

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

Vehicle registration (optional) _____ VIN/chassis number **7A9C70018K1023851**

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

Model (optional) _____ 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 32015/4

NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.

RSS ON: TWIN / SINGLE TYRE. TYRE SIZE = 265/70 R19.5

Code/standard/rule certified to **LTR 32015/4** Component load rating(s) **23 Tonnes GVM**

23.2 Tonnes (Group ratings)

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

Supporting documents

BRAKE RULE CERTIFICATE JH190514

BRAKE CALCULATION # TP51910

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) _____

Inspector's signature 

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

Date **17-May-19** Number **700085**

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

All fields are mandatory unless otherwise stated.

WABCO START-UP LOG

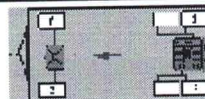
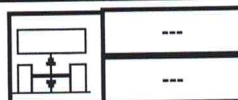
System	Trailer EBS-E	WABCO part number	480 102 084 0
Production date	2018-12-06	Serial number	437007029700G
Serial number (modulator)	000000500120		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2019-05-17 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

WABCO TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00
TDB0749

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS		
TYP TYPE TYPE	3AFT SPECIAL		
VEHICLE IDENT. NUMBER CHASSIS NUMBER NUMERO DE CHASSIS	7A9C70018K1023851		
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51910A		
POLRADZÄHNEZAHN 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 4S/3M
RSS RSS RSS	Einfachbereifung Single Tire Monte simple	Lenkachse Steering axle Essieu vireur	
	Zwillingsbereifung Twin Tire Monte jumelé	X	Kippkritisches Fahrzeug Critical Trailer Véhicule critique
Subsystems	SB	I/O	24N

GIO	Pin1	Pin3	Pin4
1	24V-O1	---	---
2	---	---	---
3	ALS2	ALS2	---
4	---	---	---
5	DIAG	DIAG	DIAG
6	---	---	---
7	---	---	---



ACHSE AXLE ESSIEU	pm (bar)		6.5		pm (bar)		0.7		2.0		---		6.5		TYP TYPE	(mm)	(mm)	(bar)	
	1.0	Pz	TR (daN)	1.0	Pz	TR (daN)	1.0	Pz	TR (daN)	1.0	Pz	TR (daN)	1.0	Pz					
1	2600	1.0	3.5	8200	3.9	0.4	1.5	---	5.1	-	20	65	69	528	4966				
2	1700	0.5	2.0	7500	3.6	0.3	1.6	---	5.1	-	14 / 16	64	69	516	3206				
3	1700	0.5	2.0	7500	3.6	0.3	1.6	---	5.1	-	14 / 16	64	69	516	3206				
4	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---				
5	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---				

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	7A9C70018K1023851
Vehicle type	3AFT SPECIAL	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature	
Date	2019-05-17 2:35:33 p.m.		

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

distribution: DOMETT TRAILERS
 7A9C70018K1023851
 SODC: JH190514
 LT400: CJC 700085

please note!

This brake calculation is made under consideration of
 -the legal precriptions mentioned above in the version valid
 at the time of making the program (V6.14.04.20).
 -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!
 WABCOBrake V6.14.04.20 db 03.11.2017

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 3AFT SPECIAL
 trailer type : 3-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 2+3: T.14/24 [TSE1416HTLD64 ACTUALLY FITTED -
 SEE PAGE 7 FOR PERFORMANCE DATA]
 265/70 R 19,5

axle 1 + 2 + 3 : SAF, SBW 1937, TDB 0749 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	6000	23200
axle 1	P1 in kg	2600	8200
axle 2	P2 in kg	1700	7500
axle 3	P3 in kg	1700	7500
wheel base	E in mm	4200 - 4200	
centre of gravity height	h in mm	800	1600

	<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>
no. of combined axles	1	1	1
no. of brake chambers per axle line	2	2	2
The power output corresponds to	BZ 122.1	BZ 119.6	BZ 119.6
brake chamber manufacturer	Meritor	Meritor	Meritor
chamber size	20.	T.14/24	T.14/24
lever length	lBh in mm	69	69
brake factor	[-]	23.03	23.03
dyn. rolling radius	rdyn min in mm	421	421
dyn. rolling radius	rdyn max in mm	421	421
threshold torque	Co Nm	6.0	6.0

