

# ROCCIA MULTILIF<sup>®</sup> FOR LUMBAR SPINAL FUSION

TLIF AND ALIF INSTRUMENTATION GUIDE



MADE IN GERMANY

# TABLE OF CONTENTS

Preface .....	3
Indications/Contraindications .....	4
Possible approaches for the ROCCIA MultiLIF system .....	5
ROCCIA MultiLIF – Instrumentation .....	7
PRODUCT INFORMATION .....	19
ROCCIA implants .....	PI 02
ROCCIA trial implants .....	PI 08
ROCCIA instruments .....	PI 10
ROCCIA general instruments .....	PI 14
ROCCIA alphabetical index .....	PI 15

**NOTE:** This Guide describes the use of ROCCIA MultiLIF as a TLIF, LLIF and as an ALIF instrumentation – it does not replace briefing by a physician experienced in the surgical instrumentation of the spinal column.

We would be happy to assist you in finding a hospital that provides an opportunity to observe surgical procedures.

## PREFACE

# ROCCIA MULTILIF<sup>®</sup> – FOR LUMBAR SPINAL FUSION

The ROCCIA MultiLIF was developed for primary stabilisation and restoration of the physiological lordosis in the lumbar spine. The cage is designed for various anterior and posterior approaches.

The special feature of ROCCIA MultiLIF is the possibility of using this cage for two different implantation techniques. Transforaminal access is one approach, but an anterior approach to the spinal column is also possible, either ventromedial or ventrolateral (anterior to the psoas). The numerous threaded holes of ROCCIA MultiLIF allow for accordingly correct placement of the cage.

The ROCCIA instrumentation system, like all Silony Medical products, can be used in a modular manner and is ergonomically designed. Thus, the ROCCIA inserter enables the user to perform various instrumentation steps with just one single instrument. This not only helps to speed up the surgical procedure, but also decreases the need for inventory which then has to be cleaned and stored in the clinic.

With interbody fusion using ROCCIA MultiLIF, we recommend additional posterior spondylodesis with instrumentation using FDA cleared fixation devices such as our VERTICALE posterior spinal fixation system.





## Indications

The ROCCIA MultiLIF System is indicated for intervertebral body fusion of the spine in skeletally mature patients. The system is designed for use with autogenous bone graft to facilitate fusion and supplemental internal spinal fixation systems cleared by the FDA for use in the thoracolumbar spine. The devices are to be used in patients who have had at least six months of non-operative treatment.

The ROCCIA MultiLIF implants are intended for use in interbody fusions at one or two contiguous levels in the thoracic spine from T1 to T12 and at the thoracolumbar junction (T12-L1), following discectomy for the treatment of a symptomatic disc degeneration (DDD), including thoracic disc herniation (myelopathy and/or radiculopathy with or without axial pain).

The ROCCIA MultiLIF implants are intended for use at one or two contiguous levels in the lumbar spine, from L1 to S1, for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The ROCCIA MultiLIF implants can be used as an adjunct to fusion in patients diagnosed with multilevel degenerative scoliosis.

**NOTE:** ROCCIA MultiLIF must be combined with additional stabilisation. For dorsal lumbar intersegmental fusion procedures, Silony Medical recommends the use of an FDA cleared posterior spinal fixator (e.g. with the VERTICALE system).

## Contraindications

Contraindications include, but are not limited to:

- Infection, local to the operative site
- Signs of local inflammation
- Patients with known sensitivity to the materials implanted
- Patients who are unwilling to restrict activities or follow medical advice
- Patients with inadequate bone stock or quality
- Patients with physical or medical conditions that would prohibit beneficial surgical outcome
- Use with components of other systems
- Reusable or multiple uses
- Prior fusion at the level(s) to be treated

**NOTE:** Please note the advice on indications and contraindications in the package insert of ROCCIA MultiLIF. The package insert also contains other important information that might lead to exclusion of the patient.

# POSSIBLE APPROACHES FOR THE ROCCIA MULTILIF<sup>®</sup> SYSTEM

Thanks to its special shape and wide range of sizes, but especially due to the many threaded holes, ROCCIA MultiLIF can be implanted either as a TLIF or as an ALIF and LLIF. The difference in its instrumentation lies mainly in the position and approach used.

## Instrumentation as TLIF – Position and approach

RI-1410\*  
ROCCIA Chisel 10 mm,  
reinforced



The patient is positioned in the prone position, as is common for the posterior approach. Exposing the abdomen decreases the load on the abdominal vessels. Corresponding bearing frames or padding underneath the pelvis and thorax can be used for this. The main incision is usually performed medially above the spinous processes depending on the spinal segments being treated. The spinal erector muscles are then displaced strictly subperiosteally on both sides and prepared until the anatomical structures of the spinal column are clearly exposed.

The transforaminal approach to the disc space is usually achieved by means of unilateral resection of the facet joint on the approach side (Fig. 1). The 6, 8 or 10 mm ROCCIA Chisels can be used for this, as well as standard instruments such as Luer forceps and swages.

\* Representative for other chisels, see ROCCIA Instruments

**NOTE:** The choice of approach (ventromedial, ventrolateral or strictly lateral) is performed at the surgeon's discretion and as appropriate for the segment being operated on, by identifying the diseased disc space with an image converter.

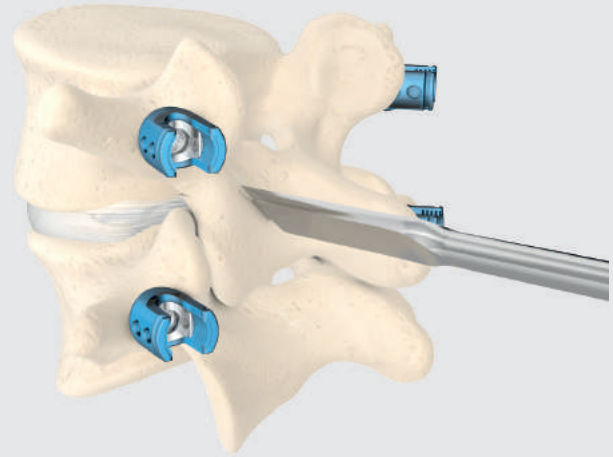


Fig. 1 Resection of a facet joint with the chisel for a TLIF approach

## Instrumentation as ALIF and LLIF – Positioning and approach

When implanting ROCCIA MultiLIF for anterior lumbar interbody fusion (ALIF), there are two main positioning options. On the one hand, there is the standard supine position with closed legs and arms abducted at 90° in which the surgeon usually stands to the left of the patient, and, on the other hand, the da Vinci or French position in which the surgeon can stand between the patient's legs. The anteromedial approach may require retraction of the larger vessels to ensure that there is sufficient room to access the disc space to implant the cage. The anterior longitudinal ligament is resected.

In the posterolateral approach (45°), the longitudinal ligament is for the most part preserved. There is no need to retract the larger vessels.

The system also supports the strictly lateral approach (LLIF). In this approach, the patient is positioned either in the lateral or supine decubitus position.

When using the lateral approach, there is no need to retract the larger vessels. Using a direct lateral transpoatic approach requires careful monitoring of the neurogenic structures present in the muscle.

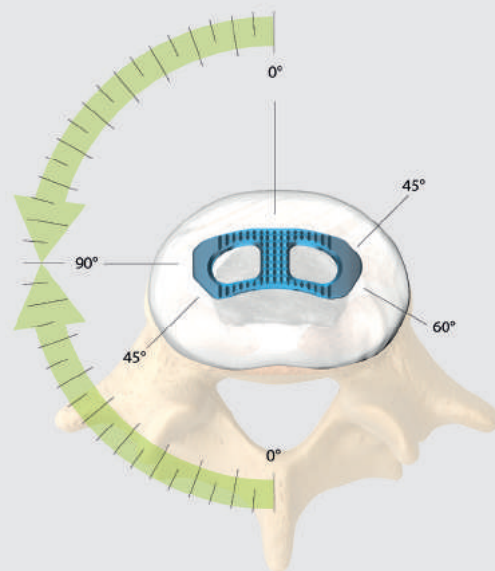


Fig. 2 Note about the degrees used in the thoracolumbar approach

# ROCCIA MULTILIF® INSTRUMENTATION

The ROCCIA MultiLIF system was developed for both the transforaminal approach and the anterior approach, and the instrumentation steps outlined in the following thus apply to both the preparation of the implant bed and the implantation of the intervertebral disc space of the aforementioned approaches and surgical techniques.

