

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 - 584

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"/>

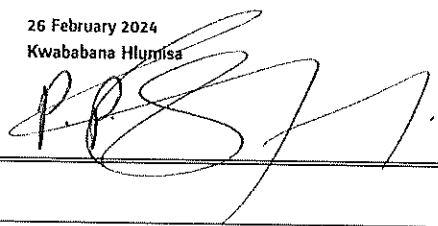
COMPLIANCE CERTIFICATE

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
NAME
VISA

26 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	584		Alstom - Abunye
Trailer Bogie Frame	AR00000176083	T0837		Alstom - Ubunye
Wheelset (Front)	AR000000177020	T01537		Alstom - Ubunye
Axle	AR00000174678	102096	1230038	Jinxi
Wheel (Right)	AR00000174670	089	07-23	Bonatrans
Wheel (Left)	AR000000174670	075	07-23	Bonatrans
Wheelset (Rear)	AR00000185203	T01538		Alstom Ubunye
Axle	AR00000174678	114930	12176732	Jinxi
Wheel (Right)	AR00000174670	055	04-23	Bonatrans
Wheel (Left)	AR00000174670	054	04-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2401082		TMT
Pneumatic suspension (Left)	AR00000176127	2401085		TMT
Brake unit with PB (Right rear)	AR00000174544	1610	02-24	Wabtec
Brake unit without PB (Right front)	AR00000175185	4853	02-24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	4838	02-24	Wabtec
Brake unit without PB (left rear)	AR00000175185	4854	02-24	Wabtec

QC: 018
Revision: 1.0

DATE
2/26/2024

DATE VALIDATION

RESPONSABLE VALIDATION

PRESSING REPORT

PRASA

INSTRUCTION SHEET:

FAMILY:

LOAD TEST : TBEXT

PROJECT:

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	36.69 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q2	5489

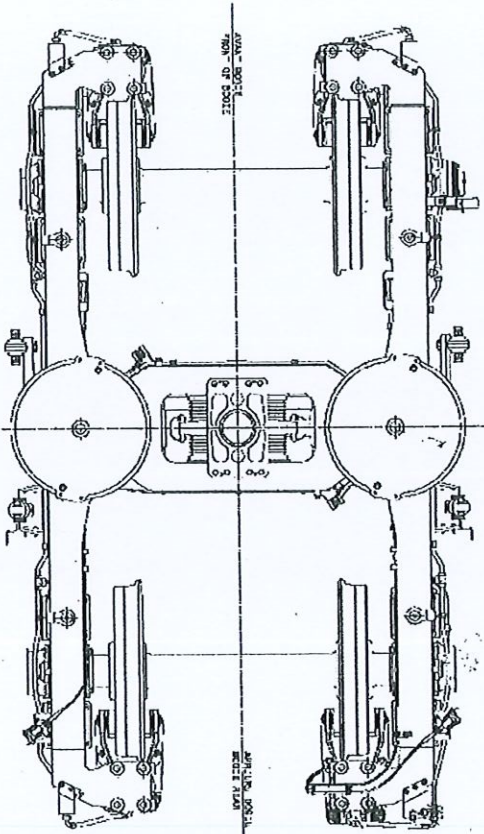
SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
585.95	+	5.00 =	MIN 590.00 MAX 592.50

RIGHT JACK LOAD
8453 Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.30 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q4	5478

BOGIE SERIAL N°	584
BOGIE TYPE	TBEXT
BOGIE WEIGHT UNDER LOAD [Kg]	21893
COMPLETE BOGIE WEIGHT [Kg]	4665
OPERATOR	DATE
BAFANA	2/26/2024

OPERATOR STAMP
DC-BFI-6



LEFT JACK LOAD
8453 Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.39 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q1	5474

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
588.87	+	2.00 =	MIN 590.00 MAX 592.50
DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]			0.08

	THEORETICAL	MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN 0.00 MAX 0.00	-0.14 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN 0.00 MAX 0.00	-0.24 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN 0.00 MAX 0.00	0.15 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN 0.00 MAX 0.00	-0.19 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN 0.00 MAX 0.00	-0.05 ✓

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.11 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q3	5452

