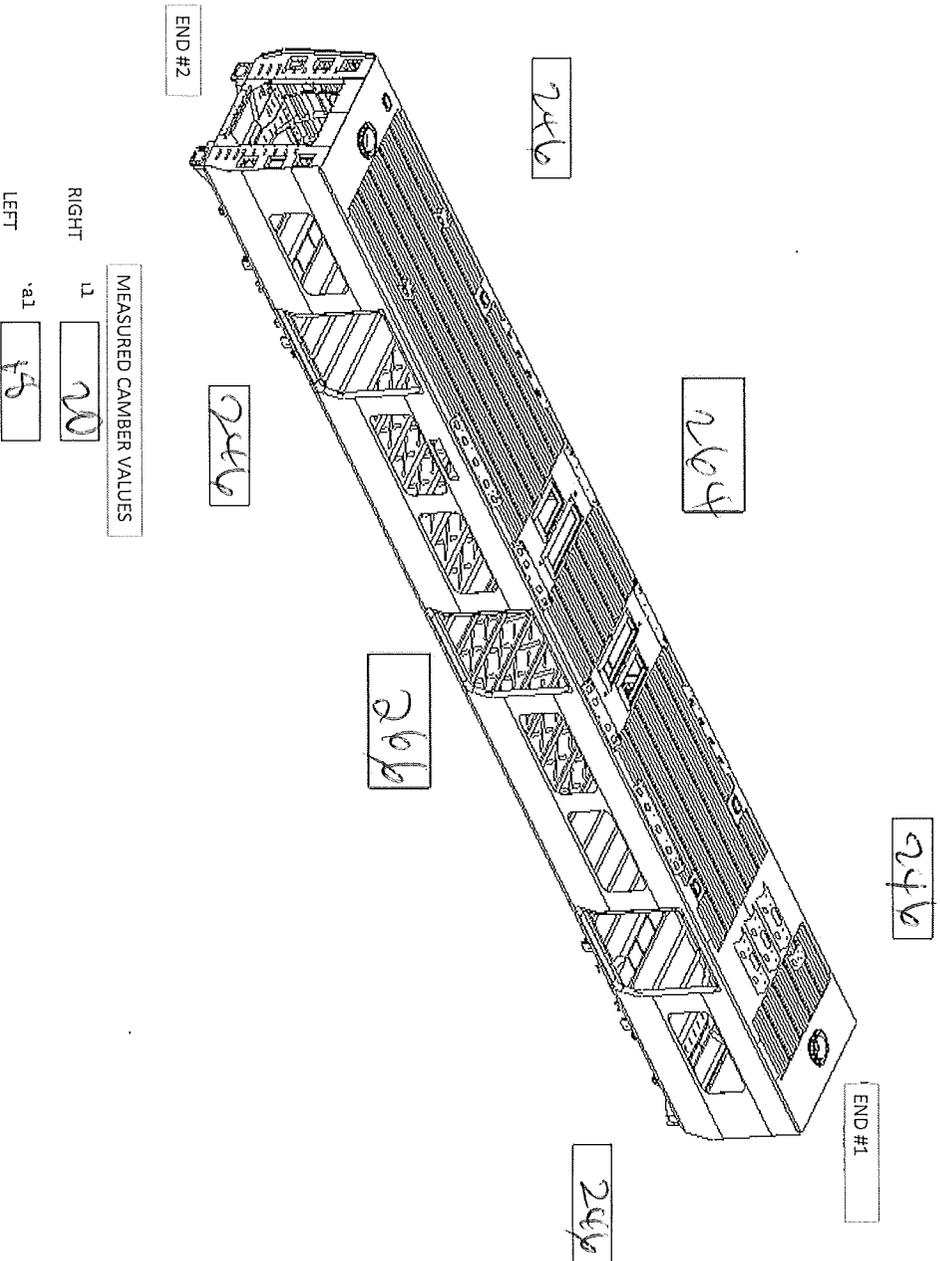
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT100000225487

