

Patient-specific implants made of titanium

Alongside our implant materials we also offer you patient specific implants made of titanium as a non-resorbable, highly stable metal alloy for long-term implantation.

Advantages of titanium

- » long-established implant material in numerous medical applications
- » excellent proven biocompatibility
- » the material's strength is very high, making it possible to design very thin implants
- » durable in aggressive pH conditions
- » sterilisation and resterilisation by means of steam sterilisation

Material

Titanium is a highly stable, dark grey material. Due to its high resilience, it cannot be modified intraoperatively with conventional tools.

Chemical composition

A Ti-6Al-4V metal alloy is used for our implants. In contrast to pure titanium, the metal alloy is not prone to abrasion. Titanium passivates automatically by the formation of a dense oxide layer on the surface.



Implant the future with 3di GmbH

We would like to present our products and services to you, as well as recommend ourselves as your partner for optimum medical care of your patients. We rely on the successful fusion of long standing experience with new ideas in order to provide you with innovative solutions in the shortest possible time. Our main products are patient-specific implants for the brain- and face-skull areas.

These patient-specific implants may be necessary after trauma, tumour surgeries, surgical access or for functional-aesthetic corrections, for example. For the fabrication of such implants, the company has developed its own procedure. This new procedure allows us to create implants which are custom-made for every patient.

The implant design is planned exclusively virtually. Afterwards the real implants are produced in our in-house production center. In consideration of the surgical-technical aspects it is therefore possible to create patient-specific implants in best time.

Advantages of the 3di method at a glance

- » Options between three different implant materials; price independent of the selected material
- » biocompatible und bioinert materials
- » swift production times
(3 to 5 work days, emergencies within 48 hours)
- » high precision of fit, high complexity structures possible
- » individual fixation options possible
- » intraoperatively machinable (PEEK, BIOVERIT®II)
- » treatment of one-stage surgeries (resection/implantation using a neuronavigation system and/or a template)
- » resterilisation of all three materials possible
- » customer focus and high service quality

The **main fields of application** of our implants are:

- » Neurosurgery
- » Casualty surgery
- » Tumour surgery
- » Plastic reconstruction and aesthetic surgery
- » Oral-maxillofacial surgery
- » ENT

We manufacture implants of following **materials**:

- » PEEK
- » BIOVERIT®II
- » Titanium



BIOVERIT®II/PEEK/Titanium