WAKA KOTAHI
NZ TRANSPORT AGENCY

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**

Plate number *(optional)*:

VIN/chassis number: **7A9E20013N2023214**

Make: **DOMETT**

Model *(optional)*: **E2001 PH**

Certification category: **HVEK**

Component being certified:

- [ ] Chassis
- [ ] Load anchorage
- [X] Brakes
- [ ] Log bolsters
- [ ] Towing connection
- [ ] 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.
5AFT CURTAINSIDE **RSS ON TYRE:** 265 70 R19.5
FOR SYSTEM ARCHITECTURE, PLEASE REFER TO PDS WORKSHEET & SCHEMATIC.
REASON FOR CERTIFICATE: NEW TRAILER BUILD

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

Component load rating(s): 32 Tonnes GVM; 16 Tonne (Front brake mass); 19 Tonne (Rear brake mass)

General drawing number(s): N/A

Supporting documents

BRAKE RULE CERTIFICATE JH220618
BRAKE CALCULATION # TP52261

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: 21.07.2023 Number: 830433

CoF vehicle inspector ID *(if applicable)*:

CoF vehicle inspector signature *(if applicable)*:

Date:

All fields are mandatory unless otherwise stated.

WABCO START-UP LOG

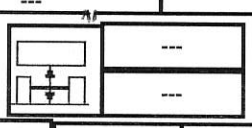
System	Trailer EBS-E	WABCO part number	480 102 084 0
Production date	2021-11-26	Serial number	897040791200N
Serial number (modulator)	000000511807		
Fingerprint Customer EOL / Customer Development / Flash Program	W503643 / 2022-07-21 ; 00000000 / 0000-00-00 ; 00000000 / 0000-00-00		

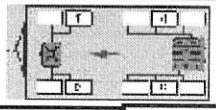
WABCO TRAILER EBS-E

GGVS/ADR TUEH TB 2007 - 019.00
361 071 04

HERSTELLER / MANUFACTURER / CONSTRUCTEUR	DOMETT TRAILERS			
TYP / TYPE / TYPE	5AFT CURTAINSIDE			
VEHICLE IDENT. NUMBER / CHASSIS NUMBER / NUMERO DE CHASSIS	7A9E20013N2023214			
BREMSBERECHNUNGS-NR. / BRAKE CALCULATION NO. / CALCUL DE FREINAGE NO.	TP52261A			
POLRADZÄHNEZAHL c-d | e-f / POLE WHEEL TEETH c-d | e-f / DENTS ROUE DENTÉE c-d | e-f	90	90	ABS-System / ABS-System / Système ABS	4S/3M
RSS / RSS / RSS — Einfachbereifung / Single Tire / Monte simple		Lenkachse / Steering axle / Essieu vireur		
Zwillingsbereifung / Twin Tire / Monte jumelée	X	Kippkritisches Fahrzeug / Critical Trailer / Véhicule critique		
Subsystems	SB	I/O	24N	

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





	pm (bar)		6.5	pm (bar)		0.8	2.0	---	6.5					(bar) 1.0	Pz
ACHSE / AXLE / ESSIEU									pz		TYP / TYPE	(mm)	(mm)	TR (daN)	
1	1650	0.6	1.8	8000	4.7	0.4	1.4	---	6.6	-	20	66	74	474	4549
2	1650	0.6	1.8	8000	4.7	0.4	1.4	---	6.6	-	20	66	74	474	4549
3	1300	0.4	1.5	6350	3.6	0.5	1.6	---	4.8	-	16 / 24	65	74	384	2696
4	1300	0.4	1.5	6350	3.6	0.5	1.6	---	4.8	-	16 / 24	65	74	384	2696
5	1300	0.4	1.5	6350	3.6	0.5	1.6	---	4.8	-	16	65	74	384	2696

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.	7A9E20013N2023214
Vehicle type	5AFT CURTAINSIDE	Odometer reading	3.7 km
Next service	0 km	Trip reading	3.7 km
Tester	Chris Clarke		
Date	2022-07-21 1:59:47 pm	Signature	

