



Heavy Vehicle Specialist Certificate

Heavy Vehicle Specialist Inspector and Inspecting Organisation

Heavy Vehicle Specialist Inspector's Name (PRINT IN CAPS)

ID

CHRIS CLARKE

CJC

Vehicle Registration*

VIN / Chassis Number

7A9E20010C1023092

Component being certified:

Chassis Modification

Load Anchorage

Log Bolsters

Certification Category

Towing Connection

✓ Brakes

SRT

HUEK

Description of Work

CARRY OUT SET UP OF TRAILER EBS SYSTEM.

Code/Standard Certified to

Component Load Rating(s)

HUBAZ 32015/2 SCHED 5.

General Drawing Number(s)

N/A.

N/A

Supporting Documents

BRAKE DESIGN CERTIFICATE - JH120904.

*Special Conditions

WARNING: LAMP MUST ILLUMINATE WHEN IGNITION IS SWITCHED ON + THEN EXTINGUISH IMMEDIATELY OR WHEN VEHICLE EXCEEDS 7KPH.

Certification Expiry Date (if applicable)

OR

Hubodometer Reading (whichever comes first)

N/A

Declaration

I the undersigned, declare that I am the Heavy Vehicle Specialist Inspector identified above 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 Deed of Appointment. To the best of my knowledge the information contained in this Certificate is true and correct.

Designer's ID (if certified by a manufacturer)

Inspector's / Delegate's Signature

*Delegate's Name (PRINT IN CAPS)

Date

Number

16.10.2012

416799

COF Vehicle Inspector ID:

COF Vehicle Inspector Signature:

Date

All fields excluding those marked with * must be completed before this certificate can be accepted.

WABCO				TRAILER EBS-E				GGV/ADR TUEH TB 2007 - 019.00 361-041-08 ECE					
HERSTELLER MANUFACTURER CONSTRUCTEUR		DOMETT T&T		G10		Pin1		Pin3		Pin4			
TYP TYPE TYPE		5AX F/T CURTAINSIDE		1		---		---		---			
FAHRZEUG IDENTIF. CHASSIS NUMBER NUMERO DE CHASSIS		7A9E20010C1023092		2		---		---		---			
BREMSENRECHNUNG-NR. BRAKE CALCULATION NO. CALCUL. DE FREINAGE NO.		TP50666		3		ALS2		ALS2		---			
POLRADZÄHREZÄHL. o-d o-f POLE WHEEL TIEBTR. o-d o-f DENTS ROUE DENTÉE o-d o-f		80 80		4		---		---		---			
ABS		ABS-System ABS-System Systeme ABS		5		DIAG		DIAG		DIAG			
RBS		Leitvorrichtung Steering axle Roue avant		6		---		---		---			
RBS		Zulassungsbefreiung Tech Tyre Monte Janabla		7		---		---		---			
Subsystems		SB		I/O									
ACHSE AXLE ESSEU		pm (bar)		6.5		pm (bar)		0.6 2.0 --- 6.5		pz		TR (daN)	
1		1500 0.7 1.9		7250 4.6 0.4 1.5		---		5.8		- 16 60 80		431 3649	
2		1500 0.7 1.9		7250 4.6 0.4 1.5		---		5.8		- 16 60 80		431 3649	
3		1300 0.6 2.0		6000 3.7 0.5 1.8		---		5.7		- 14 / 24 57 80		316 2882	
4		1300 0.6 2.0		6000 3.7 0.5 1.8		---		5.7		- 14 / 24 57 80		316 2882	
5		1300 0.6 2.0		6000 3.7 0.5 1.8		---		5.7		- 14 / 24 57 80		316 2882	



P.O.Box 98-971

South Auckland Mail Centre

J.HIRST (JEH)

DATE

16-Sep-12

BRAKE SYSTEM

12/24V EBS

CERT. NO.

