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FOR INCREASED  
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## THE **CLUSTER MANAGEMENT** OF THE SPECIAL-PURPOSE MACHINE AND PLANT ENGINEERING (SMAB) **PRESENTS ITSELF**

The main goal of the Special-Purpose Machines and Plant Engineering cluster is the improvement of the competitiveness of companies in this sector by reducing the disadvantages of the multitude of small elements of the companies through cooperation. Since its foundation in 2008, the cluster management of Special Purpose Machines and Plant Engineering (SMAB) has successfully contributed to:

- advertising this sector on a transregional base,
- integrating companies of the sector into the cluster work on a broad base,
- supporting companies with their innovations,
- promoting the settlement and growth of companies,
- helping companies in staff issues, and
- supporting the knowledge and technology transfer from science into the companies.



The main focus of our work is the support of companies in the development of special-purpose machines, linked system solutions, energy-efficient plants, efficient production technologies as well as of products in the field of medical technology. The significance of the cluster management sponsored by the Land Saxony-Anhalt on a pro-rata basis is manifested in its rapid development. When the cluster was established, 23 companies were participating. In 2012, more than 100 companies and institutions were already integrated in the cluster on a contractual basis. More information may be found online.



Get more  
information online

## COMPANIES OF THE CLUSTER HAVE **STABILIZED** AND **STRENGTHENED** THEIR MARKET POSITION

From the outset, the cluster management has organized the cluster structures in a way that they depict the added-value chain. For this purpose, it was necessary to attract more companies from different sectors to the cluster, especially from the research field, but also service providers for marketing, sales, industrial design, and personnel management, and others. Furthermore, the structural disadvantages of small and medium-sized companies should be reduced compared to companies from regions with more intensive recourse to industry and industrial service providers as well as to larger business units with access to international markets. This is facilitated by the financial support of the cluster management.

This strategy created the conditions for the initiation and successful implementation of joint research and development projects by companies and scientific institutions in the various projects. The technology transfer among companies as well as between companies and research institutions has gained enormous significance. Entrepreneurs practise active location marketing for Saxony-Anhalt in collaboration with the cluster management and take on a positive role in training. The Special-Purpose Machine and Plant Engineering cluster has given a substantial impetus to other sectors and to companies organized in clusters.

In recent years, companies of the cluster have stabilized and strengthened their market position. However, on a medium- and long-term basis, this is not sufficient for improving their structural disadvantages sustainably. For this purpose, strategic approaches have to be developed which strengthen the position of the companies in the markets by networking and cooperation, mainly in the field of innovations. This can only be achieved with new products and technologies with a high degree of innovation to respond to the growing competition, particularly from the Far East.



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- Markt- und Trendanalysen
- Transfer- und Veröffentlichung von Forschungsergebnissen



Ihre Ansprechpartnerin:

**Andrea Urbansky**  
Sandtorstr. 22, 39106 Magdeburg  
Tel.: +49 391 4090 321  
Fax: +49 391 4090 92 321  
Mail: [urbansky@fasa-ev.de](mailto:urbansky@fasa-ev.de)



## THE TTI MAGDEBURG: MUCH EFFORT FOR SUCCESSFUL COLLABORATION



The cluster management is supported by tti Technologietransfer und Innovationsförderung Magdeburg GmbH (Technology Transfer and Innovation Support Magdeburg GmbH) founded in 1992. The object of the company is to promote the economic development in the region of Magdeburg and within the framework of European projects to promote innovation and technology transfer in Saxony-Anhalt. The place of business is the State capital Magdeburg; Halberstadt and Genthin maintain offices. tti is a business-oriented, commercially operating service provider. Its employees are exclusively engineering graduates. They offer a wide range of services from a single source:

- Corporate consulting,
- Support of companies in the development of national and international business and science contacts,
- Consultation for an energy-efficient production,
- Research and development management,
- Networking and network support,
- Business creation,
- Protection of intellectual property (patent rights),
- Project management of development, technology and process projects,
- Infrastructure development,
- Event management,
- Cooperation initiation,
- Product and technology development.

tti is well known beyond Saxony-Anhalt's borders. So far, it has supervised more than 3000 companies. Each year, the employees visit about 250 companies, conduct about 140 individual consultations related to e-commerce, have about 160 discussions on protection rights as well as guided research and development projects with an annual volume of approximately 20 million € and investments of approximately 100 million €. This contributed to the recognition of tti. tti supports companies from all sectors (except chemical industry) and cooperates with a number of cluster initiatives. The tti Magdeburg GmbH is a partner in the Enterprise Europe Network (EEN), the largest network of non-profit-oriented information and advice centres in Europe. Almost all projects of companies with innovative and transnational standard developed in Saxony-Anhalt are supported by the EEN and used for various economic activities in close cooperation with the Saxony-Anhalt Ministries of Sciences and Economic Affairs and of Agriculture and Environment. For a successful attraction of European funding programmes, an international network has been created, consisting of research institutions, companies, investors and partners from chambers of commerce, associations, politics and administration. The Magdeburg Electronic Commerce Centre (MD-ECZ) has become a member of the Electronic Commerce Network. Since its foundation in 1998, this network has conducted more than 30,000 events and individual consultations with over 300,000 participants and has succeeded in establishing itself as an independent and impartial guide for „e-business in small and medium-sized and crafttrade companies“. The tti Magdeburg GmbH has always aimed at making the services of the MD-ECZ available to many companies. For example, the range of services of the centre has been integrated into other activities.

More Infos  
about the tti:



More Infos  
about the md-ecz:



## STRENGTHENING RESEARCH AND DEVELOPMENT

The cluster management supports research and development in many ways. For example, research and development projects are supported according to a year plan within the framework of cooperations among companies and between companies and research institutions. Likewise, for member companies, it takes the function of planning network projects, which are not based on technology platforms. Furthermore, the cooperation with universities outside Saxony-Anhalt has been deepened through the implementation of corresponding information events. Specifically, companies have been supported in the following projects:

Project content	Project agency
<b>Research and development project</b> – Central Innovation Programme SME (ZIM), single projects, cooperation projects, network projects	Federal Ministry of Economics and Technology: PA: EuroNorm GmbH, PA: Aif Projekt GmbH, PA: VDI/VDE-Innovation + Technik GmbH
<b>Research and development project</b> – Land of Saxony-Anhalt	Investment Bank of Saxony-Anhalt
<b>„go-inno“</b> – innovation consulting easy and fast	Federal Ministry of Economics and Technology, PA: EuroNorm GmbH
<b>Consultancy Aid Scheme</b> Saxony-Anhalt	Investment Bank of Saxony-Anhalt
<b>GRW business support</b> – community task of „Improvement of the regional economic structure“	Investment Bank of Saxony-Anhalt
<b>Innovation forums</b> – Innovationsinitiative Innovation Initiative „Entrepreneurial Regions“	Federal Ministry of Education and Research



### LVQ-WP Werkstoffprüfung - komplexe Werkstoffprüfung F&E, Ausbildung und Dienstleistung

Seit die LVQ-WP 1994 von und mit einem erfahrenen Team von Werkstoff- und Prüfspezialisten gegründet wurde, hat sich die LVQ-WP Werkstoffprüfung als feste Größe im Bereich der komplexen Werkstoffprüfung etabliert. Darunter verstehen wir die Bündelung von Knowhow auf den Gebieten der zerstörenden und zerstörungsfreien Prüfung sowie der damit verbundenen Werkstofftechnikfelder, wie z.B. Wärmebehandlungsverfahren, nicht nur im Bereich der Dienstleistung, sondern parallel auch in der Ausbildung. Eine derartige weit reichende Verknüpfung unter der Prämisse „die LVQ-WP lehrt, was sie praktiziert und praktiziert, was sie lehrt“ ist deutschlandweit einmalig.

