

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
	7 A 9 B 2 0 0 1 9 G 1 0 2 3 5 0 5
Make DOMETT	<input type="checkbox"/> Chassis <input type="checkbox"/> Load anchorage <input type="checkbox"/> Log bolsters <input type="checkbox"/> Towing connection <input checked="" type="checkbox"/> Brakes <input type="checkbox"/> SRT <input type="checkbox"/> PSV stability <input type="checkbox"/> PSV rollover <input type="checkbox"/> Swept path <input type="checkbox"/> PBS
Model (optional)	
Certification category HVEK	

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/3

Code/standard/rule certified to LTR 32015/3	Component load rating(s) 16.4 Tonnes GVM
General drawing number(s) N/A	

Supporting documents

BRAKE CODE CERTIFICATE JH160601

BRAKE CALCULATION # TP51452

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="text"/>

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) ID number

CHRIS CLARKE CJC

Date: 2-Jun-16 Number: 553780

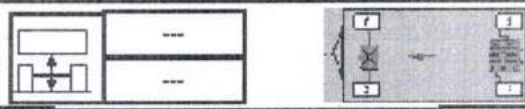
CoF vehicle inspector ID	CoF vehicle inspector signature	Date

All fields are mandatory unless otherwise stated.

WABCO

START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2015-12-01	Serial number	437002064800A
Serial number (modulator)	000000052529		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2016-06-02 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		


WABCO		TRAILER EBS-E		GGVS/ADR TUEH TB 2007 - 019.00 TDB0459											
HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS		GIO	Pin1	Pin3	Pin4									
TYP TYPE TYPE	2AFT CURTAINSIDE		1	24V-O1	---	---									
FAHRZEUG IDENT.NR. CHASSIS NUMBER NUMERO DE CHASSIS	7A9B20019G1023505		2	---	---	---									
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP51452A		3	ALS2	ALS2	---									
POLRADZAHNZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTEE c-d e-f	90	90	4	---	---	---									
RSS RSS RSS			5	DIAG	DIAG	DIAG									
Einfachbereifung Single Tire Monte simple		Lenkachse Steering axle Essieu vieur	6	---	---	---									
Zwillingsbereifung Twin Tire Monte jumelée	X	Kippkritisches Fahrzeug Critical Trailer Vehicule critique	7	---	---	---									
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		
	TR (daN)														
1	2100	0.5	2.5	8200	5.0	0.4	1.3	---	6.0	-	24	67	152	646	5020
2	1700	0.5	1.6	8200	5.0	0.5	1.5	---	4.4	-	24 / 30	64	127	606	3023
3	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---
4	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---
5	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---

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 TRAILERS	Vehicle ident. no	7A9B20019G1023505
Vehicle type	2AFT CURTAINSIDE	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature 	
Date	2016-06-02 5:00:01 p.m.		

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

distribution: DOMETT TRAILERS
 7A9B20019G1023505
 SODC: JH160601
 LT400: 553780

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 (V6.14.04.20).
 -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 20.04.2016

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 2AFT CURTAINSIDE
 trailer type : 2-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS
 TRISTOP 2: 24/30 [TSE ACTUALLY FITTED]
 265/70 R 19,5

axle 1 + 2 : SAF, SNK 367x180, TDB 0459 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	3800	16400
axle 1	P1 in kg	2100	8200
axle 2	P2 in kg	1700	8200
wheel base	E in mm	5350 - 5350	
centre of gravity height	h in mm	1000	2000

