



Idys[®]-**TLIF TiVac**

POSTERIOR INTERBODY



Surgical Technique - USA

Idys® - TLIF TiVac

POSTERIOR INTERBODY



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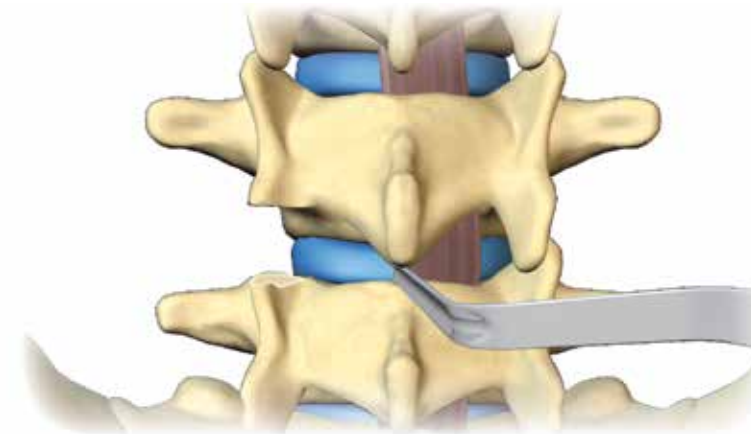
Surgical Technique

To become the architects of spine, Clariance has developed its products in collaboration with expert surgeons in their practice from all backgrounds including from France and the US. Because of this diversity, Clariance offers solutions that meet all practices. This surgical technique guide is the result of the proximity between the surgeons and Clariance.

Prior to using any Clariance device, please review the instructions for use and surgical technique for a complete listing of indications, contraindications, warnings, precautions, potential adverse events, and directions for use.



The **nerve root retractor** is used to protect the surrounding nerve structures throughout the surgical procedure.



OSTEOTOME

04705010



NERVE ROOT RETRACTOR

04781006



2 | DISTRACTION

Progressive distraction tension is applied in accordance with the surgeon's habits and preferences.

This maneuver temporarily opens the posterior disc space and promotes increased exposure for discectomy, decompression and delivery of the implant.

3 | DISCECTOMY

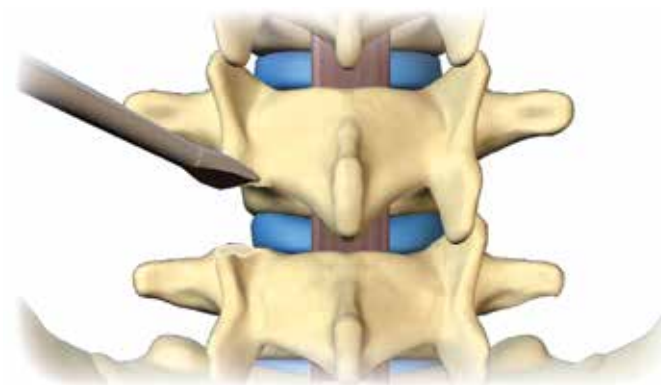
A window is created in the intervertebral disc using a scalpel.



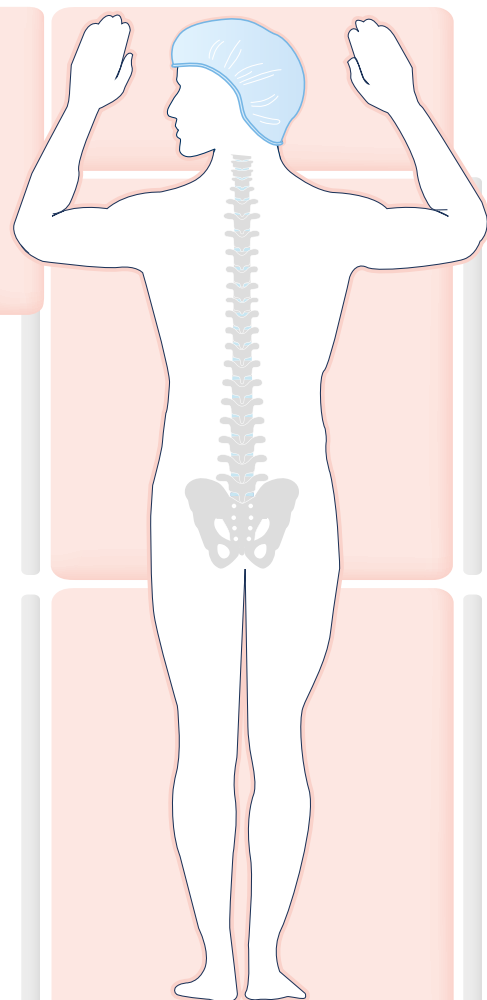
1 | DISC EXPOSURE

Using the **Osteotome**, perform a unilateral facetectomy on the appropriate side to obtain transforaminal access to the disc space.

