

Heavy vehicle specialist inspector's or manufacturing inspecting organisation's name (PRINT IN CAPS) **CHRIS CLARKE** ID **CJC**

Plate number (optional)

VIN/chassis number **7A9D10017N2023179**

Make **DOMETT** Component being certified:  Chassis  Load anchorage

Model (optional) **D1001**  Log bolsters  Towing connection  Brakes

Certification category **HVEK**  SRT  PSV stability  PSV rollover

Swept path  PBS

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015: NZ HEAVY VEHICLE BRAKE SPECIFICATION.  
 CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.  
 4A TANKER  
 RSS ON TYRE: 265 70 R19.5  
 FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.

Code/standard/rule certified to  Component load rating(s)

LTR 32015, SCHEDULE 5  26 Tonnes GVM

General drawing number(s)  15 Tonne (Front group ratings)

N/A  15 Tonne (Rear group ratings)

Supporting documents

BRAKE RULE CERTIFICATE LC220511

BRAKE CALCULATION # 2022 SAF 4A WPC

Special conditions (optional)

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

Certification expiry date (if applicable)  OR Hubodometer reading (whichever comes first)

N/A [UNLESS MODIFIED]

**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) **LPC**

Inspector's signature 

Inspector's name (PRINT IN CAPS) **LANCE CAWTE**

Date **07.06.2022**

Inspector's name (PRINT IN CAPS) **CHRIS CLARKE** ID number **830358**

CoF vehicle inspector ID (if applicable)

CoF vehicle inspector signature (if applicable)

Date

All fields are mandatory unless otherwise stated.

# WABCO START-UP LOG

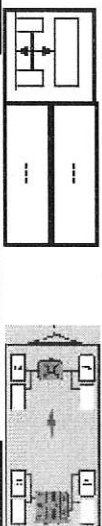
System	Trailer EBS-E	WABCO part number	480 102 064 0
Production date	2020-12-15	Serial number	436080501200F
Serial number (modulator)	000000539117		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2022-06-07 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

## WABCO

### TRAILER EBS-E

GGV/S/ADR TÜEH TB 2007 - 019.00  
TDB 0878

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT		
VEHICLE IDENT. NUMBER TYPE	4A TANKER, D1001		
CHASSIS NUMBER NUMERO DE CHASSIS	7A9D10017N2023179		
BREMSENRÜCHENUNGS-NR. GRUND-ÖL-PRÜFNUMMER NO. POLE POSITION	2022 SAF 4A WPC		
POLE POSITION POLE POSITION DENTS ROUE DENTEE c-d1 e1	90	90	AS-System Abs-System 4S/3M
Einzelbremsung Single Tire Kontrollschaltung Zweitachssteuerung Twin Tire Monte-Jaehre	X		Leitachse Steuerung axle Espier Vitreur Kippschütliches Fahrzeug Critical Trailer Vehicule critique
Subsystems	I/O		24N



ACHTER AXLE ESSIEU	pm (bar)	6.5	pm (bar)	0.8	2.0	6.5	pz	TYP	TYP TYPE	(mm)	(mm)	TR (dan)	
												1.0	Pz
1	1400	0.5	1.5	7500	4.7	0.4	1.3	---	20	65	76	534	4241
2	1400	0.5	1.5	7500	4.7	0.4	1.3	---	20	65	76	534	4241
3	1200	0.4	1.2	7500	4.7	0.4	1.5	---	16 / 16	63	76	496	3115
4	1200	0.4	1.2	7500	4.7	0.4	1.5	---	16 / 16	63	76	496	3115
5	0	---	---	---	---	---	---	---	---	---	---	---	---

#### 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	Vehicle ident. no.	7A9D10017N2023179
Vehicle type	4A TANKER, D1001	Odometer reading	0.0 km
Next service	0 km	Trip reading	0.0 km
Tester	Chris Clarke	Signature	
Date	2022-06-07 12:52:19 pm		