# Discectomy

RI-1020\*  
ROCCIA Ring Endplate Scraper  
Straight



RI-1040\*\*  
ROCCIA Curette Straight



RI-1107\*\*\*  
ROCCIA Shaver



GI-3101  
T-Handle



To begin with, the disc is incised with a standard scalpel. The disc material is loosened by means of shavers, via the transforaminal approach for Transforaminal Lumbar Intercorporeal Fusion (TLIF), or via the anterior approach for Anterior Lumbar Intercorporeal Fusion (ALIF), and is then removed using various standard forceps and available endplate scrapers and curettes (Figs. 3 and 4). The fibrous ring is opened up in the process, and the nucleus and the inner fibrous ring are then removed and the surfaces of the end plates are roughened in order to prepare a spacious cage bed.

Various angled endplate scrapers are available to facilitate the removal of the intervertebral disc tissue in the wide lateral disc space.

- \* Representative for other ring endplate scrapers (angled and curved)
- \*\* Representative for other curettes (curved)
- \*\*\* Representative for other shaver sizes, see ROCCIA Instruments

**NOTE:** ROCCIA Shavers are only suitable for mobilising the disc and preparing the cover plates. They must not be used for distraction.

**NOTE:** When performing implantations using the strictly lateral approach (LLIF), a release of the contralateral part of the fibrous ring is recommended.

**NOTE:** If possible, the outer fibrous ring should be preserved as support for the cage.

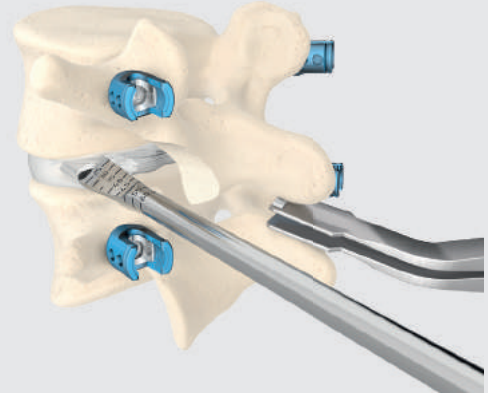


Fig. 3 Loosening of the disc material with a shaver

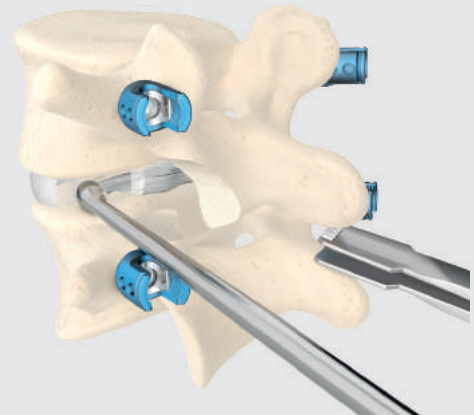


Fig. 4 Discectomy with a curette



# Preparing the disc space

RI-1020\*  
ROCCIA Ring Endplate Scraper  
Straight



RI-1030  
ROCCIA Box Endplate Scraper  
Straight



RI-1050  
ROCCIA Rasp Curved 45°



RI-1107\*\*  
ROCCIA Shaver



GI-3101  
T-Handle



For more extensive curettage, the ROCCIA Box Endplate Scraper is also available (Fig. 5). The surface of the remaining cartilaginous layer of the base plate and cover plate can be roughened with bone rasps, curettes and shavers (Fig. 6). The curved endplate scrapers in particular also facilitate the preparation of the opposite side when using the transforaminal approach.

\* Representative for other ring endplate scrapers (angled and curved)

\*\* Representative for other shaver sizes, see ROCCIA Instruments

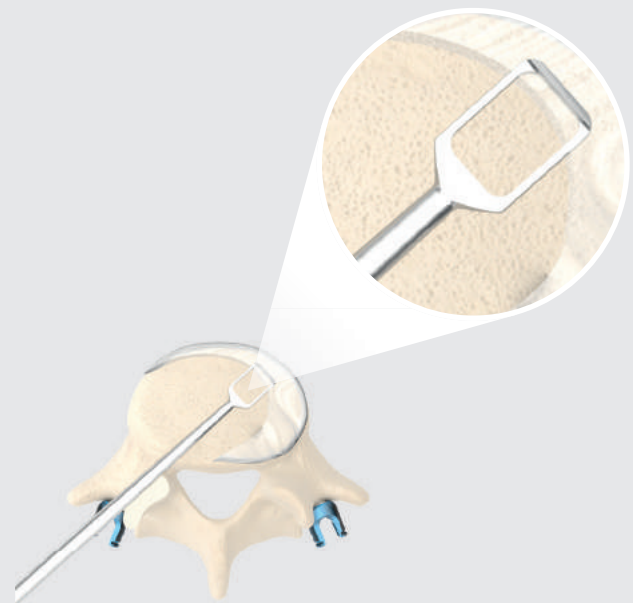


Fig. 5: Box endplate scraper for extensive removal of disc material

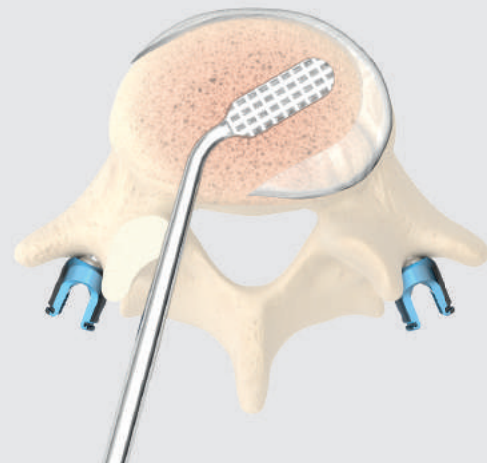


Fig. 6: Rasp for roughening the cover plates

**NOTE:** Careful preparation of the disc space, especially extensive roughening of the end plates, provides the basis for better vascularisation and successful bone fusion. Damage of the bony base and cover plate can lead to sinking of the implant into the vertebral body.

# Distracting the disc space

RI-1207\*  
ROCCIA Paddle Sizer 7 mm



GI-3101  
T-Handle



Blunt ROCCIA Paddle Sizers are available for distraction. They start with a height of 7 mm, and the height increases in steps of 1 mm up to a height of 13 mm; after that, the height increases in steps of 2 mm up to a maximum height of 21 mm. At the distal end of the paddle sizers, there are depth markings between 20 mm and 60 mm in 5-mm steps (Fig. 7).

The paddle shavers are connected to the T-handle by means of a quick-release system. For better orientation, the handle ends are aligned in the same way as the end of the paddle shavers. Two T-handles are available to enable rapid instrumentation.

For distraction, the blunt 7 mm paddle sizer is first inserted into the disc space and erected by 90° rotation (Fig. 8). The next paddle sizers are then inserted in steps of 1 mm with the same movement until the desired height is achieved. The appropriate distraction height is achieved when the paddle shaver is under tension and provides a feeling of stability. Standard lamina spreader forceps can additionally be used for distraction.

\* Representative for other distractor sizes, see ROCCIA Instruments

**NOTE:** Overdistraction should be avoided. This increases the risk of damaging the base plates and cover plates and subsequent sinking of the implant, and jeopardises the restoration of physiological lordosis.

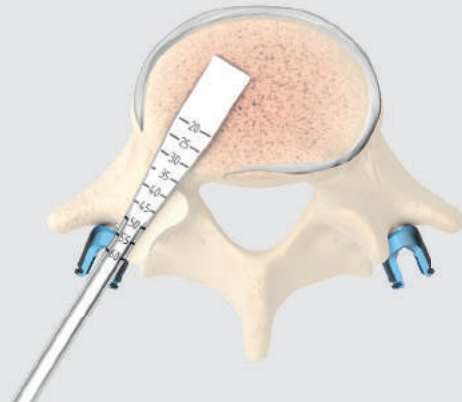


Fig. 7 Depth marking on the distractor

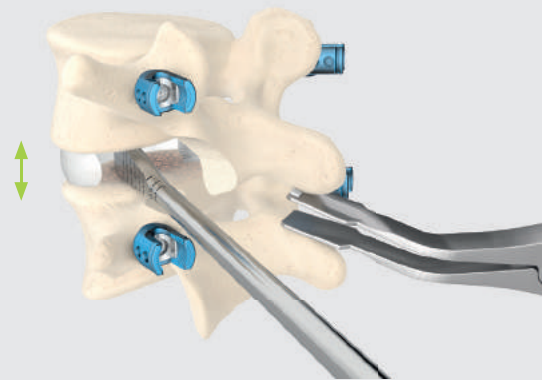


Fig. 8 Spreading the disc space with the distractor

# Selecting the trial implant

RI-1324  
ROCCIA Inserter M4,  
dismountable



RI-1325  
ROCCIA Inserter M5,  
dismountable



RI-1207\*  
ROCCIA Paddle Sizer 7 mm



GI-3101  
T-Handle



To determine the size of the disc space, the blunt distractors are available with depth markings between 20 and 60 mm in 5 mm steps. The heights 7 mm - 13 mm in 1 mm steps and 15 mm and 17 mm correspond to the eventual implant. Trial implants can be selected on the basis of these measurements and under image converter control (Fig. 9).

