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ROLLER BRAKE TESTERS For trucks and buses of 6 to 20 tons axle load

BT FOR TRUCKS

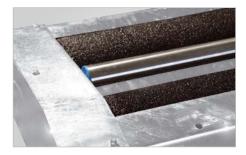
JohnBean





BRAKING FORCE TRANSDUCERS

The features to be tested are detected by means of well-proven strain-gauge type load cells. This wear-free measuring system ensures reliable and error-free measurement of the forces produced.



ROLLER COATING

The steel rollers with wear-proof plastic coating on welded expanded metal mesh guarantee tyre-preserving vehicle tests.

Alternatively SmoothGrip rollers are available, featuring thousands of nubs welded onto the steel rollers to ensure long life, low tyre wear and best suitability for spiked tyres.

PROVEN TESTING TECHNOLOGY FOR YOUR WORKSHOP

Roller brake testers in proven testing technology for an axle load range of 6 to 20 tons – the optimum solution for workshops, truck and bus fleets as well as expert organisations carrying out inspections in line with government standards.

OUR PRODUCT LINE FOR TRUCKS

BT 3106 of up to 6 t axle load

- Roller set in compact design
- Motors in middle position

BT 3513/BT 3515 of up to 13 tons and 15 tons axle load

- Roller set in two-part design
- Motors under the rollers

BT 4516/BT 4520 of up to 16 tons and 20 tons axle load

- Roller set in two-part design
- Motors under the rollers

BT 4616 of up to 16 tons axle load

- Roller set in two-part compact design
- Motors at drive-off end

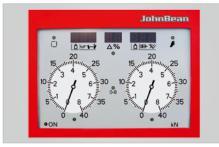
The brake testers of series BT offer standard features such as:

- Automatic mode
- Manual mode
- Ovality measurement
- Cut-out at wheel lock
- Automatic switching in
- Display of braking force imbalance
- Indication of cut-out at wheel lock
- Automatic switching over between car and truck modes
- Electric automatic drive-off aid



PC CABINET

The optional PC cabinet offers ample space for a PC, a TFT monitor, an A4 inkjet printer, keyboard and mouse.



DISPLAY CABINET

The electronic unit is integrated in the display cabinet.



PC VERSIONS

With E box and brake tester software instead of display cabinet.



PROVEN TESTING TECHNOLOGY FOR YOUR WORKSHOP

Basic equipment

The brake testers consist of the following basic equipment:

- roller set with cables
- display cabinet

Roller set with cables

The mechanical parts are hot-galvanised and the motors are splash-proof – the optimum prerequisite to withstand harsh shop conditions and outdoor installation.

Elevated rear rollers

Elevated rear rollers facilitate driving off the rollers and prevent the vehicle from driving off too early. Alternatively truck brake testers of 13 t axled load and more are available with level rollers, dual direction testing and 4WD mode.

Rust-proof feeler rolls

The brake test does not start before both feeler rolls are depressed. This safety feature prevents unintentional starting of the brake tester.

Measuring range of 0-6/0-30 kN for • BT 3513 - 13 t

Measuring range of 0-8/0-40 kN for • BT 3515 - 15 t • BT 4516 - 16 t • BT 4520 - 20 t • BT 4616 - 16 t

When a car is tested, the measuring range switches automatically to 6 kN or 8 kN. In addition there is the possibility of simultaneous operation, e.g. with the display cabinet installed in the check-in bay and connected via COM lead to the PC which is for instance located in the shop office.



ROLLER SET BT 3106





ROLLER SET BT 4616

PROVEN TESTING TECHNOLOGY FOR YOUR WORKSHOP

Optional built-in frames for the roller sets facilitate preparation of the foundation.

- There is no need to embed in concrete a steel beam with edge guards as otherwise inevitable.
- The time required for encasing is considerably reduced.
- Foundations will always fit perfectly.

Depending on individual requirements and conditions on site the roller sets can be installed in front of the pit, or separately on left and right sides.

Brake testers for 13 t axle load and more are available with one or two speeds. All truck brake testers are also available with brake motors.



OPTIONAL WHEEL/AXLE LOAD Weighing Unit

The wheel/axle load weighing unit is designed to automatically detect, calculate and store weight. The values are read out on the optional integrated LED on the display cabinet, or in graphical form on the optional monitor.

BRAKE TESTER OPTIONS

PEDAL FORCE MEASURING SYSTEMS

For pedal force measurement during the brake test pedal force measuring systems are available in cable or wireless design. Pedal pressure is read out either on an optional integrated LED on the display cabinet, or in graphical form on the optional monitor. One version is available with integrated display and power supply.

PRESSURE TRANSDUCERS

Set of 2 to 8 off, wireless design, also available as cable-type transducer.

The values measured remain available also for later analysis.

SAFETY DEVICE FOR PIT INSTALLATION



When the roller sets are installed over a pit, the danger zone is to be protected with a safety device so that the rollers stop at once when a person enters the danger zone (comply with country-specific regulations).

4WD KIT FOR BRAKE TESTERS WITH ELEVATED ROLLERS

In 4WD mode the roller sets start in counter-directions to prevent damage to gearbox and axle of 4WD buses and trucks.

JOINT PLAY DETECTOR JPD 4620 FA



The joint play detector JPD 4620 FA is a useful supplement for check-in or inspections to carry out a visual check of axle play. The galvanised test plates are operated hydraulically upon key operation of the test lamp. The test plates can be controlled one by one, in counter-directions (4-way control), or in same directions (8-way control).

LOAD SIMULATOR NSV 3000

The load simulator NSV 3000 is designed to simulate various axle loads of 0 to 2,800 kg on unloaded trucks by pulling the vehicle downwards by means of chains; for use on all truck brake testers for 13t and more.

SIDE-SLIP TESTER TT 4020



The side-slip tester is designed to measure toe of the vehicle under test immediately. The results of toe-in and toe-out respectively are read out on the optional integrated LED on the display cabinet, or in graphical form on the optional monitor.

CONTROL OPTIONS

OPTIONAL POCKET PC PWA

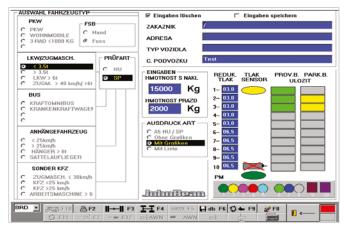
The optional PWA (pocket workshop assistant) is a pocket PC with John Bean testing software (country- or customer-specific software must be ordered separately and is not included in delivery) integrated remote control which can replace other display units such as display cabinet or monitor. The entire test sequence is controlled from driver's seat. Only the function keys required for the current test are displayed on the screen. Control is via touch screen. A PC station is necessary for connection of the PWA.



AUTOMATIC TEST SEQUENCE

After the error check routine the brake test starts automatically, determining rolling resistance of tight brakes, ovality of brake drum and brake disc and the permanent braking force imbalance between left-hand and right-hand sides. The data measured for the individual axles are assigned automatically.

TESTING SOFTWARE MAIN SCREEN



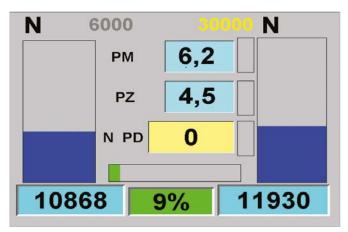
The main screen of the PC shows all essential customer and vehicle data at a single glance.

TABLET PC



As an alternative to the pocket PC the tablet PC is rugged and very handy and has the added benefit that no specific user software is required.

GRAPHICS GRAPHICAL BRAKE ANALYSIS



During the brake test the braking forces and braking force imbalance between left-hand and right-hand sides are viewed on the monitor.

