



A Company's Performance



ISO 9001
ISO 14001
ISO 50001
ISO/IEC 17025
SINCE 1969

- Vehicle Safety Technology
- Suspension Technology
- Lifting Equipment
- Chassis Dynamometers, Diagnostic Units, Emission Testers

Premium Workshop
Equipment

A COMPANY

WHO WE ARE AND WHAT WE DO



MAHA Maschinenbau Haldenwang GmbH & Co. KG was founded in 1969. With expertise, efficiency and innovative energy the workshop outfitter from the Allgäu region has conquered market leadership in the various product segments.

MAHA develops and manufactures all kinds of vehicle testers and measurement units as well as complete systems to measure, control and adjust vehicle components. The manufacturing program is enhanced by vehicle lifts in various versions.

MAHA has its own subsidiaries and representatives in more than 150 countries worldwide and is considered a reliable manufacturer, supplier and service partner. MAHA's customers include motor vehicle test organizations, workshops and automobile manufacturers.

QUALITY

OUR DEFINITION OF QUALITY

Being an innovation leader requires highly qualified, well-trained, motivated employees. Careful personnel planning, internal and external training programs and a large number of apprentices ensures that these defined, high-quality standards are maintained.

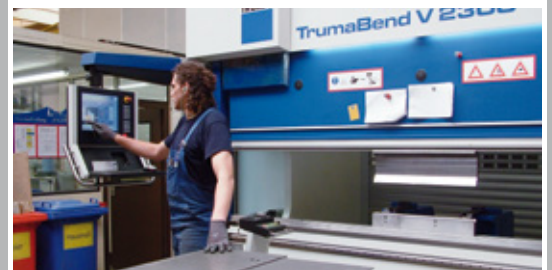
Important innovation factors include offering university students practical-oriented internships during their studies and entering into intensive cooperation programs with universities of applied science- just as meaningful is our above-average investment in research and development.

Our international network is the ideal platform for our workforce to gain valuable experience and expertise in various countries throughout the world.

Ongoing investments in production modernization is the basis for manufacturing sustainably successful products.



Automatic raw material pick-and-place system for precision laser cutting



State-of-the-art bending machine



Electronically controlled high-bay warehouse



Precision laser cutting



State-of-the-art production lines as an example: Scissors lifts production line

TEST COMPONENT

ELECTRIC

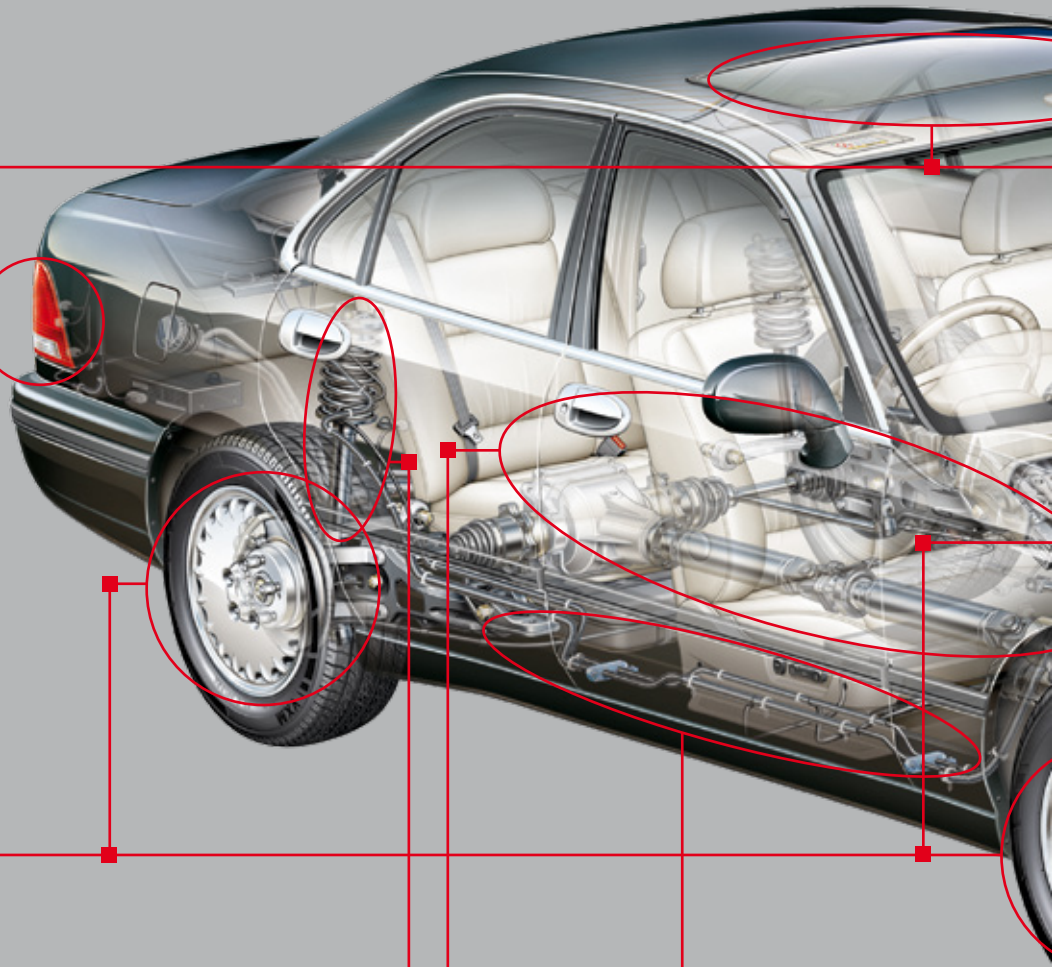
- Headlights
 - Adjustment
 - Function
 - Light intensity
- Signal lights
 - Blinker
 - Brake lights
 - Back-up lights
 - License plate lighting
- Safety equipment
 - Airbag
 - Brake system
 - Steering
 - Roll over protection
 - Restraint system
 - Driving dynamic system
- Battery
- Charging status
- Alternator
- Alternator – drive belt
- Starter motor
- Horn
- Wipers
- Power window actuator
- Sunroof
- Mirror
- Central locking
- Seats
- Instrument panel

