

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 - 616**

CONTENTS

- Compliance certificate.....	Page 1/2	<input checked="" type="checkbox"/>
- List of deviations and missing parts.....	Page 2/2	<input checked="" type="checkbox"/>
- Products traceability.....	1 page	<input checked="" type="checkbox"/>
- Load test report.....	1 page	<input checked="" type="checkbox"/>

COMPLIANCE CERTIFICATE

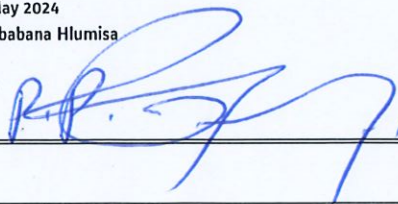
We hereby declare, barring exceptions, reservations, or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completions of testing and verification, they completely satisfy all specified requirements and applicable standards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

CONSTRUCTOR APPROVAL

DATE **28 May 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 TBEXT	DTR0009706803	616		Alstom - Abunye
Trailer Bogie Frame	AR00000176083	T0 899		Alstom - Ubunye
Wheelset (Front)	AR000000177020	T0 1669		Alstom - Ubunye
Axle	AR00000174678	102076	1230038	Jinxi
Wheel (Right)	AR00000174670	042	07.23	Bonatrans
Wheel (Left)	AR000000174670	050	07.23	Bonatrans
Wheelset (Rear)	AR00000185203	T0 1670		Alstom Ubunye
Axle	AR00000174678	101526	1230044	Jinxi
Wheel (Right)	AR00000174670	089	07.23	Bonatrans
Wheel (Left)	AR00000174670	094	07.23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2402046		TMT
Pneumatic suspension (Left)	AR00000176127	2402020		TMT
Brake unit with PB (Right rear)	AR00000174544	1802	05.24	Wabtec
Brake unit without PB (Right front)	AR00000175185	5430	05.24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	5429	05.24	Wabtec
Brake unit without PB (left rear)	AR00000175185	5428	05.24	Wabtec

PRESSING REPORT

DATE 5/23/2024	RESPONSABLE VALIDATION	PRASA ALDO G. ORTIZ	LOAD TEST : TBEXT
DATE VALIDATION		INSTRUCTION SHEET:	PROJECT:
		FAMILY:	

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.92 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q2	5429

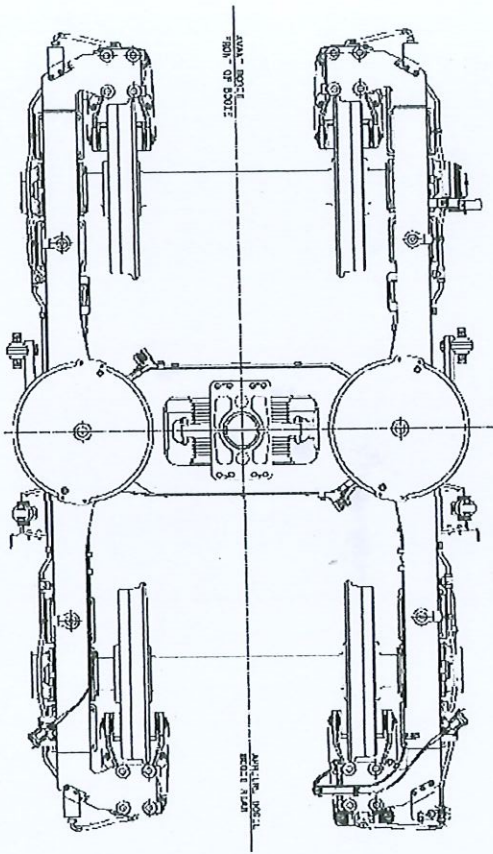
SECONDARY SUSPENSION ✓			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
586.94	+	4.00 =	MIN 590.00 MAX 592.50

RIGHT JACK LOAD
8453 Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.58 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q4	5477

BOGIE SERIAL N°	616
BOGIE TYPE	TBEXT
BOGIE WEIGHT UNDER LOAD [Kg]	21916
COMPLETE BOGIE WEIGHT [Kg]	4659
OPERATOR	DATE
EDWARD	5/23/2024

OPERATOR STAMP
BF1-21



LEFT JACK LOAD
8453 Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	38.35 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q1	5537

SECONDARY SUSPENSION ✓			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
585.68	+	5.00 =	MIN 590.00 MAX 592.50

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

	THEORETICAL	MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN 0.00 MAX 0.00	0.98 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN 0.00 MAX 0.00	-0.05 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN 0.00 MAX 0.00	0.08 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN 0.00 MAX 0.00	0.47 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN 0.00 MAX 0.00	-0.52 ✓

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	36.77 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q3	5472



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CUSTOMER **Gibela**
CONTRACT
PROJECT **PRASA**

