

#### REVOLVING PLATFORM MOD. PCA

To rotate trucks and heavy vehicles at industry facilities or outside

Pellicer Revolving platforms can rotate trucks, bus and heavy vehicles. These turntables are designed to work outside, with bad weather conditions. High anti rust protection. Our patented system allows to rotate high loads with few energy. These platforms are the most efficient rotating platforms.

- Maximum Load: up to 200 Tn (depends on model)
- Reliability: more than 1.000.000 of turns
- Diameter: 10 to 20 mts (depends on model)
- Floor: Steel metal Sheet
- Protection: Galvanized and Epoxi powder coating
- Platform height: from 40 cm
- Wheels: High resistance wheels
- Bearings: Lifetime lubed
- Rotating Power: 1 kw (2 o 4 groups)
- Rotating Speed: 0,25 rpm (variable upon request)
- Way of wheels: Upper positioned
- Operation: Remote control or button
- Can be paved (optional)

PELLICETTECHNOLOGY

Pellicer LTR Technology Our RECD platforms need 80% less power than our competitors to rotate the same loads.

LTR (Low Turning Resistance) gets:

>>Less Frictions
>>80% Less Power Needed
>>Less Breakdowns
>>Less Maintenance
.... more Reliability and Profitability

PELLICER TECHNOLOGY Revolving platforms& Rotating systems +34 96 253 80 63 www.pellicertech.com Valencia (SPAIN)



#### **APLICATION**

Revolving platform for heavy loads, to rotate trucks, buses, and lorries up to 5 axes.

This kind of platform is used in Logistics areas with a high traffic of trucks.

Also, this platform can be installed and used in public thoroughfare where would be impossible to make a 180° maneuver without the platform.

#### HIGH ANTI RUST PROTECTION

The platform is totally protected with hot galvanized treatment in its lower structure and the steel metal sheet.

It gives a high anti rust protection even in port areas.

#### WAY OF WHEELS

The support tracks, are the pieces that have more stress in a revolving platform, and they are the most important component to get a correct movement of the platform.

The PCA platform has the special feature that these track ways are mounted with bolts. It allows the possibility of change these components after inundations or wearing down, only loose the screw bolts, and mounting new tracks.

#### **OPTIONS**

The revolving platform, optionally, can be adapted to be paved.

Possibility of automatic maneuvers

Remote control

#### PROFITABILITY AND RELIABILITY

The reliability and profitability of the PCA platform is tested to guarantee more than 1.000.000 rotations.

The structure is protected by two layers of rust protection by epoxy powder coating. And its bearings are lifetime lubed in axis and wheels

The use of this platform allows save fuel because avoid the maneuvers of the trucks, and it allows to reduce the pollution.

#### **USE AND MAINTENANCE**

It's tested that the PCA turntables are the most profitable platform in maintenance.

Due to its reduced turning torque, without frictions, the revolving platform requires very low energy, this reason becomes in save electricity.

- High profitability: Avoid downtimes waiting the difficulty truck traffic.
- Save maintenance costs: All the components can be replaced without Pellicer's technician.
- Reduces the environmental pollution of the trucks.
- 100% reliable in its use and maintenance
- Easy to use.
- Control Box: Remote control and/or button at control box. Dead man function. Speed regulator (frequency regulator).

#### **GUARANTEE**

5 years guarantee in structural elements

2 years guarantee in moving parts and bearings and electrical components

#### **DELIVERY**

The production time of this model is 16 to 20 weeks

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- FEMEVAL 09: Enterprising Business Award
- ADCV: Example of Valencian Design
- SELECT I: Graphic design from Spain

Pellicer Technology in the media

# Presentation

# PELLICETTECHNOLOGY

#### The company

Pellicer Technology began operations over 30 years ago as provider of engineering solutions, manufacturing prototype machines for diverse sectors such as food, furniture, decoration, electronics (IBM), automotive (ISTOBAL), etc.

For the past 20 years, it has focused its operations on the development and production of parking systems and turntables, leading the production of both with customized solutions and with no limits.



### Philosophy



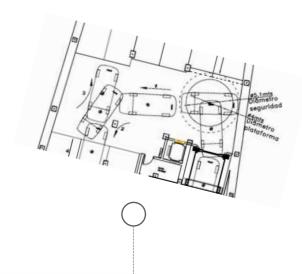
# Creating solutions tailored to each customer and every need

Customized systems and products with the highest standards of quality, with no limits to design, structure, rotation, use or purpose.

We materialize the projects and ideas of our clients through customized viability studies,

which in most cases we carry out at no cost under the commitment to deliver in just 48 hours.

Optimization of spaces, times and resources with minimum energy consumption.



#### Its turntables are

- Customized solutions to manoeuvrability problems in lorries, trailers and vehicles.
- Important aids in product exhibitions and displays.
- The basis for major Rotary or Dynamic Architecture projects such as the first and only revolving restaurant in Spain, whose base was developed by Pellicer Technology with stateof-the-art technology earning it the

**Technological Innovation Award** at the International Fair, Construmat09.

In addition, they all offer **major energy savings of between 60% and 80%** with regard to any other similar system on the market.

Thanks to the technology developed by Pellicer Technology energy savings of 60% to 80% are achieved in all our products



# Future

Pellicer Technology looks to the future. Proof of this is its recent new and intense phase of Internationalization, and its commitment to new market niches such as large Logistics Centres and Rotary or Dynamic Architecture.

Energy Efficiency and

Sustainability



Turntables for large sizes and with high load



#### Internationalization

After consolidating itself as leader of its sector in the Spanish market, Pellicer Technology has made a clear commitment to internationalization.

To this end, it has created an export department and has started an aggressive schedule of international promotion which has had and will maintain throughout 2010 the following targets: Greece, China, Belgium, Turkey, Morocco, Russia, Mexico, Germany, Colombia, Brazil, Canada and United States.

Early efforts have not been slow to bear fruit.

In March 2010, it signed with a Belgian company a Commercial Representation Agreement for its products throughout the territory of the European capital.

This agreement provides a logistical, service and sales network at a national level, but with the proximity, market knowledge and speed of response offered by the group of regional distributors that comprise it



projects in countries such as Mexico, Colombia and Kuwait, among others, both in the parking systems sector and in Transport

revolving restaurant proposals.



and Logistics, Exhibition platforms and new

### New market niches

On the basis of Pellicer Technology as a generator of ideas and solutions, the company will strengthen its bid to diversify into new market niches, facing the new engineering and design challenges this involves:

- Rotary or Dynamic Architecture Projects – Revolving Restaurants
- Large Scale Transport and Logistics
- Energy Efficiency and Sustainability

The first references have been given with firm steps.

