

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name (PRINT IN CAPS) **CHRIS CLARKE** ID **CJC**

Plate number (optional) VIN/chassis number **7A9E1501XN2023243**

Make **DOMETT** Component being certified: Chassis Load anchorage

Model (optional) **E1501** Log bolsters Towing connection Brakes

Certification category **HVEK** SRT PSV stability PSV rollover
 Swept path PBS

Description of work
CERTIFY TO SCHEDULE 5 OF LTR 32015: NZ HEAVY VEHICLE BRAKE SPECIFICATION.
CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.
5AFT PLATFORM **RSS ON TYRE: 265 70 R19.5**
FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.
REASON FOR CERTIFICATION: NEW TRAILER BUILD

Code/standard/rule certified to **LTR 32015/5**

Component load rating(s) **30 Tonnes GVM**

General drawing number(s) **N/A**

16 Tonne (Front brake mass)
19 Tonne (Rear brake mass)

Supporting documents
BRAKE RULE CERTIFICATE JH230201
BRAKE CALCULATION # TP52592

Special conditions (optional)
WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KM/H

Certification expiry date (if applicable) **N/A [UNLESS MODIFIED]**

or Hubodometer reading (whichever comes first)

Declaration

I the undersigned, declare that I am the heavy vehicle specialist inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002 and my appointment. To the best of my knowledge the information contained in the certificate is true and correct.

Designer's ID (if different from inspector below) **JOHN HIRST JEH**

Inspector's signature 

Inspector's name (PRINT IN CAPS) **CHRIS CLARKE** ID number **CJC**

Date **16.02.2023** Number **859155**

CoF vehicle inspector ID (if applicable) CoF vehicle inspector signature (if applicable) Date

All fields are mandatory unless otherwise stated.

WABCO START-UP LOG

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2023-01-03	Serial number	897043000700C
Serial number (modulator)	000000566362		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2023-02-16 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

WABCO		TRAILER EBS-E		GGVS/ADR TUEH TB 2007 - 019.00 361-005-16											
HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS			GIO	Pin1	Pin3	Pin4								
TYP TYPE TYPE	5AFT PLATFORM			1	TAV1	MH	TAV1								
VEHICLE IDENT. NUMBER CHASSIS NUMBER NUMERO DE CHASSIS	7A9E1501XN2023243			2	eTASC	---	eTASC								
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL. DE FREINAGE NO.	TP52592A			3	ALS2	ALS2	---								
POLRADZÄHNEZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTÉE c-d e-f	90	90	ABS-System ABS-System Système ABS	4	---	---	LS1								
RSS RSS RSS	Einfachbereifung Single tire Monte simple		Lenkachse Steering axle Essieu vitreur	5	DIAG	DIAG	DIAG								
	Zwillingsbereifung Twin tires / Super single Monte jumelée	X	Kippkritisches Fahrzeug Critical Trailer Véhicule critique	6	---	---	---								
Subsystems	---		I/O	24N											
ACHSE AXLE ESSIEU	pm (bar)	6.5	pm (bar)	0.7	2.0	---	6.5	TYP TYPE	(mm)	(mm)	(bar)	1.0	Pz		
	+	+	+	+	+	+	+	pz							
1	1600	0.6	2.1	8000	4.4	0.4	1.3	---	5.8	-	20	66	76	540	4507
2	1600	0.6	2.1	8000	4.4	0.4	1.3	---	5.8	-	20	66	76	540	4507
3	1300	0.4	1.6	6350	3.4	0.4	1.5	---	4.3	-	16 / 24	65	76	440	2720
4	1300	0.4	1.6	6350	3.4	0.4	1.5	---	4.3	-	16 / 24	65	76	440	2720
5	1300	0.4	1.6	6350	3.4	0.4	1.5	---	4.3	1	16	65	76	440	2720

TEBS-E

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light supply	OK
EBS pressure test	OK	Lifting axle test	Not tested
Redundancy test	OK	ECAS height sensor calibration	Not tested
ABS sensor assignment	OK	Height sensor axle load	Not tested
RTR test	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs	Not tested
Signal inputs	Not tested	Tag axle test	Not tested

Electronic Extension Module

Diagnostic memory	Not tested	Signal outputs	Not tested
TailGUARDlight	Not tested	TailGUARD	Not tested

Manufacturer	DOMETT TRAILERS	Vehicle ident. no.	7A9E1501XN2023243
Vehicle type	5AFT PLATFORM	Odometer reading	0.0 km
Next service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature	
Date	2023-02-16 2:21:27 pm		

trailer (full, semi-, centre-axle) with air brake system acc. to UN/ECE-R.13.11

distribution: DOMETT TRAILERS
 7A9E1501XN2023243
 SoDC: JH230201
 LT400: CJC 859155

please note!

