

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
	7A9E1001XH1023580
Make DOMETT	Component being certified:
Model (optional)	<input type="checkbox"/> Chassis <input type="checkbox"/> Load anchorage
Certification category HVEK	<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

Description of work

**CERTIFY TO HEAVY VEHICLE BRAKE RULE 32015/4.
 NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.**

Code/standard/rule certified to SCHEDULE 5	Component load rating(s) GVM 30,000 Kgs
General drawing number(s) N/A	BRAKES 35,200 Kgs

Supporting documents

BRAKE CODE CERTIFICATE LC170508

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)

UNTIL MODIFIED or CHANGE OF USE

or Hubodometer reading (whichever comes first)

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 **29-May-17** Number **596266**

CoF vehicle inspector ID	CoF vehicle inspector signature	Date
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All fields are mandatory unless otherwise stated.

WABCO START-UP LOG

System	Trailer EBS-E	WABCO part number	480 102 064 0
Production date	2017-02-07	Serial number	436030960200F
Serial number (modulator)	000000142138		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2017-05-29 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

WABCO TRAILER EBS-E

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT T&T			GGVS/ADR TUEH TB 2007 - 019.00 TDB0870			
TYP TYPE	5AFT TANKER			GIO	Pin1	Pin3	Pin4
VEHICLE IDENT. NUMBER CHASSIS NUMBER NUMERO DE CHASSIS	7A9E1001XH1023580			1	ILS1	---	ILS1
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP2017 SAF NEW			2	eTASC	---	eTASC
POLRADZÄHNZAHL 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	3	ALS2	ALS2	---
RSS RSS RSS	Einfachbereifung Single Tire Monte simple	Lenkachse Steering axle Essieu vitour	4S/3M	4	---	---	LS1
	Zwillingsbereifung Twin Tire Monte jumeté	Kippkritisches Fahrzeug Critical Trailer Véhicule critique		5	DIAG	DIAG	DIAG
Subsystems	---	I/O	24N	6	---	---	---
				7	---	---	---

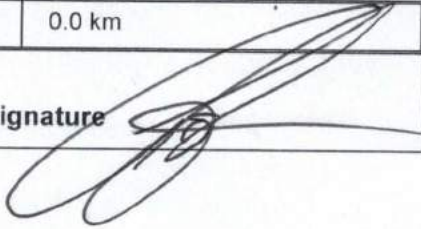
ACHSE AXLE ESSIEU	pm (bar)		6.5		pm (bar)		0.8		2.0		---		6.5		(bar)	
	1.0	Pz	TR (daN)		1.0		Pz		TR (daN)		1.0		Pz		TR (daN)	
1	1400	0.5	1.5	8000	5.1	0.4	1.3	---	5.8	-	18	65	69	506	3799	
2	1400	0.5	1.5	8000	5.1	0.4	1.3	---	5.8	-	18	65	69	506	3799	
3	1100	0.3	1.2	6400	3.9	0.3	1.4	---	4.6	-	14 / 16	64	69	500	2781	
4	1100	0.3	1.2	6400	3.9	0.3	1.4	---	4.6	-	14 / 16	64	69	500	2781	
5	1100	0.3	1.2	6400	3.9	0.3	1.4	---	4.6	1	14	64	69	500	2781	

TEBS-E

Diagnostic memory	OK	Warning lamp control	OK
Parameter setting	carried out	Stop light 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 test	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	7A9E1001XH1023580
Vehicle type	5AFT TANKER	Odometer reading	0.0 km
next Service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature 	
Date	2017-05-29 10:23:58 a.m.		

