MAHA uses international platform and introduces new products and developments

auto mechanika 14. - 19.09.2010
Automechanika 2010: important platform for industry news

At the Automechanika 2010 in Frankfurt an international audience will be presented with interesting innovations in all areas revolving around workshop equipment. All these new developments and improvements are intended to optimize and accelerate workshop processes. For the most part these new developments can be found in the electronics as is also the case in the automotive industry.

The focus of the industry is on new methods to measure diesel exhaust and chassis which were developed jointly with lawmakers. Also the vehicle industry and associations deal with current topics and develop appropriate solutions to be implemented by qualified companies. The new technologies for wheel alignment as well as the wheel alignment lifts are our responses to the industry’s demands; to safely and quickly test the most modern suspensions, vehicles with longer wheelbases and /or higher weights.

Also the checking of the drive assistance system and the safe repair and adjustment of the electronic components is gaining more importance all the time for workshops and test organizations.

Our equipment and software solutions of the latest generation which we are presenting at the Automechanika 2010 for the first time make it possible for the workshop to keep pace with the vehicle electronic and to maintain them safely and accurately.

The completed changes in electronics and computer equipment also trigger changes with equipment manufacturers and workshops. Data availability and administration are the basis today for an efficient workshop and test process. Our newly developed networking software offers all users a practical networking of various devices and is thereby equally relevant for test stations and workshops.

Klaus Burger
Management - MAHA Maschinenbau Haldenwang
NEWS
Further Education
The future belongs to international welding engineers  P. 04
Prestigious Award
MAHA Diploma student receives E.ON Prize  P. 05
Final Exam in Mechatronics
100 points for Melanie Weigel  P. 05
Sportsmanship
Winning for others  P. 05

GLOBAL PLAYER
Signs of a Global Player
New MAHA branch in Brazil  P. 06/07

INDUSTRY
The Power of Innovation
MAHA with numerous new developments and improvements at the automechanika  P. 08/09
MAHA highlights at the automechanika  P. 10/11 P. 12/13

GENERAL INFORMATION
The Allgäu and Switzerland
Mobile column lifts for Basel  P. 14
Exhibition dates
Legal notice  P. 14
Voices within the Industry
Questions about the topic automechanika  P. 15
The international welding engineer already brings his highly specialized knowledge into the design phase. The goal is to improve welding design thereby lowering costs.

The training to become an international welding engineer is the optimum opportunity to acquire broad knowledge in this versatile field. The course covers 3 parts: parts 1 and 2 of the training deal with specialized basics and theory and are divided up into 4 main areas including welding processes, material technology, design/calculation as well as application technology. In part 2 of the training the knowledge learned in theory is put into practice. The processes of manual metal arc welding, metal protective gas welding and Wolframizing gas welding are all part of a multi-day intensive practice phase. Once completed the seams are subject to intense evaluation.

The training to become an international welding engineer is offered by the SLV-Fellbach and the University at Ulm. Andreas Gartner made use of this opportunity and completed the training in a special course for those maintaining full time employment. Personnel development is very important at MAHA and is an investment in the future.

The MAHA design engineer Andreas Gartner recognized the trend and completed the training to become an international welding engineer (EWE). These engineers with their extensive technical welding skills are necessary to fulfill the extensive demands beginning with design right up through manufacturing.

Andreas Gartner, design engineer at MAHA, completed the in-service training course to qualify as an international welding engineer.
Prestigious Award:
MAHA Diploma student receives E.ON Prize

It has become a tradition since 2005: once each year E.ON Bayern AG awards the E.ON Science and Culture Prize. One thesis at each Bavarian university in the field of ‘Universities of Applied Science’ receives a special award. This year’s award went to Veronika Blecker (University Kempten) for her thesis titled ‘Development of a New Raising Lever Mechanism for Lifts’.

The E.ON Science and Culture Prize awards outstanding achievements in science and art in the categories ‘Universities’, ‘Universities of Applied Sciences’, ‘State Art Schools and Artists’. Veronika Blecker, this year’s winner, started her thesis in September 2009 in the Lifting Technology department under Winfried Schmitt. The thesis topic deals with the design of a new lever mechanism which decreases the forces in the lowest position when raising the scissor lift thereby guaranteeing an optimum pressure distribution during the lifting process. This newly developed mechanism spreads the scissor arms by the rotational movement of a raising lever and the shear movement of a sliding block. The decisive advantage over the previously used mechanism is the substantial savings in manufacturing costs of the individual components.

