

MANUFACTURER ALSTOM Ubunye
 Marievale Road, Vosterkroon, Nigel, 1490

CUSTOMER Gibela

CONTRACT

PROJECT PRASA

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE TRAILER BOGIE type TBEXT

DTR0009706803

SERIAL NUMBER TBEXT - 580

CONTENTS

- Compliance certificate.....	Page 1/2	☒
- List of deviations and missing parts.....	Page 2/2	☒
- Products traceability.....	1 page	☒
- Load test report.....	1 page	☒

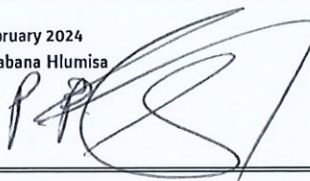
COMPLIANCE CERTIFICATE

We hereby declare, barring exceptions, reservations, or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completions of testing and verification, they completely satisfy all specified requirements and applicable standards and regulations.

CONSTRUCTOR APPROVAL

DATE
NAME
VISA

22 February 2024
Kwababana Hlumisa



I - Deviation / Derogation**II - Bogie configuration**

B Bogie index



ALSTOM UBUNYE PRODUCTS TRACEABILITY

Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Trailer Bogie TBEXT	DTR0009706803	580		Alstom - Abunye
Trailer Bogie Frame	AR00000176083	T0833		Alstom - Ubunye
Wheelset (Front)	AR000000177020	T01531		Alstom - Ubunye
Axle	AR000000174678	114888	121767332	Jinxi
Wheel (Right)	AR000000174670	010	07-23	Bonatrans
Wheel (Left)	AR000000174670	123	11-22	Bonatrans
Wheelset (Rear)	AR000000185203	T01532		Alstom Ubunye
Axle	AR000000174678	114532	12176733	Jinxi
Wheel (Right)	AR000000174670	091	07-23	Bonatrans
Wheel (Left)	AR000000174670	009	07-23	Bonatrans
Pneumatic suspension (Right)	AR000000176127	2312097		TMT
Pneumatic suspension (Left)	AR000000176127	2401060		TMT
Brake unit with PB (Right rear)	AR000000174544	1573	01-24	Wabtec
Brake unit without PB (Right front)	AR000000175185	4743	01-24	Wabtec
Brake unit without PB (Left Front)	AR000000175185	4740	01-24	Wabtec
Brake unit without PB (left rear)	AR000000175185	4742	01-24	Wabtec

2/21/2024

DATE VALIDATION

RESPONSABLE VALIDATION

PRASA

INSTRUCTION SHEET:

PRESSING REPORT

LOAD TEST : MOTOR BOGIE

PROJECT:

FAMILY:

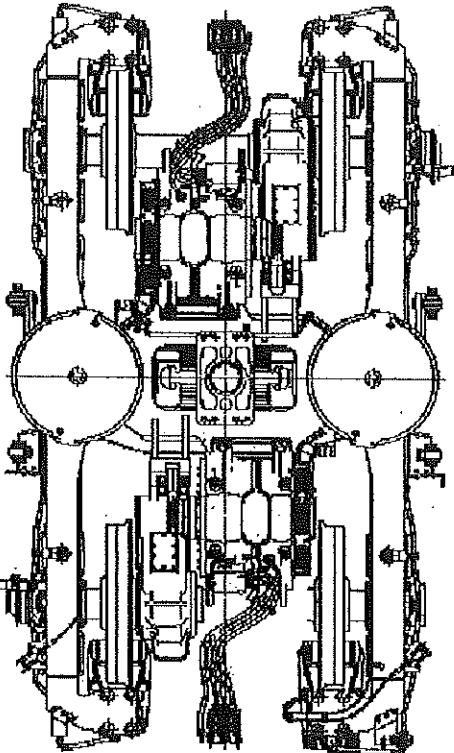
	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	36.80 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q2	5630

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
585.40	+	2.00	= 587.40
			MIN 585.00 MAX 587.50

RIGHT JACK LOAD	
7376	Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.06 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q4	5573

BOGIE SERIAL N°	MB1-1335
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22399
COMPLETE BOGIE WEIGHT [Kg]	7299
OPERATOR	DATE
EDWARD	2/21/2024



	THEORETICAL	MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN 0.00 MAX 0.00	-0.64 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN 0.00 MAX 0.00	0.58 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN 0.00 MAX 0.00	-0.10 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN 0.00 MAX 0.00	-0.03 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN 0.00 MAX 0.00	0.61 ✓

OPERATOR STAMP
BFI-21

LEFT JACK LOAD	
7376	Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	36.89 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q1	5558

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
587.32	+	0.00	= 587.32
			MIN 585.00 MAX 587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]		✓	THEORETICAL [mm]
0.08			MIN -1.00 MAX 1.00

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	36.26 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q3	5638



ALSTOM UBUNYE

MANUFACTURER **ALSTOM Ubunye**
Marievale Road, Vosterkroon, Nigel, 1490

CUSTOMER **Gibela**

CONTRACT

PROJECT **PRASA**

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE **TRAILER BOGIE type TBINT**

DTR0009706802

SERIAL NUMBER **TBINT - 586**

CONTENTS

- Compliance certificate.....	Page 1/2	☒
- List of deviations and missing parts.....	Page 2/2	☒
- Products traceability.....	1 page	☒
- Load test report.....	1 page	☒

COMPLIANCE CERTIFICATE

We hereby declare, barring exceptions, reservations, or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completions of testing and verification, they completely satisfy all specified requirements and applicable standards and regulations.