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: DOMETTS
2017, 5A, SAF,
NEW TANKER
SAF CALIPERS

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 20.04.2016

vehicle manufacturer: DOMETTS
trailer model : 2017 5A TANKER, E1001 SAF
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
EC w.o.annexVII
WABCO TRAILER - EBS
TRISTOP 3+4: T.14/24
265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBS 1918, TDB 0870 ext01 ECE,

		unladen	laden
total mass	P in kg		
axle 1	P1 in kg	6100	35200
axle 2	P2 in kg	1400	8000
axle 3	P3 in kg	1400	8000
axle 4	P4 in kg	1100	6400
axle 5	P5 in kg	1100	6400
wheel base	E in mm	1100	6400
centre of gravity height	h in mm	5700 - 5700	1524
		900	

	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 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	76	76	76	76	76
brake factor [-]	22.37	22.37	22.37	22.37	22.37
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	2.2	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	5.8	5.8	4.6	4.6	4.6
piston force ThA at pm6,5bar N	6172	6172	4385	4385	4385
brake force(rdyn min)T lad. at pm6,5bar N	49996	49996	35408	35408	35408
brake force(rdyn max)T lad. at pm6,5bar N	49996	49996	35408	35408	35408
brake force within 1 % rolling friction proportion %	21.2	21.2	19.2	19.2	19.2

braking rate z laden 0.597 for rdyn min
z = sum (TR)/PRmax 0.597 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.. 0 WABCO
EBS trailer modulator

brake cylinder: Meritor 1424HTLD64

axle 4:

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

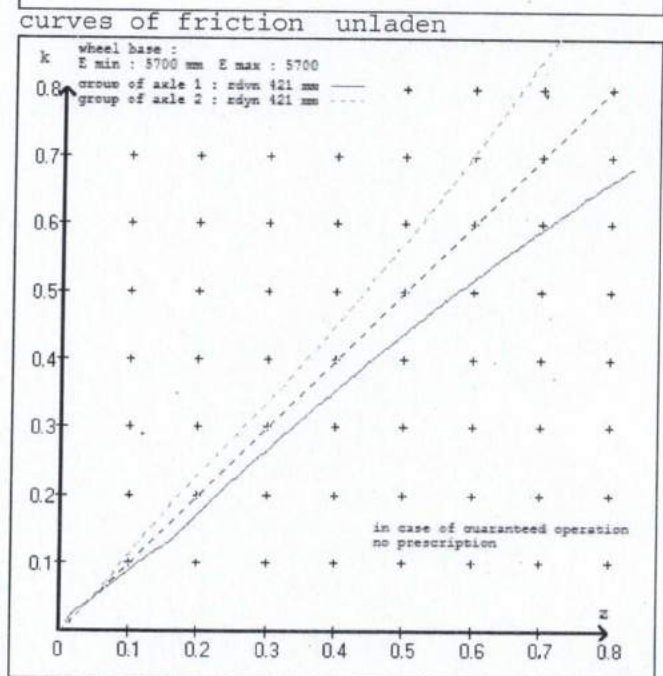
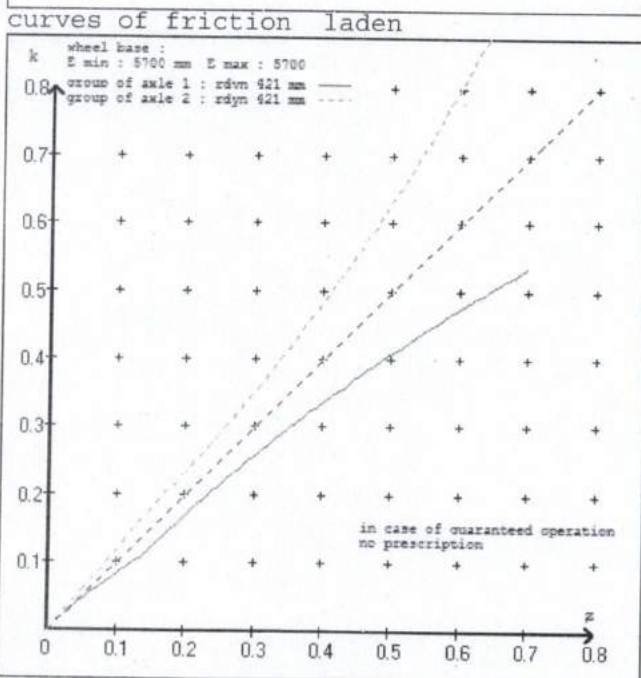
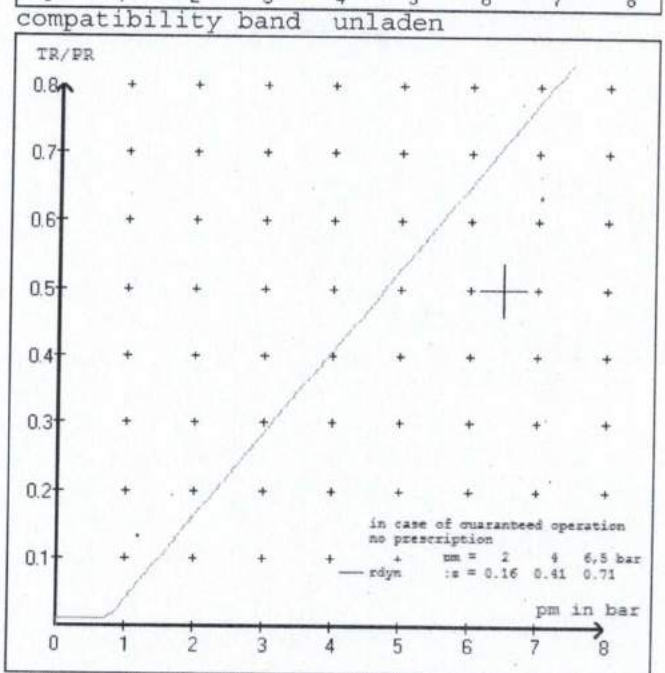