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 - 590**

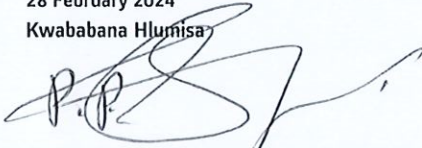
CONTENTS

- 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 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	590		Alstom - Ubunye
Trailer Bogie Frame	AR00000176083	T0838		Poland -MZ
Wheelset (Front)	AR000000177020	T01545		Alstom - Ubunye
Axle	AR00000174678	114668	12176732	Jinxi
Wheel (Right)	AR00000174670	061	02-23	Bonatrans
Wheel (Left)	AR000000174670	111	02-23	Bonatrans
Wheelset (Rear)	AR00000185203	T01546		Alstom - Ubunye
Axle	AR00000174678	114467	12176733	Jinxi
Wheel (Right)	AR00000174670	105	04-23	Bonatrans
Wheel (Left)	AR00000174670	108	04-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2401117		TMT
Pneumatic suspension (Left)	AR00000176127	2312169		TMT
Brake unit with PB (Right rear)	AR00000174544	1608	02-24	Wabtec
Brake unit without PB (Right front)	AR00000175185	4823	02-24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	4820	02-24	Wabtec
Brake unit without PB (left rear)	AR00000175185	4824	02-24	Wabtec

PRESSING REPORT

DATE 2/27/2024	RESPONSABLE VALIDATION
PRASA	
INSTRUCTION SHEET:	
FAMILY:	
LOAD TEST: TBINT	
PROJECT: PRASA	

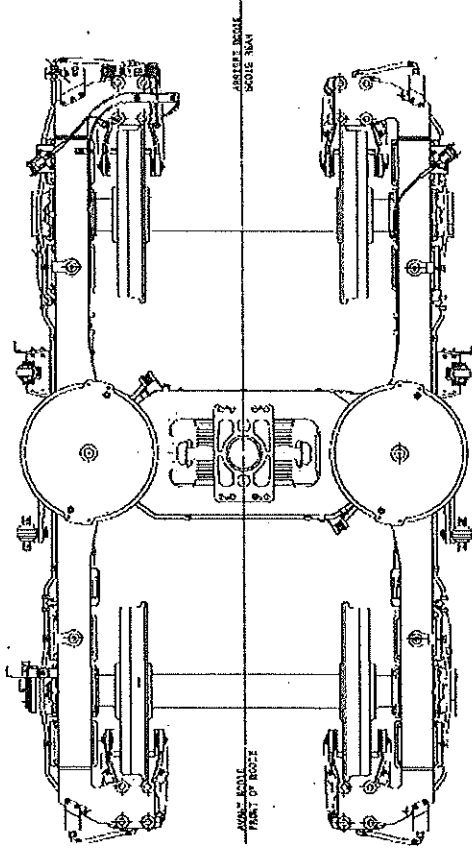
	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	34.50	40.50	39.00
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		4554

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
588.73	+	0.00	MIN 587.50 MAX 590.00

RIGHT JACK LOAD	Kg
6695	

BOGIE SERIAL N°	590
BOGIE TYPE	TBINT
BOGIE WEIGHT UNDER LOAD [Kg]	18364
COMPLETE BOGIE WEIGHT [Kg]	4616
OPERATOR	BAFANA
DATE	2/27/2024

OPERATOR STAMP
DC-3FI-6



	THEORETICAL		MEASURED
	MIN	MAX	
LOAD DIFFERENCE ON FRONT AXLE [%]	-2.00	2.00	0.63
LOAD DIFFERENCE ON REAR AXLE [%]	-2.00	2.00	-0.48
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	-2.00	2.00	-0.19
LOAD DIFFERENCE ON RAILS [%]	-2.00	2.00	0.08
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	-2.00	2.00	-0.56

LEFT JACK LOAD	Kg
6695	

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	34.50	40.50	38.80
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		4612

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
589.34	+	0.00	MIN 587.50 MAX 590.00

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]	-0.61
THEORETICAL [mm]	MIN -1.00 MAX 1.00

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	34.50	40.50	38.69
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		4578