This brake calculation is made under consideration of
 -the legal prescriptions mentioned above in the version valid at the time of making the program (V6.18.07.12).
 -the functional characteristics of our products as well as the data of the brake out of the test approvals of the axle manufacturers, and
 -the other vehicle data included in the brake calculation.
 Please check whether these data correspond to the actual vehicle data.
 Our conditions of delivery apply (particularly section 9.0).
 In any case we commend to do a braking harmonisation!
 WABCO Brake V6.18.07.12 db 31.08.2018

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT PLATFORM
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS E
 TRISTOP 3+4: 16/24
 265/70 R 19,5
 THE FRONT CHAMBERS ARE HALDEX [T20. 125 200 00]

axle 1 + 2 + 3 + 4 + 5 : Assali Stefen, R, 361-005-16 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	7100	35050
axle 1	P1 in kg	1600	8000
axle 2	P2 in kg	1600	8000
axle 3	P3 in kg	1300	6350
axle 4	P4 in kg	1300	6350
axle 5	P5 in kg	1300	6350
wheel base	E in mm	6630 - 6730	
centre of gravity height	h in mm	1025	2070

	<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>	<u>axle 4</u>	<u>axle 5</u>
no. of combined axles	1	1	1	1	1
no. of brake chambers per axle line	2	2	2	2	2
The power output corresponds to	BZ 122.1	BZ 122.1BC	0165.2BC	0165.2BC	0169.2
brake chamber manufacturer	Meritor	Meritor	Haldex	Haldex	Haldex
chamber size	20.	20.	16/24	16/24	16"
lever length	lBh in mm	76	76	76	76
brake factor	[-]	22.37	22.37	22.37	22.37
dyn. rolling radius	rdyn min in mm	421	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421	421
threshold torque	Co Nm	6.0	6.0	6.0	6.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.1	2.1	2.0	2.0	2.0
chamber pressure(rdyn max)pH at z=22,5%bar	2.1	2.1	2.0	2.0	2.0
chamber press.(servo)pcha at pm6,5bar bar	5.8	5.8	4.3	4.3	4.3
piston force ThA at pm6,5bar N	6702	6702	4058	4058	4058
brake force(rdyn min)T lad. at pm6,5bar N	54273	54273	32760	32760	32760
brake force(rdyn max)T lad. at pm6,5bar N	54273	54273	32760	32760	32760
Brake force incl. 1 % rolling resistance proportion %	22.2	22.2	18.5	18.5	18.5

braking rate z laden 0.602 for rdyn min
 z = sum (TR)/PRmax 0.602 for rdyn max

Trailer may only be operated in combination with trucks/tractors with ISO 7638 supply (5 or 7 polar).

axle 4:

valve 1: 480 102 0.. 0 WABCO
EBS trailer modulator

brake cylinder: Haldex 135 1624 ... / 175 1624...