Rotary or dynamic

architecture - revolving restaurants

Such is the case of the First Revolving Restaurant in Spain, for which it earned the Technological Innovation Award – CONSTRUMAT'09.

Similarly, we build Turntables for Large Masses, such as the one built in the port of Algeciras for turning Trailer Lorries and

#### masses of up to 80 tonnes with just 1 Kw of power.

Energy efficiency is one of the main goals of sustainable architecture and, with its designs and engineering, Pellicer Technology contributes to this commitment to the future.

R&D applied to the optimization of energy consumption, spaces and times.

Meeting of Pellicer Technology with Juan Manual Revuelta, General Director of the Delegation of Valencia in Brussels, with Gustavo Martinie, Coordinator of the Transport, Tourism and Communication Area, and with IVEX representatives in Brussels

# Products

### Parking systems

In continuous adaptation and search for new designs, our parking systems create solutions where before, in many cases, there was a problem.

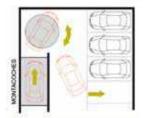
The small spaces in some car parks in which full advantage has been taken of the available space make the manoeuvres of some turns impossible. Our parking systems make these turns easier and in most situations make the manoeuvres possible. With major energy savings of 60% to 80% with regard to any other similar system on the market.

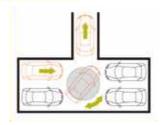
In addition, in all cases, Pellicer Technology first conducts a technical viability study – with no economic cost to the client.

With this study, the client, with full knowledge of the facts, can decide whether the solution we provide is the most suitable and dos so without having to risk any prior investment.

A unique advice and consultancy service we provide free of charge and with no commitment to purchase as part of the Total Quality Guarantee of our products













### Our parking systems:

- Make it possible to create parking spaces in areas which would be impossible without their installation.
- Eliminate the need to manoeuvre.
- Are the flattest platforms on the market, making it possible to install them in low height garages and on different car park floors thanks to the minimal height of the platform.
- Minimum motor and minimum rotation power, reduced by a factor of 4 thanks to their high precision and smoothness, allowing for major energy savings.
- Automatic activation of the manual option in cases of electrical failure.
- Installation with simple civil works.
- No maintenance programme required.
- Straightforward handling with standard remote control.
- "Safe Person" closing edge safety device.
- Specialist after-sales service.
- Highest quality materials ensuring lifelong optimum performance.
- Comprehensive quality control in design and manufacture.



ustomized solutions cover the



Movable revolving platform to turn trucks inside tunnels and to use at civil work. Load 50 tonnes.







We adapt our turntables to the new needs of clients enabling us to be present in a wide range of activities such as:

- Commerce
- Hotel trade
- Industry
- Entertainment: Theatre, cinema
- Automobiles
- Decoration
- Railway industry
- Promotional events: Political, commercial
- Maritime sector
- Etc.



# Major Projects

The following are examples of this line of business:

# Revolving Restaurants

With a surface area of **400 m<sup>2</sup>**, the restaurant has seating for 200 persons.

With a capacity of 80 tonnes, the whole thing rotates silently, smoothly and continuously, almost imperceptibly to the diners **and with** a power consumption of just 1 Kw.





Technological
Innovation Award at
the International Fair,
Construmat 2009

# Large Size, High Capacity Turntables

Logistics centres and freight terminals now see how large, heavy lorries save time, distances, man hours, fuel, tyres and manoeuvre, significantly increasing their productivity.





They move over 80 tonnes with just 1 Kw power







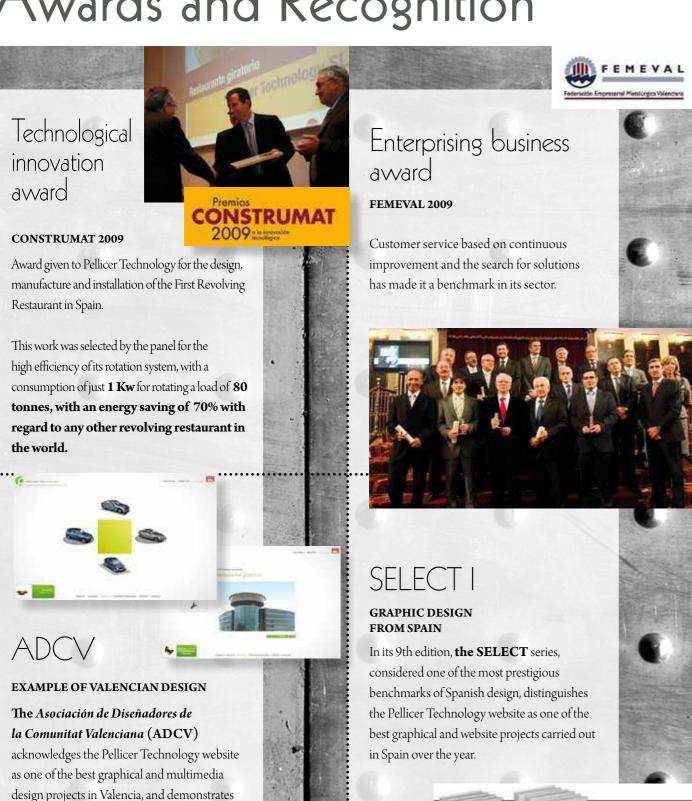




Pellicer Technology currently has modern facilities and an ISO 9001:2008 quality management system as well as the EC mark on its products, while different companies in the area carry out important collaborative work as subcontractors in the manufacture of many components.



# Awards and Recognition





# Pellicer technology in the media



Pellicer, technology applied to car parks with manoeuvrability problems.

March, 2006 Coche Actual Magazine

Report: New parking solutions.

2006 2005 1999

#### **EL**

onde pongo el coche?

21-08-05

Comunitat valenciana agraria

The agricultural cooperative, San Bernado, in

Carlet, introduces a new watermelon calibrator.

Pellicer, technology applied to car parks with manoeuvrability problems.

**EL PAÍS** 

28-10-06

Pellicer Technology, leader in parking systems.



this in its fourth biannual meeting.





25-11-09

"FEMEVAL Awards and statements from its chairman"



26-06-09

Pellicer, awarded for the first revolving restaurant in Spain

CORREO DE LA

CONSTRUCCION



LAS PROVINCIAS

29-11-09

FEMEVAL gives the IX edition of its awards

Levante

FEMEVAL acknowledges the work and

commitment of metal companies in Valencia.



