

# CATALOG



Zürich Cementless Total Hip System™  
THR\*



Cupless™ Zürich Partial Hip System  
PHR\*



Double Pelvic Osteotomy  
DPO\*



Patellar Groove Replacement  
PGR™\*



Tibial Tuberosity Advancement  
TTA



Tibial Tuberosity Advancement 2  
TTA-2™\*



Tibial Plateau Leveling Osteotomy  
TPLO\*



Toy Breed Geometry Modification  
mini TPLO\* & mini TTA



Advanced Locking Plate System  
ALPS™\*



Titanium Contoured Locking Biological Fixation  
mini ALPS\* ( 3.5mm / 4.0mm ;  $\phi$ 1.6mm,  $\phi$ 1.0mm )



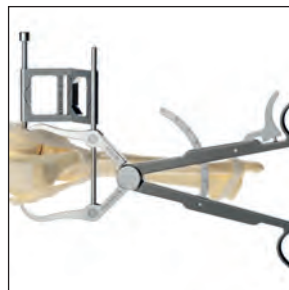
Proximal Interphalangeal Arthrodesis  
PIP\*



Proximal Abducting Ulnar Osteotomy  
PAUL™\*



Proximal Abducting Ulnar Osteotomy  
PAUL-2™\*



Fine Touch Locking Instruments  
Targeting Forceps\*



General and Specialist Instruments  
mini TPLO Jig



|              |  |      |
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KYON Veterinary Surgical Products was incorporated in 1999, in Zurich, Switzerland, to provide the veterinary orthopedic community with innovative products for joint surgery in dogs. KYON (kyon- Greek for dog) invents new techniques, designs implants and instruments, clinically tests all procedures and materials, utilizes cutting edge manufacturing technology to produce the highest quality products, educates the veterinary community and distributes worldwide.

When renowned Soviet physician Gavriil Abramovich Ilizarov journeyed to the western countries in the 1990s to share his life's work, he presented hundreds of slides with two words, "Aparat; Resultat." With limited knowledge of foreign languages, Prof. Ilizarov let the slides speak for themselves, saying, "Aparat" for the slides of fractures and corrective osteotomies fixed with the Ilizarov apparatus and "Resultat" for the slides of the successfully healed bones. The Ilizarov approach to treatment of bone fractures and deformities was a major advancement in orthopedics and trauma.

KYON founder, Dr. Slobodan Tepic had the opportunity to see Prof. Ilizarov lecture and the scene left an indelible mark on Dr. Tepic and his approach to the field of orthopedic surgery. "Aparat; Resultat," which means, in essence: the correct apparatus yields the desired outcome, has become the KYON mission. We invent, design, clinically test, manufacture, and educate with this in mind. Tremendous effort goes into the development of KYON procedures and careful steps are taken to ensure every procedure has undergone extensive research and development prior to broad clinical release.

KYON implants and instruments are invented and developed through iteration during clinical testing, to best meet the exacting demands of the procedure and surgical convenience, with optimal selection of materials and manufacturing techniques for precision, durability, and maintenance. KYON products are manufactured with proprietary processes that produce superior products to those made by conventional manufacturing.

We are committed to providing our surgeons, pet owners and patients with successful and reproducible surgical outcomes. Adverse effects of orthopedic surgery may not manifest for several years, but, with sound biomechanical rationales, careful design, manufacture, and refinement based on clinical feedback, permanent orthopedic correction is possible.

KYON procedures are most successful when the surgeon/clinic assembles a team, makes a serious commitment to online, course, and cadaver training, has a consistent case load, and regular follow-up examinations. It must be understood that common sense, caution, and care are factors that cannot be built into any procedure. Caution and care must be supplied by the person(s) planning for the procedure. We strongly recommend instructional training.

Stifle, hip and fracture repair systems have made major advances in recent decades, but surgeons and their patients are still troubled by difficult cases, adverse events, and less than ideal outcomes. KYON is committed to providing the veterinary orthopedic community with the best possible implants and instruments.

KYON continues to develop new techniques and products to further advance the field of veterinary orthopedic surgery. Your input is invaluable. Your patronage drives our efforts.



## COURSES | CONFERENCES | EVENTS

KYON procedures are technically demanding. Even for the most experienced surgeons, we strongly recommend instructional training. KYON sponsors instructional courses to facilitate the introduction of KYON techniques into clinical practice. We offer multi-instructor, 1, 2, and 3 day courses, emphasizing surgical technique, planning, hands-on exercises (bone model & wet lab), and discussion. Online training materials, surgical technique presentations, and videos are provided in advance.

### COURSE CONTENT:

- instruction in lecture / video / bone model / cadaver formats
- technical / practical instruction
- bone model and wet lab exercises
- ample discussion and wet lab post-op review
- presentations on clinical experience, advanced techniques, avoiding/managing complications, new/ongoing research



## SYMPOSIUM

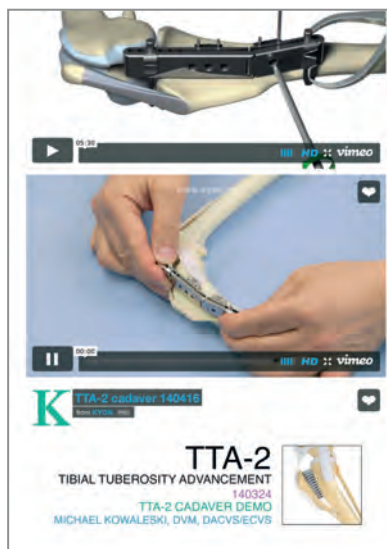


ZURICH, CH - BOSTON, US

Every April, KYON hosts a Symposium primarily for clients, but open to all veterinary professionals. Each Symposium provides a forum for addressing advancements, adaptations, issues and complications in veterinary orthopedic and trauma surgery.

In addition to a dynamic international faculty of human and veterinary orthopedic opinion leaders who present, we give attendees a glimpse into our ongoing research and development in the area of veterinary orthopedic surgery.

## COMMUNITY



The KYON Community is an online library of educational materials for KYON procedures. We hope you find the resources interesting and informative.

The content contained in the KYON Community is not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution, and care are factors that cannot be built into any procedure. Caution and care must be supplied by the person(s) planning for the procedure. These are technically demanding procedures. We strongly recommend instructional training.

These documents are for educational purposes only. Use of these documents, in whole or part, for commercial purposes without the approval of the original creator is prohibited. Fortunately, KYON and all of the instructors are extremely helpful, friendly and generally willing to share their content with you. We advise you to contact us/them directly for approval to use content from their presentations. This tends to result in your receiving a more current/better version.

We hope you find the content helpful and please do comment. Your input is essential to the evolution of these procedures.

For more details and information, visit us at [www.kyon.ch](http://www.kyon.ch)

## SOCIAL MEDIA

Follow and like us on Facebook! Follow us to receive the latest news, upcoming events, updates and amazing cases performed by your colleagues.

[www.facebook.com/kyonvet](http://www.facebook.com/kyonvet)



- Step 1 - contact the KYON office servicing your area.  
 Step 2 - complete and submit the client registration form and credit card authorization form.  
 Step 3 - collaborate with a sales representative to place initial order.

## CONTACT

KYON AG: Europe, Asia, Australia, and Africa  
 phone: +41 44 350 31 05  
 fax: +41 44 350 31 06  
 email: info@kyon.ch

KYON Veterinary Surgical Products: The Americas  
 phone: 617 567 2436  
 fax: 617 567 3193  
 email: main@kyon.us

## SHIPPING

Orders from the European Union, received before 2 pm Central European Time will be processed and shipped that day. We attempt to process orders received after 2pm that day, but in some cases they will be processed on the next business day.

Orders received before 3pm Eastern Standard Time will be processed and shipped that day. We attempt to process orders received after 3pm EST that day, but in some cases they will be processed on the next business day. Default shipping is Priority Overnight via FedEx for arrival by 10:30am the following business day, to most destinations.

Orders shipped from Zurich are sent via FedEx as Priority Delivery for delivery the following business day, to most destinations.

KYON Veterinary Surgical Products offers the following shipping options via FedEx:

All KYON orders include a shipping, insurance and handling surcharge.

|                    |               |
|--------------------|---------------|
| First Overnight    | 2-Day         |
| Priority Overnight | Express Saver |
| Standard Overnight | Ground        |

All orders include a shipping and handling surcharge. Some shipping options are not available to certain destinations.

All invoices are due 30 days after receipt. Clients within Switzerland must pay by direct bank transfer. For all other locations, we accept payment by direct bank transfer, check, or credit card.

All invoices are due upon receipt. We accept payment by check or credit card.

direct bank transfer - contact the Zurich office to arrange bank transfer payments.

credit card - complete the KYON Credit Card Authorization form and fax it to the Boston office 617.567.3193 or call the Boston office 617.567.2436 to set up credit card payments by phone.

## PAYMENT

credit card - complete and fax the KYON Credit Card Authorization form to +41 44 350 31 06.

check - make checks payable to KYON Veterinary Surgical Products and include your client account number and invoice number on the check, and send to:

KYON Veterinary Surgical Products  
 480 William F. McClellan HWY  
 Suite 202  
 Boston, MA 02128  
 USA

## ORDERING

To place an order, please contact the KYON office serving your area by phone, fax, or email.

KYON offers a limited 2 year warranty on all products against defects in materials and workmanship. The KYON limited warranty is based upon the designed use of the instruments and implants to normal operating conditions and established techniques. Instruments that have been misused, or not properly cared for, are the responsibility of the owner. All orthopedic instruments and implants represented and sold by KYON are for veterinary use only. This warranty is valid only to licensed veterinary medical professionals and practices that originally purchased the product.

## WARRANTY

All implants and instruments are thoroughly inspected before packaging. KYON will replace an implant or instrument if it is determined, by KYON, to have been used solely according to the products designed use by the original owner. This warranty is limited to the repair or replacement of an instrument or implant.

The replacement warranty only pertains to non-perishable instruments. The KYON warranty excludes any and all products that are designed for cutting, gouging, drilling, or powering equipment, such as drill bits, osteotomes, chisels, saw blades, etc.

## RETURNS

We will accept unused and unsterilized, unopened implants and instruments returned in their original packaging within 30 days of purchase. Returns are for credit, not refund and are subject to a 25% inspection and restocking charge.

PRICES AND TERMS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

If you are interested in becoming a KYON client, please complete the following form and fax the completed form to the KYON office serving your location. Please complete any and all fields that apply.

### Account Information

doctors name

company name

street

city / town

state / province

zip / postal code

country

phone

fax

email

website

### Ordering/Shipping Information

contact name

phone

fax

email

V.A.T. #: (required by customs for shipments in the EU)

special instructions:

shipping address, if different from above

### Website Profile Information

doctors name

company name

street

city / town

state / province

zip / postal code

country

phone

fax

email

### Billing Information

billing address, if different from shipping

street

city / town

state / province

zip / postal code

country

phone

email

Please select your preferred form of payment:

Direct Bank Transfer  Check  Credit Card  (auto charge)

KYON AG credit card payments - (Visa and MasterCard)

Please complete the credit card information form and fax it to + 44-350-31-06.

KYON Veterinary Surgical Products credit card payments - (Visa, MasterCard, American Express, and Discover)

Please call our office at 617.567.2436 to arrange credit card payments.

Hip

- Zürich Cementless Total & Partial Hip System
- Double Pelvic Osteotomy ( DPO )

Introducing: 6th Generation THR & “Cupless” PHR

The 6th Generation of Zurich Cementless THR is a landmark for the system, includes the following improvements:

- Simplified implants and instruments
- Reduced Capital, Carrying, and Single Case Costs
- Improved versatility for complex, FHO, revision and juvenile patients
- Shortened surgical time and refined instrumentation
- Improved bone integration
- Increased screw strength and reduced risk of jamming
- Reduced wear of the joint bearing materials

Updates:

CUP REAMERS

The past few years have seen the introduction of mini cup reamers, cupless reamers and finishing reamers. After assessing the clinical performance of these instruments we have decided upon a universal solution to cup and cupless reaming, “Gold” reamers. The new Gold reamer system requires a selection of reamer sizes and a quick coupling shaft. For more information on this update, see THR Update - 180621 Letter.

STEM SCREWS

6th Generation stem screws have been modified for increased strength and reduced risk of screw jamming and stripping. This update requires the purchase of a THR specific T10 screwdriver. For more information on this update, see THR Update - 180713 Letter.

