

**EMELTA**

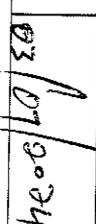
Global Rail Transport Consortium RFP Pty Ltd  
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 Dunmore XT  
 Edinburgh, 1500 South Africa  
 Telephone: +27 (0)10 600 9551

TRAIN 58723 REF: 08630001672\_10 PROSA WEIGHT BALANCE EN  
 A10 WEIGHTING REPORT

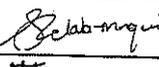
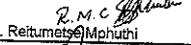
Item	Front (kg)	Rear (kg)	Front/Rear Imbalance (%)	Weight Difference (%)	Reference (%)	Criteria	Inspection
T2	Balance across front and rear bogies	18.51	15.58	8.59%		PASS	
	Weight Measured vs Predicted	34.09	34.42	0.97%		1.63%	PASS
M3	Balance across front and rear bogies	17.43	17.87	0.11%		PASS	
	Weight Measured vs Predicted	35.70	35.90	0.56%		1.46%	PASS
M2	Balance across front and rear bogies	18.50	17.87	2.00%		PASS	
	Weight Measured vs Predicted	36.47	37.05	1.60%		1.37%	PASS
M1	Balance across front and rear bogies	18.62	18.05	1.46%		PASS	
	Weight Measured vs Predicted	36.71	38.87	0.43%		1.37%	PASS
M4	Balance across front and rear bogies	17.79	17.90	0.21%		PASS	
	Weight Measured vs Predicted	35.69	35.55	0.23%		1.30%	PASS
T1	Balance across front and rear bogies	18.82	15.53	10.22%			
	Weight Measured vs Predicted	34.15	34.42	0.80%		1.67%	PASS
TOTAL TRAIN	Measured Weight	212.81	215.9725	1.8			

Notes: **Fluss**

Preparation: **31/03/2014** Signature:  Date: **03/07/2014**

End of cycle: **Fluss** End of cycle EPU manager: 

Company Gibela	Name of the requester Joshua Nemanashe	Function PME	Date 7 May 2024	Visa 	Request N° PRASA-DERSU-1096																																										
			Plant Country Gibela South Africa																																												
Project	PRASA PROJECT		Customer	PRASA																																											
Product name Reference	TS161 to TS210 TC1,M4,M1,M2,M3,TC2		Drawing number and Revision	DT00000207673																																											
Temporary <input checked="" type="checkbox"/> Until : TS161 to TS210	Quantity : 80 Train sets	Serial Numbers / Batch: TS211 to TS290			Permanent <input type="checkbox"/>																																										
<p><b>Requirement:</b> According to GIB0000001672 prasa weight balance EN . TC1/TC2:The weighing report specification requires the weight difference (weight measured vs predicted weight) tolerance to be 1.62%. M1/M2:The weighing report specification requires the weight difference (weight measured vs predicted weight) tolerance to be 1.37%. M3/M4:The weighing report specification requires the weight difference (weight measured vs predicted weight) tolerance to be 1.36%.</p> <p><b>Non-conformity description:</b> The average weights measured from TS120 up to 162 has shown a deviation from the acceptance criteria. However, after discussions with BARRABES-PRADAL Daniel an additional 0.5% deviation from the acceptance criteria will not have an impact. Should we had this to the acceptance tolerance then all the cars will pass. <b>"these trains are equivalent in terms of mass (we have seen a gap around 0,5)"</b></p> <p>See below min and max weight measured for TS120-162 and the average tolerances (We expect the same deviation for the next 80 train sets):</p> <table border="1" data-bbox="188 1025 545 1451"> <thead> <tr> <th></th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>TC2</td> <td>33.9</td> <td>34.6</td> </tr> <tr> <td>M3</td> <td>35.4</td> <td>35.9</td> </tr> <tr> <td>M2</td> <td>36</td> <td>37.1</td> </tr> <tr> <td>M1</td> <td>36.6</td> <td>37</td> </tr> <tr> <td>M4</td> <td>35.3</td> <td>36.6</td> </tr> <tr> <td>TC1</td> <td>33.9</td> <td>34.4</td> </tr> </tbody> </table>					Min	Max	TC2	33.9	34.6	M3	35.4	35.9	M2	36	37.1	M1	36.6	37	M4	35.3	36.6	TC1	33.9	34.4	<p><b>Anteriority:</b></p> <p><b>Impact on:</b></p> <p>Environment..... <input type="checkbox"/></p> <p>Safety (people)..... <input type="checkbox"/></p> <p>Contract clauses..... <input type="checkbox"/></p> <p>Economic..... <input type="checkbox"/></p> <p>Development.. <input type="checkbox"/></p> <p>Product Safety..... <input type="checkbox"/></p> <p>Reliability..... <input type="checkbox"/></p> <p>Performances..... <input checked="" type="checkbox"/></p> <p>Delivery..... <input type="checkbox"/></p> <p>Cost..... <input type="checkbox"/></p> <p>Documentation..... <input type="checkbox"/></p> <p>Resources..... <input type="checkbox"/></p> <p>Others..... <input type="checkbox"/></p>																						
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<p><b>Cause of the non-conformity / reasons for request:</b>                  Weight balance document was revised from J to K by engineering and the following was removed from the weight calculations:                  -Main Reservoir Tank Removal                  -Brake Reservoir Resizing                  -CPU bloc is combined with the screen                  - Closure of Air Extractor Opening</p>						
<p><b>Attached documents:</b>                  REF: GIB000001672_K0 PRASA WEIGHT BALANCE EN report</p> <p>                  RE TS Weight is failing .msg</p>						
<p><b>Containment action:</b>                  Each train is evaluated by engineering and based on risk it will be approved or declined. A new version of GIB000001672 will be created to align the sub system actual weight with the theoretical weight which will reduce the error percentage.</p>				<p><b>Use or assignment limitations of the non-conforming product:</b></p>		
<p><b>Corrective &amp; Preventive action:</b>                  Engineering to revise car weights per baseline.</p>						
Function	Entity	Name	Date	Visa	Observations / Conditions	Decision
Process Manufacturing Engineering	GIB	Junior MAGADA	14/05/2024			<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOK
Train System Engineering	GIB	Mpho LELALA-MNGUNI				<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOK
Industrial Quality	GIB	Lucy MAKOFANE	14/05/2024			<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOK
Project Engineering Manager	GIB	Tshepo NKODI	15/05/2024			<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOK
Project Quality Safety Manager	GIB	Solani MALIBONGWE	16/05/2024	 R. M. C. Malibongwe pp. Reitumetshe Mahuti		<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOK
Project Manager	GIB	Devendran GOVENDER	17/05/2024		Engineering to update the test procedure with new targets	<input checked="" type="checkbox"/> OK <input type="checkbox"/> NOK