

Heavy vehicle specialist certificate

Must be presented to a CoF (heavy) inspecting organisation
Heavy vehicle specialist inspector and inspecting organisation

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

Vehicle registration (optional)	VIN/chassis number
	7A9E10013G1023483

Make DOMETT	Component being certified:	<input type="checkbox"/> Chassis	<input type="checkbox"/> Load anchorage
Model (optional)	<input type="checkbox"/> Log bolsters	<input type="checkbox"/> Towing connection	<input checked="" type="checkbox"/> Brakes
Certification category HVEK	<input type="checkbox"/> SRT	<input type="checkbox"/> PSV stability	<input type="checkbox"/> PSV rollover
	<input type="checkbox"/> Swept path	<input type="checkbox"/> PBS	

Description of work

**CERTIFY TO HEAVY VEHICLE BRAKE RULE 32015/3.
NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.**

Code/standard/rule certified to SCHEDULE 5	Component load rating(s) N/A
General drawing number(s) N/A	

Supporting documents

BRAKE CODE CERTIFICATE LC160610

Special conditions (optional)

WARNING LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON & THEN EXTINGUISH IMMEDIATELY OR WHEN VEHICLE SPEED EXCEEDS 7 KPH

Certification expiry date (if applicable) N/A	or	Hubodometer reading (whichever comes first)
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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 **8-Jul-16** Number **556849**

CoF vehicle inspector ID	CoF vehicle inspector signature	Date

All fields are mandatory unless otherwise stated.

WABCO

START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 064 0
Production date	2015-12-03	Serial number	436020907500N
Serial number (modulator)	000000121809		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2016-07-08 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

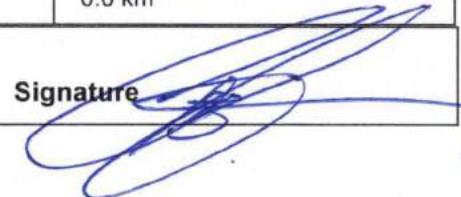
WABCO		TRAILER EBS-E		GGVS/ADR TUEH TB 2007 - 019.00 TDB0749	
HERSTELLER MANUFACTURER CONSTRUCTEUR		DOMETT T&T		GIO	
TYP TYPE		5AFT TANKER		Pin1	
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS		7A9E10013G1023483		Pin3	
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.		TP2016A		Pin4	
POLRADZÄHNEZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTEE c-d e-f		90	90	ABS-System ABS system système ABS	4S/3M
Einfachbereifung Single Tire Monte simple		Lenkachse Steering axle Essieu vieur		1	
Zwillingsbereifung Twin Tire Monte jumelle		Kippkritisches Fahrzeug Critical Trailer Vehicule critique		2	
Subsystems		I/O		24N	
ACHSE AXLE ESSIEU		pm (bar)		TYP TYPE	
1		1500	0.6	1.6	8000
2		1500	0.6	1.6	8000
3		1100	0.3	1.2	6400
4		1100	0.3	1.2	6400
5		1100	0.3	1.2	6400

TEBS-E

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light power 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 check	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 T&T	Vehicle ident. no	7A9E10013G1023483
Vehicle type	5AFT TANKER	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature 	
Date	2016-07-08 4:01:54 p.m.		

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

distribution: DOMETTS
 2016, 5A, SAF,
 7A9E10013G1023483
 LC160610
 LT400 CJC 556849

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 08.07.2014

vehicle manufacturer: DOMETTS
 trailer model : 2016 5A TANKER, E1001
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 3+4: T.14/24
 265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBW 1937, TDB 0749 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	6300	35200
axle 1	P1 in kg	1500	8000
axle 2	P2 in kg	1500	8000
axle 3	P3 in kg	1100	6400
axle 4	P4 in kg	1100	6400
axle 5	P5 in kg	1100	6400
wheel base	E in mm	5700 - 5700	
centre of gravity height	h in mm	900	1521