JH120904

PREV EXEMPTION

HVB12/278

VIN / CHASSIS

7A9E20010C1023092

BRAKE CHAMBERS FRONT 16 (BPW max stroke 60mm)

BRAKE CHAMBERS REAR 1424 BPW max stroke 57mm)

SLACK LENGTH FRONT

80 mm

TYRE SIZE FRONT

265 70 R 19.5

SLACK LENGTH REAR

80 mm

TYRE SIZE REAR

265 70 R 19.5

THIS VEHICLE COMPLIES WITH THE NZ

LINING MATERIAL FRONT

BPW 8101 / 8200

HVBR 32015/2 - SCHEDULE 5

LINING MATERIAL REAR

BPW 8101 / 8200



NZ TRANSPORT AGENCY
WAKA KOTAHI

NATIONAL OFFICE

50 Victoria Street
Private Bag 6995
Wellington 6141
New Zealand

T 64 4 894 5400
F 64 4 894 6100

www.nzta.govt.nz

Exemption: HVB12/278

**EXEMPTION FROM SPECIFIED REQUIREMENTS OF LAND TRANSPORT RULE:
Heavy-vehicle Brakes 2006, Rule 32015**

Pursuant to Section 166(1) of the Land Transport Act 1998, and pursuant to the powers delegated to me, I Jackie Hartley, Administrator (Assessments) hereby exempt the motor vehicle specified in Schedule 1 hereto from the section of Land Transport Rule: Heavy-vehicle Brakes 2006 (the Rule) listed in Schedule 2, subject to the conditions specified in Schedule 3.

SCHEDULE 1:

Make/Model: **Domett Truck & Trailer Ltd, 5 axle full-trailer**
VIN/CHASSIS: **7A9E20010C1023092**

SCHEDULE 2: - Exempted Requirement

Section 2.3(9); The parking brake of a vehicle, whether or not it is being operated as a combination vehicle, must be able to be applied by the driver from the normal driving position using one control only.

SCHEDULE 3: - Conditions of this exemption:

- 1) The vehicle must be fitted with a Wabco park-release emergency valve (PREV), Part Number: 971 002 900 0.
- 2) The vehicle must be fitted with the Wabco PREV name plate, Part Number 971 002 103 4, adjacent to the PREV.
- 3) The vehicle must still be fitted with a parking brake that complies with all parking brake requirements in the Rule other than the requirement in Clause 2.3(9) of the Rule.
- 4) The installation of the PREV must be approved in writing by Gough Transpecs or an NZ Transport Agency appointed HVEK certifier acting on behalf of, and under instruction from, Gough Transpecs; Gough Transpecs must keep a written record of all approvals.
- 5) An HVEK certifier in 4) must be fully trained in end of line procedures for Wabco electronically controlled braking systems
- 6) Gough Transpecs must provide full operator training in the use of the PREV and furnish the operator with full written operating instructions for the PREV.
- 7) The vehicle must not be modified in any way while operating under this exemption.
- 8) This original exemption must be kept by Gough Transpecs.
- 9) A copy of this exemption (printed on a silver WABCO Sticker) must be affixed to the exempted vehicle as close to the WABCO PREV as possible.
- 10) The sticker in 8) must be legible and include all printed areas of this original exemption letter.
- 11) This exemption can be revoked at any time in writing by the NZ Transport Agency.

Signed at Wellington this 11th day of September 2012.

Jackie Hartley
Administrator (Assessments)

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an Electronic Brake System.

To comply with the New Zealand Heavy Vehicle Brake RULE, 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.

NB:

If this vehicle is fitted with mechanical (spring) suspension, the load sense valving has been adjusted to suit exactly the performance of the original springs. In event of replacement being required, original equipment springs **must** be fitted to ensure correct ongoing operation. Fitment of non genuine springs can affect operation and therefore, compliance.

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

NOTICE TO VEHICLE OPERATOR

THIS VEHICLE HAS A BRAKE SYSTEM WHICH HAS BEEN DESIGNED AND FITTED IN ACCORDANCE WITH THE NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015: SCHEDULE 5.

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

PLEASE REFER TO THE CERTIFIER FOR FURTHER INFORMATION.

