In rolling mills worldwide

VEM drives for rolling mills – here the furnace area of a hot strip mill – are enjoying constantly growing popularity worldwide. That applies both for renowned plant engineering companies and for countless end users. They all benefit from the competence of VEM and its application-specific products – from roller table and geared roller table motors, through to the main drives for blooming stands.

We will be reporting in detail in our next issue.

CUSTOMER INFORMATION

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NO. 01|13

Impulse

SENSE EXPERIENCE
EXPERIENCE VISION

White, cool, big, intelligent

VEM to unveil its new size 400 motor series at the HANNOVER FAIR 2013

They will catch the eye not only of designers, but indeed of all technical visitors to the HANNOVER FAIR 2013 – the two shiny-white transnorm motors in size 400. In its role as a supplier of complete drive systems, VEM is presenting this innovative solution to the public for the first time. Visitors will be able to examine the machines in Hall 14, stand H10, and a team of experts will be on hand to discuss and answer all arising questions.

The rib-cooled drives in low- and high-voltage versions are the latest additions to the proven VEM product range. Their special feature: They are fitted with an RFID chip as standard. This "memory design", using modern passive transponders, permits the individual technical data of a machine to be saved and kept available on site, alongside useful customer-specific data such as motor maintenance records.

A second focus of the presentations deals with the relationship between energy-related costs and benefits in the field of standard motors. Beside VEMoDRIVE system solutions, this spotlights branch-specific motor variants incorporating innovative converter technology for high energy efficiency classes. Visitors can obtain information on the various possibilities for improving machine efficiency. The spectrum of VEM products catering to such needs ranges from classic energy-saving motors based on asynchronous technologies to synchronous motors with permanent-magnet rotors and in reluctance versions.

A size 400 motor on the test stand at the VEM factory in Dresden. This exhibition motor is a high-voltage version for 6 kV, with an output of 670 kW.

Read more on pages 2 and 3.

CONTENTS

TECHNICAL CONFERENCE

Invites for the 12th time

"Asynchronous machines – Obsolete or drive solution of the future?" is the theme of this year's VEM Technical Conference. It is to be held – as already traditional – at the HKK Hotel in Wernigerode, namely on 24th and 25th September 2013.

Year for year, practical users, engineers and scientists come together to discuss the latest development trends and research results. In 2012, more than 260 participants from 18 countries accepted the invitation from VEM. A similarly positive response is expected in 2013, too.

To facilitate identification of a motor when it is installed by the customer, individual customer data are already written onto the chip at the factory in Wernigerode. Here, Michaela Möser is using the wireless reader to write data to the RFID transponder.

EDITORIAL

Dear friends and colleagues,

we have always known that German entrepreneurs and their employees are successful not thanks to, but rather despite the political framework, and especially the misguided economic policies. As a result, we have come to simply endure the political class, but rarely lend our true attention, and are certainly unable to recognise any strategic leadership. Politicians seem to live in a parallel world, and the economy with its around 40 million taxpayers is left to take care of the financing for public spending for the most part. Even the enormous burdens imposed by German Unification were shouldered by the German taxpayer. The infrastructure on the territory of the former GDR is right up to date and in some aspects even surpasses the necessary standard.

But the situation is worsening from safety net to safety net. Around 80 % of legislation is elaborated in Brussels by non-elected commissions, and then simply waved through by our federal government. The hysterical "energy revolution", socialist hand-holding mentalities and the plain incapability of those in positions of government are reflected in the failure to properly build even a medium-size airport. Industry associations, trade unions, churches and parties are standing by and doing nothing as our successful country is gradually ruined. Planned economy has never functioned anywhere. And it is also not going to function in any softened-up form.

The most able minds in those same industry associations, trade unions, churches and parties must at last work together as representatives of the German people, and must force our politicians to represent the interests of the people, and not those of the major banks, economic refugees and bureaucrats. There is otherwise every chance that our attempt at democracy could fail once more. For the second time in recent history, we could have millions who are allegedly born opponents and resistance fighters, but nevertheless simply follow the crowd.

Yours, Freiherr von Rothkirch

SIZE 400

Motors with a mind of their own

The RFID chip, which turns VEM drives into memory motors, holds many benefits for the customers.

