

APPLICABLE FROM TRAINSET 190+ AS PER BASELINE 10.4

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 ? | | |
|--------------------------|---------------|---------------|-----------------------------|----------|----|----|----|----|----|------------------|----------|------------------------------|-----|
| | | | | TC | MA | ME | ME | ME | TC | | | | |
| <input type="checkbox"/> | DTR30225487/3 | AAD0001278566 | CARBODYSHELL M3,M4 ASSEMBLY | CB2210 | | X | | | | X | | PRA.CB2210.DTR30225487/3.V30 | YES |
| <input type="checkbox"/> | | | | | | | | | | | | | |

| REV | DATE | MODIFICATION CONTENT | RESPONSIBLE | NAME | DATE |
|-----|------------|---|-------------|--------------------|------------|
| 0 | 10/01/2018 | GIBELA NEW CREATION | APPROVER | Itumeleng Modiba | 10/01/2018 |
| | | | CHECKER | Nosizo Pindela | 10/01/2018 |
| | | | COMPILER | Thanyani Mathegu | 10/01/2018 |
| 1 | 2018/05/18 | Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager | APPROVER | Itumeleng Modiba | 2018/05/18 |
| | | | CHECKER | Nosizo Pindela | 2018/05/18 |
| | | | REVISED BY | Ramokone Motama | 2018/05/18 |
| 2 | 2018/07/04 | Certain dimensional checks moved to CB1220 and CB1230 | APPROVER | Itumeleng Modiba | 2018/07/04 |
| | | | CHECKER | Nosizo Pindela | 2018/07/04 |
| | | | REVISED BY | Ramokone Motama | 2018/07/04 |
| 3 | 2018/12/12 | Added dimensional check points to CB2210 | APPROVER | Itumeleng Modiba | 2018/12/12 |
| | | | CHECKER | Nosizo Pindela | 2018/12/12 |
| | | | REVISED BY | Ramokone Motama | 2018/12/12 |
| 5 | 22/01/2019 | As per Baseline 10.2 | APPROVER | Itumeleng Modiba | 22/01/2019 |
| | | | CHECKER | Nosizo Pindela | 22/01/2019 |
| | | | REVISED BY | Vanessa Ntuli | 22/01/2019 |
| 6 | 13/03/2019 | Added D1 and D2 on Self - Inspection | APPROVER | Itumeleng Modiba | 13/03/2019 |
| | | | CHECKER | Nosizo Pindela | 13/03/2019 |
| | | | REVISED BY | Nosizo Pindela | 13/03/2019 |
| 10 | 21/08/2019 | New Baseline 10.2.5 | APPROVER | Itumeleng Modiba | 21/08/2019 |
| | | | CHECKER | Nosizo Pindela | 21/08/2019 |
| | | | REVISED BY | Nosizo Pindela | 21/08/2019 |
| 15 | 06/08/2020 | New Baseline 10.2.6 | APPROVER | Timothy Maimela | 06/08/2020 |
| | | | CHECKER | Bongane Masina | |
| | | | 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 | |
| 21 | 17/08/2021 | ADDED DIMENSIONS BEFORE WELDING | APPROVER | Mbhombi collins | 17/08/2021 |
| | | | CHECKER | Mpho Mulaudzi | |
| | | | REVISED BY | Mpho Mulaudzi | |
| 25 | 19/02/2022 | New Baseline change 10.3.1 | APPROVER | Mbhombi collins | 19/02/2022 |
| | | | CHECKER | Andani Muthelo | |
| | | | REVISED BY | Andani Muthelo | |
| 26 | 14/04/2023 | Addition of welding consumable traceability | APPROVER | Ntuli Vanessa | 14/04/2023 |
| | | | CHECKER | Mohlampe Amogelang | |
| | | | REVISED BY | Mohlampe Amogelang | |
| 30 | 20/07/2023 | New Baseline change 10.4 | APPROVER | Ngobeni Tyson | 28/07/2023 |
| | | | CHECKER | Mohlampe Amogelang | |
| | | | REVISED BY | Mohlampe Amogelang | |
| 31 | 07/11/2023 | Added traceability for welding sections | APPROVER | Ngobeni Tyson | 07/11/2023 |
| | | | CHECKER | Mohlampe Amogelang | |
| | | | REVISED BY | Ntokoza Zwane | |

| TRAINSET | CAR | OPERATOR NAME/ ACPS NO | DATE | SELF INSPECTION NUMBER | PAGES |
|----------|-----|------------------------|----------|------------------------|-------|
| 223 | M4 | 1/EB0820 432833 | 16/04/24 | SI.CB2210.254.V30 | 17 |



CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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

Car: M3 & M4

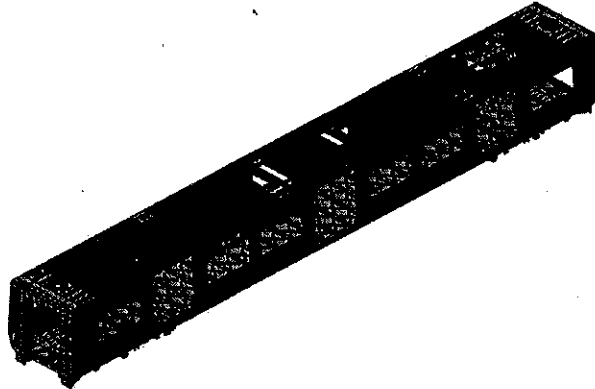
NCR:

Work station:

CB2210



Safety Related



I - Documentation and Instruments Control

I.1 - Documentation Control

| Document | Type of use | | | | | | Revision | Observation | | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|---------------|-------------|---|---|---|---|---|----------|-------------|---|--------------------------------|--------------------------|
| | D | S | I | V | A | U | | | | | |
| DTR30225487/3 | | | | | X | | | | ✓ | <i>[Signature]</i> | 17/07/23 |

I.2 - Instruments Control

Monitoring and Measuring Instrument Control - Used for Special Process

| Instrument | Serial number | Calibration or Verification Validation Date | | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|------------|---------------|---|---|--------------------------------|--------------------------|
| Tubular | 32623-2 | 05/03/25 | ✓ | <i>[Signature]</i> | 17/07/23 |
| 30m tape | CMBTP0102 | 16/11/24 | ✓ | <i>[Signature]</i> | 17/07/23 |
| Laser Tape | 125425924 | 08/10/25 | ✓ | <i>[Signature]</i> | 17/07/23 |

I.3 Consumables

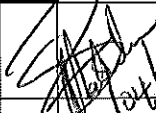
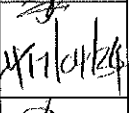

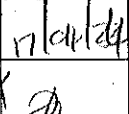

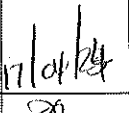

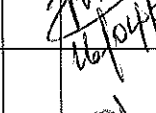
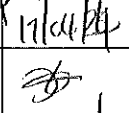
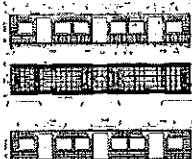

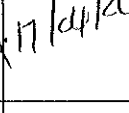


Welding Consumable Control - Used for Special Process

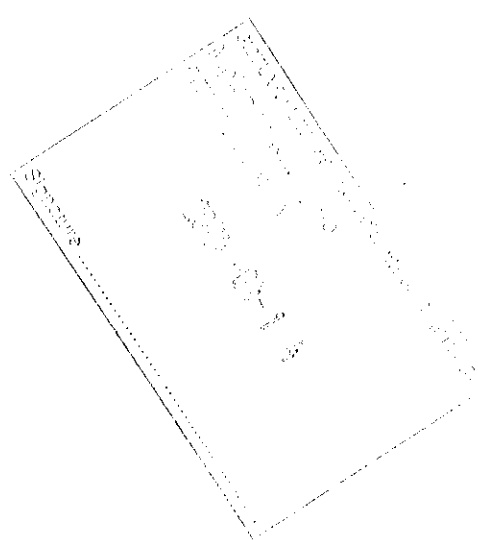
| Type Material | Heat Number | Welding Process | | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|---------------|-------------|-----------------|---|--------------------------------|--------------------------|
| Autrod 308 | E221880 | MIG | ✓ | <i>[Signature]</i> | 17/07/23 |
| EF 309 | 318394 | MIG | ✓ | <i>[Signature]</i> | 17/07/23 |
| | | | | | |
| | | | | | |

2023-07-17
 Signature: *[Signature]*
 Date: 17/07/23

II - Self Inspection - Items to Check

II.1 - Items to check

| Item | Picture/Drawing | Description | Acceptance criteria / Reference | ✓ | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|------|---|---|---|---|---|---|
| 01 | N/A | Carshell free of significant flaws which compromise the appearance or functionality | DTD0000210675 | ✓ |  17/04/24 |  17/04/24 |
| 02 | REFER TO ANNEXURE A | Spot welding inspected and approved according to procedure | IND-SAL-WMS-016 + DTD0000210675 | ✓ |  17/04/24 |  17/04/24 |
| 03 | REFER TO ANNEXURE B | Arc welding inspected and approved according to procedure | IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000 | ✓ |  17/04/24 |  17/04/24 |
| 04 |  | Cleaning of all Stainless Steel Surface | According TO GIB-WEL - PROC-0002 | ✓ |  17/04/24 |  17/04/24 |
| 05 |  | Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document | Approved according specified on pages below. | ✓ |  17/04/24 |  17/04/24 |
| 06 | N/A | Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658. | As the welding procedure IND-SAL-WMS-018 and DTD0000210658. | ✓ |  17/04/24 |  17/04/24 |





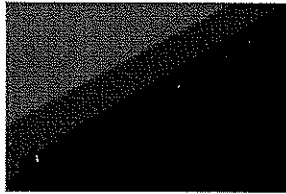
CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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SI.CB2210.254.V30

Welding Traceability

Roof ring welds



Boiler maker (Name & Sign): Lungu [Signature] ^{LHS} Welder (Name & Sign): Mthokozisi [Signature]

END 1

Boiler maker (Name & Sign): Tumelo [Signature] ^{RHS} Welder (Name & Sign): Mthokozisi [Signature]

Boiler maker (Name & Sign): Lungu [Signature] ^{LHS} Welder (Name & Sign): Mthokozisi [Signature]

END 2

Boiler maker (Name & Sign): Tumelo [Signature] ^{RHS} Welder (Name & Sign): Mthokozisi [Signature]

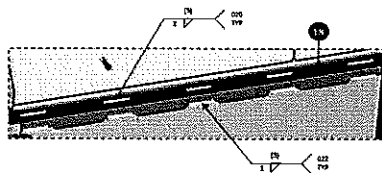
Door ring welds



Boiler maker (Name & Sign): Tim [Signature] ^{LHS}
Welder (Name & Sign): Thabang [Signature]

Boiler maker (Name & Sign): Tim [Signature] ^{RHS}
Welder (Name & Sign): Thabang [Signature]

EU Reinforcement Plates





CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

Rev.

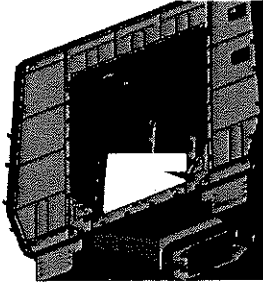
31

Project: PRASA

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Date

07/11/2023



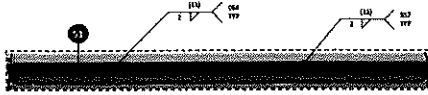
END 1

Boiler maker (Name & Sign):

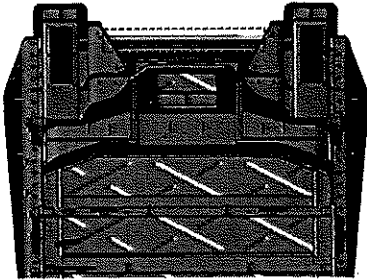
Tim [Signature]

Welder (Name & Sign):

Thabang [Signature]



END 2



Underneath the CAR

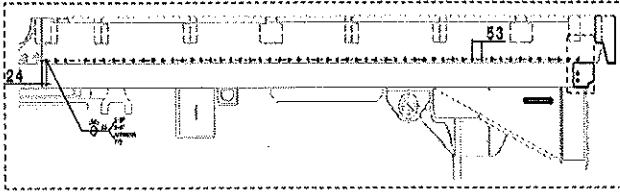
END 2

Boiler maker (Name & Sign):

Gerald [Signature]

Welder (Name & Sign):

Gipb [Signature]



FEDOLI

Operator:

Roberto [Signature]



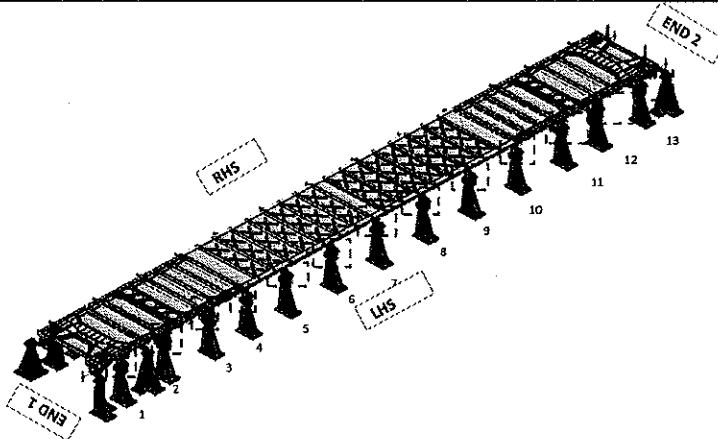


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Specifications of Details for CBS measurement