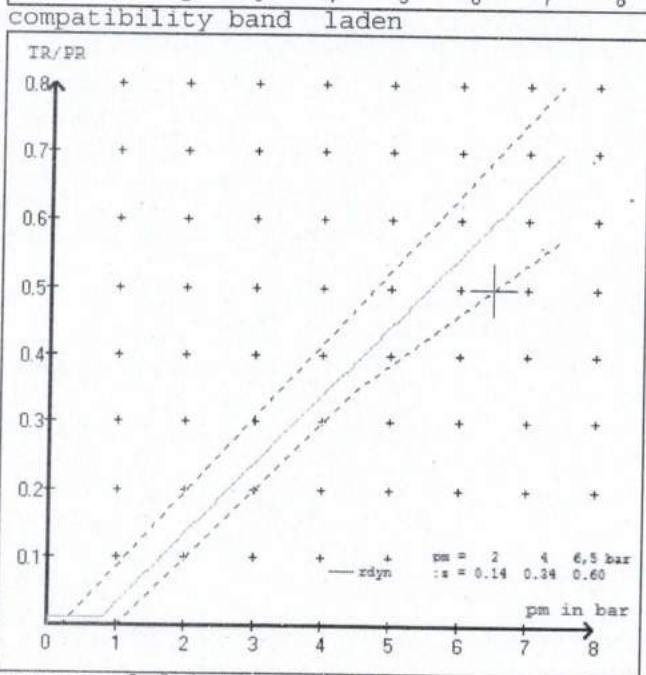
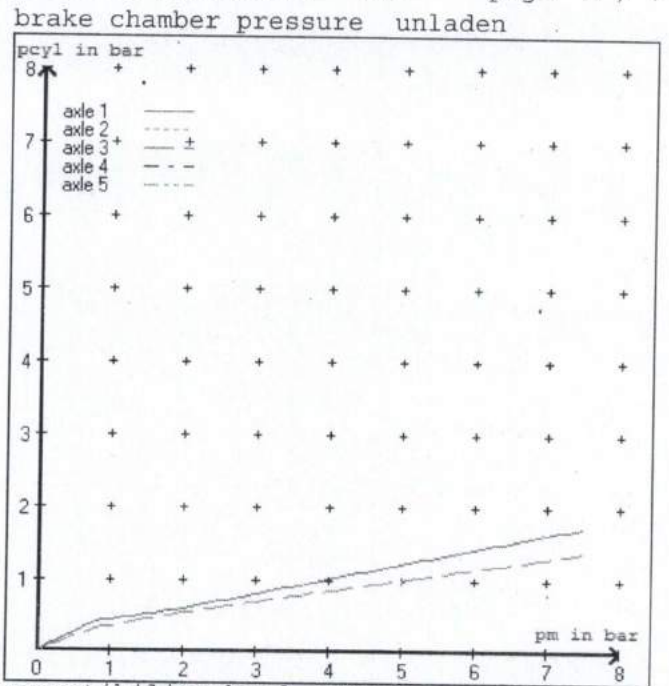
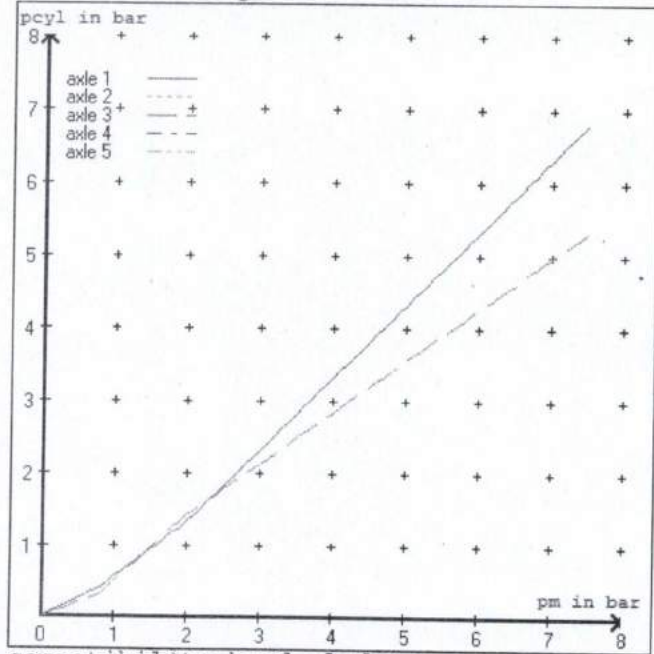
brake cylinder: Meritor 1424HTLD64

