




implantcast





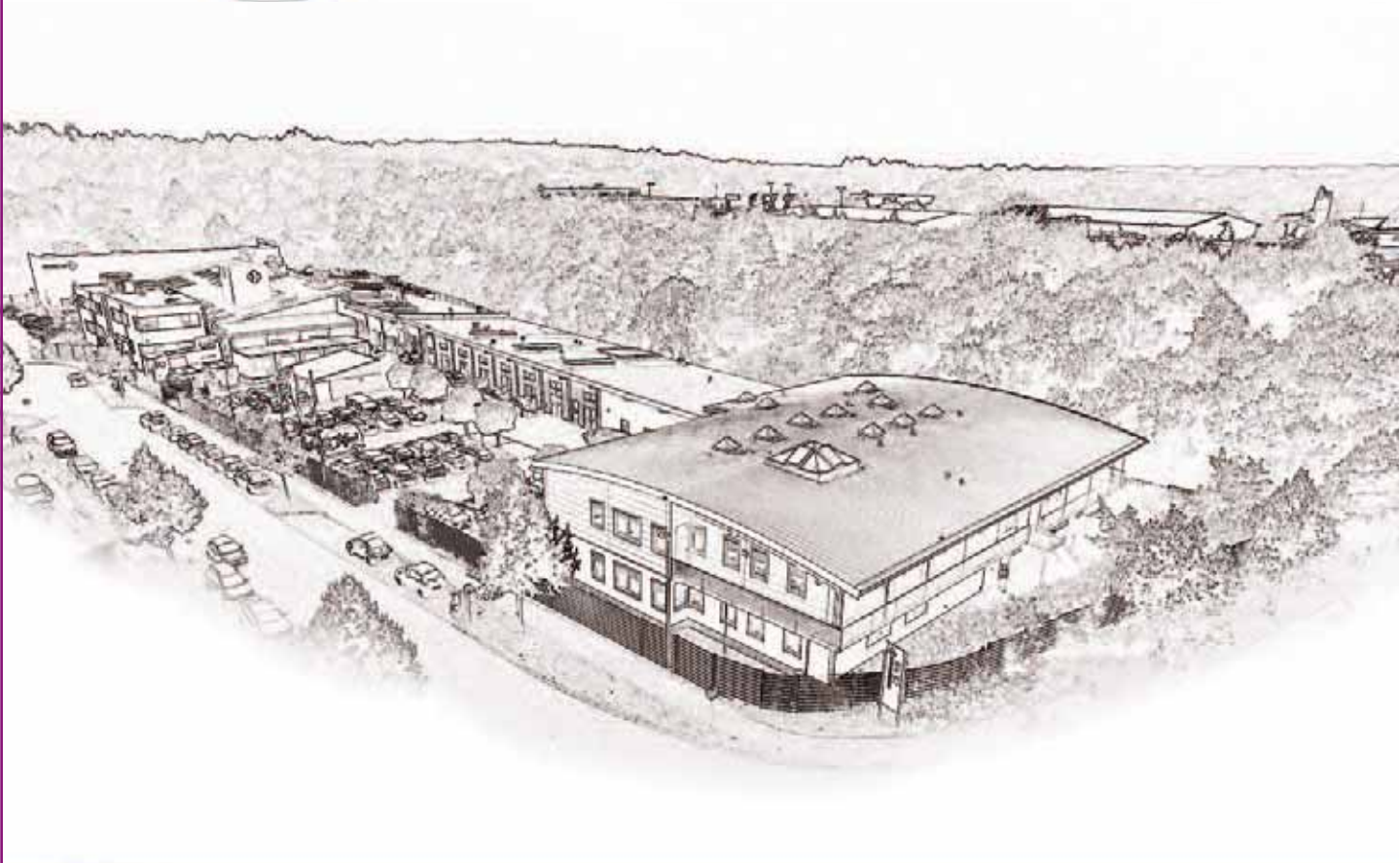
*Dear Ladies and Gentlemen,
since our founding in the
year 1988, implantcast
GmbH can look back on
many successful years.*

