

# POWERVIEW

ISSUE SUMMER 2010

## Biogas: Energy Source of the Future!

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### Dear Customers, Interested Parties and Employees,

Biogas is becoming a more and more important alternative source of energy and the farmer, a producer of high quality products, turns out to be a partner in the regional economy. Therefore we have to concentrate more on renewable energy sources worldwide, as we slowly, but definitely run short on our natural deposits of coal, natural gas and oil.

In Germany biogas has gained more relevance as alternative over the last couple of years; more and more farmers have already switched over to this kind of income source. But where does biogas come from?

The process of bacterial fermentation of animal or herbal substances generates a mixture of carbon dioxide and methane. These are fossile energy carriers – in this case it's biogas.

This biogas will be delivered to cogeneration units, where it will be used to produce electricity and heat. One of the most profitable mass is sweet corn silage: 1 t will render approx. 200m<sup>3</sup> biogas.

The number of biogas plants has increased constantly in Germany. Due to the new renewable energy law from March 2000 as well as the increase of financial support on any energy produced by biogas plants, there was a real boom of building new plants from 2002 – 2007. In the meantime Germany has more than 4.500 operating biogas units.

MOTORTECH can especially support this market segment with a lot of high value products, e.g. the Air/Fuel Mixer "VariFuel2" or the new generation of ignition units; products, particularly developed to service this market segment.

#### Our top products for the biogas market are:

"MIC850" Ignition Controller of the latest generation, "DetCon20" Detonation Control System, "PolyMot™" High Tension Leads, "DENSO" Spark Plugs, "VariFuel2" Air/Fuel Ratio Mixer, "AlphaRail" Wiring Rail System with ignition coils (from left to right side).



## PRODUCT GUIDE 2010/11

Advance Notice! Brandnew and updated!  
Soon coming out in English and German.  
Available for the World of MOTORTECH June 4,  
2010.



**WORLD OF  
MOTORTECH**  
2010 - Industrie und Technik in Celle

In June 2009 MOTORTECH took a chance and initiated an Open House day in combination with a professional convention and workshops on the company site in Celle. A major success! This year wellknown speakers, subject-related exhibition stands, a visit to a biogas plant and various company tours will be arranged in a special surrounding. The "Get together" in the evening will also offer a lot of surprises. You better register on time!

**Short subject overview** (all workshops are in German language)

### Efficiency of Power Plants

Dipl. Ing. Gerhard Klink, MTU Onsite Energy GmbH

### Development of a B-Field-Measuring System for Gas Engine Ignition Coils

Prof. Dr. Ing. Volkhard Klinger, FHDW Hanover – Technical Informatics/Embedded Systems

### MAN-Engines

Dipl. Ing. Benjamin Krug, Diesel SE

### Wood Gas Systems

Dr. Wilfried Hans and Dipl. Ing. Robert Alheid, Kuntschar Energieerzeugung GmbH

### Renewable Energy Law Biomass Plants

Frank Hustedt, SVO Netz GmbH

Please visit our homepage under:  
[www.motortech.de/WOM.html](http://www.motortech.de/WOM.html)

## QUALITY INVESTMENT – NEW SHAKER

**Fractures by vibration are a serious problem when it comes to engine mounted parts. So far MOTORTECH subcontracted external laboratories to undertake vibration tests on their products. Since December 2009 MOTORTECH has its own vibration teststand, thus simulating engine vibrations and their influence on devices and attached components.**

Already in the development phase our MOTORTECH engineers can make sure with the teststand that the new products will not be destroyed by vibrations while being in operation on engine packages. The development times for new products have been clearly reduced, because there is no need to involve external test laboratories anymore. The test stand can expose components up to a weight of 10 kg which includes products such as ignition

coils, air fuel mixer and ignition devices to an endurance testing.

MOTORTECH-OEM customers can predefine the oscillating profile of their engine packages as a test data set. This way the customer is sure that the delivered products demonstrate an extreme endurance without fractures by vibration.