axle 5:

valve 1: 480 102 0.. 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 :	2.9	2.9	2.5	2.5	2.5		
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	0.7	0.7	0.7		



vehicle manufacturer: DOMETTS
 trailer model : 2017 5A TANKER, E1001 SAF
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 18. (Meritor) lever length 76 mm
 axle 2 : 2 x type/diameter 18. (Meritor) lever length 76 mm
 axle 3 : 2 x type/diameter T.14/24 (Meritor) lever length 76 mm
 axle 4 : 2 x type/diameter T.14/24 (Meritor) lever length 76 mm
 axle 5 : 2 x type/diameter 14. (Meritor) lever length 76 mm

brake diagram :

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: DOMETTS
 trailer model : 2017 5A TANKER, E1001 SAF
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 2017A

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	1400	to be	1.5	8000	to be	0.4	1.3	5.8	
2	1400	entered by	1.5	8000	entered by	0.4	1.3	5.8	
3	1100	the vehicle	1.2	6400	the vehicle	0.3	1.4	4.6	
4	1100	manufact.	1.2	6400	manufact.	0.3	1.4	4.6	
5	1100		1.2	6400		0.3	1.4	4.6	

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
1400 1.5	1400 1.5	1100 1.2	1100 1.2	1100 1.2
1900 1.8	1900 1.8	1600 1.5	1600 1.5	1600 1.5
2400 2.2	2400 2.2	2100 1.8	2100 1.8	2100 1.8
2900 2.5	2900 2.5	2600 2.2	2600 2.2	2600 2.2
3400 2.8	3400 2.8	3100 2.5	3100 2.5	3100 2.5
3900 3.1	3900 3.1	3600 2.8	3600 2.8	3600 2.8
4400 3.5	4400 3.5	4100 3.1	4100 3.1	4100 3.1
4900 3.8	4900 3.8	4600 3.4	4600 3.4	4600 3.4
