

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

**CHRIS CLARKE**

ID

**C J C**

Vehicle registration (optional)

VIN/chassis number

**7 A 9 D 1 0 0 1 3 L 1 0 2 3 9 6 0**

Make

**DOMETT**

Model (optional)

Certification category

**HVEK**

Description of work

CERTIFY TO SCHEDULE 5 OF LTR 32015/5

NEW ZEALAND HEAVY VEHICLE BRAKE SPECIFICATION.

4A TANKER

Code/standard/rule certified to

**LTR 32015/5**

Component load rating(s)

**26 Tonnes GVM**

General drawing number(s)

**N/A**
**30 Tonnes (Group ratings)**
**RSS TWIN TYRES**

Supporting documents

**BRAKE RULE CERTIFICATE** LC200702

**BRAKE CALCULATION #** 823LPC

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)

**LANCE CAWTE, L P C**

Inspector's signature

Inspector's name (PRINT IN CAPS)

**CHRIS CLARKE**

ID number

**C J C**

Date

**21-Aug-20**

Number

**753608**

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   | 2019-08-19   | Serial number     | 436067251300H |
| Serial number (modulator)                                       | 000000512095   |                   |               |
| Fingerprint Customer EOL / Customer Development / Flash Program | W503643 / 2020-08-21 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00 |                   |               |

**TRAILER EBS-E**

GGVS/ADR TUEH TB 2007 - 019.00

361-005-16

**WABCO**

|  |   |     |  |
|--|---|-----|--|
| HERSTELLER<br>MANUFACTURER<br>CONSTRUCTEUR   | DOMETT  |     |  |
| TYP<br>TYPE  | 4A TANKER, D1001  |     |  |
| VEHICLE IDENT. NUMBER<br>CHASSIS NUMBER<br>NUMERO DE CHASSIS                           | 7A9D10013L1023960   |     |  |
| BREMBERECHNUNGS-NR.<br>BRAKE CALCULATION NO.<br>CALCUL DE FREINAGE NO.                 | 823LPC, 2020ROR4AWPC  |     |  |
| POLRADZAHNEZAHL c-d   e-f<br>POLE WHEEL TEETH c-d   e-f<br>DENTS ROUE DENTEE c-d   e-f | 90  | 90  | ABS System<br>ABS-System<br>Système ABS  |
| RSS<br>RSS<br>RSS  | Einfachbereifung<br>Single Tire<br>Monte simple<br>Zwillingsbereifung<br>Twin Tire<br>Monte jumelée | X   | Lenkachse<br>Steering axle<br>Essieu virieur<br>Kippkritisches Fahrzeug<br>Critical Trailer<br>Véhicule critique |
| Subsystems   | ---   | I/O | 24N  |

| GIO | Pin1   | Pin3 | Pin4 |
|-----|--------|------|------|
| 1   | 24V-O1 | ---  | ---  |
| 2   | ---    | ---  | ---  |
| 3   | ALS2   | ALS2 | ---  |
| 4   | ---    | ---  | ---  |
| 5   | DIAG   | DIAG | DIAG |
| 6   | ---    | ---  | ---  |
| 7   | ---    | ---  | ---  |



(bar)

1.0 Pz

(daN)

4277

539

4277

479

3078

479

3078

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**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 | 7A9D10013L1023960 |
| Vehicle type      | 4A TANKER, D1001       | Odometer reading  | 0.0 km            |
| next Service      | 0 km                   | Trip reading      | 0.0 km            |
| Tester            | Chris Clarke           | Signature         |                   |
| Date              | 2020-08-21 11:55:32 AM |                   |                   |

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

distribution: DOMETT  
2020.1 ROR 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 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  
 trailer model : 4A TANKER, D1001  
 trailer type : 4-axle-full-trailer  
 remarks : air / hydraulic / VA suspension  
 WABCO TRAILER - EBS  
 TRISTOP 3+4: T.16/24  
 265/70 R 19,5

axle 1 + 2 + 3 + 4 : Assali Stefen, R, 361-005-16 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 - 5070    |              |
| centre of gravity height | h in mm  | 700            | 1534         |

