Innovations 2026

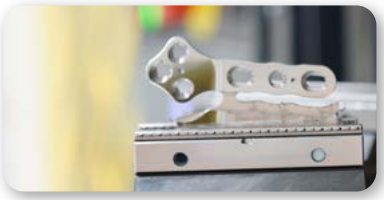
LeiLOX Locking Plate 1.0 Nano
Dr. Ditte Skytte

INNOVATION
WITHOUT LIMITS
FROM NANO TO GIANT

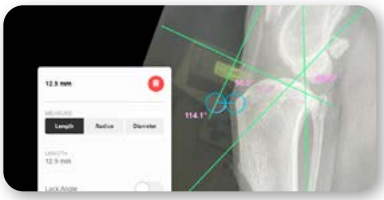
CBLO 3.5 Giant + LeiCOM
Dr. Allen Dunbar

RITA LEIBINGER MEDICAL

THERE
FOR YOU.



Products with outstanding quality
cutting edge technology manufactured by us



Consistent reliability and support
dependable service beyond product sales

Constant Innovation
creating solutions for emerging needs

That is the

RITA LEIBINGER GUARANTEE.

RITA LEIBINGER MEDICAL

OUR PRODUCTS

CRUCIATE LIGAMENT REPAIR & PATELLA LUXATION SYSTEMS

Knee and Patella

for smaller patients

Tiny

TTA RAPID®

RAPID Patella Luxation

LeiLOX TPLO

LeiLOX TPLO Patella Luxation

LeiLOX CBLO

LeiLOX CCWO

PATIENT-SPECIFIC SOLUTIONS

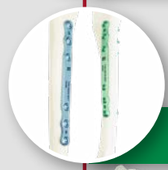
Individually manufactured

3D HIP
Patient-specific Hip Implant

CUSTOM
3D-Printed patient-specific Implant

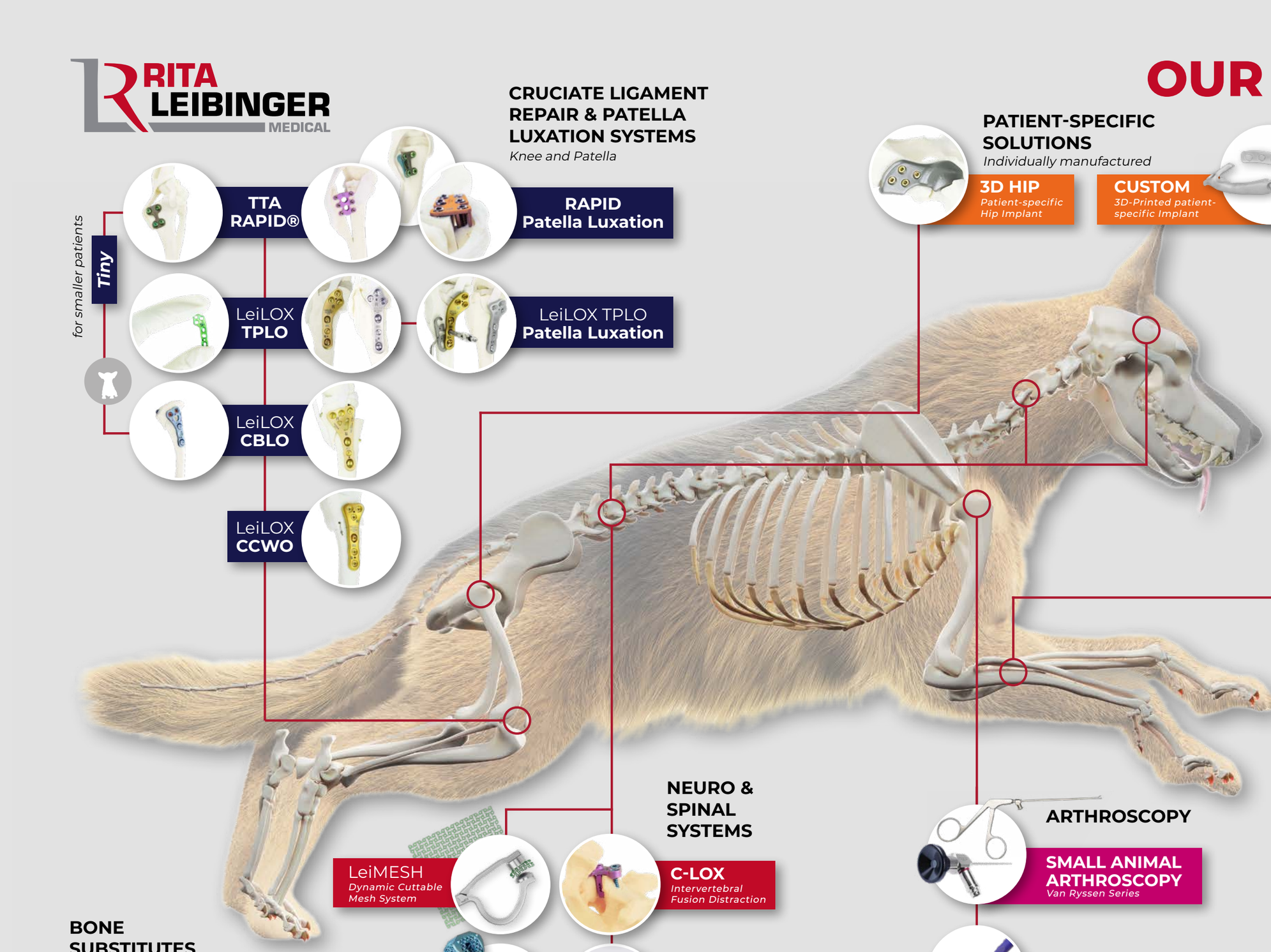
OSTEOSYNTHESIS

LeiLOX 1.0/1.3 Nano
Locking Plate System, Titanium

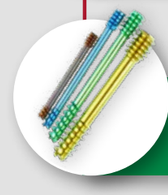


LeiLOX 1.5/2.0 Micro
Locking Plate System, Titanium

LeiLOX 2.0-3.5
Locking Plate System, Titanium



LeiSU SUTURES & BONE ANCHORS



LeiCOM COMPRESSION SCREWS

NEURO & SPINAL SYSTEMS

LeiMESH
Dynamic Cuttable Mesh System

C-LOX
Intervertebral Fusion Distraction

LeiCAGE
Intervertebral Cages

LeiPED
Pedicle Screw System

BONE SUBSTITUTES

General Application

LeiLA BONE SUBSTITUTES

ARTHROSCOPY

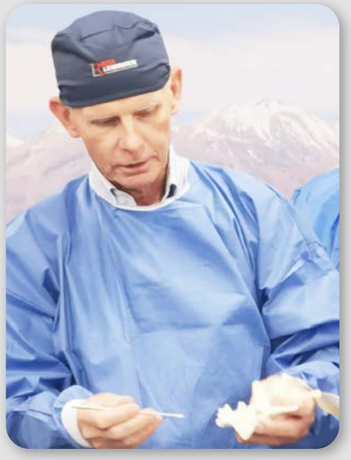
SMALL ANIMAL ARTHROSCOPY
Van Ryssen Series

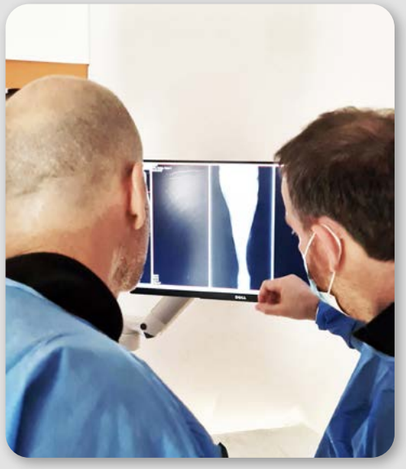
EQUINE ARTHROSCOPY

DENTAL

EQUINE DENTAL PLUGS

RITA LEIBINGER ACADEMY





Learn from the Experts

Experience and knowledge are essential for successful surgeries. We provide you with our all-out support. Learn from the best and hone your skills in one of our Continuing Education (CE) Courses / Workshops, Online Courses and Webinars, or a personal one-on-one.

Our CE Courses and Workshops are held by renowned experts and clinicians at locations all over the world, and cover everything from the fundamentals to advanced procedures.

Take a look at the range of educational courses we offer at the RITA LEIBINGER Academy website page.

Visit our Academy Page
leibinger.vet/academy

Register for our Courses
leibinger.vet/academy/#registration

Contact Us
info@leibinger-medical.com

WORKSHOPS

NEW

FROM RITA LEIBINGER

LeiLOX TPLO
1.5mm Tiny & 3.5mm Giant

LeiLOX CBLO
3.5mm Giant

The TPLO and CBLO systems continue to evolve - now available in new sizes: TPLO Swing 1.5 mm Tiny and 3.5 mm Giant, and CBLO 3.5 mm Giant. Designed to provide optimal solutions across the full spectrum of patient anatomies.

3D HIP

A newly developed, patient-specific 3D-printed titanium implant for joint-preserving treatment of hip dysplasia in young dogs, offering a less invasive alternative to pelvic osteotomies with precise anatomical fit.

LeiPED & LeiCAGE

Expanding our range of advanced solutions for canine spinal surgery, these new systems provide reliable stabilization and fusion support for conditions such as DLSS, vertebral instability, and spinal trauma.

CONTENTS

STIFLE SURGERY SYSTEMS

FEATURED SYSTEMS

TTA RAPID®
& RAPID Patella Luxation Systems

An advanced tibial tuberosity advancement system for CCL repair, allowing simultaneous patella luxation correction. The open-sponge titanium cage construct ensures stability, precision, and efficiency.

LeiLOX TPLO
& Patella Luxation Systems

The Stainless Steel System provides robust, proven stability, the Titanium TPLO Swing System offers lightweight handling and excellent biocompatibility, and the TPLO Patella Luxation System allows combined TPLO and patellar luxation correction in a single surgery.

LeiLOX CBLO
Locking Plate System, Titanium

For CORA-Based Leveling Osteotomy, offering precise angular correction, multiaxial locking, and double compression with rigid titanium fixation and excellent biocompatibility.

LeiLOX CCWO
Locking Plate System, Titanium

Offers precise wedge correction and superior stability with its anatomically contoured design, multiaxial locking capability, and enhanced compression features.

STIFLE SURGERY SYSTEMS

RITA LEIBINGER MEDICAL

TTA RAPID®

More than 150,000 successful surgeries worldwide

Tibial Tuberosity Advancement (TTA) has become a widely popular technique for the surgical correction of cruciate ligament tears in recent years. The introduction of TTA RAPID® has significantly enhanced the original method, making the procedure much simpler and more efficient.
To date, veterinarians globally have performed over 150,000 successful TTA RAPID® surgeries, opting for this improved technique to ensure permanent repair of cruciate ligament tears.

Now with 59 different cage sizes

With 59 different cage sizes, TTA RAPID® stands out as the most versatile surgical technique designed to repair a cruciate ligament injury.

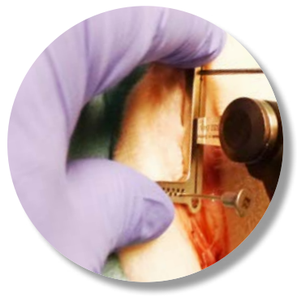
Ranging from 2mm to 18mm, these cage sizes accommodate all patients, from toy to giant breeds. Our system also includes three different saw guides and five distinct spreaders, providing an unparalleled level of diversity and adaptability that you won't find in any other system.

Rapid Healing + Short Surgery Time

TTA RAPID® implants offer high stability with a less invasive approach. The TTA RAPID® surgery allows for shorter surgery times which means lower risk of infection, less anesthesia, and less costs.
The open sponge Titanium construct allows for rapid bone growth throughout the cage.

Patella Luxation + CCL Rupture

TTA RAPID® is extremely effective for a patella luxation in combination with a cruciate ligament rupture. The uniquely designed Tibia Tappet allows you to accurately advance the tibial tuberosity and test functionality of the new position before fixating the screws.



Minimal Learning Curve

Due to the simplicity of the technique and instruments, a level of comfort can be achieved quickly.

TTA RAPID®

RITA LEIBINGER MEDICAL

TTA RAPID®

Tibial Tuberosity Advancement (TTA) as a technique for the surgical management of cranial cruciate ligament insufficiency has gained increasing acceptance and popularity in recent years. As we learn more, efforts are being made to simplify the technique, to make it more user-friendly and overcome some of the pitfalls of the original technique.

Developed in collaboration with Dr. Yves Samoy, University of Ghent, TTA RAPID® is one of the newer developments in both implant technology and technique.

The Implant

The manufacture of TTA RAPID® cages has only been made possible with advances in materials and manufacturing technology. The cages are made by an additive manufacturing (AM) 3D printing process known as selective laser sintering (SLS). The process is interesting to watch. Although other materials can be used in the process, TTA RAPID® Cages start life as a very fine, commercially pure titanium powder. A very thin layer of titanium powder is deposited on the working bed of the SLS machine and a modified print head carrying a high intensity laser is used to selectively melt the powder to bond (sinter) regions together. As further layers of powder are applied and the laser sintering process repeated, a solid three dimensional structure begins to form within the 'sand-pit' of metal powder. Electron beam melting (EBM) is a similar procedure that uses an electron beam instead of a laser.

Once the full structure has been created, the cages are separated from the powder and various chemical and other finishing processes are performed to leave the cages in their final, implantable state. Through this process, shapes can be created that would either be impossible to produce using more conventional technologies or cost prohibitive.

In the case of TTA RAPID®, a very porous honeycomb titanium lattice with a modulus similar to that of cancellous bone is generated permitting very rapid bony ingrowth to occur. Titanium is also very biocompatible, MRI compatible and typically needs to be inoculated with 10 times as many infectious units for an implant associated infection to develop when compared to Stainless Steel.

The lattice found in the TTA Rapid cages is bound on 4 sides by an anatomically shaped, rigid shell of the same material with one side carrying lugs with screw holes in them. With the lattice, cage and screw lugs being one piece, the cages are very stable in situ.

The constructs are so stable that auxiliary implants such as plates, wires, forks and staples are rarely indicated. This has a number of benefits:

- Reduced morbidity and biological cost that may be associated with the dissection and placement of additional implants.
- Reduced potential for cold conduction with superficially sited metallic implants.
- Fewer additional holes created in the tibial diaphysis which may contribute to crack propagation and failure of the tibial shaft.
- Metals of different electro-potentials are avoided in the same construct. Theoretically this reduces the potential for galvanic corrosion to occur (all components are titanium).
- Simplified inventory management.
- Potential time savings in the placement of implants.

CAUTION: TTA RAPID® patients are often subjectively more comfortable in their early post-operative recovery compared to those undergoing other osteotomy surgeries. Nevertheless, TTA RAPID® still involves a major osteotomy, and both appropriate patient selection and appropriate client education for post-operative management are indicated.

TTA RAPID® TECHNIQUE

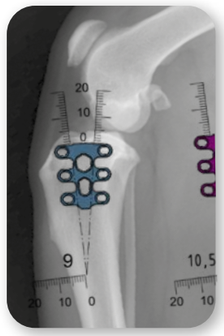
Pre-Operative Planning

Calculating the Advancement

Calculating the advancement can be done in different ways (classic TTA template; common tangent technique (Dennler); 2.07 x Tibial plateau Length (Inauen); Ness; …). However, none of these techniques are perfect. A critical mind is advised when applying those measurements.

Using the TTA RAPID® Template

1. Where possible, calibrate the radiograph on the screen to the actual size.
2. Place the template over the radiograph and select the appropriate cage width.
3. Adjust the template position until the cage sits about 3mm below the proximal cortex on its caudal edge. Now measure the thickness of the cranial tibial cortex in the region of the black dot. Note these values as you will need them during surgery: XX / YY/ Z



XX = Size of Implant from Template

YY = Implant Depth (can be measured after the saw cut)

Z = Thickness of the cranial tibial cortex in the region of the distal end of the osteotomy.

TTA RAPID® TECHNIQUE

Surgery Protocol

The dog is positioned in a dorsal recumbency, with the affected limb suspended from a stand. Make sure that the dog's paws are not fixed too tightly, since the affected limb will be put against the table later in the surgery. Preferably, the joint is thoroughly examined to assess the condition of the menisci and cranial cruciate ligament remnants. Remedial action is taken as necessary.

The TTA RAPID® Procedure is initiated through a medial skin incision.

Joint Surgery

If performing a lateral arthrotomy, leave about the lasts centimeter of the joint capsule closest to the tibia open. This allows enough slack to later perform the advancement.

Sawing the Crista Tibiae

1. A 2.5mm pin is placed through the joint capsule at the intersection of the femoral condyle and the tibial plateau. On the lateral side, the pin should start slightly in front of the level of "Gerdy's Tubercle". This pin is used as the proximal fixation of the saw guide.

Using the Saw Guide

The saw guide is an L-shaped device developed to facilitate the correct positioning of the osteotomy. It was designed to ensure that a sufficiently large cranial fragment is created for screw placement. The vertical arm of the guide has 2.5mm holes placed at strategic points, over a 1mm wide slot. The numbers next to these holes correspond with the size of the cage. This will prevent making a too distal osteotomy. The horizontal arm of the guide is a scale in millimeters. This will prevent making a too caudal osteotomy.

2. The guide is dropped over the pin using one of the numbered holes in the vertical arm, corresponding with the size of the cage measured during pre-operative planning.

3. A peg is placed into one of the holes in the horizontal arm of the drill guide, selecting the number of millimeters measured during pre-operative planning.

4. Press the saw guide against the medial aspect of the tibia with protruding peg forced up against the cranial side of the tibia. Hold it in that position. Correct use of the saw guide will place the osteotomy just caudal to the cranial cortex of the tibia. (As a guide: In a large dog the cortex is approximately 5mm thick and in a small dog approximately 3mm.)

   IMPORTANT: Do not press the horizontal arm against the bone, as this will cause an oblique Osteotomy!

5. Use the saw guide to create the osteotomy. Optionally, a blade can be used to open the fascia/periostium prior to the osteotomy.

Opening the Osteotomy

1. Depending on the required cage size, different osteotomy spreaders can be used to spread and hold open the osteotomy. Provided this is done carefully and slowly, allowing the bone time to adjust, the hinge is unlikely to fail. This being the most critical point of the surgery, the spreaders should be used with great caution!

2. Start with the 3mm spreader held sideways (thinnest part) located at the most proximal part of the osteotomy and gently turn it to spread open the osteotomy. Always turn the spacer downwards to minimize the forces on the fragment. A second spacer/ spreader held sideways in the distal region of the osteotomy can be used to maintain the displacement.

   CAUTION: Do not use this second spreader to increase the displacement as this will cause breaking of the cortex!

   Repeat these steps until the required displacement is reached.

3. The depth of the osteotomy is measured with a drill depth gauge at the proximal extent of the osteotomy. This measurement is rounded up to select the correct cage Length.

TTA RAPID® TECHNIQUE

Fitting the Cage

1. The ears of the TTA RAPID® Cage need to be bent using the bending iron. Ears on the caudal side (tibia) should point slightly upwards, while the ears on the cranial side (crista tibiae) should be tilted slightly downwards. Slight under-bending of the caudal ears and slight over-bending of the cranial ears will help compress the osteotomy against the cage.

2. Elevate the periostium from the bone in the region where the cage will be fixed.

3. Insert the cage into the osteotomy. Use bone forceps to make sure the ears of the cage are in close contact with the bone.

4. Once the cage is in place, check if the height of the cage is correct. This can be done by palpating the proximal tibia with the tip of a small mosquito clamp. You should feel about 3mm of bone above the top of the cage. More bone means a more distal placement of the cage and thus subsequently a more cranial displacement of the tibial tuberosity.

5. Large bone forceps can be used to give extra compression on the cage. This step is not essential if the distal cortex is still intact, but will result in a better bone contact with the cage.

6. Titanium screws are then inserted into the cage. Start with the most cranial, most proximal screw. The orientation of the screws should be medio-proximal to latero-distal (similar as the orientation of the fork in a standard TTA).The second screw is the caudo-proximal screw. The orientation of this screw is cranio-medio-proximal to caudo-latero-distal ("Away from the joint, away from the osteotomy site"). The rest of the screws are placed in the same fashion starting with the most proximal screws.

   Once all screws are inserted, remove the bone forceps and re-tighten all screws.

7. Application of Hydroxyapatite Paste inside and underneath the cage will accelerate healing of the osteotomy. Close the fascia where possible.

8. Close the wound using standard techniques.

Aftercare

1. Casting/bandaging is generally not required.

2. A light dressing can be applied for 3 to 5 days.

3. NSAIDs are provided for 3 to 4 weeks.

4. With the application of Hydroxyapatite Paste, clinical union can generally be anticipated within 6 weeks.

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Department of Medical Imaging and Small Animal Orthopedics
Faculty of Veterinary Medicine, Ghent University

rapid.leibinger.vet

STUDIES ABOUT TTA RAPID®

Comparison of Outcomes Associated with Tibial Plateau Levelling Osteotomy and a Modified Technique for Tibial Tuberosity Advancement for the Treatment of Cranial Cruciate Ligament Disease in Dogs: A Randomized Clinical Study

University of Lyon, VetAgro Sup, Marcy l'Etoile, France
Véronique Livet, Arnaud Baldinger, Éric Viguier, Mathieu Taroni, Mathieu Harel, Claude Carozzo, Thibaut Cachon; VCOT 2019

TTA RAPID: Description of the Technique and Short Term Clinical Trial Results of the First 50 Cases

Ghent University, Faculty of Veterinary Medicine, Department of Veterinary Medical Imaging and Small Animal Orthopaedics
Yves Samoy, DVM, PhD, Geert Verhoeven, DVM, PhD, Diplomate ECVS, Tim Bosmans, DVM, PhD, Elke Van der Vekens, DVM, Diplomate ECVDI, Evelien de Bakker, DVM, PhD, Piet Verleyen, DVM and Bernadette Van Ryssen, Prof, DVM, PhD; Vet Surg 2014

Tibial tuberosity advancement in small-breed dogs using TTA RAPID implants. Complications and outcome

Evidensia Strömsholm Small Animal Referral Hospital, Sweden; Dyall B A R, DVM, Spec SWE. Schmökel H, DVM, DECVS, PHD; 2016

TTA RAPID in the treatment of the canine cruciate deficient stifle: short- and medium-term outcome

S. J. Butterworth & D. M. Kydd, Weighbridge Referral Centre & Kydd & Kydd Vets; Journal of Small Animal Practice 2017

TTA RAPID for treatment of cranial cruciate ligament injuries in dogs. Clinical results 50 cases

Kydd and Kydd Veterinary Health Centre, Wimbledon
David M Kydd BVetMed CertVR CertSAO MRCVS; Orthopaedic News from Kydd & Kydd 2014

Postoperative infection with a multiresistant Staphylococcus aureus (MRSA) in a Bernese mountain dog with a rupture of the cranial cruciate ligament

Ghent University, Faculty of Veterinary Medicine, Department of Veterinary Medical Imaging and Small Animal Orthopaedics; F. Vandael, E. de Bakker, D. Paepe, L.Mosselmans, Y. Samoy, G. Verhoeven, B. Van Ryssen; Flemish Veterinary Journal, 2015, 84

TTA RAPID: an interesting alternative operation method of an injured cranial crucial ligament

Lecznica Weterynaryjna Arwet w Wieliczce; lek. wet. Rafał Korta; VETERYNARIA W PRAKTYCE 2014

Bone Regeneration in Critical-Sized Bone Defects Treated with Additively Manufactured Porous Metallic Biomaterials: The Effects of Inelastic Mechanical Properties

M. Koolen, S.A. Yavari, K. Lietaert, R. Wauthle, A.A. Zadpoor, H. Weinans; Universities of Utrecht & Delft, 3D Systems Healthcare; MDPI Journals (Materials) 2020

TTA RAPID® with porous structure stimulates bone ingrowth

"TTA RAPID is made from pure titanium using innovative additive manufacturing (3D printing) technologies that allow to create complex geometries like porous structures. These porous structures stimulate bone ingrowth through the open porosities, have an improved fixation thanks to the high roughness and corresponding coefficient of friction, and have, in addition, a lower stiffness and thus avoid stress-shielding. The mechanical and clinical performance of the dodecahedron unit cell – also used in TTA RAPID – has been reported in literature, showing superior dynamical properties[1] and bone regeneration[2] compared to standard Ti-6Al-4V porous structures. These research-based innovations are the cornerstone of TTA RAPID, leading to over 80,000 TTA RAPID cages successfully implanted since 2011."

[1] Wauthle et al., Revival of pure titanium for dynamically loaded porous implants using additive manufacturing. Mater. Sci. Eng. C Mater. Biol. Appl. 2015, 54, 94–100.

[2] Koolen et al., Bone Regeneration in Critical-Sized Bone Defects Treated with Additively Manufactured Porous Metallic Biomaterials: The Effects of Inelastic Mechanical Properties. Materials 2020, 13, 1992.

TTA RAPID®Giant Set

Perfect for giant dog breeds!
Contains the big cage sizes 13.5mm and 15mm with depths ranging from from 19 to 28mm, as well as the **new giant cage sizes 16.5mm and 18mm** with depths from 22mm up to 31mm.

TTA RAPID® Giant Set

Contains:
Sterilization Tray with Lid
3x 2.4mm Screws of each length
(6-40mm, 54 pcs. total)
2x 2.7mm Screws of each length
(10-50mm, 36 pcs. total)
1 Cage of each size from 13.5 to 18mm
(16 cages total)

Set with LeiStar Screws

132-6200-00

Tray without contents

132-6200-10

TTA RAPID® Premium Set

Contains:
Sterilization Tray with Lid
5x 2.4mm Screws of each length
(6-40mm, 90 pcs. total)
1 Cage of each size from 3 to 12mm
Plus: 1 additional cage each of the short and very short cages (42 cages total)

Set with LeiStar Screws

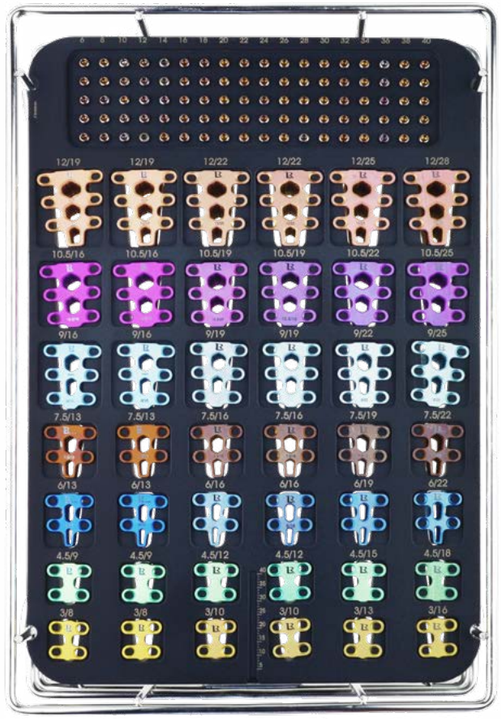
132-6012-00

Set with Hexagonal Screws

132-6002-00

Tray without contents

132-5000-00/A



TTA RAPID® Starter Split Set I

Contains:
Sterilization Tray with Lid
5x 2.4mm Screws of each length
(6-40mm, 90 pcs. total)
1 Cage of each size from 3 to 12mm
(28 cages total)

Set with LeiStar Screws

132-6013-00

Set with Hexagonal Screws

132-6003-00

Tray without contents

132-5000-00/A

TTA RAPID® Starter Set II

Contains:
Sterilization Tray with Lid
5x 2.4mm Screws of each length
(6-40mm, 90 pcs. total)
1 Cage of each size from 6mm to 10.5mm
Plus: 1 additional cage each of the short and very short cages (24 cages total)

Set with LeiStar Screws

132-6014-00

Set with Hexagonal Screws

132-6004-00

Tray without contents

132-5000-00/A

TTA RAPID® Starter Set III

Contains:
Sterilization Tray with Lid
5 pcs. 2.4mm Screws of each length
(6-40mm, 90 pcs. total)
1 Cage of each size from 6 to 10.5mm
(16 Cages total)

Set with LeiStar Screws

132-6015-00

Set with Hexagonal Screws

132-6005-00

Tray without contents

132-5000-00/A

TTA RAPID® Starter Set IV

Contains:
Sterilization Tray with Lid
5 pcs. 2.4mm Screws of each length
(6-40mm, 90 pcs. total)
1 Cage of each size from 6 to 10.5mm,
not including the longest versions
(12 Cages total)

Set with LeiStar Screws

132-6016-00

Set with Hexagonal Screws

132-6006-00

Tray without contents

132-5000-00/A

TTA RAPID® Instrument Kit

Contains:
Sterilization Tray
Petite Saw Guide (not Tiny) + K-Wire
Standard Sawguide + K-Wire
1 Pin
Lever-Spreader 3/9 + 6/12
Twist Drill 1.8
Depth Gauge
Screwdriver Handle
Screw Driver Shaft 2.4 + Holding Sleeve
Drill Guide
Plate Holding Forceps

Set withLeiStar (Holding Sleeve not included)

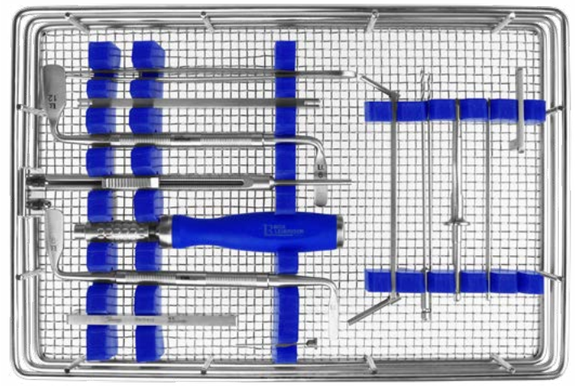
132-6010-00

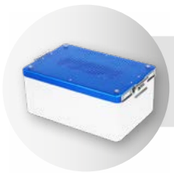
Set with Hex

132-6000-10

Tray without contents

132-5000-10/A





Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

TTA RAPID® TINY SYSTEM

TTA RAPID®Tiny Set

Specially developed for tiny patients
The TTA RAPID® Tiny System is specifically designed for our smallest companions, including cats, toy breed dogs, and dogs with short legs. Engineered to address the delicate anatomical nuances of these patients, the set features 1.5mm and 2.0mm cages and screws. Accompanying instrumentation includes a "tiny" sawguide and spreader, allowing short osteotomies and ensuring meticulous surgical precision for the tiniest patients.

TTA RAPID® Tiny Set

Contains:
1 Sterilization Tray with Lid
1 of each TTA RAPID® Tiny Cage (12 total)
1 of each 2, 3 & 4mm Patella Spacer (6 total)
1 Rapid Luxation Plate "Petite"
5 of each 1.5mm Screw (6-20mm, 40 total)
5 of each 2.0mm Screw (6-26mm, 55 total)
1 Tibia Tappet Petite
1 Plate Holding Forceps
1 Tiny Sawguide with Pin & K-Wire
1 Depth Gauge
2 Drills (1.1 & 1.5mm)
2 Screw Driver Shafts (T6 & T8)
1 Screwdriver Handle
1 Drill Guide

Set with LeiStar Screws

132-6500-00

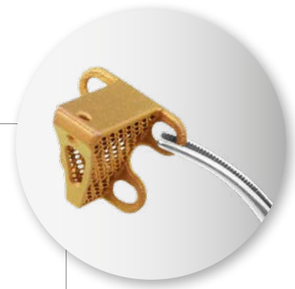
Tray without contents

132-6500-10

Complete Solution for CrCL + Patella Luxation

The TTA RAPID® Tiny Set includes Patella Spacers, a RAPID Luxation Plate, and the essential instruments to treat a cruciate ligament rupture and a concomitant Patella Luxation in one surgery.

Learn more about this procedure on **Page 23.**



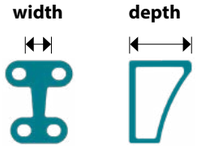
Suture Holes for More Rotational Stability

The TTA RAPID® Tiny cages now feature a suture hole that allows passing a suture material through the cage and a bone anchor in the distal femur.

TTA RAPID® Tiny Cages

Titanium

Product Code	Size in mm (width/depth)	Screw Size
132-0152-06	2/06	for 1.5 screws
132-0152-08	2/08	for 1.5 screws
132-0152-10	2/10	for 1.5 screws
132-0153-07	3/07	for 1.5 / 2.0 screws
132-0153-09	3/09	for 1.5 / 2.0 screws
132-0153-11	3/11	for 1.5 / 2.0 screws
132-0245-08	4.5/08	for 2.0 screws
132-0245-10	4.5/10	for 2.0 screws
132-0245-12	4.5/12	for 2.0 screws
132-0026-09	6/09	for 2.0 screws
132-0026-11	6/11	for 2.0 screws
132-0026-13	6/13	for 2.0 screws
132-0275-13	7.5/13	for 2.0 screws



patented

NEW

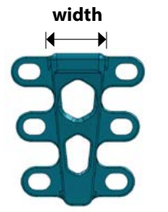
Suture Holes for More Rotational Stability

The TTA RAPID® Tiny cages now feature a hole that allows passing a suture material through the cage and a bone anchor in the distal femur to temporarily increase the post-operative rotational stability in highly unstable stifle joints with a CrCL rupture and pivot shift.

TTA RAPID® Cages

Titanium

Product Code	Size in mm (width/depth)	Screw Size
132-0023-08	3/08 (petite)	for 2.0 screws
132-0023-10	3/10 (petite)	for 2.0 screws
132-0023-13	3/13 (petite)	for 2.0 screws
132-0003-08	3/08	for 2.4 screws
132-0003-10	3/10	for 2.4 screws
132-0003-13	3/13	for 2.4 screws
132-0003-16	3/16	for 2.4 screws
132-0045-09	4.5/09	for 2.4 screws
132-0045-12	4.5/12	for 2.4 screws
132-0045-15	4.5/15	for 2.4 screws
132-0045-18	4.5/18	for 2.4 screws
132-0006-13	6/13	for 2.4 screws
132-0006-16	6/16	for 2.4 screws
132-0006-19	6/19	for 2.4 screws
132-0006-22	6/22	for 2.4 screws
132-0075-13	7.5/13	for 2.4 screws
132-0075-16	7.5/16	for 2.4 screws
132-0075-19	7.5/19	for 2.4 screws
132-0075-22	7.5/22	for 2.4 screws



patented

TTA RAPID® Cages

Titanium

Product Code	Size in mm (width/depth)	Screw Size
132-0009-16	9/16	for 2.4 screws
132-0009-19	9/19	for 2.4 screws
132-0009-22	9/22	for 2.4 screws
132-0009-25	9/25	for 2.4 screws
132-0105-16	10.5/16	for 2.4 screws
132-0105-19	10.5/19	for 2.4 screws
132-0105-22	10.5/22	for 2.4 screws
132-0105-25	10.5/25	for 2.4 screws
132-0012-19	12/19	for 2.4 screws
132-0012-22	12/22	for 2.4 screws
132-0012-25	12/25	for 2.4 screws
132-0012-28	12/28	for 2.4 screws

TTA RAPID® Giant Cages

Titanium

Product Code	Size in mm (width/depth)	Screw Size
132-0135-19	13.5/19	for 2.4 / 2.7 screws
132-0135-22	13.5/22	for 2.4 / 2.7 screws
132-0135-25	13.5/25	for 2.4 / 2.7 screws
132-0135-28	13.5/28	for 2.4 / 2.7 screws
132-0015-19	15/19	for 2.4 / 2.7 screws
132-0015-22	15/22	for 2.4 / 2.7 screws
132-0015-25	15/25	for 2.4 / 2.7 screws
132-0015-28	15/28	for 2.4 / 2.7 screws
132-0165-22	16.5/22	for 2.4 / 2.7 screws
132-0165-25	16.5/25	for 2.4 / 2.7 screws
132-0165-28	16.5/28	for 2.4 / 2.7 screws
132-0165-31	16.5/31	for 2.4 / 2.7 screws
132-0018-22	18/22	for 2.4 / 2.7 screws
132-0018-25	18/25	for 2.4 / 2.7 screws
132-0018-28	18/28	for 2.4 / 2.7 screws
132-0018-31	18/31	for 2.4 / 2.7 screws

1.5 Cortical Screws, Titanium

LeiStar head, self tapping,
with three flute cutting edge

Length (mm)	LeiStar
6	245-515-06
7	245-515-07
8	245-515-08
9	245-515-09
10	245-515-10
12	245-515-12
14	245-515-14
16	245-515-16
18	245-515-18
20	245-515-20

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

2.4 Cortical Screws, Titanium

Hexagonal or **LeiStar** Head, self tapping,
with three flute cutting edge

Length (mm)	Hexagonal (Standard)	LeiStar (Standard)
6	245-224-06	245-524-06
8	245-224-08	245-524-08
10	245-224-10	245-524-10
12	245-224-12	245-524-12
14	245-224-14	245-524-14
16	245-224-16	245-524-16
18	245-224-18	245-524-18
20	245-224-20	245-524-20
22	245-224-22	245-524-22
24	245-224-24	245-524-24
26	245-224-26	245-524-26
28	245-224-28	245-524-28
30	245-224-30	245-524-30
32	245-224-32	245-524-32
34	245-224-34	245-524-34
36	245-224-36	245-524-36
38	245-224-38	245-524-38
40	245-224-40	245-524-40

2.0 Cortical Screws, Titanium

Hexagonal or **LeiStar** head, self tapping,
with three flute cutting edge

Length (mm)	Hexagonal	LeiStar
6	245-220-06	245-520-06
8	245-220-08	245-520-08
10	245-220-10	245-520-10
12	245-220-12	245-520-12
14	245-220-14	245-520-14
16	245-220-16	245-520-16
18	245-220-18	245-520-18
20	245-220-20	245-520-20
22	245-220-22	245-520-22
24	245-220-24	245-520-24
26	245-220-26	245-520-26
28	245-220-28	245-520-28
30	245-220-30	245-520-30

2.7 Cortical Screws, Titanium

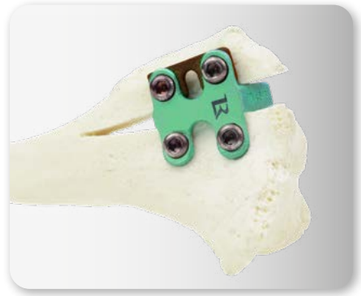
Hexagonal or **LeiStar** Head, self tapping,
with three flute cutting edge

Length (mm)	LeiStar (Standard)
10	245-527-10
12	245-527-12
14	245-527-14
16	245-527-16
18	245-527-18
20	245-527-20
22	245-527-22
24	245-527-24
26	245-527-26
28	245-527-28
30	245-527-30
32	245-527-32
34	245-527-34
36	245-527-36
38	245-527-38
40	245-527-40
45	245-527-45
50	245-527-50

TTA RAPID® & RAPID PATELLA LUXATION SYSTEM

Correction of a Patella Luxation during a TTA RAPID® Surgery

This technique is suitable for dogs suffering from patella luxation with a simultaneous cruciate ligament tear, a partial cruciate ligament tear, or when a cruciate ligament tear is imminent.



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TTA + PATELLA LUXATION (TTTA)

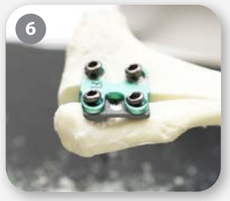
Dr. Hugo Schmökel

When a dog suffers from a cranial cruciate ligament rupture with a simultaneous patellar luxation, this can be addressed with a modified TTA RAPID® procedure. Prior to the TTA RAPID® surgery itself, it should be determined if the dog would benefit from a trochleoplasty. If so, this should be performed before the actual TTA RAPID® procedure [1].

The osteotomy used for the TTA RAPID® procedure can also be used to achieve a medial or lateral tibial tuberosity transposition (TTT), depending on the kind of patellar luxation. The further described procedure focuses on a lateralization of the crest, needed for the correction of a medial patellar luxation.

After performing the osteotomy, the appropriate cage is inserted into the osteotomy and all of the caudal screws are inserted in the tibia *(Image 1)*. Take care to choose a cage that has a bigger medio-lateral length than measured after the osteotomy, as both cortices of the transposed crest need to be supported! Usually, the longest cage is advised.

Consecutively, the tibial crest is slightly advanced, so that itcan be moved laterally with the tibia tappet instrument *(Image 2)*.



Be very careful performing this and restrict the advancement to the absolute minimum to avoid crest avulsion. Once the desired position is reached, a corresponding washer is placed between the crista tibiae and the ears of the cage *(Image 3)*.

If the transposition is sufficient to prevent dislocation of the patella, the remaining screws are inserted and the operation finished as described *(Images 4 and 5)*.

In case of a lateral luxation, the tibial crest is shifted medially in a similar manner after fixating the cranial part of the cage in the tibial crest.

1. Samoy Y, Verhoeven G, Bosmans T, Van der Vekens E, de Bakker E, Verleyen P, et al. TTA RAPID: Description of the Technique and Short Term Clinical Trial Results of the First 50 Cases. Vet Surg. 2014:n/a-n/a.

Patella Luxation Spacers

For RAPID LUXATION and TTA RAPID, Titanium

Product Code	Specifications	For Cage Sizes
132-8030-01L	1 mm height, 2 holes, left	Tiny / Petite
132-8030-01R	1 mm height, 2 holes, right	Tiny / Petite
132-8030-02L	2 mm height, 2 holes, left	Tiny / Petite
132-8030-02R	2 mm height, 2 holes, right	Tiny / Petite
132-8030-03L	3 mm height, 2 holes, left	Tiny / Petite
132-8030-03R	3 mm height, 2 holes, right	Tiny / Petite
132-8030-04L	4 mm height, 2 holes, left	Tiny / Petite
132-8030-04R	4 mm height, 2 holes, right	Tiny / Petite
132-8020-02L	2 mm height, 2 holes, left	3 - 7,5 mm
132-8020-02R	2 mm height, 2 holes, right	3 - 7,5 mm
132-8020-03L	3 mm height, 2 holes, left	3 - 7,5 mm
132-8020-03R	3 mm height, 2 holes, right	3 - 7,5 mm
132-8020-04L	4 mm height, 2 holes, left	3 - 7,5 mm
132-8020-04R	4 mm height, 2 holes, right	3 - 7,5 mm
132-8010-02L	2 mm height, 3 holes, left	9 - 15 mm
132-8010-02R	2 mm height, 3 holes, right	9 - 15 mm
132-8010-04L	4 mm height, 3 holes, left	9 - 15 mm
132-8010-04R	4 mm height, 3 holes, right	9 - 15 mm
132-8010-06L	6 mm height, 3 holes, left	9 - 15 mm
132-8010-06R	6 mm height, 3 holes, right	9 - 15 mm

Tibia Tappet

For inserting Patella Luxation Spacers.

Product Code	Description
132-4071-00	Petite / Tiny 2.0 mm
132-4070-00	Standard 2.4 mm

Patella Saw

With standard sawblade, incl. Allen Wrench 1.5mm

23-1005-90

Replacement Saw Blade

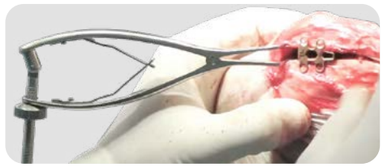
23-1005-20

TTA RAPID® & RAPID LUXATION SYSTEM INSTRUMENTS

TTA RAPID ® Spreader

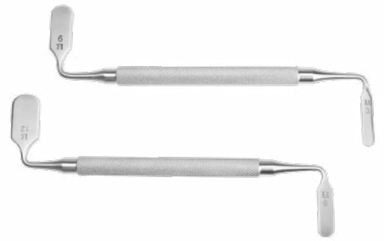
With tensioning and fixation screw

Product Code	Description
132-4080-12	12 cm (Tiny)
132-4080-16	16 cm (Standard)



TTA RAPID ® Lever-Spreader

Product Code	Description
132-4000-13	3 mm & 9 mm (Tiny)
132-4010-13	6 mm & 12 mm
132-4015-13	13.5 mm & 15 mm



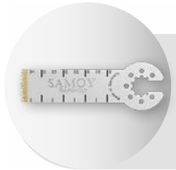
TTA RAPID ® Saw Guide

Product Code	Description
132-4042-00	For Tiny cage sizes 2 - 6 mm
132-4041-00	For cage sizes 3 - 4.5 mm
132-4040-00	For cage sizes 6 - 15 mm

TTA RAPID ® Saw Guide Pin

Ø 1.0mm

132-4030-10



Saw Blades
See saw blades on **Page 212.**

Calibration Ball
See Radiography Calibration Ball on **Page 87.**

OTHER ESSENTIAL INSTRUMENTS

Depth Gauge

Product Code	Description	Compatibility
164-1520-20	150mm in length, scale up to 40mm	for 1.5/2.0/2.4 mm screws
164-2735-60	150mm in length, scale up to 60mm	for 2.4/2.7/3.5 mm screws

Drill Guide

Product Code	Size (mm)	Length (mm)
164-0070-20	1.1/1.5	100 mm
164-0070-18	1.5/1.8	100 mm
164-0070-27	2.0/2.7	100 mm
164-0070-35	2.5/3.5	100 mm

K- Wires, Single Trocar

Product Code	Description
144-1015-10	1.5 mm x 100 mm
144-1025-10	2.5 mm x 100 mm

See more K-Wires on **Page 144.**

Plate Holding Forceps

90 mm, curved

164-0050-09

Plate Holding Forceps

160 mm, angled

164-0050-16

Bone Holding Forceps

21,5 cm - with spin lock

128-0525-21

TTA Bending Iron

120 mm

132-4020-00

Twist Drill

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)	Connection
148-0080-11	1.1	for 1.5 screws	45	round shaft
148-0080-15	1.5	for 2.0 screws	70	round shaft
148-0080-18	1.8	for 2.4 screws	125	round shaft
148-0080-20	2.0	for 2.7 screws	85	round shaft

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)	Connection
148-0081-11	1.1	for 1.5 screws	60/35	AO QC
148-0081-15	1.5	for 2.0 screws	85/60	AO QC
148-0081-18	1.8	for 2.4 screws	125/25	AO QC
148-0081-20	2.0	for 2.7 screws	100/75	AO QC

See more Twist Drills on **Page 220.**

Screwdriver Shaft LeiStar

AO conncection, self-holding
(no Holding Sleeve needed)

Product Code	Description
128-1520-15	T6, for 1.5 mm Screws, 60 mm in length
128-1520-20	T8, for 2.0 / 2.4 mm screws, 60 mm in length
128-2024-08	T8, for 2.0 / 2.4 mm screws, 100 mm in length
128-2735-10	T10, for 2.7 / 3.5 mm screws, 100 mm in length

Screwdriver Shaft Hexagonal

AO connection (Holding Sleeve recommended)

Product Code	Description
128-0900-15	for 2.0 mm Screws, 100 mm long
128-0900-20	for 2.4 mm Screws, 100 mm long

More Screwdriver Shafts on **Page 222.**

Holding Sleeve

for Hexagonal Screwdriver Shafts

Product Code	Size
128-0940-24	2.0 / 2.4 mm

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

247-0103-00

RAPID LUXATION

Patella Correction – Safe And Simple

Patella Luxations are frequently seen in dogs and cats. In the past, correcting these could prove to be challenging, but RAPID LUXATION has simplified the technique and instrumentation.

Testing The Stifle During The Surgery

The uniquely designed Tibia Tappet allows you to move the tibial tuberosity very accurately and test the functionality of the new position during the surgery before placing the screws.

Once the desired position is reached, it an be securely fixed with the patella spacer and screws.

Secure Construction

The screws securely fix the plate and spacer together and do not allow movement of the bone, which is essential for quick bone growth.
If you realize a recorrection is necessary post-operatively, you only need to replace the spacer with another size.

Three Different Sizes

The RAPID LUXATION Patella Plates are available in three different sizes: Petite/Tiny (2.0mm), Medium (2.4mm) and Large (2.4mm).

Compatible With TTA RAPID®

RAPID LUXATION is compatible with TTA RAPID® since both techniques use identical instrumentation (sawguide, tibia tappet, etc.), screws and patella spacers.

RAPID LUXATION

RITA LEIBINGER MEDICAL

RAPID LUXATION SURGERY PROTOCOL

Placement of the Patient

The dog is positioned in a dorsal recumbency, with the affected limb suspended from a stand. Make sure that the dog's paws are not fixed too tightly, as the affected limb will later be placed against the table during the surgery.

The RAPID Luxation procedure is initiated through a medial skin incision.

Using the Saw Guide

The saw guide is an L-shaped device developed to facilitate the correct positioning of the osteotomy. It was designed to ensure that a sufficiently large cranial fragment is created for screw placement. The vertical arm of the guide has 2.5mm holes placed at strategic points, over a 1mm wide slot, with markings derived from the TTA RAPID® technique, making it equally suitable for the RAPID Luxation technique to prevent overly distal osteotomies. The horizontal arm of the guide includes a millimeter scale, preventing overly caudal osteotomies and ensuring accurate alignment during surgery.

Making the Osteotomy

1. A 2.5mm pin is placed through the joint capsule at the intersection of the femoral condyle and the tibial plateau. On the lateral side, the pin should start slightly in front of the level of "Gerdy's Tubercle". This pin is used as the proximal fixation of the saw guide.

2. The saw guide is dropped over the pin using one of the numbered holes in the vertical arm. The selected number should ensure that the osteotomy ends just below the Tibial Tuberosity.
3. A peg is placed into one of the holes in the horizontal arm of the drill guide, selecting the cortical thickness in millimeters measured during pre-operative planning.
4. Press the saw guide against the medial aspect of the tibia with protruding peg forced up against the cranial side of the tibia. Hold it in that position. Correct use of the saw guide will place the osteotomy just caudal to the cranial cortex of the tibia. (As a guide: In a large dog the cortex is approximately 5mm thick and in a small dog approximately 3mm.)

   IMPORTANT: Do not press the horizontal arm against the bone, as this will cause an oblique Osteotomy!

5. Use an oscillating saw to create the osteotomy. Optionally, a blade can be used to open the fascia/ periostium prior to the osteotomy.

Placing the Implants

In the following, a medial Patella Luxation (PL) is described. In a lateral PL, place the implants in the lateral/medial opposite site.

1. The RAPID Luxation Plate is placed on the tibia. The osteotomy should be in the middle of the RAPID Luxation Plate. The plate is then screwed on the caudal side of the tibia (for a medial PL) *(Note: Place screws on the cranial side for a lateral patella luxation.)*

2. The RAPID Luxation Tibia Tappet is inserted on the cranial screw holes (top and centre screw hole for the 3-hole plates) of the RAPID Luxation Plate.

3. Then the tappet can be rotated, it fixates itself in the screw holes of the RAPID Luxation Plate and transposes the tibia crest to the lateral side. The scale (in mm) on the top of the instruments shows exactly how far the tibia crest is transposed.
4. During transposition using the tappet, the stifle can be flexed and extended to check if there is perfect alignment of the patella and if the patella stays in place. If the alignment is not optimal, the transposition can be further increased.

5. Once the desired position is achieved, insert the RAPID Luxation Spacer between the plate and the bone. The tappet may then be removed.

6. Insert the remaining screws to secure the plate and spacer. Close the fascia where possible. Close the wound according to standard procedure.

RAPID Luxation Set

Contains:
Sterilization Tray with Lid
3 of each 2.0mm Screw (6-20mm)
(24 pcs. total)
3 of each 2.4mm Screw (6-40mm)
(54 pcs. total)
1 of each Rapid Luxation Plate
(3 pcs. total)
1 of each Patella Spacer (18 pcs. total)
Large Sawguide with Pin & K-Wire
Petite Sawguide with Pin & K-Wire
Tibia Tappet Petite
Tibia Tappet Standard
Screwdriver Handle
Screw Driver Shaft 2.4/2.0 or T8
Holding Sleeve (Hexagonal Set only)
Plate Holding Forceps
Depth Gauge
Drill Guide
Drills 1.5 + 1.8

Set with Hexagonal Screws
132-8000-00

Set with LeiStar Screws
132-8000-01

Tray without contents
132-8000-10

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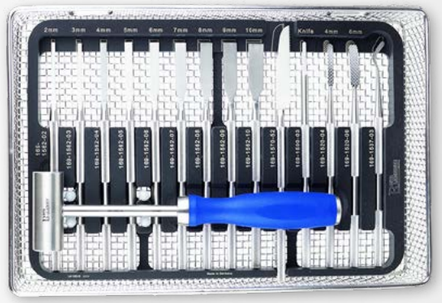


EXPLORE NOW

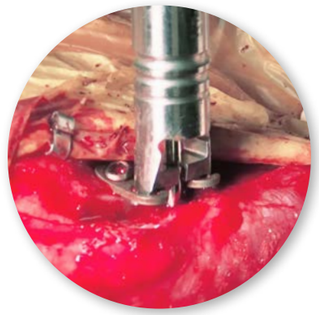
Sulcoplasty Set & Instruments

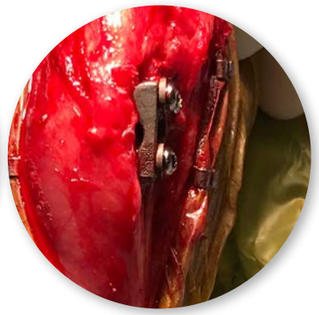
See our Sulcoplasty Set and our range of sulcoplasty instruments on **Page 236 .**

RAPID LUXATION VIDEO

Watch the animation video of the RAPID Patella Luxation Technique.

