





UNIMETAL is a manufacturer of advanced equipment and automated systems for vehicle inspection centers and automotive garages. The company has its own production plant, mechanical and software R&D departments as well as a service division operating worldwide for special projects and training.

The variety of UNIMETAL's products include: roller brake testers, shock absorber (suspension) testers, side slip plates, roller speedometer testers, headlight testers, gas analysers, opacimeters, sound level meters, deceleration meters and others.



UNIMETAL supplies fully integrated test lanes with all types of the equipment together with computer systems and mobile applications. Our solutions are based on the latest IT technologies and are characterized by user friendly interfaces and ergonomics as well as advanced functionalities. The systems are designed in a way allowing us to adapt quickly to regional requirements of our customers or data exchange with external IT systems.



UNIMETAL offers also a range of mobile vehicle inspection test lanes including

- light mobile test lanes that can be easily unfolded and transported by standard vehicles,
- on-ground test test lanes that can be used in temporary locations,
- mobile containerized test lanes with automatic unfolding systems.

The mobile test lanes are available in full configurations, i.e. with all types of equipment integrated.



CONTROL CABINETS

Control cabinets of the QUANTUM and ALPHA series test lanes contain electrical and electronic systems controlling test devices and processing measurement signals. They also integrate a number of other accessories used in inspection processes and are platforms for user communication by use of display and computer. Cabinets come in three different design variants: ERGO, GALAXY and OPTIMA.



UNILINE SYSTEM

Integration

UNILINE SYSTEM is a computer software that integrates several various test devices in one system. The system is designed for inspection centers and automotive garages where many different devices are used by one operator at the same time. Regional settings and inspection pass/fail criteria can be easily customized by use of system files.

Efficiency and Ergonomy

Vehicle data can be input in many different ways, e.g. manually by use of system vehicle data form, QR/Rfid readers, file exchange or direct connections with external systems. A user can navigate the main menu in order to select test type/range, e.g. side slip, suspension damping, brakes, speedometer, exhaust analysis, headlights, sound level and others that are configured to be a part of the system. Once a test is selected, the proper measuring screen and/or instructions for users appear. After the selected test is performed, one can pass to the next stages of vehicle inspection. When the inspection is completed, the system generates a joint test report with results from all the devices. Test results are stored in the system's own database and can be exported to external systems.

Remote Control

UNILINE SYSTEM can be controlled by use of a simple five-button radio remote control or an Android device. The Android application UniTerminal plays the role of remote control but additionally displays user instructions and test results.

Mobile Applications

UNILINE SYSTEM is accompanied by the family of UNIMETAL's Android applications that can be paired with the system and significantly extends its functionalities. Apart from UniTerminal used for remote control, the system offers the following applications:

- UniList with customizable check-lists for visual vehicle inspection,
- UniFoto attaching odometer and vehicle photos to the system,
- UniPlay controlling movements of play detectors.



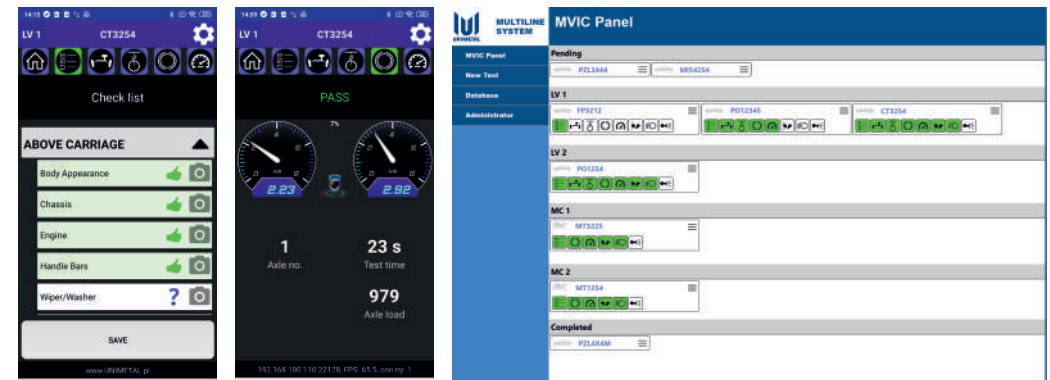
MULTILINE SYSTEM

Highest Efficiency Vehicle Testing

Multiline System is a revolutionary vehicle inspection management computer software dedicated to inspection centers that need two or more test lanes or want to work on a continuous basis and test large numbers of vehicles per day. It enables quick check-in and fast vehicle flow through the center. This modular system is flexible and can be adapted to different configurations and organizational models.