ADDITIONAL OPTIONS AND TECHNICAL DATA

ADDITIONAL OPTIONS

IR remote control unit



A4 printer black/white, serial interface

Column or swivel-type wall bracket for display cabinet



8-digit LED

Roller cover plates, drive-over version, plug-in type



TECHNICAL DATA

		BT 3106	BT 3513	BT 3515
Max. drive-over load per axle	t	6	13	15
Roller coefficient dry – wet		> 0.7 / > 0.6	> 0.7 / > 0.6	> 0.7 / > 0.6
Temperature range	°C	0 up to + 40	0 up to + 40	0 up to + 40
Measuring principle		load cell	load cell	load cell
Processing of measured data		microprocessor	microprocessor	microprocessor
Measuring range: maximum achievable brake force	kN	12	26	30
E box for PC version – H x W x D $$	mm	600 x 800 x 200	600 x 800 x 200	600 x 800 x 200
E box for PC version - Weight	kg	35	35	35
Display cabinet – H x W x D	mm	600 x 800 x 200	600 x 800 x 200	600 x 800 x 200
Display cabinet – Weight	kg	35	35	35
Mains voltage	V	3/N/PE 400 V AC	3/N/PE 400 V AC	3/N/PE 400 V AC
Frequency	Hz	50	50	50
Fusing slow-blow type	А	3 x 25	3 x 50	3 x 50
Drive rating	kW	2 x 3.7	2 x 9.2	2 x 11
Test width min max	mm	800 - 2800	variable	variable
Roller set – W x L x H	mm	3070 x 700 x 270	1225 x 700 x 550	1225 x 700 x 550
Roller diameter	mm	204	204	204
Roller length	mm	1000	1000	1000
Roller elevation	mm	25	30	30
Anti-corrosion finish: galvanisation	DIN	50976-t Zno	50976-t Zno	50976-t Zno
speed (2nd speed optional)	km/h	2.6	2.5 / 5.0	2.8 / 5.6
Roller set - Weight	kg	725	2 x 400	2 x 430

TECHNICAL DATA

TECHNICAL DATA

		BT 4616	BT 4516	BT 4520
Max. drive-over load per axle	t	16	16	20
Roller coefficient dry – wet		> 0.7 / > 0.6	> 0.7 / > 0.6	> 0.7 / > 0.6
Temperature range	°C	0 up to +40	0 up to +40	0 up to +40
Measuring principle		load cell	load cell	load cell
Processing of measured data		microprozessor	microprozessor	microprozessor
Measuring range: maximum achievable brake force	kN	30	30	40
E box for PC version – H x W x D	mm	600 x 800 x 200	600 x 800 x 200	600 x 800 x 200
E box for PC version - Weight	kg	35	35	35
Display cabinet – H x W x D	mm	600 x 800 x 200	600 x 800 x 200	600 x 800 x 200
Display cabinet – Weight	kg	35	35	35
Mains voltage	V	3/N/PE 400 V AC	3/N/PE 400 V AC	3/N/PE 400 V AC
Frequency	Hz	50	50	50
Fusing slow-blow type	А	3 x 50	3 x 50	3 x 80
Drive rating	kW	2 x 11	2 x 11	2 x 15
Test width min. – max	mm	variable	variable	variable
Roller set - W x L x H	mm	1390 x 1560 x 380	1270 x 1210 x 640	1270 x 1210 x 640
Roller diameter	mm	255	255	255
Roller length	mm	1200	1000	1000
Roller elevation	mm	50	50	50
Anti-corrosion finish: galvanisation	DIN	50976-t Zno	50976-t Zno	50976-t Zno
Idling speed (2nd speed optional)	km/h	2.7 / 5.4	2.7 / 5.4	2.6 / 5.2
Roller set – Weight	kg	2 x 960	2 x 700	2 x 700

EMEA-JA

Snap-on Equipment s.r.l. · Via Prov. Carpi, 33 · 42015 Correggio (RE) Phone: +39 0522 733-411 · Fax: +39 0522 733-479 · www.johnbean-europe.com

Austria Snap-on Equipment Austria GmbH · Hauptstrasse 24/Top 14 · A-2880 St. Corona/Wechsel (RE) Phone: +43 1 865 97 84 · Fax: +43 1 865 97 84 29 · www.johnbean-europe.com

France Snap-on Equipment France - ZA du Vert Galant - 15, rue de la Guivernone BP 97175 Saint-Ouen-l'Aumône - 95056 Cergy-Pontoise CEDEX Phone: +33 134 48 58-78 - Fax: +33 134 48 58-70 - www.johnbean-france.fr

Part of the machines is illustrated with optional extras which are available at extra cost. Technical and visual modifications reserved.

Germany Snap-on Equipment GmbH - Konrad-Zuse-Straße I - 84579 Unterneukirchen Phone: +49 8634 622-0 - Fax: +49 8634 5501 - www.johnbean-deutschland.com

Italy Snap-on Equipment s.r.l. · Via Prov. Carpi, 33 · 42015 Correggio (RE) Phone: +39 0522 733-411 · Fax: +39 0522 733-410 · www.johnbean-italia.com

United Kingdom Snap-on Equipment Ltd. - Unit 17 Denney Road, King's Lynn - Norfolk PE30 4HG Phone: +44 118 929-6811 - Fax: +44 118 966-4369 - www.snapon-equipment.co.uk

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