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

distribution: DOMETT  
2022 WABCO 4A WPC

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 (V6.18.07.12).  
-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 correspond to the actual vehicle data.  
Our conditions of delivery (particularly section 9.0):  
In any case we commend to do a braking harmonisation!  
WABCOBrake V6.18.07.12 dp 31.08.2018

vehicle manufacturer: DOMETT  
trailer model : 4A TANKER, D1001  
trailer type : 4-axle-full-trailer  
remarks : air / hydraulic / VA suspension  
WABCO TRAILER - EBS  
TRISTOP 3+4: 16/16  
265/70 R 19,5

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

		<u>unladen</u>				<u>laden</u>
total mass		P	in	kg	5200	30000
axle 1		P1	in	kg	1400	7500
axle 2		P2	in	kg	1400	7500
axle 3		P3	in	kg	1200	7500
axle 4		P4	in	kg	1200	7500
wheel base		E	in	mm	5070	
centre of gravity height		h	in	mm	700	1492

		<u>axle 1</u>		<u>axle 2</u>		<u>axle 3</u>		<u>axle 4</u>	
no. of combined axles		1	1	1	1	1	1	1	1
no. of brake chambers per axle line	KDZ	2	2	2	2	2	2	2	2
The power output corresponds to	BZ 122.1	BZ 122.1	IBC 0006.0	IBC 0006.0	IBC 0006.0	IBC 0006.0	IBC 0006.0	IBC 0006.0	IBC 0006.0
brake chamber manufacturer	Meritor	Meritor	Meritor	Meritor	Meritor	Meritor	Meritor	Meritor	Meritor
chamber size		20.	20.	20.	20.	16/16	16/16	16/16	16/16
lever length	LBh	in	mm	69	69	69	69	69	69
brake factor		23.03	23.03	23.03	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	6.0

calculation:

chamber pressure(rdyn min)	pH at z=22,5%bar	2.3	2.3	2.2	2.2
chamber pressure(rdyn max)	pH at z=22,5%bar	2.3	2.3	2.2	2.2
chamber press.(servo)pcha at pm6,5bar	bar	5.8	5.8	4.9	4.9
piston force	ThA at pm6,5bar	N	6702	4974	4974
brake force(rdyn min)T lad. at pm6,5bar	N	50729	50729	37673	37673
brake force(rdyn max)T lad. at pm6,5bar	N	50729	50729	37673	37673
Brake force incl. 1% rolling resistance	%	26.5	26.5	23.5	23.5

braking rate z laden 0.601 for rdyn min  
z = sum (TR)/PRmax 0.601 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 20HSCLD65

axle 2:

valve 1: 480 207 0.. 0 WABCO or 480 207 2.. 0  
EBS relay valve

brake cylinder: Meritor 20HSCLD65

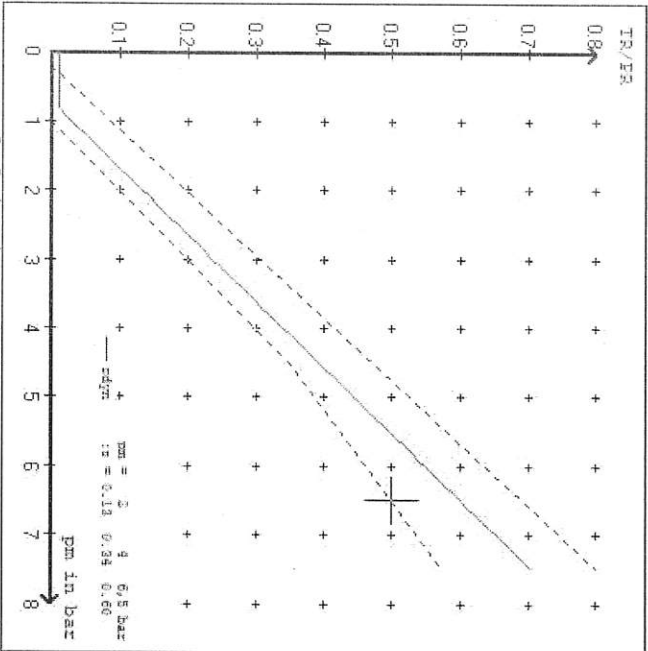
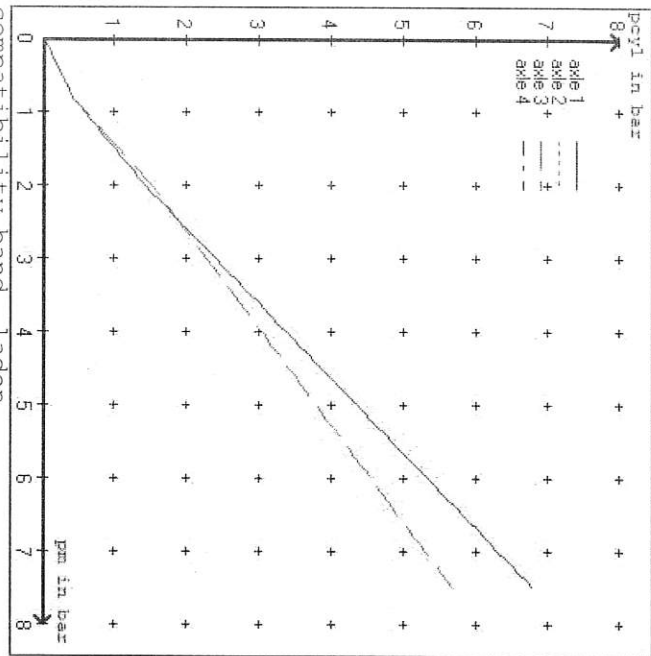
axle 3:

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

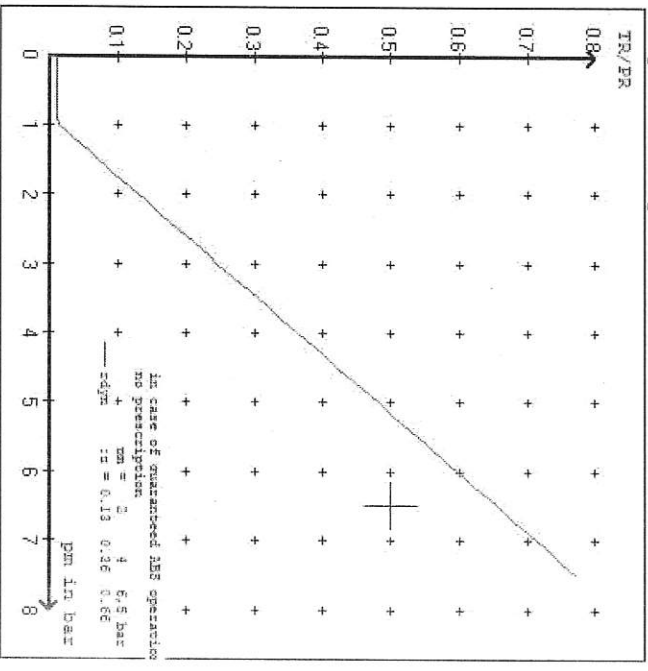
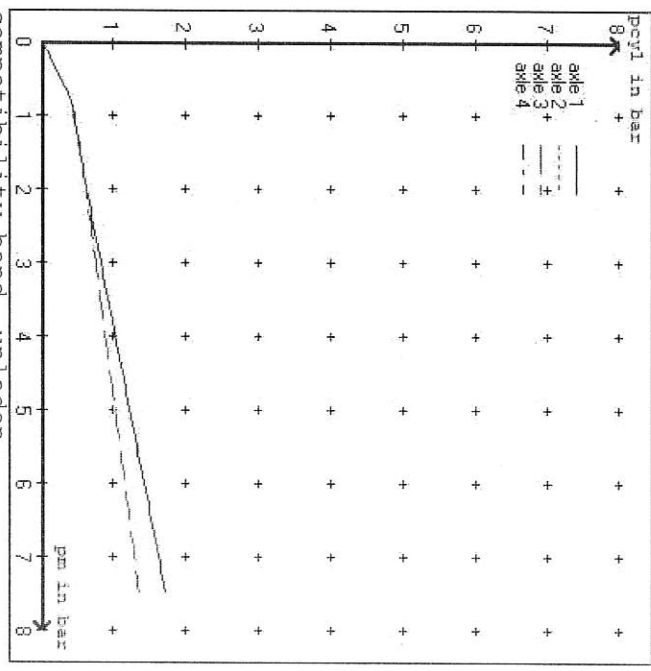
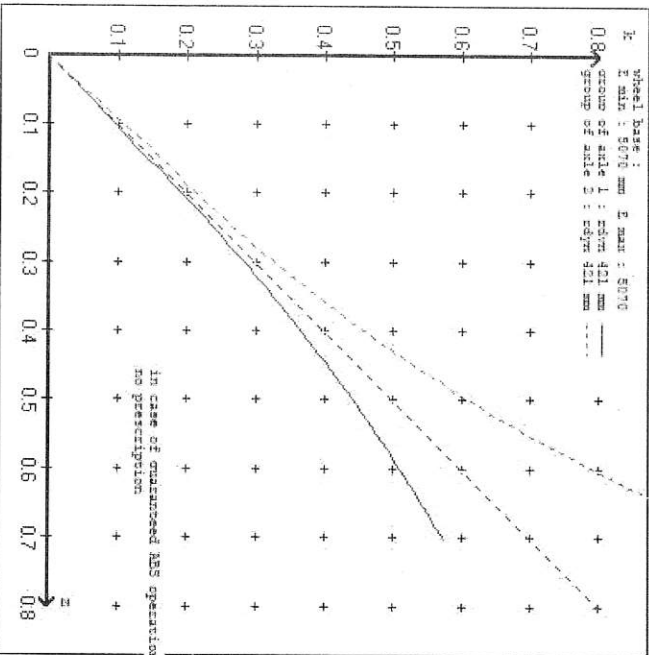
brake cylinder: WABCO 925 464 4.. 0 / 925 484 96. 0

axle 4 :  
valve 1: 480 102 ... 0 WABCO  
EBS trailer modulator  
brake cylinder: WABCO 925 464 4.. 0 / 925 484 96. 0

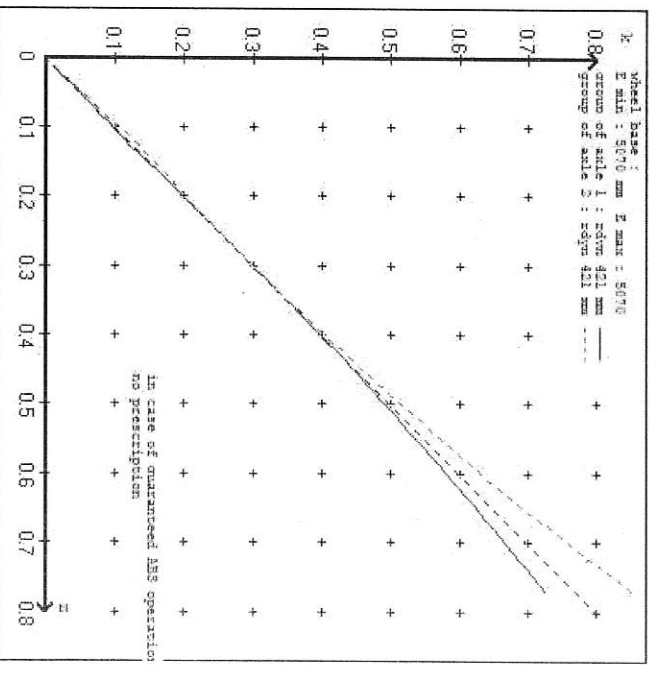
test type III	(ZIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4
at pm	3.6 bar =>	pcha in bar :	3.0	3.0	2.7	2.7
test type III	(ZIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4
at pm	1.3 bar =>	pcha in bar :	0.8	0.8	0.9	0.9



