The Medical Technology Industry in Germany

Medical Technology for the World
German medical technology is one of the mainstays of the global health care sector. The third biggest medical technology products producer and medical services provider in the world (after the USA and Japan), Germany is also the largest market and leading location in Europe. The reasons for this include the innovative strength of the small and medium-sized company sector, a sound capital base, and a constant level of demand within the global health care sector. Thanks to global megatrends including demographic change and the fast pace of technological development, the world market for medical technologies currently totals in the region of more than EUR 220 billion per year – a figure which is increasing all the time.

Innovative Market Environment
Medical technology companies located in Germany operate in a highly favorable technical and economic environment. In terms of new patent registrations, German manufacturers currently lie second behind the USA, making Germany Europe’s strongest medical technology location. German medical technology producers generate approximately one third of their turnover from products that are less than three years on the market.

Stable Industry Growth
The German medical technology industry is a high-tech sector with high levels of innovation. The industry is best characterized by its small and medium-sized company structure with a strong export character. In 2011, the approximately 1,200 manufacturers in the medical technology industry generated total turnover of EUR 21.4 billion. This represents an increase of nearly seven percent on the previous year’s results. For 2012, the SPECTARIS industry association has forecast a medical technology industry growth rate of four percent.

Export Base Germany
Medical technology “Made in Germany” is in high demand around the world. In 2011, approximately two thirds of total industry turnover was generated abroad, resulting in an 11 percent foreign turnover increase [EUR 14.2 billion]. Although the USA is the primary target market and demand from China continues to grow, the European market remains an important cornerstone of German medical technology exports. Domestic demand is also strong. Strong domestic results in 2009 spared the sector from the worst decrease in turnover effects felt elsewhere during the global financial crisis. The “Health - Made in Germany” export initiative has also been set up to help companies enter new markets.
Cutting-Edge Medical Technology in Germany

Germany is home to a thriving network of medical technology companies. Highly interdisciplinary and research oriented in nature, the medical technology sector is characterized by a thriving small and medium-sized company sector. These companies benefit from optimal conditions for fast knowledge transfer in leading-edge medical technology clusters made up of actors drawn from science and industry.

Medical Technology Companies in Germany 2012

Source: Bureau van Dijk (Markus database) 2012
Investment Opportunities

Research and Product Development

Germany’s medical technology industry enjoys a positive international reputation as a global innovative force. The approximately 1,250 companies (each with more than 20 employees) active in the medical technology sector invest around nine percent of their turnover in R&D. Around 15 percent of all employees in this industry work in R&D. The medical technology industry R&D landscape is best exemplified by its close cooperation between the worlds of science and industry, i.e. publicly funded R&D institutes, equipment manufacturers, and a plethora of in-house R&D facilities. This helps Germany maintain an internationally unparalleled competitive edge. Besides its outstanding engineering capabilities, Germany is the place to branch out into new technologies and product divisions.

Public R&D Funding Options

R&D projects can count on numerous types of public financial support in the form of grants, interest-reduced loans, and special partnership programs, some especially created for SMEs. The Central Innovation Program SME (ZIM) set up by the Federal Ministry of Economics and Technology (BMWi) supports companies in continuing to advance their research and innovation efforts, and develop new products, processes and services, in order to meet the challenges of global competition. This funding program has no thematic restrictions. Total grants available through 2014 amount to roughly half a billion euro. All investors, regardless of country of origin, have access to attractive R&D incentives.

Central Innovation Program SME: Best Practice Example

A New Running Experience - Adaptive Joints for Knee and Foot Prostheses

One cooperative project received over half a million euro in funding over a two-year period for the development of new adaptive joints for knee and foot prostheses through the Central Innovation Program SME. Participants included the Institute of Composite Structures and Adaptive Systems of the German Aerospace Center (www.dlr.de/fa/) and the Faculty for Electronics, Informatics and Mathematics of the University Paderborn (www.eim.uni-paderborn.de) as well as iXtronixs GmbH (www.ixtronics.com) from Paderborn and OTW Orthopädiertechnik Winkler GmbH (www.winkler-ot.com) from Minden. This project resulted in new prosthesis product promoting the natural and effort-saving motion sequence of the users. By implementing this cooperation project all partners were able to create a unique selling proposition for the developed product and therefore open worldwide markets with significant positive impacts on their sales and human resource development. In addition it led to the formation of the HAPS Technology GmbH, which currently is setting up a high tech production line for lightweight and biomechatronic elements in Paderborn.

Profiting from Innovation Clusters

A 2011 study carried out by the German Institute of Economic Research (DIW) found that no other industrialized country produces a larger share of gross value added in research-intensive manufacturing industries than Germany. One reason for this can be found in the very close cooperation between institutional research facilities and the industry - providing an efficient way to close knowledge gaps and outsource costly research activities. Scientists can be easily integrated into the company team of developers and researchers and, increasingly, institutes provide for the necessary laboratory facilities. This eases the access of developing new products and decreases research and development costs. Numerous spin-offs underline the ability of German research organizations to capitalize on new technology.
Investment Climate

Medical Technology Infrastructure Advantages

The German medical technology sector is largely made up of small and medium-sized enterprises. Ninety-seven percent of all medical technology firms in Germany employ less than 500 employees and 20 percent of all employees work in businesses with less than 50 employees. The big companies with more than 500 employees account for roughly 60 percent of total turnover in this sector. The smallest companies (less than 50 employees) account for around seven percent of total turnover.

Thriving SME Sector

With an average of 101 employees per company, the medical technology industry is typically more small and medium scale than German industry by and large - with an average employee number of around 133 in 2011. Based on the number of companies, sales, and total employment, it is a smaller industry within the manufacturing industry - but has developed in dynamic fashion. In marked contrast to the overall manufacturing sector which has seen employment levels decline over the past decade, the medical technology industry workforce continues to grow constantly.

World-Class Education Standards

Germany’s world-class education system ensures that the highest standards are always met. Eighty-three percent of the German population have been trained to university entrance level or possess a recognized vocational qualification. The country’s dual education system – unique in combining the benefits of classroom-based and on-the-job training over a period of two to three years – is specifically geared to meet industry needs. The German Chambers of Industry and Commerce (IHK) ensure that exacting standards are adhered to; guaranteeing the quality of training provided across the country. Germany provides direct access to a highly qualified and flexible labor pool to meet industry needs whilst ensuring that skilled and unskilled workers are well prepared for the workplace.

Academic Excellence

Academic training in the medical technology sector in Germany is of the highest degree. In order to maintain and enhance the country’s excellent medical technology production as well as R&D standards, key skills in engineering and natural sciences – and especially in information technology – are taught in medical technology training.

Numerous interdisciplinary courses for the training of medical technicians exist. Having obtained a vocational qualification in the metal or electrical industry, it is possible to gain further qualifications in medical technology. A number of universities also offer advanced courses as a supplement to the traditional technical fields of study. In the universities of applied sciences there are even several separate programs in biomedical and clinical engineering.

Leading-Edge Clusters

Launched in 2007, the Leading-Edge Cluster Competition has been created to put Germany top of the world’s league of technologically advanced nations. The German innovation landscape is best characterized by close cooperation between the worlds of science and industry in “leading-edge clusters.” These are industry or technology-specific networks or competence centers which cover the complete R&D and production chain at one site. Innovative products and services for optimal health care are being developed at the Medical Valley EMN in Nuremberg. Cluster partners already occupy globally leading positions in a number of medical technology product categories.
Stable Investment Conditions for International Investors

In economically challenging times, a safe and attractive investment like medical technology proves particularly attractive to investors. As a comparatively low-risk investment, the medical industry requires stable policy frameworks and sufficient legal stability. Germany is world renowned for its highly developed economic, legal and political frameworks which provide investors – in all industry sectors – with the necessary security for their business investments.

Open and Transparent Markets
German law generally makes no distinction between German and foreign nationals regarding investments, available incentives or the establishment of companies. The legal framework for foreign direct investment in Germany favors the principle of freedom of foreign trade and payment. There are no restrictions or barriers to capital transactions or currency transfers, real estate purchases, repatriation of profits, or access to foreign exchanges.