Transponder, tag, memory chip – many different names are used to describe a small component with which a product not only gains a long-term memory, but also becomes a abundant source of information. The new 400 series of VEM motors is fitted with such an RFID chip as standard in both the low- and high-voltage versions. The chip holds significantly more data and at the same time more detailed information than any rating plate can offer. It is attached to the cooling ribs and is thus readily accessible. The stored data can be retrieved simply and at any time by wireless transmission from a distance of up to three millimetres – even while the motor is running.

"VEM was perhaps ahead of its time with this technology in 2004," says technologist Sebastian Chyla from the VEM facility in Wernigerode. "But the market is now showing stronger interest and, thanks to our technology lead, we possess a new generation of data records which offers the customer even greater flexibility." The improvements include tripling of the write speeds; writing now takes just three seconds.

Erfurt-based partner microsensys manufactures the memory chips and the corresponding readers. The outcome of this fertile cooperation is an RFID chip with special capabilities which it would otherwise neither possess nor actually need. Sebastian Chyla: "As metal normally absorbs radio waves, we already had to develop a chip which would function reliably in a metallic environment back in 2004."

It goes without saying that VEM customers can also order the RFID chip for other motor series.

On the VEM stand at the HANNOVER FAIR, visitors will be able to witness how stored data are retrieved from the memory chip with a wireless reader (here an example).

The two size 400 motors in versions for low and high voltages, as they can be seen on the VEM stand at the HANNOVER FAIR 2013.

ENGINEERING

"It has turned out a beautiful motor"

Development team members Dirk Weidemann and Dirk Seehase talk about the new size 400 motors which VEM is presenting for the first time at the HANNOVER FAIR 2013

Which versions of the new size 400 transnorm motor series will be on show?

Dirk Weidemann: We will be showing a 4-pole rib-cooled machine in a low-voltage version for an output of 710 kW, and a high-voltage version with an output of 630 kW.

What is new about these machines?

Dirk Weidemann: The rotors are manufactured from die-cast aluminium and are designed with an additional internal cooling circuit. This internal cooling circuit ensures a even temperature distribution in the machine and prevents excessive warming of the rotor. The machine then stays cooler overall and achieves a high degree of performance utilisation. The fact that the size 400 series is fitted with an RFID chip as standard is another unique selling point compared to our competitors, and it also brings our customers added value without costing them a single extra penny (see also page 2).

Dirk Seehase: The motor series was developed as a team project of our design department in Wernigerode in close cooperation with experts from Sachsenwerk. We were originally only planning for a low-voltage motor, but the joint project of the two VEM locations in Wernigerode and Dresden has in the end produced a well-rounded result for both low and high voltages.

Are there any special technical features?

Dirk Seehase: Thanks to the good cooperation with the Dresden University of Technology, many of the latest scientific findings could be taken into account when developing the new motor. The system with an internal cooling circuit is state of the art. And the 355 series is now also available in this design. The principal design elements such as housing, cooling system and rotor assembly are elements of a modular system for low- and high-voltage models.

Why was the transform motor series developed?

Dirk Weidemann: Size 400 is a first important milestone for expansion of our product range to encompass higher outputs. This expansion will be completed in 2015 with a size 450 motor for an output of 1 MW. VEM will then be able to cover the whole spectrum of motors demanded in project business.

Dirk Seehase: The developments in frequency converter technologies mean that the series is also interesting and economical for customers in the low voltage segment. A special mica-based winding system is available for converter-fed applications with converter output voltages up to 690 V.

What does the 400 series mean for VEM?

Dirk Weidemann: It is a further, logical step which enables us to present ourselves to the market as a supplier of complete drive solutions. The fact that, despite the relatively small size of our company, we have realised the necessary investments and also integrated the latest research results, is for me a clear commitment to Germany as a manufacturing location.

Dirk Seehase: With these motors, we are furthermore prepared for the widening of the scope of efficiency classifications to cover further output ranges in future legislation. The motors comply with demands of the future efficiency class IE3 for this output range.

And there is one more aspect I would like to mention. Frontline technology needs a correspondingly attractive design. I think we have done a good job in that respect. It has turned out a very harmonious design.

SIZE 400

Investment in a new winding shop

The production start-up for the new size 400 has also brought changes in the manufacturing process. The higher performance of this motor series, for example, places new demands with regard to parallel conductors and wire diameters. Consequently, VEM motors has now taken a new winding machine of type MW 5002 PC into operation (photo). The investment was realised in conjunction with expansion of the winding department. The coils have been manufactured in the new workshop at the new location since last month.