Rev.  
30  
Date  
06/11/2023

Project: PRASA  
SI.CB2230.256.V29

Specifications of Details for GBS measurement GB1230

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





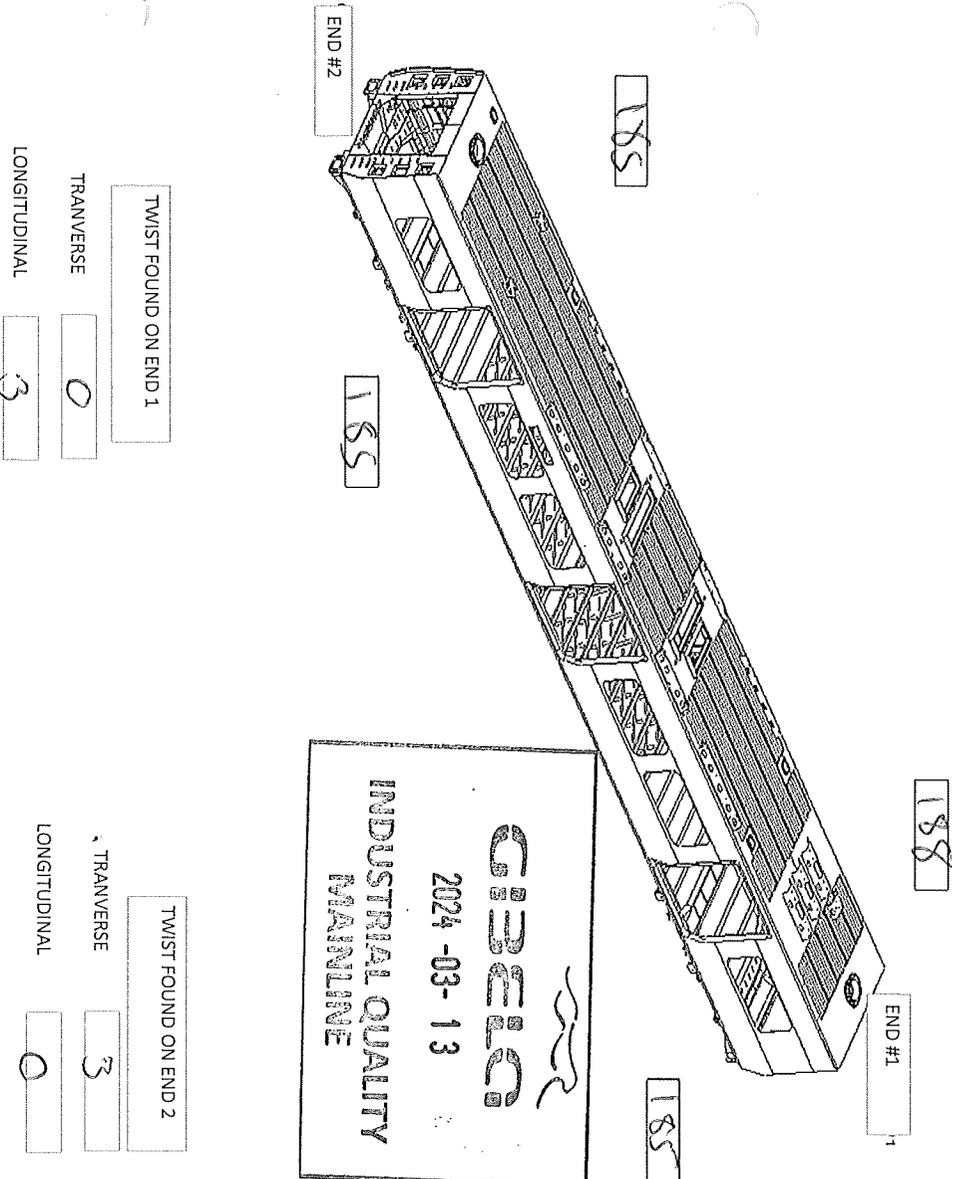
CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.  
30  
Date  
06/11/2023