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

distribution: DOMETT TRAILERS
7A9E20013N2023214
SoDC: JH220618
LT400: CJC 830433

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 : 5AFT CURTAINSIDE
trailer type : 5-axle-full-trailer
remarks : air / hydraulic / VA suspension
WABCO TRAILER - EBS E
TRISTOP 3+4: 16/24
265/70 R 19,5
THE FRONT CHAMBERS ARE HALDEX T.20 [125 200 ..]

axle 1 + 2 + 3 + 4 + 5 : Assali Stefen, K, 361-071-04 ECE Re 432,

		unladen	laden
total mass	P in kg	7200	35050
axle 1	P1 in kg	1650	8000
axle 2	P2 in kg	1650	8000
axle 3	P3 in kg	1300	6350
axle 4	P4 in kg	1300	6350
axle 5	P5 in kg	1300	6350
wheel base	E in mm	6600 - 6650	
centre of gravity height	h in mm	1080	2100

		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 122.1BC	0165.2BC	0165.2BC	0169.2
brake chamber manufacturer		Meritor	Meritor	Haldex	Haldex	Haldex
chamber size		20.	20.	16/24	16/24	16"
lever length	lBh in mm	74	74	74	74	74
brake factor	[-]	20.26	20.26	20.26	20.26	20.26
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	7.0	7.0	7.0	7.0	7.0

calculation:

chamber pressure(rdyn min)pH at z=22,5%	bar	2.4	2.4	2.2	2.2	2.2
chamber pressure(rdyn max)pH at z=22,5%	bar	2.4	2.4	2.2	2.2	2.2
chamber press.(servo)pcha at pm6,5bar	bar	6.6	6.6	4.8	4.8	4.8
piston force ThA at pm6,5bar	N	7687	7687	4573	4573	4573
brake force(rdyn min)T lad. at pm6,5bar	N	54861	54861	32519	32519	32519
brake force(rdyn max)T lad. at pm6,5bar	N	54861	54861	32519	32519	32519
Brake force incl. 1 % rolling resistance proportion	%	22.2	22.2	18.5	18.5	18.5

braking rate z laden	0.603	for rdyn min
z = sum (TR)/PRmax	0.603	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: Haldex 135 1624 ... / 175 1624...

axle 4:
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...

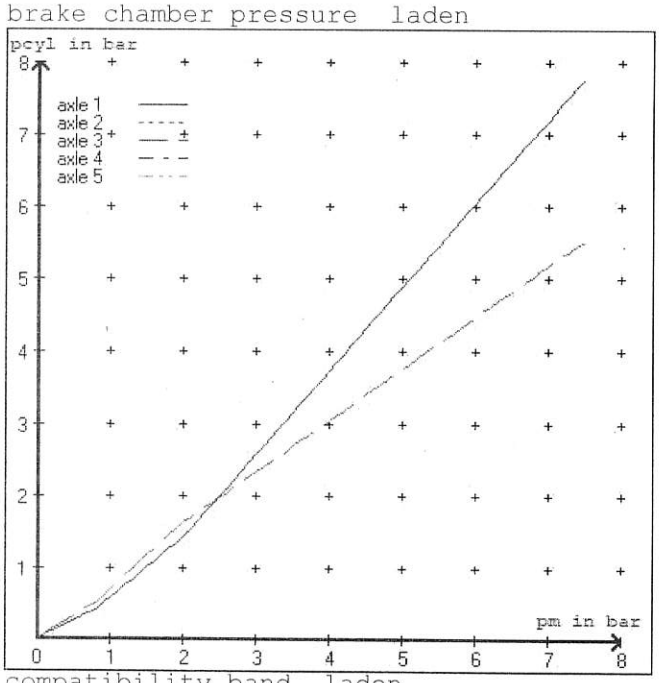
axle 5:
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