IoT Structure

Vehicle inspection (on all configured test lanes) is controlled by the Multiline central process management computer system that is connected with office terminals (vehicle data input, inspection progress visualization, test report printout) and a number of mobile devices used by inspectors. The system receives the current status of each vehicle being tested as well as test results that are processed and stored in the system database.



Vehicle Data Input

Vehicle check-in can be done in many ways: either by QR-code scanning or RFID reading or OCR license plate reading and connecting with internal/external databases or by office terminals.

Intelligent Vehicle Testing

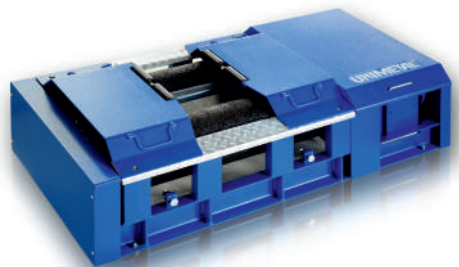
Once vehicle data is input, the inspector by use of a mobile device with the Multiline System App selects a vehicle and test lane on which it is to be tested. The app enables the inspector to proceed with the vehicle through all the inspection stages. Test results are immediately transmitted to the central computer system.

Joint Inspection Result Report

All test results are stored in the Multiline System database. System test reports are generated according to templates that are adaptable to legal requirements and regulations. Data export and data interchange services are also available.

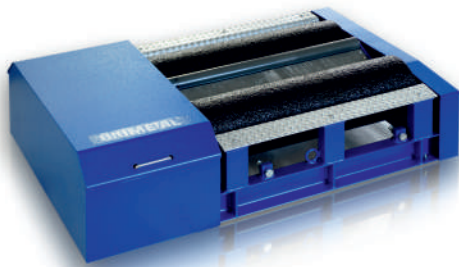
Universal roller brake tester RHE-40

- Motors: 2 x 7.5 kW / 2 x 11 kW
- Braking force range: 0-40 kN
- Max. axle load: 18 t / 20 t
- Brake testing speed: 2.5 and 5 km/h
- Roller length: 1000 - 1200 mm



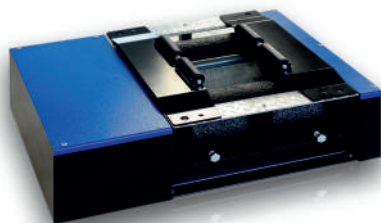
Heavy vehicle roller brake tester RHC-30 / RHC-40

- Motors: 2 x 7.5 kW / 2 x 11 kW
- Braking force range: 0-30 kN / 0-40 kN
- Max. axle load: 18 t / 20 t
- Brake testing speed: 2.5 km/h
- Roller length: 1000 - 1500 mm



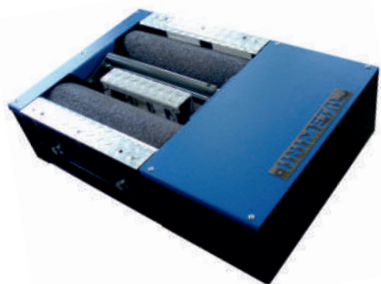
Light vehicle roller brake tester RHO-6

- Motors: 2 x 4 kW
- Braking force range: 0-6 kN
- Max. axle load: 2 t
- Brake testing speed: 5 km/h
- Roller length: 625 mm
- Electromagnetic brake



Light vehicle roller brake tester RHO-6 W

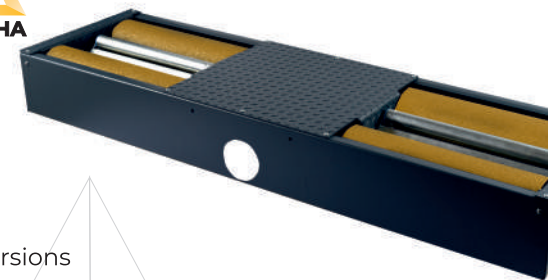
- Version equipped with a pneumatic lifting device to ensure easy entry and exit of low-profile vehicles



Light vehicle roller brake tester RBT-2080 / RBT-2100



- Motors: 2 x 3 kW
- Braking force range: 0-8 kN / 0-10 kN
- Max. axle load: 4 t
- Brake testing speed: 4.5 km/h
- Roller length: 710 mm
- Electromagnetic brake
- Available in compact and pit-separated versions



Universal roller brake tester RBT-5300 / -5400 / -5500



- Motors: 2 x 11 kW / 2 x 15 kW
- Braking force range: 0-40 kN / 0-50 kN
- Max. axle load: 18 t / 20 t
- Brake testing speed: 4.6 km/h i 2.3 km/h
- Roller length: 1000 - 1200 mm
- Available with lift system option for vehicle axle loading