	<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 KDZ	2	2	2	2	2
The power output corresponds to	BZ 122.1	BZ 122.1	BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor	Meritor
chamber size	18.	18.	T.14/24	T.14/24	14.
lever length lBh in mm	69	69	69	69	69
brake factor [-]	23.03	23.03	23.03	23.03	23.03
dyn. rolling radius rdyn min in mm	421	421	421	421	421
dyn. rolling radius rdyn max in mm	421	421	421	421	421
threshold torque Co Nm	6.0	6.0	6.0	6.0	6.0

calculation:

chamber pressure (rdyn min) pH at z=22,5%bar	2.4	2.4	2.1	2.1	2.1
chamber pressure (rdyn max) pH at z=22,5%bar	2.4	2.4	2.1	2.1	2.1
chamber press. (servo) pcha at pm6,5bar bar	6.2	6.2	4.9	4.9	4.9
piston force ThA at pm6,5bar N	6622	6622	4686	4686	4686
brake force (rdyn min) T lad. at pm6,5bar N	50176	50176	35386	35386	35386
brake force (rdyn max) T lad. at pm6,5bar N	50176	50176	35386	35386	35386
brake force within 1 % rolling friction proportion %	21.2	21.2	19.2	19.2	19.2

braking rate z laden 0.598 for rdyn min
 z = sum (TR)/PRmax 0.598 for rdyn max

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

brake diagram :

maximum pressure: 8.5 bar

axle 1:

valve 1: 480 207 0.. 0 WABCO or 480 207 2.. 0
EBS relay valve

brake cylinder: Meritor 18HSCLD64

axle 2:

valve 1: 480 207 0.. 0 WABCO or 480 207 2.. 0
EBS relay valve

brake cylinder: Meritor 18HSCLD64

axle 3:

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

brake cylinder: Meritor 1424HTLD64

axle 4:

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

brake cylinder: Meritor 1424HTLD64

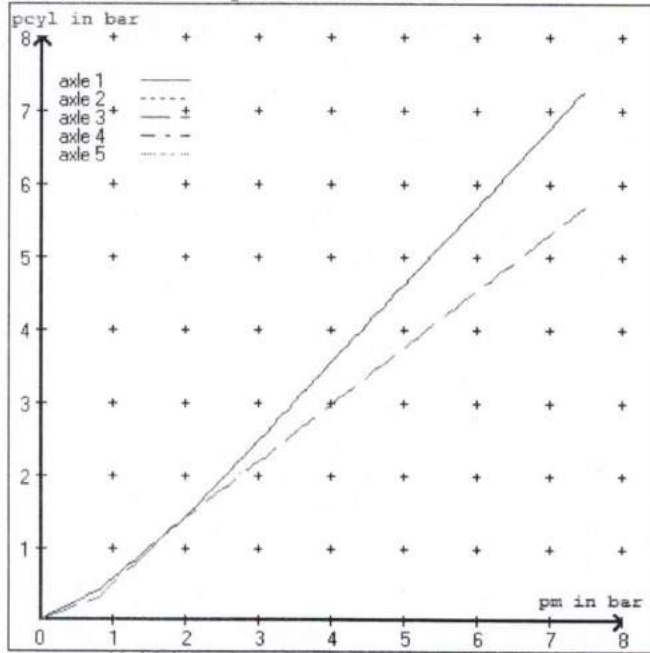
axle 5:

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

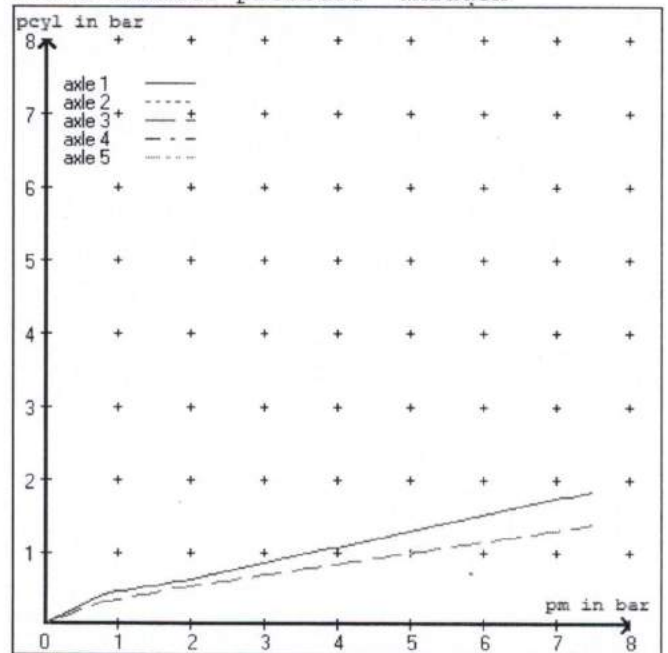
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.6 bar =>	pcha in bar :	3.1	3.1	2.7	2.7	2.7	
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.3 bar =>	pcha in bar :	0.8	0.8	0.8	0.8	0.8	