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT  
 trailer model : 4A TANKER, D1001  
 trailer type : 4-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 16/16 (WABCO) lever length 69 mm  
 axle 4 : 2 x type/diameter 16/16 (WABCO) lever length 69 mm

brake diagram :

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  
 trailer model : 4A TANKER, D1001  
 trailer type : 4-axle-full-trailer  
 brake calculation no. : TP 2022A

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  
 2.0 bar z = 0.134  
 (Laden condition) 6.5 bar z = 0.600

axle	control pressure pm		brake pr. unladen	axle load laden	control pressure pm		brake pr. laden	brake pr. laden	brake pr. laden
	axle load unladen	bellow pr. unladen			axle load laden	bellow pr. laden			
1	1400	to be	1.5	7500	to be	0.4	1.4	5.8	
2	1400	entered by	1.5	7500	entered by	0.4	1.4	5.8	
3	1200	the vehicle	1.2	7500	the vehicle	0.4	1.5	4.9	
4	1200	manufact.	1.2	7500	manufact.	0.4	1.5	4.9	
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 load pcyl axle 2 axle load pcyl axle 3 axle load pcyl axle 4 axle load pcyl

1400	1.5	1400	1.5	1200	1.2	1200	1.2
1900	1.9	1900	1.9	1700	1.5	1700	1.5
2400	2.2	2400	2.2	2200	1.8	2200	1.8
2900	2.6	2900	2.6	2700	2.1	2700	2.1
3400	2.9	3400	2.9	3200	2.4	3200	2.4
3900	3.3	3900	3.3	3700	2.7	3700	2.7
4400	3.6	4400	3.6	4200	3.0	4200	3.0
4900	4.0	4900	4.0	4700	3.3	4700	3.3
7500	5.8	7500	5.8	7500	4.9	7500	4.9

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

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 = 24.4 % Fe
axle 2	(rdyn 421 mm)	T = 24.4 % Fe
axle 3	(rdyn 421 mm)	T = 19.7 % Fe
axle 4	(rdyn 421 mm)	T = 19.7 % 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 = 51 mm)	s = 39 mm
axle 4	(sp = 51 mm)	s = 39 mm

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

axle1	ThA = 6702 N
axle2	ThA = 6702 N
axle3	ThA = 4974 N
axle4	ThA = 4974 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 = 39620 N
axle 2	(rdyn 421 mm)	T = 39620 N
axle 3	(rdyn 421 mm)	T = 29492 N
axle 4	(rdyn 421 mm)	T = 29492 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 0.47

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 = 39620 N
axle 2	(rdyn 421 mm)	T = 39620 N
axle 3	(rdyn 421 mm)	T = 29492 N
axle 4	(rdyn 421 mm)	T = 29492 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 0.47

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



spring parking brake

	axle 3	axle 4
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	16/16	16/16
lever length	69	69
stat. tyre radius	401	401
	rstat max in mm	
at a stroke of	S	in mm
min. force of spring brake	TFZ in N	
sp.brake chamber no 925	464	464
sp.brake chamber no 925	96	96
release pressure	5.0	5.0
	pls in bar	

calculation:

```

ratio until road          3.9674      3.9674
iFb = 1Bh*Eta+C*rBt/(rBn+rstat)
for rstat in mm          401         401
brake force of spring br. Tf in N    49157      49157
Tf = (TFZ*KDZ-2*Co/1Bh)*iFb

braking rate              zf laden          0.344
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 = 3617 mm    for E = 5070 mm
=====
min Ef = 3617 mm    for E = 5070 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 = 1492 mm height of center of gravity - laden
PR = 15000 kg maximum bogie mass - laden
P = 30000 kg maximum total mass - laden
nF = 2 no. of axle(s) with TRISTOP spring brake actuators
ng = 2 no. of bogie axle(s)
    
```