These electric motor housings are manufactured at the company's main facility in Olsberg (left). Here a comparison of the shaft heights 400 and 160.

COMPANY PORTRAIT

Working hand in hand

The cast iron division of Olsberg Hermann Everken GmbH is a valued partner for the manufacturing of ribbed housings for electric motors.

"Our partnership with VEM dates from 1990, when representatives from Wernigerode asked about possibilities to produce electric motor housings at our foundry," as technical foundry manager Ulrich Herrmann recalls. Closely ribbed housings are one of the technically most demanding cast-iron products for the electrical engineering industry. It takes a lot of experience to produce such thin-walled castings which must at the same time withstand heavy loads, dampen vibration and provide for good heat dissipation. "In Olsberg, we have found an ideal partner who is able to meet our every requirement," says Dirk Seehase, chief design engineer for VEM motors in Wernigerode.

The two experts are fully agreed that the cooperation functions excellently in every respect, and that it brings substantial benefits for both sides. One important aspect here is the comprehensive package of services which Olsberg has put together for VEM. It embraces development, product casting, machining and finishing, storage and transport logistics. The ribbed housings are cleaned, primed and machined at the works in Königshütte. The company has invested in a new CNC compact machining centre to handle the cast parts. It realises the full machining of workpieces with diameters up to one metre and unit weights of 1,000 kilograms in a single clamping. The customer-specific manufacturing then often permits the core stacks and windings to be pressed in directly at the Wernigerode factory. This optimisation of the manufacturing chains benefits both companies.

Another plus point for VEM is that its partner maintains a generous distribution store at its site in Königshütte, just a few kilometres from Wernigerode. This ensures that housings are always available on time to match the current production rhythm at VEM motors.

The latest joint project concerns a ribbed motor housing in grey cast iron with a weight of almost one tonne. VEM announced its interest to Olsberg at the beginning of last July. "We already worked together very closely during the design phase for the cast parts," says Ulrich Herrmann. "Our part was to optimise the ribbing in accordance with the requirements expressed by VEM."

To speed up progress, Olsberg tackled the project from two sides, so to speak. While an external supplier was producing the pattern, Olsberg installed a new, larger stripping machine for the moulds. The pattern equipment arrived in Olsberg at the end of November. Just a week later, the first samples could be sent on their way to Wernigerode.

OUR PARTNER

Olsberg Hermann Everken GmbH

- Manufacturer of a variety of industrial products in cast iron and from steel sheet.
- Castings with weights from 1 kg to 8,000 kg can be produced in both small and large series.
- As a specialist for heat generation from renewable energies, the company also manufactures fireplaces and pellet stoves, as well as heating and ventilation systems.
- Three locations in Germany and over 300 employees.
- The family-run company with headquarters in the federal state of North Rhine-Westphalia looks back over a more than 430-year history.

The open mould (left) and casting (right) of a ribbed electric motor housing for shaft height 400

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The countdown to the HANNOVER FAIR is running. We look forward to seeing you in Hall 14 from 8th to 12th April 2013.

QUALITY

New test stand taken into operation

Zwickau motor manufacturers well prepared for coming stricter demands on energy efficiency

Steffen Lenk checking the rotor temperature of a Ex-rated motor. The photo shows two of the five measuring enclosures belonging to the new test stand at VEM motors Thurm. Each is set up to control two test benches; while measurements are performed on one motor, a second can already be connected and prepared for testing.

The new, € 1.5 million test stand at VEM motors Thurm in Zwickau has sailed through its practical proving with checks on motors for use in potentially explosive environments. In connection with a customer order, the equipment installed by test system specialists Vogelsang & Benning simulated a diversity of ambient conditions with temperatures up to 60 degrees Celsius. Data collected at 12 measuring points were able to verify that the fan drives incorporate adequate safety protection against the risk of explosion.

There were numerous reasons behind the decision to set up a new test stand for type testing and experimental development in Zwickau. "Energy-saving motors demand measuring methods with further enhanced accuracy, improved measuring instruments and higher testing quality," says Michael Gruner, chief design engineer at VEM motors Thurm. "The number of necessary tests has increased ten-fold since the EU regulations on the introduction of minimum efficiency classes came into force for motors in 2011." The old system was simply no longer able to cope with this volume of testing.