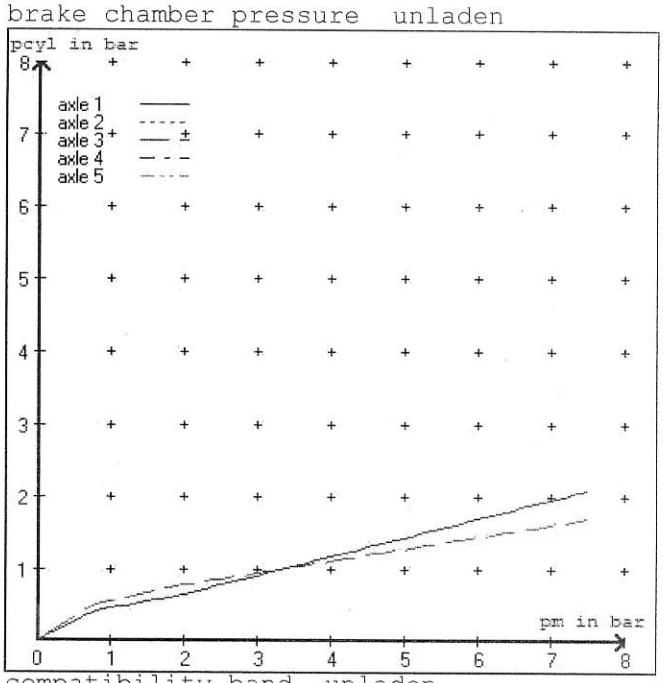
brake cylinder: Haldex 125 160 0.. - 125 160 5.. / 125 160 6.. - 125 160 9..

test type III (zIII = 0.30)	for rdyn min :	axle1	axle2	axle3	axle4	axle5
at pm 3.6 bar =>	pcha in bar :	3.3	3.3	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	0.9	0.9	0.9

