INDIVIDUAL REPLACEMENTS

The Art of
Technical Surgery

ProSpon

3D-PRINT CUSTOM MADE IMPLANTS ProSpon

ProSpon´s product range covers replacements of all major human joints (knee, hip, shoulder, elbow, ankle and wrist)

BENEFITS:

- Custom made implants.
- Unique manufacturing by 3D printing from the **titanium alloy Ti6Al4V ELI**.
- Surface treatment – coated with diamond-like carbon (**DLC**).
- Other possible materials used: stainless steel/ PEEK.
- Possibility to print a **3D plastic model** of a damaged bone.
- Fast process of creating a **Design Proposal** with pre-operational planning and production.
- **Doctor/Designer** consultation option for a flawless result.
- Implants for **oncology**.
- Implants for complicated fractures.
- Certified modular hip and knee system.

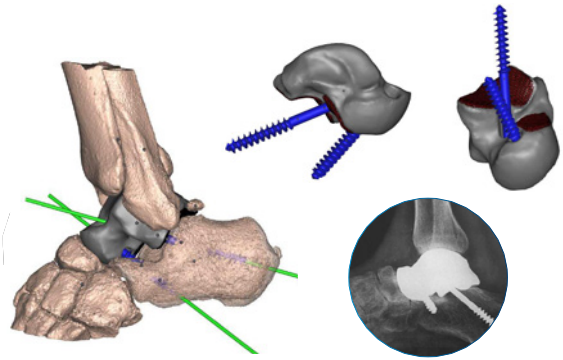
3D-PRINT CUSTOM MADE IMPLANTS ProSpon are produced for specific patients:

A) as **FULLY CUSTOM MADE** ProSpon's products covers replacements of all major human joints

B) as **INDIVIDUAL REPLACEMENTS** with possible connection to some parts of the serial production (e.g. hipball head)

- Production of a **computer 3D CAD model** and **Design Proposal** based on a provided X-ray or a Dicom CT/MRI data.
- Posibility to implement the **3D CAD models** and modelling of „clinical initial situation" e.g. the bone with the tumor or the originally implant.
- Manufacturing by **3D printing** from the **titanium alloy Ti6Al4V ELI**.
- Further used materials are polymers – **UHMWPE** (ISO 5834-2), **MOTIS** material (implantable carbon fibre filledplastic) and **Stainless Steel**.
- **DLC (diamond-like carbon) layer** is a specific surface treatment of the implant, that enhances the anti-allergenic and sliding properties.
- **PEEK** (polyether ether ketone) sliding parts have excellent strength parameters for maximal possible life.
- Blasting and Hydroxyapatite spraying of the shafts or annealing in a vacuum furnace.
- The materials used allow the magnetic resonance imaging without any limitations.
- **Production and delivery time** after confirming the final **order** and **design proposal** is from 1 week for the simplest products (e.g. hip stem) up to a maximum of 6 weeks for the complex individual replacements, delivered in sterile packaging.

Talus custom made Implant.



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