

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

CHRIS CLARKE

ID

CJC

Plate number (optional)

VIN/chassis number

7A9E23019T2023569

Make

DOMETT

Component being certified:

☐ Chassis

☐ Load anchorage

Model (optional)

E2301

☐ Log bolster attachment

☐ 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.

5AFT TIP CURTAINSIDE

RSS ON TYRE: 265 70 R19.5

FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.

REASON FOR CERTIFICATION:

NEW TRAILER BUILD

Code/standard/rule certified to

LTR 32015

Component load rating(s)

32 Tonnes GVM

General drawing number(s)

N/A

16 Tonne (Front brake mass)

19 Tonne (Rear brake mass)

Supporting documents

BRAKE RULE CERTIFICATE

JH260808

BRAKE CALCULATION #

TP53165

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

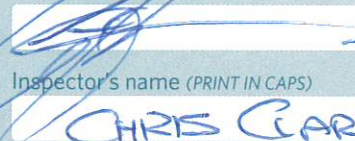
I the undersigned, declare that I am the heavy vehicle specialist inspector identified and I hold a current valid appointment. I certify that the above mentioned vehicle component's design, manufacture and installation, and this certification complies in all respects with the Land Transport Rule: Vehicle 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

JEH

Inspector's signature



Inspector's name (PRINT IN CAPS)

CHRIS CLARKE

ID number

CJC

Date

17-Aug-26

Serial number (includes letter)

H 26544

CoF vehicle inspector ID (if applicable)

CoF vehicle inspector signature (if applicable)

Date

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

distribution: DOMETT TRAILERS
 7A9E23019T2023569
 SoDC: JH260808
 LT400: CJC H26544

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 13.10.2020

vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT TIP CURTAINSIDE
 trailer type : 5-axle-full-trailer
 remarks : air / hydraulic / VA suspension
 WABCO TRAILER - EBS E
 TRISTOP 3+4: T.14/24 [TSE1416HTLD ARE ACTUALLY FITTED -
 SEE PAGE 7 FOR PERFORMANCE DATA]
 265/70 R 19,5

axle 1 + 2 + 3 + 4 + 5 : SAF, SBS1918, TDB 0878 ECE,

		<u>unladen</u>	<u>laden</u>
total mass	P in kg	9300	35050
axle 1	P1 in kg	2400	8000
axle 2	P2 in kg	2400	8000
axle 3	P3 in kg	1500	6350
axle 4	P4 in kg	1500	6350
axle 5	P5 in kg	1500	6350
wheel base	E in mm	6700 - 6900	
centre of gravity height	h in mm	1100	2260

		<u>axle 1</u>	<u>axle 2</u>	<u>axle 3</u>	<u>axle 4</u>	<u>axle 5</u>
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	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	1.9	1.9	1.9	
chamber pressure(rdyn max)pH at z=22,5%bar	2.2	2.2	1.9	1.9	1.9	
chamber press.(servo)pcha at pm6,5bar bar	6.0	6.0	4.1	4.1	4.1	
piston force ThA at pm6,5bar N	6948	6948	3884	3884	3884	
brake force(rdyn min)T lad. at pm6,5bar N	56263	56263	31356	31356	31356	
brake force(rdyn max)T lad. at pm6,5bar N	56263	56263	31356	31356	31356	
Brake force incl. 1 % rolling resistance						
proportion %	22.3	22.3	18.5	18.5	18.5	

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: 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:

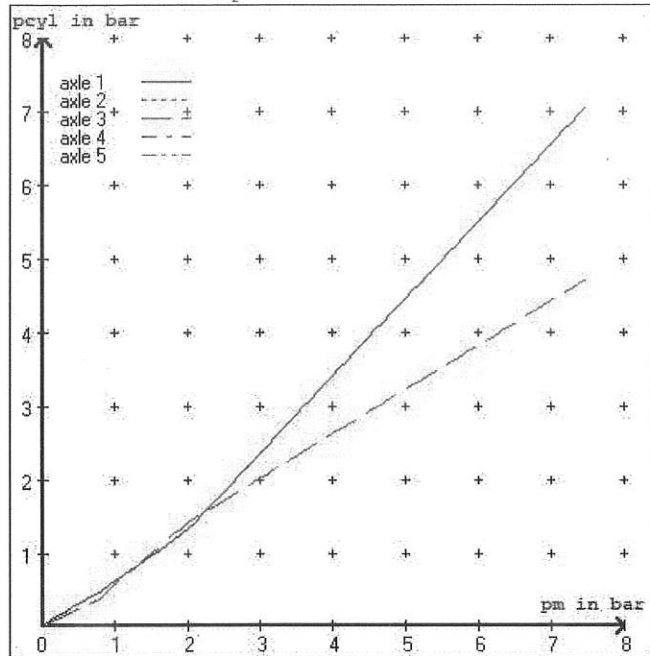
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

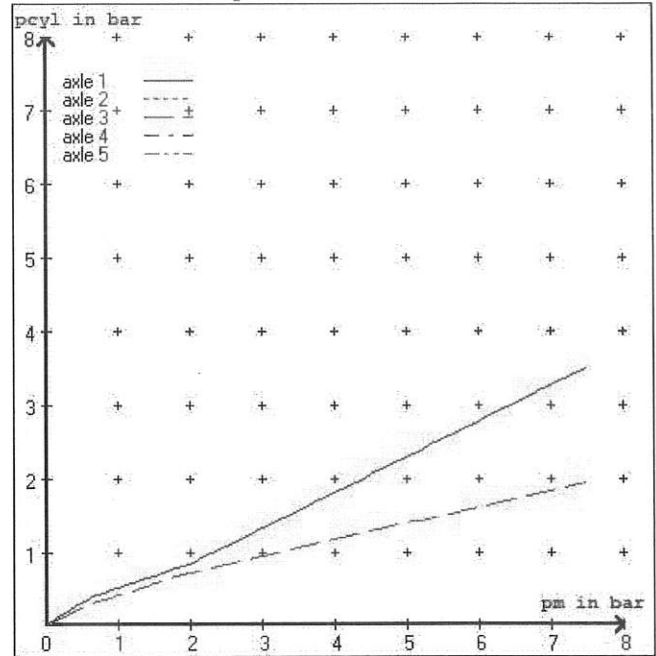
brake cylinder: Meritor 14HSCLD64

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	2.3	2.3	2.3	
test type III (zIII = 0.06)	for rdyn min :	axle1	axle2	axle3	axle4	axle5	
at pm 1.2 bar =>	pcha in bar :	0.8	0.8	0.7	0.7	0.7	