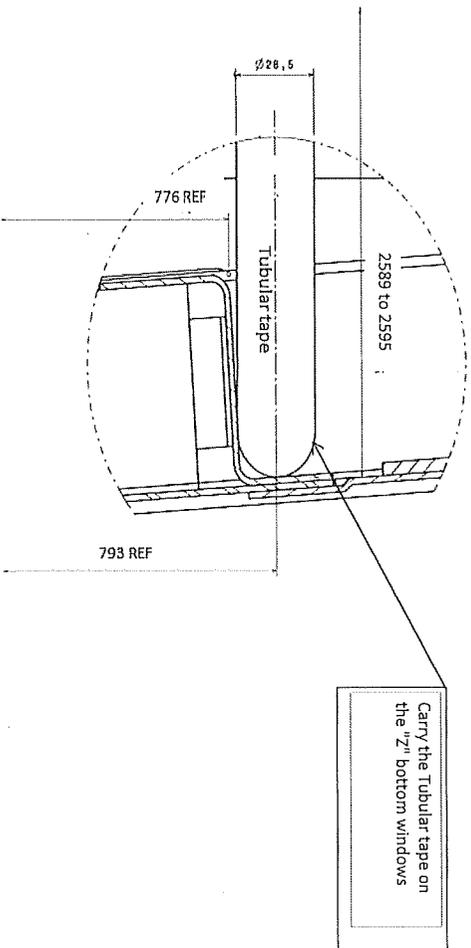
Project: PRASA  
SI.CB2230.256.V29

Specifications of Details for GBS measurement GB1230

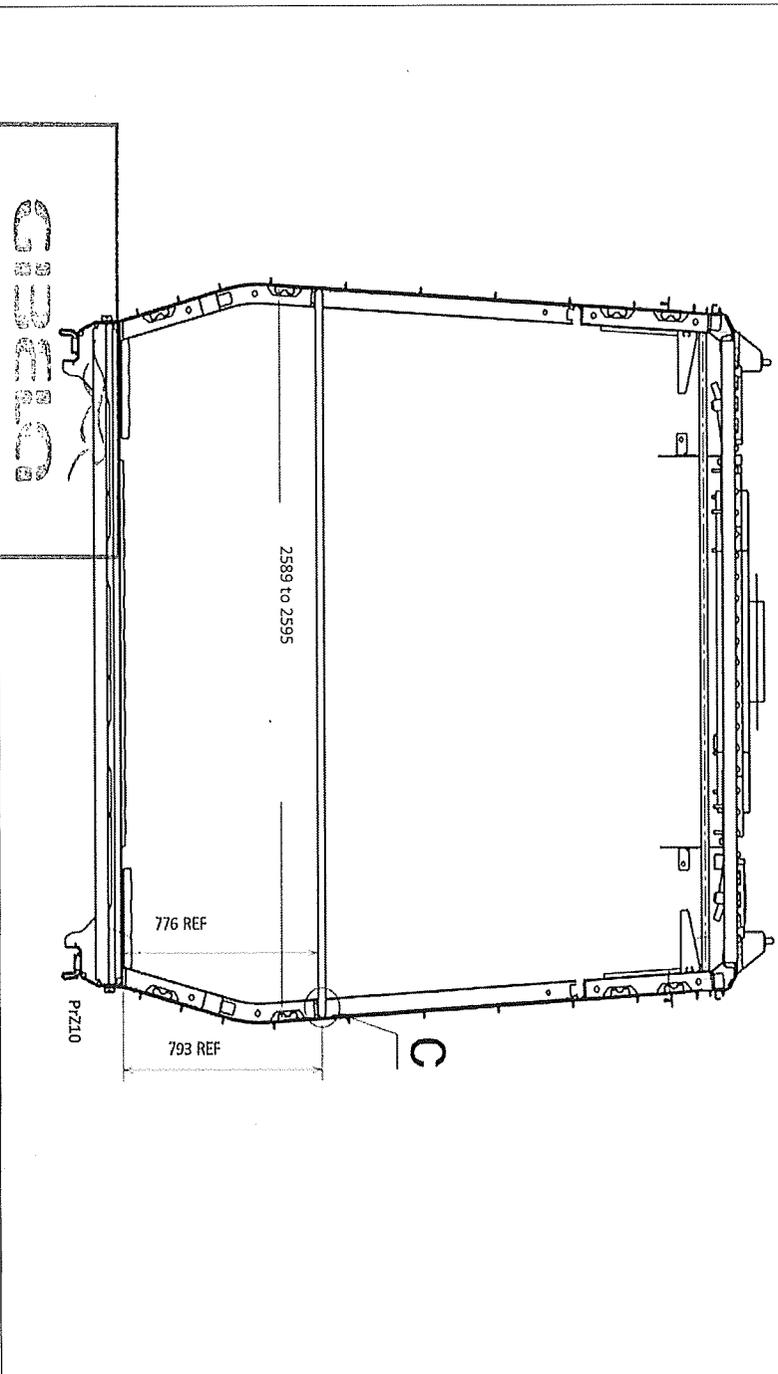
Twist measured in transversal and longitudinal = Maximum 3mm. Measure twist on air spring plates (LHS and RHS), both End 1 and End 2 following twist measurement document.



