NZ TRANSPORT AGENCY
WAKA KOTAHI

Heavy vehicle specialist certificate

Must be presented to a CoF (heavy) inspecting organisation if not entered into LANDATA

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

ID: **CJC**

Vehicle registration *(optional)*:

VIN/chassis number: **7A9C20031L2023024**

Make: **DOMETT**

Model *(optional)*: **C2003 PH**

Certification category: **HVEK**

Component being certified:

- [ ] Chassis
- [ ] Load anchorage
- [ ] Log bolsters
- [ ] Towing connection
- [X] Brakes
- [ ] SRT
- [ ] PSV stability
- [ ] PSV rollover
- [ ] Swept path
- [ ] PBS

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/5: NZ HEAVY VEHICLE BRAKE SPECIFICATION.
CARRY OUT BRAKE CALCULATIONS, INSPECTION AND ECU END OF LINE PROTOCOL.
3ASBTF CURTAINSIDE RSS ON TYRE: 265 70 R19.5
FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.

Code/standard/rule certified to: LTR 32015/5

Component load rating(s): 33 Tonnes GVM
19 Tonnes (Rear brake mass)

General drawing number(s): N/A

Supporting documents

BRAKE RULE CERTIFICATE JH201211
BRAKE CALCULATION # TP52191

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)*: N/A [UNLESS MODIFIED]

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)*: JOHN HIRST J E H

Inspector's signature:

Inspector's name *(PRINT IN CAPS)*: CHRIS CLARKE

ID number:

Date: 12-Jan-21

Number: 770240

CoF vehicle inspector ID *(if applicable)*:

CoF vehicle inspector signature *(if applicable)*:

Date:

All fields are mandatory unless otherwise stated.

WABCO START-UP LOG

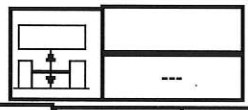
System	Trailer EBS-E	**WABCO part number**	480 102 080 0
Production date	2020-08-10	**Serial number**	437009242100A
Serial number (modulator)	000000519784		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2021-01-12 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

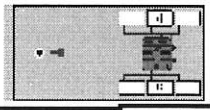
WABCO TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00
361-071-04

HERSTELLER MANUFACTURER CONSTRUCTEUR	DOMETT TRAILERS
TYP TYPE TYPE	3ASBTF CURTAINSIDE
VEHICLE IDENT. NUMBER CHASSIS NUMBER NUMERO DE CHASSIS	7A9C20031L2023024
BREMSBERECHNUNGS-NR. BRAKE CALCULATION NO. CALCUL DE FREINAGE NO.	TP52191S
POLRADZÄHNEZAHL c-d | e-f POLE WHEEL TEETH c-d | e-f DENTS ROUE DENTÉE c-d | e-f	90 --- ABS-System ABS-System Système ABS: 2S/2M
RSS RSS RSS — Einfachbereifung Single Tire Monte simple	
RSS RSS RSS — Zwillingsbereifung Twin Tire Monte jumelée	X
Lenkachse Steering axle Essieu vireur	
Kippkritisches Fahrzeug Critical Trailer Véhicule critique	
Subsystems	SB I/O 24N

GIO	Pin1	Pin3	Pin4
1	24V-O1	---	---
2	eTASC	---	eTASC
3	---	---	---
4	---	---	LS1
5	DIAG	DIAG	DIAG
6	---	---	---
7	---	---	---





ACHSE AXLE ESSIEU	pm (bar)		6.5	pm (bar)		0.8	2.0	---	6.5		TYP TYPE	(mm)	(mm)	(bar) 1.0	(bar) Pz
									pz					TR (daN)	
1	1200	0.4	2.0	6350	3.6	0.5	1.5	---	5.5	-	16 / 24	65	74	345	2805
2	1200	0.4	2.0	6350	3.6	0.5	1.5	---	5.5	-	16 / 24	65	74	345	2805
3	1200	0.4	2.0	6350	3.6	0.5	1.5	---	5.5	-	16	65	74	345	2805
4	0	---	---	0	---	---	---	---	---	-	---	---	---	---	---
5	0	---	---	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 TRAILERS	**Vehicle ident. no**	7A9C20031L2023024
Vehicle type	3ASBTF CURTAINSIDE	**Odometer reading**	0.0 km
next Service	0 km	**Trip reading**	0.0 km
Tester	Chris Clarke		
Date	2021-01-12 3:09:49 PM	**Signature**	

