

COGNIMED  
Engineering for People

A middle-aged man with short grey hair, wearing a dark suit, white shirt, and a patterned tie, is leaning on a wooden railing. He is looking off to the side with a thoughtful expression. The background is a blurred industrial structure with a grid of beams and panels.

Engineering

Which Reaches Further

A hand-drawn black line representing an ECG (heart rate) signal is shown against a light blue background. The line starts with a small peak, followed by a dip, then a sharp, tall peak, and then continues with several smaller, irregular waves.

for Medicine and Industry



## Put your engineering process in good hands

We act in a fast-paced, networked world. Nowadays, the success of a company depends on whether it can place its products on price-sensitive markets quicker than its competitors. This presents a constant challenge, particularly for manufacturers of products on which the user needs to be able to rely in every situation.

A key factor determining market – and therefore business – success is a professional product conceptualization and engineering process. Products must be developed quickly and cost-effectively, and deliver the desired functions with absolute reliability.

We engineer with people and their needs in mind. You and your customers are the central focus of everything we do. This is reflected in the fact that we are specialized in technical engineering in sensitive areas such as medical technology and aerospace technology. Our own range of medical technology products underlines our professionalism in our responsible and highly regulated engineering work.

For over 10 years, demanding partners have placed their trust in our engineering services. Our services, which include hardware and software, encompass the entire development cycle. We accompany you from an analysis of your requirements to the validation process, and on to the final production stage. Throughout, we keep your needs in mind, to ensure that your customers end up with an excellent product. So that you can smoothly incorporate the results of our work into your project and product documentation, we deliver not only the critically tested functionality, but also the necessary documentation, e.g. requirements specifications, test plans and test results.

Sometimes you will find the results of our work on the floor – as in the case of some medical devices. Other times, they are to be found several hundred kilometres up in the air, like when we provided technical advice for a spacecraft component.

All our employees contribute to our performance and quality, so we only recruit R&D staff who have at least one technical degree under their belts. Whatever job you have for us, the wide range of expertise and training of our staff means we can always provide the requisite specialist knowledge. For research-based projects, you will additionally profit from the good cooperation between CogniMed and the nearby universities and colleges of Lübeck. In many fields of business, legal requirements demand the maximum possible precision, conformity with standards, and documentation. We are happy to meet all your regulatory requirements, and have complied for many years with the strict demands of EN ISO 9001:2000 and EN ISO 13485:2003 (or their predecessors). Established and controlled engineering processes make sure that you can depend at all times on the quality of our work.

### Examples of engineering

- Sensors and microprocessor technology
- Analogue and digital electronics design in hardware and software
- PC software and human interface engineering
- Technical measurement solutions for end products, engineering and production issues



### Software

80% of the value of many projects is added by software, and software functionality has a major influence on the market worth and success of a product, so the different engineering methods and tools must be optimally employed to achieve the task in hand. We are just as familiar with requirements and configuration management as we are with different analysis and design methods, and are equally at home with real-time-capable multitasking systems, human interface-oriented applications, assembler dialects of the tiniest processors, and C, C++ and JAVA. We will be happy to support you with the software engineering of your embedded systems and the PCs which communicate with them. Whatever the requirements of your project may be – we look forward to meeting them.

### Hardware

There tends to be great pressure on the costs of hardware components. Every piece of hardware is tailor-made for its particular function. If you wish to measure particularly small or particularly quick signals, if communication between your products needs to be hardwired or wireless, or if you want to minimize manufacturing costs or power consumption, we can help you achieve your goals with analogue and digital hardware engineering. We then validate the systems for you and manufacture your prototypes or series products.

### Consulting

Companies these days must continuously optimize their performance if they are to achieve success in the face of global competition. We provide the expert help you need to determine the progress your engineering work has made so far, and to allow you to follow new approaches if necessary in order to maximize the efficiency of your engineering department and minimize "friction losses" and problems associated with the introduction of new methods and technologies in the product engineering process. Talk to us about

- improving engineering processes
- introducing new engineering methods or technologies
- the importance of and compliance with regulatory requirements for medical technology
- creating measurement solutions for end products and engineering and production issues

German industrial firms which are active primarily – though by no means exclusively – in the area of medical technology and aerospace, have come to value us as a reliable partner. We develop new products and enhance existing products on behalf of our partners, or provide our customers with advice throughout the engineering cycle.

"To secure market leadership as a globally active company, you need innovative and superior products. Time to market is another success factor. We work with CogniMed, a highly efficient partner which offers strong conceptualization capabilities thanks to its wide range of expertise, and creates hardware and software conforming to the relevant regulations for medical devices with the greatest of ease. Another aspect which sets CogniMed apart from its rivals is the punctuality we experience time after time."

Holger Panier – Development Manager at seca gmbh & co. kg., world market leader in medical weighing and measurement systems, based in Hamburg.

"The knowledge transfer from university to industry, as practised by CogniMed, receives the full support of the university. Because medical technology is one of the university's areas of specialization and its applicational relevance is always an important focus, close cooperation with local medical technology companies is extremely important to us. Our cooperation with CogniMed is exemplary."

Professor Dr. Stefan Bartels –  
Vice Chancellor of the Lübeck University of Applied Sciences

We will be happy to send you our brochure "The TM Series: Exercise in Motion" upon request.

## QUALITÄTS- MANAGEMENT

Wir sind zertifiziert

Regelmäßige freiwillige  
Überwachung nach ISO 9001:2000



## QUALITÄTS- MANAGEMENT

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Überwachung nach EN ISO 13485



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