
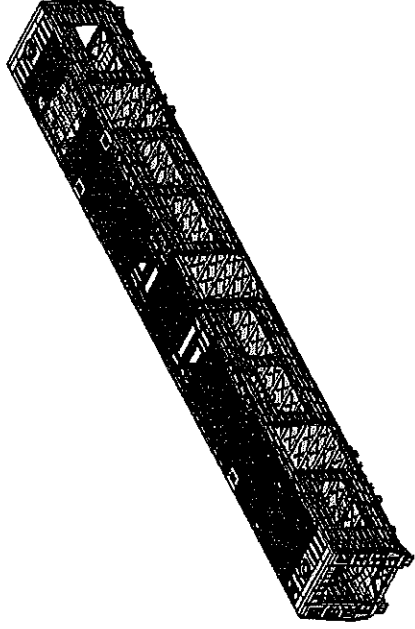


CONFIDENTIAL INFORMATION
This document and the information contemplated therein have to be considered as Confidential Information pursuant to the provisions of Clause 25 of the MSA, and treated as such.


| APPLICATION REFERENCE | | | | | | | | | | |
|---------------------------------------|---------------|---|----------|------------------------|----|----|-------------|--------------------|---------------------|-----|
| DRAWING | DESCRIPTION | STATION | CAR TYPE | | | | | WORK INSTRUCTION | SAFETY ? | |
| | | | TCL | M4 | M6 | M8 | TCL | | | |
| <input type="checkbox"/> 0TR3025487/3 | AAD0001278566 | ASSEMBLY | CB1230 | | | | | | PRA.CB1210.0TR30225 | YES |
| <input type="checkbox"/> | | | | | | | | | 487/3.V25 | |
| REV | DATE | MODIFICATION CONTENT | | | | | RESPONSIBLE | NAME | DATE | |
| 0 | 10/01/2018 | GIBELA NEW CREATION | | | | | APPROVER | Itumeleng Modiba | 10/01/2018 | |
| | | | | | | | CHECKER | Nosizo Pindela | 10/05/2018 | |
| | | | | | | | COMPLIER | Thanyani Mathhegu | 10/01/2018 | |
| 1 | 2018/05/18 | Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager | | | | | APPROVER | Itumeleng Modiba | 2018/05/18 | |
| | | | | | | | CHECKER | Nosizo Pindela | 2018/05/18 | |
| | | | | | | | REVISED BY | Ramokone Motama | 2018/05/18 | |
| 2 | 2018/07/04 | Certain dimensional checks moved to CB1220 and CB1230 | | | | | APPROVER | Itumeleng Modiba | 2018/07/04 | |
| | | | | | | | CHECKER | Nosizo Pindela | 2018/07/04 | |
| | | | | | | | REVISED BY | Ramokone Motama | 2018/07/04 | |
| 3 | 2018/12/12 | Added dimensional check points to CB1210 | | | | | APPROVER | Itumeleng Modiba | 2018/12/12 | |
| | | | | | | | CHECKER | Nosizo Pindela | 2018/12/12 | |
| | | | | | | | REVISED BY | Ramokone Motama | 2018/12/12 | |
| 5 | 22/01/2019 | As per Baseline 10.2 | | | | | APPROVER | Itumeleng Modiba | 22/01/2019 | |
| | | | | | | | CHECKER | Nosizo Pindela | 22/01/2019 | |
| | | | | | | | REVISED BY | Vanesa 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 | Mkhombi 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 | Mkhombi collins | 19/02/2022 | |
| | | | | | | | CHECKER | Ardani Muthelo | 19/02/2022 | |
| | | | | | | | REVISED BY | Ardani 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 | Ngothi Tyson | 27/07/2023 | |
| | | | | | | | CHECKER | Zwane Ntokozo | 27/07/2023 | |
| | | | | | | | REVISED BY | Mehlampe Amogelang | 27/07/2023 | |
| 28 | 07/11/2023 | Addition of welding traceability | | | | | APPROVER | Ngothi Tyson | 07/11/2023 | |
| | | | | | | | CHECKER | Ardani Muthelo | 07/11/2023 | |
| | | | | | | | REVISED BY | Ntokozo Zwane | 07/11/2023 | |
| TRAINSET | CAR | OPERATOR NAMES ALPS NO | DATE | SELF INSPECTION NUMBER | | | PAGES | | | |
| Q15 | M1 | WINGA 471401 | 28/02/24 | SI.CB1210.254.V28 | | | 17 | | | |

| | | | | |
|---|--|--|-------------------------|-------------------|
|  | CARBODYSHELL M1 ASSEMBLY DTR30225487/3 | | Rev. 28 | Project: PRASA |
| | | | Date 07/11/2023 | SI.CB1210.254.V28 |
| Code: M1 | NORC | | Work station: CB1210 | |






I - Documentation and Instruments Control



1.1 - Documentation Control

| Document | Type of car | | | | | Revision | Observation | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|---------------|-------------|----|----|----|----|----------|-------------|----|---|--------------------------|
| | DL | EW | EW | EW | EW | | | | | |
| DTR30225487/3 | ✓ | | | | | | | ✓ |  | 28/02/24 |

1.2 - Instruments Control

| Monitoring and Measuring Instrument Control - Used for Special Process | | | | | |
|--|---------------|--|----|---|--------------------------|
| Instruments | Serial number | Calibration or Verification Validation Date | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
| TUBULAR | 22713 | 04/10/23 | ✓ |  | 28/02/24 |
| 30M TAPE | 6187P 00874 | 23/03/31 | ✓ |  | 28/02/24 |
| LASER TAPE | 125425924 | 08/10/24 | ✓ |  | 28/02/24 |

1.3 Consumables

| Welding Consumable Control - Used for Special Process | | | | |
|---|-------------|-----------------|----|---|
| Filler Material | Host Number | Welding Process | OK | Signature/Date (Manufacturing) |
| AUT PAD 308LS1 | 622880 | MIG | ✓ |  |
| ER 309 LS1 | 318394 | MIG | ✓ |  |
| | | | | |
| | | | | |
| | | | | |
| | | | | |




CARBODYSHELL M1 ASSEMBLY DTR30225487/3

Rev.
28
Date
07/11/2023

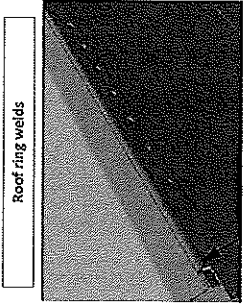
Project: PRASA
SLCB1210.254.V28


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 ports loaded (Sidewalls, Endframes, Roof and Underframe) | DTD00000311225 | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |
| 02 | N/A | Carshell free of significant flows which compromise the appearance or functionality | DTD00000210675 | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |
| 03 | REFER TO ANNEXURE A | Spot welding inspected and approved according to procedure | IND-SAL-WMS-016 DTD00000210675 | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |
| 04 | REFER TO ANNEXURE B | Arc welding inspected and approved according to procedure | IND-SAL-WMS-016 REFER TO GIB - TYPEDEF - ARC - 0000 | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |
| 05 | | Cleaning of all Stainless Steel Surface | According TO GIB-WEL - PROC-0002 | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |
| 06 | | Functional dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document | Approved according specified on pages below. | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |
| 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 DTD00000210658. | As the welding procedure IND-SAL-WMS-018 and DTD00000210658. | ✓ | | | M/O 28/02/24 28/02/24 | 28/02/24 | |

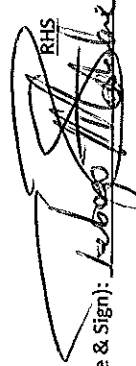
| | | | |
|---|--|--------------------|-------------------------------------|
|  | CARBODYSHELL M1 ASSEMBLY DTR00225487/3 | Rev. 28 | Project: PRASA SI.CB1210.254.V28 |
| | | Date 07/11/2023 | |

Welder Traceability

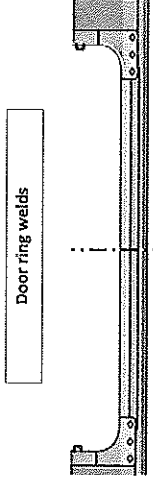


| | |
|---|--|
| LHS Boiler maker (Name & Sign): <u>LINGA [Signature]</u> | Welder (Name & Sign): <u>ROBERT BULL</u> |
| RHS  | |
| Boiler maker (Name & Sign): <u>Jobygo [Signature]</u> | |

END 1

| | |
|---|--|
| LHS Boiler maker (Name & Sign): <u>LINGA [Signature]</u> | Welder (Name & Sign): <u>ROBERT BULL</u> |
| RHS  | |
| Boiler maker (Name & Sign): <u>Jobygo [Signature]</u> | |

END 2



| | |
|--|--|
| LHS Boiler maker (Name & Sign): <u>CEZARD [Signature]</u> | Welder (Name & Sign): <u>KEVIN K. REED</u> |
|--|--|

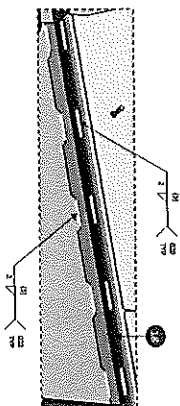
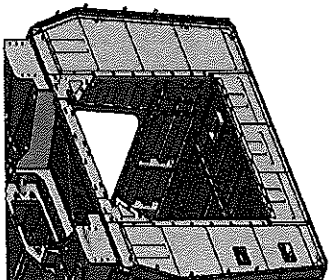
| | |
|--|--|
| RHS Boiler maker (Name & Sign): <u>CEZARD [Signature]</u> | Welder (Name & Sign): <u>KEVIN K. REED</u> |
|--|--|



CARBODYSHELL M1 ASSEMBLY DTR30225487/3

| | |
|--------------------|-------------------|
| Rev. 28 | Project: PR05A |
| Date 07/11/2023 | SI.CB1210.254.V28 |

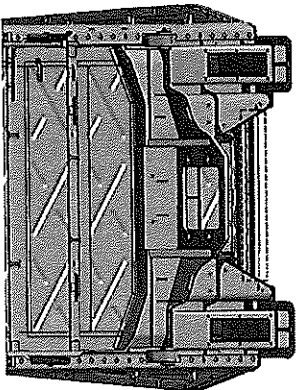
EUF Reinforcement Plates



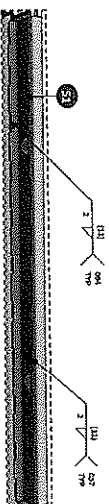
END 1

Boiler maker (Name & Sign): Lawrence Weyer

Welder (Name & Sign): Barber Blair



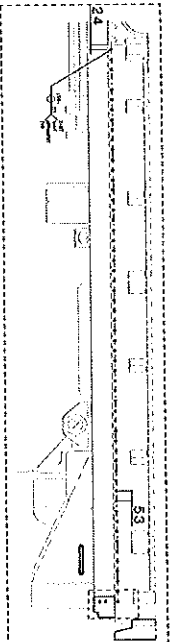
END 2




END 2

Boiler maker (Name & Sign): Jim Barber

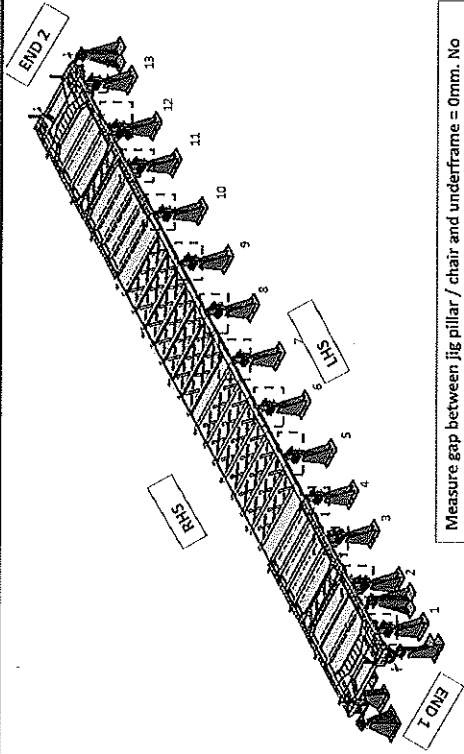
Welder (Name & Sign): Wison JH 18/02/24



FEDOU
OPERATOR: Barber Blair

| | | | |
|---|---------------------------------------|------------------|-------------------------------------|
|  | CARBODYSHELL M1 ASSEMBLY DTR0025487/3 | Rev. 28 | Project: PRASA SI.CB1210.254.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 foundon each jig pillars / chair and underframe should be 0mm.