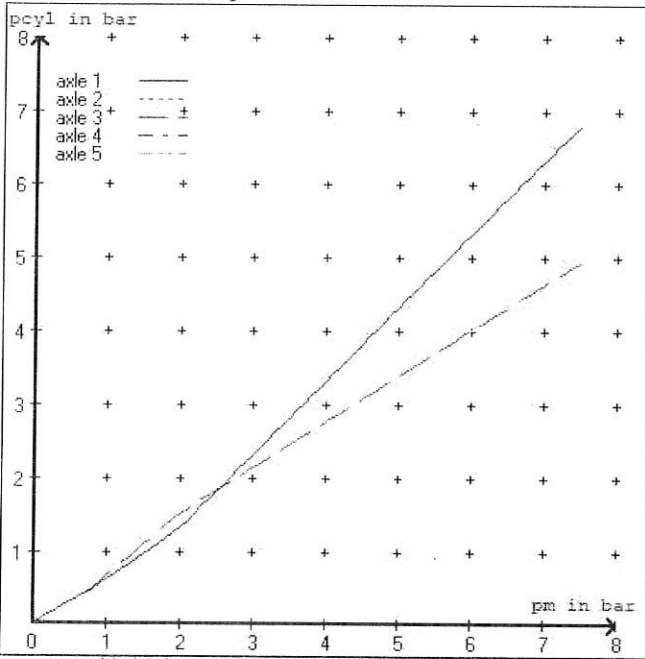
axle 5:

valve 1: 480 102 0.. 0 WABCO
EBS trailer modulator

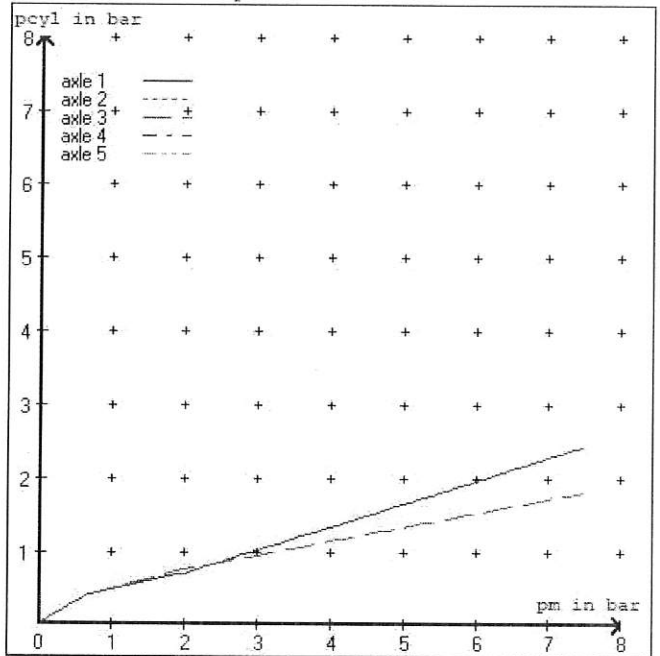
brake cylinder: Haldex 125 160 0.. - 125 160 5.. / 125 160 6.. - 125 160 9..

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.6 bar =>	pcha in bar :	2.9	2.9	2.5	2.5	2.5	
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.2 bar =>	pcha in bar :	0.8	0.8	0.9	0.9	0.9	

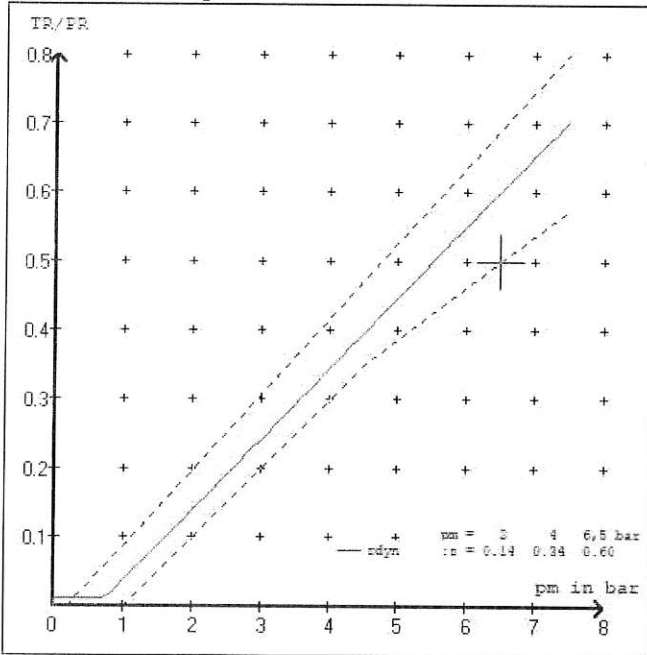
brake chamber pressure laden



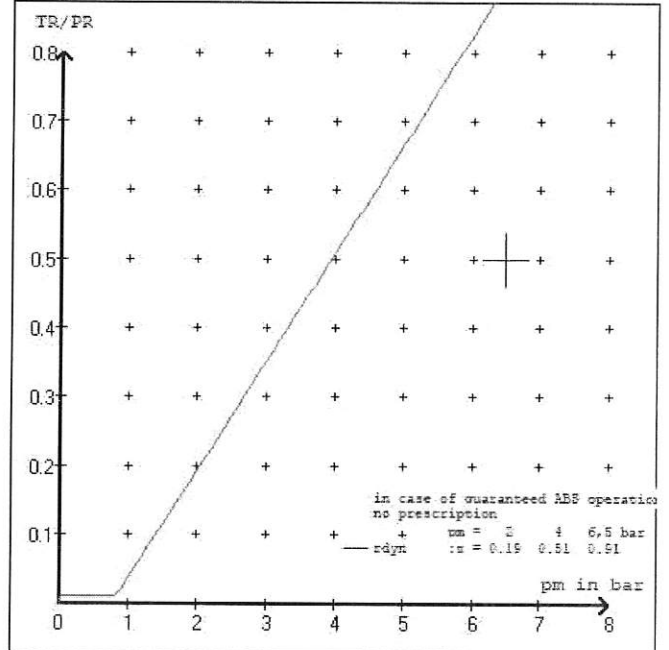
brake chamber pressure unladen



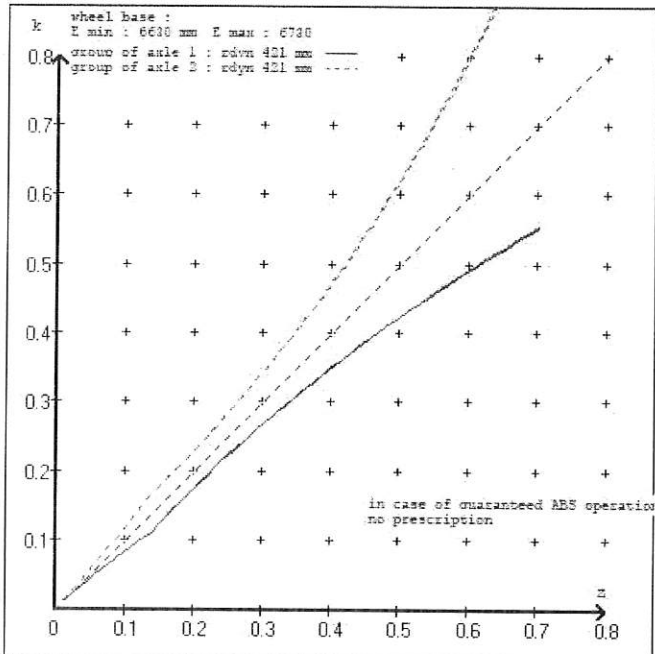
compatibility band laden



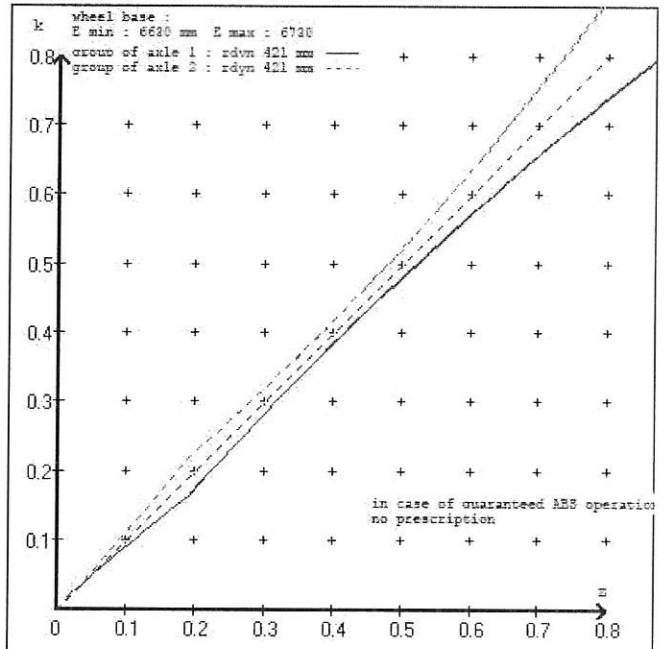
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT PLATFORM
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 76 mm
 axle 2 : 2 x type/diameter 20. (Meritor) lever length 76 mm
 axle 3 : 2 x type/diameter 16/24 (Haldex) lever length 76 mm
 axle 4 : 2 x type/diameter 16/24 (Haldex) lever length 76 mm
 axle 5 : 2 x type/diameter 16" (Haldex) lever length 76 mm

brake diagram :

valve :

480 207 0.. 0 WABCO EBS relay valve or 480 207 2.. 0
 480 102 0.. 0 WABCO EBS trailer modulator

EBS input data

=====
 vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT PLATFORM
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 52592A

tire circumference main axle : 2650 for rdyn max
 tire circumference auxiliary axle : 2650 for rdyn max

assignment pm / deceleration z: pm 0.7 bar z = 0.010
 (laden condition) 2.0 bar z = 0.142
 6.5 bar z = 0.600

control pressure pm		6,5		control pressure pm		0.7	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden		
1	1600	to be	2.1	8000	to be	0.4	1.3	5.8
2	1600	entered by the vehicle manufact.	2.1	8000	entered by the vehicle manufact.	0.4	1.3	5.8
3	1300		1.6	6350		0.4	1.5	4.3
4	1300		1.6	6350		0.4	1.5	4.3
5	1300		1.6	6350		0.4	1.5	4.3

The unladen values indicated in the above table are values for the basic parameter set. Higher unladen axle loads and liftaxles are automatically recognized and do not require separate adjustment. The above unladen axle loads must not be fallen below.

=====

axle 1		axle 2		axle 3		axle 4		axle 5	
axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl
1600	2.1	1600	2.1	1300	1.6	1300	1.6	1300	1.6
2100	2.4	2100	2.4	1800	1.9	1800	1.9	1800	1.9
2600	2.7	2600	2.7	2300	2.1	2300	2.1	2300	2.1
3100	3.0	3100	3.0	2800	2.4	2800	2.4	2800	2.4
3600	3.3	3600	3.3	3300	2.7	3300	2.7	3300	2.7
4100	3.5	4100	3.5	3800	2.9	3800	2.9	3800	2.9
4600	3.8	4600	3.8	4300	3.2	4300	3.2	4300	3.2
5100	4.1	5100	4.1	4800	3.5	4800	3.5	4800	3.5
8000	5.8	8000	5.8	6350	4.3	6350	4.3	6350	4.3

data sheet to ECE vehicle type-approval certificate concerning braking equipment: according to ECE R13 annex 11

axle 1 : reference axle: Assali StefLM or LC or TMen	brake lining: MAT 5200-215
test report : 361-005-16 ECE	date : HL090216 09.02.2016
axle 2 : reference axle: Assali StefLM or LC or TMen	brake lining: MAT 5200-215
test report : 361-005-16 ECE	date : HL090216 09.02.2016
axle 3 : reference axle: Assali StefLM or LC or TMen	brake lining: MAT 5200-215
test report : 361-005-16 ECE	date : HL090216 09.02.2016
axle 4 : reference axle: Assali StefLM or LC or TMen	brake lining: MAT 5200-215
test report : 361-005-16 ECE	date : HL090216 09.02.2016
axle 5 : reference axle: Assali StefLM or LC or TMen	brake lining: MAT 5200-215
test report : 361-005-16 ECE	date : HL090216 09.02.2016

calc. verific. of residual (hot) braking force type III
(item 4.2.1 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 25.1 % Fe
axle 2	(rdyn 421 mm)	T = 25.1 % Fe
axle 3	(rdyn 421 mm)	T = 17.6 % Fe
axle 4	(rdyn 421 mm)	T = 17.6 % Fe
axle 5	(rdyn 421 mm)	T = 17.6 % Fe

calculated actuator stroke in mm
(item 4.3.1.1 of appendix 2 to annex 11)

axle 1	(sp = 58 mm)	s = 42 mm
axle 2	(sp = 58 mm)	s = 42 mm
axle 3	(sp = 50 mm)	s = 42 mm
axle 4	(sp = 50 mm)	s = 42 mm
axle 5	(sp = 50 mm)	s = 42 mm

average thrust output in N at pm = 6,5 bar (however max. pcha = 7,0 bar)

axle1	ThA = 6702 N
axle2	ThA = 6702 N
axle3	ThA = 4058 N
axle4	ThA = 4058 N
axle5	ThA = 4058 N

calc. residual (hot) braking force in N
(item 4.3.1.4 of appendix 2 to annex 11)

axle 1	(rdyn 421 mm)	T = 39378 N
axle 2	(rdyn 421 mm)	T = 39378 N
axle 3	(rdyn 421 mm)	T = 23814 N
axle 4	(rdyn 421 mm)	T = 23814 N
axle 5	(rdyn 421 mm)	T = 23814 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking
	0.44

braking rate of the vehicle
(item 4.3.2 to appendix 2 to annex 11)

0.60

required braking rate
(items 1.5.3 and 1.7.2 to annex 11)

$\geq 0,4$ and
 $\geq 0,6 * E (0.36)$

axle 1	(rdyn 421 mm)	T = 39378 N
axle 2	(rdyn 421 mm)	T = 39378 N
axle 3	(rdyn 421 mm)	T = 23814 N
axle 4	(rdyn 421 mm)	T = 23814 N
axle 5	(rdyn 421 mm)	T = 23814 N

basic test	type III
of subject	(calculated)
trailer (E)	residual
	(hot)braking
	0.44

braking rate of the vehicle
(item 4.3.2 to appendix 2 to annex 11)

0.60

required braking rate
(items 1.5.3 and 1.7.2 to annex 11)