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 | | | | | | | | | | | | | |
| Right Hand Side | | | | | | | | | | | | | |

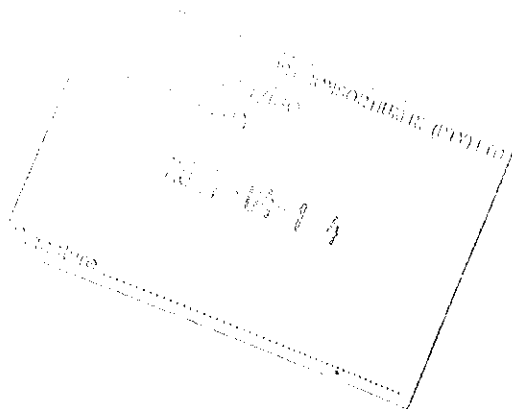
Signature Operations: *[Signature]* Date: 16/09/24

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: *[Signature]* Date: 16/09/24



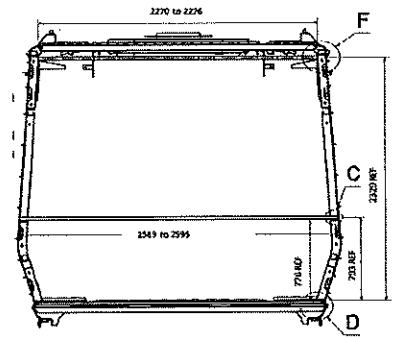
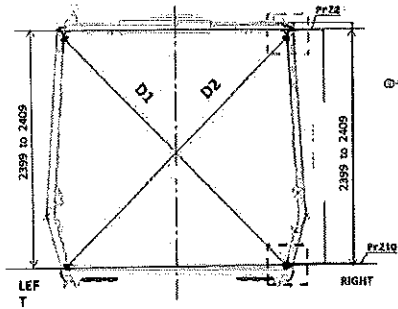
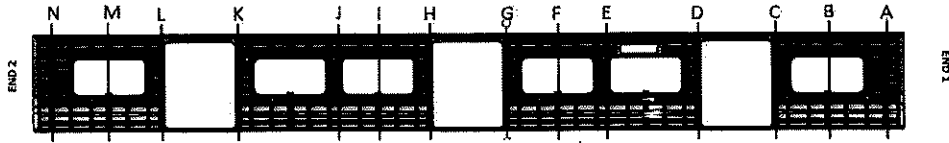


CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

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Specifications of Details for CBS measurement



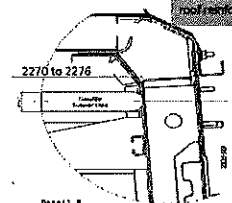
Measurement positions on roof rail and sidewall corner



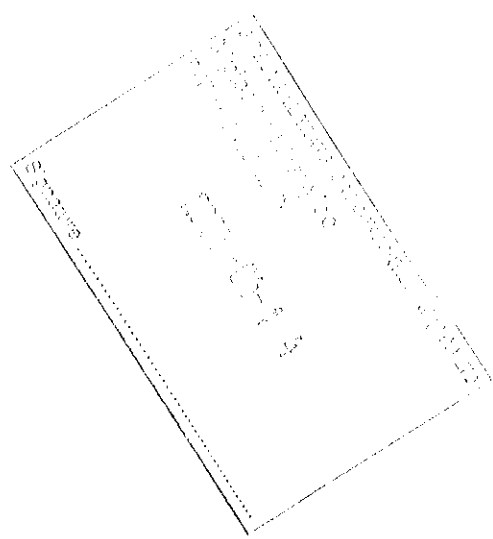
Measurement positions on sidewall and side sill corner



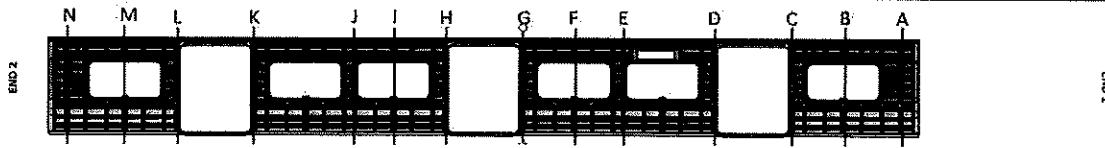
Reference corners in the measurement positions on roof reinforcement area



Detail P
See 3 specification for manufacturing



Specifications of Details for CBS measurement



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

BEFORE WELDING

| | Record D1 values | Record D2 values | D1-D2 ≤ 5 mm | 2399 to 2409 | 2399 to 2409 (RHS) | LHS-RHS ≤ 2 |
|---|------------------|------------------|-------------------|--------------|--------------------|------------------|
| A | 3266 | 3268 | 1 | 2405 | 2404 | 1 |
| B | 3268 | 3269 | 2 | 2406 | 2405 | 1 |
| C | 3266 | 3266 | 0 | 2406 | 2405 | 1 |
| D | 3266 | 3265 | 1 | 2404 | 2406 | 2 |
| E | 3263 | 3264 | 1 | 2405 | 2404 | 1 |
| F | 3266 | 3267 | 1 | 2406 | 2406 | 0 |
| G | 3267 | 3268 | 1 | 2406 | 2405 | 1 |
| H | 3265 | 3265 | 0 | 2405 | 2407 | 2 |
| I | 3266 | 3268 | 2 | 2405 | 2406 | 1 |
| J | 3265 | 3266 | 1 | 2404 | 2407 | 3 |
| K | 3267 | 3264 | 3 | 2405 | 2406 | 1 |
| L | 3265 | 3266 | 1 | 2408 | 2408 | 0 |
| M | 3265 | 3267 | 2 | 2406 | 2407 | 1 |
| N | 3265 | 3268 | 1 | 2405 | 2407 | 2 |

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

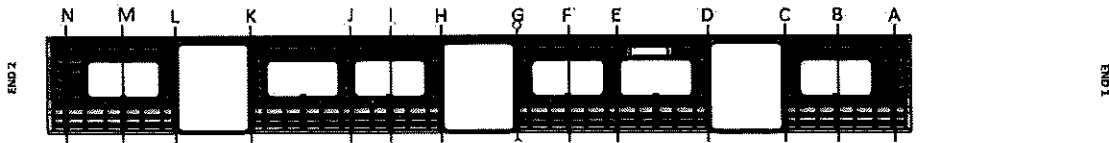


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Specifications of Details for CBS measurement



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

AFTER WELDING

| | Record D1 values | Record D2 values | D1-D2 ≤ 5 mm | 2399 to 2409 | 2399 to 2409 (RHS) | LHS-RHS ≤ 2 |
|---|------------------|------------------|-------------------|--------------|--------------------|------------------|
| A | 3295 | 3297 | 2 | 2404 | 2405 | 1 |
| B | 3266 | 3268 | 2 | 2403 | 2404 | 1 |
| C | 3294 | 3296 | 2 | 2406 | 2405 | 1 |
| D | 3295 | 3295 | 0 | 2406 | 2405 | 0 |
| E | 3266 | 3265 | 1 | 2405 | 2404 | 1 |
| F | 3265 | 3264 | 1 | 2406 | 2404 | 2 |
| G | 3294 | 3295 | 1 | 2404 | 2405 | 1 |
| H | 3295 | 3295 | 0 | 2403 | 2405 | 2 |
| I | 3263 | 3265 | 2 | 2405 | 2404 | 1 |
| J | 3266 | 3267 | 1 | 2406 | 2405 | 1 |
| K | 3297 | 3296 | 1 | 2404 | 2404 | 0 |
| L | 3296 | 3296 | 0 | 2403 | 2404 | 1 |
| M | 3265 | 3268 | 3 | 2405 | 2406 | 1 |
| N | 3298 | 3299 | 1 | 2407 | 2405 | 2 |



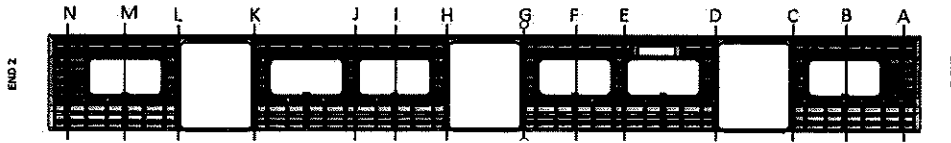


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

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CBS measurement

BEFORE WELDING



2270 to 2276

A: 2271

B: 2273

C: 2273

D: 2274

E: 2270

F: 2272

G: 2271

H: 2275

I: 2276

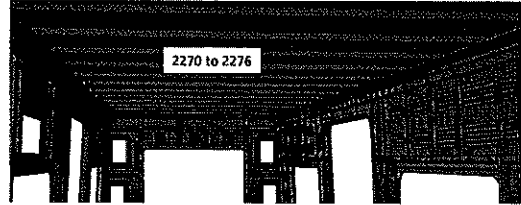
J: 2276

K: 2274

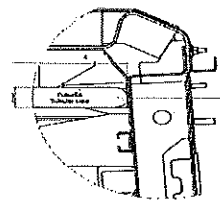
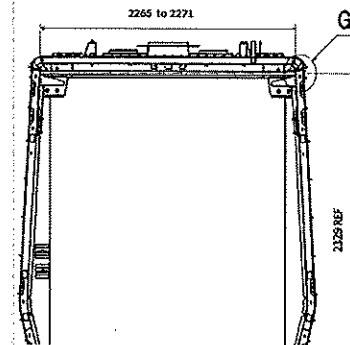
L: 2271

M: 2273

N: 2274

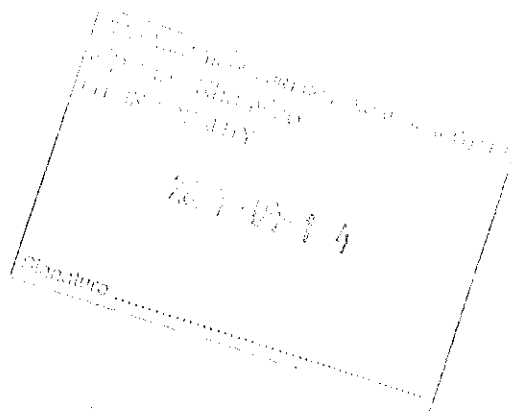


Do not consider reinforcement (Take measurements top area of zee profile



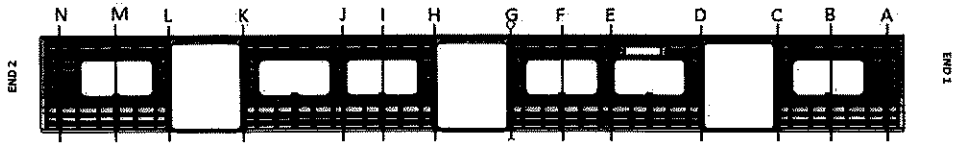
2265 to 2271

Detail 4
Considering the reinforcement plate

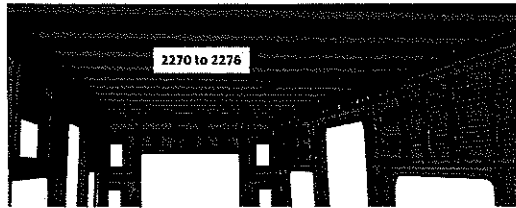


CBS measurement

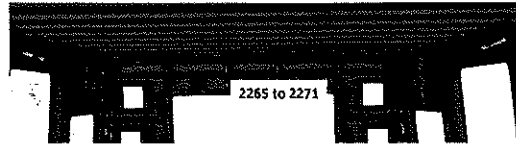
AFTER WELDING



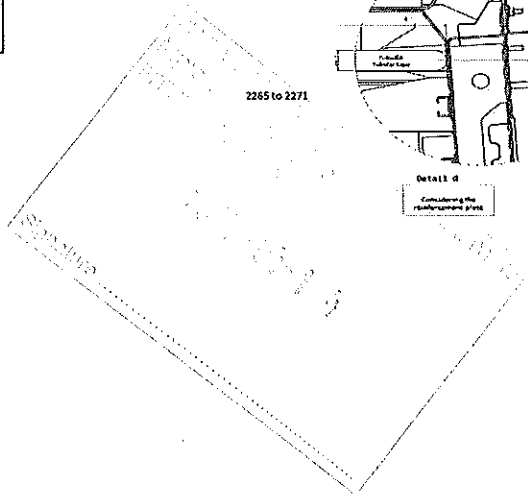
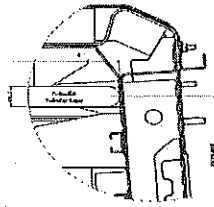
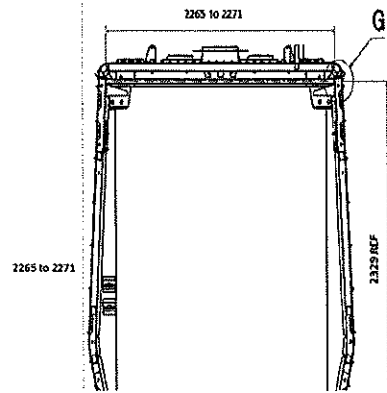
| | 2265 to 2271 | 2270 to 2276 |
|---|--------------|--------------|
| A | 2269 | |
| B | | 2276 |
| C | 2270 | |
| D | 2268 | |
| E | | 2274 |
| F | | 2276 |
| G | 2271 | |
| H | 2267 | |
| I | | 2275 |
| J | | 2273 |
| K | 2269 | |
| L | 2268 | |
| M | | 2275 |
| N | 2270 | |



