NZ TRANSPORT AGENCY
WAKA KOTAHI

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)*: CHRIS CLARKE

ID: CJC

Vehicle registration *(optional)*:

VIN/chassis number: 7A9E20012G1023519

Make: DOMETT

Component being certified:
- [ ] Chassis
- [ ] Load anchorage
- [ ] Log bolsters
- [ ] Towing connection
- [X] Brakes
- [ ] SRT
- [ ] PSV stability
- [ ] PSV rollover
- [ ] Swept path
- [ ] 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): 32 Tonnes GVM

General drawing number(s): N/A

Supporting documents:
BRAKE CODE CERTIFICATE CJC164058
BRAKE CALCULATION # GenNZ 50157A

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)*:

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: 26-Aug-16

Number: 564908

CoF vehicle inspector ID:

CoF vehicle inspector signature:

Date:

All fields are mandatory unless otherwise stated.

KNORR-BREMSE

ECUtalk® - TEBS G2 / G2.x (v.3.4.15.3)

EOL Report

TEBS G2.2 Prm	ES2095	K110612V01N49	E0 13R-
SW Version	TCPG.730.040.001.005	KB Help Centre	+ 49 (0) 180 566 77 05
Type	Full-trailer	Manufacturer	DOMETT
Brake calculation no.	7A9E20013G1023514	VIN	7A9E20013G1023514
Serial number	20155050029	PIN	00 00 05 D2

	Front pressure parameters				Rear pressure parameters			
Demand	Pneumatic (CAN) [bar]				Pneumatic (CAN) [bar]			
Control pressure [bar]	0.70	1.6	4.5	6.5	0.70	1.6	4.5	6.5
Brake press. unladen [bar]	0.45	0.8	1.7	2.4	0.43	0.7	1.6	2.2
Brake press. laden [bar]		1.5	4.4	6.5		1.1	3.3	4.8

Axle	Max. load [kg]		
1	8000	20	0
2	8000	20	0
3	6400	16	0
4	6400	16	0
5	6400	16	0

			Ext.brake demand	None
Bogie load unladen [kg]	3440	4080	Differential slip [%]	-
Bogie load laden [kg]	16000	19200	Max slip demand [bar]	-
Tyre diameter [mm]	842	842	Pressure limit (CAN) [bar]	-
Sensing ring teeth	90	90	ABS Configuration	4S/3M
Module turned	No		3rd modulator	TEPM Premium
TBM LS Type	TBM-Internal		TEPM LS Type	TEPM-Internal
LS1 U_unladen [V]	-		LS-TEPM U_unladen [V]	-
LS1 U_laden [V]	-		LS-TEPM U_laden [V]	-
Spring deflection TBM	-		Spring deflection TEPM-P	-
Lever length TBM	-		Lever length TEPM	-

AUXIO1	Disabled
AUXIO2	Disabled
AUXIO3	Supply
SENS_IN1	Disabled
SENS_SUP	Disabled
P28	Disabled
TEPM-AUXIO1	Disabled
TEPM-AUXIO2	Disabled
TEPM-SENS_IN1	Disabled
TEPM-SENS_IN2	Disabled

	Unladen	Laden
Airspring pressure TBM [bar]	0.5	3.9
Airspring pressure TEPM [bar]	0.7	5
Suspension pressure TBM [bar]	-	-
Suspension pressure TEPM [bar]	-	-

Kilometre counter [km]	0
Next service [km]	9999999
Next service [date]	31/12/2254

ACF01490DF33C002

KNORR-BREMSE

ECUtalk® - TEBS G2 / G2.x (v.3.4.15.3)

EOL Report

TEBS G2.2 Prm	ES2095	K110612V01N49	E0 13R-
SW Version	TCPG.730.040.001.005	KB Help Centre	+ 49 (0) 180 566 77 05
Type	Full-trailer	Manufacturer	DOMETT
Brake calculation no.	7A9E20013G1023514	VIN	7A9E20013G1023514
Serial number	20155050029	PIN	00 00 05 D2