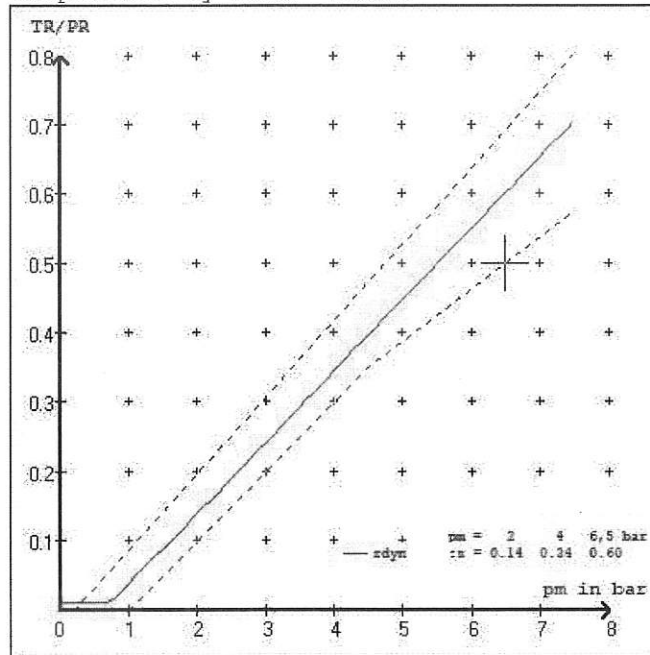
brake chamber pressure laden



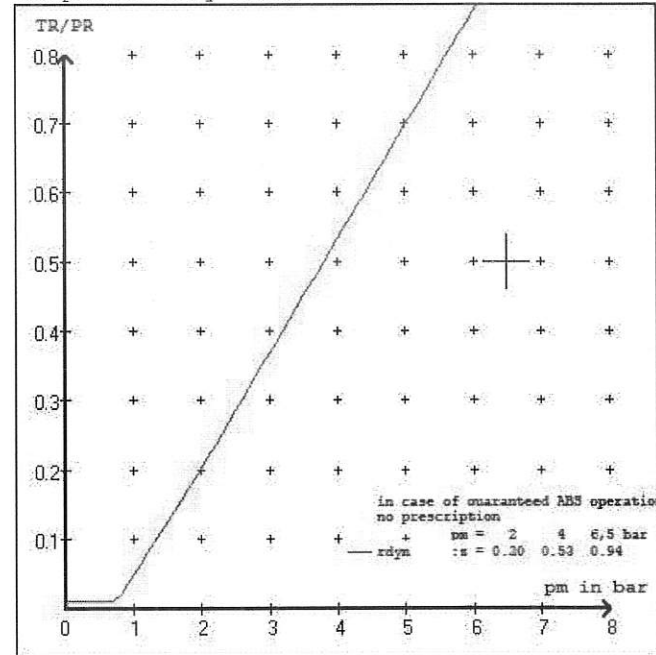
brake chamber pressure unladen



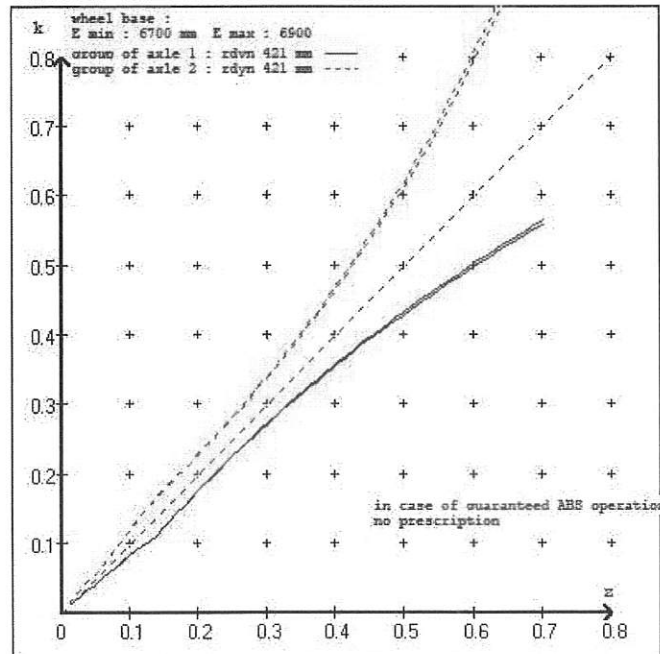
compatibility band laden



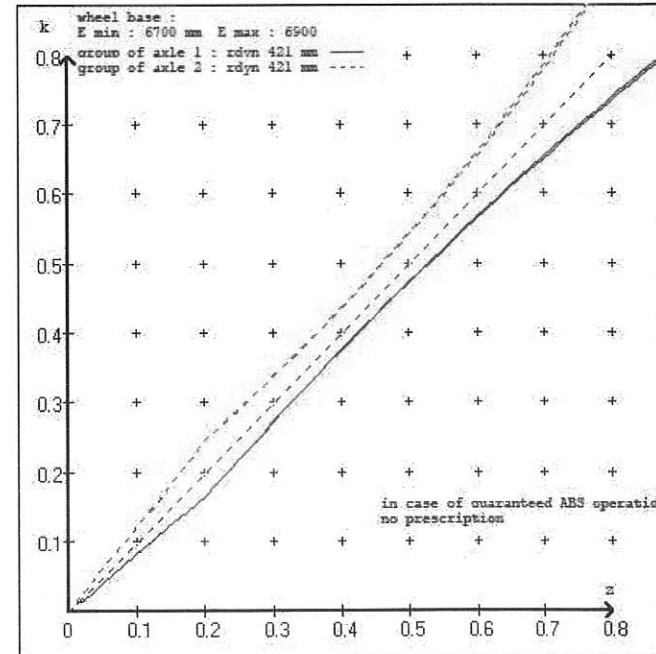
compatibility band unladen



curves of friction laden



curves of friction unladen



vehicle manufacturer: DOMETT TRAILERS
 trailer model : 5AFT TIP CURTAINSIDE
 trailer type : 5-axle-full-trailer

brake chamber and lever length :

axle 1 : 2 x type/diameter 20. (Meritor) lever length 76 mm
 axle 2 : 2 x type/diameter 20. (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 :

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 TIP CURTAINSIDE
 trailer type : 5-axle-full-trailer
 brake calculation no. : TP 53165A

tire circumference main axle : 2650 for rdyn max
 tire circumference auxiliary axle : 2650 for rdyn max

assignment pm / deceleration z: pm 0.7 bar z = 0.010
 (laden condition) 2.0 bar z = 0.142
 6.5 bar z = 0.600

control pressure pm			6,5	control pressure pm			0.7	2.0	6.5
axle	axle load unladen	bellow pr. unladen	brake pr. unladen	axle load laden	bellow pr. laden	brake pr. laden			
1	2400	to be	3.0	8000	to be		0.4	1.3	6.0
2	2400	entered by	3.0	8000	entered by		0.4	1.3	6.0
3	1500	the vehicle	1.7	6350	the vehicle		0.3	1.4	4.1
