



Test Equipment

**NTS 800 / NTS 810 / NTS 815**

Test Lane for car and motorcycle

# The NUSSBAUM Test Line concept

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## Customer retention with system

Modern service conceptions integrate your customer into the diagnostics process to create clarity and trust. Consequently the use of test lanes for the reception of vehicles becomes even more important.



Test lanes in the direct reception of car dealers belong already for a long time to the basic equipment and daily tool of the service personal. In this environment it supports primarily the communication with the customer.

During the reception of a vehicle, the most important factor is to communicate to the customer jobs that are required while he is there watching. This portrays technical know how and generates a degree of transparency and trust between all parties. After repairs, the customer can observe the difference in readings thus promoting customer satisfaction and increasing the prospect of him returning again.

The general inspections (GI) can all be completed using a test lane as well as having the added bonus of it being fast and reliable.

## Dialogue with the customer

- Enables transparency and cultivates trust with your customers
  - Relays professionalism to your customers
  - Increases the workshop efficiency
  - Decreases doubt and reduces complaints
  - Through the satisfaction of customers, promotes them to come back to you
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## At a glance

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### Fast and thoroughly informed

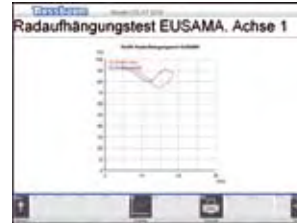
The test lane can be connected to a PC to transform it into a communications and network platform. It supports user friendly optimal workshop and personal planning and generates maximum efficiency. The type of vehicle you would like to test is just a mouse click away i.e., cars and motorcycles.

All results are consistently saved and administered through the customer and vehicle data base. These can be recalled when desired by using the history-function. Further to this it also guarantees the connection capabilities to workshop networking and compatibility to business software such as asanetwork, MCTC-NET etc. to reduce errors, save time and lower costs thanks to the central data acquisition.

The detailed customer protocol eases the ability to give clear and precise diagnosis evaluations. Through these test results you are able to recommend eventual repairs that would be required. Clearly laid out graphics enable easy interpretation of results, which quickly and completely documents your competent interpretation of the customer's vehicle.

### At a glance

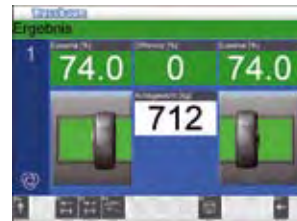
- User friendly Windows operating system
- Easy to configure test sequences for car and motorcycles
- PC supported graphical analysis program
- Analysis, management and printouts of all test results
- Central saving and management of customer and vehicle history and data
- Fully integrated emissions testing of diesel and petrol engine vehicles



All results can be displayed in graphs in order to analyse any faults.



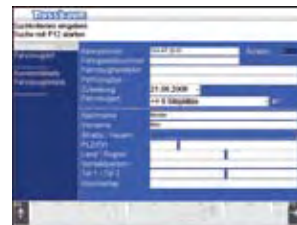
During the brake test, the brake force, brake force difference and deceleration, as well as the optional pedal force are permanently displayed.



Clear presentation of road holding values according the Eusama-Principle.



Easy understandable presentation for the directional stability of the vehicle.



Entering, saving and managing customer- and vehicle data on the central database.



Customer specific definition and default setting of test sequences.

## Test lane car & motorcycle

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### Hardware

- Galvanised roller set for optimal corrosion protection
  - Testing width 800 mm – 2200mm or 2800 mm
  - Automatic re-start of the rollers for exit of vehicle
  - Splash proof roller drive motors (IP54)
  - Drive off aid through self locking worm transmission
  - Industrially tested CAN-BUS-System
  - Maintenance free, top precision DMS measuring system
  - Long lasting and tyre friendly roller coating
  - Automatic error check and zero point calibration
  - Fully automatic time delayed start of the rollers after driving onto the test stand
  - Automatic stop after reaching the configurable slip threshold
  - Automatic stop after exiting brake tester
  - Single wheel testing (optional)
  - Permanent measurement and saving of all measured values
  - Program controlled evaluation of all values
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## Testing components

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### Safety of investment

- Modular extendable to a complete service diagnostic system
- Higher amount of vehicles through per shift
- Industry approved CAN-Bus-System
- asanetwork capable
- Possibility to connect to country specific networks (MCTC-NET, GIEGNET etc.)
- TÜV-approved

### Side slip tester

The vehicle drives onto a movable plate which triggers the start of the automatic testing procedure. The diversion of the track is measured in m/km. In the shortest amount of time you receive the run out of each axle.