Specifications of Details for GBS measurement GB1230



Detail C



GIBEL

2024-03-13

INDUSTRIAL QUALITY  
MARLINE

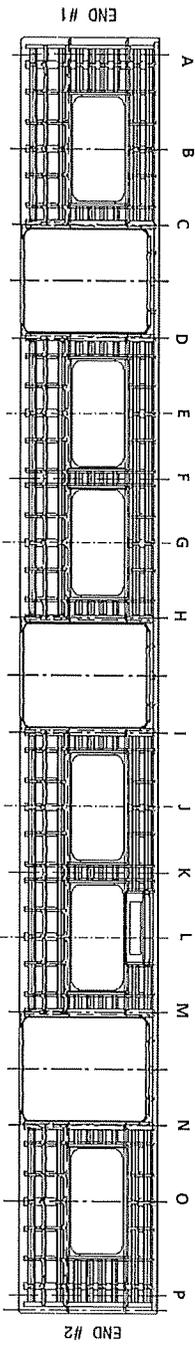


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

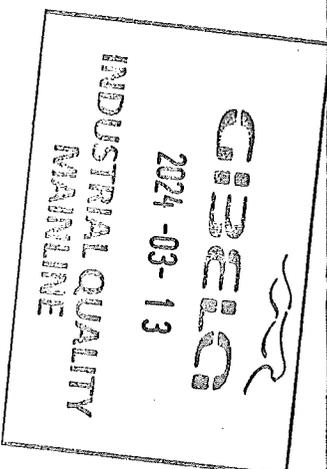
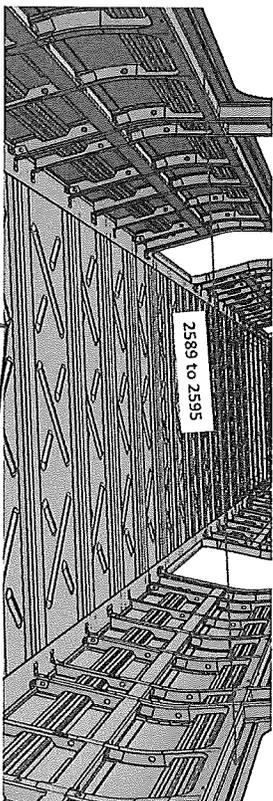
Rev. 30  
Date 06/11/2023

Project: PRASA  
SI, CB2230.256.V29

Specifications of Details for GBS measurement GB1230



A	2595
B	25 89
C	25 93
D	25 95
E	25 96
F	25 96
G	25 96
H	25 93
I	25 96
J	25 90
K	25 91
L	25 94
M	25 93
N	25 99
O	25 93
P	25 95