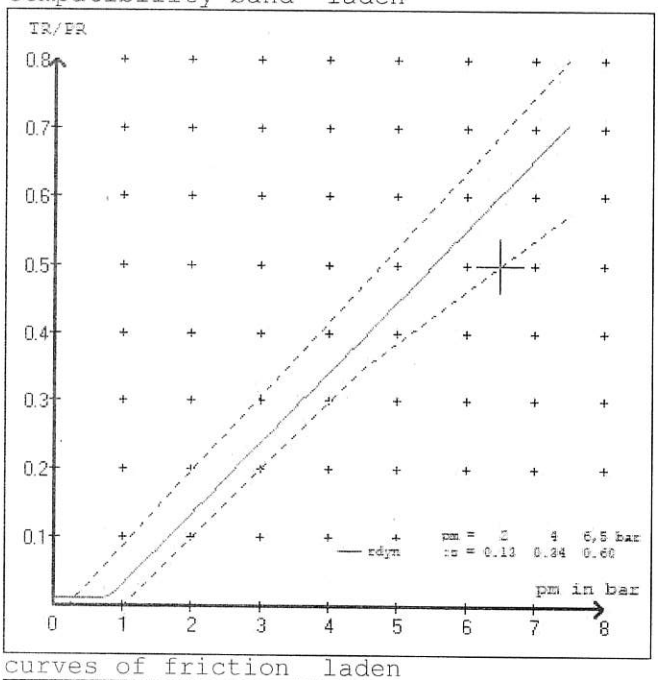
brake chamber pressure laden



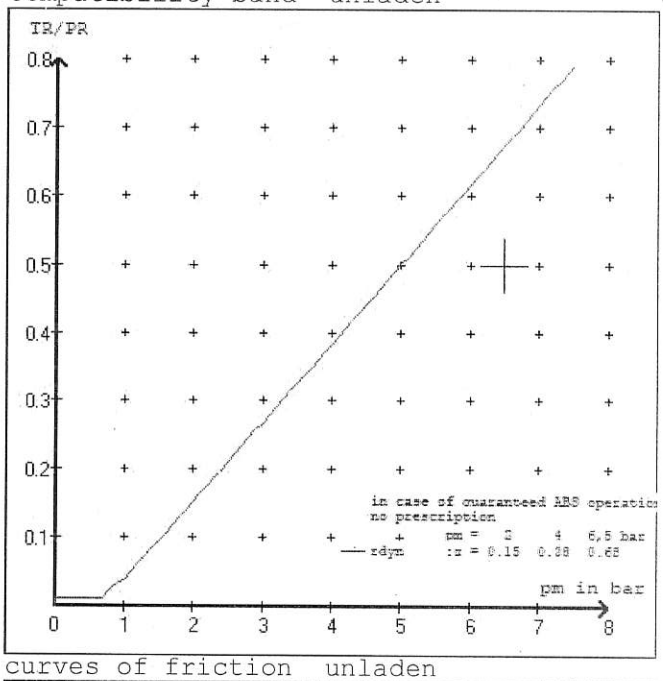
brake chamber pressure unladen



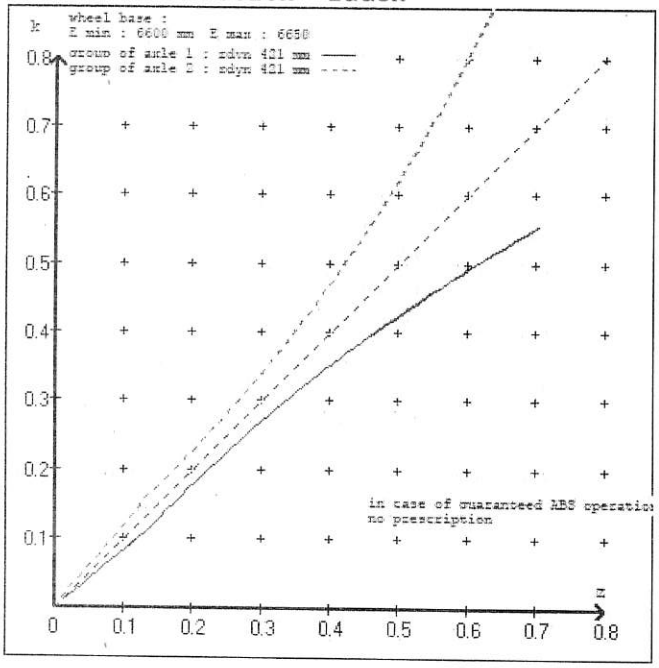
compatibility band laden



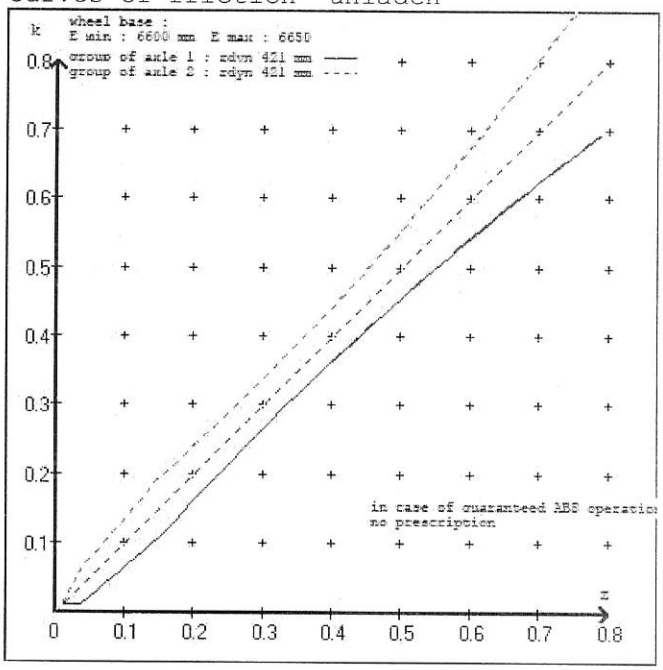
compatibility band unladen



curves of friction laden



curves of friction unladen



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

brake chamber and lever length :

axle 1 :	2 x type/diameter	20.	(Meritor)	lever length 74 mm
axle 2 :	2 x type/diameter	20.	(Meritor)	lever length 74 mm
axle 3 :	2 x type/diameter	16/24	(Haldex)	lever length 74 mm
axle 4 :	2 x type/diameter	16/24	(Haldex)	lever length 74 mm
axle 5 :	2 x type/diameter	16"	(Haldex)	lever length 74 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 CURTAINSIDE
trailer type : 5-axle-full-trailer
brake calculation no. : TP 52261A

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	1650	to be entered by the vehicle manufact.	1.8	8000	to be entered by the vehicle manufact.	0.4	1.4	6.6
2	1650		1.8	8000		0.4	1.4	6.6
3	1300		1.5	6350		0.5	1.6	4.8
4	1300		1.5	6350		0.5	1.6	4.8
5	1300		1.5	6350		0.5	1.6	4.8