December, 2009

Valmetal Magazine IX Edition of the FEMEVAL Awards



Ciutat... Carlet

The Company from Carlet, Pellicer

Technology, completes 2009 with two

January, 2010

prestigious awards.

levante-emv.com

15-04-10

Spain's first revolving restaurant, made in Carlet.



Vinntament de Carler

Pellicer Technology opens up new avenues of business in the European market on its

14-04-10

31-03-10

way through Brussels.

Pellicer Technology opens up new avenues of business in the European market on its way through Brussels.

15-04-10

A company from Carlet designs the first revolving restaurant.

The company, Pellicer Technology, from Carlet, has built Spain's first revolving restaurant in Granada, a project for which it has obtained the technological innovation award at the International Fair, Construmat.

2010

2007

March, 2007

NAN Magazine

Parking solutions

2009

22.04.09

Construmat 2009 Awards Technological Innovation Award



**EcoDiario** 

24-11-09

"FEMEVAL Awards and statements from its chairman" EcoDiario, the general information channel of Economista.es

21-12-09



07-01-10

Pellicer receives the Enterprising Business award.

The award recognizes the PIPE for its business trajectory.



14-04-10

Pellicer Technology opens up new avenues of business in the European market on its way through Brussels.

Ciutat ... Carlet

April, 2010

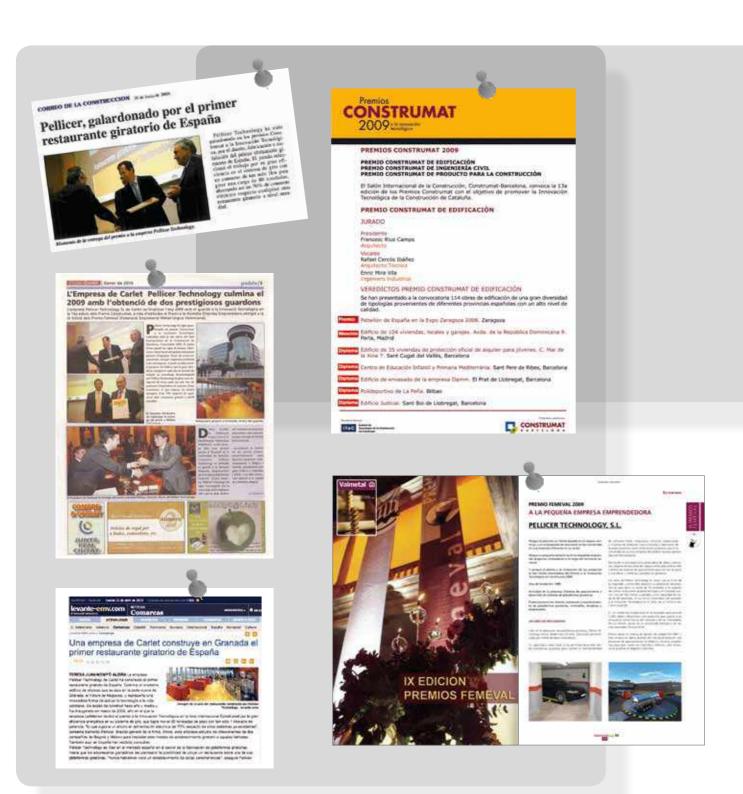
Pellicer Technology opens up new avenues of business in the European market on its way through Brussels.





# Presence in the media







#### Presence in the media



Periódico Levante 15-04-10



Periódico Levante 27-06-10



# Pellcer Technology

The leading company in revolving platforms

# Revolving Platforms & Parking Systems

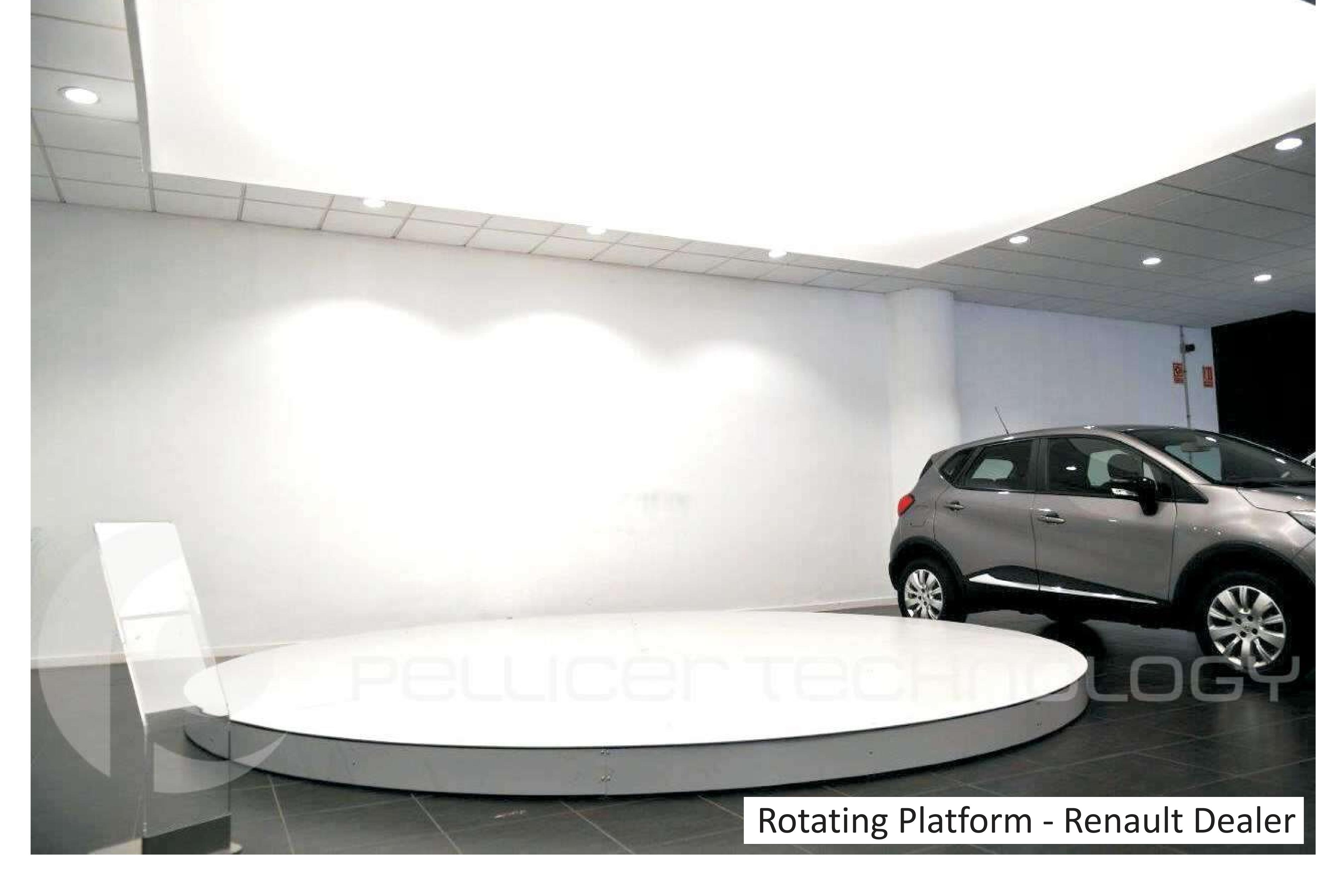
www.pellicertech.com

# Revolving Platforms - Show Car











# Peulcer Technology

The leading company in revolving platforms

www.pellicertech.com







Geneva Motor Show



Nissan Car Showroom (under construction)







including brake testers up to testing lanes

- Fully automatic testing procedure with operator guidance
- Digital measurement value recording and storage
- From LON to EUROSYSTEM: the modular structure
- Patented, correct all-wheel drive testing
- Robust, easy-to-service technology
- Network compatible ASA network, GIEGNET, MCTC, ...

#### Description

The MBT 2100 brake tester is the successful result of a consistently on-going developmental effort to design high-quality brake testers. Its display unit stands out with clearly readable round instruments and an integrated optical differential display. The flat and light-weight design facilitates versatile installation possibilities and presents a professional and modern workshop outfitting. "Plug and Play preparation" is used for easy and efficient installation. The MBT 2100 meets the requirements for the main inspection (HU) and is network-compatible due to its PC interface.

#### Scope of delivery

- Analogue display for brake force values
- Differential display for brake force
- Tester is pre-wired with 12 m of cable
- Software control by 32 Bit microprocessor electronics
- Flash-Prom for variable system configuration
- Electronic start-up monitoring and roller exiting aid
- Delayed automatic switch-on after vehicle has entered the test stand
- Automatic cut-off at selected slip with pointer stop and automatic restart
- Automatic shut-off after exiting the test stand
- Electronic DMS measuring system
- Interface RS 232 for printer or PC
- Self-supporting, enclosed roller set
- Roller surface welded (optionally plastic-coated)
- Corrosion protection: powder coating
- TÜV approved





b mskräft li 2.61kN Achse Differenz:	re	2 . 69kN 5 . 38kN 32	
HINTERAC	HS	E:	
Bremskräfte: li 3.30kN Achse: Differenz: Rollwiderstand:	re	3.38kN 6.68kN 2%	
li 0.27kN	re	0.29kN	
Ovalität: li 0.02kN	re	0.01kN	
statische Gewich li 653kg Achse: stat Abbremsung	re	644kg 1297kg 53%	
ENDAUSWERTUNG:			
	3A:	13 52kN 5 30kN 2594kg 537 217	
Kennzeichen:			

Printed via "Thermoprint" printer



# TECHNICAL DATA

#### DISPLAY

Analogue display			2 x Ø 350 mm	
Display range	0-6/0-8 kN*			
Display box dimensions (H x W x L)	470 × 840 × 100 mm			
Interface connection			RS 232 for DIN A4 printer or PC	
ROLLER SET	RS 2	RS 4	RS 5	
Drive power of motors	2 x 3 kW / 2 x 4 kW*	$2 \times 3 \text{ kW} / 2 \times 4 \text{ kW}^*$	2 x 4 kW	
Test speed	5 km/h	5 km/h	5 km/h	
Measured value display	0 - 6 kN / 0 - 8 kN*	0 - 6 kN / 0 - 8 kN*	0 – 8 kN	
Permitted axle load (drive-over)	3.0 t / 4.0 t*	3.5 t / 4.0 t*	5.0 t	
Track, minimum	780 mm	780 mm	780 mm	
Track, maximum	2200 mm	2500 mm	2800 mm	
Roller diameter	202 mm	202 mm	202 mm	
Roller axle distance	400 mm	400 mm	400 mm	
Electrical connection / fuse protection	3 x 400 V, N, PE 50/60 Hz / 25 A time-delay	3 x 400 V, N, PE 50/60 Hz / 25 A time-delay	3 x 400 V, N, PE 50/60 Hz / 25 A time-delay	
Bearing	water-tight, maintenance free	water-tight, maintenance free	water-tight, maintenance free	
Corrosion protection	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)	
Roller set dimensions (H x W x L)	280 x 680 x 2320 mm	280 x 680 x 2644 mm	280 x 680 x 2925 mm	
Weight, including packaging	375 kg	410 kg	450 kg	

<sup>\*</sup>optional

#### **MBT 2200 LON**

#### Description

The MBT 2200 LON brake tester is used as the basic module for the test lane. The automatic test procedure with display, allows for a convenient and user-friendly operation and enables an accurate diagnosis of the tested vehicle. With the analogue display, included in the scope of delivery, all measurement values of the connected test devices can be clearly displayed. In combination with the standard braking force difference display a top-class assessment of the measurement values can be performed. The brake tester is particularly suitable for reception and diagnostics lanes; it exceeds the requirements for the main inspection (HU), comes with a PC interface which makes it network-compatible.