With the new stand, the motor manufacturers in Zwickau can now run automated checks and can make much more efficient use of the measuring equipment. Time-consuming manual intervention is now a thing of the past. At the same time, the system permits the recovery of electrical energy. Only the losses immanent to the process are actually drawn from the mains supply. That helps to reduce energy consumption. The company is consequently well prepared for the next round of new test specifications. That time will come at the latest in two years, when the even stricter European regulations on minimum energy efficiency classifications take effect.

FAIRS AND EVENTS

Where to meet VEM in 2013

The forthcoming HANNOVER FAIR is not the only important event at which VEM will be welcoming customers, visitors and all those interested in electrical engineering this year. You can also meet us here:

ELEKTRO, Moscow/Russia, 17th to 20th June 2013

TRAKO, Gdansk/Poland, 24th to 27th September 2013

MECATEC, Helsinki/Finland, 1th to 3rd October 2013 (VEM stand 7d50)

SPS, IPC, DRIVES in Nürnberg, 26th to 28th November 2013

12th TECHNICAL CONFERENCE

12th VEM Technical Conference 24th/25th September 2013 HKK Wernigerode

Week of enterprise open days in Saxony from 11th to 16th March 2013

Girls Day on 25th April 2013 in Saxony and Saxony-Anhalt

Graduate and contact fair ZWIK on 7th November 2013 in Zwickau

Training Fair 2013 in Zwickau

This prototype gives a design preview of the trams which will soon be operating local public transport in Lviv (Ukraine) – driven by motors from VEM.

TRANSPORTATION

Traction motors for Russia and Ukraine

Tram fleets rolling with VEM drives.

Traction motors for low-floor trams are currently being manufactured in large numbers at VEM Sachsenwerk. Several parallel orders have been received for deliveries to cities in Russia and Ukraine. The vehicle fleets in St. Petersburg, Kasan, Lviv and Kaliningrad, for example, will soon be driven by motors from VEM.

The outstanding reliability of the traction motor family was the factor which sealed the decision in favour of VEM. Such motors have demonstrated their performance capabilities over many millions of kilometres of use, also under extreme climatic conditions.

VEM motors drive trams in many cities around the world.

ENERGY EFFICIENCY

Chance for the future with a catch

EU regulations must harmonise better with necessary energy savings.

A German economic delegation attended the 6th World Future Energy Summit in Abu Dhabi. Its members included Dr. Peter Altmeier, German federal minister for the environment, nature conservation and nuclear safety (4th from left), and NuMOV board member and delegation leader Jürgen Sander, managing director of VEM motors GmbH (3rd from left).

It is an unmistakeable picture: The world of electric motors and drives is in a state of flux. Energy efficiency is currently defined by way of efficiency classes to IEC 60034-30 for 2- to 6-pole motors for the output range from 0.75 to 375 kW. Efficiency class IE2 has been binding since 16th June 2011. After 01.01.2015, only motors or drives which comply with the requirements of efficiency class IE3 can be brought onto the market for outputs ≥7.5 kW. An ever stricter framework is to come into force from 01.01.2017, extending the specifications to include also output ranges <7.5 kW.

VEM believes that, at the latest after implementation of the above requirements by 2020, more than two-thirds of all machines will be contributing to energy savings. Of these, 60 % will be accounted for by IE3 motors, and 40 % by IE2 motors in combination with a converter. There are also a number of new approaches. The limit values defined in Commission Regulation (EC) No. 640/2009 are about to change. That refers, for example, to raising of the altitude specifications to >4000 metres, and modifications of the ambient temperature limits for surface-cooled motors to >60 °C and -20 °C, and to 0 °C for water-cooled motors. The EU plans to formulate these new limit values in an amendment in the third quarter of 2013.

Equating cost and benefit

As manufacturer and representative of the users' interests, VEM has supported CEMEP in demanding that the EU grant a one-year transition period. In this same context, we also view another EU plan very critically. The intention, probably with effect from 2016, is to extend the current specifications to cover 2- to 8-pole motors with outputs between 0.12 and 1,000 kW. Especially in the lower output range, and in particular with regard to 8-pole motors, we consider such an extension unrealistic. It is imperative to assess the costs and benefits from the manufacturer and user perspectives. That applies similarly to the step up to IE3 and higher, also in connection with new motor technologies. We would like to see a less emotional approach which takes into account the real possibilities for all concerned.