8000 5.8	8000 5.8	6400 4.6	6400 4.6	6400 4.6

		<u>axle 3</u>	<u>axle 4</u>
no of TRISTOP-actuators per axle line KDZ		2	2
TRISTOP-actuator type		T.14/24	T.14/24
lever length	lBh in mm	76	76
stat. tyre radius	rstat max in mm	401	401
at a stroke of	s in mm	30	30
min. force of spring brake	TFZ in N	7605	7605
sp.brake chamber no Meritor.....		4	4
release pressure	pLs in bar	4.8	4.8

calculation:

ratio until road		4.2397	4.2397
$iFb = lBh * \eta * C * rBt / (rBn * rstat)$			
	for rstat in mm	401	401
brake force of spring br. Tf in N		63816	63816
$Tf = (TFZ * KDZ - 2 * Co / lBh) * iFb$			
braking rate	zf laden	0.380	
$zf = \text{sum}(Tf) / P + 0,01$			

Test of the frictional connection required by the parking brake

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

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

$$\min Ef = 4325 \text{ mm} \quad \text{for } E = 5700 \text{ mm}$$

$$\min Ef = 4325 \text{ mm} \quad \text{for } E = 5700 \text{ mm}$$

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 =	1524 mm	height of center of gravity - laden
PR =	19200 kg	maximum bogie mass - laden
P =	35200 kg	maximum total mass - laden
nf =	2	no. of axle(s) with TRISTOP spring brake actuators
ng =	3	no. of bogie axle(s)

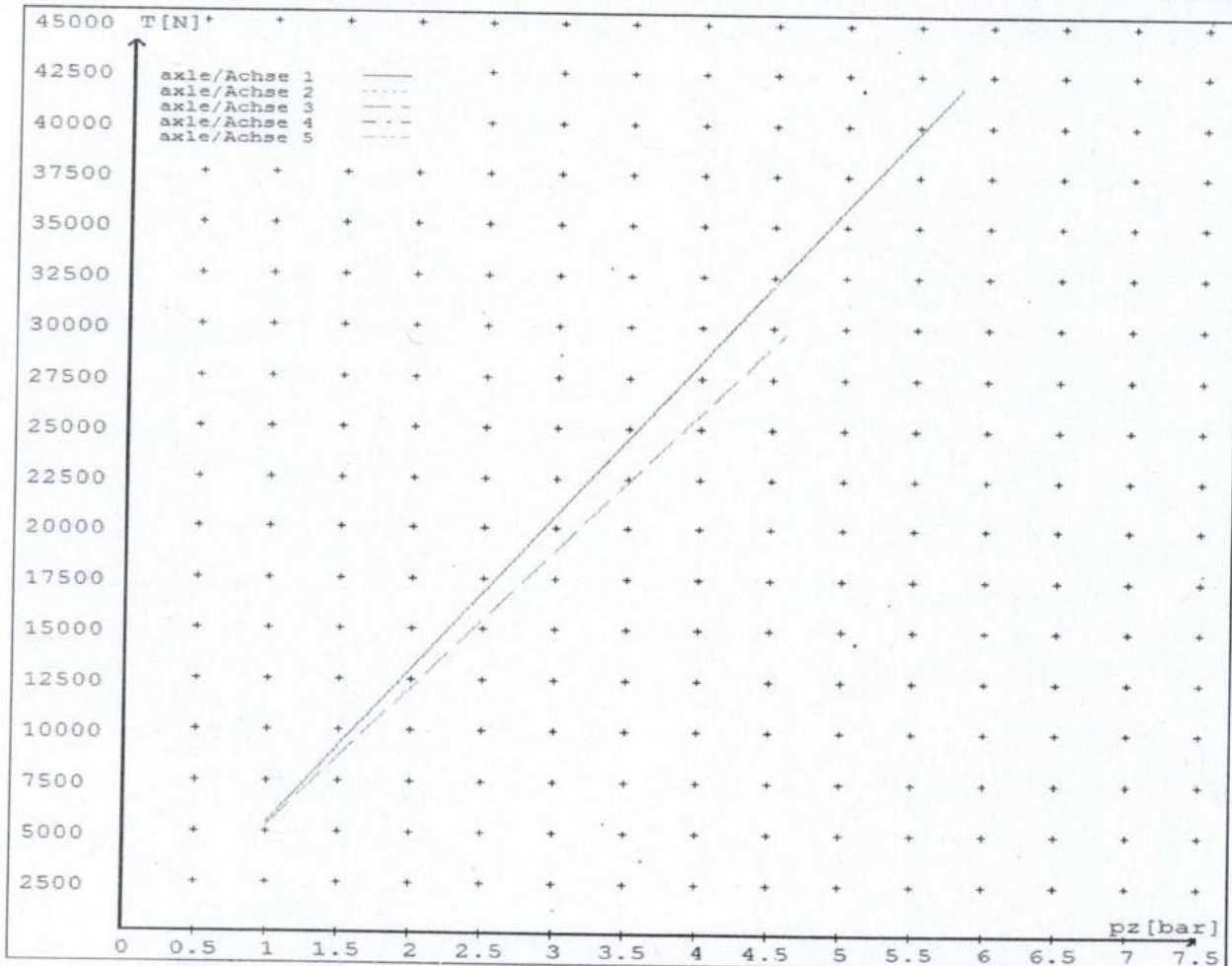
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	5345	
	5.8	41873	
axle 2	1.0	5345	
	5.8	41873	
axle 3	1.0		5254
	4.6		29655
axle 4	1.0		5254
	4.6		29655
axle 5	1.0		5254
	4.6		29655

VIN - no.:

	Axle(s) / Achse(n)				
	18./	18./	T.14/24	T.14/24	14./
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	76	76	76	76	76



reference values for $z = 0.5$

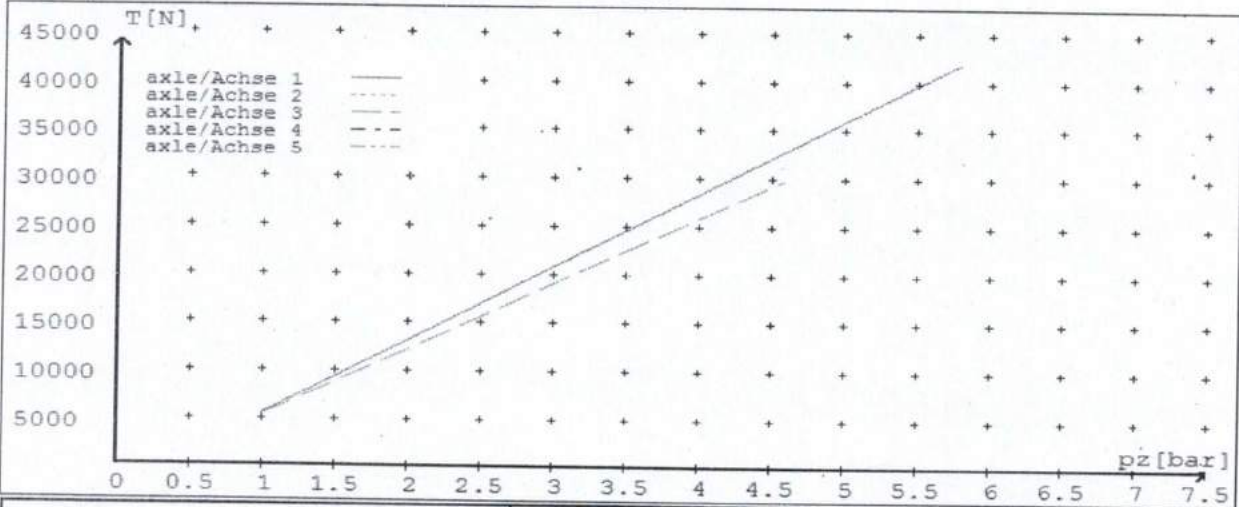
Angabe der Referenzwerte für $z = 0.5$

for max rdyn: 421 mm

für max rdyn: 421 mm

brake calculation no: TP 2017A date 17.02.2017

Bremsberechnung Nr: TP 2017A vom 17.02.2017



	Achse(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	76	76	76	76	76

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: DOMETTS
2017, 5A, SAF,
NEW TANKER
SAF CALIPERS

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: DOMETTS
trailer model : 2017 5A TANKER, E1001
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
EC w.o.annexVII
WABCO TRAILER - EBS
TRISTOP 3+4: T.16/16
265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBS 1918, TDB 0870 ext01 ECE,

		unladen	laden
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

	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 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.16/16	T.16/16	14.
lever length lbh in mm	76	76	76	76	76
brake factor [-]	22.37	22.37	22.37	22.37	22.37
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	2.2	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	5.6	5.6	4.7	4.7	4.7
piston force ThA at pm6,5bar N	5947	5947	4589	4589	4485
brake force (rdyn min) T lad. at pm6,5bar N	48179	48179	37050	37050	36217
brake force (rdyn max) T lad. at pm6,5bar N	48179	48179	37050	37050	36217
brake force within 1 % rolling friction proportion %	21.0	21.0	19.5	19.5	19.0

braking rate z laden 0.599 for rdyn min
z = sum (TR)/PRmax 0.599 for rdyn max

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

GOUGH**Transpecs**

**HEAVY VEHICLE BRAKE RULE
32015/4 WORKSHEET
PROCEDURE DOCUMENTATION SHEET- (PDS)
&
CONFIRMATION OF COMPLIANCE**

CERTIFICATE NO:

LC170508

CUSTOMER NAME:

DOMETT TRAILERS

CUSTOMER ORDER NO:

4728

DATE RECEIVED:

13/02/2017

VEHICLE TYPE:

FULL TANKER

VIN / CHASSIS NO:

7A9E1001XH1023580

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

BRAKE VALVES:

MAKE

TYPE

PRIMARY RELAY:

WABCO

480 102 064 0

SECONDARY RELAY:

WABCO

480 207 001 0

SPRING BRAKE RELAY:

SEALCO

110701

PARK BRAKE VALVE:

SEALCO

17600B

LOCKED RATIO:

MAKE:

SETTING:

OTHER VALVES

OTHER VALVES

MAKE:

TYPE

SETTING

MAKE:

TYPE

SETTING

MAKE:

TYPE

SETTING

MAKE:

TYPE

SETTING

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: SAF

FRICTION MATERIAL: OEM Aftermarket

LINING BRAND

LINING BRAND

FRONT	REAR
SAF 607	SAF 607

OTHERS

TYRES:

FRONT	REAR
265/70R 19.5	265/70R 19.5

COMMENTS

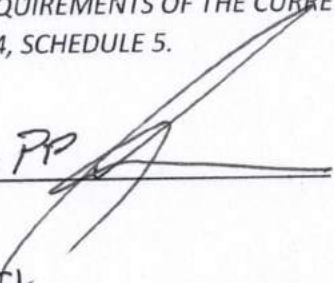
EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 # 0

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 32015/4, SCHEDULE 5.

DATE: 29/05/2017 **SIGNED:** PP 

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 32015/4 SCHEDULE 5.

DATE: _____ **SIGNED:** _____

NAME: _____

CERTIFIERS ID: _____ **POSITION:** _____

PHONE (BUS): _____ **FAX (BUS):** _____

COMMENTS: _____