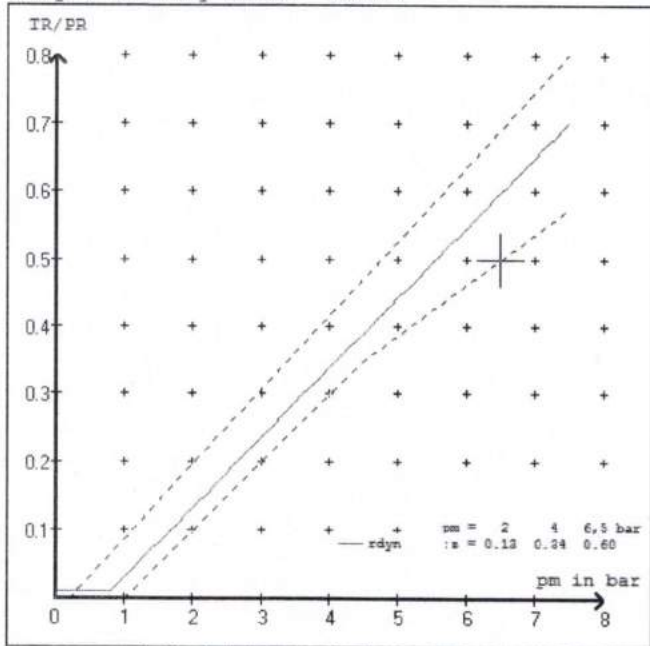
brake chamber pressure laden



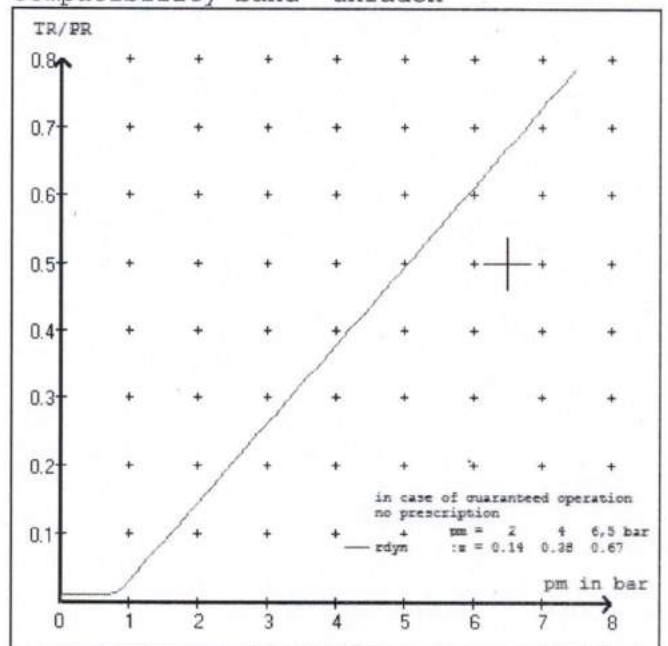
brake chamber pressure unladen



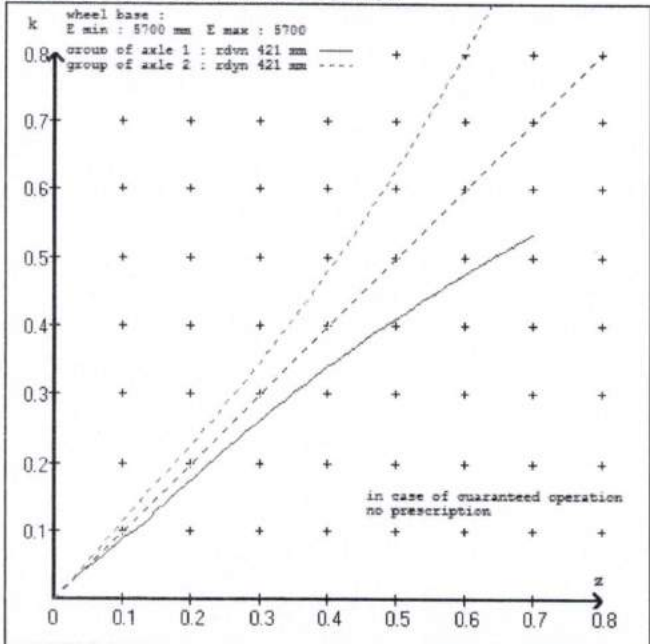
compatibility band laden



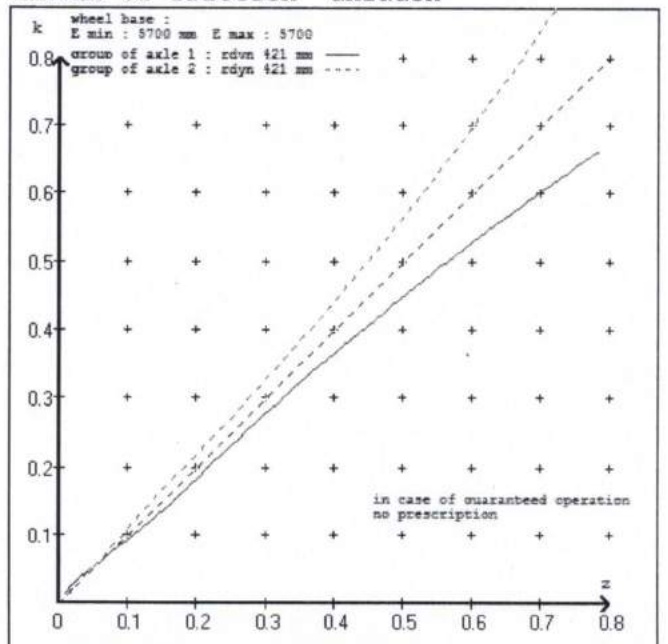
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETTS
 trailer model : 2016 5A TANKER, E1001
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 18. (Meritor) lever length 69 mm
 axle 2 : 2 x type/diameter 18. (Meritor) lever length 69 mm
 axle 3 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 4 : 2 x type/diameter T.14/24 (Meritor) lever length 69 mm
 axle 5 : 2 x type/diameter 14. (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: DOMETTS
 trailer model : 2016 5A TANKER, E1001
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 2016A

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

assignment pm / deceleration z: pm 0.8 bar z = 0.010