|                                     |                | <u>axle 1</u> | <u>axle 2</u> | <u>axle 3</u> | <u>axle 4</u> |
|-------------------------------------|----------------|---------------|---------------|---------------|---------------|
| no. of combined axles               |                | 1             | 1             | 1             | 1             |
| no. of brake chambers per axle line | KDZ            | 2             | 2             | 2             | 2             |
| The power output corresponds to     |                | BZ 122.1      | BZ 122.1      | BZ 119.6      | BZ 119.6      |
| brake chamber manufacturer          |                | Meritor       | Meritor       | Meritor       | Meritor       |
| chamber size                        |                | 20.           | 20.           | T.16/24       | T.16/24       |
| lever length                        | 1Bh in mm      | 76            | 76            | 76            | 76            |
| brake factor                        | [ - ]          | 22.37         | 22.37         | 22.37         | 22.37         |
| dyn. rolling radius                 | rdyn min in mm | 421           | 421           | 421           | 421           |
| dyn. rolling radius                 | rdyn max in mm | 421           | 421           | 421           | 421           |
| threshold torque                    | Co Nm          | 6.0           | 6.0           | 6.0           | 6.0           |

## calculation:

|  |       |       |       |       |
|--|-------|-------|-------|-------|
| chamber pressure(rdyn min)pH at z=22,5%bar | 2.1   | 2.1   | 2.1   | 2.1   |
| chamber pressure(rdyn max)pH at z=22,5%bar | 2.1   | 2.1   | 2.1   | 2.1   |
| chamber press. (servo)pcha at pm6,5bar bar | 5.5   | 5.5   | 4.6   | 4.6   |
| piston force ThA at pm6,5bar N             | 6332  | 6332  | 4555  | 4555  |
| brake force(rdyn min)T lad. at pm6,5bar N  | 51239 | 51239 | 36884 | 36884 |
| brake force(rdyn max)T lad. at pm6,5bar N  | 51239 | 51239 | 36884 | 36884 |
| Brake force incl. 1 % rolling resistance   |       |       |       |       |
| proportion %                               | 26.7  | 26.7  | 23.3  | 23.3  |

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

0.599 for rdyn min  
 0.599 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