#### Scope of delivery

- Multi-functional analogue display for measurement values of brake tester, shock absorber tester and side slip tester including switching elements
- Braking force difference display digital
- Lockable main switch
- RS 232 interface connection for printer or PC
- Electronic start-up monitoring and roller exiting aid
- Single wheel switchover, delayed automatic startup
- Automatic shut-off after exiting the test stand
- Automatic cut-off at selected slip with measured value display and automatic restart
- Electronic DMS strain gauge measuring system
- Self-supporting, enclosed roller set
- Roller surface optionally welded or plastic-coated
- Corrosion protection: powder coating
- TÜV approved



PC connection (optional)





Printed with the data printer "DIN A4 dot matrix printer"



# **TECHNICAL DATA**

#### DISPLAY

Analogue display	<u> </u>	2 x Ø 350 mm			
Display range		0.02 – 0.3 D, 0 – 100 % / -20 m/km – +20 m/km / 0 – 8 kN			
Display box dimensions (H x W x L)		630/910* x 870 x 240/300* mm			
Electrical connection / fuse protection		3 x 400 V, N , PE 50/60 Hz / 25 A time-delay			
Interface connection	_	RS 232 for DIN A4 printer or PC			
ROLLER SET	RS 2	RS 4	RS 5		
Drive power of motors	2 x 3 kW / 2 x 4 kW*	2 x 3 kW	2 × 4 kW		
Test speed	5 km/h	5 km/h	5 km/h		
Measured value display	0 – 8 kN	0 - 6 kN / 0 - 8 kN*	0 – 8 kN		
Permitted axle load (drive-over)	3.5 t / 4.0 t*	3.5 t / 4.0 t*	5.0 t		
Track, minimum	780 mm	780 mm	780 mm		
Track, maximum	2200 mm	2500 mm	2800 mm		
Roller diameter	202 mm	202 mm	202 mm		
Roller axle distance	400 mm	400 mm	400 mm		
Electrical connection / fuse protection	3 x 400 V, N , PE 50/60 Hz / 25 A time-delay	3 x 400 V, N, PE 50/60 Hz / 25 A time-delay	3 x 400 V, N , PE 50/60 Hz / 25 A time-delay		
Bearing	water-tight, maintenance free	water-tight, maintenance free	water-tight, maintenance free		
Corrosion protection	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)		
Roller set dimensions (H x W x L)	280 × 680 × 2320 mm	280 x 680 x 2644 mm	280 × 680 × 2925 mm		
Weight, including packaging	375 kg	410 kg	450 kg		

\*optional

#### **MBT 2250 EUROSYSTEM**

#### Description

The MBT 2250 EUROSYSTEM brake tester is the premium tester of the MBT 2000 series. With the EUROSYSTEM test lane software based on Windows and an SQL database, it provides the user with endless possibilities. Whether "only" applied as a brake tester, used as a diagnostics reception device or as a control unit for workshop processes: The MBT 2250 EUROSYSTEM is the all-rounder. In combination with other testers, it provides a complete, objective vehicle assessment within in seconds. Recommended by vehicle manufacturers and tested in endurance tests by international inspection organisations, the brake tester is highly ergonomic and cost-effective. The MBT 2250 EUROSYSTEM is the ideal diagnostics brake tester and can also be upgraded with a four-wheel drive regulator set. The brake tester is particularly suitable for reception and diagnostics lanes with high vehicle through-put; it exceeds the requirements for the main inspection (HU) and is network-compatible.

#### Scope of delivery

- Communication Desk or Switching cabinet for test stand control
  - Communication Desk MCD 2000 with integrated Switching and electro-cabinet
  - Lockable drawer for keyboard and mouse including storage shelf
- Single wheel switchover, delayed automatic startup
- Automatic shut-off after exiting the test stand
- Automatic cut-off at selected slip with measured value display and automatic restart
- Electronic DMS strain gauge measuring system
- Self-supporting, enclosed roller set
- Roller surface optionally welded or plastic-coated
- Corrosion protection: powder coating
- TÜV approved

#### Software



**Customer data screen**For recording owner and vehicle data.



Brake test
Digital and graphical display
of brake values.



"Brake Test" graphic Clear display of brake values using graphical or digital analyses



device
TM 1000: Automatic measurement of the full tire tread (circumference and tire width)



Database

Comprehensive databases holding customer and vehicle specific information.







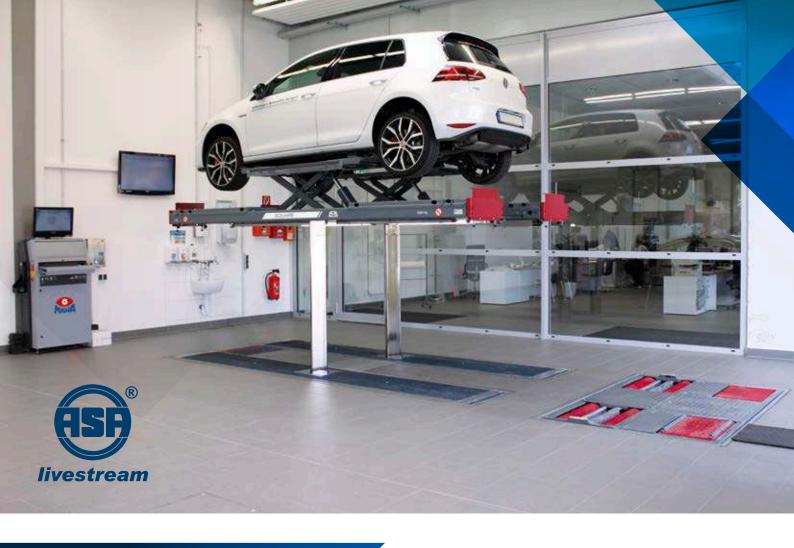
**Shock absorber test**Graphical and digital display of the measurement values.



Side slip test
Clear display of the directional stability of the vehicle axles.



**Light test**Digital determination of the headlight setting by means of a CMOS camera.



# **TECHNICAL DATA**

#### COMMUNICATION DESK MCD

Display unit

		The state of the s	The second secon	
Control	Fully automatic via MCD 2000 communication console			
Power supply	3 x 400 V / N / PE 50/60 Hz			
Dimensions (W x H x D)	$860 \times 1230 \times 350 \text{ mm}$ $860 \times 1500 \times 420 \text{ mm}$			
Dimensions incl. printer shelf* (W x H x D)				
ROLLER SET	RS 2	RS 4	RS 5	
Drive power of motors	2 x 3 kW / 2 x 4 kW*	2 x 3 kW	2 × 4 kW	
Test speed	5 km/h	5 km/h	5 km/h	
Measured value display	0 – 8 kN	0 - 6 kN / 0 - 8 kN*	0 – 8 kN	
Permitted axle load (drive-over)	3.5 t / 4.0 t*	3.5 t / 4.0 t*	5.0 t	
Track, minimum	780 mm	780 mm	780 mm	
Track, maximum	2200 mm	2500 mm	2800 mm	
Roller diameter	202 mm	202 mm	202 mm	
Roller axle distance	400 mm	400 mm	400 mm	
Electrical connection / fuse protection	3 x 400 V, N , PE 50/60 Hz / 25 A time-delay	3 x 400 V, N, PE 50/60 Hz / 25 A time-delay	3 x 400 V, N , PE 50/60 Hz / 25 A time-delay	
Bearing	water-tight, maintenance free	water-tight, maintenance free	water-tight, maintenance free	
Corrosion protection	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)	
Roller set dimensions (H x W x L)	280 × 680 × 2320 mm	280 x 680 x 2644 mm	280 × 680 × 2925 mm	
Weight, including packaging	375 kg	410 kg	450 kg	

