ACTIA MULLER

Vehicle Testing

2009 • 2010

ACTIA MULLER

Worldwide Presence

Two big names combined to provide the best in garage and vehicle testing equipment.

In 2003, the ACTIA group – a partner of major automotive manufacturers for the design, diagnosis and production of on-board systems – acquired the MULLER BEM brand, a benchmark for garage equipment and vehicle testing since 1919.
ACTIA MULLER, born out of this merger, now offers a complete range of electronic diagnostics, garage equipment and vehicle test lanes.

ACTIA MULLER
Our commitments to professionals in servicing, repair and vehicle testing.

Keeping ahead of the game

In 1953 MULLER BEM® created the brake tester chassis, and in 1985 ACTIA® invented automotive diagnostics with the XR 25, the first electronic diagnostic tool. These examples, among numerous other innovations, bear witness to the pioneering spirit which drives the two brands and highlights their role in the aftermarket and vehicle testing sectors.
Backed by ACTIA Group's investments in R&D (15% of annual turnover), ACTIA MULLER knows how to stay ahead of the game. The multiplexed test lane, the shock absorber tester, new measuring heads for wheel alignment equipment, mobile vehicle testing stations or innovations in the field of multi-make diagnostics are further developments that are changing the daily lives of our customers and are steering the aftermarket towards motorist advice and safety.

Guaranteeing high quality

Designed and developed in France, ACTIA MULLER products are manufactured in the group's production facilities. A certified environment, with high tech industrial equipment, these factories meet the very stringent requirements of the automotive and aeronautical sectors (another field of activity for the ACTIA Group).

Guaranteeing efficient local service

Quality service means proximity and fast response. ACTIA MULLER also provides medium sized companies deployed throughout the world to assist its customers. Therefore some forty agents and distributors, almost half of which are subsidiaries of the ACTIA Group, provide support and service for ACTIA MULLER equipment in 140 countries. If the major motor manufacturers, vehicle testing networks and players in the automotive aftermarket have placed their confidence in us, it's because for 90 years, we have been at their side listening to them.

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Vehicle Testing

ACTIA MULLER

Vehicle testing

Light Vehicles

BILANMATIC 10 000 Mx LV

The new 10000 Mx multiplexed test lane provides you with the possibility of increasing your productivity thanks to the integration of new technologies.

- CAN-bus: communication between test chassis and the console improves measurement accuracy
- 22" flat screen: convenient to use, easy to view
- USB port: quick and easy connection to peripheral test equipment.

The 10000 Mx test lane is also configured for Remote Assistance, a new service which enables our engineers to remotely access your test lane to carry out, for example, instant settings update.

The lane may be split into several test bays, allowing simultaneous testing of multiple vehicles:

- 16 possible users via 16 infrared remote controls (patented by Muller Bem).
- this lane is perfect for both «drive through» and «drive in, reverse out» testing.

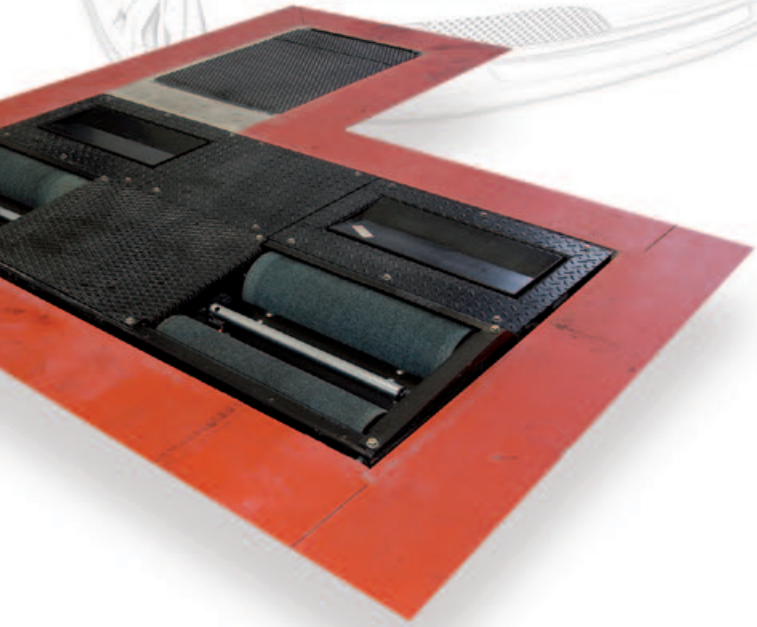
Multiplexed Light Vehicle Test Lane

BILANMATIC 10 000 Mx
ref. 1004X041AEJ-KCT

Includes:
- Console with 22" TFT flat screen
- Industrial PC running Windows, with high capacity hard disk
- Infrared remote control
- Brake tester chassis
- Suspension tester chassis
- Side slip tester
- Axle play detector

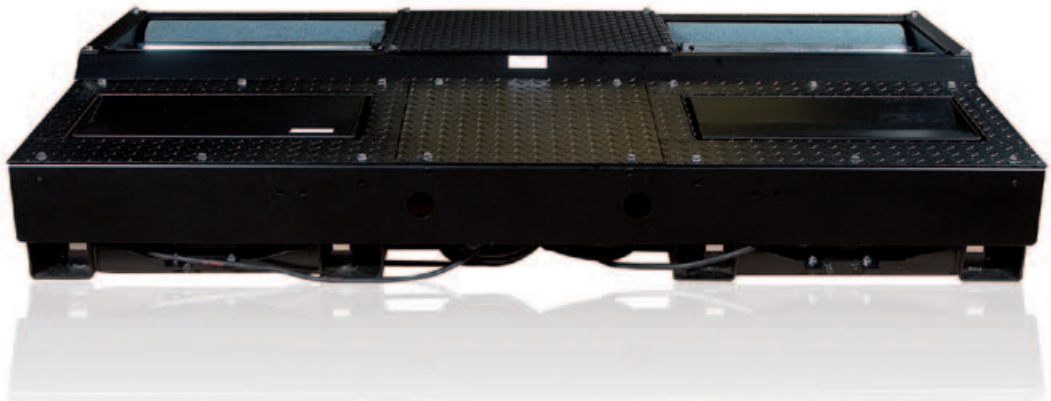
Chassis Measurements:
- Residual, ovality, max. force, max. imbalance, individual brake efficiency, overall efficiency on all light vehicles up to 3.5 ton, parking brake efficiency.
- Static weighing, measurement of suspension efficiency and imbalance
- Measurement of front and rear total toe (m/km)

Chassis Range



Brake tester chassis with roller lock
ref. 1004X041AAJ

Axle load: 4T
Max. force: 750daN
Motor power: 2 x 4.7kW
Roller Diameter: 205mm
Coefficient of friction: 0.9
Min. drive through axle width: 800mm
Max. drive through axle width: 2200mm
Chassis Length: 2320mm
Chassis Width: 650mm
Chassis Depth: 280mm
Chassis supply voltage: 400V 3 phase ⏚ + N.



EUSAMA suspension chassis
ref. 1004X041AEJ

Axle load: 3T
Dynamic test load: 2.5
Frequency: 16Hz
Motor power: 2 x 3kw
Min. drive through axle width: 800mm
Max. drive through axle width: 2200mm
Chassis length: 2320mm
Chassis width: 600mm
Depth: 280mm
Chassis supply voltage: 400V 3 phase ⏚ + N.
Motor power: 3kW

Expert shock absorber tester
ref. 1004X041AFJ

Optionally, you can take advantage of the expert shock absorber tester. This provides a real technological plus by analysing the response of the shock absorber to its variable resonance frequency. The result obtained is completely independent of tyre pressure and vehicle load.

In addition to its high precision, the expert shock absorber tester is simple to use, reliable and fast.

