

A photograph of three surgeons in an operating room. They are wearing blue scrubs, blue surgical masks, and green hairnets. The central surgeon is also wearing glasses and green gloves, and is holding a surgical instrument. The background shows the sterile environment of an operating room with white walls and ceiling lights.

MEDICAL TECHNOLOGY CLUSTER

**WELCOME TO YOUR
FAST TRACK TO EUROPE**

MANNHHEIM IS READY FOR ONE
OF THE FASTEST GROWING INDUSTRIES
WORLDWIDE.

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MEDICAL TECHNOLOGY CLUSTER

WELCOME TO MANNHEIM.
WELCOME TO YOUR FAST TRACK TO EUROPE.

MANNHEIM and the region have become one of the Medical Technology and Biotechnology hotspots across Europe. MANNHEIM provides a unique commercial, clinical, skilled labour and research opportunity to medical device companies expanding in Europe, while providing you safety in numbers.

GET CONNECTED!

People buy from people. Being able to easily visit your customers, business partners or affiliates for personal meetings is a key to your success. Located at the core of Europe, MANNHEIM provides an optimal hub for time-saving and efficient business travel.

MANNHEIM Main Station includes one of the most frequent ICE high-speed train connections to all major cities every hour. Get e.g. to **Munich by rail in 2:58hrs**, and get to **Paris by rail in just 3:09hrs**.

This includes a direct **31-minutes ICE high-speed train connection to Frankfurt Airport** Terminal 1, a worldwide hub for direct flights to EMEA, US, ASPAC and ROW destinations.

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Dr. Elmar Bourdon



COMMERCIAL OPPORTUNITY

YOUR FAST TRACK TO MEDICAL DEVICE INDUSTRY PARTNERS AND RESOURCES

MANNHEIM provides access to a large variety of MedTech partners right in MANNHEIM and one hour car drive around. The following list presents just a small sample. Beyond, there is a broad landscape of potential MedTech manufacturing partners, mostly highly innovative specialized SMEs.

MANNHEIM: quick access to a broad environment of global medical device industry partners that can help you leverage your own resources and capabilities.

Abbott, Bausch & Lomb Medical, BD, C.R. Bard, Dentsply Implants, Dfine Europe, Fresenius Medical Care, GE Healthcare, Heraeus Medical, Johnson & Johnson DePuy, Roche Diagnostics, Siemens Healthcare, Sirona, St. Jude, Terumo

■ **For a complete list of companies visit:**

www.medtech-mannheim.de/en/medical-technology-industry



RESEARCH OPPORTUNITY

YOUR FAST TRACK TO A POWERFUL R&D ECOSYSTEM

MANNHEIM provides access to a powerful ecosystem of collaborative clinical research and product R&D:

- Central Institute of Mental Health
- European Laboratory for Molecular Biology EMBL
- Fraunhofer Group for Automation in Medical Engineering and Bioengineering
- Freudenberg New Technologies GmbH
- German Cancer Research Center DKFZ
- Heidelberg University Medical Center
- Institute of Medical Technology Mannheim
- Mannheim University Medical Center
- Mannheim University of Applied Sciences
- Max-Planck-Institute for Medical Research
- National Tumor Center NCT
- Roche Diagnostics Research Center Mannheim

YOUR FAST TRACK TO CLINICAL RESEARCH ORGANISATIONS

Deep therapeutic knowledge and understanding of clinical development drives more efficient pathways to commercialization. Whether you are conducting a clinical study or are managing a product life-cycle, MANNHEIM includes CROs dedicated to support you. The following shortlist presents just a sample of CROs in MANNHEIM:

- AMS Advanced Medical Services
- CONET Clinical Operations Network
- CRS Clinical Research Services Andernach
- FORIM
- IST Clinical Research
- KKS coordination center for clinical studies
- PharmaLex
- PRA International
- QUINTILES Innovex
- Scope International

YOUR FAST TRACK TO PHYSICIAN TRAINING

Physician training is key to launching medical devices, and to drive adoption and diffusion of new medical technologies. The MANNHEIM medical technology cluster provides you quick access to simulator centers dedicated to physician training in surgical and transcatheter therapies:

- CatHi Simulator Training Center
- CardioSkills Simulator Training Center
- VRmagic Eyesi Simulator Training Center

CLINICAL OPPORTUNITY

YOUR FAST TRACK TO KEY OPINION LEADERS



MANNHEIM provides you quick access to key opinion leaders in high-volume centers **in MANNHEIM City and 10 miles around:**