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE **TRAILER BOGIE TBINT**
DTR0009706802
SERIAL NUMBER **TBINT 622**

CONTENTS

- Compliance certificate.....	Page 1/2	<input checked="" type="checkbox"/>
- List of deviations and missing parts.....	Page 2/2	<input checked="" type="checkbox"/>
- Products traceability.....	1 page	<input checked="" type="checkbox"/>
- Load test report.....	1 page	<input checked="" type="checkbox"/>
- Motor certificate.....	8 pages	<input checked="" type="checkbox"/>

COMPLIANCE CERTIFICATE

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CONSTRUCTOR APPROVAL

DATE	28 May 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	622		Alstom - Abunye
Trailer Bogie Frame	AR00000176083	T902		Alstom - Ubunye
Wheelset (Front)	AR000000177020	701671		Alstom - Ubunye
Axle	AR00000174678	101507	D1230044	Jinxi
Wheel (Right)	AR00000174670	086	10-23	Bonatrans
Wheel (Left)	AR000000174670	085	10-23	Bonatrans
Wheelset (Rear)	AR00000185203	701672		Alstom Ubunye
Axle	AR00000174678	101455	D1230044	Jinxi
Wheel (Right)	AR00000174670	157	10-23	Bonatrans
Wheel (Left)	AR00000174670	160	10-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2311081		TMT
Pneumatic suspension (Left)	AR00000176127	2311127		TMT
Brake unit with PB (Right rear)	AR00000174544	1805	05-24	WABTEC
Brake unit without PB (Right front)	AR00000175185	5454	05-24	WABTEC
Brake unit without PB (Left Front)	AR00000175185	5453	05-24	WABTEC
Brake unit without PB (left rear)	AR00000175185	5444	05-24	WABTEC

PRESSING REPORT

DATE 5/28/2024	RESPONSABLE VALIDATION	PRASA INSTRUCTION SHEET:	LOAD TEST : TBINT
DATE VALIDATION		FAMILY:	PROJECT: PRASA

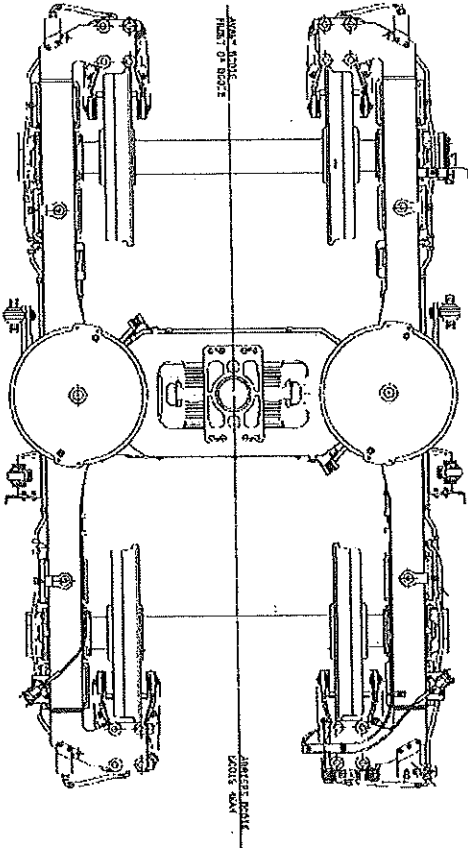
	THEORETICAL	MEASURED
WHEEL	MIN	
DIAMETER [mm]	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 34.50 MAX 40.50	37.62 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q2	4549

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM[mm]	THEORETICAL [mm]
587.65	+	2.00	= 589.65
			MIN 587.50 MAX 590.00

RIGHT JACK LOAD
6695 Kg

	THEORETICAL	MEASURED
WHEEL	MIN	
DIAMETER [mm]	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 34.50 MAX 40.50	37.20 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q4	4661

BOGIE SERIAL N°	622
BOGIE TYPE	TBINT
BOGIE WEIGHT UNDER LOAD [Kg]	18377
COMPLETE BOGIE WEIGHT [Kg]	4616
OPERATOR	DATE
EDWARD	5/28/2024



LEFT JACK LOAD
6695 Kg

	THEORETICAL	MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN -2.00 MAX 2.00	0.82 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN -2.00 MAX 2.00	-1.27 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN -2.00 MAX 2.00	-0.17 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN -2.00 MAX 2.00	-0.23 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN -2.00 MAX 2.00	-1.04 ✓

OPERATOR STAMP
BFI-21

	THEORETICAL	MEASURED
WHEEL	MIN	
DIAMETER [mm]	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 34.50 MAX 40.50	36.91 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q1	4624

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
589.00	+	0.00	= 589.00
			MIN 587.50 MAX 590.00
DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]	✓		THEORETICAL [mm]
0.65			MIN -1.00 MAX 1.00

	THEORETICAL	MEASURED
WHEEL	MIN	
DIAMETER [mm]	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 34.50 MAX 40.50	37.15 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q3	4544