EXCERPT FROM NZ HEAVY VEHICLE BRAKE RULE 32015

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 the rule : and*
- (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 a person or organisation appointed to carry out specialist inspection and certification of heavy vehicle brakes.*

10.5 Responsibilities of manufactures and retailers

A person may manufacture, stock, or offer for sale a brake or its components. Intended for fitting to a vehicle to be used on New Zealand roads, only if that brake or component:

- (a) complies with this Rule: and*
- (b) does not prevent a repair to a vehicle, its structure, systems, components and equipment from complying with this Rule.*

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 Land Transport Safety Authority if dissatisfied with a Compliance issue. (refer LTNZ Deed Of Appointment Para 47.4) Land Transport NZ Helpdesk 0800 699 000

.....
C J Clarke
(CJC HVEK)

trailer (full, semi-, centre-axle) with air brake system acc. to 71/320/EEC, last amended by 98/12/EC and 2006/96/EC

distribution: DOMETT T&T
 7A9E20015C1023072 7A9E20017C1023073
 7A9E20010C1023092
 SODC - JH120821 - JH120903 - JH120904

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 (V6.12.08.27).
 -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 V6.12.08.27 db 30.08.2012

vehicle manufacturer: DOMETT T&T
 trailer model : 5AX F/T CURTAINSIDE
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS E
 TRISTOP 3+4+5: 14/24
 265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : BPW, TSB 3709, 361-041-08 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	6900	32500
axle 1	P1 in kg	1500	7250
axle 2	P2 in kg	1500	7250
axle 3	P3 in kg	1300	6000
axle 4	P4 in kg	1300	6000
axle 5	P5 in kg	1300	6000
wheel base	E in mm	7400 - 7400	
centre of gravity height	h in mm	1090	2078

	<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 106.0	BZ 106.0	BZ 107.0	BZ 107.0	BZ 107.0
brake chamber manufacturer	BPW	BPW	BPW	BPW	BPW
chamber size	16	16	14/24	14/24	14/24
lever length lbh in mm	80	80	80	80	80
brake factor [-]	20.50	20.50	20.50	20.50	20.50
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	12.0	12.0	12.0	12.0	12.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%bar	2.2	2.2	2.5	2.5	2.5
chamber pressure(rdyn max)pH at z=22,5%bar	2.2	2.2	2.5	2.5	2.5
chamber press.(servo)pcha at pm6,5bar bar	5.8	5.8	5.7	5.7	5.7
piston force ThA at pm6,5bar N	5840	5840	4641	4641	4641
brake force(rdyn min)T lad. at pm6,5bar N	45039	45039	35574	35574	35574
brake force(rdyn max)T lad. at pm6,5bar N	45039	45039	35574	35574	35574
brake force within 1 % rolling friction proportion %	22.6	22.6	18.2	18.2	18.2

braking rate z laden 0.617 for rdyn min
 z = sum (TR)/PRmax 0.617 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 05.444.32.....

axle 2:

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 05.444.32.....

axle 3:

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

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

brake cylinder: BPW 05.444.38.....

axle 4:

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

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

brake cylinder: BPW 05.444.38.....

axle 5:

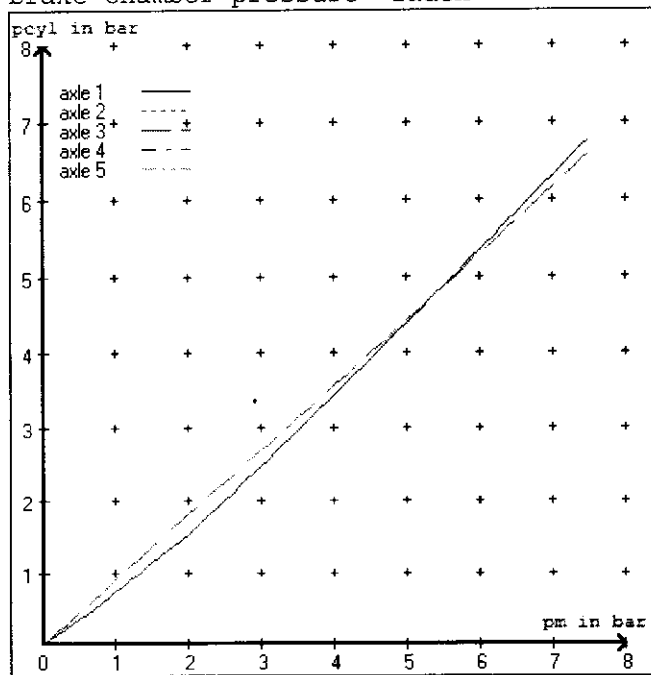
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