Resection must be sufficient to allow access of the instruments and insertion of the Cage into the disc space.



*In accordance with safety procedures in force, the patient is placed in the **ventral decubitus** position on the operating table. The surgical approach is based on the usual techniques used by the surgeon.*



T-HANDLE

99781001



SHAVERS

047070xx



CURVED DISC RONGEUR

06708002

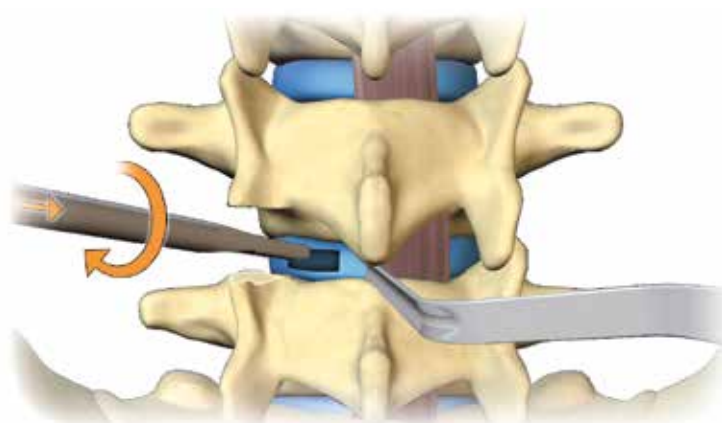


DISC RONGEUR 45°

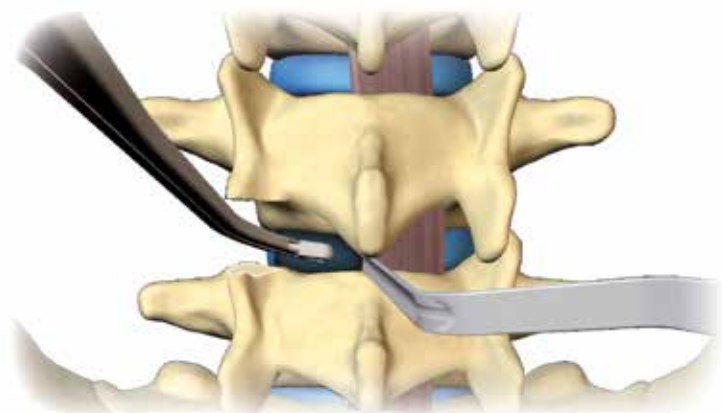
06708003



- **Rounded shavers** are used in rotation to start the discectomy and gradually restore the disc height.
- Shavers are available in heights ranging from 6 - 14mm in 1mm increment.



- The disc material is removed using **disc rongeurs 45°**.
- Use the **Curved Disc Rongeur** to complete the discectomy on the other side of the intervertebral disc

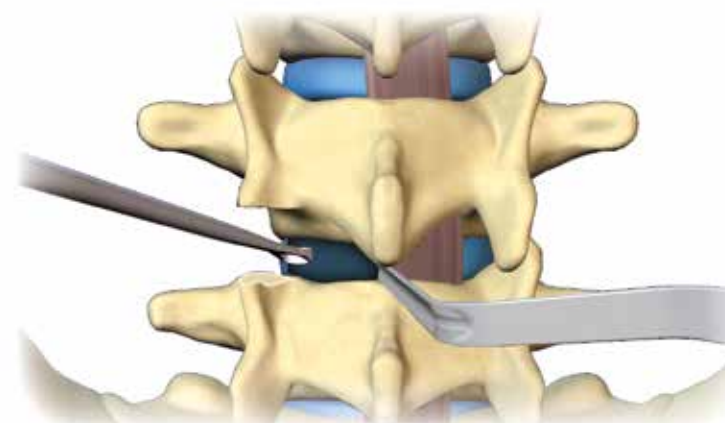


When possible, the anterior and lateral walls of the annulus are preserved in order to provide additional stability for the cage.