$\geq 0,4$ and
 $\geq 0,6 * E (0.36)$

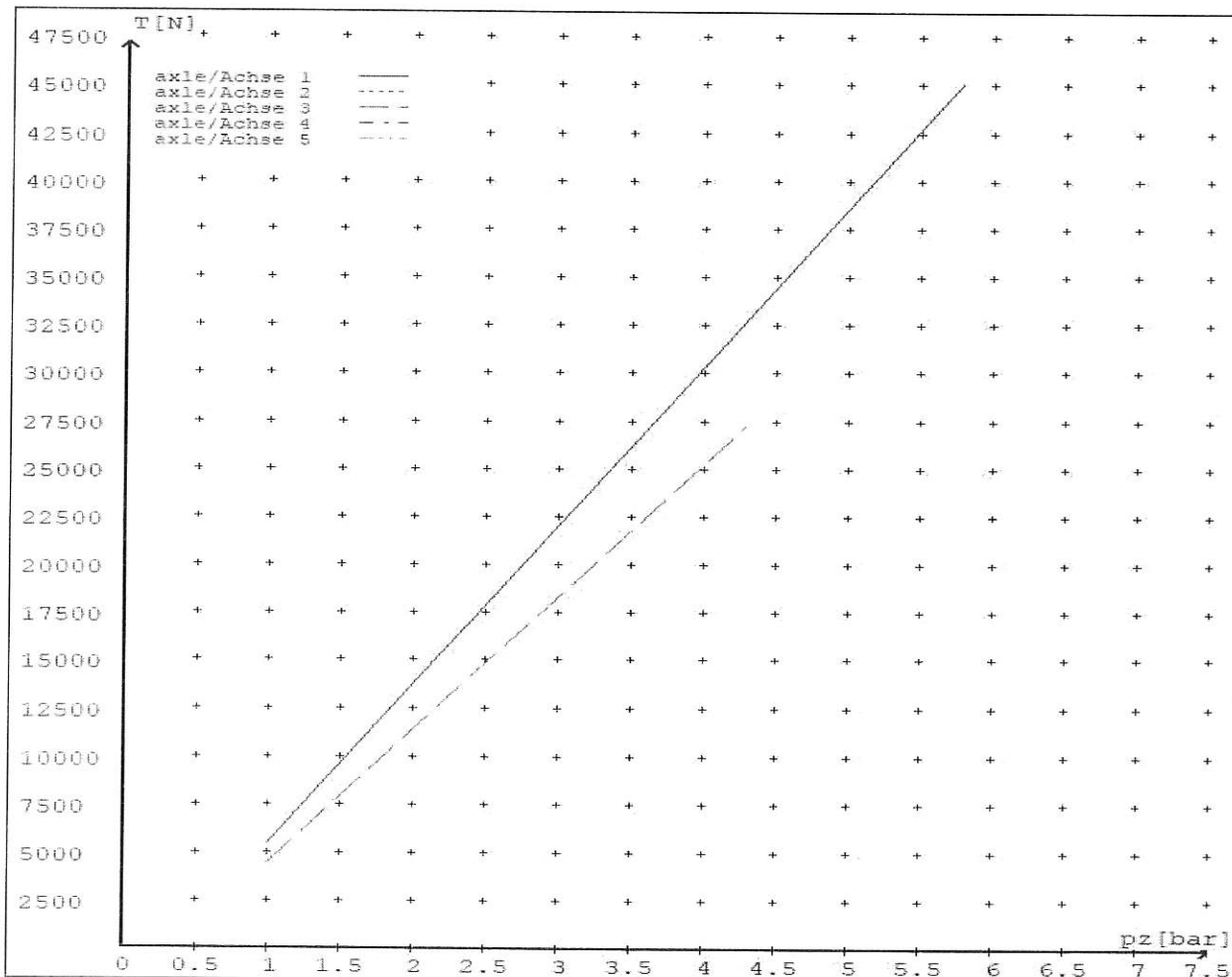
reference values

reference values for z = 50% for max rdyn: 421 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0	5408	
	5.8	45077	
axle 2	1.0	5408	
	5.8	45077	
axle 3	1.0		4408
	4.3		27209
axle 4	1.0		4408
	4.3		27209
axle 5	1.0		4408
	4.3		27209

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	16/24	16/24	16"/
Maximum stroke s _{max} = ...mm maximaler Hub s _{max} =mm	65	65	65	65	65
Lever length =mm Hebellänge =mm	76	76	76	76	76





**NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015
WORKSHEET, PROCEDURE DOCUMENTATION SHEET
& CONFIRMATION OF COMPLIANCE**

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKURA DRIVE, TAURANGA 3110
FLEET:	MCLEOD HIABS

VEHICLE DETAILS

VEHICLE TYPE:	5AFT PLATFORM	CERT #:	JH230201
YEAR:	2023	CALCULATION #:	TP52592
MAKE:	DOMETT	REGO #:	N/A
MODEL:	E1501	LT400 #:	859155
CHASSIS #:	2243	ORDER #:	9169
VIN #:	7A9E1501XN2023243		
GVM: t	30	PRIME MOVER:	UNKNOWN
LOAD CONFIGURATION:	MIXED FREIGHT		
GROUP RATINGS: t	FRONT	REAR	
	16	19	
WHEEL BASE: m	6.68		
	UNLADEN COG m	MAX HEIGHT m	HEIGHT DECK m
	1.025	4.3	1.143
COG: m	2.071		
	FRONT	REAR	TOTAL
TARE: t	3.28	4	7.28
	FRONT	REAR	
TYRE SIZE:	265 70 R19.5	265 70 R19.5	
ROLLING CIRCUMFERENCE: mm	2645	2645	
AXLE SPACING: m	1.31	2.51	

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	ROR_ASSALI_STEFEN	ROR-SL9 TSA	361-005-16
POLE WHEEL FRONT:	90	POLE WHEEL REAR:	90
LINING MATERIAL:	MAT 5200-215	BRAKE FACTOR:	22.37
SENSED AXLES:	2 + 4	NOTES:	
SERIAL NUMBERS:	1	N/A	ROR SL9
	2	N/A	ROR SL9
	3	N/A	ROR SL9
	4	N/A	ROR SL9
	5	N/A	ROR SL9