- Mannheim University Hospital (1,400 beds)
- Mannheim Theresien-Hospital & St. Hedwig (660 beds)
- Mannheim/Speyer Diakonie Hospital (540 & 440 beds)
- Ludwigshafen Hospital (940 beds)
- BG Ludwigshafen Trauma Surgery Center (450 beds)
- Heidelberg University Hospital (1,700 beds)

■ **For further information visit:**
www.medtech-mannheim.de/en/research-clinics

SKILLED LABOUR OPPORTUNITY & ACCESS TO EXPERTS

YOUR FAST TRACK TO TALENTS & PROFESSIONALS

MANNHEIM provides quick access to leading academic institutions dedicated to providing a ready pool of graduates for medical device R&D, operations, supply chain, QA, regulatory, marketing, sales and distribution:

- University of Applied Science (Medical Engineering)
- Medical Faculty Mannheim of Heidelberg University (Medicine)
- Mannheim University (Business)
- DHBW Cooperative State University (Electrical/Medical Engineering, Business)
- Graduate School RN (Life Science & Healthcare Management)
- University of Applied Management Studies (Business)
- Vocational colleges for nurses and nurse-technicians



SKILLED LABOUR OPPORTUNITY & ACCESS TO EXPERTS

YOUR FAST TRACK TO DEDICATED MEDTECH EXPERTS

MANNHEIM provides direct access to a dedicated group of experts that offer specific consulting services to address the key challenges of medical device start-ups and SMEs in four critical areas. Start-ups and SMEs based in MANNHEIM can apply for subsidies for using those consulting services.

EXPERT GROUP

Units	Key Challenges
I Unit for Disease State Clinical Advisory	<div><div></div>No or suboptimal real-time validation of product development steps in clinical routine practice</div>
II Unit for Market Access and Health Technology Assessment	<div><div></div>No or suboptimal regulatory market access and/or access to reimbursement</div> <div><div></div>No health technology assessment</div>
III Unit for Market Research, internat. Out-Licensing, and Continuing Education	<div><div></div>No or suboptimal design-to-cost/ market assessment</div> <div><div></div>Gap in distribution & market penetration</div> <div><div></div>Gap in planning and decision-making skills</div>
IV Unit for Technology Transfer and Public-Private-Academic Collaboration	<div><div></div>Gap in technology transfer</div> <div><div></div>Gap in own R&D resources</div>

■ For further information visit:
www.medtech-mannheim.de/en/pilot-incubator

SERVICES FOR YOU IN MANNHEIM

READY-TO-GO SALES OFFICE IN MANNHEIM

The initial set-up of your German/EU direct sales organization may present a significant challenge to both, your P&L as well as your risk profile and management resources.

When setting up your German/EU direct sales affiliate in MANNHEIM, you will be able to address those challenges using the Ready-to-go Sales Office: Just hire your own local sales organization, and focus 100% on customers & taking market share. The Ready-to-go Sales Office may take care of the rest, i.e.:

- Regulatory/legal status of „Inverkehrbringer von Medizinprodukten durch Herstellung oder Einfuhr“ acc. to German medical device law MPG
- Customer service/order taking
- Local warehouse
- Order processing
- Consignment stock management
- Shelf life management
- Local recall management
- Invoicing
- Accounts receivables management
- Accounting, forecasting, reporting



The Ready-to-go Sales Office team provides experience in partnering with US medical device companies, and understands your standards of performance, reporting, forecasting and business code of conduct.

You may be charged for this service according to actual workload/sales. Thus, you will be able to keep your dedicated & allocated commercial cost as well as your overhead staff in this critical stage of your business low.

Once established in the market, you may either continue in this Ready-to-go Sales Office mode or build your own resources, and transfer this service in a controlled fashion.

SERVICES FOR YOU IN MANNHEIM

■ **Example:**
Cover customer service, warehouse, shipping, etc., 500 – 3000 shipments, weight 3 pounds per unit, size 15x15x5 inches, sterile medical device disposable with expiry date.