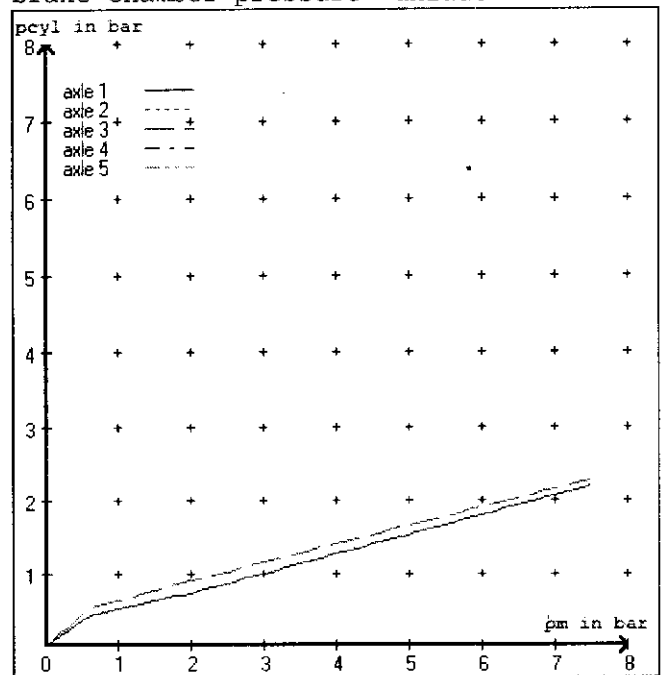
brake cylinder: BPW 05.444.38.....

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.5 bar =>	pcha in bar :	2.9	2.9	3.1	3.1	3.1	3.1
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.1 bar =>	pcha in bar :	0.8	0.8	1.0	1.0	1.0	1.0