A patent is pending for this new concept.

Veronika Blecker has been working as a design engineer in the lifting technology design department since February 2010. One of her main tasks deals with the implementation of the new raising lever for scissors lifts.

Final exam for Mechatronics
100 Points for Melanie Weigel

At this year’s final exam to become a qualified mechatronic Melanie Weigel received 100 points in the area of ‘Documentation’.

Documentation is one part of the mechatronic final exam. Melanie Weigel’s task was to describe in concrete terms the documentation of the roller welding machine. She describes the roller welding machine in its application, functions, as well as mechanical, electrical and control-technical workings including commissioning. The topics of work safety, environmental protection and time planning is also included.

The welded rollers are needed for car roller test stands, with 4 rollers built into each one. The rollers transfer the effects of the car brakes. In order to transfer this result free-of-loss, the friction force between the car tires and rollers must be as large as possible.

For this the rollers need a rough surface which is achieved either with a synthetic coating or welding without shielding gas.

Sportsmanship
Winning for the others

It is not new that MAHA employees enjoy spending time together outside of the workplace. So it is no surprise that MAHA has created its own soccer team which has won some impressive games of late, for example the Mercedes Cup in Altusried. MAHA’s team reached 4th place in the tournament and was awarded a money prize.

The players displayed their sportsmanship not only on the field but also with their decision to donate the money award to a good cause.
GLOBAL PLAYER

New Branch Office in Brazil

It is every global player’s intention to constantly extend the boundaries of its presence. MAHA, as an active company worldwide is continually working to identify new markets, reacting to trends and developing individual solutions.

The expansion of the existing presence in Latin America is a goal that has now been realized in July MAHA established a sales subsidiary in São Paulo. Latin America is not a new market for MAHA where they have been actively engaged in the Brazilian market since 1996. The most important test organizations from INMETRO (Metrologic Institute in Brazil) work with equipment from MAHA. Test lanes from MAHA can also be found in well known universities in the country.

Brazil has the largest GDP of all countries in America, except the United States. Because of advanced industrialization, political stability and large quantities of raw material Brazil has great ecological potential. Thanks to long years of industry experience in this country MAHA is well informed about the markets. The new branch manager, Ricardo Silva also has relevant experience in the automobile industry and will now be able to use this profitably for MAHA.

The tasks of the new office will be to implement country-specific total solutions which will result in increased market share for MAHA. And the fact that the Brazilian Environmental Ministry (CONAMA) has stipulated that by the end of the year major cities must present a concept for the control of vehicle emission values is a confirmation for MAHA that its timing in opening up its own subsidiary is exactly right. Then in order to fulfill these kinds of requirements in Latin America partners with long years of experience are needed who are in a position to support the test organizations and official agencies with skilled expertise.

Only technical know-how, uncompromising customer proximity, flexibility and optimized logistic services ensure the successful introduction of this type of project. Minimum delivery times, quick response times in service and maintenance as well as rapid spare part delivery are taken for granted.

MAHA sees these aspects as basic benefits and is well aware of the fact that it is precisely these success factors that contribute significantly to conquering markets, securing and expanding them. Countless projects throughout the world prove this.
New MAHA Branch Office in Brazil

The main export goods are cars, airplanes, steel, aluminum, tin, coffee, soy beans, sugar and meat. And with over 2 million km road network the second largest in the world with 200,000 km of this network paved.
The Automechanika in Frankfurt is the ideal platform for MAHA to demonstrate innovative solutions to the industry. The very nature of the presentation, surely a milestone in the history of the company, reflects the philosophy. Visitors will be offered a true experience in which MAHA clearly sets itself apart from its competitors when looking at the exhibition booth design. Interesting news and proven MAHA technology and innovative developments will be presented in unique ways on over 1,000 qm.

Exhibition highlights from MAHA will be presented from the testing and safety technology product division showing the communication desk Eurosystem and analog display units, lifting technology with the scissors lift MSL and from the emission division the measurement device series MIT 6.