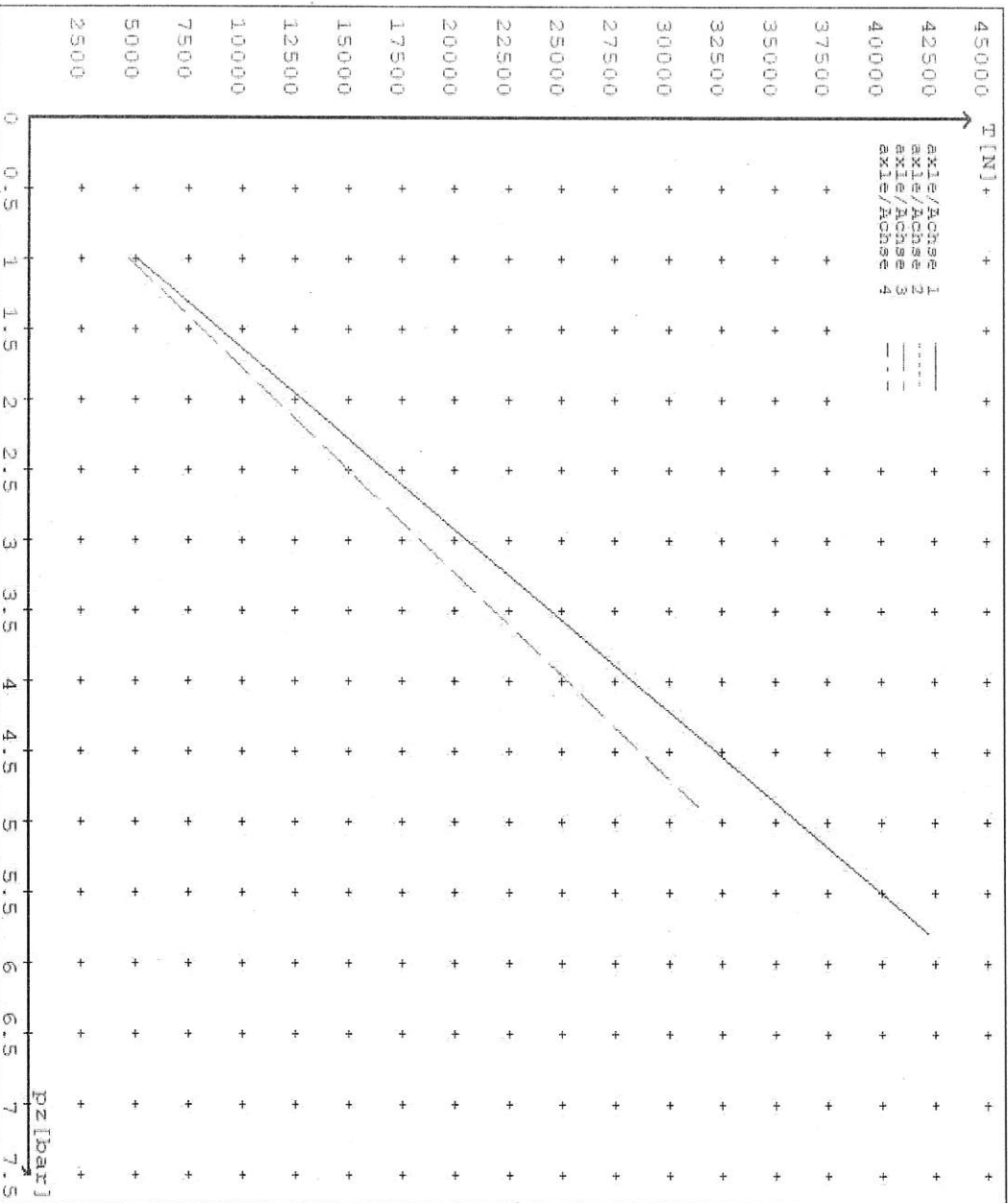
**reference values**

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

	pz [bar]	T [N]	T [N]
axle 1	1.0	5021	
	5.8	42203	
axle 2	1.0	5021	
	5.8	42203	
axle 3	1.0		4662
	4.9		31342
axle 4	1.0		4662
	4.9		31342

VIN - no.:

		Axle(s) / Achse(n)			
Brake cylinder type (service / parking)		20. /	20. /	16/16	16/16
Bremszylinder Typ (Betrieb / Fest)		65	65	63	63
Maximum stroke smax = ...mm					
maximaler Hub smax = ...mm					
Lever length = ...mm		69.08	69.08	69.08	69.08
Hebellänge = ...mm					







**NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015  
WORKSHEET, PROCEDURE DOCUMENTATION SHEET  
& CONFIRMATION OF COMPLIANCE**

**CLIENT**

**MANUFACTURER:** DOMETT TRAILERS  
**ADDRESS:** Taurikura Drive, Tauranga 3110  
**FLEET:** FONTEERRA

**VEHICLE DETAILS**

**VEHICLE TYPE:** 4A TANKER **CERT #:** LC220511  
**YEAR:** 2022 **CALCULATION #:** 2022 SAF 4A WPC  
**MAKE:** DOMETT **REGO #:**  
**MODEL:** D1001 **LT400 #:** 830358  
**CHASSIS #:** 2179 **ORDER #:** 8869  
**VIN #:** 7A9D10017N2023179

**GVM: t** 26 **PRIME MOVER:** EBS / EUROPEAN

**LOAD CONFIGURATION:** UNIFORM DENSITY

**GROUP RATINGS: t** **FRONT** **REAR**

15 15  
 5.07

**WHEEL BASE: m** **UNLADEN COG m** **MAX HEIGHT m** **HEIGHT DECK m**

0.7 2.38 1.00

**COG: m** 1.492

**TARE: t** **FRONT** **REAR** **TOTAL**

2.8 2.4 5.2  