HEAD-NECKS - to - HEADS and NECKS

While satisfied with the performance of ADLC coated head necks, the switch to PEEK cups brought a potential to transition heads to human grade ceramic, CERAVET™. Ceramic on CFR-PEEK is the best pair for low wear in simulator testing. This change enabled the separation of the head and neck components, reducing the overall implant inventory. For more information on this update, see THR Update - 180801 Letter.

SYSTEM OVERVIEW

5th and 6th Generation implant updates and their associated instrumentation represent significant change, but many small changes have occurred since 1999. We are offering clients an opportunity to participate in a Zürich Cementless THR System Audit for the purpose of ensuring your system is current. To participate in this program, contact the KYON office serving your location.

The following pages depict the complete 6th Generation Zurich Cementless THR and PHR “Cupless” System. Please contact us with any questions or concerns and we appreciate your patience during this transition.





# Zürich Cementless Total Hip Replacement

The Zürich Cementless Hip Replacement System is the most biocompatible, durable and versatile joint replacement system available. The components of the system reflect different, novel approaches to addressing the most common complications of canine total hip replacement: aseptic loosening, infection, breakage, and wear. A wide range of sizes, dual mobility and screw-fixation revision cups, as well as a partial "Cupless" hip system (PHR) make the system more versatile than any other on the market.

## size - Standard (Medium - Large) Breed

### 8 mm Stems & Stem Screws

8 mm Stems;  
titanium alloy, Ti-HA coated w/ T10 screws

- 01.11.25 x-small, plus 3 screws (T10)
- 01.11.21 small, plus 3 screws (T10)
- 01.11.22 medium, plus 4 screws (T10)
- 01.11.23 large, plus 4 screws (T10)



ø3.4 mm Stem Screws;  
for 8 mm stems, Ti alloy, T10 recess

- 01.35.12 12 mm monocortical
- 01.35.25 25 mm bicortical
- 01.35.30 30 mm bicortical
- 01.35.35 35 mm bicortical
- 01.35.40 40 mm bicortical



## IMPLANTS

### 6mm Standard Stem Heads & Necks

Heads;  
CERAVET™ Ceramic by CeramTec

- 01.26.16 ø16 mm
- 01.26.19 ø19 mm



Necks;  
for CERAVET™ heads, titanium alloy

- 01.20.30 x-short
- 01.20.31 short
- 01.20.32 medium
- 01.20.33 long
- 01.20.34 x-long



### ø16 and ø19 mm Inlay Standard Cups

ø16 mm Inlay Cups;  
titanium alloy, Ti-HA coated, PEEK/CFR-PEEK ring

- 01.31.20 ø21.5 mm (xx-small)
- 01.31.21 ø23.5 mm (x-small)



ø19 mm Inlay Cups;  
titanium alloy, Ti-HA coated, PEEK/CFR-PEEK ring

- 01.31.25 ø26.5 mm (small)
- 01.31.23 ø29.5 mm (medium)
- 01.31.24 ø32.5 mm (large)





size - Standard (Medium - Large) Breed

IMPLANTS

6th Generation Revision Cups & Screws

ø16 mm Inlay Revision Cups;  
titanium alloy, Ti-HA coated, PEEK/CFR-PEEK ring

01.31.31 ø23.5 mm (x-small)

01.31.32 ø26.5 mm (small)



ø2.0 mm Cortical Specialty Screw;  
for Standard THR Revision Cups, Ti alloy, self-tapping, T8 recess

41.20.06 - 41.20.20

6 mm - 20 mm  
( 2 mm increments )



ø19 mm Inlay Revision Cups;  
titanium alloy, Ti-HA coated, PEEK/CFR-PEEK ring

01.31.35 ø26.5 mm (small) - coming soon

01.31.33 ø29.5 mm (medium)

01.31.34 ø32.5 mm (large)



Dual Mobility Cup System

Dual Mobility Cups;  
titanium alloy, Ti-HA

01.31.43 ø29.5 mm cup

01.31.44 ø32.5 mm cup

01.31.53 ø29.5 mm revision cup

01.31.54 ø32.5 mm revision cup



Dual Mobility Heads;  
PEEK/CFR-PEEK ring, CERAVET™ Ceramic

01.31.60 ø19 mm dual mobility head



Dual Mobility Heads are compatible with 6th Generation Standard (01.20.30-34) and Giant (01.20.41-43) Necks.

size - Giant Breed

IMPLANTS

Stems & Stem Screws

“Giant” 8mm Stem;  
titanium alloy, Ti-HA coated w/ T10 screws

01.11.64 x-large, plus 6 screws (T10)



“Giant” Necks;  
for CERAVET™ heads; titanium alloy

01.20.41 short

01.20.42 medium

01.20.43 long



ø3.4 mm Stem Screws;  
for 8 mm stems; Ti alloy, T10 recess

01.35.12 12 mm monocortical

01.35.25 25 mm bicortical

01.35.30 30 mm bicortical

01.35.35 35 mm bicortical

01.35.40 40 mm bicortical

Giant Necks are compatible with 6th Generation CERAVET™ Heads (01.26.16-17) for Standard, Revision and Dual Mobility Cups.

size - “Cupless” Standard ( Medium - Large ) Breed PHR

IMPLANTS

“Cupless” Heads & Necks

PHR “Cupless” Heads;  
titanium alloy, ADLC

31.30.02 ø22 mm

31.30.03 ø24 mm

31.30.04 ø26 mm

31.30.05 ø28 mm

31.30.06 ø30 mm

31.30.07 ø32 mm



PHR “Cupless” Necks;  
for Standard THR 8 mm Stems; titanium alloy

31.20.01 short

31.20.02 medium

31.20.03 long

31.20.04 x-long



size - Standard & Giant Breed

INSTRUMENTS

8mm Stem Femur Preparation

- 02.10.01 ø6.0 mm drill; L195/170 mm, 3 lipped
- 02.10.02 ø8.2 mm stem reamer
- 02.10.03 medium stem broach
- 02.10.04 large stem broach
- 02.10.05 T-handle
- 02.10.06 ø6.0 mm drill adapter

Standard & Small Cup Reamer Shafts

- 02.10.16 Standard Hollow machine reamer shaft, quick coupling
- 32.32.00 Small Hollow reamer shaft, quick coupling
- 02.15.00 Solid hand reamer shaft, for T-handle
- 02.10.160 Solid machine reamer shaft, quick coupling

Gold Standard and Small Cup Reamers

- 02.14.16 ø16 mm
- 02.14.18 ø18 mm
- 02.14.20 ø20 mm
- 02.14.21 ø21 mm
- 02.14.22 ø22 mm
- 02.14.23 ø23 mm
- 02.14.24 ø24 mm
- 02.14.26 ø26 mm
- 02.14.28 ø28 mm
- 02.14.29 ø29 mm
- 02.14.30 ø30 mm
- 02.14.32 ø32 mm
- 02.14.34 ø34 mm
- 02.14.36 ø36 mm



Standard PHR "Cupless" Reamers

- 32.32.22 ø22 mm cupless reamer
- 32.30.03 ø24 mm cupless reamer
- 32.30.04 ø26 mm cupless reamer
- 32.30.05 ø28 mm cupless reamer
- 32.30.06 ø30 mm cupless reamer
- 32.30.07 ø32 mm cupless reamer

Standard & Giant 8mm Stem Drill Guide & Sleeves

- 02.20.01 Standard stem drill guide
- 02.20.00 Giant stem drill guide
- 02.20.05 ø4.5 mm drill sleeve; for lateral cortex drilling
- 02.20.06 ø3.0 mm drill sleeve; for medial cortex drilling
- 02.20.07 ø2.5 mm drill sleeve; for acetabulum

Standard & Giant 8mm Stem Drill Bits & Stops

- 02.20.02 ø4.5 mm drill bit; L 145/120 mm, 3 lipped, flat
- 02.20.03 ø3.0 mm drill bit; L 145/120 mm, 3 lipped
- 02.20.04 ø2.5 mm drill bit; L 145/120 mm, 2 lipped
- 02.20.11 ø4.5 mm THR drill stop
- 02.20.12 ø3.0 mm THR drill stop
- 06.15.05 ø2.5 mm THR drill stop

Standard & Giant 8mm Stem Screwdrivers

- 02.20.09 2.5 mm hex screwdriver, for 2.5 hex stem screws
- 06.60.11 screw retaining sleeve
- 02.20.20 screw driver insert T10, L=105
- 02.20.19 screwdriver, T10, replacing 02.20.09 hex driver

Standard THR Impactors

- 02.30.01 16 mm / 19 mm cup impactor shaft
- 02.30.06 ø5.0 mm orientation pins for impactor (2)
- 02.30.02 16 mm cup impactor attachment; flat
- 02.30.03 16 mm cup impactor attachment; ball
- 02.30.13 19 mm cup impactor attachment; flat
- 02.30.14 19 mm cup impactor attachment; ball
- 02.30.15 16 mm cup impactor; 21.5/ 23.5 cup flat
- 02.30.04 head-neck impactor
- 02.30.05 pointed impactor
- 02.31.01 ø23 mm Revision cup impactor
- 02.31.02 ø26 mm Revision cup impactor
- 02.31.03 ø29 mm Revisiom cup impactor



Trial Implants

|          |                                     |
|----------|-------------------------------------|
| 02.80.05 | 8 mm x-small trial stem             |
| 02.80.01 | 8 mm small trial stem               |
| 02.80.02 | 8 mm medium trial stem              |
| 02.80.03 | 8 mm large trial stem               |
| 02.80.06 | 8 mm trial stem handle              |
| 02.80.08 | calcar support for trial head-necks |
| 02.80.10 | 16 mm x-short trial head-neck       |
| 02.80.11 | 16 mm short trial head-neck         |
| 02.80.12 | 16 mm medium trial head-neck        |
| 02.80.13 | 16 mm long trial head-neck          |
| 02.80.14 | 16 mm x-long trial head-neck        |
| 02.80.15 | 19 mm short trial head-neck         |
| 02.80.16 | 19 mm medium trial head-neck        |
| 02.80.17 | 19 mm long trial head-neck          |
| 02.80.18 | 19 mm x-long trial head-neck        |
| 02.81.21 | ø21 mm trial cup                    |
| 02.81.23 | ø23 mm trial cup                    |
| 02.81.26 | ø26 mm trial cup                    |
| 02.81.29 | ø29 mm trial cup                    |
| 02.81.32 | ø32 mm trial cup                    |

Rasps

|          |   |
|----------|---|
| 345-228  | Putti rasp, single end conical, phenolic handle, 10"L |
| 77-0450  | Gallaher Antrum rasp, straight 7"L                    |
| 77-0452  | Gallaher Antrum rasp, curved in 7"L                   |
| 1100-490 | Miller Rasp, regular and serrated, 5/6 mm 7 1/8"L     |
| 345-262  | Good bone file/rasp, curved, 6 1/2"L                  |
| 345-263  | Good bone file/rasp, straight, 6 1/2"L                |

Auxiliaries

|          |   |
|----------|---|
| 04.20.05 | depth gauge; 2.7 - 4.0 mm, up to 60 mm                              |
| 02.20.14 | adapter AO - quick coupling/standard chuck                          |
| 02.30.07 | hammer  |
| 02.30.08 | hammer head   |
| 330-841  | large mallet, phenolic handle, ø1 1/4", 8 3/4" 22cm                 |
| 02.30.09 | femoral reposition hook   |
| 02.55.01 | 25 degree anteversion guide   |
| 02.60.01 | positioner for the operating table                                  |
| 315-612  | Ruskin rongeur, 2x-action, curved, 5mm bite 7 1/4"                  |
| 02.30.19 | Hattspoon, 23cm long / bone curette<br>mini Hattspoon, bone curette |

Elevators & Retractors

|           |  |
|-----------|--|
| 02.30.16  | Hohmann retractor, 4 teeth, 12 mm wide   |
| 02.30.17  | Hohmann retractor, 6 teeth, 20 mm wide   |
| 02.30.18  | Finger Meyerding retractor               |
| 1100-671  | large Hohmann 8mm 8 1/2"                 |
| 1100-678  | mini Hohmann elevator                    |
| 1100-668  | Senn retractor sharp 6 1/4"              |
| 1100-670  | Army-Navy retractor 8 1/2" (pair)        |
| 1100-660  | Volkman retractor 4 prong, sharp, 8 1/2" |
| 1100-630A | Gelpi retractor, long curved 8"          |
| 1100-631B | Gelpi retractor, deep angle 8"           |