CHASSIS AND BODY

- Accident damage
- Paint
- Rust
- Window
- Front windshield
- Bumper
- Safety belts

VEHICLE IDENTIFICATION

- Chassis number
- Engine number



BRAKE SYSTEM

- Function
- Brake force
- Ovality
- Main cylinder
- Brake fluid
- Brake hose
- Brake line
- Brake disc
- Brake drum
- Brake lining

SUSPENSION

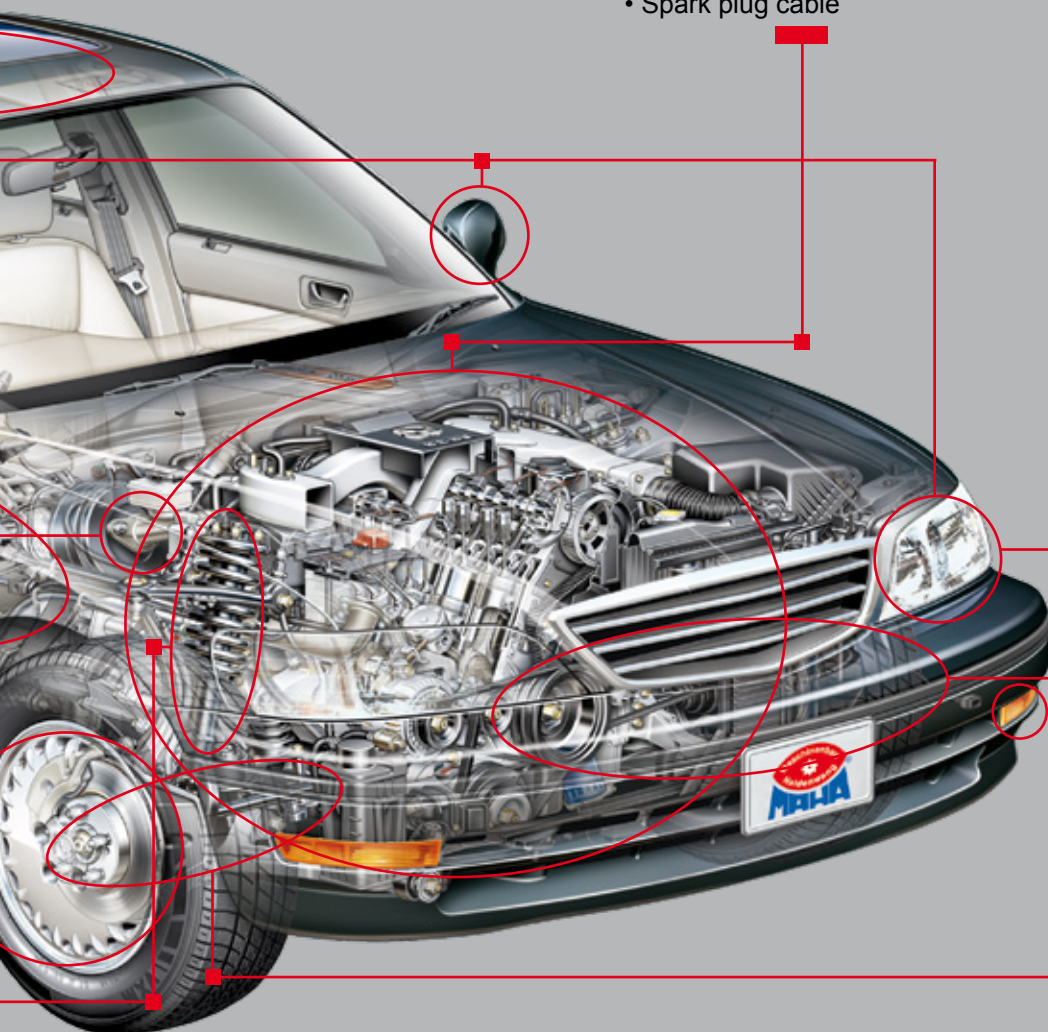
- Shock absorber
- Spring
- Upper suspension arm
- Lower suspension arm
- Suspension arm connector
- Suspension arm ball joint
- Torsion spring
- Stabilizer
- Tires
 - Tread depth
 - Wear pattern detection
 - Seasonal check (winter/summer tires)
- Wheel bearing

