

OUR RESULTS

PERFECT FUSION

Optimal osteointegration thanks to the thin layer Titanium coating

OPTIMAL MECHANICAL PROPERTIES

The PEEK core provides a lower elastic modulus than Titanium.

STRESS RESISTANCE

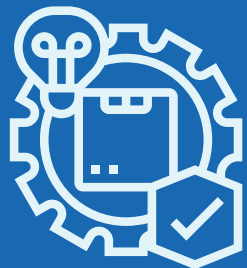
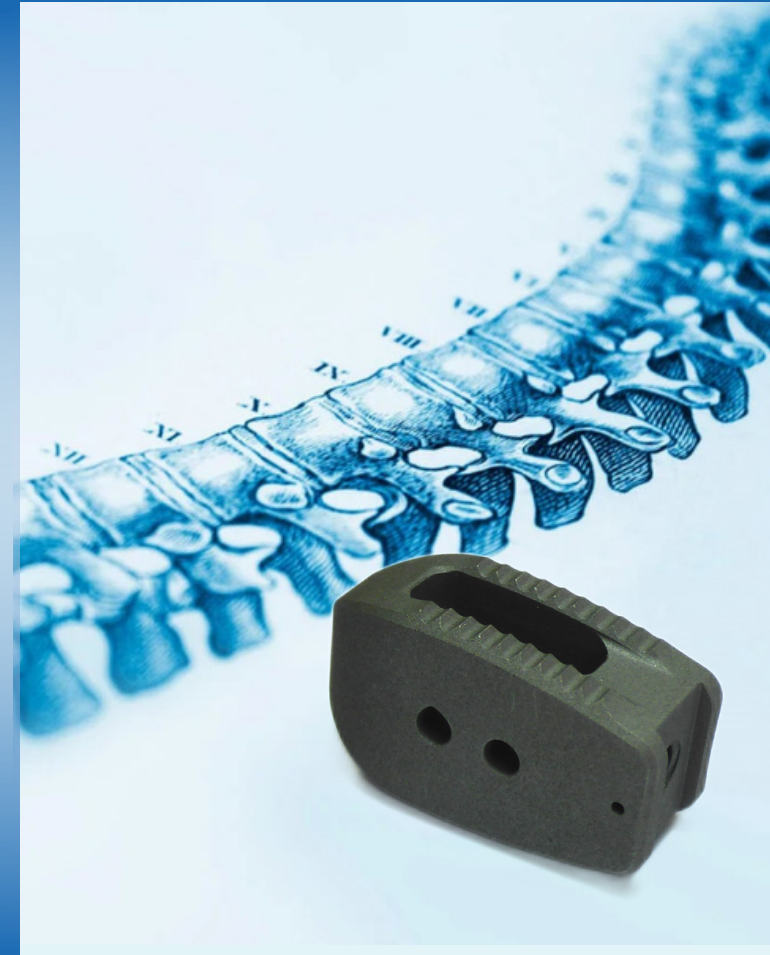
The thin layer of Titanium does not generate flakes

EASE OF DETECTION

TSC Cages are radiolucent and equipped with two markers, allowing for easy detection with Imaging techniques, with no artifacts



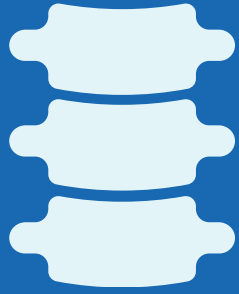
TSC Cages



CONTACT US

-  spine@orthobion.com
-  Gottlieb-Daimler Strasse 5
D-78467 Konstanz - Germany
-  www.orthobion.com





TSC CAGES

The Real Best of Two Worlds

OUR TECHNOLOGY

TSC Cages consist of a composite PEEK/Titanium implant with a biomimetic imprint.

Our proprietary Titanium Fine Grained Osseo Integrative Coating technology (FGOIC Ti) allows for optimal interaction between biomaterials and bioenvironment, granting all the advantages of PEEK and Titanium, and no downsides.

The Titanium layer on TSC cages, with a thickness of less than $1\mu\text{m}$, is 1000 times thinner than layers deposited with plasma coating.

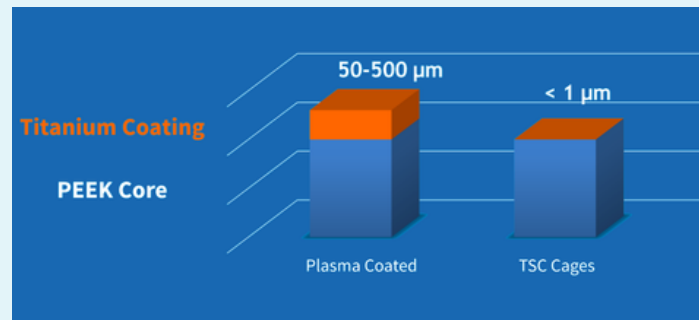
CE0044

A MATTER OF SURFACE

Starting from pure PEEK Optima® material, a unique biomimetic imprint consisting of a **proprietary engineered surface topography** is created.

The thin Titanium layer is applied on the PEEK Optima® core, to grant the **best combination of both materials**.

The ideal hydrophilic environment for bone formation is ensured, promoting a **positive postoperative recovery and outcome**.



The benefits:

- The **mechanical properties** of PEEK are maintained
- **Increased surface area** on the entire implant, allowing for faster direct bone ongrowth on the Titanium layer
- **Stress resistance**: no flaking, no wearing

ABOUT US

Orthobion GmbH is a medical device legal manufacturer with design and development, production, manufacturing and distribution of medical implants and instruments based in Konstanz, Germany.

Our team combines decades of know-how in the fields of spinal surgery, medical technology, medical education and training.

LEARN MORE



www.orthobion.com