Customer Service	Prices
Single costs of IT-Software installation (Phone, Mails, etc.)	on account
Order Processing, Invoicing	7,50 EUR/ approx. 15 min./ per order
Complaints Management	30.00 EUR/ h after expenses
Office usage fee: approx.	250.00 EUR/ per month
Material costs	on account
Accounting	40.00 EUR/ h after expenses
handling fee per package	5,00 EUR

- Warehouse Services**
- Receipt of goods
 - Storage of the products in our certified warehouse (referring to manufacturing rules)
 - As needed, we will arrange shipping to the European distributor or customer
 - Backtracking of batches, as well as documentation
 - Checking of expiration dates
 - Insurances (extra sale on account!)
 - Package will be charged on actual costs
 - Packaging material on account

We can offer:
10 EUR/ month per sqm
5 EUR handling fee/ package

■ **For further information visit:**
www.medtech-mannheim.de/en/ready-go-sales-office-o

OPTIMAL ACCOUNT TARGETING IN MANNHEIM



When setting up your legal entity in MANNHEIM you will be provided with a tailored starter-package that includes:

- Contacts of TOP-50 German in-patient accounts ranked by procedural volume of your targeted disease/therapy
- Contacts of TOP-20 German Key Opinion Leaders of your targeted disease/therapy
- Contacts of TOP-20 German Group Purchase Organisations (control up to 80% of hospital sales)

FINANCIAL PERFORMANCE AND COMPLIANCE IN MANNHEIM

Financial performance and compliance according to international standards present key metrics for managing your business. Four worldwide leaders in business & strategy consulting run offices in MANNHEIM City, and provide business consulting, finance, taxation, accounting, and expat payroll services to you on site:

- Ernst & Young
- Deloitte
- KPMG
- PriceWaterhouseCoopers

ALLIANCES FOR STRATEGIC RECRUITING

People make the difference. We provide you advice on suitable recruiting profiles for your sales and marketing organization (farmers vs hunters, rep vs clinical, talents vs pros). Moreover, we maintain strategic alliances with leading recruiters specialized in the medical device industry.

■ **For our strategic recruiting partners visit:**
www.medtech-mannheim.de/en/strategic-recruiting



Advancing Medical Technology:
Professor Diehl and his Interventional
Radiology team at the University
Medical Center Mannheim.

SAFETY IN NUMBERS

Beyond achieving net sales growth, today's medical device market environment requires solid management of both, your gross profit from operations, and your income from customers. Located in the MANNHEIM medical technology cluster, you are able to benefit from competitive labour cost and taxation schemes that help you drive bottom line growth.

COMPETITIVE LOCAL BUSINESS TAX

Local Business Tax is charged by all territorial authorities. Its key indicator forms the so-called Gewerbesteuer-Hebesatz %.

LOCAL BUSINESS TAX COMPARISON FOR MAJOR GERMAN COMMERCIAL AREAS 2013

		in %
Berlin		410
Mannheim		430
Duesseldorf		440
Frankfurt		460
Hamburg		470
Cologne		475
Munich		490

Source: Federal Chamber of Commerce: Realsteuer Hebesätze 2013

COMPETITIVE CORPORATE INCOME TAX

The Corporate Income Tax does not include other taxes, like local business tax and other comparable taxes of federal and territorial authorities.

CORPORATE INCOME TAX COMPARISON OF EUROPEAN INDUSTRIAL COUNTRIES 2012

		Standard tax rates in %
Germany		15.0
United Kingdom		24.0
The Netherlands		25.0
Italy		27.5
Belgium		33.0
France		33.3

Source: Federal Ministry of Finance: Wichtigste Steuern im Vergleich, 2012

COMPETITIVE COMPANY TAX

The Company Tax includes business tax, corporate income tax and other comparable taxes of federal and territorial authorities.

COMPANY TAX COMPARISON OF EUROPEAN INDUSTRIAL COUNTRIES 2012

		Tax burden of incorporated companies (nominal) in %
United Kingdom		24.00
The Netherlands		25.00
Germany		29.83
Italy		31.40
Belgium		33.99
France		36.10

Source: Federal Ministry of Finance: Wichtigste Steuern im Vergleich, 2012

YOUR FAST TRACK TO EMERGING MARKETS

Germany has always been a natural gateway to emerging markets in Eastern Europe, particularly following the German reunification in 1990.

Benefit from established political and commercial relationships facilitating your access to emerging markets in Poland, Russia, Czech Republic, Hungary, Turkey, Slovakia, Romania, and the Baltics.

In 2011, German exports to Eastern Europe increased to 17%, worth 172 billion Euro.