In den akkreditierten Laboren stehen z.B. moderne Prüfsysteme für die Durchführung von konventionellen Prüfungen hinsichtlich mechanisch-technologischer Kennwerte, aber auch für Klimatests zur Verfügung. Parallel betreibt die LVQ-WP Werkstoffprüfung eine florierende Dienstleistung im Bereich der zerstörungsfreien Prüfung, die sowohl in eigenen Laboren (z.B. drei eigene Röntgenräume), aber auch natürlich im mobilen Einsatz angeboten wird.

Die Kenntnisse aus diesen Dienstleistungstätigkeiten fließen in das Ausbildungsangebot ein, das die LVQ-WP Werkstoffprüfung anbietet. Neben der zweijährigen Umschulung zum Werkstoffprüfer mit IHK-Abschluss werden auch mehrere Weiterbildungen im Bereich zerstörungsfreie Prüfung angeboten, z.B. Fachkraft für Werkstoff- und Wärmebehandlung oder der EuroMaterialprüfer. In dessen Verlauf werden sechs verschiedene Verfahren der zerstörungsfreien Prüfung bis zur Stufe 2 (nach DIN EN 473) gelehrt. Diese Umschulungen und Weiterbildungen können durch öffentliche Träger gefördert werden. Parallel werden diese Prüfverfahren natürlich auch als Einzelkurse für Kunden aus Industriebetrieben angeboten.

Dieses geballte Knowhow bringt die LVQ-WP auch in der Forschung und Entwicklung ein, z.B. wird z.Zt. im Bereich der Ultraschallprüfung von Schweißverbindungen an Polyethylen-Rohren geforscht und die Entwicklung eines Prüfsystems zur Untersuchung hochlegierter austenitischer Stähle auf Korrosion betrieben. Daneben werden auch immer wieder Entwicklungen für die eigene Dienstleistung betrieben, wie z.B. die Implementierung eines Wirbelstromprüfsystems für die Prüfung von Rohrbögen für den Einsatz im Offshore-Bereich.

Weitere Informationen finden Sie auf den Internetseiten [www.lvq-wp.com](http://www.lvq-wp.com) und [www.euromaterialpruefer.info](http://www.euromaterialpruefer.info).

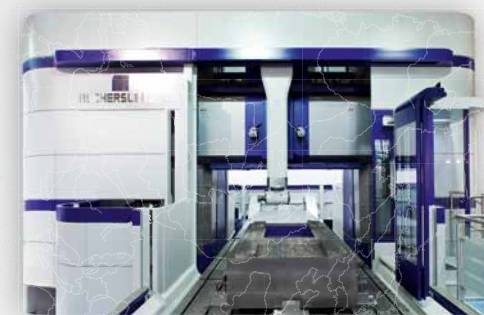


## DEVELOPMENT OF TECHNOLOGY PLATFORMS

A number of priorities have emerged from research and development projects as well as network projects and discussions carried out in the past few years with cluster partners and other cluster initiatives. These will be developed to technology platforms that are at the same time the future instrument for working together with other cluster initiatives and sectors.

If needed, they can be temporarily incorporated via the respective platform. The results obtained can then be developed further for the specific needs of the individual company. Strategic objectives of the SMAB cluster for the next two years consist in the building and development of sector-oriented technology platforms to support the innovation strategy of the Land Saxony-Anhalt and to further develop key technologies. Of particular importance are:

- Machines, equipment and technologies for medical technology,
- Development of mechanical engineering products for the use of renewable energy,
- Special-purpose machine and machine tool construction in linked systems for the aerospace industry, the automotive industry, the energy industry and medical technology.



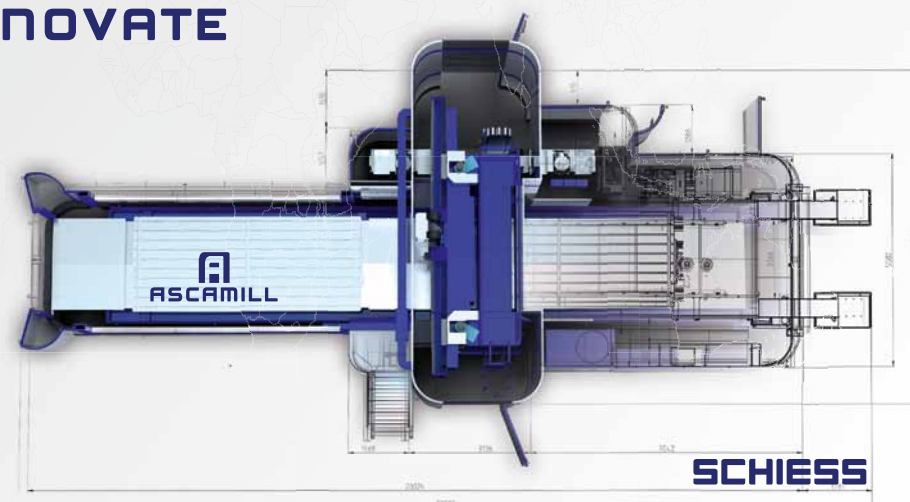
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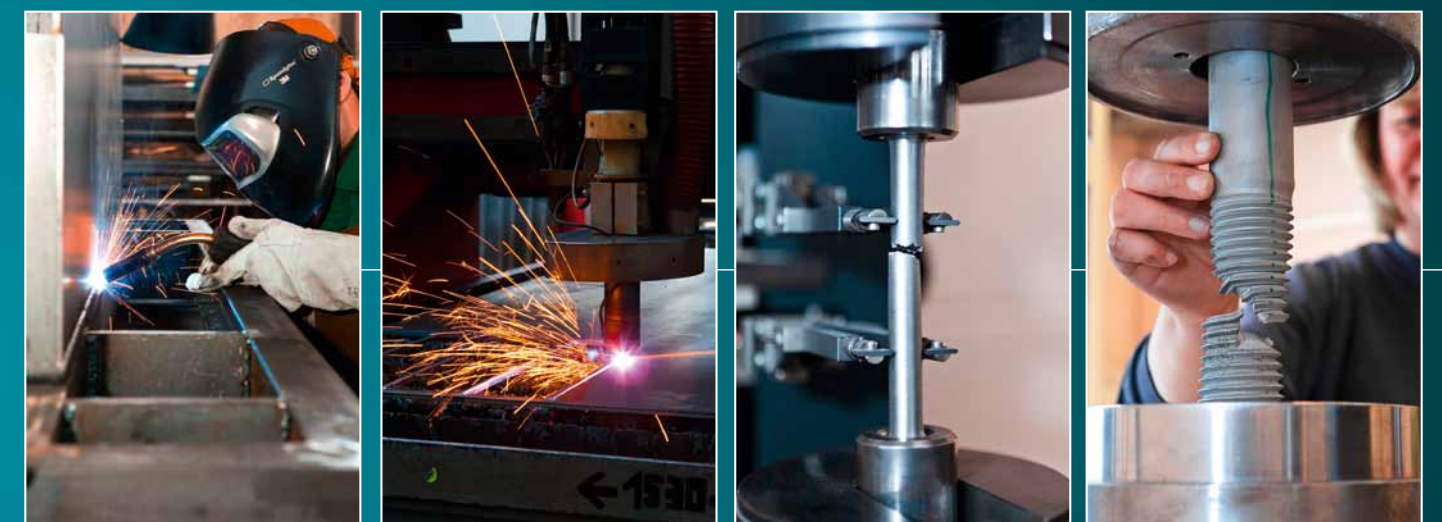
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## SUPPORT OF BUSINESS COOPERATION AND INVESTMENTS

Another area of responsibility is the support of companies in the interdisciplinary or distributed cooperation for the development of new products, technologies or procedures.

For this, suitable technology platforms will be established and managed and the companies involved will be integrated. To improve the creative power of the sector, the cluster management cooperates with institutions like the VDI or mechanical engineering associations.



Settlement projects and expansion investments of companies are also actively supported by the cluster management. If possible, two of these intentions will be implemented annually within the scope of the cluster. Target groups are in particular technologically oriented business foundations, above all from the area of the technology platforms.





## COOPERATION WITH OTHER CLUSTERS AND INITIATIVES

The Special-Purpose Machine and Plant Engineering cluster is aware of the fact that its content and objectives also involve other sectors. Therefore, it is also involved in the cooperation with other clusters and initiatives. Here are some examples:

- Cooperation with the Automotives cluster: Cooperation in particular with the Institute of Competence in Automobility (IKAM GmbH) to prepare the integration into the technology platform "Linked Systems",
- Cooperation with the Renewable Energy cluster: The primary concern is the implementation of the regional objectives to promote plant engineering with chances for strengthening the export power in cooperation with the companies of the SMAB cluster. The technology focus "Renewable Energy" will be established by the end of 2013,
- Cooperation with POLYKUM e. V. and the Chemistry/Plastics cluster within the technology platform "Medical Technology",
- Support of companies in the range of IT-supported business processes by the Magdeburg Electronic Commerce Centre (MD-ECZ) as a cooperation partner,
- International cooperation with support by the cooperation partner Enterprise Europe Network (EEN) Saxony-Anhalt.

Enterprise Europe Network (EEN) Saxony-Anhalt: The cooperation with the EEN covers, for example, the initiation of European projects in research and development, the implementation of international co-operation exchanges and technology offers and request by the cluster companies. Other tasks include the organization of an information day for EU support of health/medical technology activities, as well as the support of the work of technology platforms by the membership in the European sector groups for medical technology, renewable energy and materials.

## PUBLIC RELATIONS

Successful cooperation requires transparency and smooth information flow. This is why public relations play an important role. It serves the provision of results from the basic and applied research within the scope of knowledge and technology transfer for the improvement of available technologies and products.

The cluster management also operates the website of the cluster ([www.cluster-smab.de](http://www.cluster-smab.de)). This is conceived as a mechanical engineering portal. Public relations is improved by the following measures:

- Advertising of product-specific web domains, by way of example, for high-technology products from selected cluster companies,
- Attraction of cluster members for contributions in the "Members" "Projects/Profiles" section for the initiation of national and international cooperation among companies,
- Publication of success stories in the "News" section as information source for companies covering topics such as technologies, markets, fairs, conventions, using the new services to be integrated.

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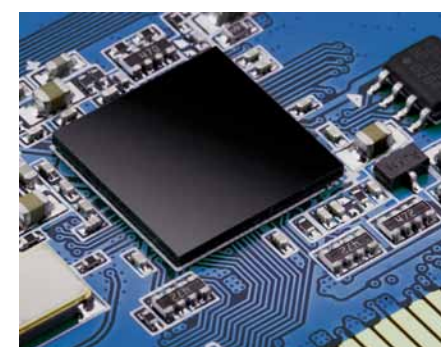
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## PARTICIPATION IN FAIRS AND EVENTS

### EVENTS

As part of public relations activities, but also for the personal exchange of information and views, the SMAB cluster organizes a large number of events and fairs. It has become a tradition to conduct a specialized annual meeting.

In cooperation with the Magdeburg Electronic Commerce Centre (MDECZ), a number of information events regarding information and communication technologies are offered. In addition, there are events in the "Dialog" series of lectures by the Chamber of Industry and Commerce (IHK) Magdeburg covering cluster-specific topics. Apart from that, the individual technology platforms offer specialized workshops as required. Finally, events and cooperation exchanges are carried out together with the Enterprise Europe Network (EEN) Saxony-Anhalt with the aim to strengthen the international cooperation.



### FAIRS

The cluster is represented regularly on the following fairs:

- Hannover fair (on the stand of the Land Saxony-Anhalt),
- MSV Brno (International Engineering Fair),
- Industrial Fair Plovdiv.

If requested, participation in other fairs is carried out, for instance, the EMO Hannover (International Trade Fair for the Machine Tool Industry), Enertec Leipzig (International Trade Fair for the Generation, Distribution and Storage of Energy), Achema Frankfurt/M. (World Exhibition Congress on Chemical Engineering, Environmental Protection and Biotechnology), and the International Construction Fair Szczecin.

## SUPPORT FOR INTERNATIONALIZATION

Germany as an export nation depends on international customers – the companies of the cluster are basically no exception. Hence, internationalization also plays an important role when supporting companies in foreign-trade activities.

The cluster management supports them with the widening of the corporate base by use of international partnerships and networks. In addition, by utilizing cluster potentials and European cooperation processes in economic priority sectors, participation in the Europe-wide knowledge and technology transfer can be intensified. The following support is offered in addition:

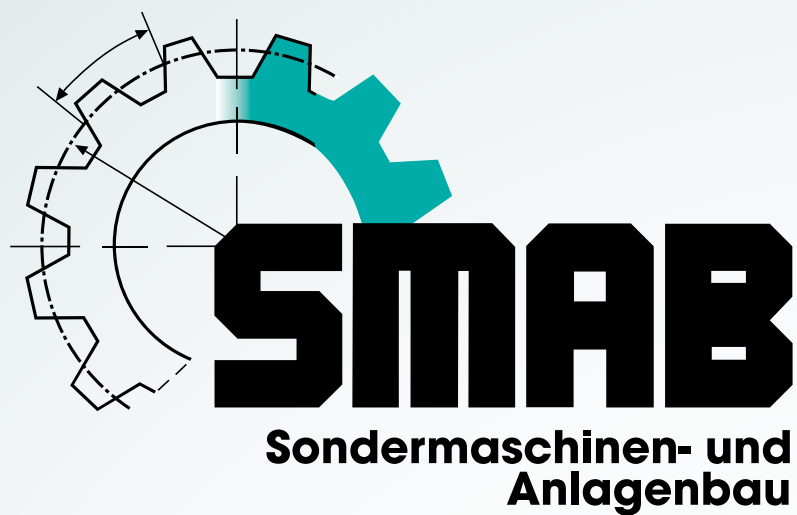
- Support with the participation in international fairs and cooperation exchanges,
- Utilization of the potentials of the cluster and the cooperation with chambers and associations with the intensification of the internationalization of business relations,
- Support with the preparation of the marketing by organizing and conducting conferences, workshops, fair participations and international cooperation exchanges covering mechanical engineering, medical technology, measuring and testing technology.

The EEN mentioned earlier takes a key role in this support. All activities are aimed to promote innovation and competitiveness as well as the access to international markets and the interdisciplinary cooperation at international level. The EEN offers concrete and efficient solutions like the specific search for international business and cooperation partners, technology audits as well as the consultation regarding current European measures, programmes and funding possibilities. The portfolio includes 50 countries, among others, all 27 member states of the European Union as well as a growing number of other countries, such as the Russian Federation, Chile, Norway, Israel, the USA, China, and South Korea.

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More infos about  
EEN Sachsen-Anhalt:



## KONTAKT

### **tti Magdeburg GmbH**

Bruno-Wille-Straße 9  
39108 Magdeburg

Telefon: 03917 44 35-20

Fax: 03917 44 35-11

E-Mail: [mklaeger@tti-md.de](mailto:mklaeger@tti-md.de)

**[www.ttimd.de](http://www.ttimd.de)**