## NEW DENSO SPARK PLUG – GT3-1

**DENSO extends its product range in the industrial spark plug sector with a brand new product and therefore offers in the future with the GT3-1 spark plug an upgrade to those spark plugs, mainly being used on engines of the Waukesha-VHP-series.**

Fitted with all positive aspects of the already available Iridium Saver Performer Spark Plug family. This new type of spark plugs also grants high quality, long endurance, more engine stability and as such reduced maintenance costs due to less mechanical strain on bearings, pistons, valves etc. This effect is based on the Iridium alloy with a high melting point developed and patented by DENSO. This drastically improves the wear resistance compared to other Iridium spark plugs and the 360° laser weld seam of the Iridium alloy on the middle electrode, keeping up with the most extreme engine conditions. The Cross Groove Design, also patented by DENSO, additionally upgrades the

ignition features of this spark plug and guarantees clean combustion and less misfirings. Another positive result is the reduced voltage demand by approx. 4-5 kV and the decreased impact on all components within the ignition system, such as ignition coils and wirings.



**Daniel Kretzer**  
Product Manager  
[dkretzer@motortech.de](mailto:dkretzer@motortech.de)

## "SAFETY BELT" IGNITION COIL

**In the context of the continuous development of the ignition coil market MOTORTECH has found a solution to build shielded ignition coils in a more compact way.**

Due to reduced construction dimensions and a pleat going all around the coil, a high pressure resistant mounting of the coil bobbin and also an even greater safety margin (standard) was gained. MOTORTECH is sure that this type of coil with the "safety belt" will set new dimensions for shielded coils.



**Dr. Claus Schulze**  
Strategic Projects Manager  
[cschulze@motortech.de](mailto:cschulze@motortech.de)

## NEW MOTORTECH PERSONNEL



**Axel Dieckmann**  
Sales Manager  
Entry: 10.01.2009



**Olga Baranovski**  
Sales Department  
Entry: 01.01.2010



**Klaus-Dieter Söder**  
Sales Department  
Entry: 01.04.2010



**Angelika Schuster**  
Sales Department  
Entry: 11.16.2009



**Liesbeth Krause**  
Accounts Department  
Entry: 11.23.2009



**Ralf Weist**  
Warehouse Department  
Entry: 12.01.2009



**Tanja von Hörsten**  
Warehouse Department  
Entry: 11.02.2009



**Arno Lindert**  
Process Planning  
Entry: 11.16.2009



**Lutz Lange**  
Quality Manager  
Entry: 01.01.2010

## EMPLOYEES INTRODUCE THEMSELVES



Please introduce yourself.  
A.D.: My name is Axel Dieckmann and I joined MOTORTECH on October 1, 2009 as Sales Manager. I am 47 years old, married with 2 children.

What was your first impression of MOTORTECH?

A.D.: Medium-sized company with very interesting products. Main focus on teamwork and customer satisfaction.

What is your personal goal for your department in 2010?

A.D.: Development of customer enthusiasm, product range improvement and introduction of a new MRP-system.

Which is your favourite MOTORTECH product?

A.D.: Ignition Controller MIC850 with AlphaRail wiring system and the NEW red C-coil.

Which role would you like to play with MOTORTECH being a game of chess?

A.D.: The knight, he is flexible and always full of surprises...



Please introduce yourself.  
L.L.: Hello, I am Lutz Lange, Quality Manager at MOTORTECH since January 1, 2010, 56 years old, married with 2 children.

What would you like to achieve with MOTORTECH?

L.L.: Continuous improvement of quality standards in order to generate more quality and reduce testing processes.

How do you unwind from work?

L.L.: Currently there is not a lot of leisure time. Usually I like to spend time with my family, ride bicycle or do Nordic Walking.

What is your personal goal for your department in 2010?

L.L.: Important is a solid job training and a successful realisation of the first steps towards more quality.

What are you looking forward to in 2010?

L.L.: An active outdoor summertime. Don't we all look forward to that...

## MOTORTECH WAREHOUSE – MORE THAN JUST PACKAGING



From the smallest screw to the engine – more than 7.000 different articles are currently held in stock at MOTORTECH. The flow of materials ranges from incoming goods, consignment sales, packaging to outgoing goods.

The most different kinds of packaging specially developed by MOTORTECH are used in line with the process orientation. The warehouse represents the most important part in the valued added process chain. Equipped with 3 high racks and 2 mobile racks as well as several heavy duty racking systems with a storage capacity of 75 pallets, 6 employees, 1 trainee and the warehouse manager guarantee a smooth warehouse operation.