	<u>axle 1</u>	<u>axle 2</u>
no. of combined axles	1	1
no. of brake chambers per axle line	2	2
The power output corresponds to	BC 0069.2BC	0051.0
brake chamber manufacturer	BPW	WABCO
chamber size	24.	24/30
lever length	1Bh in mm	152
brake factor	[-]	9.73
dyn. rolling radius	rdyn min in mm	421
dyn. rolling radius	rdyn max in mm	421
threshold torque	Co Nm	13.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.1	2.0
chamber pressure(rdyn max)pH at z=22,5%bar	2.1	2.0
chamber press.(servo)pcha at pm6,5bar bar	6.0	4.4
piston force ThA at pm6,5bar N	8631	6208
brake force(rdyn min)T lad. at pm6,5bar N	60844	36648
brake force(rdyn max)T lad. at pm6,5bar N	60844	36648
brake force within 1 % rolling friction proportion	54.8	45.2

braking rate z laden 0.606 for rdyn min
 z = sum (TR)/PRmax 0.606 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: 971 002 ... 0 WABCO
 EBS emergency valve

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

brake cylinder: BPW 05.444.15...

axle 2:

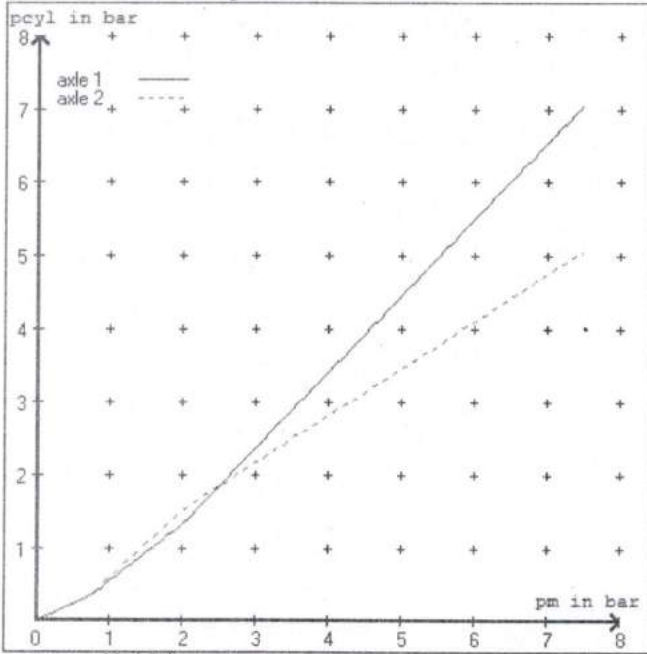
valve 1: 971 002 ... 0 WABCO
 EBS emergency valve

valve 2: 480 102 0.. 0 WABCO
 EBS trailer modulator

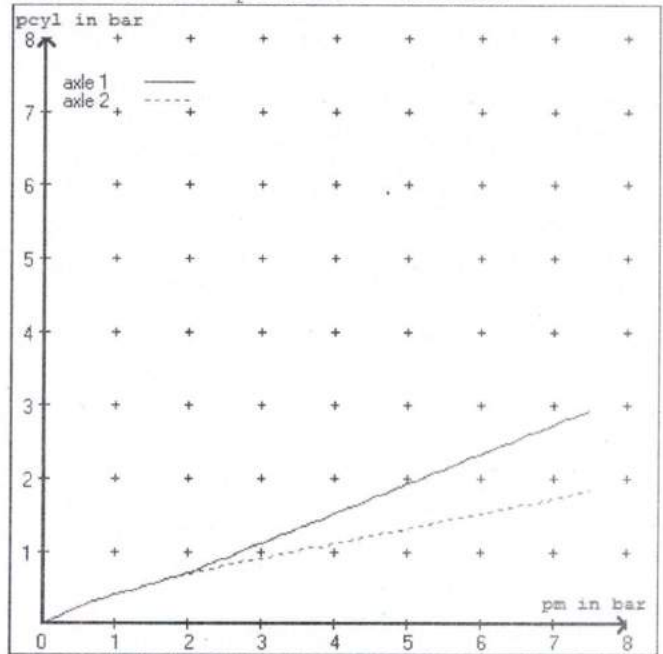
brake cylinder: WABCO 925 376 005 0 / 925 376 2.. 0

test type III (zIII = 0.30) for rdyn min : axle1 axle2
at pm 3.5 bar => pcha in bar : 2.9 2.5
test type III (zIII = 0.06) for rdyn min : axle1 axle2
at pm 1.2 bar => pcha in bar : 0.7 0.8