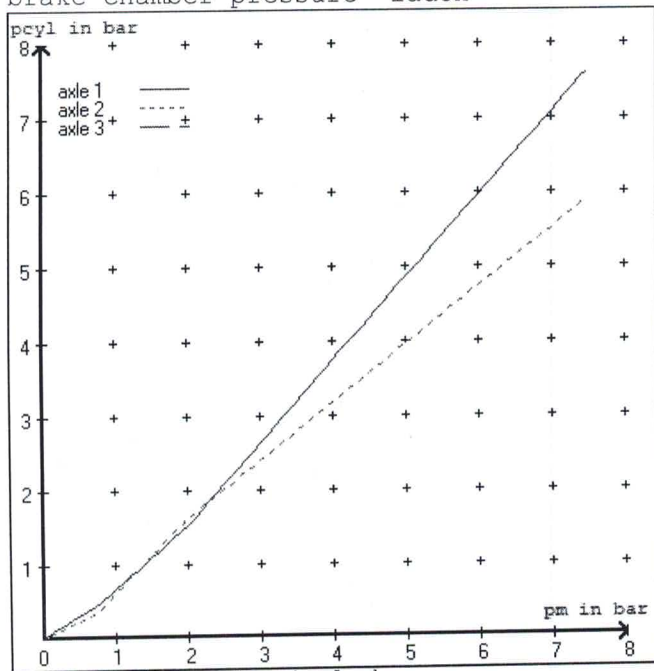
calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.5	2.3	2.3
chamber pressure(rdyn max)pH at z=22,5%bar	2.5	2.3	2.3
chamber press.(servo)pcha at pm6,5bar bar	6.5	5.1	5.1
piston force ThA at pm6,5bar N	7564	4886	4886
brake force(rdyn min)T lad. at pm6,5bar N	57315	37008	37008
brake force(rdyn max)T lad. at pm6,5bar N	57315	37008	37008
brake force within 1 % rolling friction proportion %	37.6	31.2	31.2

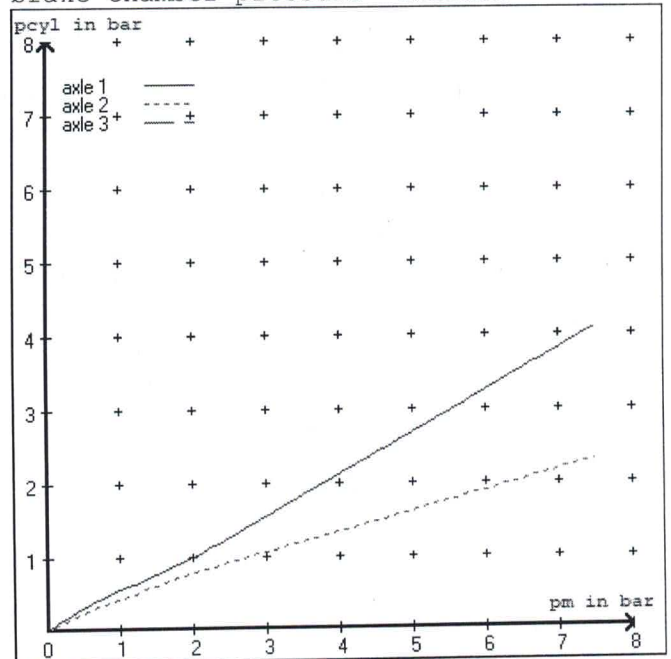
braking rate z laden 0.577 for rdyn min
 z = sum (TR)/PRmax 0.577 for rdyn max