*Constant changes both with-
in the company and the
medical sector have
smoothed our path to date.
In the meantime implantcast
has become one of the most
important endoprosthesis
manufacturers in Germany.
Implantcast's success is
based on its qualified and
motivated employees, excel-
lent partners in hospitals, dili-
gence, inquisitiveness and
perhaps also a certain meas-
ure of obsession.*

*In the following pages, you
will read much concerning
products, technology,
machines and material.
However, these are all
dependent on people:
employees, development
partners, distributors and
users. Together, we strive
daily to ensure the health
and mobility of patients.*

*Jens Saß
CEO and shareholder
implantcast GmbH*

company
products
development
production
innovation
service
customized products
co-operation



The company building in Buxtehude, occupied in the year 1999, provides workplaces for more than 480 employees and accommodates both the administration as well as the production areas.

the company

implantcast GmbH, the company formed in 1988, is one of the specialists in its sector with regard to development, construction and production of joint replacements.

Its core competence lies in the manufacture of endoprotheses as functional joint replacements, specialist implants and customized products.

Constant investments in the location, highest quality „made in Germany“, qualified employees and its specialized services are the fundamental pillars of company success.

Due to co-operation with leading european hospitals amongst others the successful MUTARS® system has been constantly improved. It is the most frequently used tumor system in Europe.





The product portfolio of implantcast comprises the fields of primary, revision, tumor and special endoprosthetics.

our products

First class **quality** products, the **spirit of innovation**, large capacities and a high depth of manufacturing together with a constant willingness for **further development** are the characteristics which distinguish our products. Currently, more than 480 employees work at our location in Buxtehude. As a result of the close co-operation between national and international university hospitals with implantcast, new implant systems are constantly being developed. More than 90 products have been developed and established in the market since 2009. implantcast is market leader in the fields of revision, tumor and special endoprosthesis.



Our current product range comprises the following product groups:

- hip endoprosthesis
- knee endoprosthesis
- shoulder endoprosthesis
- elbow endoprosthesis
- endoprosthesis for small joints
- tumor endoprosthesis (MUTARS®)
- revision endoprosthesis
- special products
- navigation / instruments
- additional products



Take a walk with us...

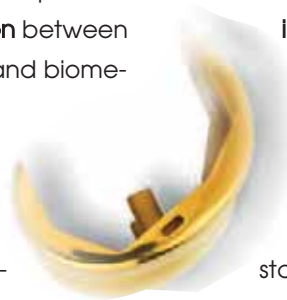
The implantcast team!
Together for the benefit of the patients.

improving the good, researching the new

The **development and construction** of implant systems is one of the core tasks. The requirements for new and **improved products** are specified in intensive **co-operation** between our engineers, users and biomechanics.

We employ most modern resources to transfer the **innovative ideas** into marketable products.

In addition to **computer-assisted development** and calculation of implants and instruments, the mechanical **testing** of newly developed components in **simulators** forms a part of our activities. The simulation of stresses and strains as close to reality as possible leads to insights which are directly incorporated into the development process.



Although today's endoprosthesis systems are configured modular and cover a wide range of sizes, there is a continuing **demand for individually planned implants.**

This particularly applies to the fields of revision or tumor prosthetics or cases where special anatomic circumstances preclude the use of standardized implants.

For such cases, implantcast offers a service of digital planning of implants designed optimally for the intended purpose in co-operation with doctors to produce these implants within a **short period of time.**

Many of these **customized products** inspire the development of new standard implants.

The desire to improve the good and research the new unites us in the field of R & D.





All manufacturing steps in our production are performed according to the most current national and international standards.

production & manufacturing



Manufacturing is the synonym for **willingness to perform, flexibility, high quality** and **economy**.

Precision casting was and still is one of our core competences. Highly qualified employees are involved in the production of more than **300,000 castings per year**. Our castings are manufactured by means of wax production, production of ceramic shells, dewaxing, and pouring into the two casting furnaces and subsequently they are subjected to vacuum heat treatment.

Further employees are responsible for manual processing and **finishing of endoprostheses** and their associated instruments. In this way, more than **120,000 knee implants, 110,000 hip prostheses** and a multitude of other endoprostheses are produced each year.