 (laden condition) 2.0 bar z = 0.134
 6.5 bar z = 0.600

control pressure pm			6,5	control pressure pm			0.8	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden			
1	1500	to be	1.6	8000	to be	0.4	1.4	6.2	
2	1500	entered by the vehicle manufact.	1.6	8000	entered by the vehicle manufact.	0.4	1.4	6.2	
3	1100		1.2	6400		0.3	1.4	4.9	
4	1100		1.2	6400		0.3	1.4	4.9	
5	1100		1.2	6400		0.3	1.4	4.9	

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 pcy1	axle load pcy1	axle load pcy1	axle load pcy1	axle load pcy1
1500 1.6	1500 1.6	1100 1.2	1100 1.2	1100 1.2
2000 2.0	2000 2.0	1600 1.5	1600 1.5	1600 1.5
2500 2.3	2500 2.3	2100 1.9	2100 1.9	2100 1.9
3000 2.7	3000 2.7	2600 2.2	2600 2.2	2600 2.2
3500 3.0	3500 3.0	3100 2.6	3100 2.6	3100 2.6
4000 3.4	4000 3.4	3600 2.9	3600 2.9	3600 2.9
4500 3.7	4500 3.7	4100 3.3	4100 3.3	4100 3.3
5000 4.1	5000 4.1	4600 3.6	4600 3.6	4600 3.6
8000 6.2	8000 6.2	6400 4.9	6400 4.9	6400 4.9