Blood Clot Trays

|          |                                       |
|----------|---------------------------------------|
| 02.70.01 | blood clot tray frame                 |
| 02.70.11 | small stem tray                       |
| 02.70.12 | medium stem tray                      |
| 02.70.13 | large stem tray                       |
| 02.70.15 | x-small stem tray                     |
| 02.70.20 | ø21 mm cup tray                       |
| 02.70.21 | ø23 mm cup tray                       |
| 02.70.22 | ø26 mm cup tray                       |
| 02.70.23 | ø29 mm cup tray                       |
| 02.70.24 | ø32 mm cup tray                       |
| 02.70.30 | cup-holding pin                       |
| 02.70.40 | nozzle for accelerated blood clotting |
| 02.70.50 | spare seal for stem trays             |

Organization

|          |                                       |
|----------|---------------------------------------|
| 02.40.01 | instrument tray; REAMERS              |
| 02.40.02 | instrument tray; DRILL GUIDE          |
| 02.40.03 | instrument tray; AUXILIARIES          |
| 02.40.08 | instrument tray; TRIALS               |
| 02.01.00 | instrument tray; REAMERS & CUP TRIALS |



# Small Breed

## Zürich Cementless Total Hip Replacement

While the most common breeds impacted by hip dysplasia are large in size, many medium, small and even toy breeds suffer from this debilitating condition. Few options have been available to manage these patients, meaning most receive the conventional Femoral Head Ostectomy (FHO). To meet the needs of these patients, we developed the Small Breed Zürich Hip System and have additional, toy and miniature breed sizes in clinical development. The Small Breed Zürich Total and Partial Hip Replacement is suitable for patients 9 - 15 kg, e.g. Cocker Spaniel, Beagle, and Tibetan Terrier.

size - **Small Breed**

### IMPLANTS

#### 6 mm Stems & Stem Screws

6 mm Stems;  
titanium alloy, Ti-HA plasma coated

01.12.15 large, plus 4 screws

01.12.16 x-large, plus 5 screws



ø2.4 mm Stem Screws;  
titanium alloy, for 6 mm stems

01.42.01 11 mm monocortical

01.42.02 19 mm bicortical

01.42.03 22 mm bicortical

01.42.04 26 mm bicortical



#### Heads

ø12 mm Heads;  
for 6 mm Stems; titanium alloy, ADLC

01.23.02 short

01.23.03 medium

01.23.04 long



#### Cups

ø12 mm Inlay Cups;  
titanium alloy, Ti-HA plasma coated, PEEK/CFR-PEEK ring

01.32.04 ø18 mm

01.32.05 ø20 mm



#### Small to Standard Conversion Implants

ø16 mm Heads;  
for 6 mm Stems; titanium alloy, ADLC

01.24.04 custom, long

01.24.05 x-long

6mm Stem Adaptor to ø16 mm CERAVET™ Heads;  
titanium alloy, ADLC

01.24.06 medium

01.24.07 long

01.24.08 x-long

#### PHR "Cupless" Heads & Necks

PHR "Cupless" Necks;  
for 6 mm stems; titanium alloy

31.22.01 short

31.22.02 medium

31.22.03 long



PHR "Cupless" Heads;  
for 6 mm stems; titanium alloy, ADLC

31.32.04 ø18 mm

31.32.05 ø20 mm



size - Small Breed

INSTRUMENTS

Small 6mm Stem Femur Preparation

- 06.10.09 ø4.5 mm drill, L 110/85 mm
- 06.10.10 ø5.0 mm drill, L 110/85 mm
- 02.10.01 ø6.0 mm drill; L 195/170 mm, 3 lipped
- 02.10.05 T-handle
- 02.10.06 ø6.0 mm drill adapter

Standard & Small Cup Reamer Shafts

- 02.15.00 Solid hand reamer shaft, for T-handle
- 02.10.160 Solid machine reamer shaft, quick coupling

Gold Small THR/PHR Reamers

- 02.14.16 ø16 mm
- 02.14.18 ø18 mm
- 02.14.20 ø20 mm

6 mm Stem Drill Guide & Sleeves

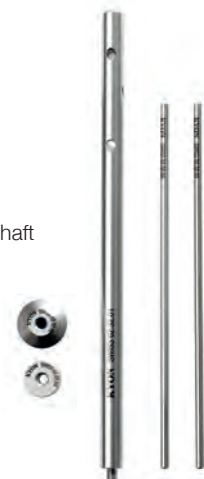
- 02.22.10 6 mm stem drill guide set
- 02.22.00 6 mm stem drill guide connector screw
- 02.22.01 6 mm stem drill guide, base
- 02.22.02 6 mm stem drill guide, arm for Right
- 02.22.03 6 mm stem drill guide, arm for Left
- 02.22.04 6 mm stem drill guide, alignment pin
- 02.22.06 ø3.2 mm drill stop; mini THR
- 06.15.04 ø2.0 mm drill stop
- 02.22.05 ø3.2 mm drill sleeve
- 02.22.07 ø2.0 mm drill sleeve

Drill Bits

- 06.10.07 ø3.2 mm drill, L 145/120 mm
- 38.10.200 ø2.0 mm drill, L 145/120 mm

Impactors

- 02.32.01 ø12 mm cup impactor shaft
- 02.32.02 ø12 mm flat shoulder impactor
- 02.32.03 ø12 mm ball impactor
- 02.32.06 ø3.0 mm orientation pins (x2)
- 02.30.01 ø16 mm / ø19 mm cup impactor shaft
- 02.30.04 head-neck impactor
- 02.30.07 hammer
- 02.30.08 hammer head



Trial Implants

- 02.82.15 6 mm large trial stem
- 02.82.16 6 mm x-large trial stem

Organization

- .00. — KSS tray; mini THR Instrument Tray





# DPO with KLS™ Technology

## Double Pelvic Osteotomy

The KYON Double Pelvic Osteotomy (DPO) System\* synthesizes the biological benefits of the minimal contact Advanced Locking Plate System (ALPS)\* with the novel thread design and locking mechanism of the KYON Locking System (KLS)™. The point-contact design of the plate minimizes damage to the periosteum. The shape is pre-contoured to best match the DPO construct, developed through iteration and feedback from Dr. Aldo Vezzoni, DVM, DECVS. A designated compression hole and KLS™ Technology in all holes make application of the plate routine and robust. The DPO system requires minimal instrumentation, consisting of drill bits, drill stops, drill sleeves, and screw driver inserts appropriate for each screw size.

The Medium & Large Breed DPO system is designed to match the strength and stiffness of the 3.5 and 3.5 stainless steel locking DPO plates.

### size - Medium & Large Breed

DPO Plates ( KLS™ ø4.0 mm ); titanium alloy

- 33.30.21 25°, left
- 33.30.22 25°, right
- 33.30.23 30°, left
- 33.30.24 30°, right



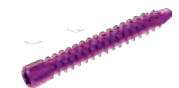
ø3.0 mm Cortical Cancellous Screws; Ti alloy; self-tapping, T15 recess

- 41.30.16 - 40.30.24 16 - 24 mm ( 2 mm increments )



ø4.0 mm KYON Locking System (KLS)™ Screws; titanium alloy; self-tapping, T15 recess

- 40.40.16 - 40.40.24 16 - 24 mm ( 2 mm increments )



### IMPLANTS

#### DPO Specific

- 34.10.30 ø4.0 DPO pin
- 34.20.40 ø3.0 drill sleeve; KLS™ ø4.0 mm Locking
- 34.10.20 ø2.0 drill sleeve; Cortical

#### Auxiliaries

- 06.15.04 drill stop, ø2.0 mm
- 02.20.12 drill stop, ø3.0 mm
- 06.60.08 screwdriver insert; T15 (Torx compatible)
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 04.20.05 depth gauge; f/ screws 2.7 - 4.0 mm, up to 60 mm

#### Drill Bits

- 38.10.200 ø2.0 mm drill bit; quick coupling, L 145/120mm
- 02.20.03 ø3.0 mm drill bit; quick coupling, L 145/120 mm, 3L

#### Organization

- 83.10.03 KSS DPO tray set; 7 pieces
- 82.10.11 KSS drawer lid; center
- 82.40.05 KSS drawer; center (for KLS™ ø4.0 mm screws)
- 82.11.11 KSS drawer lid; side
- 82.41.08 KSS drawer; side (for CSS ø3.0 mm screws)

### INSTRUMENTS

## STIFLE

- Tibial Tuberosity Advancement ( TTA, TTA-2, mini TTA )
- Tibial Plateau Leveling Osteotomy ( TPLO )
- Ruby Joint Stabilization System ( Ruby )
- Patellar Groove Replacement

## Choose your Method

Surgical repair of cranial cruciate deficiency is one of the most common small animal orthopedic procedures, due not only to the high incidence of the problem, but also to the clinical success of recent surgical techniques, including KYON's second major contribution to advanced veterinary orthopedics, Tibial Tuberosity Advancement (TTA). KYON offers the three main categories of standard treatment: TPLO, TTA and Ruby lateral suture.

KYON launched TTA for cranial cruciate deficiency in dogs in early 2004, following three years of clinical testing. Slobodan Tepic, Dr. Sci., Dipl. Ing., and Prof. Pierre M. Montavon, Head of Small Animal Surgery at the School of Veterinary Medicine, University of Zurich, developed TTA to allow neutralization of cranial tibial thrust without compromising joint congruency. This technique was a major departure from conventional practice. KYON's TTA procedure has become an important addition to the canine cranial cruciate repair armamentarium, treating over 100,000 patients world-wide.

KYON continued to refine both the TTA system and procedure to maximize clinical outcomes. In addition to iterative improvements to the Original TTA system, KYON introduced "Long" TTA plates to accommodate indistinct cranial borders, a wide selection of cage widths for more precise advancement, cage ear spacers for combination TTA and Tibial Tuberosity Transposition (TTT), and a mini TTA system to accommodate the smallest patients.

In 2012, KYON, in collaboration with Dr. Joop Hopmans, began in vitro testing and a safety and efficacy study to explore the next step in the TTA evolution, TTA-2\*. To provide surgeons and their clients with real benefits, TTA-2 was developed to reduce iatrogenic damage to the bone, lower the risk of infection, speed the incorporation of the implant into the bone, ease pes anserinus reconstruction, reduce start-up, carrying and overall costs, shorten surgery time, and deliver consistent execution with predictable outcomes. Over four years, KYON conducted seven in vitro studies, Finite Element (FE) analysis and a clinical study with over 700 cases. TTA-2 was made commercially available in spring 2014 and continues to meet the expectations of the clinical adapters who have performed >6,000 cases.

In 2015, we introduced the KYON Tibial Plateau Leveling Osteotomy (TPLO) with KYON Locking System (KLS)<sup>™</sup> technology. The plate synthesizes the biological benefits of the minimal contact Advanced Locking Plate System (ALPS)\* with the novel thread design and locking mechanism of the KYON Locking System (KLS)<sup>™</sup>. The point-contact design of the plate minimizes damage to the periosteum. The shape is pre-contoured to best match the TPLO construct and allows for final adjustments by bending. The screw direction is fixed in the proximal segment to avoid the articular surface and osteotomy. Monocortical locking screws can be used in the distal segment to further protect the vascular supply. The plate can be applied in compression or in neutral fashion. TPLO Plates and screws are manufactured from titanium alloy for supreme biocompatibility and strength. Since its release, over 6,000 patients have been treated.

Also in 2015, KYON began controlled clinical introduction of the Ruby Joint Stabilization System (Ruby) to bring KYON innovation to the lateral extra-capsular suture. The goal of the Ruby Joint Stabilization System (Ruby)\* is to provide surgeons with the most biocompatible, strongest, abrasion resistant implant that is stable at its interface to the bone, straightforward in its surgical application and kinematically compatible with canine stifle range of movement. This KYON project began in 2007, utilized an iterative implant design process, clinical refinement and several in vitro studies before the first clinical case in 2015. Over 400 cases have been performed in limited clinical release and the first publication first article on the Ruby system has been published in the Journal of Small Animal Practice, May 2017. - N. M. Muro, O. I. Lanz. Use of a novel extracapsular bone anchor system for stabilisation of cranial cruciate ligament insufficiency. Journal of Small Animal Practice JSAP. 2017; 58(5):251-304.