4 | ENDPLATE PREPARATION

- The endplates are prepared using the **curettes** and the cup curette to remove the remaining layers of the entire cartilaginous endplates.
- Use the **Curved Curette, left and right Cup Curettes** to facilitate the removal of material in the distant lateral disc space.



RECOMMENDATION:

Thorough cleaning of the endplates is important for the vascular supply of the bone graft. Caution: a too aggressive endplate preparation can fragilize cortical bone and thus weaken the vertebral endplates.

CYLINDRICAL HANDLE

99782003



CURETTE CUP CURETTE

04704015
04704005



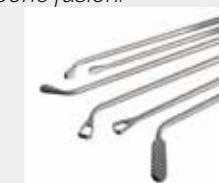
CURVED CURETTE RIGHT CUP CURETTE LEFT CUP CURETTE

06704015
06704105
06704205



Optimizing the vertebral endplates

The Idys-TLIF TiVac instrumentation offers a set of specific curettes to ensure a high performance of the vertebral endplates preparation and thus create the conditions favorable to bone fusion.



TLIF TRIALS

067145xx



TRIAL HOLDER

06715003



SLAP HAMMER

04762000



5 | CAGE SELECTION

RECOMMENDATION :

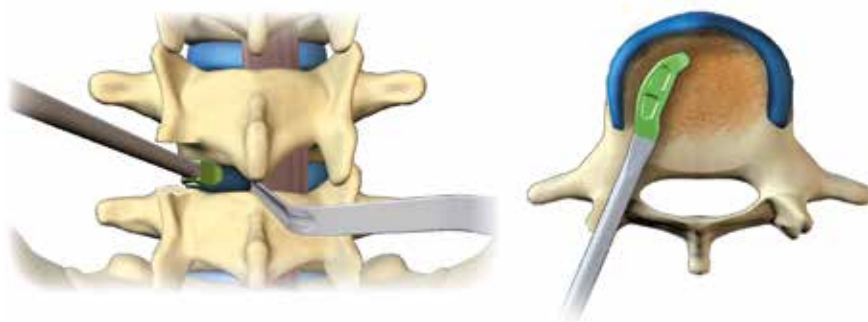
The height of the final implant are determined by selecting the trial that restores the desired disc height and lumbar lordosis of the treated segment.

The **trial** is connected and secured to the **Trial holder** by turning the locking knob clockwise.



The trial is then inserted in the intervertebral space as close as possible of the desired final position.

The trial is not dissociated from the TLIF Trial holder.

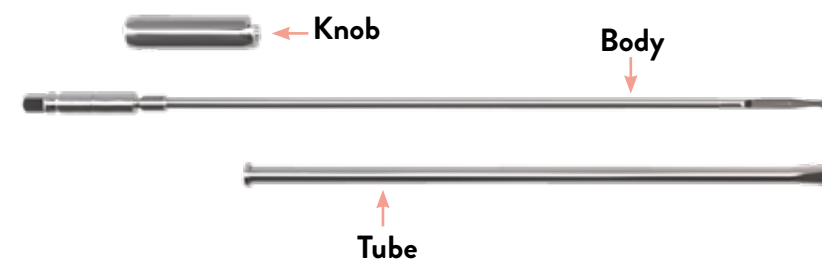


Distraction is momentarily released and an X-ray check is performed to verify the trial position and validate the height of the final implant.

Distraction is re-established and the trial is removed using the **slap hammer**.

6 | CAGE HOLDER ASSEMBLY

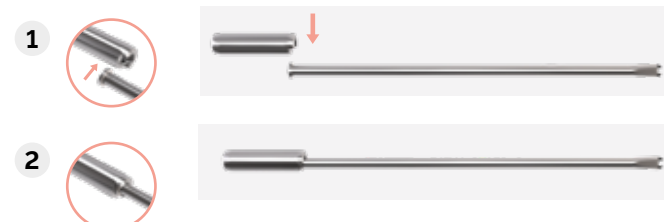
The TLIF **Cage Holder** is composed of the Knob, Body and Tube:



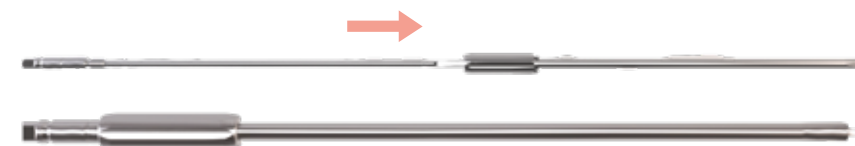
Lubricate the Body with a surgical lubricant after each sterilization.