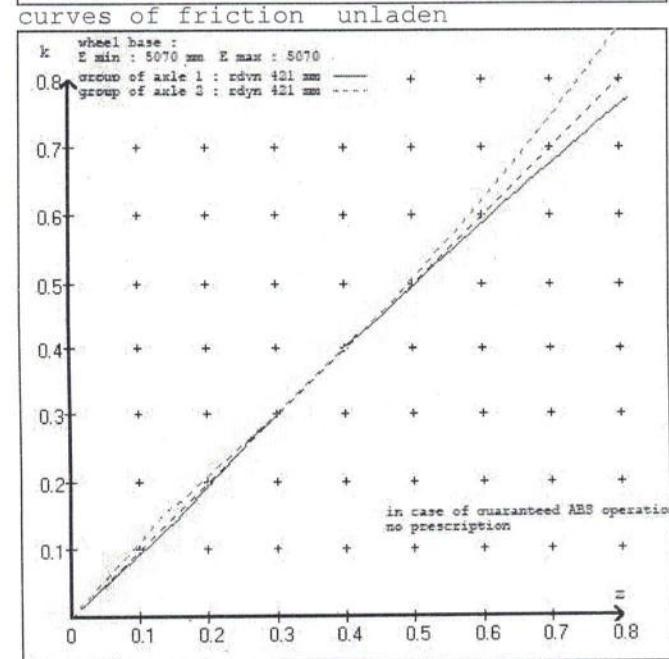
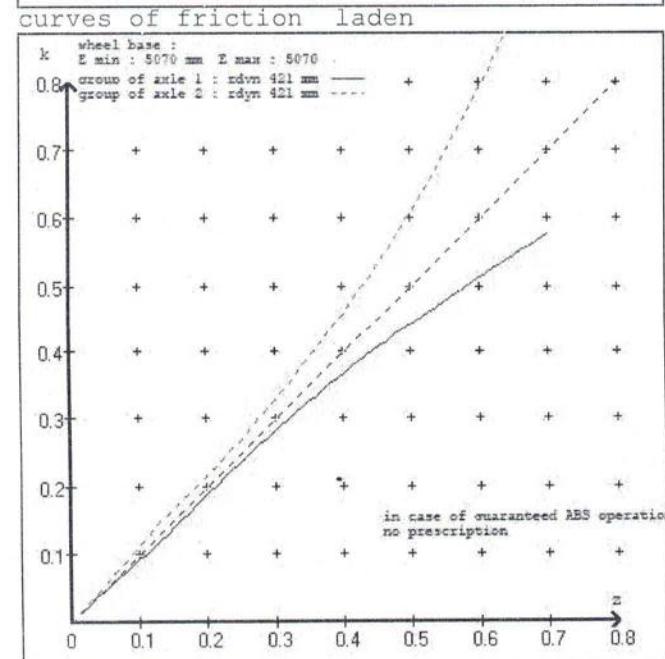
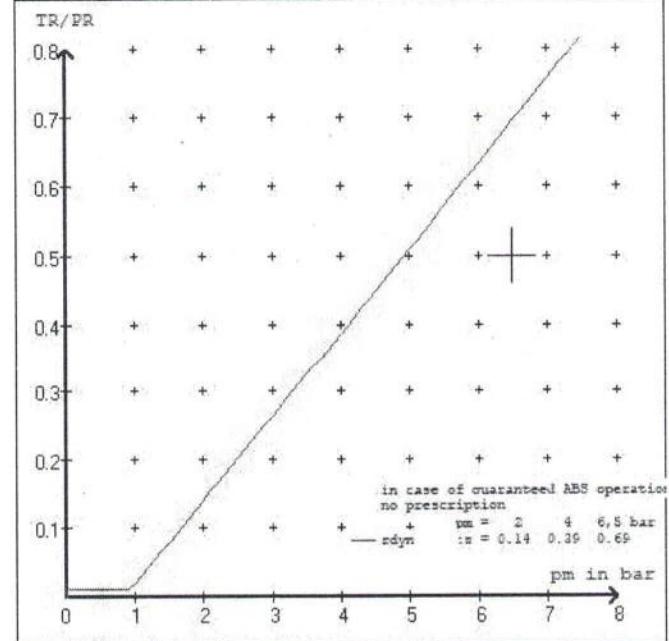
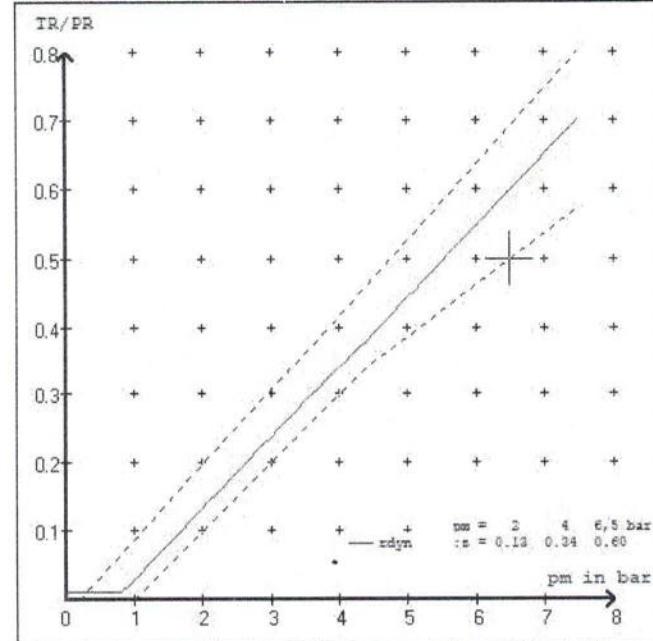
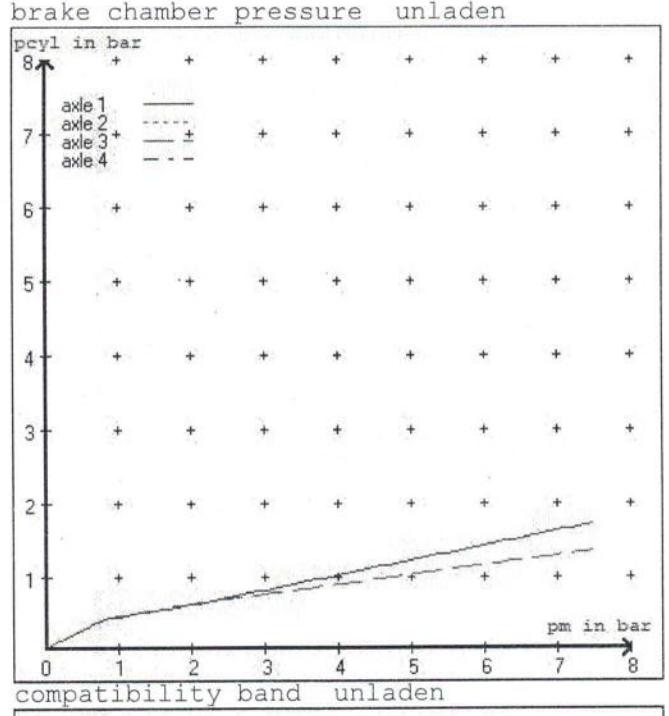
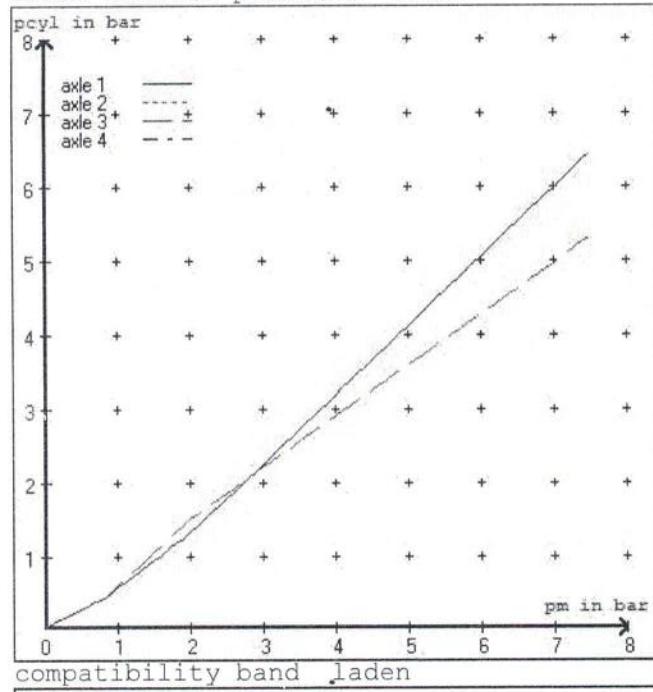
brake cylinder: Meritor 1624HTLD64