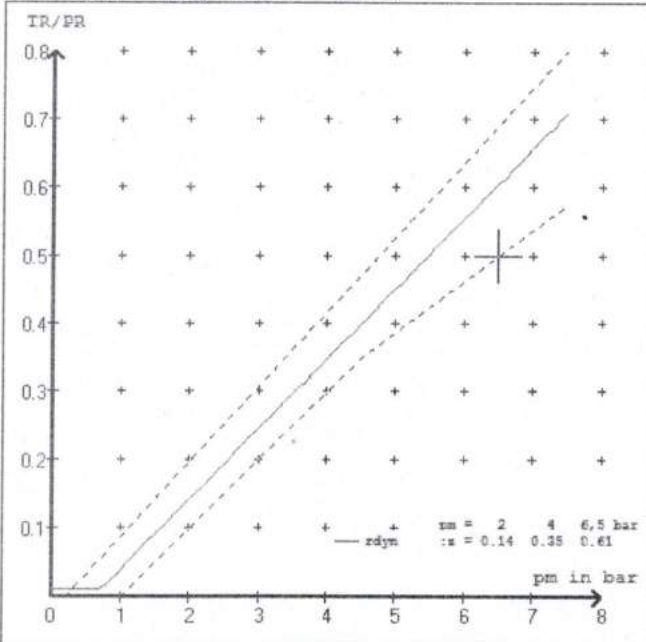
brake chamber pressure laden



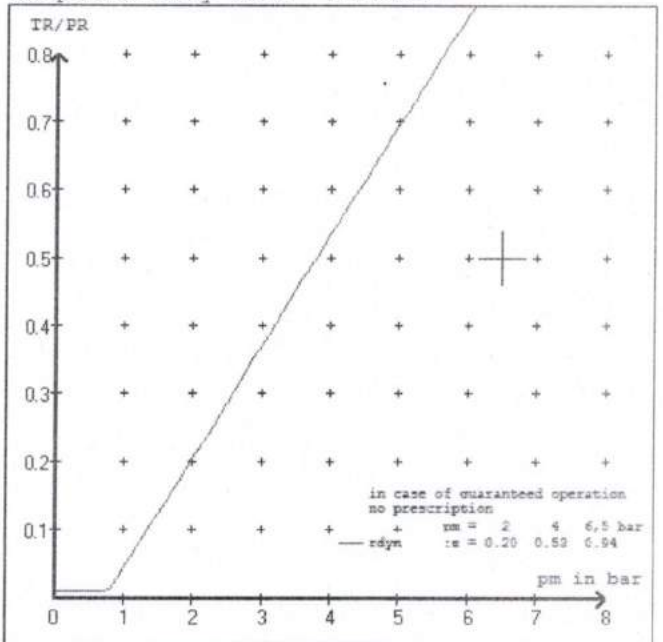
brake chamber pressure unladen



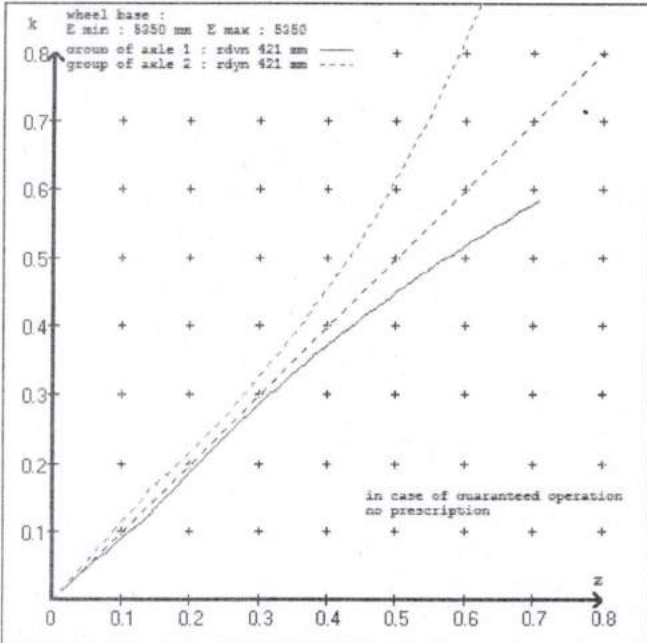
compatibility band laden



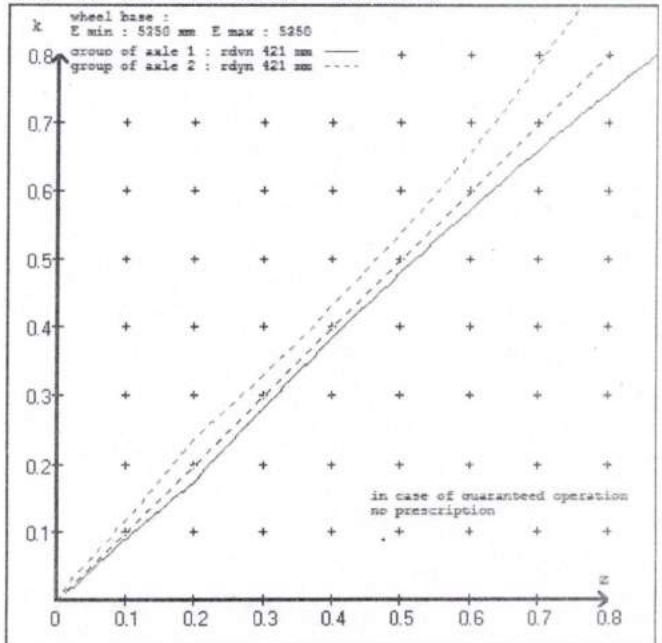
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 2AFT CURTAINSIDE
 trailer type : 2-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 24. (BPW) lever length 152 mm
 axle 2 : 2 x type/diameter 24/30 (WABCO) lever length 127 mm

brake diagram :

valve :

971 002 ... 0 WABCO EBS emergency 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 : 2AFT CURTAINSIDE
 trailer type : 2-axle-full-trailer
 brake calculation no. : TP 51452A

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	2100	to be	2.5	8200	to be	0.3	1.3	6.0
2	1700	entered by the vehicle manufact.	1.6	8200	entered by the vehicle manufact.	0.3	1.5	4.4
3	0		0,0	0		0,0	0,0	0,0
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 load	pcyl	axle load	pcyl
2100	2.5	1700	1.6
2600	2.8	2200	1.8
3100	3.1	2700	2.0
3600	3.4	3200	2.2
4100	3.6	3700	2.5
4600	3.9	4200	2.7
5100	4.2	4700	2.9
5600	4.5	5200	3.1
8200	6.0	8200	4.4

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

axle 1 : reference axle: SAF	SNK 3718	brake lining: BK 6386
test report :	TDB 0459 ECE	date : 20130801 01.08.2013
axle 2 : reference axle: SAF	SNK 3718	brake lining: BK 6386
test report :	TDB 0459 ECE	date : 20130801 01.08.2013

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 = 28.0 % Fe
axle 2	(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 = 73 mm)	s = 64 mm
axle 2	(sp = 63 mm)	s = 54 mm

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

axle1	ThA = 8631 N
axle2	ThA = 6208 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 = 43757 N
axle 2	(rdyn 421 mm)	T = 26480 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)	0.61	0.44
---	------	------

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 = 43757 N
axle 2	(rdyn 421 mm)	T = 26480 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)	0.61	0.44
---	------	------

required braking rate (items 1.5.3 and 1.7.2 to annex 11)	>= 0,4 and
	>= 0,6*E (0.36)

spring parking brake

		<u>axle 2</u>
no of TRISTOP-actuators per axle line KDZ		2
TRISTOP-actuator type		24/30
lever length	lBh in mm	127
stat. tyre radius	rstat max in mm	401
at a stroke of	s in mm	30
min. force of spring brake	TFZ in N	6360
sp.brake chamber no 925		376 005 0
sp.brake chamber no 925		376 2.. 0
release pressure	pLs in.bar	4.9

calculation:

ratio until road		3.0816
iFb = lBh*Eta*C*rBt/(2*rBn*rstat)		
	for rstat in mm	401
brake force of spring br. Tf in N		38567
Tf = (TFZ*KDZ-2*Co/lBh)*iFb		
braking rate	zf laden	0.250
zf = sum (Tf)/P + 0,01		

Test of the frictional connection required by the parking brake

minimum wheelbase/minimum supporting width min Ef necessary to fulfil the regulations

$$\min Ef = E * (1 - PR/P + zferf * h/E) / (1 - zferf / (fzul * nf/ng))$$

min Ef = 3916 mm for E = 5350 mm

=====

min Ef = 3916 mm for E = 5350 mm

=====

- min Ef = minimum distance between front axle(s) (trailer) or support (semitraile) and the rear axle(s) (resultant of the bogie)
- E = wheel base
- fzul = 0.80 maximum permissible frictional connection required
- zferf = 0.18 maximum required braking ratio of the parking brake
- h = 2000 mm height of center of gravity - laden
- PR = 8200 kg maximum bogie mass - laden
- P = 16400 kg maximum total mass - laden
- nf = 1 no. of axle(s) with TRISTOP spring brake actuators
- ng = 1 no. of bogie axle(s)

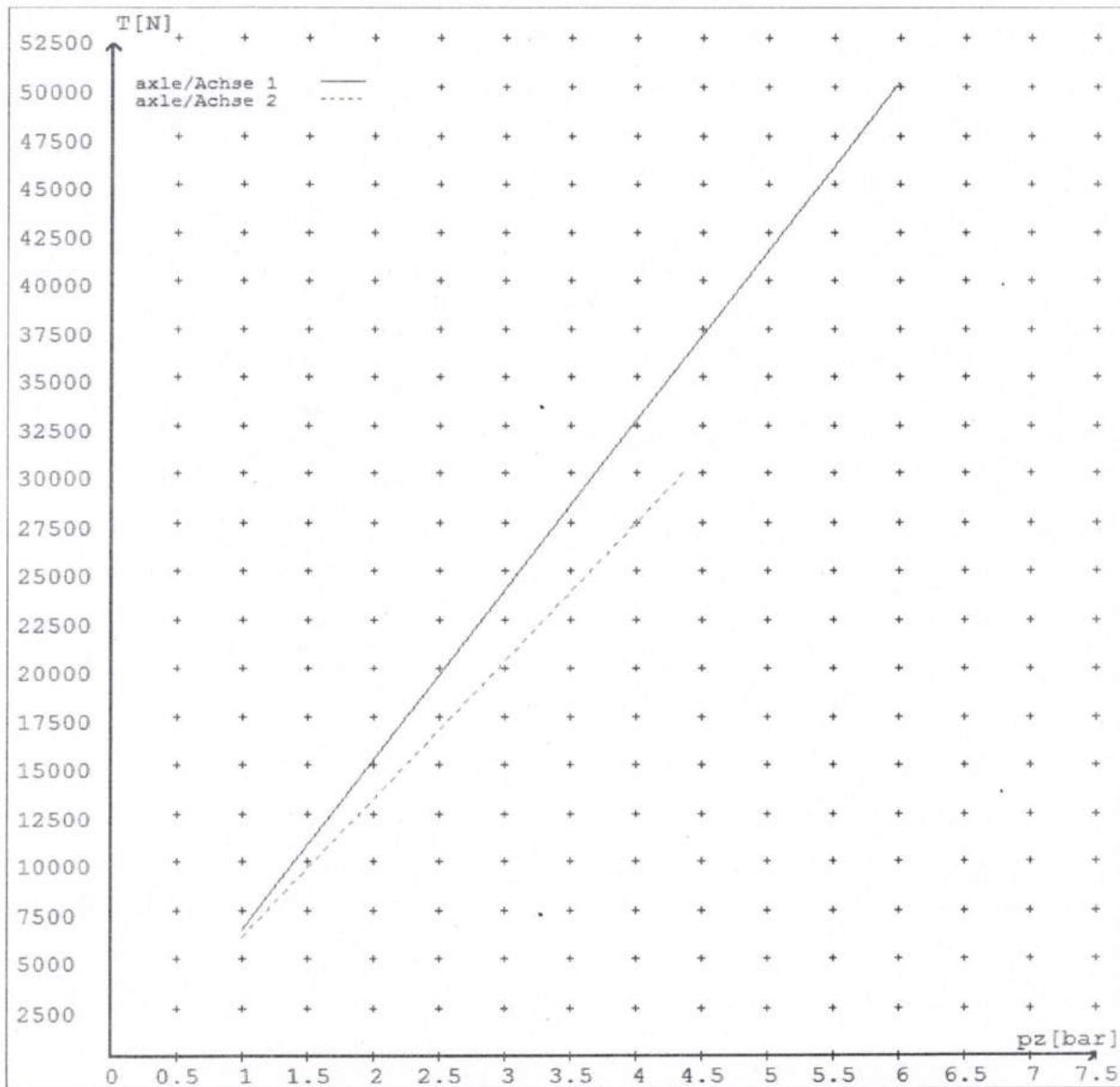
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	6463	
	6.0	50202	
axle 2	1.0		6062
	4.4		30238

