HOFMANN®

safelane® 204-RP

BRAKE TESTER

TEST LANE FOR CARS AND VANS

ENGINEERING UNLEASHED™

THE ULTIMATE IN PRODUCTIVITY AND PERFORMANCE

TEST LANES TO MEET YOUR INDIVIDUAL REQUIREMENTS

For more than 50 years the name of Hofmann has been a synonym for engineering and manufacturing of testing and diagnostics technology for cars and trucks.

Our customers benefit from concentrated competence and direct and smooth handling of enquiries and orders.

A qualified team, the well-known product quality, good service and the advantages of the strong global Snap-on Group guarantee testing technology which is constantly optimised in terms of customer requirements.

The safelane® 204-RP is the optimum test lane for check-in, final inspection, tests in line with government standards, and training classes. The vehicle test in the presence of your customer and the relative print-out make diagnostics much more transparent and increase your customers‘ confidence.

MODULAR DESIGN

Owing to the modular design it is possible to buy test lane components step by step:

Basis is the brake tester, whereas suspension tester and side-slip tester can be retrofitted at a later date. All components of Hofmann testing equipment can be combined at customer‘s discretion.

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CUSTOMISED OPERATION OF TESTING EQUIPMENT

Brakes and shock absorbers are wear parts and there are numerous possible defects which might occur.

Regular diagnostics with results documented on the test record provide an additional service and profit for your shop. The complete vehicle test can be accomplished with the fully automatic test sequence where all testing units (brake tester, suspension tester and slide-slip tester) start automatically.

Due to short test cycles of 2 to 3 minutes each, shop technicians can noticeably increase their productivity. Additionally with the fully automatic mode employed a remote control unit is not required.

USER-FRIENDLY REMOTE CONTROL

The optional radio remote control unit can be used to control the testing equipment from driver‘s seat at the entire discretion of the operator, e.g. by starting the brake tester only, or by conducting the tests in the sequence he prefers.

BASIC MODULE - BRAKE TESTER

Additional modules:
- suspension tester
- side-slip tester

Display modules:
- workstation
- alternatively 32“ display kit
- alternatively 42“ display kit

The brake tester, which forms the basic unit of the test lane, is also available with braking motors (3.7 kW motors only).

The basic brake test covers the following measurements/calculations:
- rolling resistance
- ovality
- braking force imbalance left/right
- braking force left/right
- braking efficiency

BASIC MODULE - BRAKE TESTER

Standard equipment of the roller sets:
- Mechanics in compact or split flat design, galvanised and consequently suitable for outdoor installation
- Composite coated rollers, or steel rollers in SmoothGrip design
- Roller sets are equipped with rust-proof feeler rolls
- Splash-proof motors
- Measurement with wear-free strain-gauge type load cells
- Electric automatic drive-off aid
- 4WD mode (counter rotation) – operation with radio remote control or auto detection
- Dual direction testing – radio remote control unit required

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RP BOX

Latest technology for highest flexibility. The RP box with integrated electronics is the technological core of the system. Communication with the workstation or the display kit is wireless, which allows flexible and simple installation.

SIDE-SLIP TESTER TRACTEST® 204

The side-slip tester is designed to measure toe of the vehicle under test immediately. No additional tests are necessary as the testing plate is positioned directly in front of the suspension or brake tester and the vehicle simply rolls over. The data automatically detected supplies a sound diagnostics of toe-in and toe-out.The measured value is read out in 0 +/– 20 mm/m.

SUSPENSION TESTERS

contactest 202-E – Eusama-based suspension tester
contactest 202-T – Theta-type suspension tester

Shock absorbers wear slowly so that customers often do not recognise it. In less than a minute the suspension tester enables you to determine the cause of dangerous cornering abilities, irregular tyre wear, steering wheel vibrations, insufficient driving stability in case of cross winds, and poor braking performance.

Two different measuring systems are available:

EUSAMA-BASED SUSPENSION TESTER

Two independent test plates determine vehicle chassis vibrations as they phase out. The forces thus produced, which might adversely effect the vibratory behaviour of the vehicle, are detected and calculated (dynamic analysis).

THETA-TYPE SUSPENSION TESTER

This simple-to-operate suspension tester provides an unmistakable and highly accurate procedure for evaluation of suspension values. The evaluation is based on determination of the damping ratio ϑ according to Lehr, with a limit value being defined where wheel suspension no longer guarantees sufficient vehicle safety.

NOISE TEST MODULE

The suspension testers can be equipped with the noise test module as conventional techniques hardly allow localising any noise on or inside the vehicle. With this noise test module wheel can be set into vibration by operating the remote control unit. In the test cycle to follow, the noise is easily localised.

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DISPLAY MODULES

WORKSTATION

The workstation is supplied with control unit, 27“ TFT flat screen, A4 inkjet printer, keyboard and mouse and an extended software package.

PORTABLE CONTROLLER DEVICE

In addition to the workstation the test lane can be operated by means of a portable controller device such as a tablet PC.

VIRTUAL ANALOGUE DISPLAY

As an alternative to the workstation one of the following display kits is available:

- 32” display kit
- 42” display kit

with basic software package

The display kit can be mounted on the wall or on the stand.