axle 4:

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

brake cylinder: Meritor 1624HTLD64

test type III (zIII = 0.30) for rdyn min : axle1 axle2 axle3 axle4  
at pm 3.6 bar => pcha in bar : 2.8 2.8 2.6 2.6  
test type III (zIII = 0.06) for rdyn min : axle1 axle2 axle3 axle4  
at pm 1.3 bar => pcha in bar : 0.3 0.8 0.9 0.9



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 76 mm |
| axle 2 : | 2 x type/diameter | 20.     | (Meritor) | lever length 76 mm |
| axle 3 : | 2 x type/diameter | T.16/24 | (Meritor) | lever length 76 mm |
| axle 4 : | 2 x type/diameter | T.16/24 | (Meritor) | lever length 76 mm |

brake diagram :

valve :  
 480 207 0..0 WABCO EBS relay valve or 480 207 2..0  
 480 102 ... 0 WABCO EES trailer modulator

EBS input data

=====

vehicle manufacturer: DOMETT  
 trailer model : 4A TANKER, D1001  
 trailer type : 4-axle-full-trailer  
 brake calculation no. : TP 2020A

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<br>unladen | bellow pr.<br>unladen                           | brake pr.<br>unladen | axle load<br>laden  | bellow pr.<br>laden                             | brake pr.<br>laden |     |     |     |
| 1                   | 1400                 | to be<br>entered by<br>the vehicle<br>manufact. | 1.5                  | 7500                | to be<br>entered by<br>the vehicle<br>manufact. | 0.4                | 1.3 | 5.5 |     |
| 2                   | 1400                 |   | 1.5                  | 7500                |   | 0.4                | 1.3 | 5.5 |     |
| 3                   | 1200                 |   | 1.2                  | 7500                |   | 0.4                | 1.5 | 4.6 |     |
| 4                   | 1200                 |   | 1.2                  | 7500                |   | 0.4                | 1.5 | 4.6 |     |
| 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 4         |
|----------------|----------------|----------------|----------------|
| axle load pcyl | axle load pcyl | axle load pcyl | axle load pcyl |
| 1400           | 1.5            | 1200           | 1.2            |
| 1900           | 1.8            | 1700           | 1.5            |
| 2400           | 2.2            | 2200           | 1.7            |
| 2900           | 2.5            | 2700           | 2.0            |
| 3400           | 2.8            | 3200           | 2.3            |
| 3900           | 3.1            | 3700           | 2.5            |
| 4400           | 3.5            | 4200           | 2.8            |
| 4900           | 3.8            | 4700           | 3.1            |
| 7500           | 5.5            | 7500           | 4.6            |