Threshold verification

Nominal value :38

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

BOILER MAKER: mmathapeto Alaska  
 WELDER: Zante Alaska

Dye penetrant test

Dye-penetration test to be performed by quality personnel







CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev. 30  
Date 06/11/2023

Project: PRASA  
SI.CB2230.256.V29

Self Inspection - Final Result

Is the car good to advance to the next workstation/process? (Approval of Operations and Industrial Quality)		DATE	NAME	SIGNATURE
GO	(If activities are not complete, the missing activities must not impact the next stage)	23/03/24	manatpapad Operations	W&C
	Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)	23/03/24	Nholcan Industrial Quality	
NO GO	There are activities pending that impact the activities of the next process Obs: (To describe problems below)		Operations	
	There are non-conformities impact the quality of the product and there is no corrective action defined yet)		Industrial Quality	

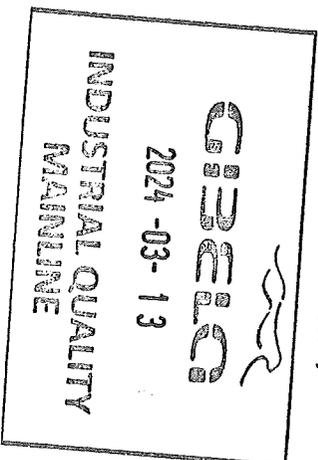
In case of "NO GO", describe blocking problems

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

Item	Description	Responsible	Due date	Status

Operations

Quality



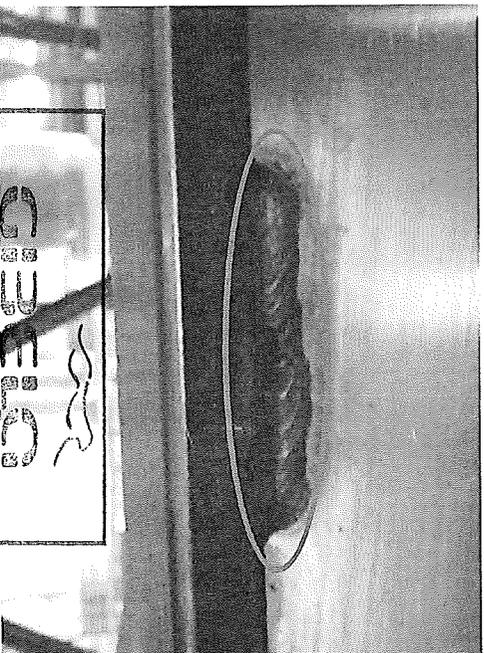


CARBODYSHELL M1,M3,M4 ASSEMBLY  
DT00000225487

Rev.	30
Date	06/11/2023

Project: PRASA  
SI.CB2230.256.V29

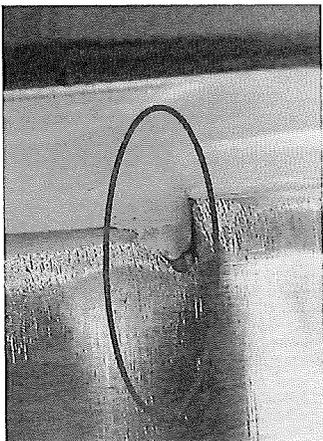
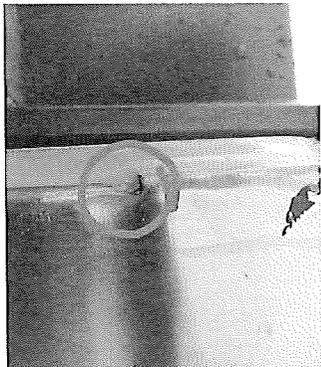
ANNEXURE A: Arc Welding Quality Acceptance Standard



  
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INDUSTRIAL QUALITY  
MAINTENANCE

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		Date 06/11/2023	

**ANNEXURE B: Sealant**



  
**GIBELCO**  
 2024 -03- 13  
**INDUSTRIAL QUALITY**  
**MANLINE**