- Slide the Knob over the shoulder of the Tube.



- Insert the Body into the Knob and through the Tube.



- Ensure that the Body is fully inserted in the Tube, exposing the clamp at the distal end.



Rotate the Knob counterclockwise to fully open the clamp.

CAGE HOLDER

06715002



SLAP HAMMER

04762000



CYLINDRICAL HANDLE

99782003



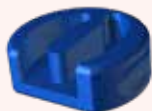
CAGE HOLDER

06715002



FILLING SUPPORT

06717003



GRAFT IMPACTOR

06761002



7 | IMPLANT PREPARATION

The selected cage is connected to the TLIF cage holder and placed into the TLIF filling support;

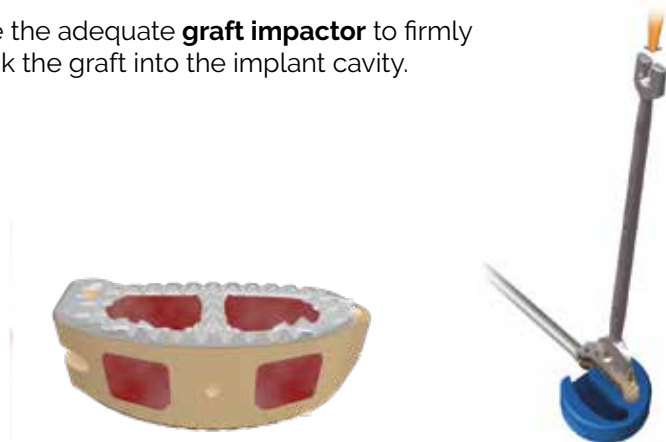
- Unscrew the Knob to open the door clamp of the Cage Holder.
- Grasp the clamp on the Cage assembly tube which is located at the back of the Cage.
- Screw the knob so that the Cage is maintained firmly and straight on the Cage Holder



The cage can then be placed into the corresponding **Filling support**.



Use the adequate **graft impactor** to firmly pack the graft into the implant cavity.

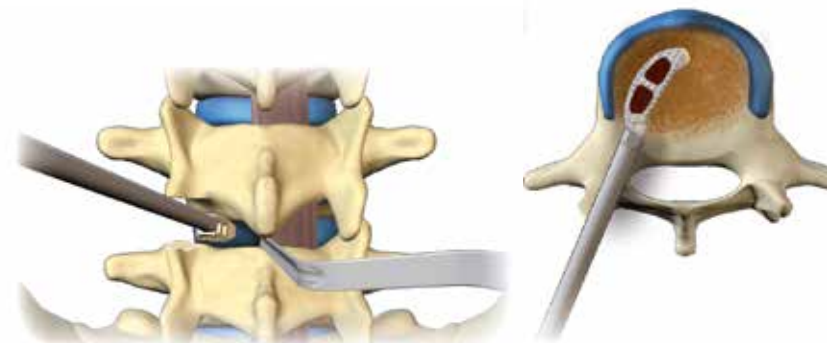


IMPORTANT:

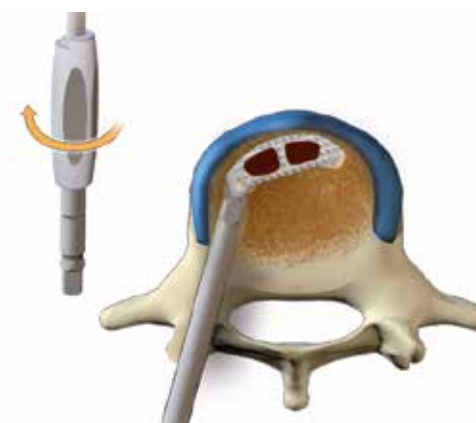
It is important to completely fill the implant cavity in order to ensure optimal contact between the graft material and the vertebral endplates.

8 | CAGE INSERTION

- Connect the Cage Holder to the **Cylindrical Handle**
- The prepared cage is inserted straight into the intervertebral space with light impactions.



- Turn the knob of the TLIF Cage Holder counterclockwise (2 turns) to rotate the Cage in the disc space.



Lightly impact the Cage for oblique orientation. The Cage can also be pushed sideways to center its position.



- An X-ray check is performed.

Important:

Le Porte Cage ne doit pas être désassemblé de la cage avant que la position finale soit confirmée par le contrôle radiologique.

CYLINDRICAL HANDLE

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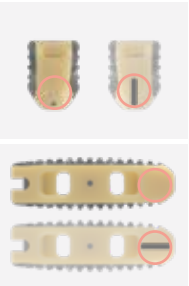
CAGE HOLDER

06715002

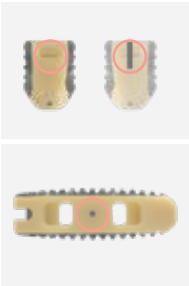


After the final positioning is validated, the Cage Holder is detached from the Cage by untightening completely the knob. **The Cage Holder must not be detached from the cage until the final positioning is validated.**

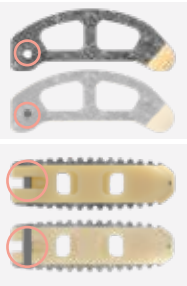
- Positioning of the markers on the cage



Tantalum Marker N°1
(at front of the cage)

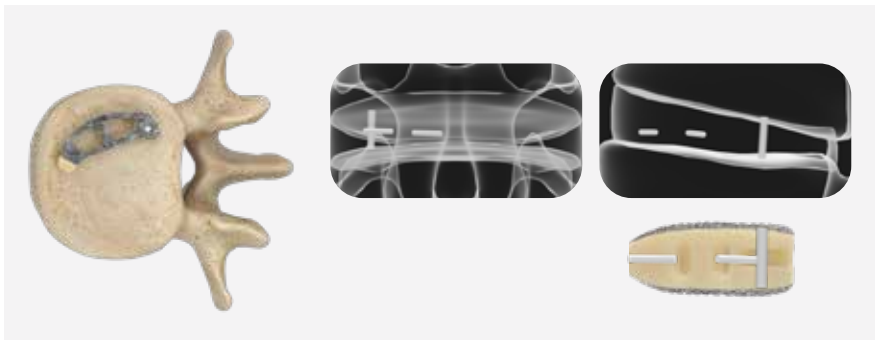


Tantalum Marker N°2
(in the middle of the cage)

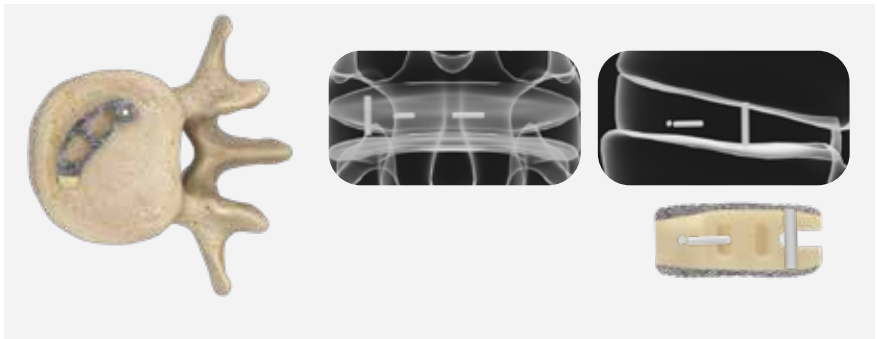


Marker N°3
(in the back of the cage)