4	1500	manufact.	1.7	6350	manufact.		0.3	1.4	4.1
5	1500		1.7	6350			0.3	1.4	4.1

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
2400 3.0	2400 3.0	1500 1.7	1500 1.7	1500 1.7
2900 3.3	2900 3.3	2000 1.9	2000 1.9	2000 1.9
3400 3.5	3400 3.5	2500 2.2	2500 2.2	2500 2.2
3900 3.8	3900 3.8	3000 2.4	3000 2.4	3000 2.4
4400 4.1	4400 4.1	3500 2.7	3500 2.7	3500 2.7
4900 4.3	4900 4.3	4000 2.9	4000 2.9	4000 2.9
5400 4.6	5400 4.6	4500 3.2	4500 3.2	4500 3.2
5900 4.9	5900 4.9	5000 3.4	5000 3.4	5000 3.4
8000 6.0	8000 6.0	6350 4.1	6350 4.1	6350 4.1

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

axle 1 : reference axle: SAF	SBS1937	brake lining: SAF 607
test report :	TDB 0878 ECE	date : 20150626
axle 2 : reference axle: SAF	SBS1937	brake lining: SAF 607
test report :	TDB 0878 ECE	date : 20150626
axle 3 : reference axle: SAF	SBS1937	brake lining: SAF 607
test report :	TDB 0878 ECE	date : 20150626
axle 4 : reference axle: SAF	SBS1937	brake lining: SAF 607
test report :	TDB 0878 ECE	date : 20150626
axle 5 : reference axle: SAF	SBS1937	brake lining: SAF 607
test report :	TDB 0878 ECE	date : 20150626

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 = 25.8 % Fe
axle 2	(rdyn 421 mm)	T = 25.8 % Fe
axle 3	(rdyn 421 mm)	T = 17.1 % Fe
axle 4	(rdyn 421 mm)	T = 17.1 % Fe
axle 5	(rdyn 421 mm)	T = 17.1 % Fe