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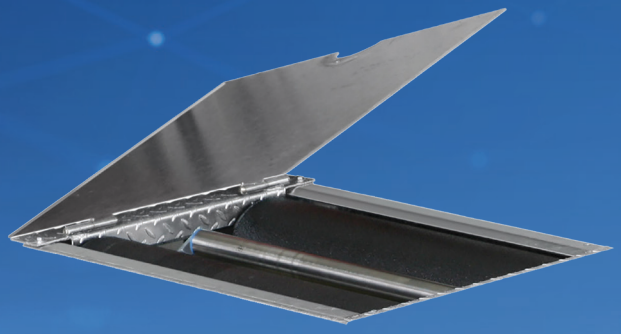
OPTIONS

OPTIONAL BUILT-IN FRAME

These built-in frames considerably facilitate preparation of foundations. There is no need to embed in concrete a steel beam with edge guards which is otherwise inevitable. None the less built-in frames are always exactly level with ground.



DRIVE-OVER AXLE LOAD 1.4 T

OPTIONAL PNEUMATIC LIFTING DEVICE

As the lifting device raises the vehicle to ground level, driving in and off the rollers is considerably facilitated and hence especially advantageous for vehicles with sports chassis, low ground clearance, or small wheel diameters where damage to the underbody is very likely under usual conditions.

Note: suitable foundation must be available
8 bar compressed-air supply required
Lowering / lifting capacity 3 t

OPTIONAL OUTDOOR CABINET FOR DISPLAY KIT

For outdoor installation of the brake tester an optional outdoor kit is available for the analogue display kits. Hence the analogue display can be adjusted to suit on-site conditions in conjunction with optional heating system, wall bracket, or stand

TECHNICAL DATA

General		safelane 204-RP K	safelane 204-RP K 5	safelane 204-RP G	safelane 204-RP G 5
Scope of application (with limitation of drive-over load and test weight as specified) (1)		M1, N1	M1, N1	M1, N1	M1, N1
Design of mechanics		compact	compact	split	split
Temperature range (without additional heating system)	°C	0 bis +40	0 bis +40	0 bis +40	0 bis +40
Power supply		3/N/PE 400 VAC 50 Hz	3/N/PE 400 VAC 50 Hz	3/N/PE 400 VAC 50 Hz	3/N/PE 400 VAC 50 Hz
Fuse rating – slow blow type	A	3 x 25	3 x 25	3 x 25	3 x 25
RP box – dimensions	mm	500 x 500 x 200	500 x 500 x 200	500 x 500 x 200	500 x 500 x 200
RP box – weight	kg	20	20	20	20
Workstation – dim. (W x H x L)	mm	750 x 1700 x 530	750 x 1700 x 530	750 x 1700 x 530	750 x 1700 x 530
Workstation – weight	kg	63	63	63	63
32” display kit – dim. (W x H x L)	mm	740 x 450 x 250	740 x 450 x 250	740 x 450 x 250	740 x 450 x 250
32” display kit – weight	kg	23	23	23	23
42” display kit – dim. (W x H x L)	mm	1030 x 680 x 330	1030 x 680 x 330	1030 x 680 x 330	1030 x 680 x 330
42” display kit – weight	kg	32	32	32	32

1) Vehicle categories according to EU standards, M1: Vehicles for the carriage of passengers and comprising not more than eight seats in addition to the driver‘s seat, N1: Vehicles for the carriage of the goods and having a maximum mass not exceeding 3.5 tonnes

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TECHNICAL DATA

Roller brake tester		safelane 204-RP K	safelane 204-RP K 5	safelane 204-RP G	safelane 204-RP G 5
Drive-over load / axle	kg	4000	4000	4000	4000
Test weight / axle (70% efficiency – ISO 21069)	kg	1750	2000	1750	2000
Roller coefficient dry/wet		> 0.7 / > 0.6	> 0.7 / > 0.6	> 0.7 / > 0.6	> 0.7 / > 0.6
Measuring range	kN	0 – 8	0 – 8	0 – 8	0 – 8
Maximum brake force	kN	6	7	6	7
Motor power	kW	2 x 3,7	2 x 5	2 x 3,7	2 x 5
Test width min. – max. – for roller length 700 mm – for roller length 1000 mm	 mm mm	 800 – 2200 800 – 2800	 800 – 2200 800 – 2800	 variable variable	 variable variable
Roller diameter	mm	216	216	216	216
Roller length	mm	700 oder 1000	700 oder 1000	700 oder 1000	700 oder 1000
Roller elevation	mm	level	level	level	level
Roller distance	mm	400	400	400	400
Wheel diameter min. – max.	mm	400 – 900	400 – 900	400 – 900	400 – 900
Anti-corrosion finish: galvanisation	DIN	50976-t Zno	50976-t Zno	50976-t Zno	50976-t Zno
Idling speed	km/h	5,4	5,4	5,2	5,2
Dimensions of roller set without options (L x W x H) – for roller length 700 mm – for roller length 1000 mm	 mm mm	 670 x 2305 x 255 670 x 2905 x 255	 670 x 2305 x 255 670 x 2905 x 255	 1040 x 940 x 243 each 1040 x 1240 x 243 each	 1040 x 940 x 243 each 1040 x 1240 x 243 each
Weight of roller set without options – for roller length 700 mm – for roller length 1000 mm	 kg kg	 400 450	 400 450	 250 each 280 each	 250 each 280 each

FIND A DISTRIBUTOR

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