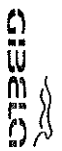
| | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Left Hand Side | | | | | | | | | | | | | |
| Right Hand Side | | | | | | | | | | | | | |

Signature Operations:  Date: 28/02/24

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

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

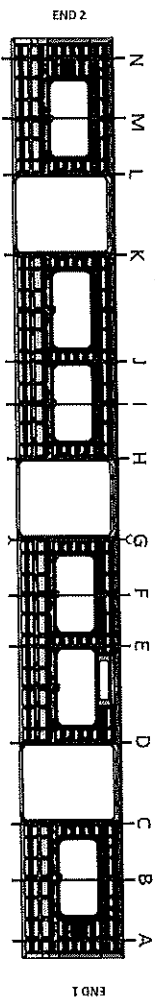
Signature Industrial Quality:  Date: 28/02/24



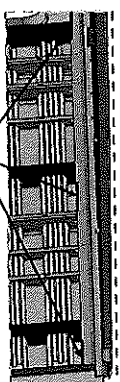
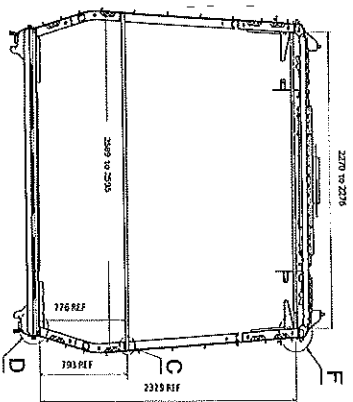
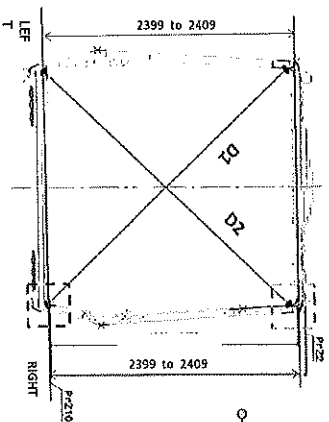
CARBODYSHELL M1 ASSEMBLY DTR302254873

| | |
|------------|-------------------|
| Rev. | Project: PRASA |
| 28 | SI.CB1210.254.V28 |
| Date | |
| 07/11/2023 | |

Specifications of Details for CBS measurement



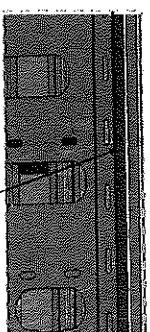
9



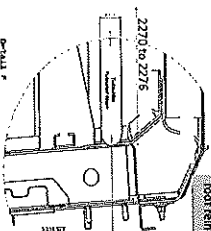
Measurement positions on roof and side wall corner corner




Measurement positions on side wall and side sill corner

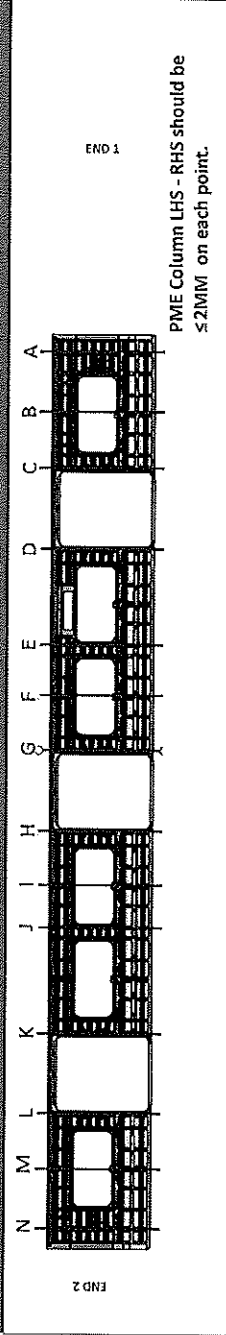


Measurement area measurement positions on roof reinforcement area



Detail 1
Measurement positions on roof reinforcement area

| | | | |
|---|---------------------------------------|---|-------------------------------------|
|  | CARBODYSHELL M1 ASSEMBLY DTR3025487/3 | Rev. 28 | Project: PRASA SI.CB1210.254.V28 |
| | | Date 07/11/2023 | |
| | | Specifications of Details for CBS measurement | |

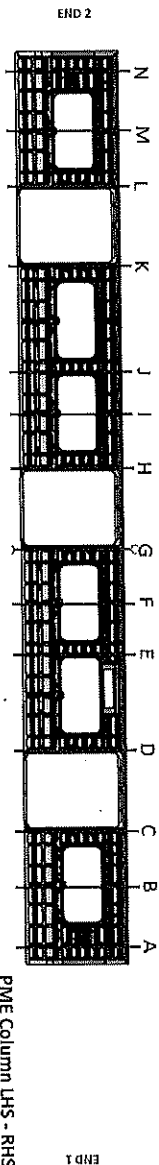


BEFORE WELDING

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

28/02/24

Specifications of Details for CB5 measurement




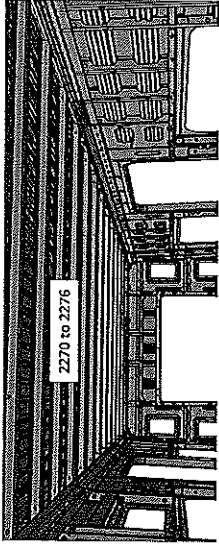
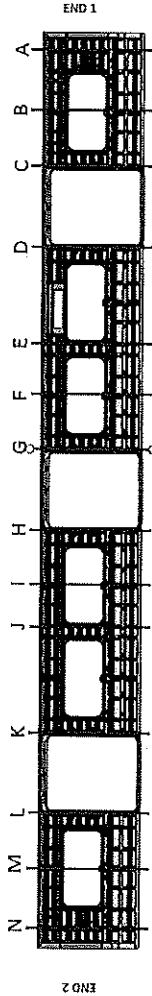
PME Column LHS - RHS should be $\leq 2MM$ on each point.

AFTER WELDING

| | Record D1 values | Record D2 values | D1-D2 $\leq 5mm$ | 2399 to 2409 | 2399 to 2409 (RHS) | LHS-RHS ≤ 2 |
|---|------------------|------------------|------------------|--------------|--------------------|------------------|
| A | 3298 | 3296 | 2 | 2406 | 2408 | 2 |
| B | 3268 | 3265 | 3 | 2407 | 2406 | 1 |
| C | 3296 | 3296 | 0 | 2403 | 2406 | 1 |
| D | 3295 | 3296 | 1 | 2404 | 2405 | 1 |
| E | 3265 | 3265 | 0 | 2405 | 2403 | 0 |
| F | 3266 | 3265 | 1 | 2406 | 2404 | 2 |
| G | 3296 | 3296 | 0 | 2405 | 2406 | 1 |
| H | 3296 | 3297 | 1 | 2402 | 2404 | 0 |
| I | 3265 | 3266 | 1 | 2404 | 2402 | 0 |
| J | 3266 | 3266 | 0 | 2407 | 2406 | 1 |
| K | 3295 | 3295 | 0 | 2403 | 2405 | 2 |
| L | 3295 | 3296 | 1 | 2405 | 2406 | 1 |
| M | 3266 | 3268 | 2 | 2405 | 2405 | 0 |
| N | 3296 | 3296 | 0 | 2408 | 2409 | 1 |

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28/02/24

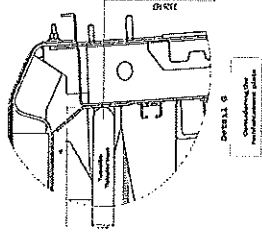
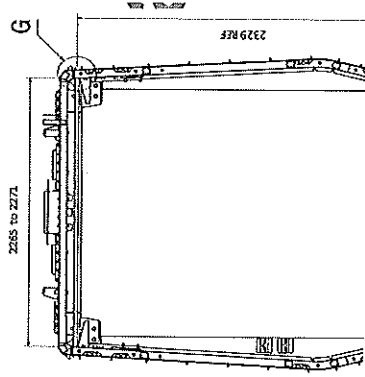
| | | | |
|---|--|----------------------------|-------------------------------------|
|  | CARBODYSHELL M1 ASSEMBLY DTR30225487/3 | Rev. 28 Date 07/11/2023 | Project: PRASA SI-CB1210.254.V28 |
| | | CBS measurement | |
| | | BEFORE WELDING | |



| | |
|---|--------------|
| | 2270 to 2276 |
| A | 2271 |
| B | 2273 |
| C | 2272 |
| D | 2273 |
| E | 2276 |
| F | 2274 |
| G | 2272 |
| H | 2273 |
| I | 2276 |
| J | 2277 |
| K | 2273 |
| L | 2271 |
| M | 2274 |
| N | 2272 |

1990 to

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



6/19
28/02/2024

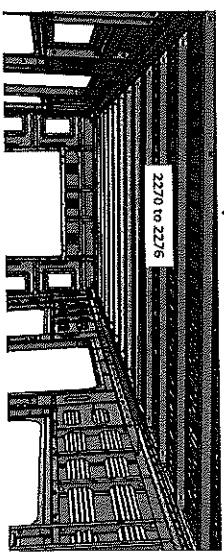
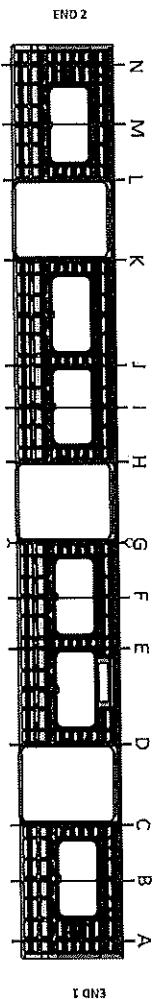


CARBODYSHELL M1 ASSEMBLY DTR30225487/3

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SI.CB1210.254.V28

CBS measurement

AFTER WELDING

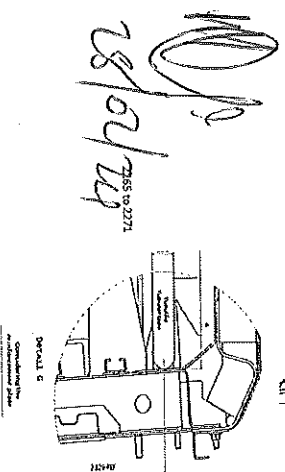


Do not consider reinforcement (Take measurements top area of zee profile)



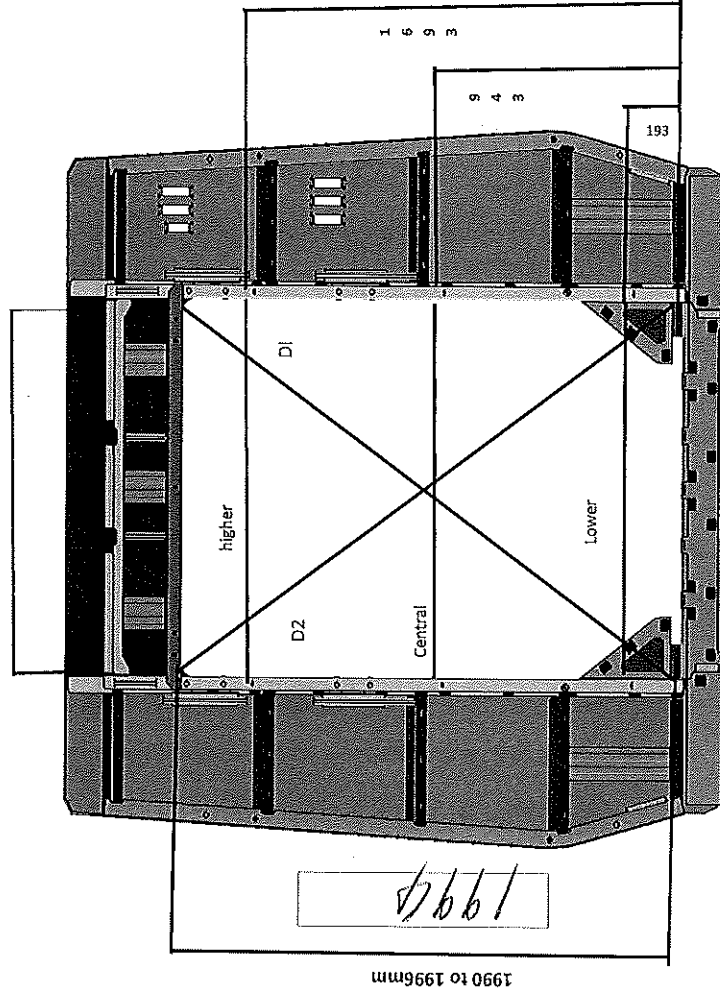
Take measurement close to radius (considering reinforcement)

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



Specifications of Details for CBS measurement

End frame 1



1380 to 1382 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

Higher Dimension

1382

D1

2414

Central Dimension

1381

D2

2413

Lower Dimension

1381

D1-D2

1

Dp
28/02/24



CARBODYSHELL M1 ASSEMBLY DTR30225487/3

Rev.