CONSTRUCTOR APPROVAL

DATE	19 February 2024
NAME	Kwababana Hlumisa
VISA	

I - Deviation / Derogation

II - Bogie configuration

B Bogie index



ALSTOM UBUNYE PRODUCTS TRACEABILITY

Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Trailer Bogie TBINT	DTR0009706802	586		Alstom - Ubunye
Trailer Bogie Frame	AR00000176083	T0830		Poland -MZ
Wheelset (Front)	AR000000177020	T01517		Alstom - Ubunye
Axle	AR000000174678	108044	1232169	Jinxi
Wheel (Right)	AR000000174670	135	07-23	Bonatrans
Wheel (Left)	AR0000000174670	134	07-23	Bonatrans
Wheelset (Rear)	AR000000185203	T01518		Alstom - Ubunye
Axle	AR000000174678	108018	1232169	Jinxi
Wheel (Right)	AR000000174670	006	07-12	Bonatrans
Wheel (Left)	AR000000174670	136	07-23	Bonatrans
Pneumatic suspension (Right)	AR000000176127	2310167		TMT
Pneumatic suspension (Left)	AR000000176127	2310161		TMT
Brake unit with PB (Right rear)	AR000000174544	1587	01-24	Wabtec
Brake unit without PB (Right front)	AR000000175185	4800	01-24	Wabtec
Brake unit without PB (Left Front)	AR000000175185	4797	01-24	Wabtec
Brake unit without PB (left rear)	AR000000175185	4856	01-24	Wabtec

PRESSING REPORT

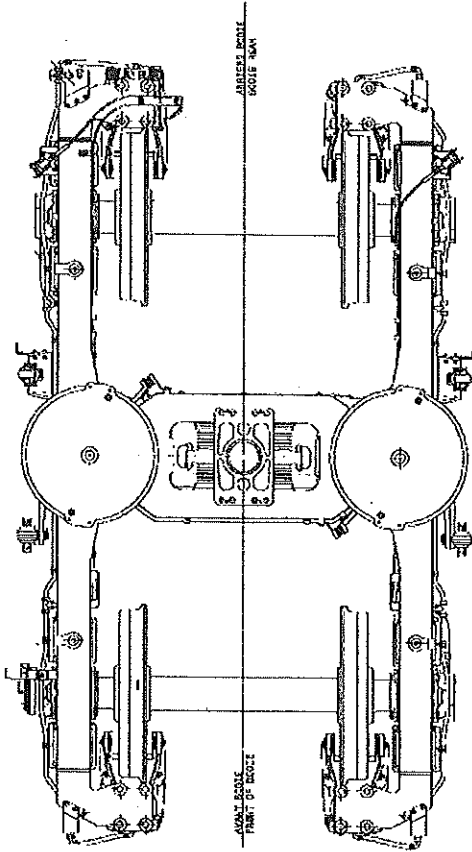
DATE 2/19/2024	PRASA ALUMINUM		LOAD TEST : TBINT
RESPONSABLE VALIDATION	INSTRUCTION SHEET:		PROJECT: PRASA
	FAMILY:		

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	34.50	40.50	39.26 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		4622

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
588.74	+	0.00	588.74
			MIN 587.50
			MAX 590.00

RIGHT JACK LOAD
6695 Kg

BOGIE SERIAL N°	586
BOGIE TYPE	TBINT
BOGIE WEIGHT UNDER LOAD [Kg]	18362
COMPLETE BOGIE WEIGHT [Kg]	4623
OPERATOR	EDWARD
DATE	2/19/2024
OPERATOR STAMP	BFI-21



	THEORETICAL		MEASURED
	MIN	MAX	
LOAD DIFFERENCE ON FRONT AXLE [%]	-2.00	2.00	0.64 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	-2.00	2.00	-0.45 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	-2.00	2.00	-0.24 ✓
LOAD DIFFERENCE ON RAILS [%]	-2.00	2.00	0.10 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	-2.00	2.00	-0.54 ✓

LEFT JACK LOAD
6694 Kg

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
588.81	+	0.00	588.81
			MIN 587.50
			MAX 590.00

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	34.50	40.50	39.07 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		4609

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
			MIN -1.00
			MAX 1.00

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	34.50	40.50	38.43 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		4581