In a nutshell: We have chances for the future on the one side, but on the other side excessive, unrealistic demands, spending without effects, and neglect for the overall outlay for materials, manufacturing and investment. This all notwithstanding, VEM has taken up the challenges of the presently set goals. We are sparing no effort, however, to ensure that further developments remain realistic.

Myanmar, or Burma as it is also known, was visited by a German economic delegation in 2012. The country in South-east Asia looks back over long-standing traditions and culture.

CUSTOMER STATEMENT

Rapid transition straight to IE3

Dirk Harald Bestehorn from BIS Prozesstechnik GmbH, a member of the Bilfinger Industrial Services Group, reflects on the use of energy-saving motors.

Motors for use in environments subject to explosion hazard have so far been excluded from the EU ecodesign requirements relating to the development of energy-consuming products. So why are you nevertheless buying IE3 motors?

Sustainability and environmental protection are very important matters for Bilfinger Industrial Services. Both as a service partner and as operator of the equipment leased to customers, we are noticing an increasing interest in the availability of energy-optimised motors which comply with the requirements of higher efficiency classifications. After all, the use of energy-optimised motors is a factor which helps to safeguard the competitiveness of the company concerned.

In connection with the graduated introduction of ever stricter efficiency classes, starting with IE1 and progressing via IE2 and IE3 by 2015 and 2017, respectively, the chemical and pharmaceuticals industries are working on a rapid transition to motor efficiency class IE3, leaving out the intermediate step via IE2.

What is to be achieved by using IE3 motors?

The objective is very clearly to reduce operating costs and thus to safeguard the economic feasibility of processes in the chemical industry. At the same time, we expect to reduce harmful emissions and improve our climate balance.

Where are the IE3 motors used?

Around 80 % of the motors we supply are used directly in areas subject to explosion hazards. Our customers include many renowned operators of chemical installations and pharmaceuticals companies in Germany and Europe.

Why do you buy these motors from VEM?

We have already been cooperating with VEM for many years. The experience gained with VEM products, the readiness to translate our particular needs into new solutions, and the excellent customer care are for us important factors. We greatly appreciate this very significant aspect of our partnership.

The company BIS Prozesstechnik has its offices in the industry park Frankfurt-Höchst, an important chemicals and pharmaceuticals location.

TRADE

Delegation visits Myanmar

Myanmar was visited by a delegation from the German Federal Economics Ministry in October 2012. Among its members was Jürgen Sander, managing director of VEM motors GmbH. The prime objective of the visit was to explore new possibilities for economic cooperation between Germany and Myanmar. Given the current status of trade relationships and the cautious signs of a process of democratisation in Myanmar, the visit took place at precisely the right time. One of the most important aims was to establish contacts to local companies.

COMPETENCE CENTRE

Sales teams close ranks

The move of the Berlin Competence Centre of VEM last autumn served to further concentrate sales activities within the VEM Group. The competence centre now shares a site with VEM transresch in Berlin. “The objective is to establish and make intensive use of significantly improved synergy effects in our daily work,” explains Ulrich T. Beholz, head of the competence centres in Berlin and Hannover.

Also these combi drives from VEM Sachsenwerk belong to a new generation of marine motors.

ENGINEERING

Stable performance from less material and area

VEM starting converters for high-output synchronous motors offer significant customer benefits.

A large-scale plant for polyethylene production incorporates so-called hyper and booster/primary compressors. VEM has supplied the synchronous motors and starting converters for both systems.

The joint project of the VEM facilities in Dresden and Berlin for a customer in the Middle East is characterised by a special technical solution. With a motor voltage of 11 kV, the starting converter is usually operated with a step-down/step-up transformer. The VEM solution, however, does without these power transformers. This renders a separate switching station superfluous. The drive system from VEM thus not only saves material, but also occupies a smaller area on the customer's site, not to mention the contribution to trouble-free operation of the plant.

The synchronous hyper motor with an output of 23 MW and the booster/primary motor with an output of 7.2 MW were manufactured at VEM Sachsenwerk. The Berlin VEM subsidiary transresch is supplying the LCI starting converter and the two excitation systems for the joint solution.

Following the successful completion of complex testing, the plant is scheduled to go into operation in the early summer of this year.

View into the controller enclosure of the starting converter

SHIPBUILDING

Sailing the world's oceans

Numerous marine drives will be leaving the VEM factory in Dresden this year.