Side slip testers and axle play detectors

Side slip tester with pressure release
ref. 10000RMX-VL

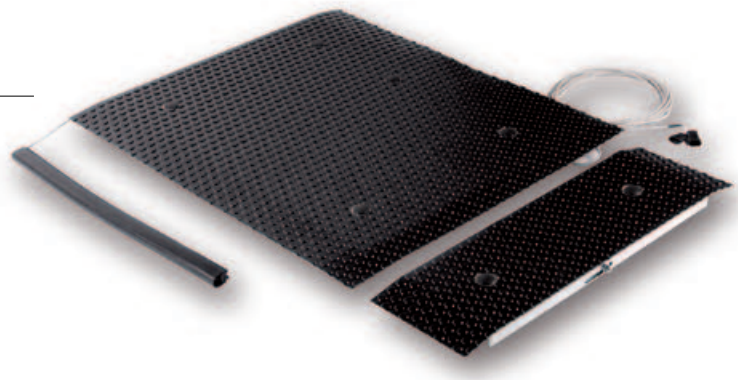
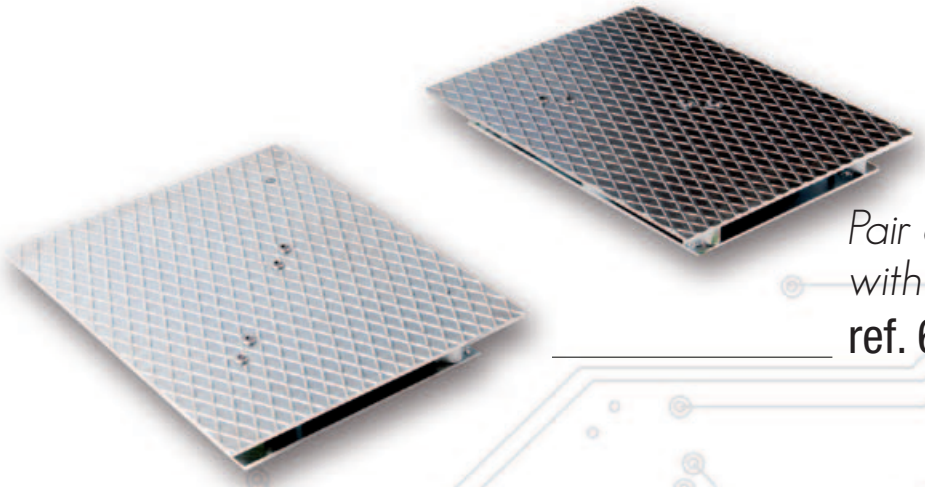


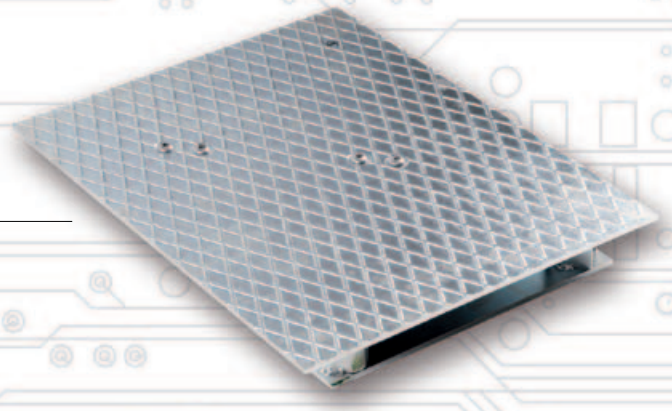
Plate dimensions with cover	740 x 1120 x 40 mm
Pit dimensions	650 x 1080 x 35 mm
Clearance	± 17 mm
Measuring range	± 20 m/km
Load capacity	1250 kg
Chassis weight	55 kg
Sensor supply	Low voltage
Plate cover	Rubber cover, hydrocarbon quality

Sealing kit for side slip testers
ref. 103786



Pair of axle play detectors with wired remote control/torch
ref. 6839-F

Pair of axle play detectors with wireless remote control/torch
ref. 6839-RAD



Load capacity per axle	2.5 T
Dimensions	550 x 410 mm
Maximum pressure	120 bar
Motor power	3 KW 3 phase ⏚ + N.

Sealing kit for LV axle play testers
ref. 104780

Torch with control buttons

MULTIGAS gas analyser
ref. 898MB/KP3

A Class 1 gas analyser conforming to the different European standards, MULTIGAS is the most technically advanced in terms of anti-pollution measurement and performance. The user-friendly software is ideal for rapid measurement and testing to all applicable European regulations.

Main specifications:
Supplied on a mobile workstation
Integrated printer
Measures CO, CO2, HC
Lambda, corrected CO and O2 (NOX optional) values.
Engine temperature
Battery connection engine rev counter
V5 and GIENET connection
17" TFT video screen

Combined with the opacimeter, MULTIGAS also measures the opacity of diesel emissions
ref. 898MBGO/KP3

Opacimeter - head unit
ref. 898LIGHTMB/KP3

The opacimeter is connected to the measuring station of the analyser and enables measurement of the opacity of diesel emissions (according to the current NFR 10025 regulations).

Technical specifications		
Measuring range	0 - 99.9 %	res. 0.1
Opacity	0 - 9.99 km-1	res. 0.01
Temperature of exhaust fumes	0 - 600°C	res. 1°C
Dimensions	470 x 230 x 220 mm	
Weight	6 kg	

ACTIGAS Combi Emissions Station

The ACTIGAS Combi emissions station is designed for full emissions testing of both petrol and diesel engines.

The station includes:

Mobile workstation
AT505 gas analyser, for petrol engines
AT605 opacimeter with sensor, for diesel engines
Petrol and diesel emissions probes
Speed and oil temperature measuring module
Remote control
Oil temperature sensor

Technical specifications		
Carbon monoxide CO	0 - 10 % vol	res. 0.01
Carbon dioxide CO2	0 - 20 % vol	res. 0.1
Unburnt hydrocarbons HC (hex)	-12 à 2000 ppm vol	res. 1
	2001 - 9000 ppm vol	res. 10
Oxygen O2	0 - 4 % vol	res. 0.01
	4 - 21 % vol	res. 0.1
Corrected carbon monoxide COco	0 - 10 % vol	res. 0.01
NOx (optional)	0 - 5000 ppm vol	res. 1
Lambda ratio	0.500 à 2.000	res. 0.001

The Opacimeter:

Measures the opacity of diesel engine emissions. The unit takes measurements both at idle and during acceleration. During an acceleration test the unit records engine RPM, peak fume opacity and acceleration time.

Technical specifications		
Absorption coefficient (k)	0 - ∞ m-1	res. 0.01
Opacity (N)	0 - 100 %	res. 0.1
Duration of acceleration	0 - 99.99 s	res. 0.1
Speed	400 - 2000 min-1	res. 10
	2001 - 9990 min-1	
Oil temperature	0 - 150°C	res. 1
Dimensions	235 x 380 x 90 mm	
Weight	4.5 kg	

Peripheral Test Equipment

Headlamp aligners
ref. 664-6CT

The 664-6CT uses a photodiode measuring system. It can be mounted on wheels or on rails, and the measurement head is positioned on a cylindrical aluminium column.

Accurate alignment of the unit to the vehicle headlamp assembly is achieved either by means of a mirror or a laser beam. Its ergonomic control box, which can be rotated according to the position of the operator, is extremely easy to use.

The operator, guided by the headlamp aligner display, measures the height from the bottom of the reflector, thus determining the tolerance range of acceptable inclination on the vehicle. The headlamp aligner then transmits the results to the PC workstation via Wifi or Bluetooth using GiegNet and/or GiegLan protocols.

Headlamp aligners
ref. 764-5CT

The 764-5CT is fitted with a CCD camera whose image sensors are analysed by the integrated software.

It consists of a cylindrical column with assisted measurement head positioning, a combined mirror/laser alignment solution and automatic centring on the optical axis.

Its interface is very user-friendly and its large LCD display, with integrated network control procedure, makes it easier to read off the results. The headlamp aligner transmits the results obtained to the PC workstation via Wifi or Bluetooth using GiegNet and/or GiegLan protocols.