KYON will continue to iterate and innovate in the realm of cruciate rupture treatment, bringing novel improvements to surgeons, pet owners and patients. To learn more about TTA, TTA-2, TPLO, and Ruby contact us.





# TTA

## Tibial Tuberosity Advancement

Tibial Tuberosity Advancement (TTA) implants and instruments were invented and developed by KYON, through iteration during clinical testing, to best meet the exacting demands of the procedure and surgical convenience, with optimal selection of materials and manufacturing techniques for precision, durability and performance.\*

### size - Original TTA

### IMPLANTS

TTA Cages;  
titanium

|          |           |          |            |
|----------|-----------|----------|------------|
| 03.10.00 | 3/10 mm   | 03.10.25 | 10.5/19 mm |
| 03.10.01 | 3/13 mm   | 03.10.26 | 10.5/22 mm |
| 03.10.02 | 3/16 mm   | 03.10.27 | 10.5/25 mm |
| 03.10.03 | 3/19 mm   | 03.10.30 | 12/19 mm   |
| 03.10.05 | 4.5/10 mm | 03.10.31 | 12/22 mm   |
| 03.10.06 | 4.5/13 mm | 03.10.32 | 12/25 mm   |
| 03.10.07 | 4.5/16 mm | 03.10.33 | 12/28 mm   |
| 03.10.10 | 6/13 mm   | 03.10.36 | 13.5/22 mm |
| 03.10.11 | 6/16 mm   | 03.10.37 | 13.5/25 mm |
| 03.10.12 | 6/19 mm   | 03.10.38 | 13.5/28 mm |
| 03.10.13 | 6/22 mm   | 03.10.41 | 15/25 mm   |
| 03.10.15 | 7.5/16 mm | 03.10.42 | 15/28 mm   |
| 03.10.16 | 7.5/19 mm | 03.10.43 | 15/31 mm   |
| 03.10.17 | 7.5/22 mm |          |            |
| 03.10.20 | 9/16 mm   |          |            |
| 03.10.21 | 9/19 mm   |          |            |
| 03.10.22 | 9/22 mm   |          |            |
| 03.10.23 | 9/25 mm   |          |            |



ø2.4 mm Cortical Screws;  
for TTA Cages; titanium, self-tapping, T10

03.40.08T - 03.40.40T      8 - 40 mm  
( 2 mm increments )



TTA Cage Spacers;  
titanium

03.11.02      2 mm  
03.11.04      4 mm  
03.11.06      6 mm



size - Original TTA

Implants

TTA Plates;  
titanium

- 03.20.02 2-hole, cat
- 03.20.03 3-hole
- 03.20.04 4-hole
- 03.20.05 5-hole
- 03.20.06 6-hole
- 03.20.07 7-hole
- 03.20.08 8-hole
- 03.21.03 3-hole long
- 03.21.04 4-hole long
- 03.21.05 5-hole long
- 03.21.06 6-hole long
- 03.21.07 7-hole long
- 03.21.08 8-hole long



TTA Forks;  
titanium

- 03.30.02 2-prong, cat
- 03.30.03 3-prong
- 03.30.04 4-prong
- 03.30.05 5-prong
- 03.30.06 6-prong
- 03.30.07 7-prong
- 03.30.08 8-prong



ø2.7 mm Cortical Screws;

for 3 - 5 hole plates; titanium, self-tapping, T10

- 03.50.12T - 03.50.26T 12 - 26 mm ( 2 mm increments )



ø3.5 mm Cortical Screws;

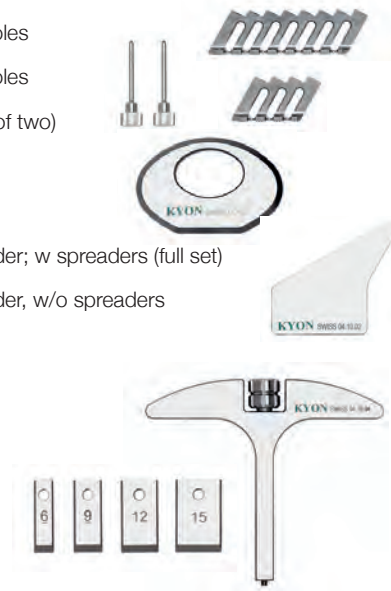
for 6 - 8 hole plates; titanium, self-tapping, T10

- 03.60.16T - 03.60.34T 16 - 34 mm ( 2 mm increments )



TTA Specific

- 04.10.01 fork drill guide; 8 holes
- 04.10.06 fork drill guide; 4 holes
- 04.10.05 ø1.9 mm pins (set of two)
- 04.10.02 fork inserter
- 04.10.03 plate bender
- 04.10.04 T-handle/plate bender; w spreaders (full set)
- 04.10.14 T-handle/plate bender, w/o spreaders
- 04.50.06 6 mm spreader
- 04.50.07 7.5 mm spreader
- 04.50.09 9 mm spreader
- 04.50.10 10.5 mm spreader
- 04.50.12 12 mm spreader
- 04.50.13 13.5 mm spreader
- 04.50.15 15 mm spreader
- 04.20.12 ø2.0 mm/ø2.5 mm drill sleeve
- 04.20.18 ø1.8 mm drill sleeve for use with cage ears



Auxiliaries

- 04.30.01 hammer; 100 g
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 04.20.07 screwdriver insert; 2.5 mm hex
- 04.20.08 screwdriver insert; cross-head
- 06.60.11 screw retaining sleeve
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm - measuring depth up to 60 mm
- 06.50.01 depth gauge; f/ screws 1.5 to 2.0 mm - measuring depth 38 mm



Forceps

- 30.10.40 FT TTA forceps; max span 64 mm, 175 mm
- 1103-41A 8" point-to-point forceps w/ speed lock (Sontec)
- 1103-41B 6" point-to-point forceps w/ speed lock (Sontec)
- 30.10.15 FineTouch Claw forceps, long
- 1103-008 stefan bone holding forceps w/ speed lock 6", Sontec

Drill Bits

- 06.10.03 ø1.8 mm drill bit; quick coupling, L 125/100 mm
- 04.20.03 ø2.0 mm drill bit; quick coupling, L 102/75 mm
- 02.20.04 ø2.5 mm drill bit; quick coupling, L 145/120 mm



Organization

- 04.40.02 TTA implant tray 1.0; aluminum
- 04.41.02 TTA implant tray 2.0; aluminum
- 80.02.04 tray separators (set of two)
- 06.60.06 screw forceps







# mini TTA

## Tibial Tuberosity Advancement

Tibial Tuberosity Advancement (TTA) implants and instruments were invented and developed by KYON, through iteration during clinical testing, to best meet the exacting demands of the procedure and surgical convenience, with optimal selection of materials and manufacturing techniques for precision, durability and performance.\*

size - mini TTA

Implants

Mini Cages;  
titanium

- 03.15.31 3/6.5 mm
- 03.15.32 3/8 mm
- 03.15.33 3/9.5 mm
- 03.15.42 3.75/8 mm
- 03.15.43 3.75/9.5 mm
- 03.15.44 3.75/11 mm
- 03.15.53 4.5/9.5 mm
- 03.15.54 4.5/11 mm
- 03.15.55 4.5/12.5 mm



Mini Plates;  
titanium

- 03.25.03 3-hole
- 03.25.04 4-hole
- 03.26.03 3-hole, LONG
- 03.26.04 4-hole, LONG
- 03.27.03 3-hole, X-LONG



Mini Forks;  
titanium

- 03.35.03 3-prong
- 03.35.04 4-prong
- 03.26.03 3-hole, LONG
- 03.26.04 4-hole, LONG
- 03.27.03 3-hole, X-LONG

ø1.0 mm Cortical Screws;  
titanium alloy; self-tapping, T4 recess

- 05.06.05 - 05.60.12 5 - 12 mm  
( 1 mm increments )



ø2.0 mm Cortical Specialty Screws;  
titanium alloy, self-tapping, T8 recess

- 41.20.08 - 41.20.22 8 - 22 mm  
( 2 mm increments )



Mini TTA Specific

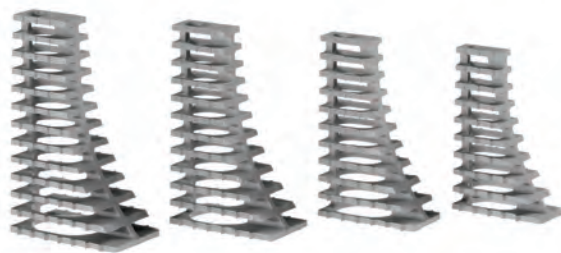
- 04.11.01 mini TTA, drill guide; 4 holes
- 04.11.05 mini TTA, 1.5mm pins (set of two)
- 04.21.12 ø0.7 mm / ø1.5 mm drill sleeve



mini TTA Auxiliaries

- 06.60.03 screwdriver insert; T4 (Torx compatible)
- 06.60.07 screwdriver insert; T8 (Torx compatible)
- 06.60.00 screwdriver handle, x-small, PEEK
- 06.50.00 depth gauge, 1.0 to 1.6 mm, PEEK

Instruments



# TTA-2

## Tibial Tuberosity Advancement

TTA-2\*\* consists of an incomplete osteotomy, performed with a novel hinged saw guide and a new cage, designed to transfer shear and compression forces. The simplified surgical technique preserves the periosteum on the medial aspect of the tibial tuberosity, eliminates stress risers created by the plate, fork, and screws, shortens the surgery time, and reduces the implant inventory. TTA-2 implants are packaged sterile for surgical convenience.

### TTA-2

### Implants

TTA-2 Cages;  
Ti alloy, Biocer®

- 03.80.11 3/12 mm
- 03.80.21 4.5/14 mm
- 03.80.31 6/16 mm and staple
- 03.80.41 7.5/18 mm and staple
- 03.80.51 9/20 mm and staple
- 03.80.61 10.5/22 mm and staple
- 03.80.71 12/24 mm and staple
- 03.80.81 13.5/26 mm and staple
- 03.80.91 15/28 mm and staple



### TTA-2b

TTA-2b Cages;  
titanium alloy

- 03.81.31 6/22 mm
- 03.81.41 7.5 mm
- 03.81.51 9/25mm
- 03.81.61 10.5 mm
- 03.81.71 12/28mm



TTA-2 Staples;  
titanium

- 03.90.21 4.5: 9.8 mm (for 03.80.11)
- 03.90.31 6: 13.1 mm (for 03.80.21)
- 03.90.41 7.5: 15.8 mm (for 03.80.31)
- 03.90.51 9: 17.6 mm (for 03.80.41)
- 03.90.61 10.5: 20.8 mm (for 03.80.51)
- 03.90.71 12: 23.3 mm (for 03.80.61)
- 03.90.81 13.5: 25.8 mm (for 03.80.71)
- 03.90.91 15: 28.3 mm (for 03.80.71 and 03.80.91)

TTA-2 and TTA-2b

Instruments

TTA-2 Saw Guide (small - Cages 3 - 6)

- 04.60.21 hinged-sawguide, small w/ clamps screws
- 04.60.33 clamp for small sawguide, (replacement)
- 04.60.34 screw for small clamp, (replacement)
- 04.60.11 distal pin, 3.5 mm (for 04.60.21)
- 04.60.12 distal pin, 4.0 mm (for 04.60.21)
- 04.60.25 proximal pin, 31 mm (for 04.60.21)
- 04.60.26 proximal pin, 36.5 mm (for 04.60.21)



TTA-2 Saw Guide (large - Cages 6 - 15)

- 04.60.22 hinged-sawguide, large w/ clamps, screws
- 04.60.03 clamp for large sawguide, (replacement)
- 04.60.04 screw for large clamp, (replacement)
- 04.60.13 distal pin, 4.5 mm (for 04.60.22)
- 04.60.14 distal pin, 5.0 mm (for 04.60.22)
- 04.60.15 distal pin, 5.5 mm (for 04.60.22)
- 04.60.27 proximal pin, 42 mm (for 04.60.22)
- 04.60.28 proximal pin, 52 mm (for 04.60.22)



TTA-2 Specific

- 30.10.45 TTA-2 spreader for 7.5 mm-15 mm, L 175 mm
- 04.90.01 drill guide for staples 3-6 mm w/ pin - coming soon
- 04.90.02 drill guide for staples 7.5-15 mm w/ pin