A new generation of marine motors in a 4.0 kV version is currently being manufactured at VEM Sachsenwerk in Dresden. The first six combi drives of an order totalling 14 machines are to be delivered to customer SCHOTTEL GmbH in the autumn. A further 10 drives are to be ordered shortly. The combi drives (azimuth-thruster drives) for tug vessels are earmarked for the American market.

Sachsenwerk is also supplying two propulsion drives as asynchronous squirrel-cage machines for a further mega yacht. Both boast an output of 12 MW. They will be sent on their way to the luxury shipyard Lürssen-Werft in Bremen in late autumn.

Two new cruise liners of the "Odin" series are to incorporate several drives which are presently in the Dresden production hall. The order centres around two propulsion drives with outputs of 7,250 kW each and three 1,400 kW thruster motors. Further requirements include four diesel generators, two with ratings of 8,400 kVA each and two with 6,300 kVA. The electrical equipment for the first liner will be sent directly to the Fincantieri shipyard in Italy. The contract provides for delivery of the machines for the second liner in 2014.

A project for the Hudong yard in Shanghai/China, finally, comprises deliveries of five shaft generators with outputs of 2,240 kVA each.

The historical water mill in the Saxon village of Elstertrebnitz belongs to a larger ensemble of buildings protected under a preservation order. It includes the only surviving iron-powder mill in Germany. The complex includes also a mill museum with demonstration workshop and a museum for mechanical musical instruments. Visitors are welcome, but are recommended to make an appointment by phone under +49-34296-399199.

ENERGY GENERATION

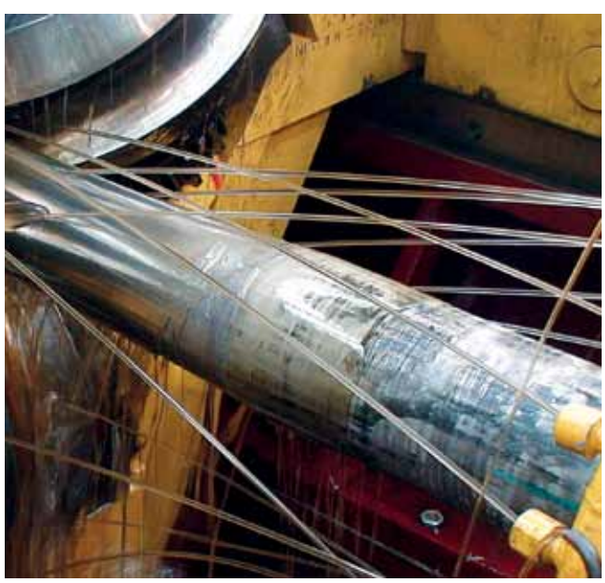
Generator for historical hydropower

VEM supports restoration of a technical and cultural monument near Leipzig

The two turbines of a 20-year-old hydropower plant in the Saxon village of Elstertrebnitz have been producing electricity again since the autumn of last year. An urgently needed new generator was supplied by VEM. The plant belongs to an historical ensemble of buildings which are protected under a preservation order. One of these technical monuments is the Oderwitz Iron-Powder Mill. The mill location is able to trace its roots far back into the Middle Ages.

Five years ago, Anne-Sabine and Jost Mucheyer decided to breathe new life into the historical walls – with significant own investment and a partial grant from the Saxony government and the EU. The mill has since become a particular attraction for visitors in the region. "When one of the generators broke down, we looked around for a new, more efficient system which would allow us to produce even more renewable energy," says Anne-Sabine Mucheyer. It was with this concern that the couple approached VEM. "We were pleased to respond and drew up an offer in which VEM agreed to deliver at cost," says fields sales representative Gert-Ulrich Blank from the Leipzig Competence Centre. "We view such projects as a form of social commitment to our sales region. In this way, we were able to contribute to the restoration of a technical and cultural monument which is open to the public as a museum."

With the plate in the background, the operators of the historical water mill honour VEM's readiness to supply a new generator. The machine is now producing energy from renewable sources for the Oderwitz Iron-Powder Mill.



The heart of the plant: A three-high stand with the necessary oiling

COOPERATION

Well-rounded project

Russian plant engineering works equips a tube rolling mill in the USA with VEM

VEM transresch is providing the complete electrical equipment, including variable-speed drives and modules for the automatic control system, for a new cold-rolling train for tubular products. Software and technical documentation also belong to VEM's scope of supply. The partner for this order is a Russian heavy plant engineering works from the Moscow region.