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

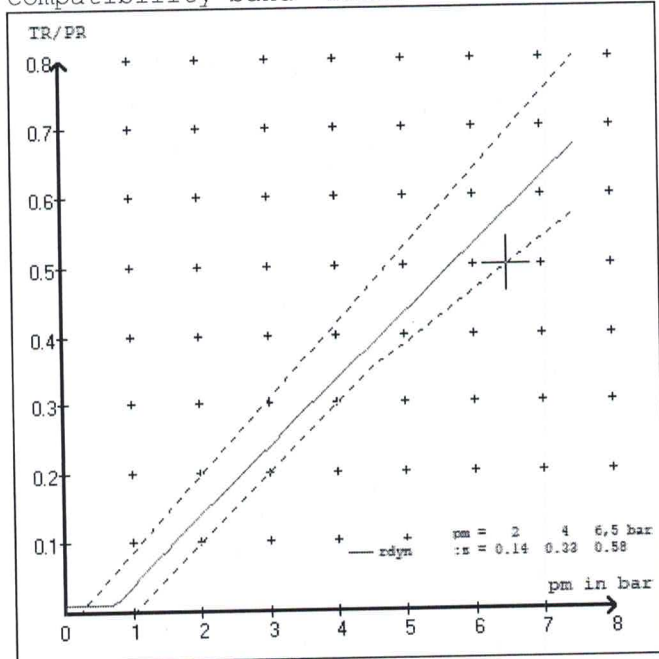
brake chamber pressure laden



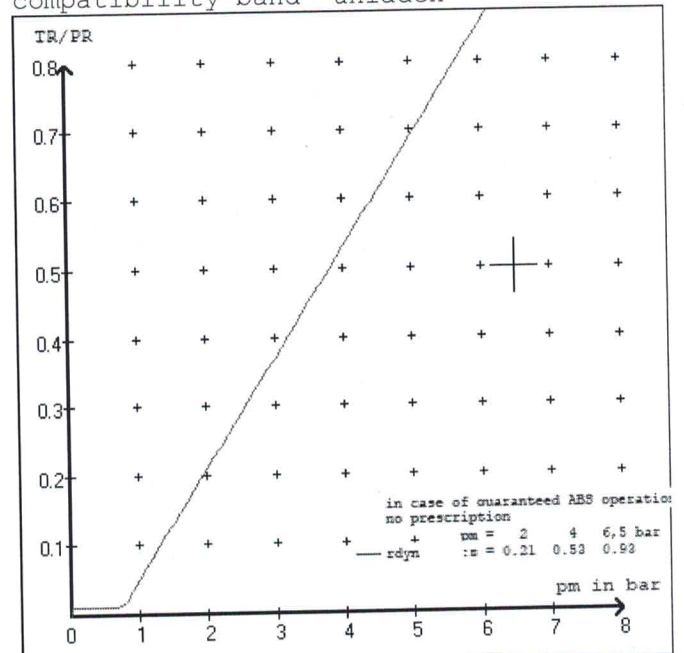
brake chamber pressure unladen



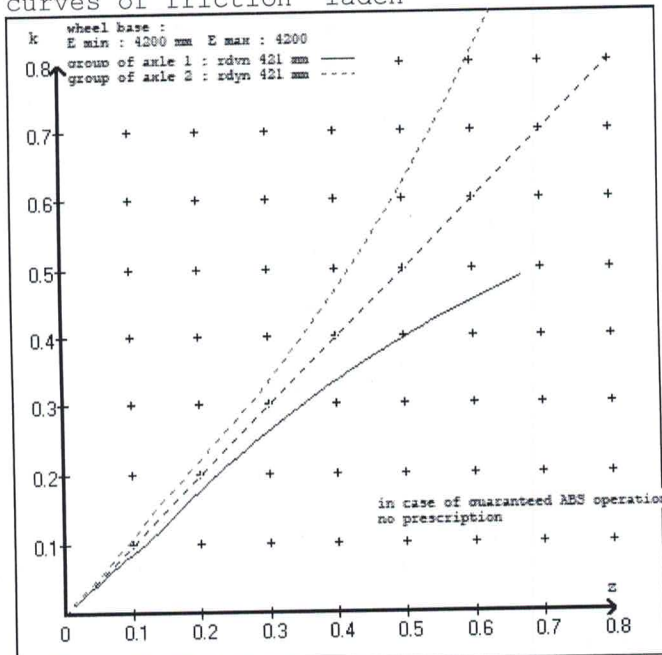
compatibility band laden



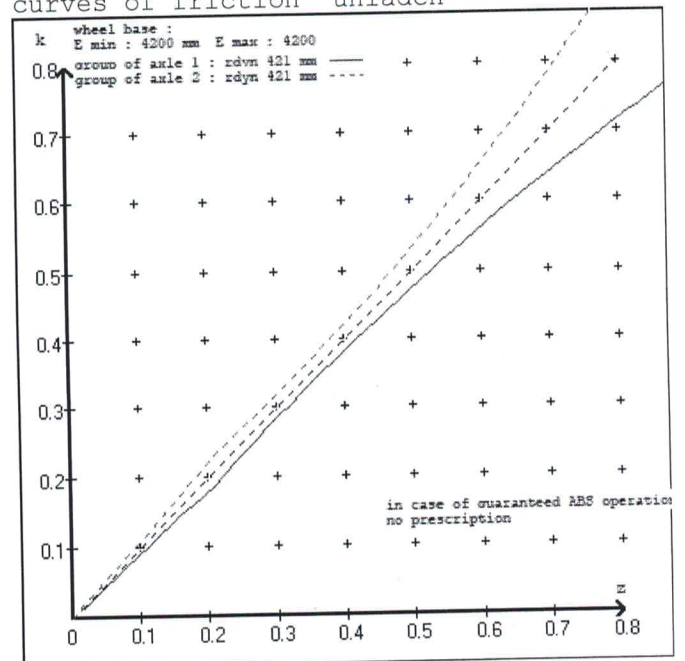
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 3AFT SPECIAL
 trailer type : 3-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 69 mm
 axle 2 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 3 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm

brake diagram :

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

EBS input data

=====

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 3AFT SPECIAL
 trailer type : 3-axle-full-trailer
 brake calculation no. : TP 51910A

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 = 0.138
 6.5 bar z = 0.580

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	2600	to be	3.5	8200	to be	0.4	1.5	6.5	
2	1700	entered by the vehicle manufact.	2.0	7500	entered by the vehicle manufact.	0.3	1.6	5.1	
3	1700		2.0	7500		0.3	1.6	5.1	
4	0		0,0	0		0,0	0,0	0,0	
5	0		0,0	0		0,0	0,0	0,0	

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 load pcyl	axle load pcyl	axle load pcyl
2600	3.5	1700
3100	3.8	2200
3600	4.0	2700
4100	4.3	3200
4600	4.6	3700
5100	4.8	4200
5600	5.1	4700
6100	5.4	5200
8200	6.5	7500

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

axle 1 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 2 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 3 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013

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

axle 1	(rdyn 421 mm)	T = 27.8 % Fe
axle 2	(rdyn 421 mm)	T = 20.2 % Fe
axle 3	(rdyn 421 mm)	T = 20.2 % Fe

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

axle 1	(sp = 58 mm)	s = 39 mm
axle 2	(sp = 56 mm)	s = 39 mm
axle 3	(sp = 56 mm)	s = 39 mm

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

axle1	ThA = 7564 N
axle2	ThA = 4886 N
axle3	ThA = 4886 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 = 44747 N
axle 2	(rdyn 421 mm)	T = 28976 N
axle 3	(rdyn 421 mm)	T = 28976 N

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

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

0.58	0.45
------	------

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

>= 0,4 and
>= 0,6*E (0.35)

axle 1	(rdyn 421 mm)	T = 44747 N
axle 2	(rdyn 421 mm)	T = 28976 N
axle 3	(rdyn 421 mm)	T = 28976 N

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

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

0.58	0.45
------	------

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

>= 0,4 and
>= 0,6*E (0.35)