At the present time ACTIA MULLER is the only automotive equipment supplier to offer a range of headlamp aligners dedicated to vehicle test stations and adapted to their present and future needs

Class 2 Sonometer

ref. 7000-S2-A

Operates on any type of vehicle and measures all sources of noise.
The device can be connected to the BILANMATIC using protocol V5.

Compliant with:
- NF EN 61672-1
- NF EN 60651/60804
- CEI 1260 ISO 5130

Technical specifications	
Microphone	20 ml / Pa
Preamplifier	PRE 21 S
Weightings	A/B//C & Z
Dynamics	30 - 137 dB
Indicators	Lp min & Lp p max. Leq Lpk start / stop
Storage	99 results
Battery life	24 hours
Weight	700 g

Portable air cylinder

ref. 205220-1

For tyre inflation

Specifications:
Portable cylinder with 9.90 l tank
Inlet valve with 0 to 9 bar pressure gauge
Dimensions: L. 0.400 x W. 0.400 X H. 0.650.
Total weight: 9 Kg

BILANMATIC 8 000 Mx

ACTIA MULLER strengths

The Bilanmatic 8 000 Mx is the most advanced product on the market. Its combined technology has been developed to increase your productivity thanks to its multiplexed system. Our Mx system enables high performance and accurate operation of your test lane.

Remote Maintenance
For instantaneous remote assistance in operating your equipment.

Simplified electronics
Easier and faster maintenance and upgradability of your equipment. Thanks to standardised parts and simplified electronic wiring, the addition of equipment and adaptation to new vehicle testing standards (EOBD, Giegnet – Gieglan protocols) are achieved at minimum cost.

Fully digital system
Greater measurement accuracy and 100% reliable results.

High-tech design
A more attractive, modern workshop to welcome your customers.

Multi-station and multi-controller system
Test several vehicles simultaneously for maximum profitability from your test station.

Multiplexed Light Vehicle test lane

The 8 000 Mx multiplexed test lane for light vehicles, enables you to produce full reports to ensure the safety of your customers. Completely modular, you can build your test lane to your requirements (numerous options available).

The 8 000 Mx test lane

ref. 8003Z031AAH

Brake tester

- Durable composite rollers
- Roller lock to assist vehicle exit
- Flush-mounted chassis
- CAN-bus communication technology

Suspension and shock absorber tester

Tests conforming to EUSAMA European regulations

Unique option: the **"expert shock absorber tester"** gives you a real technological advantage by analysing the response of the shock absorber to its variable resonance frequency. The result obtained is totally independent of tyre pressure and vehicle load.
In addition to its accuracy, the expert shock absorber tester is easy to use, reliable and fast.

Side slip tester, option

ref. 52100

- Results in m/km
- Pressure release plate
- Pressure sensor to detect vehicle presence
- Preliminary test before alignment

OBD Testing

OBD 10 000
wired and Bluetooth versions

Simple to use
- Test program integrated in the Bilanmatic software
- Optimisation of the work area
- The test is carried out directly on the vehicle using the Bilanmatic 10000 remote control

Security
- Once the test has been carried out the results are transferred directly to the PC workstation by the Bilanmatic 10000 over GIEGNET or GIEGLAN protocol
- The OBD test software is certified by UTAC according to SRV 37/38 and F9-3
- A printed report allows results to be preserved (requires printer option)

Time saving
An integrated database enables immediate display of the vehicle's OBD plug location (unique to MULLER BEM)

Upgradability
Database update by remote maintenance (Remote access for instant update)
Guaranteed development for future electronic tests

With the OBD 10000 you benefit from ACTIA MULLER's electronic diagnostics know-how and a complete tool that is simple to use and ready for integration of future tests.

OBD Pack
ref. 10000 Wired

Communications interface with USB cable and RS232
OBD software on CD-ROM
OBD cable
Cigarette lighter power cable
Intermediate cigarette lighter power cable
Installation and user manuals
Clips interface
Cable winder
Fixing collar
Screws
Accreditation document + certificate

OBD Pack
ref. 10000 Bluetooth

Bluetooth communications interface
OBD software on CD-ROM
OBD cable
Cigarette lighter power cable
Intermediate cigarette lighter power cable
Installation and user manuals
Clips interface
Bluetooth USB key + support
USB cable
Accreditation document + certificate

I-OBD
ref. OBD/CT-ST

I-OBD is a scantool that enables OBD testing whatever your technical installation. The standalone OBD solution is compatible with all existing equipment and is guaranteed for 3 years.

Practical
- Portable tool with keypad and LCD screen
- Protective enclosure supplied with the tool

Simple setup
Requires no wired connection and can be used in the most suitable location in your workshop

Easy access
Data is transmitted to the central computer via Bluetooth

Universal
Compatible with all test station computer equipment

Option
Portable printer

Security
- I-OBD stores the last few measurements taken
- The OBD test software is certified by UTAC according to SRV 37/38 and F9-3
- Printing a report allows results to be preserved (requires printer option)

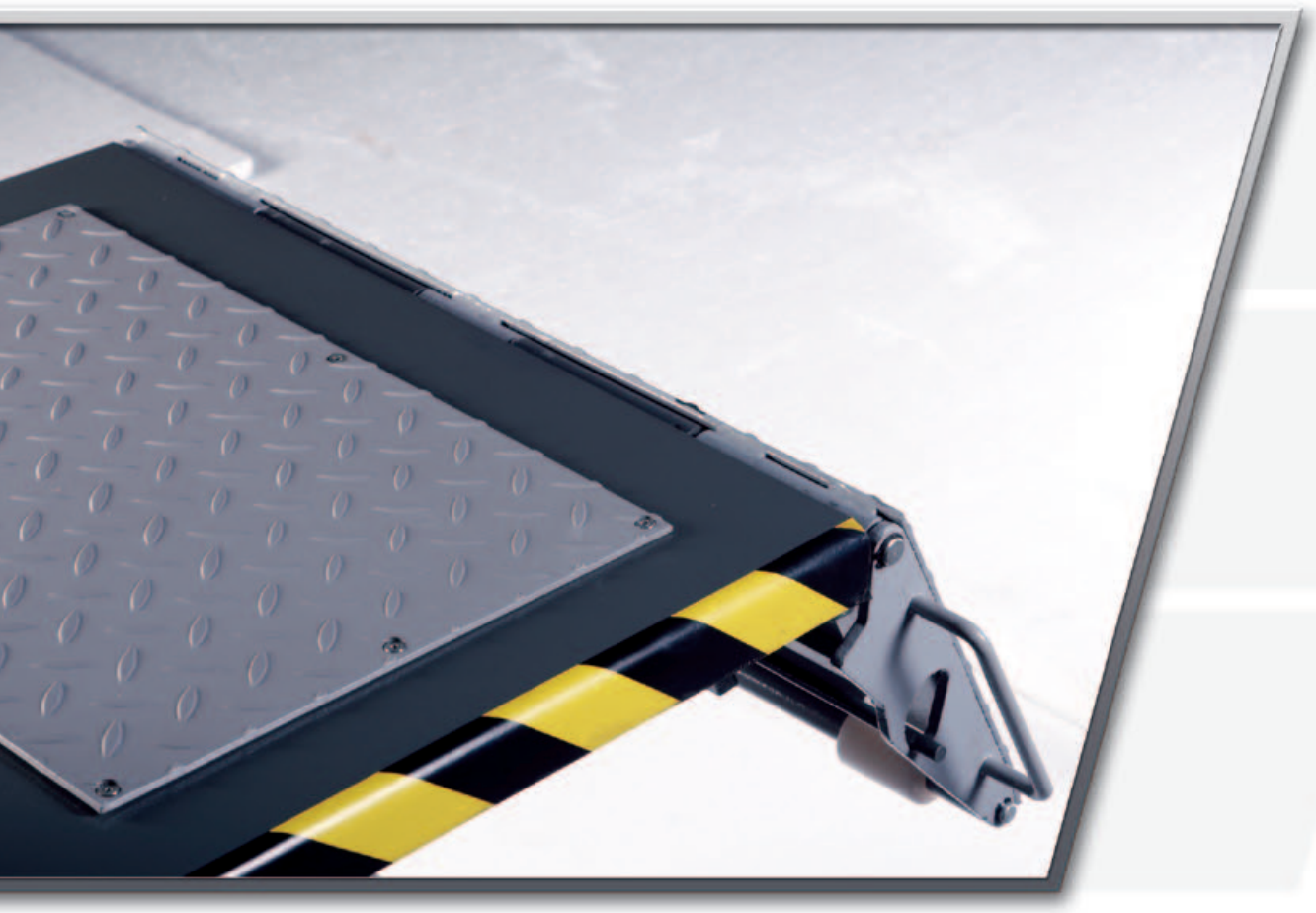
With I-OBD and its Bluetooth system, you can organise your work space to optimise your test station