TRANSMISSION

- Transmission casing
- Oil level / leak tightness / condition
- Joint
- Cardan shaft
- Differential
- Double joint sleeve

TS

WE TEST OVER 600 INDIVIDUAL POSITIONS



ENGINE

- Engine performance
- Running qualities
- Oil level / leak tightness / condition
- Drive belts
- Engine bearing
- Water outlet
- Suction hose
- On and off valve
- Spark plug cable

FUEL SYSTEM

- Fuel pump
- Fuel line
- Fuel filter
- Fuel tank
- Fuel tank venting

STEERING

- Track deviation
- Steering wheel
- Toothed rod
- Joint
- Sleeves
- Steering track rod
- Steering track head
- Steering casing
- Steering pump
- Steering hoses
- Steering fluid
- Pump belts

EXHAUST SYSTEM

- Exhaust emission
- Noise
- Exhaust pipe
- Noise damping

COOLING SYSTEM

- Water hoses
- Water pump
- Cooler
- Cooler cover
- Reserve tank
- Fan

SYSTEM SOLUTION

TESTING W

Axle Play Detector

Quick determination of defects and wear and tear on steering components, wheel bearings, springs and suspension

Headlight Tester

Quick and precise testing of the headlight setting

Turning Plates

Integrated into lift; by manually turning the plates the steering components can be checked in a matter of seconds

Shock Absorber Tester

For easy and exact testing of axle damping- indirect shock absorber testing

Scissors Lift

Reliable and cost-effective detection of underbody damage by high raising and lowering speed, built-in lighting and axle lift

- Tread depth
- Track observation

Lift Operations Desk

Includes lift hydraulic and control unit

1550 mm

4730 mm long runway 4400 mm
5130 mm long runway 4800 mm

680 mm
400 mm
800 mm
600 mm



ONS

WITH COMPLETE SYSTEMS OR INDIVIDUAL UNITS

Side-slip Tester MINC

Instant testing of axle geometry

The Communication Desk MCD 2000

Is the "brain" of the test system with

- comfortable database for vehicle and customer registration,
- communication and network program,
- user-friendly Windows® platform, and takes over
- control and data administration of all connected test devices and external devices,
- display and print out (optional) of all transmitted measurement values,
- organization of all data terminals networked to one another.