**TYRE SIZE:** 265 70 R19.5 265 70 R19.5 265 70R 19.5

**ROLLING CIRCUMFERENCE: MM** 2645 2645

**AXLE SPACING: m** 1.3 1.3

**BRAKE & AXLE DETAILS**

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-Z19W	TDB0749
POLE WHEEL FRONT:	90	POLE WHEEL REAR:	90
LINING MATERIAL:	JURID 539	BRAKE FACTOR:	23.03
SENSED AXLES:	1 + 3	NOTES:	
SERIAL NUMBERS:	1		
	2		
	3		
	4		
	5		

**CHAMBER AND VALVING DETAILS**

	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
CHAMBERS:	TSE_CHAMBERS	WABCO_CHAMBERS	N/A
BRAND:	20HSCLD	1616 (925/464/461/0)	N/A
SIZE:	65	63	
STROKE: mm	BC 0041.0 Jul '07	BC 0006.0	
TEST REPORT #:	N/A	6.28	
SPRING BRAKE FORCE: kN	N/A	5	
HOLDOFF PRESSURE: Bar	WABCO PAN19	WABCO PAN19	
FOUNDATION BRAKE:	76	76	N/A
LEVER LENGTH: mm	MAKE:	PART NUMBER:	PM PRESS. kPa
BRAKE VALVES:	WABCO	480 102 08. 0 (MV)	80 kPa
ECU PART #:	WABCO	480 207 001 0 (24V)	80 kPa
3RD MODULATOR #:	YES		
ANTI-COMPOUNDING:	SEALCO_SBR	110701	
SPRING BRAKE RELAY:	SEALCO_YR	17600B	
YARD RELEASE VALVE:	N/A	N/A	
INLINE RELAY FITTED:			
ECU DIRECTION:	<input checked="" type="checkbox"/> FRONT	<input type="checkbox"/> REAR	FRONT FRICTION: $\mu$ 0.51
SUBSYSTEMS:	<input type="checkbox"/> SMARTBOARD	<input type="checkbox"/> OPT-LINK	<input type="checkbox"/> CAN ROUTER 446 122 050 0
	<input type="checkbox"/> ELEX 446 122 070 0	<input type="checkbox"/> TAILGUARD	

**SUSPENSION**

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	PNEUMATIC
MAKE:	SAF_AIRSPRING	SAF_AIRSPRING
MODEL:	SAF_INTRA	SAF_INTRA
BELLOW SIZE:	2619, 300mm	2619, 300mm
HEIGHT CONTROL VALVE:	464 008 011 0	464 008 011 0
OTHER VALVES:	NORGREN 3042402	NORGREN 3042402
RIDE HEIGHT <small>MM</small> :	250	250
HANGER HEIGHT <small>MM</small> :		
PEDESTAL HEIGHT <small>MM</small> :		
LIFT AXLE:	N/A	N/A
TIPPING DUMP SWITCH:		PNEUMATIC
LIFTAXLE VALVE:		N/A
PRESSURE LIMITING:		N/A

**AIR TANKS**

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: L	C51902, 48L	C51902, 48L
AUXILIARY TANK SIZE: L		C51901, 25L x 2
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

**AIR LINES**

TEST POINTS:		
CONTROL LINE:	FILTER X 1	TANK: ECU X 1
REAR CHAMBER:	ECU X 2	FRONT CHAMBER: LEFT 1st
DUOMATIC COLOUR CODED:	YES	

**ELECTRONIC HEIGHT SENSOR CALIBRATION**

	TIMER TICKS [F/R]	MILLIMETRE [F / R]
UPPER LEVEL:	<input type="text"/>	<input type="text"/>
NORMAL LEVEL:	<input type="text"/>	<input type="text"/>
LOWER LEVEL:	<input type="text"/>	<input type="text"/>

**CHECKS AT COMMISSION OF VEHICLE**

CHAMBER BUNGS REMOVED:  VALVE MOUNTING:

ECU BLANKING PLUGS CHECKED:

RESPONSE TIME:	MODULATOR 2.1	MODULATOR 2.2	RELAY VALVE
ms:	<input type="text" value="255"/>	<input type="text" value="265"/>	<input type="text" value="295"/>

**NOTES AND SPECIAL CONDITIONS**

3/12/2021 received est build schedule. 15/12/2021 request to do project, receive drawings etc.  
24/3/2022 start files, request and receive product and trailer data. 25/3/2022 do calculations and ECU files.  
29/03/2022 Advised air reservoirs changed. Redo paperwork to reflect change.  
25/05/2022 Complete paperwork,SODC & ECU file and send.

**REASON FOR CERTIFICATION:** NEW TRAILER

I UNDERSTAND AND DECLARE THAT I AM THE CERTIFIER IDENTIFIED BELOW AND HOLD A CURRENT VALID APPOINTMENT. I CERTIFY THAT AT THE TIME OF INSPECTION THE ABOVE MENTIONED VEHICLE COMPONENT DESIGN 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.

**RULE / STD COMPLIED TO:**

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015, SCHEDULE 5, ADR 35, EGE R13, FMVSS 121

DATE: 7/06/2022

SIGNED: Lance Cawte

CERTIFIER NAME & ID: CHRIS CLARKE CJC

SODC BY: LANCE CAWTE LPC

PHONE (BUS): 09-980-7300

FAX:

POSTAL ADDRESS: P.O. Box 98-971, Manukau 2241  
New Zealand