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
1650	1.8	1650	1.8	1300	1.5	1300	1.5	1300	1.5
2150	2.2	2150	2.2	1800	1.8	1800	1.8	1800	1.8
2650	2.6	2650	2.6	2300	2.2	2300	2.2	2300	2.2
3150	2.9	3150	2.9	2800	2.5	2800	2.5	2800	2.5
3650	3.3	3650	3.3	3300	2.8	3300	2.8	3300	2.8
4150	3.7	4150	3.7	3800	3.1	3800	3.1	3800	3.1
4650	4.1	4650	4.1	4300	3.5	4300	3.5	4300	3.5
5150	4.4	5150	4.4	4800	3.8	4800	3.8	4800	3.8
8000	6.6	8000	6.6	6350	4.8	6350	4.8	6350	4.8

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
axle 4 :	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 5 :	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 = 23.6 % Fe
axle 2	(rdyn 421 mm)	T = 23.6 % Fe
axle 3	(rdyn 421 mm)	T = 16.1 % Fe
axle 4	(rdyn 421 mm)	T = 16.1 % Fe
axle 5	(rdyn 421 mm)	T = 16.1 % Fe

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

axle 1	(sp = 58 mm)	s = 38 mm
axle 2	(sp = 58 mm)	s = 38 mm
axle 3	(sp = 50 mm)	s = 38 mm
axle 4	(sp = 50 mm)	s = 38 mm
axle 5	(sp = 50 mm)	s = 38 mm

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

axle1	ThA = 7687 N
axle2	ThA = 7687 N
axle3	ThA = 4573 N
axle4	ThA = 4573 N
axle5	ThA = 4573 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 = 47013 N
axle 2	(rdyn 421 mm)	T = 47013 N
axle 3	(rdyn 421 mm)	T = 27893 N
axle 4	(rdyn 421 mm)	T = 27893 N
axle 5	(rdyn 421 mm)	T = 27893 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 = 47013 N
axle 2	(rdyn 421 mm)	T = 47013 N
axle 3	(rdyn 421 mm)	T = 27893 N
axle 4	(rdyn 421 mm)	T = 27893 N
axle 5	(rdyn 421 mm)	T = 27893 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 3	axle 4
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	0.267	
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 = 5118 mm for E = 6600 mm
==========
min Ef = 5153 mm for E = 6650 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	=	35050 kg	maximum total mass - laden
nf	=	2	no. of axle(s) with TRISTOP spring brake actuators
ng	=	3	no. of bogie axle(s)