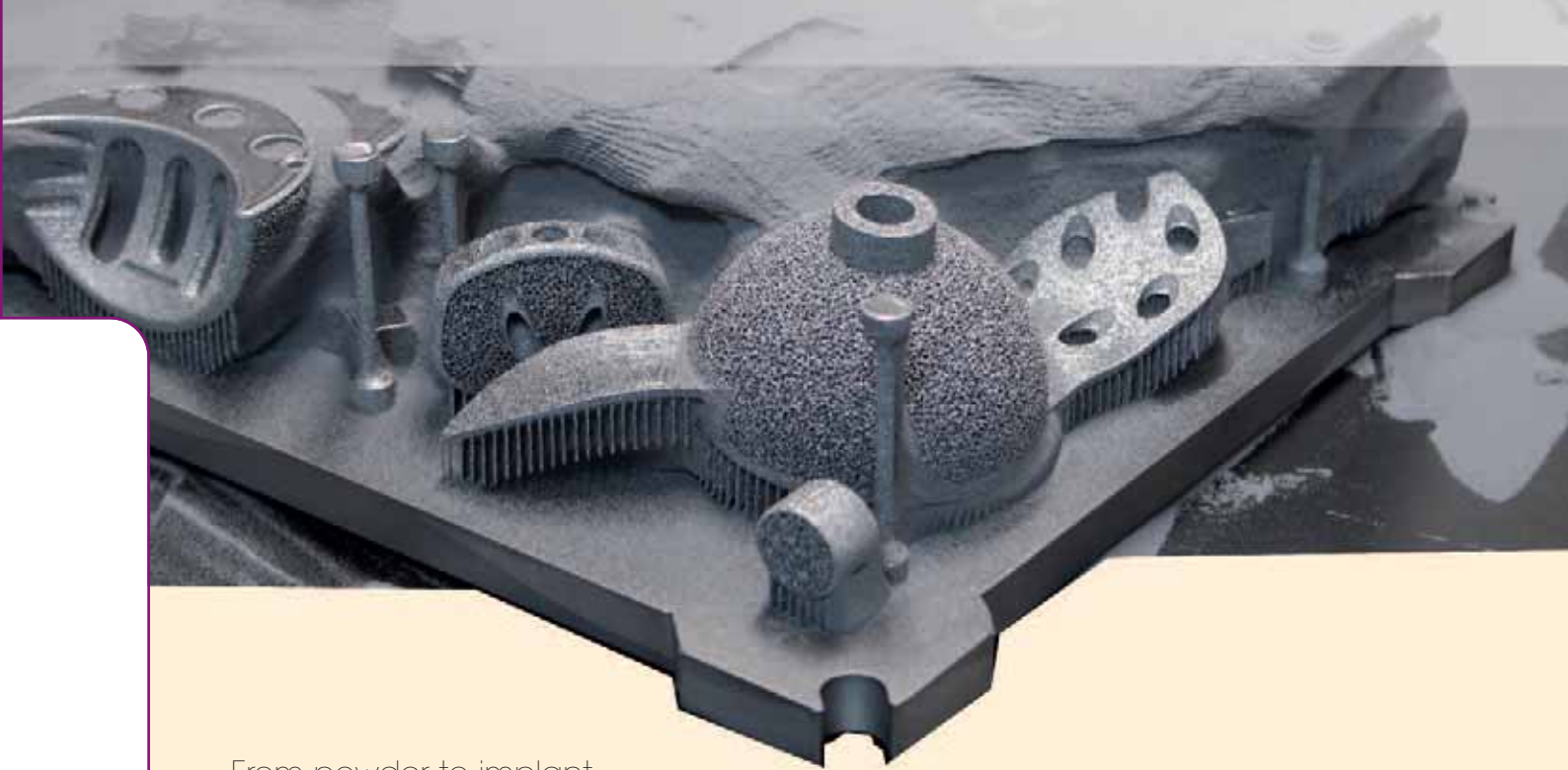
Our machining department with its modern equipment is responsible for **high precision CNC processing** of materials made of CoCrMo, titanium alloys, stainless steel and polyethylene.