Project PRASA
SI.CB1210.254.V28

28

Date

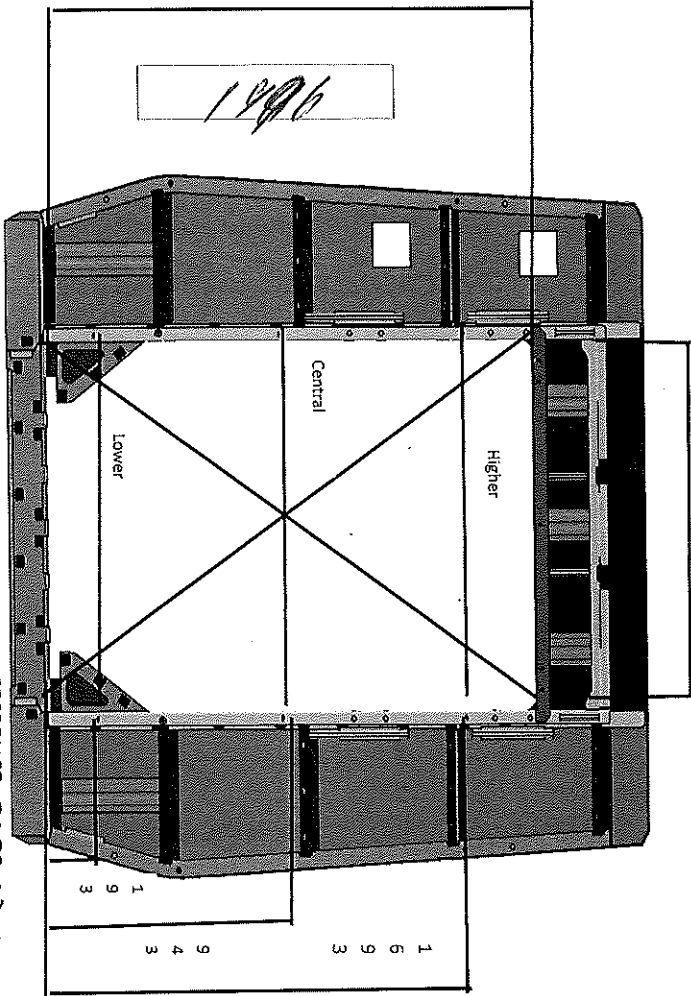
07/11/2023

Specifications of Details for C85 measurement

Endframe 2

1380 to 1382 mm

1990 to 1996mm



1380 to 1382 mm

DIAGONAL DIFFERENCE D1-D2 ≤ 3mm

HIGHER DIMENSION

1381

D1

2413

CENTRAL DIMENSION

1381

D2

2414

LOWER DIMENSION

1381

D1-D2

1

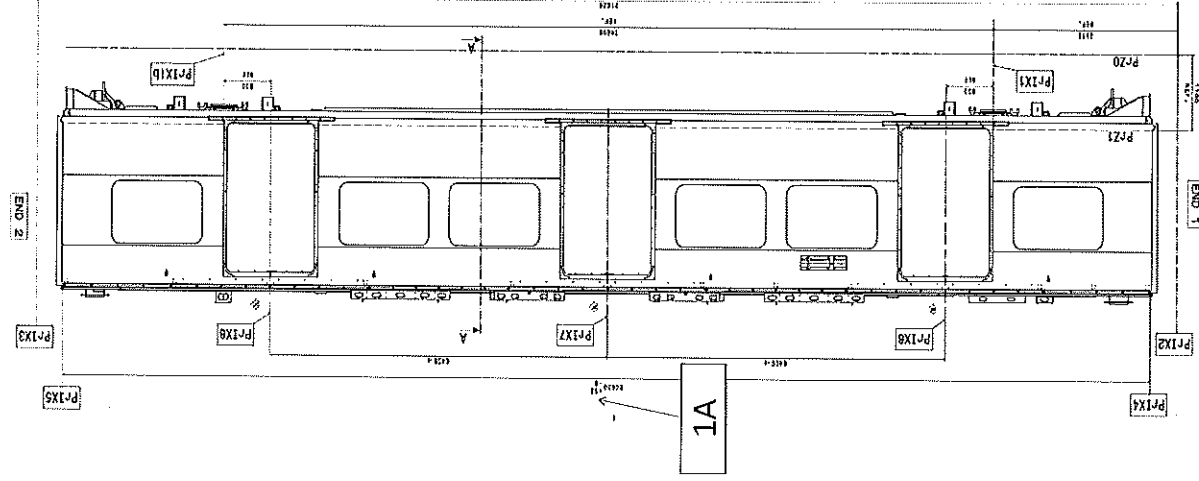
W/O
240224



CARBODYSHELL M1 ASSEMBLY DTR30225487/3

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Date 07/11/2023
Project: PRASA
SI.CB1210.254.V28

Specifications of Details for CBS measurement

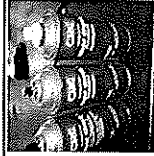



| LEFT SIDE | | |
|-----------|--------------------|-------------|
| | SPECIFICATION SIZE | ACTUAL SIZE |
| 1A | 20632 - 20614 | 20615 |

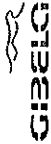
| RIGHT SIDE | | |
|------------|--------------------|-------------|
| | SPECIFICATION SIZE | ACTUAL SIZE |
| 1A | 20632 - 20614 | 20615 |

Dye penetrant test



Dye-penetration test to be performed by quality personnel



|  | | CARBODYSHELL M1 ASSEMBLY DTR302254873 | | Rev. 28 Date 07/11/2023 | | Project: PRASA SI.CB1210.254.V28 | |
|---|--------------------------|---------------------------------------|--|----------------------------------|-----------------------------------|-------------------------------------|--------------------------|
| Item | Description of the Issue | | | | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |
| 11.2 - Check List REX | | | | | | | |
| Check List Items | | | | | | | |
| Item | Picture/Drawing | Description | Crash Record | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) | |
| 01 | N/A | To complete REX | Refer to REX. New defects must be added on the REX | | | | |

| | | | |
|---|---------------------------------------|--------------------|-------------------------------------|
|  | CARBODYSHELL M1 ASSEMBLY DTR3025487/3 | Rev. 28 | Project: PRASA SI.CB1210.254.V28 |
| | | Date 07/11/2023 | |

Self Inspection - Final Result



| | | DATE | NAME | SIGNATURE |
|------------|----|---|--------------------|---|
| HOLD POINT | GO | (If activities are not complete, the missing activities must not impact the next stage) | 28/12/2023 LUNBA |  |
| | | Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the component party.) | 28/12/2023 Redmond |  |
| | | There are activities pending that impact the activities of the next process Cok: (To describe problems below) | | |
| | | There are non-conformities impact the quality of the product and there is no corrective action defined yet) | | |
| | | | Industrial Quality | |
| | | | 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

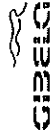


SELF INSPECTION SHEET

APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1

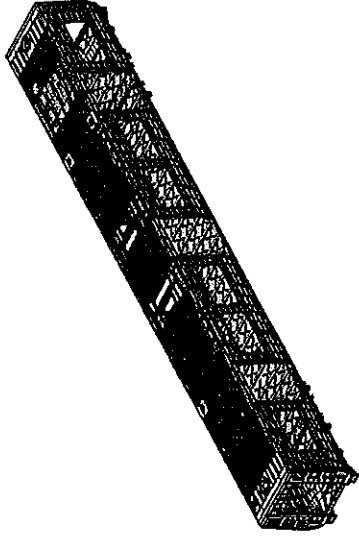
CONFIDENTIAL INFORMATION
 This document and the information contemplated therein have to be considered as Confidential information pursuant to the provisions of Clause 25 of the MSA, and treated as such.

| APPLICATION REFERENCE | | | | | | | | | |
|--------------------------|------------|---|----------|------------------------|----|-------------|------------------|-----------------------------------|---------|
| FOUNDING | DRAWING | DESCRIPTION | STATION | CAR TYPE | | | | WORK INSTRUCTION | SHEET 1 |
| | | | | TC | MA | MA | MA | TC | |
| <input type="checkbox"/> | 07R0234672 | GA8807SHSL M.L.M.M. ASSGMENT | GB220 | | X | X | X | PRASA CB1220.07R0232546 7/2/22 | YES |
| <input type="checkbox"/> | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | |
| REV. | DATE | MODIFICATION CONTENT | | | | RESPONSIBLE | NAME | DATE | |
| 0 | 01/02/2018 | GIBELA NEW CREATION | | | | APPROVER | burneleng Mediba | 01/02/2018 | |
| | | | | | | CHECKER | Ntsoa Findle | 01/02/2018 | |
| | | | | | | COMPLER | Thangeni Muthelo | 01/02/2018 | |
| 1 | 18/05/2018 | Team leader and Quality Technician to sign Change final signature from PNE Manager to Quality manager | | | | APPROVER | burneleng Mediba | 18/05/2018 | |
| | | | | | | CHECKER | Ntsoa Findle | 18/05/2018 | |
| | | | | | | REVISED BY | Ramokone Mearna | 18/05/2018 | |
| 2 | 2018/07/05 | Certain dimensional checks added and others moved to CB1210 | | | | APPROVER | burneleng Mediba | 2018/07/05 | |
| | | | | | | CHECKER | Ntsoa Findle | 2018/07/05 | |
| | | | | | | REVISED BY | Ramokone Mearna | 2018/07/05 | |
| 3 | 2018/06/12 | Width tolerance as per DT000036600 | | | | APPROVER | burneleng Mediba | 2018/06/12 | |
| | | | | | | CHECKER | Ntsoa Findle | 2018/06/12 | |
| | | | | | | REVISED BY | Ntsoa Findle | 2018/06/12 | |
| 5 | 24/01/2019 | As per Baseline 10.2 | | | | APPROVER | burneleng Mediba | 24/01/2019 | |
| | | | | | | CHECKER | Ntsoa Findle | 24/01/2019 | |
| | | | | | | REVISED BY | Vanessa Ntuli | 24/01/2019 | |
| 6 | 13/03/2019 | Added D1 and D2 on Self-Inspection length measurements | | | | APPROVER | burneleng Mediba | 13/03/2019 | |
| | | | | | | CHECKER | Ntsoa Findle | 13/03/2019 | |
| | | | | | | REVISED BY | Ntsoa Findle | 13/03/2019 | |
| 10 | 22/08/2019 | New Baseline 10.2.5 | | | | APPROVER | burneleng Mediba | 22/08/2019 | |
| | | | | | | CHECKER | Ntsoa Findle | 22/08/2019 | |
| | | | | | | REVISED BY | Ntsoa Findle | 22/08/2019 | |
| 15 | 06/08/2020 | New Baseline 10.2.6 | | | | APPROVER | burneleng Mediba | 06/08/2020 | |
| | | | | | | CHECKER | Bongane Masina | 06/08/2020 | |
| | | | | | | REVISED BY | Bongane Masina | 06/08/2020 | |
| 20 | 19/04/2021 | New Baseline change to 3 | | | | APPROVER | burneleng Mediba | 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 | burneleng Mediba | 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 | burneleng Mediba | 20/02/2022 | |
| | | | | | | CHECKER | Andani Muthelo | 20/02/2022 | |
| | | | | | | REVISED BY | Andani Muthelo | 20/02/2022 | |
| 26 | 14/06/2022 | Update minimum temperature requirement for sealant application | | | | APPROVER | burneleng Mediba | 14/06/2022 | |
| | | | | | | CHECKER | Andani Muthelo | 14/06/2022 | |
| | | | | | | REVISED BY | Andani Muthelo | 14/06/2022 | |
| 27 | 17/10/2022 | Addition of traceability for sealant application and welding | | | | APPROVER | burneleng Mediba | 17/10/2022 | |
| | | | | | | CHECKER | Ntsoa Zwane | 17/10/2022 | |
| | | | | | | REVISED BY | Ntsoa Zwane | 17/10/2022 | |
| 28 | 14/04/2023 | Added sealant batch number & welding consumables traceability | | | | APPROVER | burneleng Mediba | 14/04/2023 | |
| | | | | | | CHECKER | Ntsoa Zwane | 14/04/2023 | |
| | | | | | | REVISED BY | Ntsoa Zwane | 14/04/2023 | |
| 29 | 28/10/2023 | Addition of bracket quantity | | | | APPROVER | burneleng Mediba | 28/10/2023 | |
| | | | | | | CHECKER | Ntsoa Zwane | 28/10/2023 | |
| | | | | | | REVISED BY | Ntsoa Zwane | 28/10/2023 | |
| TRAINSET | CAR | OPERATOR NAME& ALPS NO | DATE | SELF INSPECTION NUMBER | | | | PAGES | |
| 215 | M1 | burneleng Mediba 426954 | 29/04/24 | SI CB1220.250.V29 | | | | 14 | |

| | | | | |
|---|---|--|--------------------|-------------------|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2 | | Rev. 29 | Project: PRASA |
| | | | Date 28/10/2023 | SI.CB1220.250.V29 |
| Car: M1,M3,M4 | NCR | | Work station: | CB1220 |



