



Special Instruments –  
for Hand Surgery



In the field of hand surgery we not only offer you solutions for standard restorations, but also products for unusual and difficult situations. We therefore regard ourselves as being a true highly specialized partner in all matters relating to hand surgery with our intelligent system solutions.

## Table of Contents

	Pages
Hand Arthroscopy System	6-9
Vigorimeter	10-11
Wrist Positioning Device	12-13
Vickers Wound Spreaders	14-15
Vickers Easidriver™	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



---

## Special Instruments – for Hand Surgery

Hand surgical interventions nowadays request more than just basic instruments. Besides indication-related systems the 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.

## 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 horizontal or vertical for the arthroscopic task at hand.



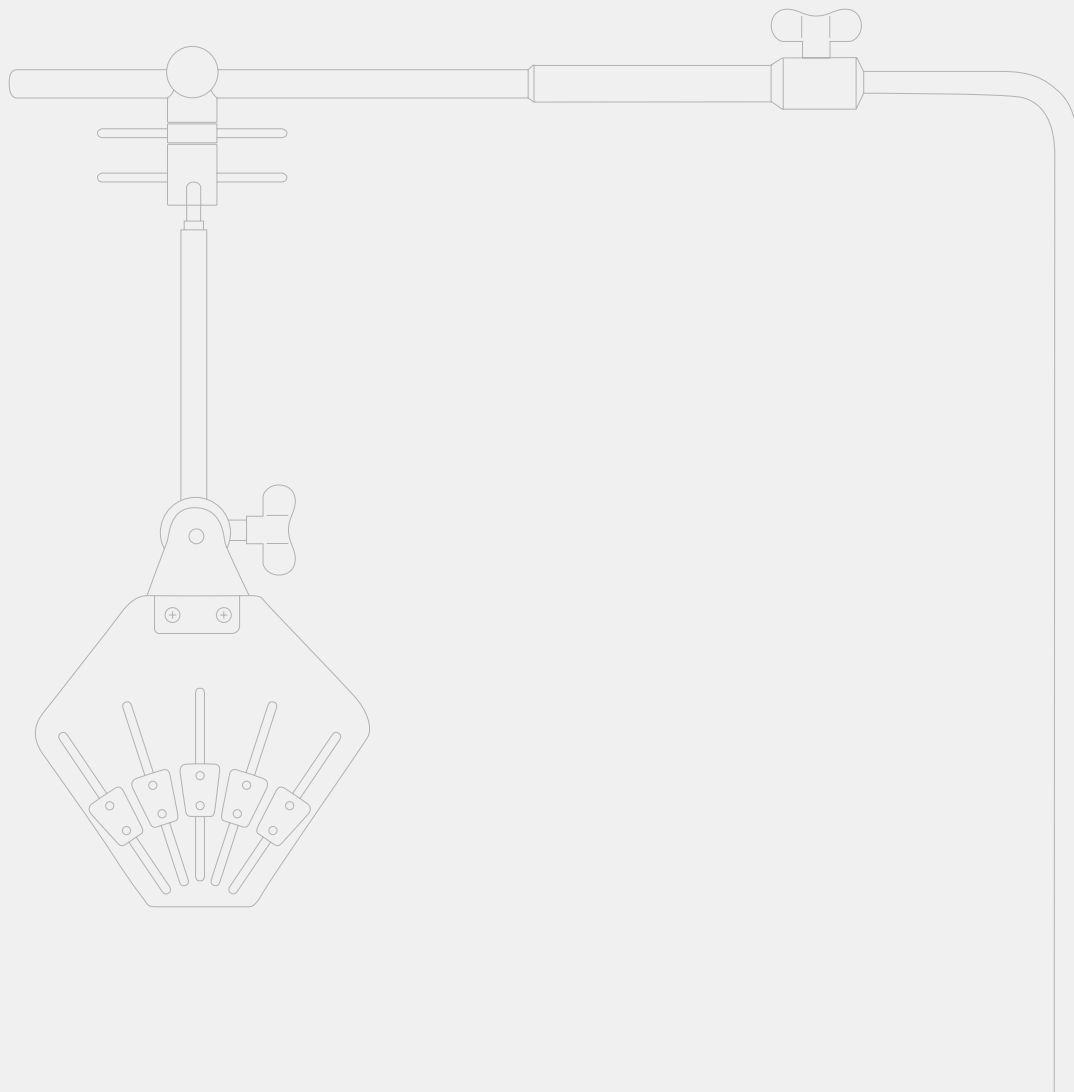
Vertical positioning  
(with hand immobilizer)



Vertical positioning  
(with finger extension sleeves)



Horizontal positioning  
(with hand immobilizer)



## Hand Arthroscopy System



15-910-63-07

Hand immobilizer for hand arthroscopy, sterilizable



22-596-11-07 small  
22-596-12-07 medium  
22-596-13-07 large  
22-596-14-07 extra large

Finger extension sleeve,  
autoclavable"



15-910-62-07

Horizontal suspension bar  
for finger extension sleeves



15-910-61-07

Vertical bar for horizontal placement  
40 cm



15-910-60-07  
Arm extension, short  
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



## Storage



55-442-15-04  
microStop® container  
600 x 300 x 160 mm

55-808-75-01  
Tray



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
<b>15-910-03-07</b>	<b>Set complete</b>
	<b>consisting of:</b>
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

### Horizontal positioning

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

## Vigorimeter

In medical diagnosis, the testing of muscle strength plays a multipurpose role.

The Vigorimeter is a user-friendly dynamometer in which the measurement results are displayed by a manometer. This is connected to pear-shaped rubber bulbs of various sizes using tubing and metal connectors.

The key advantage of the Vigorimeter is not only its ease of use, but also the delivery of reliable, accurate test results. And all this, across a wide spectrum of individual applications, ranging from small children to adolescents and adults.



Finger test



Thumb test



Grip strength test



1/4

**Vigorimeter**

17-400-01-04

complete with 3 rubber bulbs and manometer in plastic box

17-400-01-22

Vigorimeter with calibration certificate



Art. No	Components
17-400-05-04	Replacement rubber bulbs, set of 3 sizes
17-400-94-98	Rubber bulb, small
17-400-90-98	Rubber bulb, medium
17-400-95-98	Rubber bulb, large
17-400-91-98	Tubing alone, with push-on cone

## 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

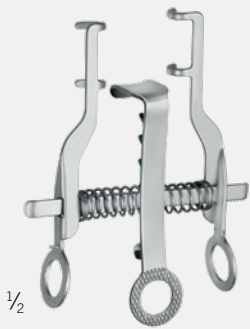
23-963-02-04  
Upper part

## 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.



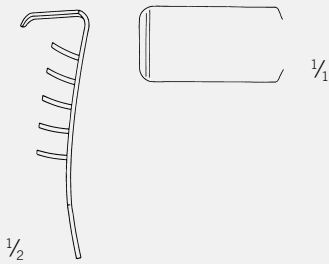
Vickers  
15-792-00-01  
Low Profile 1  
for hand and carpal tunnel,  
complete with center blade,  
10 x 18 mm



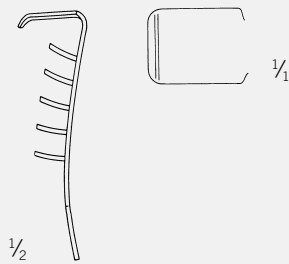
Vickers  
15-793-00-01  
Low Profile 2  
for hand and forearm,  
complete with center blade,  
10 x 18 mm



Vickers  
15-794-00-01  
Low Profile 3  
for snapping fingers and small incisions,  
complete with center blade,  
10 x 18 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

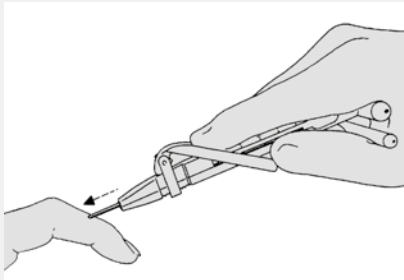
## Vickers Easidriver™

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

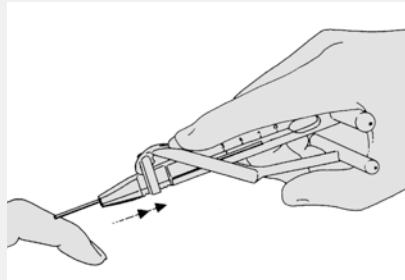
Also, it is usually important for the surgeon to be able to insert K-wires single-handedly because the other hand is needed for manipulating tissue, for example.

For this reason, we have developed the Vickers Easidriver™ – an instrument that simplifies the guiding of Kirschner wires as it can be easily operated single-handedly.

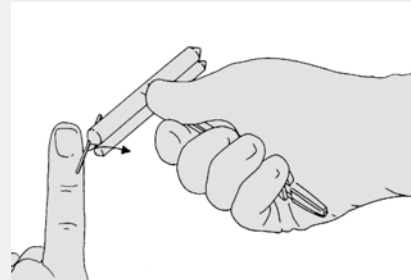




The wire is safely grasped with a gentle adduction of the thumb and is then screwed in or out with a simple rotational movement of the forearm.



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.



1/2

For insertion and extraction of K-wires Ø 0.8 - 1.6 mm

Vickers  
22-618-00-07  
Easidriver™

## Iliac Crest Mill

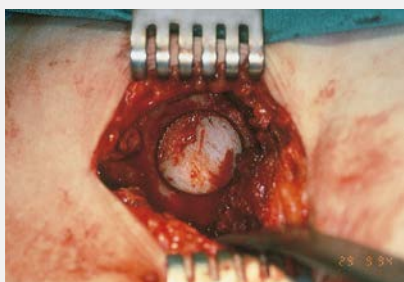
In reconstructive surgery, filling bony defects is a frequent necessity. To this end, the use of auto-genous, well vascularized spongiosa still represents the so-called “Golden Standard”.

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:**



**Instruments required for this working step:**



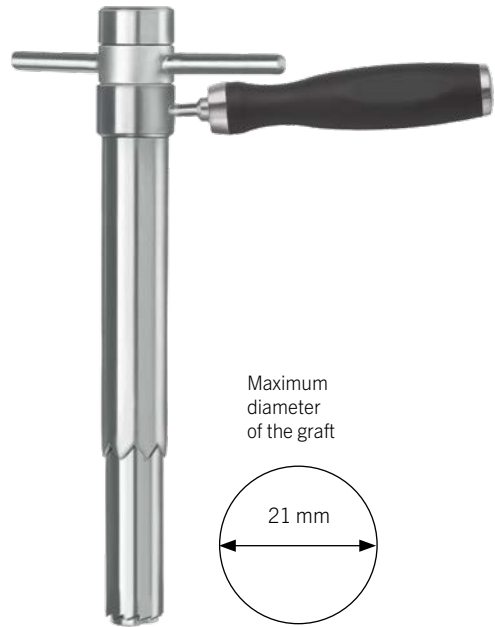
## Iliac Crest Mill



Maximum diameter of the graft

16 mm

23-190-05-07  
22.5 cm / 8 3/4"  
Iliac crest mill, complete



Maximum diameter of the graft

21 mm

23-190-06-07  
22.5 cm / 8 3/4"  
Iliac crest mill, complete





## Components

Icon explanations:

 Silicone



## 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.

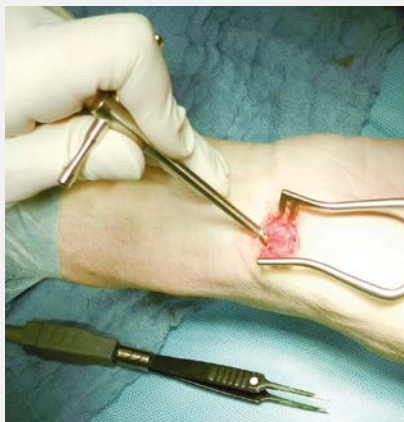
Specifically for fixation and extraction of the carpal bone, we have developed the CarpalStick – an instrument which gets into the structure of the bone like a corkscrew.

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.



Following careful stabilization of the carpus, the affected carpal bone is exposed.

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



1/2

**23-192-00-71**

CarpalStick  
single-use only

## 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.

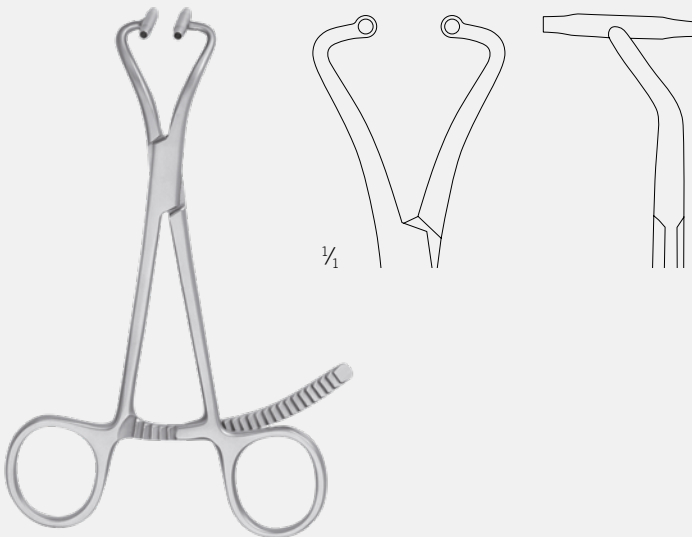
To complement our line of hand surgery instruments, we have added the new SL ligament disimpaction forceps to our range of products.

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.

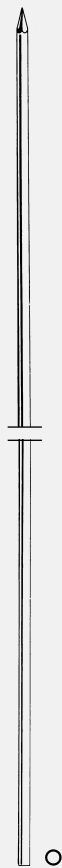




Preoperative 3 mm gap



23-721-15-07  
SL ligament disimpaction forceps



Kirschner  
22-631-16-05  
Trocar, pointed, with round end  
Ø 1.6 mm, length 160 mm / 6<sup>2</sup>/<sub>8</sub>"  
SU = 10/pack

22-633-16-05  
Trocar, pointed, with round end  
Ø 1.6 mm, length 310 mm / 12<sup>2</sup>/<sub>8</sub>"  
SU = 10/pack

## 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.

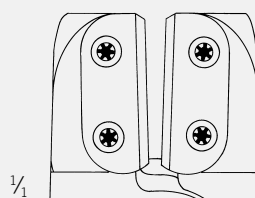
The removable TC hard-metal cutting inserts can be replaced easily, no special knowledge required.



Cutting K-wire with the EasyCut



22-523-25-07  
EasyCut  
20 cm / 8"  
**TC GOLD**



22-523-81-98  
Hard-metal (TC) inserts  
for EasyCut  
**TC GOLD**

Icon explanations:

**TC GOLD** TC Instruments with hard-metal inserts

## 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	No.	Screw		Screw head socket
50-425-11-07	No. 1	1.5/2.0 mm	⊖	Slot
50-425-12-07	No. 2	2.0/2.3 mm	⊖	Centre Drive®
50-425-13-07	No. 3	1.3/2.4 mm	⊕	Cross-recessed
50-425-14-07	No. 4	2.7/3.5/4.0 mm	⊖	Hexagon socket
50-425-15-07	No. 5	2.0/2.7 mm	⊕	Philips
50-425-16-07	No. 6	0.8/1.0/1.2 mm	⊕	Cross-recessed
50-425-17-07	No. 7	1.5 mm	⊖	Centre Drive®
50-425-18-07	No. 8	1.0 mm	⊖	Centre Drive®
50-425-19-07	No. 9	2.7 mm	⊖	Centre Drive®
50-425-20-07	No. 10	2.7 mm	⊖	Slot
50-425-21-07	No. 11	2.0 mm	⊖	Hexagon socket
50-425-22-07	No. 12	2.3/2.7 mm	⊖	Hexagon socket
50-425-23-07	No. 13	all		Bone explantation blade
50-425-25-07	No. 15	1.5 mm	⊕	Torx/star/T-Drive T5
50-425-24-07	No. 16	2.0 mm	⊕	Torx/star/T-Drive T6
<b>Optional</b>				
50-425-26-07	No. 17	2.5 mm	⊕	Torx/star/T-Drive T7
50-425-27-07	No. 18	2.7/3.5 mm	⊕	Torx/star/T-Drive T8

\* Storage option for the optional blades is provided in the universal screw explantation system



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.

**Linos**

for hand fracture treatment



**HBS 2**

for the treatment of fractures and non-unions in small bones



**Ixos®**

for the treatment of distal radius fractures



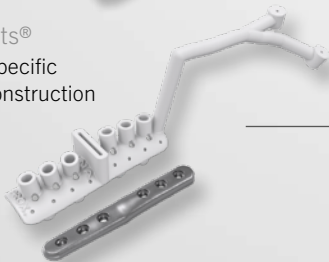
**IPS Implants®**

for patient-specific radius reconstruction



**IPS Implants®**

for patient-specific forearm reconstruction



**CapFlex PIP**

for endoprosthetic treatment of the PIP joints



**Genos**

for internal distraction of metacarpal bones



**Flower Plate**

for mediocarpal partial arthrodesis



**UHP**

for treating disorders of the distal radioulnar joint



**Recos®**

for ulnar shortening and radius reconstruction osteotomies



## KLS Martin Group

### **KLS Martin Australia Pty Ltd.**

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

### **KLS Martin Italia S.r.l.**

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

### **KLS Martin Nederland B.V.**

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

### **KLS Martin UK Ltd.**

Reading · United Kingdom  
Tel. +44 118 467 1500  
info.uk@klsmartin.com

### **KLS Martin do Brasil Ltda.**

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

### **KLS Martin Japan K.K.**

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

### **KLS Martin SE & Co. KG**

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

### **KLS Martin LP**

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

### **KLS Martin Medical (Shanghai) International Trading Co., Ltd**

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

### **KLS Martin SE Asia Sdn. Bhd.**

Penang · Malaysia  
Tel. +604 261 7060  
malaysia@klsmartin.com

### **KLS Martin Taiwan Ltd.**

Taipei · Taiwan  
Tel. +886 2 2325 3169  
taiwan@klsmartin.com

### **KLS Martin SE Asia Sdn. Bhd.**

Hanoi · Vietnam  
Tel. +49 7461 706-0  
info@klsmartin.com

### **KLS Martin India Pvt Ltd.**

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

### **KLS Martin de México, S.A. de C.V.**

Mexico City · Mexico  
Tel. +52 55 7572 0944  
mexico@klsmartin.com

### **KLS Martin SE & Co. KG**

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



### **KLS Martin SE & Co. KG**

#### **A company of the KLS Martin Group**

KLS Martin Platz 1 · 78532 Tuttlingen · Germany  
PO Box 60 · 78501 Tuttlingen · Germany  
Tel. +49 7461 706-0 · Fax +49 7461 706-193  
info@klsmartin.com · www.klsmartin.com