COUNTRIES IN EASTERN EUROPE AMONG GERMANY'S TOP 25 EXPORT TRADING PARTNERS:

Ranking¹	Exports in billion Euro¹	Increase since 2010²
10. Poland	43.47	+27%
12. Russia	34.40	+28%
13. Czech Republic	30.63	+17%
15. Turkey	20.14	+31%
16. Hungary	15.70	+21%
22. Slovakia	10.34	+34%
23. Romania	8.80	+16%

¹Federal Office of Statistics: Rangfolge Handelspartner, 2011; ²Germany Trade & Invest, 2011

SAFETY IN NUMBERS

COMPETITIVE LABOUR COST

Germany offers a favourable overall labour cost development when compared to other major geographies in Europe.

The EU Labour Cost Index includes salaries, social insurance charges for employers and labour-related tax deducting labour-related subsidies.

EU LABOUR COST INDEX Q2/2012

		Index
UK		104.5
Germany		107.4
The Netherlands		107.4
Italy		108.2
France		112.2

Source: Eurostat Statistical office of the European Union: Labour Cost, 2012

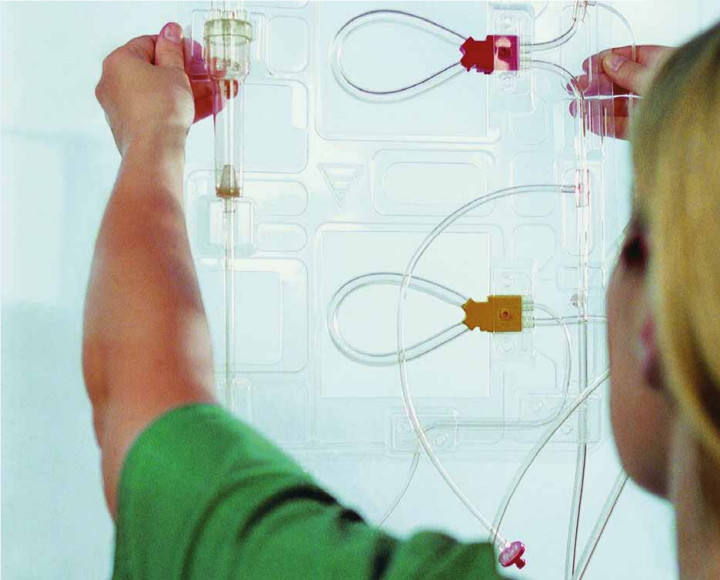
ADDITIONAL EMPLOYMENT COST

Charges for obligatory social and health insurance schemes are shared almost equally by both, employee and employer. The absolute EUR amount of such a charge is calculated as a %-rate of the employee's base salary.

ADDITIONAL EMPLOYMENT COSTS FOR OBLIGATORY SOCIAL & HEALTH INSURANCE SCHEMES

	% of base salary paid by employee	% of base salary paid by employer
Retirement fund	9.45	9.45
Statutory Health Insurance	7.3	8.2
Unemployment Insurance	1.5	1.5
Aging Care Insurance	1.025	1.025

OTHER COSTS/FRINGE BENEFITS FOR THE EMPLOYEES



- Beyond their base salary, MedTech reps and senior professionals that are eligible for a company car may expect private use (car & fuel) of their company car
- MedTech employees would expect 30 days/year vacation, while the legal minimum required is 24 days/year.
- MedTech employees would expect holiday pay and Christmas bonus. In total, both benefits together usually amount to approx. 50% of a monthly salary, in few cases up to 100% of a monthly salary.

EMPLOYMENT PRACTICE

- A six-month probation period is an established practice.
- Temporary employment contracts are legally possible, and can be prolonged consecutively up to three times for a total period of up to two years if necessary. However, MedTech talents & professionals would definitely expect a regular continuous employment contract.
- While the German labour law environment might be considered restrictive vs, for instance, the US labour law, offboarding can be managed. However, such an offboarding process needs to be conducted in appropriate, consecutive and well-documented steps.

FINANCIAL GOVERNMENT INCENTIVES IN MANNHEIM

FEDERAL GOVERNMENT INCENTIVES

There is a large variety of financial support programs, particularly for start-up companies and SMEs, ranging from research to commercialization. Potential access to these programs needs to be further evaluated on the basis of a case-specific analysis. Programs include, e.g.

■ ZIM:

Provides financial support for 25% to 55% of the company's actual R&D expenses (materials, staff, services, equipment), max. 350.000 EUR. Cooperating in your R&D project with another company or with an university increases access to this program, yet it's not a precondition to be eligible for ZIM.

■ INNOVATION VOUCHER B-Hightech:

Provides financial support for 50% of the company's actual R&D expenses (expert consultants, market assessment, prototyping, engineering services, equipment), max. 20.000 EUR.