TTA-2 / 2b Auxiliaries

- 30.10.15 FineTouch Claw forceps, long
- 1103-008 stefan bone holding forceps w/ speed lock 6", Sontec
- 1103-41A 8" point-to-point bone clamp forceps w/ speed lock (Sontec)
- 1103-41B 6" point-to-point bone clamp forceps w/ speed lock (Sontec)
- 04.30.01 hammer; 100 g
- 04.20.07 screwdriver insert; 2.5 mm hex
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm - measuring depth up to 60 mm

TTA-2 Specific

- 04.70.01 TTA-2B cage cutter
- 04.71.06 TTA-2B cage holder, size 6, 7.5
- 04.71.09 TTA-2B cage holder, size 9, 10.5
- 04.71.12 TTA-2B cage holder, size 12, 13.5



TTA-2 / 2b Consumables

- 04.20.03 ø2.0 mm drill bit; quick coupling, L 102/75 mm
- 04.60.43 K-wire, 0.045" (1.25 mm) diameter, 6" (150 mm) long (x 6)
- 04.60.44 K-wire, 0.062" (1.6 mm) diameter, 6" (150 mm) long (x 6)
- 04.61.01 50 mmL x 9 mmW sagittal saw blade, Synthes Colibri; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm
- 04.61.02 50 mmL x 10 mmW sagittal saw blade, Zimmer/Linvatec; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm
- 04.61.03 50 mmL x 10 mmW sagittal saw blade, Stryker; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm
- 04.61.04 50 mmL x 10 mmW sagittal saw blade, 3M Mini Driver; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm



Veterinary Transplant Services

Bone Graft

- CBOFFD1 Canine Bone: Osteoallograft Orthomix (Fine), Freeze-Dried, Irradiated 1 cc
- CBOFFD2 Canine Bone: Osteoallograft Orthomix (Fine), Freeze-Dried, Irradiated 2 cc
- CBOFFD3 Canine Bone: Osteoallograft Orthomix (Fine), Freeze-Dried, Irradiated 3 cc
- FXBP0.5cc Fusion Xpress Bone Putty: Irradiated Single Dose Syringe 0.5 cc
- FXBP1cc Fusion Xpress Bone Putty: Irradiated Single Dose Syringe 1.0 cc
- FXBP2.5cc Fusion Xpress Bone Putty: Irradiated Single Dose Syringe 2.5 cc



# TPLO with KLS<sup>TM</sup> Technology

## Tibial Plateau Leveling Osteotomy

The KYON Tibial Plateau Leveling Osteotomy (TPLO) plate synthesizes the biological benefits of the minimal contact Advanced Locking Plate System (ALPS)\* with the novel thread design and locking mechanism of the KYON Locking System (KLS)<sup>TM</sup>. TPLO Plates and screws are manufactured from titanium alloy for supreme biocompatibility and strength. The plate is pre-contoured to best match the tibial plateau leveling osteotomy construct. Final minor adjustments can be made by bending of the plate.

### size 4 ( KLS<sup>TM</sup> 1.5 )

### Implants

size 4 Plates; 6 hole;  
titanium alloy; saw radius 10 mm

35.04.31 left

35.04.32 right

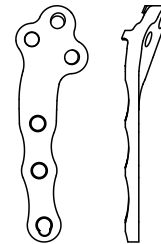
ø1.5 mm KLS<sup>TM</sup> Screws;  
titanium alloy; self-tapping, T4 recess

40.15.05 5 mm

40.15.06 - 40.15.24 6 - 24 mm ( 2 mm increments )

ø1.0 mm Cortical Screws;  
titanium alloy; self-tapping, T4 recess

05.06.05 - 05.06.12 5 - 12 mm ( 1 mm increments )



### size 4 ( KLS<sup>TM</sup> 1.5 )

### Instruments

#### TPLO 4 Specific Instruments

36.05.11 ø1.1 mm drill sleeve; KLS<sup>TM</sup>

36.10.07 ø0.7 mm drill sleeve; TPLO KLS<sup>TM</sup> Compression

36.35.15 KLS<sup>TM</sup> ø1.5 mm temporary fixation peg; ø0.7 K-wire

#### Drill Bits

06.10.00 ø0.7mm drill bit, L 85/60mm (for 1.0 mm screw)

06.10.01 ø1.1 mm drill bit; quick coupling, L 85/60 mm

#### Auxiliaries

06.15.01 ø1.1 mm drill stop

06.60.03 screwdriver insert; T4 (Torx compatible)

06.60.07 screwdriver insert; T8 (Torx compatible)

06.60.00 screwdriver handle; x-small, PEEK

06.50.00 depth gauge, 1.0 to 1.6 mm, PEEK

#### Organization

83.10.06 Complete TPLO 4/5/6 KSS Instrument & Implant System

36.50.00 surgical instrument fabric case; cotton

82.11.11 KSS side drawer lid

82.41.13 ø1.5 mm KLS<sup>TM</sup> screw side drawer; KSS

82.41.06 ø1.0 mm cortical screw side drawer, KSS

06.60.06 screw forceps

#### TPLO Jigs & Sleeves

36.30.01 small TPLO jig w/ 2 sleeves

36.33.11 small TPLO jig sleeve, ø1.1 mm

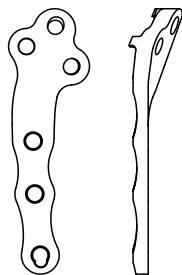
size 5 & 6 ( KLS<sup>™</sup> 2.0 )

Implants

size 5 Plates; 6 hole;  
titanium alloy; saw radius 12 mm

35.05.31 left

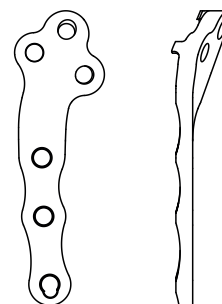
35.05.32 right



size 6 Plates; 6 hole;  
titanium alloy; saw radius 15 mm

35.06.31 left

35.06.32 right



ø2.0 mm KLS<sup>™</sup> Screw;  
titanium alloy; self-tapping, T6 recess

40.20.06 - 40.20.30 6 - 30 mm ( 2 mm increments )

ø1.5 mm Cortical Screws;  
titanium alloy; self-tapping, T6 recess

05.16.06 - 05.16.12 6 - 12 mm ( 1 mm increments )

05.16.14 - 05.16.22 14 - 22 mm ( 2 mm increments )



size 5 & 6 ( KLS<sup>™</sup> 2.0 )

Instruments

TPLO 5 / 6 Specific Instruments

36.05.15 ø1.5 mm drill sleeve; KLS<sup>™</sup> Locking

36.10.11 ø1.1 mm drill sleeve; KLS<sup>™</sup> Compression

36.35.20 KLS<sup>™</sup> 2.0 mm temporary fixation peg; ø1.2 K-wire

Drill Bits

38.10.150 ø1.5 mm drill bit; quick coupling, L 110/85 mm

06.10.01 ø1.1 mm drill bit; quick coupling, L 85/60 mm

Auxiliaries

06.15.02 ø1.5 mm drill stop

06.60.04 screwdriver insert; T6 (Torx compatible)

06.60.10 screwdriver insert; T10 (Torx compatible)

06.60.00 screwdriver handle; x-small, PEEK

06.50.00 depth gauge, 1.0 to 1.6 mm, PEEK

Organization

83.10.06 Complete TPLO 4/5/6 KSS Instrument & Implant System

36.50.00 surgical instrument fabric case; cotton

82.11.11 drawer lid; side KSS

82.41.10 KLS<sup>™</sup> ø2.0 mm screw drawer; side KSS

82.41.12 cortical ø1.5 screw drawer; side KSS

06.60.06 screw forceps

TPLO Jigs & Sleeves

36.30.01 small TPLO jig w/ 2 sleeves

36.30.02 medium TPLO jig w/ 2 sleeves

36.33.11 small TPLO jig sleeve, ø1.1 mm

36.33.20 medium TPLO jig sleeve, ø2.0 mm



size 7 ( KLS<sup>TM</sup> 3.0 )

Implants

size 7 Plates; 6 hole;  
titanium alloy; saw radius 18 mm

35.07.31 left

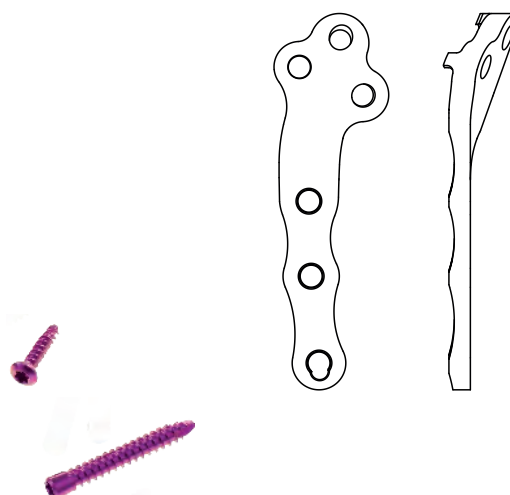
35.07.32 right

ø2.0 mm Cortical Cancellous Screw;  
titanium alloy; self-tapping, T8 recess

41.20.06 - 41.20.30 6 - 30 mm ( 2 mm increments )

ø3.0 mm KLS<sup>TM</sup> Screw;  
titanium alloy; self-tapping, T8 recess

40.30.08 - 40.30.40 8 - 40 mm ( 2 mm increments )



size 7 ( KLS<sup>TM</sup> 3.0 )

Instruments

TPLO 7 Specific Instruments

- 36.05.20 ø2.0 mm drill sleeve; KLS<sup>TM</sup> Locking
- 36.10.15 ø1.5 mm drill sleeve; KLS<sup>TM</sup> Compression
- 36.35.20 temporary fixation peg; 2.0 screw / ø1.2 K-wire

Drill Bits

- 38.10.200 ø2.0 mm drill bit; quick coupling, 145/120 mm
- 38.10.150 ø1.5 mm drill bit; quick coupling, 110/85 mm

Auxiliaries

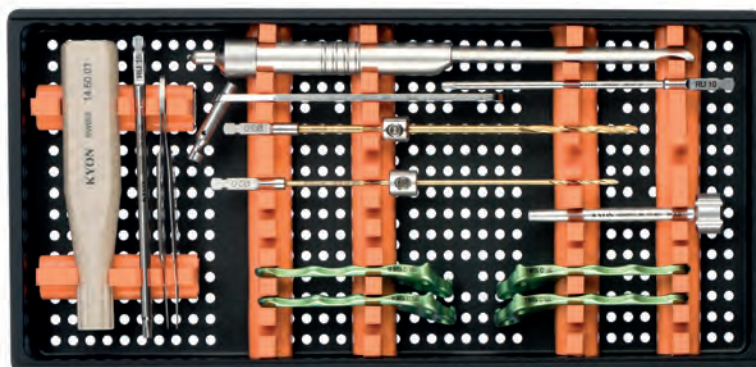
- 06.15.04 ø2.0 mm drill stop
- 06.60.07 screwdriver insert; T8 (Torx compatible)
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 36.40.10 T10 screwdriver, industrial
- 06.50.01 depth gauge, 1.5 to 2.4 mm

Organization

- 83.10.05 Complete TPLO 7/9 KSS Instrument & Implant System
- 36.50.00 surgical instrument fabric case; cotton
- 82.11.11 drawer lid; side KSS
- 82.10.11 drawer lid; center KSS
- 82.40.07 KLS<sup>TM</sup> ø3.0 mm screw drawer; center KSS
- 82.41.11 CSS ø2.0 mm screw drawer; side KSS
- 06.60.06 screw forceps

TPLO Jigs & Sleeves

- 36.30.02 medium TPLO jig w/ 2 sleeves
- 36.33.20 medium TPLO jig sleeve, ø2.0 mm



size 9 ( KLS<sup>TM</sup> 3.5 )

Implants

size 9 Plates; 6 hole;  
titanium alloy; saw radius 21 mm

35.09.31 left

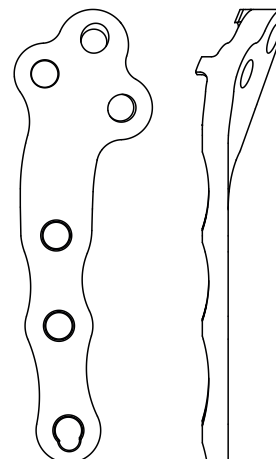
35.09.32 right

ø2.4 mm Cortical Screws;  
titanium alloy, self-tapping, T10 recess

05.26.10 - 05.26.40 10 - 40 mm ( 2 mm increments )