<sup>\*</sup>optional

PC monitor, optional via TV screen, simultaneous display, radio touchscreen

#### Description

The MBT 2250 EUROSYSTEM with optional 4WD regulation set brake tester with analogue display provides you with high-precision 4WD testing technology in a compact design. With the patented measuring methods, you have the security of being able to correctly test 4WD vehicles without damage. MAHA brake tester have been setting the standard for more than 30 years for testing 4WD vehicles and are keeping pace with modern vehicle technology. The modern, electronic control system also enables the checking of ASR (Anti Slip Regulator) and electronic parking brakes in the course of the brake testing. It is particularly suitable for reception and diagnostics lanes with a high proportion of 4WD; exceeds the requirements for the main inspection, has a PC interface and is thus network-compatible.

#### Scope of delivery

- Communication Desk or Switching cabinet for test stand control
  - Communication Desk MCD 2000 with integrated Switching and electro-cabinet
  - Lockable drawer for keyboard and mouse including storage shelf
- Remote control IFB3
- Pedal force meter
- Lockable main switch
- Electronic start-up monitoring including automatic roller blocking
- Single wheel switchover, delayed automatic startup
- Automatic shut-off after exiting the test stand
- Automatic cut-off at selected slip with measured value display and automatic restart
- Electronic DMS strain gauge measuring system
- Four-wheel drive regulation set with electronically controlled roller set
- Self-supporting, enclosed roller set
- Roller surface optionally welded or plastic-coated
- Corrosion protection: powder coating
- TÜV approved

German Patent No. 3603508 European Patent No. 3641339

#### Software

#### ALL-WHEEL AUTOMATIC "DRIVE CONTROL PRO"

The automatic all-wheel detection from MAHA, supports the inspector in safe and accurate brake testing. Step by step for a reliable test result



 The brake tester detects a high starting resistance and notifies the inspector about any possible remedies.



The brake tester starts for a second time and checks the starting resistance. If the all-wheel drive has been deactivated, a brake test can possibly be performed in standard mode.



3. The brake tester starts in a regulated counter run mode. First, test the left side.



4. Brake test, left side. The braking force is only displayed for the wheel that is rotating in a forward direction.



5. Brace test, right side.



After the brake test is completed, the related measurement values of an axle are displayed clearly and automatically stored.



# TECHNICAL DATA

#### COMMUNICATION DESK MCD

Display unit		PC monitor, optional via TV screen, simultaneous display, radio touchscreen			
Control	Fully automatic via MCD 2000 communication console				
Power supply	3 x 400 V / N / PE 50/60 Hz				
Dimensions (W x H x D)	860 × 1230 × 350 mm 860 × 1500 × 420 mm				
Dimensions incl. printer shelf* (W x H x D)					
ROLLER SET	RS 2	RS 4	RS 5		
Drive power of motors	2 x 3 kW / 2 x 4 kW*	2 x 3 kW	2 × 4 kW		
Test speed	5 km/h	5 km/h	5 km/h		
Measured value display	0 – 8 kN	0 – 6 kN / 0 – 8 kN*	0 – 8 kN		
Permitted axle load (drive-over)	3.5 t / 4.0 t*	3.5 t / 4.0 t*	5.0 t		
Track, minimum	780 mm	780 mm	780 mm		
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Bearing	water-tight, maintenance free	water-tight, maintenance free	water-tight, maintenance free		
Corrosion protection	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)	powder coating (opt. hot-dip galvanised)		
Roller set dimensions (H x W x L)	280 × 680 × 2320 mm	280 x 680 x 2644 mm	280 × 680 × 2925 mm		
Weight, including packaging	375 kg	410 kg	450 kg		