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

|  |                            |
|--|----------------------------|
| axle 1 : reference axle: Assali StefLM or LC or TMen | brake lining: MAT 5200-215 |
| test report : 361-005-16 ECE                         | date : HL090216 09.02.2016 |
| axle 2 : reference axle: Assali StefLM or LC or TMen | brake lining: MAT 5200-215 |
| test report : 361-005-16 ECE                         | date : HL090216 09.02.2016 |
| axle 3 : reference axle: Assali StefLM or LC or TMen | brake lining: MAT 5200-215 |
| test report : 361-005-16 ECE                         | date : HL090216 09.02.2016 |
| axle 4 : reference axle: Assali StefLM or LC or TMen | brake lining: MAT 5200-215 |
| test report : 361-005-16 ECE                         | date : HL090216 09.02.2016 |

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 = 42 mm |
| axle 2 (sp = 58 mm) | s = 42 mm |
| axle 3 (sp = 57 mm) | s = 42 mm |
| axle 4 (sp = 57 mm) | s = 42 mm |

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

|       |              |
|-------|--------------|
| axle1 | ThA = 6332 N |
| axle2 | ThA = 6332 N |
| axle3 | ThA = 4555 N |
| axle4 | ThA = 4555 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 = 37175 N |
| axle 2 (rdyn 421 mm) | T = 37175 N |
| axle 3 (rdyn 421 mm) | T = 26822 N |
| axle 4 (rdyn 421 mm) | T = 26822 N |

| basic test<br>of subject<br>trailer (E) | type III<br>(calculated)<br>residual<br>(hot)braking |
|---|--|
|---|--|

|   |           |
|---|-----------|
| braking rate of the vehicle<br>(item 4.3.2 to appendix 2 to annex 11) | 0.60 0.43 |
|---|-----------|

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

|                      |             |
|----------------------|-------------|
| axle 1 (rdyn 421 mm) | T = 37175 N |
| axle 2 (rdyn 421 mm) | T = 37175 N |
| axle 3 (rdyn 421 mm) | T = 26822 N |
| axle 4 (rdyn 421 mm) | T = 26822 N |

| basic test<br>of subject<br>trailer (E) | type III<br>(calculated)<br>residual<br>(hot)braking |
|---|--|
|---|--|

|   |           |
|---|-----------|
| braking rate of the vehicle<br>(item 4.3.2 to appendix 2 to annex 11) | 0.60 0.43 |
|---|-----------|

|  |                               |
|--|-------------------------------|
| required braking rate<br>(items 1.5.3 and 1.7.2 to annex 11) | >= 0,4 and<br>>= 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.16/24 | T.16/24 |
| lever length                              | 1Bh 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 = 1Bh*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/1Bh)*iFb       |                 |        |        |
| braking rate                      | zf laden        | 0.444  |        |
| 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

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

$$\text{min Ef} = 3627 \text{ mm} \quad \text{for } E = 5070 \text{ mm}$$

$$\text{min Ef} = 3627 \text{ mm} \quad \text{for } E = 5070 \text{ mm}$$

|   |   |
|---|---|
| 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 = 1534 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)  |