ø3.5 mm KLS<sup>TM</sup> Screws;  
titanium alloy; self-tapping, T10 recess

40.35.08 - 40.35.40 8 - 40 mm ( 2 mm increments )



size 9 ( KLS<sup>TM</sup> 3.5 )

Instruments

TPLO 9 Specific Instruments

- 36.05.25 ø2.5 mm drill sleeve; KLS<sup>TM</sup> Locking
- 36.10.18 ø1.8 mm drill sleeve; KLS<sup>TM</sup> Compression
- 36.35.30 temporary fixation peg; 3.0 screw / ø1.6 K-wire

Drill Bits

- 02.20.04 ø2.5 mm drill bit; quick coupling, 145/120 mm
- 38.10.180a ø1.8 mm drill bit; quick coupling, uncoated, 145/117 mm

Auxiliaries

- 06.15.05 ø2.5 mm drill stop
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 36.40.10 T10 screwdriver, industrial
- 06.50.01 depth gauge, 1.5 to 2.4 mm

Organization

- 83.10.05 Complete TPLO 7/9 KSS Instrument & Implant System
- 36.50.00 surgical instrument fabric case; cotton
- 82.11.11 drawer lid; side KSS
- 82.10.11 drawer lid; center KSS
- 82.40.06 KLS<sup>TM</sup> ø3.5 mm screw drawer; center KSS
- 82.41.03 cortical ø2.4 mm screw drawer; side KSS
- 06.60.06 screw forceps

TPLO Jigs & Sleeves

- 36.30.02 medium TPLO jig w/ 2 sleeves
- 36.30.03 large TPLO jig w/ 2 sleeves
- 36.33.20 medium TPLO jig sleeve, ø2.0 mm
- 36.33.25 large TPLO jig sleeve, ø2.5 mm

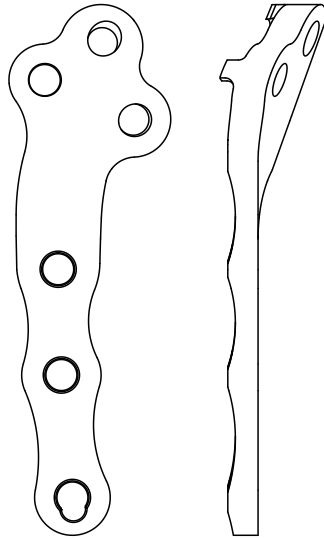


size - size 10 ( KLS<sup>TM</sup> 4.0 )

Implants

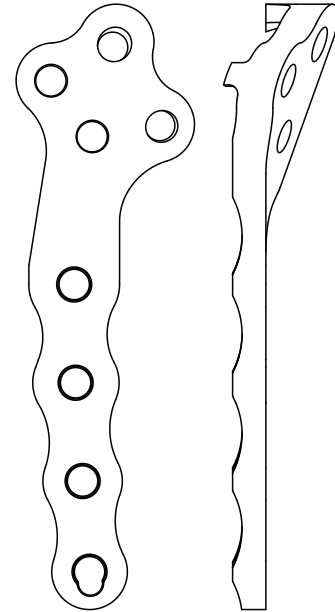
size 10 Plates; 6 hole;  
titanium alloy; saw radius 24/21 mm

- 35.10.31 left
- 35.10.32 right



size 10 Plates; 8 hole;  
titanium alloy; saw radius 27/30 mm

- 35.10.41 left
- 35.10.42 right



ø3.0 mm Cortical Specialty Screws;  
titanium alloy; self-tapping, T15 recess

- 41.30.10 - 41.30.50 10 - 50 mm ( 2 mm increments )

ø4.0 mm KLS<sup>TM</sup> Screws  
titanium alloy; self-tapping, T15 recess

- 40.40.12 - 40.40.50 12 - 50 mm ( 2 mm increments )



size - size 10 ( KLS<sup>TM</sup> 4.0 )

Instruments

TPLO 10 Specific Instruments

- 36.10.40 ø3.0 mm drill sleeve; KLS<sup>TM</sup> Locking
- 36.10.22 ø2.0 mm drill sleeve; KLS<sup>TM</sup> Compression
- 36.35.40 KLS<sup>TM</sup> ø4.0 mm temporary fixation peg; ø1.6 K-wire

Drill Bits

- 38.10.200 ø2.0 mm drill bit; quick coupling, 145/120 mm
- 02.20.03 ø3.0 mm drill bit; 3 lipped, 145/120 mm

Auxiliaries

- 06.15.04 ø2.0 mm drill stop
- 02.20.12 ø3.0 mm drill stop
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 06.60.08 screwdriver insert; T15 (Torx compatible)
- 36.40.10 T10 screwdriver, industrial
- 36.40.15 T15 screwdriver, industrial
- 14.60.01 screwdriver handle; quick coupling, PEEK

Organization

- 83.10.04 Complete TPLO 10 KSS Instrument & Implant System
- 36.50.00 surgical instrument fabric case; cotton
- 82.11.11 drawer lid; side KSS
- 82.10.11 drawer lid; center KSS
- 82.40.05 KLS<sup>TM</sup> ø4.0 mm screw drawer; center KSS
- 82.41.05 KLS<sup>TM</sup> ø4.0 mm long screw drawer; side KSS
- 82.41.08 CSS ø3.0 mm screw drawer; side KSS
- 82.41.09 CSS ø3.0 mm long screw drawer; side KSS
- 06.60.06 screw forceps

TPLO Jigs & Sleeves

- 36.30.03 large TPLO jig w/ 2 sleeves
- 36.33.25 large TPLO jig sleeve, ø2.5 mm

size - size 12 ( KLS<sup>™</sup> 4.5 )

Implants

size 12 Plates; 8 hole;  
titanium alloy; saw radius 30/33 mm

35.12.41 left

35.12.42 right

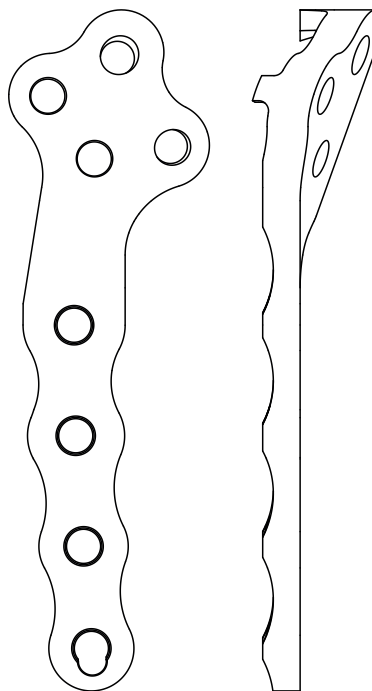
ø3.5 mm Cortical Screws;  
titanium alloy; self-tapping, T10 recess

05.46.14 - 05.46.32 14 - 32 mm ( 2 mm increments )



ø4.5 mm KLS<sup>™</sup> Screws;  
TAN; self-tapping, T15 recess

40.45.12 - 40.45.58 12 - 58 mm ( 2 mm increments )



size - size 12 ( KLS<sup>™</sup> 4.5 )

Instruments

TPLO 12 Specific Instruments

- 36.05.35 drill sleeve ø3.5 mm; for KLS<sup>™</sup> ø4.5 mm screws
- 36.10.25 drill sleeve ø2.5 mm; for cortical ø3.5 mm screws
- 36.35.45 KLS<sup>™</sup> ø4.5 mm temporary fixation peg; ø1.6 K-wire

Drill Bits and Stops

- 06.10.11 drill, 3.5mm, L 147/120mm
- 06.15.08 drill stop, ø3.5mm
- 02.20.04 drill, 2.5mm, 145/120mm
- 06.15.05 drill stop, ø2.5mm

Auxiliaries

- 04.20.05 depth gauge, 2.4 to 4.5mm
- 06.60.10 screwdriver insert, T10, compatible with Torx 10
- 06.60.08 screwdriver insert, T15, compatible with Torx 15
- 14.60.01 screwdriver handle, small, quick coupling
- 36.40.10 screwdriver T10, industrial, compatible with Torx 10
- 36.40.15 screwdriver T15, industrial, compatible with Torx 15

Organization

- 82.30.01 KSS tray; general purpose
- 82.10.01 KSS tray lid
- 82.20.01 KSS rack (21.0mmH)
- 36.50.00 surgical instrument fabric case; cotton
- 82.11.11 drawer lid; side KSS
- 82.10.11 drawer lid; center KSS
- 82.40.09 KLS<sup>™</sup> ø4.5mm screw drawer; center KSS
- 82.41.15 KLS<sup>™</sup> ø4.5mm long screw drawer; side KSS
- 82.41.14 cortical ø3.5mm screw drawer; side KSS
- 06.60.06 screw forceps

TPLO Jigs & Sleeves

- 36.30.03 large TPLO jig w/ 2 sleeves
- 36.33.25 large TPLO jig sleeve, ø2.5 mm



# Ruby

## Joint Stabilization System

### 4.5 mm Ruby System

ø4.5 mm Anchor,  
13 mmL Anchor & Loop; titanium, Ruby, Dyneema

- 11.44.08 8 mm loop
- 11.44.10 10 mm loop
- 11.44.12 12 mm loop
- 11.44.14 14 mm loop
- 11.44.16 16 mm loop
- 11.44.18 18 mm loop
- 11.44.20 20 mm loop



ø4.5 mm Anchor Links;  
titanium alloy

- 11.10.08 8 mm
- 11.10.09 9 mm
- 11.10.10 10 mm
- 11.10.11 11 mm
- 11.10.12 12 mm



ø4.5 mm Anchor Link Locks;  
PEEK

- 11.10.00 link lock, for ø4.5 mm Anchor



### Implants

#### Ruby Specific

- 12.10.10 ø4.5 mm drill, with ø3.8 mm rounded, counterbore
- 12.10.45 screwdriver with PEEK handle, ø4.5 mm
- 12.11.38 freehand drill sleeve ø3.8 mm, stainless steel
- 12.10.11 loop length gauge, stainless steel
- 12.14.45 link holder, for ø4.5 mm anchor links
- 12.15.45 link lock holder, for ø4.5 mm anchor links

#### Consumables

- 12.12.02 ø3.8 mm drill, cannulated for ø1.6 mm k-wire, 155/130 mm
- 10.11.01 ø3.8 mm drill, cannulated for ø1.2 mm k-wire, 120/95 mm
- 10.10.01 ø3.8 mm drill, 155/130 mm
- 04.60.43 K-wire, ø 0.045" (1.25 mm), 6" (150 mm) long (6)
- 04.60.44 K-wire, ø 0.062" (1.6 mm), 6" (150 mm) long (6)

#### Auxiliaries

- 12.12.38 ø3.8 mm drill stop
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 14.60.01 screwdriver handle; quick coupling, PEEK

### Instruments







PGR

## Patellar Groove Replacement

Patello-femoral degenerative joint disease is a frequent, often ignored consequence of some of the most common conditions of the canine stifle such as patellar luxation, or cruciate ligament degeneration and rupture. Surgical treatments of patellar luxation, whether by tibial tuberosity transposition or by corrective osteotomies of the femur and/or tibia, combined with patellar groove deepening by one of several methods, seek restoration of joint stability.

Progression of arthrosis to a chronically painful joint must be expected, but that seems to be an accepted, generally ignored consequence of these surgical interventions. Replacement of the severely effected and/or worn-out patellar groove by a prosthesis presents an option worthy of serious consideration. In an effort to address this need, Slobodan Tepic, Dr. Sci., CTO, KYON AG proposed a novel prosthesis, the KYON Patellar Groove Replacement (PGR)\*.

The PGR should provide a low friction, scratch resistant surface that could indefinitely tolerate the contact pressures and gliding friction generated by the bare bone of the patella. The KYON Patellar Groove Replacement (PGR) is thus comprised of two components (patent pending):

- I. an upper anatomically shaped groove component produced from Titanium alloy (TiAl6V4), highly polished and treated with Amorphous Diamond-Like Coating (ADLC). ADLC shows exceptionally low friction against many solid surfaces, offering the possibility of maintaining heat generation below the threshold of thermal necrosis. ADLC is also very hard and scratch resistant when applied to a suitable substrate. It is chemically inert and thus biocompatible.
- II. a perforated base plate produced from c.p. titanium, coated by glow discharge anodisation with addition of calcium phosphate to promote bony integration.

