

CHRIS CLARKE

CJC

7A9E15011D1023216



HUEK

CARRY OUT COMPLIANCE TO SCHEDULE 5.

ROLL STABILITY FUNCTION ACTIVATED

HUBS: 3215/2 SCHED 5.

33000KG.

N/A

BRACE DESIGN CERTIFICATE - ~~2013~~ JH131204.
PREV EXISTATION REF - HUB13/482.

WARNING LIGHT MUST ILLUMINATE WHEN GATION SWITCHED ON + THEN
EXTINGUISH IMMEDIATELY OR WHEN VEHICLE EXCEEDS 7KPH

or

N/A

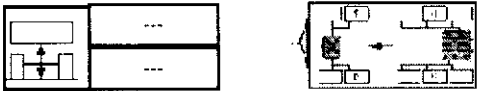
18-12-2013

457732

WABCO


START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2013-04-12	Serial number	897001327400J
Serial number (modulator)	000000021334		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2013-12-18 ; 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			GIO	Pin1	Pin3	Pin4																							
TYP TYPE TYPE	5AFT PLATFORM			1	---	---	---																							
FAHRZEUGEIDENTIFIKATION CHASSIS NUMBER NUMERO DE CHASSIS	7A9E15011D1023216			2	---	---	---																							
BREMSEBERECHNUNG NR BRAKE CALCULATION NO CALCUL DE FREINAGE NO	TP50956A			3	ALS2	ALS2	---																							
ACHSENANZAHL POLE WHEELS TET DE L'AXE	90	90	ABS System ABS System Système ABS	4	---	---	---																							
REIFENGRÖßEN TYRES SIZES ROLES DE PNEUMATIQUES			4S/3M	5	DIAG	DIAG	DIAG																							
Einachs- / Einachse Single / Simple Mono- / simple			Lenk- / Par Steering axle Essieu / essieu	6	---	---	---																							
Zweifach- / Zweifach Twin / Type Mono- / jumeaux	X		Kritischer / Kritischer Critical / Transer Vehicule critique	7	---	---	---																							
Subsystems	SB	I/O	24N																											
ACHSENANZAHL (ESSEU)	1800		6.5		7500		0.7		2.0		---		6.5		pz		TYP TYPE		(mm)		(mm)		(bar)		1.0		Pz			
	pm (bar)		6.5		pm (bar)		0.7		2.0		---		6.5		pz		TYP TYPE		(mm)		(mm)		(bar)		1.0		Pz			
	1800		1.0		2.4		7500		4.9		0.4		1.4		---		5.7		-		18		65		69		507		3934	
	1800		1.0		2.4		7500		4.9		0.4		1.4		---		5.7		-		18		65		69		507		3934	
	1250		0.6		1.7		6000		3.9		0.4		1.4		---		4.5		-		14 / 16		64		69		498		2771	
	1250		0.6		1.7		6000		3.9		0.4		1.4		---		4.5		-		14 / 16		64		69		498		2771	
	1250		0.6		1.7		6000		3.9		0.4		1.4		---		4.5		-		14		64		69		498		2771	

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light power supply	OK
EBS pressure test	Not tested	Lifting axle test	Not tested
Redundancy test	OK	ECAS distance sensor calibration	Not tested
ABS sensor assignment	OK	Distance sensor Axle load calibr	Not tested
RTR check	Not tested	Leak test	Not tested
Immobilizer test	Not tested	Signal outputs TEBS	Not tested
Signal inputs	Not tested		

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

Manufacturer	DOMETT TRAILERS	Vehicle ident. no	7A9E15011D1023216
Vehicle type	5AFT PLATFORM	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tested by	Chris Clarke	Signature 	
Date	2013-12-18 10:08:46 a.m.		