I-OBD Pack

I-OBD scantool (with protective enclosure)
OBD cable
Bluetooth USB key
Bluetooth RS232 key
USB cable
Cigarette lighter power cable
Installation and user manuals
Installation CD-ROM
Accreditation document + certificate

Portable I-OBD printer
ref. OBD/CT-ST-PRINT

Short Platform Scissor Lifts
(wheel free)



ACTIA MULLER strengths

Performance

- 3 ton capacity
- Hydraulic motion synchronisation with automatic control mechanism
- All the shafts are fitted with self-lubricating rings and lubricators
- The 777 range combines robustness with the reliability required for intensive use.
- PCB fitted with universal electromechanical components

Safety

- Mechanical, hydraulic and optical safety devices conforming to European regulations, CE and EN 1493, for total safety during use
- Audio alarm sounds during the final lowering phase

Profitability

- Work space optimisation
- Access in both directions
- No mechanical connection between the platforms (no obstruction, maximum functionality)

777 Low profile surface mounted double scissor lift

The 777 low profile surface mounted model is easily and quickly installed without any civil engineering works.
It is an ideal alternative to recessed installations.

- Only 110mm profile when in the down position, vehicle access is easier for fast positioning
- Small footprint, thereby optimising your workshop space
- Access in both directions
- Double jack and double hydraulic circuit:
  - Optimised synchronisation
  - Double hydraulic safety system
- The access ramps can be used as platform extensions enabling you to extend the jacking points for long wheelbase vehicles
- Control by photoelectric cell (optical safety):
  - Synchronisation of levels
  - Stop in case of any obstacles

777E recessed double scissor lift for flush fitting

The simplicity and robustness required for intensive use!

The recessed 777E model enables optimised workshop space.

The floor area is completely flat when the lift is in the down position.

- Over-sized jacks combining reliability and the safety required for intensive use
- Lift platform specially developed for intensive use
- Technology combining simplicity with robustness
- Control by photoelectric cell (optical safety):
  - Synchronisation of levels
  - Stop in case of any obstacles
- Platforms fitted with extensions enabling you to reach the jacking points for long wheelbase vehicles

ACTIA MULLER

Vehicle testing

Commercial Vehicles

BILANMATIC 10 000 Mx HGV

Multi-station and multi-controller vehicle test lane conforming to French regulations, approval granted by UTAC.

The new 10000 Mx multiplexed test lane provides you with the possibility of increasing your productivity thanks to the integration of new technologies.

- CAN-bus: communication between test chassis and the console improves measurement accuracy
- 20" flat screen: convenient to use, easy to view
- USB port: quick and easy connection to peripheral test equipment.

The 10000 Mx test lane is also configured for Remote Assistance, a new service which enables our engineers to remotely access your test lane to carry out, for example, instant settings update.

The lane may be split into several test bays, allowing simultaneous testing of multiple vehicles: 16 possible users via 16 infrared remote controls (patented by Muller Bem).

This lane is perfect for «drive through» testing.

Multiplexed Commercial Vehicle Test Lane

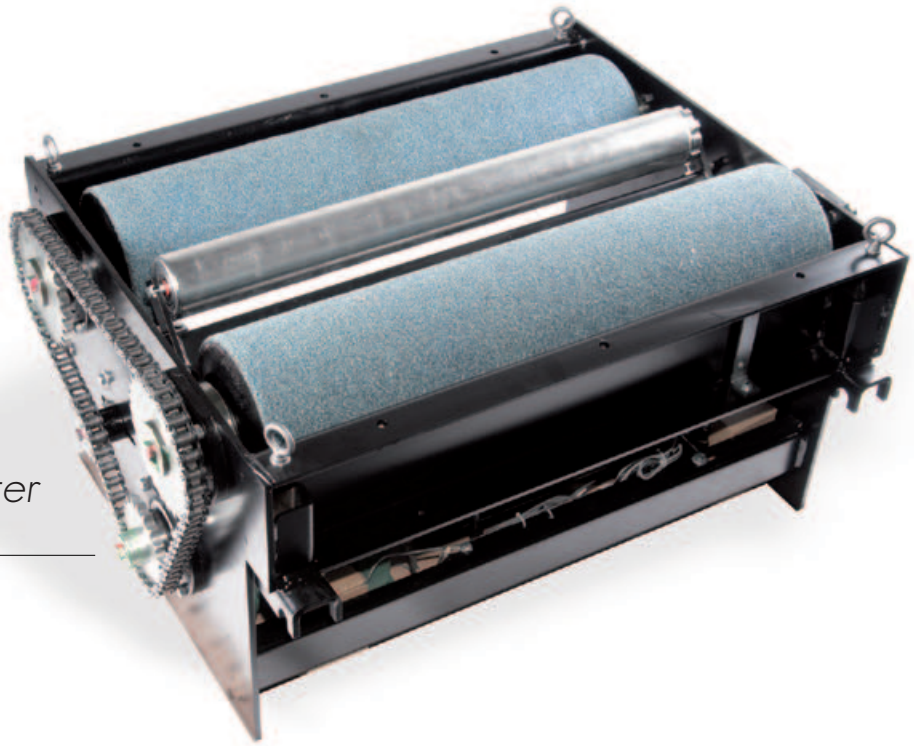
BILANMATIC 10 000 Mx
ref. 1020Z11AAAF

Includes:
- console with 20" TFT flat screen
- Industrial PC running Windows, with high capacity hard disk
- Multi-user infrared remote control
- 20 ton brake tester chassis (SRVP03 compliant)

Main Connections:
Serial or USB ports allowing connection to:
- other PC or network terminal
- other test equipment (smoke meter, headlamp aligner, sonometer etc.)
- pneumatic and hydraulic brake pressure sensors, radio controlled
- infrared or radio pedometer
- microcomputer connection (Giegnet, Gieglan)

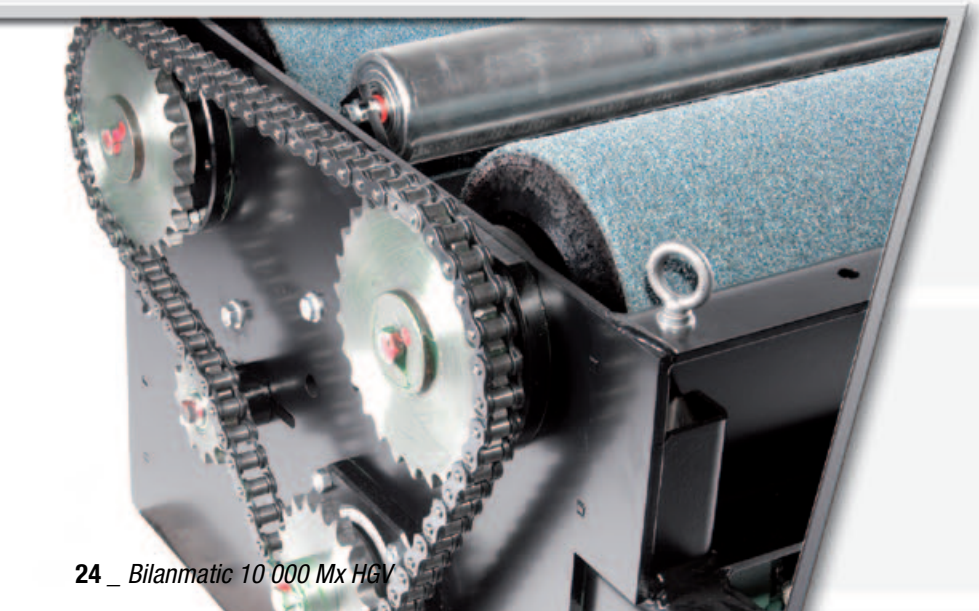
Chassis Measurements:
- Residual, ovality, max. force, individual brake efficiency, overall efficiency on all commercial vehicles (4x4 and 6x4 options available)
- Dynamic weighing
- Brake circuit pressure (optional)
- Side slip tester: measurement of axle toe alignment
- Axle play detectors: inspection of axle joint clearances

Test Chassis



Commercial Brake Tester
ref. 44 700

Axle load: 20T
Roller Diameter: 205mm
Test speed: 2.2km/h
Double safety presence contactors: 2
Force sensor with strain gauge: 2
Motor power with roller lock (to facilitate drive off): 2 x 11kW
Max. braking force: 2 x 4000 da N
Static and dynamic weighing: 2 x 4 sensors
Roller Coating: epoxy silicon
Coefficient of friction (dry): > 0.9
Coefficient of friction (wet): > 0.7
Elevated rear rollers: 35mm
Min. drive through axle width: 800mm
Max. Drive through axle width: 2800mm
Free passage between chassis: 580mm
Power Supply: 400 V 3 phase ⏚ + N. 50Hz*
Other voltages or frequencies: ask for details



Side slip testers and axle play detectors

Multiplexed side slip tester with pressure release
ref. 10 000 RMX-PL

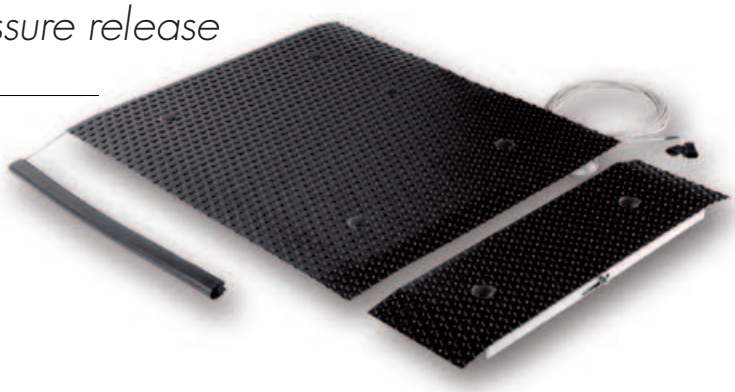
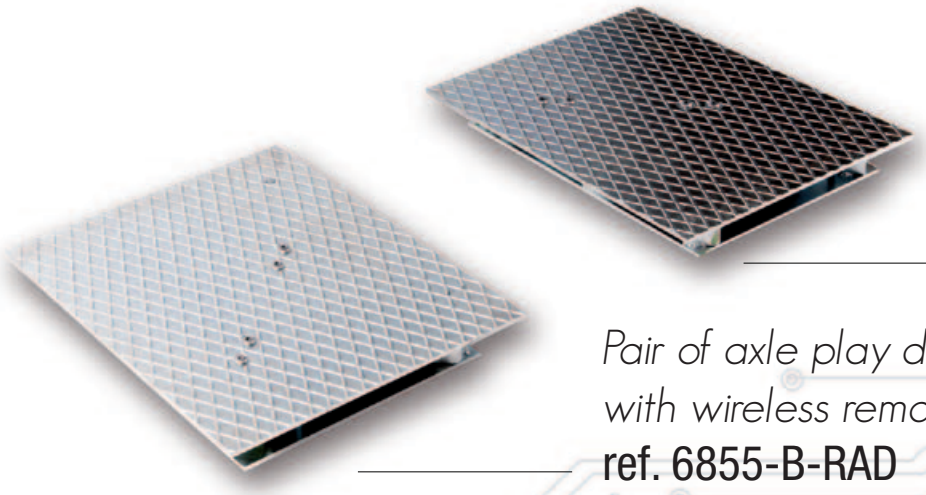


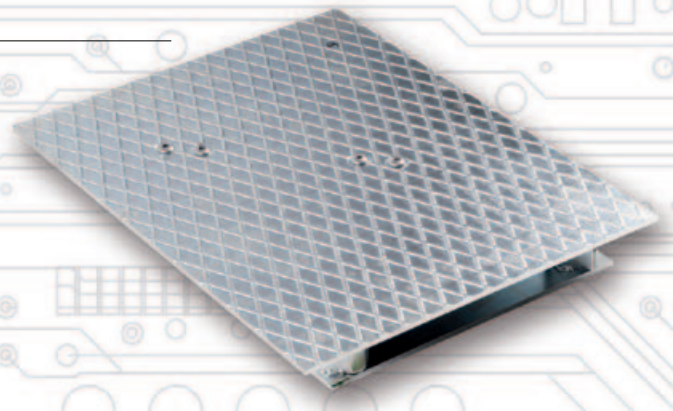
Plate Dimensions	750 x 1020 x 36 mm
Clearance	+/- 17 mm
Measuring range	+/- 20 m/km
Load capacity	10 000 kg
Plate cover	
Textured rubber	hydrocarbon quality



Pair of axle play detectors with wired remote control
ref. 6855-B

Pair of axle play detectors with wireless remote control
ref. 6855-B-RAD

Commercial axle play detectors, 16 movements
ref. 6855-B



These enable a visual inspection to be carried out underneath the vehicle (clearances of bearing, stub axle, pivots, etc.)

Load capacity: 20T
Dimensions: 850 x 650mm
Hydraulic station: 400 V 3 phase ⏚ + N. 50 Hz
Power: 4kW
Maximum pressure: 120 bar
Radio control (optional)

Peripheral Test Equipment

MULTIGAS gas analyser
ref. 898MB/KP3

A Class 1 gas analyser conforming to the different European standards, MULTIGAS is the most technically advanced in terms of anti-pollution measurement and performance. The user-friendly software is ideal for rapid measurement and testing to all applicable European regulations.

Main specifications:
Supplied on a mobile workstation
Integrated printer
Measures CO, CO2, HC
Lambda, corrected CO and O2 (NOX optional) values.
Engine temperature
Battery connection engine rev counter
V5 and GIENET connection
17" TFT video screen

Combined with the opacimeter, MULTIGAS also measures the opacity of diesel emissions.
ref. 898MBG0/KP3

Opacimeter - head unit
ref. 898LIGHTMB/KP3

The opacimeter is connected to the measuring station of the analyser and enables measurement of the opacity of diesel emissions (according to the current NFR 10025 regulations).

Technical specifications		
Measuring range	0 - 99.9 %	res. 0.1
Opacity	0 - 9.99 km-1	res. 0.01
Temperature of exhaust fumes	0 - 600°C	res. 1°C
Dimensions	470 x 230 x 220 mm	
Weight	6 kg	

ACTIGAS Combi Emissions Station

The ACTIGAS Combi emissions station is designed for full emissions testing of both petrol and diesel engines.

The station includes:

Mobile workstation
AT505 gas analyser, for petrol engines
AT605 opacimeter with sensor, for diesel engines
Petrol and diesel emissions probes
Speed and oil temperature measuring module
Remote control
Oil temperature sensor

Technical specifications		
Carbon monoxide CO	0 - 10 % vol	res. 0.01
Carbon dioxide CO2	0 - 20 % vol	res. 0.1
Unburnt hydrocarbons HC (hex)	-12 - 2000 ppm vol	res. 1
	2001 - 9000 ppm vol	res. 10
Oxygen O2	0 - 4 % vol	res. 0.01
	4 - 21 % vol	res. 0.1
Corrected carbon monoxide COco	0 - 10 % vol	res. 0.01
NOx (optional)	0 - 5000 ppm vol	res. 1
Lambda ratio	0.500 à 2.000	res. 0.001

The Opacimeter

Measures the opacity of diesel engine emissions. The unit takes measurements both at idle and during acceleration. During an acceleration test the unit records engine RPM, peak fume opacity and acceleration time.

Technical specifications		
Absorption coefficient (k)	0 - ∞ m-1	res. 0.01
Opacity (N)	0 - 100 %	res. 0.1
Duration of acceleration	0 - 99.99 s	res. 0,1
Speed	400 - 2000 min-1	res. 10
	2001 - 9990 min-1	
Oil temperature	0 - 150°C	res. 1
Dimensions	235 x 380 x 90 mm	
Weight	4.5 kg	

Peripheral Test Equipment

Headlamp aligners
ref. 664-6CT

The 664-6CT uses a photodiode measuring system. It can be mounted on wheels or on rails, and the measurement head is positioned on a cylindrical aluminium column.

Accurate alignment of the unit to the vehicle headlamp assembly is achieved either by means of a mirror or a laser beam. Its ergonomic control box, which can be rotated according to the position of the operator, is extremely easy to use.

The operator, guided by the headlamp aligner display, measures the height from the bottom of the reflector, thus determining the tolerance range of acceptable inclination on the vehicle. The headlamp aligner then transmits the results to the PC workstation via Wifi or Bluetooth using GiegNet and/or GiegLan protocols.

Headlamp aligners
ref. 764-5CT

The 764-5CT is fitted with a CCD camera whose image sensors are analysed by the integrated software.

It consists of a cylindrical column with assisted measurement head positioning, a combined mirror/laser alignment solution and automatic centring on the optical axis.

Its interface is very user-friendly and its large LCD display, with integrated network control procedure, makes it easier to read off the results. The headlamp aligner transmits the results obtained to the PC workstation via Wifi or Bluetooth using GiegNet and/or GiegLan protocols.

At the present time ACTIA MULLER is the only automotive equipment supplier to offer a range of headlamp aligners dedicated to vehicle test stations and adapted to their present and future needs.

Technical specifications	
Microphone	20 ml / Pa
Preamplifier	PRE 21 S
Weightings	A/B//C & Z
Dynamics	30 - 137 dB
Indicators	Lp min & Lp p max. Leq Lpk start / stop
Storage	99 results
Battery life	24 hours
Weight	700 g

Class 2 Sonometer
ref. 7000-S2-A

Operates on any type of vehicle and measures all sources of noise.
The device can be connected to the BILANMATIC using protocol V5.
Compliant with :
- NF EN 61672-1
- NF EN 60651/60804
- CEI 1260 ISO 5130

8 hand-held repeater terminal
ref. 120900-2

Autostop Maxi commercial decelerometer
ref. 35230-1KP

Convex mirror
ref. 686

Pedometer Kit
ref. 19200-1-A

NOVA Bench

Multiplexed twin chassis brake tester

Universal next generation commercial brake tester chassis , for universal recessed fitting.
Replace your brake tester without requiring any civil engineering modification, and access Muller Bem technology.

Compatible with the following pit installations (without civil engineering modification):

- VLT
- Bosch
- Maha
- Muller 16600
- Schenck

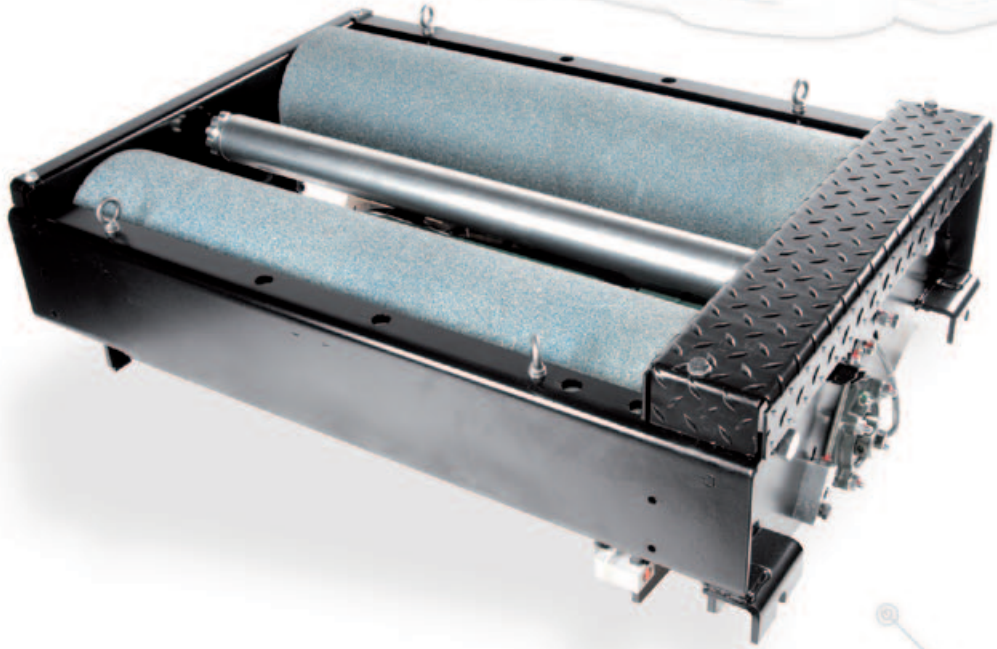
Save money: No pit modification costs

Save time: quick fitting in 16 hours

The Bilanmatic 10 000 Mx is the most advanced product on the market. Its combined technology has been developed to increase your productivity thanks to its multiplexed system.

Our Mx system enables high performance and accurate operation of your test lane:

- Remote Maintenance
  For instantaneous remote assistance of your equipment
- Simplified electronics
  Easier and faster maintenance and upgradability of your equipment. Thanks to standardised parts and simplified electronic wiring, the addition of equipment and adaptation to new vehicle testing standards (EOBD, Giegnet – Gieglan protocols) are achieved at minimum cost and without civil engineering works.
- Fully digital system
  Greater measurement accuracy and 100% reliable results.
- High-tech design
  A more attractive, modern workshop to welcome your customers.
- Multi-station and multi-controller system
  Test several vehicles simultaneously for maximum profitability from your test station.



NOVA Bench
ref. 10CCD11AAAF

Technical specifications:

2 frames with reinforced mechanically welded structure (20 ton) with double drive chains

2 11 kW reduction motors fitted with automatic roller lock allowing considerable put and output comfort

Metal rollers, 250mm in diameter, coated with a closed matrix composite concrete

Rear rollers elevated by 35 mm

Large diameter (80 mm) safety rollers, 10 impulses for perfect monitoring of the tangential speed of the wheels, even for those fitted with “wide tread” tyres.

8 5000 daN sensors with a strain gauge (DMS) on each side, enabling measurement of static and dynamic vertical forces.

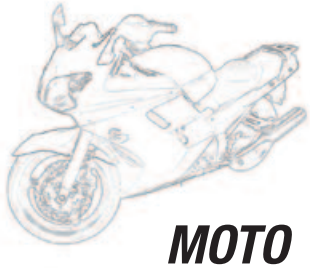
1 HP A4 colour printer
1 Microcomputer connecting cable
1 Extension cable
1 Remote handling software with RJ45 cable
1 all pit weighing kit
1 covering plate kit
1 all pit locking kit
1 Metrology book

Technical specifications	
Brake force per wheel	4000 daN
Distance between roller axes	500 mm
Min / max track	800 / 2800 mm
Weight of the frame	1040 kg
Coefficient of friction (dry)	> 0.8
Coefficient of friction (wet)	< 0.6
Min. drive through width between frames	800 mm
Maximum drive through width	2800 mm
Free passage between frames	580 mm
Test speed	2.2 Km/h

ACTIA MULLER

Motorcycle

testing



MOTO

BILANMATIC 10 000 Mx Moto

The lane may be split into several bays, allowing simultaneous testing of multiple vehicles:

16 possible users via 16 infrared remote controls (patented by Muller Bem) with no risk of the data being confused.

This lane is perfect for drive through testing.

Includes:

- Console with directional 20" TFT flat screen
- Industrial PC running Windows XP
- Multi-User infrared remote control
- Brake tester chassis
- Braking force
- Dynamic weighing
- Force applied to the brake pedal
- Force applied to the brake lever
- Wheel clamps (for safety and improved measurement):
    - Speedometer
    - Measurement of maximum speed of mopeds
    - Road simulator
    - Emissions testing
    - Reproduction of the actual running conditions (wind factor, road simulation)

Software :

- 2,3 and 4 wheels
- Taking account of the braking circuits
- Monitoring of safety mechanisms

Safety:

- The passage of a motorcycle on the brake tester chassis presents risks to the technician and to the vehicle if the motorcycle is not held in place. The "wheel clamp" locking system ensures a perfect hold on the 2 wheels during brake, speed, emissions and headlamp testing. Moreover, the wheel clamps significantly improve the performance of measurement devices.
- At suitable points on the lane, steps with a pressure sensor guarantee maximum safety for the technician.

Multiplexed MOTORCYCLE test lane

Series 1001 Recessed
ref. 1001X31AJA0AF

Series 1001 Podium
ref. 1001X31AJA0AF

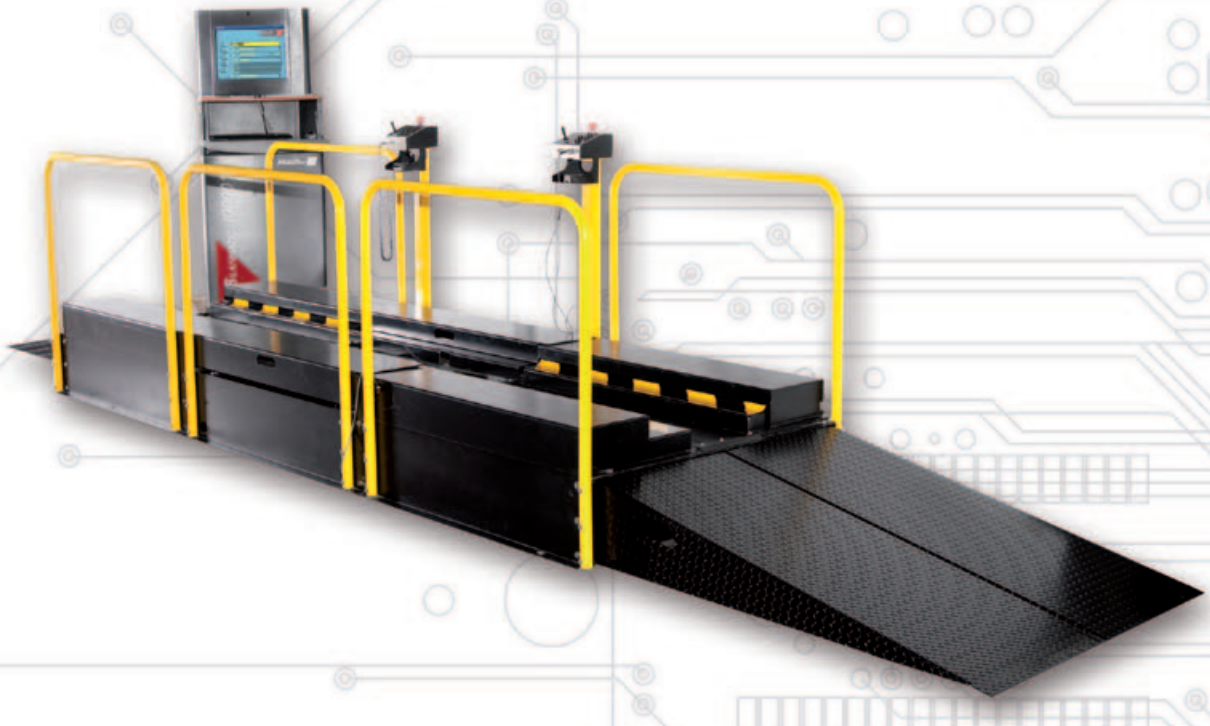
Series 1001 Recessed *for 3 and 4 wheels*
ref. 1001Y31AJA0AF

MULTIPLEX brake tester chassis
Permissible useful load: 1000 Kg
Wheel Diameter: 6 to 24“
Roller Diameter: 200mm
Max. braking force: 300daN
Force sensors with strain gauge
Test speed: 5km/h
Roller Coating: Epoxy silicon
Integrated weighing: 4 sensors

A second pair of rollers is required to test lightweight 3 or 4 wheel vehicles. With the exception of the length of the rollers, the specifications of this chassis are the same as those of the main chassis.

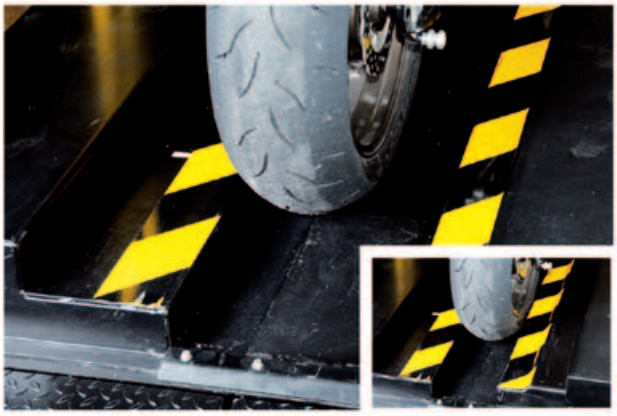
Wheel Alignment
The wheel alignment system measures the alignment between the front and rear wheels.
This system uses one of the brake tester clamps to lock the rear wheel.

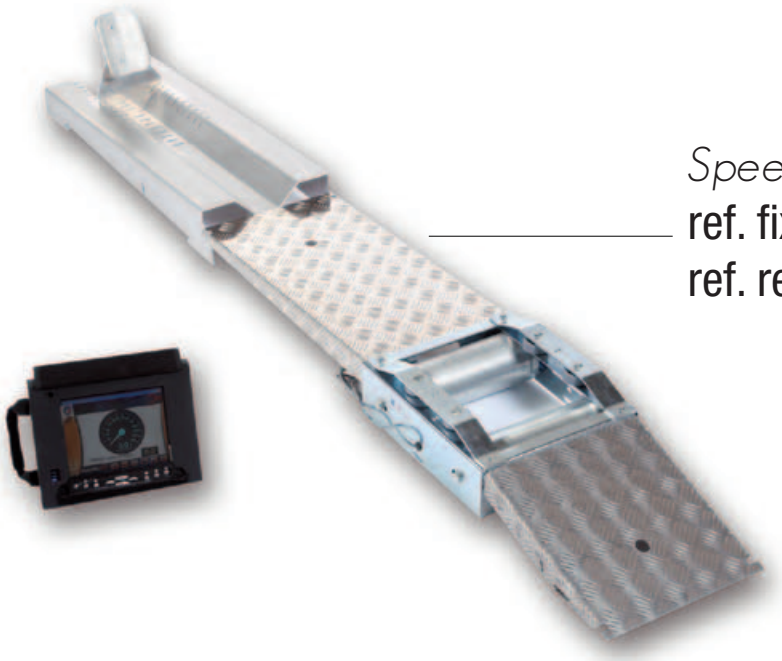
Wheel clamps
Permissible useful load: 1000Kg
Maximum controlled tightening force: 200Kg
Vehicle anti recoil: 100Kg
Step height: 150mm



