

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: BPW 05.444.15...

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: BPW 05.444.15...

axle 3:

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

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

brake cylinder: WABCO 925 376 005 0 / 925 376 2.. 0

axle 4:

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

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

brake cylinder: WABCO 925 376 005 0 / 925 376 2.. 0

axle 5:

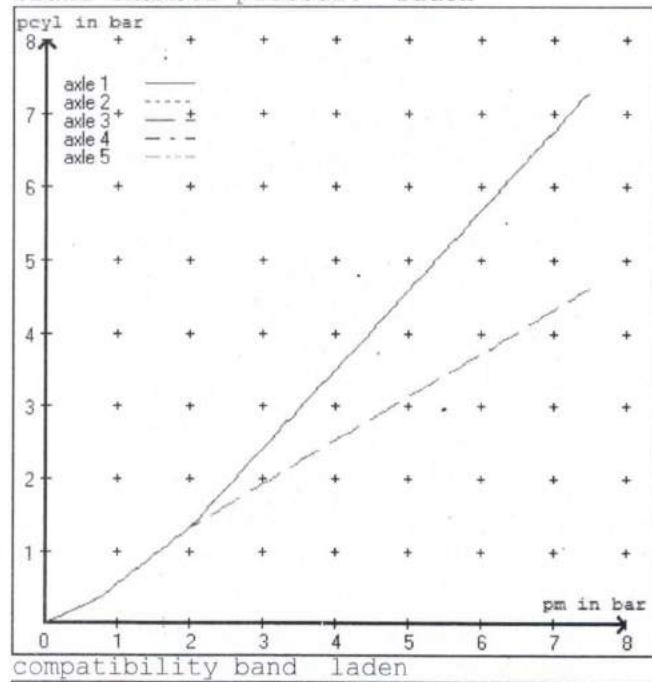
valve 1: 971 002 ... 0 WABCO
EBS emergency valve

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

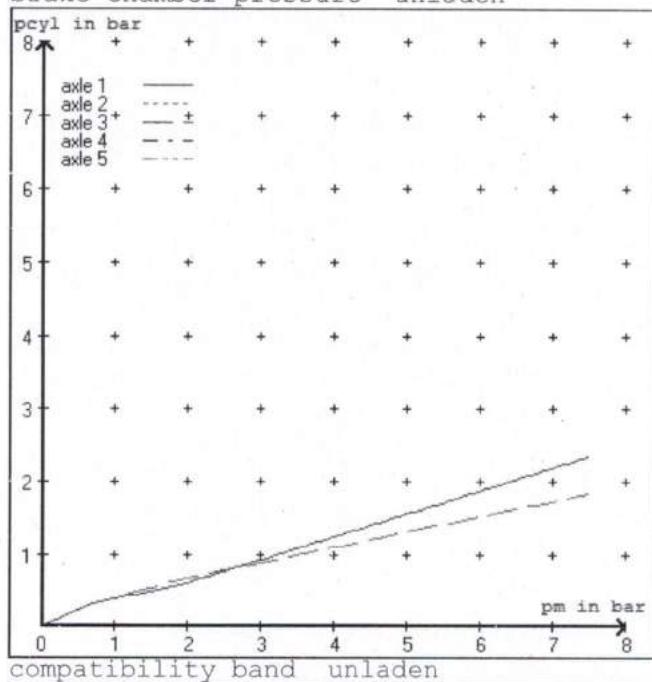
brake cylinder: BPW 05.444.15...

test type III (zIII = 0.30) for rdyn min : axle1 axle2 axle3 axle4 axle5
at pm 3.5 bar => pcha in bar : 2.9 2.9 2.2 2.2 2.2
test type III (zIII = 0.06) for rdyn min : axle1 axle2 axle3 axle4 axle5
at pm 1.1 bar => pcha in bar : 0.6 0.6 0.6 0.6 0.6