Internationally Competitive Tax Conditions
Germany offers one of the most competitive tax systems of the big industrialized countries. For corporations the average overall tax burden is just below 30 percent. Significantly lower rates are available in certain German municipalities – up to eight percent less. The overall corporate tax burden can therefore be as low as 22.83 percent. Moreover, Germany provides an extensive network of double taxation agreements (DTA) ensuring that double taxation is ruled out, e.g. when dividends are transferred from a German subsidiary company to the foreign parent company.

Reliable Logistics Infrastructure
Germany’s infrastructure excellence is confirmed by a number of recent studies including the Swiss IMD’s World Competitiveness Yearbook and various UNCTAD investor surveys. The 2012-2013 Global Competitiveness Report of the World Economic Forum (WEF) ranked Germany first in Europe and third worldwide for infrastructure; singling out Germany’s extensive and efficient infrastructure for highly efficient transportation of goods and passengers for special praise.

Labor Cost Growth in Total Economy 2002-2011 (annual average growth in percent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Growth (2002-2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1.6%</td>
</tr>
<tr>
<td>France</td>
<td>2.4%</td>
</tr>
<tr>
<td>Austria</td>
<td>3.0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.1%</td>
</tr>
<tr>
<td>Spain</td>
<td>3.3%</td>
</tr>
<tr>
<td>UK</td>
<td>3.7%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>5.7%</td>
</tr>
<tr>
<td>Poland</td>
<td>5.8%</td>
</tr>
<tr>
<td>Hungary</td>
<td>7.2%</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Source: Eurostat 2012

Stable Labor Costs
High productivity rates and steady wage levels make Germany an extremely attractive investment location. Labor cost increase levels have been the lowest in Europe in recent years. Since 2002, wages have risen in most European countries (EU-27). While some countries – particularly those in eastern Europe – experienced a rise of more than seven percent, Germany recorded the lowest labor cost growth within the EU at just 1.6 percent. German productivity rates are more than five percent greater than the average of the EU’s 15 core national economies, and more than one quarter higher than the OECD average. Highly flexible working practices such as fixed-term contracts, shift systems, and 24/7 operating permits contribute to enhance Germany’s international competitiveness as a suitable investment location for internationally active businesses.
Germany Trade & Invest

Germany Trade & Invest is the foreign trade and inward investment agency of the Federal Republic of Germany. The organization advises and supports foreign companies seeking to expand into the German market, and assists companies established in Germany looking to enter foreign markets. Germany Trade & Invest’s teams of industry experts will assist foreign companies in setting up operations in Germany. The company supports all project management activities from the earliest stages of expansion strategy on. All inquiries relating to Germany as a business location are treated confidentially. All investment services and related publications are free of charge.

"Health – Made in Germany" Export Initiative

The “Health – Made in Germany” export initiative is where partners from abroad should look first to discover how they can gain access to and benefit from Germany’s long commitment to innovation, quality and reliability in health care sector. The Federal Ministry for Economics and Technology (BMWi) initiative bundles key information and provides vital business contacts for new and fruitful cooperation. www.health-made-in-germany.com

SPECTARIS

SPECTARIS is the German industry association for the high-tech medium-sized business sector and representative body in the areas of medical technology, optical technologies and analytical, biological, laboratory, and ophthalmic devices. In the medical technologies sector, SPECTARIS represents around 150 German capital goods and auxiliary aid companies who mostly produce high-tech products and have a pronounced export orientation. www.spectaris.de

Imprint

Publisher
Germany Trade and Invest
Gesellschaft für Außenwirtschaft und Standortmarketing mbH
Friedrichstraße 60
10117 Berlin
Germany
T. +49 (0)30 200 099-555
F. +49 (0)30 200 099-999
invest@gtai.com
www.gtai.com

Executive Board
Dr. Benno Bunse, Chairman/CEO
Dr. Jürgen Friedrich, CEO

Author
Dr. Sandra Bütow, Manager, Chemicals & Healthcare, Germany Trade & Invest, sandra.buetow@gtai.com

Editor
William MacDougall

Layout
Germany Trade & Invest

Print
CDS Chudeck-Druck-Service, Bornheim-Sechtem

Support

Notes
©Germany Trade & Invest, October 2012
All market data provided is based on the most current market information available at the time of publication. Germany Trade & Invest accepts no liability for the actuality, accuracy, or completeness of the information provided.

Order Number
17410