2 asymmetrical clamps with control terminals for recessed version
ref. 51300-S2

2 asymmetrical clamps with control terminals for Podium version
ref. 51300-P2





Speedometer for mopeds:
ref. fixed / 51200
ref. recessed / 51200-E

Permissible useful load: 250Kg
Maximum measurable speed: 60km/h
Roller Diameter: 100mm
Wheel Diameter: 6 to 24”

Kit of 5 guard rails for Podium
ref. 121707-P

1 guard rail for Recessed option (No. required varies per installation)
ref. 121707-S

Class 2 Sonometer
ref. 7000-S2-A

Operates on any type of vehicle and measures all sources of noise.
The device can be connected to the BILANMATIC using protocol V5.
Compliant with :
- NF EN 61672-1
- NF EN 60651/60804
- CEI 1260 ISO 5130

Technical specifications	
Microphone	20 ml / Pa
Preamplifier	PRE 21 S
Weightings	A/B//C & Z
Dynamics	30 - 137 dB
Indicators	Lp min & Lp p max. Leq Lpk start / stop
Storage	99 results
Battery life	24 hours
Weight	700 g

MULTIGAS gas analyser
ref. 898MB/KP3

MULTIGAS is an upgradeable tool for emissions testing on petrol engines. It conforms to European standards and makes use of technology that provides potential for future upgrade. The integration of new standards or applications is easily achieved by inserting a new memory card.

This class 0 “gas analyser” platform, is the most technically advanced available in terms of emissions measurement and performance.

The software is ideal for rapid measurement and testing, whilst being simple to use to enable the operator to move easily from one test to another.

Main specifications:
Supplied on a mobile workstation
Integrated printer
Measures CO, CO2, HC
Lambda, corrected CO and O2 (NOX optional) values.
Engine temperature
Battery connection engine rev counter
V5 and GIENET connection
17” TFT video screen

Headlamp aligners
ref. 664-6CT

The 664-6CT uses a photodiode measuring system. It can be mounted on wheels or on rails, and the measurement head is positioned on a cylindrical aluminium column.

Accurate alignment of the unit to the vehicle headlamp assembly is achieved either by means of a mirror or a laser beam. Its ergonomic control box, which can be rotated according to the position of the operator, is extremely easy to use.

The operator, guided by the headlamp aligner display, measures the height from the bottom of the reflector, thus determining the tolerance range of acceptable inclination on the vehicle. The headlamp aligner then transmits the results to the PC workstation via Wifi or Bluetooth using GiegNet and/or GiegLan protocols.

Headlamp aligners
ref. 764-5CT

The 764-5CT is fitted with a CCD camera whose image sensors are analysed by the integrated software.

It consists of a cylindrical column with assisted measurement head positioning, a combined mirror/laser alignment solution and automatic centring on the optical axis.

Its interface is very user-friendly and its large LCD display, with integrated network control procedure, makes it easier to read off the results. The headlamp aligner transmits the results obtained to the PC workstation via Wifi or Bluetooth using GiegNet and/or GiegLan protocols.

At the present time ACTIA MULLER is the only automotive equipment supplier to offer a range of headlamp aligners dedicated to vehicle test stations and adapted to their present and future needs.

ACTIA MULLER

Mobile Test

stations

Light and Commercial Vehicles

Mobile Test Station for light vehicles

For over 20 years, Actia Muller has been the benchmark for bespoke mobile test stations dedicated to car, commercial and motorcycle testing.

Trailer equipped with a complete, modular vehicle test lane for testing light vehicles.

Rolled out and operational in less than 15 minutes, it enables testing to be carried out in isolated areas or those with a low density of vehicles.

Mobile Test Lane

Specifications: Complete light vehicle test lane

- Tablet PC running Windows XP
- Infrared remote control
- Brake tester chassis with 4T brake motor
- Eusama suspension bench
- Side slip tester
- Headlamp aligner
- Emissions tester

Mobile Test Station for light and commercial vehicles

Semi-trailer for light/commercial vehicle testing, self-powered thanks to an integrated electricity generator in the cab.

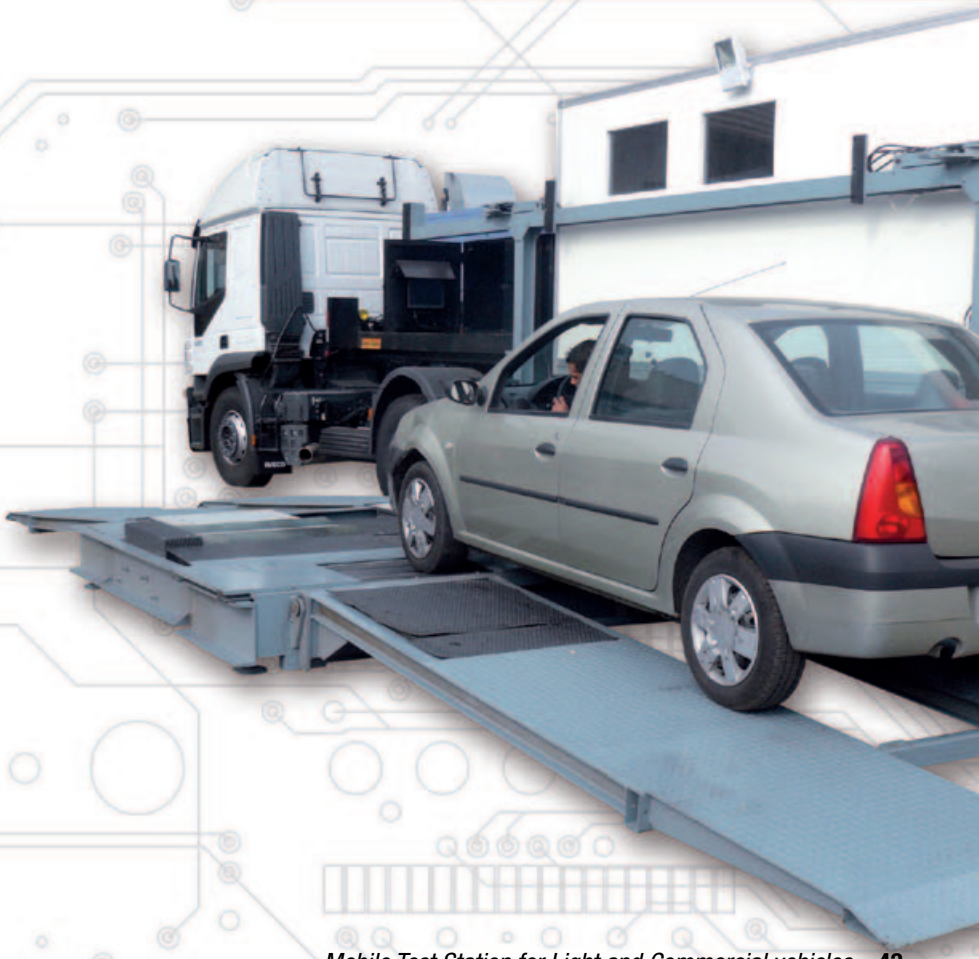
These stations may be designed to carry out testing laterally or transversally. The station allows light and heavy vehicles to pass through, with sequential testing of brakes, suspension (for light vehicles) and front drive clearances.

Once off the road, the trailer opens laterally or on 2 sides to provide access for the vehicles to be tested.

Mobile Test Lane

Specifications:
Complete light and commercial vehicle test lane

- Electricity generator
- light/commercial vehicle brake tester
- light/commercial vehicle axle play detectors
- light vehicle suspension test chassis
- Console with 20” TFT flat screen
- Industrial PC running Windows XP
- Infrared remote control
- Side slip tester
- Headlamp aligner
- Emissions tester



ACTIA MULLER

5 rue de la Taye
28110 LUCE
FRANCE
Tél.: +33 2 37 33 34 00
Fax: +33 2 37 33 42 36

www.actiamuller.com
www.actia.com

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Arnaud Lombard
Julien Marpault

Ref. CATIRUK09_V01