Ostectomy of the patellar groove just cranially to the insertion of the tendon of the long digital extensor creates a broad, well perfused cancellous bone bed onto which the base plate is secured by titanium bone screws. The groove component is then attached to the base plate by means of 3 conical pegs fitted into receiving conical holes. The broad area of the ostectomy of the patellar groove allows for considerable freedom in medial-lateral positioning of the base plate that can be used to improve quadriceps-to-patellar tendon alignment, thus avoiding conventional tibial tuberosity transposition. Use of trial implants during surgery aids the search for an optimal position of the final implant.

Functional loading of the implant leads to compression of its interface to the bone, which is mechanically favourable to the ill-conditioned load transfer called for by conventional tuberosity transposition, where the full force of the patellar tendon is transferred to the tibia by pins and a figure eight wire.

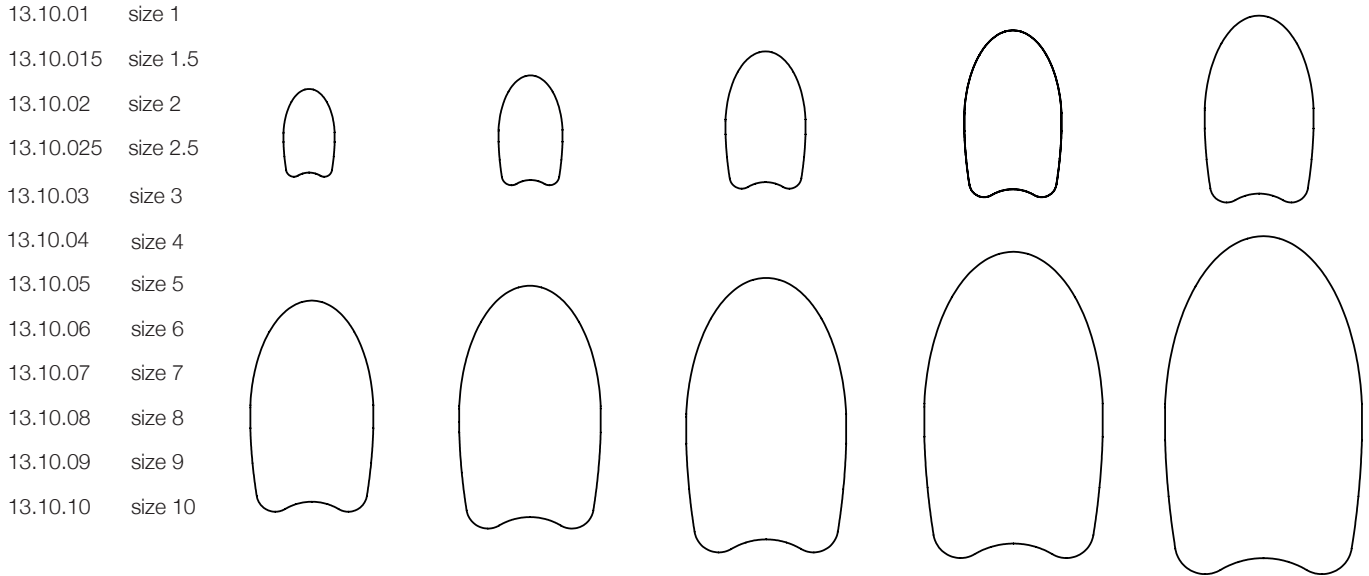
Significant angular deformities can be treated by concurrent corrective osteotomies in addition to patellar groove replacement, should the condition of the patello-femoral joint call for it. The same is true for cruciate ligament ruptures that can be concurrently treated by, for example, Tibial Tuberosity Advancement (TTA).

Clinical application of the Kyon PGR was initiated in 2009 through a controlled clinical release with 15 surgeons (from USA, Europe and Japan) participating in this phase. By mid 2012, 35 surgeons had performed ~100 procedures. Post-surgical recovery was rapid, presented relatively low morbidity and was meeting the expectations of the early adopters in terms of clinical improvement. Surgical planning and execution of the procedure are straightforward and the risks acceptable. By the spring of 2015, 1,600 procedures had been performed in 140 locations.



Implants

PGR Implants;  
Titanium alloy, Ti, ADLC, Biocer®  
Size 1 - 4 accept ø1.5 mm cortical screws, Size 5 - 10 accept ø2.4 mm cortical screws



ø1.5 mm Cortical Screws;  
titanium alloy; self-tapping, T6 recess

- 05.16.06            6 - mm
- 05.16.07            7 mm
- 05.16.08 - 05.16.22    8 - 22 mm  
( 2 mm increments )



ø2.4 mm Cortical Screws;  
titanium alloy, self-tapping, T10 recess

- 05.26.10 - 05.26.32    10 - 32 mm  
( 2 mm increments )



PGR Trial Prostheses

- 14.10.01    size 1
- 14.10.015    size 1.5
- 14.10.02    size 2
- 14.10.025    size 2.5
- 14.10.03    size 3
- 14.10.04    size 4
- 14.10.05    size 5
- 14.10.06    size 6
- 14.10.07    size 7
- 14.10.08    size 8
- 14.10.09    size 9
- 14.10.10    size 10



PGR Specific

- 14.20.01    ø1.1 mm / ø1.8 mm drill sleeve
- 345-222    PGR rasp (Sontec)

Instruments

Auxiliaries

- 06.60.04    screwdriver insert; T6 (Torx compatible)
- 06.60.10    screwdriver insert; T10 (Torx compatible)
- 06.60.11    screw retaining sleeve
- 14.60.01    screwdriver handle, quick coupling, PEEK
- 06.50.01    depth gauge; f/ screws 1.5 to 2.4 mm,  
measuring depth up to 38 mm

Drill Bits

- 06.10.01    ø1.1 mm drill bit; quick coupling, L 85/60 mm
- 06.10.03    ø1.8 mm drill bit; quick coupling, L 125/100 mm

Organization

- 14.90.01    patellar groove instrument & trial implants tray
- 06.60.06    screw forceps



# ALPS

## Advanced Locking Plate System

The Advanced Locking Plate System (ALPS)\* plates minimize contact with the periosteum, allow for use of monocortical and bicortical locking, as well as conventional screws in compression and angulation, can be contoured in all planes and are made from commercially pure titanium, screws from a titanium alloy, to further reduce infection risk and increase biocompatibility compared with stainless steel.

The development of fixed angle devices, starting with PC-Fix in the 1990s, has led to a new generation of implants. The Advanced Locking Plate System\* (ALPS) offers less iatrogenic trauma, greater versatility, increased overall stability and early fracture healing advantages for animals.

The ALPS plating system builds on research and development work done on the PC-Fix (Point Contact Fixator) in the 1980s and 1990s at the AO Research Institute, Davos, Switzerland. Numerous publications have documented the PC-Fix design and clinical results.

Slobodan Tepic, Dr. Sci., Dipl. Ing., who conducted the research on PC-Fix, has developed the Advanced Locking Plate System (ALPS) as a “biological internal fixation” system, designed from conception to preserve the vascular supply, increase resistance to infection and accelerate healing. “Biological internal fixation” involves the use of locked internal fixators, which have minimal implant-to-bone contact, long-span bridging and fewer screws for fixation. (Perren SM, – Evolution of the internal fixation of long bone fractures. The scientific basis of biological internal fixation: choosing a new balance between stability and biology. J Bone Joint Surg Br. 2002 Nov;84(8): 1093-110.)

The ALPS plate is a combination of Shermann (1907) and Brunner (Vattolo, 1986; Joerger, 1987) plates, with holes providing for use of either conventional or locking screws. The shape of the plate allows for bending in both planes. The plate material is c.p. titanium; for the screws, titanium alloy. Finite Element Analysis was used to optimize the shape of the plate. Eight sizes, suitable for small animals, are currently available, designated by the width of the plate (3.5, 4, 5, 6.5, 8, 9, 10 and 11 mm). For large animals, two sizes of Proximal Interfalangeal Arthrodesis (PIP) plates are available.

As of 2015, the ALPS had been used in over 15,000 cases by more than 280 clinics in Europe, the Americas, Japan and Australia. Expected benefits of increased resistance to infection and faster more consistent healing have been documented in several clinical studies, presented at international meetings and KYON Symposia, and published in peer reviewed journals.

### size - Mini 3.5 / 4 ( B1.6 mm )

### Instruments

3.5 mm Plate;  
titanium

05.00.20 20 holes, L=79.5 mm



4.0 mm Plate;  
titanium

05.01.20 20 holes, L=89.5 mm



B1.6 mm Locking Screws;  
titanium alloy, self-tapping, T4

05.05.05 - 05.05.10 5 - 10 mm ( 1 mm increments )



ø1.0 mm Cortical Screws;  
titanium alloy, self-tapping, T4

05.06.05 - 05.05.12 5 - 12 mm ( 1 mm increments )



size - Mini 3.5 / 4 ( B1.6 mm )

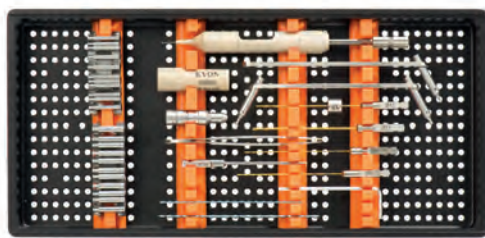
Instruments

ALPS 3.5 / 4 Specific

- 06.20.00 ø1.1 mm drill sleeve; LOCKING
- 06.30.00 ø0.7 mm / ø1.1 mm drill sleeve; NEUTRAL
- 06.40.00 ø0.7 mm drill sleeve; COMPRESSION
- 06.82.01 in-plane bending jig, 3.5 mm plate
- 06.82.02 in-plane bending jig, 4 mm plate

Drill Bits

- 06.10.00 ø0.7 mm drill bit; quick coupling, L 85/60 mm
- 06.10.01 ø1.1 mm drill bit; quick coupling, L 85/60 mm



Auxiliaries

- 06.15.01 ø1.1 mm drill stop
- 06.60.03 screwdriver insert; T4 (Torx compatible)
- 06.60.07 screwdriver insert; T8 (for drill stop)
- 06.60.00 screwdriver handle; x-small; quick coupling, PEEK
- 06.50.00 depth gauge; f/ screws 1.0 to 1.6 mm, PEEK

Organization

- 83.10.02 Complete ALPS 3.5 / 4 KSS Implant & Instrument Tray
- 82.11.11 KSS drawer lid; side
- 82.41.07 KSS drawer; side (for locking B1.6 mm screws)
- 82.41.06 KSS drawer; side (for cortical ø1.0 mm screws)



size - Small 5 / 6.5 ( B2.4 mm )

Implants

5 mm Plate;  
titanium

- 05.10.43 43 holes, L=236.5 mm



6.5 mm Plate;  
titanium

- 05.40.34 34 holes, L=238 mm



B2.4 mm Locking Screws;  
titanium alloy, self-tapping, T6

- 05.15.05 5 mm
- 05.15.06 - 05.15.16 6 - 16 mm ( 2 mm increments )



ø1.5 mm Cortical Screws;  
titanium alloy, self-tapping, T6

- 05.16.05 - 05.16.07 5 - 7 mm ( 1 mm increments )
- 05.16.08 - 05.16.30 8 - 30 mm ( 2 mm increments )



size - Small 5 / 6.5 ( B2.4 mm )

Instruments

ALPS 5 / 6.5 Specific

- 06.20.01 ø1.8 mm drill sleeve; LOCKING
- 06.30.01 ø1.1 mm / ø1.5 mm drill sleeve; NEUTRAL
- 06.40.01 ø1.1 mm drill sleeve; COMPRESSION
- 06.21.01 ø1.1 mm drill sleeve; SCREW-IN / PRE-LOCKING
- 06.71.01 bending iron; 5 / 6.5 mm plates
- 06.71.11 cutting iron; 5 / 6.5 mm plates
- 06.81.01 in-plane bending pliers; 5 / 6.5 mm plates