Tachograph Tester

Used for testing of speed display of tachometers

Roller Brake Tester

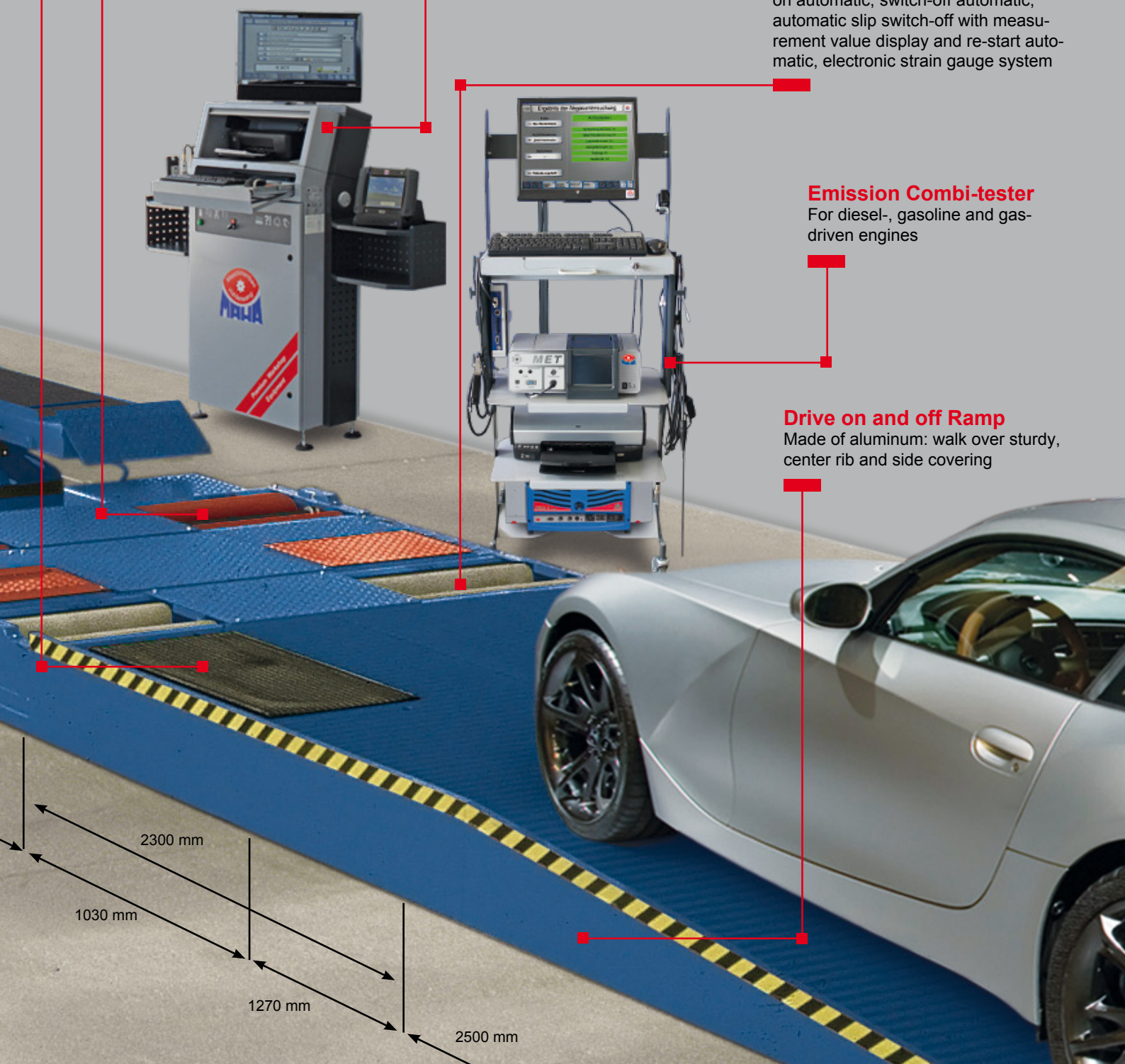
Single wheel switching, delayed switch-on automatic, switch-off automatic, automatic slip switch-off with measurement value display and re-start automatic, electronic strain gauge system

Emission Combi-tester

For diesel-, gasoline and gas-driven engines

Drive on and off Ramp

Made of aluminum: walk over sturdy, center rib and side covering



PRODUCT:



TWO WHEELERS / THREE WHEELERS / QUADS

Roller brake tester/test lane with communication desk

- for motorcycles up to 500 kg axle load
- for three wheelers/quads up to 1000 kg axle load

CARS

Platform brake tester with LED digital display

- for car/van up to 4 t axle load

Roller brake tester with analogue display

- for car/van up to 5 t axle load

Roller brake tester/test lane with communication desk

- for car/van up to 5 t axle load

Fair Vehicle Inspection

- a future concept for workshops and auto dealerships



TRUCKS

Roller brake tester/test lane with analogue display

- for car/van/light weight truck up to 8 t axle load
- for car/van/commercial vehicle up to 15 t axle load
- for car/van/commercial vehicle up to 20 t axle load
- Roller set for above ground operation for vans and trucks up to 18 t axle load