Exemption: HVB13/482

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

Pursuant to Section 165(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: Vehicle Details:

Make/Model: **Domett Trailers Ltd, 5 Axle Full Trailer**
VIN/Chassis: **7A9E15011D1023216**

Schedule 2: Exempted Requirement:

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) The 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 9) 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 28th day of November 2013

Jackie Hartley
Administrator (Assessments)

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

distribution: DOMETT TRAILERS
 7A9E15011D1023216
 SODC: JH131204
 PREV: HVB13/482

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 (V6.13.06.12);
 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 corresponds to the actual vehicle data.
 Our conditions of delivery apply (particularly section 9.0).
 In any case we commend to do a braking harmonisation!
 WABCO3brake V6.13.06.12 db 12.06.2013

vehicle manufacturer: DOMETT TRAILERS
 trailer model : SAFT PLATFORM
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS E
 TRISTOP 3+4: T.14/16
 265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, PAN 19-1, TDB 0749 ECE,

		unladen	laden
total mass	P in kg	7350	33000
axle 1	P1 in kg	1800	7500
axle 2	P2 in kg	1800	7500
axle 3	P3 in kg	1250	6000
axle 4	P4 in kg	1250	6000
axle 5	P5 in kg	1250	6000
wheel base	E in mm	7850 - 7850	
centre of gravity height	h in mm	1110	2084

	axle 1	axle 2	axle 3	axle 4	axle 5
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 122.1	BZ 119.6	BZ 119.6	BZ 122.1
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor	Meritor
chamber size	18.	18.	T.14/16	T.14/16	14.
lever length	lBh in mm	69	69	69	69
brake factor	[-]	23.03	23.03	23.03	23.03
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	2.2	2.2	2.0	2.0	2.0
chamber pressure (rdyn max) pH at z=22,5%bar	2.2	2.2	2.0	2.0	2.0
chamber press. (servo) pcha at pm6,5bar bar	5.7	5.7	4.5	4.5	4.5
piston force ThA at pm6,5bar N	6060	6060	4285	4285	4285
brake force (rdyn min) T lad. at pm6,5bar N	45876	45876	32317	32317	32317
brake force (rdyn max) T lad. at pm6,5bar N	45876	45876	32317	32317	32317
brake force within 1 % rolling friction proportion	%	21.2	19.2	19.2	19.2

braking rate z laden 0.583 for rdyn min
 z = sum (TR) / PRmax 0.583 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: 971 002 111 0 WABCO
 EBS emergency valve

valve 2: 480 207 011 0 WABCO or 480 207 211 0
 EBS relay valve

brake cylinder: Meritor 18HSCLD64

axle 2:

valve 1: 971 002 111 0 WABCO
 EBS emergency valve

valve 2: 480 207 011 0 WABCO or 480 207 211 0
 EBS relay valve

brake cylinder: Meritor 18HSCLD64

axle 3:

valve 1: 971 002 111 0 WABCO
 EBS emergency valve

valve 2: 480 102 011 0 WABCO
 EBS trailer modulator

brake cylinder: Meritor 1416HTLD64

axle 4:

valve 1: 971 992 0... 0 WABCO
ERS emergency valve

valve 2: 480 192 0... 0 WABCO
ERS trailer modulator

brake cylinder: Meritor 1416HTLD64

axle 5:

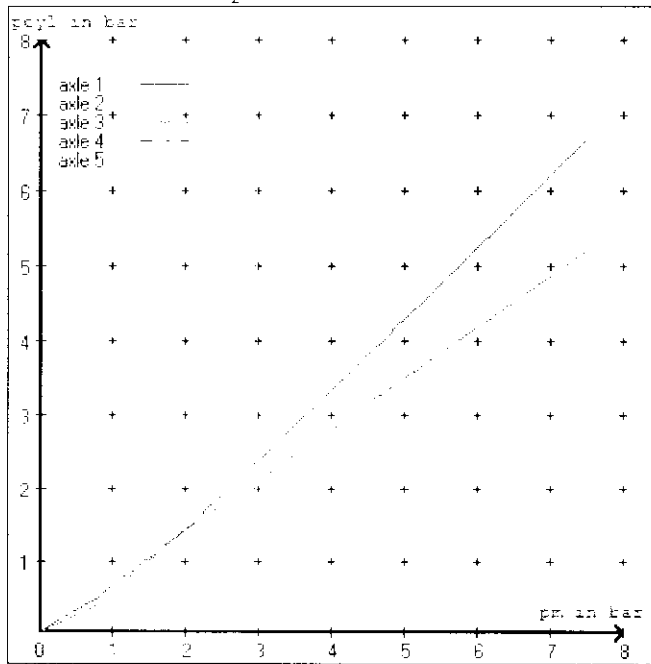
valve 1: 971 992 0... 0 WABCO
ERS emergency valve

valve 2: 480 192 0... 0 WABCO
ERS trailer modulator

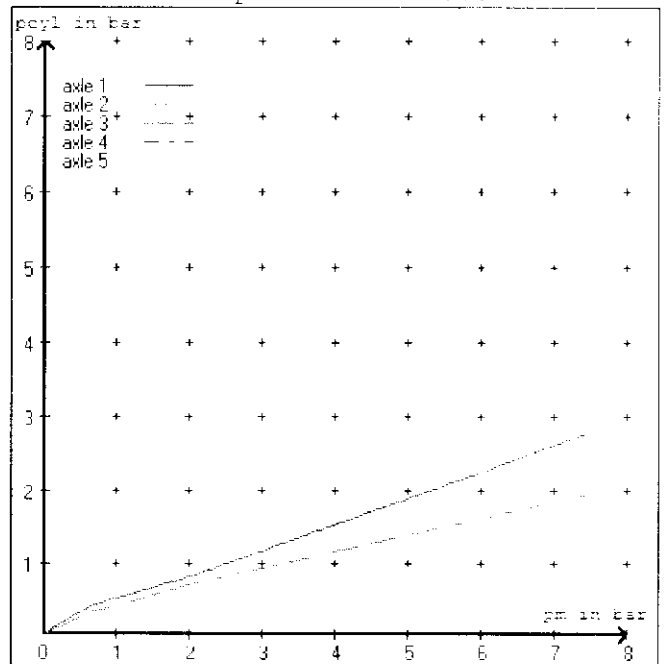
brake cylinder: Meritor 14HSCLD64

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 3.6 bar ->	pcha in bar :	3.0	3.0	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	0.7	0.7	0.7	

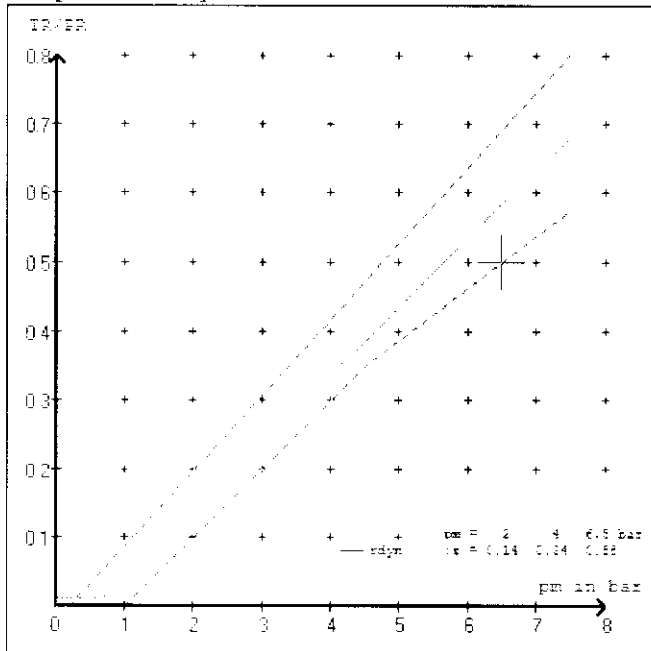
brake chamber pressure laden



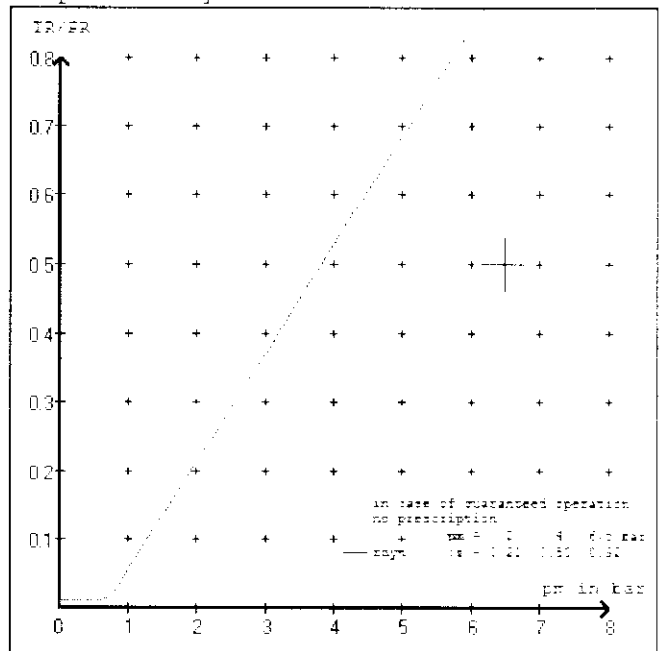
brake chamber pressure unladen



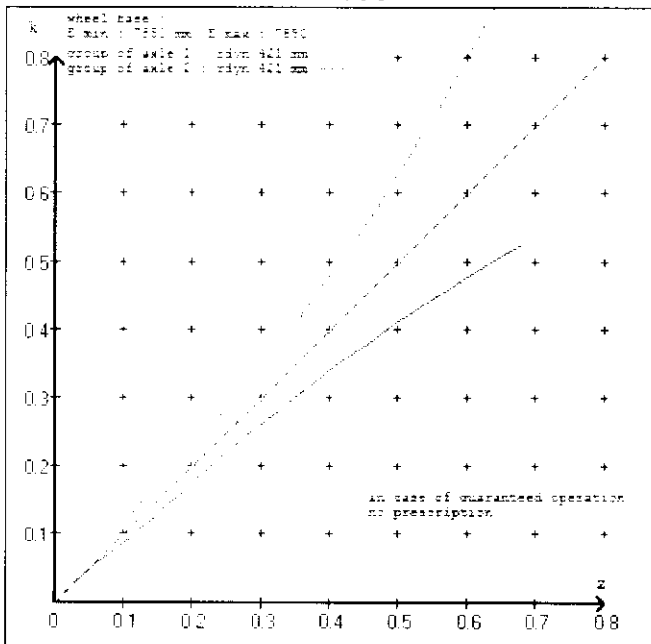
compatibility band laden



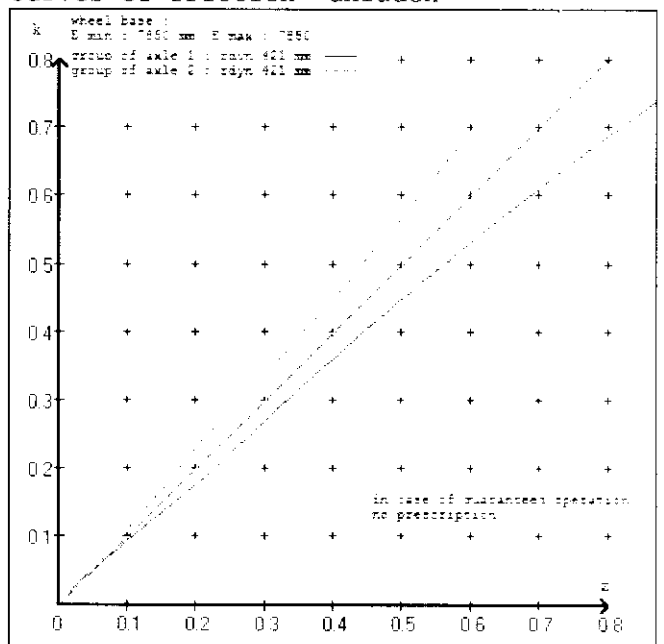
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : SAFT PLATFORM
 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.14/16 (Meritor) lever length 69 mm
 axle 4 : 2 x type/diameter T.14/16 (Meritor) lever length 69 mm
 axle 5 : 2 x type/diameter 14. (Meritor) lever length 69 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 : SAFT PLATFORM
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 50956A

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	1800	to be	2.4	7500	to be	0.4	1.4	5.7	
2	1800	entered by the vehicle manufact.	2.4	7500	entered by the vehicle manufact.	0.4	1.4	5.7	
3	1250		1.7	6000		0.4	1.4	4.5	
4	1250		1.7	6000		0.4	1.4	4.5	
5	1250		1.7	6000		0.4	1.4	4.5	

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					
1800	2.4	1800	2.4	1250	1.7	1250	1.7	1250	1.7
2300	2.7	2300	2.7	1750	2.0	1750	2.0	1750	2.0
2800	3.0	2800	3.0	2250	2.3	2250	2.3	2250	2.3
3300	3.3	3300	3.3	2750	2.6	2750	2.6	2750	2.6
3800	3.6	3800	3.6	3250	2.9	3250	2.9	3250	2.9
4300	3.8	4300	3.8	3750	3.2	3750	3.2	3750	3.2
4800	4.1	4800	4.1	4250	3.5	4250	3.5	4250	3.5
5300	4.4	5300	4.4	4750	3.8	4750	3.8	4750	3.8
7500	5.7	7500	5.7	6000	4.5	6000	4.5	6000	4.5

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 : 13.10.2008
axle 2	: reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 13.10.2008
axle 3	: reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 13.10.2008
axle 4	: reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 13.10.2008
axle 5	: reference axle: SAF	SBW 1937-...	brake lining: Jurid 539
	test report :	TDB 0749 ECE	date : 13.10.2008

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 = 22.5 % Fe
axle 2	(rdyn 421 mm)	T = 22.5 % Fe
axle 3	(rdyn 421 mm)	T = 17.3 % Fe
axle 4	(rdyn 421 mm)	T = 17.3 % Fe
axle 5	(rdyn 421 mm)	T = 17.3 % 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 = 6060 N
axle2	ThA = 6060 N
axle3	ThA = 4285 N
axle4	ThA = 4285 N
axle5	ThA = 4285 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 = 36129 N
axle 2	(rdyn 421 mm)	T = 36129 N
axle 3	(rdyn 421 mm)	T = 25468 N
axle 4	(rdyn 421 mm)	T = 25468 N
axle 5	(rdyn 421 mm)	T = 25468 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	0.46
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 = 36129 N
axle 2	(rdyn 421 mm)	T = 36129 N
axle 3	(rdyn 421 mm)	T = 25468 N
axle 4	(rdyn 421 mm)	T = 25468 N
axle 5	(rdyn 421 mm)	T = 25468 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	0.46
required braking rate (items 1.5.3 and 1.7.2 to annex 11)		>= 0,4 and >= 0,6*E (0.35)

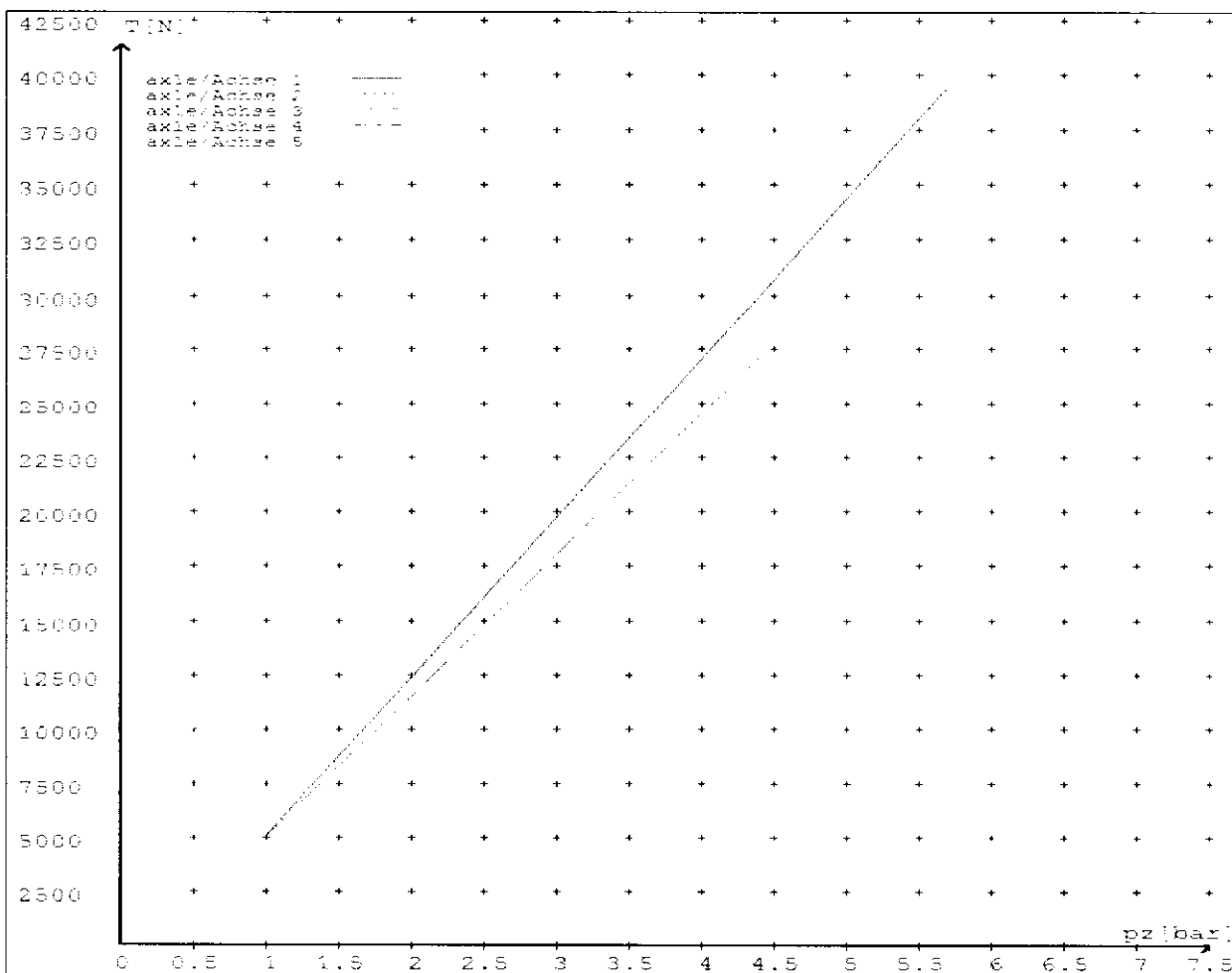
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	5072	
	5.7	39344	
axle 2	1.0	5072	
	5.7	39344	
axle 3	1.0		4985
	4.5		27716
axle 4	1.0		4985
	4.5		27716
axle 5	1.0		4985
	4.5		27716

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	18./	18./	T.14/16	T.14/16	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



HVBR WORKSHEET
(PROCEDURE & COMPLIANCE DOCUMENTATION SHEET)

CERTIFICATE No. JH131204

CUSTOMER NAME DOMETT TRAILERS LTD

CUSTOMER ORDER No. 4122 DATE RECEIVED Nov 13

VEHICLE TYPE 5 AXLE FULL TRAILER

REG No. CHASSIS No. 7A9E15011D1023216

BRIEF SPECIFICATION AS CERTIFIED TO HVBR

BRAKE CHAMBERS:

<u>Ax #</u>	<u>Make/model</u>	<u>Max stroke</u>	<u>Lever length</u>
1&2	TSE 18HSCLD65	65 mm	69 mm
3&4	TSE 1416HTLD64	64 mm	69 mm
5	TSE 14HSCLD64	64 mm	69 mm

BRAKE SYSTEM: WABCO EBS : RSS ACTIVATED
TEST POINTS FITTED: 3 4 5 7

FRICITION LINING: OEM Aftermarket
(All) Lining Brand JURID 539

EBS CONTROL: SPECIAL CONDITIONS APPLY – SEE INSTRUCTION ON L1400:

VALVES: AS PER BRAKE CALCULATION TP 50956 & SO1542648

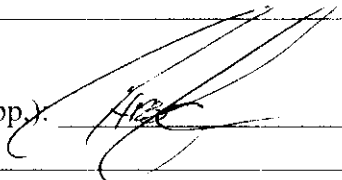
TYRE SIZE: 265 70 R 19.5

NOTES

PACKING SLIP NO. SO1542648 PROCESS TIME: 1

BRAKE CALC #TP50956

COMPLETION DATE : 12th Dec 2013

SIGNATURE (pp.) 

Statement of Compliance with the New Zealand Heavy Brake Rule

Documentation required supporting 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: 12th Dec 2013

Signed (pp.): _____

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