<sup>\*</sup>optional

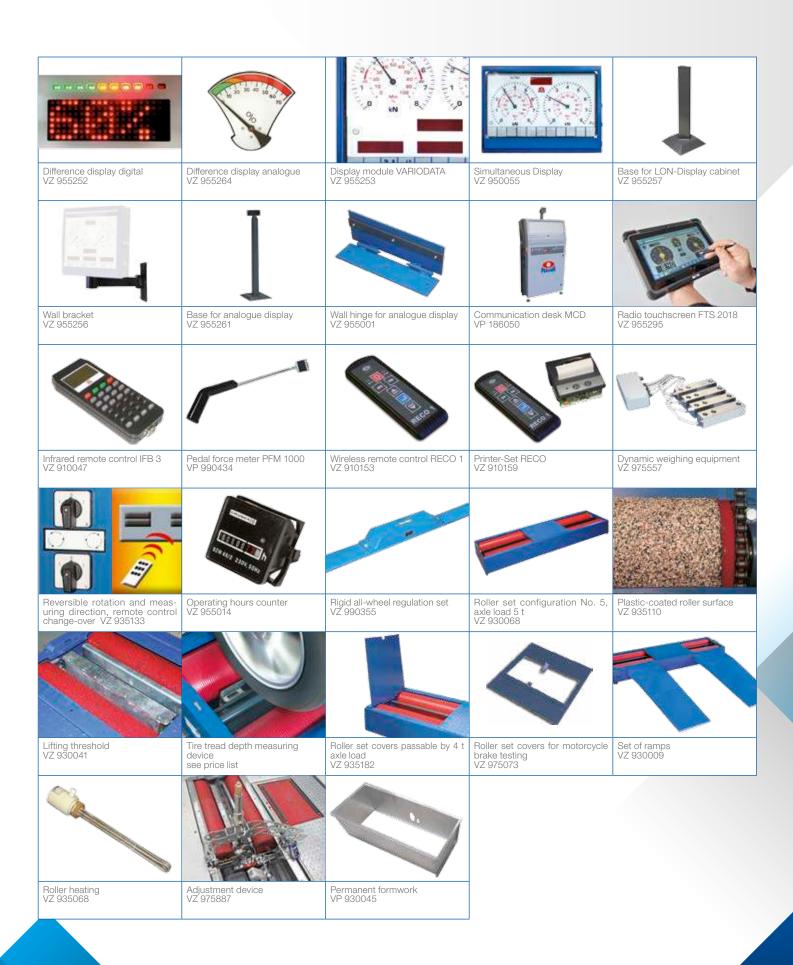
# **ACCESSORIES-MATRIX**

		MBT 2100	MBT 2200 LON	MBT 2250 EUROSYST	MBT 2250 EUROSYST
DESCRIPTION	ITEM NO.	Σ	≥	≥	≥
Add-on Kit: Directive 2011	VZ 955278	0	0	0	0
Plastic-coated roller surface	VZ 935110	0	0	0	0
Roller Set RS4 3.5 t, 3 kW	VZ 930103	0	0	0	0
Reinforced roller set RS 2, 4 kW, 4 t	VZ 930067	0	0	0	0
Roller set RS 5, 4 kW, 5 t	VZ 930068	0	0	0	0
Roller set covers passable by 4 t axle load	VZ 935182	0	0	0	0
Roller heating	VZ 935068	0	0	0	0
Divided roller set	VZ 930040		0	0	0
Automatic lifting threshold	VZ 930041	0	0	0	0
Mechanical-Hydraulic Roller Set Raiser 2.5 t	VZ 935243	0	0	0	0
Tire tread measuring device TM 1000, only in combination with RS 2*	VZ 935144		-	0	0
Roller set covers for motorcycle brake testing	VZ 975073		0	0	0
Dynamic weighing equipment for RS 2	VZ 975557	0	0	0	0
Dynamic weighing equipment for RS 2 divided	VZ 975559		0	0	0
Manually reversible rotation and measuring direction	VZ 935132	0	0	0	Χ
Automatic 4WD detection "Drive Control Pro"	VZ 911294	0	0	0	Χ
Difference display analogue	VZ 955264	0	-	-	-
Base for analogue display MBT 2100	VZ 955261	0	-	-	-
Wall hinge	VZ 955001	0	-	-	-
4WD detection and 4WD set	VZ 990355		0	0	Χ
DC Brake	VZ 935114		0	0	Χ
Special voltage 3 x 230 V / 50 Hz	VZ 990352	0	0	0	0
Wall bracket	VZ 955256		0	-	-
Base for display cabinet	VZ 955257		0	-	_
Simultaneous Display MSA C CLASSIC	VZ 950055		0	0	0
Difference display digital	VZ 955252	_	0	0	0
Display module VARIODATA	VZ 955253	_	0	0	0
Radio touchscreen FTS 2018	VZ 955295	_	-	0	0
DIN A 4 Dot Matrix Printer	VZ 910053	_	0	-	-
Wireless remote control RECO 1	VZ 910153	0	0	-	-
Printer-Set 'RECO 1'	VZ 910159	0	-	-	-
Motorcycle connection including roller set cover	VZ 935229	0	-	-	-
Infrared remote control IFB3	VZ 910047	0	0	0	Χ
Pedal force meter (only in combination with IFB3)	VZ 990050	0	0	0	Χ
Communication Desk MCD	VP 186050	0	0	Χ	Χ
Automatic license plate recognition	VZ 955287	_	-	0	0
Operating hours counter	VZ 955014		0	0	0
Hot dip galvanized roller set	VZ 995457	0	0	0	0
Hot dip galvanized roller set divided version	VZ 995458	0	0	0	0
Adjusting device MJV II	VP 975887	0	0	0	0
Permanent formwork	VP 930045	0	0	0	0

<sup>\*</sup> Not in combination with lifting threshold For more accessories, please see our current price list!

X standard equipment O optionally available – not available

#### **ACCESSORIES**









Lowering device for chassis alignment included as standard, with precision-adjustable lock ladder and electromagnetically operated latches

Runways equipped with preintegrated guide rail for axle lift

# Large runway width for all vehicle track widths









**MAHA Maschinenbau Haldenwang** GmbH & Co. KG Hoyen 20 | 87490 Haldenwang | Germany

Phone +49 8374 585 0 Fax +49 8374 585 497 Mail sales@maha.de

www.maha.de



- ★ A sturdy and solid design
- \* Safe usability
- ★ Simple maintenance and service
- ★ Simple installation
- ★ Intuitive operation



#### for cars and vans with total weights of up to 3.5 t

#### **A sturdy and solid design** (origami technology)



Maximum precision thanks to industrially rolled H-profile columns (origami technology, weld-free!) - patent pending.

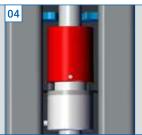


Optimum load distribution thanks to almost wear-free sliding blocks rail-guided in the H-profile (8 pieces per column with 24 contact surfaces).



Highly stable and torsion-free column design thanks to additionally welded column collar.

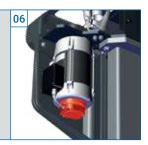
# x Safe usability (triple safety)



Tried-and-tested spindle-nut package with self-locking thread and 5-year commercial warranty\*.



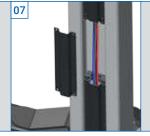
Unique patented "Giraffe" nut breakage detection.



Triple safety thanks to motor brake. Overrun no longer possible.

# Height measurement and detection of hitting obstacles during lowering. Movement can continue without problems. Safe and slip-free force transmission thanks to toothed belt drive 06 03 01 07 09 04 02 Finely graduated, safe support arm restraint Space-saving 20 mm-thick base plate for good stability

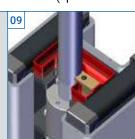
#### Simple maintenance and service (quick 'n' easy)



Highly service-friendly thanks to easy-to-access cable duct in H-profile on the outside.



Simple visual error diagnostics thanks to LEDs mounted on the circuit board



Straightforward lubrication of the spindle as container filled with oil

# 11 Maintenance-free spindle bearing 10 Effective door stop thanks to 08 spring-loaded rubber 12 mouldings 13 180° swivel-mounted, short support arms (type "A") further increase the take-up area and reduce manoeuvring

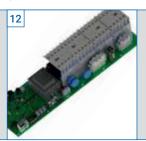
#### ★ Simple installation (plug 'n' play)



MA STAR = plug 'n' play. All power cables pluggable incl. automatic rotating field detection (no specialist electrician needed).



The patented folding cable bridge simplifies installation and significantly reduces setup time. No work platform needed.



All sensors and options (second control unit, photoelectric ceiling barrier) with electric supply can be plugged into circuit board (plug 'n' play).

#### Intuitive operation (LED-based)



Upper end position or photoelectric ceiling barrier reached. Only lowering is possible. Lower button lights up blue.