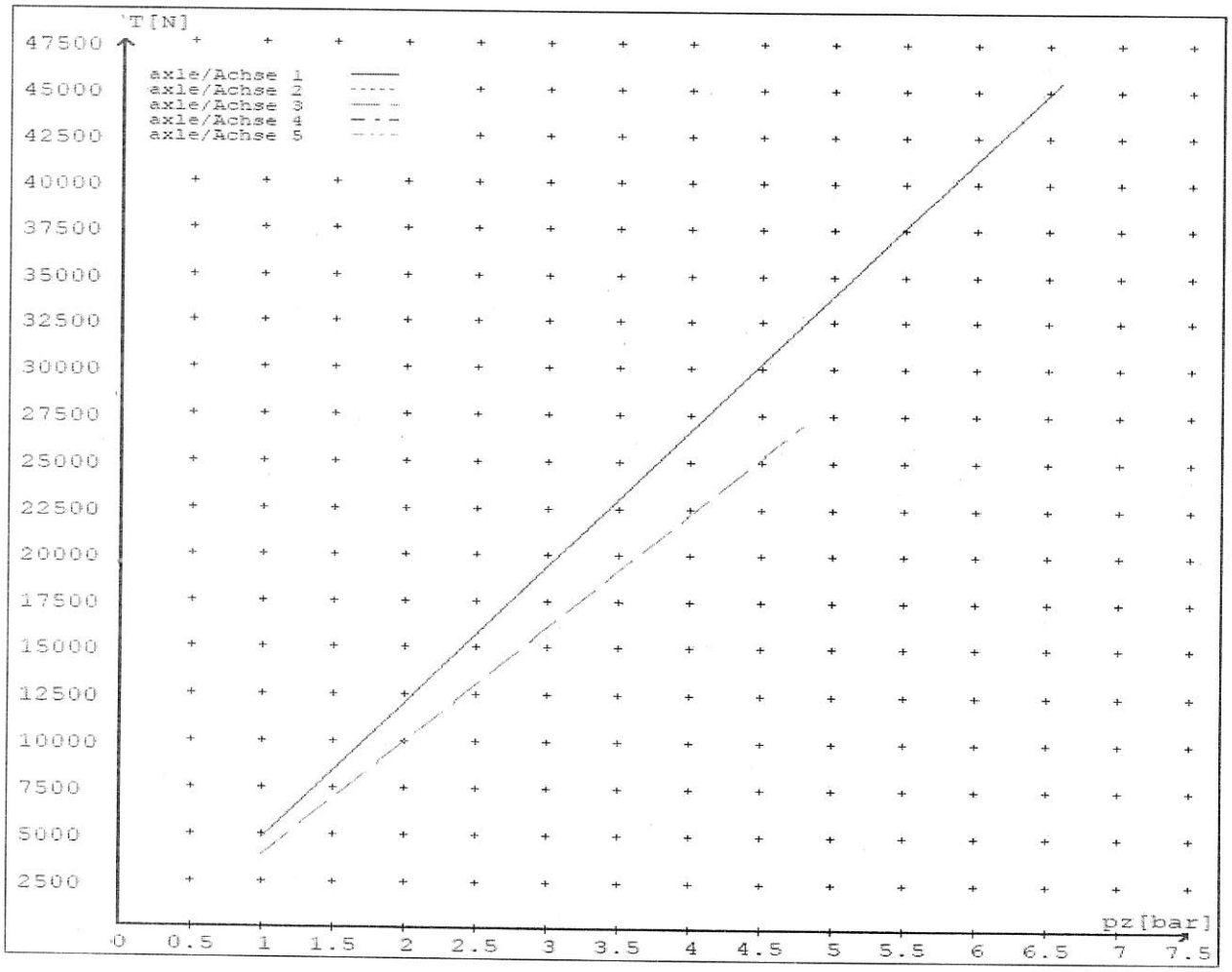
reference values

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

	pz [bar]	T [N]	T [N]
axle 1	1.0 6.6	4746 45490	
axle 2	1.0 6.6	4746 45490	
axle 3	1.0 4.8		3850 26965
axle 4	1.0 4.8		3850 26965
axle 5	1.0 4.8		3850 26965

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	20./	20./	16/24	16/24	16"/
Maximum stroke smax = ...mm maximaler Hub smax = ...mm	65	65	65	65	65
Lever length = ...mm Hebellänge = ...mm	74	74	74	74	74



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**

(J.Hirst (JEH) HVEK)

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.

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

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.

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:	5AFT CURTAINSIDE	**CERT #:**	JH220618
YEAR:	2022	**CALCULATION #:**	TP52261
MAKE:	DOMETT	**REGO #:**	N/A
MODEL:	E2001 PH	**LT400 #:**	830433
CHASSIS #:	2214	**ORDER #:**	9004
VIN #:	7A9E20013N2023214		
GVM: *t*	32	**PRIME MOVER:**	EBS / EUROPEAN
LOAD CONFIGURATION:	MIXED FREIGHT		

	FRONT	REAR
GROUP RATINGS: *t*	16	19
WHEEL BASE: *m*	6.605	

	UNLADEN COG *m*	MAX HEIGHT *m*	HEIGHT DECK *m*
	1.08	4.3	1.09
COG: *m*	2.083		

	FRONT	REAR	TOTAL
TARE: t	3.3	3.9	7.2

	FRONT	REAR
TYRE SIZE:	265 70 R19.5	265 70 R19.5
ROLLING CIRCUMFERENCE: *mm*	2645	2645
AXLE SPACING: *m*	1.31	2.7

BRAKE & AXLE DETAILS

	MAKE	MODEL	TEST REPORT
AXLE:	ROR_ASSALI_STEFEN	ROR-CS9 I DISC	361-071-04
POLE WHEEL FRONT:	90	**POLE WHEEL REAR:**	90
LINING MATERIAL:	ROR 8616	**BRAKE FACTOR:**	20.26
SENSED AXLE(S):	# 2 + 4		**NOTES:**
SERIAL NUMBERS: 1	N/A		ROR CS9L
2	N/A		ROR CS9L
3	N/A		ROR CS9L
4	N/A		ROR CS9L
5	N/A		ROR CS9L