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
axle 4 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013
axle 5 : reference axle: SAF	SBW 1937	brake lining: Jurid 539
test report :	TDB 0749 ECE	date : 20130930 30.09.2013

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 = 24.1 % Fe
axle 2	(rdyn 421 mm)	T = 24.1 % Fe
axle 3	(rdyn 421 mm)	T = 18.4 % Fe
axle 4	(rdyn 421 mm)	T = 18.4 % Fe
axle 5	(rdyn 421 mm)	T = 18.4 % 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 = 58 mm)	s = 39 mm
axle 3	(sp = 56 mm)	s = 39 mm
axle 4	(sp = 56 mm)	s = 39 mm
axle 5	(sp = 56 mm)	s = 39 mm

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

axle1	ThA = 6622 N
axle2	ThA = 6622 N
axle3	ThA = 4686 N
axle4	ThA = 4686 N
axle5	ThA = 4686 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 = 39203 N
axle 2	(rdyn 421 mm)	T = 39203 N
axle 3	(rdyn 421 mm)	T = 27691 N
axle 4	(rdyn 421 mm)	T = 27691 N
axle 5	(rdyn 421 mm)	T = 27691 N

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	basic test	type III
	of subject trailer (E)	(calculated) residual (hot)braking
	0.60	0.47
required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)

axle 1	(rdyn 421 mm)	T = 39203 N
axle 2	(rdyn 421 mm)	T = 39203 N
axle 3	(rdyn 421 mm)	T = 27691 N
axle 4	(rdyn 421 mm)	T = 27691 N
axle 5	(rdyn 421 mm)	T = 27691 N

braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	basic test	type III
	of subject trailer (E)	(calculated) residual (hot)braking
	0.60	0.47
required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.36)

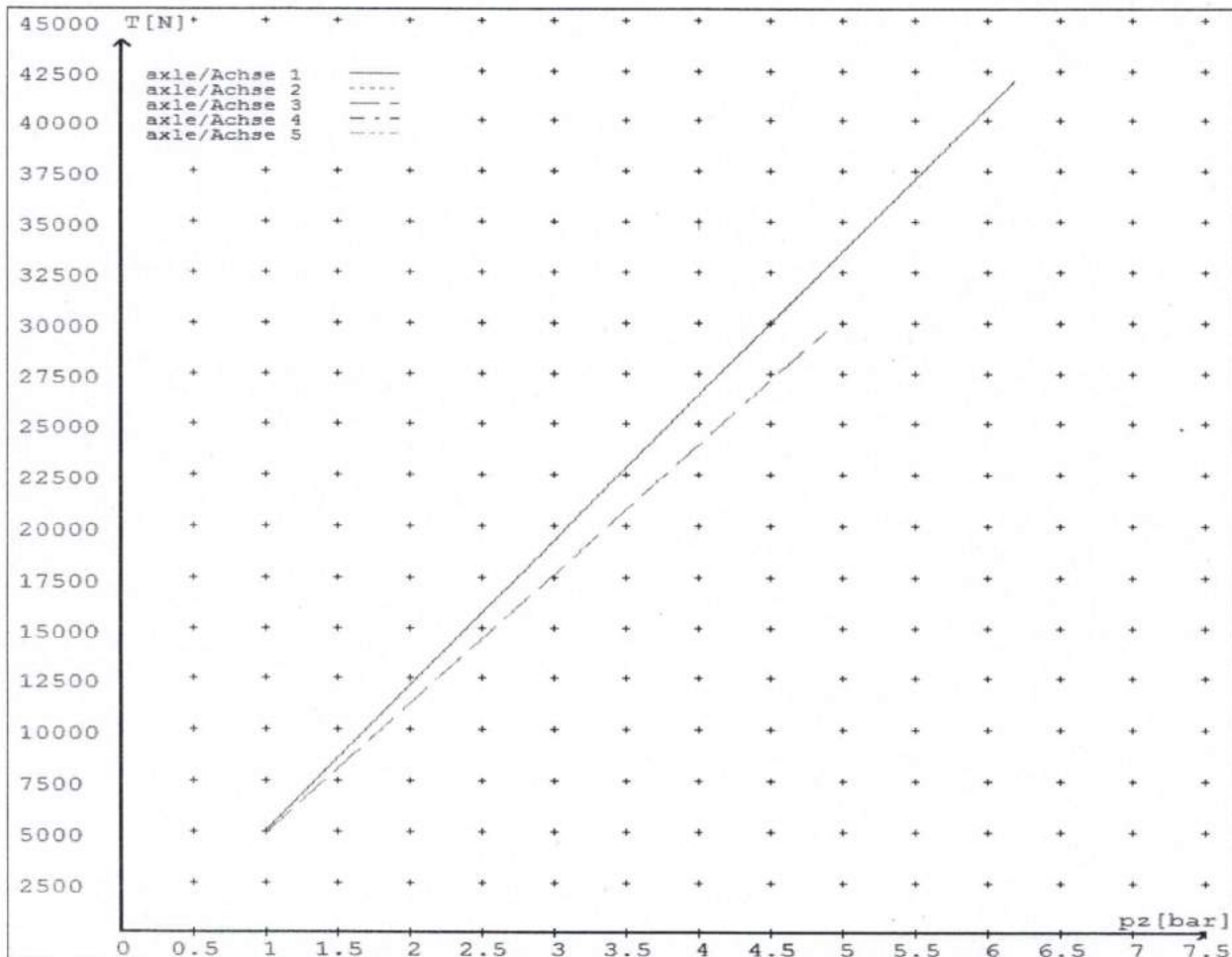
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	4986	
	6.2	41953	
axle 2	1.0	4986	
	6.2	41953	
axle 3	1.0		4892
	4.9		29587
axle 4	1.0		4892
	4.9		29587
axle 5	1.0		4892
	4.9		29587