EOL Test Result: OK

EOL Test Step Results

Initial "Fault" status (0.0)	OK (1)		
Installation check (1)	OK (1)		
System pressure test (2)	OK (1)		
Warning lamp test (3)	OK (1)		
S-A sensor test (11.1)	OK (1)		
Air gap speed at SA [km/h]	1.97		
S-C sensor test (11.3)	OK (1)		
Air gap speed at SC [km/h]	1.87		
S-D sensor test (11.4)	OK (1)		
Air gap speed at SD [km/h]	1.93		
S-B sensor test (11.2)	OK (1)		
Air gap speed at SB [km/h]	2.01		
RSP installation test (13)	OK (1)		
Final "Fault" status (0.1)	OK (1)		

Tester's name	Chris Clarke	Signature
Location	Genese Ltd	
Date	Friday, 26 August 2016	
Additional information		

ACF01490DF33C002

GOUGH Transpecs

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

CERTIFICATE NO.	CJC164058
CUSOMER NAME	DOMETT TRUCK & TRAILER
CUSTOMER ORDER NO.	4630
DATE RECEIVED	26-Aug-16
VEHICLE TYPE	CURTAINSIDE
VIN/ CHASSIS NO.	7A9E20012G1023519

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

BRAKE VALVES	MAKE	TYPE
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

LOCKED RATIO:	FRONT	REAR
MAKE	N/A	N/A
SETTING	N/A	N/A

OTHER VALVES:

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

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

distribution: DOMETT TRAILERS
7A9E20012G1023519
CJC164058
LT400 564908

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 08.07.2014

vehicle manufacturer: DOMETT TRAILERS
trailer model : 5AFT C/SIDE
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 3+4: T.14/24
265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBW 1937, TDB 0749 ECE,

		unladen	laden
total mass	P in kg	7540	35200
axle 1	P1 in kg	1700	8000
axle 2	P2 in kg	1700	8000
axle 3	P3 in kg	1380	6400
axle 4	P4 in kg	1380	6400
axle 5	P5 in kg	1380	6400
wheel base	E in mm	8200 - 8200	
centre of gravity height	h in mm	1090	2056

		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		20.	20.	T.14/24	T.14/24	14.
lever length	lBh in mm	69	69	69	69	69
brake factor	[-]	23.03	23.03	23.03	23.03	23.03
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	2.1	2.1	2.1
chamber pressure(rdyn max)pH at z=22,5%	bar	2.2	2.2	2.1	2.1	2.1
chamber press.(servo)pcha at pm6,5bar	bar	5.6	5.6	5.0	5.0	5.0
piston force ThA at pm6,5bar	N	6455	6455	4786	4786	4786
brake force(rdyn min)T lad. at pm6,5bar	N	48915	48915	36143	36143	36143
brake force(rdyn max)T lad. at pm6,5bar	N	48915	48915	36143	36143	36143
brake force within 1 % rolling friction proportion	%	22.3	22.3	18.5	18.5	18.5

braking rate z laden
z = sum (TR)/PRmax

0.597 for rdyn min
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: 971 002 ... 0 WABCO
EBS emergency valve