Safety Related



I - Documentation and Instruments Control

I.1 - Documentation Control

| Document | Type of car | | | | | Revision | Observation | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|---------------|-------------|---|---|---|----|----------|-------------|----|-----------------------------------|--------------------------|
| | D1 | W | Z | W | D1 | | | | | |
| DTR30225487/2 | | | | | | 29 | 29/02/24 | ✓ | N/A | 29/02/24 |

I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process

| Instruments | Serial number | Calibration or Verification Validation Date | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|--------------|---------------|--|----|--------------------------------|--------------------------|
| Tubular | 12062-2 | 2025/02/19 | ✓ | 29/02/24 | 29/02/24 |
| Tapc Measure | GIB7AB3 | 2024/04/05 | ✓ | 29/02/24 | 29/02/24 |
| | | | | | |
| | | | | | |

1.3 Consumables

Welding Consumable Control - Used for Special Process

| Filler Material | Part Number | Welding Process | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|-----------------|-------------|-----------------|----|--------------------------------|--------------------------|
| 308 | P231067 | 308 MIG | ✓ | 29/02/24 | 29/02/24 |
| | | | | | |
| | | | | | |
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




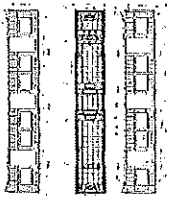















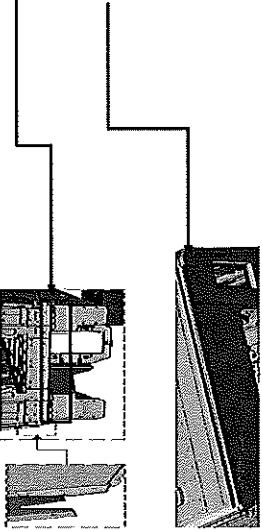
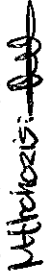
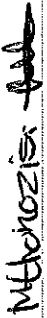
CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30224647/2

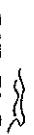
Rev.
28
Date
28/10/2023
Project: PRASA
SI,CB1220,250,V29

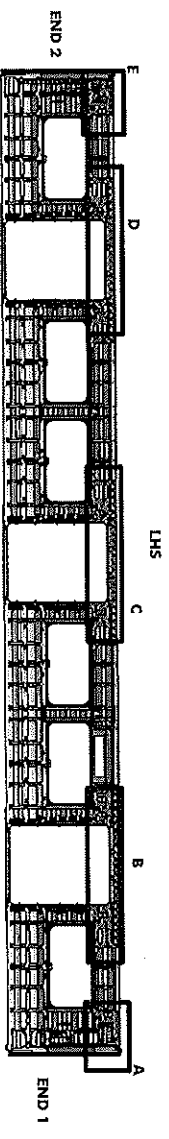
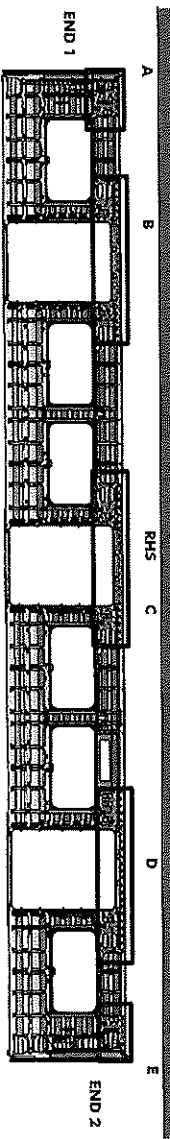
II - Self Inspection - Items to Check

II.1 - Items to check

| Item | Picturizing | Description | Acceptance criteria / Record | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|------|---|---|---|-------------------------------------|---|---|
| 01 | N/A | Assembly according to Instruction Engineering n° PRA-CB1220, DTR30224647/2 Verification of fitment for all reinforcement brackets. | PRA-CB1220, DTR30224647/2 | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 02 | N/A | Cantile free of significant flaws which compromise the appearance or functionality | DTD0000210675 | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 03 | REFER TO ANNEXURE A | Arc Welding inspected and approved according procedure. | IND-SAL-WMS-016 REFER TO GIB - TYPEF - ARC - 0000 | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 04 |  | Cleaning of all Stainless Steel Surfaces | According TO GIB-WEL - PROC-0002 | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 05 |  | Functional 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"/> |  29/02/24 |  29/02/24 |
| 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-016. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210668. | As the welding procedure IND-SAL-WMS-016 and DTD0000210668. | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 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 Max 65% | Sealant Borch No: <u>LD 7003</u> Exp Date: <u>02/24</u> Actuals Temperature: <u>18</u> Humidity: <u>75</u> | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 08 | NA | Verification of sealant application in certain regions in the drawing. | AAD0000278566 | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |
| 09 |  | Verification of safety welds | Approved according to DTD0000210658 reference and Self inspection | <input checked="" type="checkbox"/> |  29/02/24 |  29/02/24 |


| | | | |
|---|---|--|-------------------|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2 | Rev. | Project: PRASA |
| | | 29 | |
| | | Date | SI.CB1220.250.V29 |
| | | 28/07/2023 | |
| II - Self Inspection - Items to Check | | | |
| SEALANT APPLICATION | | | |
| AREA 1 & 2 END 1 | | | |
|  | | Operator (Name & sign):  | |
| | | Operator (Name & sign):  | |

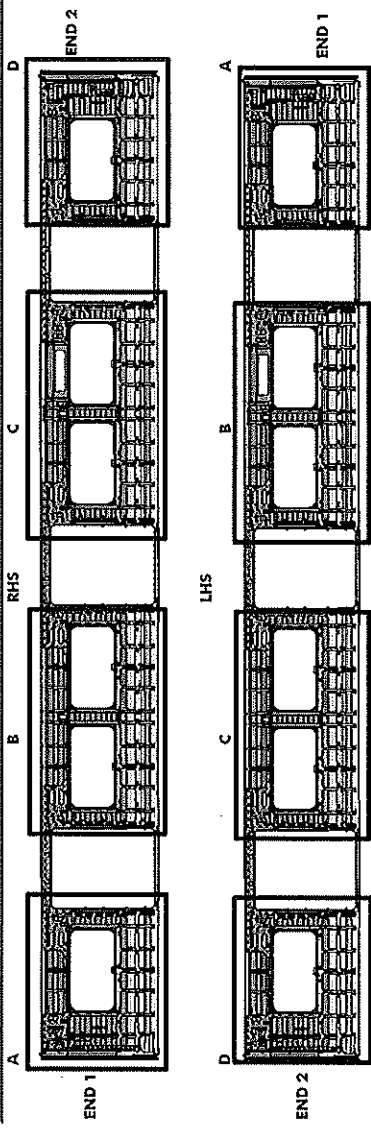
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|---|---|--|--------------------|-------------------|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2 | | Rev. 29 | Project: PRASA |
| | II - Self Inspection - Items to Check | | Date 28/10/2023 | SI.CB1220.250.V29 |



REINFORCEMENT WELDING

| AREA | LHS | RHS |
|------|--|--------------------|
| A | Operator (Name&sign): <u>Miguel M. M. M.</u> | <u>[Signature]</u> |
| B | Operator (Name&sign): <u>Miguel M. M. M.</u> | <u>[Signature]</u> |
| C | Operator (Name&sign): <u>Miguel M. M. M.</u> | <u>[Signature]</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. 29 | Project: PRASA |
| | | | Date 28/10/2023 | SLCB1220.250.V29 |
| | II - Self Inspection - Items to Check | | | |



BRACKETING

| | | |
|-----------------------------|-----------|-------------------|
| C-RAILS: | Operator: | <u>Ascilla</u> |
| | Operator: | |
| DOOR MECHANISMS: | Operator: | <u>Asandra</u> |
| | Operator: | |
| TAPPING PADS | Operator: | <u>Lindo END1</u> |
| | Operator: | <u>Lindo END2</u> |
| INSTALLATION & VERIFICATION | | |
| SEAT & LUGGAGE BRACKETS: | Operator: | |
| | Operator: | |
| SEAT BRACKETS VERIFICATION: | Operator: | <u>Hilichuza</u> |
| | Operator: | |

WELDING

| | | |
|-------------------------------------|---|---|
| AREA | LHS | RHS |
| B (Seat brackets) | : Operator (Name&sign): <u>Johnny P</u> | : Operator (Name&sign): <u>Johnny P</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Johnny P</u> | : Operator (Name&sign): <u>Johnny P</u> |
| B (Seat brackets) | : Operator (Name&sign): <u>Johnny P</u> | : Operator (Name&sign): <u>Johnny P</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Johnny P</u> | : Operator (Name&sign): <u>Johnny P</u> |
| C (Seat brackets) | : Operator (Name&sign): <u>Sibing</u> | : Operator (Name&sign): <u>Sibing</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Sibing</u> | : Operator (Name&sign): <u>Sibing</u> |
| D (Seat brackets) | : Operator (Name&sign): <u>Sibing</u> | : Operator (Name&sign): <u>Sibing</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Sibing</u> | : Operator (Name&sign): <u>Sibing</u> |

ENDS

| | |
|-----------------------------|------------------------------------|
| END 1 TAPPING PADS WELDING: | Operator (Name&sign): <u>Lindo</u> |
| END 1 TAPPING PADS WELDING: | Operator (Name&sign): <u>Lindo</u> |



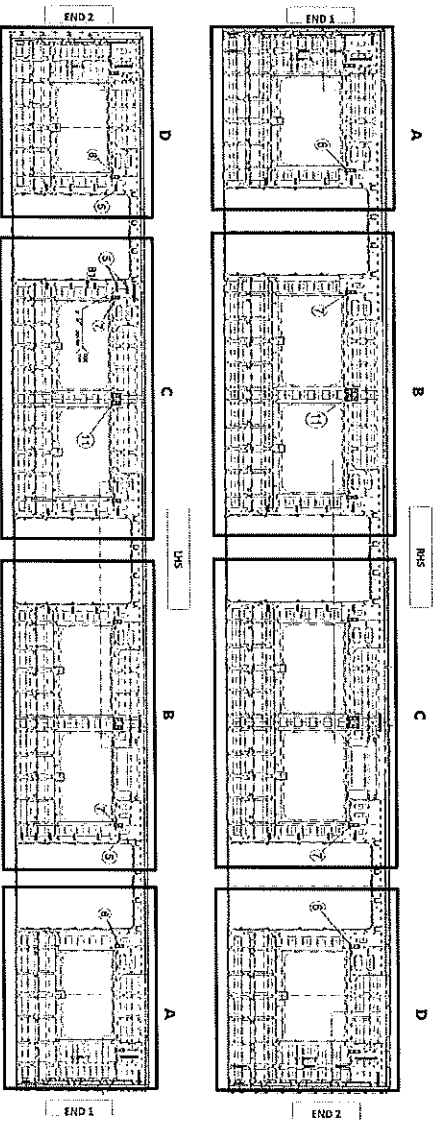
CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR302254872

Rev.
28
Date
28/10/2023

Project: PRASA
SI.CB1220.250.V29

II - Self Inspection - Items to Check

M1/M3/M4 BRACKET INSTALLATION



QUANTITIES (M3/M4)

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

ROOF ENDS:

GRAIS 2 OFF EACH END
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: _____

| LHS | | | |
|---------------|----------|----|-----|
| SECTION | QUANTITY | OK | NOK |
| C-RAILS | | | |
| A | 2 | | |
| B | 8 | | |
| C | 11 | | |
| D | 16 | | |
| SEAT BRACKETS | | | |
| A | 13 | | |
| B | 21 | | |
| C | 21 | | |
| D | 13 | | |
| EARTH BUSH | | | |
| A | 3 | | |
| B | 5 | | |
| C | 4 | | |
| D | 2 | | |

ROOF ENDS:

GRAIS 2 OFF EACH END
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: _____

QUANTITIES (M4)

| RHS | | | |
|---------------|----------|----|-----|
| SECTION | QUANTITY | OK | NOK |
| C-RAILS | | | |
| A | 4 | | |
| B | 8 | | |
| C | 6 | | |
| D | 6 | | |
| SEAT BRACKETS | | | |
| A | 13 | | |
| B | 21 | | |
| C | 21 | | |
| D | 13 | | |
| EARTH BUSH | | | |
| A | 3 | | |
| B | 4 | | |
| C | 5 | | |
| D | 2 | | |

ROOF ENDS:

GRAIS 2 OFF EACH END
EARTH BUSH 6 OFF EACH END

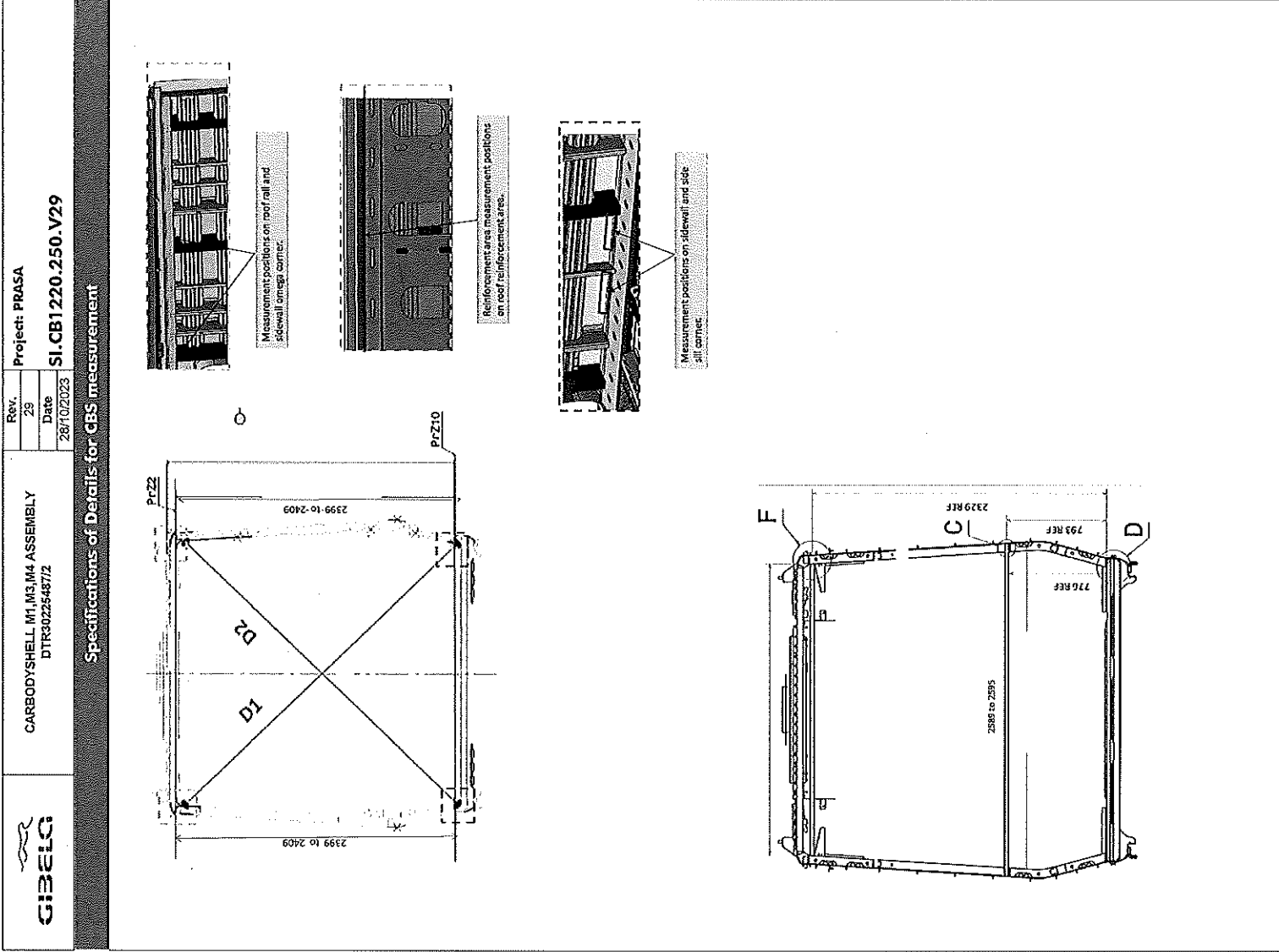
VERIFICATION BY: Mthobeni

| LHS | | | |
|---------------|----------|----|-----|
| SECTION | QUANTITY | OK | NOK |
| C-RAILS | | | |
| A | 2 | | |
| B | 11 | | |
| C | 11 | | |
| D | 8 | | |
| SEAT BRACKETS | | | |
| A | 13 | | |
| B | 21 | | |
| C | 21 | | |
| D | 13 | | |
| EARTH BUSH | | | |
| A | 3 | | |
| B | 7 | | |
| C | 4 | | |
| D | 2 | | |

ROOF ENDS:

GRAIS 2 OFF EACH END
EARTH BUSH 6 OFF EACH END

VERIFICATION BY: Mthobeni

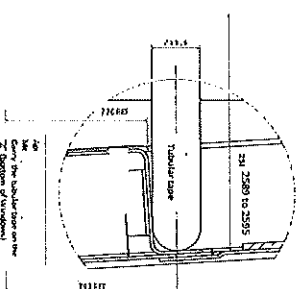
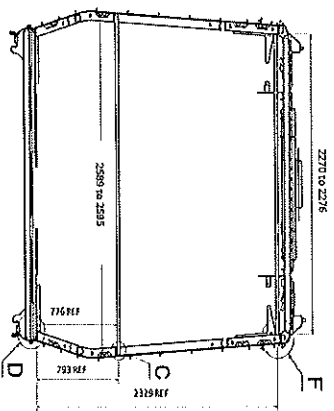




CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

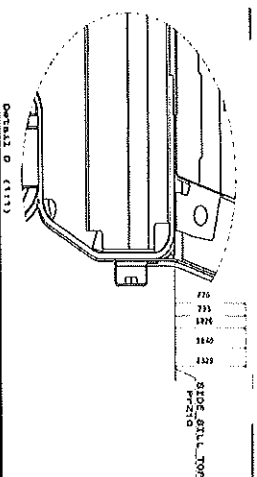
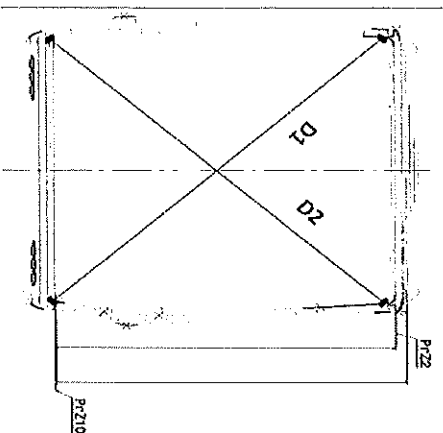
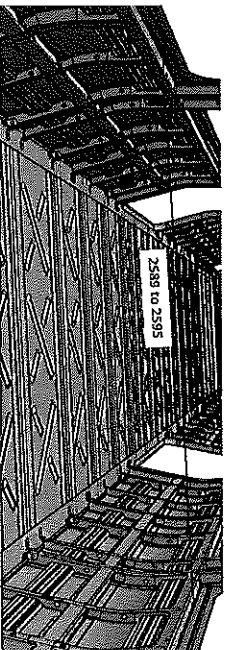
| Rev. | Project: PRASA |
|------------|-------------------|
| 29 | |
| Date | |
| 28/10/2023 | |
| | SI.CB1220.250.V29 |

CBS measurement




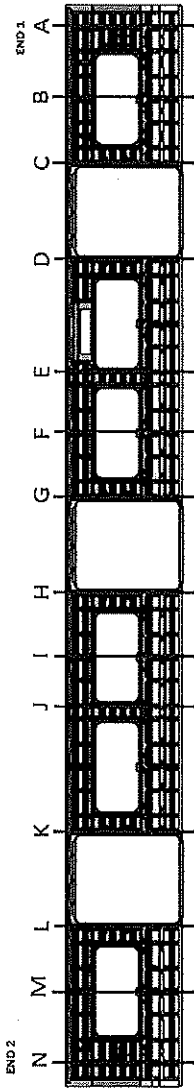
Detail C

Take measurement close to
radius



Detail D (1/1)

| | | | | |
|---|--|--|--------------------|---|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR302254872 | | Rev. 29 | Project: PRASA SI.CB1220.250.V29 |
| | | | Date 28/10/2023 | |
| | cES measurement | | | |



BEFORE WELDING

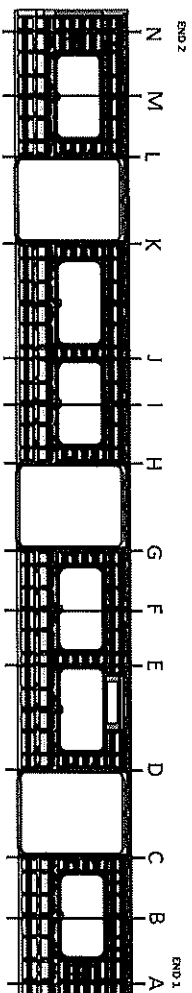
| | Record D1 values | Record D2 values | D1-D2 ≤ 5mm | 2589 to 2595 |
|---|------------------|------------------|-------------|--------------|
| A | 3300 | 3295 | 5 | - |
| B | 3266 | 3266 | 0 | - |
| C | 3299 | 3299 | 0 | - |
| D | 3298 | 3298 | 0 | - |
| E | 3267 | 3265 | 2 | - |
| F | 3266 | 3268 | 2 | - |
| G | 3298 | 3300 | 2 | - |
| H | 3297 | 3300 | 3 | - |
| I | 3265 | 3265 | 0 | - |
| J | 3268 | 3268 | 0 | - |
| K | 3299 | 3294 | 5 | - |
| L | 3300 | 3298 | 2 | - |
| M | 3267 | 3268 | 1 | - |
| N | 3300 | 3300 | 0 | - |

CIBELD

CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR3025487/2

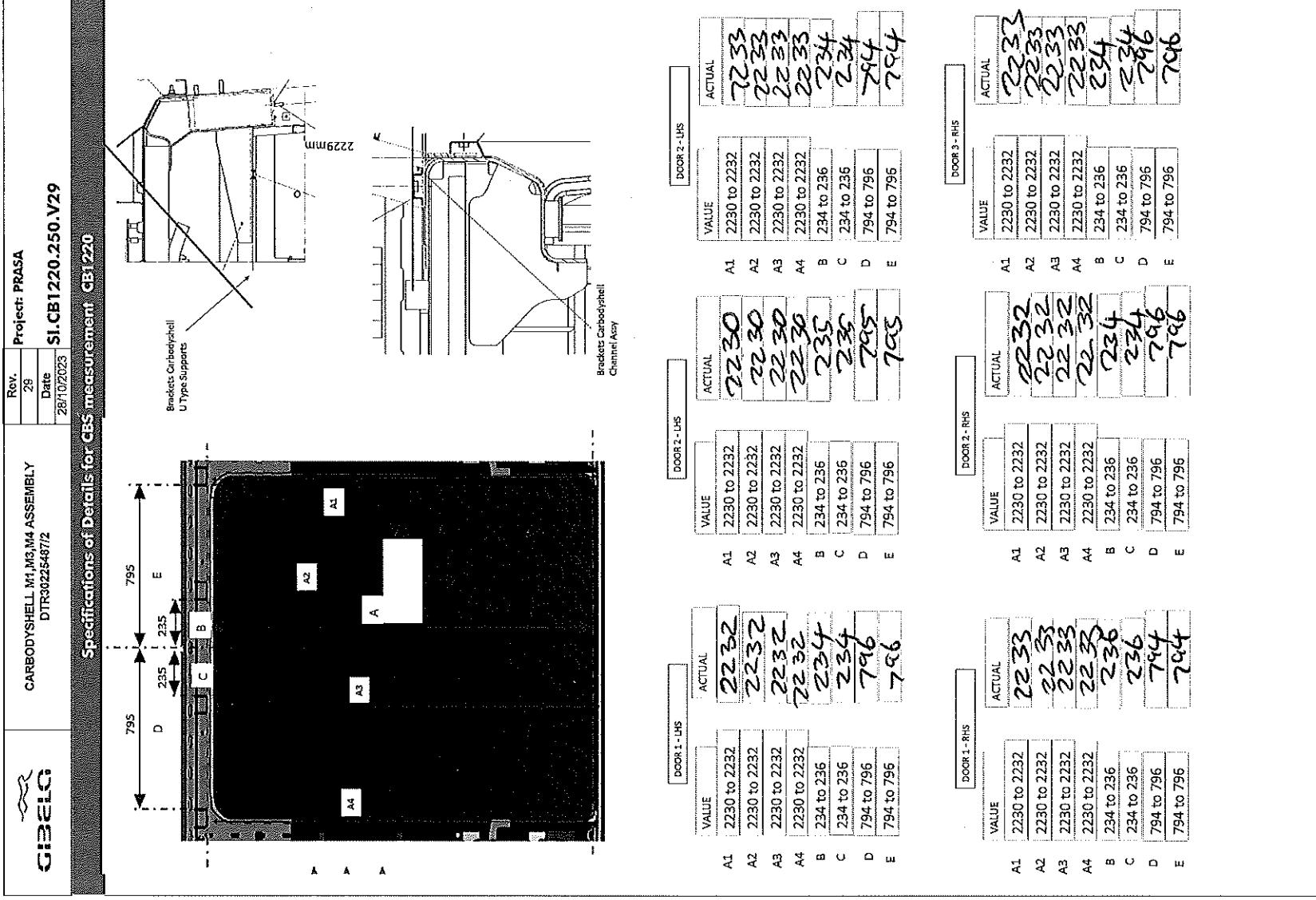
| | | |
|-------------------|------------|----------------|
| Rev. | 29 | Project: PRASA |
| Date | 28/10/2023 | |
| SI.CB1220.250.V29 | | |

C/S measurement

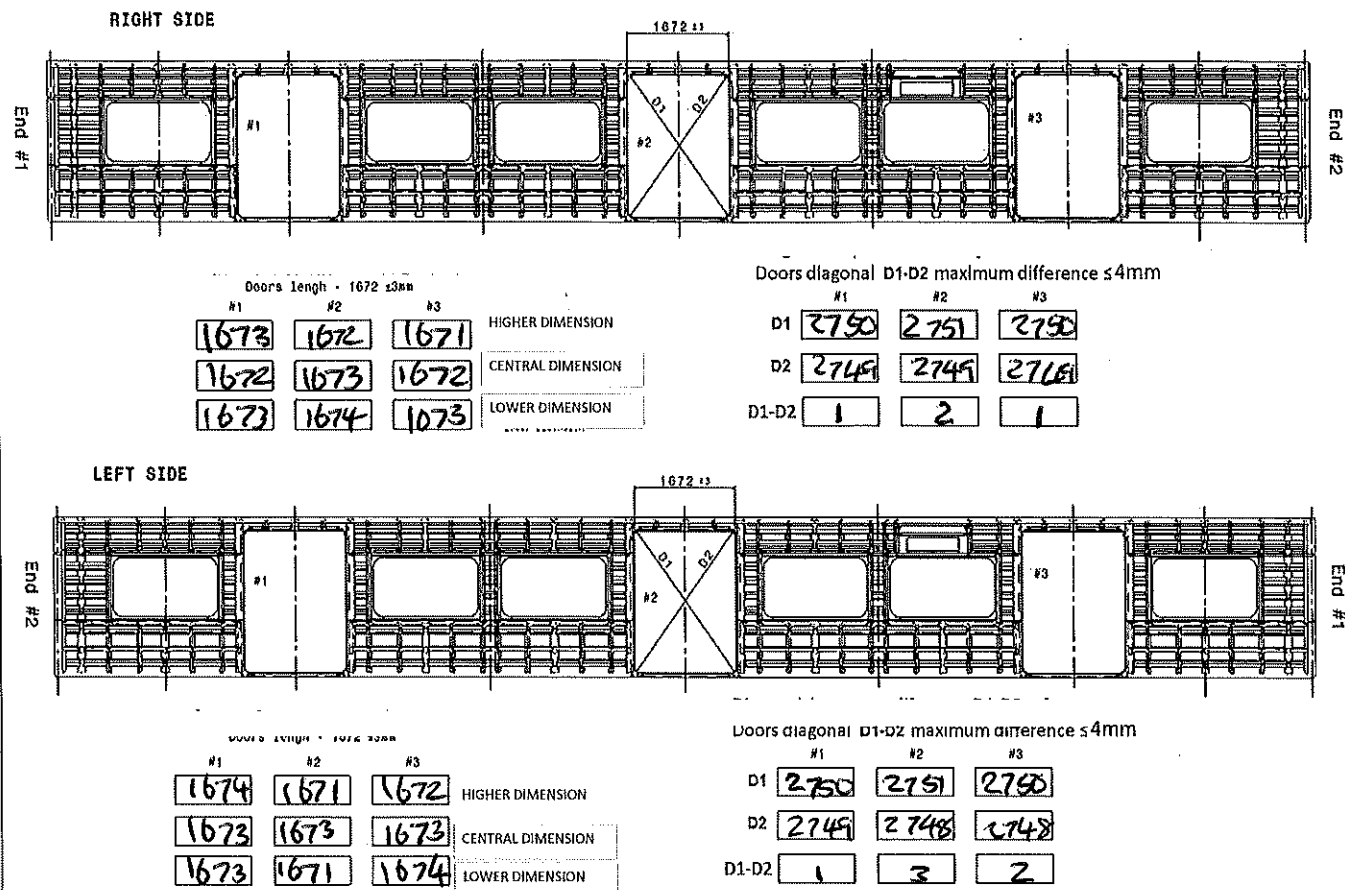


AFTER WELDING

| Record D1 values | Record D2 values | D1-D2 ≤ 5mm | 2589 to 2595 |
|------------------|------------------|-------------|--------------|
| A 3255 | 3243 | 2 | 2574 |
| B 3263 | 3263 | 0 | 2590 |
| C 3293 | 3274 | 4 | 2574 |
| D 3274 | 3243 | 1 | 2574 |
| E 3264 | 3264 | 0 | 2572 |
| F 3263 | 3263 | 0 | 2570 |
| G 3294 | 3296 | 2 | 2576 |
| H 3275 | 3277 | 2 | 2575 |
| I 3260 | 3263 | 3 | 2573 |
| J 3263 | 3268 | 5 | 2570 |
| K 3268 | 3293 | 5 | 2571 |
| L 3270 | 3298 | 2 | 2570 |
| M 3263 | 3264 | 1 | 2581 |
| N 3263 | 3295 | 2 | 2572 |



Specifications of Details for CBS measurement CB1220





CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

Rev.
29
Date
28/10/2023

Project: PRASA
SI.CB1220.250.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

29/02/24

Nthibozzi

Operations

29/02/24

Ridweneul

Industrial Quality

(If activities are not complete, the missing activities must not impact the next stage)
Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.)
There are activities pending that impact 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)

Operations

Industrial Quality


In case of "NO GO", describe blocking problems

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

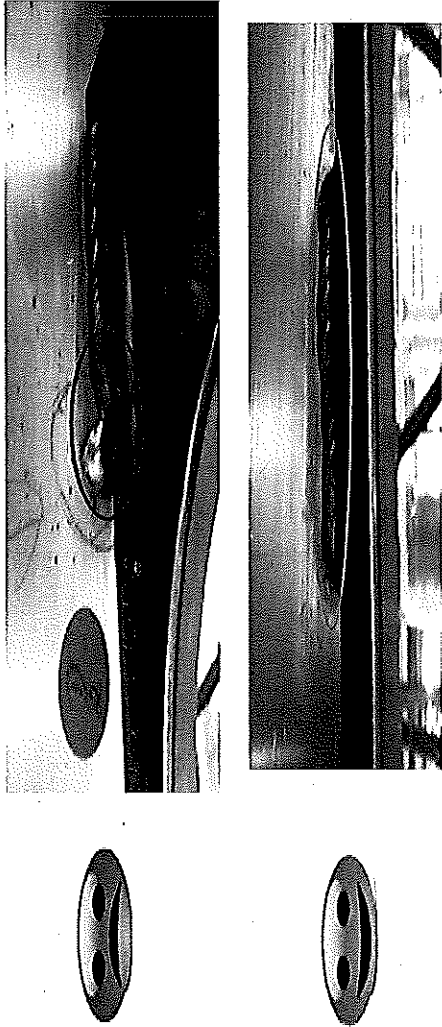
| Item | Description | Responsible | Due date | Status |
|------|-------------|-------------|----------|--------|
| | | | | |
| | | | | |
| | | | | |

Operations

Quality

| | | | |
|---|---|------------|---|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30225487/2 | Rev. | Project: PRASA SI.CB1220.250.V29 |
| | | 29 | |
| | | Date | |
| | | | |
| | | 28/10/2023 | |

ANNEXURE A: Arc Welding Quality Acceptance Standard




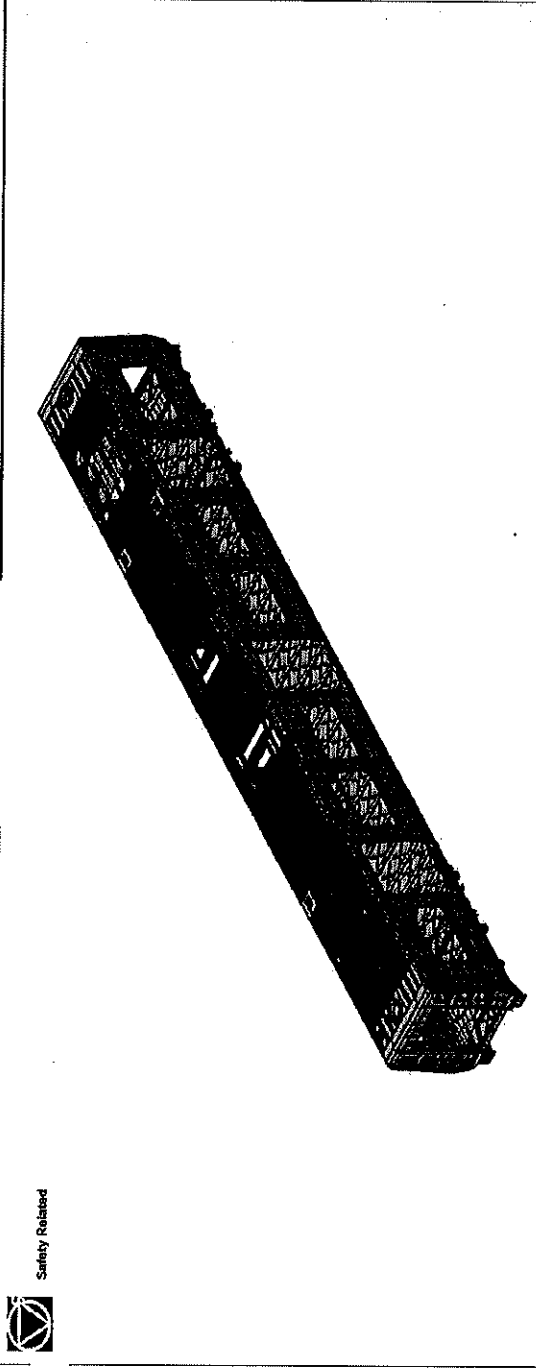
APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1

SELF INSPECTION SHEET

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

| DRAWING | DESCRIPTION | STATION | CNA TYPE | | | | WORK INSTRUCTION | SARBY ¹ |
|---------------------------------------|-------------------------------------|---|----------|------------------------|----|----|----------------------------------|--------------------|
| | | | ED | MA | MC | MC | | |
| <input type="checkbox"/> 070000025487 | ADD00017866 MC, MA, MC, ASSEMBLY | CR220 | X | (X) | | X | PRC/CB2230.DT000002 25487 V20 | YES |
| <input type="checkbox"/> | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | |
| | DATE | MODIFICATION CONTENT | | | | | | |
| 0 | 2018/09/02 | GIBELCO NEW CREATION | | | | | | |
| | | APPROVER | NAME | DATE | | | | |
| | | CHECKER | | | | | | |
| | | COMPLIER | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 1 | 30/5/2018 | Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 2 | 2018/05/07 | Certain dimensional checks moved to CR220 | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 5 | 24/01/2019 | As per Baseline 10.2 | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 6 | 13/09/2019 | Added Twist and Door Bracket Measurements Remove Door Measurements | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 10 | 23/08/2019 | New Baseline 10.2.5 | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| | 06/08/2020 | New Baseline 10.2.5 | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 20 | 19/04/2021 | New Baseline change 10.3 | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 25 | 20/02/2022 | New Baseline change 10.3.1 | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 26 | 14/06/2022 | Update minimum temperature requirement for sealant application | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 27 | 26/07/2022 | Threshold measurements addition | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 28 | 17/10/2022 | Added traceability of sealant application | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| 29 | 14/04/2023 | Added sealant batch number & welding consumables traceability | | | | | | |
| | | APPROVER | | | | | | |
| | | CHECKER | | | | | | |
| | | REVISED BY | | | | | | |
| TRAINSET | CNR | OPERATING NUMBER | DATE | SELF INSPECTION NUMBER | | | | PAGES |
| 215 | Mo1 | Boitumelo 436543 | 29/02/24 | 51.CB2230.256.V29 | | | | 12 |

| | | | | |
|---|---|----------------------|--------------------|--------------------|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487 | | Rev. 29 | Project: PRASA |
| | | | Date 14/04/2023 | SI.CB22230.256.V29 |
| Car: | NCR: | Work station: CB2230 | | |