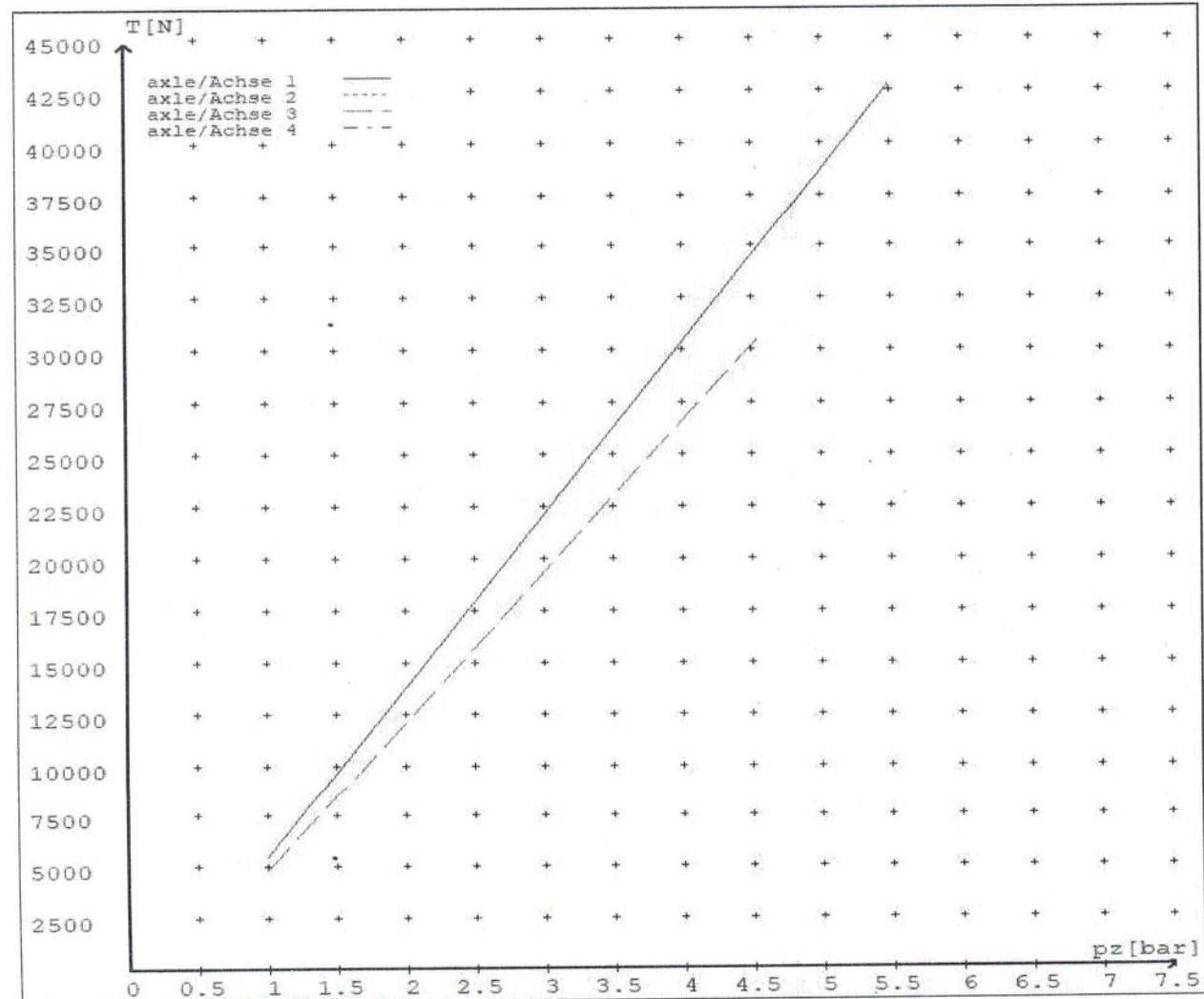
**reference values**

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

|        | pz [bar] | T [N] | T [N] |
|--------|----------|-------|-------|
| axle 1 | 1.0      | 5394  |       |
|        | 5.5      | 42770 |       |
| axle 2 | 1.0      | 5394  |       |
|        | 5.5      | 42770 |       |
| axle 3 | 1.0      |       | 4794  |
|        | 4.6      |       | 30788 |
| axle 4 | 1.0      |       | 4794  |
|        | 4.6      |       | 30788 |

VIN - no.:

|   | Axe(s) / Achse(n) |      |         |         |   |
|---|-------------------|------|---------|---------|---|
| brake cylinder type (service / parking)<br>Bremszylinder Typ (Betrieb / Fest) | 20./              | 20./ | T.16/24 | T.16/24 | / |
| Maximum stroke smax = ...mm<br>maximaler Hub smax = ....mm                    | 65                | 65   | 64      | 64      |   |
| Lever length = ....mm<br>Hebellänge = ....mm                                  | 76                | 76   | 76      | 76      |   |