CHAMBER AND VALVING DETAILS

CHAMBERS:	**AXLE 1 & 2**	**AXLE 3 & 4**	**AXLE 5**
BRAND:	HALDEX_CHAMBERS	HALDEX_CHAMBERS	HALDEX_CHAMBERS
SIZE:	20, (125 200)	1624 (135 1624)	16, (125 160)
STROKE: *mm*	66	65	65
TEST REPORT #:	BC0175.0	BC0165.0	BC0169.0
SPRINGBRAKE FORCE: *kN*	N/A	6.003	N/A
HOLDOFF PRESSURE: *Bar*	N/A	5.2	N/A
FOUNDATION BRAKE:	MERITOR	MERITOR	MERITOR
LEVER LENGTH: *mm*	74	74	74

BRAKE VALVES:	**MAKE:**	**PART NUMBER:**	**PM PRESS.** *kPa*
ECU PART #:	WABCO	480 102 08. 0 (MV)	80 kPa
3RD MODULATOR #:	WABCO	480 207 202 0 (12V)	80 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** 0.49

SUBSYSTEMS: ☐ SMARTBOARD ☐ OPTI-LINK ☐ CAN ROUTER 446 122 050 0

☐ ELEX 446 122 070 0 ☐ TAILGUARD

SUSPENSION

	FRONT	REAR
SUSPENSION TYPE:	PNEUMATIC	PNEUMATIC
MAKE:	ROR_AIRSPRING	ROR_AIRSPRING
MODEL:	ROR_INTRA	ROR_INTRA
BELLOW SIZE:	CS9I	CS9I
HEIGHT CONTROL VALVE:	HALDEX 90554950	HALDEX 90554950
OTHER VALVES:	N/A	N/A
RIDE HEIGHT *mm* :	260	260
HANGER HEIGHT *mm* :	225	225
PEDESTAL HEIGHT *mm* :	50	50
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		

ELECTRONIC HEIGHT SENSOR CALIBRATION

	TIMER TICKS [F/R]	MILLIMETRE [F / R]
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:	275	285	320

NOTES AND SPECIAL CONDITIONS

FILES RECEIVED: 06.04.2022

FILES CREATED & SENT TO CJC: 13.06.2022

FILES RETURNED AS COMPLETE:

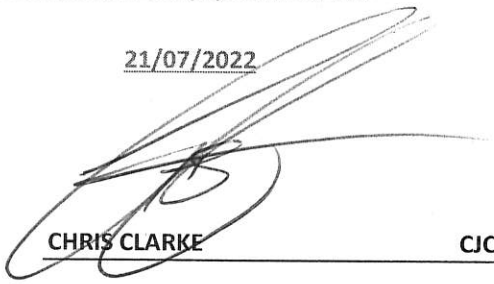
REASON FOR CERTIFICATION: NEW TRAILER BUILD

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 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: 21/07/2022

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

LT400 No: 824859 Refer No: 6581-04

promech Consultants Ltd

PDS :	CERTIFICATE OF COMPLIANCE

Certifier:	GEORGE BARBOUR	ID: GRB4
Branch :	Promech Consultants Ltd, 103 Wharf Street Tauranga	

Client :	Domett Truck & Trailer Limited	Order No:	44433
Address :	217 Taurikura Drive, Tauriko, PO Box 9458, Greerton, Tauranga	Phone No:	(07) 575 5139

Vehicle Details :

Make: 2022 DOMETT				Model: E2001 PH							Rego:						
VIN / Chassis:	7	A	9	E	2	0	0	1	3	N	2	0	2	3	2	1	4
Class: TD				Speedo: - km							Hubmeter: km						
GCM: - kg				GVM: 32000 kg							Tare: 6500 kg						

Requirements of customer and standards / Codes design to comply with :

Item certified:	SRT New
Standards / codes:	VDAM 41001: 2016

Operating condition and intended use: On highway

Welder: Refer Checksheet

Assumptions & Special Conditions: SRT COMPLIANCE CERTIFICATE ATTACHED

Fabrication / Installation Instructions / Drawing No:

Design For: Single use	Design Life: N/A

Static Roll Threshold inspection check sheet completed: Y Pass: Y Time Refer JDS

Description of work :
CERTIFY SRT - 5 AXLE FULL TRAILER

Rechecked and Passed Y

I declare that I am a heavy vehicle specialist certifier engineer and I hold a current valid appointment. I certify that at the time of inspection this vehicle component design and this certification comply in all respects with the Land Transport Rule: Vehicle Standards Compliance 2002; my Notice of Appointment and applicable requirements. To the best of my knowledge the information contained in this certificate is true and correct.