Roller brake tester/test lane with communication desk and PC

- for car/van up to 8 t axle load
- for car/van up to 15 t axle load
- for car/van up to 20 t axle load
- mobile test lane (Container) for vehicles up to 15 t axle load
- Roller set for above ground operation for vans and trucks up to 18 t axle load



TRACTORS / PURPOSE VEHICLES

Roller brake tester with analogue display

- for tractors up to 18 t axle load

Roller brake testers with communication desk and PC

- for tractors up to 18 t axle load

SOFTWARE SOLUTIONS

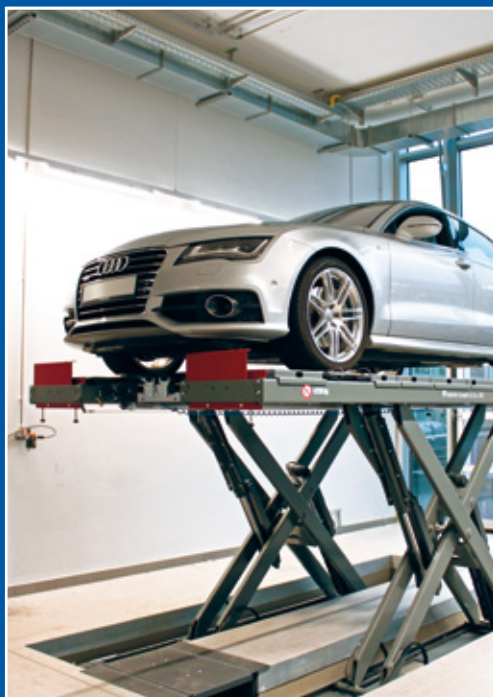
MISCELLANEOUS

- Pit safety for working pit
- Diagnosis (conditioning test in the workshop)

MODEL:

MBT 1000 EUROSISTEM MBT 1000 EUROSISTEM	
MPP 2140	MPP 2240
Series MBT 2100	MBT 2200 LON
MBT 2250 EUROSISTEM	MBT 2450 EUROSISTEM 4WD
FFI	
MBT 3200 LON	3400 LON 4WD
MBT 4200 LON W CLASSIC	MBT 4200 LON W COMPETENCE
MBT 7200 LON W CLASSIC	MBT 7200 LON W COMPETENCE
MBT 5200 LON W CLASSIC	MBT 5200 LON W COMPETENCE
MBT 3250 EUROSISTEM	MBT 3450 EUROSISTEM 4WD
MBT 4250 EUROSISTEM	MBT 4450 EUROSISTEM 4WD
MBT 7250 EUROSISTEM	MBT 7450 EUROSISTEM 4WD
MTL 15	
MBT 5250 EUROSISTEM	
MBT 6200 LON W CLASSIC	
MBT 6250 EUROSISTEM	
EUROSISTEM 7	VIMAS (Data Management System for periodic vehicle testing)
GSQ I / GSQ II	GSL I / GSL III
PTI Tool	

PRODUCT:



ABOVE GROUND

Two-post lifts

- electro-mechanic, load capacity up to 6.5 t
- elektro-hydraulic, load capacity 4 t

Four-post lifts

- electro-hydraulic, load capacity 4 and 5 t
- electro-mechanic, load capacity 8 and 10 t

Scissors lifts

- flush-floor or surface mounted, load capacity up to 5 t

Double scissors lifts

- flush-floor or surface mounted, load capacity up to 4 t

Mobile short stroke scissors lift

- load capacity 2.5 t

Mobile wheel engaging lifts

- for vans/trucks/buses/special vehicles, load capacity up to 7.5 t per column
- for tractors, load capacity up to 5 t / 7.5 t per column

INGROUND

One-cylinder lifts

- with flat support, swing arms or wheel support load capacity up to 3 t

Two-cylinder lifts

- with flat support, swing arms, adjustment bench or runways load capacity up to 6.5 t

Four-cylinder lifts

- with runways, load capacity up to 10 t

Multiple-cylinder lifts

- with movable cylinders, load capacity 15 t per cylinder

Energy box for lift control

PIT JACK

- axle and gear jack pneumatic, track-guided, hanging or freely moving, load capacity up to 16.5 t
- axle and gear jack hydraulic/pneumatic, with gear plate, free moving, load capacity up to 4 t
- pit jack hydraulic/electro-hydraulic, with carriage, load capacity up to 30 t