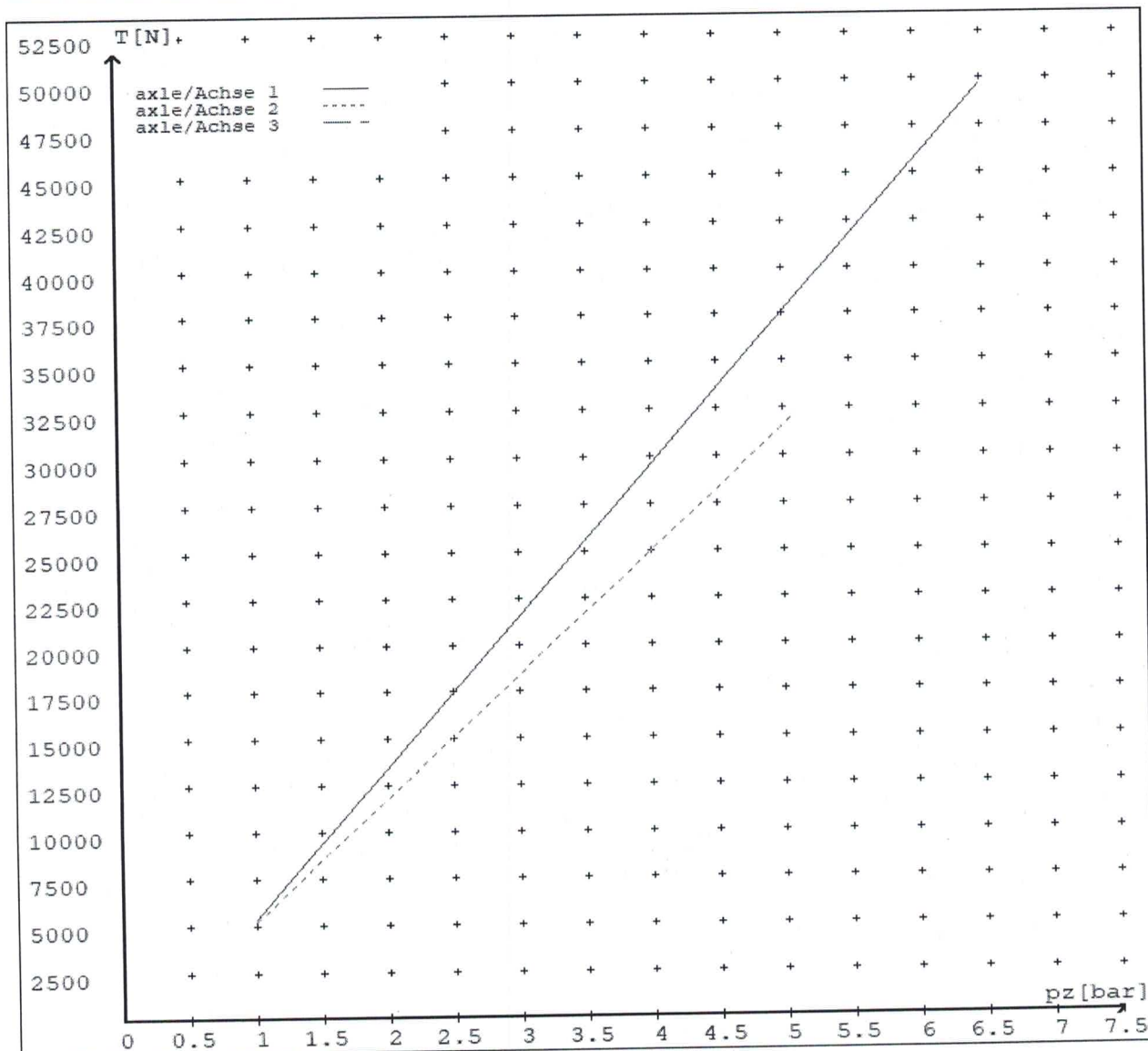
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	5289	
	6.5	49666	
axle 2	1.0		5164
	5.1		32069
axle 3	1.0		5164
	5.1		32069

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	T.14/24	T.14/24	/	/
Maximum stroke smax = ...mm maximaler Hub smax =mm	65	64	64		
Lever length =mm Hebellänge =mm	69.08	69.08	69.08		