An appropriate trial implant with 5° or 15° lordosis is available for each definitive cage size. The trial implants are marked analogously to the implants to be implanted later on. The colour marking facilitates identification of the matching inserter, which has coloured rings on the instrument stem.

The trial implants correspond to the subsequent ROCCIA MultiLIF size. The height of the cage interlock on the definitive implant was taken into account when selecting the trial implants.

\* Representative for other distractor sizes  
see ROCCIA instruments

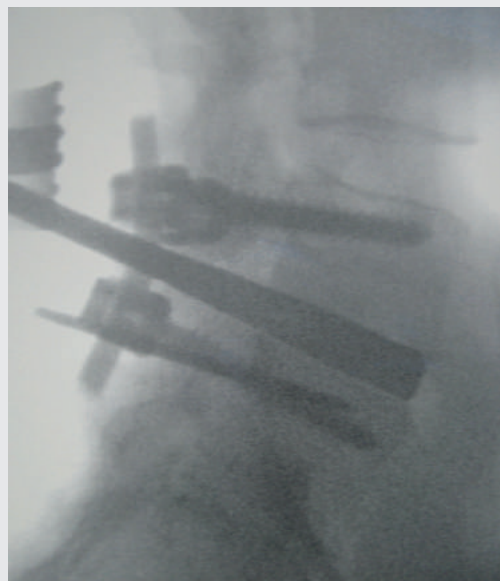


Fig. 9 Image converter control with distractor for selection of the trial implant

# Determining the cage sizes with the trial implants

RI-1324  
ROCCIA Inserter M4,  
dismountable



RI-1325  
ROCCIA Inserter M5,  
dismountable



RI-T113405\*  
ROCCIA MultiLIF Trial  
11 x 34 mm 5°



ROCCIA inserters are required to insert the trial implants. The ROCCIA inserters fit onto both the trial implants and the definitive implants. The selected trial implant is screwed onto the respective ROCCIA Inserter and then, applying mild pressure, carefully inserted into the intervertebral space via the transforaminal window or accordingly when using the anterior approach (Fig. 10). At the surgeon's discretion a mallet can also be used to insert the trial. After that, the position and size of the trial implant is verified in the image converter.

To ensure that the height of the intervertebral disc is preserved after loosening the distraction, the implant must fit between the end plates after full distraction of the segment.

Using the largest possible implant for each individual patient maximises the stability of the segment.

If the trial implant does not sufficiently fill in the intervertebral disc space, the next larger implant must be used. If the trial implant cannot be inserted because the intervertebral disc space is too small, either the next smaller size has to be used or the segment has to be distracted further using the aforementioned instruments. Once the correct size has been determined, the distraction can be temporarily loosened.

\* Representative for other trial implant sizes see ROCCIA Trial implants

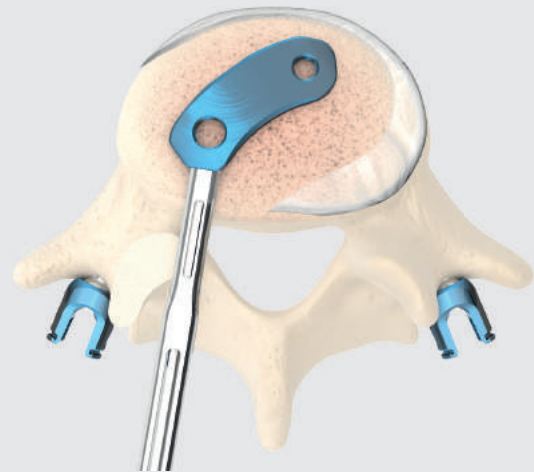


Fig. 10 Introducing the trial implant

**NOTE:** Correctly selecting the cage size has a decisive impact on the success of the instrumentation and fusion.

# Multitude of cage sizes

To optimise the treatment of the patient in terms of anatomy and pathology, a wide range of ROCCIA MultiLIF sizes is available (Fig. 11). The portfolio comprises nine anterior heights (from 7 to 13 mm, in 1-mm increments, and the heights 15mm and 17mm) and five widths (34, 40, 46, 52 and 58 mm). In addition to the regular lordotic angles of 0°, 5° and 10°, hyperlordotic cages with an angle of 15° are also available.

The inserter with the respective colour code corresponds to the respective cage.

The wide cage sizes (46, 52, 58 mm) are recommended for the lateral (90°) approach (LLIF). Following discectomy, the cage is positioned in the target segment. Care should be taken to ensure that it rests as much as possible laterally and contralaterally on the end plates.

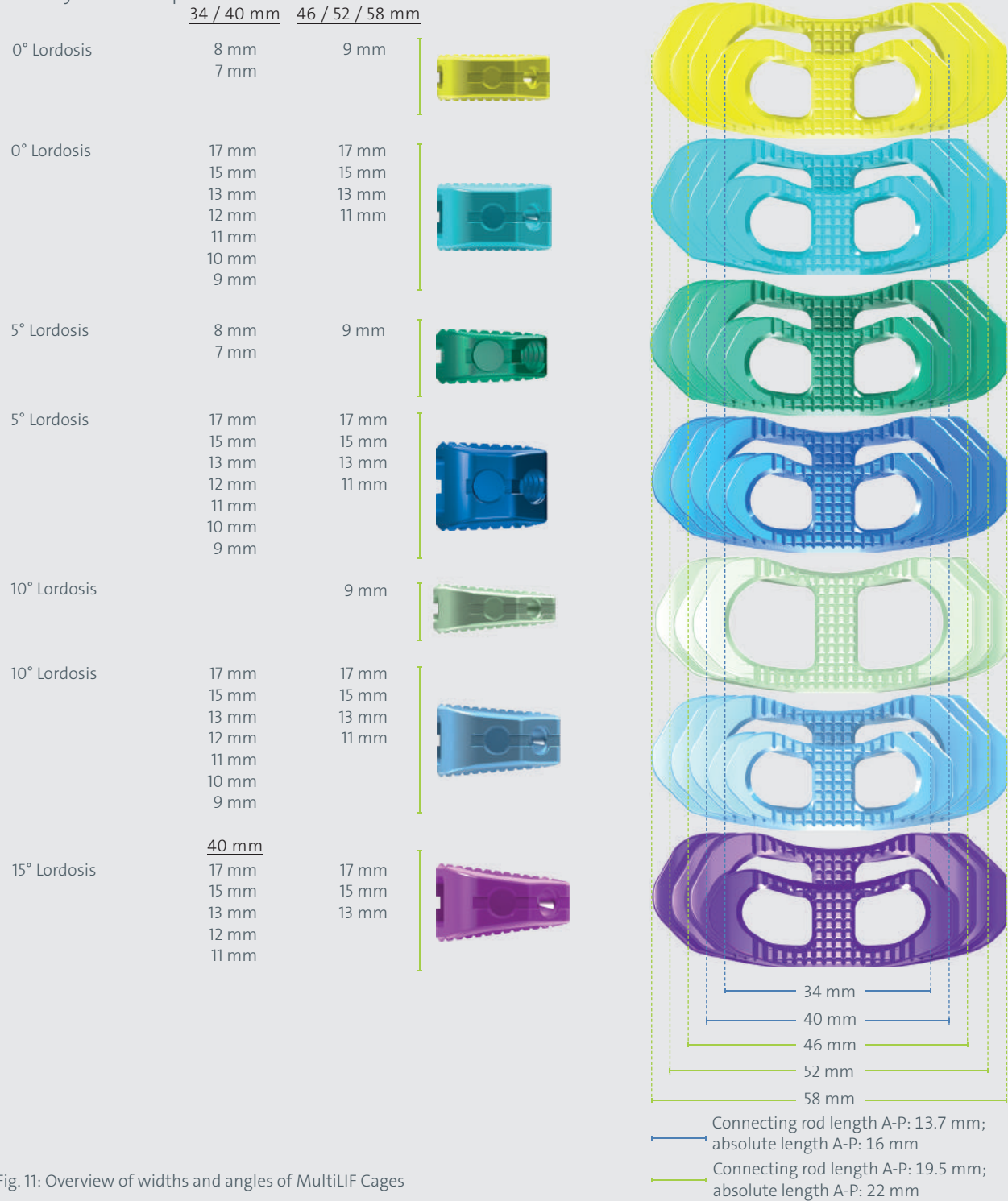


Fig. 11: Overview of widths and angles of MultiLIF Cages

## Filling the cage

RI-1324  
ROCCIA Inserter M4,  
dismountable



RI-1325  
ROCCIA Inserter M5,  
dismountable



RI-2050\*  
ROCCIA Implant Loading Block



RI-2051  
ROCCIA Bone Graft Pusher



RI-1355  
ROCCIA Slotted Mallet, solid



Remaining areas of the intervertebral disc space can be filled with autologous bone (e.g. from the iliac crest) either before or after implantation of the cage in order to achieve the largest possible fusion surface area. Filling of the disc space, but also filling of the implant, is an important prerequisite for secure fusion. A loading block and a pusher are provided for this (Fig. 12).

To ensure comfortable insertion when using the TLIF approach, the existing threaded holes on the ROCCIA MultiLIF allow for various dorsolateral angles (60°, 45°). A ventromedial drill-hole in the implant is available for the ALIF approach. In addition, the cage has a drill-hole at 45° and a strictly lateral drill-hole at 90° for the ventrolateral approach.

\* Representative for other loading blocks, see ROCCIA instruments

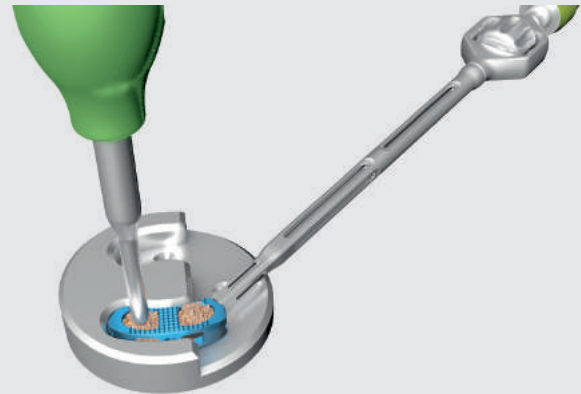


Fig. 12 Filling the cage with bone material in the loading block with pusher

# Inserting the cage

RI-1324  
ROCCIA Inserter M4,  
dismountable



RI-1325  
ROCCIA Inserter M5,  
dismountable



RI-1355  
ROCCIA Slotted Mallet, solid



The ROCCIA inserter, which is used in the same way as previously for the trial implants, is screwed accordingly into one of the threaded holes of the cage, enabling the cage to be definitively inserted without requiring any further instrument change (Fig. 13 a-d). The autologous bone material must be inserted well compressed into the cage.

The trial implant is removed just shortly before final insertion of the implant in order to prevent subsequent sinking. Depending on the previously selected approach (Fig. 13 a-d), the filled implant is carefully inserted into the disc space and the correct alignment of the implant is verified. Slight pressure or careful hammering with the ROCCIA Slotted Mallet on the implant holder may be required.

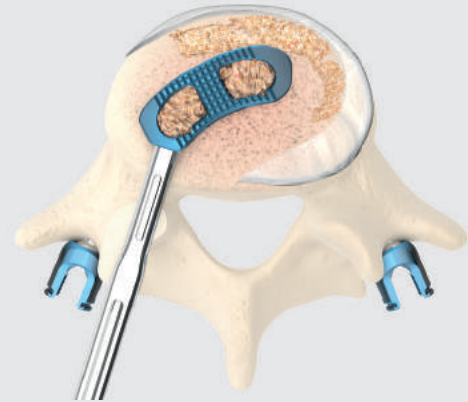


Fig. 13a Inserting the filled cage into the disc space via the TLIF approach (45°)

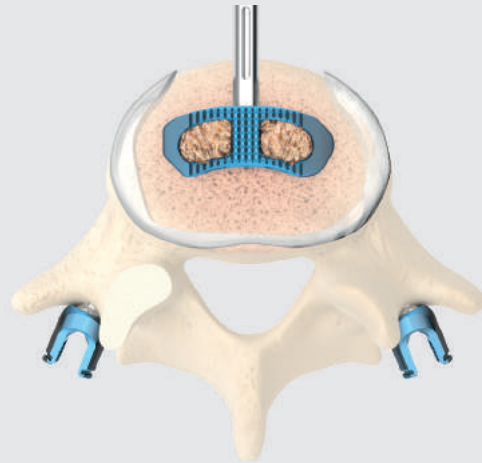


Fig. 13b Inserting the filled cage via the ALIF 0° approach

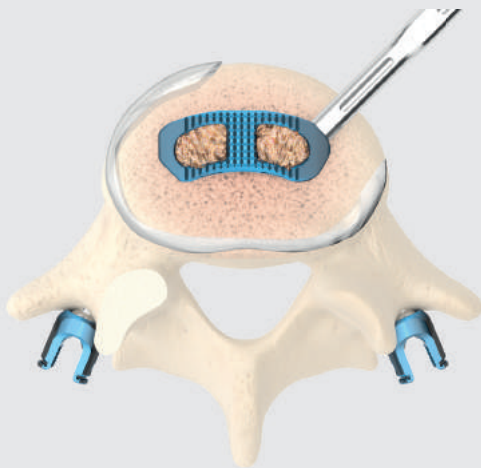


Fig. 13c Inserting the filled cage via the ALIF 45° approach

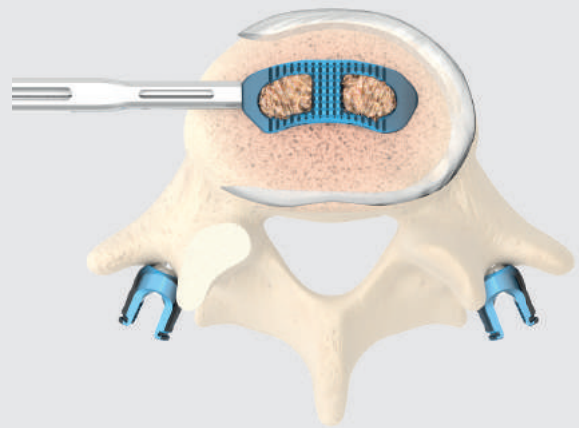


Fig. 13d Inserting the filled cage via the LLIF 90° approach

# Correct position of the ROCCIA® MultiLIF

If possible, when using the TLIF approach, the inserter is left in the cage until an AP image and a lateral image with the image converter confirm the correct position of the cage.

For biomechanical reasons, the optimal position of the implanted ROCCIA MultiLIF cage should be in the anterior to middle third of the disc space, centered as far as possible in the frontal projection (guided by the spinous processes or pedicles, Fig. 14a and 14b).

The more anterior the cage is positioned, the better lordosis can be achieved in the respective section of the spine.

Once it has been successfully implanted, the remaining disc space should be filled up to ensure secure fusion.

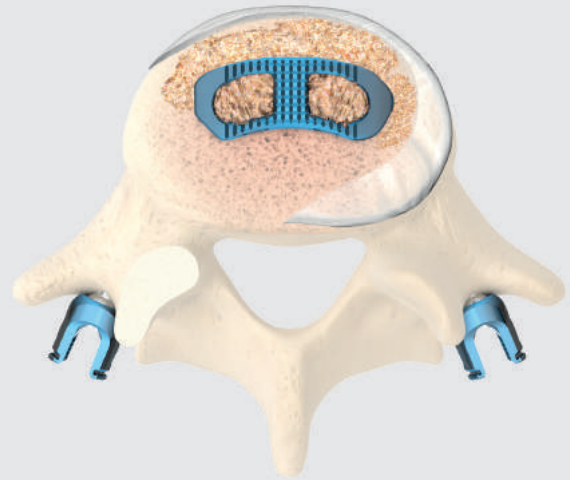


Fig. 14a Optimal position of the filled MultiLIF Cage



Fig. 14b Optimal position of the filled MultiLIF Cage including posterior fixation

**NOTE:** Posterior tension band wiring with the VERTICALE Posterior Spinal Fixator is recommended (or posterior or anterior securing of the implant when using the anterior approach). Tension band wiring supports the biomechanical stability of the motion segment of the spine and the stability of the MultiLIF Cage.

The final steps of posterior fixation (e.g. insertion of the rod, compression and final tightening of the set screws) are completed after implantation of the cage.

**NOTE:** When implanting a MultiLIF Cage with 15° lordosis, it is imperative to provide the segment with additional stabilisation using a fixation system or anterior plating.



# CORRECTING THE POSITION OF THE ROCCIA MULTILIF® CAGE

A straight implant driver and a hooked implant driver are available for definitive positioning of the ROCCIA MultiLIF Cage. The use of these instruments is outlined below.

## Hooked implant driver

RI-1343  
ROCCIA Hooked Implant Driver,  
reinforced



RI-1355  
ROCCIA Slotted Mallet, solid



The reinforced ROCCIA Hooked Implant Driver is inserted into the drill-hole of the cage (Fig. 15). The shape of this hooked implant driver provides good stability for the desired correction, which can be carried out with the aid of the slotted mallet.

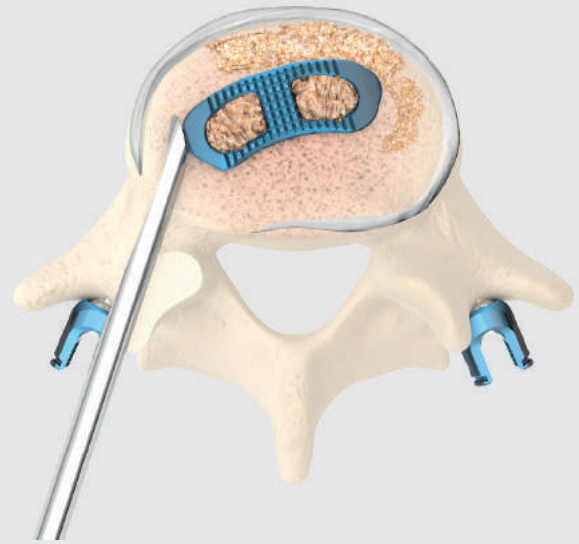


Fig. 15: Hooked implant driver for correcting the position of the cage

## Implant Driver Straight

RI-1340  
ROCCIA Implant Driver Straight



RI-1355  
ROCCIA Slotted Mallet, solid



The ROCCIA Implant Driver is positioned straight onto the lateral posterior front of the cage (Fig. 16). The cage can then be carefully moved into the desired position with the slotted mallet.

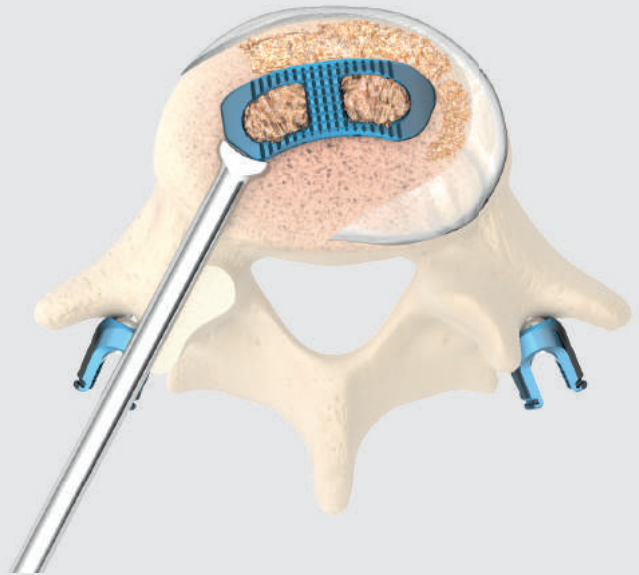


Fig. 16: Straight implant driver to finalise the position of the cage

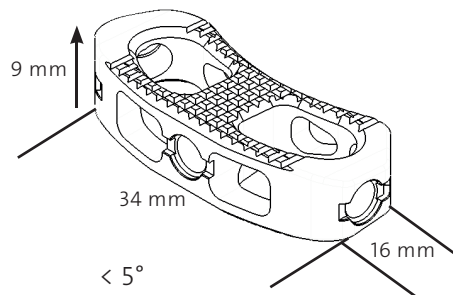
# ROCCIA MULTILIF® PRODUCT INFORMATION

ROCCIA MultiLIF implants by article number .....	PI 02
ROCCIA MultiLIF trial implants by article number .....	PI 08
ROCCIA instruments by article number .....	PI 10
ROCCIA general instruments by article number .....	PI 14
ROCCIA alphabetical index .....	PI 15

# ROCCIA MultiLIF® implants

## Article number explanation for the cage, as an example

ROCCIA MultiLIF Cage 9 x 34 mm, 5° lordosis



System:  
ROCCIA

Implant type:  
MultiLIF

Configuration:  
34 mm

Material:  
Ti6Al4V ELI

Article number	Description	Illustration	
S-RUT-073400-S	ROCCIA MultiLIF Cage 7 x 34 mm, 0° lordosis		
S-RUT-083400-S	ROCCIA MultiLIF Cage 8 x 34 mm, 0° lordosis		
S-RUT-093400-S	ROCCIA MultiLIF Cage 9 x 34 mm, 0° lordosis		
S-RUT-103400-S	ROCCIA MultiLIF Cage 10 x 34 mm, 0° lordosis		
S-RUT-113400-S	ROCCIA MultiLIF Cage 11 x 34 mm, 0° lordosis		
S-RUT-123400-S	ROCCIA MultiLIF Cage 12 x 34 mm, 0° lordosis		
S-RUT-133400-S	ROCCIA MultiLIF Cage 13 x 34 mm, 0° lordosis		
S-RUT-153400-S	ROCCIA MultiLIF Cage 15 x 34 mm, 0° lordosis		
S-RUT-173400-S	ROCCIA MultiLIF Cage 17 x 34 mm, 0° lordosis		
S-RUT-073405-S	ROCCIA MultiLIF Cage 7 x 34 mm, 5° lordosis		
S-RUT-083405-S	ROCCIA MultiLIF Cage 8 x 34 mm, 5° lordosis		
S-RUT-093405-S	ROCCIA MultiLIF Cage 9 x 34 mm, 5° lordosis		
S-RUT-103405-S	ROCCIA MultiLIF Cage 10 x 34 mm, 5° lordosis		
S-RUT-113405-S	ROCCIA MultiLIF Cage 11 x 34 mm, 5° lordosis		
S-RUT-123405-S	ROCCIA MultiLIF Cage 12 x 34 mm, 5° lordosis		
S-RUT-133405-S	ROCCIA MultiLIF Cage 13 x 34 mm, 5° lordosis		
S-RUT-153405-S	ROCCIA MultiLIF Cage 15 x 34 mm, 5° lordosis		
S-RUT-173405-S	ROCCIA MultiLIF Cage 17 x 34 mm, 5° lordosis		
S-RUT-093410-S	ROCCIA MultiLIF Cage 9 x 34 mm, 10° lordosis		
S-RUT-103410-S	ROCCIA MultiLIF Cage 10 x 34 mm, 10° lordosis		
S-RUT-113410-S	ROCCIA MultiLIF Cage 11 x 34 mm, 10° lordosis		
S-RUT-123410-S	ROCCIA MultiLIF Cage 12 x 34 mm, 10° lordosis		
S-RUT-133410-S	ROCCIA MultiLIF Cage 13 x 34 mm, 10° lordosis		
S-RUT-153410-S	ROCCIA MultiLIF Cage 15 x 34 mm, 10° lordosis		
S-RUT-173410-S	ROCCIA MultiLIF Cage 17 x 34 mm, 10° lordosis		

# ROCCIA MultiLIF® implants

Article number	Description	Illustration
S-RUT-074000-S	ROCCIA MultiLIF Cage 7 x 40 mm, 0° lordosis	
S-RUT-084000-S	ROCCIA MultiLIF Cage 8 x 40 mm, 0° lordosis	
S-RUT-094000-S	ROCCIA MultiLIF Cage 9 x 40 mm, 0° lordosis	
S-RUT-104000-S	ROCCIA MultiLIF Cage 10 x 40 mm, 0° lordosis	
S-RUT-114000-S	ROCCIA MultiLIF Cage 11 x 40 mm, 0° lordosis	
S-RUT-124000-S	ROCCIA MultiLIF Cage 12 x 40 mm, 0° lordosis	
S-RUT-134000-S	ROCCIA MultiLIF Cage 13 x 40 mm, 0° lordosis	
S-RUT-154000-S	ROCCIA MultiLIF Cage 15 x 40 mm, 0° lordosis	
S-RUT-174000-S	ROCCIA MultiLIF Cage 17 x 40 mm, 0° lordosis	
S-RUT-074005-S	ROCCIA MultiLIF Cage 7 x 40 mm, 5° lordosis	
S-RUT-084005-S	ROCCIA MultiLIF Cage 8 x 40 mm, 5° lordosis	
S-RUT-094005-S	ROCCIA MultiLIF Cage 9 x 40 mm, 5° lordosis	
S-RUT-104005-S	ROCCIA MultiLIF Cage 10 x 40 mm, 5° lordosis	
S-RUT-114005-S	ROCCIA MultiLIF Cage 11 x 40 mm, 5° lordosis	
S-RUT-124005-S	ROCCIA MultiLIF Cage 12 x 40 mm, 5° lordosis	
S-RUT-134005-S	ROCCIA MultiLIF Cage 13 x 40 mm, 5° lordosis	
S-RUT-154005-S	ROCCIA MultiLIF Cage 15 x 40 mm, 5° lordosis	
S-RUT-174005-S	ROCCIA MultiLIF Cage 17 x 40 mm, 5° lordosis	
S-RUT-094010-S	ROCCIA MultiLIF Cage 9 x 40 mm, 10° lordosis	
S-RUT-104010-S	ROCCIA MultiLIF Cage 10 x 40 mm, 10° lordosis	
S-RUT-114010-S	ROCCIA MultiLIF Cage 11 x 40 mm, 10° lordosis	
S-RUT-124010-S	ROCCIA MultiLIF Cage 12 x 40 mm, 10° lordosis	
S-RUT-134010-S	ROCCIA MultiLIF Cage 13 x 40 mm, 10° lordosis	
S-RUT-154010-S	ROCCIA MultiLIF Cage 15 x 40 mm, 10° lordosis	
S-RUT-174010-S	ROCCIA MultiLIF Cage 17 x 40 mm, 10° lordosis	
S-RUT-114015-S	ROCCIA MultiLIF Cage 11 x 40 mm, 15° lordosis	
S-RUT-134015-S	ROCCIA MultiLIF Cage 13 x 40 mm, 15° lordosis	
S-RUT-154015-S	ROCCIA MultiLIF Cage 15 x 40 mm, 15° lordosis	
S-RUT-174015-S	ROCCIA MultiLIF Cage 17 x 40 mm, 15° lordosis	

System:  
ROCCIA

Implant type:  
MultiLIF

Configuration:  
40 mm

Material:  
Ti6Al4V ELI

# ROCCIA MultiLIF® implants

System:  
ROCCIA

Implant type:  
MultiLIF

Configuration:  
46 mm

Material:  
Ti6Al4V ELI

Article number	Description	Illustration
S-RUT-094600-S	ROCCIA MultiLIF Cage 9 x 46 mm, 0° lordosis	
S-RUT-114600-S	ROCCIA MultiLIF Cage 11 x 46 mm, 0° lordosis	
S-RUT-134600-S	ROCCIA MultiLIF Cage 13 x 46 mm, 0° lordosis	
S-RUT-154600-S	ROCCIA MultiLIF Cage 15 x 46 mm, 0° lordosis	
S-RUT-174600-S	ROCCIA MultiLIF Cage 17 x 46 mm, 0° lordosis	
S-RUT-094605-S	ROCCIA MultiLIF Cage 9 x 46 mm, 5° lordosis	
S-RUT-114605-S	ROCCIA MultiLIF Cage 11 x 46 mm, 5° lordosis	
S-RUT-134605-S	ROCCIA MultiLIF Cage 13 x 46 mm, 5° lordosis	
S-RUT-154605-S	ROCCIA MultiLIF Cage 15 x 46 mm, 5° lordosis	
S-RUT-174605-S	ROCCIA MultiLIF Cage 17 x 46 mm, 5° lordosis	
S-RUT-094610-S	ROCCIA MultiLIF Cage 9 x 46 mm, 10° lordosis	
S-RUT-114610-S	ROCCIA MultiLIF Cage 11 x 46 mm, 10° lordosis	
S-RUT-134610-S	ROCCIA MultiLIF Cage 13 x 46 mm, 10° lordosis	
S-RUT-154610-S	ROCCIA MultiLIF Cage 15 x 46 mm, 10° lordosis	
S-RUT-174610-S	ROCCIA MultiLIF Cage 17 x 46 mm, 10° lordosis	
S-RUT-134615-S	ROCCIA MultiLIF Cage 13 x 46 mm, 15° lordosis	
S-RUT-154615-S	ROCCIA MultiLIF Cage 15 x 46 mm, 15° lordosis	
S-RUT-174615-S	ROCCIA MultiLIF Cage 17 x 46 mm, 15° lordosis	

# ROCCIA MultiLIF® implants

Article number	Description	Illustration
S-RUT-095200-S	ROCCIA MultiLIF Cage 9 x 52 mm, 0° lordosis	
S-RUT-115200-S	ROCCIA MultiLIF Cage 11 x 52 mm, 0° lordosis	
S-RUT-135200-S	ROCCIA MultiLIF Cage 13 x 52 mm, 0° lordosis	
S-RUT-155200-S	ROCCIA MultiLIF Cage 15 x 52 mm, 0° lordosis	
S-RUT-175200-S	ROCCIA MultiLIF Cage 17 x 52 mm, 0° lordosis	
S-RUT-095205-S	ROCCIA MultiLIF Cage 9 x 52 mm, 5° lordosis	
S-RUT-115205-S	ROCCIA MultiLIF Cage 11 x 52 mm, 5° lordosis	
S-RUT-135205-S	ROCCIA MultiLIF Cage 13 x 52 mm, 5° lordosis	
S-RUT-155205-S	ROCCIA MultiLIF Cage 15 x 52 mm, 5° lordosis	
S-RUT-175205-S	ROCCIA MultiLIF Cage 17 x 52 mm, 5° lordosis	
S-RUT-095210-S	ROCCIA MultiLIF Cage 9 x 52 mm, 10° lordosis	
S-RUT-115210-S	ROCCIA MultiLIF Cage 11 x 52 mm, 10° lordosis	
S-RUT-135210-S	ROCCIA MultiLIF Cage 13 x 52 mm, 10° lordosis	
S-RUT-155210-S	ROCCIA MultiLIF Cage 15 x 52 mm, 10° lordosis	
S-RUT-175210-S	ROCCIA MultiLIF Cage 17 x 52 mm, 10° lordosis	
S-RUT-135215-S	ROCCIA MultiLIF Cage 13 x 52 mm, 15° lordosis	
S-RUT-155215-S	ROCCIA MultiLIF Cage 15 x 52 mm, 15° lordosis	
S-RUT-175215-S	ROCCIA MultiLIF Cage 17 x 52 mm, 15° lordosis	

System:  
ROCCIA

Implant type:  
MultiLIF

Configuration:  
52 mm

Material:  
Ti6Al4V ELI

# ROCCIA MultiLIF® implants

System:  
ROCCIA

Implant type:  
MultiLIF

Configuration:  
58 mm

Material:  
Ti6Al4V ELI

Article number	Description	Illustration
S-RUT-095800-S	ROCCIA MultiLIF Cage 9 x 58 mm, 0° lordosis	
S-RUT-115800-S	ROCCIA MultiLIF Cage 11 x 58 mm, 0° lordosis	
S-RUT-135800-S	ROCCIA MultiLIF Cage 13 x 58 mm, 0° lordosis	
S-RUT-155800-S	ROCCIA MultiLIF Cage 15 x 58 mm, 0° lordosis	
S-RUT-175800-S	ROCCIA MultiLIF Cage 17 x 58 mm, 0° lordosis	
S-RUT-095805-S	ROCCIA MultiLIF Cage 9 x 58 mm, 5° lordosis	
S-RUT-115805-S	ROCCIA MultiLIF Cage 11 x 58 mm, 5° lordosis	
S-RUT-135805-S	ROCCIA MultiLIF Cage 13 x 58 mm, 5° lordosis	
S-RUT-155805-S	ROCCIA MultiLIF Cage 15 x 58 mm, 5° lordosis	
S-RUT-175805-S	ROCCIA MultiLIF Cage 17 x 58 mm, 5° lordosis	
S-RUT-095810-S	ROCCIA MultiLIF Cage 9 x 58 mm, 10° lordosis	
S-RUT-115810-S	ROCCIA MultiLIF Cage 11 x 58 mm, 10° lordosis	
S-RUT-135810-S	ROCCIA MultiLIF Cage 13 x 58 mm, 10° lordosis	
S-RUT-155810-S	ROCCIA MultiLIF Cage 15 x 58 mm, 10° lordosis	
S-RUT-175810-S	ROCCIA MultiLIF Cage 17 x 58 mm, 10° lordosis	
S-RUT-135815-S	ROCCIA MultiLIF Cage 13 x 58 mm, 15° lordosis	
S-RUT-155815-S	ROCCIA MultiLIF Cage 15 x 58 mm, 15° lordosis	
S-RUT-175815-S	ROCCIA MultiLIF Cage 17 x 58 mm, 15° lordosis	



A series of horizontal dotted lines for writing notes.


# ROCCIA MultiLIF® Trial Implants

System:  
ROCCIA

Instrument type:  
Trial implant

Configuration:  
34 mm

Material:  
Ti6Al4V ELI

Article number	Description	Illustration
RI-T073405	ROCCIA MultiLIF Trial 7 x 34 mm, 5° lordosis	
RI-T083405	ROCCIA MultiLIF Trial 8 x 34 mm, 5° lordosis	
RI-T093405	ROCCIA MultiLIF Trial 9 x 34 mm, 5° lordosis	
RI-T103405	ROCCIA MultiLIF Trial 10 x 34 mm, 5° lordosis	
RI-T113405	ROCCIA MultiLIF Trial 11 x 34 mm, 5° lordosis	
RI-T123405	ROCCIA MultiLIF Trial 12 x 34 mm, 5° lordosis	
RI-T133405	ROCCIA MultiLIF Trial 13 x 34 mm, 5° lordosis	
RI-T153405	ROCCIA MultiLIF Trial 15 x 34 mm, 5° lordosis	
RI-T173405	ROCCIA MultiLIF Trial 17 x 34 mm, 5° lordosis	

System:  
ROCCIA




Instrument type:  
Trial implant

Configuration:  
40 mm

Material:  
Ti6Al4V ELI

Article number	Description	Illustration
RI-T074005	ROCCIA MultiLIF Trial 7 x 40 mm, 5° lordosis	
RI-T084005	ROCCIA MultiLIF Trial 8 x 40 mm, 5° lordosis	
RI-T094005	ROCCIA MultiLIF Trial 9 x 40 mm, 5° lordosis	
RI-T104005	ROCCIA MultiLIF Trial 10 x 40 mm, 5° lordosis	
RI-T114005	ROCCIA MultiLIF Trial 11 x 40 mm, 5° lordosis	
RI-T124005	ROCCIA MultiLIF Trial 12 x 40 mm, 5° lordosis	
RI-T134005	ROCCIA MultiLIF Trial 13 x 40 mm, 5° lordosis	
RI-T154005	ROCCIA MultiLIF Trial 15 x 40 mm, 5° lordosis	
RI-T174005	ROCCIA MultiLIF Trial 17 x 40 mm, 5° lordosis	
RI-T114015	ROCCIA MultiLIF Trial 11 x 40 mm, 15° lordosis	
RI-T134015	ROCCIA MultiLIF Trial 13 x 40 mm, 15° lordosis	
RI-T154015	ROCCIA MultiLIF Trial 15 x 40 mm, 15° lordosis	
RI-T174015	ROCCIA MultiLIF Trial 17 x 40 mm, 15° lordosis	

# ROCCIA MultiLIF® Trial Implants



Article number	Description	Illustration
RI-T094605	ROCCIA MultiLIF Trial 9 x 46 mm, 5° lordosis	
RI-T114605	ROCCIA MultiLIF Trial 11 x 46 mm, 5° lordosis	
RI-T134605	ROCCIA MultiLIF Trial 13 x 46 mm, 5° lordosis	
RI-T154605	ROCCIA MultiLIF Trial 15 x 46 mm, 5° lordosis	
RI-T174605	ROCCIA MultiLIF Trial 17 x 46 mm, 5° lordosis	
RI-T134615	ROCCIA MultiLIF Trial 13 x 46 mm, 15° lordosis	
RI-T154615	ROCCIA MultiLIF Trial 15 x 46 mm, 15° lordosis	
RI-T174615	ROCCIA MultiLIF Trial 17 x 46 mm, 15° lordosis	

System:  
ROCCIA

Instrument type:  
Trial implant

Configuration:  
46 mm

Material:  
Ti6Al4V ELI



Article number	Description	Illustration
RI-T095205	ROCCIA MultiLIF Trial 9 x 52 mm, 5° lordosis	
RI-T115205	ROCCIA MultiLIF Trial 11 x 52 mm, 5° lordosis	
RI-T135205	ROCCIA MultiLIF Trial 13 x 52 mm, 5° lordosis	
RI-T155205	ROCCIA MultiLIF Trial 15 x 52 mm, 5° lordosis	
RI-T175205	ROCCIA MultiLIF Trial 17 x 52 mm, 5° lordosis	
RI-T135215	ROCCIA MultiLIF Trial 13 x 52 mm, 15° lordosis	
RI-T155215	ROCCIA MultiLIF Trial 15 x 52 mm, 15° lordosis	
RI-T175215	ROCCIA MultiLIF Trial 17 x 52 mm, 15° lordosis	

System:  
ROCCIA

Instrument type:  
Trial implant

Configuration:  
52 mm

Material:  
Ti6Al4V ELI

Article number	Description	Illustration
RI-T095805	ROCCIA MultiLIF Trial 9 x 58 mm, 5° lordosis	
RI-T115805	ROCCIA MultiLIF Trial 11 x 58 mm, 5° lordosis	
RI-T135805	ROCCIA MultiLIF Trial 13 x 58 mm, 5° lordosis	
RI-T155805	ROCCIA MultiLIF Trial 15 x 58 mm, 5° lordosis	
RI-T175805	ROCCIA MultiLIF Trial 17 x 58 mm, 5° lordosis	
RI-T135815	ROCCIA MultiLIF Trial 13 x 58 mm, 15° lordosis	
RI-T155815	ROCCIA MultiLIF Trial 15 x 58 mm, 15° lordosis	
RI-T175815	ROCCIA MultiLIF Trial 17 x 58 mm, 15° lordosis	

System:  
ROCCIA


Instrument type:  
Trial implant

Configuration:  
58 mm


Material:  
Ti6Al4V ELI

# ROCCIA® Instruments

Article number	Description	Illustration	Page
RI-1020	ROCCIA Ring Endplate Scraper Straight		8, 9
RI-1021	ROCCIA Ring Endplate Scraper Angled 25°		
RI-1022	ROCCIA Ring Endplate Scraper Curved 45°		
RI-1030	ROCCIA Box Endplate Scraper Straight		9
RI-1040	ROCCIA Curette Straight		8
RI-1041	ROCCIA Curette Curved Right 45°		8
RI-1042	ROCCIA Curette Curved Left 45°		8
RI-1050	ROCCIA Rasp Curved 45°		9








Article number	Description	Illustration	Page
RI-1107	ROCCIA Shaver 7 mm		8, 9
RI-1108	ROCCIA Shaver 8 mm		
RI-1109	ROCCIA Shaver 9 mm		
RI-1110	ROCCIA Shaver 10 mm		
RI-1111	ROCCIA Shaver 11 mm		
RI-1112	ROCCIA Shaver 12 mm		
RI-1113	ROCCIA Shaver 13 mm		
RI-1115	ROCCIA Shaver 15 mm		
RI-1117	ROCCIA Shaver 17 mm		

# ROCCIA® Instruments



Article number	Description	Illustration	Page	
RI-1207	ROCCIA Paddle Sizer 7 mm			
RI-1208	ROCCIA Paddle Sizer 8 mm			
RI-1209	ROCCIA Paddle Sizer 9 mm			
RI-1210	ROCCIA Paddle Sizer 10 mm			
RI-1211	ROCCIA Paddle Sizer 11 mm			
RI-1212	ROCCIA Paddle Sizer 12 mm			
RI-1213	ROCCIA Paddle Sizer 13 mm			
RI-1215	ROCCIA Paddle Sizer 15 mm			
RI-1217	ROCCIA Paddle Sizer 17 mm			
				10, 11

Article number	Description	Illustration	Page
RI-1324	ROCCIA Inserter M4, dismountable		11, 12, 14, 15
RI-1325	ROCCIA Inserter M5, dismountable		
RI-1330	ROCCIA Removal Adapter		15
RI-1340	ROCCIA Implant Driver Straight		18
RI-1343	ROCCIA Hooked Implant Driver, reinforced		18
RI-1355	ROCCIA Slotted Mallet, solid		14, 15, 18
RI-1406	ROCCIA Chisel 6 mm Width, reinforced		6
RI-1408	ROCCIA Chisel 8 mm Width, reinforced		
RI-1410	ROCCIA Chisel 10 mm Width, reinforced		

# ROCCIA® Instruments

Article number	Description	Illustration	Page
RI-1506	ROCCIA Chisel 6 mm Width Angled 25°		6
RI-1508	ROCCIA Chisel 8 mm Width Angled 25°		
RI-1510	ROCCIA Chisel 10 mm Width Angled 25°		
RI-1706	ROCCIA Chisel 6 mm Width Angled 25°, reinforced		
RI-1708	ROCCIA Chisel 8 mm Width Angled 25°, reinforced		
RI-1710	ROCCIA Chisel 10 mm Width Angled 25°, reinforced		
RI-2046	ROCCIA Implant Loading Block, 46 mm		14
RI-2050	ROCCIA Implant Loading Block		
RI-2051	ROCCIA Bone Graft Pusher		
RI-2052	ROCCIA Implant Loading Block, 52 mm		
RI-2058	ROCCIA Implant Loading Block, 58 mm		

## General Instruments

Article number	Description	Illustration	Page
GI-3101	T-Handle		8, 9, 10, 11
GI-2101	T-Handle, short		8, 9, 10, 11



# ROCCIA® Alphabetical Index

A-Z	Description	Article number	Page
B	Bone Graft Pusher	RI-2051	14
	Box Endplate Scraper Straight	RI-1030	9
C	Chisel 6 mm Width, reinforced	RI-1406	6
	Chisel 8 mm Width, reinforced	RI-1408	
	Chisel 10 mm Width, reinforced	RI-1410	
	Chisel 6 mm Width, angled 25°	RI-1506	
	Chisel 8 mm Width, angled 25°	RI-1508	
	Chisel 10 mm Width, angled 25°	RI-1510	
	Chisel 6 mm, angled 25°, reinforced	RI-1706	
	Chisel 8 mm, angled 25°, reinforced	RI-1708	
	Chisel 10 mm, angled 25°, reinforced	RI-1710	
	Curette Curved Left 45°	RI-1042	8
	Curette Curved Right 45°	RI-1041	
	Curette Straight	RI-1052	
H	Hooked Implant Driver, reinforced	RI-1343	18
I	Implant Driver Straight	RI-1340	18
	Implant Loading Block	RI-2050	14
	Implant Loading Block, 46 mm	RI-2046	
	Implant Loading Block, 52 mm	RI-2052	
	Implant Loading Block, 58 mm	RI-2058	
	Insertor M4, dismountable	RI-1324	11, 12, 14, 15
	Insertor M5, dismountable	RI-1325	
P	Paddle Sizer 7 mm	RI-1207	10, 11
	Paddle Sizer 8 mm	RI-1208	
	Paddle Sizer 9 mm	RI-1209	
	Paddle Sizer 10 mm	RI-1210	
	Paddle Sizer 11 mm	RI-1211	
	Paddle Sizer 12 mm	RI-1212	
	Paddle Sizer 13 mm	RI-1213	
	Paddle Sizer 15 mm	RI-1215	
	Paddle Sizer 17 mm	RI-1217	

# ROCCIA® Alphabetical Index

A-Z	Description	Article number	Page
R	Rasp Curved 45°	RI-1050	9
	Removal Adapter	RI-1330	15
	Ring Endplate Scraper Curved 45°	RI-1022	8, 9
	Ring Endplate Scraper Straight	RI-1020	
	Ring Endplate Scraper Angled 25°	RI-1021	
S	Slotted Mallet, solid	RI-1355	14, 15, 18
	Shaver 7 mm	RI-1107	8, 9
	Shaver 8 mm	RI-1108	
	Shaver 9 mm	RI-1109	
	Shaver 15 mm	RI-1115	
	Shaver 17 mm	RI-1117	
	Shaver 10 mm	RI-1110	
	Shaver 11 mm	RI-1111	
	Shaver 12 mm	RI-1112	
	Shaver 13 mm	RI-1113	
	Shaver 15 mm	RI-1115	
	Shaver 17 mm	RI-1117	
	T	Trial 7 x 34 mm, 5° lordosis	
Trial 8 x 34 mm, 5° lordosis		RI-T083405	
Trial 9 x 34 mm, 5° lordosis		RI-T093405	
Trial 10 x 34 mm, 5° lordosis		RI-T103405	
Trial 11 x 34 mm, 5° lordosis		RI-T113405	
Trial 12 x 34 mm, 5° lordosis		RI-T123405	
Trial 13 x 34 mm, 5° lordosis		RI-T133405	
Trial 15 x 34 mm, 5° lordosis		RI-T153405	
Trial 17 x 34 mm, 5° lordosis		RI-T173405	
Trial 7 x 40 mm, 5° lordosis		RI-T074005	
Trial 8 x 40 mm, 5° lordosis		RI-T084005	
Trial 9 x 40 mm, 5° lordosis		RI-T094005	
Trial 10 x 40 mm, 5° lordosis		RI-T104005	
Trial 11 x 40 mm, 5° lordosis		RI-T114005	
Trial 12 x 40 mm, 5° lordosis		RI-T124005	
Trial 13 x 40 mm, 5° lordosis		RI-T140005	
Trial 15 x 40 mm, 5° lordosis		RI-T154005	
Trial 17 x 40 mm, 5° lordosis		RI-T174005	

# ROCCIA® Alphabetical Index

A-Z	Description	Article number	Page
T	Trial 9 x 46 mm, 5° lordosis	RI-T094605	12, PI 08, PI 09
	Trial 11 x 46 mm, 5° lordosis	RI-T114605	
	Trial 13 x 46 mm, 5° lordosis	RI-T134605	
	Trial 15 x 46 mm, 5° lordosis	RI-T154605	
	Trial 17 x 46 mm, 5° lordosis	RI-T174605	
	Trial 9 x 52 mm, 5° lordosis	RI-T095205	
	Trial 11 x 52 mm, 5° lordosis	RI-T115205	
	Trial 13 x 52 mm, 5° lordosis	RI-T146005	
	Trial 15 x 52 mm, 5° lordosis	RI-T155205	
	Trial 17 x 52 mm, 5° lordosis	RI-T175205	
	Trial 9 x 58 mm, 5° lordosis	RI-T095805	
	Trial 11 x 58 mm, 5° lordosis	RI-T115805	
	Trial 13 x 58 mm, 5° lordosis	RI-T135805	
	Trial 15 x 58 mm, 5° lordosis	RI-T155805	
	Trial 17 x 58 mm, 5° lordosis	RI-T175805	
	Trial 11 x 40 mm, 15° lordosis	RI-T114015	
	Trial 13 x 40 mm, 15° lordosis	RI-T134015	
	Trial 15 x 40 mm, 15° lordosis	RI-T154015	
	Trial 17 x 40 mm, 15° lordosis	RI-T174015	
	Trial 13 x 46 mm, 15° lordosis	RI-T134615	
	Trial 15 x 46 mm, 15° lordosis	RI-T154615	
	Trial 17 x 46 mm, 15° lordosis	RI-T174615	
	Trial 13 x 52 mm, 15° lordosis	RI-T135215	
	Trial 15 x 52 mm, 15° lordosis	RI-T155215	
	Trial 17 x 52 mm, 15° lordosis	RI-T175215	
	Trial 13 x 58 mm, 15° lordosis	RI-T094605	
	Trial 15 x 58 mm, 15° lordosis	RI-T104605	
	Trial 17 x 58 mm, 15° lordosis	RI-T114605	
	T-Handle	GI-3101	8, 9, 10, 11
	T-Handle, short	GI-2101	

# Notes

A series of horizontal dotted lines for writing notes.

# Notes

A series of horizontal dotted lines for writing notes.

# Notes

A series of horizontal dotted lines for writing notes.





[www.silony-medical.com](http://www.silony-medical.com)

 **Silony Medical Corp.**  
8200 NW 27th Street, Suite 104  
Doral, FL 33122, USA  
Phone +1 305 916 0016

 **Silony Medical GmbH**  
Leinfelder Strasse 60  
70771 Leinfelden-Echterdingen, Germany  
Tel +49 711 78 25 25 0  
Fax +49 711 78 25 25 11

This information is only intended for the USA and its territories.

D60008.a.EN 25.04.2018