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	18./	18./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax =mm	64	64	64	64	64
Lever length =mm Hebellänge =mm	69.08	69.08	69.08	69.08	69.08



reference values for $z = 0.5$

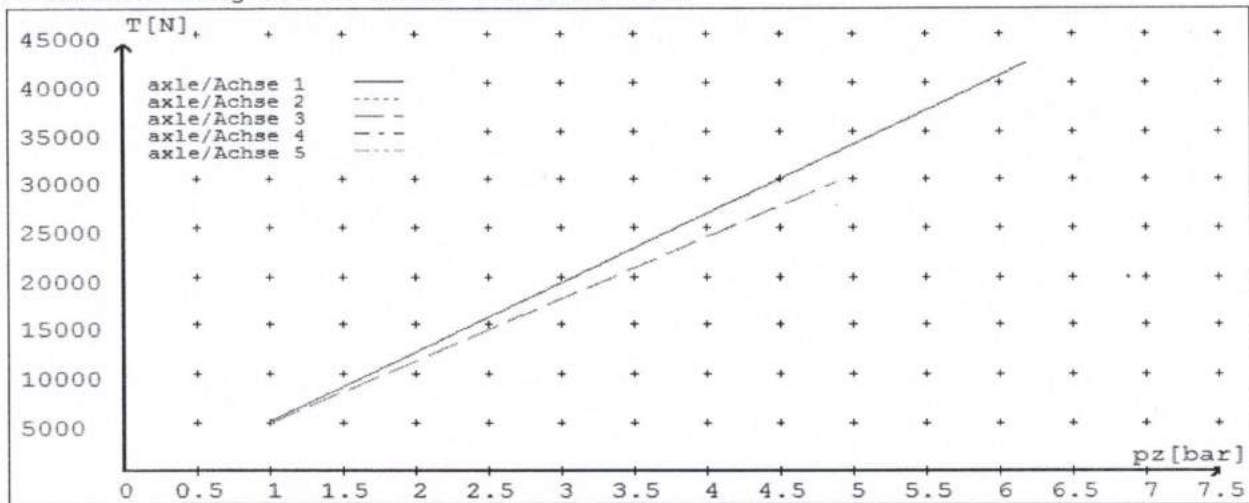
Angabe der Referenzwerte für $z = 0.5$

brake calculation no: TP 2016A date 22.03.2016

Bremsberechnung Nr: TP 2016A vom 22.03.2016

for max r_{dyn}: 421 mm

für max r_{dyn}: 421 mm



	Axle (s) / Achse (n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	18./	18./	T.14/24	T.14/24	14./
Maximum stroke $s_{max} = \dots$ mm maximaler Hub $s_{max} = \dots$ mm	64	64	64	64	64
Lever length = \dots mm Hebellänge = \dots mm	69.08	69.08	69.08	69.08	69.08

GOUGH**Transpecs**

**HEAVY VEHICLE BRAKE RULE
32015/3 WORKSHEET
PROCEDURE DOCUMENTATION SHEET- (PDS)
&
CONFIRMATION OF COMPLIANCE**

CERTIFICATE NO:

CUSTOMER NAME:

CUSTOMER ORDER NO: 4551 DATE RECEIVED:

VEHICLE TYPE:

VIN / CHASSIS NO:

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

BRAKE VALVES:	MAKE	TYPE
PRIMARY RELAY:	WABCO	<input type="text" value="480 102 064 0"/>
SECONDARY RELAY:	WABCO	<input type="text" value="480 207 001 0"/>
SPRING BRAKE RELAY:	SEALCO	<input type="text" value="110701"/>
PARK BRAKE VALVE:	SEALCO	<input type="text" value="17600B"/>
LOCKED RATIO:	<input type="text"/>	
MAKE:	<input type="text"/>	
SETTING:	<input type="text"/>	

OTHER VALVES

OTHER VALVES

MAKE:	<input type="text"/>	TYPE	<input type="text"/>	SETTING	<input type="text"/>