Lower end position reached or an obstacle has been hit. Only lifting is possible. Raise button lights up blue.



Sensor malfunction. Signal light flashes red.



Extremely stable support arms with patented extension stop

#### Further advantages (no hydraulic oil, no leakage)



Large door opening for easy exit from the vehicle thanks to 45° rotated columns (type "A").



Maximum safety thanks to arched support-arm restraint with operation across the entire length with small ratchet graduation.



Support arms pivot directly above the floor, which enables a very low minimum pad height.



Can hold vehicles from mini-cars to vans (e.g. SMART fortwo and VW T6 long).



Height measurement thanks to touchless, non-wearing inductive proximity switches.



Second control unit on opposite column means less walking around the lift.



Energy set for control unit: 2 x 230 V power socket 1 compressed-air coupling



Sheet metal tray for support disc extensions.



Impact wrench holder with integrated tray for support disc extensions.



Document holder for practical storage of instruction manuals, work orders, etc.



Magnetic wheel nut trays.



Special supports and slip-proofing – flexible and secure.



Support disc extensions in four different lengths 50/100/150/200 mm.



Drilling template for straightforward set-up.



Installation anchors incl. cartridge (one anchor length for all floors).





# **HARDWARE**



ONE SINGLE PROBE SUFFICIENT FOR DIESEL AND PETROL

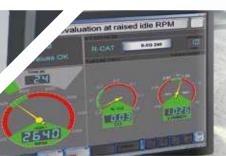
# **SOFTWARE**

Intuitive operation, clear structure in emissions testing process as set out in current guidelines 5 enable minimum cycle times













The MAHA VCI makes EOBD analysis easy



MAHA Maschinenbau Haldenwang GmbH & Co. KG Hoyen 20 | 87490 Haldenwang | Germany

Phone +49 8374 585 0 Fax +49 8374 585 497 Mail sales@maha.de

www.maha.de

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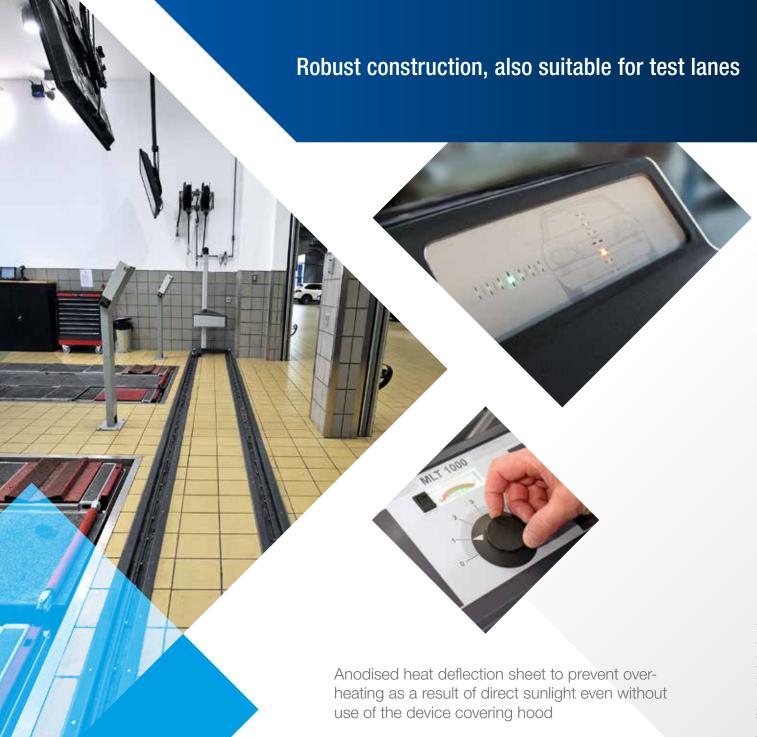




# EXTREMELY THIN FRESNEL LENS MADE FROM MATERIAL WITH OPTIMISED REFRACTIVE INDEX FOR SUPPRESSING BLUE AND RED FRINGING INCREASES MEASUREMENT ACCURACY SIGNIFICANTLY



Large Fresnel lens for easy positioning in front of the headlights helps speed up the entire set-up process





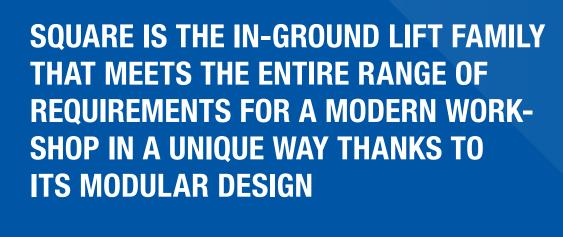
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Phone +49 8374 585 0 Fax +49 8374 585 497 Mail sales@maha.de

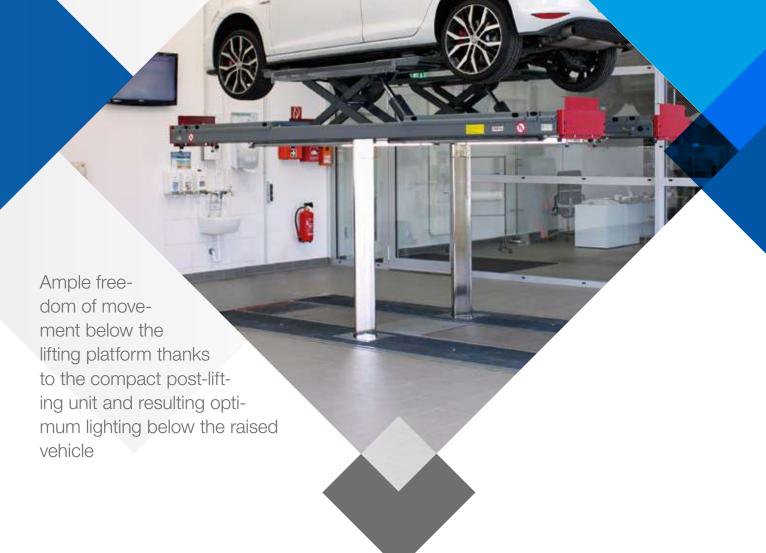
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... in more than 150 countries worldwide











Outstanding rigidity and optimum safety thanks to torsion-resistant square post

Very smooth running due to special long-life nickel coating on posts that promotes sliding, with robust, low-maintenance post design

High lifting/lowering speeds are guaranteed



Optimisation of workplace ergonomics mentioned thanks to optional, standard-independent control via traffic-light energy module or flush-mounted switching system



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