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

axle 1	(sp = 58 mm)	s = 48 mm
axle 2	(sp = 58 mm)	s = 48 mm
axle 3	(sp = 56 mm)	s = 48 mm
axle 4	(sp = 56 mm)	s = 48 mm
axle 5	(sp = 56 mm)	s = 48 mm

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

axle1	ThA = 6948 N
axle2	ThA = 6948 N
axle3	ThA = 3884 N
axle4	ThA = 3884 N
axle5	ThA = 3884 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 = 38715 N
axle 2	(rdyn 421 mm)	T = 38715 N
axle 3	(rdyn 421 mm)	T = 21508 N
axle 4	(rdyn 421 mm)	T = 21508 N
axle 5	(rdyn 421 mm)	T = 21508 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
		0.41

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 = 38715 N
axle 2	(rdyn 421 mm)	T = 38715 N
axle 3	(rdyn 421 mm)	T = 21508 N
axle 4	(rdyn 421 mm)	T = 21508 N
axle 5	(rdyn 421 mm)	T = 21508 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
		0.41

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

spring parking brake

	<u>axle 3</u>	<u>axle 4</u>
no of TRISTOP-actuators per axle line KDZ	2	2
TRISTOP-actuator type	T.14/16	T.14/16
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	6160	6160
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	51564	51564
Tf = (TFZ*KDZ-2*Co/lBh)*iFb		
braking rate	0.310	
zf = sum (Tf)/P + 0,01		
zf laden		

Test of the frictional connection required by the parking brake

Min. wheelbase/min. supporting width (theoretical proof / no ECE regulation!):
In the event of non-compliance, carry out a practical test or use the procedure
described in ECE / Appendix 20.

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

$$\min E_f = 5231 \text{ mm} \quad \text{for} \quad E = 6700 \text{ mm}$$

$$\min E_f = 5368 \text{ mm} \quad \text{for } E = 6900 \text{ mm}$$

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	=	2260 mm height of center of gravity - laden
PR	=	19050 kg maximum bogie mass - laden
P	=	35050 kg maximum total mass - laden
nf	=	2 no. of axle(s) with TRISTOP spring brake actuators
ng	=	3 no. of bogie axle(s)

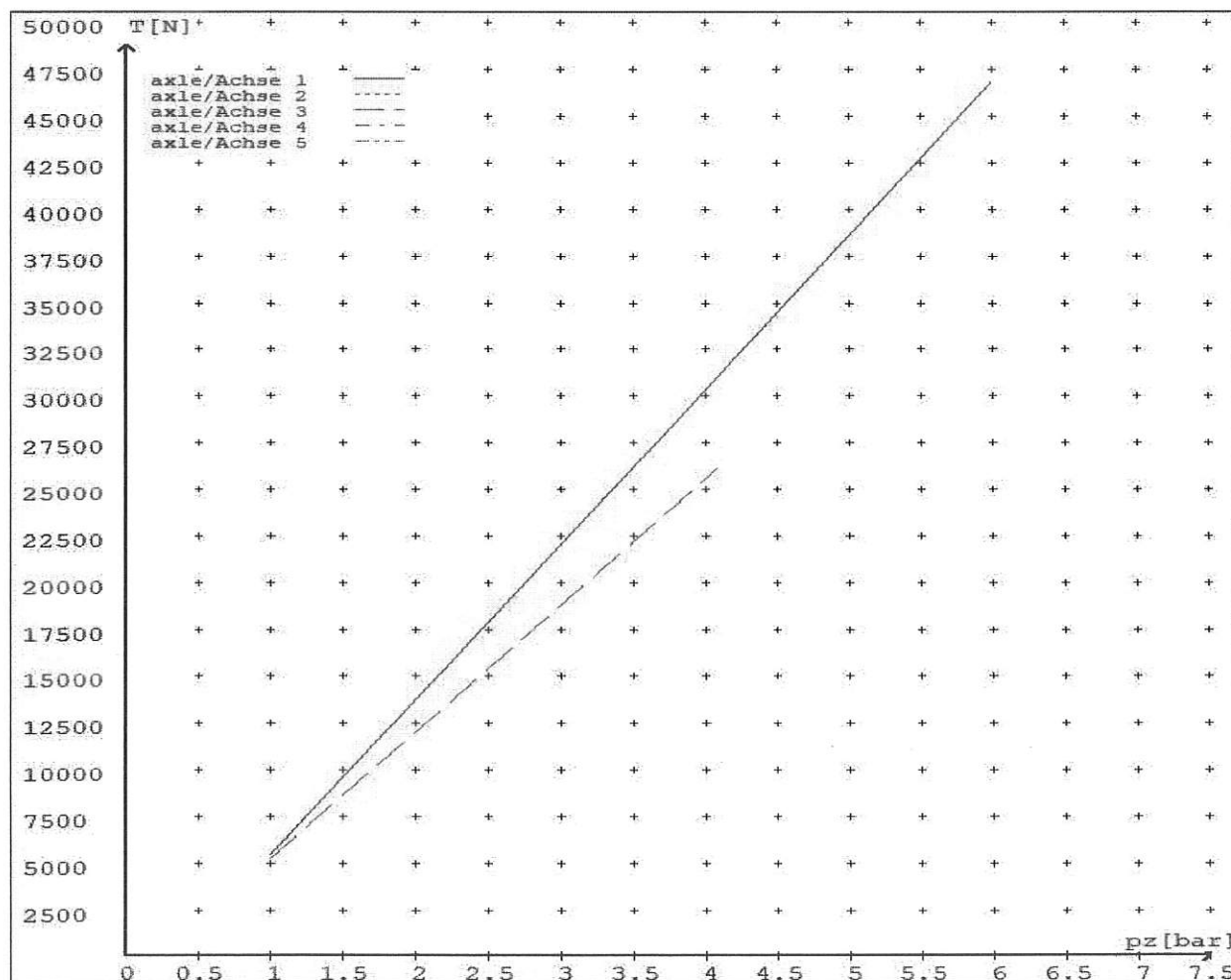
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0 6.0	5417 46808	
axle 2	1.0 6.0	5417 46808	
axle 3	1.0 4.1		5215 26087
axle 4	1.0 4.1		5215 26087
axle 5	1.0 4.1		5215 26087

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	76	76	76	76	76





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

CLIENT

MANUFACTURER:	DOMETT TRAILERS
ADDRESS:	TAURIKURA DRIVE, TAURANGA 3110
FLEET:	DALTONS TRANSPORT

VEHICLE DETAILS

VEHICLE TYPE:	5AFT TIP CURTAINSIDE	CERT #:	JH260808
YEAR:	2026	CALCULATION #:	TP53165
MAKE:	DOMETT	REGO #:	N/A
MODEL:	E2301	LT400 #:	H26544
CHASSIS #:	2569	ORDER #:	10902
VIN #:	7A9E23019T2023569		
GVM: <i>t</i>	32	PRIME MOVER:	UNKNOWN
LOAD CONFIGURATION:	UNIFORM DENSITY		
GROUP RATINGS: <i>t</i>	FRONT	REAR	
	16	19	
WHEEL BASE: <i>m</i>	6.77		
	UNLADEN COG <i>m</i>	MAX HEIGHT <i>m</i>	HEIGHT DECK <i>m</i>
	1.1	4.3	1.165
COG: <i>m</i>	2.258		
	FRONT	REAR	TOTAL
TARE: <i>t</i>	4.8	4.5	9.3
	FRONT	REAR	
TYRE SIZE:	265 70 R19.5	265 70 R19.5	
ROLLING CIRCUMFERENCE: <i>mm</i>	2645	2645	
AXLE SPACING: <i>m</i>	1.31	2.51	

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	SAF	SAF-ZI9S	TDB0878
POLE WHEEL FRONT:	90	POLE WHEEL REAR:	90
LINING MATERIAL:	SAF 607	BRAKE FACTOR:	22.37
SENSED AXLES:	2 + 4	NOTES:	
SERIAL NUMBERS:	1	N/A	NG-IU25-ZI9-19S
	2	N/A	NG-IU25-ZI9-19S
	3	N/A	NG-IU25-ZI9-19S
	4	N/A	NG-IU25-ZI9-19S
	5	N/A	NG-IU25-ZI9-19S

CHAMBER AND VALVING DETAILS

CHAMBERS:	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
BRAND:	TSE_CHAMBERS	TSE_CHAMBERS	TSE_CHAMBERS
SIZE:	20HSCLD	1416HTLD	14HSCLD
STROKE: <i>mm</i>	65	64	64
TEST REPORT #:	BC 0041.1	BC0143.0	BC 0127.0
SPRINGBRAKE FORCE: <i>kN</i>	N/A	6.16	N/A
HOLDOFF PRESSURE: <i>Bar</i>	N/A	4.8	N/A
FOUNDATION BRAKE:	SAF SBS1918	SAF SBS1918	SAF SBS1918
LEVER LENGTH: <i>mm</i>	76	76	76
BRAKE VALVES:	MAKE:	PART NUMBER:	PM PRESS. <i>kPa</i>
ECU PART #:	WABCO	480 102 08. 0 (MV)	70 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	70 kPa
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	FRONT FRICTION: μ	0.495
SUBSYSTEMS:	☒ SMARTBOARD ☐ ELEX 446 122 070 0	☐ OPTI-LINK ☐ TAILGUARD	☐ CAN ROUTER 446 122 050 0

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:	HALDEX 90554950	HALDEX 90554950
OTHER VALVES:	N/A	N/A
RIDE HEIGHT mm :	250	230
HANGER HEIGHT mm :	200	200
PEDESTAL HEIGHT mm :	5	5
LIFTAXLE:		N/A
TIPPING DUMP SWITCH:		N/A
LIFTAXLE VALVE:		N/A
PRESSURE LIMITING:		N/A

AIR TANKS

AIR TANKS STANDARD:	SAE J10A / EN286-2	
	FRONT	REAR
BRAKE TANK SIZE: L	46	46 + 25
AUXILLARY TANK SIZE: L	N/A	46
PRESSURE PROTECTION:	WABCO PEM: 461 513 002 0	

AIR LINES

TEST POINTS:

CONTROL LINE:	X 1	TANK:	X 1
REAR CHAMBER:	X 2	FRONT CHAMBER:	X 1
DUOMATIC COLOUR CODED:	YES		

HEAVY VEHICLE BRAKE RULE - 32015 (TRAILER)☐ SCHEDULE 4☒ SCHEDULE 5☐ SECTION 6☐ APPROVED STD**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:

NOTES, SKETCHES AND SPECIAL CONDITIONS

FILES RECEIVED: 15.05.2026

FILES CREATED: 17.08.2026

FINAL INSPECTION & SIGN OFF (CJC): 18.08.2026

REQUEST A COPY OF THE TARE WEIGHT DOCKET ☒

FILES RETURNED AS COMPLETE:

REASON FOR CERTIFICATION:

NEW TRAILER BUILD

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 NOTICE OF APPOINTMENT. TO THE BEST OF MY KNOWLEDGE THE INFORMATION CONTAINED IN THIS CERTIFICATE IS TRUE AND CORRECT.

NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015, SCHEDULE 5.

DATE:

17/08/2026

SIGNED:

CERTIFIER NAME & ID:

CHRIS CLARKE

CJC

SODC BY:

JOHN HIRST

JEH

PHONE (BUS):

09-980-7300

POSTAL ADDRESS:

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