reference values for $z = 0.5$

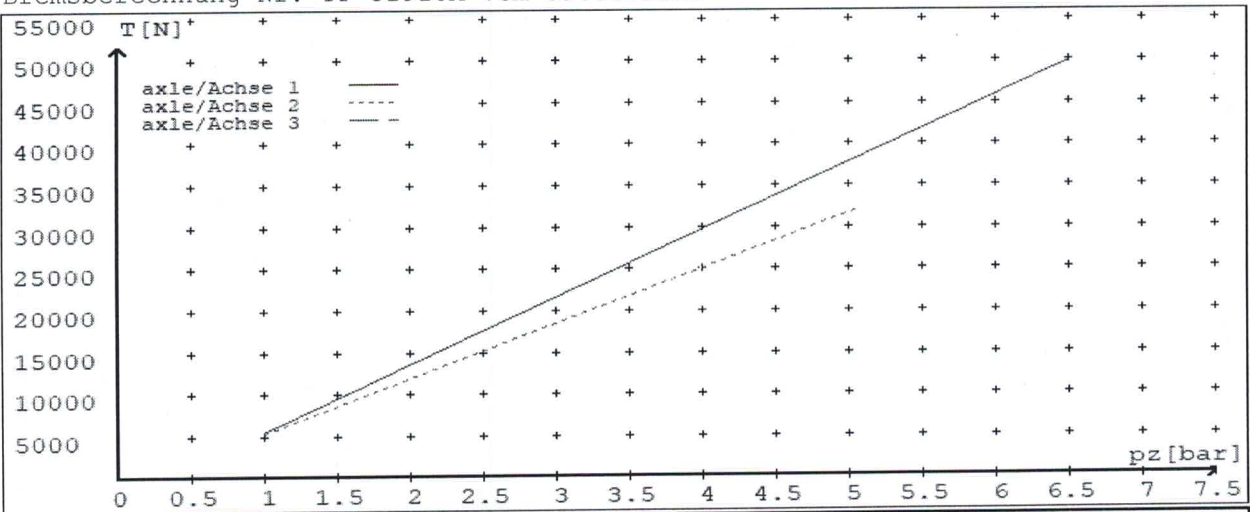
Angabe der Referenzwerte für $z = 0.5$

for max r_{dyn}: 421 mm

für max r_{dyn}: 421 mm

brake calculation no: TP 51910A date 09.05.2019

Bremsberechnung Nr: TP 51910A vom 09.05.2019



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	T.14/24	T.14/24	/	/
Maximum stroke s _{max} = ...mm maximaler Hub s _{max} = ...mm	65	64	64		
Lever length = ...mm Hebellänge = ...mm	69.08	69.08	69.08		

**NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015-4
WORKSHEET, PROCEDURE DOCUMENTATION SHEET
& CONFIRMATION OF COMPLIANCE**

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKO, TAURANGA 3110
FLEET:	WEALLENS TRANSPORT

VEHICLE DETAILS

VEHICLE TYPE:	3AFT SPECIAL	CERT #:	JH190514
YEAR:	2019	CALCULATION #:	TP51910
MAKE:	DOMETT	REGO:	N/A
MODEL:	C7001	LT400 #:	
CHASSIS #:	1851	ORDER NUMBER:	6429
VIN #:	7A9C70018K1023851		
GVM: TONNES	23	PRIME MOVER:	UNKNOWN
LOAD CONFIGURATION:	UNIFORM DENSITY		
GROUP RATINGS: TONNES	FRONT	REAR	
	8.2	15	
WHEEL BASE: METRES	4.2		
	UNLADEN COG	MAX HEIGHT	HEIGHT DECK
	0.8	1.36	2.4
COG: METRES	1.598		
	FRONT	REAR	TOTAL
TARE: TONNES	2.6	3.4	6
	FRONT	REAR	
TYRE SIZE:	265/70 R19.5	265/70 R19.5	
ROLLING CIRCUMFERENCE: MM	2645	2645	
AXLE SPACING: METRES		1.266	

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-ZI9W	TDB0749
POLE WHEEL FRONT:	90	POLE WHEEL REAR:	90
LINING MATERIAL:	JURID 539	BRAKE FACTOR:	23.03
SENSED AXLES:	1 + 3		
SERIAL NUMBERS:	1		
	2		
	3		
	4	N/A	
	5	N/A	

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1	AXLE 2 & 3	
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	
SIZE:	20HSCLD	1416HTLD	
STROKE: <i>MILLIMETRES</i>	65	64	
TEST REPORT #:	BC 0041.0 Jul '07	TSE derived	
SPRINGBRAKE FORCE: <i>kN</i>	N/A	6.16	
HOLDOFF PRESSURE: <i>kPa</i>	N/A	4.8	
FOUNDATION BRAKE:	WABCO PAN19	WABCO PAN19	
LEVER LENGTH: <i>MILLIMETRES</i>	69	69	
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 08. 0 (MV)	70
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	70
ANTI-COMPOUNDING:	YES		
SPRING BRAKE RELAY:	SEALCO_SBR	110701	
YARD RELEASE VALVE:	SEALCO_YR	17600B	
INLINE RELAY FITTED:	N/A	N/A	N/A
ECU DIRECTION:	<input checked="" type="checkbox"/> FRONT	<input type="checkbox"/> REAR	
SMARTBOARD/OPTILINK:	<input type="checkbox"/> SMARTBOARD	<input type="checkbox"/> OPTI-LINK	

SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	PNEUMATIC
MAKE:	SAF_AIRSPRING	SAF_AIRSPRING
MODEL:	SAF_INTRA	SAF_INTRA
BELLOW SIZE:	2924, 350mm	2924, 350mm
HEIGHT CONTROL VALVE:	464 008 011 0	464 008 011 0
OTHER VALVES:	N/A	N/A
RIDE HEIGHT <i>MM</i> :	375	375
HANGER HEIGHT <i>MM</i> :	300	300
PEDESTAL HEIGHT <i>MM</i> :	100	100
LIFTAXLE:	N/A	N/A
TIPPING DUMP SWITCH:	N/A	N/A
LIFTAXLE VALVE:	N/A	N/A

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: <i>L</i>	46	46
AUXILLARY TANK SIZE: <i>L</i>	N/A	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

AIR LINES

TEST POINTS:

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

ELECTRONIC HEIGHT SENSOR CALIBRATION

	TIMER TICKS	MILLIMETRE
UPPER LEVEL:	N/A	N/A
NORMAL LEVEL:	N/A	N/A
LOWER LEVEL:	N/A	N/A

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:

NOTES AND SPECIAL CONDITIONS

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 /4, SCHEDULE 5.

DATE: 17/05/2019

SIGNED: 

CERTIFIER NAME & ID: JOHN HIRST JEH

SODC BY: CHRIS CLARKE CJC

PHONE (BUS): 09-980-7300

FAX:

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



NOTICE TO VEHICLE OPERATOR

THIS VEHICLE HAS A BRAKE SYSTEM WHICH HAS BEEN DESIGNED AND FITTED IN ACCORDANCE WITH THE LAND TRANSPORT HEAVY VEHICLE BRAKE RULE 32015/4.

IF THIS VEHICLE IS OPERATED IN CONJUNCTION WITH NON-CERTIFIED VEHICLES, THERE MAY BE OPERATIONAL FACTORS WHICH NEED TO BE TAKEN INTO CONSIDERATION.

PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.

EXCERPT FROM LAND TRANSPORT RULE; HEAVY-VEHICLE BRAKES RULE 32015/4. SECTION 10,

10.1 RESPONSIBILITIES OF OPERATORS

A person who operates a vehicle must ensure that the vehicle complies with this rule.

10.2 RESPONSIBILITIES OF REPAIRERS

A person who repairs or adjusts a brake must ensure that the repair or adjustment:

- a) does not prevent the vehicle from complying with this rule;
- b) complies with Land Transport Rule: Vehicle Repair 1998.

10.3 RESPONSIBILITIES OF MODIFIERS

A person who modifies a vehicle so as to affect the braking performance of the vehicle must:

- a) ensure that the modification does not prevent the vehicle from complying with this Rule; and
- b) notify the operator that the vehicle must be inspected and, if necessary, certified by person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.

IF YOU ARE UNSURE ABOUT YOUR RESPONSIBILITIES, PLEASE CONTACT THE VEHICLE MANUFACTURER, OR MYSELF.

COMPLAINTS. Complaints and Warranty issues which relate to Brake Certification will be acknowledged within 7 working days and a resolution proposed within 25 working days. Resolution of complaints and Warranty issues is subject to Transpecs Warranty policy. Customers have the right to appeal to the New Zealand Transport Authority if dissatisfied with a Compliance issue. (Refer NZTA Deed Of Appointment Para 47.4) NZTA Helpdesk 0800 699 000

(p.p.).....
(J.Hirst (JEH) HVEK)

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an Electronic Brake System.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015/4, it must be used only in conjunction with a truck/tractor equipped with a 5 or 7 pin ABS/EBS power supply socket.

Failure to connect to such supply invalidates Brake Rule compliance.

The trailer ABS/EBS warning light on the towing vehicle dashboard must illuminate when the ignition is switched on and extinguish when the vehicle is in motion.

If the light does not illuminate when ignition is switched on, the system must be checked. If the light remains illuminated when the vehicle is in motion, Brake Rule compliance is compromised. Repairs must be made as soon as possible.

If you are unsure of your responsibilities and/or obligations, please contact either the vehicle manufacturer or myself.

(p.p.)

J E Hirst

(JEH HVEK)

(09 980 7300)