## reference values for z = 0.5

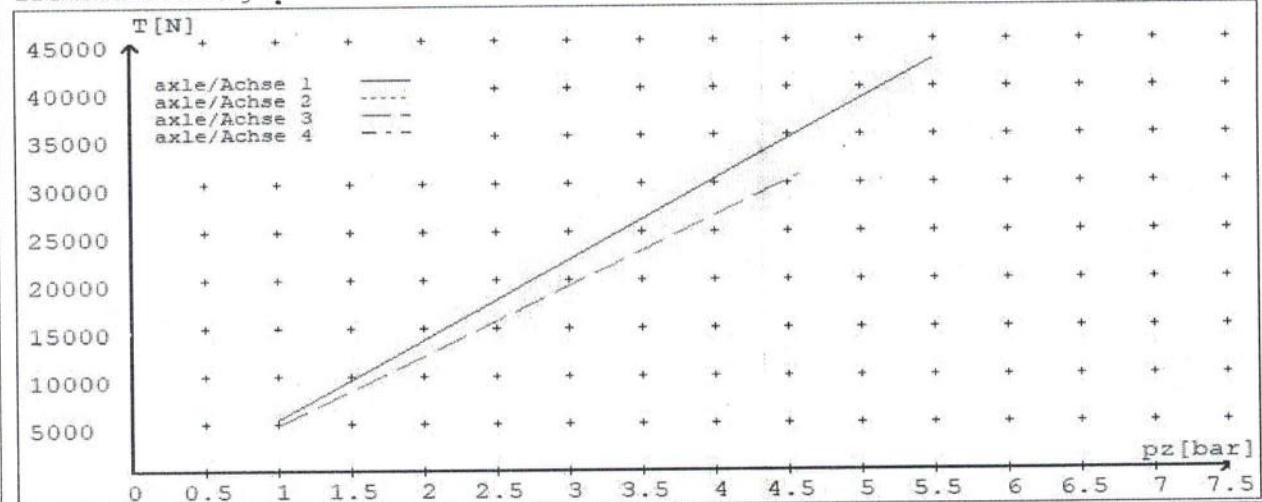
Angabe der Referenzwerte für z = 0.5

for max rdyn: 421 mm

für max rdyn: 421 mm

brake calculation no: TP 2020A date 16.04.2020

Bremsberechnung Nr: TP 2020A vom 16.04.2020



| Axe(s) / Achse(n)   |      |      |         |         |   |
|---|------|------|---------|---------|---|
| brake cylinder type (service / parking)<br>Bremszylinder Typ (Betrieb / Fest) | 20./ | 20./ | T.16/24 | T.16/24 | / |
| Maximum stroke smax = ...mm<br>maximaler Hub smax = ....mm                    | 65   | 65   | 64      | 64      |   |
| Lever length = ....mm<br>Hebellänge = ....mm                                  | 76   | 76   | 76      | 76      |   |

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

**CLIENT****MANUFACTURER:**

DOMETT TRUCK and TRAILERS

**ADDRESS:**

Taurikura Drive, Tauranga 3110

**FLEET:**

FONterra

**VEHICLE DETAILS****VEHICLE TYPE:**

4A TANKER

**CERT #:**

LC200702

**YEAR:**

2020

**CALCULATION #:**

823LPC

**MAKE:**

DOMETT

**REGO:****MODEL:**

D1001

**LT400 #:**

753608

**CHASSIS #:**

1960

**ORDER NUMBER:**

7158

**VIN #:**

7A9D10013L1023960

**GVM: TONNES**

26

**PRIME MOVER:**

EBS / EUROPEAN

**LOAD CONFIGURATION:**

UNIFORM DENSITY

**GROUP RATINGS: TONNES****FRONT****REAR**

15

15

**WHEEL BASE: METRES**

5.07

**COG: METRES**

1.534

**UNLADEN COG****MAX HEIGHT****HEIGHT DECK**

0.7

2.485

1

**TARE: TONNES****FRONT****REAR****TOTAL**

2.8

2.4

5.2

**TYRE SIZE:****FRONT****REAR**

265 70 R19.5

265 70 R19.5

**ROLLING CIRCUMFERENCE: MM**

2645

2645

**AXLE SPACING: METRES**

1.3

1.3

**BRAKE & AXLE DETAILS**

|                   | MAKE              | MODEL            | TEST REPORT |
|-------------------|-------------------|------------------|-------------|
| AXLE:             | ROR_ASSALI_STEFEN | ROR-SL9 LRC DISC | 361-005-16  |
| POLE WHEEL FRONT: | 90                | POLE WHEEL REAR: | 90          |
| LINING MATERIAL:  | MAT 5200-215      | BRAKE FACTOR:    | 22.37       |
| SENSED AXLES:     | 1 & 3             |                  | NOTES:      |
| SERIAL NUMBERS:   | 1                 |                  |             |
|                   | 2                 |                  |             |
|                   | 3                 |                  |             |
|                   | 4                 |                  |             |