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

distribution: DOMETT TRAILERS
7A9C20031L2023024
SODC: JH201211
LT400: CJC 770240

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 (V6.18.07.12).
-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 apply (particularly section 9.0).
In any case we commend to do a braking harmonisation!
WABCOBrake V6.18.07.12 db 31.08.2018

vehicle manufacturer: DOMETT TRAILERS
trailer model : 3ASBTF CURTAINSIDE
trailer type : 3-axle-semi-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 1+2: 16/24
265/70 R 19,5

axle 1 + 2 + 3 : Assali Stefen, K, 361-071-04 ECE Re 432,

		unladen	laden
total mass	P in kg	5000 - 6000	32000 - 34000
king-pin	PS kg	1400 - 2400	12950 - 14950
axle 1	P1 in kg	1200	6350
axle 2	P2 in kg	1200	6350
axle 3	P3 in kg	1200	6350
total axle mass	PR in kg	3600	19050
wheel base	E in mm	6700 - 6800	
centre of gravity height	h in mm	757	2100
K-factor		Kv min 2.1088	Kc min 0.9766
K-factor		Kv max 2.1373	Kc max 0.9954

		axle 1	axle 2	axle 3
no. of combined axles		1	1	1
no. of brake chambers per axle line	KDZ	2	2	2
The power output corresponds to		BC 0165.2	BC 0165.2	BC 0169.2
brake chamber manufacturer		Haldex	Haldex	Haldex
chamber size		16/24	16/24	16"
lever length	lBh in mm	74	74	74
brake factor	[-]	20.26	20.26	20.26
dyn. rolling radius	rdyn min in mm	421	421	421
dyn. rolling radius	rdyn max in mm	421	421	421
threshold torque	Co Nm	7.0	7.0	7.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%	bar	2.3	2.3	2.3
chamber pressure(rdyn max)pH at z=22,5%	bar	2.3	2.3	2.3
chamber press.(servo)pcha at pm6,5bar	bar	5.5	5.5	5.5
piston force ThA at pm6,5bar	N	5294	5294	5294
brake force(rdyn min)T lad. at pm6,5bar	N	37655	37655	37655
brake force(rdyn max)T lad. at pm6,5bar	N	37655	37655	37655
Brake force incl. 1 % rolling resistance				
proportion	%	33.3	33.3	33.3

braking rate z laden 0.604 for rdyn min
z = sum (TR)/PRmax 0.604 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: Haldex 135 1624 ... / 175 1624...

axle 2:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

brake cylinder: Haldex 135 1624 ... / 175 1624...

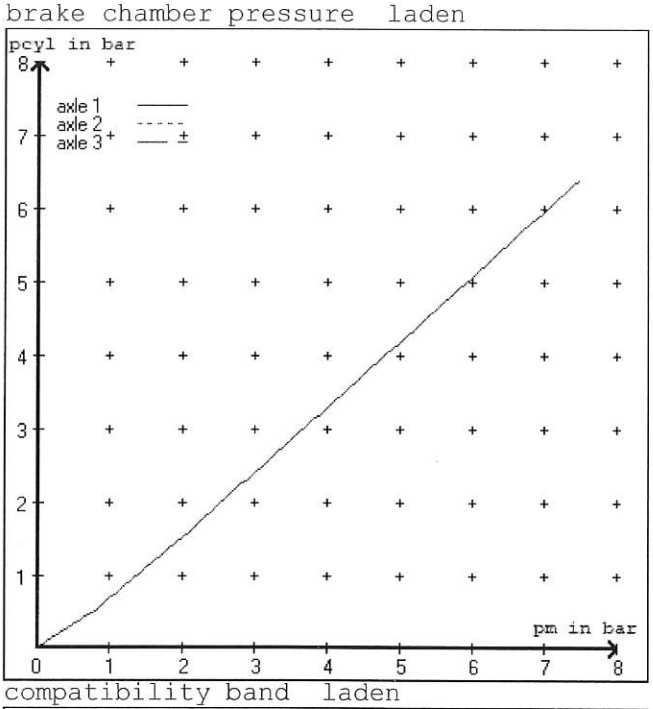
axle 3:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

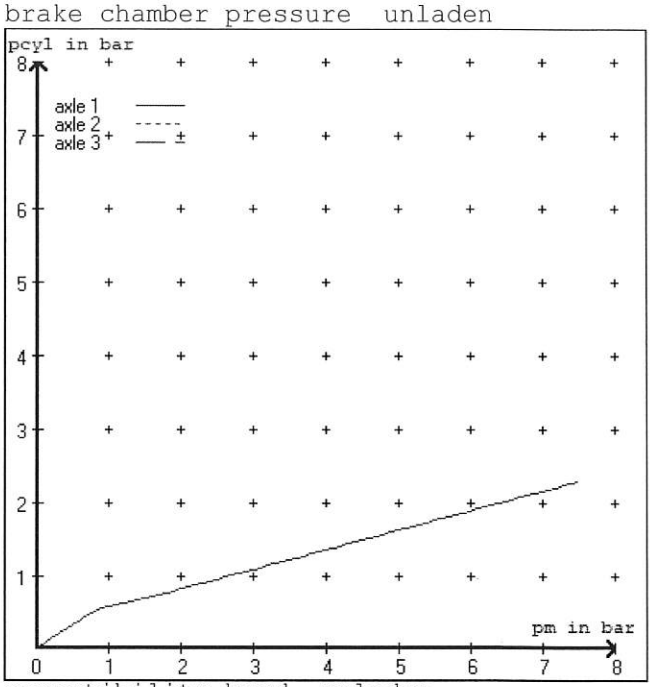
brake cylinder: Haldex 125 160 0.. - 125 160 5.. / 125 160 6.. - 125 160 9..

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3
at pm 3.6 bar =>	pcha in bar :	2.9	2.9	2.9
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3
at pm 1.3 bar =>	pcha in bar :	0.9	0.9	0.9

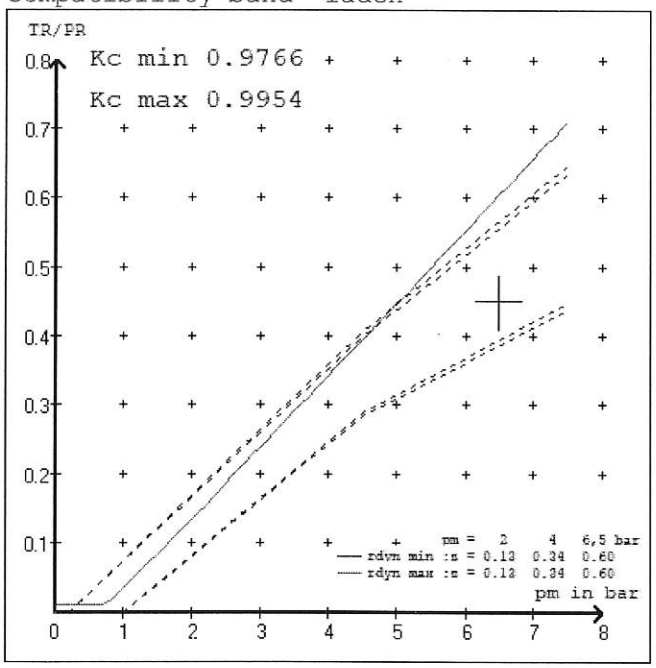
brake chamber pressure laden



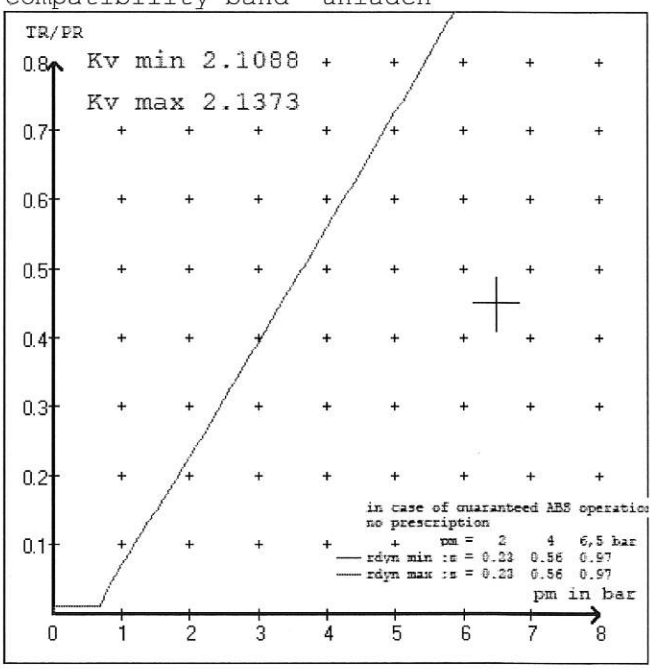
brake chamber pressure unladen



compatibility band laden



compatibility band unladen



vehicle manufacturer: DOMETT TRAILERS
trailer model : 3ASBTF CURTAINSIDE
trailer type : 3-axle-semi-trailer

brake chamber and lever length :
axle 1 : 2 x type/diameter 16/24 (Haldex) lever length 74 mm
axle 2 : 2 x type/diameter 16/24 (Haldex) lever length 74 mm
axle 3 : 2 x type/diameter 16" (Haldex) lever length 74 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
==========
vehicle manufacturer: DOMETT TRAILERS
trailer model : 3ASBTF CURTAINSIDE
trailer type : 3-axle-semi-trailer
brake calculation no. : TP 52191S

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	1200	to be	2.0	6350	to be	0.5	1.5	5.5
2	1200	entered by	2.0	6350	entered by	0.5	1.5	5.5
3	1200	the vehicle	2.0	6350	the vehicle	0.5	1.5	5.5
4	0	manufact.	0,0	0	manufact.	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
1200	2.0	1200	2.0	1200	2.0
1700	2.3	1700	2.3	1700	2.3
2200	2.7	2200	2.7	2200	2.7
2700	3.0	2700	3.0	2700	3.0
3200	3.4	3200	3.4	3200	3.4
3700	3.7	3700	3.7	3700	3.7
4200	4.0	4200	4.0	4200	4.0
4700	4.4	4700	4.4	4700	4.4
6350	5.5	6350	5.5	6350	5.5

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

axle 1 :	reference axle: Assali StefTM or LM or LCen		brake lining: ROR 8616 AF (M13)
	test report : 361-071-04 ECE Re 432		date : GA310709
axle 2 :	reference axle: Assali StefTM or LM or LCen		brake lining: ROR 8616 AF (M13)
	test report : 361-071-04 ECE Re 432		date : GA310709
axle 3 :	reference axle: Assali StefTM or LM or LCen		brake lining: ROR 8616 AF (M13)
	test report : 361-071-04 ECE Re 432		date : GA310709

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 = 17.3 % Fe
axle 2	(rdyn 421 mm)	T = 17.3 % Fe
axle 3	(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 = 51 mm)	s = 38 mm
axle 2	(sp = 51 mm)	s = 38 mm
axle 3	(sp = 51 mm)	s = 38 mm

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

axle1	ThA = 5294 N
axle2	ThA = 5294 N
axle3	ThA = 5294 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 = 32282 N
axle 2	(rdyn 421 mm)	T = 32282 N
axle 3	(rdyn 421 mm)	T = 32282 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	0.52
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 = 32282 N
axle 2	(rdyn 421 mm)	T = 32282 N
axle 3	(rdyn 421 mm)	T = 32282 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	0.52
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 1	axle 2
no of TRISTOP-actuators per axle line	KDZ	2	2
TRISTOP-actuator type		16/24	16/24
lever length	lBh in mm	74	74
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	6003	6003
sp.brake chamber no Haldex		135 162	135 162
sp.brake chamber no Haldex		175 162	175 162
release pressure	pLs in bar	5.2	5.2

calculation:

ratio until road		3.7388	3.7388
iFb = lBh*Eta*C*rBt/(rBn*rstat)			
	for rstat in mm	401	401
brake force of spring br. Tf	in N	44180	44180
Tf = (TFZ*KDZ-2*Co/lBh)*iFb			
braking rate	zf laden	0.483	
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 = 5017 mm for E = 6700 mm
==========
min Ef = 5084 mm for E = 6800 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	=	2100 mm	height of center of gravity - laden
PR	=	19050 kg	maximum bogie mass - laden
P	=	34000 kg	maximum total mass - laden
nf	=	2	no. of axle(s) with TRISTOP spring brake actuators
ng	=	3	no. of bogie axle(s)

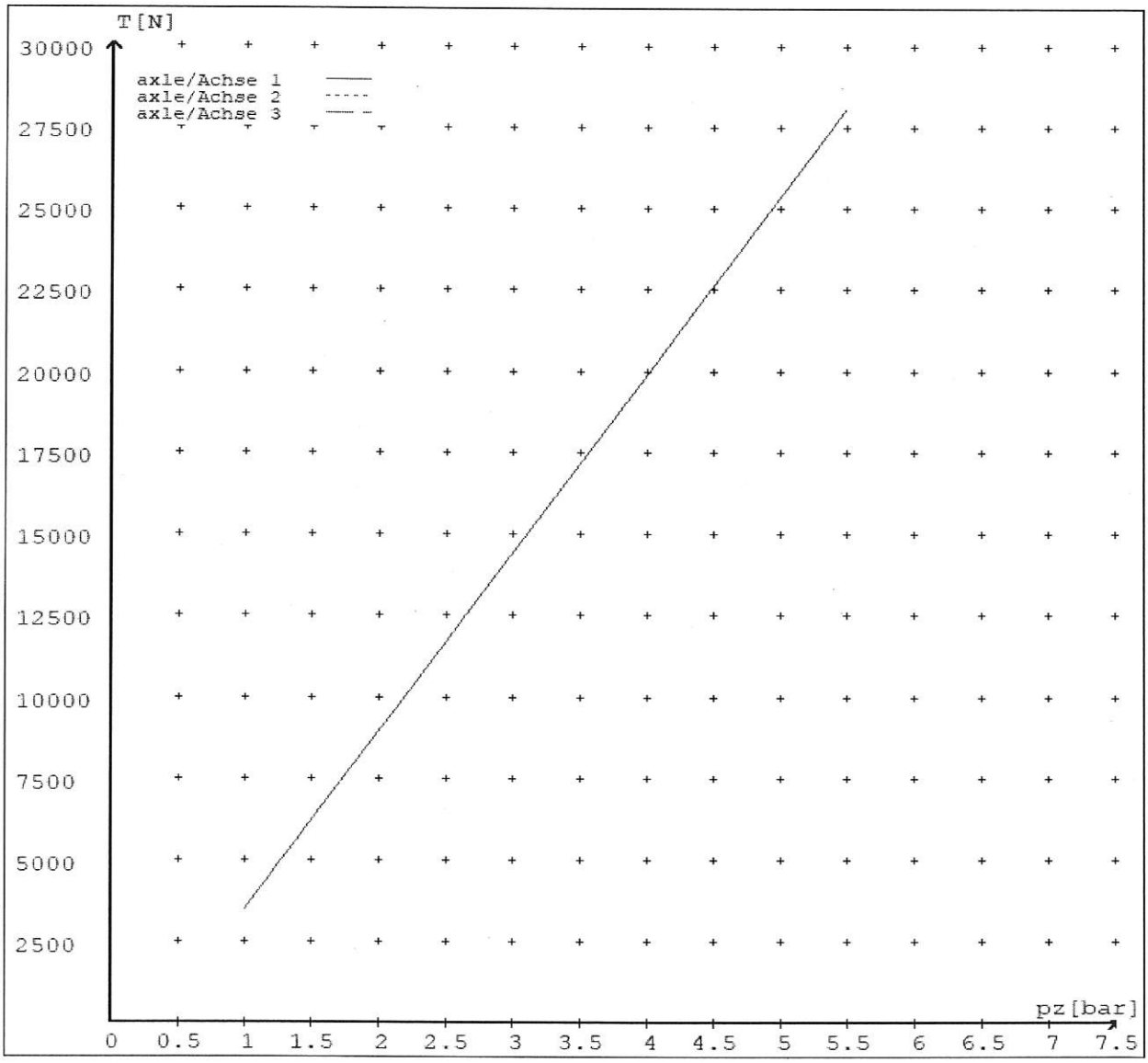
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0 5.5		3459 28054
axle 2	1.0 5.5		3459 28054
axle 3	1.0 5.5		3459 28054

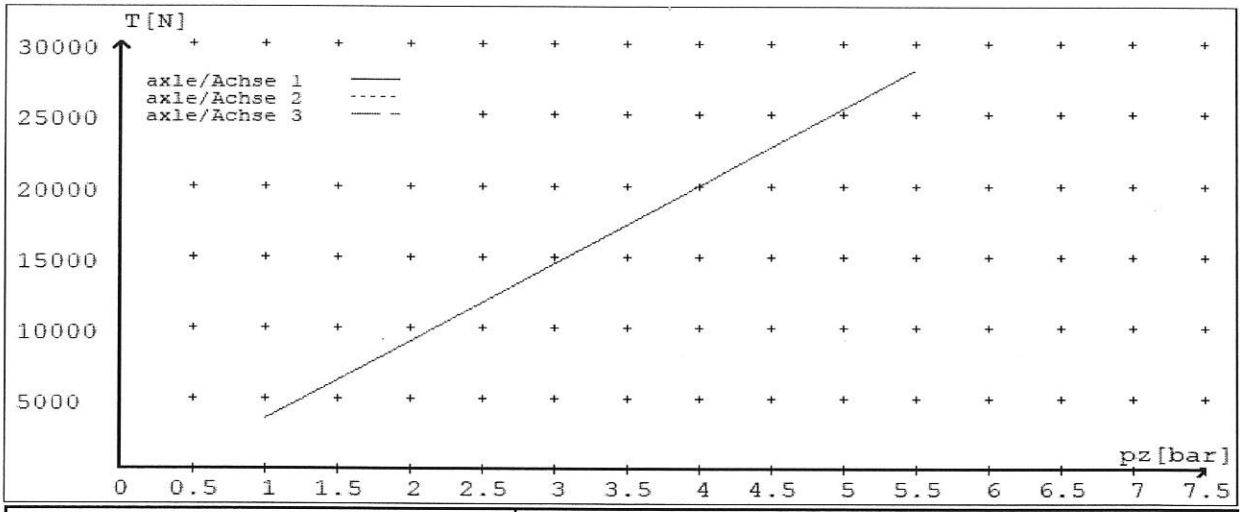
VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	16/24	16/24	16"/	/	/
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	65		
Lever length = ...mm Hebellänge = ...mm	74	74	74		



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

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: TP 52191S date 08.12.2020
Bremsberechnung Nr: TP 52191S vom 08.12.2020



	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	16/24	16/24	16"/	/	/
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	65		
Lever length = ...mm Hebellänge = ...mm	74	74	74		

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 32015/5.

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 32015/5. 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**

(p.p.).....
(J.Hirst (JEH) 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 32015/5, 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.

(p.p.)
J E Hirst
(JEH HVEK)
(09 980 7300)

GOUGH Transpecs

NOTICE TO VEHICLE OPERATOR

WABCO Park Release Emergency Valve (PREV)

This trailer is equipped with a WABCO PREV
Part # 971 002 900 0

Application of the park brake via the cab control valve will actuate and apply all service brakes on the trailer. In the event of a leak in the service brake system the Spring Brakes will automatically override and hold the vehicle in compliance to Land Transport Rule: Heavy-vehicle Brakes Rule 32015/5.

When the vehicle is presented for COF the trailer park brake system is tested by pulling the red actuation knob on the PREV, situated mid way down the chassis rail. The cab control in the prime mover does not have to be applied for this test procedure.

If you are unsure of any aspect relating to this instruction please contact either the vehicle manufacturer or myself.

(p.p.)
J E Hirst
(JEH HVEK)
(09 980 7300)

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015-5
WORKSHEET, PROCEDURE DOCUMENTATION SHEET
& CONFIRMATION OF COMPLIANCE

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKURA DRIVE, TAURANGA 3110
FLEET:	FITCHETT LINEHAUL

VEHICLE DETAILS

VEHICLE TYPE:	3ASBTF CURTAINSIDE	**CERT #:**	JH201211
YEAR:	2020	**CALCULATION #:**	TP52191
MAKE:	DOMETT	**REGO #:**	N/A
MODEL:	C2003 PH	**LT400 #:**	770240
CHASSIS #:	2024	**ORDER #:**	7795
VIN #:	7A9C20031L2023024		
GVM: *t*	33	**PRIME MOVER:**	EBS / EUROPEAN
LOAD CONFIGURATION:	MIXED FREIGHT		

	FRONT	REAR
GROUP RATINGS: *t*	14	19
WHEEL BASE: *m*	6.77	

	UNLADEN COG *m*	MAX HEIGHT *m*	HEIGHT DECK *m*
	0.757	4.3	1.123
COG: *m*	2.084		

	FRONT	REAR	TOTAL
TARE: *t*	1.8	3.6	5.4

	REAR
TYRE SIZE:	265 70 R19.5
ROLLING CIRCUMFERENCE: *mm*	2645
AXLE SPACING: *m*	3

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	ROR_ASSALI_STEFEN	ROR-CS9 I DISC	361-071-04
STEER AXLE[S]:	NO	**POLE WHEEL:**	90
LINING MATERIAL:	ROR 8616	**BRAKE FACTOR:**	20.26
SENSED AXLES:			**NOTES:**
SERIAL NUMBERS: 1	N/A		RORCS9L
2	N/A		RORCS9L
3	N/A		RORCS9L
4	N/A		N/A

CHAMBER AND VALVING DETAILS

CHAMBERS:	**AXLE 1 & 2**	**AXLE 3**	
BRAND:	HALDEX_CHAMBERS	HALDEX_CHAMBERS	
SIZE:	1624 (135 1624)	16, (125 160)	
STROKE: *mm*	65	65	
TEST REPORT #:	BC0165.0	BC0169.0	
SPRINGBRAKE FORCE: *kN*	6.003	N/A	
HOLDOFF PRESSURE: *Bar*	5.2	N/A	
FOUNDATION BRAKE:	MERITOR	MERITOR	
LEVER LENGTH: *mm*	74	74	
BRAKE VALVES:	**MAKE:**	**PART NUMBER:**	**PM PRESS.** *kPa*
ECU PART #:	WABCO	480 102 08. 0 (MV)	80 kPa
3RD MODULATOR #:	N/A	N/A	N/A
ANTI-COMPOUNDING:	YES		
SPRING BRAKE RELAY:	WABCO_PREV	971 002 900 0	
YARD RELEASE VALVE:	WABCO-PREV	971 002 900 0	
INLINE RELAY FITTED:	N/A	N/A	

ECU DIRECTION:	☑ FRONT	☐ REAR	
SUBSYSTEMS:	☑ SMARTBOARD	☐ OPTI-LINK	☑ CAN ROUTER 446 122 050 0
	☐ ELEX 446 122 070 0	☐ TAILGUARD	

SUSPENSION

	REAR
SUSPENSION TYPE:	ELECTRONIC
MAKE:	ROR_AIRSPRING
MODEL:	ROR_INTRA
BELLOW SIZE:	CS9I
HEIGHT CONTROL VALVE:	441 050 100 0
OTHER VALVES:	463 090 500 0 (eTASC)
RIDE HEIGHT *mm* :	245
HANGER HEIGHT *mm* :	225
PEDESTAL HEIGHT *mm* :	50
LIFTAXLE:	N/A
DUMP SWITCH:	N/A
LIFTAXLE VALVE:	N/A

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2

	REAR
BRAKE TANK SIZE: L	46 + 25
AUXILLARY TANK SIZE: L	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0

AIR LINES

TEST POINTS:	
CONTROL LINE:	X 1
FIXED AXLE CHAMBERS:	X 2
STEER AXLE CHAMBERS:	N/A

DUOMATIC COLOUR CODED:	YES
TANK:	X 1

ELECTRONIC HEIGHT SENSOR CALIBRATION

	TIMER TICKS [F/R]	MILLIMETRE mm [F / R]
UPPER LEVEL:	1329	320
NORMAL LEVEL:	1282	245
LOWER LEVEL:	1249	190

CHECKS AT COMMISSION OF VEHICLE

CHAMBER BUNGS REMOVED:	☑	**VALVE MOUNTING:**	☑
ECU BLANKING PLUGS CHECKED:	☑	**DUOMATIC DRILLED:**	☑

RESPONSE TIME:	**MODULATOR 2.1**	**MODULATOR 2.2**	**RELAY VALVE**
ms:	215	230	N/A

NOTES AND SPECIAL CONDITIONS

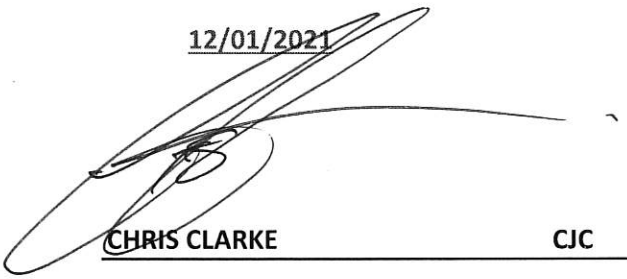
REASON FOR CERTIFICATION: NEW TRAILER

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.

NEW ZEALAND HEAVY VECHLE BRAKE RULE 32015/5, SCHEDULE 5.

DATE: 12/01/2021

SIGNED:



CERTIFIER NAME & ID:	**CHRIS CLARKE**	**CJC**
SODC BY:	**JOHN HIRST**	**JEH**
PHONE (BUS):	**09-980-7300**	
FAX:		
POSTAL ADDRESS:	**P.O. Box 98-971, Manukau 2241** **New Zealand**	