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

brake cylinder: Meritor 20HSCLD65

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: Meritor 20HSCLD65

axle 3:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

brake cylinder: Meritor 1424HTLD64

axle 4:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

brake cylinder: Meritor 1424HTLD64

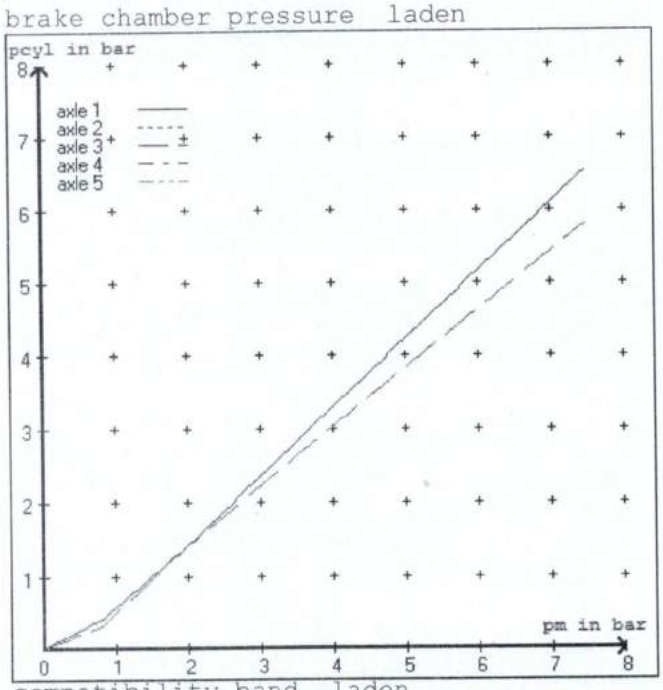
axle 5:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

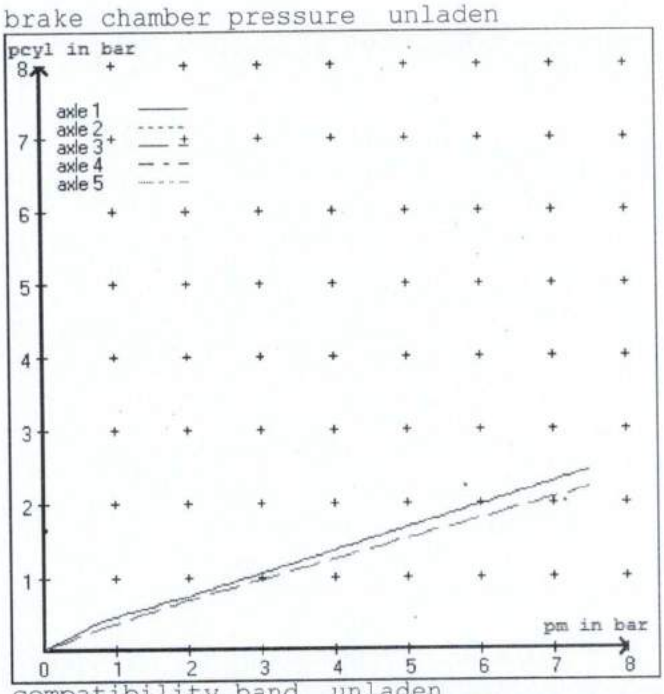
brake cylinder: Meritor 14HSCLD64

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	2.7	2.7	2.7
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	0.8	0.8	0.8

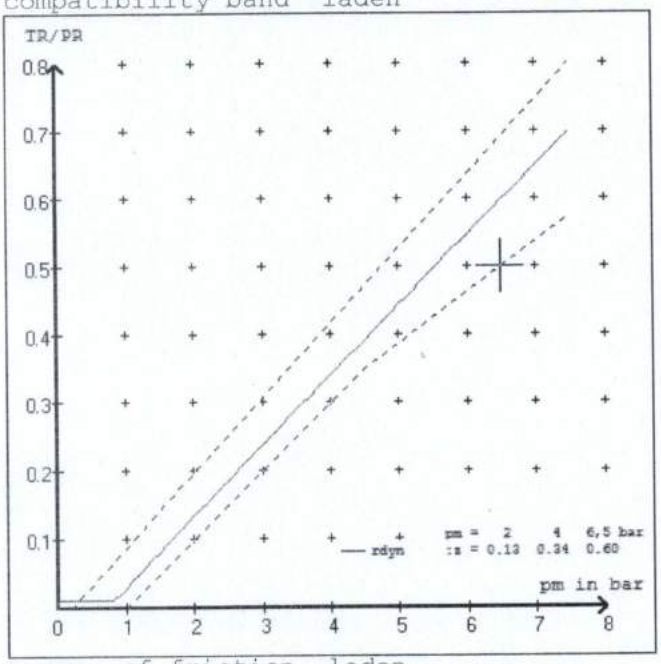
brake chamber pressure laden



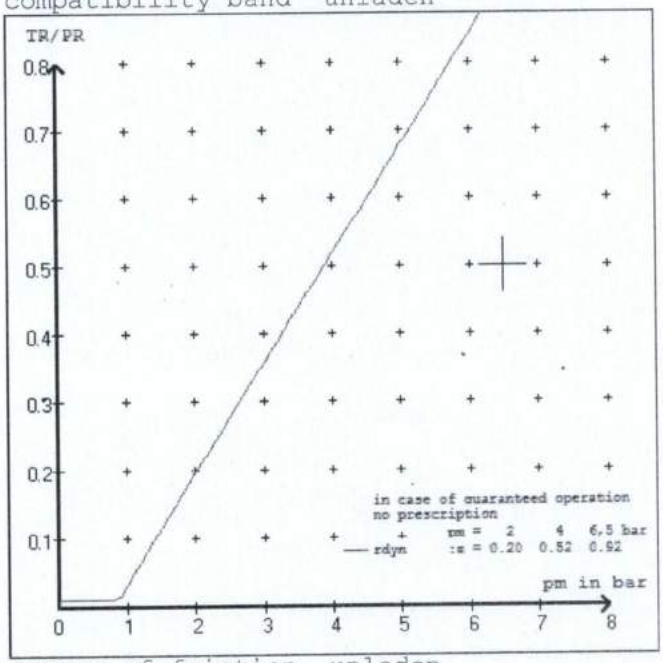
brake chamber pressure unladen



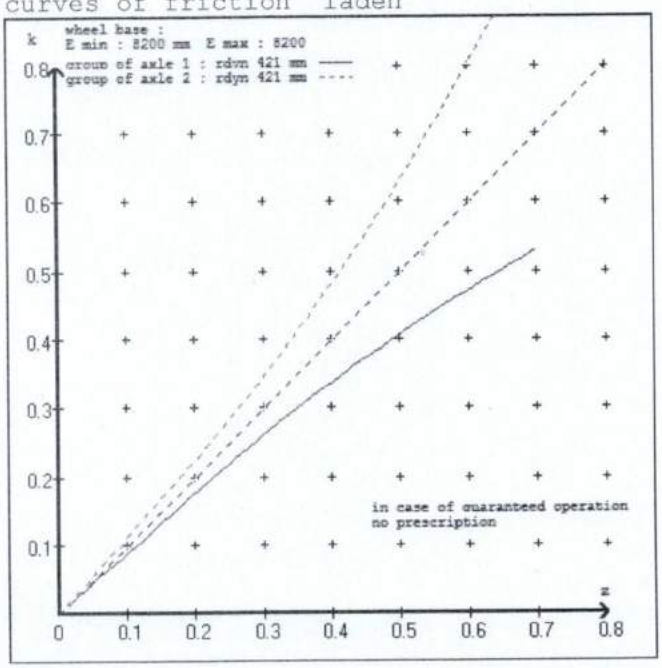
compatibility band laden



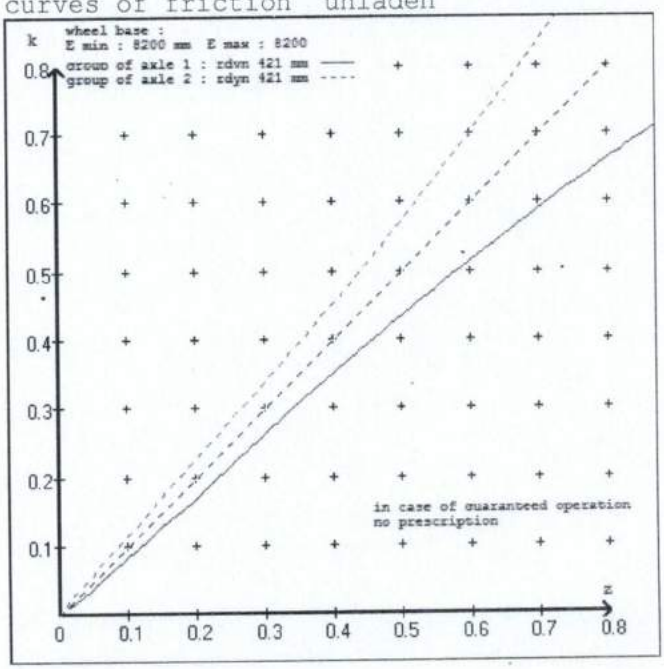
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
trailer model : 5AFT C/SIDE
trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 :	2 x type/diameter	20.	(Meritor)	lever length 69 mm
axle 2 :	2 x type/diameter	20.	(Meritor)	lever length 69 mm
axle 3 :	2 x type/diameter	T.14/24	(Meritor)	lever length 69 mm
axle 4 :	2 x type/diameter	T.14/24	(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	WABCO EBS trailer modulator	

EBS input data
==========
vehicle manufacturer: DOMETT TRAILERS
trailer model : 5AFT C/SIDE
trailer type : 5-axle-full-trailer
brake calculation no. : GenNZ 50157A

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	1700	to be entered by the vehicle manufact.	2.1	8000	to be entered by the vehicle manufact.	0.4	1.4	5.6
2	1700		2.1	8000		0.4	1.4	5.6
3	1380		1.9	6400		0.3	1.4	5.0
4	1380		1.9	6400		0.3	1.4	5.0
5	1380		1.9	6400		0.3	1.4	5.0

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 4		axle 5	
axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl	axle load	pcyl
1700	2.1	1700	2.1	1380	1.9	1380	1.9	1380	1.9
2200	2.4	2200	2.4	1880	2.2	1880	2.2	1880	2.2
2700	2.7	2700	2.7	2380	2.5	2380	2.5	2380	2.5
3200	2.9	3200	2.9	2880	2.8	2880	2.8	2880	2.8
3700	3.2	3700	3.2	3380	3.1	3380	3.1	3380	3.1
4200	3.5	4200	3.5	3880	3.4	3880	3.4	3880	3.4
4700	3.8	4700	3.8	4380	3.8	4380	3.8	4380	3.8
5200	4.0	5200	4.0	4880	4.1	4880	4.1	4880	4.1
8000	5.6	8000	5.6	6400	5.0	6400	5.0	6400	5.0

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 :	20130930 30.09.2013
axle 2 :	reference axle: SAF	SBW 1937	brake lining:	Jurid 539
	test report :	TDB 0749 ECE	date :	20130930 30.09.2013
axle 3 :	reference axle: SAF	SBW 1937	brake lining:	Jurid 539
	test report :	TDB 0749 ECE	date :	20130930 30.09.2013
axle 4 :	reference axle: SAF	SBW 1937	brake lining:	Jurid 539
	test report :	TDB 0749 ECE	date :	20130930 30.09.2013
axle 5 :	reference axle: SAF	SBW 1937	brake lining:	Jurid 539
	test report :	TDB 0749 ECE	date :	20130930 30.09.2013

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 = 23.8 % Fe
axle 2	(rdyn 421 mm)	T = 23.8 % Fe
axle 3	(rdyn 421 mm)	T = 18.6 % Fe
axle 4	(rdyn 421 mm)	T = 18.6 % Fe
axle 5	(rdyn 421 mm)	T = 18.6 % 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 = 6455 N
axle2	ThA = 6455 N
axle3	ThA = 4786 N
axle4	ThA = 4786 N
axle5	ThA = 4786 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 = 38225 N
axle 2	(rdyn 421 mm)	T = 38225 N
axle 3	(rdyn 421 mm)	T = 28278 N
axle 4	(rdyn 421 mm)	T = 28278 N
axle 5	(rdyn 421 mm)	T = 28278 N

	basic test of subject trailer (E)	type III (calculated) residual (hot)braking
braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	0.47
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 = 38225 N
axle 2	(rdyn 421 mm)	T = 38225 N
axle 3	(rdyn 421 mm)	T = 28278 N
axle 4	(rdyn 421 mm)	T = 28278 N
axle 5	(rdyn 421 mm)	T = 28278 N

	basic test of subject trailer (E)	type III (calculated) residual (hot)braking
braking rate of the vehicle (item 4.3.2 to appendix 2 to annex 11)	0.60	0.47
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

		axle 3	axle 4
no of TRISTOP-actuators per axle line	KDZ	2	2
TRISTOP-actuator type		T.14/24	T.14/24
lever length	lBh in mm	69	69
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		3.9674	3.9674
iFb = lBh*Eta*C*rBt/(rBn*rstat)			
	for rstat in mm	401	401
brake force of spring br. Tf	in N	59654	59654
Tf = (TFZ*KDZ-2*Co/lBh)*iFb			
braking rate	zf laden	0.356	
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 = 6185 mm for E = 8200 mm

==========

min Ef = 6185 mm for E = 8200 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	=	2056 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)

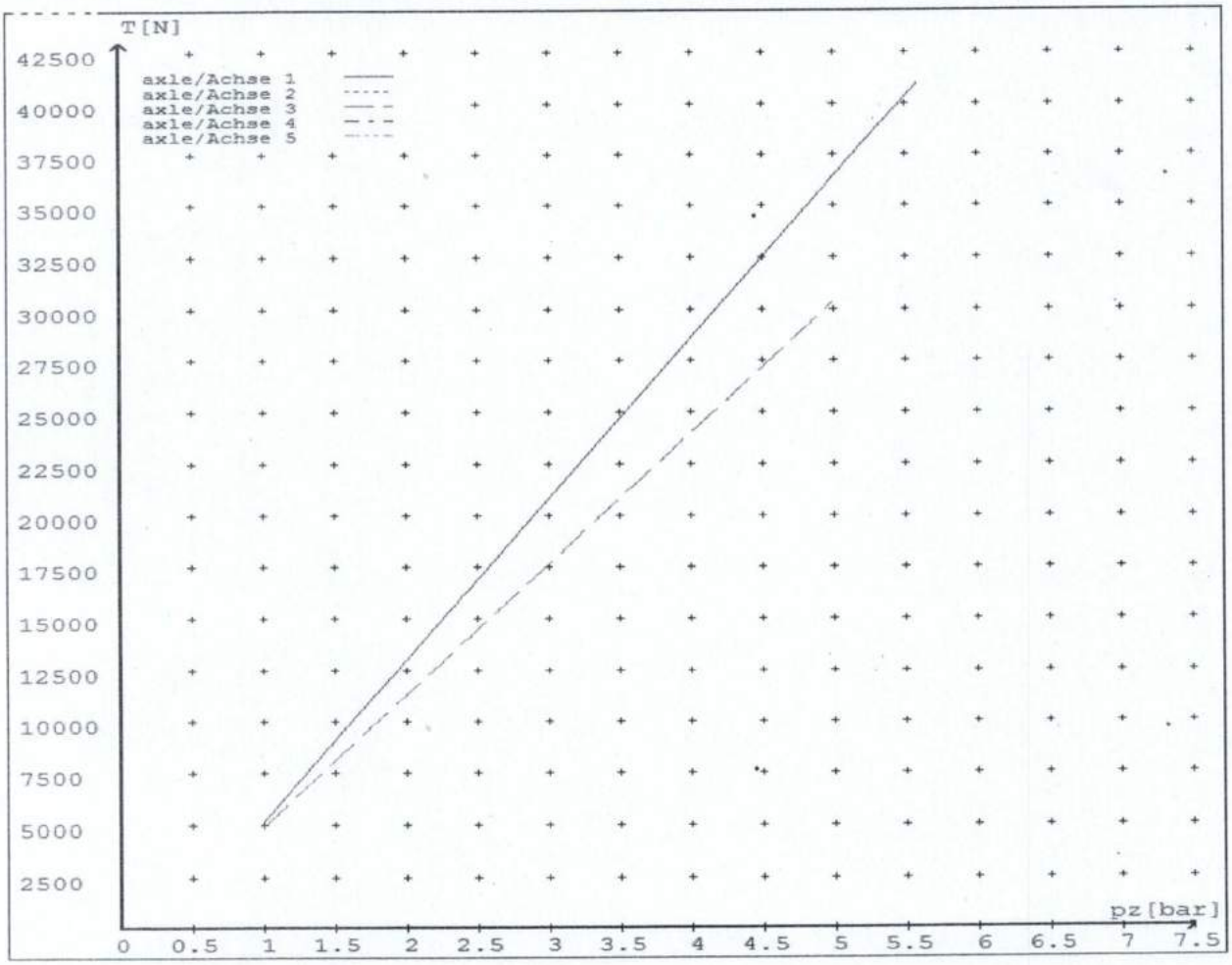
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0 5.6	5095 40968	
axle 2	1.0 5.6	5095 40968	
axle 3	1.0 5.0		4901 30270
axle 4	1.0 5.0		4901 30270
axle 5	1.0 5.0		4901 30270

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	64	64	64
Lever length = ...mm Hebellänge = ...mm	69.08	69.08	69.08	69.08	69.08

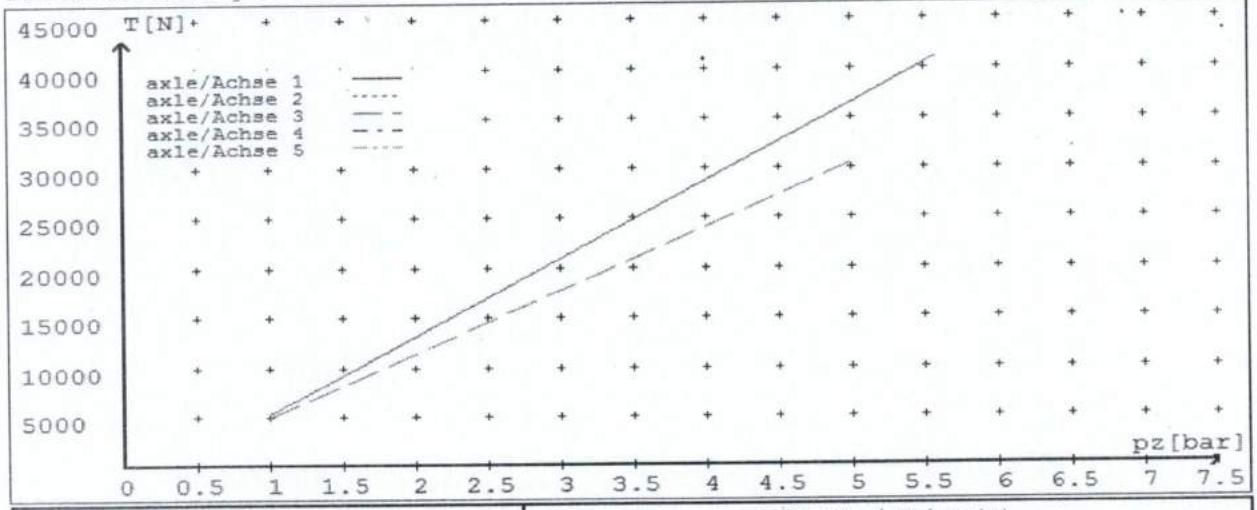


Print on WABCO no. 899 200 922 4 (only possible with laser printers!)