■ SME INNOVATIVE – Medical Technology:

Provides financial support for 50% of the company's actual pre-competitive R&D expenses.

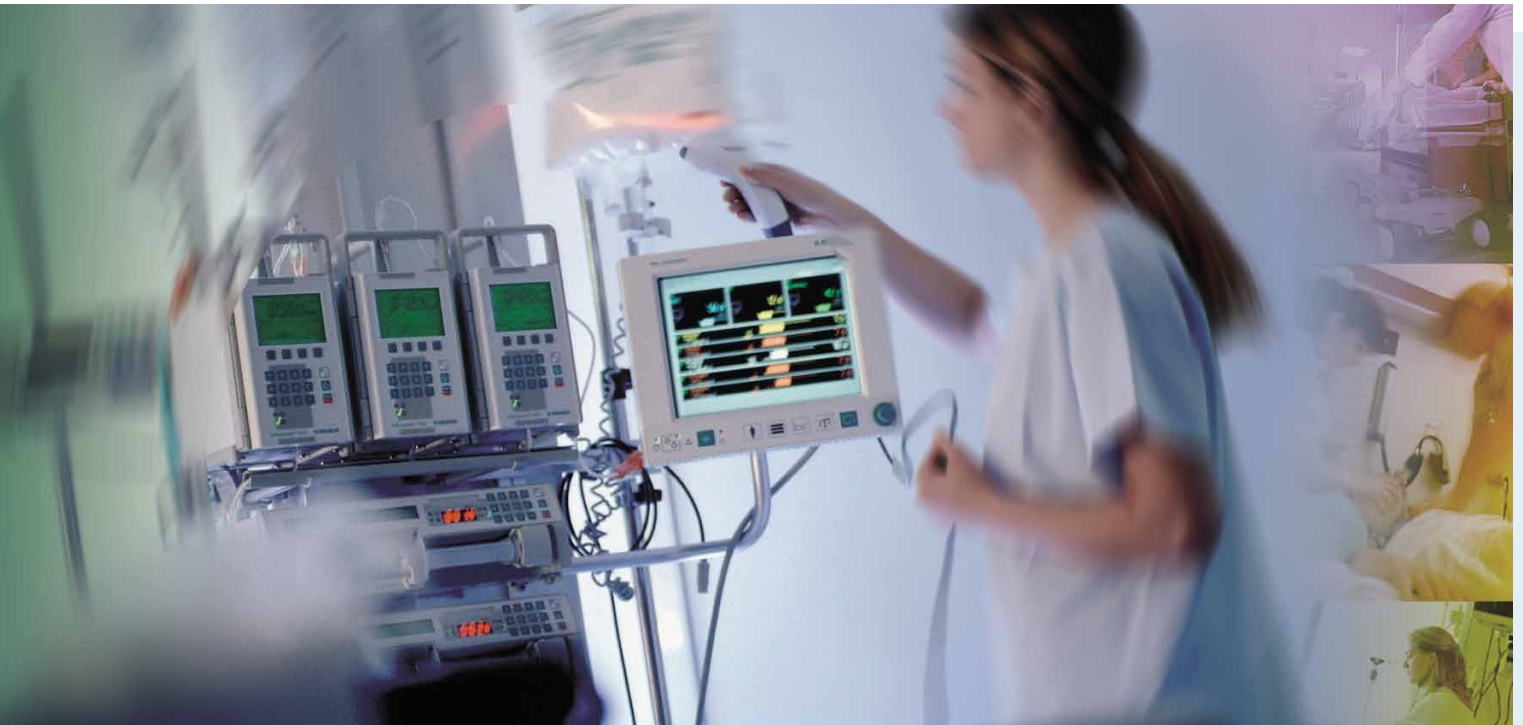
LOCAL GOVERNMENT INCENTIVES

■ Start-up incentive program KREATECH::

Provides financial support for 25% of a start-up's investment in hardware, software, equipment and labour cost, max. 20.000 EUR.

■ Optimal access to pre-seed/seed capital in MANNHEIM

The City of MANNHEIM provides a financial program to help bridge the critical venture capital gap in the pre-seed/seed stage until a medical device company/start-up is able to demonstrate sufficient clinical evidence or technological proof of concept to access the venture capital market. In this unique program, the City of MANNHEIM becomes a shareholder of the start-up with up to 200.000 EUR. The goal is to agree with the entrepreneur on an exit date where the entrepreneur is able to buy the City's shares out in order to allow the City to then re-invest this amount again as a shareholder in a new start-up.



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