AXLE JACK

- manual-hydraulic or hydro-pneumatic, load capacity up to 2.6 t
- hydro-pneumatic, load capacity 4 t

WHEEL-FREE JACK

- pit wheel-free jack, load capacity up to 3 t

MODEL:

ECON III 4.0 / 5.0 HL CS 4.0	MAPOWER II 3.0 / 3.5	ECONLIFT 6500	
CARLIFT II 4.0 / W TRUCKLIFT II 8.0 / 10.0	CARLIFT II 5.0		
MSL 4.0 A / U	DUO UC 5.0 W A / U	DUO CM 4.2 A / U	DUO CM 5.0 A / U
TWIN F IV 3.0 A / U	TWIN F IV 3.5 A / U	TWIN F III 4.0	
SOLO III 2.5 M			
MCL 22 / 33 / 44	RGE	RGE-GPGU	RGA
RGE T / TS	RGA T / TS		
Series ES 93	ES SQUARE II		
Series ZS SQUARE II Series ZS4	Series ZS 94 II Series ZS5	Series ZS VARIO	
VS SQUARE II 5.0	VS SQUARE II 6.5	VS SQUARE II 10.0	
Series TL SQUARE Teleskop	ES DUAL		
E-BOX			
Series MAH			
Series MAH-E			
Series MGH	Series MGH-E		
AL II 2.0 / 2.6 (PH) Series AL II 4.0 PH			
MPL 3.5			

PRODUCT:



PERFORMANCE

Roller dynamometer

- for small vehicles up to 10 kW
- dynamometer for function and emission test up to 5.5 t axle load

Speed tester

- for one-track small vehicles

Roller performance dynamometers and roller function dynamometers

- communication desk with software package for performance measurement
- roller sets for cars/vans, axle load up to 2.5 t
- roller sets for cars/trucks/buses, axle load up to 15 t

Single roller function and performance dynamometer

- roller set for motorcycle, axle load up to 1 t
- roller sets for cars, axle load up to 2.5 t
- roller sets for 4WD car, axle load up to 2.5 t

Pit safety for performance dynamometers

- for working pits range of 15 m

Air cooling fans

- axial type of fan
- radial type of fan

Power take-off functions and performance dynamometer

- for tractors

EMISSION

Roller set for emission inspection

- above-ground or inground, axle load up to 2.7 t

Roller set for emission inspection and performance test

- above-ground or inground, axle load up to 5.5 t

Emission measurement devices

- for diesel engines
- for gasoline and gas-driven Otto engines
- combi-emission tester

DIAGNOSIS

Headlight tester

Tachometer tester

Tachograph and trip recorder test device

Speed Limiter Tester

Brake fluid tester

Decelerometer

Closing force meter

Noise level meter

PRODUCT:



CARS

Shock absorber tester

- for cars and vans up to 2.2 t testable axle load, drive-over axle load 2.5 t - optional 13 t

Side-slip tester

- for cars/vans/motorcycles up to 3 t axle load

Axle and joint play detector

- for cars/vans up to 3.5 t axle load

TRUCKS

Side-slip tester

- for cars/vans/commercial vehicles up to 15 t axle load

Axle and joint play detector

- for cars/vans/trucks/buses up to 20 t axle load



Complete service / workshop concept

Spare parts supply 24/48

Service, installation, maintenance, routine check test

Corrosion protection: galvanizing, special painting

Foundation formwork

Continuing education / user training

MODEL:

MSD 3000

Series MINC

Series PMS

Series MINC

Series LMS

MAHA Introduces Energy Management

As one of the first companies in the industry MAHA introduces energy efficiency labels for workshop equipment products.

Across the board MAHA Maschinenbau Haldenwang GmbH & Co. KG focuses consistently on energy efficiency for all its products. For the first time the company from the Allgäu region introduced energy efficiency labels for workshop equipment products at the Automechanika 2012. It allows customers to participate actively in climate and environmental protection and to save costs.

We have been one of the first companies in the workshop equipment industry to introduce a certified energy management system in accordance with ISO 50001. With this measure we have implemented numerous steps to improve the energy efficiency of the company. Thus, we are making a significant contribution to sustainable climate protection.





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