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



Take measurement close to radius (considering reinforcement)



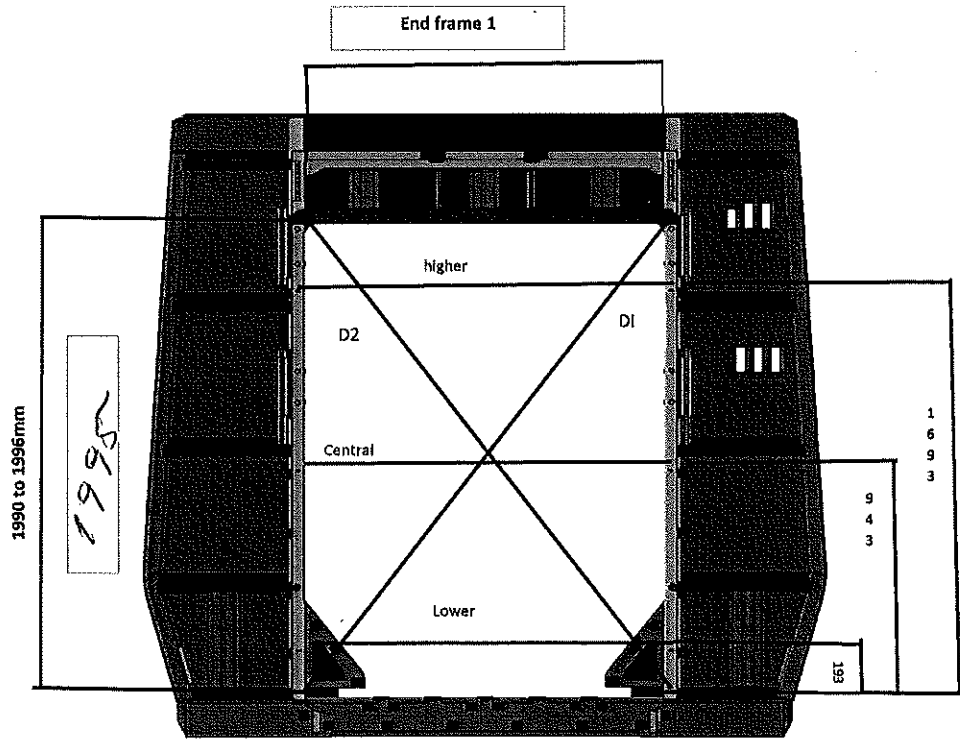


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Specifications of Details for CBS measurement



1380 to 1382 mm

DIAGONAL DIFFERENCE $D1-D2 \leq 3\text{mm}$

Higher Dimension

1381

D1

2416

Central Dimension

1381

D2

2415

Lower Dimension

1381

D1-D2

1

Handwritten signature and date: 07/11/23

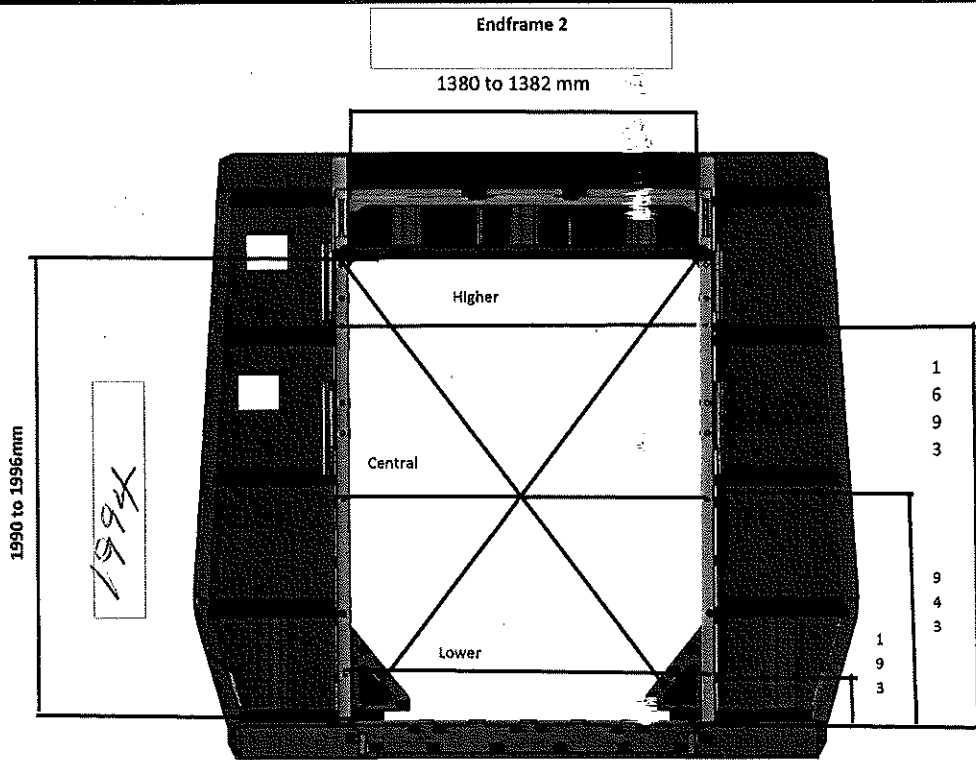


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev.
31
Date
07/11/2023

Project: PRASA
SI.CB2210.254.V30

Specifications of Details for CBS measurement



1380 to 1382 mm

DIAGONAL DIFFERENCE $D1-D2 \leq 3\text{mm}$

Higher Dimension

1381

D1

2413

Central Dimension

1380

D2

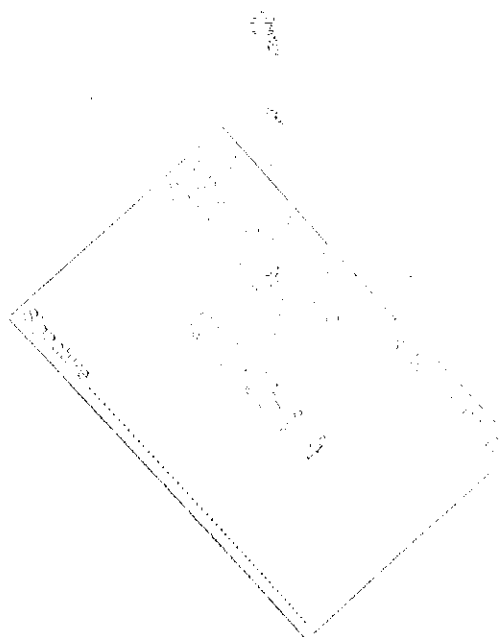
2415

Lower Dimension

1380

D1-D2

2



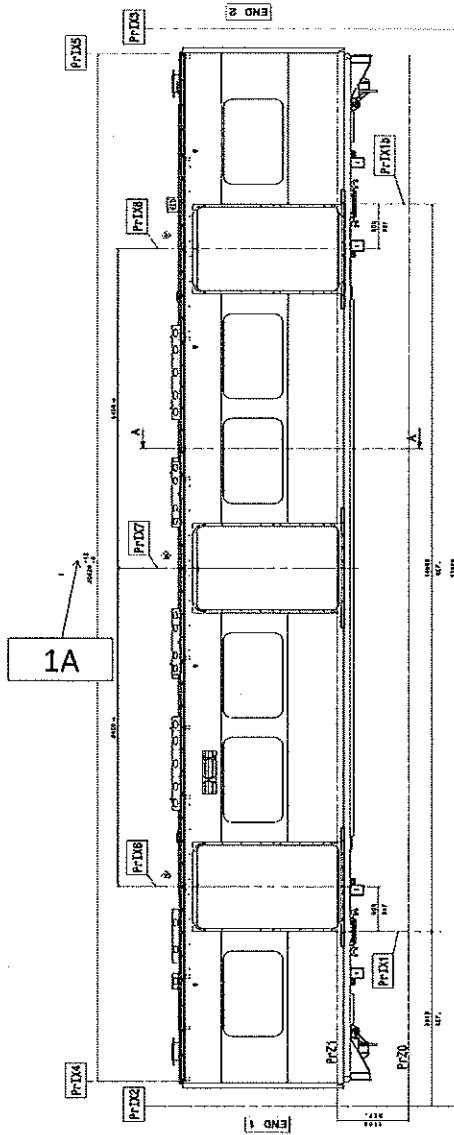


CARBODYSHELL M3,M4 ASSEMBLY DTR30225487/3

Rev. 31
Date 07/11/2023

Project: PRASA
SI.CB2210.254.V30

Specifications of Details for CBS measurement

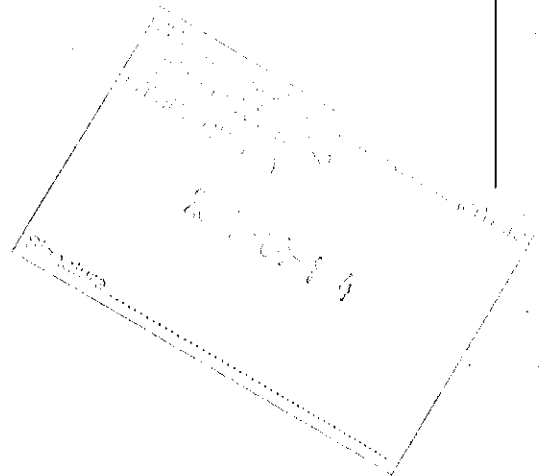


| LEFT SIDE | | |
|-----------|--------------------|-------------|
| | SPECIFICATION SIZE | ACTUAL SIZE |
| 1A | 20632 - 20614 | 20629 |

| RIGHT SIDE | | |
|------------|--------------------|-------------|
| | SPECIFICATION SIZE | ACTUAL SIZE |
| 1A | 20632 - 20614 | 20629 |

Dye penetrant test

Dye-penetration test to be performed by quality personnel





CARBODYSHELL M3,M4 ASSEMBLY DTR30226487/3

Rev. 31
Date 07/11/2023

Project: PRASA
SI.CB2210.254.V30

Self Inspection - Final Result

| | | DATE | NAME | SIGNATURE |
|------------|---|----------|------------------------------|-----------|
| HOLD POINT | (If activities are not complete, the missing activities must not impact the next stage) | 16/07/24 | Jebung Operations | |
| | Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.) | 26/04/24 | Andani Industrial Quality | |
| | There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below) | | Operations | |
| | There are non-conformities impact the quality of the product and there is no corrective action defined yet) | 17/04/24 | Andani Industrial Quality | |

In case of "NO GO", describe blocking problems

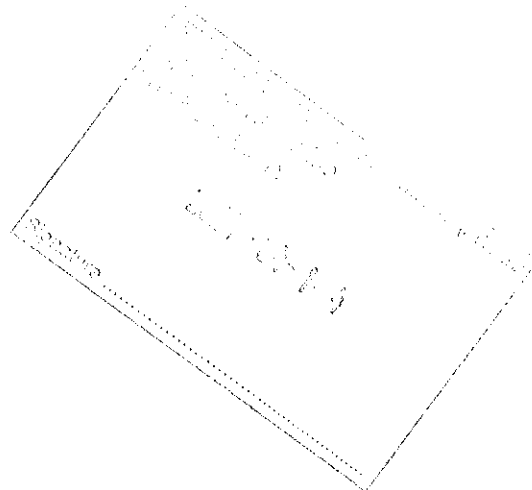
Mechanical damage on sty

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

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

Operations

Quality

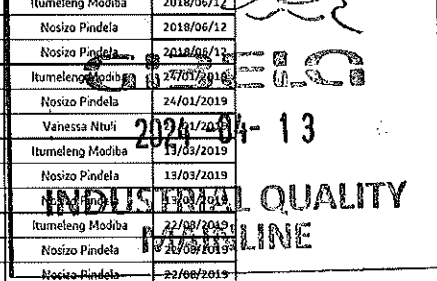





APPLICATION REFERENCE

| MOUNTING | DRAWING | DESCRIPTION | STATION | CAR TYPE | | | | | | WORK INSTRUCTION | SAFETY? |
|--------------------------|--------------|---|---------|----------|----|----|----|----|-----|----------------------------------|---------|
| | | | | TCL | SM | M3 | M4 | M5 | TC2 | | |
| <input type="checkbox"/> | DTR302254872 | AAD0001278556 CARBODY/SHELL M3,M3,M4 ASSEMBLY | CB2220 | | X | X | | X | | PRA.CB2220.DTR3022548 7/2.V21 | YES |
| <input type="checkbox"/> | | | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | | | |
| <input type="checkbox"/> | | | | | | | | | | | |

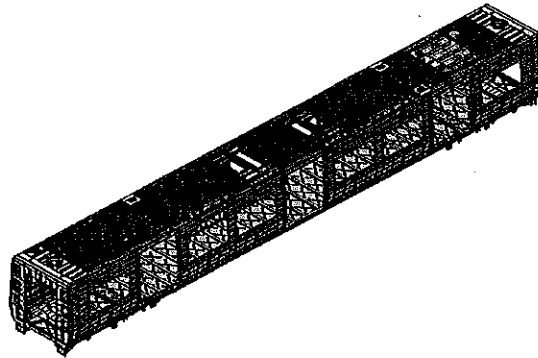
| REV | DATE | MODIFICATION CONTENT | RESPONSIBLE | NAME | DATE |
|-----|------------|--|-------------|--------------------|------------|
| 0 | 01/02/2018 | GIBELA NEW CREATION | APPROVER | Itumeleng Modiba | 01/02/2018 |
| | | | CHECKER | Nosizo Pindela | 01/02/2018 |
| | | | COMPILER | Thanyani Mathegu | 01/02/2018 |
| 1 | 18/05/2018 | Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager | APPROVER | Itumeleng Modiba | 18/05/2018 |
| | | | CHECKER | Nosizo Pindela | 18/05/2018 |
| | | | REVISED BY | Ramokone Motama | 18/05/2018 |
| 2 | 2018/07/05 | Certain dimensional checks added and others moved to CB1210 | APPROVER | Itumeleng Modiba | 2018/07/05 |
| | | | CHECKER | Nosizo Pindela | 2018/07/05 |
| | | | REVISED BY | Ramokone Motama | 2018/07/05 |
| 3 | 2018/06/12 | Width tolerance as per DT0000336500 | APPROVER | Itumeleng Modiba | 2018/06/12 |
| | | | CHECKER | Nosizo Pindela | 2018/06/12 |
| | | | REVISED BY | Nosizo Pindela | 2018/06/12 |
| 5 | 24/01/2019 | As per Baseline 10.2 | APPROVER | Itumeleng Modiba | 24/01/2019 |
| | | | CHECKER | Nosizo Pindela | 24/01/2019 |
| | | | REVISED BY | Vanessa Ntuli | 24/01/2019 |
| 6 | 13/03/2019 | Added D1 and D2 on Self - Inspection length measurements | APPROVER | Itumeleng Modiba | 13/03/2019 |
| | | | CHECKER | Nosizo Pindela | 13/03/2019 |
| | | | REVISED BY | Itumeleng Modiba | 22/08/2019 |
| 10 | 22/08/2019 | New Baseline 10.2.5 | APPROVER | Itumeleng Modiba | 22/08/2019 |
| | | | CHECKER | Nosizo Pindela | 22/08/2019 |
| | | | REVISED BY | Nosizo Pindela | 22/08/2019 |
| 15 | 06/08/2020 | New Baseline 10.2.6 | APPROVER | Timothy Maimela | 06/08/2020 |
| | | | CHECKER | Bongane Masina | 06/08/2020 |
| | | | REVISED BY | Bongane Masina | 06/08/2020 |
| 20 | 19/04/2021 | New Baseline change 10.3 | APPROVER | Timothy Maimela | 19/04/2021 |
| | | | CHECKER | Bongane Masina | 19/04/2021 |
| | | | REVISED BY | Bongane Masina | 19/04/2021 |
| 21 | 17/08/2021 | ADDED DIMENSIONS BEFORE WELDING | APPROVER | Mbhombi Collins | 17/08/2021 |
| | | | CHECKER | Mpho Mulaudzi | 17/08/2021 |
| | | | REVISED BY | Mpho Mulaudzi | 17/08/2021 |
| 25 | 20/02/2022 | New Baseline change 10.3.1 | APPROVER | Collins Mbhombhi | 19/02/2022 |
| | | | CHECKER | Andani Muthelo | 19/02/2022 |
| | | | REVISED BY | Andani Muthelo | 19/02/2022 |
| 26 | 14/06/2022 | Update minimum temperature requirement for sealant application | APPROVER | Collins Mbhombhi | 14/06/2022 |
| | | | CHECKER | Andani Muthelo | 14/06/2022 |
| | | | REVISED BY | Andani Muthelo | 14/06/2022 |
| 27 | 19/10/2022 | Addition of traceability for sealant application & welding | APPROVER | Collins Mbhombhi | 19/10/2022 |
| | | | CHECKER | Ntokozo Zwane | 19/10/2022 |
| | | | REVISED BY | Amogelang Mohlampe | 19/10/2022 |
| 28 | 14/04/2023 | Added sealant batch number & welding consumables traceability | APPROVER | Vanessa Ntuli | 14/04/2023 |
| | | | CHECKER | Ntokozo Zwane | 14/04/2023 |
| | | | REVISED BY | Amogelang Mohlampe | 14/04/2023 |
| 29 | 28/10/2023 | Addition of bracket quantity | APPROVER | Ngobeni Tyson | 28/10/2023 |
| | | | CHECKER | Ntokozo Zwane | 28/10/2023 |
| | | | REVISED BY | Amogelang Mohlampe | 28/10/2023 |



| TRAINSET | CAR | OPERATOR NAME & ALPS NO | DATE | SELF INSPECTION NUMBER | PAGES |
|----------|-----|-------------------------|------------|------------------------|-------|
| 223 | M14 | Mashudu Gwaxa | 17/10/2023 | SI.CB2220.250.V29 | 13 |

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

| | | | |
|---------------|------|---------------|--------|
| Car: M1,M3&M4 | NCR: | Work station: | CB2220 |
|---------------|------|---------------|--------|



I - Documentation and Instruments Control

I.1 - Documentation Control

| Document | Type of car | | | | | Revision | Observation | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|---------------|-------------|---|---|---|---|----------|-------------|----|--------------------------------|--------------------------|
| | D | M | M | M | D | | | | | |
| DTR30225487/2 | | | | ✓ | | | | ✓ | N/A | 17/04/24 |

I.2 - Instruments Control

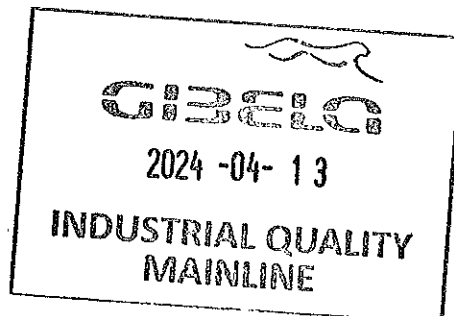
Monitoring and Measuring Instrument Control - Used for Special Process

| Instruments | Serial number | Calibration or Verification Validation Date | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|----------------|---------------|---|----|--------------------------------|--------------------------|
| Tubular | 32823-3 | 15/03/2025 | ✓ | 17/04/24 | 17/04/24 |
| Measuring tape | GIBTA0031 | 10/04/2025 | ✓ | 17/04/24 | 17/04/24 |

I.3 Consumables

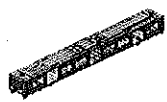
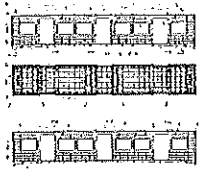


Welding Consumable Control - Used for Special Process

| Filler Material | Heat Number | Welding Process | OK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|-----------------|-------------|-----------------|----|--------------------------------|--------------------------|
| 308 1.0mm | 5231067 | MIG | ✓ | 17/04/24 | 17/04/24 |



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 | Assembly according to Instruction Engineering n° PRA.CB2220.DTR30225487/2 Verification of fitment for all reinforcement brackets. | PRA.CB2220.DTR30225487/2 | ✓ | M. Mandin 17/04/24 | 17/04/24 |
| 02 | N/A | Carshell free of significant flaws which compromise the appearance or functionality | DT00000210675 | ✓ | M. Mandin 17/04/24 | 17/04/24 |
| 03 | REFER TO ANNEXURE A | Arc Welding inspected and approved according procedure. | IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000 | ✓ | M. Mandin 17/04/24 | 17/04/24 |
| 04 |  | Cleaning of all Stainless Steel Surface | According TO GIB-WEL - PROC-0002 | ✓ | M. Mandin 17/04/24 | 17/04/24 |
| 05 |  | Functionals dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document. | Approved according specified on pages below. | ✓ | M. Mandin 17/04/24 | 17/04/24 |
| 06 |  | Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DT00000210658. | As the welding procedure IND-SAL-WMS-018 and DT00000210658. | ✓ | M. Mandin 17/04/24 | 17/04/24 |
| 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 25% - 88% | Sealant Batch No: <u>204935P</u> Exp Date: <u>05</u> / <u>24</u> Actuals Temperature: <u>17</u> Humidity: <u>61</u> | ✓ | 17/04/24 | 17/04/24 |
| 08 | NA | Verification of sealant application in certain regions in the drawing. | AAD0001278566 | ✓ | 17/04/24 | 17/04/24 |
| 09 |  | Verification of safety welds | Approved according to DT0000210658 reference and Self inspection 2024 -04- 13 | ✓ | M. Mandin 17/04/24 | 17/04/24 |

INDUSTRIAL QUALITY
MAINLINE



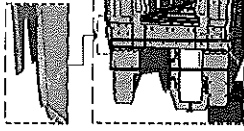
CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

Rev.
29
Date
28/10/2023

Project: PRASA
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II - Self Inspection - Items to Check

SEALANT APPLICATION



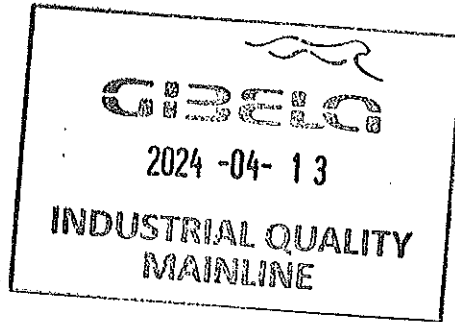
AREA 1 & 2 END 1


Operator (Name & sign):

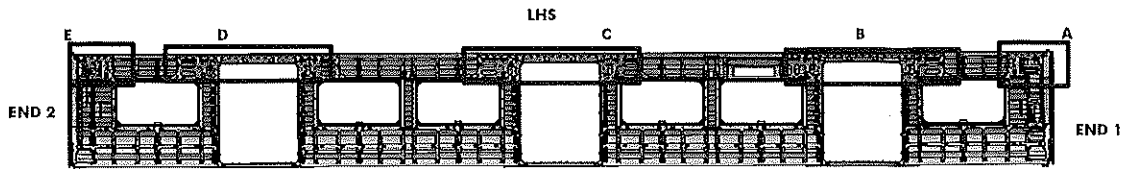
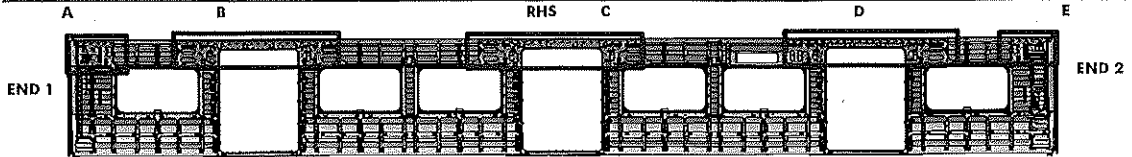
M. Kichozis

Operator (Name & sign):

M. Kichozis




| | | | |
|---|--|--------------------|--|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2 | Rev. 29 | Project: PRASA SI.CB2220.250.V29 |
| | | Date 28/10/2023 | |
| II - Self Inspection - Items to Check | | | |

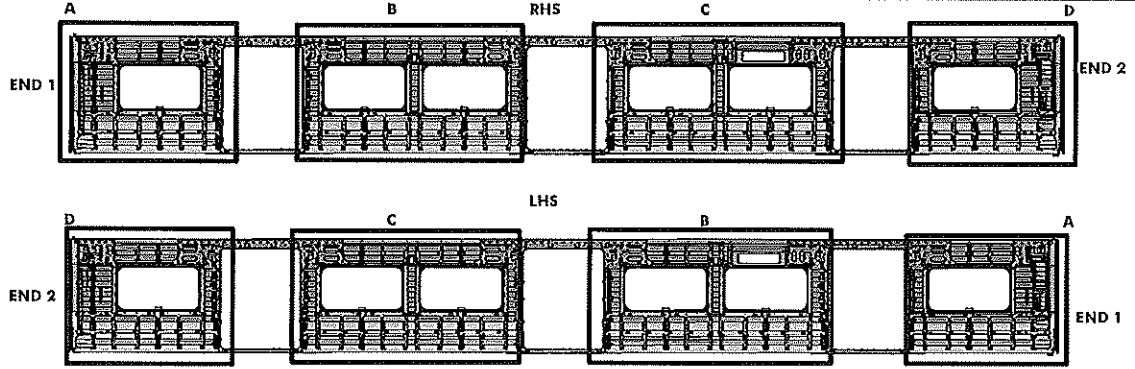


REINFORCEMENT WELDING


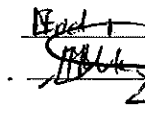
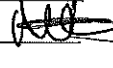
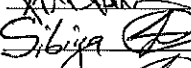
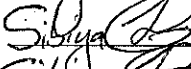
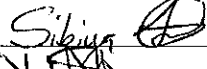
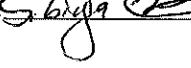

| AREA | LHS | RHS |
|------|--|-----------------------------|
| A | Operator (Name&sign): <i>Nokulungezi Diphu</i> | <i>[Signature]</i> |
| B | Operator (Name&sign): <i>Nokulungezi Diphu</i> | <i>[Signature]</i> |
| C | Operator (Name&sign): <i>Nokulungezi Diphu</i> | <i>[Signature]</i> |
| D | Operator (Name&sign): <i>Sibijani</i> | Thinkani <i>[Signature]</i> |
| E | Operator (Name&sign): <i>Sibijani</i> | Thinkani <i>[Signature]</i> |

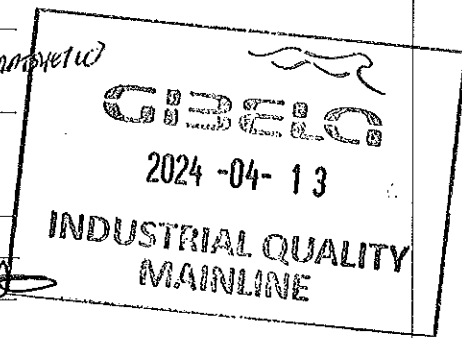

2024-04-13
**INDUSTRIAL QUALITY
MAINLINE**

| | | | |
|---|---|------------|-------------------|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2 | Rev. | Project: PRASA |
| | | 29 | |
| | | Date | SI.CB2220.250.V29 |
| | | 28/10/2023 | |
| II - Self Inspection - Items to Check | | | |



BRACKETING

| | | |
|--|---|---|
| INSTALLATION | | |
| C-RAILS: | Operator: <u>16/12/17/19</u>  | |
| | Operator: _____ | |
| DOOR MECHANISMS: | Operator: <u>Moshudh Moshudh</u> | |
| | Operator: _____ | |
| TAPPING PADS | Operator: <u>Beet</u> <u>Mohan Moshudh</u> | |
| | Operator:  | |
| INSTALLATION & VERIFICATION | | |
| SEAT & LUGGAGE BRACKETS: | Operator: <u>Levi</u> <u>LSB</u> | |
| | Operator: _____ | |
| SEAT BRACKETS VERIFICATION: | Operator: <u>Mthokozisi</u>  | |
| | Operator: _____ | |
| WELDING | | |
| AREA | LHS | RHS |
| A (Seat brackets) | : Operator (Name&sign): <u>S. MASHA</u> | <u>S. MASHA</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Djawa</u> | <u>S. MASHA</u> |
| B (Seat brackets) | : Operator (Name&sign): <u>Kh. D.</u> | <u>Kh. D.</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Djawa</u> | <u>S. MASHA</u> |
| C (Seat brackets) | : Operator (Name&sign): <u>Kh. D.</u> | <u>Kh. D.</u> |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Sibiga</u>  | <u>Kh. D.</u> |
| D (Seat brackets) | Operator (Name&sign): <u>Sibiga</u>  | <u>Sibiga</u>  |
| (C-rails, Luggage and earth bushes) | : Operator (Name&sign): <u>Sibiga</u>  | <u>Kh. D.</u> |
| ENDS | | |
| END 1 TAPPING PADS WELDING: | Operator (Name&sign): <u>Moshudh Moshudh</u> | |
| END 2 TAPPING PADS WELDING: | Operator (Name&sign):  | |





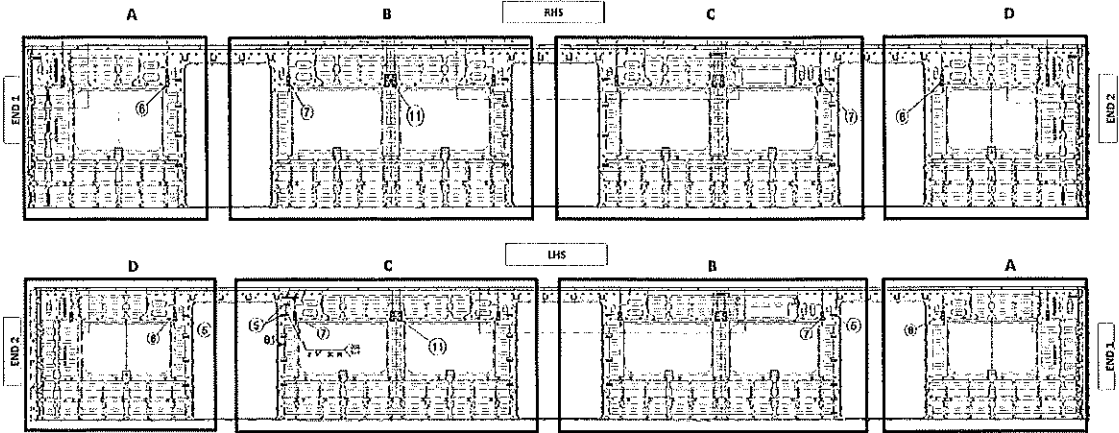
CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

Rev.
29
Date
28/10/2023

Project: PRASA
SI.CB2220.250.V29

II - Self Inspection - Items to Check

M1/M3/M4 BRACKET INSTALLATION



QUANTITIES (M3/M4)

RHS

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

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

LHS

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

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

QUANTITIES (M1)

RHS

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

ROOF ENDS:
 CRAILS 2 OFF EACH END
 EARTH BUSH 6 OFF EACH END
 VERIFICATION BY: N/A

LHS

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

ROOF ENDS:
 CRAILS 2 OFF EACH END
 EARTH BUSH 6 OFF EACH END
 VERIFICATION BY: N/A

GIBELO
 2024-04-13
 INDUSTRIAL QUALITY
 MAINLINE

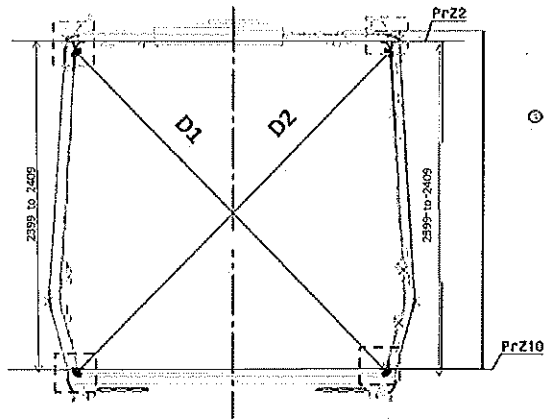


CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30226487/2

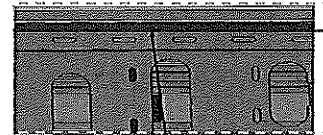
Rev. 29
Date 28/10/2023

Project: PRASA
SI.CB2220.250.V29

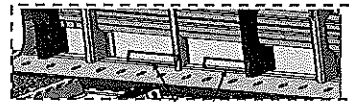
Specifications of Details for GBS measurement



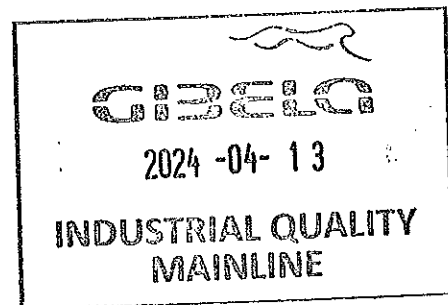
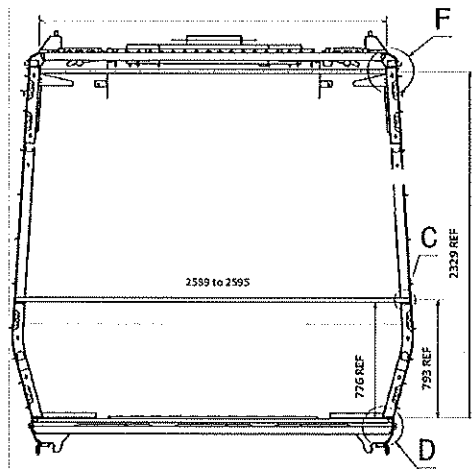
Measurement positions on roof rail and sidewall omega corner.



Reinforcement area measurement positions on roof reinforcement area.



Measurement positions on sidewall and side sill corner.



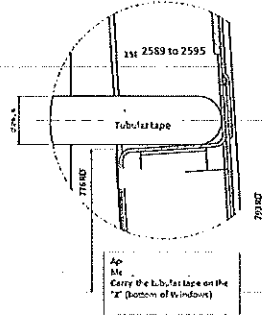
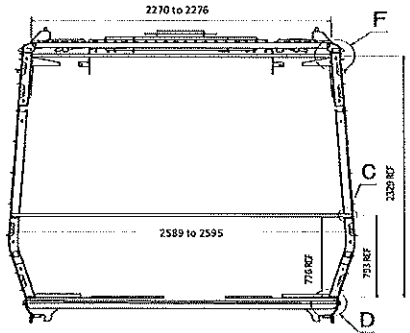


CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30226487/2

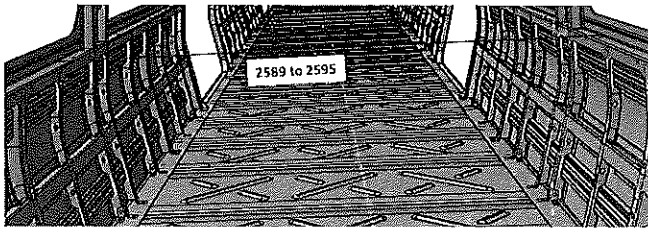
Rev.
29
Date
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SI.CB2220.250.V29

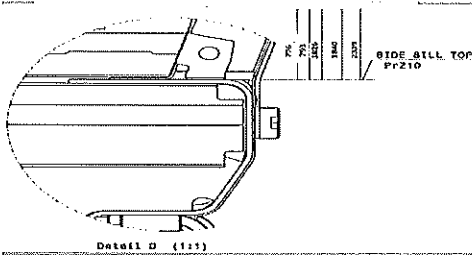
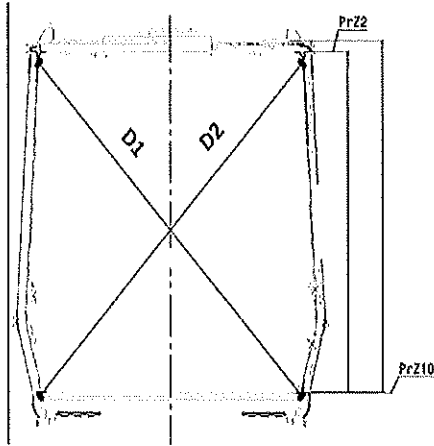
CBS measurement




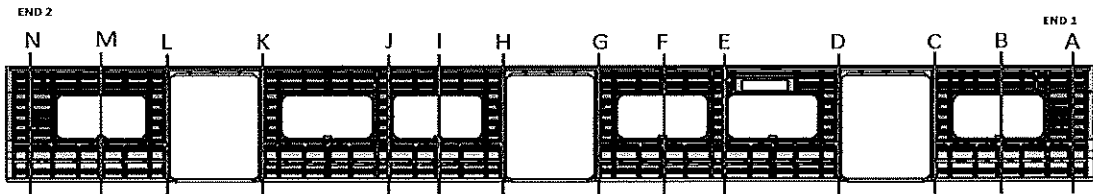
Detail C



Take measurement close to
radius



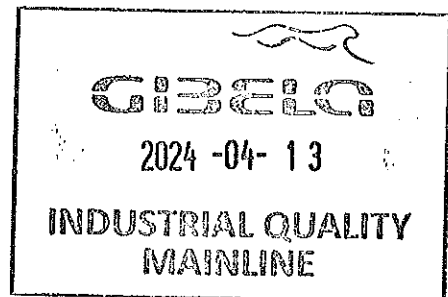
| | | | |
|---|---|------------|---|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2 | Rev. | Project: PRASA SI.CB2220.250.V29 |
| | | 29 | |
| | | Date | |
| | | 28/10/2023 | |
| GBS measurement | | | |



BEFORE WELDING

| | Record D1 values | Record D2 values | D1-D2 ≤ 5mm | 2589 to 2595 |
|---|------------------|------------------|-------------|--------------|
| A | 3293 | 3297 | 4 | |
| B | 3267 | 3262 | 5 | |
| C | 3290 | 3295 | 5 | |
| D | 3295 | 3294 | 1 | |
| E | 3260 | 3261 | 1 | |
| F | 3261 | 3262 | 1 | |
| G | 3292 | 3291 | 1 | |
| H | 3292 | 3293 | 1 | |
| I | 3262 | 3261 | 1 | |
| J | 3264 | 3262 | 2 | |
| K | 3293 | 3294 | 1 | |
| L | 3293 | 3294 | 1 | |
| M | 3263 | 3264 | 1 | |
| N | 3298 | 3295 | 3 | |