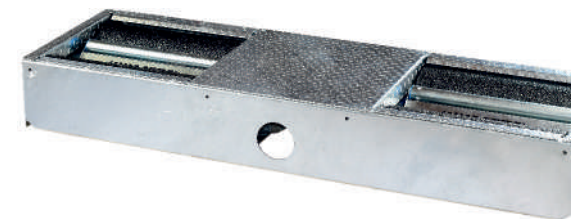
Motorcycle roller brake tester RHB-3

- Motor: 1.5 kW
- Braking force range: 0-3 kN
- Max. axle load: 1 t
- Brake testing speed: 2.9 km/h
- Roller length: 300 mm



Light vehicle roller brake tester RHO-8-C

- Motors: 2 x 4 kW
- Braking force range: 0-8 kN
- Max. axle load: 4 t
- Brake testing speed: 3.6 km/h
- Roller length: 700 mm



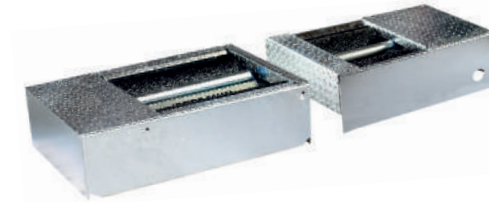
Light vehicle roller brake tester **RHO-8**

- Motors: 2 x 4 kW
- Braking force range: 0-8 kN
- Max. axle load: 4 t
- Brake testing speed: 3.6 km/h
- Roller length: 900 mm



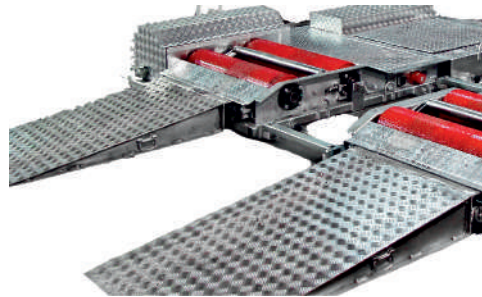
Three wheelers and motorcycles roller brake tester **RBT-3TW**

- Motors: 2 x 1.5 kW
- Braking force range: 0-3 kN
- Max. axle load: 1 t
- Brake testing speed: 2.9 km/h
- Roller length: 300 and 1000 mm



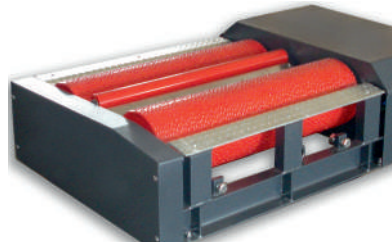
Mobile roller brake tester **RHM-30 / RHM-40**

- Motors: 2 x 7.5 kW / 2 x 11 kW
- Braking force range: 0-30 kN / 0-40 kN
- Max. axle load: 18 t / 20 t
- Brake testing speed: 2.5 and 5 km/h
- Roller length: 1000 mm



Possible options for roller brake testers:

- 4WD vehicle detection and testing system
- Soft Start system
- Weighing system and axle load simulator
- Electromagnetic brake
- Extended rollers for oversized vehicles
- Lift for low-profile vehicles
- Adaptation for tachograph inspection
- Welded rollers



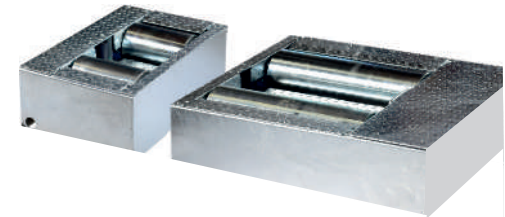
Motorcycle speed tester **SPT-1S**

- Motor: 4 kW
- Max. permissible speed: 100 km/h
- Max. axle load: 1 t
- Roller length: 300 mm
- Drive-out support: pneumatic lift



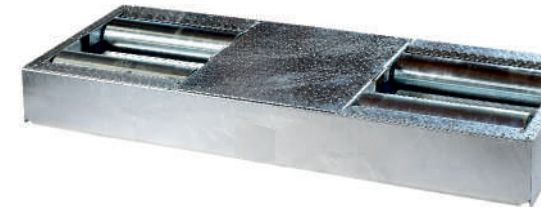
Three wheelers and motorcycles speed tester **SPT-1TW**

- Motors: 2 x 4 kW
- Max. permissible speed: 100 km/h
- Max. axle load: 1 t
- Roller length: 300 mm / 1000 mm
- Drive-out support: pneumatic lift



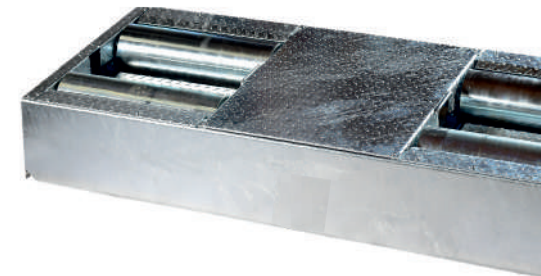
Light vehicle speed tester **SPT-4-C**

- Max. permissible speed: 140 km/h
- Max. axle load: 4 t
- Roller length: 700 mm
- Drive-out support: pneumatic lift



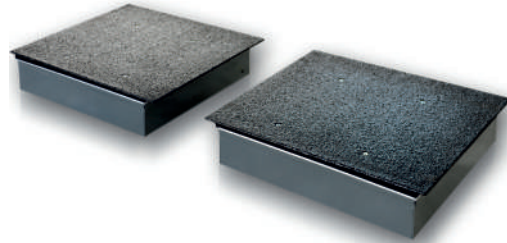
Universal speed tester **SPT-20**

- Max. permissible speed: 140 km/h
- Max. axle load: 20 t
- Roller length: 1050 mm
- Drive-out support: pneumatic lift



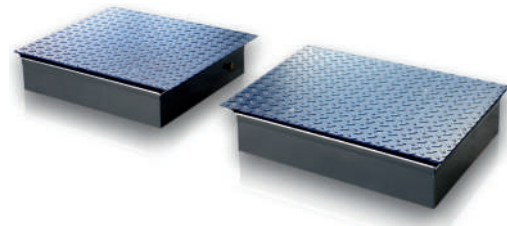
Light vehicle play detector SZ-3,5 H / SZ-3,5 HR

- Power supply: hydraulic
- Max. thrust per side: 8 kN
- Max. axle load: 2 t
- Movement: synchronic / independent (optional)
- Plate travel: lateral and rotational
- Max. plate travel: 45 mm and 16 degrees



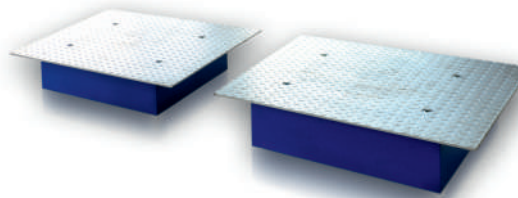
Light vehicle play detector SZ-3,5 / SZ-3,5 R

- Power supply: air
- Max. thrust per side: 8 kN
- Max. axle load: 2 t
- Movement: synchronic / independent
- Plate travel: lateral and rotational
- Max. plate travel: 45 mm and 16 degrees



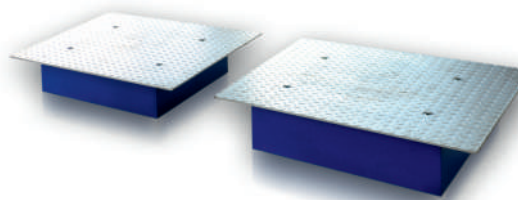
Universal play detector SZ-16 / SZ-16 R

- Power supply: hydraulic
- Max. thrust per side: 30 kN
- Max. axle load: 20 t
- Movement: synchronic / independent (optional)
- Plate travel: lateral and longitudinal
- Max. plate travel: 100 mm



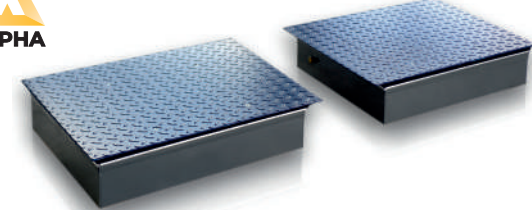
Universal play detector SZ-16 A / SZ-16 AR

- Power supply: hydraulic
- Max. thrust per side: 30 kN
- Max. axle load: 20 t
- Movement: synchronic / independent
- Self-centering of the plates
- Plate travel: lateral and longitudinal
- Max. plate travel: 100 mm



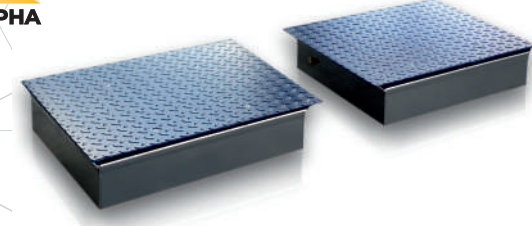
Light vehicle play detector PDT-2040

- Power supply: hydraulic
- Max. thrust per side: 8 kN
- Max. axle load: 4 t
- Movement: synchronic / independent (optional)
- Plate travel: lateral and rotational
- Max. plate travel: 45 mm and 16 degrees



Universal play detector PDT-5200

- Power supply: hydraulic
- Max. thrust per side: 30 kN
- Max. axle load: 20 t
- Movement: synchronic / independent (optional)
- Plate travel: lateral and longitudinal
- Max. plate travel: 100 mm



Mobile play detector SZM-18 / SZM-18 R

- Power supply: hydraulic
- Max. thrust per side: 30 kN
- Max. axle load: 20 t
- Movement: synchronic
- Plate travel: diagonal
- Max. plate travel: 100 mm



Play detectors control:

- Wire LED torch
- Wireless LED torch (radio)
- Quantum Terminal application (Wi-Fi)

Plates:

- Galvanized checker plate
- Stainless checker plate
- Galvanized plate covered with bitumen mass

Light vehicle side slip tester

SST-2200

- Max. axle load: 4 t
- Measuring range: +/- 20 mm
- Dimensions: 1020 x 460 x 85 mm



Universal side slip tester

SST-5250

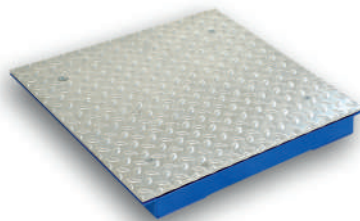
- Max. axle load: 20 t
- Measuring range: +/- 25 mm
- Dimensions: 1020 x 770 x 135 mm



Light vehicle side slip tester

UNO-SMART / UNO-2A

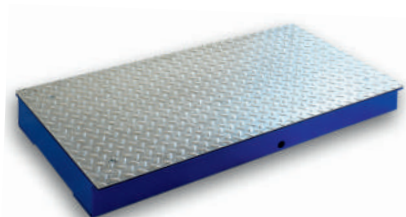
- Max. axle load: 2 t
- Measuring range: +/- 9 mm
- Dimensions SMART: 500 x 500 x 50 mm
- Dimensions UNO-2A: 1000 x 500 x 109 mm



Universal side slip tester

UNC-8

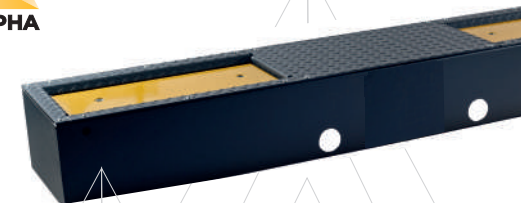
- Max. axle load: 18 t
- Measuring range: +/- 25 mm
- Dimensions: 1000 x 870 x 140 mm



Suspension tester

SAT-2400 / SAT-2400 C

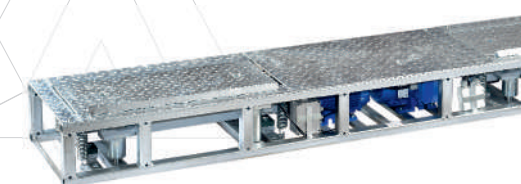
- Max. axle load: 2 t
- Max. axle load while driving over: 18 t
- Measuring method: EUSAMA
- Clatter detection function (option)
- Available in compact and pit versions



Suspension tester

TUZ-2-C

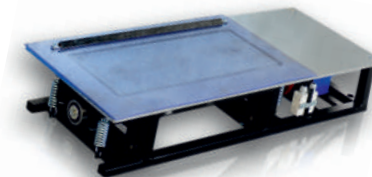
- Compact version device
- Max. axle load: 2 t
- Max. axle load while driving over: 18 t
- Measuring method: EUSAMA
- Clatter detection function (option)
- Available in mobile and onground versions



Suspension tester

TUZ-1

- Pit version device
- Max. axle load: 2 t
- Max. axle load while driving over: 18 t
- Measuring method: EUSAMA
- Clatter detection function (option)



Container universal test lane

MLD-40

- Built in 20 ft. container
- Automatically unfolding ramps
- Power generator
- Lighting and camera system
- Technical room
- Air-conditioned office room
- Unloading by choice: hook or by lowering on side cylinders





UNIMETAL SP. Z O.O. / Kujańska 10 / 77-400 Złotów
export@unimetal.pl / +48 603 194 904
+48 692 555 770 / +48 697 107 907
www.unimetal-moto.com