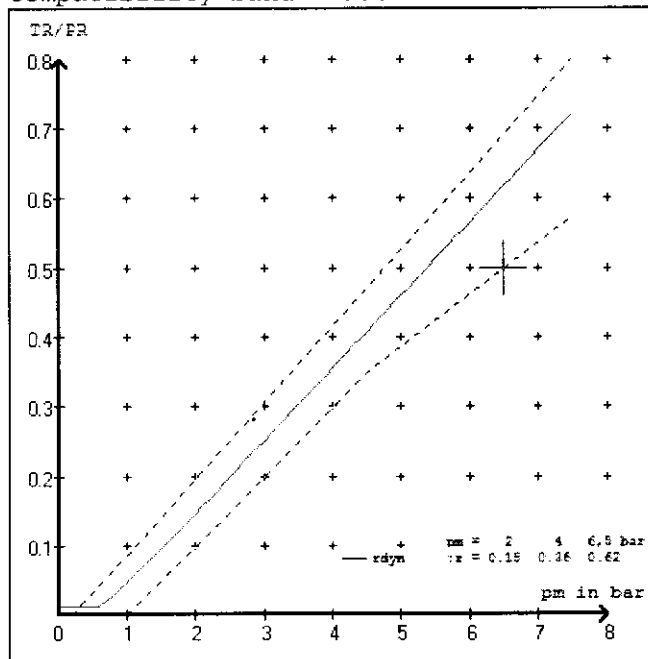
brake chamber pressure laden



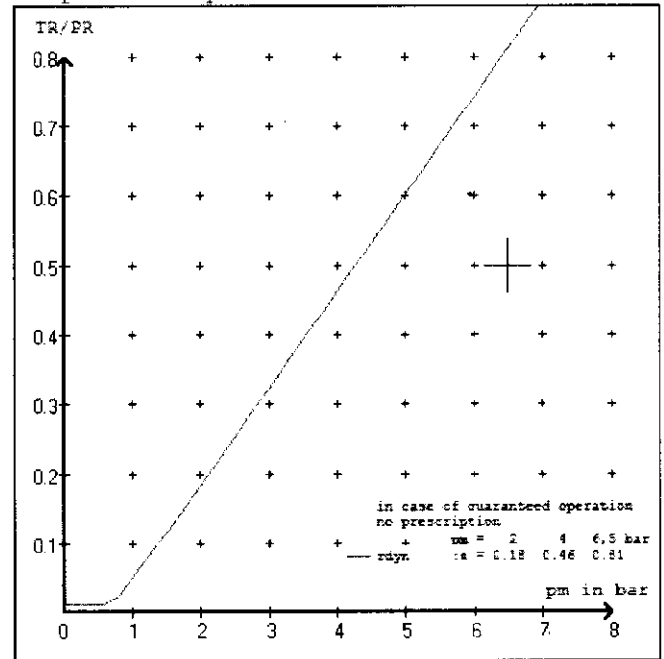
brake chamber pressure unladen



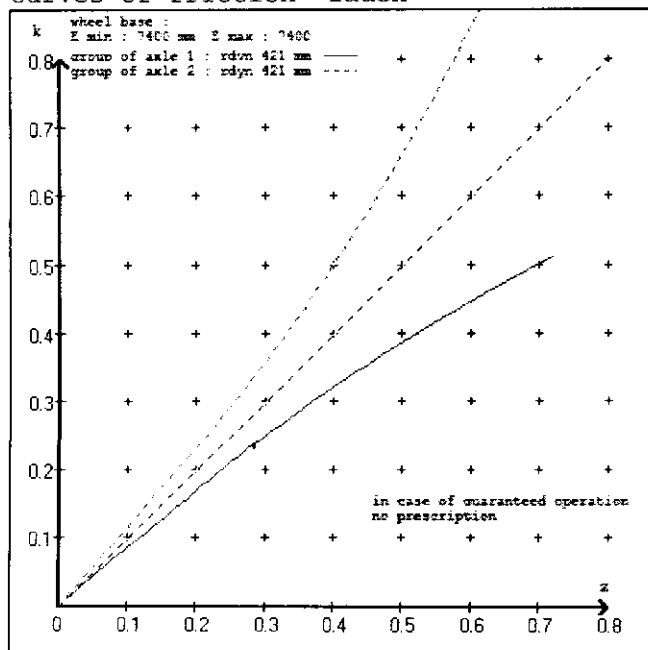
compatibility band laden



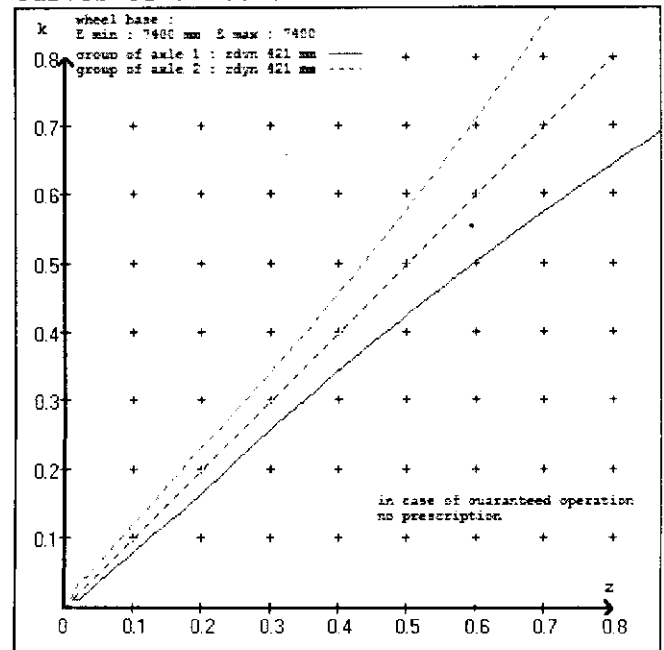
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT T&T
 trailer model : 5AX F/T CURTAINSIDE
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 16 (BPW) lever length 80 mm
 axle 2 : 2 x type/diameter 16 (BPW) lever length 80 mm
 axle 3 : 2 x type/diameter 14/24 (BPW) lever length 80 mm
 axle 4 : 2 x type/diameter 14/24 (BPW) lever length 80 mm
 axle 5 : 2 x type/diameter 14/24 (BPW) lever length 80 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 WABCO EBS trailer modulator

EBS input data

=====

vehicle manufacturer: DOMETT T&T
 trailer model : 5AX F/T CURTAINSIDE
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 50666A

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

assignment pm / deceleration z: pm 0.6 bar z = 0.010
 (laden condition) 2.0 bar z = 0.146
 6.5 bar z = 0.615

control pressure pm			6,5	control pressure pm			0.6	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	1.9	7250	to be	0.4	1.5	5.8	
2	1500	entered by	1.9	7250	entered by	0.4	1.5	5.8	
3	1300	the vehicle	2.0	6000	the vehicle	0.5	1.8	5.7	
4	1300	manufact.	2.0	6000	manufact.	0.5	1.8	5.7	
5	1300		2.0	6000		0.5	1.8	5.7	

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
1500 1.9	1500 1.9	1300 2.0	1300 2.0	1300 2.0
2000 2.2	2000 2.2	1800 2.4	1800 2.4	1800 2.4
2500 2.6	2500 2.6	2300 2.8	2300 2.8	2300 2.8
3000 2.9	3000 2.9	2800 3.2	2800 3.2	2800 3.2
3500 3.3	3500 3.3	3300 3.6	3300 3.6	3300 3.6
4000 3.6	4000 3.6	3800 4.0	3800 4.0	3800 4.0
4500 3.9	4500 3.9	4300 4.4	4300 4.4	4300 4.4
5000 4.3	5000 4.3	4800 4.8	4800 4.8	4800 4.8
7250 5.8	7250 5.8	6000 5.7	6000 5.7	6000 5.7

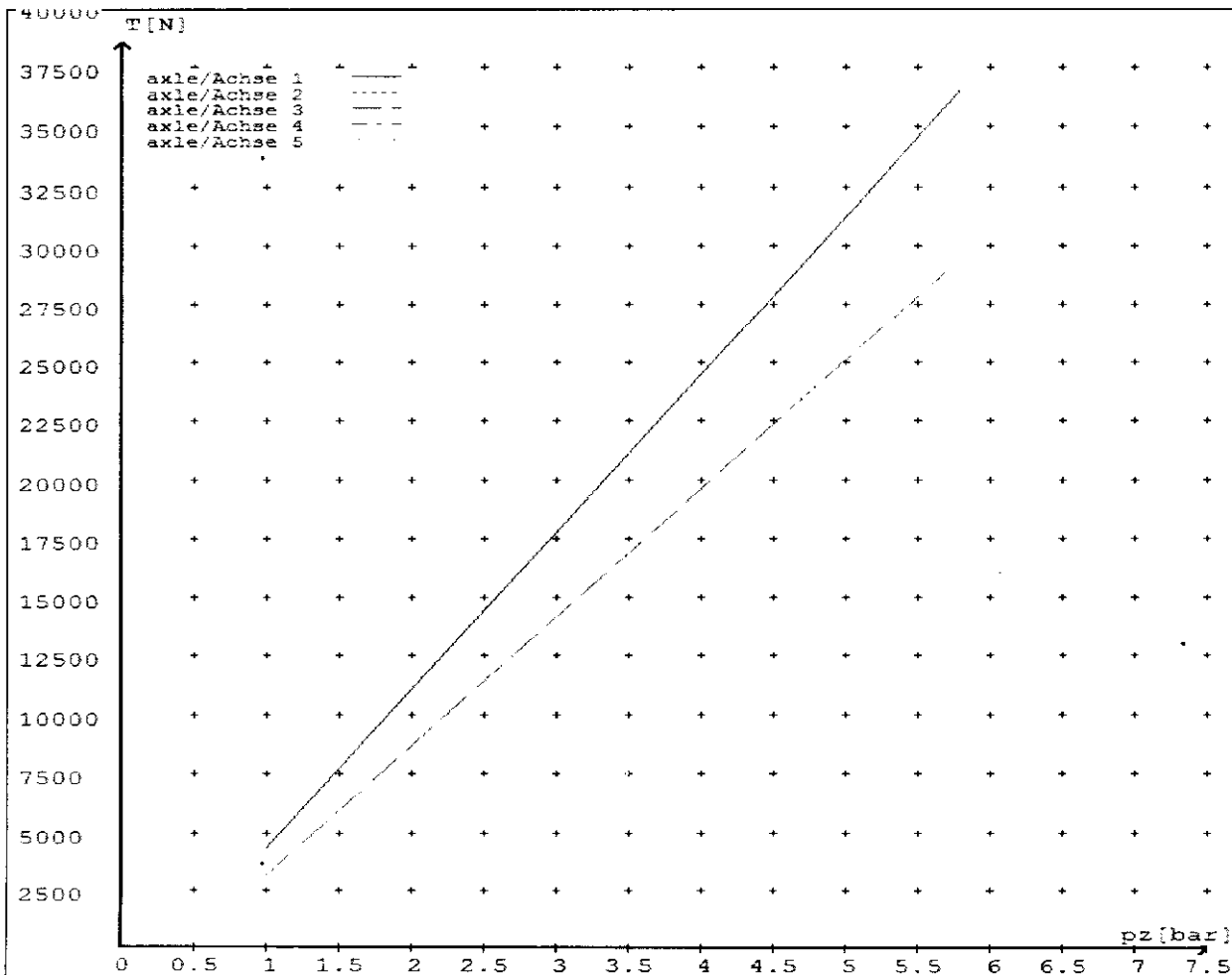
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	4314	
	5.8	36498	
axle 2	1.0	4314	
	5.8	36498	
axle 3	1.0		3160
	5.7		28828
axle 4	1.0		3160
	5.7		28828
axle 5	1.0		3160
	5.7		28828

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	16/	16/	14/24	14/24	14/24
Maximum stroke smax = ...mm maximaler Hub smax =mm	60	60	57	57	57
Lever length =mm Hebellänge =mm	80	80	80	80	80



