

Special Instruments – for Hand Surgery



Special Instruments – for Hand Surgery

Hand surgical interventions nowadays request more than just basic instruments. Besides indication-related systemsthe need for special products containing supporting functions is more and more increasing.

However, the necessity of those products is often under-estimated. Therefore we set our target to offer easy-to-use instruments and systems in this meaningful field.

Thus we for example provide self-retaining wound spreaders to grant autonomous and unaltered exposure of small access openings or components to achieve intraoperatively the best possible fixation of the hand.



Table of Contents

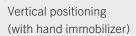
	Pages
Hand Arthroscopy System	6-9
Fixation Hand	10-11
Wrist Positioning Device	12-13
Vickers Wound Spreaders	14-15
Vickers EasidriverTM	16-17
Iliac Crest Mill	18-21
CarpalStick	22-23
SL Ligament Disimpaction Forceps	24-25
EasyCut	26-27
Universal Screw Removal System	28-29
Hand Surgery – Overview Implant Systems	30-31

Hand Arthroscopy System

Where injured joint structures of the carpal region require treatment, wrist arthroscopy has established itself as a surgical procedure with a comparatively low rate of complications in recent years.

For this reason, we have developed a system that allows the surgeon to place the patient's hand in the best possible position horizintal or vertical for the arthroscopic task at hand.



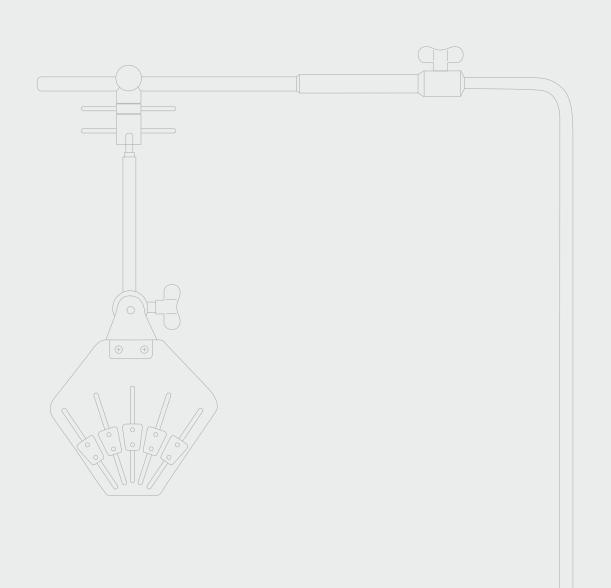




Vertical positioning (with finger extension sleeves)



Horizontal positioning (with hand immobilizer)



Hand Arthroscopy System



15-910-63-07 Hand immobilizer for hand arthroscopy, sterilizable

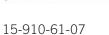


22-596-01-07 small 22-596-02-07 medium 22-596-03-07 large

Finger extension sleeve, autoclavable"



15-910-62-07 Horizontal suspension bar for finger extension sleeves



Vertical bar for horizontal placement 40 cm



15-910-60-07

Arm extension 50 cm

15-910-60-22

Arm extension, long 65 cm



15-910-64-07

Vertical bar for hand arthroscopy, with ball joint 46 cm





15-910-52-07 Fixation clamp, non-insulated

15-910-59-07

Main support arm for hand arthroscopy Ø 16 mm

Set recommendations

Vertical positioning

Item No.	System components		
15-910-03-07	Set complete		
	consisting of:		
15-910-52-07	Fixation clamp, non-insulated		
15-910-59-07	Main support arm		
15-910-60-07	Arm extension		
15-910-63-07	Hand immobilizer		
15-910-64-07	Vertical bar with ball joint		

Horizontalpositioning

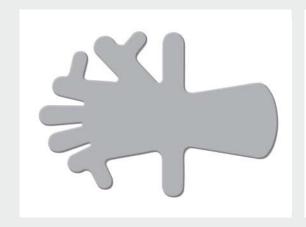
Item No.	System components
15-910-52-07	Fixation clamp, non-insulated
15-910-59-07	Main support arm
15-910-61-07	Vertical bar
15-910-63-07	Hand immobilizer
15-910-64-07	Vertical bar with ball joint

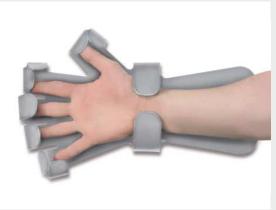
Fixation Hand

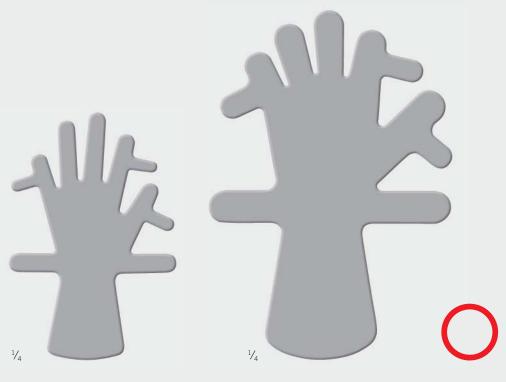
Due to the superior properties of the materials from which it is made, the KLS Martin Fixation Hand has proved to be an excellent device for intraoperative fixation of the hand.

This lead fixation hand can be quickly and easily bent in any direction. What's more, it can just as conveniently be returned to its initial form without causing fatigue in the material.

This allows the hand to be operated on to be optimally fixed in place as required by the situation and in accordance with the surgeon's needs.







Icon explanations:

Silicone

Lead

23-960-01-04

Fixation hand for children

Pb

23-960-02-04

Fixation hand for adults

Pb

Silicone ring small 24 x 3 mm

Silicone ring medium 27 x 3 mm

23-960-24-04 23-960-27-04 23-960-44-04

Silicone ring large 34 x 3 mm

Wrist Positioning Device

Especially where scaphoid fractures are concerned, correct placement of the wrist in extension or flexion position has an important influence on the surgical result.

Our wrist positioning device has been developed with a view to provide a better alternative to the conventional method of placing the wrist on a stack of folded textile cloths.

This device offers the surgeon stable fixation of the wrist during the operation. Whether with its palmar or dorsal side, the wrist can be conveniently placed on the device in overextended position to give the surgeon a better view of the opened wrist and the radius during the operation.





Wrist position for palmar approach

Wrist position for dorsal approach



23-963-00-04
Wrist Positioning Device, complete

23-963-01-04 Lower part 23-963-02-04 Upper part

Vickers Wound Spreaders

In hand and traumatologic surgery, it is essential to ensure that small access openings are reliably kept open throughout the intervention.

Moreover, the surgeon must often be able to perform the operation without the help of an assistant (whose task is to keep the wound open), especially in emergency surgery.

For this reason, we have developed the Vickers wound spreaders. They are ideal for keeping small access openings perfectly open, can be operated single-handedly and adapt themselves automatically to wound size.



Vickers 15-792-00-01

Low Profile 1

for hand and carpal tunnel, complete with center blade, 10 x 18 mm



Vickers 15-793-00-01

Low Profile 2

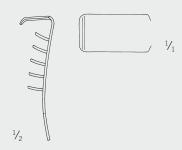
for hand and forearm, complete with center blade, 10 x 18 mm



Vickers 15-794-00-01

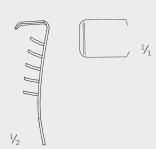
Low Profile 3

for snapping fingers and small incisions, complete with center blade, $10 \times 18 \text{ mm}$



15-792-01-01

Center blade only 10 x 18 mm



15-792-02-01

Center blade only 10 x 12 mm



Vickers 15-798-01-01

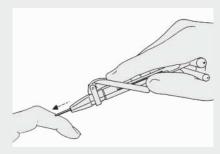
Finger wound spreader

Vickers Easidriver™

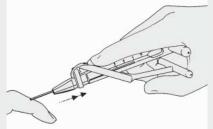
In orthopedic and traumatologic surgery, it is often necessary to insert, shorten and subsequently remove Kirschner wires.

Also, it is usually important for the surgeon to be able to insert K-wires single-handedly because the other hand is needed for manipulating tissue, for example.

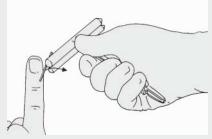
For this reason, we have developed the Vickers Easidriver $^{\text{TM}}$ — an instrument that simplifies the guiding of Kirschner wires as it can be easily operated single-handedly.



The wire is safely grasped with a gentle adduction of the thumb and is then screwed in or out with a simple rotational movement of the forearm.



Abduction of the thumb opens the Easidriver™ and allows fast adjustment of the appropriate length of the wire.



The handles feature bending devices for different wire diameters.



Vickers 22-618-00-07 Easidriver™

Iliac Crest Mill

In reconstructive surgery, filling bony defects is a frequent necessity. To this end, the use of autogenous, well vascularized spongiosa still represents the so-called "Golden Standard".

The iliac crest certainly is the most preferred donor site, given the very high quality of bone grafts harvested there. And even though the process of grafting bone material from the iliac crest region is a very simple operation in itself, complications are nonetheless common, with patients complaining about persistent pain and secondary hemorrhaging being a frequent side-effect.

For this reason, we have developed an instrument that greatly facilitates iliac crest bone grafting and, thanks to the special and simple surgical technique, prevents painful scars and nerve damage at the same time.



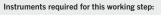
To position the mill correctly, an approx. 4-cm-long skin incision is made 2 to 3 cm below the iliac crest and at least 2 cm dorsally to the antero-inferior iliac spine. This is followed by careful dissection of the hypodermis to prevent damage to the nerve branches with their irregular paths. Blunt dissection with a periosteal elevator is then used to keep the outer muscles of the iliac wing apart.



The guide tube is directly applied to the bone and its teeth are driven in a little with a mallet to prevent the guide sleeve from slipping away. The hollow mill is then inserted into the guide tube and moved forward by continuous handle rotation. As soon as resistance is felt to weaken, the cutter has cut through the opposite corticalis.



The bone cylinder remains in the guide tube and is subsequently removed with the tamper.





Instruments required for this working step:



Iliac Crest Mill



23-190-05-07 22.5 cm / 8 ¾" Iliac crest mill, complete



23-190-06-07 22.5 cm / 8 ¾" Iliac crest mill, complete



Components



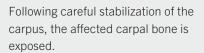
CarpalStick

Following post-traumatic or degenerative arthritis of the wrist rescue operations such as partial midcarpal arthrodesis after excision of the affected carpal bone may often be the last resort to relieve the patient's discomforts. However the extraction of the bone is not easily carried out and sometimes requires a considerable expenditure of force and holding effort.

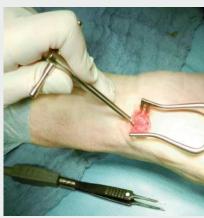
Specifically for fixation and extraction of the carpal bone, we have developed the CarpalStick – an instrument which gets into the structure of the bone like a corkscrew.

Thereby, via the T-handle large forces can be transmitted into the threads of the instrument. To ensure patient's safety and to grant best possible performance of the instrument this single-use article is offered sterile packed.





Paying due regard to the soft tissue situation, the CarpalStick can now be drilled into the bone at right angles to the bone surface while maintaining a uniform movement.



Once the affected carpal bone has been properly exposed, the extraction process can be started.



Using bone holding forceps, the extracted bone piece is removed from the CarpalStick for subsequent disposal.

Icon explanations:

STERILE | steam sterilized



23-192-00-71

CarpalStick single-use only

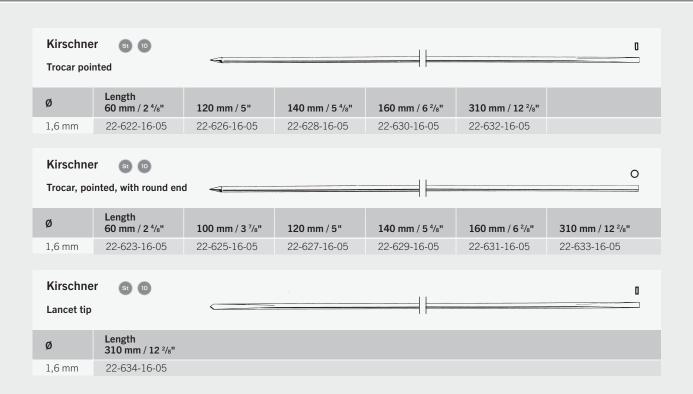
Surgical technique: Dr. med. Eva-Maria Baur, Murnau

SL Ligament Disimpaction Forceps

Scapholunate dissociation occurs as a result of a ligament rupture between the scaphoid and lunate bones, usually caused by a fall on the hand or an impact injury from ball sports.

To complement our line of hand surgery instruments, we have added the new SL ligament disimpaction forceps to our range of products.

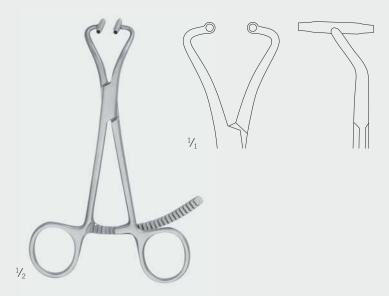
After performing reduction of the scaphoid and lunate bones, the two carpal bones can be held in their correct position using two parallel Kirschner wires and the forceps as the primary measure. The pressure and locking mechanism of the forceps prevent the bones from moving apart. This makes it possible to stabilize the construct without any problems. These new forceps are designed to permit the insertion of two Kirschner wires of 1.6 mm in diameter (see attachment for item number) exactly parallel to each other, considerably simplifying reduction.





Preoperative 3 mm gap





23-721-15-07
SL Ligament Disimpaction Forceps

EasyCut

The implantation of Kirschner wires rarely means that the wire is inserted fully. To shorten it to the correct length, however, considerable force must usually be applied. This is exactly where our EasyCut comes in. Thanks to its special design, wires with a diameter of up to 3.0 mm can be cut with little effort.

Since the handle has no sharp edges and incorporates no screws, the instrument can be handled conveniently with no risk of injury.

The removable TC hard-metal cutting inserts can be replaced easily, no special knowledge required.



Cutting K-wire with the EasyCut



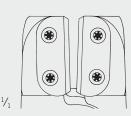
22-523-25-07

EasyCut 20 cm / 8"

TC GOLD

Icon explanations:

TC GOLD TC Instruments with hard-metal inserts



22-523-81-98

Hard-metal (TC) inserts for EasyCut

TC GOLD

Universal Screw Removal System

Osteosynthesis systems are available from numerous manufacturers. Micro screws and mini screws etc. are available in diameters ranging from 0.8 mm through 3.5 mm. The most common screw head configurations are Single Slot, Centre Drive®, Cruciate Philips and Hexagonal Socket.

The KLS Martin universal screw removal system provides 17 interchangeable screwdriver blades in one compact kit allowing the easy removal of virtually any common cranio-maxillofacial osteosynthesis screw.

Set

50-600-00-04	Universal screw removal system,
	Set complete with blades 1-18
	and screwdriver handle

	Storage, consisting of:
55-962-37-04	Twin insert module, gray
55-964-31-04	Insert for screw removal set (A) SD
55-964-32-04	Insert for screw removal set (B)
55-963-29-04	Lid for screw removal set

Blades

Blade		Screw		Screw head socket
50-425-11-07	Nr. 1	1.5/2.0 mm	\ominus	Slot
50-425-12-07	Nr. 2	2.0/2.3 mm		Centre Drive
50-425-13-07	Nr. 3	1.3/2.4 mm		Cross-recessed
50-425-14-07	Nr. 4	2.7/3.5/4.0 mm	0	Hexagon socket
50-425-15-07	Nr. 5	2.0/2.7 mm	(1)	Philips
50-425-16-07	Nr. 6	0.8/1.0/1.2 mm		Cross-recessed
50-425-17-07	Nr. 7	1.5 mm		Centre Drive
50-425-18-07	Nr. 8	1.0 mm		Centre Drive
50-425-19-07	Nr. 9	2.7 mm		Centre Drive
50-425-20-07	Nr. 10	2.7 mm	\ominus	Slot
50-425-21-07	Nr. 11	2.0 mm	0	Hexagon socket
50-425-22-07	Nr. 12	2.3/2.7 mm	0	Hexagon socket
50-425-23-07	Nr. 13	all		Bone explantation blade
50-425-25-07	Nr. 15	1.5 mm		Torx/star/T-Drive T5
50-425-24-07	Nr. 16	2.0 mm		Torx/star/T-Drive T6
50-425-26-07	Nr. 17	2.5 mm		Torx/star/T-Drive T7
50-425-27-07	Nr. 18	2.7/3.5 mm		Torx/star/T-Drive T8



50-600-00-04 Universal Screw Removal System Set, complete



50-425-05-07 Screwdriver handle, rigid

Hand Surgery

A field where we can offer you much more than just standard treatment solutions for, say, distal radius fractures. Many of our products are intended to help you to achieve outstanding results in difficult, non-everyday situations as well. Products such as our Ulna Head Prosthesis (UHP) or the Flower Plate for mediocarpal partial arthrodesis are excellent examples.

Our objective is to simplify hand surgery interventions via intelligent system solutions, helping you to achieve the best possible results in the interest of the patient. Working in close cooperation with well-known authors and their teams, we have translated new ideas into innovative products that are consistently being developed further in an ongoing process. The result is a wide range of high-quality systems that impress with their clever design along with easy and safe handling.

Furthermore we have never lost sight on the economic perspective and service needs of our customers.

We consider ourselves as a true partner — to be relied upon for routine tasks and special challenges alike.



KLS Martin Group

KLS Martin Australia Pty Ltd.

Sydney · Australia Tel. +61 2 9439 5316 australia@klsmartin.com

KLS Martin India Pvt Ltd.

Chennai · India Tel. +91 44 66 442 300 india@klsmartin.com

Martin Nederland/Marned B.V.

Huizen · The Netherlands Tel. +31 35 523 45 38 nederland@klsmartin.com

KLS Martin LP

Jacksonville · Florida, USA Tel. +1 904 641 77 46 usa@klsmartin.com

KLS Martin do Brasil Ltda.

São Paulo · Brazil Tel. +55 11 3554 2299 brazil@klsmartin.com

Martin Italia S.r.l.

Milan · Italy Tel. +39 039 605 67 31 italia@klsmartin.com

Gebrüder Martin GmbH & Co. KG

Moscow · Russia Tel. +7 499 792-76-19 russia@klsmartin.com

Gebrüder Martin GmbH & Co. KG

Shanghai · China Tel. +86 21 5820 6251 china@klsmartin.com

Nippon Martin K.K.

Tokyo · Japan Tel. +81 3 3814 1431 nippon@klsmartin.com

Gebrüder Martin GmbH & Co. KG

Dubai · United Arab Emirates Tel. +971 4 454 16 55 middleeast@klsmartin.com

KLS Martin France SARL

Mulhouse · France Tel. +33 3 8951 3150 france@klsmartin.com

KLS Martin SE Asia Sdn. Bhd.

Penang · Malaysia Tel. +604 505 7838 malaysia@klsmartin.com

KLS Martin UK Ltd.

London · United Kingdom Tel. +44 1189 000 570 uk@klsmartin.com

Gebrüder Martin GmbH & Co. KG A company of the KLS Martin Group

KLS Martin Platz $1\cdot78532$ Tuttlingen \cdot Germany P.O. Box $60\cdot78501$ Tuttlingen \cdot Germany Tel. +49 7461 706-0 \cdot Fax +49 7461 706-193 info@klsmartin.com \cdot www.klsmartin.com