The roll train equipment is to be installed at a new plant for the production of seamless tubes in the USA. A production centre covering an area of 400,000 square metres and with a length of 435 metres is being built in Tunica/Mississippi. It is to produce a new type of tubing in diameters from 8 to 24 inches. The plant is being erected by a metallurgical company from the German federal state of North Rhine-Westphalia. Customers for the tubes include various market leaders in the oil and gas industry.

The skyline of Singapore, the smallest state in Southeast Asia. With MES, VEM also has a competent local service partner here.

CUSTOMER SERVICE

Strong partner in Southeast Asia

VEM motors with service presence in the world's growth regions

The volumes of German electrical engineering exports within and outside the Euro region have been drifting apart for about the last three years. While exports to the Euro countries have decreased on an annual basis, trade with non-Euro countries has seen considerable growth. This development was also the topic of a recent publication from the German Electrical and Electronic Manufacturers' Association ZVEI.

The main reason for the increased export levels outside the Euro region is the positive economic development in these countries, above all in Asia and the Far East, but also in Central and South America. "It is nowadays no longer sufficient simply to realise projects with customers abroad. The key to sustained success is the care given to customers after completion of the sale," says Jürgen Sander, managing director of VEM motors. "With that in mind, we have set ourselves the target of increasing the numbers of our service partners in the economic growth regions of the world, and in this way of strengthening our proximity to the customer." This approach will enable even a medium-sized company like VEM to benefit from the economic development in such growth regions.

For some time now, the company MES Maintech Engineering & Supplies PTE Ltd. in Singapore has been active as a service partner for VEM motors. The company is already well-established on the Southeast Asian market, possesses extensive know-how, and is one of the region's most reputed service providers in the field of repairs and maintenance for electrical machines and equipment. With a further branch office in Malaysia, MES helps to implement the VEM objective of providing local service throughout Southeast Asia. MES also handles service in Indonesia, Taiwan, Vietnam and the Philippines.

SERVICE

Reorganised for you

Our sales partners in Scandinavia extend their portfolio.

As a system supplier and manufacturer of customer-tailored solutions and special motors, VEM has reorganised its activities in Scandinavia to better reflect these circumstances. With immediate effect, all VEM partners in the region are responsible for the whole product range in low and high voltages. This naturally includes advice and support, as well as specially coordinated packages in conjunction with the VEM locations in Germany. In project work, in particular, it is intended to offer not only products or components, but also technology competence in the various branches. Our partners are:

In Finland:
VEM motors Finland Oy with particular competence in drive technology, with stores, workshop and a comprehensive network of authorised partners

In Sweden:
A dealer network is still to be set up, with local staff for customer advice and support, in cooperation with the existing experience of VEM motors Finland Oy

In Norway:
VEM motors Norge AS as local representative, continuing proven cooperation with the company Grønsås and its partners

In Denmark:
R. Frimodt Pedersen as general representative with experienced staff, stores and workshop, and a network of authorised partners

RENEWABLE ENERGIES

Prototype for wind generators

VEM is currently designing the prototype of a wind power generator of the output class 3.4 MW for a new turbine concept of the company SkyWind. The first system is to be delivered in mid-2013. SkyWind GmbH possesses longstanding experience on the market. Through optimisation and simplification of the typical properties of a wind farm, the company develops less expensive, but at the same time significantly more efficient wind turbines with a service life in excess of 20 years.

Norway, the land of mountains and lakes, is home to VEM partner Grønsås Vikleverksted AS.

Mario Girotto already left his home town of Wernigerode for Munich in 1997. At the VEM Competence Centre there, he switched from in-house to field support at the beginning of 2013.

VEM – THE PEOPLE

A call centre would simply not work

Mario Girotto has taken over the field support baton at the Munich Competence Centre.

When the time comes for a new generation to take over the reins, it is important that the transition is accomplished as smoothly as possible also from the customer's perspective. That, too, is an aspect of what VEM understands by service. And the customers in Baden-Württemberg can confirm that this is no empty promise. Thomas Rebhuhn, longstanding sales representative at the Munich Competence Centre, retired at the end of 2012, and handed over to Mario Girotto.

"We had already formed a team since 1999," says Mario Girotto. "It was my job as in-house support to elaborate quotations and to process the orders for our customers together with our order centre." He is thus well acquainted with all the customers and their special requirements, and explains the benefits this brings with the example of the cooperation with plant manufacturer Ystral: "For their process engineering plants, they constantly ask for new individual solutions. You cannot answer such queries through a call centre. You need people like us who understand the whole background." When he says "us", he is referring also to Florian Meyer, his in-house partner in the new team (see Impulse 2/2012).