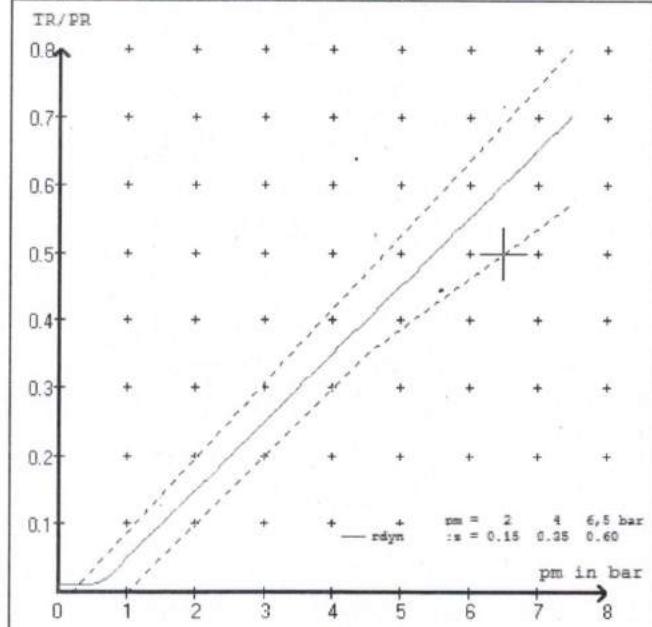
brake chamber pressure laden



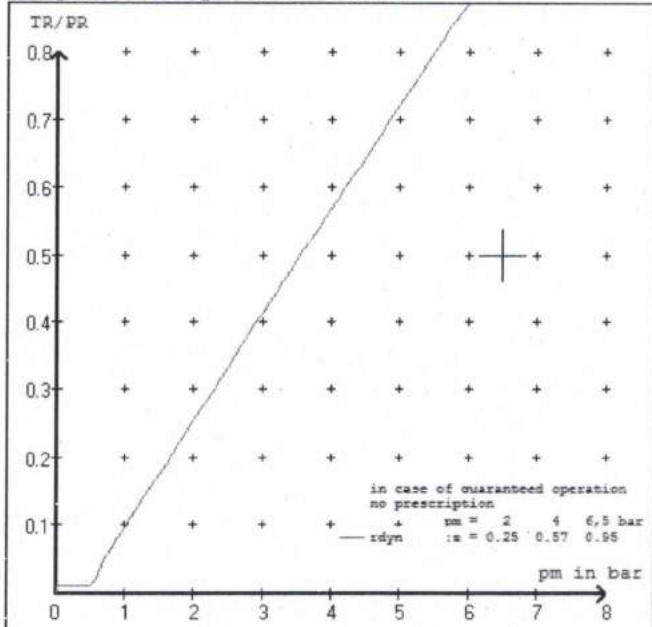
brake chamber pressure unladen



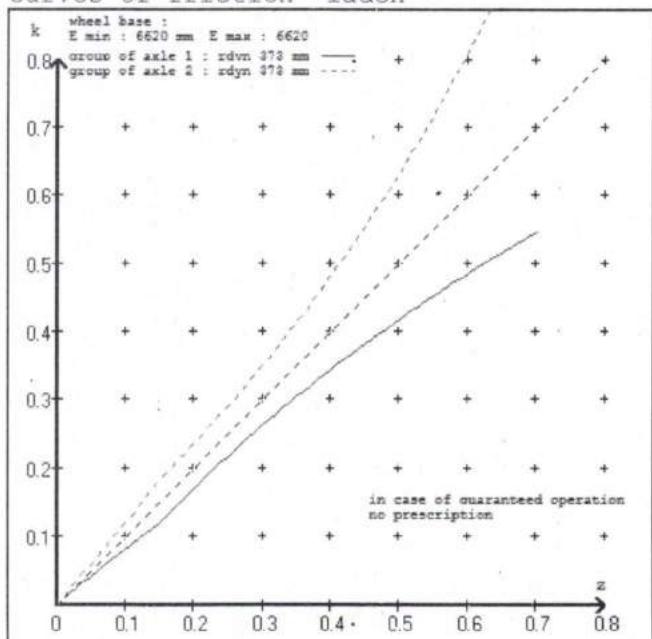
compatibility band laden



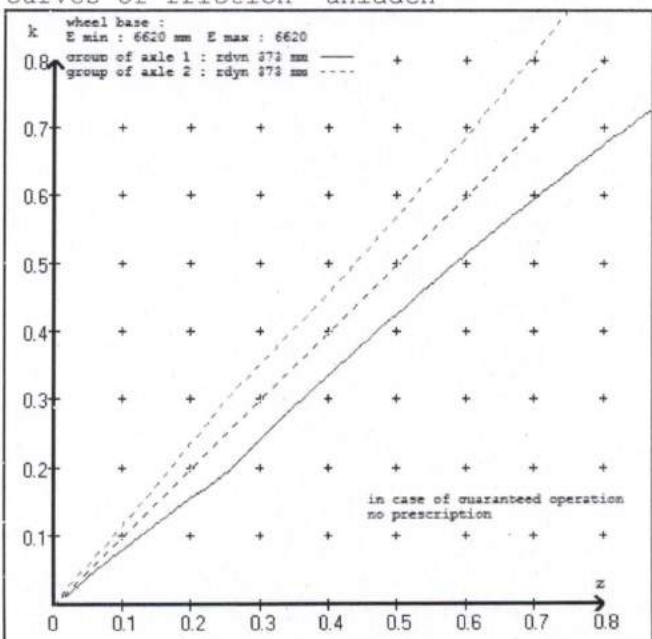
compatibility band unladen



curves of friction laden



curves of friction unladen



spring parking brake

		axle 3	axle 4
no of TRISTOP-actuators per axle line KDZ		2	2
TRISTOP-actuator type		24/30	24/30
lever length	lBh in mm	127	127
stat. tyre radius	rstat max in mm	356	356
at a stroke of	s in mm	30	30
min. force of spring brake	TFZ in N	6360	6360
sp.brake chamber no 925	376 005 0376 005 0		
sp.brake chamber no 925	376 2.. 0376 2.. 0		
release pressure	pLs in bar	4.9	4.9

calculation:

ratio until road		3.0680	3.0680
iFb = lBh*Eta*C*rBt/(2*rBn*rstat)			
for rstat in mm		356	356
brake force of spring br. Tf in N		39290	39290
Tf = (TFZ*KDZ-2*Co/lBh)*iFb			
braking rate	zf.laden	0.238	
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

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

min Ef = 5089 mm	for E = 6620 mm
=====	=====
min Ef = 5089 mm	for E = 6620 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 = 2013 mm height of center of gravity - laden
 PR = 19200 kg maximum bogie mass - laden
 P = 35200 kg maximum total mass - laden
 nf = 2 no. of axle(s) with TRISTOP spring brake actuators
 ng = 3 no. of bogie axle(s)

axle manufacturer Assali Stefen
type of brake AC (311x190)
type of axle TM
test report no. TDB 0854 ECE
test report of characteristic value

adm. stat. axle load	Pstat	in kg	10500
tested axle load	Pe	in kg	10500
max. adm. tyre radius	Rezul	in mm	999
adm. cam. torque (6,5 bar)	Czul	in Nm	1926
lining area per brake	AB	in cm ²	1136
no. of brake cylinder	-	-	2
brakefactor Bf	-	-	8.60
threshold torque (Co,dec)		in Nm	-6

date	2011-07-20		
brake lining	ROR 685 AF		
cam torque	Ce	in Nm	1642
brake force	TeIII	in daN	5322
stroke	seIII	in mm	56
tested tyre radius	Re	in mm	438
tested lever length	le	in mm	127
threshold torque (Co,e)		in Nm	27

