# CONSTRUX<sup>™</sup> Mini TI SPACER SYSTEM

Anterior Cervical Discectomy and Fusion





# **CONSTRUX<sup>™</sup> Mini** Ti SPACER SYSTEM



## **3D-Printed Titanium Interbody with Porous Surface Technology**

The CONSTRUX<sup>™</sup> Mini Ti Spacer System with Nanovate<sup>™</sup> Technology has been developed to enhance anterior cervical procedures with a 3D-printed titanium cervical interbody designed with a functional gradient porous structure. This implant has an optimized porosity and pore size which creates a 3D porous surface designed to help facilitate bone ingrowth\*\*. The CONSTRUX Mini Ti Spacer System offers four footprints to address the cervical interbody fusion solution. The implants are available in both parallel and lordotic angles with heights of 5mm-12mm in one-millimeter increments.

#### **Design Advantages:**

- 3D porous titanium with macro, micro, and nano-scale surface features
- The nano-scale surface has been shown to increase proliferation and alkaline phosphatase activity (an early osteogenic differentiation marker) in human stem cells in vitro
- 3D-printed titanium endplates with 400 micron pores and 50% porosity are designed to help facilitate bone ingrowth<sup>\*\*</sup>
- The endplates consist of interconnected gyroid structures analogous in form to trabecular bone which provide an open porous environment

15mm

12mm

15mm

- Functional gradient porous structure with 80% porosity at the midline of the implant allows for increased fluoroscopic visualization
- Large center opening with concaved inner walls for packing bone grafting material

12mm

#### **4 Footprints**

- 12mm x 12mm
- 15mm x 12mm
- 15mm x 15mm
- 17mm x 15mm

# <u>15mm</u> 17mm

#### Parallel and Lordotic (5°)

- 5mm-12mm heights
- Imm increments

#### Lordotic (10° and 15°)

- 6mm-12mm heights
- Imm increments

\*In vitro performance may not be representative of clinical performance. \*\*As suggested in an in-vivo ovine lumbar spinal fusion model.

### **CONSTRUX Mini Ti Fluoroscopic Images**



Lateral fluoroscopy of CONSTRUX Mini Ti IBD with CETRA Anterior Cervical Plate



Lateral fluoroscopy of CONSTRUX Mini Ti two-level IBD



## **Graft Packing Area**

12 x 12 = 0.24 – 0.65cc based on height\*\* 15 x 12 = 0.33 – 0.90cc based on height\*\*  $15 \times 15 = 0.43 - 1.26cc$  based on height\*\* 17 x 15 = 0.49 – 1.45cc based on height\*\*



CONSTRUX Mini Ti packed with Trinity ELITE<sup>™</sup> Allograft\*\*\*

## \*The CONSTRUX Mini Ti Spacer System is intended for use with autograft and/or allograft comprised of cancellous and/or corticocancellous bone graft

\*\*See graft volume chart in CONSTRUX Mini Spacer System Operative Technique (OP-47-9903)

\*\*\*Trinity ELITE Allograft is exclusively processed by MTF Biologics

Please visit <u>Orthofix.com/IFU</u> for full information on indications for use, contraindications, warnings, precautions, adverse reactions and sterilization.

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician. Proper surgical procedure is the responsibility of the medical professional. Operative techniques are furnished as an informative guideline. Each surgeon must evaluate the appropriateness of a technique based on his or her personal medical credentials and experience.



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