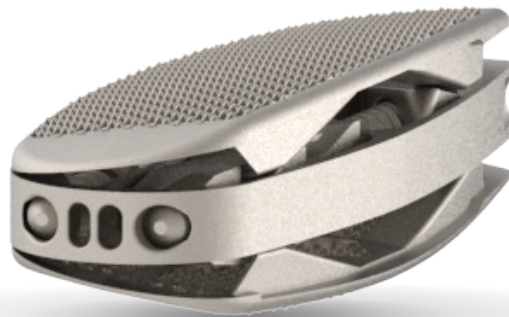


Inter-Body Fusion Cages

GIANNUTRI

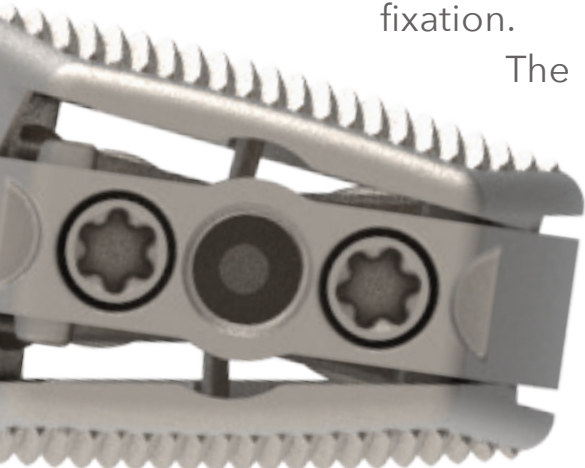
DLIF 3D Printed Titanium Cage

Expandable



Excellent Stability

Additive manufacturing technology in combination with a unique geometrical implant design facilitates efficient and reliable primary and secondary fixation.



The unique "net" structure provides strong primary fixation and eliminates the risk of implant migration. The elasticity modulus of the implant is similar to PEEK alternatives and close to natural bone characteristics, which is the key success factor of bone in-growth: secondary fixation by supporting fast and effective osteointegration.

Wide Variety of Footprints & Heights

The design concept of Giannutri 3D printed DLIF Cage is made to meet well experienced surgeons' requirements.

Tsunami Medical offers implants in a wide range of footprints, heights, and lordosis angles, providing just one system matching patients' natural anatomy and surgeons' preferences.

For Giannutri, Tsunami Medical offers two footprints and six heights, with possible lordosis angles ranging from 8° to 13°, thanks to its innovative expansion feature.



Bone InGrowth Technology®

Giannutri 3D printed DLIF Cage has a unique net structure and a semi-open internal design, which allows a large volume of new bone colonisation.

Both the pore size of the net structure and the surface roughness of the implant edges meet with the ideal dimensions to facilitate fast and effective osteointegration, as described in scientific publications.

Elasticity of the 3D printed titanium geometry facilitates fast new bone formation and offers an excellent platform for Bone InGrowth.

When surgeons deem necessary to add an additional bone growth accelerator, Tsunami Medical's Universal Filling System supports the bone substitute filling procedure, at post-implantation stage of the surgical procedure, in an effective way.

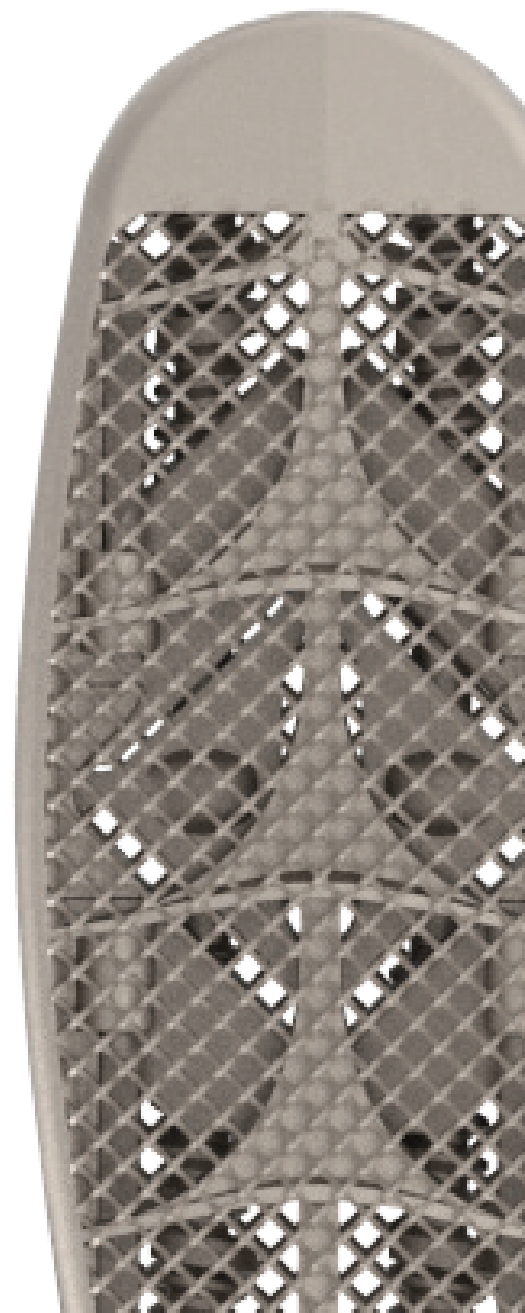
Additional Expansion Feature & Surgical Technique

Giannutri has a unique multi-direction extension mechanism: it allows cranial-caudal height extension and amendment to the required lordosis angle by individual and gradual extension in anterior and posterior direction. With this unique feature surgeons are able to make the implant perfectly fit the natural anatomy or achieve the required restoration of balance at one or more affected levels.

Both implantation and the individual expansion features are being performed with one and the same implant introducer, no additional instruments are required. Apart from ease of use for the surgeon and time saving, patient's safety and comfort are being secured because of this.

Although the Direct Lateral surgical approach allows the use of multiple tissue retractor systems, the use of Tsunami Medical's GHOST retractor is strongly advised: because of its flexible characteristics, post operative pain during this MIS procedure is minimised, because of less tension on the Psoas muscle.

When using the GHOST retractor, a 360° fusion procedure is possible without turning the patient, when in prone position.



Product Reference Codes

Ref. Code	Dimensions
ACXH48180800	Footprint Size 48x18mm - Angles 0°-14° Heights [mm] 08-13
ACXH52180800	Footprint Size 52x18mm - Angles 0°-14° Heights [mm] 08-13

Tsunami Medical S.r.l.

Via XXV Aprile n. 22
41037 Mirandola (MO) Italy
Tel. +39.0535.38397
Fax. +39.0535.38399
www.tsunamimedical.it

0051
UNI EN ISO 13485:2016


Made in Italy