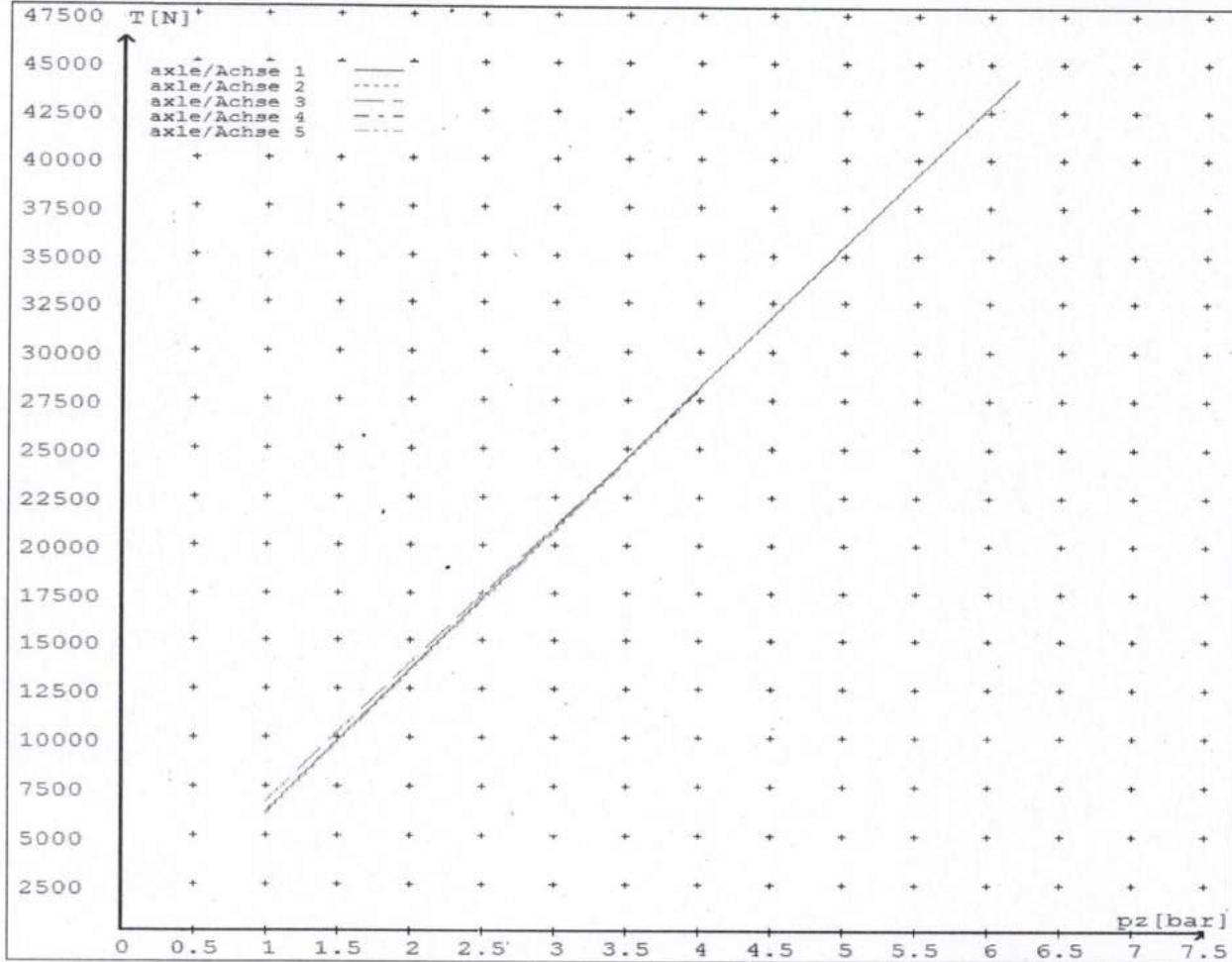
reference values

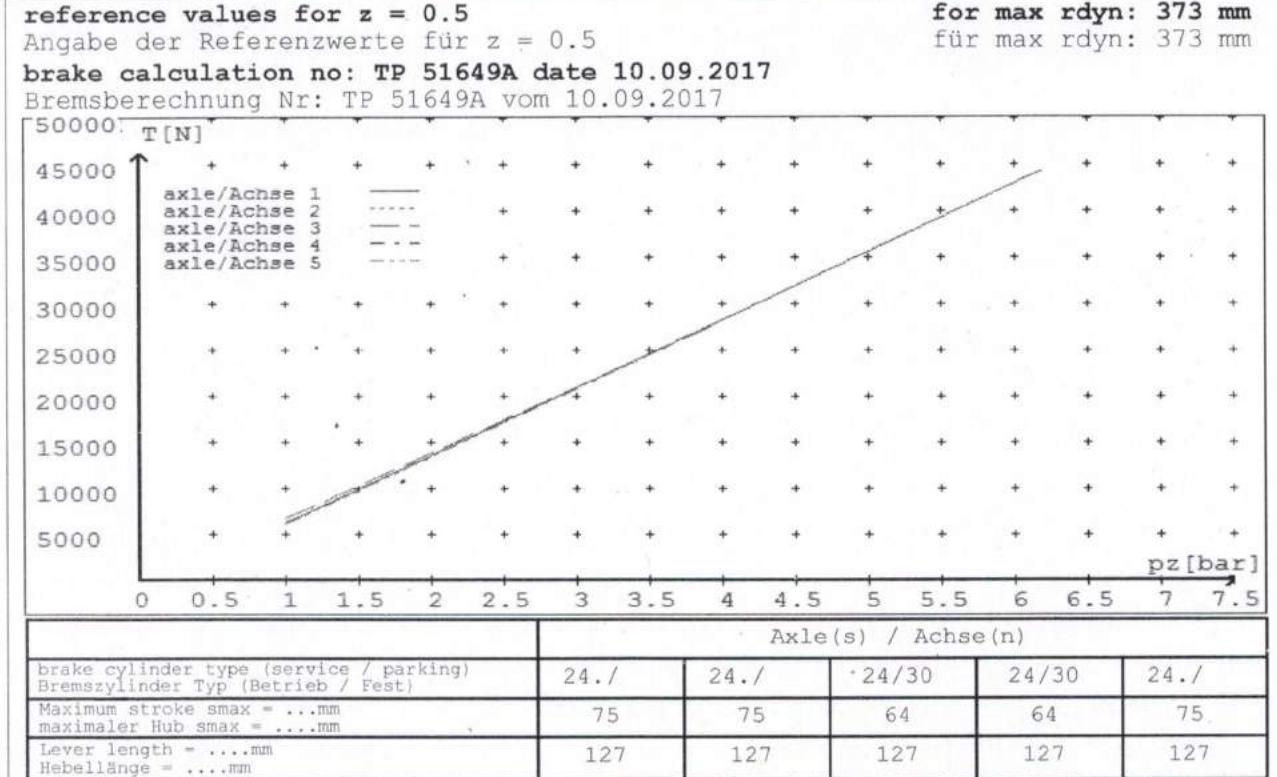
reference values for z = 50% for max rdyn: 373 mm

	pz [bar]	T [N]	T [N]
axle 1	1.0	6135	
	6.2	44238	
axle 2	1.0	6135	
	6.2	44238	
axle 3	1.0		6641
	4.0		28026
axle 4	1.0		6641
	4.0		28026
axle 5	1.0		6004
	4.0		27987

VIN - no.:

	Axle(s) / Achse(n)				
brake cylinder type (service / parking) Bremszylinder Typ (Betrieb / Fest)	24./	24./	24/30	24/30	24./
Maximum stroke smax =mm maximaler Hub smax =mm	75	75	64	64	75
Lever length =mm Hebellänge =mm	127	127	127	127	127





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 32015/4.

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 32015/4. 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 a 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)

NOTICE TO VEHICLE OPERATOR

This trailer is equipped with an **Electronic Brake System**.