Visit our website:
www.leibinger.vet/rapid-patella-luxation/rapid-patella-luxation-technique





Luxation Plate

6-hole, 1.5 mm thick, with gliding holes, for 2.4 mm screws, Titanium

132-8200-01

Spacer

Product Code	Spacer left
132-8010-02L	2 mm height, 3 holes, left
132-8010-04L	4 mm height, 3 holes, left
132-8010-06L	6 mm height, 3 holes, left

Product Code	Spacer right
132-8010-02R	2 mm height, 3 holes, right
132-8010-04R	4 mm height, 3 holes, right
132-8010-06R	6 mm height, 3 holes, right

Luxation Plate

4-hole, 1 mm thick, with gliding holes for 2.4 mm screws, Titanium

132-8200-02

Spacer

Product Code	Spacer left
132-8020-02L	2 mm height, 2 holes, left
132-8020-03L	3 mm height, 2 holes, left
132-8020-04L	4 mm height, 2 holes, left

Product Code	Spacer right
132-8020-02R	2 mm height, 2 holes, right
132-8020-03R	3 mm height, 2 holes, right
132-8020-04R	4 mm height, 2 holes, right

Luxation Plate Petite

4-hole, 1 mm thick, with gliding holes for 2.0 mm screws, Titanium

132-8200-03

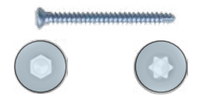
Spacer

Product Code	Spacer left
132-8030-01L	1 mm height, 2 holes, left
132-8030-02L	2 mm height, 2 holes, left
132-8030-03L	3 mm height, 2 holes, left
132-8030-04L	4 mm height, 2 holes, left

Product Code	Spacer right
132-8030-01R	1 mm height, 2 holes, right
132-8030-02R	2 mm height, 2 holes, right
132-8030-03R	3 mm height, 2 holes, right
132-8030-04R	4 mm height, 2 holes, right

2.0 Self-tapping Screws, Titanium

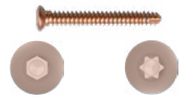
Hexagonal or **LeiStar** head, self tapping, with three flute cutting edge



Length (mm)	Hexagonal (Petite)	LeiStar (Petite)
5		245-520-05
6	245-220-06	245-520-06
7		245-520-07
8	245-220-08	245-520-08
9		245-520-09
10	245-220-10	245-520-10
12	245-220-12	245-520-12
14	245-220-14	245-520-14
16	245-220-16	245-520-16
18	245-220-18	245-520-18
20	245-220-20	245-520-20
22	245-220-22	245-520-22
24	245-220-24	245-520-24
26	245-220-26	245-520-26
28	245-220-28	245-520-28
30	245-220-30	245-520-30

2.4 Self-tapping Screws, Titanium

Hexagonal or **LeiStar** head, self tapping, with three flute cutting edge



Length (mm)	Hexagonal (Standard)	LeiStar (Standard)
6	245-224-06	245-524-06
8	245-224-08	245-524-08
10	245-224-10	245-524-10
12	245-224-12	245-524-12
14	245-224-14	245-524-14
16	245-224-16	245-524-16
18	245-224-18	245-524-18
20	245-224-20	245-524-20
22	245-224-22	245-524-22
24	245-224-24	245-524-24
26	245-224-26	245-524-26
28	245-224-28	245-524-28
30	245-224-30	245-524-30
32	245-224-32	245-524-32
34	245-224-34	245-524-34
36	245-224-36	245-524-36
38	245-224-38	245-524-38
40	245-224-40	245-524-40

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

Tibia Tappet

For inserting Patella Luxation Spacers

Product Code	Description
132-4071-00	Petite / Tiny 2.0 mm
132-4070-00	Standard 2.4 mm

Patella Saw

With standard sawblade, incl. Allen Wrench 1.5mm

23-1005-90

Replacement Saw Blade

23-1005-20

RAPID LUXATION Saw Guide

Product Code	Description
132-4040-00	for plates 132-8200-01 & -02
132-4041-00	for plates 132-8200-02 & -03
132-4042-00	for Petite plates 132-8200-03

TTA RAPID ® Saw Guide Pin

Ø 1.0mm

132-4030-10

Depth Gauge

Product Code	Description	Compatibility
164-1520-20	150mm in length, scale up to 40mm	for 1.5/2.0/2.4 mm screws
164-2735-60	150mm in length, scale up to 60mm	for 2.4/2.7/3.5 mm screws

Plate Holding Forceps

90 mm, curved

164-0050-09

Drill Guide

Product Code	Size (mm)	Length (mm)
164-0070-18	1.5/1.8	100 mm

K- Wires, Single Trocar

Product Code	Description
144-1015-10	1.5 mm x 100 mm
144-1025-10	2.5 mm x 100 mm

See more K-Wires on **Page 144.**

Twist Drill

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)	Connection
148-0080-15	1.5	for 2.0 screws	70	round shaft
148-0080-18	1.8	for 2.4 screws	125	round shaft

See more on **Page 220.**

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)	Connection
148-0081-15	1.5	for 2.0 screws	85/60	AO QC
148-0081-18	1.8	for 2.4 screws	125/25	AO QC

Screwdriver Shaft LeiStar

AO conncection, self-holding
(no Holding Sleeve needed)

Product Code	Description
128-1520-20	T8, for 2.0 / 2.4 mm screws, 60 mm in length
128-2024-08	T8 for 2.0 / 2.4 mm screws, 100 mm in length

Screwdriver Shaft Hexagonal

AO connection (Holding Sleeve recommended)

Product Code	Description
128-0900-15	for 2.0 mm Screws, 100 mm long
128-0900-20	for 2.4 mm Screws, 100 mm long

More Screwdriver Shafts on **Page 222.**

Holding Sleeve

for Hexagonal Screwdriver Shafts

Product Code	Size
128-0940-24	2.0 / 2.4 mm

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

247-0103-00

TTA Standard

Made in Germany

TTA Standard implants are manufactured by Rita Leibinger with a high quality.

Titanium Implants Available In Many Sizes

Our TTA Standard implants are available from very small to very large sizes. All implants are made of Titanium.

Cuttable Cages

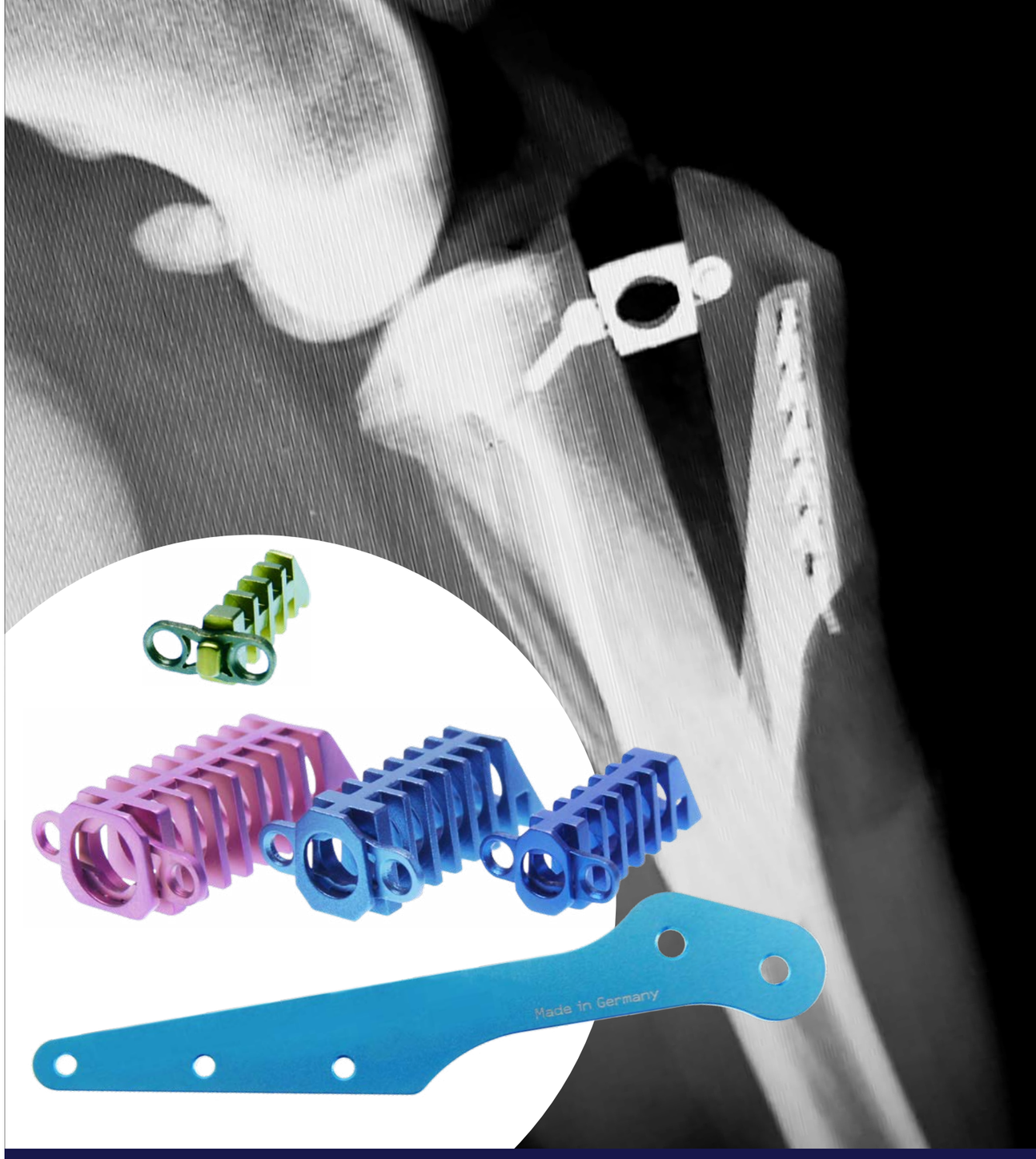
Besides standard cages we offer cuttable cages, too. This allows you to adjust the depth of each cage yourself.

Affordable

Because you are buying directly from the manufacturer, we can offer all implants at affordable pricing.

Convenience + Great Customer Service

In addition to our Standard TTA Implants, we also offer TTA RAPID, and many other implant systems. And because we manufacture the implants ourselves, we can assist you directly with your needs.



TTA STANDARD

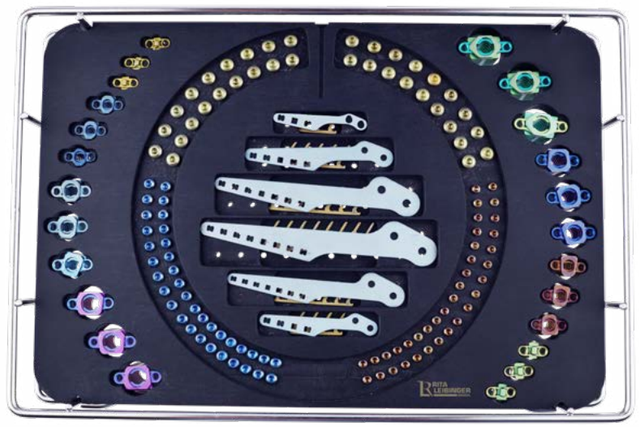
RITA LEIBINGER MEDICAL

TTA Implant Standard Set

Contains:
1 TTA Implant Tray with Lid
1 of each TTA Cage 3mm - 15mm (24 total)
2 of each 2.4mm Screw (6-40mm, 36 total)
2 of each 2.7mm Screw (6-40mm, 36 total)
2 of each 3.5mm Screw (10-50mm, 36 total)
1 of each Fork Standard Style 3-8
1 of each Plate Standard Style 3-8

230-2020-00

Tray without contents
230-2080-00

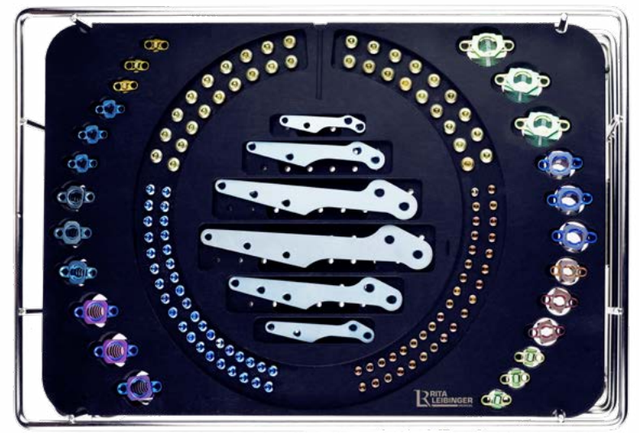


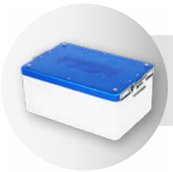
TTA Implant ESY Set

Contains:
1 TTA Implant Tray with Lid
1 of each TTA Cage 3mm - 15mm (24 total)
2 of each 2.4mm Screw (6-40mm, 36 total)
2 of each 2.7mm Screw (6-40mm, 36 total)
2 of each 3.5mm Screw (10-50mm, 36 total)
1 of each ESY Plate Style 3-8

230-2040-00

Tray without contents
230-2080-00

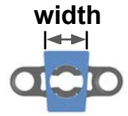


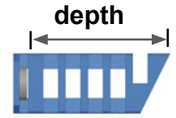


Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

Cages

Titanium





Product Code	Size (w/d)
230-2162-310	3/10
230-2162-313	3/13
230-2162-316	3/16
230-2162-319	3/19
230-2162-4512	4.5/12
230-2162-4515	4.5/15
230-2162-4518	4.5/18
230-2162-616	6/16
230-2162-619	6/19

Product Code	Size (w/d)
230-2162-622	6/22
230-2162-7513	7.5/13
230-2162-7516	7.5/16
230-2162-7519	7.5/19
230-2162-7522	7.5/22
230-2162-919	9/19
230-2162-922	9/22
230-2162-925	9/25

Product Code	Size (w/d)
230-2162-10519	10.5/19
230-2162-10522	10.5/22
230-2162-10525	10.5/25
230-2162-1222	12/22
230-2162-1225	12/25
230-2162-1228	12/28
230-2162-1525	15/25
230-2162-1528	15/28
230-2162-1531	15/31

Cuttable Cages

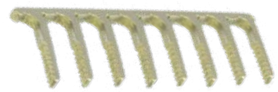
Titanium

Product Code	Size (w/d)
230-2163-622	6/22
230-2163-7524	7.5/24
230-2163-926	9/26

Product Code	Size (w/d)
230-2163-10528	10.5/28
230-2163-1230	12/30
230-2163-1532	15/32

Forks

Titanium



Product Code	Prongs
230-2161-03	3
230-2161-04	4

Product Code	Prongs
230-2161-05	5
230-2161-06	6

Product Code	Prongs
230-2161-07	7
230-2161-08	8

Plates Standard

Titanium

Product Code	Holes
230-2160-03	3
230-2160-04	4

Product Code	Holes
230-2160-05	5
230-2160-06	6

Product Code	Holes
230-2160-07	7
230-2160-08	8

ESY TTA Plate

Titanium

	Specification	
Product Code	Holes	Style
230-155-03	2	3
230-155-04	2	4

	Specification	
Product Code	Holes	Style
230-155-05	2	5
230-155-06	3	6

	Specification	
Product Code	Holes	Style
230-155-07	3	7
230-155-08	3	8

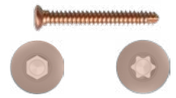
TTA Spacers Titanium

For Patella Luxation

Product Code	Size (mm)
246-008-02	2
246-008-04	4
246-008-06	6

2.4 Self Tapping Screws Titanium

Hexagonal or **LeiStar** head, self tapping with three flute cutting edge



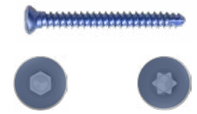
Length (mm)	Hexagonal	LeiStar
6	245-224-06	245-524-06
8	245-224-08	245-524-08
10	245-224-10	245-524-10
12	245-224-12	245-524-12
14	245-224-14	245-524-14
16	245-224-16	245-524-16
18	245-224-18	245-524-18
20	245-224-20	245-524-20
22	245-224-22	245-524-22
24	245-224-24	245-524-24
26	245-224-26	245-524-26
28	245-224-28	245-524-28
30	245-224-30	245-524-30
32	245-224-32	245-524-32
34	245-224-34	245-524-34
36	245-224-36	245-524-36
38	245-224-38	245-524-38
40	245-224-40	245-524-40

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

2.7 Self Tapping Screws Titanium

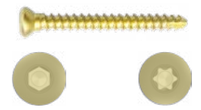
Hexagonal or **LeiStar** head, self tapping with three flute cutting edge



Length (mm)	Hexagonal	LeiStar
6	245-227-06	245-527-06
8	245-227-08	245-527-08
10	245-227-10	245-527-10
12	245-227-12	245-527-12
14	245-227-14	245-527-14
16	245-227-16	245-527-16
18	245-227-18	245-527-18
20	245-227-20	245-527-20
22	245-227-22	245-527-22
24	245-227-24	245-527-24
26	245-227-26	245-527-26
28	245-227-28	245-527-28
30	245-227-30	245-527-30
32	245-227-32	245-527-32
34	245-227-34	245-527-34
36	245-227-36	245-527-36
38	245-227-38	245-527-38
40	245-227-40	245-527-40

3.5 Self Tapping Screws Titanium

Hexagonal or **LeiStar** head, self tapping with three flute cutting edge



Length (mm)	Hex Head	LeiStar
8	245-235-08	
10	245-235-10	
12	245-235-12	245-535-12
14	245-235-14	245-535-14
16	245-235-16	245-535-16
18	245-235-18	245-535-18
20	245-235-20	245-535-20
22	245-235-22	245-535-22
24	245-235-24	245-535-24
26	245-235-26	245-535-26
28	245-235-28	245-535-28
30	245-235-30	245-535-30
32	245-235-32	245-535-32
34	245-235-34	245-535-34
36	245-235-36	245-535-36
38	245-235-38	245-535-38
40	245-235-40	245-535-40
45	245-235-45	245-535-45
50	245-235-50	245-535-50
55	245-235-55	245-535-55
60	245-235-60	245-535-60

Drill Guides for Forks

Product Code	Holes
246-001-04	4
246-001-08	8

Fork Inserter

246-002-00

Pin

Size 1.9 mm

246-006-19

Drill Sleeves

Product Code	Size (mm)
164-0070-18	1.5/1.8
164-0070-27	2.0/2.7
164-0070-35	2.5/3.5

Drill Bits

Product Code	ø (mm)	Length (mm)	Connection
148-0080-18	1.8	125/25	straight shank
148-0080-20	2.0	85/70	straight shank
148-0080-25	2.5	95/80	straight shank

Product Code	ø (mm)	Length (mm)	Connection
148-0081-18	1.8	125/25	AO Schaft
148-0081-20	2.0	100/75	AO Schaft
148-0081-25	2.5	110/85	AO Schaft

Depth Gauge

For 2.4 | 2.7 | 3.5 srews
maximal measurement 60 mm

164-2735-60

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

247-0103-00

Screwdriver LeiStar

AO conncection, self-holding (no Holding Sleeve needed)

Product Code	Description
128-1520-20	T8, for 2.0 and 2.4 mm Screws
128-2735-10	T10, for 2.7 and 3.5 mm Screws

Screwdriver Hex Insert

AO conncection, self-holding, (Holding Sleeve recommended)

Product Code	Description
128-0900-20	for 2.4 mm Screws
128-0900-25	for 2.7 and 3.5 mm Screws

Holding Sleeve

for Hexagonal Screwdriver Shafts

Product Code	Size
128-0940-24	2.0 / 2.4 mm
128-0940-25	2.7 / 3.5 mm

Plate Holding Forceps

16 cm angled

164-0050-16

TTA RAPID ® Spreader

With tensioning and fixation screw, 16 cm

132-4080-16

Boneholding Forceps

21.5 cm, with spin lock

128-0525-21

TTA Bending Iron

120 mm

132-4020-00

LeiLOX **TPLO**

Tradition improved and Made Affordable

LeiLOX TPLO implants are made in Germany by Rita Leibinger. Because you are buying directly from the manufacturer, we can offer them at an affordable price.

Multiaxial Locking

The screws can be locked in a 90° angle with a 12° deviation in any direction. This allows you to angle the screws away from vital structures. The robust LeiStar screw head can be locked firmly into the plate.

Anatomically Shaped Limited Contact Dynamic Compression Plates

The LeiLOX TPLO plates are contoured to match the anatomic shape of the bone. This makes it easier to place the plate in an optimal position.
The plate features limited contact dynamic compression to minimize vascular damage to the plated bone segment.

Double Compression

Two precisely designed compression holes enable a very tight compression of the osteotomy.

Interchangeable 2.7 & 3.5mm and 2.0 & 2.4mm Screws

Because the screwheads are identical, all Stainless Steel 2.7/3.5 LeiLOX plates (TPLO and fracture systems) work with 2.7mm as well as 3.5mm screws in all of the plate sizes. Same applies for the 2.0/2.4 systems. This offers flexibility and ideal implant selection for each patient. Moreover, this saves on inventory cost.

High Performance TPLO Sawblades are available. The Titanium Nitrate coating allows them to last significantly longer than standard blades.

TPLO *Stainless Steel*

RITA LEIBINGER MEDICAL

LEILOX TPLO TECHNIQUE

Pre-Operative Planning

Positioning the Patient for Radiographs

Proper positioning is essential for accurate planning. By ensuring proper positioning of the limb, accurate radiographs with consistent appearance of anatomic landmarks can be obtained for TPLO pre-operative planning, allowing for precise measurements.

To obtain lateral radiographic views of the stifle joint and tibia, the patient is positioned in lateral recumbency on a radiographic table, with the stifle and tarsus positioned at 90°. The patient is best sedated to ensure optimal positioning. Orthogonal radiographs are taken with the beam centered over the stifle joint.

It is important to know that any internal or external rotation of the tibia can affect how the tibial plateau appears on the X-ray. This rotation can occur due to incorrect positioning of the affected limb or failure to center the X-ray beam accurately over the stifle joint.

Determining the Tibial Plateau Angle (TPA)

Draw the functional axis (FA), also known as the weight bearing axis or mechanical tibial axis. Draw a line from the intercondylar eminence or tibial eminence proximally to the center of the tarsal joint or talocrural joint distally.

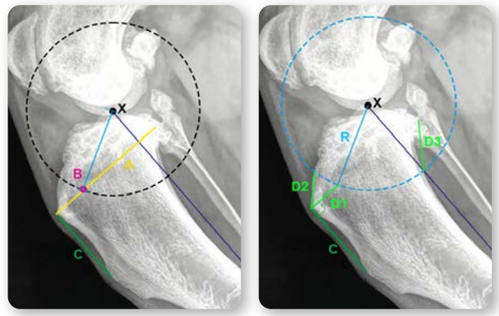
Draw the tibial plateau line (TP). To check correctness of the tibial plateau line, the cranial and caudal points of this line should be equally distant from the intercondylar eminence.

Draw a line perpendicular to the FA, where it intersects with the TP. The **TPA** is the angle between this line and TP.

Determining Saw Blade Radius

Considering the patient's weight and bone size, a suitable curved saw blade is chosen, ranging from 9mm to 33mm in radius. The saw blade radius is determined as follows:

- The osteotomy is centered at the intercondylar eminence (**X**)
- A line is drawn from the tibial crest to the caudal edge of the medial tibial plateau (**Line A**). Mark the cranial third of this line (Point **B**) and measure the distance between points B and X. Choose the saw blade radius (**R**) closest to this distance.
- With the center at X, draw a circle with a radius equivalent to the selected saw blade radius (R).
- Note down the following measurements:
  - **D1** - Draw a line perpendicular to the cranial border of the tibia (**Line C**) starting from the insertion of the patellar tendon to the osteotomy line, and measure this distance. In large dogs, this distance should be at least 1cm.
  - **D2** - From the cranial end of D1 to the cranial point of the osteotomy
  - **D3** - From the caudal point of the osteotomy to the caudal end of the tibia
- Also check to make sure that the osteotomy line is perpendicular to the caudal border of the tibia.



With the pre-op TPA and the selected saw blade radius (R) values at hand, determine the amount of rotation with the help of the TPLO Rotation Chart. The goal is to achieve a post-op TPA of 4-6 degrees, effectively neutralizing abnormal shear forces resulting from cruciate ligament deficiency and restoring biomechanical stability.

*See TPLO Rotation Chart on **Page 48** .*

View online or download the rotation chart here

Original Author (English version):
***Dr. Yves Samoy**, DVM, PhD, Dipl. ECVSMR,*
Certified Small Animal Rehabilitation Practitioner (UGent)

tplo.leibinger.vet

LEILOX TPLO TECHNIQUE

Surgery Protocol

Positioning of the Patient

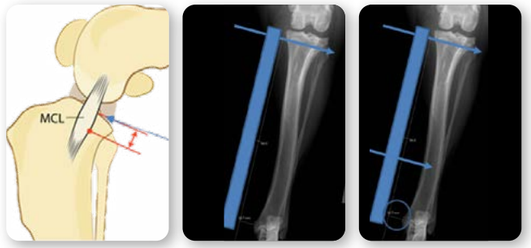
The dog is placed in a dorsal recumbency with the affected limb suspended from a stand. Make sure that the dog's paws are not fixed too tightly, since the affected limb will be put against the table later in the surgery. TPLO is performed through a medial skin incision.

Use of a Jig

The use of a jig is advised when performing a leveling osteotomy.

Placement of the Jig

1. The joint surface is marked with a needle. About 3 to 4 mm below is the insertion point of the proximal pin for the TPLO Jig.
2. The proximal pin is inserted in a 90° angle to the joint surface.

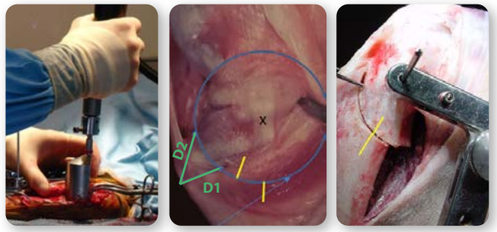


3. The distal pin is placed. Take care to not tilt the jig. The pins must be parallel to each other, and absolutely perpendicular to to the jig.

Making the Osteotomy

The location of the osteotomy is determined with the use of the D1-D3 measurements taken during pre-op planning.

1. Using a radial oscillating saw, perform a partial osteotomy, making sure that the cut is parallel to the pins and perpendicular to the jig.
2. The cut is made approximately half-way (1/2) or a third (1/3) of the way through the bone. Then, measure and make the following markings for the rotation as determined during pre-op planning:
   - Position the first mark on the proximal bone fragment adjacent to the edge of the osteotomy, ensuring it is situated cranially to the midpoint of the osteotomy.
   - A second mark is then made on the distal bone fragment at the designated distance from the first mark, as determined by the TPLO Rotation Chart during pre-operative planning.

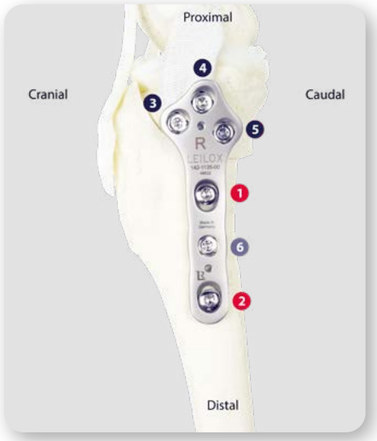


3. Complete the cut, loosen the jig, and rotate the proximal bone fragment to align the two markings. Once the correct rotation has been achieved, stabilize the osteotomy by placing a K-Wire across the tibial tuberosity.

Placement of the TPLO Plate

Place the TPLO Plate, securing it in place with K-Wires. At this point, the jig may be loosened or completely removed.

The screws are inserted in the following (recommended) sequence:



1 2

Insert standard ***cortical screws*** 1 and then 2 into the compression holes. Do not tighten yet.

3 4 5

Insert ***locking screws*** 3, 4, and then 5 into the plate head and tighten.

1 2

Remove K-Wires (IMPORTANT!) and tighten screws 1 and 2 for a strong compression.

6

Insert ***locking screw*** 6 and tighten.

LeiLOX TPLO Rotation Chart

Saw Blade Size / Radius	Pre-operative Tibia Plateau Angle (TPA)												
	15 °	16 °	17 °	18 °	19 °	20 °	21 °	22 °	23 °	24 °	25 °	26 °	27 °
	Rotation (mm) - Provides Resultant 5° TPA												
9 mm	1.6	1.7	1.9	2.0	2.2	2.4	2.5	2.7	2.8	3.0	3.1	3.3	3.5
12 mm	2.1	2.3	2.5	2.7	2.9	3.1	3.4	3.6	3.8	4.0	4.2	4.4	4.6
15 mm	2.6	2.9	3.1	3.4	3.7	3.9	4.2	4.5	4.7	5.0	5.2	5.5	5.8
18 mm	3.1	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.7	6.0	6.3	6.6	6.9
21 mm	3.7	4.0	4.4	4.8	5.1	5.5	5.9	6.2	6.6	7.0	7.3	7.7	8.1
24 mm	4.2	4.6	5.0	5.4	5.9	6.3	6.7	7.1	7.5	8.0	8.4	8.8	9.2
27 mm	4.7	5.2	5.7	6.1	6.6	7.1	7.5	8.0	8.5	9.0	9.4	9.9	10.4
30 mm	5.2	5.8	6.3	6.8	7.3	7.9	8.4	8.9	9.4	9.9	10.5	11.0	11.5
33 mm	5.8	6.3	6.9	7.5	8.1	8.6	9.2	9.8	10.4	10.9	11.5	12.1	12.7

Saw Blade Size / Radius	Pre-operative Tibia Plateau Angle (TPA)												
	28 °	29 °	30 °	31 °	32 °	33 °	34 °	35 °	36 °	37 °	38 °	39 °	40 °
	Rotation (mm) - Provides Resultant 5° TPA												
9 mm	3.6	3.8	3.9	4.1	4.2	4.4	4.6	4.7	4.9	5.0	5.2	5.3	5.5
12 mm	4.8	5.0	5.2	5.4	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3
15 mm	6.0	6.3	6.5	6.8	7.1	7.3	7.6	7.9	8.1	8.4	8.6	8.9	9.2
18 mm	7.2	7.5	7.9	8.2	8.5	8.8	9.1	9.4	9.7	10.1	10.4	10.7	11.0
21 mm	8.4	8.8	9.2	9.5	9.9	10.3	10.6	11.0	11.4	11.7	12.1	12.5	12.8
24 mm	9.6	10.1	10.5	10.9	11.3	11.7	12.1	12.6	13.0	13.4	13.8	14.2	14.7
27 mm	10.8	11.3	11.8	12.3	12.7	13.2	13.7	14.1	14.6	15.1	15.6	16.0	16.5
30 mm	12.0	12.6	13.1	13.6	14.1	14.7	15.2	15.7	16.2	16.8	17.3	17.8	18.3
33 mm	13.2	13.8	14.4	15.0	15.6	16.1	16.7	17.3	17.9	18.4	19.0	19.6	20.2

Rotation Calculation

X (mm) = [2π (saw blade diameter)] (TPA-5°/360°)
According to: TPLO principles, patient selection, and preoperative planning
by Derek B. Fox, DVM, PhD, Dipl ACVS, Assistant Professor, Missouri, USA

Patient Weight Guide for LeiLOX TPLO Plates

The weight ranges are suggestions based on the recommendations of our veterinary consultants. This table only serves as a guide. It is up to the veterinarian to assess and determine the correct implant size, material type, and configuration to use for his patient, as well as its application and the technique to be employed.

Weight Range	LeiLOX TPLO Implant Size
Less than **5 kg**	1.5 mm
5 - 10 kg	2.0 mm
8 - 18 kg	2.4 mm
15 - 30 kg	2.7 mm
25 - 40 kg	3.5 mm
35 - 55 kg	3.5 mm Broad
More than **50 kg**	3.5 mm Giant

Treating CrCL Rupture + Patella Luxation with TPLO

Tibial Plateau Leveling Osteotomy (TPLO) is a widely recognized surgical technique and remains a globally popular choice for addressing cranial cruciate ligament (CrCL) tears in dogs and cats. Joint instability following a ligament injury can exacerbate an existing, mild patellar luxation. CrCL injuries in susceptible dogs, particularly those with pre-existing anatomical predispositions, might also indirectly affect the alignment and tracking of the patella, potentially leading to luxation.

Conversely, an existing patellar luxation can increase the risk of CrCL rupture due to limb alignment abnormalities and joint instability.

When both conditions are present, addressing both is crucial for ensuring optimal joint stability and function.

LeiLOX TPLO Patella Spacers
Treating both conditions simultaneously with TPLO

One-surgery solution

The **LeiLOX TPLO Patella Spacers** can be seamlessly implanted together with our LeiLOX TPLO Plates in a challenging case of a CrCL rupture and a concomitant patella luxation.

Learn this technique in one of our workshops:
academy.leibinger.vet

See TPLO Patella Luxation Spacers on **Page 62.**

2.0 / 2.4 TPLO Set

Contains:
1 TPLO Implants and
Instruments Tray with Lid
2 of each TPLO Plate
3 of each Cortical Screw
(8-18mm // 8-22mm, 42 total)
5 of each Locking Screw
(6-24mm // 6-30mm, 115 total)
2 Drills (1.5 & 1.8mm)
5 K-Wires
2x2 Locking Drill Guides
2 Compression Drill Guides
1 TPLO Jig
1 Screwdriver Handle
1 Screwdriver Shaft T8
1 Depth Gauge

142-0150-00

Tray without contents
142-0150-10

Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

2.0 / 2.4 LeiLOX TPLO Locking Plate

LeiLOX TPLO Locking Plate, 2.0 mm,
left, 33 mm, Stainless Steel

142-1120-10

LeiLOX TPLO Locking Plate, 2.0 mm,
right, 33 mm, Stainless Steel

142-1120-00

LeiLOX TPLO Locking Platte, 2.4 mm,
left, 37 mm, Stainless Steel

142-1124-10

LeiLOX TPLO Locking Plate, 2.4 mm,
right, 37 mm, Stainless Steel

142-1124-00

2.0 / 2.4 LeiLOX Locking Screw Stainless Steel

For LeiLOX Locking Systems, LeiStar T8
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.0 mm	2.4 mm
Length (mm)	Product Code	Product Code
06	242-120-06	242-124-06
08	242-120-08	242-124-08
10	242-120-10	242-124-10
12	242-120-12	242-124-12
14	242-120-14	242-124-14
16	242-120-16	242-124-16
18	242-120-18	242-124-18
20	242-120-20	242-124-20
22	242-120-22	242-124-22
24	242-120-24	242-124-24
26		242-124-26
28		242-124-28
30		242-124-30

2.0 / 2.4 Cortical Screw Stainless Steel

LeiStar T8, Non-Locking
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.0 mm	2.4 mm
Length (mm)	Product Code	Product Code
08	245-620-08	245-624-08
10	245-620-10	245-624-10
12	245-620-12	245-624-12
14	245-620-14	245-624-14
16	245-620-16	245-624-16
18	245-620-18	245-624-18
20	245-620-20	245-624-20
22		245-624-22

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

2.7 / 3.5 TPLO Implant Set

Contains:
1 TPLO Implant Tray with Lid
2 of each TPLO Plate
3 of each Cortical Screw
(16-34mm, 60 total)
5 of each Locking Screw
(16-46mm, 160 total)

142-0100-02

Tray without contents
142-0100-10

2.7 / 3.5 LeiLOX TPLO Locking Plate

LeiLOX TPLO Locking Plate, 2.7 mm, left, 46 mm, Stainless Steel

142-1127-10

LeiLOX TPLO Locking Plate, 2.7 mm, right, 46 mm, Stainless Steel

142-1127-00

LeiLOX TPLO Locking Plate, 3.5 mm, left, 66 mm, Stainless Steel

142-1135-10

LeiLOX TPLO Locking Plate, 3.5 mm, right, 66 mm, Stainless Steel

142-1135-00

LeiLOX TPLO Locking Plate, broad, 3.5 mm, left, 75 mm, Stainless Steel

142-1135-60

LeiLOX TPLO Locking Plate, broad, 3.5 mm, right, 75 mm, Stainless Steel

142-1135-50

2.7 / 3.5 LeiLOX Locking Screw Stainless Steel

For LeiLOX Locking Systems, LeiStar T10
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
10	242-127-10	242-135-10
12	242-127-12	242-135-12
14	242-127-14	242-135-14
16	242-127-16	242-135-16
18	242-127-18	242-135-18
20	242-127-20	242-135-20
22	242-127-22	242-135-22
24	242-127-24	242-135-24
26	242-127-26	242-135-26
28	242-127-28	242-135-28
30	242-127-30	242-135-30
32	242-127-32	242-135-32
34	242-127-34	242-135-34
36	242-127-36	242-135-36
38	242-127-38	242-135-38
40	242-127-40	242-135-40
42	242-127-42	242-135-42
44	242-127-44	242-135-44
46	242-127-46	242-135-46
48	242-127-48	242-135-48
50	242-127-50	242-135-50
52		242-135-52
54		242-135-54
56		242-135-56
58		242-135-58
60		242-135-60
62		242-135-62
64		242-135-64
66		242-135-66
68		242-135-68
70		242-135-70

2.7 / 3.5 Cortical Screw Stainless Steel

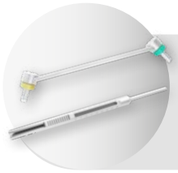
LeiStar T10, Non-Locking
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
16	245-627-16	245-635-16
18	245-627-18	245-635-18
20	245-627-20	245-635-20
22	245-627-22	245-635-22
24	245-627-24	245-635-24
26	245-627-26	245-635-26
28	245-627-28	245-635-28
30	245-627-30	245-635-30
32	245-627-32	245-635-32
34	245-627-34	245-635-34

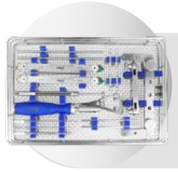
See more screw lengths on **Page 134.**

TPLO Saw Blades
See radial saw blades for TPLO and CBLO in various radii on **Page 213.**

Screw Racks
See screw racks for 1.5mm up to 3.5mm screws on **Page 227.**



TPLO Instruments
See essential instruments for a TPLO Surgery on **Page 84.**



Instrument Set
See Instrument Set for TPLO / CBLO / CCWO on **Page 84.**

LeiLOX **TPLO *Swing***

Titanium for Best Biocompatibility

LeiLOX TPLO Swing implants are made of medical grade Titanium, which makes them very durable but lightweight, highly biocompatible, and low in temperature sensitiveness.

Multiaxial Locking

The screws can be locked in a 90° angle with a 12° deviation in any direction. This allows you to angle the screws away from vital structures. The robust LeiStar screw head can be locked firmly into the plate.

Anatomically Shaped Limited Contact Dynamic Compression Plates

The LeiLOX TPLO Swing plates are contoured to match the anatomic shape of the bone. This makes it easier to place the plate in an optimal position.

The plate features limited contact dynamic compression to minimize vascular damage to the plated bone segment.

Double Compression

Two precisely designed compression holes enable a very tight compression of the osteotomy.

Interchangeable 2.7 & 3.5mm and 2.0 & 2.4mm Screws

Because the screwheads are identical, all Titanium 2.7/3.5 LeiLOX plates (TPLO Swing, CBLO, and CCWO systems) work with 2.7mm as well as 3.5mm screws in all of the plate sizes. Same applies for the 2.0/2.4 systems. This offers flexibility and ideal implant selection for each patient. Moreover, this saves on inventory cost.

High Performance Sawblades are available. The Titanium Nitrate coating allows them to last significantly longer than standard blades.

TPLO SWING *Titanium*

RITA LEIBINGER MEDICAL

1.5 LeiLOX TPLO Swing Locking Plates Titanium

Instruments & screws are compatible with the LeiLOX 1.5/2.0 Micro Locking Plate System

NEW

LeiLOX TPLO Swing Plate, 1.5 mm Tiny left, 26 mm, Titanium

142-2815-10

NEW

LeiLOX TPLO Swing Plate, 1.5 mm Tiny right, 26 mm, Titanium

142-2815-00

NEW

LeiLOX TPLO Swing 1.5mm Tiny Plate

The 1.5 mm TPLO Swing Tiny plate is one of the two newest members of the LeiLOX TPLO Swing family, launched alongside the 3.5 mm Giant plate. Specially designed for the smallest patients, such as toy dog breeds, the Tiny plate combines the lightweight, biocompatible benefits of titanium with the trusted stability of the LeiLOX design.

2.0 / 2.4 LeiLOX TPLO Swing Locking Plates Titanium

LeiLOX TPLO Swing Plate, 2.0 mm left, 33 mm, Titanium

142-2820-10

LeiLOX TPLO Swing Plate, 2.0 mm right, 33 mm, Titanium

142-2820-00

LeiLOX TPLO Swing Plate, 2.4 mm left, 37 mm, Titanium

142-2824-10

LeiLOX TPLO Swing Plate, 2.4 mm right, 37 mm, Titanium

142-2824-00

1.5 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T6
self-holding (T6 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

Length (mm)	Product Code
5	245-415-05
6	245-415-06
7	245-415-07
8	245-415-08
9	245-415-09
10	245-415-10
11	245-415-11
12	245-415-12
14	245-415-14
16	245-415-16
18	245-415-18
20	245-415-20

1.5 Cortical Screw (Non-Locking) Titanium

LeiStar T6, Non-Locking
self-holding (T6 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	Product Code
5	245-515-05
6	245-515-06
7	245-515-07
8	245-515-08
9	245-515-09
10	245-515-10
12	245-515-12
14	245-515-14
16	245-515-16
18	245-515-18
20	245-515-20

See more screw lengths on **Page 134.**

2.0 / 2.4 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T8
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	2.0 mm	2.4 mm
	Product Code	Product Code
06	242-220-06	242-224-06
08	242-220-08	242-224-08
10	242-220-10	242-224-10
12	242-220-12	242-224-12
14	242-220-14	242-224-14
16	242-220-16	242-224-16
18	242-220-18	242-224-18
20	242-220-20	242-224-20
22	242-220-22	242-224-22
24	242-220-24	242-224-24
26	242-220-26	242-224-26
28	242-220-28	242-224-28
30	242-220-30	242-224-30
32		242-224-32
34		242-224-34
36		242-224-36
38		242-224-38
40		242-224-40

2.0 / 2.4 Cortical Screw (Non-Locking) Titanium

LeiStar T8, Non-Locking
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	2.0 mm	2.4 mm
	Product Code	Product Code
08	245-520-08	245-524-08
10	245-520-10	245-524-10
12	245-520-12	245-524-12
14	245-520-14	245-524-14
16	245-520-16	245-524-16
18	245-520-18	245-524-18
20		245-524-20
22		245-524-22

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

2.7 / 3.5 LeiLOX TPLO Swing Locking Plates Titanium

LeiLOX TPLO Swing Plate, 2.7 mm
left, 44 mm, Titanium

142-2827-10

LeiLOX TPLO Swing Plate, 2.7 mm
right, 44 mm, Titanium

142-2827-00

LeiLOX TPLO Swing Plate, 3.5 mm
left, 63 mm, Titanium

142-2835-10

LeiLOX TPLO Swing Plate, 3.5 mm
right, 63 mm, Titanium

142-2835-00

LeiLOX TPLO Swing Plate, 3.5 mm broad
left, 74 mm, Titanium

142-2835-60

LeiLOX TPLO Swing Plate, 3.5 mm broad
right, 74 mm, Titanium

142-2835-50

NEW

LeiLOX TPLO Swing Plate, 3.5 mm Giant
left, 95 mm, Titanium

142-2835-80

NEW

LeiLOX TPLO Swing Plate, 3.5 mm Giant
right, 95 mm, Titanium

142-2835-70

2.7 / 3.5 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T10
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
10	242-227-10	242-235-10
12	242-227-12	242-235-12
14	242-227-14	242-235-14
16	242-227-16	242-235-16
18	242-227-18	242-235-18
20	242-227-20	242-235-20
22	242-227-22	242-235-22
24	242-227-24	242-235-24
26	242-227-26	242-235-26
28	242-227-28	242-235-28
30	242-227-30	242-235-30
32	242-227-32	242-235-32
34	242-227-34	242-235-34
36	242-227-36	242-235-36
38	242-227-38	242-235-38
40	242-227-40	242-235-40
42	242-227-42	242-235-42
44	242-227-44	242-235-44
46	242-227-46	242-235-46
48	242-227-48	242-235-48
50	242-227-50	242-235-50
52		242-235-52
54		242-235-54
56		242-235-56
58		242-235-58
60		242-235-60

See more screw lengths on **Page 134.**

2.7 / 3.5 Cortical Screw Titanium

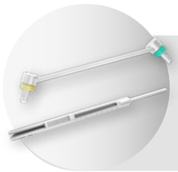
LeiStar T10, Non-Locking
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

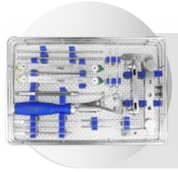
	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
16	245-527-16	245-535-16
18	245-527-18	245-535-18
20	245-527-20	245-535-20
22	245-527-22	245-535-22
24	245-527-24	245-535-24
26	245-527-26	245-535-26
28	245-527-28	245-535-28
30	245-527-30	245-535-30
32	245-527-32	245-535-32
34	245-527-34	245-535-34

TPLO Saw Blades
See radial saw blades for TPLO and CBLO in various radii on **Page 213.**

Screw Racks
See screw racks for 1.5mm up to 3.5mm screws on **Page 227.**



TPLO Instruments
See essential instruments for a TPLO Surgery on **Page 84.**



Instrument Set
See Instrument Set for TPLO / CBLO / CCWO on **Page 84.**

2.0 / 2.4 TPLO Swing Set

Contains:
1 TPLO Implants and
Instruments Tray with Lid
2 of each TPLO Swing Locking Plate
3 of each Cortical Screw
(2.0, 8-18mm // 2.4, 8-22mm, 42 total)
5 of each Locking Screw
(2.0, 6-24mm // 2.4, 6-30mm, 115 total)
2 Drills (1.5 & 1.8mm)
5 K-Wires
2x2 Locking Drill Guides
2 Compression Drill Guides
1 TPLO Jig
1 Screwdriver Handle
1 Screwdriver Shaft T8
1 Depth Gauge

142-2820-24

Tray without contents

142-2800-10

Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

2.7 / 3.5 TPLO Swing Set

Contains:
1 TPLO Implant Tray with Lid
2 of each TPLO Swing Plate
3 of each Cortical Screw
(16-34mm, 60 total)
5 of each Locking Screw
(16-46mm, 160 total)

142-2827-35

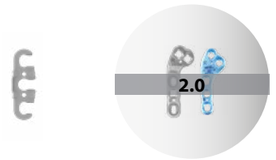
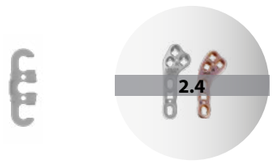
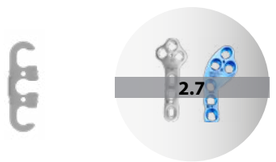
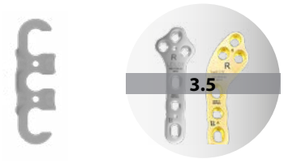
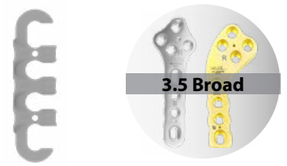
Tray without contents

142-2800-20

TPLO + Patella Luxation

TPLO Patella Luxation Spacers

For LeiLOX TPLO Stainless Steel and TPLO Swing Titanium Systems

Description	Compatibility	Product Code
2.0 TPLO Patella Luxation Spacer Titanium, 2.0mm thick for 2.0 mm TPLO Locking Plates, left & right		142-8020-00
2.4 TPLO Patella Luxation Spacer Titanium, 2.0mm thick for 2.4 mm TPLO Locking Plates, left & right		142-8024-00
2.7 TPLO Patella Luxation Spacer Titanium, 2.0mm thick for 2.7 mm TPLO Locking Plates, left & right		142-8027-00
3.5 TPLO Patella Luxation Spacer Titanium, 2.0mm thick for 3.5 mm TPLO Locking Plates, left & right		142-8035-00
3.5 broad TPLO Patella Luxation Spacer Titanium, 2.0mm thick for 3.5 mm broad TPLO Locking Plates, left & right		142-8035-10

Tibia Tappet

For inserting TPLO Patella Luxation Spacers

Product Code	Description
142-2890-00	For 2.0 / 2.4 mm plates
142-2891-00	For 2.7/3.5 mm plates

LEILOX TPLO PATELLA LUXATION SYSTEM

Correction of a Patella Luxation during a TPLO Surgery

Treating concurrent cranial cruciate ligament (CrCL) rupture and patella luxation in dogs has traditionally posed a significant challenge for veterinary surgeons. However, the introduction of LeiLOX TPLO Patella Luxation Spacers has revolutionized this process, making it simpler and more efficient. By seamlessly integrating the spacer insertion into the standard Tibial Plateau Leveling Osteotomy (TPLO) procedure, surgeons can now address both conditions simultaneously with greater ease and precision.

Learn this technique in one of our workshops:
academy.leibinger.vet

TPLO + PATELLA LUXATION

The LeiLOX TPLO Patella Luxation Spacer is designed to be inserted directly beneath the TPLO plate after the rotation of the proximal bone fragment and before tightening the distal screws. This straightforward addition eliminates the need for a separate surgical approach for patella luxation correction, significantly streamlining the procedure. The specially designed tappet allows for precise lateral transposition of the tibial crest, ensuring optimal alignment and guidance of the patella.

Osteotomy and TPLO Plate Placement
Perform a tibial plateau leveling osteotomy (TPLO) using the preselected radial saw blade, centering it in the region of the tibial eminences to achieve the desired TPA correction. Rotate the proximal tibial fragment to achieve a postoperative TPA of 4-6 degrees. Secure the LeiLOX TPLO Plate onto the proximal bone fragment with pins.

Patella Luxation Correction Using LeiLOX TPLO Patella Luxation Spacers

Insertion of the First Five Screws
Insert standard cortical screws 1 and then 2 into the compression holes. Do not tighten yet. Insert locking screws 3, 4, and then 5 into the plate head and tighten.

Use of the Tappet:
Insert the special tappet into locking hole 6 of the LeiLOX TPLO Plate. Rotate the tappet to fixate it in the screw hole of the TPLO Plate. Rotate the pin to transpose the tibia to the lateral side until the luxation is corrected.

Flex and extend the stifle to check the alignment of the patella. Adjust the transposition with the tappet if needed to achieve optimal patellar alignment.

Insertion of the Patella Luxation Spacer:
Once the desired position is achieved, insert the TPLO Patella Luxation Spacers between the plate and the bone. Spacers are stackable. Remove the tappet.

Final Fixation
Remove any remaining pins, then tighten compression screws 1 and 2. Insert locking screw 6 and tighten. Ensure stable fixation and verify the correction of the tibial plateau angle and patella alignment through intraoperative radiography if available.

Closure
Close the periosteum and soft tissue layers carefully to protect the implant site, ensuring all incisions, including the distal jig pin incision, are properly closed.

LeiLOX **CBLO**

Combines the advantages of TPLO and TTA

CBLO (CORA based leveling osteotomy) is a modern osteotomy technique to level the tibia plateau, similar to TPLO. However, CBLO addresses further challenges such as secondary (late) meniscal damage, overload of the caudal cruciate ligament, reduction of proximal anatomic axis shift and the secondary translation as well as misalignment of the joint.

Multiaxial Locking & Titanium

The screws can be locked in 90° angle with a 12° deviation in any direction. This allows you to angle the screws away from vital structures. The robust LeiStar screw head can be locked firmly into the plate.
All LeiLOX CBLO Implants are made of Titanium by RITA LEIBINGER for the best biocompatibility.

Anatomically Shaped Limited Contact Dynamic Compression Plates

The LeiLOX CBLO plates are contoured to match the anatomic shape of the bone. This makes it easier to place the plate in an optimal position.
The plate features limited contact dynamic compression to minimize vascular damage to the plated bone segment.

Double Compression

Two precisely designed compression holes enable a very tight compression of the osteotomy. This allows you to use a standard cortical screw as the cranio-caudal holding screw (instead of a headless compression screw).

Interchangeable 2.0/2.4 & 2.7/3.5mm Screws

Because the screwheads are identical, all Titanium 2.7/3.5 LeiLOX plates (TPLO Swing, CBLO, and CCWO systems) work with 2.7mm as well as 3.5mm screws in all of the plate sizes. Same applies for the 2.0/2.4 systems. This offers flexibility and ideal implant selection for each patient. Moreover, this saves on inventory cost.

High Performance Sawblades are available. The Titanium Nitrate coating allows them to last significantly longer than standard blades.

LeiLOX **CBLO**

RITA LEIBINGER MEDICAL

LEILOX CBLO TECHNIQUE

Pre-Operative Planning

Positioning the Patient for Radiographs

Proper positioning is essential for accurate planning. Orthogonal radiographs are taken with the stifle positioned at 90 degrees and the tarsus at 90 degrees for the lateral projection. The AP projection must have the stifle and tarsus included for the attending surgeon to assess limb alignment. The patient is best sedated for radiographs to assure optimal positioning.

Determining the CORA

The distal mid-diaphyseal line (**FA**) as well as the Tibia Plateau (**TP**) are determined.

The proximal axis (PA) is determined from the intersection point on the tibia plateau with the angle α [normally 80° = 90° - 10° *(post-operative required TP angle)*].

The intersection point of FA and PA is the **CORA**.

The angle **β** is then the correction.

The required saw blade is determined by a circle CORA as the centre point. Draw and measure a line (**D1**) from the insertion of the patella tendon to the point at which the saw blade crosses the cranial cortex. Draw and measure a second line (**D2**) from the joint line at a point where the MCL crosses the joint to the location where the saw blade crosses the caudal cortex. With these D1 and D2 measurements, the osteotomies can be positioned correctly during the surgery.

Determining the Correction

Based on the measured correction angle and the selected saw blade select the appropriate correction in the Leibinger LeiLOX CBLO Rotation Chart in the field "Rotation".

See CBLO Rotation Chart on ***Page 68 .***

View online or download the rotation chart here

Surgery Protocol

Positioning of the Patient

The dog is placed in a dorsal recumbency with the affected limb suspended from a stand. Make sure that the dog's paws are not fixed too tightly, since the affected limb will be put against the table later in the surgery. CBLO is performed through a medial skin incision. The internal structures of the joint should be examined, this is accomplished arthroscopically or with a medial open mini arthrotomy.

Most importantly, the caudal horn of the medial meniscus must be examined closely and torn meniscus parts excised if present. Next, the insertion of the sartorius muscle is reflected from the medial tibia to expose the MCL. Limited reflection of the popliteal muscle and protection of the popliteal artery with gauze packing or Hohmann retractor is optional. D1 and D2 measurements are marked distal to the insertion of the patella tendon (D1) and distal to the joint line at the MCL (D2).

Use of a Jig

The use of a jig is advised when performing a leveling osteotomy.

Placement of the Jig

The proximal pin of the jig is inserted about 3-4mm below the joint surface caudal to the MCL. The pin must be absolutely parallel to the joint surface.

The Jig is slid over the proximal pin. The Jig can be used as a guide for placing the distal pin. Both pins must be parallel to each other. The Jig must be in a right angle to the pins. After the positions are correct, the screws as well as the grub screws can be tightened.

Making the Osteotomy

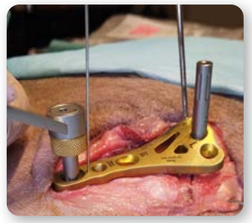
1. The appropriate saw blade determined in the pre-operative planning is positioned at D1/D2 and a circular osteotomy begins. The osteotomy is stopped when 1/3 to 1/2 complete. Move the saw circularly so that it won't stick. The pre-operatively determined correction measurements (in mm) should be marked for example by a small chisel and mallet.

2. At the insertion point of the patella a 2.0mm pin can be preplaced without crossing the osteotomy.

3. Complete the cut and rotate the bone fragment. The rotation is made with the pin so that the marks are aligned. The osteotomy is then stabilized with the pin. Carefully avoid a rotation or valgus mistake. The preplaced pin is directed across the osteotomy under the medial cortex to exit the caudal cortex of the tibia distal to the osteotomy.

Stabilization of the Osteotomy with Plate Compression

The CBLO procedure not only levels the tibial plateau, but also involves cranially advancing the tibial crest. This advancement enhances the structural moment arm of the tibia, consequently increasing quadriceps force on the osteotomy site. To increase stability and promote faster healing, compression of the osteotomy is essential.



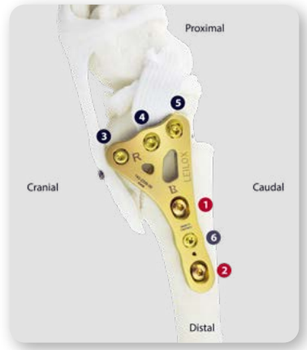
The LeiLOX CBLO plate facilitates this compression, particularly when the distal portion of the plate sits flush on the tibial surface without exerting lateral pressure on the proximal tibia. By positioning the LeiLOX CBLO Plate at the desired location and pre-fixing it with a 1mm positioning pin in the plate shaft, precise compression and stabilization of the osteotomy can be achieved.

Original Author (English version):
Dr. Hugo Schmökel, Dr.med.vet. PhD, Dipl. ECVS

cblo.leibinger.vet

Sequence of Screw Insertion

The screws are inserted in the following (recommended) sequence:



1 **2**

The first screws to be placed are the ***2 cortical screws*** in the 2 compression holes in the plate. Drill the holes with the matching compression drill guide facing distal. Place the screw but do not tighten yet.

3 **4** **5**

Place the proximal ***locking screws*** in the plate head. Drill the hole with the matching locking drill guide and insert the screw one by one. Fully tighten the screws.

NOTE: The locking mechanism of the LeiLOX CBLO plate is designed multi-axial, offering versatility and adaptability during surgical procedures. If there is concern about screws entering the joint when drilling at a 90° angle, simply adjust the angle of the drill guide to face distally. This adjustment allows for precise screw placement while minimizing the risk of intra-articular penetration.

Remove the stabilizing pin and the positioning pin.

1 **2**

Tighten the compression screws 1 and 2.

6

Insert ***locking screw*** 6 and tighten.

Screws

To counteract the pull of the quadriceps muscle, a screw should be placed in the same location as the pin through the crest in a caudo-distal direction.

In large dogs it is advised to place 2 cranial screws to counteract the quadriceps force. In giant breed dogs the placement of a second plate should be considered.

Image: Big dogs, stabilized with a 3.5mm broad plate and two cranial screw

Check the tightness of all screws.

Close the wound using standard techniques. It is crucial to properly close the periosteum and soft tissue layers to safeguard the plate site. Ensure not to overlook the closure of incision made for the distal jig pin.

LeiLOX CBLO Rotation Chart

Correction Angle			5 °	6 °	7 °	8 °	9 °	10 °	11 °	12 °	13 °	14 °	15 °	16 °	17 °	18 °	19 °
Radians			0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17
Saw Blade Size / Radius	9 mm	Rotation	0.8	0.9	1.1	1.3	1.5	1.6	1.7	1.9	2.1	2.2	2.4	2.5	2.7	2.8	3.0
	12 mm		1.0	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.8	4.0
	15 mm		1.3	1.6	1.8	2.1	2.4	2.6	2.9	3.1	3.4	3.7	3.9	4.2	4.4	4.7	5.0
	18 mm		1.6	1.9	2.2	2.5	2.8	3.1	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.6	5.9
	21 mm		1.8	2.2	2.6	2.9	3.3	3.7	4.0	4.4	4.8	5.1	5.5	5.8	6.2	6.6	6.9
	24 mm		2.1	2.5	2.9	3.3	3.8	4.2	4.6	5.0	5.4	5.8	6.3	6.7	7.1	7.5	7.9
	27 mm		2.4	2.8	3.3	3.8	4.2	4.7	5.2	5.6	6.1	6.6	7.0	7.5	8.0	8.4	8.9
	30 mm		2.6	3.1	3.7	4.2	4.7	5.2	5.8	6.3	6.8	7.3	7.8	8.4	8.9	9.4	9.9
	33 mm		2.9	3.5	4.0	4.6	5.2	5.8	6.3	6.9	7.5	8.0	8.6	9.2	9.8	10.3	10.9

Correction Angle			20 °	21 °	22 °	23 °	24 °	25 °	26 °	27°	28 °	29 °	30 °	31 °	32 °	33 °	34 °
Radians			0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.27	0.28	0.29	0.30
Saw Blade Size / Radius	9 mm	Rotation	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	4.5	4.7	4.8	5.0	5.1	5.3
	12 mm		4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0
	15 mm		5.2	5.5	5.7	6.0	6.2	6.5	6.7	7.0	7.3	7.5	7.8	8.0	8.3	8.5	8.8
	18 mm		6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.6	9.9	10.2	10.5
	21 mm		7.3	7.7	8.0	8.4	8.7	9.1	9.4	9.8	10.2	10.5	10.9	11.2	11.6	11.9	12.3
	24 mm		8.3	8.7	9.2	9.6	10.0	10.4	10.8	11.2	11.6	12.0	12.4	12.8	13.2	13.6	14.0
	27 mm		9.4	9.8	10.3	10.8	11.2	11.7	12.1	12.6	13.1	13.5	14.0	14.4	14.9	15.3	15.8
	30 mm		10.4	10.9	11.4	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5
	33 mm		11.5	12.0	12.6	13.2	13.7	14.3	14.8	15.4	16.0	16.5	17.1	17.6	18.2	18.7	19.3

View online or download the rotation chart here

2.0 / 2.4 LeiLOX CBLO Set

Contents:
1 CBLO Implants and Instruments Tray with Lid
2 of each CBLO Plate
3 of each Cortical Screw (8-18mm // 8-22mm, 42 total)
5 of each Locking Screw (6-24mm // 6-30mm, 115 total)
2 Drills (1.5 & 1.8mm)
5 K-Wires
2x2 Locking Drill Guides
2 Compression Drill Guides
1 TPLO Jig
1 Screwdriver Handle
1 Screwdriver Shaft T8
1 Depth Gauge

142-4200-00

Tray without contents
142-4200-10

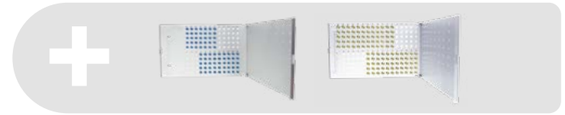
Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

2.7 / 3.5 LeiLOX CBLO Set

Contains:
1 CBLO Implants and Instruments Tray with Lid
1 Screwrack CBLO 2.7
1 Screwrack CBLO 3.5
2 of each CBLO Plate
3 of each 2.7mm Cortical Screw (16-34mm)
3 of each 3.5mm Cortical Screw (16-34mm)
5 of each 2.7mm Locking Screw (16-46mm)
5 of each 3.5mm Locking Screw (16-60mm)

142-4000-10

Tray without contents
142-4000-01



2.0 / 2.4 LeiLOX CBLO Locking Plates

LeiLOX CBLO Plate, 2.0 mm
left, 35 mm, titanium

142-2320-10

LeiLOX CBLO Plate, 2.0 mm
right, 35 mm, titanium

142-2320-00

LeiLOX CBLO Plate, 2.4 mm
left, 40 mm, titanium

142-2324-10

LeiLOX CBLO Plate, 2.4 mm
right, 40 mm, titanium

142-2324-00

Patient Weight Guide for LeiLOX CBLO Plates

The weight ranges are suggestions based on the recommendations of our veterinary consultants. This table only serves as a guide. It is up to the veterinarian to assess and determine the correct implant size, material type, and configuration to use for his patient, as well as its application and the technique to be employed.

		LeiLOX CBLO Implant Size
Weight Range	Less than **10 kg**	2.0 mm
	8 - 18 kg	2.4 mm
	15 - 30 kg	2.7 mm
	25 - 40 kg	3.5 mm
	35 - 55 kg	3.5 mm Broad
	More than **50 kg**	3.5 mm Giant

2.0 / 2.4 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T8
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.0 mm	2.4 mm
Length (mm)	Product Code	Product Code
06	**242-220-06**	**242-224-06**
08	**242-220-08**	**242-224-08**
10	**242-220-10**	**242-224-10**
12	**242-220-12**	**242-224-12**
14	**242-220-14**	**242-224-14**
16	**242-220-16**	**242-224-16**
18	**242-220-18**	**242-224-18**
20	**242-220-20**	**242-224-20**
22	**242-220-22**	**242-224-22**
24	**242-220-24**	**242-224-24**
26	**242-220-26**	**242-224-26**
28	**242-220-28**	**242-224-28**
30	**242-220-30**	**242-224-30**
32		**242-224-32**
34		**242-224-34**
36		**242-224-36**
38		**242-224-38**
40		**242-224-40**

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

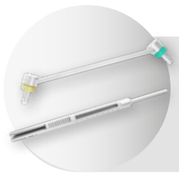
2.0 / 2.4 Cortical Screw (Non-Locking) Titanium

LeiStar T8, Non-Locking
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.0 mm	2.4 mm
Length (mm)	Product Code	Product Code
08	**245-520-08**	**245-524-08**
10	**245-520-10**	**245-524-10**
12	**245-520-12**	**245-524-12**
14	**245-520-14**	**245-524-14**
16	**245-520-16**	**245-524-16**
18	**245-520-18**	**245-524-18**
20		**245-524-20**
22		**245-524-22**

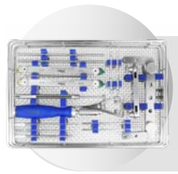
TPLO Saw Blades

See radial saw blades for TPLO and CBLO in various radii on **Page 213.**



CBLO Instruments

See essential instruments for a CBLO Surgery on **Page 84.**



Instrument Set

See Instrument Set for TPLO / CBLO / CCWO on **Page 84.**

2.7 / 3.5 LeiLOX CBLO Locking Plates

LeiLOX CBLO Plate, 2.7 mm
left, 55 mm, titanium

142-2327-10

LeiLOX CBLO Plate, 2.7 mm
right, 55 mm, titanium

142-2327-00

LeiLOX CBLO Plate, 3.5 mm
left, 70 mm, titanium

142-2335-10

LeiLOX CBLO Plate, 3.5 mm
right, 70 mm, titanium

142-2335-00

LeiLOX CBLO Plate, 3.5 mm broad
left, 78 mm, titanium

142-2335-60

LeiLOX CBLO Plate, 3.5 mm broad
right, 78 mm, titanium

142-2335-50

NEW

LeiLOX CBLO Plate, 3.5 mm Giant
left, 112 mm, titanium

142-2335-80

NEW

LeiLOX CBLO Plate, 3.5 mm Giant
right, 112 mm, titanium

142-2335-70

2.7 / 3.5 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T10
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
10	242-227-10	242-235-10
12	242-227-12	242-235-12
14	242-227-14	242-235-14
16	242-227-16	242-235-16
18	242-227-18	242-235-18
20	242-227-20	242-235-20
22	242-227-22	242-235-22
24	242-227-24	242-235-24
26	242-227-26	242-235-26
28	242-227-28	242-235-28
30	242-227-30	242-235-30
32	242-227-32	242-235-32
34	242-227-34	242-235-34
36	242-227-36	242-235-36
38	242-227-38	242-235-38
40	242-227-40	242-235-40
42	242-227-42	242-235-42
44	242-227-44	242-235-44
46	242-227-46	242-235-46
48	242-227-48	242-235-48
50	242-227-50	242-235-50
52		242-235-52
54		242-235-54
56		242-235-56
58		242-235-58
60		242-235-60

2.7 / 3.5 Cortical Screw Titanium

LeiStar T10, Non-Locking
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
16	245-527-16	245-535-16
18	245-527-18	245-535-18
20	245-527-20	245-535-20
22	245-527-22	245-535-22
24	245-527-24	245-535-24
26	245-527-26	245-535-26
28	245-527-28	245-535-28
30	245-527-30	245-535-30
32	245-527-32	245-535-32
34	245-527-34	245-535-34

See more screw lengths on **Page 134.**

Screw Racks
See screw racks for 1.5mm up to 3.5mm screws on **Page 227.**

LeiLOX **CCWO**

Advantages of CCWO

Straightforward technique through linear cuts. Suitable for juvenile patients as the procedure is carried out outside the growth zone. Moreover, it is suitable for patients with steep TPAs that would be too challenging to treat with other techniques.

Multiaxial Locking

The screws can be locked in a 90° angle with a 12° deviation in any direction. This allows screws to be angled away from vital structures, providing greater flexibility in fixation. The robust LeiStar screw head can be locked firmly into the plate.

Anatomically Shaped Limited Contact Dynamic Compression Plates

The LeiLOX CCWO plates are contoured to match the natural shape of the bone. It simplifies placement of the plate in an optimal position and provides high stability.

The plate features limited contact dynamic compression to minimize vascular damage to the plated bone segment, promoting better blood flow and faster healing.

Titanium for Best Biocompatibility

LeiLOX CCWO implants are made of medical grade Titanium, offering several key advantages: it is biocompatible, ensuring it is well-tolerated by the body and reducing the risk of adverse reactions; it provides strength and durability, offering robust support during the bone healing process and ensuring long-term stability; and it is resistant to corrosion, making it suitable for long-term implantation and maintaining its integrity over time.

Interchangeable 2.7 & 3.5mm and 2.0 & 2.4mm Screws

Because the screwheads are identical, all Titanium 2.7/3.5 LeiLOX plates (TPLO Swing, CBLO, and CCWO systems) work with 2.7mm as well as 3.5mm screws in all of the plate sizes. Same applies for the 2.0/2.4 systems. This offers flexibility and ideal implant selection for each patient. Moreover, this saves on inventory cost.

High Performance Sawblades are available. The Titanium Nitrate coating allows them to last significantly longer than standard blades.

LeiLOX **CCWO**

RITA LEIBINGER MEDICAL

LEILOX CCWO TECHNIQUE

Pre-Operative Planning

Positioning the Patient for Radiographs

Proper positioning is essential for accurate planning. By ensuring proper positioning of the limb, accurate radiographs with consistent appearance of anatomic landmarks can be obtained for CCWO (Cranial Closing Wedge Ostectomy) pre-operative planning, allowing for precise measurements.

To obtain lateral radiographic views of the stifle joint and tibia, the patient is positioned in lateral recumbency on a radiographic table, with the stifle and tarsus positioned at 90°. The patient is best sedated to ensure optimal positioning. Orthogonal radiographs are taken with the beam centered over the stifle joint.

It is important to know that any internal or external rotation of the tibia can affect how the tibial plateau appears on the X-ray. This rotation can occur due to incorrect positioning of the affected limb or not centering the X-ray beam accurately over the stifle joint.

Determining the Tibial Plateau Angle (TPA)

Draw the functional axis (FA), also known as the weight bearing axis or mechanical tibial axis. Draw a line from the intercondylar eminence or tibial eminence proximally to the center of the tarsal joint or talocrural joint distally.

Draw the tibial plateau line (TP). To check correctness of the tibial plateau line, the cranial and caudal points of this line should be equally distant from the intercondylar eminence.

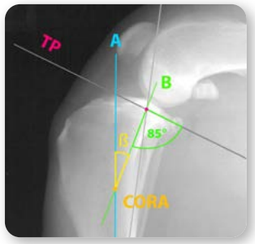
Draw a line perpendicular to the FA, where it intersects with the TP. The **TPA** is the angle between this line and TP.

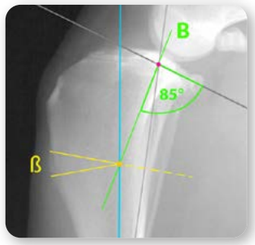
There are several CCWO Techniques in achieving the target TPA. The following procedure aims for a post-operative TPA of 5°.

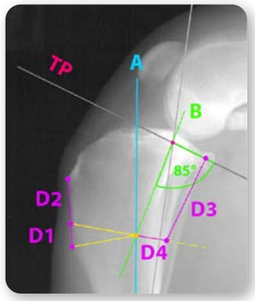
Draw the Mid-Diaphyseal Line (A)

The proximal mid-diaphyseal line bisects the marrow cavity at the distal extent of the tibial crest and 1-2 cm below; it generally exits the joint line at Gerdy's tubercle. To help visualize the anatomic tibia axis, see image of an intramedullary pin at the left.

Determining Wedge Size and Position







Draw a proximal axis line (**B**) from the intersection point of TP and FA at an angle of 85°, intersecting it with the mid-diaphyseal line (**A**). The intersection point of these two lines is the **CORA**.

Angle **β** is the correction angle. Next, the proximal wedge line is drawn from the cranial to the caudal cortex through the CORA. The distal wedge line is drawn from the CORA at the correction angle **β** to the cranial cortex.

Note down the following measurements:
D1 - from the insertion point of the patellar tendon to the cranial exit point of the proximal osteotomy
D2 - distance between exit points of the cranial proximal and distal osteotomies
D3 - from the caudal cortex to the caudal end of the tibia
D4 - from the CORA to the caudal cortex

Surgery Protocol

Positioning of the Patient

The dog is placed in a dorsal recumbency with the affected limb suspended from a stand. Make sure that the dog's paws are not fixed too tightly, since the affected limb will be put against the table later in the surgery. CCWO is performed through a medial skin incision.

Use of a Jig

The use of a jig is advised when performing a CCWO.

Placement of the Jig

1. The joint surface is marked with a needle. About 3 to 4 mm below is the insertion point of the proximal pin for the TPLO Jig.
2. The proximal pin is inserted in a 90° angle to the joint surface.
3. The distal pin is placed. Take care to not tilt the jig. The pins must be parallel to each other, and absolutely perpendicular to the jig.

LEILOX CCWO TECHNIQUE

Making the Osteotomy

1. With the measurements D1, D2, D3, and D4 determined during pre-op planning, mark the angle for the wedge cut. Use a wedge osteotomy gauge if needed. The cutting line can be outlined using an electrocautery device.
2. Holes for the cerclage proximal and distal to the wedge may already be made before the osteotomy.
3. Using a sagittal saw, perform the osteotomy, making sure that the cut aligns with the pins.
4. The wedge is removed and the proximal bone fragment is rotated to close the wedge. A cerclage may be placed to close the osteotomy. Ensure that the bone fragments do not move relative to each other.
5. If necessary, place a holding pin, or fix the plate straight away.

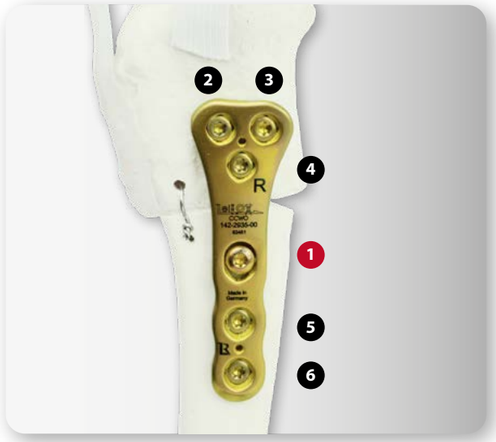
Placement of the CCWO Plate

Place the CCWO Plate, securing it in place with K-Wires. The screws are inserted in the following (recommended) sequence:

1

Prepare the hole in the bone for the cortical screw. Use the drill guide in compression position. Insert the ***cortical screw*** 1 into the compression hole. Do not tighten yet.

TIP: Use a depth gauge to determine the required length of the screws and add about 2-3mm to the measure.



2 3 4

Drill the holes with the matching locking drill guide and insert ***locking screws*** 2, 3, and 4 one by one. Fully tighten the screws.

The locking mechanism of the LeiLOX CCWO plate is designed to be multi-axial. If there is a risk of the screws ending in the joint when drilling in a 90° angle, simply adjust the angle of the drill guide to face distally.

NOTE: We recommend that the jig be removed only when at least 2 screws have already been fixed into the plate.

IMPORTANT: Remove the stabilizing pin and positioning pin before compression (next step)

1

Tighten compression screw 1 in the compression hole to reduce the osteotomy.

5 6

Insert remaining ***locking screws*** 5 and 6 and tighten.

Check the tightness of all screws. Close the wound using standard techniques. It is crucial to properly close the periosteum and soft tissue layers to safeguard the plate site. Ensure not to overlook the closure of incision made for the distal jig pin.

Author: ***Dr. Hugo Schmökel****, DVM, PhD, Dipl. ECVS, MRCVS*

2.0 / 2.4 CCWO Set

Contains:
1 CCWO Implants and
Instruments Tray with Lid
2 of each CCWO Locking Plate
3 of each Cortical Screw
(2.0, 8-18mm // 2.4, 8-22mm, 42 total)
5 of each Locking Screw
(2.0, 6-24mm // 2.4, 6-30mm, 115 total)
2 Drills (1.5 & 1.8mm)
5 K-Wires
2x2 Locking Drill Guides
2 Compression Drill Guides
1 TPLO Jig
1 Screwdriver Handle
1 Screwdriver Shaft T8
1 Depth Gauge

142-2920-24

Tray without contents

142-2900-10

Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

2.7 / 3.5 CCWO Set

Contains:
1 CCWO Implant Tray with Lid
2 of each CCWO Plate
(2.7, 3.5, 3.5 broad)
3 of each Cortical Screw
(16-34mm, 60 total)
5 of each Locking Screw
(16-46mm, 160 total)

142-2927-35

Tray without contents

142-2900-20

ccwo.leibinger.vet

LEARN FROM THE BEST

WORKSHOPS

Learn the CCWO Technique
in one of our workshops.

academy.leibinger.vet

2.0 / 2.4 LeiLOX CCWO Locking Plates Titanium

LeiLOX CCWO Plate, 2.0 mm
left, 33 mm, Titanium

142-2920-10

LeiLOX CCWO Plate, 2.0 mm
right, 33 mm, Titanium

142-2920-00

LeiLOX CCWO Plate, 2.4 mm
left, 37 mm, Titanium

142-2924-10

LeiLOX CCWO Plate, 2.4 mm
right, 37 mm, Titanium

142-2924-00

2.0 / 2.4 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T8
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

Length (mm)	2.0 mm Product Code	2.4 mm Product Code
06	242-220-06	242-224-06
08	242-220-08	242-224-08
10	242-220-10	242-224-10
12	242-220-12	242-224-12
14	242-220-14	242-224-14
16	242-220-16	242-224-16
18	242-220-18	242-224-18
20	242-220-20	242-224-20
22	242-220-22	242-224-22
24	242-220-24	242-224-24
26	242-220-26	242-224-26
28	242-220-28	242-224-28
30	242-220-30	242-224-30
32		242-224-32
34		242-224-34
36		242-224-36
38		242-224-38
40		242-224-40

2.0 / 2.4 Cortical Screw (Non-Locking) Titanium

LeiStar T8, Non-Locking
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

Length (mm)	2.0 mm Product Code	2.4 mm Product Code
08	245-520-08	245-524-08
10	245-520-10	245-524-10
12	245-520-12	245-524-12
14	245-520-14	245-524-14
16	245-520-16	245-524-16
18	245-520-18	245-524-18
20		245-524-20
22		245-524-22

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

2.7 / 3.5 LeiLOX CCWO Locking Plates Titanium

LeiLOX CCWO Plate, 2.7 mm
left, 44 mm, Titanium

142-2927-10

LeiLOX CCWO Plate, 2.7 mm
right, 44 mm, Titanium

142-2927-00

LeiLOX CCWO Plate, 3.5 mm
left, 63 mm, Titanium

142-2935-10

LeiLOX CCWO Plate, 3.5 mm
right, 63 mm, Titanium

142-2935-00

LeiLOX CCWO Plate, 3.5 mm broad
left, 74 mm, Titanium

142-2935-60

LeiLOX CCWO Plate, 3.5 mm
right, 74 mm, Titanium

142-2935-50

LeiLOX CCWO Plate, 3.5 mm Giant
left, 100 mm, Titanium

142-2935-80

LeiLOX CCWO Plate, 3.5 mm Giant
right, 100 mm, Titanium

142-2935-70

2.7 / 3.5 LeiLOX Locking Screw Titanium

For LeiLOX Locking Systems, LeiStar T10
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
10	242-227-10	242-235-10
12	242-227-12	242-235-12
14	242-227-14	242-235-14
16	242-227-16	242-235-16
18	242-227-18	242-235-18
20	242-227-20	242-235-20
22	242-227-22	242-235-22
24	242-227-24	242-235-24
26	242-227-26	242-235-26
28	242-227-28	242-235-28
30	242-227-30	242-235-30
32	242-227-32	242-235-32
34	242-227-34	242-235-34
36	242-227-36	242-235-36
38	242-227-38	242-235-38
40	242-227-40	242-235-40
42	242-227-42	242-235-42
44	242-227-44	242-235-44
46	242-227-46	242-235-46
48	242-227-48	242-235-48
50	242-227-50	242-235-50
52		242-235-52
54		242-235-54
56		242-235-56
58		242-235-58
60		242-235-60

See more screw lengths on **Page 134.**

2.7 / 3.5 Cortical Screw Titanium

LeiStar T10, Non-Locking
self-holding (T10 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
16	245-527-16	245-535-16
18	245-527-18	245-535-18
20	245-527-20	245-535-20
22	245-527-22	245-535-22
24	245-527-24	245-535-24
26	245-527-26	245-535-26
28	245-527-28	245-535-28
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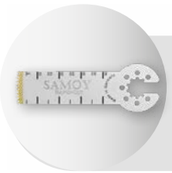
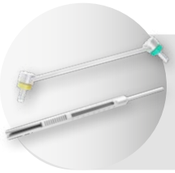
32	245-527-32	245-535-32
34	245-527-34	245-535-34

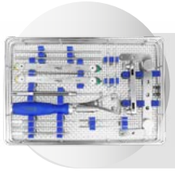


Saw Blades
See saw blades for CCWO on **Page 212.**

Screw Racks
See screw racks for 1.5mm up to 3.5mm screws on **Page 227.**



CCWO Instruments
See essential instruments for a CCWO Surgery on **Page 84.**



Instrument Set
See Instrument Set for TPLO / CBLO / CCWO on **Page 84.**

LEILOX INSTRUMENTS

One Instrument System - Multiple Surgical Solutions

The LeiLOX TPLO, CBLO, and CCWO Instrument Systems are designed with versatility and precision in mind. Built on a shared instrument platform, they allow surgeons to perform multiple procedures using the same high-quality instrumentarium - minimizing setup complexity, reducing costs, and ensuring seamless workflow across techniques.

Each component reflects the same engineering excellence behind our LeiLOX Locking Plate Systems: durable, ergonomic, and made for smooth handling in demanding surgical environments. Whether for a TPLO, CBLO, or CCWO, the instruments are optimized for efficiency and consistency, supporting precise osteotomies and secure implant placement - every time.

LeiLOX

TPLO | CBLO | CCWO

INSTRUMENTS

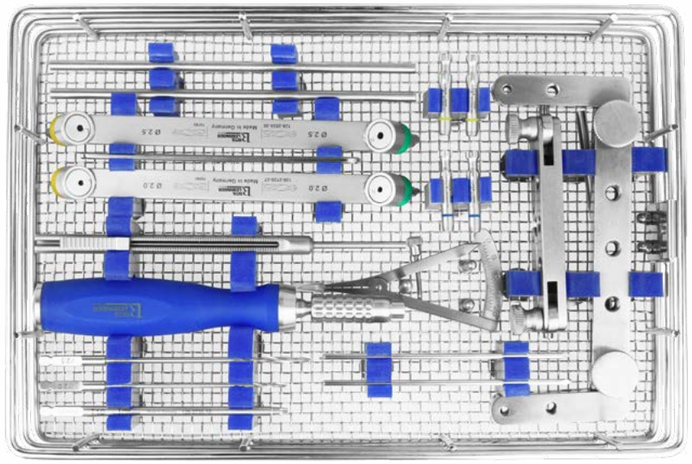
RITA LEIBINGER MEDICAL

TPLO/CBLO/CCWO Instrument Set

Contains:
1 Instrument Tray
2 Drills (2.0 & 2.5mm)
3x2 K-Wires (1.0, 2.5 & 3.0mm)
2x2 Locking Drill Guides
2 TPLO Jigs
1 Screwdriver Handle
1 Screwdriver Shaft
1 Depth Gauge
1 Castroviejo Caliper
2 Compression Drill Guides

142-0100-01

Tray without contents
142-0100-20



Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

TPLO/CBLO/CCWO Jig

Product Code	Description
128-4354-00	for 2.0/2.4 mm
128-4355-00	for 2.7 mm
128-4356-00	for 3.5 mm

Castroviejo

Caliper
17-3105-08

Depth Gauge

Product Code	Description	Compatibility
164-1013-20	150mm in length, scale up to 20mm	for 1.0/1.3/1.5 mm screws
164-1520-20	150mm in length, scale up to 40mm	for 1.5/2.0/2.4 mm screws
164-2735-60	150mm in length, scale up to 60mm	for 2.4/2.7/3.5 mm screws

Compression Drill Guide

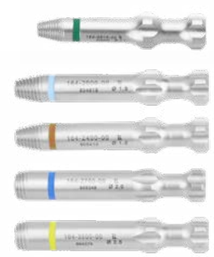
Neutral / Load

Product Code	Description
164-0071-15	for screws Ø 2.0 mm and drills Ø 1.5 mm
128-2418-24	for screws Ø 2.4 mm and drills Ø 1.8 mm
128-2720-27	for screws Ø 2.7 mm and drills Ø 2.0 mm
128-2535-35	for screws Ø 3.5 mm and drills Ø 2,5mm

Locking Drill Guide

Stainless Steel

Product Code	Description
164-0015-00	for 1.5 mm Screws, 1.1 mm Drill
164-2000-00	for 2.0 mm Screws, 1.5 mm Drill
164-2400-00	for 2.4 mm Screws, 1.8 mm Drill
164-2700-00	for 2.7 mm Screws, 2.0 mm Drill
164-3500-00	for 3.5 mm Screws, 2.5 mm Drill



K-Wire

Single Trocar
1.0 mm x 100 mm

Product Code	Dimensions (mm)
144-1010-10	1.0 x 100
144-1020-10	2.0 x 100
144-1025-10	2.5 x 100
144-1030-10	3.0 x 100

See more K-Wires on **Page 144.**

Twist Drill

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)	Connection
148-0080-11	1.1	for 1.5 screws	45	round shaft
148-0080-15	1.5	for 2.0 screws	70	round shaft
148-0080-18	1.8	for 2.4 screws	125	round shaft
148-0080-20	2.0	for 2.7 screws	85	round shaft
148-0080-25	2.5	for 3.5 screws	95	round shaft

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)	Connection
148-0081-11	1.1	for 1.5 screws	60	AO QC
148-0081-15	1.5	for 2.0 screws	85	AO QC
148-0081-18	1.8	for 2.4 screws	125	AO QC
148-0081-20	2.0	for 2.7 screws	100	AO QC
148-0081-25	2.5	for 3.5 screws	110	AO QC

See more on **Page 220.**

Screwdriver Shaft LeiStar

AO connection, self-holding

Product Code	Description
128-1520-15	T6 got 1.5 mm screws, 60 mm in length
128-2024-08	T8 for 2.0 / 2.4 mm screws, 100 mm in length
128-2735-10	T10 for 2.7 / 3.5 mm screws, 100 mm in length

See more Screwdriver Shafts on **Page 222.**

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

Torque Limiting Screwdriver Handle

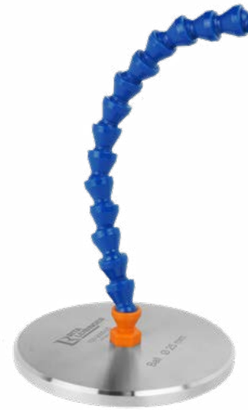
Torque 3 Nm
Silicone, AO, sterilizable up to 134°C / 273°F

247-0104-00

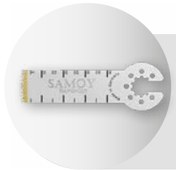
Radiography Calibration Ball

Flexible arm, Stainless Steel 25mm Ø Reference Ball and base plate

100-2000-25



TPLO Saw Blades
See radial saw blades for TPLO and CBLO in various radii on **Page 213.**

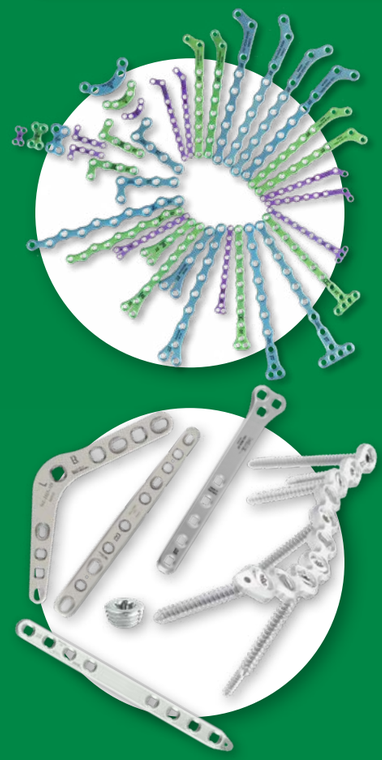


Saw Blades
See saw blades for CCWO on **Page 212.**

Power Tools
See power tools and attachments on **Page 208.**

OSTEOSYNTHESIS

FEATURED SYSTEMS



LeiLOX Titanium
Nano & Micro Locking Plate Systems

Lightweight titanium plate and screw systems for small animal fracture repair. The 1.0/1.3 Nano System is designed for the smallest patients like toy breeds, rodents and birds, while the 1.5/2.0 Micro System suits cats and small dogs.

LeiLOX Stainless Steel
Locking Plate System

Offering high-strength and durability, the LeiLOX Stainless Steel System is designed for small to large dogs. Available in a wide range of straight, T-, reconstruction, and arthrodesis plate designs to suit different anatomical locations and surgical needs.

LeiCOM
Headless Compression Screws, Titanium

Designed for precise and stable fixation of small bone fragments and fractures. Its cannulated, headless design allows for minimally invasive insertion and provides excellent compression across the fracture line without protruding hardware.

LeiSU
Suture Anchors, Titanium

Provides secure soft tissue attachment to bone in orthopedic and ligament repair procedures. After pre-drilling the pilot hole, the self-tapping anchor is easily inserted, and the insertion rod can be snapped off after placement for a smooth, flush finish.

OSTEOSYNTHESIS SYSTEMS

LeiLOX Locking Plate Systems

- LeiLOX 1.0 / 1.3 Nano, Titanium
- LeiLOX 1.5 / 2.0 Micro, Titanium
- LeiLOX 2.0 - 3.5, Stainless Steel
- LeiLOX System Instruments

Standard Plates

Screws (all)

K-Wires and Orthopedic Cerclage

LeiCOM Cannulated Compression Screw System

LeiSU Sutures

RITA LEIBINGER MEDICAL

LeiLOX **1.0/1.3 Nano**

Titanium Locking Fracture System for the smallest patients

Introducing our new LeiLOX 1.0/1.3 Titanium Locking Plate System, specially developed for the smallest patients and bones, such as toy breeds, rodents, or birds.

Titanium: Best Biocompatibility

Made of medical-grade Titanium, these implants are lightweight yet strong, minimizing stress on tiny bones. The high biocompatibility lowers the risk of infections. Furthermore, titanium's flexibility allows for precise and delicate fracture fixation, making it the ideal choice for the most fragile patients.

All-in-One Set

The new LeiLOX 1.0/1.3 Set provides everything you need to treat fractures in the tiniest patients. It includes a range of plates from standard to various unique shapes to accommodate complex anatomies. Additionally, the set comes with all the essential instruments you may require, ensuring you are fully equipped to handle even the most delicate fracture cases.

Various Applications

With 24 different plates, LeiLOX 1.0/1.3 is the perfect solution to treat a wide variety of fracture cases:
Y-Plates, L-Plates, Bridge-Plates, Standard-Plates, Cuttable 20-hole Plates and many Challenger Plates offer plenty of possibilities: from maxillofacial and pelvic fractures, to the fixation of long tubular bones.

STAR Screw-Head
BEST QUALITY
MADE IN GERMANY

LeiStar Screws

All of our locking screwheads are LeiStar, which allows for best tightening torque.
Additionally, the screws provide a self-holding feature when used with a RITA LEIBINGER screwdriver shaft, keeping the screws securely on the driver.

LeiLOX **1.0/1.3 NANO**

RITA LEIBINGER MEDICAL

1.0/1.3 Osteosynthesis Locking Set Titanium

Contains:
1 Tray for Implants and Instruments with Lid
1 Locking Plate of each style (24 pcs. total)
5 of each 1.0 Locking Screw (4-16mm, 55 pcs. total)
5 of each 1.3 Locking Screw (4-20mm, 65 pcs. total)
1 Screwdriver Shaft T5
1 Screwdriver Handle
2x2 Locking Drill Guides, 1.0 & 1.3
1 Depth Gauge
2 Drills (AO, 0.7 & 1.0)
1 pair of Bending Irons

142-1013-00

Tray without contents
142-1013-10

Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

1.0 Locking Plate Titanium
3.5 mm wide, 1.0 mm thick

Product Code	Description
142-0210-04	4-Hole, 18.5 mm
142-0210-05	5-Hole, 23.5 mm
142-0210-06	6-Hole, 28.5 mm
142-0210-07	7-Hole, 33.5 mm
142-0210-08	8-Hole, 38.5 mm
142-0210-09	9-Hole, 43.5 mm
142-0210-10	10-Hole, 48.5 mm
142-0210-20	20-Hole, 98.5 mm, cuttable

1.0 Locking-L-Plate Titanium
3.5 mm / 8.5 mm wide, 1.0 mm thick, 18.5 mm long

Product Code	Description
142-0210-504L	left
142-0210-504R	right

1.0 Locking Plate with Bridge, Titanium
3.5 mm wide, 1.0 mm thick

Product Code	Description
142-0210-610	10 mm Bridge, 4-Hole, 23.5mm
142-0210-615	15 mm Bridge, 6-Hole, 38.5mm
142-0210-625	25 mm Bridge, 6-Hole, 48.5mm
142-0210-633	33 mm Bridge, 6-Hole, 56.5 mm
142-0210-643	43 mm Bridge, 6-Hole, 66.5 mm

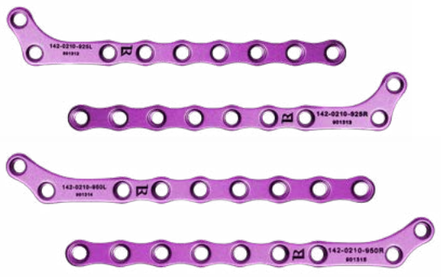
1.0 T-Locking Plate Titanium
3.5 mm wide, 1.0 mm thick, cuttable

Product Code	Description
142-0210-38	1.0 mm, 3/8-Hole, 46 mm
142-0210-49	1.0 mm, 4/8-Hole, 47 mm

1.0 Locking-Y-Plate Titanium
3.5 mm / 7.35 mm wide, 1.0 mm thick

Product Code	Description
142-0210-809	10-Hole, 44 mm long

1.0 MAYO DFO Locking Plate Titanium
3.5 mm wide, 1.0 mm thick, 9-Hole



Product Code	Description
142-0210-925L	46 mm, cuttable, left 25°
142-0210-925R	46 mm, cuttable, right 25°
142-0210-950L	47.5 mm, cuttable, left 50°
142-0210-950R	47.5 mm, cuttable, right 50°

1.0 Acetabulum-Locking Plate Titanium
1.0 mm thick , 4 hole
142-0210-453

1.0 H-Locking Plate Titanium
6.3 mm wide, 1.0 mm thick, 10 mm long, 4 hole
142-0210-4H

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LeiLOX Instruments
See LeiLOX Instruments on **Page 120.**

1.0 LeiLOX Locking Screw Titanium
For LeiLOX Locking System, LeiStar T5
self-holding (T5 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	Product Code
4	245-410-04
5	245-410-05
6	245-410-06
7	245-410-07
8	245-410-08
9	245-410-09
10	245-410-10
11	245-410-11
12	245-410-12
14	245-410-14
16	245-410-16

1.3 LeiLOX Locking Screw Titanium
For LeiLOX Locking System, LeiStar T5
self-holding (T5 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	Product Code
4	245-413-04
5	245-413-05
6	245-413-06
7	245-413-07
8	245-413-08
9	245-413-09
10	245-413-10
11	245-413-11
12	245-413-12
14	245-413-14
16	245-413-16
18	245-413-18
20	245-413-20

LeiLOX **1.5/2.0 Micro**

Titanium Locking Fracture System for cats and small dogs

Accidents happen. And you, as a surgeon, are often required to fix complex fractures.
Our 1.5/2.0 locking plate system features 62 different plates, making it the most flexible titanium locking system for small animals. The system can handle both simple and complex fractures.

Titanium: Best Biocompatibility

Unique Titanium Alloy makes our implants very strong, resistant and lightweight, which is ideal for small animals. Titanium offers advantages in biocompatibility, extreme temperatures and weight.

All-in-One Set

LeiLOX 1.5/2.0 is the “swiss army knife” for micro fractures: it contains not only (cuttable) standard plates, but also unique shapes for complex anatomy, in a compact instrument set.

Various Applications

With more than 62 different plates, LeiLOX 1.5/2.0 is the perfect solution to treat a wide variety of fracture cases:
Y-Plates, L-Plates, Bridge-Plates, Standard-Plates, Cuttable 20-hole Plates and many Challenger Plates offer plenty of possibilities: from maxillofacial and pelvic fractures, to the fixation of long tubular bones.

STAR Screw-Head
BEST QUALITY
MADE IN GERMANY

LeiStar Screws

All of our locking screwheads are LeiStar, which allows for best tightening torque.
Additionally, the screws provide a self-holding feature when used with a RITA LEIBINGER screwdriver shaft, keeping the screws securely on the driver.

LeiLOX **1.5/2.0 MICRO**

RITA LEIBINGER MEDICAL

1.5/2.0 Osteosynthesis Locking Set Titanium

Contains:
1 Tray for Implants and
Instruments with Lid
1 Locking Plate of each style
(28 pcs. total)
5 of each 1.5 Locking Screw
(5-24mm, 70 pcs. total)
5 of each 2.0 Locking Screw
(5-30mm, 85 pcs. total)
2 Screwdriver Shafts
1 Screwdriver Handle
2x2 Locking Drill Guides
1 Depth Gauge
2 Drills (AO, 1.1 & 1.5)
1 pair of Bending Irons

142-1520-00

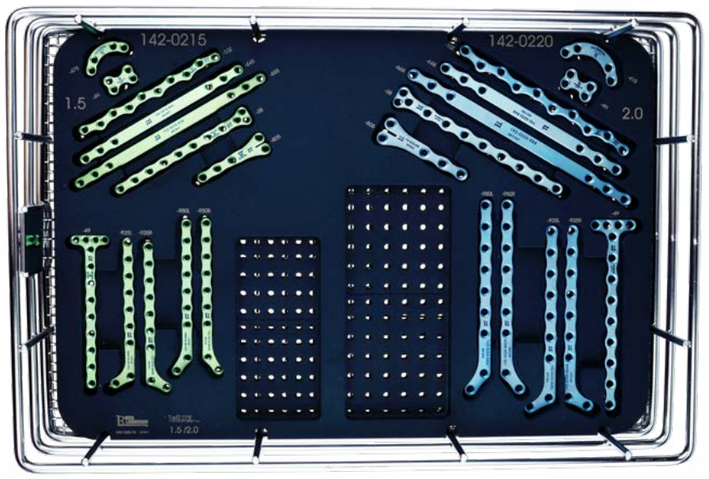
Tray without contents
142-1520-10

1.5/2.0 Challenger Locking Set Titanium

Contains:
1 Implant Tray, without contents
1 Locking Plate of each style „Challenger“
(24 pcs. total)

142-1520-50

Tray without contents
142-1520-60



Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

1.5 Osteosynthesis Locking Set Titanium

Contains:
1 Tray for implants and instruments, with lid
1 Locking Plate of each style 1.5 mm
(26 pcs. total)
5 of each 1.5 Locking Screw
(5-24mm, 70 pcs. total)
1 LeiStar Screwdriver Shaft
1 Screwdriver Handle
2 Locking Drill Guides
1 Depth Gauge
1 Drill (AO, 1.1)
1 pair of bending irons

142-1500-00

Tray without contents
142-1500-10

2.0 Osteosynthesis Locking Set Titanium

Contains:
1 Tray for implants and instruments, with lid
1 Locking Plate of each style 2.0mm
(26 pcs. total)
5 of each 2.0 Locking Screw
(5-30mm, 85 pcs. total)
1 LeiStar Screwdriver Shaft
1 Screwdriver Handle
2 Locking Drill Guides
1 Depth Gauge
1 Drill (AO, 1.5)
1 pair of bending irons

142-2000-00

Tray without contents
142-2000-10

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1.5 Locking Plate Titanium

5mm wide, 1.5mm thick

Product Code	Description
142-0215-04	4-Hole, 25.5mm
142-0215-05	5-Hole, 32.5mm
142-0215-06	6-Hole, 39.5mm
142-0215-07	7-Hole, 46.5mm
142-0215-08	8-Hole, 53.5mm
142-0215-09	9-Hole, 60.5mm
142-0215-10	10-Hole, 67.5mm
142-0215-20	20-Hole, cuttable

1.5 Locking Plate with Bridge, Titanium

5mm wide, 1.5mm thick

Product Code	Description
142-0215-614	14mm Bridge, 4-Hole, 32.5mm
142-0215-621	21mm Bridge, 6-Hole, 53.5mm
142-0215-635	35mm Bridge, 6-Hole, 67.5mm
142-0215-645	45mm Bridge, 6-Hole, 78 mm
142-0215-658	58mm Bridge, 6-Hole, 95mm

1.5 T-Locking Plate Titanium

5mm wide, 1.5mm thick, cuttable

Product Code	Description
142-0215-38	1.5 mm, 3/8 hole
142-0215-49	1.5 mm, 4/9 hole

1.5 Locking-L-Plate Titanium

5mm / 11.5mm wide, 1.5mm thick, 25.5mm long

Product Code	Description
142-0215-504L	left
142-0215-504R	right

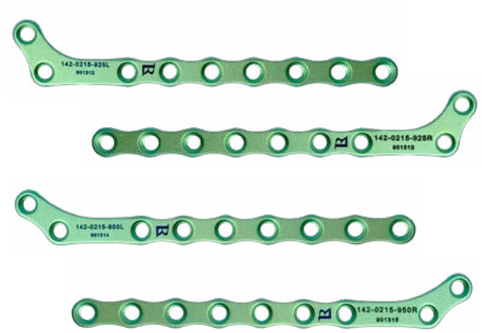
1.5 Locking-Y-Plate Titanium

5mm / 11mm wide, 1.5mm thick

Product Code	Description
142-0215-805	5-Hole, 33mm long
142-0215-809	10-Hole, cuttable

1.5 MAYO DFO Locking Plate Titanium

5mm wide, 1.5mm thick, 9-Hole



Product Code	Description
142-0215-925L	cuttable, left 25°
142-0215-925R	cuttable, right 25°
142-0215-950L	cuttable, left 50°
142-0215-950R	cuttable, right 50°

1.5 Z-Locking Plate Titanium

6mm wide, 1.5 mm thick, 10 hole, cuttable

142-0215-10Z

1.5 Acetabulum-Locking Plate Titanium

1.5 mm thick , 4 hole

142-0215-475

1.5 H-Locking Plate Titanium

9mm wide, 1.5 mm thick, 14mm long, 4 hole

142-0215-4H

LeiLOX Instruments
See LeiLOX Instruments on **Page 120.**

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1.5 LeiLOX Locking Screw Titanium

For LeiLOX Locking System, LeiStar T6
self-holding (T6 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	Product Code
5	245-415-05
6	245-415-06
7	245-415-07
8	245-415-08
9	245-415-09
10	245-415-10
11	245-415-11
12	245-415-12
14	245-415-14
16	245-415-16
18	245-415-18
20	245-415-20
22	245-415-22
24	245-415-24
26	245-415-26

See more screw lengths on **Page 134.**

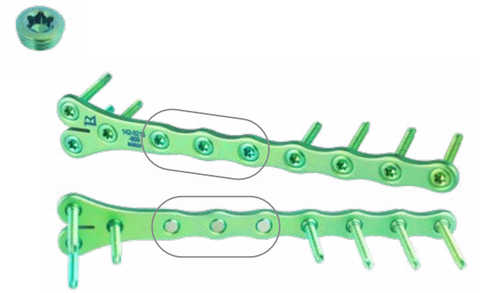
Screw Racks on **Page 227.**

NEW

1.5 LeiLOX Locking Plug Titanium

For LeiLOX Locking System Ø 1.5 mm, LeiStar T6
self-holding (T6 Shaft from Rita Leibinger recommended)

245-0015-00



2.0 Locking Plate Titanium

6mm wide, 1.5mm thick

Product Code	Description
142-0220-04	4-Hole, 33mm
142-0220-05	5-Hole, 42mm
142-0220-06	6-Hole, 51mm
142-0220-07	7-Hole, 60mm
142-0220-08	8-Hole, 69mm
142-0220-09	9-Hole, 78mm
142-0220-10	10-Hole, 87mm
142-0220-20	20-Hole, cuttable

2.0 Locking Plate with Bridge, Titanium

6mm wide, 1.5mm thick

Product Code	Description
142-0220-618	18mm Bridge, 4-Hole, 42mm
142-0220-627	27mm Bridge, 6-Hole, 69mm
142-0220-636	36mm Bridge, 6-Hole, 78mm
142-0220-648	48mm Bridge, 6-Hole, 90mm
142-0220-668	68mm Bridge, 6-Hole, 110mm

2.0 T-Locking Plate Titanium

6mm wide, 1.5mm thick, cuttable

Product Code	Description
142-0220-38	2.0 mm, 3/8 Holes
142-0220-49	2.0 mm, 4/9 Holes

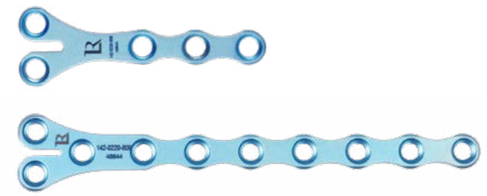
2.0 Locking-L-Plate Titanium

6mm / 15mm wide, 1.5mm thick, 33mm long

Product Code	Description
142-0220-504L	left
142-0220-504R	right

2.0 Locking-Y-Plate Titanium

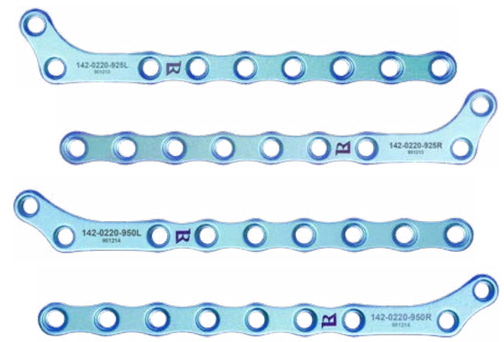
6mm / 13.5mm wide, 1.5mm thick



Product Code	Description
142-0220-805	5-Hole, 42mm long
142-0220-809	10-Hole, cuttable

2.0 MAYO DFO Locking Plate Titanium

6mm wide, 1.5mm thick, 9-Hole



Product Code	Description
142-0220-925L	cuttable, left 25°
142-0220-925R	cuttable, right 25°
142-0220-950L	cuttable, left 50°
142-0220-950R	cuttable, right 50°

2.0 Z-Locking Plate Titanium

8mm wide, 1.5mm thick, 10 Loch, cuttablev

142-0220-10Z

2.0 Acetabulum-Locking Plate Titanium

1.5mm thick, 4 holes

142-0220-410

2.0 H-Locking Plate Titanium

10.5mm wide, 1.5mm thick, 16mm long, 4 holes

142-0220-4H

LeiLOX Instruments
See LeiLOX Instruments on **Page 120.**

2.0 LeiLOX Locking Screw Titanium

For LeiLOX Locking System, LeiStar T8
self-holding (T8 Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	Product Code
5	245-420-05
6	245-420-06
7	245-420-07
8	245-420-08
9	245-420-09
10	245-420-10
11	245-420-11
12	245-420-12
14	245-420-14
16	245-420-16
18	245-420-18
20	245-420-20
22	245-420-22
24	245-420-24
26	245-420-26
28	245-420-28
30	245-420-30

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

NEW

2.0 LeiLOX Locking Plug Titanium

For LeiLOX Locking System Ø 2.0 mm, LeiStar T8
self-holding (T8 Shaft from Rita Leibinger recommended)

245-0020-00

1.5/2.0 Arthrodesis Plates

locking, bendable, Titanium, 1.5mm thick

LeiLOX Arthrodesis Plate, 1.5/2.0mm,
55mm long

142-0215-55

LeiLOX Arthrodesis Plate, 1.5/2.0mm,
60mm long

142-0215-60

LeiLOX Arthrodesis Plate, 2.0mm,
60mm long

142-0220-60

LeiLOX Arthrodesis Plate, 2.0mm,
68mm long

142-0220-68

1.5/2.0 Arthrodesis Plates, angled

locking, bendable, Titanium, 1.5mm thick

LeiLOX Arthrodesis Plate, 1.5/2.0mm,
56mm long, left

142-0215-120L

LeiLOX Arthrodesis Plate, 1.5/2.0mm,
56mm long, right

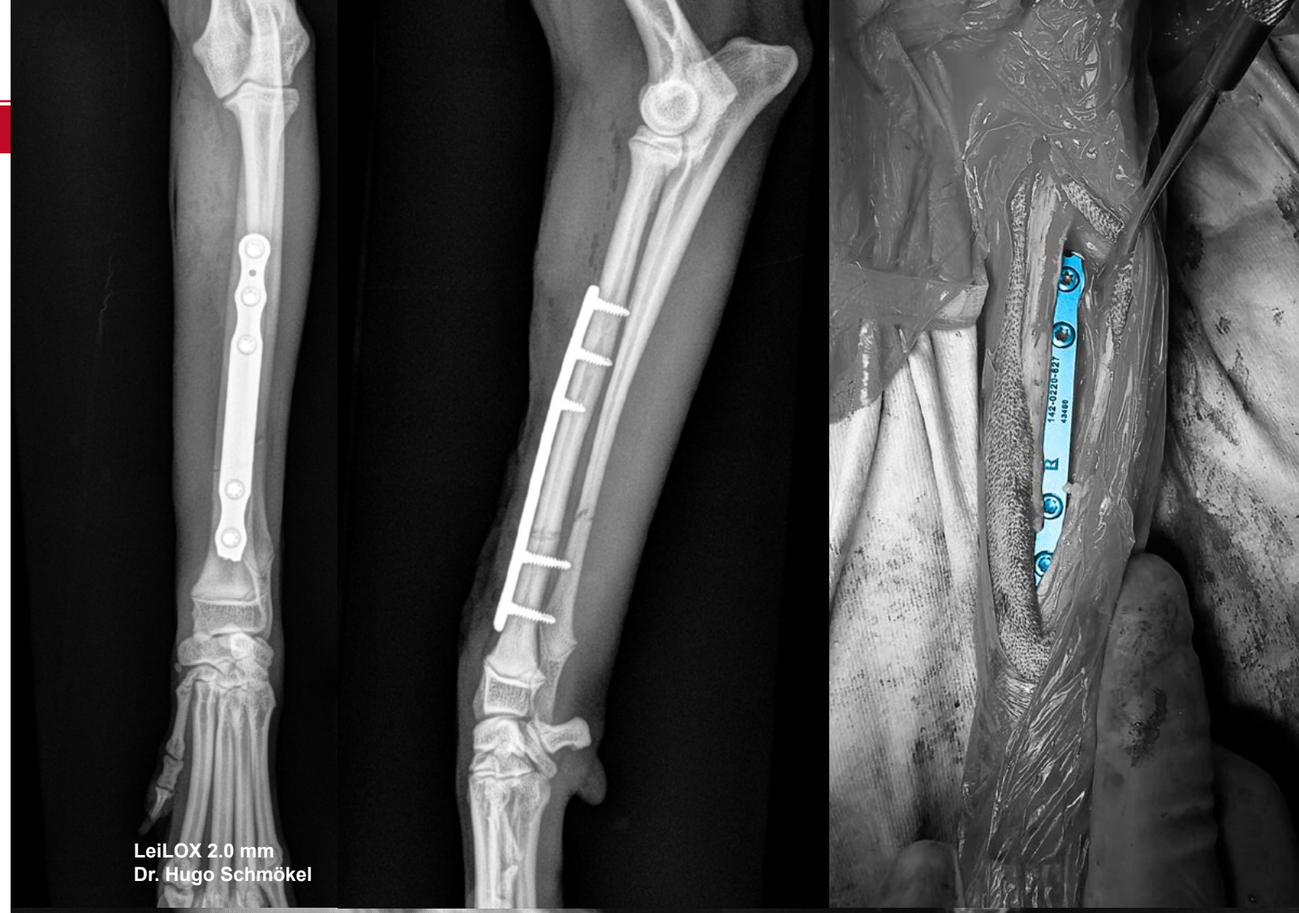
142-0215-120R

LeiLOX Arthrodesis Plate, 1.5/2.0mm,
72mm long, left

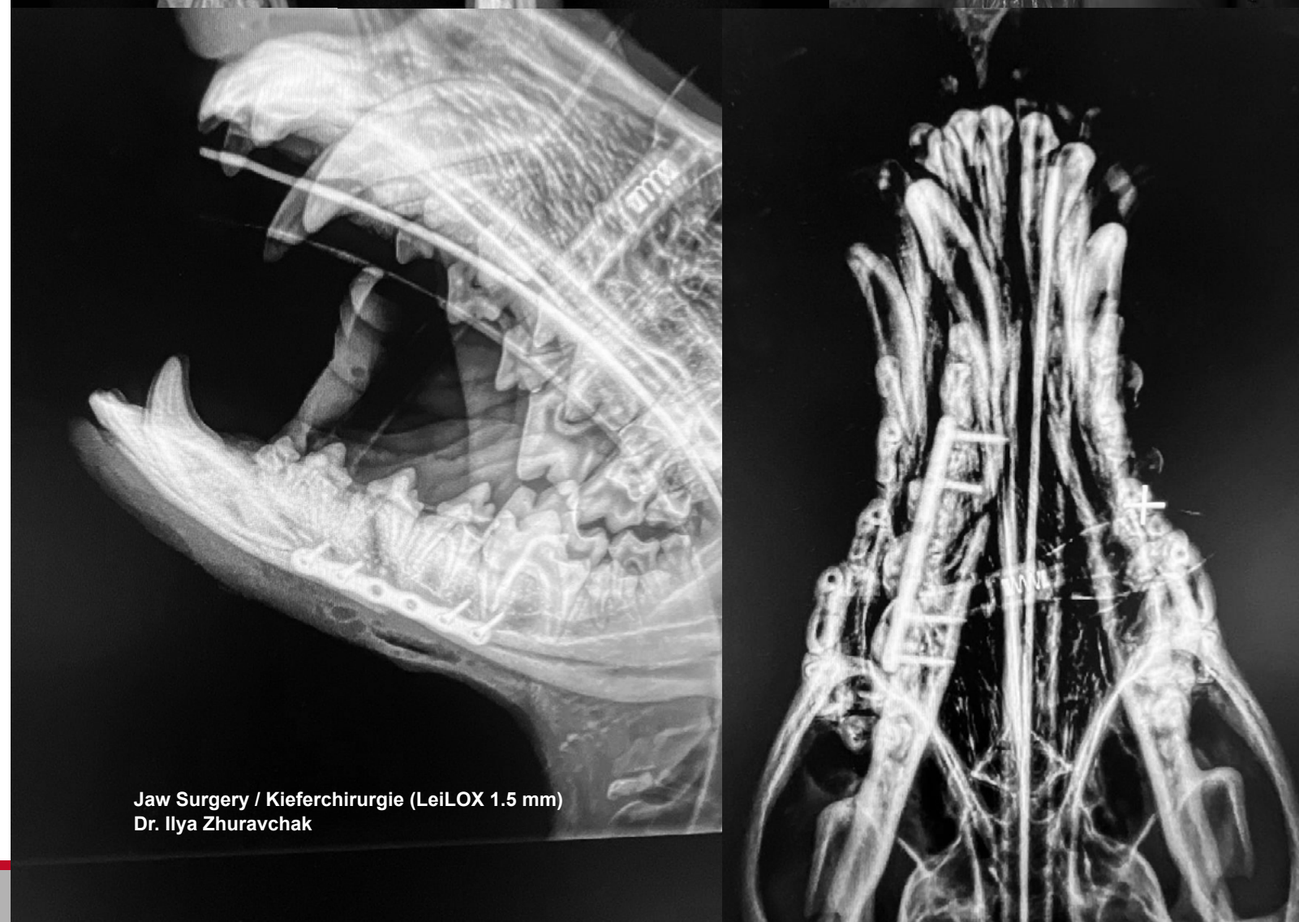
142-0215-135L

LeiLOX Arthrodesis Plate, 1.5/2.0mm,
72mm long, right

142-0215-135R



LeiLOX 2.0 mm
Dr. Hugo Schmökel



Jaw Surgery / Kieferchirurgie (LeiLOX 1.5 mm)
Dr. Ilya Zhuravchak

LeiLOX **2.0/2.4** & **2.7/3.5** **Locking System**

Multiaxial Locking

The screws can be locked in 90° angle with a 12° deviation in any direction. This allows you to angle specific screws away from vital structures. The robust LeiStar screw head locks firmly into the plate.

Straight, Bridge, Reconstruction & Arthrodesis Plates

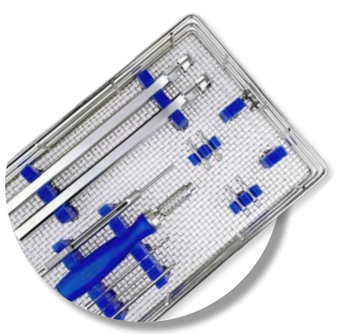
LeiLOX offers you the right plate for every fracture. It offers not only Straight, but also Bridge, Reconstruction and Arthrodesis Plates.
Further you get bending irons that comfortably bend the plates in any direction.
Locking Plugs offer additional strength and protect the screw holes when you bend the plates.

Straight Plates

Straight plates are needed in strong bones that face high forces. With our bending irons, they can be bent vertically.
Straight plates feature limited contact dynamic compression to minimize vascular damage to the plated bone segment.

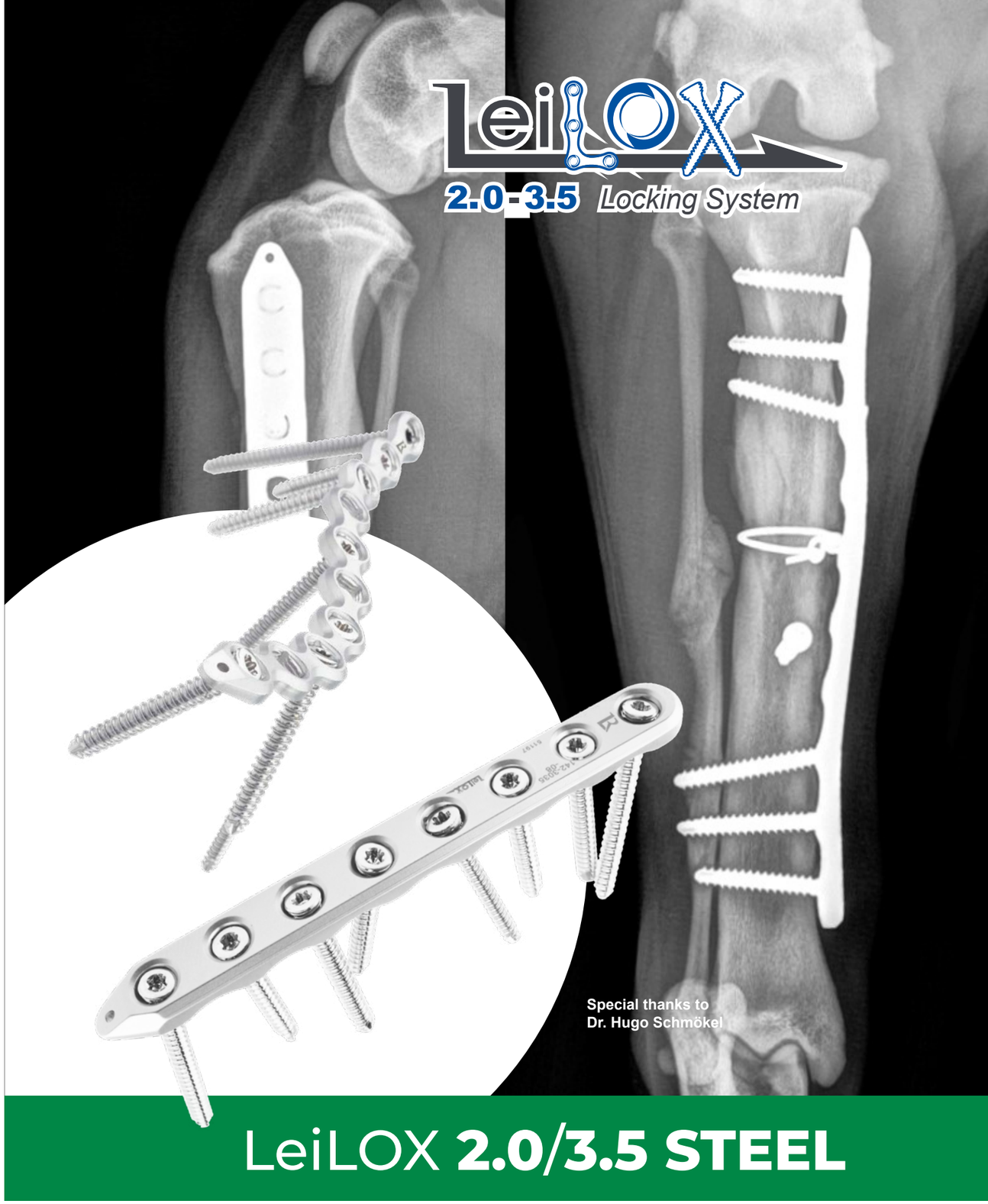
Interchangeable 2.0/2.4 & 2.7/3.5mm Screws

Because the screw heads are identical, all Stainless Steel 2.0/2.4 respectively 2.7/3.5 LeiLOX plates (TPLO and fracture systems) work with 2.0mm as well as 2.4mm screws respectively 2.7mm as well as 3.5mm screws in all plate sizes. This offers flexibility and saves on inventory cost.



Universal Instrumentation

Locking drill guides, screw drivers, depth gauge, etc. are identical and interchangeable in all of our 2.0/2.4 respectively 2.7/3.5 systems (Fracture Systems as well as TPLO and CBLO).



LeiLOX **2.0/3.5 STEEL**

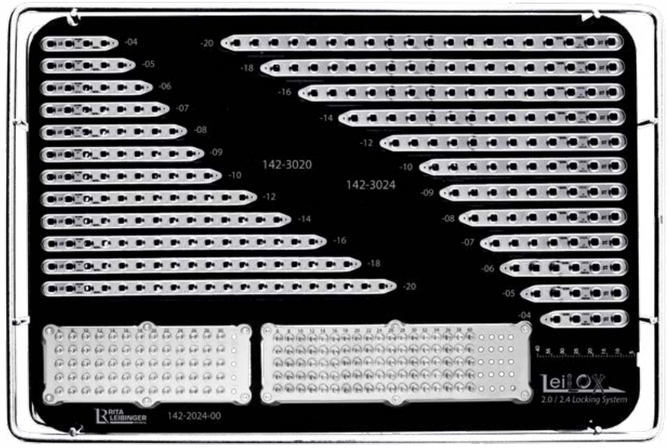
RITA LEIBINGER MEDICAL

2.0/2.4 Straight Implant Set

Contains:
1 Tray for Implants with Lid, stackable
1 of each Plate
(24 pcs. total)
5 of each 2.0 Locking Screw
(6-30mm, 65 pcs. total)
5 of each 2.4 Locking Screw
(6-40mm, 90 pcs. total)

Complete Set
142-2024-00

Tray without contents
142-2024-01

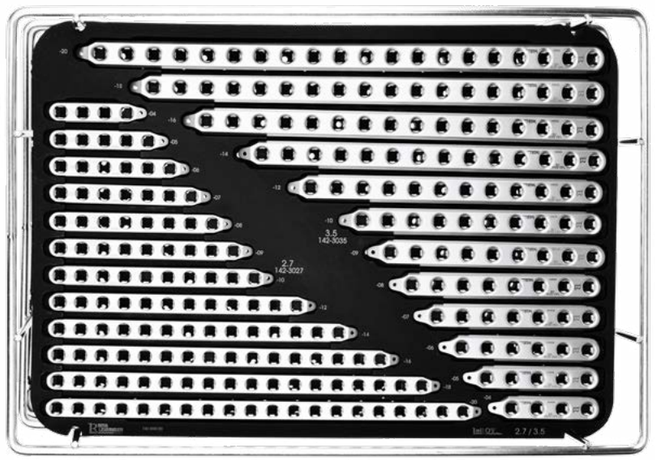


2.7/3.5 Straight Implant Set

Contains:
1 Tray for Implants with Lid, stackable
1 Screwrack 2.7
1 Screwrack 3.5
1 of each Plate
(24 pcs. total)
5 of each 2.7 Locking Screw
(10-46mm, 95 pcs. total)
5 of each 3.5 Locking Screw
(10-50mm, 100 pcs. total)

Complete Set
142-3000-00

Tray without contents
142-3010-02



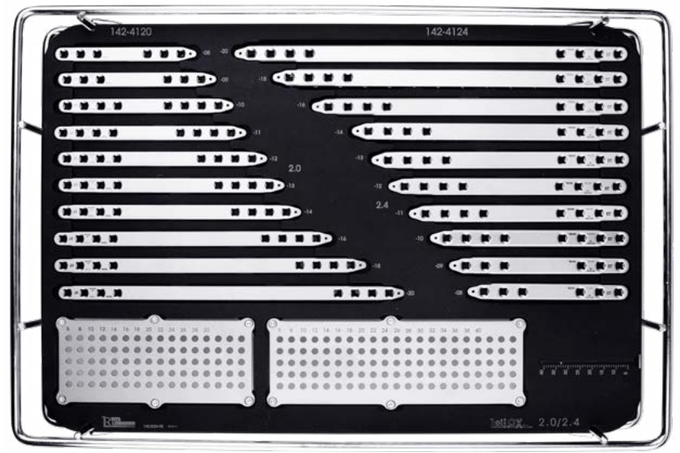
2.0/2.4 Bridge Plate Set

Contains:
1 Tray for Implants with Lid, stackable
1 of each Plate
(20 pcs. total)

Complete Set (without screws)
142-2024-60

Tray without contents
142-2024-62

See Screws *(optional)* on **Page 116.**



2.7/3.5 Bridge Plate Set

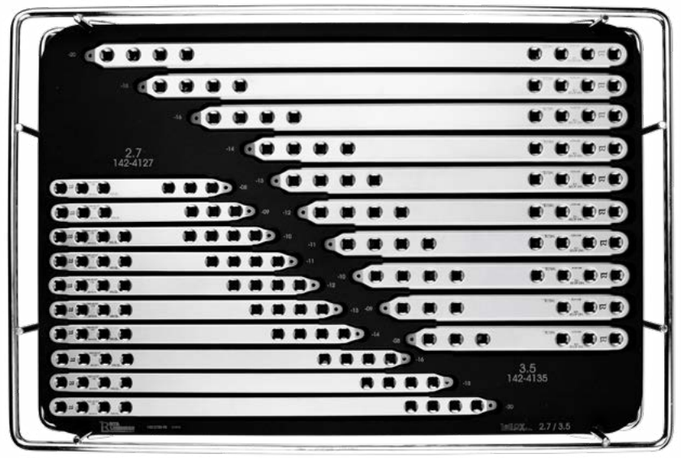
Contains:
1 Tray for Implants with Lid, stackable
1 of each Bridge Plate
(20 pcs. total)

Complete Set (without Screws)
142-3200-00

Tray without contents
142-3200-10

See Screws *(optional)* on **Page 116.**

See Screw Racks *(optional)* on **Page 227.**



2.0-3.5 Arthrodesis Set

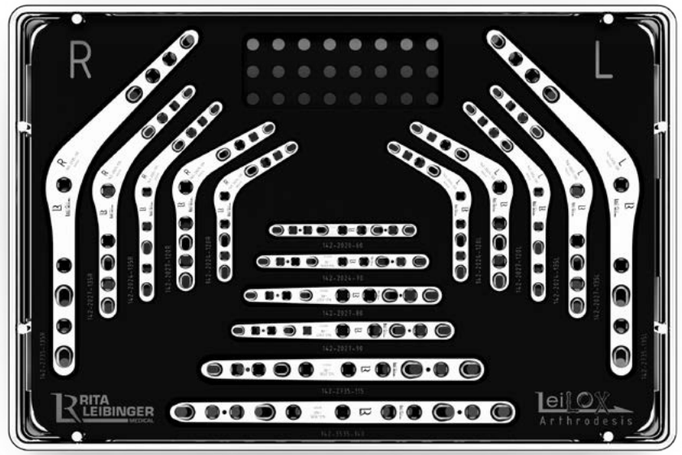
Contains:
1 Tray for Implants with Lid, stackable
1 of each Arthrodesis Plate
(16 pcs. total)

Complete Set (without Screws)
142-3300-00

Tray without contents
142-3300-10

See Screws *(optional)* on **Page 116.**

See Screw Racks *(optional)* on **Page 227.**

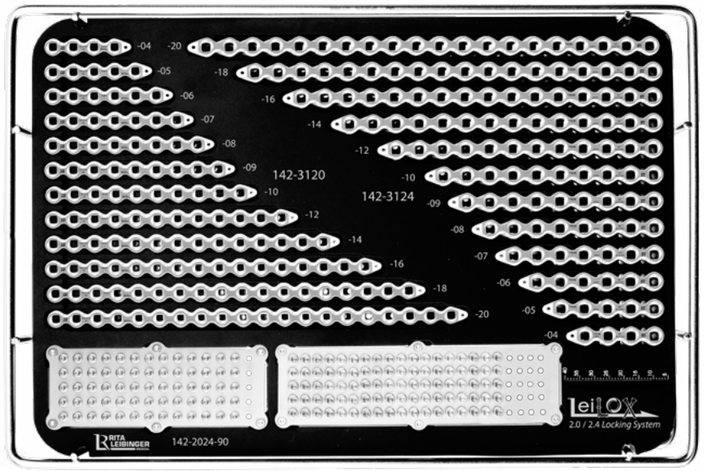


2.0/2.4 Reconstruction Implant Set

Contains:
1 Tray for Implants with Lid
1 of each Plate
(24 pcs. total)
5 of each 2.0 Locking Screw
(06-30mm, 65 pcs. total)
5 of each 3.4 Locking Screw
(6-40mm, 90 pcs. total)

142-2024-90

Tray without contents
142-2024-91

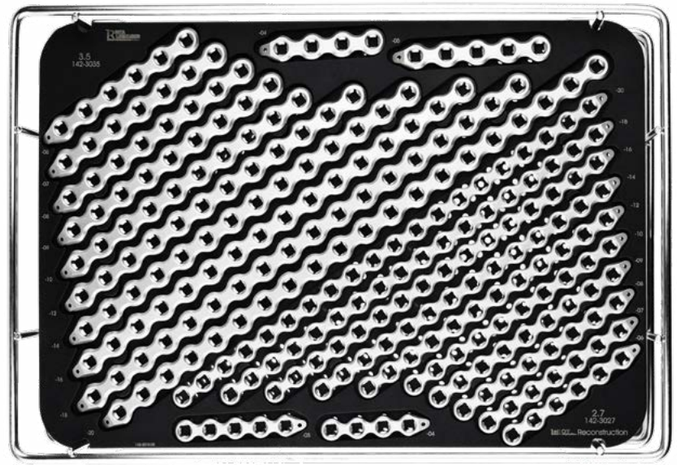


2.7/3.5 Reconstruction Implant Set

Contains:
Tray for Reconstruction Implants with Lid
1 Screwrack 2.7
1 Screwrack 3.5
1 of each Plate (24 pcs. total)
5 of each 2.7 Locking Screw
(10-46mm, 95 pcs. total)
5 of each 3.5 Locking Screw
(12-50mm, 100 pcs. total)

142-3100-00

Tray without contents
142-3100-02

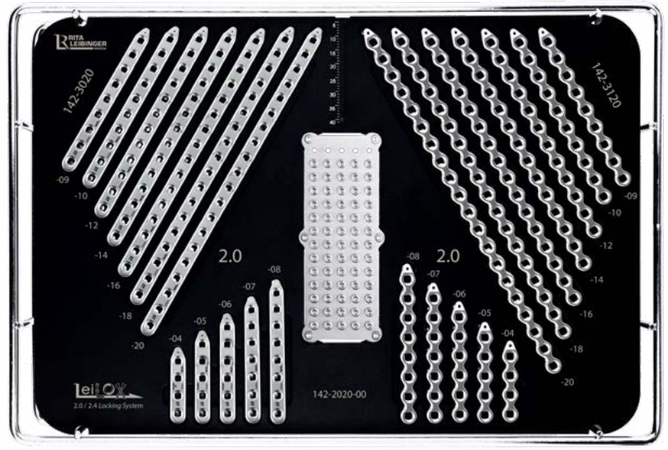


2.0/2.0 Straight + Reconstruction Implant Set

Contains:
Tray for Implants with Lid
1 of each Plate
(24 pcs. total)
5 of each 2.0 Locking Screw
(6-30mm, 65 pcs. total)

142-2020-00

Tray without contents
142-2020-01

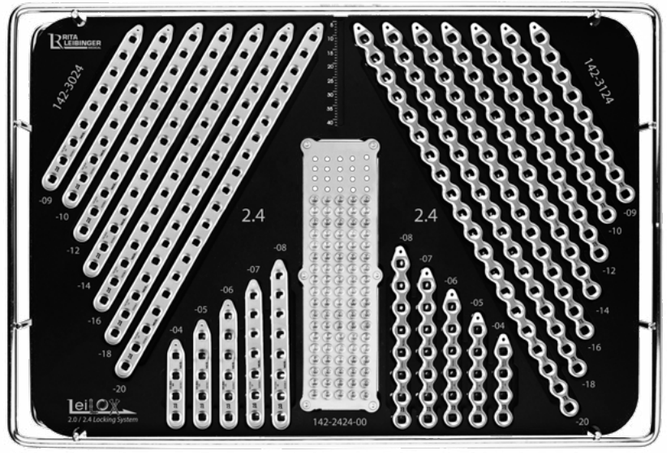


2.4/2.4 Straight + Reconstruction Implant Set

Contains:
Tray for Implants with Lid
1 of each Plate
(24 pcs. total)
5 of each 2.0 Locking Screw
(6-40mm, 90 pcs. total)

142-2424-00

Tray without contents
142-2424-01

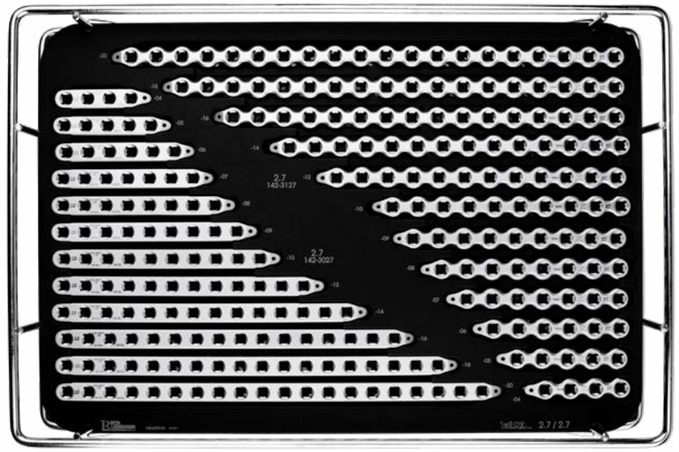


2.7/2.7 Straight + Reconstruction Implant Set

Contains:
Tray for Implants with Lid
1 of each Bone Plate
(12 pcs. total)
1 of each Reconstruction Plate
(12 pcs. total)
1 Screw rack 2.7
5 of each 2.7 Locking Screw
(10-50mm, 105 pcs. total)

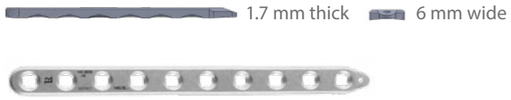
142-2727-00

Tray without contents
142-2727-01



2.0 LeiLOX Boneplate

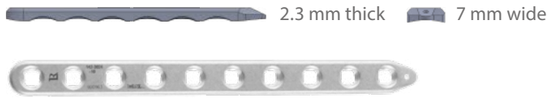
Multiaxial locking, straight, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3020-04	4	31.5
142-3020-05	5	38.5
142-3020-06	6	45.5
142-3020-07	7	52.5
142-3020-08	8	59.5
142-3020-09	9	66.5
142-3020-10	10	73.5
142-3020-12	12	87.5
142-3020-14	14	101.5
142-3020-16	16	115.5
142-3020-18	18	129.5
142-3020-20	20	143.5

2.4 LeiLOX Boneplate

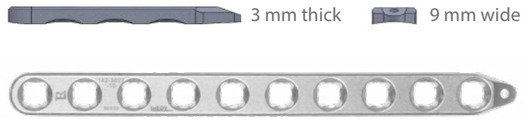
multiaxial locking, straight, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3024-04	4	35.5
142-3024-05	5	43.5
142-3024-06	6	51.5
142-3024-07	7	59.5
142-3024-08	8	67.5
142-3024-09	9	75.5
142-3024-10	10	83.5
142-3024-12	12	99.5
142-3024-14	14	115.5
142-3024-16	16	131.5
142-3024-18	18	147.5
142-3024-20	20	163.5

2.7 LeiLOX Boneplate

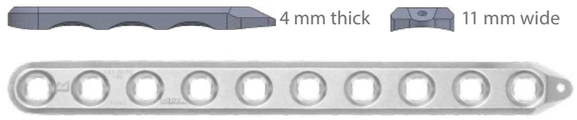
Multiaxial locking, straight, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3027-04	4	40
142-3027-05	5	49
142-3027-06	6	58
142-3027-07	7	67
142-3027-08	8	76
142-3027-09	9	85
142-3027-10	10	94
142-3027-12	12	112
142-3027-14	14	130
142-3027-16	16	148
142-3027-18	18	166
142-3027-20	20	184

3.5 LeiLOX Boneplate

Multiaxial locking, straight, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3035-04	4	49
142-3035-05	5	60
142-3035-06	6	71
142-3035-07	7	82
142-3035-08	8	93
142-3035-09	9	104
142-3035-10	10	115
142-3035-12	12	137
142-3035-14	14	159
142-3035-16	16	181
142-3035-18	18	203
142-3035-20	20	225

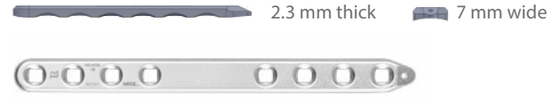
2.0 LeiLOX Bridge Plate

Multiaxial locking, straight, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws

Product Code	Holes	Length (mm)	
		Total	Bridge
142-4120-08	6	59.5	17
142-4120-09	6	66.5	24
142-4120-10	8	73.5	17
142-4120-11	8	80.5	24
142-4120-12	8	87.5	31
142-4120-13	8	94.5	38
142-4120-14	8	101.5	45
142-4120-16	8	115.5	59
142-4120-18	8	129.5	73
142-4120-20	8	143.5	87

2.4 LeiLOX Bridge Plate

Multiaxial locking, straight, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Length (mm)	
		Total	Bridge
142-4124-08	6	67.5	20
142-4124-09	6	75.5	28
142-4124-10	8	83.5	20
142-4124-11	8	91.5	28
142-4124-12	8	99.5	36
142-4124-13	8	107.5	44
142-4124-14	8	115.5	52
142-4124-16	8	131.5	68
142-4124-18	8	147.5	84
142-4124-20	8	163.5	100

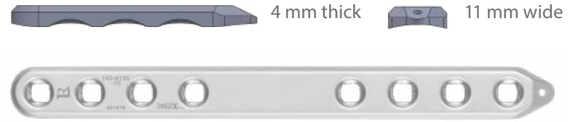
2.7 LeiLOX Bridge Plate

Multiaxial locking, straight, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws

Product Code	Holes	Length (mm)	
		Total	Bridge
142-4127-08	6	76	22
142-4127-09	6	85	31
142-4127-10	8	94	22
142-4127-11	8	103	31
142-4127-12	8	112	40
142-4127-13	8	121	48
142-4127-14	8	130	57
142-4127-16	8	148	75
142-4127-18	8	166	93
142-4127-20	8	184	111

3.5 LeiLOX Bridge Plate

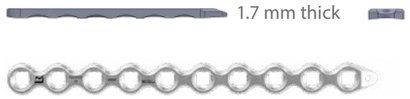
Multiaxial locking, straight, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Length (mm)	
		Total	Bridge
142-4135-08	6	93	27
142-4135-09	6	104	38
142-4135-10	8	115	27
142-4135-11	8	126	38
142-4135-12	8	137	49
142-4135-13	8	148	60
142-4135-14	8	159	71
142-4135-16	8	181	93
142-4135-18	8	203	115
142-4135-20	8	225	137

2.0 LeiLOX Reconstruction Plate

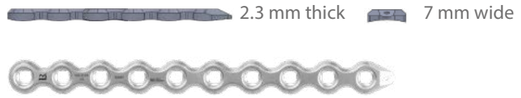
Multiaxial locking, bendable, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3120-04	4	34
142-3120-05	5	42
142-3120-06	6	50
142-3120-07	7	58
142-3120-08	8	66
142-3120-09	9	74
142-3120-10	10	82
142-3120-12	12	98
142-3120-14	14	114
142-3120-16	16	130
142-3120-18	18	146
142-3120-20	20	162

2.4 LeiLOX Reconstruction Plate

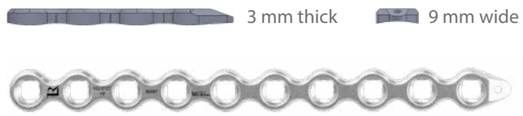
Multiaxial locking, bendable, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3124-04	4	37.5
142-3124-05	5	46.5
142-3124-06	6	55.5
142-3124-07	7	64.5
142-3124-08	8	73.5
142-3124-09	9	82.5
142-3124-10	10	91.5
142-3124-12	12	109.5
142-3124-14	14	127.5
142-3124-16	16	145.5
142-3124-18	18	163.5
142-3124-20	20	181.5

2.7 LeiLOX Reconstruction Plate

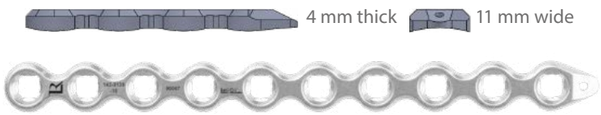
Multiaxial locking, bendable, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3127-04	4	40
142-3127-05	5	49
142-3127-06	6	58
142-3127-07	7	67
142-3127-08	8	76
142-3127-09	9	85
142-3127-10	10	94
142-3127-12	12	112
142-3127-14	14	130
142-3127-16	16	148
142-3127-18	18	166
142-3127-20	20	184

3.5 LeiLOX Reconstruction Plate

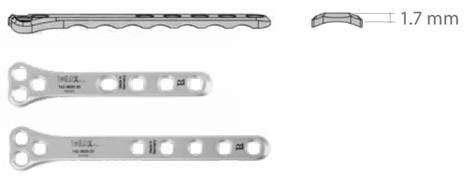
Multiaxial locking, bendable, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Length (mm)
142-3135-04	4	49
142-3135-05	5	60
142-3135-06	6	71
142-3135-07	7	82
142-3135-08	8	93
142-3135-09	9	104
142-3135-10	10	115
142-3135-12	12	137
142-3135-14	14	159
142-3135-16	16	181
142-3135-18	18	203
142-3135-20	20	225

2.0 LeiLOX T-Plate

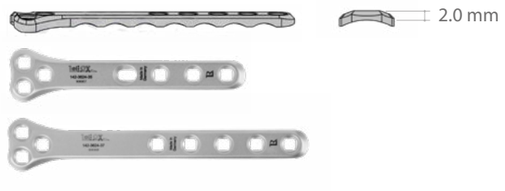
Multiaxial locking, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Size (in mm)		
		L	W	W1
142-3620-35	3 x 4	49.5	11	6
142-3620-37	3 x 5	63.5	11	6

2.4 LeiLOX T-Plate

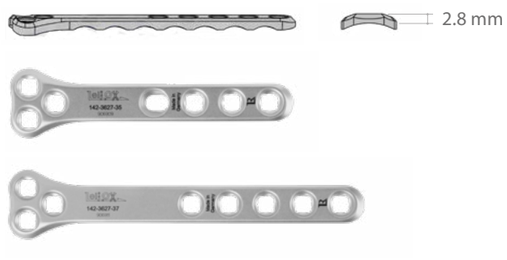
Multiaxial locking, Stainless Steel
compatible with 2.0 & 2.4mm LeiLOX Screws



Product Code	Holes	Size (in mm)		
		L	W	W1
142-3624-35	3 x 4	57.5	13	7
142-3624-37	3 x 5	73.5	13	7

2.7 LeiLOX T-Plate

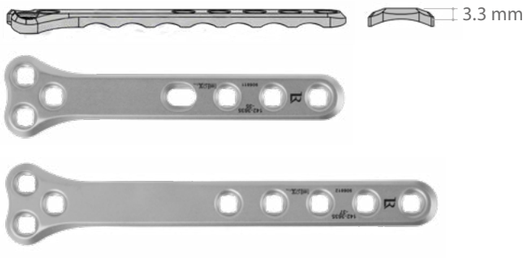
Multiaxial locking, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Size (in mm)		
		L	W	W1
142-3627-35	3 x 4	68.5	17	9
142-3627-37	3 x 5	86.5	17	9

3.5 LeiLOX T-Plate

Multiaxial locking, Stainless Steel
compatible with 2.7 & 3.5mm LeiLOX Screws



Product Code	Holes	Size (in mm)		
		L	W	W1
142-3635-35	3 x 4	82.5	20	11
142-3635-37	3 x 5	104.5	20	11

LeiLOX Instruments
See LeiLOX Instruments on
Page 120.

LeiLOX Arthrodesis Plate, straight

Multiaxial locking, bendable, Stainless Steel
compatible with 2.0/2.4mm and 2.7/3.5 LeiLOX Screws

2.0 / 2.0 mm

60 mm long

142-2020-60

2.4 / 2.0 mm

70 mm long

142-2024-70

2.7 / 2.0 mm

80 mm long

142-2027-80

2.7 / 2.0 mm

90 mm long

142-2027-90

2.7 / 3.5 mm

115 mm long

142-2735-115

3.5 / 3.5 mm

140 mm lang

142-3535-140

LeiLOX Arthrodesis Plate, angled

Multiaxial locking, bendable, Stainless Steel
compatible with 2.0/2.4mm and 2.7/3.5 LeiLOX Screws

2.0 / 2.4 mm

64 mm long

Product Code	
142-2024-120L	left
142-2024-120R	right

2.0 / 2.7 mm

77 mm long

Product Code	
142-2027-120L	left
142-2027-120R	right

2.0 / 2.4 mm

86 mm long

Product Code	
142-2024-135L	left
142-2024-135R	right

2.0 / 2.7 mm

100 mm long

Product Code	
142-2027-135L	left
142-2027-135R	right

2.7 / 3.5 mm

150 mm long

Product Code	
142-2735-135L	left
142-2735-135R	right

LeiLOX Locking Cortical Screws Stainless Steel

For LeiLOX Locking Systems, LeiStar T8 (2.0/2.4) & T10 (2.7/3.5)
self-holding (Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

Length (mm)	2.0 mm	2.4 mm	2.7 mm	3.5 mm
	Product Code	Product Code	Product Code	Product Code
6	242-120-06	242-124-06		
8	242-120-08	242-124-08		
10	242-120-10	242-124-10	242-127-10	242-135-10
12	242-120-12	242-124-12	242-127-12	242-135-12
14	242-120-14	242-124-14	242-127-14	242-135-14
16	242-120-16	242-124-16	242-127-16	242-135-16
18	242-120-18	242-124-18	242-127-18	242-135-18
20	242-120-20	242-124-20	242-127-20	242-135-20
22	242-120-22	242-124-22	242-127-22	242-135-22
24	242-120-24	242-124-24	242-127-24	242-135-24
26	242-120-26	242-124-26	242-127-26	242-135-26
28	242-120-28	242-124-28	242-127-28	242-135-28
30	242-120-30	242-124-30	242-127-30	242-135-30
32		242-124-32	242-127-32	242-135-32
34		242-124-34	242-127-34	242-135-34
36		242-124-36	242-127-36	242-135-36
38		242-124-38	242-127-38	242-135-38
40		242-124-40	242-127-40	242-135-40
42			242-127-42	242-135-42
44			242-127-44	242-135-44
46			242-127-46	242-135-46
48			242-127-48	242-135-48
50			242-127-50	242-135-50
52				242-135-52
54				242-135-54
56				242-135-56
58				242-135-58
60				242-135-60
62				242-135-62
64				242-135-64
66				242-135-66
68				242-135-68
70				242-135-70

Locking Plug for LeiLOX

LeiStar, 1.5mm K-Wire hole, for 2.0/2.4 & 2.7/3.5 plates
self-holding (shaft from Rita Leibinger recommended)

STAR Screw-Head

Product Code	Description
242-0020-24	2.0 / 2.4 mm
242-0027-35	2.7 / 3.5 mm

top bottom side

Fixation

Create an additional K-Wire fixation point in any hole of the plate.

Stability

Increase the fatigue strength by closing unused screw holes.

Protection

Protect the screw holes while bending the plate.

2024.leibinger.vet

2735.leibinger.vet

Cortical Screw (Non-Locking) Stainless Steel

LeiStar T8 (2.0/2.4) & T10 (2.7/3.5) self-holding (Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

Length (mm)	2.0 mm	2.4 mm	2.7 mm	3.5 mm
	Product Code	Product Code	Product Code	Product Code
8	245-620-08	245-624-08		
10	245-620-10	245-624-10		
12	245-620-12	245-624-12		
14	245-620-14	245-624-14		
16	245-620-16	245-624-16	245-627-16	245-635-16
18	245-620-18	245-624-18	245-627-18	245-635-18
20		245-624-20	245-627-20	245-635-20
22		245-624-22	245-627-22	245-635-22
24		245-624-24	245-627-24	245-635-24
26		245-624-26	245-627-26	245-635-26
28		245-624-28	245-627-28	245-635-28
30		245-624-30	245-627-30	245-635-30
32		245-624-32	245-627-32	245-635-32
34		245-624-34	245-627-34	245-635-34
36		245-624-36	245-627-36	245-635-36
38		245-624-38	245-627-38	245-635-38
40		245-624-40	245-627-40	245-635-40
45				245-635-45
50				245-635-50
55				245-635-55
60				245-635-60

See more screw lengths on **Page 134.**

Screw Racks on **Page 227.**

LeiLOX

1.0 / 1.3 Nano
1.5 / 2.0 Micro
2.0-3.5 Stainless Steel

INSTRUMENTS

RITA LEIBINGER MEDICAL

LeiLOX Instrument Set

2.0-3.5 Steel

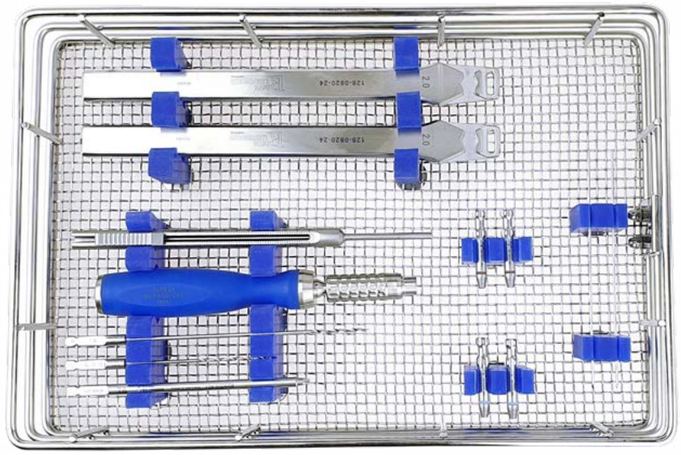
Contains:
Tray for 2.0/2.4 Instruments
2 Drills (1.5 & 1.8mm)
2x K-Wires (1.0mm)
2x2 Locking Drill Guides
1 Screwdriver Handle
1 Screwdriver Shaft
1 Depth Gauge
1 Pair Bending Irons

2.0/2.4 Instruments Set
142-2024-50

2.0/2.4 Tray without contents
142-2024-51

2.7/3.5 Intruments Set
142-3010-00

2.7/3.5 Tray without contents
142-3010-01



Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

Screw Racks
See screw racks for 1.5mm up to 3.5mm screws on **Page 227.**

Bending Iron AO Type

130 mm, Pair

Product Code	Description	
128-0881-10	for 1.0/1.3 Plates	1.0 / 1.3 Nano
128-0881-15	for 1.5/2.0 Plates	1.5 / 2.0 Micro

Bending Iron

2.0-3.5 Steel

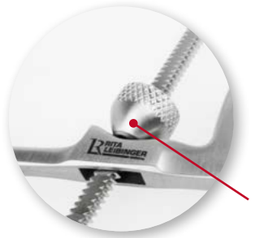
Product Code	Description
128-0820-24	Pair, for 2.0/2.4 Straight & Reconstruction Plates
128-0827-35	Pair, for 2.7/3.5 Straight & Reconstruction Plates

LEIKUTA Bone Plate Holding Forceps

1.5 / 2.0 Micro

140mm, straight with spin lock,
45 mm working end

128-0539-13



Now features a spin lock for gentle application

LEIKUTA Bone Plate Holding Forceps

1.5 / 2.0 Micro

135mm, angled up with spin lock,
45 mm working end

128-0538-13

Bone Plate Holding Retractor

1.5 / 2.0 Micro

angled up, with tensioning screw, working end 10x4mm

128-0537-10

Bone Plate Cutter

1.5 / 2.0 Micro

Double action, for titanium plates max. 1.5 mm

23-5865-24T

Drills with Round Shaft

1.0 / 1.3 Nano | 1.5 / 2.0 Micro | 2.0-3.5 Steel

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)
148-0080-07	0.7	for 1.0 screws	45
148-0080-10	1.0	for 1.3 screws	45
148-0080-11	1.1	for 1.5 screws	45
148-0180-11	1.1	for 1.5 screws	85
148-0080-15	1.5	for 2.0 screws	70
148-0180-15	1.5	for 2.0 screws	130
148-0080-18	1.8	for 2.4 screws	125
148-0080-20	2.0	for 2.7 screws	85

Drills with AO Schaft

self-centering

1.0 / 1.3 Nano | 1.5 / 2.0 Micro | 2.0-3.5 Steel

Product Code	Ø (mm)	for Screw Ø (mm)	Length (mm)
148-0081-07	0.7	for 1.0 screws	72 / 47
148-0081-10	1.0	for 1.3 screws	72 / 47
148-0081-11	1.1	for 1.5 screws	60 / 35
148-0181-11	1.1	for 1.5 screws	85 / 60
148-0081-15	1.5	for 2.0 screws	85 / 60
148-0181-15	1.5	for 2.0 screws	110 / 85
148-0081-18	1.8	for 2.4 screws	125 / 25
148-0081-20	2.0	for 2.7 screws	100 / 75

See more Twist Drills on **Page 220.**

Locking Drill Guide

1.0 / 1.3 Nano

Product Code	Description
164-0010-00	for 1.0 mm Screws, 0.7 mm Drill
164-0013-00	for 1.3 mm Screws, 1.0 mm Drill

Locking Drill Guide

1.5 / 2.0 Micro

Product Code	Description
164-0015-00	for 1.5 mm Screws, 1.1 mm Drill
164-0020-00	for 2.0 mm Screws, 1.5 mm Drill

Locking Drill Guide

2.0-3.5 Steel

Product Code	Description
164-2000-00	for 2.0 mm screws, 1.5 mm Drill
164-2400-00	for 2.4 mm screws, 1.8 mm Drill
164-2700-00	for 2.7 mm screws, 2.0 mm Drill
164-3500-00	for 3.5 mm screws, 2.5 mm Drill

Depth Gauge

1.0 / 1.3 Nano | 1.5 / 2.0 Micro | 2.0-3.5 Steel

Product Code	Description	Compatibility
164-1013-20	150mm in length, scale up to 20mm	for 1.0/1.3/1.5 mm screws
164-1520-20	150mm in length, scale up to 40mm	for 1.5/2.0/2.4 mm screws
164-2735-60	150mm in length, scale up to 60mm	for 2.4/2.7/3.5 mm screws

K-Wire

Single Trocar
1.0 mm x 100 mm

Product Code	Dimensions (mm)
144-1010-10	1.0 x 100
144-1020-10	2.0 x 100
144-1025-10	2.5 x 100
144-1030-10	3.0 x 100

See more K-Wires on **Page 144.**

Screwdriver Shaft LeiStar

1.0 / 1.3 Nano | 1.5 / 2.0 Micro | 2.0-3.5 Steel

AO conncection, self-holding
(no Holding Sleeve needed)

Product Code	Description
128-1013-00	T5, for 1.0 mm Screws, 60 mm length
128-1520-15	T6, for 1.5 mm Screws, 60 mm length
128-1520-20	T8, for 2.0 / 2.4 mm screws, 60 mm length
128-2024-08	T8 for 2.0 / 2.4 mm screws, 100 mm length
128-2735-10	T10 for 2.7 / 3.5 mm screws, 100 mm length

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

Product Code	Description
247-0103-00	compact, compatible with 1.0/1.5/2.0/2.4
247-0102-00	standard, compatible with 2.7/3.5

Torque Limiting Screwdriver Handle

Torque 3 Nm
Silicone, AO, sterilizable up to 134°C / 273°F

247-0104-00

Osteosynthesis

STANDARD PLATES

1.5mm DCP Plate

Cuttable
1mm thick, for 1.5 mm screws

Product Code	Holes	Length (mm)
130-1848-04	4	18.5
130-1848-05	5	22.5
130-1848-06	6	26.5
130-1848-07	7	30.5

Product Code	Holes	Length (mm)
130-1848-08	8	34.5
130-1848-09	9	38.5
130-1848-10	10	42.5
130-1848-20	20	82.5

2.0mm DCP Plate

1.5mm thick, 6.0mm wide

Product Code	Holes	Length (mm)
130-11-1014	4	27
130-11-1015	5	33
130-11-1016	6	39
130-11-1017	7	45

Product Code	Holes	Length (mm)
130-11-1018	8	51
130-11-1019	9	57
130-11-1020	10	63
130-11-1021	11	69
130-11-1022	12	75

2.4mm DCP Plate

2.0mm thick, 7.0mm wide

Product Code	Holes	Length (mm)
130-11-6004	4	32
130-11-6005	5	39
130-11-6006	6	46
130-11-6007	7	54
130-11-6008	8	61

Product Code	Holes	Length (mm)
130-11-6009	9	68
130-11-6010	10	75
130-11-6011	11	82
130-11-6012	12	89
130-11-6013	13	96
130-11-6014	14	103

2.7mm DCP Plate

2.5mm thick, 8.0mm wide

Product Code	Holes	Length (mm)
140-12-0004	4	37
140-12-0005	5	45
140-12-0006	6	53
140-12-0007	7	61
140-12-0008	8	70
140-12-0009	9	78

Product Code	Holes	Length (mm)
140-12-0010	10	86
140-12-0011	11	94
140-12-0012	12	102
140-12-0013	13	110
140-12-0014	14	118

3.5mm DCP Plate narrow

4mm thick, 11mm wide, 5mm hole distance

Product Code	Holes	Length (mm)
140-20-0002	2	27
140-20-0004	4	51
140-20-0005	5	63
140-20-0006	6	75
140-20-0007	7	87
140-20-0008	8	99
140-20-0009	9	111
140-20-0010	10	123

Product Code	Holes	Length (mm)
140-20-0011	11	135
140-20-0012	12	147
140-20-0013	13	159
140-20-0014	14	171
140-20-0015	15	183
140-20-0016	16	195
140-20-0017	17	207
140-20-0018	18	219

3.5mm DCP Plate broad

5mm thick, 12.5mm wide, 5mm hole distance

Product Code	Holes	Length (mm)
140-24-0004	4	54
140-24-0005	5	66
140-24-0006	6	78
140-24-0007	7	90
140-24-0008	8	102
140-24-0009	9	114
140-24-0010	10	126
140-24-0011	11	138

Product Code	Holes	Length (mm)
140-24-0012	12	150
140-24-0013	13	162
140-24-0014	14	174
140-24-0015	15	186
140-24-0016	16	198
140-24-0017	17	210
140-24-0018	18	222
140-24-0019	19	234
140-24-0020	20	246

Bone Plate 4.5 mm DCP narrow

Product Code	Holes	Length (mm)
130-30-0004	4	71
130-30-0005	5	87
130-30-0006	6	103
130-30-0007	7	119
130-30-0008	8	135
130-30-0009	9	151
130-30-0010	10	167
130-30-0011	11	183
130-30-0012	12	199

Product Code	Holes	Length (mm)
130-30-0013	13	215
130-30-0014	14	231
130-30-0015	15	247
130-30-0016	16	263
130-30-0018	18	295
130-30-0020	20	327
130-30-0022	22	359
130-30-0024	24	391

Bone Plate 4.5mm DCP broad

Product Code	Holes	Length (mm)
130-31-0005	5	87
130-31-0006	6	103
130-31-0007	7	119
130-31-0008	8	135
130-31-0009	9	151
130-31-0010	10	167
130-31-0011	11	183
130-31-0012	12	199

Product Code	Holes	Length (mm)
130-31-0013	13	215
130-31-0014	14	231
130-31-0015	15	247
130-31-0016	16	263
130-31-0018	18	295
130-31-0020	20	327
130-31-0022	22	359
130-31-0024	24	391

2.0mm Limited Contact DCP Plate

Product Code	Holes	Length (mm)
130-11-2004	4	23
130-11-2005	5	29
130-11-2006	6	35
130-11-2007	7	41

Product Code	Holes	Length (mm)
130-11-2008	8	47
130-11-2009	9	53
130-11-2010	10	59
130-11-2020	20	119

2.7 Limited Contact DCP Plate

Frontside

Backside (Limited Contact)

Product Code	Holes	Length (mm)
140-13-2004	4	36
140-13-2005	5	44
140-13-2006	6	52
140-13-2007	7	60
140-13-2008	8	68
140-13-2009	9	76

Product Code	Holes	Length (mm)
140-13-2010	10	84
140-13-2011	11	92
140-13-2012	12	100
140-13-2013	13	108
140-13-2014	14	116

Bone Plate 3.5 mm Limited Contact DCP

Frontside

Backside (Limited Contact)

Product Code	Holes	Length (mm)
140-20-2004	4	51
140-20-2005	5	64
140-20-2006	6	77
140-20-2007	7	90
140-20-2008	8	103

Product Code	Holes	Length (mm)
140-20-2009	9	116
140-20-2010	10	129
140-20-2011	11	142
140-20-2012	12	155
140-20-2014	14	168

Acetabulum Plates

2,0mm, 6 Hole, 31mm

130-11-0606

2,7mm, 4 Hole, 39mm

130-12-0604

2,7mm, 5 Hole, 47mm

130-12-0605

2,7mm, 6 Hole, 53mm

130-12-0606

Reconstruction Plates 3.5mm

Straight

Product Code	Holes	Length (mm)
140-50-0004	4	46
140-50-0005	5	58
140-50-0006	6	70
140-50-0007	7	82
140-50-0008	8	94
140-50-0009	9	106
140-50-0010	10	118

Product Code	Holes	Length (mm)
140-50-0011	11	130
140-50-0012	12	142
140-50-0014	14	166
140-50-0016	16	190
140-50-0018	18	214
140-50-0020	20	238
140-50-0022	22	262

Reconstruction Plates 3.5mm

Curved

Product Code	Holes	Length (mm)
130-50-0106	6	48
130-50-0108	8	64
130-50-0110	10	80

Product Code	Holes	Length (mm)
130-50-0112	12	96
130-50-0114	14	112
130-50-0116	16	128

2.0mm Adaption Plate

20 holes, 1.2 mm thickness, cuttable

130-11-1420

2.0mm T-Bone Plate

2x2 holes, 1.0mm thick, 5.0mm wide, 6mm hole distance

130-11-0302

1.5mm T-Plate (cuttable)

Product Code	Holes	Length (mm)
130-1863-09	3x9	50
130-1864-09	4x9	50

2.0mm T-Plate (cuttable)

Product Code	Holes	Length (mm)
130-11-0339	3x9	50
130-11-0349	4x9	50

2.0mm T-Plate

Product Code	Holes	Length (mm)
140-0620-24	2x4	32
140-0620-25	2x5	38
140-0620-26	2x6	44

Product Code	Holes	Length (mm)
140-0620-27	2x7	50
140-0620-28	2x8	56

2.0 mm L-Plate

Product Code	Description
130-11-0402	left
130-11-0502	right

2.7 mm L-Plate

Product Code	Description
130-12-0103	left
130-12-0203	right

Phillips T-Plates

Product Code	Holes	Dimensions
131-20-0304	2/4	2.0/2.7 mm, 36 mm
131-20-0305	2/5	2.0/2.7 mm, 44 mm
131-20-0306	2/6	2.0/2.7 mm, 52 mm

3.5 mm T - Bone Plate

Product Code	Holes	Dimensions
131-35-0505	2/5	3.5/65 mm
131-35-0506	2/6	3.5/75 mm

3.5 mm T - Bone Plate with curved head

Product Code	Holes	Dimensions
131-35-0404	3/4	3.5/60 mm
131-35-0406	3/6	3.5/80 mm
131-35-0508	3/8	3.5/105 mm

Arthrodesis Plates

Product Code	Description
140-05-1168	9 holes oval, 1.5/2.0/54 mm

140-05-1169	9 holes oval, 2.0/2.0/58 mm

140-05-1170	9 holes round, 2.0/2.7/76 mm

140-05-1171	9 holes oval, 2.0/2.7/76 mm

140-05-1174	9 holes round, 2.7/3.5/104 mm

140-05-1175	9 holes oval, 2.7/3.5/104 mm

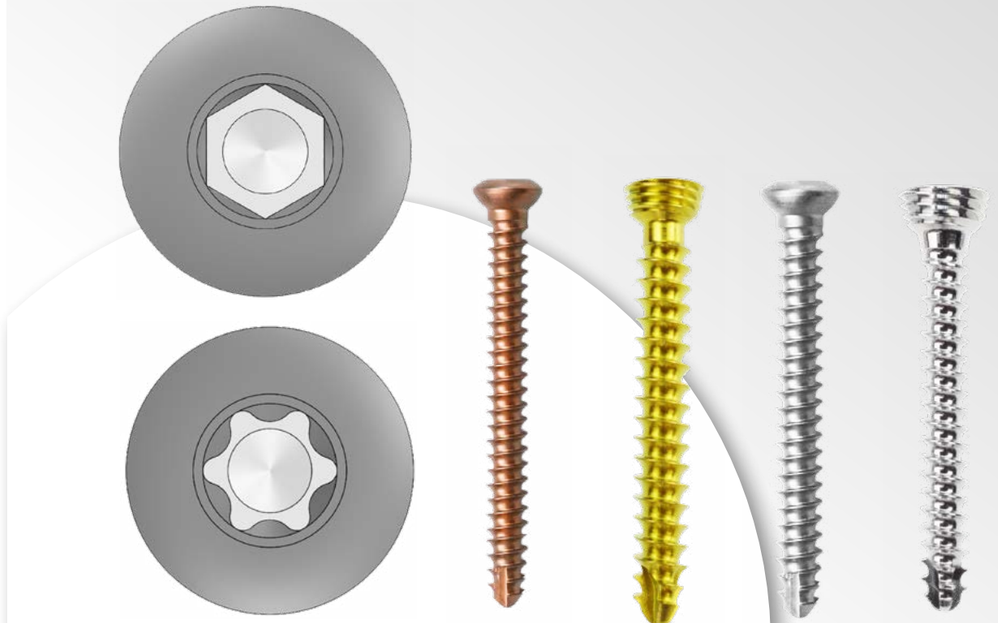
140-05-1172	9 holes round, 2.7/3.5/120 mm

140-05-1173	9 holes oval, 2.7/3.5/120 mm

140-05-1177	10 holes round, 3.5/3.5/140 mm

140-06-1178	10 holes oval, 3.5/3.5/140 mm

140-06-1176	11 holes oval, 3.5/3.5/152 mm



SCREWS

1.5 mm Cortical Screw **Hexagonal** or **LeiStar** head, self-holding, self-tapping with three flute cutting edge

Length (mm)	Stainless	Titanium	
	Hex Head	Hex Head	LeiStar
5			245-515-05
6	245-115-06	245-215-06	245-515-06
7	245-115-07	245-215-07	245-515-07
8	245-115-08	245-215-08	245-515-08
9	245-115-09	245-215-09	245-515-09
10	245-115-10	245-215-10	245-515-10
11	245-115-11	245-215-11	
12	245-115-12	245-215-12	245-515-12
14	245-115-14	245-215-14	245-515-14
16	245-115-16	245-215-16	245-515-16
18	245-115-18	245-215-18	245-515-18
20	245-115-20	245-215-20	245-515-20

2.0mm Cortical Screw **Hexagonal** or **LeiStar** head, self-holding, self-tapping with three flute cutting edge

Length (mm)	Stainless		Titanium	
	Hex Head	LeiStar	Hex Head	LeiStar
5				245-520-05
6	245-120-06	245-620-06	245-220-06	245-520-06
7				245-520-07
8	245-120-08	245-620-08	245-220-08	245-520-08
9				245-520-09
10	245-120-10	245-620-10	245-220-10	245-520-10
12	245-120-12	245-620-12	245-220-12	245-520-12
14	245-120-14	245-620-14	245-220-14	245-520-14
16	245-120-16	245-620-16	245-220-16	245-520-16
18	245-120-18	245-620-18	245-220-18	245-520-18
20	245-120-20	245-620-20	245-220-20	245-520-20
22	245-120-22	245-620-22	245-220-22	245-520-22
24	245-120-24	245-620-24	245-220-24	245-520-24
26	245-120-26	245-620-26	245-220-26	245-520-26
28	245-120-28	245-620-28	245-220-28	245-520-28
30	245-120-30	245-620-30	245-220-30	245-520-30
32	245-120-32	245-620-32		
34	245-120-34	245-620-34		
36	245-120-36	245-620-36		
38	245-120-38	245-620-38		
40	245-120-40	245-620-40		
42	245-120-42			
44	245-120-44			

2.4 mm Cortical Screw **Hexagonal** or **LeiStar** head, self-holding, self-tapping with three flute cutting edge

Length (mm)	Stainless		Titanium	
	Hex Head	LeiStar	Hex Head	LeiStar
6	245-124-06	245-624-06	245-224-06	245-524-06
8	245-124-08	245-624-08	245-224-08	245-524-08
10	245-124-10	245-624-10	245-224-10	245-524-10
12	245-124-12	245-624-12	245-224-12	245-524-12
14	245-124-14	245-624-14	245-224-14	245-524-14
16	245-124-16	245-624-16	245-224-16	245-524-16
18	245-124-18	245-624-18	245-224-18	245-524-18
20	245-124-20	245-624-20	245-224-20	245-524-20
22	245-124-22	245-624-22	245-224-22	245-524-22
24	245-124-24	245-624-24	245-224-24	245-524-24
26	245-124-26	245-624-26	245-224-26	245-524-26
28	245-124-28	245-624-28	245-224-28	245-524-28
30	245-124-30	245-624-30	245-224-30	245-524-30
32	245-124-32	245-624-32	245-224-32	245-524-32
34	245-124-34	245-624-34	245-224-34	245-524-34
36	245-124-36	245-624-36	245-224-36	245-524-36
38	245-124-38	245-624-38	245-224-38	245-524-38
40	245-124-40	245-624-40	245-224-40	245-524-40

2.7 mm Cortical Screw **Hexagonal** or **LeiStar** head, self-holding, self-tapping with three flute cutting edge

Length (mm)	Stainless		Titanium	
	Hex Head	LeiStar	Hex Head	LeiStar
6	245-127-06		245-227-06	245-527-06
8	245-127-08		245-227-08	245-527-08
10	245-127-10	245-627-10	245-227-10	245-527-10
12	245-127-12	245-627-12	245-227-12	245-527-12
14	245-127-14	245-627-14	245-227-14	245-527-14
16	245-127-16	245-627-16	245-227-16	245-527-16
18	245-127-18	245-627-18	245-227-18	245-527-18
20	245-127-20	245-627-20	245-227-20	245-527-20
22	245-127-22	245-627-22	245-227-22	245-527-22
24	245-127-24	245-627-24	245-227-24	245-527-24
26	245-127-26	245-627-26	245-227-26	245-527-26
28	245-127-28	245-627-28	245-227-28	245-527-28
30	245-127-30	245-627-30	245-227-30	245-527-30
32	245-127-32	245-627-32	245-227-32	245-527-32
34	245-127-34	245-627-34	245-227-34	245-527-34
36	245-127-36	245-627-36	245-227-36	245-527-36
38	245-127-38	245-627-38	245-227-38	245-527-38
40	245-127-40	245-627-40	245-227-40	245-527-40
42	245-127-42			
45				245-527-45
50				245-527-50

3.5 Cortical Screw (Non-Locking) Stainless Steel

Hexagonal or **LeiStar** head,
self-holding (T10 Shaft from Rita Leibinger needed)
self-tapping with three flute cutting edge

Length (mm)	Stainless		Titanium	
	Hex Head	LeiStar	Hex Head	LeiStar
8	245-135-08	245-635-08	245-235-08	245-535-08
10	245-135-10	245-635-10	245-235-10	245-535-10
12	245-135-12	245-635-12	245-235-12	245-535-12
14	245-135-14	245-635-14	245-235-14	245-535-14
16	245-135-16	245-635-16	245-235-16	245-535-16
18	245-135-18	245-635-18	245-235-18	245-535-18
20	245-135-20	245-635-20	245-235-20	245-535-20
22	245-135-22	245-635-22	245-235-22	245-535-22
24	245-135-24	245-635-24	245-235-24	245-535-24
26	245-135-26	245-635-26	245-235-26	245-535-26
28	245-135-28	245-635-28	245-235-28	245-535-28
30	245-135-30	245-635-30	245-235-30	245-535-30
32	245-135-32	245-635-32	245-235-32	245-535-32
34	245-135-34	245-635-34	245-235-34	245-535-34
36	245-135-36	245-635-36	245-235-36	245-535-36
38	245-135-38	245-635-38	245-235-38	245-535-38
40	245-135-40	245-635-40	245-235-40	245-535-40
42	245-135-42			
44	245-135-44			
45	245-135-45	245-635-45	245-235-45	245-535-45
50	245-135-50	245-635-50	245-235-50	245-535-50
55	245-135-55	245-635-55	245-235-55	245-535-55
60	245-135-60	245-635-60	245-235-60	245-535-60
65	245-135-65			245-535-65
70				245-535-70
75				245-535-75
80				245-535-80
90				245-535-90

NEW LENGTHS

Washers

Stainless Steel

Product Code	Description
130-5215-10	Washer 1.5
130-6252-12	Washer 2.0
130-7324-14	Washer 2.4
130-8327-16	Washer 2.7
130-9435-16	Washer 3.5

4.0 mm Cancellous Screws

Hexagonal head,
self-holding, self-tapping with three flute cutting edge

Length (mm)	Fully Threaded	Partially Threaded
10	245-440-10	245-140-10
12	245-440-12	245-140-12
14	245-440-14	245-140-14
16	245-440-16	245-140-16
18	245-440-18	245-140-18
20	245-440-20	245-140-20
22	245-440-22	245-140-22
24	245-440-24	245-140-24
26	245-440-26	245-140-26
28	245-440-28	245-140-28
30	245-440-30	245-140-30
32	245-440-32	245-140-32
34	245-440-34	245-140-34
35	245-440-35	245-140-35
36	245-440-36	245-140-36
38	245-440-38	245-140-38
40	245-440-40	245-140-40
42	245-440-42	245-140-42
44	245-440-44	245-140-44
45		245-140-45
46	245-440-46	245-140-46
48	245-440-48	245-140-48
50	245-440-50	245-140-50
52	245-440-52	245-140-52
54	245-440-54	245-140-54
55	245-440-55	245-140-55
56	245-440-56	245-140-56
58	245-440-58	245-140-58
60	245-440-60	245-140-60
62	245-440-62	245-140-62
63	245-440-64	245-140-64
66	245-440-66	245-140-66
68	245-440-68	245-140-68
70	245-440-70	245-140-70

4.5 mm Cortical Screw

Hexagonal head,
self-holding, self-tapping with three flute cutting edge

Length (mm)	Stainless Steel
14	245-145-14
16	245-145-16
18	245-145-18
20	245-145-20
22	245-145-22
24	245-145-24
26	245-145-26
28	245-145-28
30	245-145-30
32	245-145-32
34	245-145-34
36	245-145-36
38	245-145-38
40	245-145-40
42	245-145-42
44	245-145-44
46	245-145-46
48	245-145-48
50	245-145-50
52	245-145-52
54	245-145-54
56	245-145-56
58	245-145-58
60	245-145-60
62	245-145-62
64	245-145-64
66	245-145-66
68	245-145-68
70	245-145-70

Locking Screws Titanium

For **LeiLOX Osteosynthesis Locking Systems and C-LOX** (2.7mm)
LeiStar
self-holding (Shafts from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

	LeiLOX Osteosynthesis Systems				C-LOX
	Nano		Micro		
			TPLO Swing 1.5		
	1.0 mm	1.3 mm	1.5 mm	2.0 mm	2.7 mm
Length (mm)	Product Code	Product Code	Product Code	Product Code	Product Code
4	245-410-04	245-413-04			
5	245-410-05	245-413-05	245-415-05	245-420-05	
6	245-410-06	245-413-06	245-415-06	245-420-06	
7	245-410-07	245-413-07	245-415-07	245-420-07	
8	245-410-08	245-413-08	245-415-08	245-420-08	245-427-08
9	245-410-09	245-413-09	245-415-09	245-420-09	
10	245-410-10	245-413-10	245-415-10	245-420-10	245-427-10
11	245-410-11	245-413-11	245-415-11	245-420-11	
12	245-410-12	245-413-12	245-415-12	245-420-12	245-427-12
14	245-410-14	245-413-14	245-415-14	245-420-14	245-427-14
16	245-410-16	245-413-16	245-415-16	245-420-16	245-427-16
18		245-413-18	245-415-18	245-420-18	245-427-18
20		245-413-20	245-415-20	245-420-20	245-427-20
22			245-415-22	245-420-22	
24			245-415-24	245-420-24	
26			245-415-26	245-420-26	
28				245-420-28	
30				245-420-30	

2.0 / 2.4 LeiLOX Locking Screw Titanium

For LeiLOX Locking **TPLO, CBLO, CCWO Systems**
LeiStar T8
self-holding (Shafts from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

	2.0 mm	2.4 mm
Length (mm)	Product Code	Product Code
06	242-220-06	242-224-06
08	242-220-08	242-224-08
10	242-220-10	242-224-10
12	242-220-12	242-224-12
14	242-220-14	242-224-14
16	242-220-16	242-224-16
18	242-220-18	242-224-18
20	242-220-20	242-224-20
22	242-220-22	242-224-22
24	242-220-24	242-224-24
26	242-220-26	242-224-26
28	242-220-28	242-224-28
30	242-220-30	242-224-30
32		242-224-32
34		242-224-34
36		242-224-36
38		242-224-38
40		242-224-40

2.7 / 3.5 LeiLOX Locking Screw Titanium

For LeiLOX Locking **TPLO, CBLO, CCWO Systems**
LeiStar T10
self-holding (Shafts from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

	2.7 mm	3.5 mm
Length (mm)	Product Code	Product Code
10	242-227-10	242-235-10
12	242-227-12	242-235-12
14	242-227-14	242-235-14
16	242-227-16	242-235-16
18	242-227-18	242-235-18
20	242-227-20	242-235-20
22	242-227-22	242-235-22
24	242-227-24	242-235-24
26	242-227-26	242-235-26
28	242-227-28	242-235-28
30	242-227-30	242-235-30
32	242-227-32	242-235-32
34	242-227-34	242-235-34
36	242-227-36	242-235-36
38	242-227-38	242-235-38
40	242-227-40	242-235-40
42	242-227-42	242-235-42
44	242-227-44	242-235-44
46	242-227-46	242-235-46
48	242-227-48	242-235-48
50	242-227-50	242-235-50
52		242-235-52
54		242-235-54
56		242-235-56
58		242-235-58
60		242-235-60

LeiLOX Locking Screws Stainless Steel

For **LeiLOX Osteosynthesis Locking Systems and TPLO**
LeiStar , T8 (2.0/2.4) & T10 (2.7/3.5)
self-holding (Shafts from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

Length (mm)	2.0 mm	2.4 mm	2.7 mm	3.5 mm
	Product Code	Product Code	Product Code	Product Code
6	242-120-06	242-124-06		
8	242-120-08	242-124-08		
10	242-120-10	242-124-10	242-127-10	242-135-10
12	242-120-12	242-124-12	242-127-12	242-135-12
14	242-120-14	242-124-14	242-127-14	242-135-14
16	242-120-16	242-124-16	242-127-16	242-135-16
18	242-120-18	242-124-18	242-127-18	242-135-18
20	242-120-20	242-124-20	242-127-20	242-135-20
22	242-120-22	242-124-22	242-127-22	242-135-22
24	242-120-24	242-124-24	242-127-24	242-135-24
26	242-120-26	242-124-26	242-127-26	242-135-26
28	242-120-28	242-124-28	242-127-28	242-135-28
30	242-120-30	242-124-30	242-127-30	242-135-30
32		242-124-32	242-127-32	242-135-32
34		242-124-34	242-127-34	242-135-34
36		242-124-36	242-127-36	242-135-36
38		242-124-38	242-127-38	242-135-38
40		242-124-40	242-127-40	242-135-40
42			242-127-42	242-135-42
44			242-127-44	242-135-44
46			242-127-46	242-135-46
48			242-127-48	242-135-48
50			242-127-50	242-135-50
52				242-135-52
54				242-135-54
56				242-135-56
58				242-135-58
60				242-135-60
62				242-135-62
64				242-135-64
66				242-135-66
68				242-135-68
70				242-135-70

K-WIRES

K-Wire Set

111-0015-10

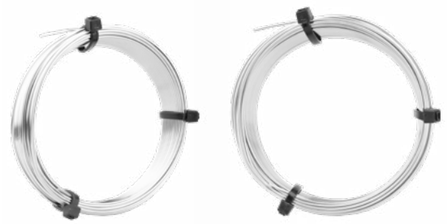
Product Code	Description	Qty
150-0865-00	Tray with Lid for K-Wires	1
143-1000-04	Cerclage Wire, 0,4 mm, 10m roll	1
143-1000-06	Cerclage Wire, 0,6 mm, 10m roll	1
143-1000-08	Cerclage Wire, 0,8 mm, 10m roll	1
143-1000-10	Cerclage Wire, 1,0 mm, 10m roll	1
144-1010-10	1.0mm x 100mm (CCC) K-Wire	6
144-1010-15	1.0mm x 150mm (CCC) K-Wire	6
144-1010-20	1.0mm x 200mm (CCC) K-Wire	6
144-1015-10	1.5mm x 100mm (CCC) K-Wire	6
144-1015-15	1.5mm x 150mm (CCC) K-Wire	6
144-1015-20	1.5mm x 200mm (CCC) K-Wire	6
144-1020-10	2.0mm x 100mm (CCC) K-Wire	6
144-1020-15	2.0mm x 150mm (CCC) K-Wire	6
144-1020-20	2.0mm x 200mm (CCC) K-Wire	6
144-1025-10	2.5mm x 100mm (CCC) K-Wire	6
144-1025-15	2.5mm x 150mm (CCC) K-Wire	6
144-1025-20	2.5mm x 200mm (CCC) K-Wire	6

The K-Wires contained in the set are single trocars with round ends.

The set contains:

Orthopedic Cerclage

Wires 10 meter roll



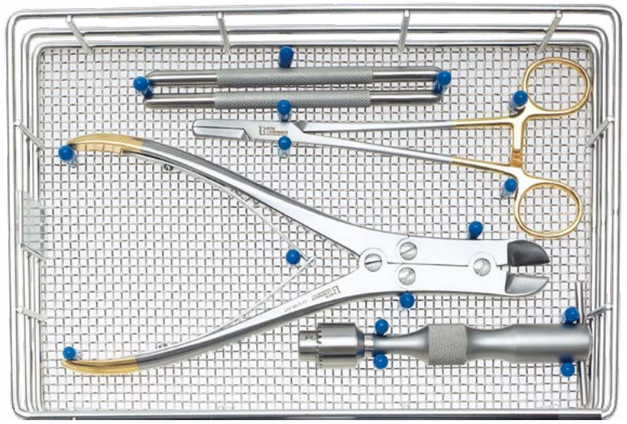
Ø (mm)	Product Code
0.2	143-1000-02
0.3	143-1000-03
0.4	143-1000-04
0.5	143-1000-05
0.6	143-1000-06
0.7	143-1000-07

Ø (mm)	Product Code
0.8	143-1000-08
0.9	143-1000-09
1.0	143-1000-10
1.2	143-1000-12
1.5	143-1000-15

INFO: More sizes available upon request

K-Wire Instrument Set

111-0015-20



The set contains:

Product Code	Description
150-0866-00	Instrument Tray for K-Wire Set
23-3513-00	Hand Chuck and key, max. Ø 4 mm
23-1363-14	K- Wire Bender, 1.0/2.0 mm 14 cm
23-1364-14	K-Wire Bender, 1.5/2.5mm, 14 cm
23-5795-22T	Wirecutter TC, 22 cm, for wires up to 2,6 mm
23-5535-18T	Wire Twister Berry, 18,5cm ,7 1/4“, straight

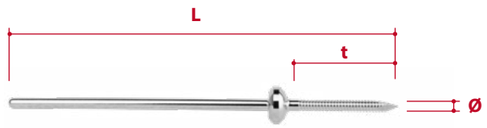
leibinger.vet/k-wires

Sterilization Container

See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

K-Wire with Olive

Stainless Steel



	Size (mm) Ø	Size (mm) L	Product Code	Thread length (t)
K-Wire	**0.7**	45	**144-9007-45**	7.5 mm
	1.0	50	**144-9010-50**	13.5 mm
	1.5	52	**144-9015-52**	13.5 mm

Single Trocar

Rounded end
Sold in packs of 10 for sizes up to 3.0 and in packs of 5 from size 3.5 upwards

INFO: More sizes available upon request

	Size (mm) Ø	L	Product Code
K-Wire	0.8	100	144-1008-10
		150	144-1008-15
		200	144-1008-20
	1.0	100	144-1010-10
		150	144-1010-15
		200	144-1010-20
	1.2	100	144-1012-10
		150	144-1012-15
		200	144-1012-20
	1.4	100	144-1014-10
		150	144-1014-15
		200	144-1014-20
	1.5	100	144-1015-10
		150	144-1015-15
		200	144-1015-20
		250	144-1015-25
		300	144-1015-30
	1.6	100	144-1016-10
		150	144-1016-15
		200	144-1016-20
		250	144-1016-25
		300	144-1016-30

	Size (mm) Ø	L	Product Code
K-Wire	1.8	100	144-1018-10
		150	144-1018-15
		200	144-1018-20
		250	144-1018-25
		300	144-1018-30
	2.0	100	144-1020-10
		150	144-1020-15
		200	144-1020-20
		250	144-1020-25
		300	144-1020-30
Steinmann Pin	2.5	100	144-1025-10
		150	144-1025-15
		200	144-1025-20
		250	144-1025-25
		300	144-1025-30
	3.0	100	144-1030-10
		150	144-1030-15
		200	144-1030-20
		250	144-1030-25
		300	144-1030-30

	Size (mm) Ø	L	Product Code
Steinmann Pin	3.5	100	144-1035-10
		150	144-1035-15
		200	144-1035-20
		250	144-1035-25
		300	144-1035-30
	4.0	100	144-1040-10
		150	144-1040-15
		200	144-1040-20
		250	144-1040-25
		300	144-1040-30
	4.5	150	144-1045-15
		200	144-1045-20
		250	144-1045-25
		300	144-1045-30
	5.0	150	144-1050-15
		200	144-1050-20
		250	144-1050-25
		300	144-1050-30
	6.0	150	144-1060-15
		200	144-1060-20
		250	144-1060-25
		300	144-1060-30

Single Trocar, threaded (negative)

Rounded end, with 15 mm negative threaded tip
Sold in packs of 10 for sizes up to 3.0 and in packs of 5 from size 3.5 upwards

INFO: More sizes available upon request

	Size (mm) Ø	L	Product Code
K-Wire	1.0	100	144-1510-10
		150	144-1510-15
		200	144-1510-20
		250	144-1510-25
		300	144-1510-30
	1.2	100	144-1512-10
		150	144-1512-15
		200	144-1512-20
		250	144-1512-25
		300	144-1512-30

	Size (mm) Ø	L	Product Code
K-Wire	1.4	100	144-1514-10
		150	144-1514-15
		200	144-1514-20
		250	144-1514-25
		300	144-1514-30
	1.5	100	144-1515-10
		150	144-1515-15
		200	144-1515-20
		250	144-1515-25
		300	144-1515-30

	Size (mm) Ø	L	Product Code
K-Wire	1.6	100	144-1516-10
		150	144-1516-15
		200	144-1516-20
		250	144-1516-25
		300	144-1516-30
	1.8	100	144-1518-10
		150	144-1518-15
		200	144-1518-20
		250	144-1518-25
		300	144-1518-30
	2.0	100	144-1520-10
		150	144-1520-15
		200	144-1520-20
		250	144-1520-25
		300	144-1520-30

Single Trocar, threaded (negative)

Rounded end, with 15 mm negative threaded tip
Sold in packs of 10 for sizes up to 3.0 and in packs of 5 from size 3.5 upwards

	Size (mm) Ø	L	Product Code
Steinmann Pin	2.5	100	144-1525-10
		150	144-1525-15
		200	144-1525-20
		250	144-1525-25
		300	144-1525-30
	3.0	100	144-1530-10
		150	144-1530-15
		200	144-1530-20
		250	144-1530-25
		300	144-1530-30

	Size (mm) Ø	L	Product Code
Steinmann Pin	3.5	150	144-1535-15
		200	144-1535-20
		250	144-1535-25
		300	144-1535-30
	4.0	150	144-1540-15
		200	144-1540-20
		250	144-1540-25
		300	144-1540-30

INFO: More sizes available upon request

	Size (mm) Ø	L	Product Code
Steinmann Pin	4.5	150	144-1545-15
		200	144-1545-20
		250	144-1545-25
		300	144-1545-30
	5.0	150	144-1550-15
		200	144-1550-20
		250	144-1550-25
		300	144-1550-30
	6.0	150	144-1560-15
		200	144-1560-20
		250	144-1560-25
		300	144-1560-30

Double Trocar

Sold in packs of 10 for sizes up to 3.0 and in packs of 5 from size 3.5 upwards

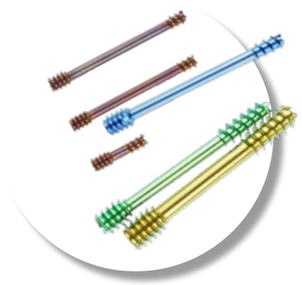
	Size (mm) Ø	L	Product Code
K-Wire	0.8	100	144-2008-10
		150	144-2008-15
		300	144-2008-20
	1.0	100	144-2010-10
		150	144-2010-15
		200	144-2010-20
		250	144-2010-25
		300	144-2010-30
	1.2	100	144-2012-10
		150	144-2012-15
		200	144-2012-20
		250	144-2012-25
		300	144-2012-30
	1.4	100	144-2014-10
		150	144-2014-15
		200	144-2014-20
		250	144-2014-25
		300	144-2014-30
	1.5	100	144-2015-10
		150	144-2015-15
		200	144-2015-20
		250	144-2015-25
		300	144-2015-30

	Size (mm) Ø	L	Product Code
K-Wire	1.6	100	144-2016-10
		150	144-2016-15
		200	144-2016-20
		250	144-2016-25
		300	144-2016-30
	1.8	100	144-2018-10
		150	144-2018-15
		200	144-2018-20
		250	144-2018-25
		300	144-2018-30
	2.0	100	144-2020-10
		150	144-2020-15
		200	144-2020-20
		250	144-2020-25
		300	144-2020-30
Steinmann Pin	2.5	100	144-2025-10
		150	144-2025-15
		200	144-2025-20
		250	144-2025-25
		300	144-2025-30
	3.0	100	144-2030-10
		150	144-2030-15
		200	144-2030-20
		250	144-2030-25
		300	144-2030-30

	Size (mm) Ø	L	Product Code
Steinmann Pin	3.5	150	144-2035-15
		200	144-2035-20
		250	144-2035-25
		300	144-2035-30
	4.0	150	144-2040-15
		200	144-2040-20
		250	144-2040-25
		300	144-2040-30
	4.5	150	144-2045-15
		200	144-2045-20
		250	144-2045-25
		300	144-2045-30
	5.0	150	144-2050-15
		200	144-2050-20
		250	144-2050-25
		300	144-2050-30
	6.0	150	144-2060-15
		200	144-2060-20
		250	144-2060-25
		300	144-2060-30

INFO: More sizes available upon request

LeiCOM Cannulated Compression Bone Screws



Titanium Compression Bone Screw Systems for small animals

The LeiCOM Cannulated Compression Bone Screws create compression through different thread pitches at the head of the screw and at the distal thread of the screw.
Available in Micro, Mini, Medium and Maxi sizes, our compression screws offer a solution for every need - from small to large breeds.

Titanium: Best Biocompatibility

Unique Titanium Alloy makes our compression screws very durable but lightweight. Titanium is also highly biocompatible and has low temperature sensitiveness.

Improved Accuracy and Optimized Positioning

All screws are cannulated to allow placement over a guidewire ensuring better accuracy before drilling or screw insertion. Using cannulated screws adopts the principles of interfragmentary screw fixation and aims to optimize screw position.

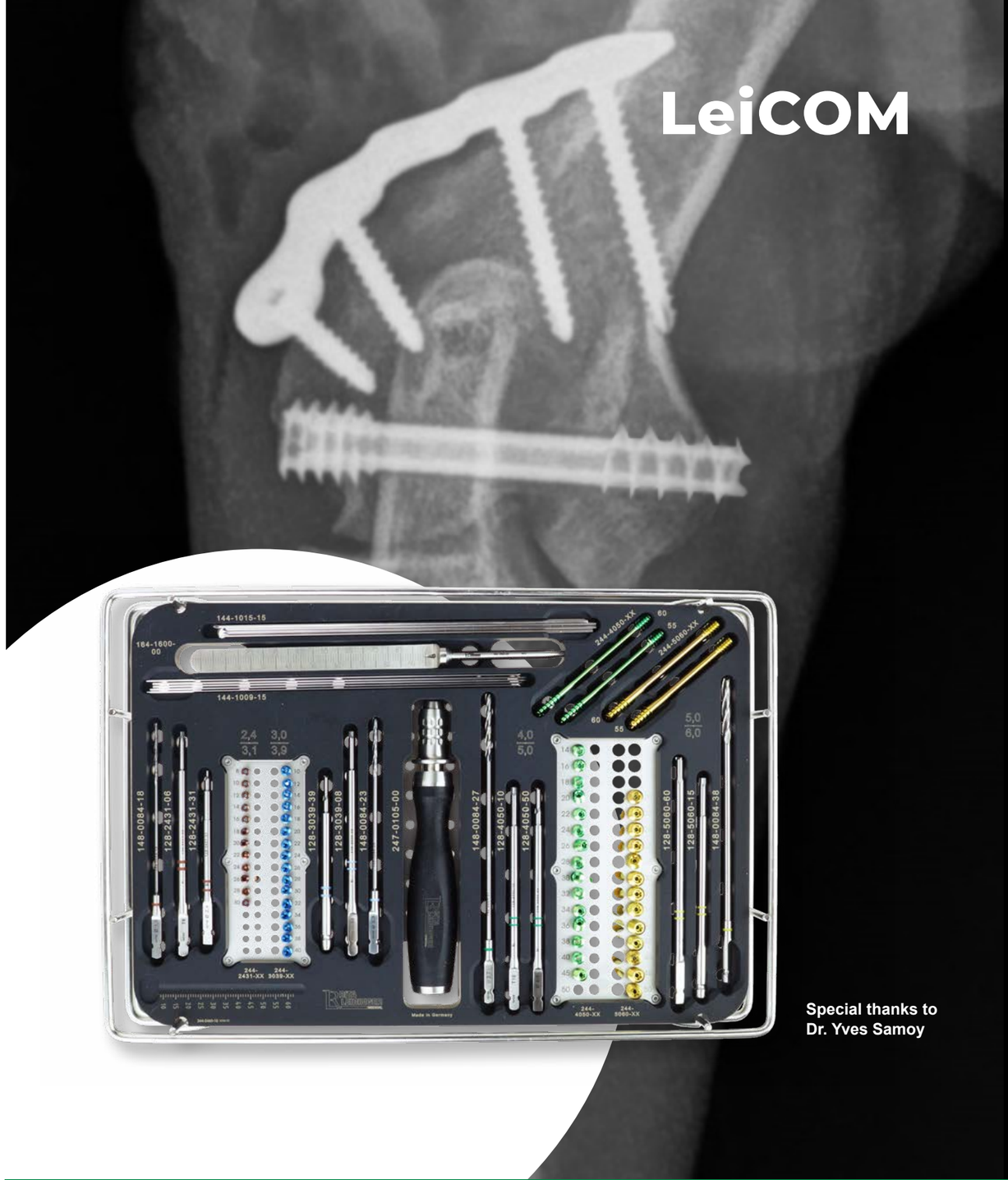
Various Applications

The LeiCOM Cannulated Compression Bone Screws can be used for corrective osteotomies, fracture fixations, distal femur, humeral condyle, degenerative changes in small bone, and non-unions.

STAR Screw-Head
BEST QUALITY
MADE IN GERMANY

LeiStar Compression Screws

All of our cannulated compression screws have LeiStar screwheads, which allows for better tightening torque compared to other screwheads. The screwdriver shaft is self-holding and keeps the screws firmly on the driver.



Special thanks to
Dr. Yves Samoy

COMPRESSION SCREWS

RITA LEIBINGER MEDICAL

LEICOM CANNULATED COMPRESSION SCREWS

Surgical Protocol

Application

The RITA LEIBINGER LeiCOM Cannulated Compression Screws have the versatility to be utilized either as standalone implants or with K-Wires.

Indications

Fractures, corrective osteotomy, pseudoarthrosis, degenerative bone changes, fractures of the humeral condyle, fractures of the distal femur.

Surgical Technique

1

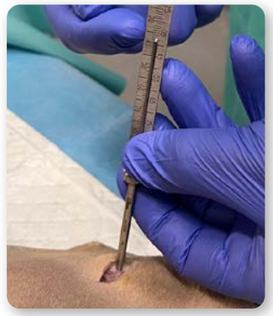
Temporary fixation using a K-Wire (guide wire).

2

The RITA LEIBINGER LeiCOM Compression Screws are self-tapping. However, in case of thick cortical bone, we recommend drilling to the core diameter to make it easier to insert the compression screw. Drill over the K-Wire with the cannulated twist drill.

3

To ensure optimal insertion of the screw/thread head, use of the cannulated screw head countersink is recommended.



4

The screw length is determined using the screw depth gauge over the K-wire into the bone.

IMPORTANT: To prevent the counter cortex from breaking through, the next smaller screw length is recommended.

5

The compression screw is placed over the guide wire using the cannulated screwdriver shaft.

6

CHECK: Neither the thread head nor the screw tip should protrude from the bone.

7

Remove the K-Wire.

Order online at:
veterinary.shop

LEARN FROM THE BEST

WORKSHOPS

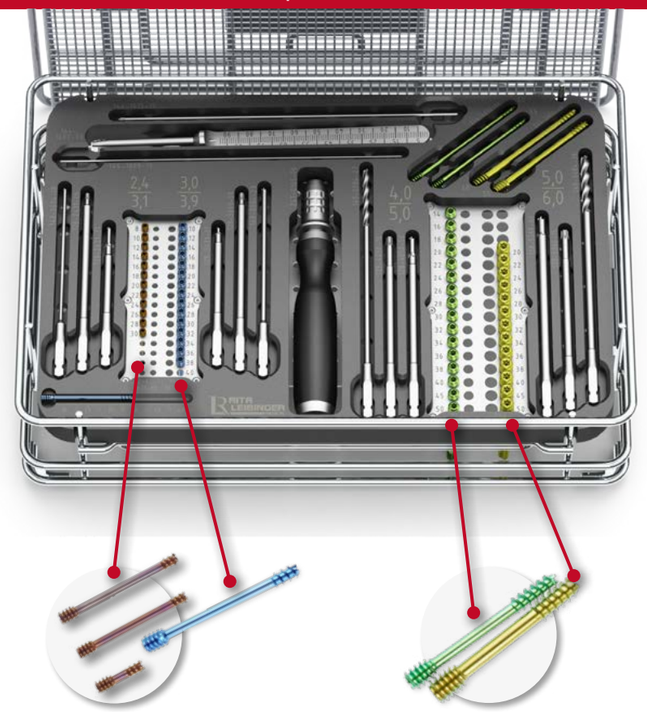
See Workshops und Online Courses at our Academy Page.

WORKSHOPS

academy.leibinger.vet

LeiCOM Combi Set

All sizes of our Titanium Cannulated Compression Bone Screws - 2.4/3.1 Micro, 3.0/3.9 Mini, 4.0/5.0 Medi and 5.0/6.0 Maxi - plus essential instruments **in one compact set**.



2.4/3.1 LeiCOM Micro
8mm - 30mm in length

3.0/3.9 LeiCOM Mini
10mm - 40mm in length

4.0/5.0 LeiCOM Medi
14mm - 60mm in length

5.0/6.0 LeiCOM Maxi
20mm - 60mm in length

LeiCOM Cannulated Compression Screws Combi Set - 2.4 - 6.0 Micro to Maxi

Contains:
1 LEICOM Compression Screws Set Tray with Lid
1 of each LEICOM Compression Screws (Micro 2.4/3.1, 8-30mm // Mini 3.0/3.9, 10-40mm // Medi 4.0/5.0, 14-60mm // Maxi 5.0/6.0, 20-60mm // 61 total)
1 Screwdriver Handle
1 of each Screwdriver Shaft T6 & T8, cannulated (2.4& 3.0mm)
1 of each Screwdriver Shaft T10 & T15, cannulated (4.0 & 5.0mm)
1 of each Screw Head countersink, cannulated (2.4 & 3.0mm)
1 of each Screw Head countersink, cannulated (4.0 & 5.0mm)
1 of each Drill Bit (Ø 1.8mm, 2.3mm, 2.7mm & 3.8mm)
1 Screw Depth Gauge
K-Wires (Ø 0.9mm x 150mm, Ø 1.5mm x 150mm)

244-2460-00

Tray without contents

244-2460-10

FEATURED CASE

SCAPULA FRACTURE TREATMENT WITH A RAPID PATELLA LUXATION PLATE & LEICOM COMPRESSION SCREW

Read about an interesting case of a a 9-year-old Old English Bulldog with a complex multifragment fracture of the scapula.

This case was shared with us courtesy of Dr. Johannes Frahm, Dr. Dominik Wilke, and the wonderful team of Wasbek Veterinary Clinic in Germany.

Read the full story at:
www.leibinger.vet/blog

LeiCOM Cannulated Compression Screws Set - 2.4 / 3.1 Micro & 3.0 / 3.9 Mini

Contains:
1 LEICOM Compression Screws Set Tray with Lid
1 of each LEICOM Compression Screws
(Micro 2.4, 8-14mm & 24-30mm // Mini 3.0,
10-18mm & 32-40mm // 18 total)
2 of each LEICOM Compression Screws
(Micro 2.4, 16-22 // Mini 3.0, 20-30mm // 20 total)
1 Screwdriver Handle
1 of each Screwdriver Shaft T6 & T8,
cannulated (2.4 & 3.0mm)
1 of each Screw Head countersink,
cannulated (2.4 & 3.0mm)
1 of each Drill Bit (Ø 1.8mm & 2.3mm)
5 K-Wires (Ø 0.9mm x 150mm)

244-2439-00

Tray without contents

244-2439-10

2.4 LeiCOM Micro Compression Screw

Cannulated Bone Screw 2.4 x 3.1 mm, Titanium
LeiStar, self-tapping, self-drilling

STAR Screw-Head

Length (mm)	Product Code
08	244-2431-08
10	244-2431-10
12	244-2431-12
14	244-2431-14
16	244-2431-16
18	244-2431-18
20	244-2431-20
22	244-2431-22
24	244-2431-24
26	244-2431-26
28	244-2431-28
30	244-2431-30

3.0 LeiCOM Mini Compression Screw

Cannulated Bone Screw 3.0 x 3.9 mm, Titanium
LeiStar, self-tapping, self-drilling

STAR Screw-Head

Length (mm)	Product Code
10	244-3039-10
12	244-3039-12
14	244-3039-14
16	244-3039-16
18	244-3039-18
20	244-3039-20
22	244-3039-22
24	244-3039-24
26	244-3039-26
28	244-3039-28
30	244-3039-30
32	244-3039-32
34	244-3039-34
36	244-3039-36
38	244-3039-38
40	244-3039-40

LeiCOM Cannulated Compression Screws Set - 4.0 / 5.0 Medi & 5.0 / 6.0 Maxi

Contains:
1 LEICOM Compression Screws Set Tray with Lid
1 of each LEICOM Compression Screws
(Medi 4.0, 14-24mm & 38-60mm // Maxi 5.0,
20-28mm & 40-60mm // 22 total)
2 of each LEICOM Compression Screws
(Medi 4.0, 26-36// Maxi 5.0, 30-38mm // 22 total)
1 Screwdriver Handle
1 of each Screwdriver Shaft T10 & T15,
cannulated (4.0 & 5.0mm)
1 of each Screw Head countersink,
cannulated (4.0 & 5.0mm)
1 of each Drill Bit (Ø 2.7mm & 3.8mm)
5 K-Wires (Ø 1.5mm x 150mm)

244-4060-00

Tray without contents

244-4060-10

4.0 LeiCOM Medi Compression Screw

Cannulated Bone Screw 4.0 x 5.0 mm, Titanium
LeiStar, self-tapping, self-drilling

STAR Screw-Head

Length (mm)	Product Code
14	244-4050-14
16	244-4050-16
18	244-4050-18
20	244-4050-20
22	244-4050-22
24	244-4050-24
26	244-4050-26
28	244-4050-28
30	244-4050-30
32	244-4050-32
34	244-4050-34
36	244-4050-36
38	244-4050-38
40	244-4050-40
45	244-4050-45
50	244-4050-50
55	244-4050-55
60	244-4050-60

5.0 LeiCOM Maxi Compression Screw

Cannulated Bone Screw 5.0 x 6.0 mm, Titanium
LeiStar, self-tapping, self-drilling

STAR Screw-Head

Length (mm)	Product Code
20	244-5060-20
22	244-5060-22
24	244-5060-24
26	244-5060-26
28	244-5060-28
30	244-5060-30
32	244-5060-32
34	244-5060-34
36	244-5060-36
38	244-5060-38
40	244-5060-40
45	244-5060-45
50	244-5060-50
55	244-5060-55
60	244-5060-60
65	244-5060-65
70	244-5060-70
75	244-5060-75
80	244-5060-80
85	244-5060-85
90	244-5060-90

NEW LENGTHS

Screwdriver Handle

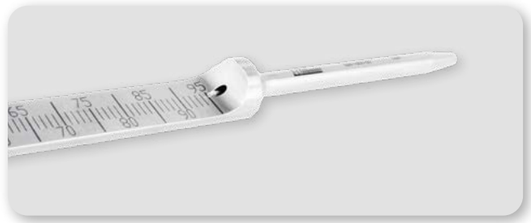
Silicone, AO-Connection
sterilizable up to 134°C / 273°F

Product Code	Description
247-0105-00	standard, straight, black

Screw Depth Gauge, cannulated

for K-Wires up to Ø 1.6, cannulated 150

164-1600-00



K-Wire, Single Trocar

Length: 150 mm, round end

Product Code	Ø x Length (mm)
144-1009-15	0.9 x 150
144-1015-15	1.5 x 150

Screwdriver Shaft LeiStar, cannulated

For LeiCOM, AO connection

Product Code	Description
128-2431-06	2.4 mm, 90mm, cannulated, T6 for 2.4 / 3.1 mm screws
128-3039-08	3.0 mm, 90mm, cannulated, T8 for 3.0 / 3.9 mm screws
128-4050-10	4.0 mm, 90mm, cannulated, T10 for 4.0 / 5.0 mm screws
128-5060-15	5.0 mm, 90mm, cannulated, T15 for 5.0 / 6.0 mm screws

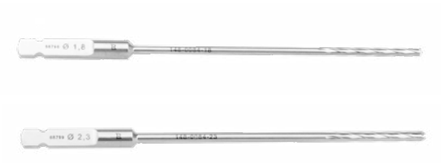
Screw Head Countersink LeiStar, cannulated

For LeiCOM, AO connection

Product Code	Description
128-2431-31	2.4 mm, 70mm, cannulated, for 2.4 / 3.1 mm screws
128-3039-39	3.0 mm, 70mm, cannulated, for 3.0 / 3.9 mm screws
128-4050-50	4.0 mm, 90mm, cannulated, for 4.0 / 5.0 mm screws
128-5060-60	5.0 mm, 100mm, cannulated, for 5.0 / 6.0 mm screws

Drill Bits, cannulated

Length 95mm, Cannulation Ø 1.1 mm, AO Connection



Product Code	Ø (mm)
148-0084-18	1.8
148-0084-23	2.3

Drill Bits, cannulated

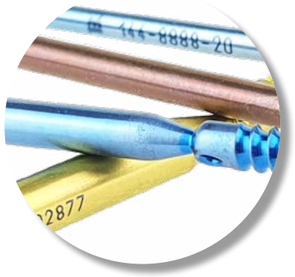
Length 125mm, Cannulation Ø 1.6 mm, AO Connection

Product Code	Ø (mm)
148-0084-27	2.7
148-0084-38	3.8

Suture Anchor Screws

High-Strength Titanium Suture Anchors

The RITA LEIBINGER Suture Anchor Screws are made of high-grade Titanium, making them very durable but lightweight. This material also allows for the design of thinner and smaller-sized anchors without compromising strength.



Titanium: Best Biocompatibility

Made from a unique Titanium alloy, our suture/bone anchors are highly biocompatible and has low temperature sensitivity. The high-strength material and construct provides fixation strength and stability, which promotes healing of the soft tissue.

Easy to use

The self-tapping design of our threaded suture anchors makes them easy to use and position, therefore shortening surgery time. Simply drill in the bone anchor using a Jacob's Chuck and snap the rod off.

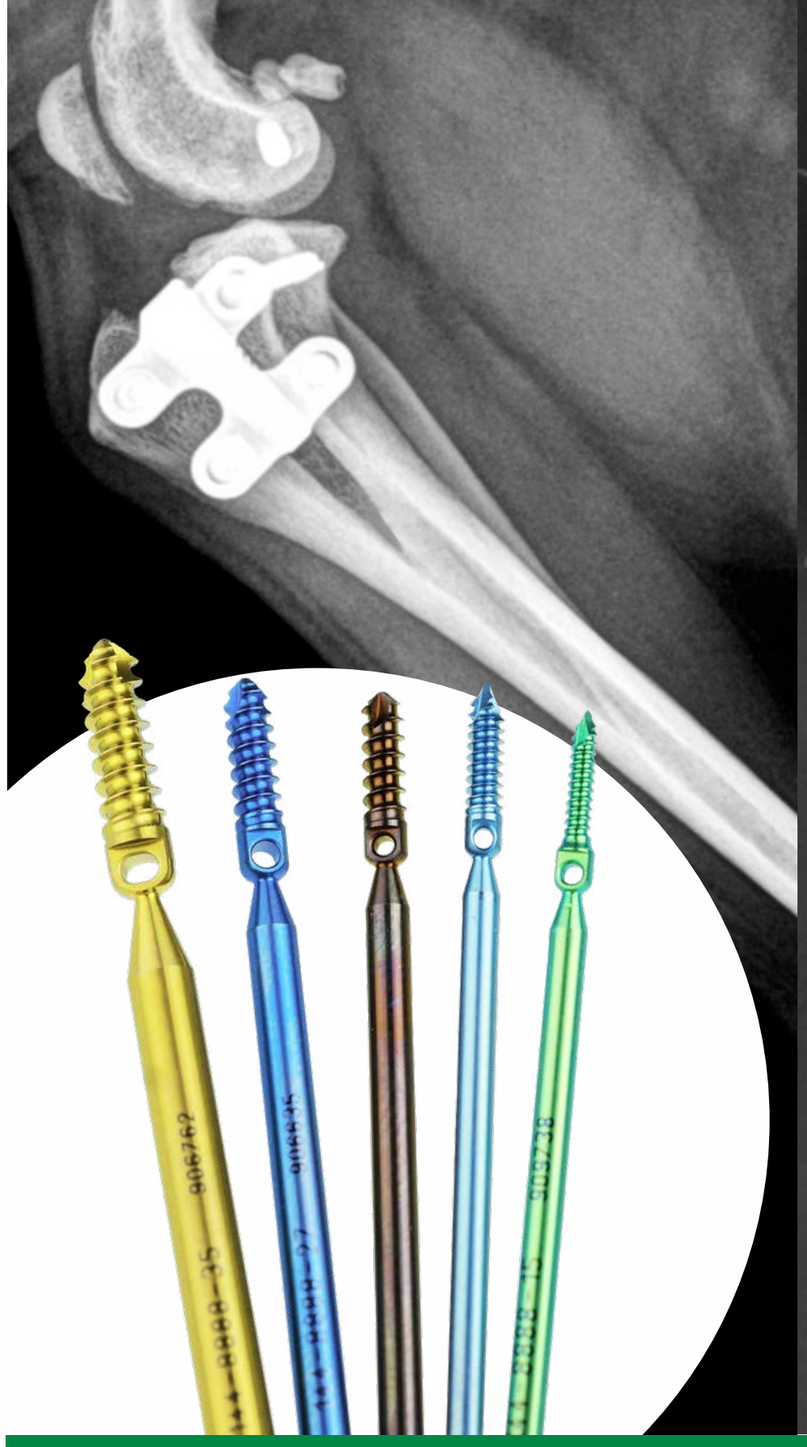
Secure and stable fixation

The stable construct ensures a secure fixation of the suture anchor, thereby maintaining the position of the anchor without loosening and providing optimal conditions for rapid and uninterrupted healing of the soft tissue.

BEST QUALITY
MADE IN GERMANY

Quality that is affordable

The Suture Anchor Screws from RITA LEIBINGER are manufactured at our own plant in Germany. We can therefore offer you high-quality products at very affordable prices.



Special thanks to
Dr. Hugo Schmökel

LeiSU SUTURES

RITA LEIBINGER MEDICAL

1.5 Suture Anchor

NEW

Titanium

144-8888-15

Total Length	45 mm
Thread Length	6.7 mm
Hole Ø	1.0 mm

NEW

Now with Larger Suture Holes

Our Titanium Suture Anchors have been redesigned with larger eyelets to accommodate a wider range of suture materials — providing greater versatility and ease of use in various surgical applications.

2.0 Suture Anchor

Titanium

144-8888-20

Total Length	45 mm
Thread Length	7 mm
Hole Ø	0.65 mm

2.4 Suture Anchor

Titanium

144-8888-24

Total Length	45 mm
Thread Length	7 mm
Hole Ø	0.85 mm

2.7 Suture Anchor

Titanium

144-8888-27

Total Length	45 mm
Thread Length	9 mm
Hole Ø	1.5 mm

3.5 Suture Anchor

Titanium

144-8888-35

Total Length	45 mm
Thread Length	11.5 mm
Hole Ø	2.0 mm

Crimp Tubes

Stainless Steel, Sold in 12-pc packs, non-sterile

Product Code	Ø (mm)	Description
143-0001-10	10	Crimp Tube for 50lb lines
143-0001-12	12	Crimp Tube for 80lb + 100 lb lines
143-0001-14	14	Crimp Tube for nylon lines over 100lb

CCL Cruciate Surgical Sutures + Crimp

Nylon cruciate surgical sutures with needle and crimps

Product Code	Description	Needle	Crimps
143-0008-50	50lb CCL nylon line (500mm) on swaged-on very small fabella needle (30mm) plus 1x10mm crimp, sterile	Very Small 30 mm	1 x 10mm crimp
143-0010-50	50lb double CCL nylon line (500mm x 2 as loop) on swaged-on very small fabella needle (30mm) plus 2x10mm crimps, sterile	Very Small 30 mm	2 x 10mm crimps
143-0008-80	80lb CCL nylon line (800mm) on swaged-on small fabella needle (45mm) plus 1x12mm crimp, sterile	Small 45 mm	1 x 12 mm crimp
143-0010-80	80lb double CCL nylon line (800mm x 2 as loop) on swaged-on small fabella needle (45mm) plus 2x12mm crimps, sterile	Small 45 mm	2 x 12mm crimps
143-0008-100	100lb CCL nylon line (800mm) on swaged-on medium fabella needle (62mm) plus 1x12mm crimp, sterile	Medium 62 mm	1 x 12mm crimp
143-0010-100	100lb double CCL nylon line (800mm x 2 as loop) on swaged-on medium fabella needle (62mm) plus 2x12mm crimps, sterile	Medium 62 mm	2 x 12mm crimps

Crimper

Orthofiber Crimping Device TC, 23 cm

129-0051-23

Universal Tensioning Device

17 cm

24-4310-17

NEURO & SPINAL SYSTEMS

OVERVIEW

LeiMESH

3D Dynamic Mesh System, Titanium

A versatile and customizable solution for cranial and maxillofacial bone reconstruction, LeiMESH can be easily cut, shaped, and contoured to match individual anatomy, providing excellent structural stability.

C-LOX

Cervical Intervertebral Fusion & Diutraction Implant, Titanium

An intervertebral fusion implant for the cervical spine in dogs, designed to treat Wobbler Syndrome by replacing the spinal disc and enabling rapid bone ingrowth through its open-porous titanium structure.

LeiCAGE

Intervertebral Cages, Titanium

An intervertebral titanium cage system designed to create distraction, support spinal fusion, and ensure reliable osseointegration with excellent biocompatibility and imaging clarity.

LeiPED

Pedicle Screw System, Titanium

A titanium pedicle screw system for spinal stabilization in dogs, designed to treat DLSS, vertebral instability, and spinal trauma through bone-near rod placement and an asymmetric, side-loading tulip head that improves biomechanical stability.

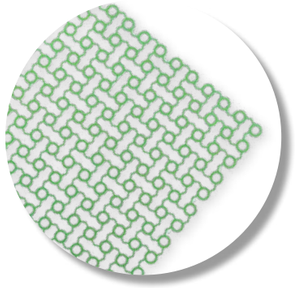
NEURO & SPINAL SYSTEMS

RITA LEIBINGER MEDICAL

LeiMESH
Cuttable Mesh Plate System

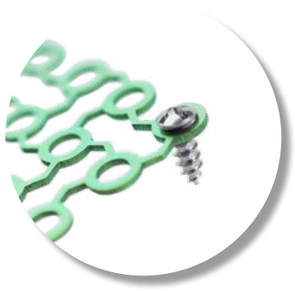
Three-Dimensional Adaptibility

The Titanium LeiMESH features a unique geometric pattern design. This creates a flexible structure that can be easily bent and shaped, which is essential for creating a custom fit during surgery. It becomes more rigid when formed into a three dimensional configuration, providing stable support.



Titanium for Best Biocompatibility

Made of medical grade Titanium, LeiMESH is highly biocompatible, strong yet lightweight, corrosion-resistant, and promotes bone integration. Its flexibility makes it suitable for custom shaping and its non-magnetic properties makes it safe for MRI scans.



Perfect Balance of Strength and Flexibility

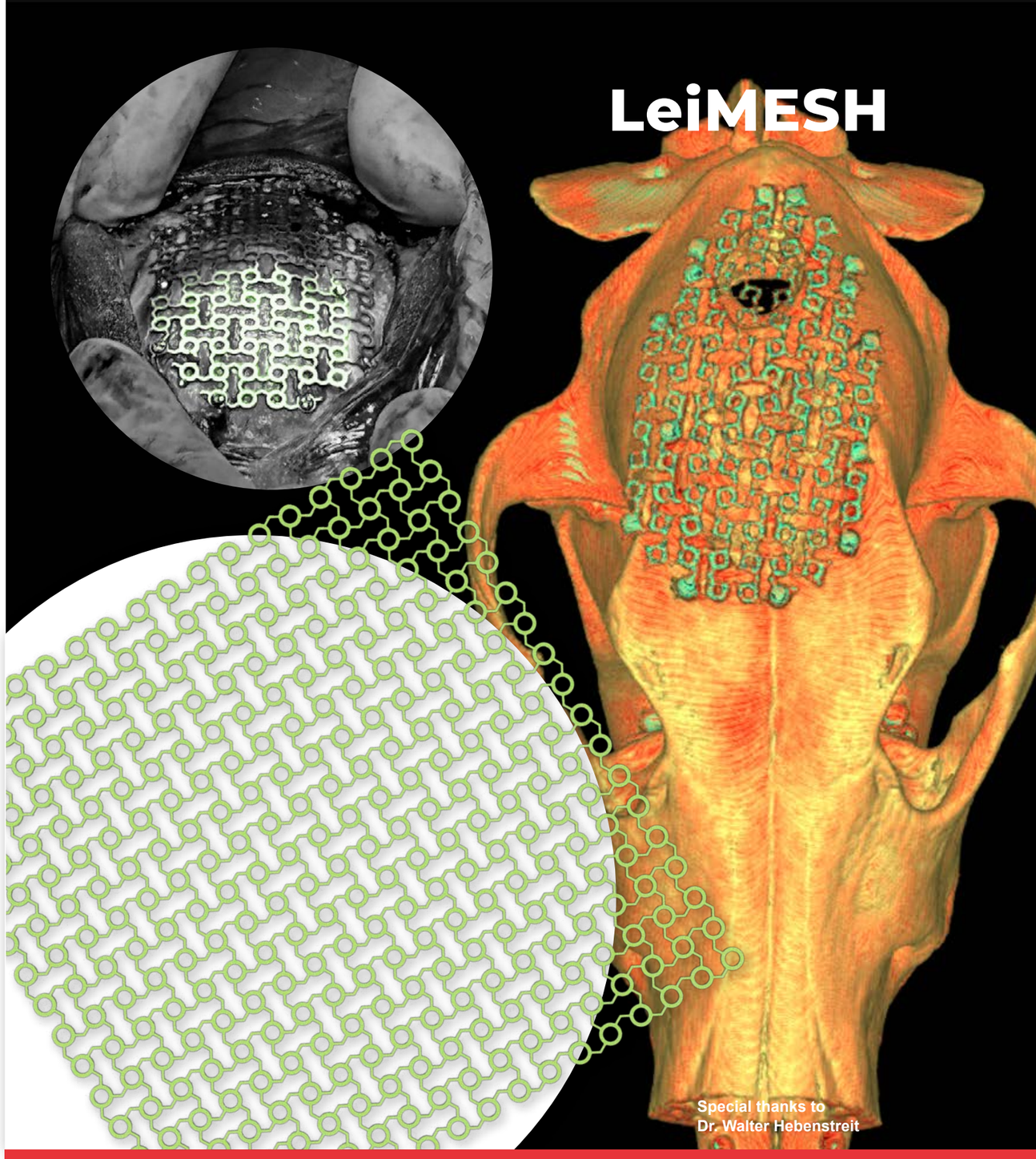
The thickness of LeiMESH provides sufficient structural support while allowing flexibility to customize the mesh to fit complex contours.

Various Applications

LeiMESH is highly versatile and can be used in various medical applications such as cranial fracture repair, bone fracture management, bone cement augmentation, and maxillofacial reconstruction surgeries.

Low Profile Cross Drive Titanium Screws

Made of Titanium to ensure seamless biocompatibility, LeiMESH Screws feature a low-profile head for minimal tissue irritation. Compatible with the LeiMESH Screwdriver, the LeiMESH Cross Drive screws provide a secure fixation, fitting perfectly into the screw holes of the Titanium Mesh to meet diverse anatomical and surgical requirements. Additionally, they offer a self-holding capability similar to LeiStar screws.



DYNAMIC MESH SYSTEM

RITA LEIBINGER MEDICAL

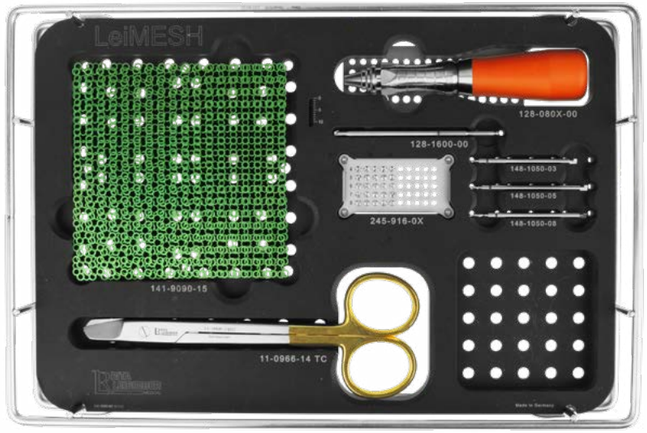
LeiMESH 3D Dynamic Mesh Set

Contains:
1 LeiMESH 3D Dynamic Titanium Mesh
5 of each LeiMESH Titanium Screws
(Ø 1.6 mm, Lengths: 4 - 8 mm // 25 total)
1 LeiMESH Screwdriver Handle
1 LeiMESH Screwdriver Shaft
1 of each Micro Twist Bone Drill
(Ø 1.0 mm, Drill Lengths: 3 mm, 5 mm, 8 mm)
Universal Wire Scissors
1 Tray for LeiMESH Set with Lid

141-9090-00

Tray without contents

141-9090-10



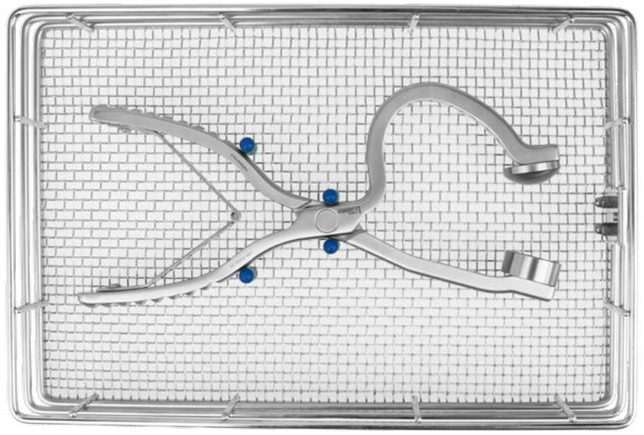
Bending Pliers with Tray

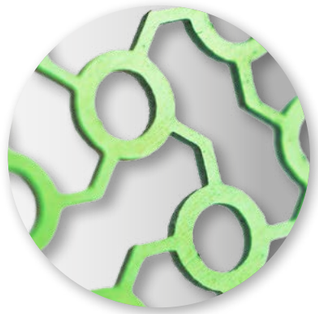
Contains:
1 LeiMESH Bending Pliers
1 Tray (without lid)

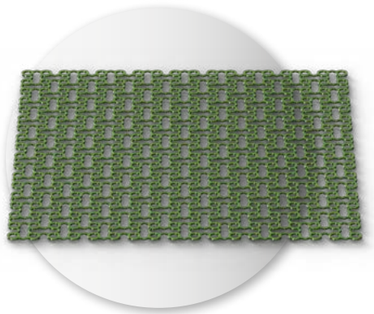
141-9091-00

Tray without lid and contents

141-9091-10







LeiMESH Cuttable Titanium Mesh System

Composed of high-quality titanium, LeiMESH offers surgeons the flexibility to shape implants during surgery.

LeiMESH Implants provide a unique solution for treating cranial or maxillofacial fractures after trauma, reconstruction after tumors, as well as mandibular cases.

LeiMESH Impants are ideal for osteosynthesis in non-load-bearing bones.

LeiMESH Implants are used to augment bone cement in joint replacement procedures.

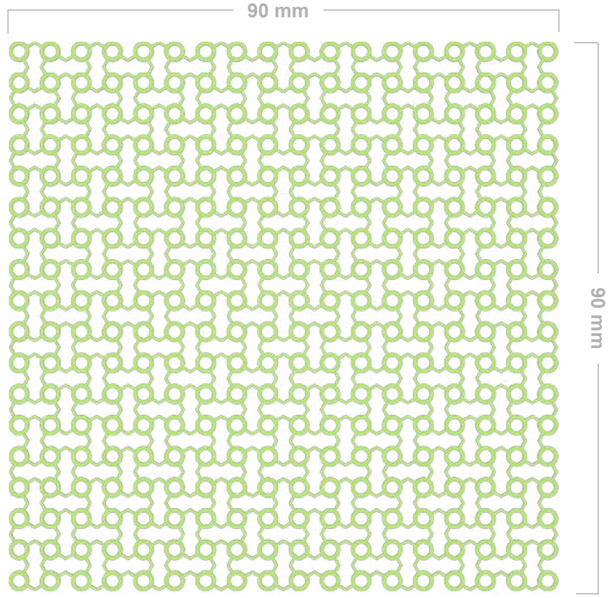
LeiMESH Implants offer the dual benefits of exceptional biocompatibility and superior corrosion resistance.

LeiMESH Implants are suitable for permanent implantation in animals due to their long-term stability.

3D Dynamic Cuttable Mesh Titanium

0.6 mm thick, 90 mm x 90 mm

141-9090-15



LeiMESH Micro Twist Bone Drill

Ø 1.0 mm, with dental connector/coupler

Product Code	Drill Length
148-1050-03	3 mm
148-1050-05	5 mm
148-1050-08	8 mm

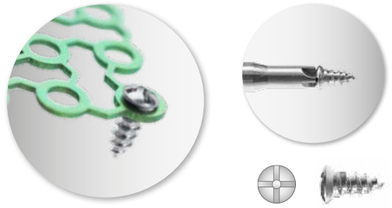
LeiMESH Screwdriver Shaft

Cross Drive, with dental connector/coupler

128-1600-00

LeiMESH Screw Titanium

Ø 1.6 mm, low profile, Cross Drive



Product Code	Length (mm)
245-916-04	4
245-916-05	5
245-916-06	6
245-916-07	7
245-916-08	8

LeiMESH Screwdriver Handle

with dental connector/coupler

128-0803-00

Universal Wire Scissors

Stainless Steel

11-0966-14TC

LeiMESH Bending Pliers

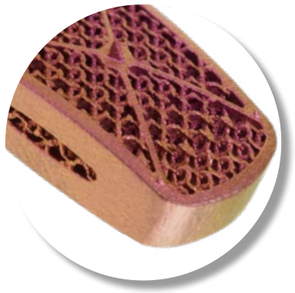
Stainless Steel

128-0122-25

C-LOX Cervical Intervertebral Fusion Implant

Versatility and Stability

The cages come in different sizes to fit different breeds and spinal segments. Developed to combine the benefits of an intervertebral spacer, rigid titanium plate, and locking screw fixation, the C-LOX Cages not only preserve the natural anatomic profile of the spine, but also provide great stability and convenience in placement and fixation.



Improved Osseointegration

The dodecahedron construct of the cage provides a larger surface area for bone growth, which improves osseointegration and cell attachment, therefore promoting bone growth and reducing implant failure rates.

Exceptional Biocompatibility & Strength

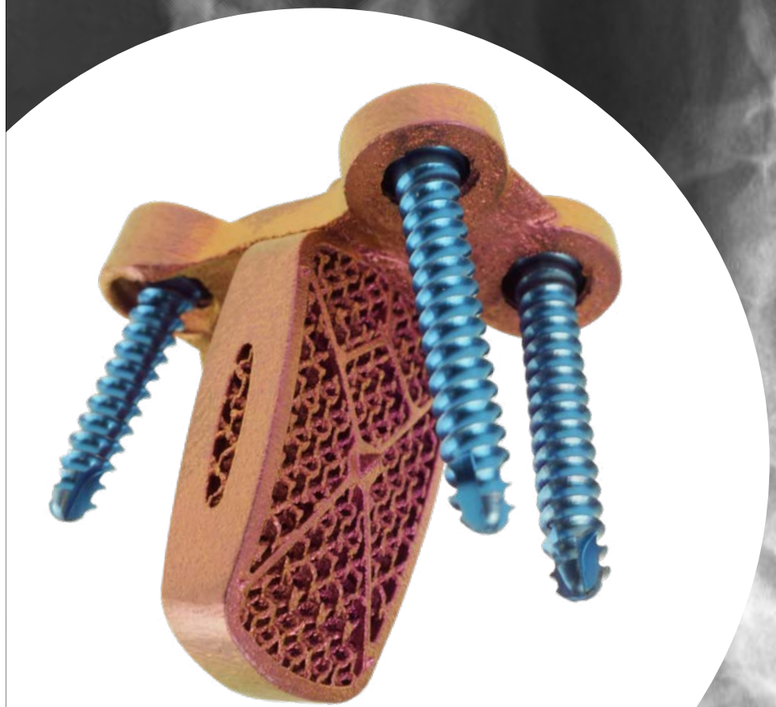
With minimal adverse reactions or rejections, Titanium reduces the risk of infection and inflammation. Its hypoallergenic properties make it a safe choice, reducing the likelihood of allergic responses.The unique Titanium Alloy also makes our implants and screws very durable but lightweight.

STAR Screw-Head
BEST QUALITY
MADE IN GERMANY

LeiStar Screws

The C-LOX Locking screws have LeiStar screwheads, which allows for best tightening torque. Additionally, the screws provide a self-holding feature when used with a RITA LEIBINGER screwdriver shaft, keeping the screws securely on the driver.

C-LOX®
Makes the lame walk again.



Special thanks to
Prof. Björn Meij

C-LOX SPINAL, locking

RITA LEIBINGER MEDICAL

C-LOX
Surgical Protocol

Surgical application of a new anchored intervertebral spacer (C-LOX) for the treatment of Canine Cervical Spondylomyelopathy (Wobbler Syndrome)

Authors: Dr. Günter Schwarz & Prof. Dr. Franck Forterre

NOTE: Preoperative radiographs are used to make preliminary selection of spacer and screw sizes. It is advisable but not indispensable to use fluoroscopy while performing the distraction-fusion technique with the C-Lox Cage. Fluoroscopy will provide accurate intraoperative assessment of correct implant and screw size, and of the depth and location of spacer and screw placement.

(1) Place the dog in dorsal recumbency with a fulcrum underneath to support the neck. Avoid overextension. A standard approach to the ventral cervical spine is performed.

(2) The affected disc space is identified and exposed, and a window is cut out of the ventral annulus fibrosus using a beaver blade. The width of this window should be minimally larger than the width of the selected spacer. The vertebral endplates delimit the cranial and caudal borders of the opening. Care must be taken not to penetrate the dorsal part of the annulus during discectomy.

(3) In order to attach the C-LOX Distractor, vertically oriented 2.5 mm holes are drilled into each of the adjacent vertebrae. These holes must be exactly on the midline and should be located in the caudal half of the cranial and in the cranial half of the caudal vertebrae. Penetration depth should at least be 2/3 of the vertebral body depth in order to avoid tilting when distracting the vertebrae. The crista ventralis marks the median plane of the vertebrae but makes it easy to slide off the midline. Preoperative measurements and fluoroscopy will aid in taking care not to enter the spinal canal.
Insert the C-LOX Distractor into the predrilled holes and open its jaws to widen the intervertebral disc space.

(4) The C-LOX Spinal Disc Broaching Curette is used to carefully remove all remnants of the nucleus pulposus. The dorsal part of the annulus fibrosus can be felt as a more dense structure and should be preserved. The exposed end plates are freed from as much connective tissue as possible, but subchondral bone must be fully preserved.

If a considerable amount of nucleus pulposus material is located within the spinal canal, this can be attempted to remove with the help of fine curettes or delicate arthroscopic biopsy forceps.

(5) The suitable size for the C-Lox implant can be estimated pre-operatively on diagnostic imaging. Attach the C-LOX Implantation Placement Rod to the suitable C-LOX Template and insert it in the intervertebral disc space. Ensure the correct fit. Here again, vertical beam fluoroscopy can be very helpful. If insertion requires energetic forcing or seems to achieve only slight distraction, a slimmer or thicker template should be used.

(6) After establishing optimal fit, the Template is replaced by the corresponding C-LOX Cage. Spikes on the cranial and caudal side will ensure a secure seating of the implant, but can make insertion slightly more difficult compared to the C-Lox Template of the same size. Press the cage firmly down into place.

(7) After proper seating of the C-Lox Cage, the C-Lox Distractor can be removed and the Implantation Placement Rod is removed from the cage. The cage will be secured with locking screws.

(8) Select the drill guide according to the screw length intended to use. Attach the Drill Guide to the Implant and use the dedicated 2.0mm drill bit to drill the hole for the Locking Cortical Screw . This drill bit forms a unit with the Drill Guide and will create the hole in the vertebral body to guide the self tapping screw. Screw Lengths are selected pre-operatively from measurements on the preoperative radiographs in precise latero-lateral projection. The four Locking Cortical Screw are inserted using the LeiStar C-Lox Screwdriver. The screws must be well anchored within the vertebral body and must not penetrate the vertebral end plates or the spinal canal. Again, fluoroscopy can be very helpful in achieving optimal screw placement.

(9) Cancellous bone or bone substitutes can be apposed to the ventral surface of the treated disc space.

Close the soft tissues in a routine manner.

C-LOX Set

Contains:
Sterilization Tray with Lid
1 of each Spinal Cage
1 of each Seizing Cage
2 Placement Rods
Spinal Curette
Screwdriver Shaft
Screwdriver Handle Silicone
1 of each Locking Drill Guide
2 Drills (2.0/2.5mm)
5 of each Screw (10, 12, 14, 16, 18, 20mm)
(30 pcs. total)

134-0100-01

Tray without contents
134-0500-01

C-LOX Cervical Intervertebral Fusion Implant

C-LOX was developed
by RITA LEIBINGER in cooperation with
Professor Dr. Franck Forterre,
Bern University (Switzerland).

For more details please visit:

spinal.leibinger.vet

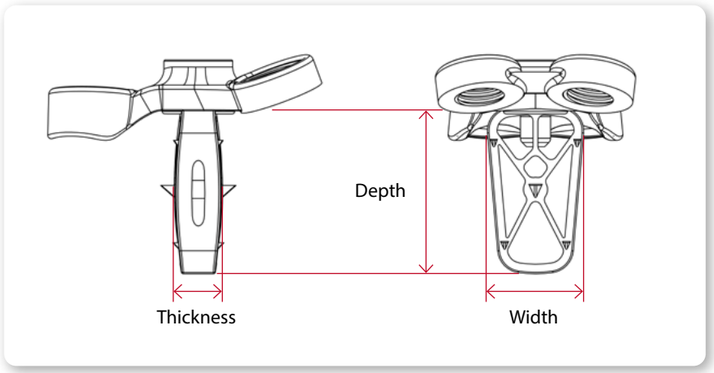
C-LOX Cages

Titanium

14 x 4 x 8 mm | 14 x 6 x 8 mm | 16 x 4 x 8 mm | 16 x 6 x 8 mm | 16 x 5 x 10 mm

16 x 7 x 10 mm | 18 x 5 x 10 mm | 18 x 7 x 10 mm | 20 x 6 x 12 mm | 20 x 8 x 12 mm

Product Code	Dimensions		
	Depth	Thickness	Width
134-0144-08	14 mm	4 mm	8 mm
134-0146-08	14 mm	6 mm	8 mm
134-0164-08	16 mm	4 mm	8 mm
134-0165-10	16 mm	5 mm	10 mm
134-0166-08	16 mm	6 mm	8 mm
134-0167-10	16 mm	7 mm	10 mm
134-0185-10	18 mm	5 mm	10 mm
134-0187-10	18 mm	7 mm	10 mm
134-0206-12	20 mm	6 mm	12 mm
134-0208-12	20 mm	8 mm	12 mm



Locking Selfdrilling Cortical Screw

Titanium, LeiStar Head, self-tapping with three flute cutting edge

Product Code	Total Length	Thread Length
245-427-08	10 mm	8 mm
245-427-10	12 mm	10 mm
245-427-12	14 mm	12 mm
245-427-14	16 mm	14 mm
245-427-16	18 mm	16 mm
245-427-18	20 mm	18 mm
245-427-20	22 mm	20 mm

C-LOX Templates

Titanium

Product Code	Dimensions		
	Depth	Thickness	Width
134-9144-08	14 mm	4 mm	8 mm
134-9146-08	14 mm	6 mm	8 mm
134-9164-08	16 mm	4 mm	8 mm
134-9165-10	16 mm	5 mm	10 mm
134-9166-08	16 mm	6 mm	8 mm
134-9167-10	16 mm	7 mm	10 mm
134-9185-10	18 mm	5 mm	10 mm
134-9187-10	18 mm	7 mm	10 mm
134-9206-12	20 mm	6 mm	12 mm
134-9208-12	20 mm	8 mm	12 mm

C-LOX Spinal Curette

22cm

134-0700-22

C-LOX Implant Placement Rod

22 cm

134-0750-22

Instruments, C-LOX

C-LOX Distractor

Product Code	Description
134-0750-16	50mm deep, 160mm length, 90° curved
134-0750-20	50mm deep, 200mm length, 90° curved

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

247-0102-00

Torque Limiting Screwdriver Handle

Torque 3 Nm
Silicone, AO, sterilizable up to 134°C / 273°F

247-0104-00

C-LOX Screwdriver Shaft 2.7

LeiStar, 135mm length, AO

134-0800-27

C-LOX Locking Drill Guides

Stainless Steel
for 2.0mm drills, for 2.7mm screws

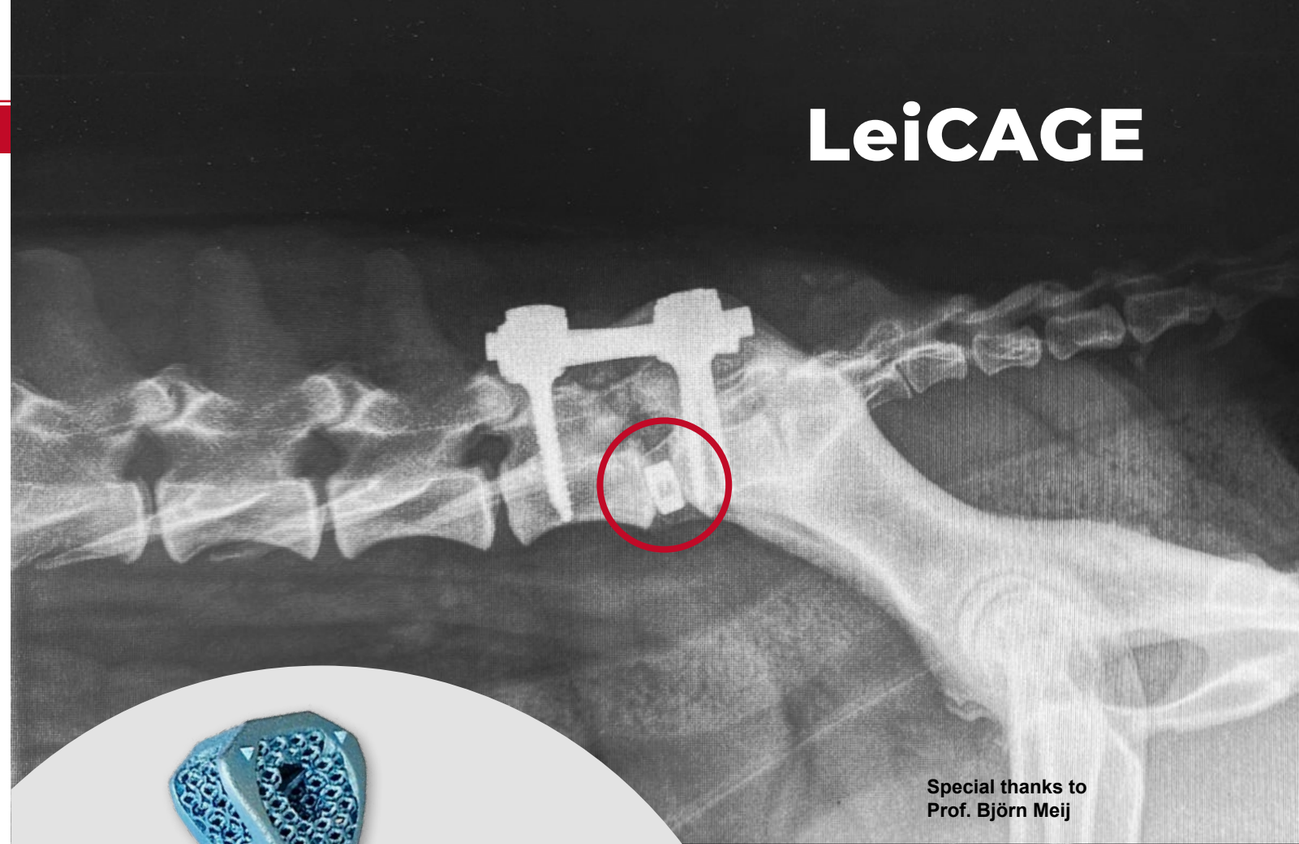
Product Code	Description
164-0027-10	10 mm working end
164-0027-12	12 mm working end
164-0027-14	14 mm working end

Product Code	Description
164-0027-16	16 mm working end
164-0027-18	18 mm working end
164-0027-20	20 mm working end

C-LOX Drill

Product Code	Ø (mm)	Connection
148-0081-20	2.0	AO QC
148-0081-25	2.5	AO QC

LeiCAGE



Special thanks to
Prof. Björn Meij

INTERVERTEBRAL CAGES

RITA LEIBINGER MEDICAL

NEW

LeiCAGE Intervertebral Titanium Cages

Restoring Height. Supporting Fusion. Ensuring Stability.

The LeiCAGE Intervertebral Titanium Cage System is designed to support distraction, provide stable intervertebral support, and promote reliable spinal fusion in canine thoracolumbar and lumbosacral procedures. Developed for use in combination with pedicle screw-rod systems such as the new LeiPED, LeiCAGE offers a robust, biologically integrated solution for the stabilization of the vertebral column following decompression or disc removal.

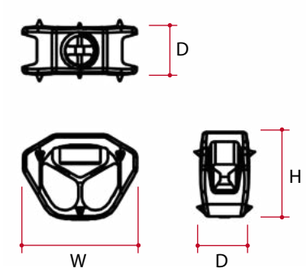
Each LeiCAGE implant is 3D-printed from medical-grade titanium, featuring a porous lattice structure (dodecahedron construction) that encourages rapid bone ingrowth and long-term osseointegration. This design replicates cancellous bone architecture, facilitating direct biological fusion between vertebral bodies and promoting stable load transfer during the healing process.

LeiCAGE implants are available in multiple sizes to accommodate anatomical variations and surgical requirements. Their anatomically contoured geometry ensures optimal endplate contact and uniform force distribution, reducing the risk of subsidence and maximizing stability.

LeiCAGE Intervertebral Cages

Titanium

Product Code	Size	Dimensions (mm)		
		W	D	H
134-0090-07	7 mm	9	7	4.5
134-0105-08	8 mm	10.5	8	5
134-0120-09	9 mm	12	9	5.5
134-0135-10	10 mm	13.5	10	6
134-0150-11	11 mm	15	11	6.5



Implant Placement Rod

Stainless Steel

Product Code	Size	Length	Compatibility
134-0751-22	M3	22 cm	For LeiCAGE sizes 7mm, 8mm, 9mm
134-0750-22	M4	22 cm	For LeiCAGE sizes 10mm, 11mm

PEDICLE SCREW SYSTEM

NEW

LeiPED Pedicle Screw System

Advanced Stabilization for the Canine Spine

The **LeiPED Pedicle Screw System** was engineered from the ground up to address the unique anatomical and clinical demands of veterinary spinal surgery. Manufactured from **medical-grade titanium**, it ensures excellent biocompatibility, high mechanical durability, and clear radiographic visibility with minimal imaging artifacts. LeiPED is designed to give veterinary surgeons confidence in treating challenging spinal pathologies such as **degenerative lumbosacral stenosis (DLSS)**, **vertebral instability**, and **spinal trauma**.

For Info & Orders:

info@leibinger-medical.com

www.leibinger.vet/**LEIPED**

GET TO KNOW THE SYSTEM

The LeiPED Pedicle Screw System is a comprehensive fixation solution developed for the unique demands of veterinary spinal surgery. With its innovative design and extensive range of implant options, LeiPED provides surgeons with the versatility, precision, and strength required to treat a wide spectrum of thoracolumbar and lumbosacral spinal conditions.

The system includes tulip screw heads in three size groups – Small (2.0 and 2.4 mm), Medium (2.7 and 3.0 mm), and Large (3.5 and 4.5 mm) – each available in multiple screw lengths to accommodate diverse patient anatomies. Matching rod diameters of 3.0, 4.0, and 5.0 mm ensure stable construct assembly across different case requirements. All screws are supplied with corresponding caps for secure rod fixation. To expand construct versatility, the system also allows the use of cross-connectors, providing additional stability where clinically required.

Small
2.0 and 2.4

Medium
2.7 and 3.0

Large
3.5 and 4.5

In addition to implants, LeiPED is supported by a complete implant set and dedicated instrument kit, offering surgeons a streamlined and efficient workflow in the operating room. The instruments are designed for intuitive handling, precise screw placement, and reliable rod insertion, ensuring consistent results and surgical confidence.

With its wide selection of implants, compatibility across different spinal pathologies, and ergonomically designed instruments, the LeiPED Pedicle Screw System delivers a full-service solution for advanced veterinary spinal stabilization.

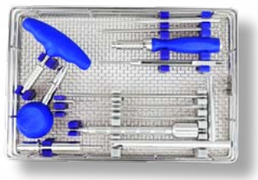
LEARN FROM THE BEST

WORKSHOPS

Join one of our Spinal Surgery workshops to learn more about our various systems.

academy.leibinger.vet

LeiPED Pedicle Screw Sets
Available in **Small**, **Medium**, and **Large**, each set includes pedicle screws in various lengths, matching rods, cross-connectors, and screw caps.



LeiPED Instrument Sets
Also offered in Small, Medium, and Large to match the corresponding implant sets, providing surgeons a size-specific toolkit.

Advantages of LeiPED over Conventional Systems

Side-Loading Rod Placement for Stability

Positioning the rod closer to the bone shortens the lever arm and reduces stress on screw threads and surrounding bone. This biomechanical advantage translates into **lower risk of screw loosening** and **improved force transmission**, ensuring stable vertebral fixation under load.

Asymmetric Screw Head for Anatomical Integration

The asymmetric tulip head adapts to the natural contour of the vertebrae, creating a secure bone-conforming fit. Unlike symmetrical designs, this geometry reduces micro-motion at the bone-implant interface, which in turn minimizes soft tissue irritation.

Variable Polyaxial Angulation for Surgical Flexibility

The screw heads allow controlled polyaxial angulation, giving surgeons the ability to fine-tune screw alignment and rod placement even in anatomically challenging or distorted spinal regions, making implantation safer and more precise.

Compact, Tissue-Sparing Profile

The compact design of the screw head and rod construct facilitates implantation in tight anatomical corridors, reduces implant prominence and protects surrounding musculature and vascular structures from irritation or damage.

High Load-Bearing Capacity with Fatneck Design

The specially engineered Fatneck screw design improves stability under repetitive loading and enhances the construct's resistance to mechanical failure, making LeiPED particularly suited to larger or more active canine patients where higher forces act on the stabilization system.

3D HIP
Patient-specific Hip Implant

Custom 3D-Printed Titanium Implant

Individually designed based on preoperative CT imaging to match the unique anatomy of each patient. This personalized design allows for precise extension of the dorsal acetabular rim, improving femoral head coverage and hip joint stability in young dogs with hip laxity.

Bilateral Surgery in a Single Session

The 3D HIP procedure is designed to be surgically efficient, allowing for bilateral treatment within the same operative session. This approach reduces total anesthesia time, hospital stay, and overall patient stress, while promoting a more streamlined postoperative period.

Titanium for Biocompatibility

3D-printed from medical-grade titanium ensuring biocompatibility and mechanical durability. Its porous internal surface facilitates bone ingrowth, promoting secondary fixation and long-term implant stability.

Less Invasive Than Osteotomies

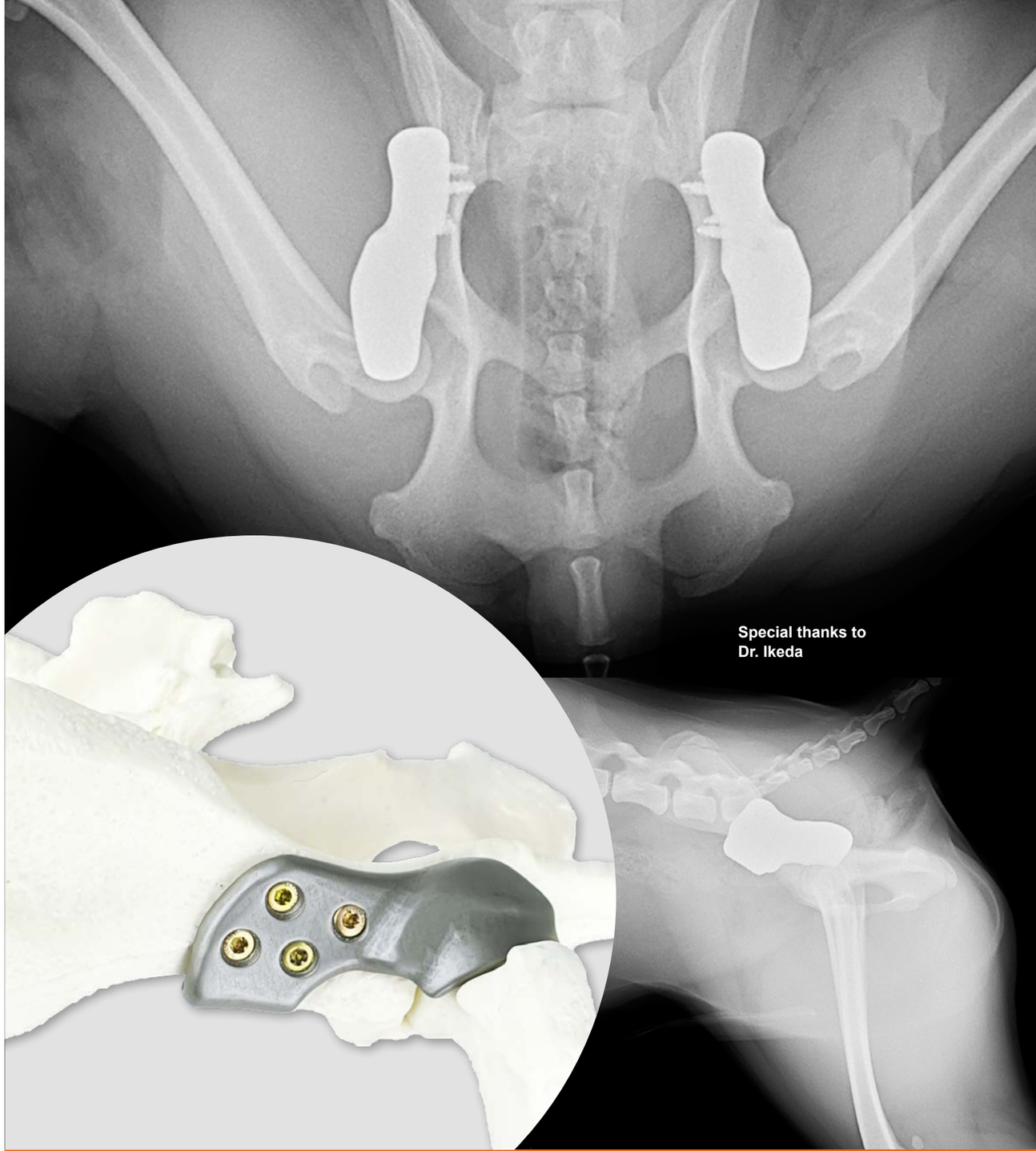
Unlike DPO or TPO, which involve cutting and rotating the pelvic bone, the 3D HIP technique is an extraarticular, bone-sparing approach that preserves native anatomy. This results in lower surgical trauma, reduced complication rates, and a faster return to function.

Article

Outcome One Year after Acetabular Rim Extension Using a Customized Titanium Implant for Treating Hip Dysplasia in Dogs

Clinically Proven to Improve Hip Stability

Clinical studies have shown that the 3D HIP implant significantly increases femoral head coverage, eliminates subluxation in 96.7% of cases, and results in measurable reductions in pain scores postoperatively. Treated dogs were typically weight-bearing within 24 hours.



Special thanks to
Dr. Ikeda

3D HIP

RITA LEIBINGER MEDICAL

NEW

3D HIP Personalized Shelf Arthroplasty Implants

A Modern Approach to Early Hip Dysplasia Intervention

Canine hip dysplasia is one of the most prevalent orthopedic conditions in young, mostly large-breed dogs, often resulting in progressive joint laxity and pain. Traditional surgical options like pelvic osteotomies or total hip replacement are typically invasive, complex, and better suited for later-stage disease.

3D HIP provides a less invasive, early-intervention solution for dogs with hip laxity, before significant degenerative changes occur. Developed in close collaboration with leading veterinary orthopedic researchers at Utrecht University, the technique is supported by clinical and biomechanical studies validating its safety and efficacy.

Designed for young patients of at least 6 months of age, without or with just minimal osteoarthritis, the 3D HIP implant addresses insufficient dorsal acetabular coverage while preserving native joint anatomy. It offers veterinary surgeons a practical and scientifically backed alternative to conventional osteotomies - bridging the gap between conservative therapy and joint replacement.

Studies on 3D HIP

Patient-specific 3D-printed shelf implant for the treatment of hip dysplasia: Anatomical and biomechanical outcomes in a canine model *(June 2021)* Koen Willemsen, Marianna Tryfonidou, Ralph Sakkers, René M. Castelein, Amir A. Zadpoor, Peter Seevinck, Harrie Weinans, Björn Meij, Bart C. H. van der Wal

Surgical Technique of the 3-Dimensional-printed Personalized Hip Implant for the Treatment of Canine Hip Dysplasia *(April 2024)* Irin Kwananocha, Femke Verseijden, Seyed A. Kamali, Joëll Magré, Koen Willemsen, Jacobine CM Schouten, Daniela Salvatori, Marianna A. Tryfonidou, Björn P. Meij

Outcome One Year after Acetabular Rim Extension Using a Customized Titanium Implant for Treating Hip Dysplasia in Dogs *(August 2024)* Irin Kwananocha, Joëll Magré, Seyed A. Kamali, Femke Verseijden, Koen Willemsen, Yuntao Ji, Bart C. H. van der Wal, Ralph J.B. Sakkers, Marianna A. Tryfonidou, Björn P. Meij

LEARN THE TECHNIQUE

JOIN A 3D HIP WORKSHOP

Shelf Arthroplasty of Dorsal Acetabular Rim with 3D-Printed Personalized Titanium Implant (3D HIP) for Young Dogs with Hip Dysplasia

Anatomiegebouw Utrecht

Attend an official 3D HIP Workshop led by Prof. Dr. Björn Meij, DVM, PhD, DECVS at the Anatomiegebouw in Utrecht — a renowned venue for veterinary surgical training, offering modern facilities and an ideal environment for hands-on education.

This course is a mandatory prerequisite for ordering 3D HIP implants and provides the essential skills for proper surgical application, patient selection, and implant planning.

leibinger.vet/3dhip-courses

3D HIP Implant

Patient-specific 3D-printed implant, Titanium

Left
138-0600-00

Right
138-0500-00

Sample images of a custom 3D-printed 3D HIP Implant

For detailed information on the ordering process of a 3D HIP implant, please refer to **Page 182.**

LeiLOX Locking Screws, Titanium

LeiStar, also compatible with our LeiLOX Locking Systems
self-holding (Shaft from Rita Leibinger recommended)
self-tapping with three flute cutting edge

STAR Screw-Head

Length (mm)	2.4 mm Product Code	2.7 mm Product Code	3.5 mm Product Code
06	242-224-06		
08	242-224-08	242-227-08	
10	242-224-10	242-227-10	242-235-10
12	242-224-12	242-227-12	242-235-12
14	242-224-14	242-227-14	242-235-14
16		242-227-16	242-235-16
18		242-227-18	242-235-18
20			242-235-20

Note: Recommended screw lengths are included in the Implant Construction Data that are sent for review and approval prior to proceeding with production.

See more screw lengths on **Page 134.**

3D HIP Instrument Set

Contains:
1 Bone Lever, Hohmann, 8mm, 22cm
1 Depth Gauge AO, 80mm for 2.7 and 3.5 screws
1 Locking Drill Guide, for 3.5mm screws
1 Periostal Elevator, 19cm, slightly curved
1 pair US Army Retractor
2 K-Wire with olive, 1.5mm dia x 52mm
4 Locking Plugs 3.5 mm
1 Screwdriver with Handle, AO
1 Screwdriver Shaft 2.7, AO, LeiStar T10
1 Twist Drill, AO, 2.5mm dia., Length: 110mm
1 Twist Drill, AO, 2.5mm dia., Length: 165mm
1 Tray with Lid
1 Wire Tray with Lid, small

138-1000-00

Tray without contents
138-1000-10

Small Wire Tray without contents
80 x 40 x 20 mm
150-0821-00

Set includes a small wire tray to hold the K-Wires and Locking Plugs.

Locking Plug 3.5
LeiStar, with 1.5mm K-Wire hole, for 2.7/3.5 plates
Stainless Steel

242-0027-35

K-Wire with Olive
Ø 1.5mm, 52mm length, 13.5mm thread, Stainless Steel

144-9015-52

Locking Drill Guide, 3.5
for 2.5mm drills, for 3.5mm screws, Length: 67mm, Stainless Steel

164-3500-67

Depth Gauge
Scale up to 80mm, for 2.7mm and 3.5mm screws, with protective sleeve

128-0811-27

HOHMANN Bone Lever
8mm working end, Length: 22 cm

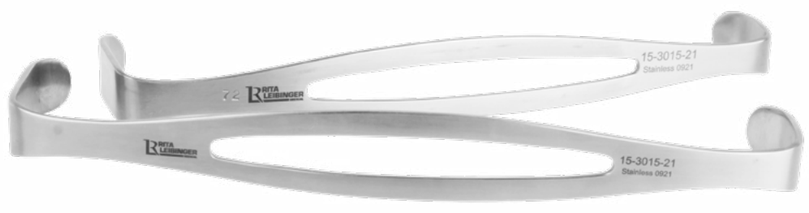
23-4620-00

Periosteal Elevator
6mm working end, slightly curved, Length: 19 cm

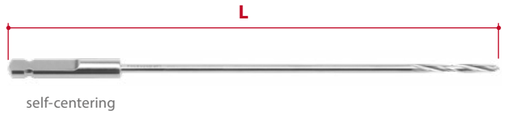
23-4552-19

U.S. Army Retractor
1 pair

15-3015-21



Drills with AO Shaft



self-centering

Product Code	Ø (mm)	Length (mm)	for Screw Ø (mm)	Price
148-0081-25	2.5	110	3.5 mm	
148-0181-25	2.5	165	3.5 mm	

Screwdriver Shaft
LeiStar T10, for 2.7 / 3.5 mm screws, Length: 135mm ,
AO connection, self-holding

134-0800-27

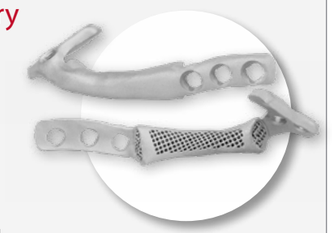
Screwdriver Handle
Silicone, AO-Connection
sterilizable up to 134°C / 273°F

247-0102-00

NEW

PATIENT-SPECIFIC IMPLANTS

Expanding Personalized Solutions in Veterinary Surgery



In addition to the 3D HIP system, we are actively developing a portfolio of custom-made, patient-specific implants designed to address complex orthopedic and reconstructive challenges in veterinary surgery.

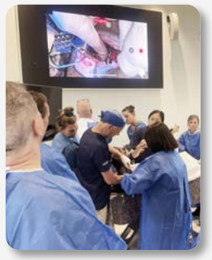
These implants are 3D-printed in medical-grade titanium and individually engineered from CT imaging to precisely match the anatomical and clinical needs of each patient. Applications include, but are not limited to, mandibular reconstruction, cranial or maxillofacial defects, and other areas where conventional implants may not provide sufficient support or anatomical fit.

Have a complex case?
Contact us to discuss feasibility, design options, and how a custom implant can support your surgical plan.

ORDERING PROCESS & REQUIREMENTS

3D HIP & Custom Implants

Ordering a patient-specific implant involves a structured and efficient workflow to ensure accuracy, safety, and optimal clinical outcomes. Please review the steps below before initiating your order.



1 **Mandatory Training Requirement**

** only applies to 3D HIP Implant orders*

Completion of a certified 3D HIP Course is required prior to ordering a 3D HIP implant. This training ensures correct surgical technique and appropriate patient selection.

Scan to see upcoming 3D HIP courses →
or visit ***www.leibinger.vet/3dhip-courses***

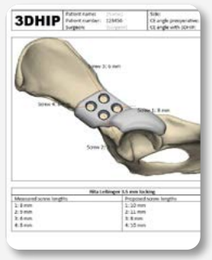
2 **Place Order & Submit Patient Data**

Fill out the order form with the patient's name, implant specifications & configuration, and upload the necessary DICOM files.

Scan to fill out the 3D HIP order form →
or visit ***www.leibinger.vet/3dhip-orders***

Custom Implant order form →
or visit ***www.leibinger.vet/custom-implants***

An order confirmation with the approximate delivery time will then be sent to you by email.



3 **Review & Approve Construction Data**

Within **3–4 working days**, you will receive the personalized implant design data for review. Please confirm all details and approve the design to proceed with production.

4 **Production & Delivery**

Upon approval, the implant is manufactured using medical-grade 3D-printed titanium. The standard production time is approximately **2 weeks**, with total turnaround time of around **3 to 4 weeks** from order placement to delivery. You will receive shipping details and an estimated delivery date once production is complete.

For questions & more info: *info@leibinger-medical.com*

Image from Alexa on Pixabay

EQUINE DENTAL

Titanium Equine Dental Plugs

Expertly designed to close non-healing oro-nasal and oro-sinusal fistulae in horses, these plugs provide convenient insertion through a straightforward transbuccal approach using a screwdriver. Their threaded design ensures secure and stable placement. Crafted from high-quality titanium, the Dental Plugs are highly biocompatible and durable.

Developed in collaboration with
Dr. Manfred Stoll, *FNCED, Dipl. EVDC Eq.*
(Fistula Plugs by Stoll, patented design)

Equine Dental Plug Set

Set contains:

Product Code	Description	Qty
888-9500-10	Tray with Lid	1
128-3019-00	Screwdriver Shaft T30	1
128-1019-00	Screwdriver Shaft T10	1
247-0101-00	Silicone T-Handle, AO	1
247-0102-00	Screwdriver Handle, AO	1
888-9501-00	Screws for Dental Plugs, Titanium	10
888-9507-20	Equine Dental Plug, Ø7 x 20mm	2
888-9510-20	Equine Dental Plug, Ø10 x 20mm	2
888-9513-20	Equine Dental Plug, Ø13 x 20mm	2
888-9516-20	Equine Dental Plug, Ø16 x 20mm	2
888-9519-20	Equine Dental Plug, Ø19 x 20mm	2

888-9500-00

Tray without contents
888-9500-10

Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

Equine Dental Plugs

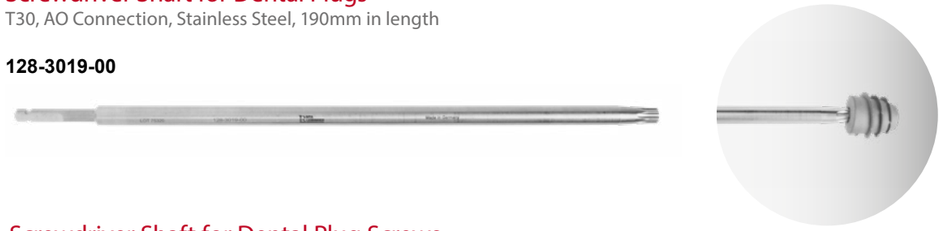
Titanium, LeiStar, including screws

Product Code	Ø	Length
888-9507-20	7 mm	20 mm
888-9510-20	10 mm	20 mm
888-9513-20	13 mm	20 mm
888-9516-20	16 mm	20 mm
888-9519-20	19 mm	20 mm

Screwdriver Shaft for Dental Plugs

T30, AO Connection, Stainless Steel, 190mm in length

128-3019-00



Screwdriver Shaft for Dental Plug Screws

T10, AO Connection, Stainless Steel, 190mm in length

128-1019-00

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

Product Code	Description
247-0102-00	standard, compatible with 2.7/3.5

Screwdriver T-Handle

Silicone, AO, not cannulated
sterilizable up to 134°C / 273°F

247-0101-00

Screw for Dental Plugs

Titanium, LeiStar, T10, 3mm length

888-9501-00

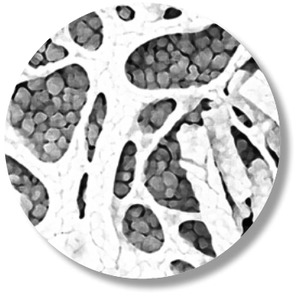
LeiLa Bone Substitutes

Easy Application

LeiLa REDy Hydroxyapatite Paste comes in a ready-to-use syringe, making it easy to apply in any situation. Apllication of our **LeiLa Bone Matter** Bone Graft Granules is straightforward: first, transfer the contents of the ampoule into a suitable container. Next, mix the LeiLa Bone Matter with a small amount of the patient's blood. Once combined, press the mixture into the bone defect. Finally, close the wound. It's as simple as that!

0% Risk of Disease Transmission

Made of 100% synthetic biocompatible materials and manufactured under sterile conditions, LeiLa Bone Substitutes can spare patients the trauma of autograft harvesting and provides a fully synthetic alternative to animal cadaver bone grafts, therfore carrying no risk of contamination and disease transmission.



Excellent Bioactivity, Osteoconductivity, & Resorbability

Made of biocompatible material, our bone substitutes form a strong bond with the surrounding bone tissue, facilitating the formation of a stable and long-lasting implant that can effectively promote healing and regeneration. Its high resorbability allows it to be efficiently replaced by new bone tissues, resulting in complete and natural bone regeneration.

Multiple Applications

The LeiLa Bone Subsitutes can be used in many different cases including filling and supporting the ingrowth of adjacent viable bone in bone defects that do not compromise the structural stability of the bone. They are also ideal for filling bone defects in cases of fractures and following the resection of benign tumors or cysts. They are perfect for filling and supporting the regeneration of bone at autograft harvest sites, and they are also ideal for addressing defects of the alveolar ridge or wall, including extraction sockets. Additionally, LeiLa Bone Substitutes provide excellent support for periodontal bone regeneration.

Radiopaque

Visible on x-rays and other imaging studies, making it easier for veterinary surgeons to accurately monitor the healing process, until the bone substitute is totally resorbed.

LeiLA **BONE MATTER**

RITA LEIBINGER MEDICAL

LeiLa REDY Hydroxyapatite Paste

1 x 2.5 g syringe, sterile

synthetic resorbable Bone Substitute, Hydroxyapatite

132-9025-00

LeiLa REDY ONEg Hydroxyapatite Paste

3 x 1 g syringe, sterile

synthetic resorbable Bone Substitute, Hydroxyapatite

140-2011-00

SYNTHETIC CERAMIC NANO-HYDROXYAPATITE PASTE

REDY Hydroxyapatite paste is a synthetic (Alloplast) ceramic, composed by a water based nano-hydroxyapatite paste.

It is resorbed and replaced by natural bone as bone healing process occurs and the paste can be molded to follow the natural contours of the bone.

REDY Hydroxyapatite paste can, in many cases, spare the patient the trauma of autograft harvesting and provides an alternative to animal cadaver bone.

LeiLa Bone Matter

99,9% tricalcium phosphate Economic, 5x1 gram-package, sterile

140-1011-00

POROUS SYNTHETIC CERAMIC BONE GRAFT

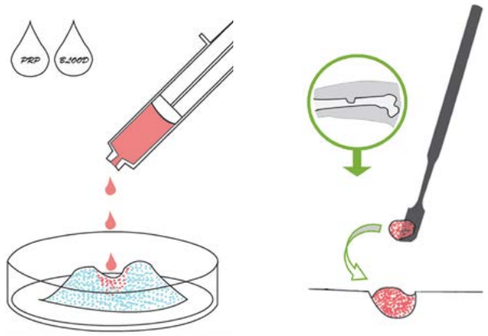
Bone Matter is a fully synthetic bone graft biomaterial, composed of pure beta-tricalcium phosphate (β-TCP).

Bone Matter features a multidirectional interconnected porosity that guides the three-dimensional bone regeneration.

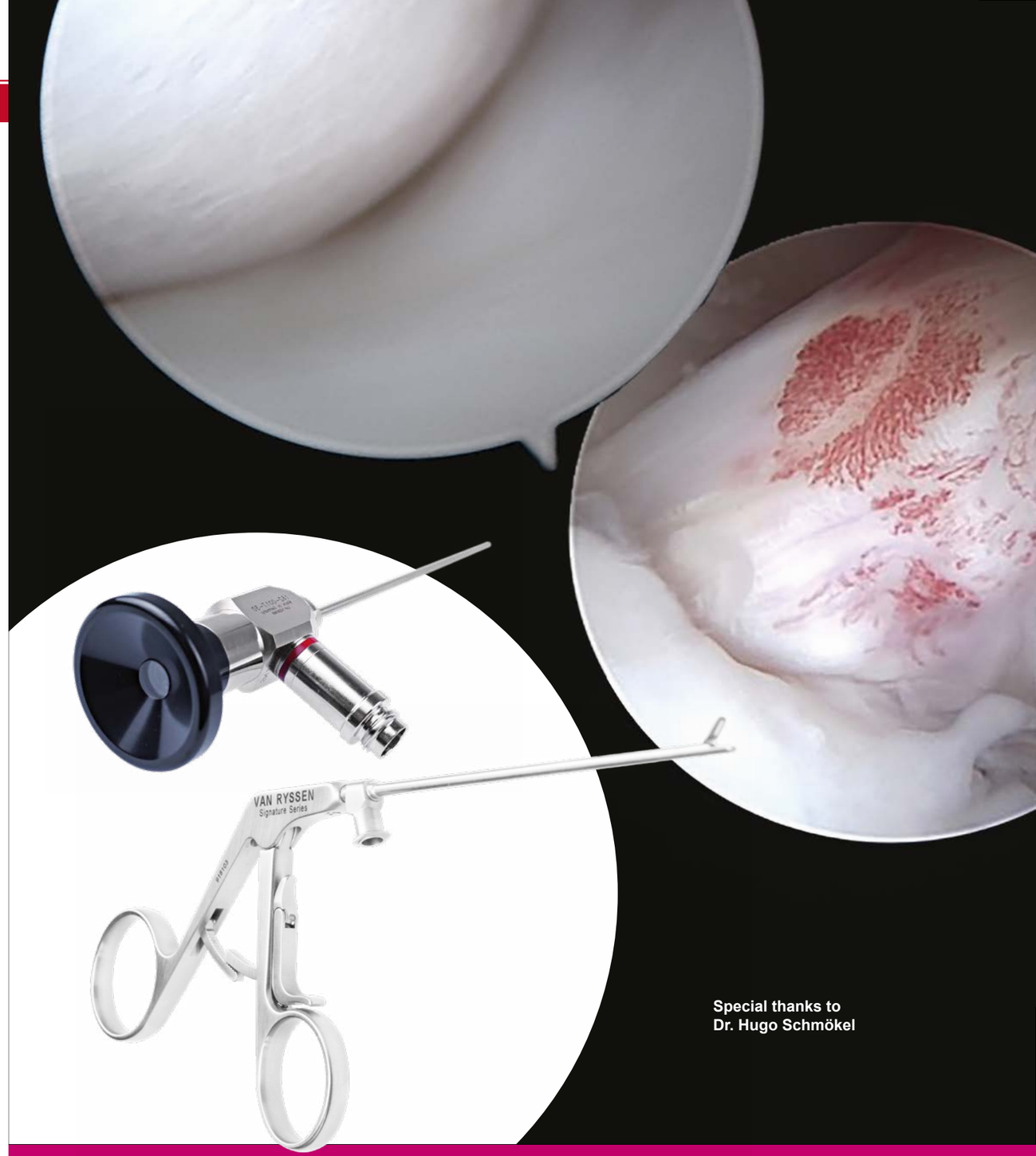
As bone healing occurs, **Bone Matter** is resorbed and replaced by new bone.

Why choose LeiLa Bone Matter and LeiLa REDY?

- Radiopaque allowing the monitorization of the graft osteointegration
- Quickly resorbed and replaced by new bone
- Provides an alternative to autologous bone graft harvesting, and is an alternative to animal cadaver bone
- Do not contain animal or human tissues or derivatives
- Intended to be used as a filling material for bone voids or defects which are not intrinsic to the stability of the bone



Find more product information online.



Special thanks to
Dr. Hugo Schmökel

Small Animal **ARTHROSCOPY**

ABOUT ARTHROSCOPY

Prof. Dr. Bernadette Van Ryssen
DVM, PhD, Dipl. ECVSMR

Department of Medical Imaging &
Small Animal Orthopaedics
Faculty of Veterinary Medicine
GHENT UNIVERSITY

In the last few decades, arthroscopy in small animals has known a rapid expansion because of some important advantages. This minimally invasive technique allows a wide and detailed inspection of the intra-articular structures and their pathologic changes because of the enlargement by the arthroscope and camera. Fibrillation and superficial erosions of cartilage, fibers of (partially) ruptured ligaments, and the structure of synovial villi are details that can be evaluated during arthroscopy. These possibilities allow an accurate diagnosis and a better understanding of the intra-articular anatomy and pathology. Arthroscopy can be used to demonstrate discrete or early lesions without radiographic evidence. It allows a second look in joints that have been treated unsuccessfully via arthrotomy or arthroscopy.
Several lesions can be treated via arthroscopy. In case of bilateral lesions, treatment of both joints can be performed during one anesthesia. Because of the limited surgical trauma, the postoperative care and risk for complications are minimal.

A prerequisite for successful arthroscopic interventions is good quality equipment to clearly visualize the intra-articular structures. It is also important to work with the correct instruments: they should be small yet strong and have an adapted shape.

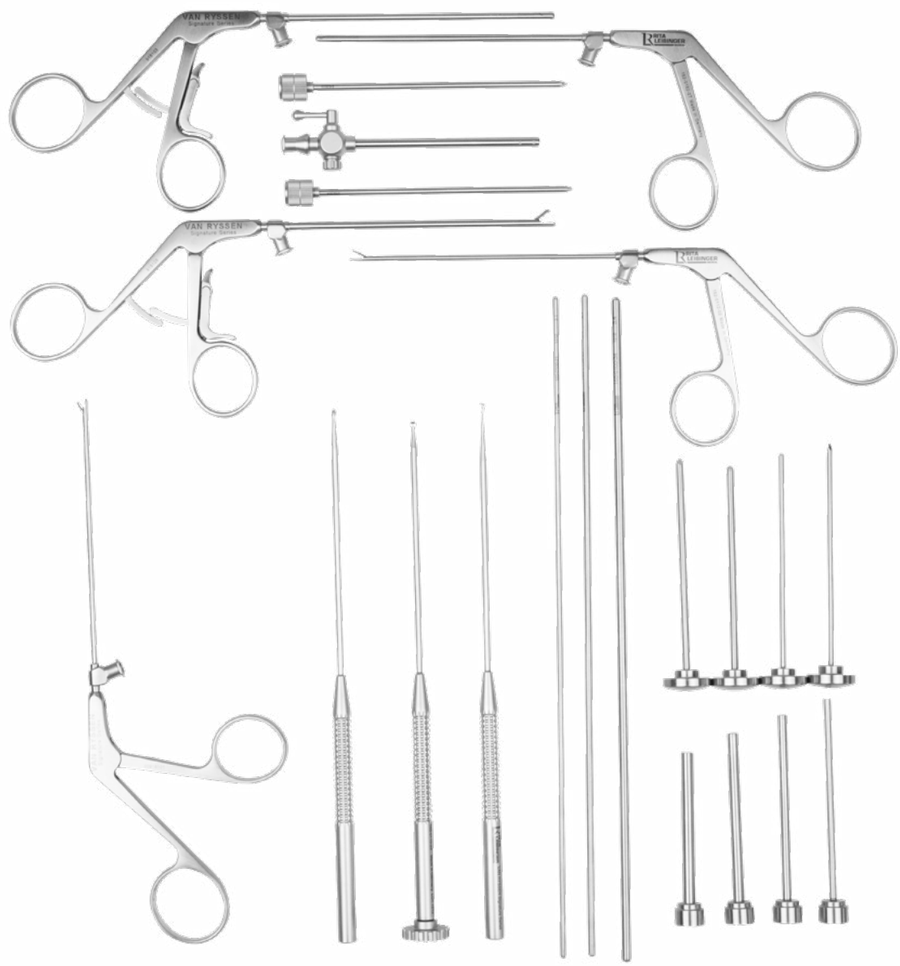
Finally, training and exercise is needed before sufficient experience is reached to apply arthroscopy in the small sized joints and to adapt a different way of surgical handling.

Original English text from Prof. Dr. Van Ryssen

arthroscopy.leibinger.vet

Van Ryssen Arthroscopy Set

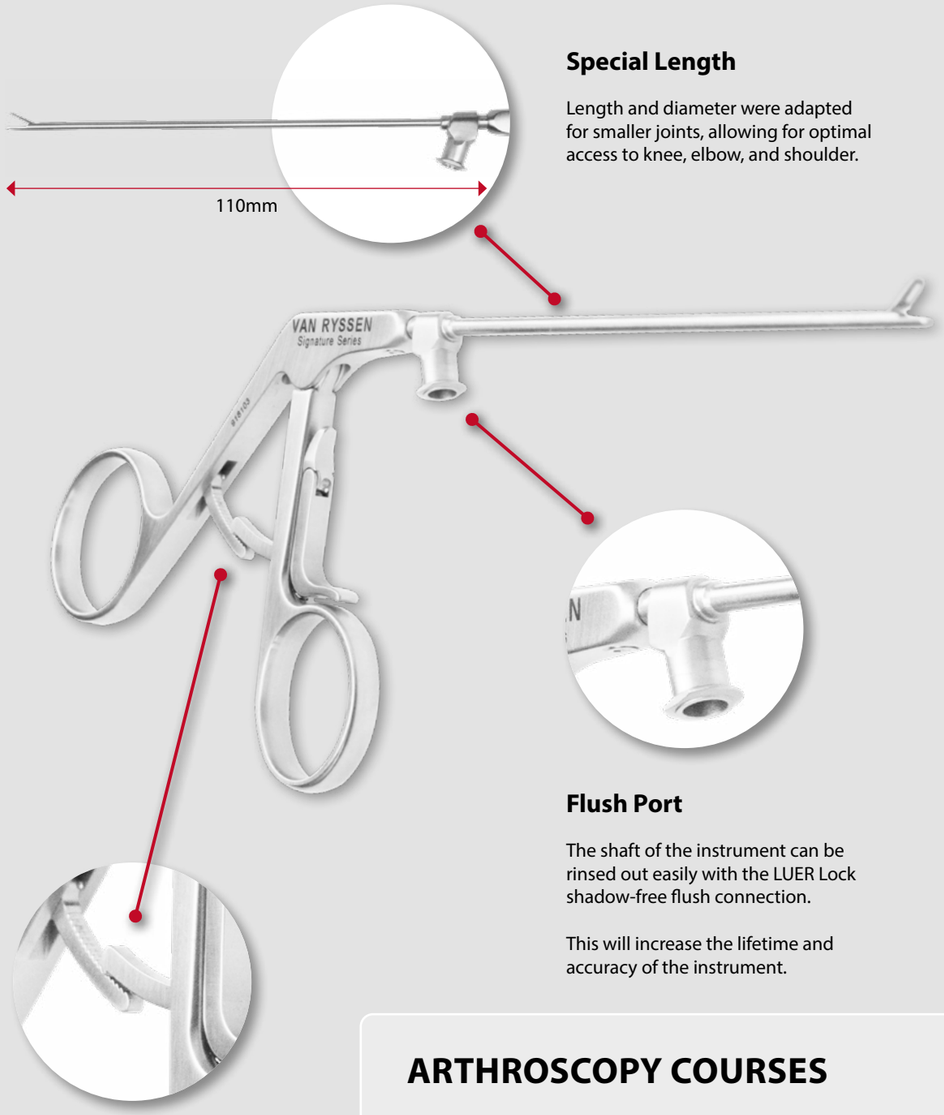
111-0016-00



Product Code	Description
165-0100-21	Marking Rod 2.1 mm, working length 250 mm
165-0100-27	Marking Rod 2.7 mm, working length 250 mm
165-0100-34	Marking Rod 3.4 mm, working length 250 mm
162-0112-02	Grasping Forcep Alligator, ø 2.0 mm, with fine serration, with flush port, working length 110 mm
162-0146-02	Biopsy Spoon, with flush port, 110 mm working length, sharp, ø 2.0 mm
162-0169-30	Grasping Forcep, with spoon, 1x2 teeth, cross serrated, ø 3.0 mm, with flush port, working length 110 mm
162-0182-27	Hook Scissors, ø 2.7 mm, with flush port, working length 110 mm
162-0197-27	Biopsy Spoon, sharp, ø 2.7, cross serrated, with flush port, working length 110 mm, with ratchet
165-0110-15	Hook Probe, 1.5 mm
165-0110-23	Ball Head Burr, 2.3 mm
165-0120-15	Spoon Curette, small model, 1.5 mm
165-0150-32	Rinse Cannula, complete with Trocar/Obturator, 3.2 mm, with Stopcock
165-0100-00	4 Sheaths, 2.2 / 2.8 / 3.5 / 4.2 mm, 2 Trocar pyramid tip, 2 Obturators round

Van Ryssen Series

Intelligent design in collaboration with Prof. Dr. Bernadette van Ryssen



Special Length

Length and diameter were adapted for smaller joints, allowing for optimal access to knee, elbow, and shoulder.

Flush Port

The shaft of the instrument can be rinsed out easily with the LUER Lock shadow-free flush connection.

This will increase the lifetime and accuracy of the instrument.

Special Ratchet

Innovative ratchet mechanism for a quick switch between ratchet and ratchet-free working.

ARTHROSCOPY COURSES

Learn Arthroscopy with Prof. Dr. Bernadette van Ryssen and other experts.

Explore available courses at our Academy page:

academy.leibinger.vet

WORKSHOPS

Sterilization Storage System

includes
- Sterilization Basket Standard with Lid
- Sterilization Rack for Arthroscopy Ringhandle Instrument
- Sterilization Insert Rack for Arthroscopy Hand Instrument
- Sterilization Insert Rack for Arthroscopy Flush/Rinse Instrument

(instruments not included)

165-5003-00

Grasping Forcep Alligator

Fine serration, with flush port
2.0 mm, 110 mm Shaft

162-0112-02

Hook Scissors

Sharp, with flush port
2.7 mm, 110 mm Shaft

162-0182-27

Biopsy Spoon Forceps

Sharp, with flush port
2.0 mm, 110 mm Shaft

162-0146-02

Biopsy Grasping Forceps

With spoon, 1x2 teeth, with ratchet, flush port
3.0 mm, 110 mm Shaft

162-0169-30

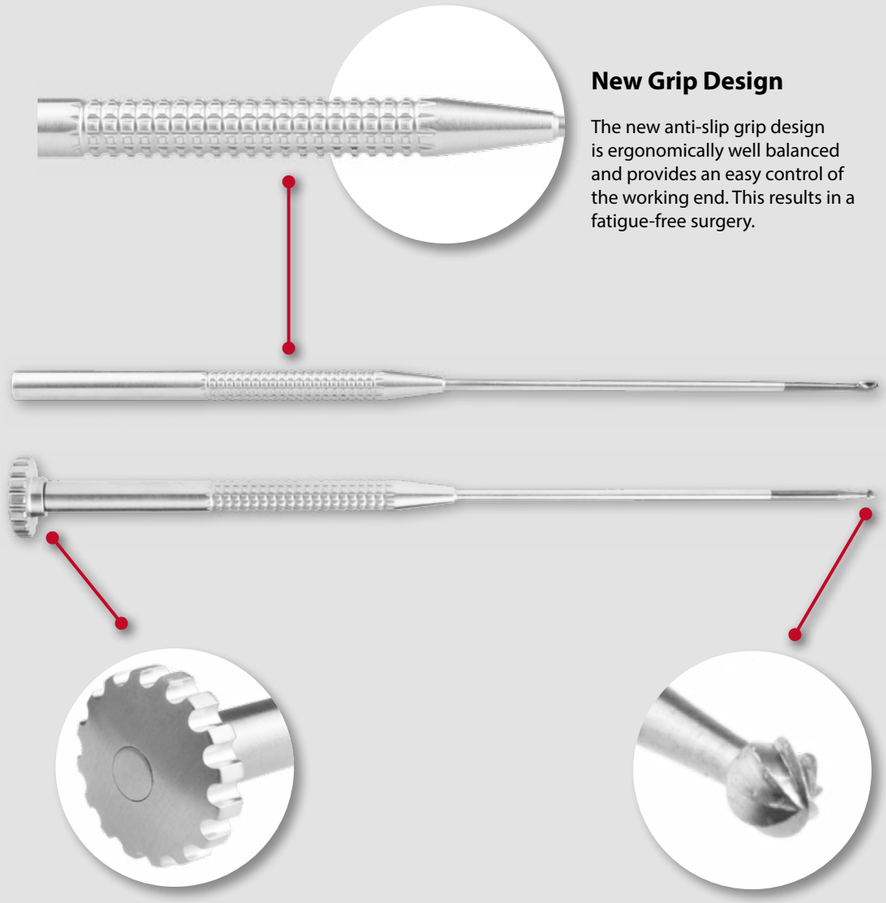
Biopsy Spoon Forceps

Cross serrated, with ratchet, flush port
2.7 mm, 105 mm Shaft

162-0197-27

Van Ryssen Signature Series

RITA LEIBINGER MEDICAL proudly presents a new ergonomic grip design.



New Grip Design

The new anti-slip grip design is ergonomically well balanced and provides an easy control of the working end. This results in a fatigue-free surgery.

Mushroom Handle for Ball Head Burr

The redesign of the mushroom handle, combined with a new grip design, allows the ball head burr to be used with greater accuracy and efficiency, saving time.

Small Working Ends

The size of the working ends has been reduced, enabling precise fine work, particularly in small joints.

Hook Probe

Product Code	Description
165-0110-10	1.0 mm
165-0110-15	1.5 mm

Ball Head Burr

2.3 mm

165-0110-23

Spoon Curette

Product Code	Description
165-0120-15	1.5 mm
165-0120-30	2.7 mm

Banana Knife

2.5x12 mm

165-0130-00

Hook Knife

2.2 mm

165-0130-22

Elevator

Penfield Style, small
2.5 mm

165-0140-00

Curette

2.7 mm with hole

165-0120-28

Meniscus Knife

2.5 mm

165-0130-25

Standard Instrument with knurled handle (Ø 4.0mm)

"knurled" handle

Hook Knife

fine

160-2401-00

Meniscotome

5.0 mm

160-2402-00

Meniscotome

7.0mm

160-2413-00

Smillie-Meniscotome

3mm

160-2408-00

Meniscus Rasp

fine

160-2420-00

Meniscus Rasp

coarse

160-2421-00

ATTENTION: only while stocks last.

Arthroscopes

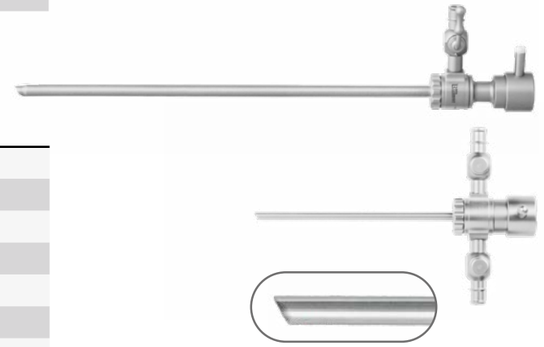
Optics

Autoclavable up to 134°C / 273°F

	Product Code	Description
●	**162-0016-30**	2.0 mm / 110 mm / 30° Optic
▲	**162-0017-30**	2.4 mm / 98 mm / 30° Optic
■	**162-1124-30**	2.4 mm / 110 mm / 30° Optic
★	**162-0013-30**	2.7 mm / 110 mm / 30° Optic
✚	**162-0018-30**	2.7 mm / 175 mm / 30° Optic
⬢	**162-1930-60**	1.9 mm / 60 mm / 30° Mini Optic

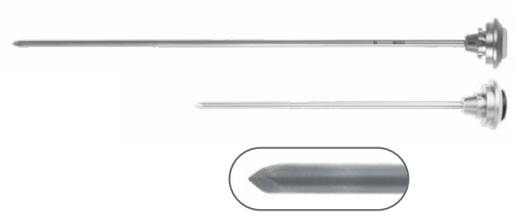
Shaft

	Product Code	Description
●	**162-0021-20**	2.0 mm / 110 mm / 30°, stop-cock
▲	**162-0031-65**	2.4 mm / 98 mm / 30°, stop-cock
▲	**162-0031-24**	2.4 mm / 98 mm / 30°, 2 stop-cocks
■	**162-1131-65**	2.4 mm / 110 mm / 30°, stop-cock
★	**162-0021-30**	2.7 mm / 110 mm / 30°, stop-cock
✚	**162-0021-45**	2.7 mm / 175 mm / 30°, stop-cock
✚	**162-0031-27**	2.7 mm / 175 mm / 30°, 2 stop-cocks
⬢	**162-0025-60**	1.9 mm / 60 mm / 30°, 2 stop-cocks



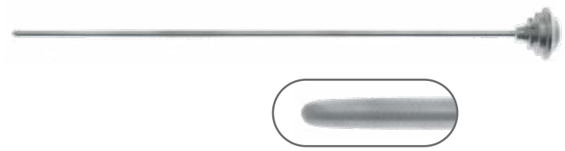
Trokar

	Product Code	Description
●	**162-0035-03**	2.0 mm / 110 mm, sharp
▲	**162-0035-22**	2.4 mm / 98 mm, sharp
▲	**162-0036-24**	2.4 mm / 98 mm, blunt
■	**162-1135-22**	2.4 mm / 110 mm, sharp
★	**162-0035-14**	2.7 mm / 110 mm, sharp
✚	**162-0035-18**	2.7 mm / 175 mm, sharp
✚	**162-0036-27**	2.7 mm / 175 mm, blunt
⬢	**162-0022-60**	2.2 mm / 60 mm, blunt



Obturator

	Product Code	Description
●	**162-0036-03**	OD 2.0 mm / 110 mm, blunt
▲	**162-0036-22**	OD 2.4 mm / 96 mm, blunt
■	**162-1136-22**	OD 2.4 mm / 110 mm, blunt
★	**162-0036-14**	OD 2.7 mm / 110 mm, blunt
✚	**162-0036-18**	OD 2.7 mm / 187.5 mm, blunt



Arthroscopy Trocar Set

4 Sheaths, 2 Trocar pyramid tip, 2 Obturators

165-0100-00

Rinse Cannula Set

Complete with Trocar/Obturator and Stopcock
3.2 mm

165-0150-32

Marking Rods

Product Code	Description
165-0100-21	2.1 mm
165-0100-27	2.7 mm
165-0100-34	3.4 mm

Mini Lambotte Osteotome

12.5 m

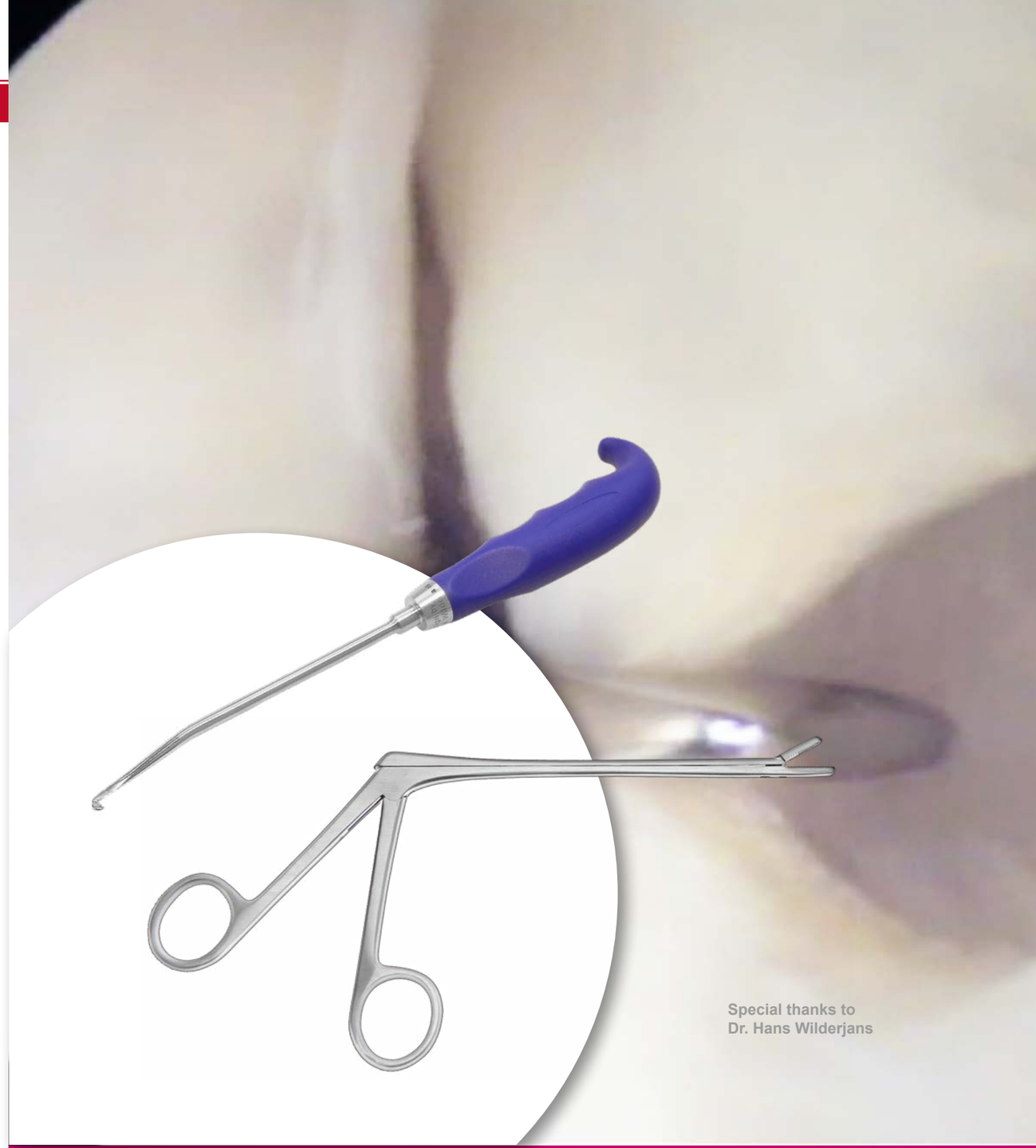
Product Code	Description
23-3805-12	3.0 mm
23-3806-12	4.0 mm
23-3807-12	6.0 mm

NEW

Knee Distractor

Stainless Steel with Propylux Handle

Product Code	Description
128-8023-27	Large, 27 mm
128-8023-20	Medium, 20 mm
128-8023-13	Small, 13 mm



Special thanks to
Dr. Hans Wilderjans

Equine **ARTHROSCOPY**

Curved Hook Knife

Design by Dr. Hans Wilderjans
Silicone Handle

163-200-20

Curved Hook Knife

INDICATIONS

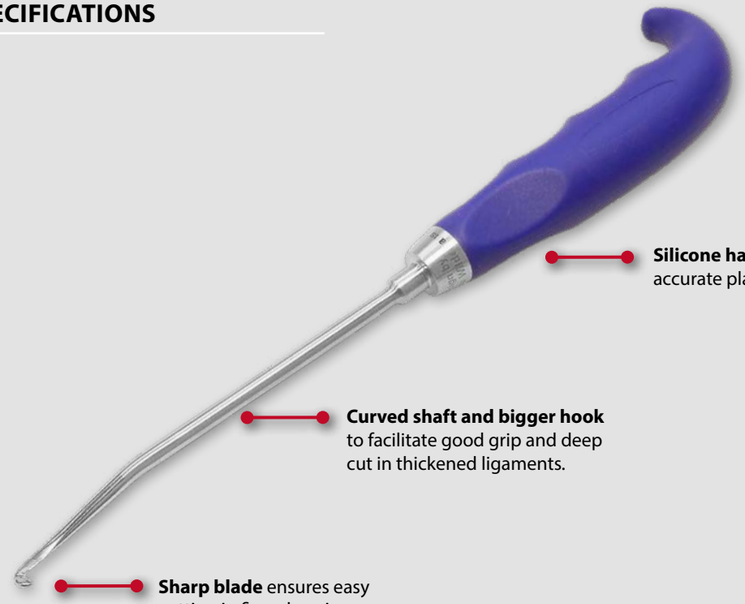
Chronic tenosynovitis of the digital flexor tendon sheath with thickening and constriction of the palmar annular ligament.

GOAL

Section of a thickened and constricted annular ligament using a tenoscopic approach.

This knife is specially designed to facilitate easy cutting of the palmar annular ligament in cases of chronic tenosynovitis of the digital flexor tendon sheath in the horse.

SPECIFICATIONS



Silicone handle will facilitate accurate placement in hand.

Curved shaft and bigger hook to facilitate good grip and deep cut in thickened ligaments.

Sharp blade ensures easy cutting in firm chronic thickened ligament.

Rita Leibinger Propylux Grip
for secure and fatigue-free working
Sterilizable up to 134°C / 273°F

Hook Probe

Propylux handle blue, 225 mm, working end 110 mm, D 18

163-600-10

Banana Knife

Curved,
Propylux handle blue, 225 mm, working end 110 mm, D 18

163-600-11

Curette

Straight
Propylux handle blue, 225 mm, working end 110 mm, D 18

Product Code	Description
163-600-12	2 mm
163-600-13	3 mm
163-600-14	4 mm
163-600-15	5 mm

Curette

Curved, 45°, 5 mm
Propylux handle blue, 225 mm, working end 110 mm, D 18

163-600-16

Pick Probe

Propylux handle blue, 225 mm, working end 110 mm, D 18

Product Code	Description
163-600-17	strongly curved
163-600-18	slightly curved

Elevator

Small
Propylux handle blue, 225 mm, D 18

Product Code	Description
163-600-19	110 mm working end
163-600-22	65 mm working end

Elevator

Large
Propylux handle blue, 300 mm, working end 150 mm, D 18

163-600-20

Periostal Elevator

Propylux handle blue, 225 mm, working end 110 mm, D 18

163-600-21

Hook Grasping Forceps

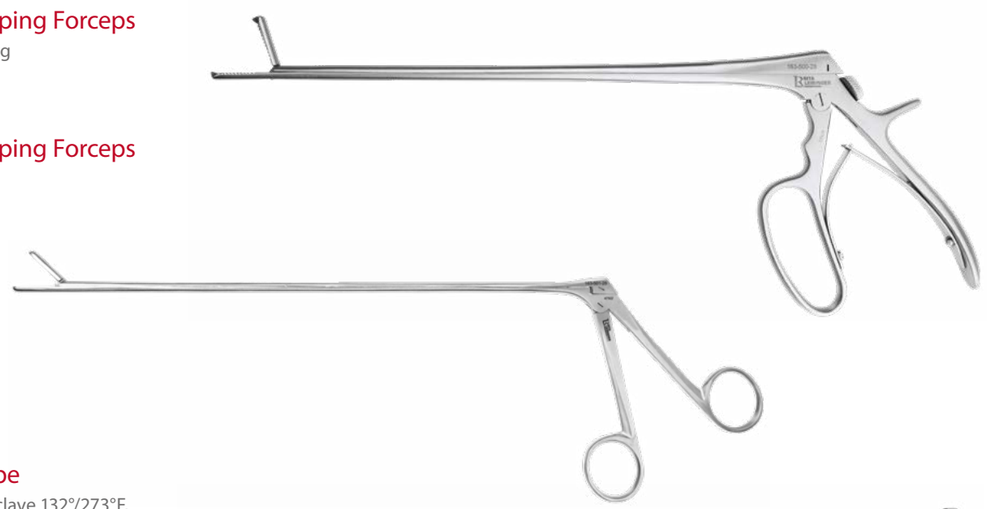
2x2 teeth, long

163-500-28

Hook Grasping Forceps

Suprapatellar

163-501-28



Arthroscope

4.0 mm, autoclave 132°/273°F,
Stainless Steel

Product Code	Description
162-0019-00	0 °, 175 mm long
162-0019-30	30 °, 175 mm long

Arthroscopy Shaft, OD 6.0 mm

With 2 stop-cocks, for 4.0mm Arthroscopes 0°/30°°

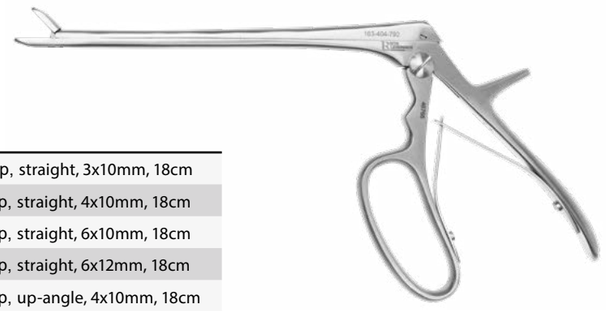
162-0040-30

Arthroscopy Obturator

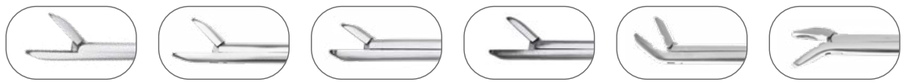
For arthroscopy shaft 162-0040-30, blunt

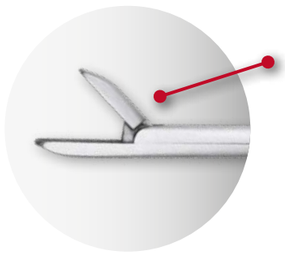
162-0040-35

Arthroscopy Rongeurs

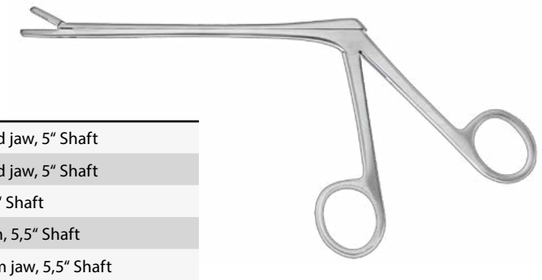


Product Code	Description
163-404-791	Ferris-Smith Arthr. Rongeur, pike shaped tip, straight, 3x10mm, 18cm
163-404-792	Ferris-Smith Arthr. Rongeur, pike shaped tip, straight, 4x10mm, 18cm
163-404-794	Ferris-Smith Arthr. Rongeur, pike shaped tip, straight, 6x10mm, 18cm
163-404-795	Ferris-Smith Arthr. Rongeur, pike shaped tip, straight, 6x12mm, 18cm
163-404-802	Ferris-Smith Arthr. Rongeur, pike shaped tip, up-angle, 4x10mm, 18cm
163-404-812	Ferris-Smi. Arthr. Rongeur, pike shaped tip, down-angle, 4x10mm, 18cm





Arthroscopy Rongeurs

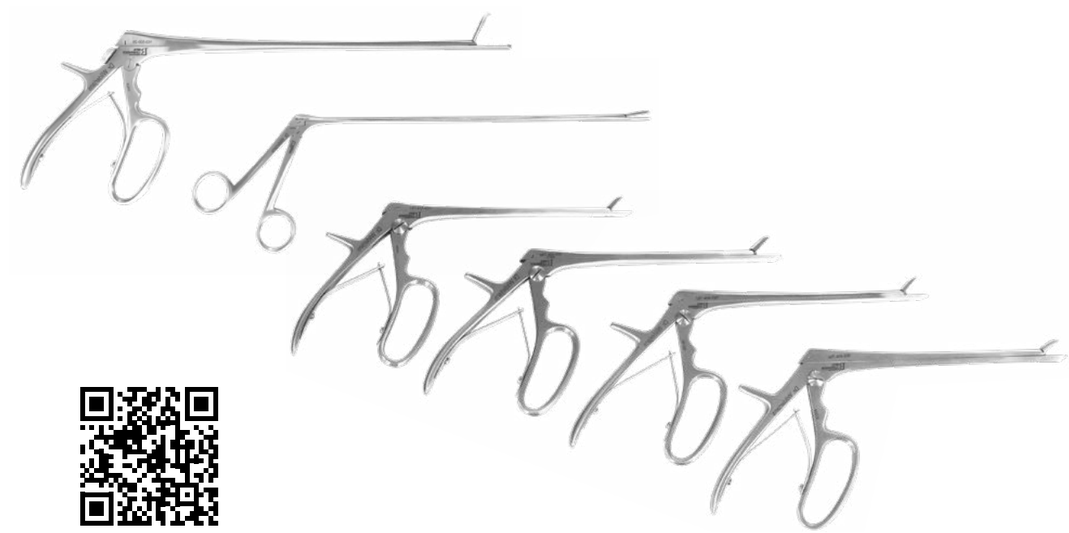


Product Code	Description
163-404-755	Schlesinger Rongeur, straight, 3x10mm serrated jaw, 5“ Shaft
163-404-756	Schlesinger Rongeur, straight, 4x10mm serrated jaw, 5“ Shaft
163-404-768	Wilde Ethmoid Rongeur, straight, 4mm jaw, 5,5“ Shaft
163-404-782	McIlwraith Peapod Rongeur, straight, 2.5x6mm, 5,5“ Shaft
163-404-784	McIlwraith Peapod Rongeur, up-angle, medium jaw, 5,5“ Shaft

Equine Arthroscopy Set

Set contains:
Hook Probe
Banana Knife
Curettes 2,3,4 & 5 mm
Curette curved, 5mm
2 pick probes, strongly and slightly curved
2 elevators, standard 110mm, large 150mm, short 65mm
Dissector Periostal Elevator
6 Ferris Smith Arthroscopic Rongeurs,
(3x10, 4x10, 6x10, 6x12, 4x10 up- & 4x10 down angle)
5 Arthroscopic Rongeurs,
(Schlesinger, Wilde Ethmoid, McIlwraith Peapod)
Hook Grasping Forceps 2x2 teeth
Hook Grasping Forceps Suprapatellar

163-1000-00



arthroscopy.leibinger.vet

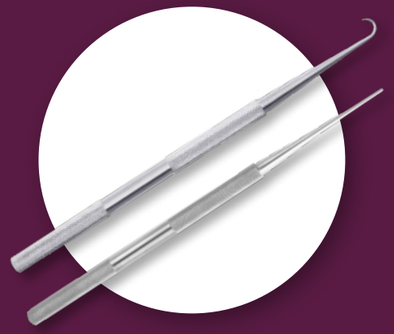
POWER TOOLS & INSTRUMENTS

OVERVIEW

Power Tools
Attachments & Saw Blades

Screw Extraction
Set & Instruments

Miscellaneous Instruments
also Storage and Sterilization Systems



Micro Surgery
Instruments

Sulcoplasty
Set & Instruments

POWER TOOLS, INSTRUMENTS, & SULCOPLASTY

RITA LEIBINGER MEDICAL

POWER TOOLS

RITA LEIBINGER MEDICAL

Advanced function controls

- High speed and oscillating drilling
- Low speed drilling, screw driving and tapping
- Torque limiting for screw driving
- Forward and reverse triggers
- Mode selector button with mechanical safety lock

Handpiece

DE SOUTTER V-MBQ-708
0-1350 rpm
Twin Trigger

125-5000-00

Compatible Batteries		Battery Housing	Battery Shield	Battery Charger
125-5006-00	DE SOUTTER AB-704 Large Battery	125-5007-00 DE SOUTTER V-AH-704	125-5008-00 DE SOUTTER AS-704	125-5060-00 DE SOUTTER BC-708
125-5055-00	DE SOUTTER AB-703 Small Battery	125-5056-00 DE SOUTTER V-AH-703	125-5057-00 DE SOUTTER AS-703	125-5059-00 DE SOUTTER BC-707

Straight Case Features

- Uses the same motor as V-MBQ-708
- Compatible with all V-MBQ-708 attachments (chucks, adapters, drivers)

Straight Case Modular Handpiece

DE SOUTTER V-MBQ-807
0-1350 rpm
Twin Trigger

125-5020-00

Compatible Batteries		Battery Housing	Battery Shield	Battery Charger
125-5006-00	DE SOUTTER AB-704 Large Battery	125-5007-00 DE SOUTTER V-AH-704	125-5008-00 DE SOUTTER AS-704	125-5060-00 DE SOUTTER BC-708
125-5055-00	DE SOUTTER AB-703 Small Battery	125-5056-00 DE SOUTTER V-AH-703	125-5057-00 DE SOUTTER AS-703	125-5059-00 DE SOUTTER BC-707

Jacobs Chuck

DE SOUTTER V-DQ-708
0.5 - 6.4 mm (1/4") keyed
speed (rpm) 0 - 1350
cannulation Ø mm 4.4

125-5001-00

AO Quick-Connection Chuck

DE SOUTTER V-DQ-708
small A.O Synthes/ASIF
speed (rpm) 0 - 1350
cannulation Ø mm 2.1

125-5002-00

Sagittal Saw Adapter

DE SOUTTER V-NQ-707
speed (cpm) 0 - 20000

125-5003-00

TPLO Saw Adapter

DE SOUTTER V-OQ-708
oscillating saw Uses Slocum blades
speed (cpm) 0 - 13500

125-5004-00

* Saw Blade not included

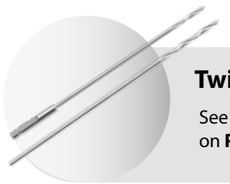
Pin Driver

DE SOUTTER V-WQ-707
0.7 - 4.0 mm wire capacity
speed (rpm) 0 - 1350

125-5005-00

Saw Blades

See saw blades on **Page 213.**



Twist Drill

See Drill Bits on **Page 220.**

Power Tools Tray

See sterilizable Trays for Power Tools on **Page 213.**

Advanced function controls

- High speed and oscillating drilling
- Low speed drilling, screw driving and tapping
- Torque limiting for screw driving
- Forward and reverse triggers
- Mode selector button with mechanical safety lock

Handpiece
DE SOUTTER V-MBU-470
0-1350 rpm
Twin Trigger

125-5050-00

Compatible Batteries		Battery Housing	Battery Shield	Battery Charger
125-5006-00	DE SOUTTER AB-704 Large Battery	125-5007-00 DE SOUTTER V-AH-704	125-5008-00 DE SOUTTER AS-704	125-5060-00 DE SOUTTER BC-708
125-5055-00	DE SOUTTER AB-703 Small Battery	125-5056-00 DE SOUTTER V-AH-703	125-5057-00 DE SOUTTER AS-703	125-5059-00 DE SOUTTER BC-707

Jacobs Chuck
DE SOUTTER V-DU-470
0.5 - 4.0 mm (5/32") Keyed
speed (rpm) 0 - 1350
cannulation Ø mm 4.1

125-5051-00

AO Quick-Connection Chuck
DE SOUTTER V-DU-470
small A.O Synthes/ASIF
speed (rpm) 0 - 1350
cannulation Ø mm 2.1

125-5052-00

Sagittal Saw Adapter
DE SOUTTER V-NU-470
speed (cpm) 0 - 20500 cpm

125-5053-00

Pin Driver
DE SOUTTER V-WU-471
0.7 - 4.0 mm capacity
speed (rpm) 0 – 1350

125-5054-00

ASEPTIC BATTERIES

Large battery
DE SOUTTER AB-703
Battery pack 14,6 V, Capacity (mAh) 2000
for charger 125-5060-00

125-5006-00

Battery housing
DE SOUTTER V-AH-703
for Battery 125-5006-00
for charger 125-5060-00

125-5007-00

Sterile Funnel
DE SOUTTER AS-703
for Battery 125-5006-00
for charger 125-5060-00

125-5008-00

Small battery
DE SOUTTER AB-703
Battery pack 10,95 V, Capacity (mAh) 2000
for charger 125-5059-00

125-5055-00

Battery housing
DE SOUTTER V-AH-703
for Battery 125-5055-00
for charger 125-5059-00

125-5056-00

Sterile Funnel
DE SOUTTER AS-703
for Battery 125-5055-00
for charger 125-5059-00

125-5057-00

DE SOUTTER BC-707 SINGLE BAY CHARGER
with 1 slot
for Battery Type AB-703 (Product Code 125-5055-00)

125-5059-00

DE SOUTTER BC-708 SINGLE BAY CHARGER
with 1 slot
for Battery Type AB-704 (Product Code 125-5006-00)

125-5060-00

*Battery not included

Why choose Lithium Ion battery technology?

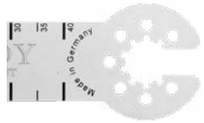
De Soutter Medical Lithium Ion batteries offer the surgical team and sterile services a number of tangible benefits over conventional battery technology, including:

- Li-Ion technology improves battery "capacity to weight" ratio by around 100% when compared to NiMH or NiCad chemistries
- Significantly extends the usable run time of the power tool
- Eliminates 'memory effect' normally associated with other battery types
- Unique fuel gauge incorporated within De Soutter Medical Li-Ion batteries allows the surgical team to instantly assess the battery capacity both before and during use

Sawblades - Samoy Rapid Cut

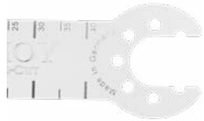
extreme cutting precision optimum performance protection against wear and tear titanium nitride*

Colibri



Aesculap

Linvatec-Hall

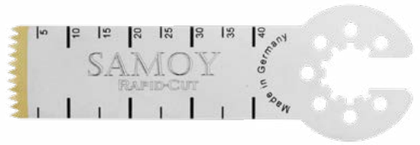


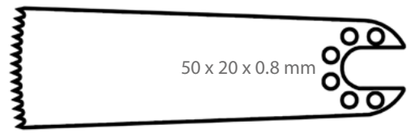
AO/Synthes

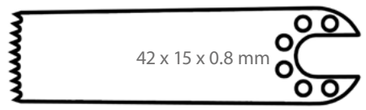
DeSoutter

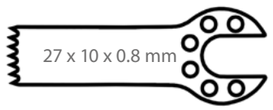
TERRIER

HORNET









Standard	Length x Width x Cutting Thickness			
for Connection	50 x 20 x 0.8 mm	42 x 15 x 0.8 mm	35 x 12 x 0.8 mm	27 x 10 x 0.8 mm
Colibri	**102-1420-50**	**102-1414-42**	**102-1411-35**	**102-1411-27**
Aesculap		**102-1714-42**	**102-1711-35**	**102-1711-27**
Linvatec-Hall	**102-1520-50**	**102-1514-42**	**102-1511-35**	**102-1511-27**
AO/Synthes	**102-1620-50**	**102-1614-42**	**102-1611-35**	**102-1611-27**
	50 x 19.8 x 0.6 mm	46 x 15 x 0.6 mm	25 x 10 x 0.6 mm	27 x 6.4 x 0.6 mm
DeSoutter	**102-16520-50**	**102-16515-46**	**102-16510-25**	**102-16506-27**
		40 x 16 x 0.95 mm	40 x 12 x 0.95 mm	
TERRIER		**102-1916-40**	**102-1912-40**	
		18 x 6 x 0.5 mm	24 x 9 x 0.5 mm	
HORNET		**102-2026-18**	**102-2026-24**	

"Petite"	Product Code	Length x Width x Cutting Thickness
Colibri	**102-1211-30**	30 x 11 x 0.6 mm
Aesculap	**102-1212-25**	25 x 10 x 0.7 mm
Linvatec-Hall	**102-1213-25**	25.5 x 9.4 x 0.65 mm
AO/Synthes	**102-1210-25**	25 x 10 x 0.6 mm

*Titanium Nitride (TiN) is one of the hardest and toughest materials in the medical field. TiN coated Saw-Blades lasts **up to 5 times longer**.

TPLO Saw Blades

with triangle connection

Leibinger TPLO Sawblades are coated with Titanium Nitride (TiN). Titanium Nitride (TiN) is one of the hardest and toughest materials in the medical field.

Product Code	Width
102-2100-09	09 mm
102-2100-12	12 mm
102-2100-15	15 mm
102-2100-18	18 mm
102-2100-21	21 mm
102-2100-24	24 mm
102-2100-27	27 mm
102-2100-30	30 mm
102-2100-33	33 mm

Sterilization Tray for Power Tools

For storage and sterilization of Power Tools
Tray with lid, without contents

Compatible with DeSoutter V-MBQ-708 and V-MBQ-807 (Product Code: 125-5000-00 and 125-5020-00) and attachments

125-5000-10

Compatible with DeSoutter V-MBU-470 (Product Code 125-5050-00) and attachments

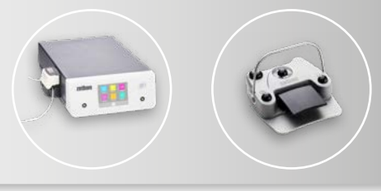
125-5050-10

**Tray with lid and silicone holders only.*
Power Tools and other contents not included.

HEKADRILL
Ultimate Precision

Developed with innovation and precision in mind

- High speed motor up to 85,000 rpm
- Allows high torque/low speed control (min. 200 rpm)
- Advanced motor control for comfort during extended use, and with minimal heat gain
- Adjustable bur exposure lengths
- Adjustable acceleration and braking functionality



hekaDrill Handpiece
DE SOUTTER HDS-121 (103347)
200-85,000 rpm
Cable length 4m

125-6050-00

hekaDrill Attachment, Straight
DE SOUTTER S-C07 (103360)
Length 70mm, Bur Size 2.38 mm

125-6051-00

hekaDrill Power Console
DE SOUTTER PC-121 (103318)
with irrigation

125-6052-00

Mains Power Cable
DE SOUTTER 8300
3m long, wit Euro plug

125-6052-01

Power Console with Irrigation

- Simultaneous dual handpiece operation
- Adjustable acceleration and braking functionality
- Integrated and customisable irrigation control with anti-drip mode
- 200+ user profiles can be stored and easily accessed
- Rings illuminate to indicate port satus for ease of use

Foot Pedal, wired
DE SOUTTER MFP-120 (103556)
with A or B tool selection and foot pedal underlighting

125-6053-00

Connecting and Charging Cable
DE SOUTTER 103597
4m long, connects and charges the foot pedals via power console

125-6053-01

hekaDrill Sterile Irrigation Kit
DE SOUTTER S101461
Box of 5

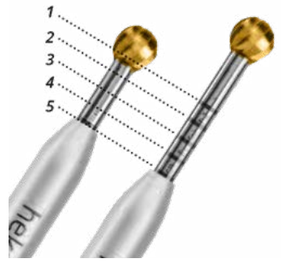
125-6054-00

** Drill attachment not included*

Fluted Bur, Ball
High Speed Bur, Fluted Ball Gold
Sold in packs of 5 pcs.

Product Code	DE SOUTTER Product Code	Size (mm)	Shaft Ø (mm)	Length (mm)
148-0650-20	C07-02031	**2.0**	2.38	70
148-0650-30	C07-03031	**3.0**	2.38	120
148-0650-50	C07-05031	**5.0**	2.38	120

** More sizes available on request*



Fluted Bur, Match
High Speed Bur, Fluted Match Gold
Sold in packs of 5 pcs.

Product Code	DE SOUTTER Product Code	Size (mm)	Shaft Ø (mm)	Length (mm)
148-0651-17	C07-01734	**1.7**	2.38	70
148-0651-30	C07-03034	**3.0**	2.38	70

** More sizes available on request*

** All Burs allow for 5 possible exposure positions offering total flexibility and reduced inventory costs*

S.O.S. Screw Extraction

CASE 1

Stripped screw head

If the screw head is stripped and the screwdriver is not engaging into the head of the screw

1. Choose a conical extractor that corresponds to the diameter of the screw. Choose one size larger when the screw drive is severely damaged.
2. Attach the conical extractor to the AO handle and insert it into the screw head recess. Applying slight pressure, turn the device counterclockwise.
3. As soon as the extractor fully engages, the screw will start to move. Continue turning until screw is completely removed.

CASE 2

Screw Head broke off

Screw head broke off and the screw shaft protrudes from the bone

1. Attach the extraction bolt to the AO Handle and place it on top of the protruding screw shaft.
2. Applying slight pressure, turn the device counterclockwise.
3. As soon as the extraction bolt engages and sufficient grip is achieved, the screw will start to move. Continue turning until the screw shaft is completely removed.

CASE 3

Broken screw shaft is below cortical surface of the bone

1. Either use a gouge chisel or a hollow reamer. Choose the correct diameter that corresponds to the screw size. Remove surrounding bone to expose enough of the screw shaft. A few initial threads is often sufficient.
2. Attach the corresponding extraction bolt to the AO Handle and place on top of the exposed screw shaft.
3. Applying slight pressure, turn the device counterclockwise.
4. As soon as the extraction bolt engages and sufficient grip is achieved, the screw will start to move. Continue turning until the screw shaft is completely removed.

Instruments

SCREW REMOVAL

RITA LEIBINGER MEDICAL

S.O.S. - Screw Removal Set

247-0000-00

Product Code	Description
150-0863-00	Wire Box for 24 Inserts, with Lid
150-0864-00	Wire Box for handles
247-0101-00	Silicone T-Handle, AO
247-0102-00	Screwdriver Handle Silicone, straight, AO
128-0300-15	Bone Pick, 15 cm
247-0110-00	Screwdriver Shaft LeiStar AO, T4, 1,28
128-1520-15	Screwdriver Shaft LeiStar AO, T6, 1,6 mm
247-0112-00	Screwdriver Shaft LeiStar AO, T7, 1,99 mm
247-0113-00	Screwdriver Shaft LeiStar AO, T8, 2,31 mm
247-0114-00	Screwdriver Shaft LeiStar AO, T9, 2,5 mm
247-0115-00	Screwdriver Shaft LeiStar AO, T10, 2,74 mm
247-0116-00	Screwdriver Shaft LeiStar AO, T15, 3,27 mm
247-0117-00	Screwdriver Shaft LeiStar AO, T25, 4,43 mm
247-0120-00	Screwdriver Shaft Cross Drive AO, CD1.0/1.2
247-0121-00	Screwdriver Shaft Cross Drive AO, CD 1.5/1.7
247-0122-00	Screwdriver Shaft Cross Drive AO, CD 2.0/2.3
247-0130-00	Screwdriver Shaft Hexagonal AO, 1.5mm
247-0131-00	Screwdriver Shaft Hexagonal AO, 2.5mm
247-0132-00	Screwdriver Shaft Hexagonal AO, 3.5mm
247-0133-00	Screwdriver Shaft Hexagonal AO, 2.0mm
247-0140-00	Extraction Bolt, AO for Screws 1.5 mm
247-0141-00	Extraction Bolt, AO for Screws 2.0 mm
247-0142-00	Extraction Bolt, AO for Screws 2.7 mm
247-0143-00	Extraction Bolt, AO for Screws 3.5/4.0 mm
247-0150-00	Conical Extractor, AO 1.5 / 2.0 mm
247-0151-00	Conical Extractor, AO 2.7 / 3.5 / 4.0 mm
247-0152-00	Conical Extractor, AO 4.5 / 5.0 / 6.5 / 7.0mm
247-0160-00	Hollow Reamer 1.5 / 2.0 mm
247-0161-00	Hollow Reamer 2.7 / 3.5 / 4.0 mm

Sterilization Container
See Sterilization Containers for Implants and Instruments Trays on **Page 228.**

Instruments

GENERAL INSTRUMENTS

Drills with Round Shaft

Product Code	Ø (mm)	Length (mm)	for Screw Ø (mm)
148-0080-07	0.7	45	1.0 mm
148-0080-10	1.0	45	1.3 mm
148-0080-11	1.1	45	1.5 mm
148-0180-11	1.1	85	1.5 mm
148-0080-15	1.5	70	2.0 mm
148-0180-15	1.5	130	2.0 mm
148-0080-18	1.8	125	2.4 mm

Product Code	Ø (mm)	Length (mm)	for Screw Ø (mm)
148-0080-20	2.0	85	2.7 mm
148-0080-25	2.5	95	3.5 mm
148-0080-27	2.7	85	3.5 mm
148-0080-32	3.2	180	4.0 mm
148-0080-35	3.5	180	4.5 mm
148-0080-45	4.5	180	6.0 mm

Drills with AO Shaft

self-centering

Product Code	Ø (mm)	Length (mm)	for Screw Ø (mm)
148-0081-07	0.7	72	1.0 mm
148-0081-10	1.0	72	1.3 mm
148-0081-11	1.1	60	1.5 mm
148-0181-11	1.1	85	1.5 mm
148-0081-15	1.5	85	2.0 mm
148-0181-15	1.5	110	2.0 mm
148-0081-18	1.8	125	2.4 mm

Product Code	Ø (mm)	Length (mm)	for Screw Ø (mm)
148-0081-20	2.0	100	2.7 mm
148-0081-25	2.5	110	3.5 mm
148-0181-25	2.5	165	3.5 mm
148-0081-27	2.7	110	3.5 mm
148-0081-32	3.2	145	4.0 mm
148-0081-35	3.5	110	4.5 mm
148-0081-45	4.5	195	6.0 mm

Drills with AO Shaft, cannulated

Product Code	Ø (mm)	Length (mm)	Cannulation Ø (mm)
148-0084-18	1.8	95	1.1
148-0084-23	2.3	95	1.1
148-0084-27	2.7	125	1.6
148-0084-38	3.8	125	1.6

Drill Guide

Standard

Product Code	Size (mm)
164-0070-20	1.1/1.5
164-0070-24	1.8/2.0
164-0070-27	2.7/2.0
164-0070-35	3.5/2.5

Drill Guide

Neutral / load

Product Code	Description
164-0071-15	for screws Ø 2.0 mm and drill Ø 1.5 mm
128-2418-24	for screws Ø 2.4 mm and drill Ø 1.8 mm
128-2720-27	for screws Ø 2.7 mm and drill Ø 2.0 mm
128-2535-35	for screws Ø 3.5 mm and drill Ø 2,5mm

Locking Drill Guide

Product Code	Description
164-0010-00	for 1.0 mm Screws, 0.7 mm Drill
164-0013-00	for 1.3 mm Screws, 1.0 mm Drill

Product Code	Description
164-0015-00	for 1.5 mm Screws, 1.1 mm Drill
164-0020-00	for 2.0 mm Screws, 1.5 mm Drill

Product Code	Description
164-2000-00	for 2.0 mm screws, 1.5 mm Drill
164-2400-00	for 2.4 mm screws, 1.8 mm Drill
164-2700-00	for 2.7 mm screws, 2.0 mm Drill
164-3500-00	for 3.5 mm screws, 2.5 mm Drill

Castroviejo

Caliper

17-3105-08

Depth Gauge

Product Code	Description	Compatibility
164-1013-20	150mm in length, scale up to 20mm	for 1.0/1.3/1.5 mm screws
164-1520-20	150mm in length, scale up to 40mm	for 1.5/2.0/2.4 mm screws
164-2735-60	150mm in length, scale up to 60mm	for 2.4/2.7/3.5 mm screws

Screw Depth Gauge, cannulated

for K-Wires up to Ø 1.6, cannulated 150

164-1600-00

Screwdriver Shaft Hex

AO conncection, (Holding Sleeve recommended)

Product Code	Description
128-0900-15	for 1.5/2.0 mm screws, 100 mm long
128-0900-20	for 2.4 mm screws, 100 mm long
134-0900-24	for 2.4 mm screws, 130 mm long
128-0900-25	for 2.7 / 3.5 mm screws, 100 mm long

Holding Sleeve

for Hexagonal Screwdriver Shafts

Product Code	Size
128-0940-24	2.0 / 2.4 mm
128-0940-25	2.7 / 3.5 mm

Screwdriver Shaft LeiStar

AO conncection, self-holding
(no Holding Sleeve needed)

Product Code	Description
128-1013-00	T5, for 1.0 mm Screws, 60 mm in length
128-1520-15	T6, for 1.5 mm Screws, 60 mm in length
128-1520-20	T8, for 2.0 / 2.4 mm screws, 60 mm in length
128-2024-08	T8, for 2.0 / 2.4 mm screws, 100 mm in length
128-2735-10	T10, for 2.7 / 3.5 mm screws, 100 mm in length
134-0800-27	T10, for 2.7 / 3.5 mm screws, 135 mm in length

Screwdriver Shaft LeiStar, cannulated

AO connection

Product Code	Description
128-2431-06	2.4 mm, 90mm, cannulated, T6 for 2.4 / 3.1 mm screws
128-3039-08	3.0 mm, 90mm, cannulated, T8 for 3.0 / 3.9 mm screws
128-4050-10	4.0 mm, 90mm, cannulated, T10 for 4.0 / 5.0 mm screws
128-5060-15	5.0 mm, 90mm, cannulated, T15 for 5.0 / 6.0 mm screws

Mini-AO QC Screwdriver 1.5/2.0

Handle
128-0807-00

Shaft, hexagonal
128-0905-15

Holding Sleeve
128-0905-17

Screwdriver 2.4 Propylux Hex

Without Holding Sleeve, Propylux handle

128-0911-25

Screwdriver Handle

Silicone, AO-Connection
sterilizable up to 134°C / 273°F

Product Code	Description
247-0103-00	compact, compatible with 2.0/2.4
247-0102-00	standard, compatible with 2.7/3.5

Torque Limiting Screwdriver Handle

Torque 3 Nm
Silicone, AO, sterilizable up to 134°C / 273°F

247-0104-00

Screwdriver T-Handle

Silicone, AO, not cannulated
sterilizable up to 134°C / 273°F

247-0101-00

LEIKUTA Bone Plate Holding Forceps

with spin lock

Product Code	Description
128-0538-13	135 mm, 45 mm working end, angled up
128-0539-13	140 mm, 45 mm working end, straight

Bone Holding Forceps

with spin lock

Product Code	Description
128-0544-03	140 mm, 3 mm working end, curved
128-0544-07	140 mm, 7 mm working end, curved

Bone Plate Holding Forceps with Drill Guide

with spin lock

Product Code	Description
128-0540-14	140 mm, for 1.5mm drill, for 2.0mm screws
128-0540-15	150 mm, for 1.8/2.0mm drill, for 2.4/2.7mm screws
128-0540-16	155 mm, for 2.5mm drill, for 3.5mm screws

Bone Holding / Reduction Forceps

Curved, with spin lock

Product Code	Description
128-0541-09	95 mm, with 2 stepped working ends
128-0541-13	135 mm, with 2 sharp pointed working ends
128-0541-14	140 mm, with 1 sharp pointed and 1 stepped working end

Bone Holding / Reduction Forceps

135 mm, curved, with 1 sharp and 1 stepped working end, with spin lock

128-0543-14

Bone Holding Forceps

215 mm, with spin lock

128-0525-21

Plate Holding Forceps
90 mm, curved

164-0050-09

Plate Holding Forceps
17 cm, angled

164-0051-17

Bending Irons AO Type 1.0/1.3
130 mm, Pair

128-0881-10

Bending Irons AO Type 1.5/2.0
130 mm, Pair

128-0881-15

Bending Iron
Pair

Product Code	Description
128-0820-24	180mm, for 2.0/2.4 LeiLOX Locking Plates
128-0827-35	220mm, for 2.7/3.5 LeiLOX Locking Plates

Bending Irons AO Type 2.7/3.5/4.5
140mm, Pair

Product Code	Description
128-0880-27	right
128-0881-27	left

RL X-RAY Markers - RITA LEIBINGER Design
With 2.0 cm scale, 0.5 cm steps

100-0000-02

Radiography Calibration Ball
Flexible arm, Stainless Steel 25mm Ø Reference Ball and base plate

100-2000-25

Screw Racks
(without screws)

Product Code	Description
150-0515-00	for 1.5 mm screws
150-0520-00	for 2.0 mm screws
150-0524-00	for 2.4 mm screws
150-0527-00	for 2.7 mm screws
150-0535-00	for 3.5 mm screws
150-4027-00	for 2.7mm screws (extended: 6-52mm)
150-4035-00	for 3.5 mm screws (extended: 6-70mm)

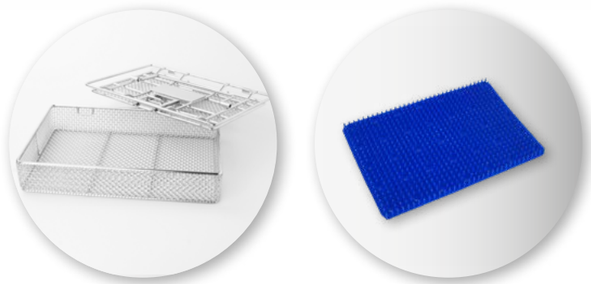
Instrument Cassette #10
for 10 Instruments

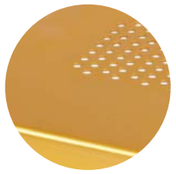
150-0300-10

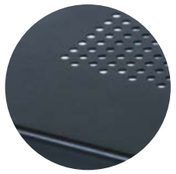
Wire Basket with Silicone Mat

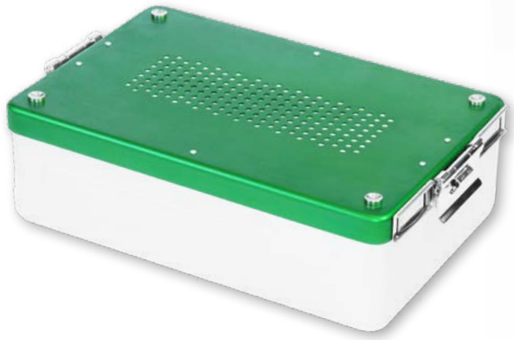
Sterilization Wire Basket with Lid
265 x 177 x 56.5 mm
Sterilization Mat, silicone
262 x 173 x 14 mm
autoclavable up to 134 ° C

138-1000-10









Sterilization Container

for Trays, includes 1 pc. single-use paper filter

Product Code	Description
150-5401-30	312 x 189 x 134 mm, fits 2 trays, blue lid
150-5402-30	312 x 189 x 134 mm, fits 2 trays, green lid
150-5401-00	310 x 190 x 100 mm, fits 1 tray only, blue lid
150-4501-00	310 x 190 x 100 mm, fits 1 tray only, green lid

** More sizes and colors available upon request*

Teflon Filter for Sterilization Containers

220 x 150mm, extended-use, up to 1200 cycles

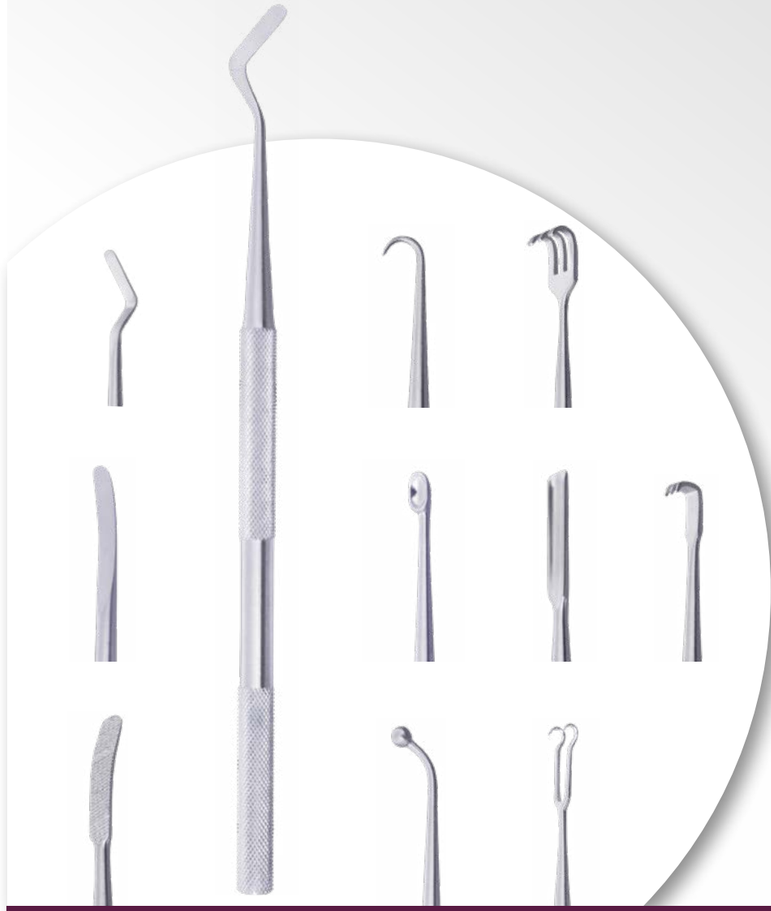
150-8020-30

Paper Filter, single use

230 x 170mm, single-use, Pack of 50 pcs.
for 150-540x-30 steri containers

150-8020-50

Instruments



MICRO SURGERY

Original Size (15 cm)

The Small Bone Orthopedic Instrument are offered in 70 various Instruments, and will offer surgeons the choice to create their own SBOI Set.

We offer the SBOI Sterilization Tray for 5 – 10 and 20 Instruments.

Bone Lever
Curved up, 3 mm tip

170-1038-03

Bone Lever
Curved side, 3mm tip

170-1037-03

Bone Hook
Sharp 1 prong

170-1170-01

Bone Hook
Blunt 1 prong

170-1225-07

Langenbeck
Langenbeck Retractor

Product Code	Description
170-1235-06	10x6 mm
170-1236-04	11x4 mm

Periosteal Elevator
Periosteal Elevator

Product Code	Description
170-1025-02	slight cvd. 2mm tip
170-1029-06	slight cvd. 6mm tip
170-1030-07	slight cvd. 7mm tip
170-1031-08	slight cvd. 8mm tip

Bone Curette
Bone Curette

Product Code	Description
170-1040-02	2 mm
170-1045-03	3 mm

Product Code	Description
170-1050-04	4 mm
170-1055-05	5 mm

Gouge

Product Code	Description
170-1082-02	2 mm tip
170-1083-03	3 mm tip
170-1084-04	4 mm tip
170-1085-05	5 mm tip
170-1086-06	6 mm tip

Product Code	Description
170-1087-07	7 mm tip
170-1088-08	8 mm tip
170-1090-10	10 mm tip
170-1092-12	12 mm tip

Bone File
Straight, fine

Product Code	Description
170-1114-04	4 mm wide, straight, fine
170-1115-06	6 mm wide, straight, fine
170-1120-06	6 mm wide, straight, fine

Bone File
Curved, coarse

Product Code	Description
170-1104-04	4 mm wide, curved, coarse
170-1105-06	6 mm wide, curved, coarse

Bone File
Curved, fine

Product Code	Description
170-1124-04	4 mm wide, curved, fine
170-1125-06	6 mm wide, curved, fine

Bone Awl

Product Code	Description
170-1135-05	5 mm tip
170-1137-25	2,5 mm tip

Bone Packer

Ball tip

Product Code	Description
170-1155-02	2 mm ball tip
170-1156-03	3 mm ball tip
170-1157-04	4 mm ball tip
170-1158-05	5 mm ball tip

Bone Tamper

Round Handle, 15 cm

Product Code	Description
170-1140-01	Bone Tamper, 1 mm tip
170-1142-02	Bone Tamper, 2 mm tip
170-1145-03	Bone Tamper, 3 mm tip
170-1146-04	Bone Tamper, 4 mm tip
170-1150-05	Bone Tamper, 5 mm tip

Joseph Hook

2-prong

Product Code	Description
170-1211-02	Joseph Hook, sharp, 2-prong, 2 mm wide
170-1210-03	Joseph Hook, sharp, 2-prong, 3 mm wide
170-1216-04	Joseph Hook, blunt, 2-prong, 4 mm wide
170-1215-06	Joseph Hook, sharp, 2-prong, 4 mm wide
170-1212-07	Joseph Hook, sharp, 2-prong, 7 mm wide
170-1218-05	Joseph Hook, sharp, 2-prong, 8 mm wide

Senn Miller Hook

Product Code	Description
170-1220-08	sharp, 3-prong, 8 mm curved, 11 mm wide
170-1222-08	blunt, 3-prong, 8 mm curved, 11 mm wide
170-1223-08	sharp, 2-prong, 8 mm curved, 7 mm wide

Meyerding Retractor

Product Code	Description
170-1232-04	6x4 mm
170-1234-04	10x4 mm
170-1233-04	6x4 mm, concave

Cushing Retractor

No. 3, straight

Product Code	Description
170-1266-06	6 mm, rigid
170-1268-08	8 mm, rigid, concave
170-1269-08	8 mm, rigid, flat
170-1270-10	10 mm, rigid
170-1273-12	12 mm, rigid

Hohmann Retractor

Product Code	Description
170-1005-04	4 mm tip
170-1005-06	6 mm tip
170-1010-09	9 mm tip

Scalpel Handle

Product Code	Description
170-1305-03	No. 3, angled
170-1300-03	No. 3, straight

Osteotome

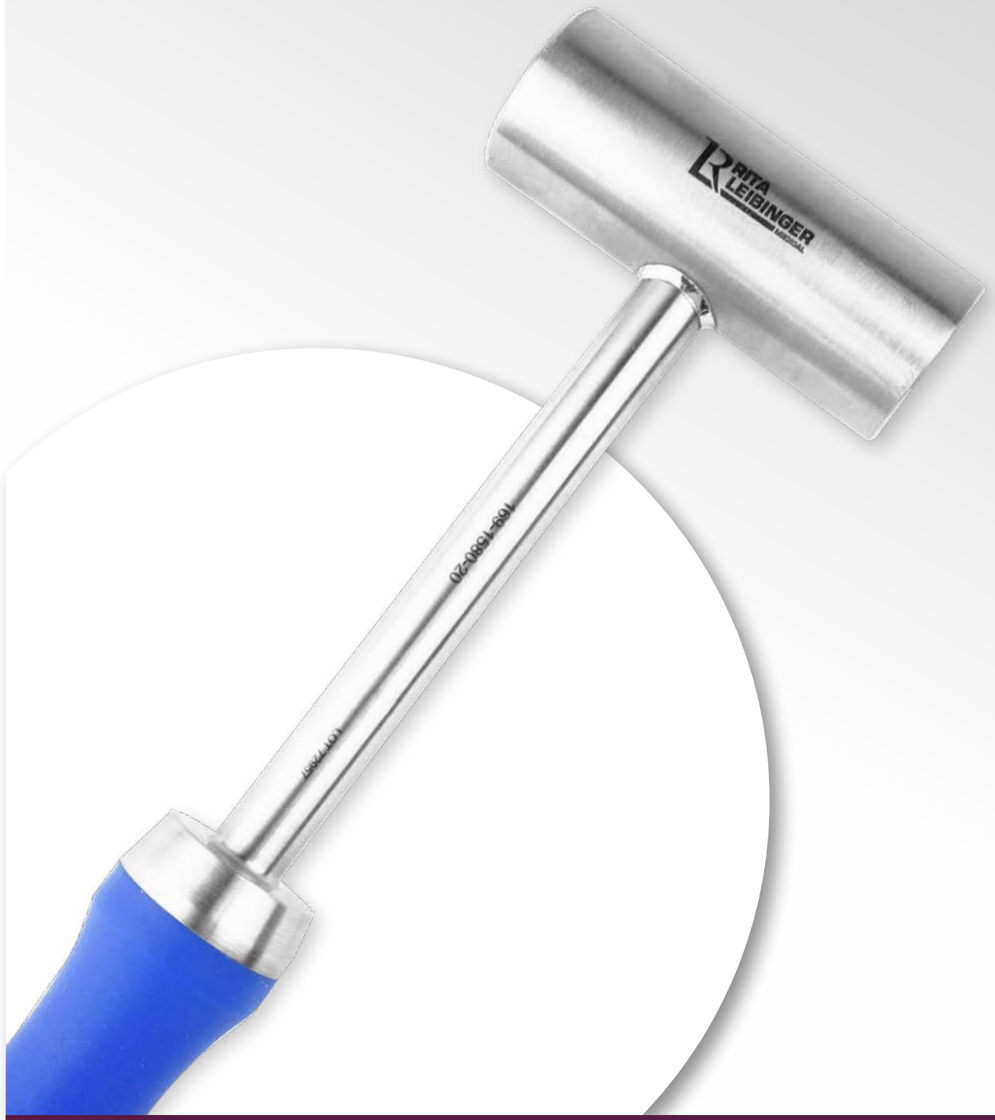
Product Code	Description
170-1062-02	2 mm tip
170-1063-03	3 mm tip
170-1065-05	5 mm tip
170-1066-06	6 mm tip

Product Code	Description
170-1067-07	7 mm tip
170-1070-10	10 mm tip
170-1072-12	12 mm tip

Instrument Cassette #10

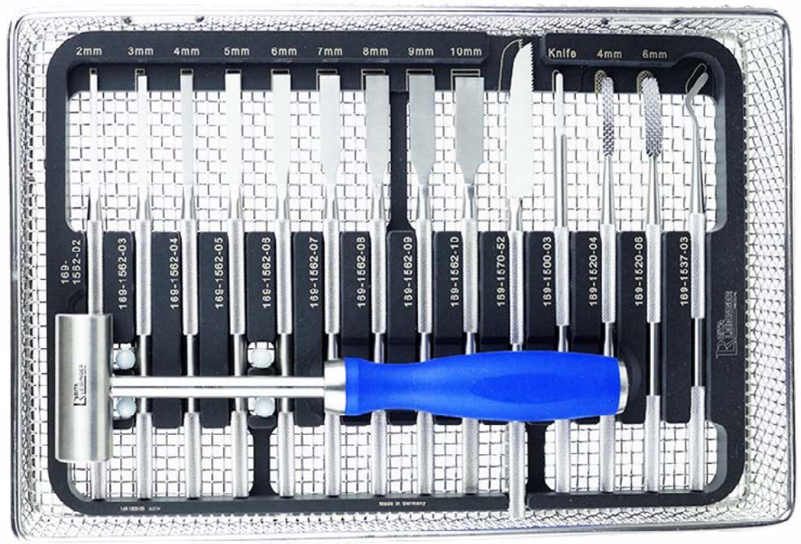
for 10 Instruments

150-0300-10



SULCOPLASTY

RITA LEIBINGER MEDICAL



Sulcoplasty Set

169-1500-00

Tray without contents

169-1500-01

Product Code	Description	Qty
169-1500-01	Sulcoplasty Instrument Tray (without contents)	1
169-1500-03	Sulcoplasty Scalpel Handle, No. 3, 16 cm, straight, Non-Slip Handle Design	1
169-1537-03	Sulcoplasty Bone Lever, 16 cm, 3 mm wide tip, angled laterally, Non-Slip Handle Design	1
169-1520-04	Sulcoplasty Bone File, 17 cm, 4 mm, slightly curved upwards, Non-Slip Handle Design	1
169-1520-06	Sulcoplasty Bone File, 17 cm, 6 mm,slightly curved upwards, Non-Slip Handle Design	1
169-1562-02	Sulcoplasty Osteotome, 16 cm, 2 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-03	Sulcoplasty Osteotome, 16 cm, 3 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-04	Sulcoplasty Osteotome, 16 cm, 4 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-05	Sulcoplasty Osteotome, 16 cm, 5 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-06	Sulcoplasty Osteotome, 16 cm, 6 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-07	Sulcoplasty Osteotome, 16 cm, 7 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-08	Sulcoplasty Osteotome, 16 cm, 8 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-09	Sulcoplasty Osteotome, 16 cm, 9 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1562-10	Sulcoplasty Osteotome, 16 cm, 10 mm wide tip, thickness 0.9mm, Non-Slip Handle Design	1
169-1570-52	Sulcoplasty / Osteotomy Bone Saw 17 cm, Cutting length 52mm, Cutting width 0.5mm, Non-Slip Handle Design	1
169-1580-20	Orthopedic hammer, length 200 mm, weight 225 g, blue silicone handle	1

Sulcoplasty Scalpel Handle

No. 3, 16 cm, straight

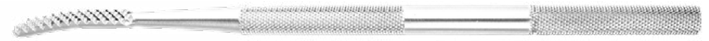
169-1500-03

Sulcoplasty Bone Lever

16 cm, 3 mm wide tip, angled laterally

169-1537-03

Sulcoplasty Bone File



Product Code	Description
169-1520-04	17 cm, 4 mm, slightly curved upwards
169-1520-06	17 cm, 6 mm, slightly curved upwards

Sulcoplasty Osteotome

Product Code	Description
169-1562-02	16 cm, 2 mm wide tip, thickness 0.9mm
169-1562-03	16 cm, 3 mm wide tip, thickness 0.9mm
169-1562-04	16 cm, 4 mm wide tip, thickness 0.9mm
169-1562-05	16 cm, 5 mm wide tip, thickness 0.9mm
169-1562-06	16 cm, 6 mm wide tip, thickness 0.9mm
169-1562-07	16 cm, 7 mm wide tip, thickness 0.9mm
169-1562-08	16 cm, 8 mm wide tip, thickness 0.9mm
169-1562-09	16 cm, 9 mm wide tip, thickness 0.9mm
169-1562-10	16 cm, 10 mm wide tip, thickness 0.9mm

Sulcoplasty / Osteotomy Bone Saw

Cutting length 52mm, Cutting width 0.5mm

169-1570-52

Blade only

169-1570-52-1

Orthopedic Hammer

Length 200 mm, Weight 225 g, blue silicone handle

169-1580-20

STERILIZATION

Sterilization of products with fractional pre-vacuum procedure (in accordance with ISO 13060 / ISO 17665) in consideration of the respective national requirements. We recommend to perform a fractional pre-vacuum procedure with the following parameters:

- Fractional pre-vacuum (three times)
- Sterilization parameter 132 °C
- Holding period 3 min. (full cycle)
- Drying time 10 min.

STORAGE

Sterilised products should be stored in a dry, clean and dust-free area at moderate temperature from 5°C to 40°C.

ADDITIONAL INFORMATION

The user takes full responsibility for the processing facilities, the equipment and materials used, the personnel, as well as the proper execution of the processes to achieve the targeted results. This usually requires validation and routine monitoring of the process and equipment used.

POWER TOOLS STERILIZATION

Cleaning, disinfection and sterilization guide

Cleaning and disinfection

All consumables, parts and battery must be removed before cleaning. Always close the end cap of the battery chamber before cleaning!
Wipe the surfaces immediately after use with a lint-free cloth moistened with a cleaning agent or disinfectant, or use a disinfectant spray, to prevent exudates or other contamination from drying on the surface.
For this manual wipe-down, use a cleaning agent or disinfectant approved for
surface disinfection under national regulations (DGHM – German Association of Hygiene and Microbiology).
Please follow the manufacturer's instructions for correct dilution, exposure time etc.
In the case of heavy contamination, the power tool can also be carefully cleaned under running water (never perform machine cleaning or soak cleaning).

Note

Excessive exposure to saline solutions or solutions containing iodine or chloride may cause harmful reactions. Damage may also be caused by strong acids and alkaline solutions or incorrectly used disinfectants. The quality of the water used for cleaning and rinsing is another possible factor affecting corrosion or surface damage for the drill and attachments.
The power tool must never be boiled or immersed in water or cleaning solutions.

CAUTION!

Always close the end cap of the battery chamber before cleaning!

Machine and ultrasonic cleaning of power tools in thermal disinfectors is strictly prohibited.

Sterilization

The power tool with end cap of the battery chamber and funnel can be sterilised at up to 2 bar at 134°C / 273°F in the steam steriliser, for up to 6 minutes. Cooling time before use is 60 minutes.
It is advisable to place the equipment on a cloth or wrap it in a cloth to prevent external or internal damage.
To ensure proper sterilisation, the battery chamber must always be closed.

Maintenance

The power tool should be regularly lubricated to ensure a long service life and smooth operation. We recommend the use of 1 drop LeiLube special instrument oil.

CAUTION!
The rechargeable battery must never be sterilized.

INSTRUCTIONS FOR USE OF SURGICAL INSTRUMENTS

Warnings

The cleaning of narrow lumens or holes requires special attention! In general, our products will be delivered unsterile. All instruments have to be completely cleaned, disinfected and sterilized before initial use according to the following procedures.

Indications

It is very important to check each surgical instrument for function and any visible damages before use. Damaged products should be scrapped or sent back to the manufacturer for maintenance. Restrictions of reprocessing: Frequent reprocessing has minimal effect on our instruments. The end of the product life cycle is determined by wear and damage through use.

Defective products should undergo the entire sterilization process before sending back to the manufacturer.

Place of use

Immerse products in cold water immediately after each use (<40°C). Do not use cleaning agents or hot water (>40°C) as this may result in the fixation of residues and could reduce the cleaning success (risk of protein coagulation / denaturation). Remove surface contamination with a disposable, single-use towel or paper towel.

Transport

Always store and transport instruments safely to avoid damages.

Preparation for decontamination

When possible and where applicable, the instruments should be disassembled and/or unfastened or opened (e.g. for hinged instruments) before proceeding further with the processing steps.

Manual Cleaning

- Immerse products in cold water for 5 min. and brush with a nylon brush thereafter.
- Flush products with a water pressure gun (with a static water pressure of at least 3.8 bar).
- Clean products in an ultrasonic bath with a smooth alkaline cleaner (neodisher Mediclean, Dr. Weigert, Hamburg).

Machine Cleaning

Machine cleaning process (Program Vario TD ; G 7735 CD Miele):

- Pre-rinse for 2 min. with cold water
- Drain water
- Clean for 5 min. at 55°C with 0,5% alkaline cleaning agent (neodisher Mediclean, Dr. Weigert, Hamburg)
- Drain water
- Neutralize for 3 min. with cold tap water
- Drain water
- Rinse for 2 min. with cold tap water

Special manufacturer's instructions of the cleaning machine should be followed.

Disinfection

Manual Disinfection

1. Immerse products in disinfectant approved by RKI or VAH. Please follow the manufacturer's instructions for use of the disinfectant.
2. Rinse products with fully demineralized water.

Automatic Disinfection

Automatic thermic disinfection in a cleaning and disinfection machine should conform to the national requirements to the A0-value.

Drying

Manual drying should be carried out using a lint free cloth. The product should never be heated over 134°C. To avoid residual water in hollows, it is recommended to blow out with sterile compressed air.

Automatic drying should be in accordance to the automatic drying process of the cleaning and disinfection machine. If necessary, subsequent manual drying with lint free cloth and blowing out of lumen by sterile, oil-free compressed air may be done.

Service, control and review

Test for function and check for contamination. If necessary, repeat the cleaning and disinfection process to remove residual contamination.

Packaging

Products should be packaged in suitable sterile packaging.

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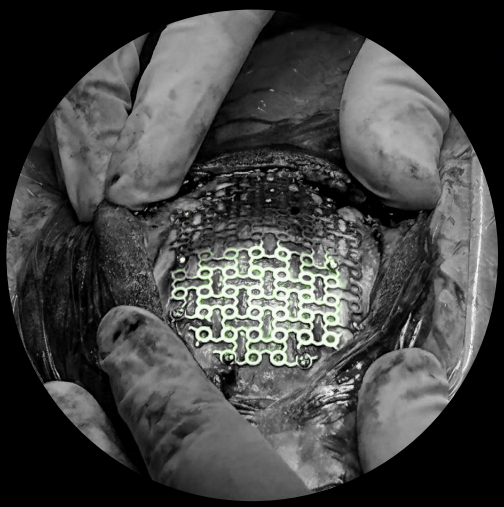
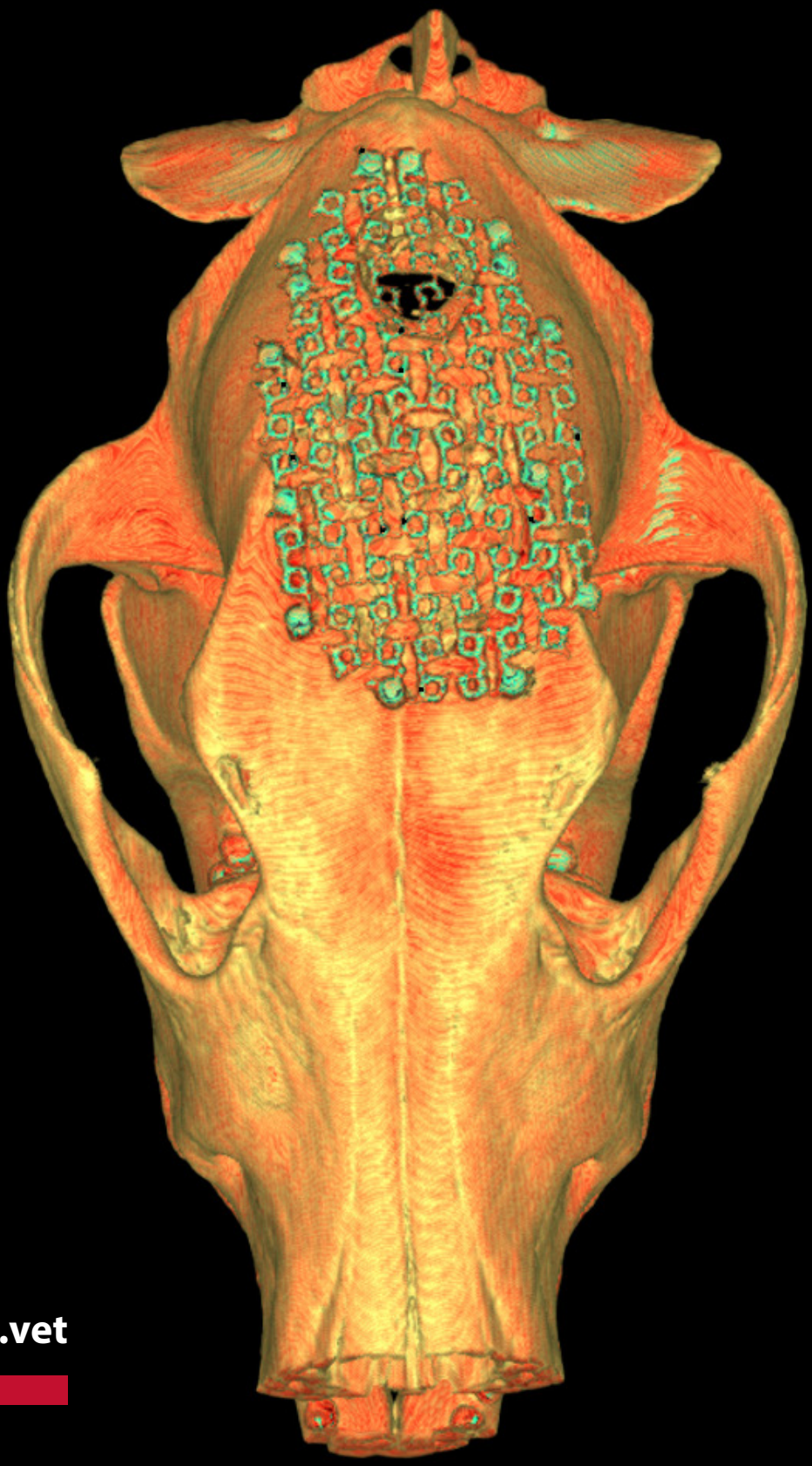
Notes





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