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	24./	24/30	/	/	/
Maximum stroke smax = ...mm maximaler Hub smax =mm	75	64			
Lever length =mm Hebellänge =mm	152	127			



reference values for $z = 0.5$

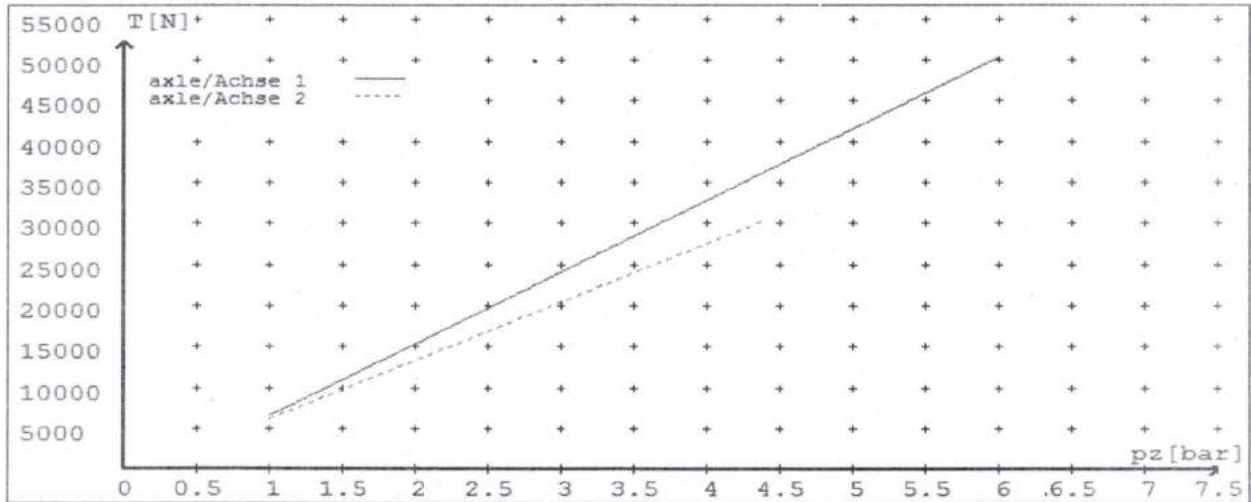
Angabe der Referenzwerte für $z = 0.5$

for max r_{dyn} : 421 mm

für max r_{dyn} : 421 mm

brake calculation no: TP 51452A date 02.06.2016

Bremsberechnung Nr: TP 51452A vom 02.06.2016



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	24./	24/30	/	/	/
Maximum stroke s_{max} = ...mm maximaler Hub s_{max} = ...mm	75	64			
Lever length = ...mm Hebellänge = ...mm	152	127			

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 32015/3.