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: GenNZ 50157A date 26.08.2016
Bremsberechnung Nr: GenNZ 50157A vom 26.08.2016



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	T.14/24	T.14/24	14./
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	64	64	64
Lever length = ...mm Hebellänge = ...mm	69.08	69.08	69.08	69.08	69.08

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

distribution: DOMETT TRAILERS
7A9E20012G1023519
PARKING ONLY
CJC164058
LT400 564908

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 08.07.2014

vehicle manufacturer: DOMETT TRAILERS
trailer model : 5AFT C/SIDE
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 3+4: T.14/24
265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBW 1937, TDB 0749 ECE,

		unladen	laden
total mass	P in kg	7540	35200
axle 1	P1 in kg	1700	8000
axle 2	P2 in kg	1700	8000
axle 3	P3 in kg	1380	6400
axle 4	P4 in kg	1380	6400
axle 5	P5 in kg	1380	6400
wheel base	E in mm	8200 - 8200	
centre of gravity height	h in mm	1090	2056

		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		20.	20.	T.16/16	T.16/16	14.
lever length	lBh in mm	69	69	69	69	69
brake factor	[-]	23.03	23.03	23.03	23.03	23.03
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	2.1	2.1	2.2	2.2	2.2
chamber pressure(rdyn max)pH at z=22,5%	bar	2.1	2.1	2.2	2.2	2.2
chamber press.(servo)pcha at pm6,5bar	bar	5.4	5.4	5.1	5.1	5.1
piston force ThA at pm6,5bar	N	6209	6209	5003	5003	4886
brake force(rdyn min)T lad. at pm6,5bar	N	47053	47053	37779	37779	36900
brake force(rdyn max)T lad. at pm6,5bar	N	47053	47053	37779	37779	36900
brake force within 1 % rolling friction proportion	%	22.1	22.1	18.8	18.8	18.3

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

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

spring parking brake

		axle 3	axle 4
no of TRISTOP-actuators per axle line	KDZ	2	2
TRISTOP-actuator type		T.16/16	T.16/16
lever length	lBh in mm	69	69
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	6160	6160
sp.brake chamber no Meritor.....		4	4
release pressure	pLs in bar	4.5	4.5

calculation:

ratio until road		3.9674	3.9674
iFb = lBh*Eta*C*rBt/(rBn*rstat)			
	for rstat in mm	401	401
brake force of spring br. Tf	in N	48189	48189
Tf = (TFZ*KDZ-2*Co/lBh)*iFb			
braking rate	zf laden	0.289	
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 = 6185 mm for E = 8200 mm
==========
min Ef = 6185 mm for E = 8200 mm
==========

min Ef	=		minimum distance between front axle(s) (trailer) or support (semitrailer) 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	=	2056 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)

BRAKE CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
MAKE	TSE	TSE	TSE
SIZE	20HSCLD65	1416HTLD64	14HSCLD64
MAX STROKE (mm)	65	64	64
SLACK LENGTH (mm)	69	69	69
DRUM TYPE:	N/A	N/A	N/A
		OR	
BRAKE CALIPER:	WABCO PAN19	WABCO PAN19	WABCO PAN19

FRICTION MATERIAL: ☑ OEM ☐ AFTERMARKET

LINING BRAND	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
	JURID 539	JURID 539	JURID 539

OTHERS:

TYRES: **FRONT** 265 70 R 19.5 **REAR** 265 70 R 19.5

BRAKE CALCULATION #: GenNZ 50157A

COMMENTS:

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 # **564908**

SALES ORDER #: **PROCESS TIME:**

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:

BRAKE CALCULATION TP51444 USES THE TSE1424HTLD TO DETERMINE THE SERVICE BRAKE PERFORMANCE & THE TSE1616HTLD64 TO MEASURE THE PARK BRAKE PERFORMANCE OF AXLES 4 & 5. THE ACTUAL CHAMBER USED (TSE1416HTLD64) IS NOT AVAILABLE IN THE WABCO BRAKE CALCULATOR.

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: 26-Aug-16 **SIGNED:**

NAME & ID: C CLARKE (CJC)

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:

GOUGH Transpecs

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**

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(C CLARKE (CJC) HVEK)

GOUGH Transpecs

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an **E**lectronic **B**rake **S**ystem.

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.

C J Clarke
(CJC HVEK)
(027 200 2084)