So this year the topic is the “MAHA-Hall 8.1” – a “Hall within a hall”. The entire booth design is in different shades of grey with only short statements or instructions about the various topics. A visualization of the products or application examples was done away with. In this way, the products which are displayed at the stand are themselves the focal point of interest.

The central element of the “MAHA hall” is the open communication area. From there the focus is automatically geared to the opposite wall with a wide-screen projection area on which all MAHA news is presented.

Innovative MAHA products developed from decades of experience and concentrated knowledge meet the most ambitious standards on quality and efficiency. In addition to proven MAHA technology the Automechanika 2010 will present interesting new developments and innovative improvements.

On his way through the hall, the visitor is quickly led to the clearly structured topic and products areas. The booth is a symbiosis of architecture, design, functionality and a unique form of communication and information reporting. Its generosity and transparency ensures that the visitor navigates easily through the booth and the connection to the product is quickly established.
Interesting new developments all about the topic of workshop equipment will be presented at the automechanika.

All these new developments and improvements have the objective of optimizing workshop processes thereby achieving clear and measurable added value for both the workshop operator and the consumer.

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**EXHIBITION HIGHLIGHTS FROM MAHA**

- Communication desk EUROSYSTEM
- Roller brake tester IW 2 ALLRAD
- Roller brake tester MBT 5000 up to 18 t axle load
- Roller brake tester MBT 6000 up to 2.2 m wheel diameter
- Test case THT (Truck Hand Terminal)
- Closing force meter SKM 2
- Two-column lift MBL
- Mobile column lifts MCL and RGA
- Inground lifts (ZS Square, ZS Teleskop and Module runways)
- Scissors lift MSL
- Single roller dynamometer MSR 500 (CAR)
- Emission tester MET 6
- Brake fluid tester BFT 3000
- Radio-Touch-Screen FTS 2010
MAHA Highlights at the automechanika

Testing and Safety Technology

Reconsider the Existing. Improve the Proven: MAHA Operations desk

The successful operations desk for test equipment has been developed further with the goal of enabling complex functions and tasks with the least amount of effort under ergonomic conditions. The test units become even more customer-friendly.

One of the demands placed on the new MAHA operations desk is that all the possible variations requested by customers be adapted quickly and easily using a modular system. The basic body containing all necessary electrical switching elements and front-side keypad already has a lockable drawer for keyboard, mouse and storage compartment. An attachable "printer box" can safety store away the local laser or inkjet printer behind a shutter. An optional VESA monitor support can hold a 32" TFT monitor. A service flap that can be opened in a matter of seconds exposes all electrical elements offering direct access which eases maintenance and installation work enormously.

Another major component of the operations desk is the vertically running frame. In addition to the attractive design this offers room for side shelves to be placed. Additional devices can be securely placed and stored away.
A scissors lift made for maximum customer benefit

The degree of innovation of this new scissors lift MSL 4.0 from MAHA is convincing: for the first time the so-called “Linear-absolute-measuring system” for the measuring of the stroke path of the hydraulic cylinder is used for the synchronization of vehicle scissors lifts. The high reliability and ease of use offer the customer great benefits. Despite its low drive-over height of only 180 mm the MSL 4.0 has an extremely good lateral stability and high flexural rigidity. Safety catches are attached under the runways which secures the lift against accidental lowering. These safety catches are also used for mechanical setting with wheel alignment. The scissors lift is especially suited for general vehicle service, wheel alignment and dialog reception.

And this is where the real innovation is found: With the scissors lift MSL 4.0 for the first time MAHA uses the so-called “Linear-absolute-measuring system” for the synchronization of vehicle scissors lifts. By integrating all components in the cylinder, it is fully insensitive to the influences of environmental factors.

Lifting Technology
Scissors lift, model MSL 4.0

- Exact electronic/hydraulic synchronization of the lift and NEW: optional wheel-free jack (no manual compensation required).
- Quick lowering time for the optional wheel-free jack.
- Resistant against environmental influences such as dirt, moisture, temperature fluctuations.
- Non-contact and maintenance-free measurement components.
- No push switch/inductive sensor to determine relevant heights “Lift lowered/lift up/height CE stop” needed (less cable, less components).
- Two parallel switched lifting cylinders (no master/slave system), for less lifting force per cylinder resulting in less system pressure and minimum stress on the hydraulic parts (long life).
The electro-hydraulic two-post lift, model HL III for cars and vans is available in version 4.0 and 5.0, meaning a load capacity of 4t and 5t. This lift model is the most universal hydraulic two-post lift on the market.