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	HALDEX_CHAMBERS	HALDEX_CHAMBERS	HALDEX_CHAMBERS
SIZE:	20, (125 200)	1624 (135 1624)	16, (125 160)
STROKE: <i>mm</i>	66	65	65
TEST REPORT #:	BC0175.0	BC0165.0	BC0169.0
SPRINGBRAKE FORCE: <i>kN</i>	N/A	6.003	N/A
HOLDOFF PRESSURE: <i>Bar</i>	N/A	5.2	N/A
FOUNDATION BRAKE:	HALDEX	HALDEX	HALDEX
LEVER LENGTH: <i>mm</i>	74	74	74
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 08. 0 (MV)	70 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	70 kPa
ANTI-COMPOUNDING:	YES		
SPRING BRAKE RELAY:	SEALCO_SBR	110701	
YARD RELEASE VALVE:	SEALCO_YR	17600B	
INLINE RELAY FITTED:	N/A	N/A	
ECU DIRECTION:	<input checked="" type="checkbox"/> FRONT <input type="checkbox"/> REAR	FRONT FRICTION: μ	0.49
SUBSYSTEMS:	<input type="checkbox"/> SMARTBOARD	<input type="checkbox"/> OPTI-LINK	<input type="checkbox"/> CAN ROUTER 446 122 050 0
	<input type="checkbox"/> ELEX 446 122 070 0	<input type="checkbox"/> TAILGUARD	

SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	ELECTRONIC
MAKE:	ROR_AIRSPRING	ROR_AIRSPRING
MODEL:	ROR_INTRA	ROR_INTRA
BELLOW SIZE:	SL9 TSA	SL9 TSA
HEIGHT CONTROL VALVE:	HALDEX 90554950	441 050 100 0
OTHER VALVES:	N/A	463 090 500 0 (eTASC)
RIDE HEIGHT <i>mm</i> :	330	330
HANGER HEIGHT <i>mm</i> :	175	175
PEDESTAL HEIGHT <i>mm</i> :	8	8
LIFTAXLE:		N/A
TIPPING DUMP SWITCH:		N/A
LIFTAXLE VALVE:		N/A
PRESSURE LIMITING:		N/A

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: <i>L</i>	46	46 + 25
AUXILLARY TANK SIZE: <i>L</i>	N/A	46
PRESSURE PROTECTION:	SEALCO 1300	

AIR LINES

TEST POINTS:

CONTROL LINE:	X 1	TANK:	X 1
REAR CHAMBER:	X 2	FRONT CHAMBER:	X 1
DUOMATIC COLOUR CODED:	YES		

HEAVY VEHICLE BRAKE RULE - 32015 (TRAILER)

SCHEDULE 4

SCHEDULE 5

SECTION 6

APPROVED STD

CHECKS AT COMMISSION OF VEHICLE

CHAMBER BUNGS REMOVED:

VALVE MOUNTING:

ECU BLANKING PLUGS CHECKED:

RESPONSE TIME:

MODULATOR 2.1

MODULATOR 2.2

RELAY VALVE

ms:

220

230

365

NOTES, SKETCHES AND SPECIAL CONDITIONS

FILES RECEIVED: 30.11.22

FILES CREATED: 01.02.2023

FILES SENT:

REQUEST A COPY OF THE TARE WEIGHT DOCKET

Multiple horizontal lines for notes and sketches.

FILES RETURNED AS COMPLETE:

REASON FOR CERTIFICATION: NEW TRAILER BUILD

I UNDERSTAND AND DECLARE THAT I AM THE CERTIFIER IDENTIFIED BELOW AND HOLD A CURRENT VALID APPOINTMENT. I CERTIFY THAT AT THE TIME OF INSPECTION THE ABOVE MENTIONED VEHICLE COMPONENT DESIGN AND THIS CERTIFICATION COMPLIES IN ALL RESPECTS WITH THE LAND TRANSPORT RULE VEHICLE STANDARDS COMPLIANCE 2002 AND MY DEED OF APPOINTMENT. TO THE BEST OF MY KNOWLEDGE THE INFORMATION CONTAINED IN THIS CERTIFICATE IS TRUE AND CORRECT.

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015, SCHEDULE 5

DATE:

02/2023

SIGNED:

CERTIFIER NAME & ID:

CHRIS CLARKE

CJC

SODC BY:

JOHN HIRST

JEH

PHONE (BUS):

09-980-7300

POSTAL ADDRESS:

P.O. Box 98-971, Manukau 2241
New Zealand