reference values for z = 0.5

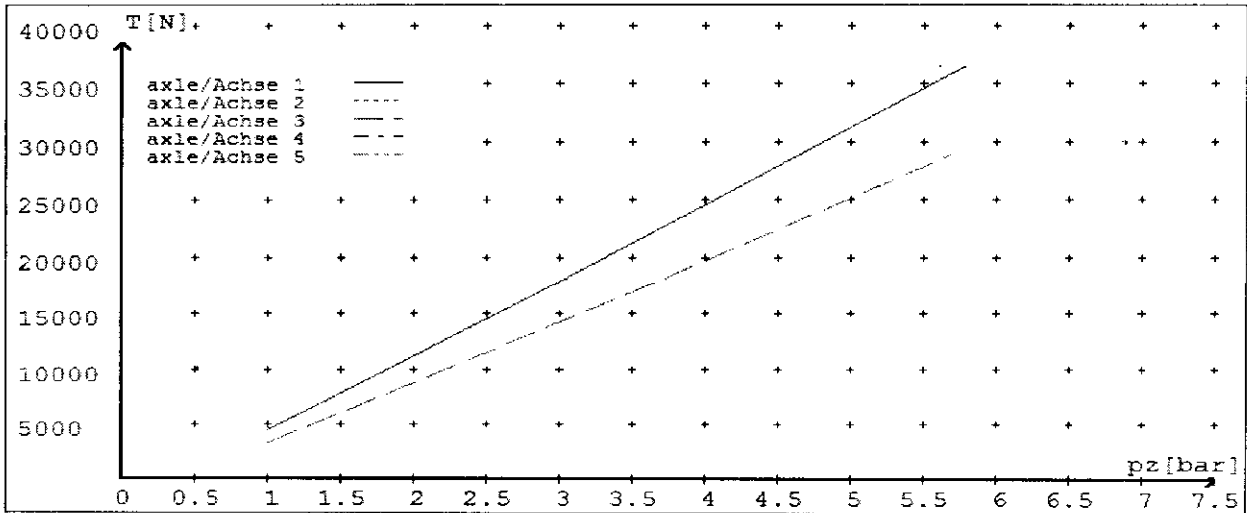
for max rdyn: 421 mm

Angabe der Referenzwerte für z = 0.5

für max rdyn: 421 mm

brake calculation no: TP 50666A date 10.09.2012

Bremsberechnung Nr: TP 50666A vom 10.09.2012



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	16/	16/	14/24	14/24	14/24
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	60	60	57	57	57
Lever length = ...mm Hebellänge = ...mm	80	80	80	80	80

HVBR WORKSHEET
(PROCEDURE & COMPLIANCE DOCUMENTATION SHEET)

CERTIFICATE No.

JH120904

CUSTOMER NAME

DOMETT TRUCK & TRAILER LTD

CUSTOMER ORDER No.

3915

DATE RECEIVED

Sept 2012

VEHICLE TYPE

5 AXLE FULL TRAILER

REG No.

CHASSIS No.

7A9E20010C1023092

BRIEF SPECIFICATION AS CERTIFIED TO HVBR

BRAKE CHAMBERS:

Type: 16 (BPW): Max stroke = 60 mm Lever length = 80 mm
Type: 1424 (BPW): Max stroke = 57 mm Lever length = 80 mm

BRAKE VALVES:

Ratio Valve Setting: EBS CONTROL

Test Points: 3 4 5 7

FRICITION LINING:

(All) Lining Brand

OEM Aftermarket
BPW 8200/8101

EBS CONTROL: SPECIAL CONDITIONS APPLY – SEE INSTRUCTION ON LT400

VALVES: AS PER DATA SHEET ATTACHED

TYRE SIZE: 265 70 R 19.5

NOTES

PACKING SLIP NO.

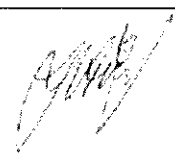
PROCESS TIME:

1

Brake calculation TP50666

COMPLETION DATE : 10th Sept 2012

SIGNATURE




Statement of Compliance with the New Zealand Heavy Brake Rule

Documentation required to support Statements of Compliance with the New Zealand Heavy Brake Rule, to be made available to the Statutory Authority on request, must include all calculations and test reports.

Confirmation of compliance

I confirm that the vehicle identified on page 1 of this Statement of Compliance complies with all relevant requirements of the current New Zealand Heavy Vehicle Brake Rule 32015/2, Schedule 5.

Date: 10th Sept 2012

Signed: 

Certifier's identification

Name: J E Hirst

Phone (bus): (09) 980 7300 Fax (bus): (09) 980 7306

Postal address: Transport Specialties, Cnr Kerrs & Ash Roads

Wiri, Auckland, PO Box 98 971 Manukau City 2241

Position: JEH

Confirmation of continued compliance of modification

I confirm the brake system of the vehicle identified on 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 Vehicle Brake Rule 32015/2, Schedule 5.

Date: _____ Signed: _____

Certifier's identification: JEH

Name:

Phone (bus): (09) 980 7300 Fax (bus): (09) 980 7306

Postal address: Transport Specialties Ltd

Cnr Kerrs & Ash Roads, Wiri, Auckland

PO Box 98 971, Manukau City 2241