The free-standing post design enormously eases the work under the vehicle with no cross support between the posts interfering with free access. There is no base frame creating tripping hazards on the floor.

The integration of the hydraulic unit at the upper post end saves space and makes the lift extremely quiet. Generous range of the support arms means the smallest vehicles up to large vans can be lifted. Automatic support arm locking – with manual release.

Version HL III 5.0 can also lift vans with extremely long wheelbases. The noise damped safety latches are activated by gravity and automatically unlock when lowering. Built-in potentiometer and electronic control in both posts enable permanent self-monitoring of all safety functions such as synchronization, obstacle collision protection, CE stop and top switch off. Thereby all essential safety aspects have been fulfilled.

The durable foil keypad, including the LIFTING, LOWERING and LOWER in LOCK functions guarantees easy operation of the two-post lift.

Optionally available are lifting plate extensions in a tray, a magnetic wheel nut storage for support arm or post and a holder for the impact wrench.

The standard delivery MAHA adapter-plug-on system is responsible for this lift’s great flexibility, high safety and optimum price-performance ratio. Consequently, installation is easy and fast. Low energy consumption has a positive effect on the operating costs.
MET 6.3 – Emission tester for Gasoline and Diesel Vehicles

MET 6.3 – the innovative and handy emission tester from MAHA for gasoline and diesel vehicles reliably and quickly measures the concentration of CO, CO₂, HC, O₂, NOₓ, turbidity coefficient and particulate mass. But its performance limits are a long way from being reached: prepared for the detection of NO, NO₂ and NH₃ it is a true investment for the future.

Using the MET 6.3, the opacimeter of the second generation from MAHA, it is possible to do accurate measurement of gasoline and diesel emission. Particles which are larger than 70 nm are identified and determined using a laser beam in the emission flow. The effectiveness of particle filters can also be verified. The function principle behind the MET 6.3 is easy and effective.

As it can measure both turbidity value and particle concentration it is suitable for use in the official emission test and for testing of particle filters.

The small size, a weight of only 5 kg, easy handling, extremely high measurement accuracy and the capability for combining it with measurement and test stands means it offers optimum application in workshops, development and research.

Thanks to the low maintenance needs, the only wear and tear part is the HEPA-filter which is easily accessible and exchangeable via a service flap, the MET 6.3 is highly efficient, economic and suited for everyday use. Depending on the usage it may be necessary to clean the detector head and laser unit which will be displayed by the unit. This only takes about 3 minutes.

Emission is one of the most dangerous components of fine particulate matter. The only way to permanently reduce the particle emission drastically is if the measurement procedures are adapted to the technical advances. With the MET 6.3 a real-time measurement of the particle concentration during the official emission inspection at the test station and in the workshops is fast, easy and cost-effective. The goal is to establish the particle measurement as a standard.
General Information

I Mobile Column Lifts

Long ago the MAHA Group established itself on the world market as expert manufacturer of lift systems ensuring efficient repair and maintenance of municipal vehicles thanks to sophisticated technology. And now the traffic authorities in Basel benefit from this after they too are using a 16-column lift from MAHA.

Basel, in comparison to other cities, has an unusually dense public transport network due to the fact that many commuters reject the use of their cars and instead use the public transport system. The Transport Agency (BVB) operates over 150 km tram and bus lines in northern Switzerland. 8 tram lines with 125 trams and motor cars and 78 trailers as well as 12 bus lines on which 64 articulated buses and 25 normal buses operate transport 123 million passengers every year.

So that this high performance traffic network can function trouble-free every day partners are needed for maintenance and repair who offer a high level of safety, flexibility and speed of action. Then nothing means higher costs for an operator than long down times for repair and maintenance work.

Hetra, a brand of the MAHA Group develops and implements tailor-made solutions for the maintenance and repair of municipal vehicles. The mobile lift systems from hetra offer a maximum of user-friendliness and workshop suitability.