To comply with the New Zealand Heavy Vehicle Brake Rule 32015/4, it must be used only in conjunction with a truck/tractor equipped with a 5 or 7 pin ABS/EBS power supply socket.

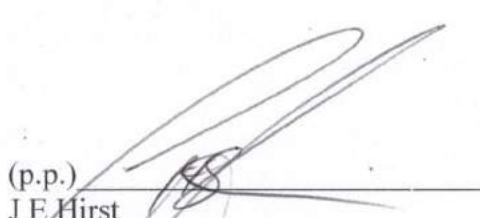
Failure to connect to such supply invalidates Brake Rule compliance.

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)





HEAVY VEHICLE BRAKE RULE
32015/4 WORKSHEET
(PROCEDURE DOCUMENTATION SHEET-PDS)
&
CONFIRMATION OF COMPLIANCE

CERTIFICATE NO. JH170919

CUSTOMER NAME DOMETT TRAILERS LTD

CUSTOMER ORDER NO. 4888 DATE RECEIVED 18-Sep-17

VEHICLE TYPE LOW LOADER

VIN/ CHASSIS NO. 7A9E45012H1023643

BRIEF SPECIFICATION AS CERTIFIED TO SCHEDULE 5

<u>BRAKE VALVES</u>	<u>MAKE</u>	<u>TYPE</u>
PRIMARY RELAY	WABCO	480 102 08. 0
SECONDARY RELAY	WABCO	480 207 202 0
YARD RELEASE VALVE	SEALCO	17600B
PARK BRAKE VALVE	SEALCO	110701
<u>SUSP. VALVES [WABCO]</u>	<u>FRONT</u>	<u>REAR</u>
CONTROL	441 044 101 0	N/A
DISTANCE SENSOR	464 008 011 0	464 008 011 0

OTHER VALVES:

MAKE:	WABCO	TYPE:	461 513 002 0	SETTING:	5.5 Bar
MAKE:	WABCO	TYPE:	446 192 110 0	SETTING:	SMARTBOARD
MAKE:		TYPE:		SETTING:	
MAKE:		TYPE:		SETTING:	

<u>BRAKE CHAMBERS:</u>	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
MAKE	TSE	TSE	TSE
SIZE	24S	2430GC	24S
MAX STROKE (mm)	67	64	67
SLACK LENGTH (mm)	127	127	127
 DRUM TYPE:	311x190	311x190	311x190
		OR	
 BRAKE CALIPER:	N/A	N/A	N/A
 FRiction MATERIAL:	<input checked="" type="checkbox"/> OEM	<input type="checkbox"/> AFTERMARKET	
<u>LINING BRAND</u>	AXLE 1 & 2	AXLE 3 & 4	AXLE 5
	ROR 685 AF	ROR 685 AF	ROR 685 AF
 OTHERS:			
TYRES:	FRONT	REAR	
	215 75 R 17.5	215 75 R 17.5	
 BRAKE CALCULATION #:	TP51649		

COMMENTS:

EBS, SPECIAL CONDITIONS APPLY. SEE INSTRUCTIONS ON LT400 #

SALES ORDER #: SO923210 **PROCESS TIME:** 1 HOUR

TRAILERS EQUIPPED WITH PREV: THE PARK BRAKE PERFORMANCE MUST BE

MEASURED BY PULLING THE RED ACTUATION KNOB ON THE PREV VALVE WHEN

THE AXLES - EQUIPPED WITH SPRING BRAKES - ARE IN THE BRAKE ROLLERS. THE

PARK BRAKE IN THE CAB MUST NOT BE APPLIED.

NOTES:

CHAMBERS & PARK BRAKE PERFORMANCE:

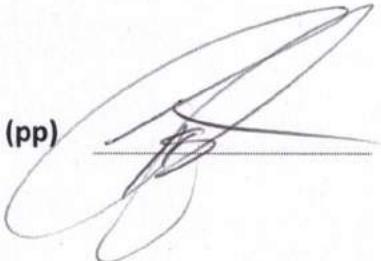
REFER TO BRAKE CALCULATION TP51649: $z = 0.238 @ 78580 \text{ (N)}$ MINIMUM WITH 4x SBC

FRONT FRICTION (μ) = 0.486

CONFORMATION OF COMPLIANCE

I CONFIRM THAT THE VEHICLE IDENTIFIED IN PAGES 1 AND 2 OF THIS CONFORMATION OF COMPLIANCE COMPLIES WITH ALL RELEVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY VEHICLE BRAKE RULE 32015/4, SCHEDULE 5.

DATE: 18-Sep-17

SIGNED: (pp) 

NAME & ID: J HIRST (JEH)

PHONE (BUS): 09 980 7300

FAX (BUS) 09 980 7306

POSTAL ADDRESS: TRANSPORT SPECIALTIES LTD
PO BOX 98-971,
MANUKAU CITY,
MANUKAU 2241

POSITION: BRAKE CERTIFIER HVEK

I CONFIRM THE BRAKE SYSTEM OF THE VEHICLE IDENTIFIED IN PAGE 1 OF THIS STATEMENT OF COMPLIANCE AS MODIFIED BY MYSELF, CONTINUES TO COMPLY WITH ALL THE RELIVANT REQUIREMENTS OF THE CURRENT NEW ZEALAND HEAVY BRAKE RULE 32015/4 SCHEDULE 5.

DATE: **SIGNED:**

NAME:

CERTIFIERS ID: **POSITION:**

PHONE (BUS): **FAX (BUS):**

COMMENTS:
