



PRESS INFORMATION

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Business location for Medtech in a state of growth

Medical technology companies have the best chances in the German federal state of Saxony-Anhalt

“It is the exchange between physicians, researchers and entrepreneurs that inspires ideas”, says Steffen Borlich, Managing Director of EKF-Diagnostic GmbH. The medical technology company was founded in the German federal state of Saxony-Anhalt in 1990 and acquired by a British investor group in 2011. It has become established as a centre of the international group. While EKF point-of-care analysers stand the test worldwide, a team of researchers from Magdeburg in cooperation with the research institute Fraunhofer for Factory Operation and Automation IFF is launching its innovative new physician’s assistance system for early detection of skin cancer. Parallel to the partner search for serial production of the dermatological full-body scanner in Europe, contacts from Saxony-Anhalt’s state capital Magdeburg to Bangkok and Singapore have been established in order to initiate a technology transfer. “The system provides standardised data, classified lesions and reliably documents the progress of skin changes”, says Dr. Dirk Berndt, Manager of the Measurement and Testing Technology Business Unit at the Fraunhofer Institute for Factory Operation and Automation (IFF).

The medical technology in the German state of Saxony-Anhalt has evolved in the last 10 years to a highly innovative, highly technologised industry. The approximately 75 companies in the state with about 2,200 employees work closely with the existing local, national and international research and development landscapes. For years, the sector shows continual growth. One reason for this is not least the good business conditions in Saxony-Anhalt.

“Medical technology is a future market. Saxony-Anhalt provides a good framework for national and international companies to position themselves here”, confirms Dr. Carlhans Uhle, Managing Director of the Investment and Marketing Corporation Saxony-Anhalt mbH (IMG), the state’s economic development agency. Research companies, production sites and universities in Saxony-Anhalt work hand in hand along the entire value- chain.

So the federal state provides a complete network for international companies to settle here and successfully set up their medical technology companies. “As IMG we support investors here. Therefore we provide a complete service offer during every step of the investment process, ranging from the project idea to business implementation, precisely geared towards the individual company needs”, adds Uhle. This includes the first briefing, assistance in the search for locations as well as comprehensive advice regarding subsidies, dealing with authorities or indicating suitable partners or networks.

In order to focus the potential of the medical technology location, the cluster Medizin- und Gesundheitstechnik Sachsen-Anhalt, cluster for medical and health technology, for example, is committed to the connect the industry players in the state. Borlich and Berndt appreciate that the cluster succeeds in combining



requirements and ideas, research competence and production capacities on short channels always succeeds better in the Saxony-Anhalt Medical & Health Technology Cluster (Med-Tech Cluster). "Our members are mainly small and medium-sized enterprises. That minimises frictional losses", explains cluster manager Dr. Frank Fleischer. "We directly encounter managers, i.e. decisive doers who seek their chances and make deeds quickly follow their promises."

In topic areas such as the manufacturing and processing of medical plastics or the latest ultrasound technology, research and science are traditionally well-networked in Saxony-Anhalt, emphasises Fleischer. For example, high-quality medical devices from Primed Halberstadt Medizintechnik GmbH for the ventilation of patients or treating wounds attest to this. Another example is the "BubbleCounter" for microbubble detection in flowing liquids, developed by GAMPT mbH (Company for Applied Medical Physics and Technique). This innovation is gaining increasing importance for prevention of microbubbles or embolisms in heart surgery.

As an example for the networking of science and industry, cluster manager Fleischer mentions the university location of Magdeburg. In order to also continue to stimulate networking within the medical technology industry, the Med-Tech Cluster brings science and industry together. Investments shall be made in the further development of research and development capacities at the Magdeburg university location in order to stimulate the development of innovative knee joint prostheses with particularly biocompatible and functionalised surfaces, reports Cluster Manager Fleischer. And he looks to the future: in the combination of innovative materials and bio-functional surfaces with the processing of three-dimensional data of the human joint and efficient device communication, the individual joint could be produced for patients in the future. According to the vision, the wear and tear would be less, and follow-up operations could be avoided.

The development of the dermatological full-body scanner involves the early detection of skin cancers which a repeated overdose of sun on light skin can cause. It is a joint project under the auspices of the research institutes Fraunhofer IFF and the Department of Dermatology and Venereology at Otto-von-Guericke University Magdeburg in cooperation with the companies Dornheim Medical Images GmbH and HASOMED GmbH. The number of new cases of skin cancer is increasing globally. The malignant melanoma, also known as black skin cancer, is the most common fatal skin disease in this connection. If it is not detected and treated in due time, the extremely malignant tumour of the pigment cells spreads metastases via the lymphatic vessels and bloodstream.

In the future, the new physician's assistance system shall support physicians with examinations for early detection. "The patient enters a cabin unclothed and assumes a predetermined posture while standing on a rotary plate. A system consisting of lighting, cameras and 3D measuring systems records 90 percent of the skin surface in 100 single frames", explains Dr. Dirk Berndt from Fraunhofer IFF. "The sensor data are fused with the body coordinates, while any lesion will be recorded true to scale and classified. The device assesses the lesions according to specific criteria such as asymmetry, borders, colouring and dimension, and sorts out unsuspecting moles. The "raised" criterion, for which further research activities are planned, shall also be added in the future.

"After that the physician only views with the dermatoscope those moles which are classified by the technology as suspicious or cannot be assessed." Berndt knows this saves a great amount of time. "Moreover, the documentation of progress is made considerably easier because the physician can retrieve the recorded data and images during follow-up examinations and can compare them with the current examination results." On the way to series-production readiness the

prototype is currently being tested at the university hospital. In particular, the duration of the individual scans shall be further shortened. But other assistance functions for the medical specialist are also an object of research activities.

Further development is also a permanent topic for EKF-Diagnostic GmbH. "We will only remain successful on the world market if we develop new technologies much faster than up to now", says Managing Director Steffen Borlich. About 80,000 point-of-care analysers from EKF are being used in about 100 countries. They measure glucose, lactate, haemoglobin, haematocrit and glycated haemoglobin. They support physicians in monitoring patients with anaemia, malnutrition or diabetes, to make the right decisions for the health of mother and child in obstetrics and to optimise training in competitive sports. The handy devices are also used in veterinary medicine. They provide data quickly and in laboratory quality, and are extremely robust, reports Borlich. Even in non-air-conditioned hospitals in desert regions or in jungle areas the analysers provide their data reliably and precisely.

Borlich describes the framework conditions for investors in Saxony-Anhalt as attractive. They range from favourable property prices to high technical competence of the workforce. And then there is the support and assistance through administrative districts and municipalities, the Med-Tech Cluster and the Investment and Marketing Corporation Saxony-Anhalt. EKF is currently investing in a new annexe building for production, administration and training courses at its site in Barleben. A project, where the company is supported by the Investment and Marketing Corporation of Saxony-Anhalt.

More information about the Investment conference "**CHECK-IN FOR SUCCESS Saxony-Anhalt**":

<http://www.invest-in-saxony-anhalt.com/CHECK-IN-FOR-SUCCESS-2016>.

More information about the medical engineering location **Saxony-Anhalt**:

<http://www.invest-in-saxony-anhalt.com/medical-technology>

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Caption:

The Dermascanner scans the patient's skin surface. It provides standardised data and supports physicians in the assessment of atypical moles. (Photo: Dirk Mahler, Fraunhofer IFF)