N/A



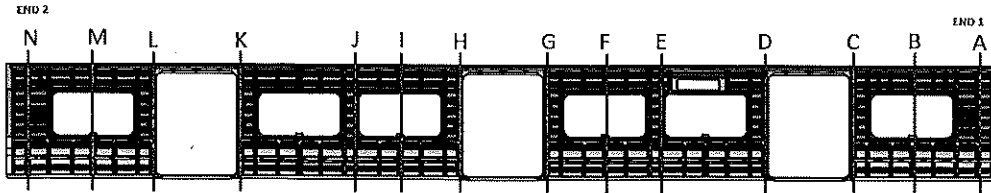


CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30226487/2

Rev.
29
Date
28/10/2023

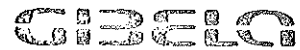
Project: PRASA
SI.CB2220.250.V29

CBS measurement



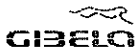
AFTER WELDING

| | Record D1 values | Record D2 values | D1-D2 ≤ 5mm | 2589 to 2595 |
|---|------------------|------------------|-------------|--------------|
| A | 3295 | 3297 | 2 | 2593 |
| B | 3263 | 3267 | 4 | 2593 |
| C | 3291 | 3294 | 3 | 2594 |
| D | 3295 | 3295 | 0 | 2594 |
| E | 3262 | 3264 | 2 | 2594 |
| F | 3261 | 3263 | 2 | 2594 |
| G | 3293 | 3295 | 2 | 2591 |
| H | 3293 | 3294 | 1 | 2595 |
| I | 3262 | 3263 | 1 | 2594 |
| J | 3263 | 3264 | 1 | 2595 |
| K | 3292 | 3294 | 2 | 2589 |
| L | 3295 | 3294 | 1 | 2594 |
| M | 3264 | 3265 | 1 | 2595 |
| N | 3299 | 3296 | 3 | 2594 |



2024-04-13

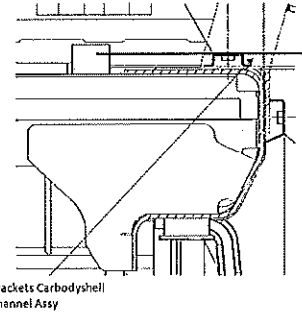
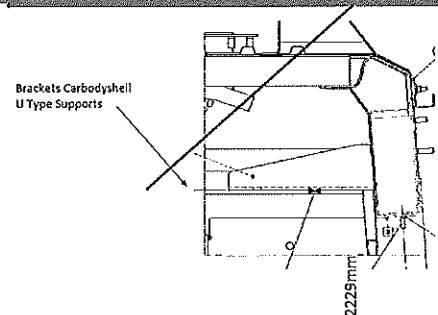
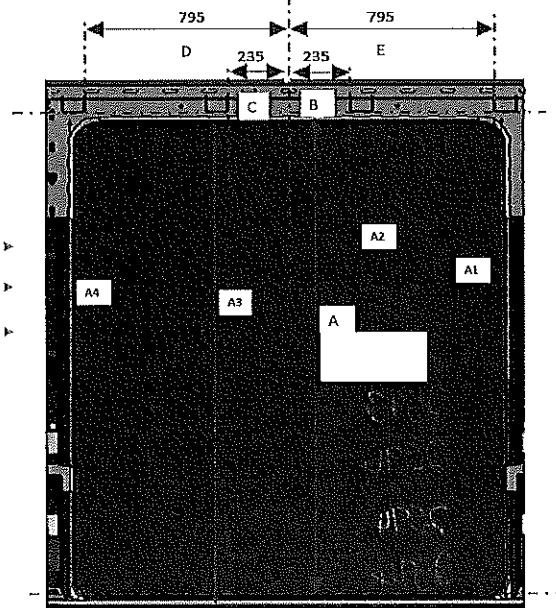
INDUSTRIAL QUALITY
MAINLINE



CARBODYSHELL M1,M3,M4 ASSEMBLY
DTR30225487/2

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

Specifications of Details for CBS measurement CB1220



DOOR 1 - LHS

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

DOOR 2 - LHS

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

DOOR 2 - RHS

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

DOOR 1 - RHS


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

DOOR 2 - RHS

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

DOOR 3 - RHS

| | VALUE | ACTUAL |
|----|--------------|--------|
| A1 | 2230 to 2232 | 2232 |
| A2 | 2230 to 2232 | 2231 |
| A3 | 2230 to 2232 | 2231 |
| 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 |



2024-04-13

**INDUSTRIAL QUALITY
MAINLINE**

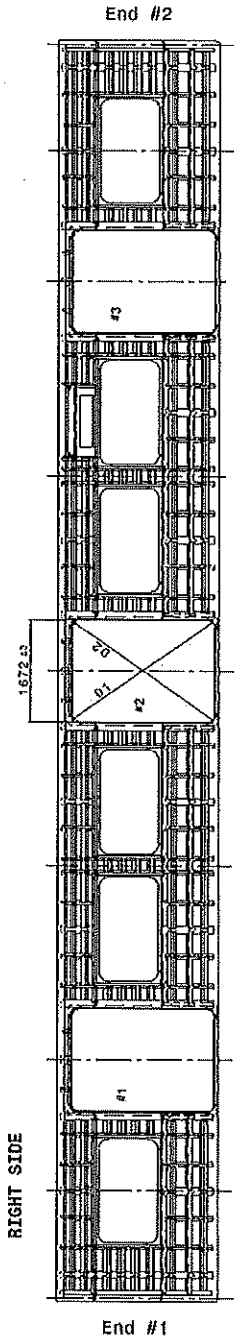


CARBODYSHELL M1,M3,M4 ASSEMBLY
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29
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28/10/2023

Project: PRASA
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Specifications of Details for CBS measurement CB1220

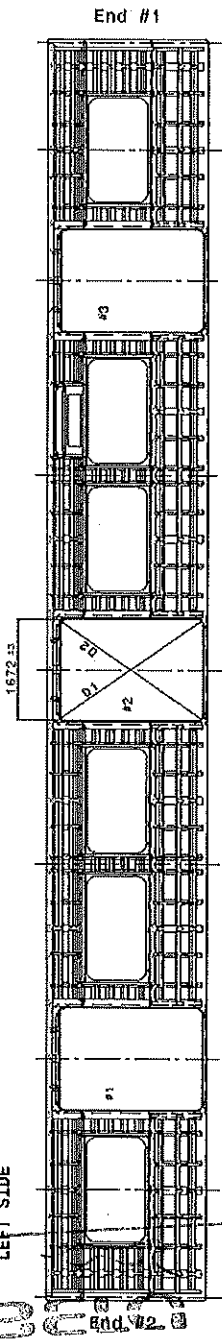


Doors diagonal D1-D2 maximum difference ≤ 4mm

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

Doors length - 1672 ±3mm

| | | | |
|-------------------|------|------|------|
| | #1 | #2 | #3 |
| HIGHER DIMENSION | 1671 | 1672 | 1670 |
| CENTRAL DIMENSION | 1671 | 1672 | 1671 |
| LOWER DIMENSION | 1672 | 1671 | 1671 |



Doors diagonal D1-D2 maximum difference ≤ 4mm

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


Doors length - 1672 ±3mm

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

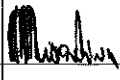
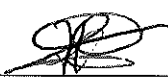


2024-04-13

INDUSTRIAL QUALITY
MAINLINE

| | | | |
|---|--|------------|---|
|  | CARBODYSHELL M1,M3,M4 ASSEMBLY DTR30226487/2 | Rev. | Project: PRASA SI.CB2220.250.V29 |
| | | 29 | |
| | | Date | |
| | | 28/10/2023 | |

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 | (if activities are not complete, the missing activities must not impact the next stage!) | 17/04/2024 | Mashuda Operations |  |
| | | Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.) | 17/04/2024 | Amo Industrial Quality |  |
| | | There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below) | | | Operations |
| | | There are non-conformities that impact the quality of the product and there is no corrective action defined yet) | | | Industrial Quality |

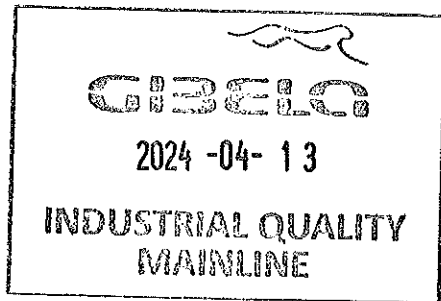
In case of "NO GO", describe blocking problems

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

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

Operations

Quality







APPLICABLE FOR TRAINSET 100+ ONLY AS PER BASELINE 10.3.1

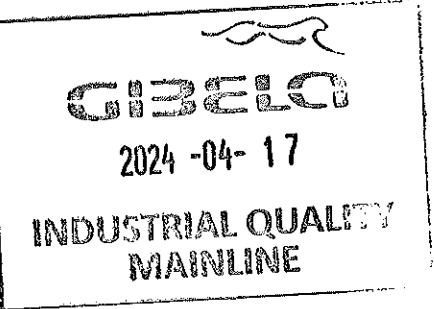
SELF INSPECTION SHEET

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 ? |
|---------------|---------------|-----------------------------------|---------|----------|----|----|----|----|-----|----------------------------------|----------|
| | | | | TCL | M6 | M1 | M2 | M3 | TCL | | |
| DT00000225487 | AAD0001278556 | CARBODYSHELL M1,M3,M4 ASSEMBLY | CB2230 | | X | | | X | | PRA.CB2230.DT000002 25487.V20 | YES |

| R# | DATE | MODIFICATION CONTENT | RESPONSIBLE | NAME | DATE |
|----|------------|--|-------------|--------------------|------------|
| 0 | 2018/08/02 | GIBELA NEW CREATION | APPROVER | Phillipe Marques | 2018/08/02 |
| | | | CHECKER | Nosizo Pindela | 2018/08/02 |
| | | | COMPILER | Nosizo Pindela | 2018/08/02 |
| 1 | 30/5/2018 | Team leader and Quality Technician to sign Change final signature from PME Manager to Quality manager | APPROVER | Itumeleng Modiba | 30/5/2018 |
| | | | CHECKER | Nosizo Pindela | 30/5/2018 |
| | | | REVISED BY | Nosizo Pindela | 30/5/2018 |
| 2 | 2018/05/07 | Certain dimensional checks moved to CB1220 | APPROVER | Itumeleng Modiba | 2018/05/07 |
| | | | CHECKER | Nosizo Pindela | 2018/05/07 |
| | | | REVISED BY | Ramokone Motama | 2018/05/07 |
| 5 | 24/01/2019 | As per Baseline 10.2 | APPROVER | Itumeleng Modiba | 24/01/2019 |
| | | | CHECKER | Nosizo Pindela | 24/01/2019 |
| | | | REVISED BY | Vanessa Ntuli | 24/01/2019 |
| 6 | 13/03/2019 | Added Twist and Door Bracket Measurements Remove Door Measurements | APPROVER | Itumeleng Modiba | 13/03/2019 |
| | | | CHECKER | Nosizo Pindela | 13/03/2019 |
| | | | REVISED BY | Nosizo Pindela | 13/03/2019 |
| 10 | 23/08/2019 | New Baseline 10.2.5 | APPROVER | Itumeleng Modiba | 23/08/2019 |
| | | | CHECKER | Nosizo Pindela | 23/08/2019 |
| | | | REVISED BY | Nosizo Pindela | 23/08/2019 |
| 15 | 06/08/2020 | New Baseline 10.2.6 | APPROVER | Timothy Maimela | 06/08/2020 |
| | | | CHECKER | Bongane Masina | |
| | | | REVISED BY | Bongane Masina | |
| 20 | 19/04/2021 | New Baseline change 10.3 | APPROVER | Timothy Maimela | 19/04/2021 |
| | | | CHECKER | Bongane Masina | |
| | | | REVISED BY | Bongane Masina | |
| 25 | 20/02/2022 | New Baseline change 10.3.1 | APPROVER | Collins Mhombhi | 20/02/2022 |
| | | | CHECKER | Andani Muthelo | |
| | | | REVISED BY | Andani Muthelo | |
| 26 | 14/06/2022 | Update minimum temperature requirement for sealant application | APPROVER | Collins Mhombhi | 14/06/2022 |
| | | | CHECKER | Andani Muthelo | |
| | | | REVISED BY | Andani Muthelo | |
| 27 | 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 | Ntokoze Zwane | |
| | | | REVISED BY | Amogelang Mohlampe | |
| 29 | 14/04/2023 | Added sealant batch number & welding consumables traceability | APPROVER | Vanessa Ntuli | 14/04/2023 |
| | | | CHECKER | Ntokoze Zwane | |
| | | | REVISED BY | Amogelang Mohlampe | |
| 30 | 06/11/2023 | Added threshold traceability for boiler makers and welders | APPROVER | Ngobeni Tyson | 06/11/2023 |
| | | | CHECKER | Andani Muthelo | |
| | | | REVISED BY | Ntokoze Zwane | |



| TRAINSET | CAR | OPERATOR NAME & ALPS NO | DATE | SELF-INSPECTION NUMBER | PAGES |
|----------|-----|-------------------------|------------|------------------------|-------|
| 223 | M4 | mmathape 10483001 | 13/04/2024 | SI.CB2230.256.V29 | 12 |





CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev.
30
Date
06/11/2023

Project: PRASA
SI.CB2230.256.V29

Car:

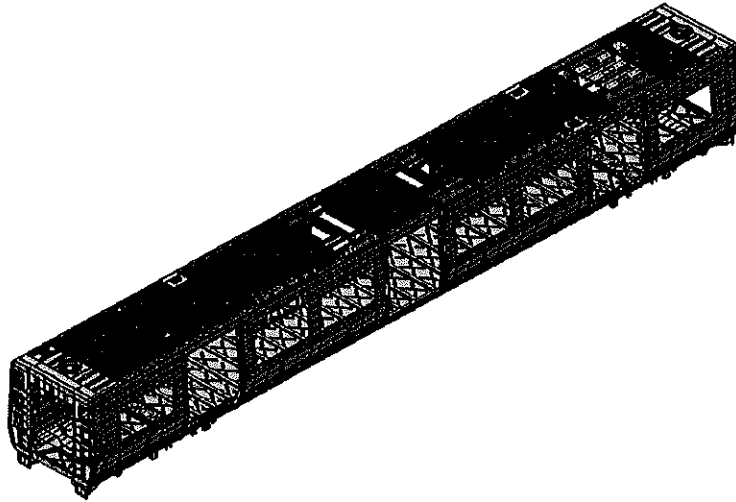
NCR:

Work station:

CB2230



Safety Related



I - Documentation and Instruments Control

I.1 - Documentation Control

| Document | Type of car | | | | | Revision | Observation | OK | NOK | Rev/DT | Signature/Date (Operations) | Signature/Date (Quality) |
|--------------------------|-------------|----|----|----|-----|----------|-------------|----|-----|--------|-----------------------------|--------------------------|
| | M1 | M2 | M3 | M4 | TC2 | | | | | | | |
| PRA.CB2230.DT00000225487 | | | | ✓ | | | | ✓ | | N/A | 18/04/24 | 15/04/24 |

I.2 - Instruments Control

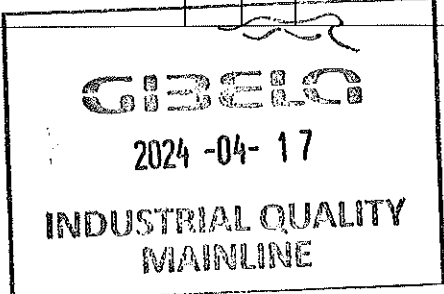
Monitoring and Measuring Instrument Control - Used for Special Process

| Instruments | Serial number | Calibration or Verification Validation Date | OK | NOK | Signature/Date (Operations) | Signature/Date (Quality) |
|--------------------|---------------|---|----|-----|-----------------------------|--------------------------|
| Tubular | 32823-3 | 15/03/2025 | ✓ | | 18/04/24 | 15/04/24 |
| Combination square | 91350140 | 2024/06/26 | ✓ | | 18/04/24 | 15/04/24 |
| measuring tape | 0113100207 | 2024/02/25 | ✓ | | 18/04/24 | 15/04/24 |

1.3 Consumables

Welding Consumable Control - Used for Special Process

| Filler Material | Heat Number | Welding Process | OK | NOK | Signature/Date (Manufacturing) | Signature/Date (Quality) |
|-----------------|-------------|-----------------|----|-----|--------------------------------|--------------------------|
| 308 | E231067 | MIG | ✓ | | 18/04/24 | 15/04/24 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |







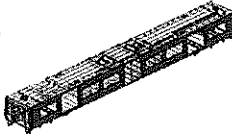
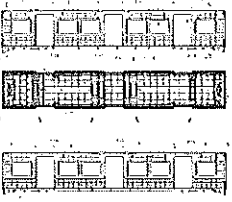
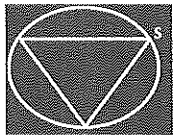
CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

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 | NOX | ReWork | Signature/Date (Operations) | Signature/Date (Quality) |
|------|---|--|--|----|-----|--------|-----------------------------|--------------------------|
| 01 | N/A | Assembly according to Instruction Engineering nº PRA.CB1230.DT00000225487 Verification of fitment for all brackets. | PRA.CB1230.DT00000225487 | ✓ | | | MHedda 18/04/24 | 18/04/24 |
| 02 | N/A | Carshell free of significant flaws which compromise the appearance or functionality | DTD0000210675 | ✓ | | | MHedda 18/04/24 | 18/04/24 |
| 03 | REFER TO ANNEXURE A | Arc Welding inspected and approved according procedure. | IND-SAL-WMS-016 REFER TO GIB - TYPDEF - ARC - 0000 | ✓ | | | MHedda 18/04/24 | 18/04/24 |
| 04 |  | Cleaning of all Stainless Steel Surface | According TO GIB-WEL - PROC-0002 | ✓ | | | MHedda 18/04/24 | 18/04/24 |
| 05 |  | Functional dimensions approved according drawing or complementary document approved by Alstom engineering and registered in this document. | Approved according specified on pages below. | ✓ | | | MHedda 18/04/24 | 18/04/24 |
| 06 |  | Perform visual inspection of welds in 100% of the project. Run by penetrant testing in electric arc welding (weld ring) as IND-SAL-WMS-018. Run by penetrant testing welds (weld ring) and fillet sampling as described in DTD0000210658. | As the welding procedure IND-SAL-WMS-018 and DTD0000210658. | ✓ | | | MHedda 18/04/24 | 18/04/24 |
| 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 (1) M-n-Max 10°C - 35°C Relative humidity M-n - Max (1) M-n-Max 25% - 80% | Sealant Batch No: 15K70-05 Exp Date: ___ / 09 / 06 Actuals Temperature: 19°C Humidity: 45% | OK | | | 17/04/24 Sime | 18/04/24 |
| 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) | OK | | | 17/04/24 Emanuel | 18/04/24 |
| 09 | N/A | Verification of sealant application in certain regions in the drawing. | Refer to Annexure B AAD000223868 | OK | | | MHedda 18/04/24 | 18/04/24 |

2024-04-17

INDUSTRIAL QUALITY
MAINLINE



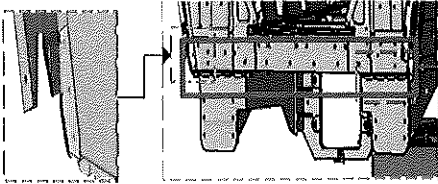
CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev.
30
Date
06/11/2023

Project: PRASA
SI.CB2230.256.V29

II - Self Inspection - Items to Check

AREA 1



END 2 SEALANT

OPERATOR
(Name & sign):

Levy

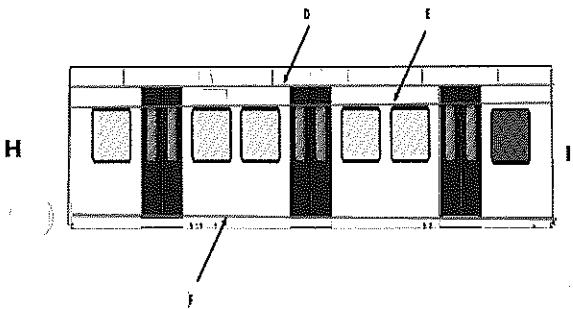
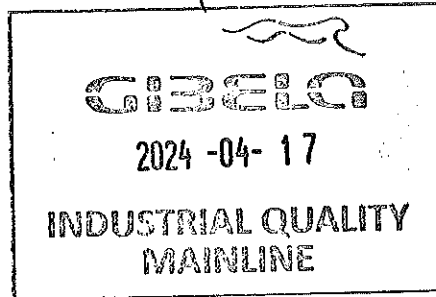
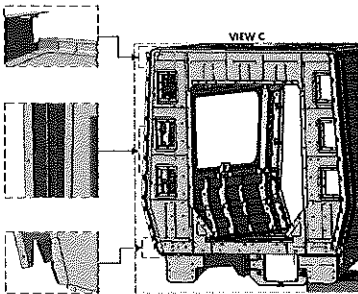
OPERATOR
(Name & sign):

Levy

OPERATOR
(Name & sign):

Levy

AREA 2 (VIEW C)



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

Operator (Name & sign):

LHS
D, E, G, H, I

RHS
D, E, G, H, I

Operator (Name & sign):

Sine

Sine

Operator (Name & sign):

Ishenold

Operator (Name & sign):

(F)

(F)

Operator (Name & sign):

LERARD

LERARD

Operator (Name & sign):

Buhie
NONHAKHID

Buhie
NONHAKHID





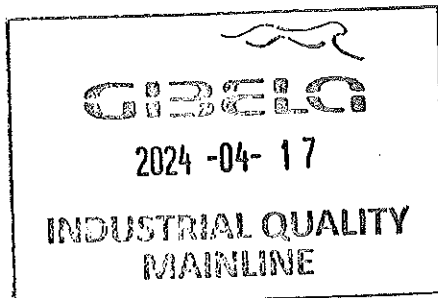
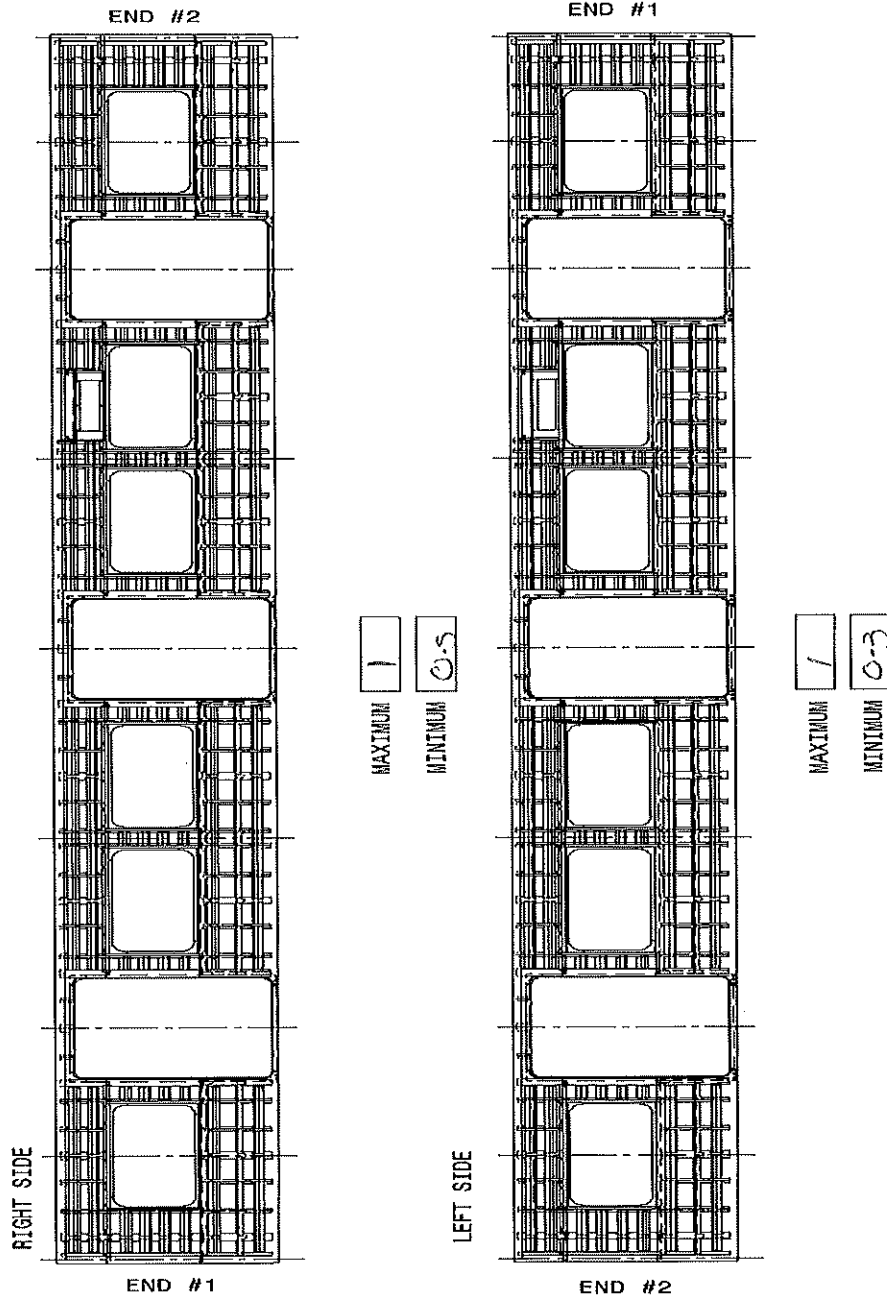
CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

Rev.
30
Date
06/11/2023

Project: PRASA
SI.CB2230.256.V29

Specifications of Details for CBS measurement CB1230

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





CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000226487

Rev.