Mario Girotto takes things equally seriously when it comes to understanding the whole background. Immediately after his vocational training as an industrial business assistant at VEM motors in 1997, he accepted an opportunity to join the sales team at the Munich Competence Centre. Over the years, a desire to further intensify his understanding of VEM's and the customers' technical processes matured. Consequently, he invested a great deal of voluntary energy and discipline to complete a two-year parallel course in technical management.

Mario Girotto listened with particular interest to the lectures on energy-saving motors at the 2012 Technical Conference in Wernigerode. "Little had happened over the past years in respect of classic asynchronous motors. But we are now standing on the threshold of a new era," he says expectantly. And it is for him a stroke of luck that this development coincides exactly with his starting a new job.

NORWAY

Start small, grow tall

Grønsås Vikleverksted AS celebrates its 50th anniversary in August.

It all began in an old barn, where Ole Grønsås founded the company Grønsås Vikleverksted AS in 1963. It has its offices in Gjøvik, almost 150 kilometres north of the Norwegian capital Oslo, where it began by producing windings for high-voltage transformers and asynchronous motors. The business expanded and it was soon possible to expand the production facility with a new building.

Today's manager Frode Amundsen starting winding and repairing motors in his father's company in 1984. It was that same year that the company sold the first motors for VEM. The company was already transformed into a share company five years. When responsibility for imports of VEM motors for the whole of Norway was assumed in 2008, the decision was taken to move to the current premises, where space is available for stores holding more than 1,500 motors up to 200 kW, as well as gearboxes, bearings, chains, seals and shaft couplings.

The company today has six employees. With their aid, VEM motors are in the meantime supplied to 13 further trading companies, who in turn are successfully selling the VEM products. Customers in Norway praise Grønsås for its fast response and flexibility. That is made possible above all by a customer-oriented stock of brand-quality motors, in combination with an excellent logistics system. Grønsås is thus an attractive partner for customers for the solution of all their drive problems.

When Grønsås Vikleverksted AS celebrates its 50th anniversary on 28th August 2013, our well-earned thanks and the best wishes of all the German VEM locations will sent on their way to Norway.

The new waste air purification plant for a hall at the VEM site in Wernigerode reduces energy consumption, filters waste products and recovers heat.

TRADEMARK ASSOCIATION

The value of the VEM brand name

Analysis by student business consultants yields positive results

The brand name VEM is more valuable than ever before. It has become a widely known synonym for the high quality and reliability of electric machines and modern drive technologies made in Germany.

This evaluation is one of the most important statements of a study dealing with the three-letter brand name introduced in 1948. The student business consultancy at Dresden University of Technology, PAUL Consultants, conducted the study on behalf of the VEM Trademark Association. It identifies some interesting starting points for further development of the brand value in cooperation with the association's member companies. As cooperation partners, the student consultants guaranteed a neutral position with regard to the association and other consultancies, and also contributed a great deal of new knowledge. Between 60 and 80 students from various disciplines work with PAUL Consultants and even advise major companies such as Microsoft. The necessary knowledge was acquired within the framework of their Bachelor or Master courses.

The project team from PAUL Consultants which worked for VEM: Sebastian Mähler, Matthias Schmidt, Julia Niewind and Franz Poike (left to right).

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ENVIRONMENT AND ENERGY MANAGEMENT

A fresh note lies in the air

A new waste air purification plant is now in operation at VEM in Wernigerode.

Care for the environment and its natural resources, and the economic use of energy in the interests of both customer and manufacturer, are inherent to the company philosophy at VEM. In this context, the rather unwieldy term "holistic environment and energy management" stands for specific measures implemented at the individual VEM locations.

Last month, for example, a new plasma-catalytic waste air purification plant went into operation in Wernigerode. It was installed in the hall in which solvent-thinned resins are used to impregnate the wound core packages. With this modern, resource-saving process, it is possible to reduce the combustion temperature to just a third of that in a conventional plant. At the same time, heat is recovered to support the heating of the production hall in winter. A correspondingly modern ventilation system provides for cool, fresh air in the summer. Last but not least, the purification plant was designed with a view to the future, so as to remain able to filter all the waste products of modern impregnation resins for years to come.