The mobile column lift offers free access and great freedom of movement under the vehicle. The ergonomic base frame and slim design makes maneuvering in confined areas easy.

A continuous lifting system means that height adjustment is extremely accurate and changes can be done smoothly.

Eight column pairs lift street cars of the latest generation. And the control of the columns remains totally flexible: each column can be moved individually using single control. With the press of a key multiple columns can be connected for group operation.

Automatic blocking takes care of safety: a blinking “A” signalizes the blocking of individual columns.

The operation of the entire system can be done from each column.

With this new generation of mobile column lifts from hetra long set up times for different types of vehicles are a thing of the past. Support stands secure maximum flexibility- and thereby an extremely attractive cost-benefit ratio.

All these attributes were also convincing for the public traffic authorities in Basel (BVB) who now use a 16-column mobile column lift from hetra for maintenance and repair work on their newest street cars (capacity 240 persons) and their 40 m long articulated buses which are underway on the roads.

EXHIBITIONS

Automechanika
Frankfurt
14. - 19.09.2010

IAA Commercial Vehicles
Hanover
23. - 30.09.2010

Professional Motor Sport
Cologne
16. - 18.11.2010

Publisher (Responsible for the contents)
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Bahnhofstr. 43
87719 Mindelheim

Printing
Wolfgang Duuck und Medien GmbH
Magnastraße 14
87437 Kempten/Sankt-Mar
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Voices within the Industry

Statements from Detlef Braun (Managing Director, Exhibition Frankfurt GmbH), Stephan Kurzawski (Brand Manager, Automechanika) and Peter H. Rehberg (Managing Director, asanetwork gmbh) about the automechanika.

Question: What is the significance of this important trade show in general and in particular for the workshop equipment industry?

Detlef Braun, Managing Director, Exhibition Frankfurt GmbH

“You could say that the Automechanika Frankfurt has become a fixed star around which the entire industry orients its scheduling. We observe time and again that companies organize their product life cycles based on this international trade fair. This fact is a clear commitment to the Automechanika.”

Stephan Kurzawski, Brand Manager, Automechanika

“For the Automechanika 2010 we expect about 4,400 exhibitors and over 160,000 visitors which indicates very stable statistics. This reflects the enormous importance of the event for the entire industry, especially workshop equipment suppliers. Then only here in Frankfurt a global offering without pre-selection can be found.”

Peter H. Rehberg, Managing Director, asanetwork gmbh

The Automechanika 2010 is as always a showcase for the automobile aftermarket worldwide. Even though in general less and less orders are being placed at exhibitions, this trade show is an important indicator of the mood in the market. Contacts are maintained, new ones established and future business prepared due to the personal presence at the show. Those manufacturers who are not represented at this trade show are in effect perceived as “non existent”.

Highlights from MAHA

Please send me detailed information about the following products:

- Communication desk EUROSYSTEM
- Roller brake tester IW 2 ALLRAD
- Roller brake tester MBT 5600
- Roller brake tester MBT 6000
- Test case THT (Truck Hand Terminal)
- Closing force meter SKM 2
- Two column lift MBL
- Mobile column lifts MCL and RGA
- Inground lifts
- Scissors lifts MSL
- Single roller dynamometer MSR 500 (CAR)
- Emission tester MET 6
- Brake fluid tester BFT 3000
- Radio-touchscreen FTS 2010

Company
First name/Surname
Postal code/City
Telephone/Cell
E-Mail
Date
Signature
Visit us from 14. – 16.09. at the
auto mechanika
FRANKFURT
Hall 8.0 / A02, B04, A06, B06, C06

INNOVATIVE AND HANDY

- Communication desk EUROSYSTEM
- Roller brake tester IW 2 ALLRAD
- Roller brake tester MIBT 5000 up to 16 t axle load
- Roller brake tester MIBT 6000 up to 2.2 m wheel diameter
- Test case THT (Truck Hand Terminal)
- Closing force meter SKM 2
- Two-column lift MBL
- Mobile column lifts MCL and RGA
- Inground lifts (ZS Square, ZS Telekopt and Module Runways)
- Scissors lift MSL
- Single roller dynamometer MDR, 500 DAR
- Emission tester MET 6
- Brake fluid tester BFT 3000
- Touch-screen FTS 2010

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