Heavy Vehicle Specialist Inspector Signature: Date: 21/07/2022

Promech Conditions of Contractual Engagement :

ACENZ / IPENZ Conditions of Engagement Apply (Conditions are available on request, standard form No. 1-038). The liability of the certifier to the client in respect of his / her services for the project shall be limited to five times the value of the Promech Consultants fee.

The client will also indemnify the Consultant for any damages, loss or costs the Consultant, as a result of providing the services, must pay or suffers under its Deed of Appointment with the Director of Land Safety to be a Heavy Vehicle Specialist Certifier. However, this indemnity will not apply to the extent that the damages, costs or loss are due to any breach by the Consultant of its common law duty of care to the Director when performing its obligations under the Deed of Appointment.

The client understands that all correspondence and communication regarding work to be carried out is a recommendation by the individual Certifier for standards compliance only and not an instruction to the engineering workshop to carry out the work.

The client should discuss any concerns regarding this certification with the Certifier or submit a formal written complaint, including the date and Promech job number or description to the attention of the Certifier identified above. The client may appeal to the NZTA if dissatisfied with any matters related to the certification.

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Consultants Ltd

Static Roll Threshold Compliance Certificate

Name of vehicle owner:	**Fitchett Linehaul Ltd**
Address:	
SRT Compliance Certificate no:	**6581-04**
Vehicle Identification No.(VIN):	**7A9E20013N2023214**
Vehicle chassis No:	**2214**
Current vehicle registration:	
Type of vehicle:	**Full-Trailer**
No of axles in front set: **2**	**No of axles in rear set:** **3**
Deck length of vehicle:	**10.23 metres**
Maximum height of load or vehicle body:	**4.3 metres**
Front suspension type:	**User Defined**
Rear suspension type:	**User Defined**

I, **George Barbour** of **Promech Consultants, PO Box 886, Tauranga** certify that

at the time of inspection this vehicle achieved a rating on a Static Roll Threshold test as follows:

Using standard load type: Uniform density Description: Assumes load mass is centred midway vertically between load bed and load height.

At a max. load height of 4.3 metres and a max. allowable gross mass of 35 tonnes, the SRT is 0.35g

This vehicle meets or exceeds the minimum SRT target of 0.35g.

Results of SRT test to be displayed on Certificate of Loading
X1 = 4.3 metres / Y1 = 35 tonnes ; Y2 = 35 tonnes / X2 = 4.3 metres.

The type of test carried out to establish this rating was: NZTA SRT Calculator Version 2.12c

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Summary Input Data used for calculation.

Tyre Data:

Axle	Tyre Size:	Tyre Configuration:
1	19.5	Dual
2	19.5	Dual
3	19.5	Dual
4	19.5	Dual
5	19.5	Dual

Body Style is Standard

Mass and Suspension Data:

Inputs	Front	Rear
Gross mass (kg):	16000	19000
Payload mass (kg):	12680	15140
Tare mass (kg):	3320	3860
Average load bed height (m):	1.078	
Average load height (m):	4.3	
Suspension type:	User Defined	User Defined
Suspension track width (m):	0.98	0.98
Lash (mm):	104	104
Suspension brand/model:	ROR CS9L - Low Mount	ROR CS9L - Low Mount
Roll stiffness/axle (Nm/radian):	2197000	2197000
Spring stiffness/spring (N/m):	128000	128000
Roll centre height from axle (m):	0.035	0.035

I certify that I am a vehicle inspector appointed under *section 2 of Land Transport Rule: Vehicle Standards Compliance 2002*. I certify that this certificate complies in all respects with the applicable requirements in that rule, and that, to the best of my knowledge, the information in this certificate is true and correct

Signed: _____ Name: **George Barbour**

Vehicle Inspector/Inspecting Organisation No **GRB4** Date: **21/7/2022**

SRT Compliance Certificate no: 6581-04

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