30

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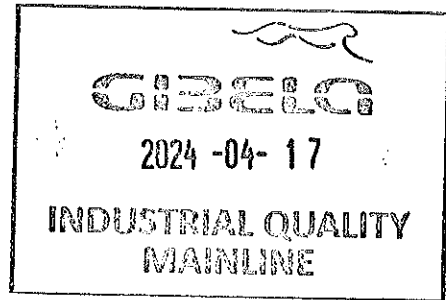
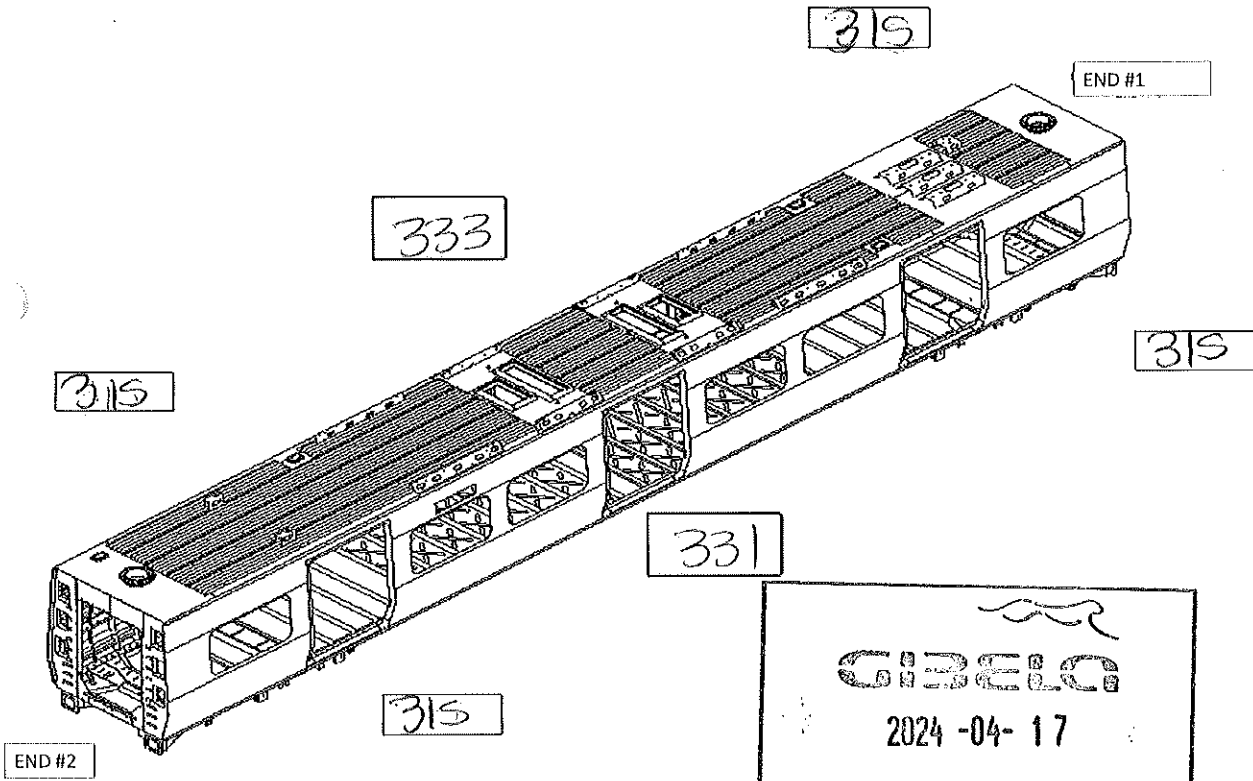
Date

06/11/2023

SI.CB2230.256.V29

Specifications of Details for CBS measurement CB1230

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



MEASURED CAMBER VALUES

| | | |
|-------|----|----|
| RIGHT | 11 | 18 |
| LEFT | 11 | 18 |



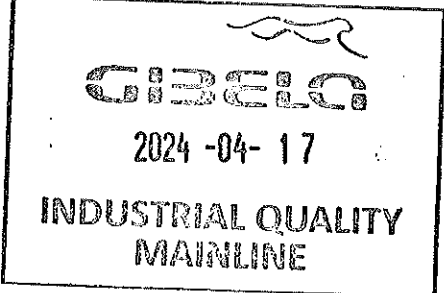
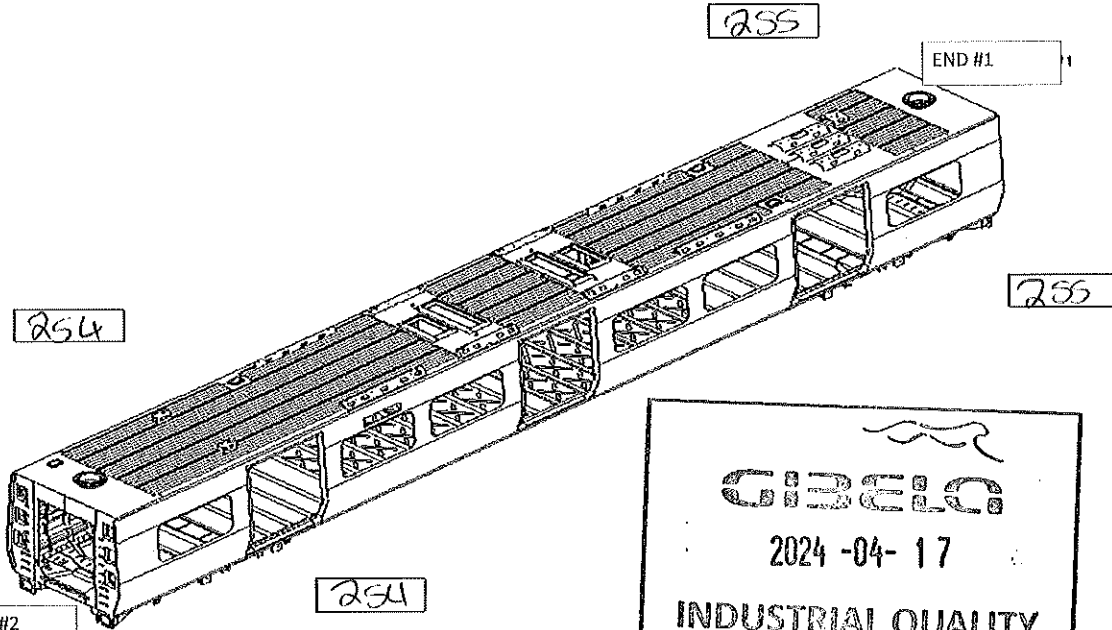
CARBODYSHELL M1,M3,M4 ASSEMBLY
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06/11/2023

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.



TWIST FOUND ON END 1

TRANVERSE

LONGITUDINAL

TWIST FOUND ON END 2

TRANVERSE

LONGITUDINAL



CARBODYSHELL M1,M3,M4 ASSEMBLY
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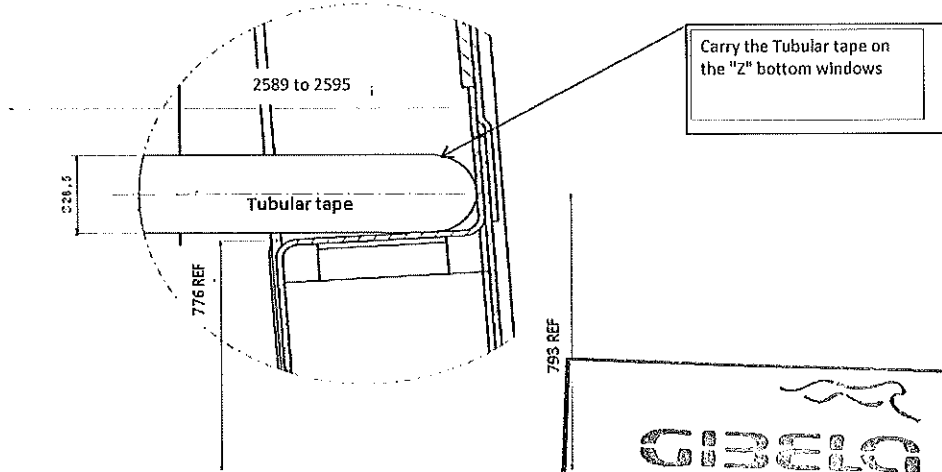
Project: PRASA

Date

SI.CB2230.256.V29

06/11/2023

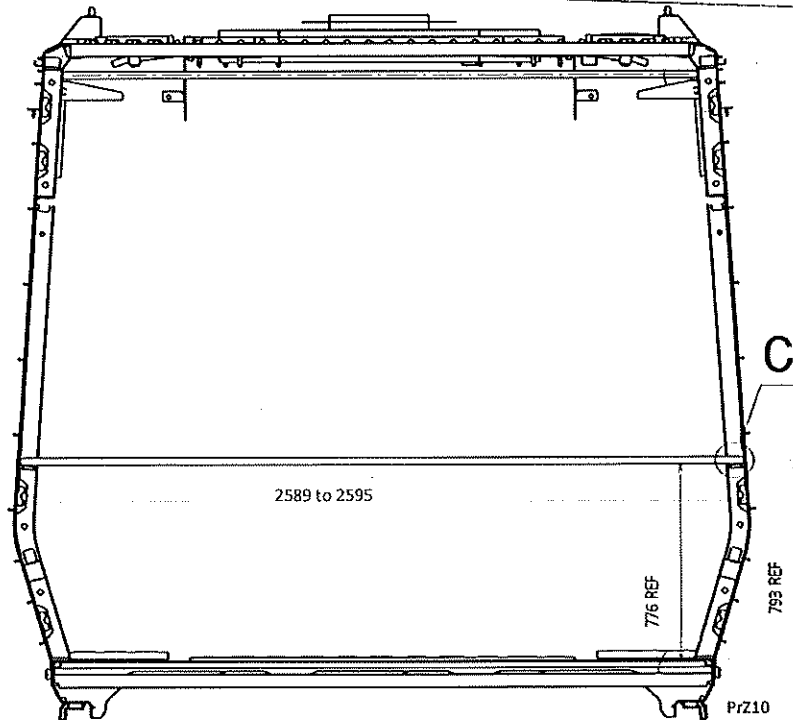
Specifications of Details for CBS measurement CB1230



Detail C

2024 -04- 17

INDUSTRIAL QUALITY
MAINLINE





CARBODYSHELL M1,M3,M4 ASSEMBLY
DT00000225487

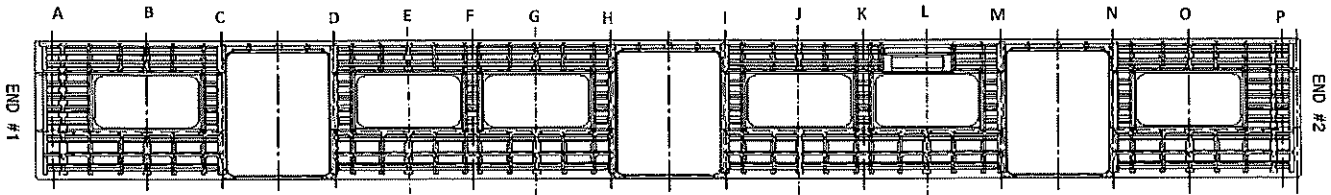
Rev.
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Project: PRASA

Date
06/11/2023

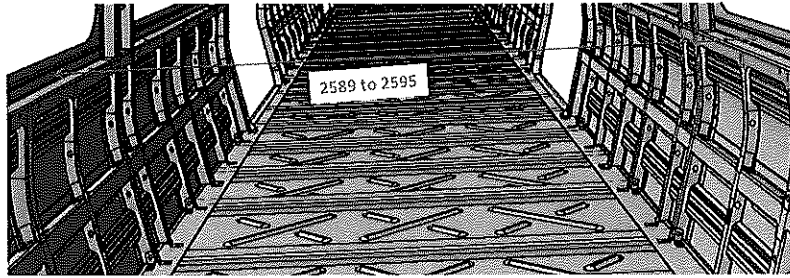
SI.CB2230.256.V29

Specifications of Details for CBS measurement CB1230



2589 to 2595mm

| | |
|---|-------|
| A | 25 94 |
| B | 25 95 |
| C | 25 91 |
| D | 25 95 |
| E | 25 95 |
| F | 25 94 |
| G | 25 95 |
| H | 25 90 |
| I | 25 94 |
| J | 25 95 |
| K | 25 95 |
| L | 25 95 |
| M | 25 99 |
| N | 25 95 |
| O | 25 94 |
| P | 25 95 |



Threshold verification

Nominal value :38

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

BOILER MAKER:

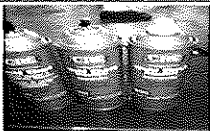
K90E50

WELDER:

Monhianha

Dye penetrant test

Dye-penetration test to be performed by quality personnel







CARBODYSHELL M1,M3,M4 ASSEMBLY
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Self Inspection - Final Result

| Is the car good to advance to the next workstation/process? (Approval of Operations and Industrial Quality) | | DATE | NAME | SIGNATURE | |
|--|-------|---|----------|---------------------------------------|---------------|
| HOLD POINT | GO | (If activities are not complete, the missing activities must not impact the next stage) | 18/04/24 | M. Mathripeth 483007 Operations | M. Mathripeth |
| | GO | Every auto inspection performed conforms to specification or in case of discrepancy the same is approved by the competent party.) | 18/04/24 | Andani Industrial Quality | [Signature] |
| | NO GO | There are activities pending that impact/stop the activities of the next process Obs: (To describe problems below) | | | |
| | | There are non-conformities impact the quality of the product and there is no corrective action defined yet) | | | |

Missing
pratic
persis

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