Safety Related

I - Documentation and Instruments Control

I.1 - Documentation Control

| Document | Type of car | | | | Revision | Observation | Signature/Date (Operations) | Signature/Date (Quality) |
|--------------------------|-------------|----|----|-----|----------|-------------|-----------------------------|--------------------------|
| | M | FH | FH | COL | | | | |
| PRA.CB2230.DT00000225487 | X | | | | 29 | | OK | N/A |

I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process

| Instruments | Serial number | Calibration or Verification Validation Date | Signature/Date (Operations) | Signature/Date (Quality) |
|--------------------|---------------|---|-----------------------------|--------------------------|
| Measuring Tape | 5581A03896 | 2024/04/05 | OK | 29/04/2024 |
| Tubular | 22713 | 2024/06/26 | OK | 29/04/2024 |
| Combination Square | 418500100 | 2024/07/27 | OK | 29/04/2024 |

1.3 Consumables

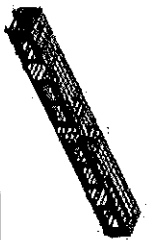
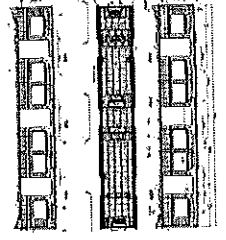

Welding Consumable Control - Used for Special Process


| Filler Material | Box Number | Welding Process | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|-----------------|------------|-----------------|--------------------------------|--------------------------|
| EE 308 L | 310180 | Mig welding | OK | 29/04/2024 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | |
|---------|---|--------------------|-------------------------------------|
| GIBELCO | CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487 | Rev. 29 | Project: PRASA SI.CB2230.256.V29 |
| | | Date 14/04/2023 | |
| | | | |


II - Self Inspection - Items to Check

II.1 - Items to check

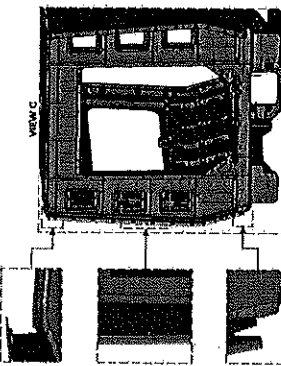
| Item | Picture/Drawing | Description | Acceptance criteria / Record | | | Signature/Date (Operator) | Signature/Date (Quality) |
|------|---|---|---|----|--|------------------------------|-----------------------------|
| 01 | N/A | Assembly according to Instruction Engineering n° PRA.CB1.230.DT00000225487 Verification of fitment for all brackets. | PRA.CB1.230.DT00000225487 | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 02 | N/A | Carshell free of significant flaws which compromise the appearance or functionality | DTD00000210675 | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 03 | REFER TO ANNEXURE A | Arc Welding inspected and approved according procedure. | IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000 | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 04 |  | Cleaning of all Stainless Steel Surface | According TO GIB-WEL - PROC. 0002 | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 05 |  | Functional dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document. | Approved according specified on pages below. | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 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 DTD00000210658. | As the welding procedure IND-SAL-WMS-018 and DTD00000210658. | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 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 (°) : 10°C - 35°C Relative humidity Min - Max (%) : 25% - 80% | Sealant Batch No: <u>LS1FA03384251</u> Exp Date: <u>10/03/24</u> Actuals Temperature: <u>16°C</u> Humidity: <u>78%</u> | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 08 | N/A | Verification of sealant application on the roof and sidewall finishers. | Sealant must be: -Applied straight and even -Free of gaps, cracks, damage and debris (flashes, dirt, dust) Refer to Annexure B | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |
| 09 | N/A | Verification of sealant application in certain regions in the drawing. | AAD0001278566 | OK | | Bl/02/29/02/2024 | SE/29/02/2024 |

| | | | |
|---|---|------------|-------------------|
|  | CARBODYSHELL M4,M3,M4 ASSEMBLY DT00000225487 | Rev. | Project: PRASA |
| | | 29 | |
| | | Date | SI.CB2230.256.V29 |
| | | 14/04/2023 | |
| II - Self Inspection - Items to Check | | | |

END 2 SEALANT




AREA 1




AREA 2 (VIEW C)


OPERATOR
(Name & sign):

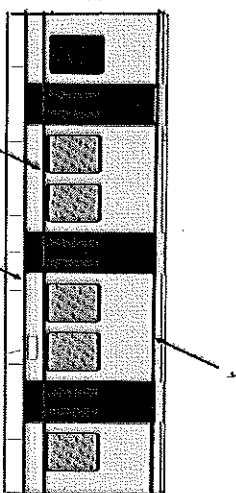


OPERATOR
(Name & sign):



OPERATOR
(Name & sign):





H

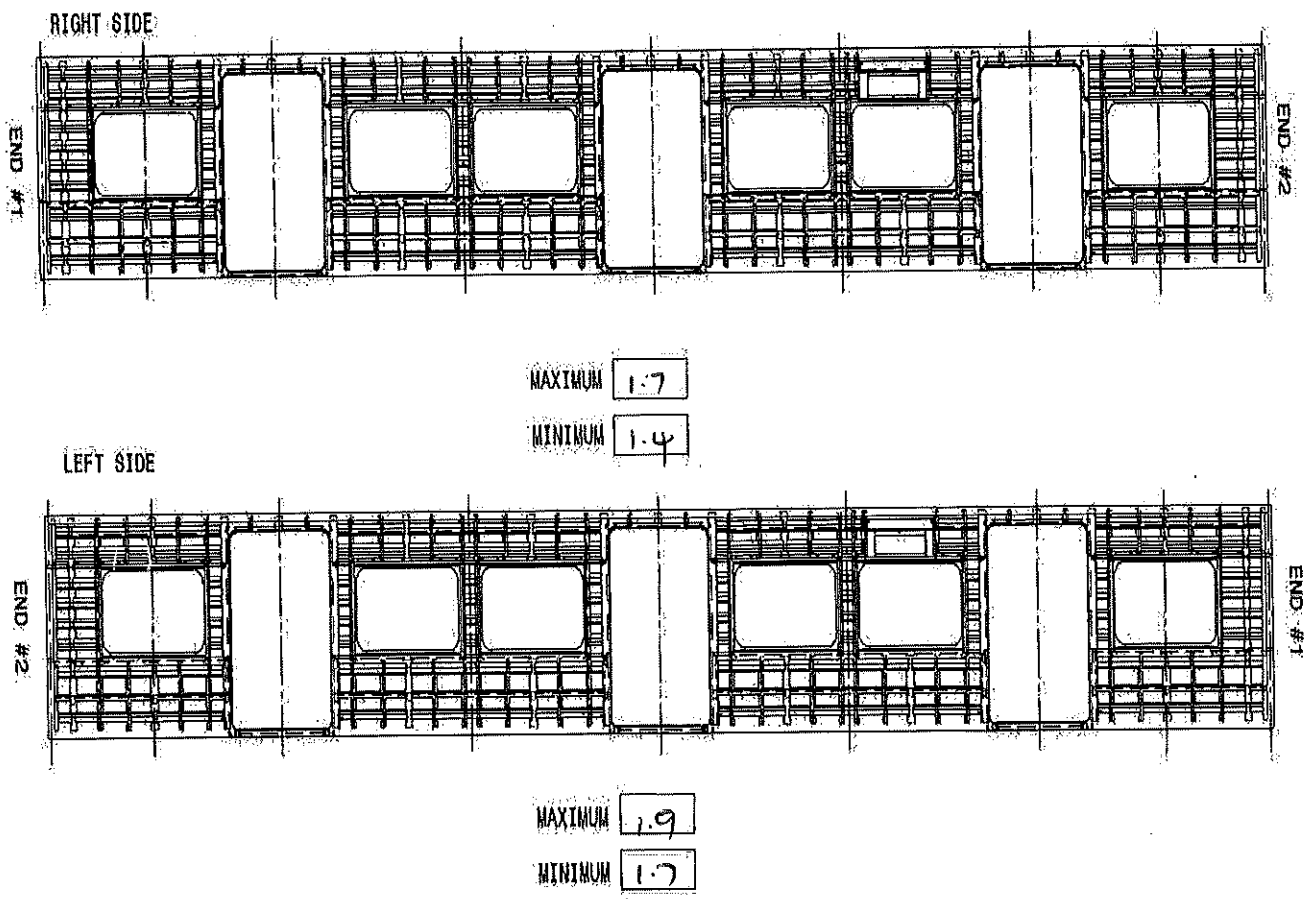
LHS

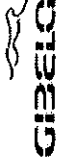
RHS

| Area D,E,F,G,H,I Operator (Name & sign): | Area J Operator (Name & sign): |
|---|--|
| Operator (Name & sign): <u>D. G. Lerato</u> | Operator (Name & sign): <u>F. D. E. H. I</u> |
| Operator (Name & sign): <u>Hi Top</u> | Operator (Name & sign): <u>Shendo</u> |
| Operator (Name & sign): <u>Namlonhla</u> | Operator (Name & sign): <u>Shendo</u> |
| Operator (Name & sign): <u>Dr.</u> | Operator (Name & sign): <u>Shendo</u> |
| Operator (Name & sign): <u>F. E.</u> | Operator (Name & sign): <u>Shendo</u> |
| Operator (Name & sign): <u>Shendo</u> | Operator (Name & sign): <u>Shendo</u> |
| Operator (Name & sign): <u>Shendo</u> | Operator (Name & sign): <u>Shendo</u> |

Specifications of Details for CBS measurement CB1230

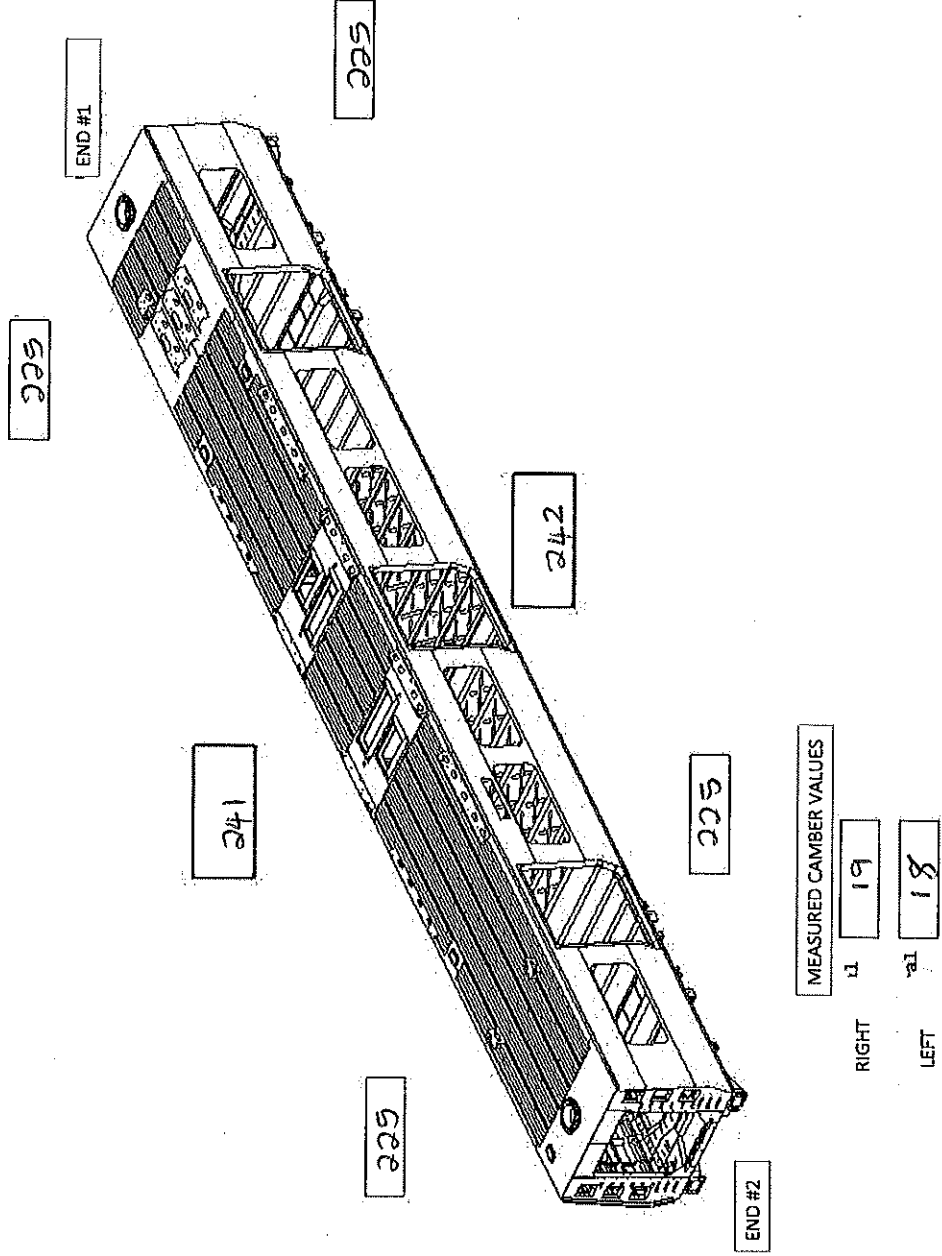
Flatness side left and right maximum of 2mm in the valley to peak measured in , 900mm. Recod the maximum and minimum value foundand indicate the corresponding region.