Our **quality assurance** ensures compliance with the high quality demands.





EPORE®



From powder to implant
by additive manufacturing.

innovative technology



At implantcast the conventional manufacturing methods like precision casting and machining are complemented by **additive manufacturing** since 2014. This method is counted among one of the most innovative technologies of the beginning century. It allows manufacturing of extreme **complex structures and geometries**, which are only difficult or even not possible to manufacture with conventional manufacturing methods. Thus implants can be manufactured, which match exactly the anatomy of the patient.

Based on electronic 3D data an electron beam is applied, which builds up the structure / geometry of the implant component layer by layer **from powder**.

The additive manufactured **EPORE®-structure** of the implant components is a highly porous structure on the basis of titanium alloy. It has a very high similarity to bony structure, so that bone ingrowth into the implant is promoted.





We are at your side –
if you wish.

flexibility & service

The fundamental pillars of implantcast

In a market, in which highest quality for the good of the patient is self-evident for every manufacturer, it quickly becomes clear how important special service is.

Unique solutions become more and more important to ensure **quality of life of the patient as long as possible**. In order to fulfill this requirement we make every effort to turn every single case into a perfect solution and that immediately.

In the field of primary treatments we considerably equip hospitals, provide instructions for medical personnel and support the first surgeries to ensure a smooth process.

Experienced medical product consultants provide support for every user. It is important for us to satisfy individual wishes.



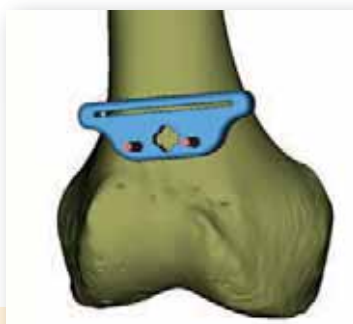
Thus, we modify instruments for example in order to comply with the individual surgeons' preferences.

CAD supported surgical planning is provided for each case on request. The teamwork between medical product consultant, construction department and conscientious order processing allows us to be responsive to almost every issue within 24 hours.



C-Fit 3F[®]

customized planning & production



Even for complex cases -
implantcast offers patient specific solutions beyond
the standard range of products.

custom-fit for the patient



C-Fit 3D® comprises the products of the individual endoprosthetics. In cases, which require a **special prosthesis**, the product range of implantcast GmbH offers a multitude of modular treatment options to be able to treat even complex revision cases in the short-term. Especially in the fields of revision and tumor endoprosthetics the demand for **patient specific implants** increases continuously. In such cases with large bone defects treatment with standard implants often is not possible.

implantcast is able to create 3D models of the joint from the high-resolution MRI or CT scans of the patient. By means of these models implants can be adapted and designed custom-fit to the particular anatomical situation of the individual patient.

Quickness and **service** play a prominent role when manufacturing customized prostheses. After **close collaboration and agreement of the physician** the implants and instruments are manufactured custom-made for the patient. The additive manufacturing technology is particularly favorable in this connection and it speeds up the manufacturing process tremendously.

Implantcast manufactures more than 350 patient specific implants and instruments per year with tendency to rise.





Buxtehude – worldwide
10 european branches and more than
65 international sales partners.

co-operations

Due to the worldwide sales network with over **65 international sales partners** implantcast products are no longer known only in Germany. implantcast is represented by **direct branches** in Italy, Poland, France, Greece, UK, Turkey, Switzerland, the Benelux countries as well as in Thailand and South Africa. In recent years the international orthopaedic market has experienced fundamental restructur-

ing, from which implantcast and its international partner companies have emerged stronger than before. The successful principle of the co-operating companies is the maintenance of their independence.

Today, endoprostheses made by implantcast are being implanted **on all continents**.

implantcast Polska

implantcast Suisse

implantcast Hellas

implantcast France

implantcast Italia

implantcast UK

implantcast Turkey

implantcast Benelux

implantcast Thailand

implantcast SA





implantcast GmbH
Lüneburger Schanze 26
21614 Buxtehude
Germany

Phone +49/4161 744-0
Fax +49/4161 744-200
Email info@implantcast.de
Internet www.implantcast.info