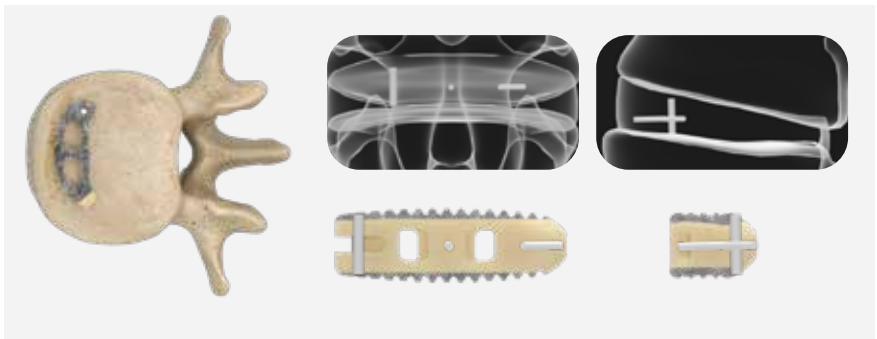
- Cage Position during insertion



- Cage progression during insertion



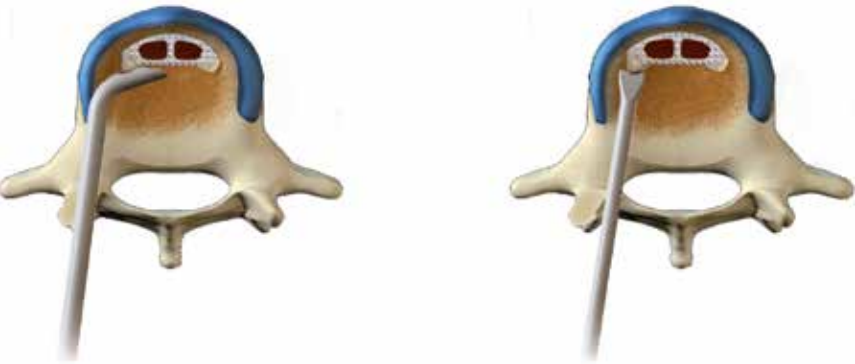
- Final position of the Cage



9 | FINAL POSITIONING OF THE CAGE

If needed, the TLIF **straight cage** impactor and the TLIF curved Cage impactor may be used to adjust the position and the depth of the cage within the intervertebral space.

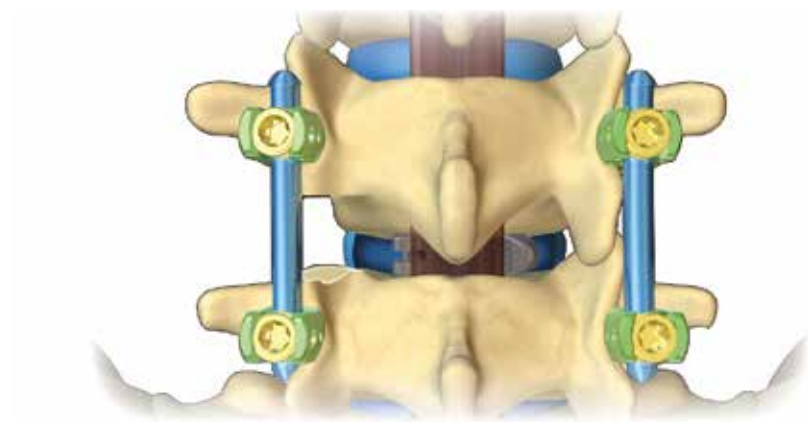
Complemental graft material can be added at the back of the cage.



Distraction is released and a final X-ray check is performed.

10 | SUPPLEMENTARY POSTERIOR FIXATION

Posterior fixation is required to place the treated segment under compression and to enhance the stability of the Idys -TLIF TiVac cage.



CURVED CAGE PUSHER

06716003



STRAIGHT CAGE PUSHER

06716002

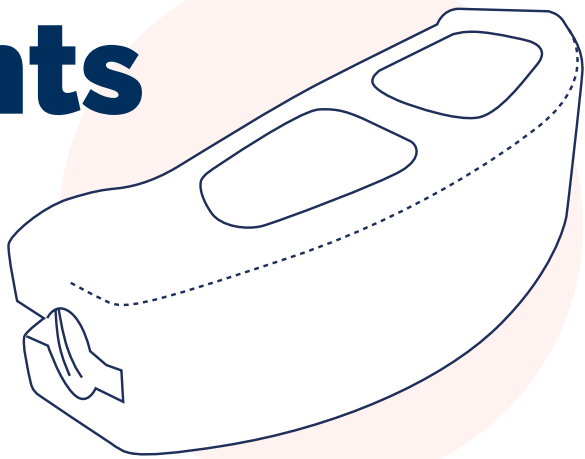


CYLINDRICAL HANDLE

99782003



Instruments



Idys-TLIF Instruments



IDYS- LIF COMMON INSTRUMENT TRAYS

04990030 LIF Base
04990047 Instrument Lid



IDYS-TLIF INSTRUMENTS TRAYS

04990036 TLIF Instruments Base
04990037 TLIF Base Lid
04990035 TLIF L33mm Trial Rack



OSTEOTOME

04705010



NERVE ROOT RETRACTOR

04781006



DISC RONGEUR

06708001 Droite
06708002 Courbe
06708003 45°



CURETTE

04704015



CUP CURETTE

04704005 5mm



CURVED CURETTE

06704015 5mm



RIGHT CUP CURETTE

06704105



LEFT CUP CURETTE

06704205



TRIAL HOLDER

06715003



CAGE HOLDER

06715002



SLAP HAMMER

04762000



FILLING SUPPORT

06717003



GRAFT IMPACTOR

06761002



CAGE PUSHER

06761002 Straight
06761003 Curved



CYLINDRICAL HANDLE

99782003



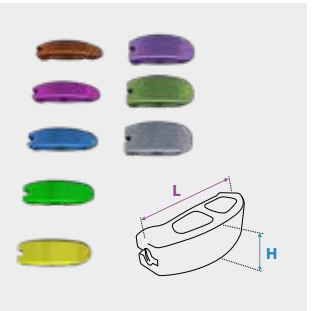
T-HANDLE

99781001



SHAVERS

04707007	H07mm
04707008	H08mm
04707009	H09mm
04707010	H10mm
04707011	H11mm
04707012	H12mm
04707013	H13mm
04707014	H14mm

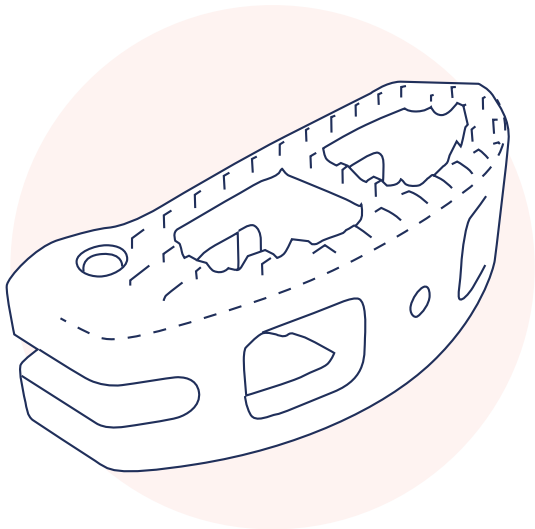


TLIF TRIALS L33MM 0°

06714507	H07mm
06714508	H08mm
06714509	H09mm
06714510	H10mm
06714511	H11mm
06714512	H12mm
06714513	H13mm
06714514	H14mm
06714515	H15mm
06714516	H16mm

Sterile Implants

Product availability may vary upon markets.
Please contact your Clariance representative.

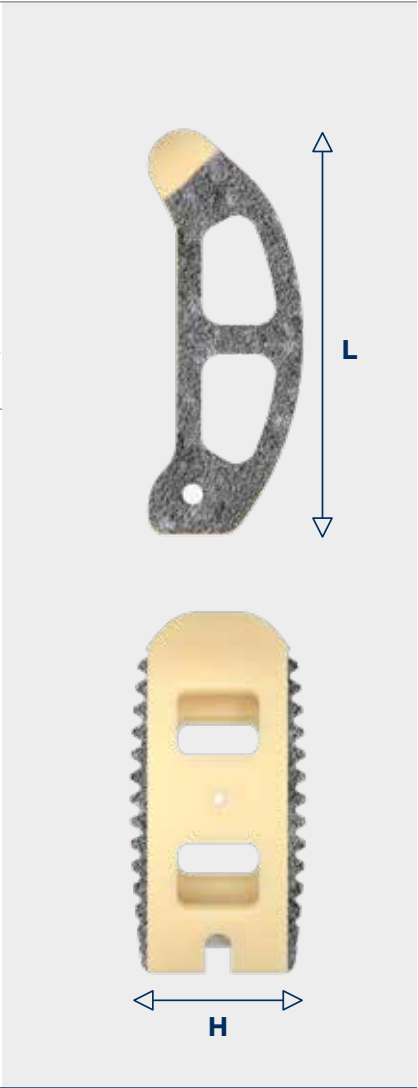


TLIF TiVac - L29MM

	H07mm	H08mm	H09mm	H10mm	H11mm
L29mm	41532907-S	41532908-S	41532909-S	41532910-S	41532911-S
	H12mm	H13mm	H14mm		
L29mm	41532912-S	41532913-S	41532914-S		

TLIF TiVac - L33MM

	H07mm	H08mm	H09mm	H10mm	H11mm
L33mm	41533307-S	41533308-S	41533309-S	41533310-S	41533311-S
	H12mm	H13mm	H14mm	H15mm	H16mm
L33mm	41533312-S	41533313-S	41533314-S	41533315-S	41533316-S





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