| | | | |
|---|---|------------|-------------------|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487 | Rev. | Project: PRASA |
| | | 29 | |
| | | Date | |
| | | 14/04/2023 | SI.CB2230.256.V29 |

Specifications of Details for CBS measurement CB1230

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





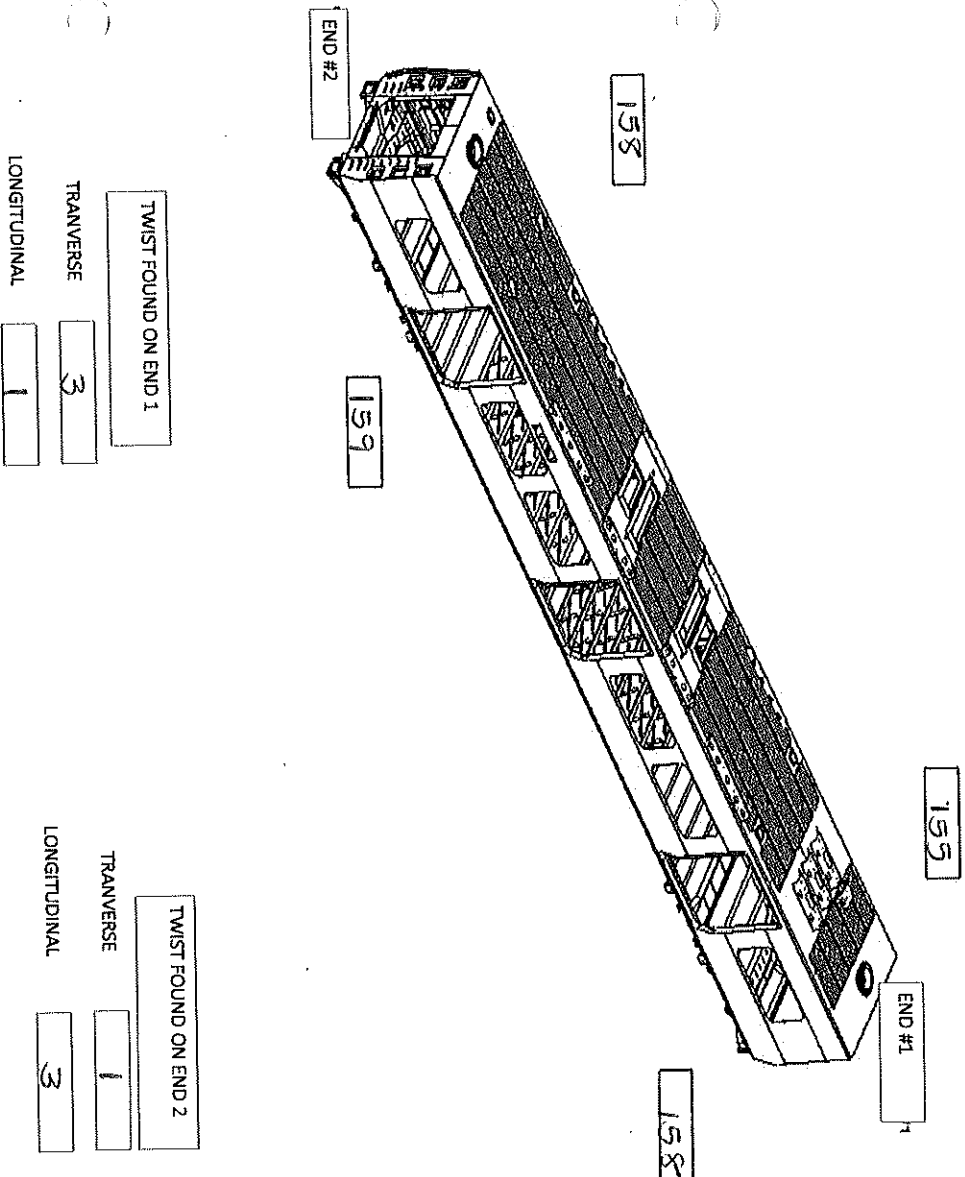
CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

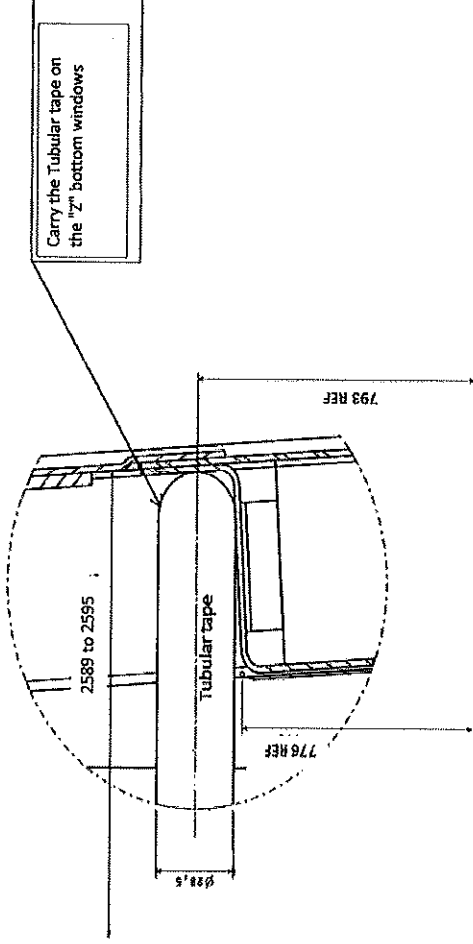
| | |
|------|------------|
| Rev. | 29 |
| Date | 14/04/2023 |

Project: **PRASA**
SI.CB2230.256.V29

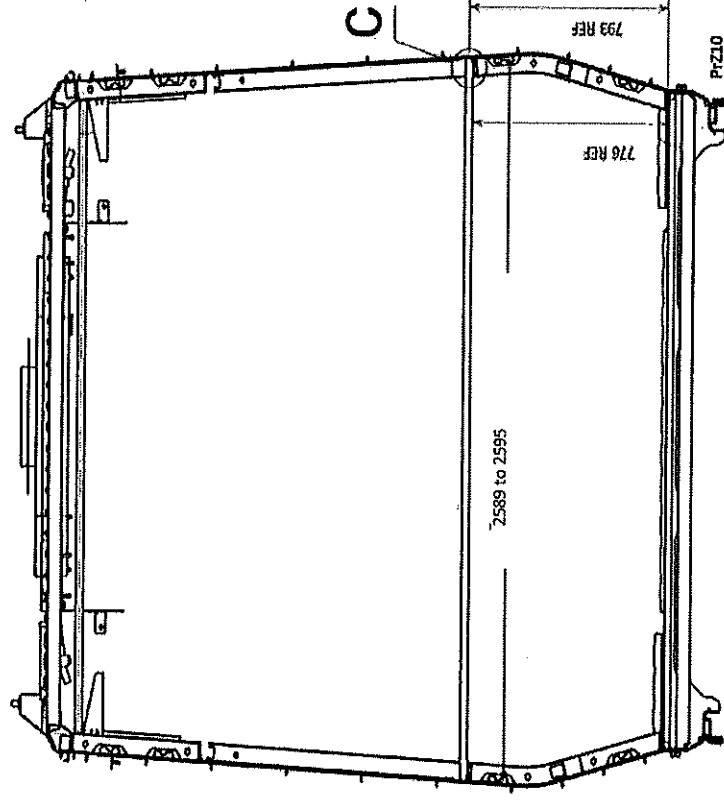
Specifications of Details for CBS measurement CB1230

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.





Detail C



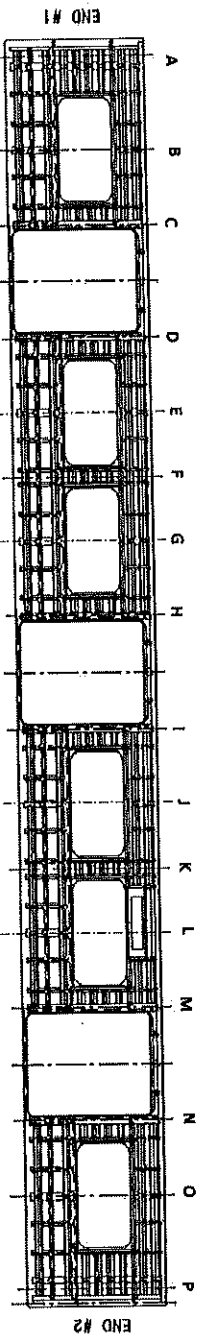
GIBELCO

CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev.
29
Date
14/04/2023

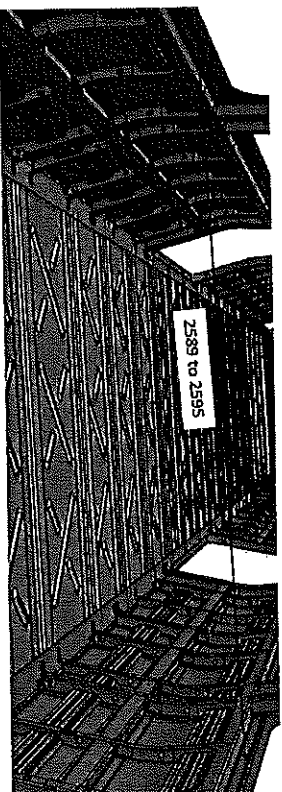
Project: PRASA
SI.CB2230.256.V29

Specifications of Details for CBS measurement CB1230



2589 to 2595mm

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



Threshold verification

| | | Nominal value :38 | |
|--------|----|-------------------|--------|
| Door 1 | | Door 2 | Door 3 |
| L | 38 | L | 38 |
| R | 38 | R | 39 |
| Door 4 | | Door 5 | Door 6 |
| L | 38 | L | 39 |
| R | 38 | R | 38 |

Dye penetrant test

Dye-penetration test to be performed by quality personnel



Threshold welding:
B/M: Duhle
Weider: F. W. M. A. B. A.

[illegible]

| | | | |
|--------|---|--------------------|-------------------------------------|
| GIBELG | CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487 | Rev. 29 | Project: PRA5A SI.CB2230.256.V29 |
| | | Date 14/04/2023 | |

Self Inspection - Final Result

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

| DATE | | NAME | SIGNATURE |
|------------|----|------------|---------------------------------|
| HOLD POINT | | 29/03/24 | Botumelo Operations |
| | GO | 29/03/2024 | Amogelang Industrial Quality |
| | | | Operations |
| | | | Industrial Quality |


In case of "NO GO", describe blocking problems

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

| Item | Description | Responsible | Due date | Status |
|------|-------------|-------------|----------|--------|
| | | | | |
| | | | | |
| | | | | |

Botumelo
 Operations

Amogelang
Industrial Quality

| | | | | |
|---|---|------|-------------------|--|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DT00000225487 | Rev. | Project: PRASA | |
| | | 29 | SI.CB2230.256.V29 | |
| | | Date | 14/04/2023 | |

ANNEXURE A: Arc Welding Quality Acceptance Standard