**Michael Ureidat**  
Warehouse Manager  
mureidat@motortech.de

## THE NEW LOOK



Our Sales Partner from Texas, USA, "Cypress Engine Accessories" invested in a new service van and demonstrated corporate identity. With 3 huge MOTORTECH logos around the van a clear position has been taken. We hope that a lot of our distributors will follow their example. Have a good trip!



**Jon Yaunke**  
www.cypressengine.com  
jon@cypressengine.com



**Axel Dieckmann**  
Sales Manager  
adieckmann@motortech.de



**Lutz Lange**  
Quality Manager  
llange@motortech.de



# POWERVIEW

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## EXHIBITION IN CO-OP WITH MAN® IN VERONA

In order to promptly follow the permanently growing demand for gas engines, especially in the biogas section as well as to simultaneously inform plant operators about the latest market developments, **MOTORTECH** presented itself together with **MAN®** Italy at the trade fair "Fieragricola" in Verona, Italy in February this year.

"Especially in this strongly expanding market we have to demonstrate our performance together with our "partner" **MAN®-South**", says Axel Dieckmann, **MOTORTECH** Sales Manager.

Particularly in South Tyrol there is a booming market for power plants up to 1 megawatt after the introduction of a feed-in remuneration by the Italian state. The trade association Bio-Gas-Italy confirms that there is a high demand for gas engines made in Germany (**MAN®**, **MTU®**, **MWM®**). Customers especially benefit from the high degrees of efficiency, the compact construction and the low level of emission. **MOTORTECH** products can exactly meet these customer requirements.

At the exhibition **MAN®/MOTORTECH** presented the new AlphaRail generation for **MAN®** engines with ASC (automatic spark control of the MIC850 Ignition Controller).

Two engines of the types E2876TE302 and



ES848LE322 convinced many exhibition visitors and media representatives.

"We will use the AlphaRail system as **MAN®** standard equipment for our engines", says Klaus Kress, Sales Manager **MAN®** Italy. For **MOTORTECH** this is a clear confirmation to go ahead and further expand the development of those products – according to the principle: when quality counts.....

## FLYING HAWKS



The year 2009 was full of success and new experience for the Flying Hawk team. After more than two years of development time, the hard work finally paid off and the V12 engine ran throughout the contest season supported by the MIC850 from **MOTORTECH**. The specialists R. Völz and S. Nenne, who actively worked on this project, were really happy. In addition to two first places numerous other successes were achieved, leading to praise and recognition by the complete European tractor pulling scene.

## THERAPY DOG



"Good Morning, **MOTORTECH**, you're speaking with Ilona Thurbahn," these are the words you've been listening to for 13 years by now when calling up the **MOTORTECH** headquarter in Celle, Germany. Every afternoon Ilona Thurbahn is accompanied by her "Coton de Tuléar". Of course, the little dog is caressed by many **MOTORTECH** employees. But in stressful situations the dog is a perfect neutralizer. Therefore we all love Jule, call her the "Therapy Dog" and hope that she will stay with us for many years.

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### MOTORTECH GmbH

Hogrevestr. 21-23 | 29223 Celle  
 Tel.: +49 5141 9399 0  
 Fax: +49 5141 9399 99  
[www.motortech.de](http://www.motortech.de)

## INSIDE

### CONGRATULATIONS



After 3 years of studying "Technical Business Management" in Cologne, **Robert Virchow** proudly presents his degree "Graduate Industrial Engineer". With immediate effect he is in charge of sales and technical support for **MOTORTECH** Americas based in New Orleans.



**Robert Virchow**  
 Junior Director  
[rvirchow@motortechamericas.com](mailto:rvirchow@motortechamericas.com)



Finally on October 10, 2009 it was **Stephan Schnelle's** big day. He and his bride tied the knot. **MOTORTECH** congratulates the bridal couple and wishes all the best for the future.



Tom Dreyer

Congratulations also go to our fathers **Thorsten Dreyer, Sebastian Hoyer and Marcin Magdon**.

Tom Dreyer (3520g, 53cm, 25.07.2009)  
 Leonas Hoyer (3530g, 53cm, 12.20.2009)  
 Sophie Marie Magdon (1320g, 38cm, 02.23.2010)

Congratulations to "**Martin von der Kammer**"  
 In January 2010 he successfully finished his exam as "Mechatronic Engineer".