MAKE:	<input type="text"/>	TYPE	<input type="text"/>	SETTING	<input type="text"/>
MAKE:	<input type="text"/>	TYPE	<input type="text"/>	SETTING	<input type="text"/>
MAKE:	<input type="text"/>	TYPE	<input type="text"/>	SETTING	<input type="text"/>

BRAKE CHAMBERS

	FRONT	REAR	5TH
MAKE:	TSE	TSE	TSE
SIZE:	18HSCLD65	1416HTLD64	14HSCLD64
STROKE: <i>MM</i>	65mm	64mm	64mm
SLACK LENGTH: <i>MM</i>	DISC	DISC	DISC

BRAKE CALIPERS

BRAKE CALIPERS:

FRICITION MATERIAL: OEM Aftermarket

LINING BRAND

FRONT	REAR
JURID 539	JURID 539

OTHERS

TYRES:	FRONT	REAR
	265/70R 19.5	265/70R 19.5

COMMENTS

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 # 0

NOTES:

PACKING SLIP NO. _____ PROCESS TIME _____

CONFIRMATION OF COMPLIANCE

I CONFIRM THAT THE VEHICLE IDENTIFIED IN PAGES 1 AND 2 OF THIS CONFIRMATION OF COMPLIANCE COMPLIES WITH ALL RELEVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015/3, SCHEDULE 5.

DATE: 8/07/2016

SIGNED: 

NAME & ID: LANCE CAWTE (LPC)

PHONE (BUS): 09 980 7300

FAX (BUS): 03 3083277

POSTAL ADDRESS:

TRANSPORT SPECIALTIES LTD
PO BOX 98-971,
MANUKAU CITY,
AUCKLAND 2241

POSITION: Brake certifier HVEK

I CONFIRM THE BRAKE SYSTEM OF THE VEHICLE IDENTIFIED IN PAGE 1 OF THIS STATEMENT OF COMPLIANCE AS MODIFIED BY MYSELF, CONTINUES TO COMPLY WITH ALL THE RELEVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY BRAKE RULE 32015/3 SCHEDULE 5.

DATE: _____

SIGNED: _____

NAME: _____

CERTIFIERS ID: _____

POSITION: _____

PHONE (BUS): _____

FAX (BUS): _____

COMMENTS: _____