### Suspension tester

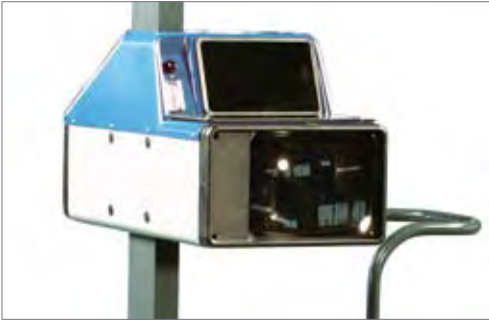
Through vibration of the measuring plates the unevenness of the road at various speeds can be simulated. The road holding of the vehicle can then be measured permanently, which will be displayed using the Eusama principle. These values will correspond to the overall safety of the vehicle. According to requirements, the test lane can also be equipped with a suspension tester using the BOGE principle.



### Brake tester

The plastic covered rollers start to rotate after the vehicle has driven into them (optional retrofit set including covering plates for motor-cycle testing available). The rolling resistance will be measured before braking begins. Afterwards ovality, brake force, brake force difference and deceleration (with optional weighing device) are being measured and calculated.





#### Visual inspection and Headlight adjustment

Using a checklist integrated into the software together with the axle play detector all tests can be visually inputted and displayed. The robust headlight tester SOL is able to test Halogen, Xenon and standard filament headlights (Luxmeter optional).



#### Emission tester

The emissions tester POLLUX is able to test Otto and Diesel engines according to the latest specifications. Above all the emission guide makes it possible to carry out detailed tests with assessment of the emission results. The step by step guide through the diagnostics function enables the user to easily and quickly achieve vehicle-specific engine settings, which guarantees optimal and economic operation of the vehicle.



#### Accessories

- Simultaneous Display
  - Pneumatic axle play detector
  - IR remote control
  - Printer
  - Pedal force meter
  - Roller cover plates
  - Lowering device
  - Alternate direction roller rotation including automatic four-wheel drive recognition
  - Weighing device
  - Installation frame
  - Motorcycle testing device
  - Reversal of roller rotation direction
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## Technology that is assured

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Additional functions and upgrade components offers you the highest comfort and service quality



Suspension tester with integrated noise-diagnostic-function – keeps you cool

Rattles in cars are not only inconvenient for the passengers, but often distract and annoy the driver as well. The consequences are stress and inattention, which could lead to a limitation of driving safety.

Up to now such sources of noise could only be localised through time-consuming and long-winded test drives. In order to simulate necessary vibrations whilst driving, partially risky manoeuvres are required. This is time-consuming and puts too much unnecessary stress on the tyres and suspension.

These vibrations can now be simulated using a noise simulator integrated into the EUSAMA-suspension tester. Annoying rattles can now be localized hassle-free within the shortest time.

More efficiency – also on four-wheel vehicles

In addition to the usual fully automatic test procedure, which includes re-starting automatism and start lock protection, the new generation of ATT brake tester supports the automatic recognition of all four-wheel drives, whether they are simple visco-, or Haldex-clutch types.

After driving onto the roller set, after a few seconds the brake tester recognises whether a four-wheel vehicle is present and switches automatically into the four-wheel mode (optional).

This additional feature avoids damage to vehicles, guarantees reliable results and saves you valuable time.



lifting- / lowering device

Working perfectly

The new electro-pneumatic controlled lifting- / lowering device ensures maximal user comfort of your brake tester. As soon as the vehicle is driven on the lifting- / lowering device, the vehicle is automatically and smoothly lowered into the roller set into the correct position.

This is particularly advantageous for low profile vehicles in that damage to front spoilers can be avoided.

The vehicle can easily exit the rollers without wasting time due to the worm gear transmission which blocks the roller after the testing has finished. Moreover the lifting- / lowering device does away with conventional cover plates to enable a smooth crossing of the brake tester in any direction. Utilise this chance to convince your workshop owner about the advantages of having this equipment in his vehicle reception to show his customers the competence of his garage.

## Technical Data

NTS 800                      NTS 810                      NTS 815

### Technical data test lane

Permissible axle weight	2 t	2 t	2 t
Min. testing width	800 mm	800 mm	800 mm
Max. testing width	2200 mm / 2800 mm	2200 mm / 2800 mm	2200 mm / 2800 mm

### Technical data side slip tester

Max. axle load	2,5 t	2,5 t	2,5 t
Values (m/km deviation)	- 15 bis + 15	- 15 bis + 15	- 15 bis + 15
Resolution (m/km)	0,1	0,1	0,1

### Technical data suspension tester

Max. axle load	2 t	2 t	2 t
Max. wheel load	1 t	1 t	1 t
Measured values (road grip)	0 - 100 %	1 - 100 %	2 - 100 %
Oscillating travel	6 mm	6 mm	6 mm
Oscillating frequency	25 Hz	25 Hz	25 Hz

### Technical data brake tester

Permissible axle weight	3 t	4 t	4 t
Range of measurement	5 kN	6 kN	8 kN
Test speed	3,3 km/h	5 km/h	5 km/h
Roller coating	Plastic and SiC	Plastic and SiC	Plastic and SiC
Max. motor power	2 x 2,5 kW	2 x 3,5 kW	2 x 4 kW
Roller diameter	200 mm	200 mm	200 mm