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 32015/3. 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 32015/3, 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)



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

CERTIFICATE NO. JH160601

CUSTOMER NAME DOMETT TRAILERS

CUSTOMER ORDER NO. 4602 DATE RECEIVED 2-Jun-16

VEHICLE TYPE CURTAINSIDE

VIN/ CHASSIS NO. 7A9B20019G1023505

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

<u>BRAKE VALVES</u>	<u>MAKE</u>	<u>TYPE</u>
PRIMARY RELAY	WABCO	480 102 080 0
SECONDARY RELAY	WABCO	480 207 202 0
YARD RELEASE VALVE	WABCO	971 002 900.0
PARK BRAKE VALVE	WABCO	971 002 900 0

<u>LOCKED RATIO:</u>	<u>FRONT</u>	<u>REAR</u>
MAKE	N/A	N/A
SETTING	N/A	N/A

OTHER VALVES:

MAKE: _____	TYPE: _____	SETTING: _____
MAKE: _____	TYPE: _____	SETTING: _____
MAKE: _____	TYPE: _____	SETTING: _____
MAKE: _____	TYPE: _____	SETTING: _____

BRAKE CHAMBERS:

	AXLE 1	AXLE 2	N/A
MAKE	TSE	TSE	N/A
SIZE	24S	2430GC	N/A
MAX STROKE (mm)	67	64	N/A
SLACK LENGTH (mm)	152	127	N/A

DRUM TYPE: 367 x 180 367 x 180 N/A

OR

BRAKE CALIPER: N/A N/A N/A

FRICTION MATERIAL:

OEM

AFTERMARKET

LINING BRAND

AXLE 1 & 2

AXLE 2

N/A

BK6386

BK6386

N/A

OTHERS:**TYRES:**

FRONT

REAR

265 70 R 19.5

265 70 R 19.5

BRAKE CALCULATION #:

TP51452

COMMENTS:

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 #

SALES ORDER #:

SO394148

PROCESS TIME:

1 HOUR

TRAILERS EQUIPPED WITH PREV: THE PARK BRAKE PERFORMANCE MUST BE

MEASURED BY PULLING THE RED ACTUATION KNOB ON THE PREV VALVE WHEN

THE AXLES - EQUIPPED WITH SPRING BRAKES - ARE IN THE BRAKE ROLLERS. THE

PARK BRAKE IN THE CAB **MUST NOT** BE APPLIED.

NOTES:**CHAMBERS & PARK BRAKE PERFORMANCE:**

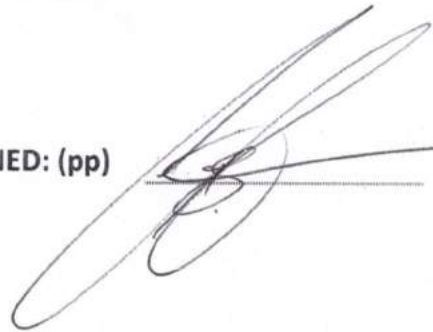
SEE BRAKE CALCULATION TP51452. PERFORMANCE DATA IS $\leq 3\%$

CONFORMATION OF COMPLIANCE

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

DATE: 2-Jun-16

SIGNED: (pp)



NAME & ID: J HIRST (JEH)

PHONE (BUS): 09 980 7300

FAX (BUS) 09 980 7306

POSTAL ADDRESS:

TRANSPORT SPECIALTIES LTD
PO BOX 98-971,
MANUKAU CITY,
MANUKAU 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 RELIVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY BRAKE RULE 32015/3 SCHEDULE 5.

DATE:

SIGNED:

NAME:

CERTIFIERS ID:

POSITION:

PHONE (BUS):

FAX (BUS):

COMMENTS:
