

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*	VIN/Chassis Number
	7A9C20024F1023374

Component being certified:

<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		

Certification Category: **HVEK**

Description of Work

CERTIFY TO SCHEDULE 5

ROLL STABILTY FUNCTION ACTIVATED

Code/Standard/Rule Certified to	Component Load Rating(s)
HVBR 32015/3 Schedule 5	26000KG

General Drawing Number(s)	
N/A	

Supporting Documents

BRAKE RULE CERTIFICATE · CJC153098

Special Conditions*

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

Certification Expiry Date (if applicable)	or	Hubodometer Reading (whichever comes first)
N/A		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

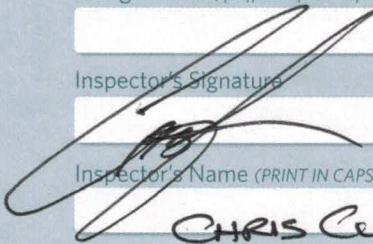
Declaration

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.

C

Designer's ID (if different from inspector below)

Inspector's Signature



Inspector's Name (PRINT IN CAPS)

CHRIS CLARKE

ID Number

CJC

Date

14-May-15

Number

510698

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

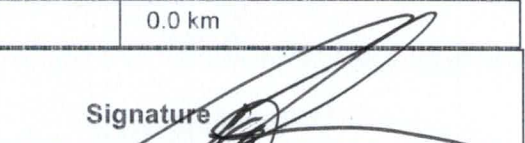
START-UP PROTOCOL

System	Trailer EBS-E	WABCO part number	480 102 080 0
Production date	2015-01-02	Serial number	437000997500B
Serial number (modulator)	000000035755		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2015-05-14 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

HERSTELLER MANUFACTURER CONSTRUCTEUR		DOMETT TRAILERS		GIO		Pin1		Pin3		Pin4	
TYP TYPE		3ABTRAIN REAR UNIT		1		24V-O1		---		---	
FAHRZEUG IDENTNR. CHASSIS NUMBER NUMERO DE CHASSIS		7A9C20024F1023374		2		---		---		---	
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.		GenNZ50059S		3		---		---		---	
POLRADZÄHNEZAHL c-d e-f POLE WHEEL TEETH c-d e-f DENTS ROUE DENTÉE c-d e-f		80		4		---		---		---	
RSS TYP TYPE		Einfachbereifung Single Tire Monte simple		5		DIAG		DIAG		DIAG	
RSS TYP TYPE		Zwillingsbereifung Twin Tire Monte jumelée		6		---		---		---	
Subsystems		I/O		24N		7		---		---	
ACHSE AXLE ESSIEU		pm (bar)		6.5		pm (bar)		0.8		2.0	
1		2030		0.8		3.2		6350		3.9	
2		2030		0.8		3.2		6350		3.9	
3		2030		0.8		3.2		6350		3.9	
4		0		---		---		0		---	
5		0		---		---		0		---	

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light power supply	Not tested
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 TEBS	Not tested
Signal inputs	Not tested	Tag axle test	Not tested

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

Manufacturer	DOMETT TRAILERS	Vehicle ident. no	7A9C20024F1023374
Vehicle type	3ABTRAIN REAR UNIT	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature 	
Date	2015-05-14 9:45:29 a.m.		

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

distribution: DOMETT TRAILERS
7A9C20024F1023374
CJC153098

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!
WABCO Brake V6.14.04.20 db 08.07.2014

vehicle manufacturer: DOMETT TRAILERS
trailer model : 3ABTRAIN REAR UNIT
trailer type : 3-axle-semi-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 1+2: 14/24
265/70 R 19,5

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

		<u>unladen</u>		<u>laden</u>	
total mass	P in kg	6500	-	6500	26000 - 26000
king-pin	PS in kg	410	-	410	6950 - 6950
axle 1	P1 in kg			2030	6350
axle 2	P2 in kg			2030	6350
axle 3	P3 in kg			2030	6350
total axle mass	PR in kg			6090	19050
wheel base	E in mm	6675	-	6675	
centre of gravity height	h in mm			1140	2073
K-factor		Kv min	1.7561		Kc min 1.0348
K-factor		Kv max	1.7561		Kc max 1.0348

		<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	KDZ	2	2	2
The power output corresponds to		BC 0056.2	BC 0056.2	BC 0055.2
brake chamber manufacturer		BPW	BPW	BPW
chamber size		14/24	14/24	14.
lever length	lBh in mm	80	80	80
brake factor	[-]	20.50	20.50	20.50
dyn. rolling radius	rdyn min in mm	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421
threshold torque	Co Nm	12.0	12.0	12.0

calculation:

chamber pressure (rdyn min) pH at z=22,5%bar	2.5	2.5	2.5
chamber pressure (rdyn max) pH at z=22,5%bar	2.5	2.5	2.5
chamber press. (servo) pcha at pm6,5bar bar	6.0	6.0	6.0
piston force ThA at pm6,5bar N	4848	4848	4848
brake force (rdyn min) T lad. at pm6,5bar N	37225	37225	37225
brake force (rdyn max) T lad. at pm6,5bar N	37225	37225	37225
brake force within 1 % rolling friction proportion %	33.3	33.3	33.3

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 : 841 701 101 0

maximum pressure: 8.5 bar

axle 1:

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 2:

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 3:

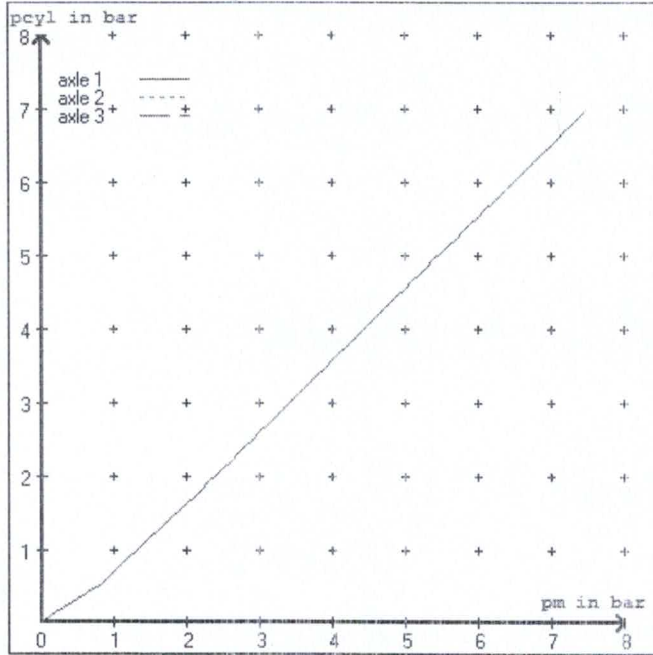
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

valve 2: 480 102 ... 0 () WABCO or 480 207 0.. 0 / 2.. 0
EBS trailer modulator

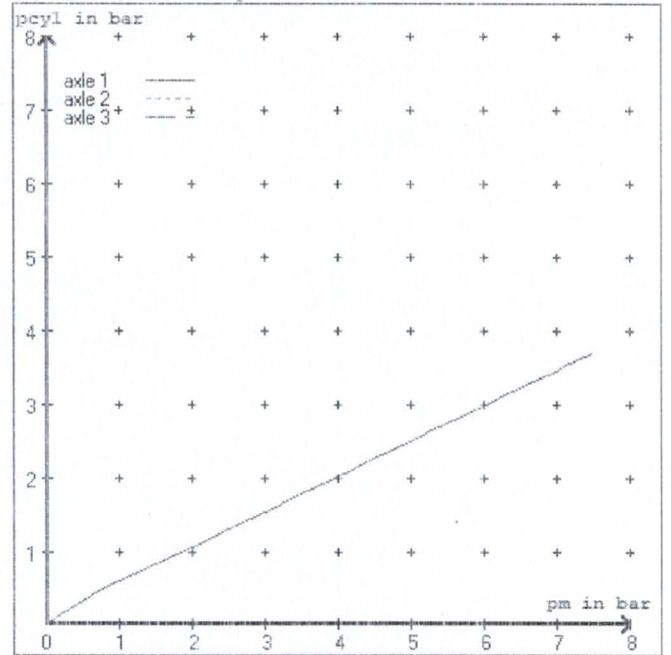
brake cylinder: BPW 05.444.30...

test type III (zIII = 0.30) for rdyn min : axle1 axle2 axle3
at pm 3.7 bar => pcha in bar : 3.2 3.2 3.2
test type III (zIII = 0.06) for rdyn min : axle1 axle2 axle3
at pm 1.3 bar => pcha in bar : 1.0 1.0 1.0

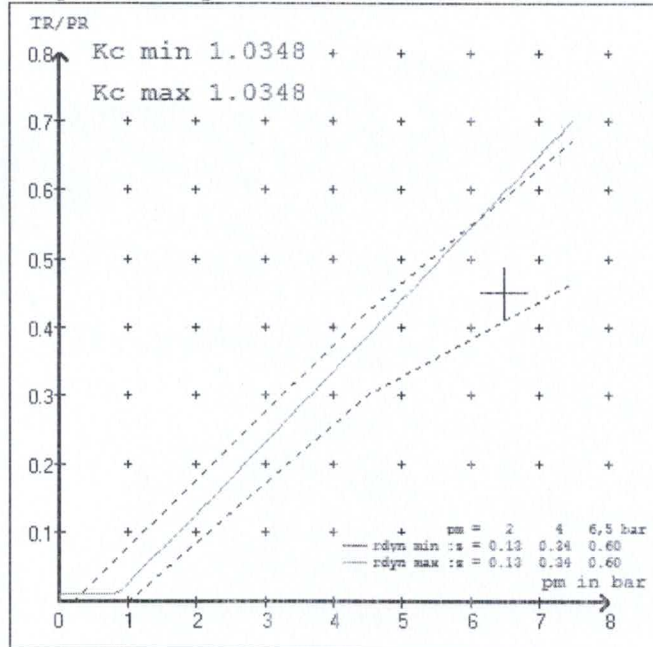
brake chamber pressure laden



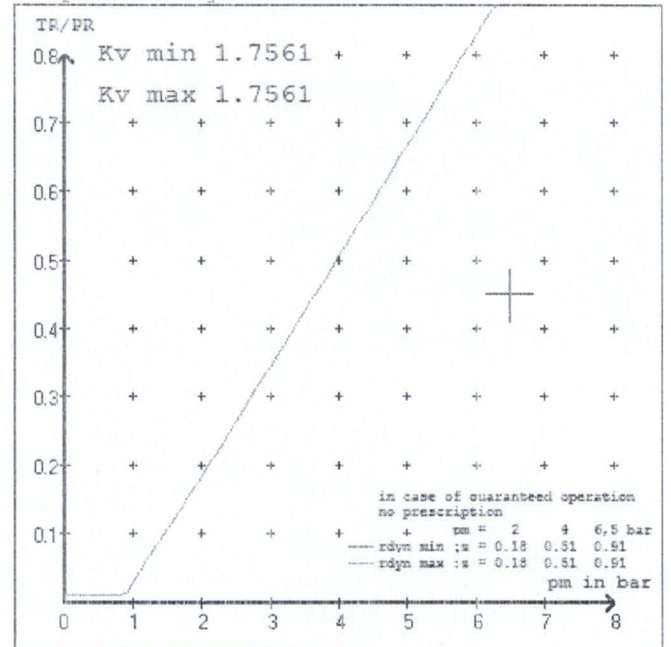
brake chamber pressure unladen



compatibility band laden



compatibility band unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 3ABTRAIN REAR UNIT
 trailer type : 3-axle-semi-trailer

brake chamber and lever length :
 axle 1 : 2 x type/diameter 14/24 (BPW) lever length 80 mm
 axle 2 : 2 x type/diameter 14/24 (BPW) lever length 80 mm
 axle 3 : 2 x type/diameter 14. (BPW) lever length 80 mm

brake diagram : 841 701 101 0

valve :
 971 002 ... 0 WABCO EBS emergency valve
 480 102 ... 0 WABCO EBS trailer modulator
 480 102 ... 0 WABCO EBS trailer modulator or 480 207 0.. 0 / 2.. 0

EBS input data

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vehicle manufacturer: DOMETT TRAILERS
 trailer model : 3ABTRAIN REAR UNIT
 trailer type : 3-axle-semi-trailer
 brake calculation no. : GenNZ 50059S

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 = 0.127
 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	2030	to be	3.2	6350	to be	0.5	1.6	6.0
2	2030	entered by the vehicle manufact.	3.2	6350	entered by the vehicle manufact.	0.5	1.6	6.0
3	2030		3.2	6350		0.5	1.6	6.0
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 3
axle load pcyl	axle load pcyl	axle load pcyl
2030 3.2	2030 3.2	2030 3.2
2530 3.5	2530 3.5	2530 3.5
3030 3.8	3030 3.8	3030 3.8
3530 4.2	3530 4.2	3530 4.2
4030 4.5	4030 4.5	4030 4.5
4530 4.8	4530 4.8	4530 4.8
5030 5.1	5030 5.1	5030 5.1
5530 5.5	5530 5.5	5530 5.5
6350 6.0	6350 6.0	6350 6.0

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

axle 1 : reference axle: BPW	D 115-2	brake lining: BPW 8101
test report :	361-041-08 ECE	date : 01.04.2011
axle 2 : reference axle: BPW	D 115-2	brake lining: BPW 8101
test report :	361-041-08 ECE	date : 01.04.2011
axle 3 : reference axle: BPW	D 115-2	brake lining: BPW 8101
test report :	361-041-08 ECE	date : 01.04.2011

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 = 16.6 % Fe
axle 2	(rdyn 421 mm)	T = 16.6 % Fe
axle 3	(rdyn 421 mm)	T = 16.6 % Fe

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

axle 1	(sp = 51 mm)	s = 48 mm
axle 2	(sp = 51 mm)	s = 48 mm
axle 3	(sp = 52 mm)	s = 48 mm

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

axle1	ThA = 4848 N
axle2	ThA = 4848 N
axle3	ThA = 4848 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 = 33739 N
axle 2	(rdyn 421 mm)	T = 33739 N
axle 3	(rdyn 421 mm)	T = 33739 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.54

required braking rate
(items 1.5.3 and 1.7.2 to annex 11) $\geq 0,4$ and
 $\geq 0,6 * E (0.36)$

axle 1	(rdyn 421 mm)	T = 33739 N
axle 2	(rdyn 421 mm)	T = 33739 N
axle 3	(rdyn 421 mm)	T = 33739 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.54

required braking rate
(items 1.5.3 and 1.7.2 to annex 11) $\geq 0,4$ and
 $\geq 0,6 * E (0.36)$

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

axle 1 : reference axle: BPW	D 115-2	brake lining: BPW 8200
test report :	361-041-08 ECE	date : 02.04.2011
axle 2 : reference axle: BPW	D 115-2	brake lining: BPW 8200
test report :	361-041-08 ECE	date : 02.04.2011
axle 3 : reference axle: BPW	D 115-2	brake lining: BPW 8200
test report :	361-041-08 ECE	date : 02.04.2011

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 = 16.6 % Fe
axle 2	(rdyn 421 mm)	T = 16.6 % Fe
axle 3	(rdyn 421 mm)	T = 16.6 % Fe

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

axle 1	(sp = 51 mm)	s = 47 mm
axle 2	(sp = 51 mm)	s = 47 mm
axle 3	(sp = 52 mm)	s = 47 mm

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

axle1	ThA = 4848 N
axle2	ThA = 4848 N
axle3	ThA = 4848 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 = 35046 N
axle 2	(rdyn 421 mm)	T = 35046 N
axle 3	(rdyn 421 mm)	T = 35046 N

	basic test	type III
	of subject	(calculated)
braking rate of the vehicle	trailer (E)	residual
(item 4.3.2 to appendix 2 to annex 11)	0.60	(hot)braking
		0.56

required braking rate
(items 1.5.3 and 1.7.2 to annex 11) $\geq 0,4$ and
 $\geq 0,6 * E (0.36)$

axle 1	(rdyn 421 mm)	T = 35046 N
axle 2	(rdyn 421 mm)	T = 35046 N
axle 3	(rdyn 421 mm)	T = 35046 N

	basic test	type III
	of subject	(calculated)
braking rate of the vehicle	trailer (E)	residual
(item 4.3.2 to appendix 2 to annex 11)	0.60	(hot)braking
		0.56

required braking rate
(items 1.5.3 and 1.7.2 to annex 11) $\geq 0,4$ and
 $\geq 0,6 * E (0.36)$

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

axle 1 : reference axle: BPW	D 115-2	brake lining: BPW 8302
test report :	361-041-08 ECE	date : 03.04.2011
axle 2 : reference axle: BPW	D 115-2	brake lining: BPW 8302
test report :	361-041-08 ECE	date : 03.04.2011
axle 3 : reference axle: BPW	D 115-2	brake lining: BPW 8302
test report :	361-041-08 ECE	date : 03.04.2011

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 = 16.6 % Fe
axle 2	(rdyn 421 mm)	T = 16.6 % Fe
axle 3	(rdyn 421 mm)	T = 16.6 % Fe

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

axle 1	(sp = 51 mm)	s = 39 mm
axle 2	(sp = 51 mm)	s = 39 mm
axle 3	(sp = 52 mm)	s = 39 mm

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

axle1	ThA = 4848 N
axle2	ThA = 4848 N
axle3	ThA = 4848 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 = 35781 N
axle 2	(rdyn 421 mm)	T = 35781 N
axle 3	(rdyn 421 mm)	T = 35781 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.57

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

axle 1	(rdyn 421 mm)	T = 35781 N
axle 2	(rdyn 421 mm)	T = 35781 N
axle 3	(rdyn 421 mm)	T = 35781 N

	basic test	type III
	of subject	(calculated)
	trailer (E)	residual
braking rate of the vehicle		(hot)braking
(item 4.3.2 to appendix 2 to annex 11)	0.60	0.57

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

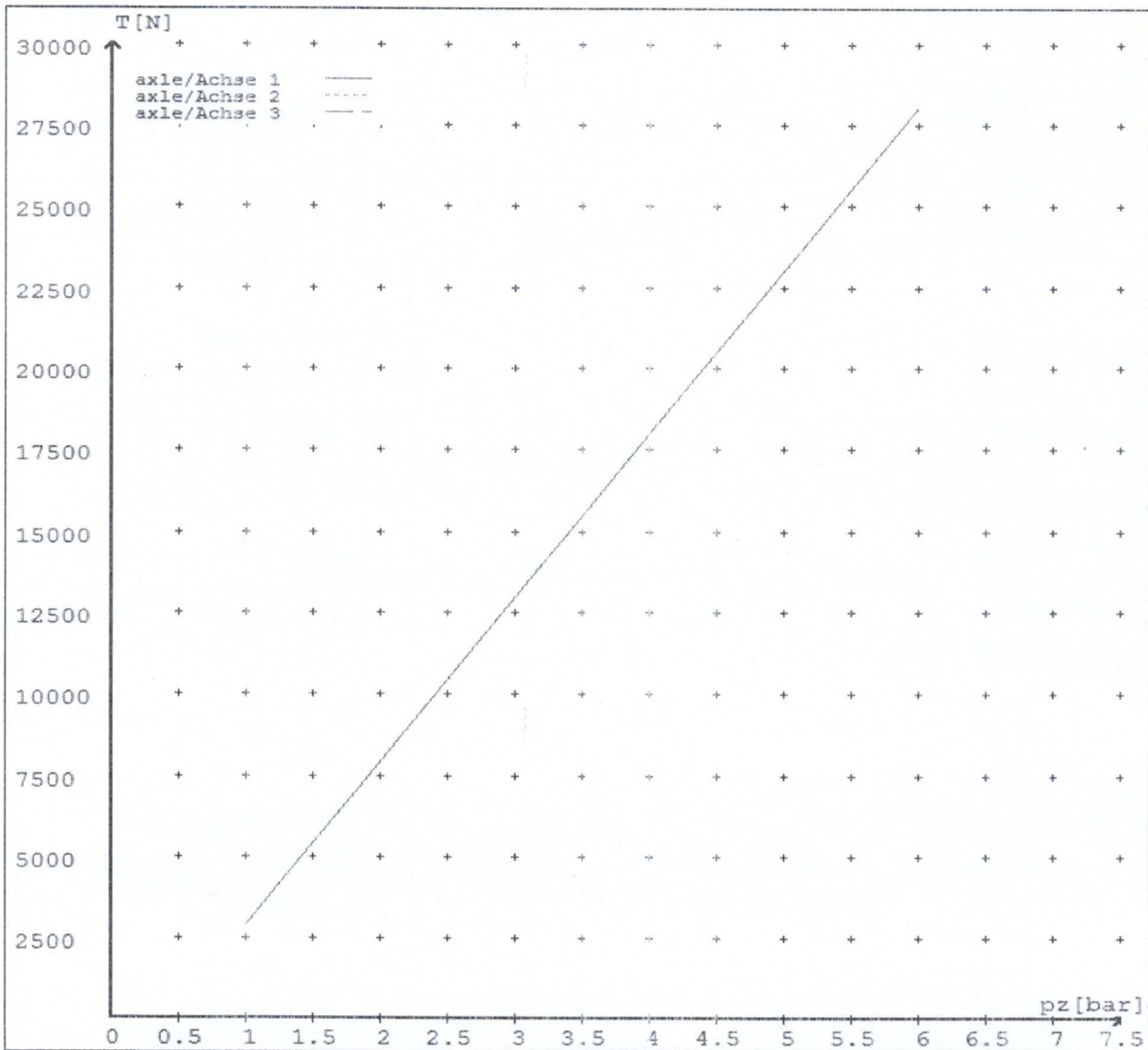
reference values

reference values for z = 45% for max rdyn: 421 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0		2861
	6.0		28012
axle 2	1.0		2861
	6.0		28012
axle 3	1.0		2861
	6.0		28012

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	14/24	14/24	14./	/	/
Maximum stroke smax = ...mm maximaler Hub smax =mm	61	61	62		
Lever length =mm Hebellänge =mm	80	80	80		



reference values for $z = 0.45$

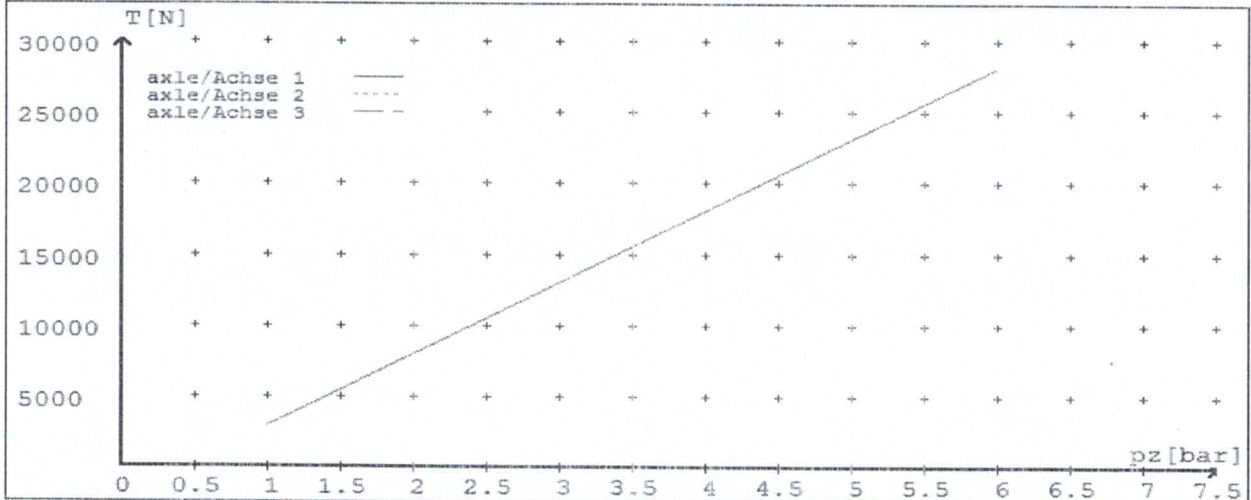
for max rdyn: 421 mm

Angabe der Referenzwerte für $z = 0.45$

für max rdyn: 421 mm

brake calculation no: GenNZ 50059S date 13.05.2015

Bremsberechnung Nr: GenNZ 50059S vom 13.05.2015



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	14/24	14/24	14./	/	/
Maximum stroke smax = ...mm maximaler Hub smax =mm	61	61	62		
Lever length =mm Hebellänge =mm	80	80	80		