**CHAMBER AND VALVING DETAILS**

| CHAMBERS:                 | AXLE 1 & 2  | AXLE 3 & 4            |
|---------------------------|---|-----------------------|
| BRAND:                    | HALDEX_CHAMBERS   | HALDEX_BERTOCO        |
| SIZE:                     | 20, (125 200)   | 1624 (C476 16 5)      |
| STROKE: MILLIMETRES       | 66  | 57                    |
| TEST REPORT #:            | BC0175.0  | BZ 130.0              |
| SPRINGBRAKE FORCE: kN     | N/A   | 7.66                  |
| HOLDOFF PRESSURE: kPa     | N/A   | 5                     |
| FOUNDATION BRAKE:         | HALDEX  | HALDEX                |
| LEVER LENGTH: MILLIMETRES | 76  | 76                    |
| BRAKE VALVES:             | MAKE:   | PART NUMBER:          |
| ECU PART #:               | WABCO   | 480 102 064 0 (24V)   |
| 3RD MODULATOR #:          | WABCO   | 480 207 001 0 (24V)   |
| ANTI-COMPOUNDING:         | YES   |                       |
| SPRING BRAKE RELAY:       | SEALCO_SBR  | 110701                |
| YARD RELEASE VALVE:       | SEALCO_YR   | 17600B                |
| INLINE RELAY FITTED:      | N/A   | N/A                   |
| ECU DIRECTION:            | <input checked="" type="checkbox"/> FRONT <input type="checkbox"/> REAR | FRONT FRICTION: $\mu$ |
|                           |   | 0.51                  |

**SMARTBOARD/OPTILINK:** SMARTBOARD     OPTI-LINK**ELEX:** ELEX 446 122 070 0 TAILGUARD

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**SUSPENSION**

|                              | FRONT         | REAR          |
|------------------------------|---------------|---------------|
| <b>SUSPENSION TYPE:</b>      | PNEUMATIC     | PNEUMATIC     |
| <b>MAKE:</b>                 | ROR_AIRSPRING | ROR_AIRSPRING |
| <b>MODEL:</b>                | ROR_INTRA     | ROR_INTRA     |
| <b>BELLOW SIZE:</b>          | SL9 LRC       | SL9 LRC       |
| <b>HEIGHT CONTROL VALVE:</b> | 464 008 011 0 | 464 008 011 0 |
| <b>OTHER VALVES:</b>         | N/A           | N/A           |
| <b>RIDE HEIGHT MM:</b>       | 250           | 250           |
| <b>HANGER HEIGHT MM:</b>     |               |               |
| <b>PEDESTAL HEIGHT MM:</b>   |               |               |
| <b>LIFTAXLE:</b>             |               | N/A           |
| <b>DUMP SWITCH:</b>          |               | PNEUMATIC     |
| <b>LIFTAXLE VALVE:</b>       |               | N/A           |
| <b>PRESSURE LIMITING:</b>    |               | N/A           |

**AIR TANKS**

| <b>AIR TANKS STANDARD:</b>    | SAE J10A / EN286-2       |             |
|-------------------------------|--------------------------|-------------|
|                               | FRONT                    | REAR        |
| <b>BRAKE TANK SIZE:</b> L     | 12113P, 46L              | 12113P, 46L |
| <b>AUXILLARY TANK SIZE:</b> L |                          | 12113P, 46L |
| <b>PRESSURE PROTECTION:</b>   | WABCO PEM: 461 513 002 0 |             |

**AIR LINES****TEST POINTS:**

|                                |            |                       |              |
|--------------------------------|------------|-----------------------|--------------|
| <b>CONTROL LINE:</b>           | FILTER X 1 | <b>TANK:</b>          | ECU X 1      |
| <b>REAR CHAMBER:</b>           | ECU X 2    | <b>FRONT CHAMBER:</b> | LEFT 1st X 1 |
| <b>TRIOMATIC COLOUR CODED:</b> | YES        |                       |              |

**ELECTRONIC HEIGHT SENSOR CALIBRATION**

|               | <b>TIMER TICKS [F/R]</b> | <b>MILLIMETRE [F / R]</b> |
|---------------|--------------------------|---------------------------|
| UPPER LEVEL:  | N/A                      | N/A                       |
| NORMAL LEVEL: | N/A                      | N/A                       |
| LOWER LEVEL:  | N/A                      | N/A                       |

**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:

230

240

275

**NOTES AND SPECIAL CONDITIONS**

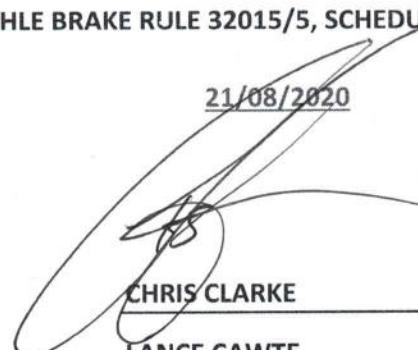
SUSPENSION DUMP VALVE 3042402 3/2 way manual valve

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 VEHICLE BRAKE RULE 32015/5, SCHEDULE 5.**DATE: 21/08/2020

SIGNED:


CERTIFIER NAME & ID: CHRIS CLARKE CJCSODC BY: LANCE CAWTE LPCPHONE (BUS): 09-980-7300

FAX:

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