

Product information

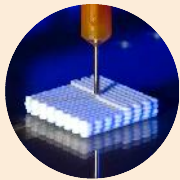
INNOTERE PSI

INNOTERE GmbH

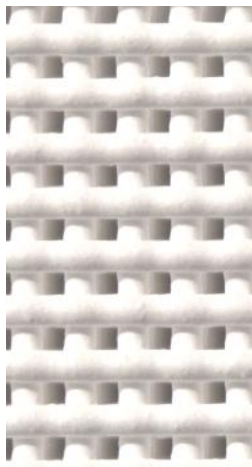
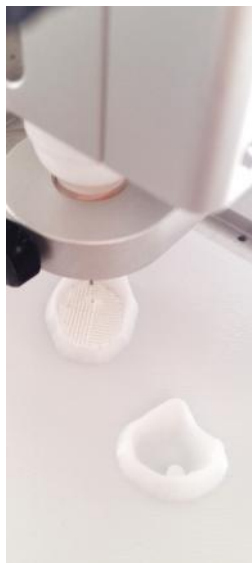
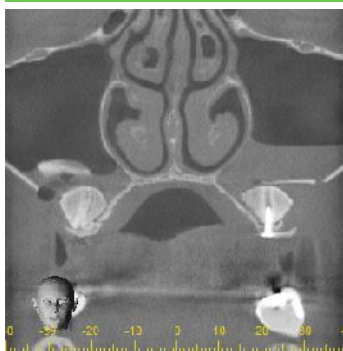
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3D printed patient specific implants made of calcium phosphate cement for bone substitution



INNOTERE offers a unique technology for the production of ready-to-use calcium phosphate cement. Based on this material, INNOTERE developed a process for the creation of patient specific scaffolds to the highest degree of precision by means of 3D printing.



- The process starts with the 3D design of the implant model based on patient's digital scan data
- Filling structure, anisotropy, and additional features like holes can be easily adapted
- The innovative 3D printing process enables printing of a large variety of shapes and a high degree of customisation.
- 3D printing of biocompatible support structures enables irregular shapes in all dimensions.
- The purely synthetic calcium phosphate cement mimics the composition of natural bone mineral.
- Main phases are α -tricalcium phosphate and microcrystalline, calcium-deficient hydroxyapatite.
- The high specific surface area and the interconnecting regular pore system promote rapid osteointegration.
- The cement is not heat-treated and resorbs in the course of natural bone remodeling.
- The high mineral density and characteristic structure result in good visibility in the X-ray image.
- Main areas of application include metaphyseal defect fractures, e.g. tibia, radius, humerus fractures; bone defects after resection of benign tumours and cysts; bone defects in oral and maxillofacial surgery; filling of spinal cages

Please contact us for more information or a personal quotation: research@innotere.de