Drill Bits

- 06.10.01 ø1.1 mm drill bit; quick coupling, L 85/60 mm
- 06.10.02 ø1.5 mm drill bit; quick coupling, L 85/60 mm
- 06.10.03 ø1.8 mm drill bit; quick coupling, L 125/100 mm

Auxiliaries

- 06.15.03 ø1.8 mm drill stop
- 06.60.04 screwdriver insert; T6 (Torx compatible)
- 14.60.01 screwdriver handle; small; quick coupling, PEEK
- 06.50.01 depth gauge; f/ screws 1.5 to 2.0 mm

Organization

- 06.91.01 ALPS 5 / 6.5 implant tray
- 06.91.11 ALPS 5 / 6.5 instrument tray
- 82.11.11 KSS drawer lid; side
- 82.41.02 KSS drawer; side (for locking B2.4 mm screws)
- 82.41.12 KSS drawer; side (for cortical ø1.5 mm screws)



size - Medium 8 / 9 ( B3.2 mm )

Implants

8 mm Plate; titanium

05.20.26 26 holes, L=234 mm



B3.2 mm Locking Screws;  
titanium alloy, self-tapping, T10

05.25.01 hole plug

05.25.06 - 05.25.30 6 - 30 mm ( 2 mm increments )



9 mm Plate; titanium

05.60.22 22 holes, L=234 mm



ø2.4 mm Cortical Screws;  
titanium alloy, self-tapping, T10

05.26.08 - 05.26.40 8 - 40 mm ( 2 mm increments )



ALPS 8 / 9 Specific

- 06.20.02 ø2.5 mm drill sleeve; LOCKING
- 06.30.02 ø1.8 mm / ø2.5 mm drill sleeve; NEUTRAL
- 06.40.02 ø1.8 mm drill sleeve; COMPRESSION
- 06.21.02 ø1.8 mm drill sleeve; SCREW-IN / PRE-LOCKING
- 06.71.02 bending iron; 8 / 9 plates
- 06.71.12 cutting iron; 8 / 9 plates
- 06.81.02 in-plane bending pliers; 8 / 9 mm plates
- 06.83.00 in-plane bender for 8 / 9 / 10 / 11 plates

Drill Bits

- 06.10.03 ø1.8 mm drill bit; quick coupling, L 125/100 mm
- 02.20.04 ø2.5 mm drill bit; quick coupling, L 145/120 mm



Auxiliaries

- 06.15.05 ø2.5 mm drill stop
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 06.60.11 screw retaining sleeve
- 14.60.01 screwdriver handle; small; quick coupling, PEEK
- 04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm
- 36.40.10 screwdriver T10, industrial, compatible with Torx 10

Organization

- 06.91.02 ALPS 8 / 9 implant tray
- 06.91.12 ALPS 8 / 9 instrument tray
- 82.10.11 KSS drawer lid; center
- 82.11.11 KSS drawer lid; side
- 82.40.03 KSS drawer; center (for locking B3.2 mm screws)
- 82.41.03 KSS drawer; center (for cortical ø2.4 mm screws)

Instruments



size - Large 10 / 11 ( B4.0 mm )

Implants

10 mm Plate;  
titanium

- 05.30.02 2 holes; L=23 mm
- 05.30.03 3 holes; L=35 mm
- 05.30.04 4 holes; L=47 mm
- 05.30.05 5 holes; L=59 mm
- 05.30.06 6 holes; L=71 mm
- 05.30.07 7 holes; L=83 mm
- 05.30.08 8 holes; L=95 mm
- 05.30.09 9 holes; L=107 mm
- 05.30.10 10 holes; L=119 mm
- 05.30.11 11 holes; L=131 mm
- 05.30.12 12 holes; L=143 mm



11 mm Plate;  
titanium

- 05.50.04 4 holes; L=51.5 mm
- 05.50.06 6 holes; L=77.5 mm
- 05.50.08 8 holes; L=103 mm
- 05.50.10 10 holes; L=129 mm
- 05.50.12 12 holes; L=155.5 mm
- 05.50.14 14 holes; L=181.5 mm
- 05.50.16 16 holes; L= 207 mm
- 05.50.18 18 holes; L= 233.5 mm



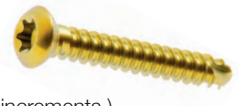
B4.0 mm Locking Screws;  
titanium alloy, self-tapping, T10

- 05.35.01 4 mm plug
- 05.35.10 - 05.35.34 10 - 34 mm ( 2 mm increments )



ø2.7 mm Cortical Screws;  
titanium alloy, self-tapping, T10

- 05.36.12 - 05.36.34 12 - 34 mm ( 2 mm increments )



size - Large 10 / 11 ( B4.0 mm )

Instruments

ALPS 10 / 11 Specific

- 06.20.03 ø3.2 mm drill sleeve; LOCKING
- 06.30.03 ø2.0 mm / ø2.7 mm drill sleeve; NEUTRAL
- 06.40.03 ø2.0 mm drill sleeve; COMPRESSION
- 06.21.03 ø2.0 mm drill sleeve; SCREW-IN / PRE-LOCKING
- 06.71.04 bending iron; 10 / 11 plates
- 06.80.03 in-plane bending pliers; 10 plates
- 06.83.00 in-plane bender for 8 / 9 / 10 / 11 plates

Drill Bits, quick coupling

- 04.20.03 ø2.0 mm drill bit; L 102/75 mm
- 06.10.06 ø2.7 mm drill bit; L 100/75 mm
- 06.10.07 ø3.2 mm drill bit; L 145/120 mm, 3-fluted

Auxiliaries

- 06.15.07 ø3.2 mm drill stop
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 06.60.11 screw retaining sleeve
- 14.60.01 screwdriver handle; small; quick coupling, PEEK
- 04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm,
- 36.40.10 screwdriver T10, industrial, compatible with Torx 10

Organization

- 06.90.03 ALPS 10 implant tray
- 06.91.13 ALPS 10 / 11 instrument tray
- 82.10.01 KSS tray lid; general purpose
- 82.30.01 KSS tray; general purpose
- 82.20.01 KSS rack (for drawers)
- 82.10.11 KSS drawer lid; center
- 82.40.04 KSS drawer; center (for locking B4.0 mm screws)
- 82.11.11 KSS drawer lid; side

# PIP

## Proximal Interphalangeal Arthrodesis



Arthrodesis of the interphalangeal joint in horses has become a common orthopedic procedure performed in large animals. Two sizes of 3 hole ALPS plates were designed for this purpose. The Advanced Locking Plate System (PIP)\* plates minimize contact with the periosteum, allow for use of monocortical and bicortical locking, as well as conventional screws in compression and angulation, can be contoured in all planes and are made from commercially pure titanium, screws from a titanium alloy, to further reduce infection risk and increase biocompatibility compared with stainless steel.

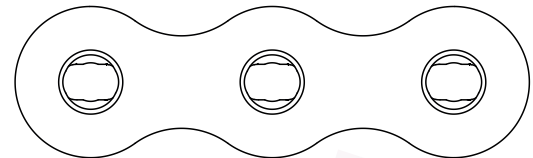
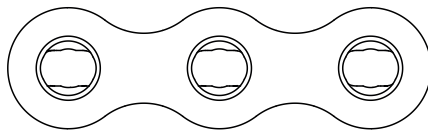
Following an In Vitro study performed by Aleksandar Vidovic, DVM, Specialist in surgery and equine medicine at the Equine Clinic St. Georg, Trier, Germany that confirmed it's viability and comparable strength to existing plate systems, The PIP system was made available for clinical use.

### size - Large Animal ( B6.4 mm )

### Implants

16 mm PIP Plate;  
titanium alloy  
05.70.03 3 holes; L=?

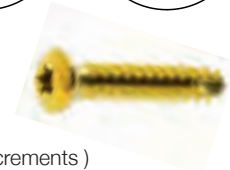
20 mm PIP Plate;  
titanium alloy  
05.80.03 3 holes; L=?



B6.4 mm Locking Screws;  
titanium alloy, T30  
05.55.18 - 05.55.28 18 - 28 mm ( 2 mm increments )



ø4.5 mm Cortical Screws;  
titanium alloy, self-tapping, T15  
05.56.18 - 05.56.32 18 - 32 mm ( 2 increments )



### Instruments

#### ALPS 16 / 20 Specific

- 06.30.05 ø5.0 mm drill sleeve; LOCKING
- 06.10.07 ø3.2 mm drill sleeve; SCREW-IN

#### Drill Bits, quick coupling

- 06.10.07 ø3.2 mm drill bit; quick coupling, 145/120 mm
- 06.10.10 ø5.0 mm drill bit; quick coupling, 110/85 mm



#### Auxiliaries

- 06.15.07 ø3.2 mm drill stop
- 06.15.09 ø5.0 mm drill stop
- 06.60.10 screwdriver insert; T10 (Torx compatible)
- 06.60.08 screwdriver insert; T15 (Torx compatible)
- 06.60.09 screwdriver, T30 (Torx compatible)
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm







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# PAUL

## Proximal Abducting Ulnar Osteotomy

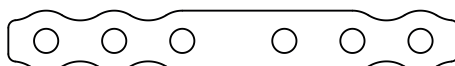
Proximal Abducting Ulnar Osteotomy (PAUL)\* clinical development began with one plate size, PAUL 10, designed for the average Labrador sized patient. We have added three new sizes: PAUL 8, 9 and 11. The number corresponds with the millimeter width of the plate and corresponding ALPS system, i.e. a PAUL 8 plate is 8 mm wide and corresponds with the ALPS 8/9 system. In addition to the difference in width, PAUL plates vary in length by size, accommodating a wide range of medium to large and giant breed patients.

### size - Medium 8 / 9 ( B3.2 mm )

### Implants

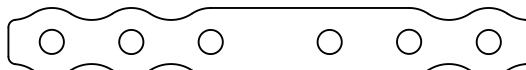
8 mm Plate;  
titanium alloy

- 05.21.02 2 mm (4°) step
- 05.21.03 3 mm (6°) step



9 mm Plate;  
titanium alloy

- 05.61.02 2 mm (4°) step
- 05.61.03 3 mm (6°) step



B3.2 mm Locking Screws;  
titanium alloy, self-tapping, T10

- 05.25.01 hole plug
- 05.25.06 - 05.25.30 6 - 30 mm ( 2 mm increments )



ø2.4 mm Cortical Screws;  
titanium alloy, self-tapping, T10

- 05.26.08 - 05.26.40 8 - 40 mm ( 2 mm increments )



### size - Medium 8 / 9 ( B3.2 mm )

### Instruments

#### PAUL 8 / 9 Specific Instruments

- 06.20.02 ø2.5 mm drill sleeve; LOCKING
- 06.30.02 ø1.8 mm / ø2.5 mm drill sleeve; NEUTRAL
- 06.21.02 ø1.8 mm drill sleeve; SCREW-IN / PRE-LOCKING



#### PAUL 8 / 9 Drill Bits

- 06.10.03 ø1.8 mm drill bit; quick coupling, 125/100 mm
- 02.20.04 ø2.5 mm drill bit; quick coupling, 145/120 mm



size - Large 10 / 11 ( B4.0 mm )

Implants

10 mm Plates;  
titanium alloy

05.31.02 2 mm (4°) step

05.31.03 3 mm (6°) step



11 mm Plates;  
titanium alloy

05.51.02 2 mm (4°) step

05.51.03 3 mm (6°) step



B4.0 mm Locking Screws;  
titanium alloy, self-tapping, T10

05.35.01 4 mm plug

05.35.10 - 05.35.34 10 - 34 mm ( 2 mm increments )



ø2.7 mm Cortical Screws;  
titanium alloy, self-tapping, T10

05.36.12 - 05.36.34 12 - 34 mm ( 2 mm increments )



size - Large 10 / 11 ( B4.0 mm )

Instruments

PAUL 10 / 11 Specific Instruments

06.20.03 ø3.2 mm drill sleeve; LOCKING

06.30.03 ø2.0 mm / ø2.7 mm drill sleeve; NEUTRAL

06.21.03 ø2.0 mm drill sleeve; SCREW-IN / PRE-LOCKING

PAUL 10 / 11 Drill Bits

04.20.03 ø2.0 mm drill bit; quick coupling, L 102/75 mm

06.10.07 ø3.2 mm drill bit; quick coupling, L 145/120 mm, 3-fluted

size - Medium 8 / 9 & Large 10 / 11

Instruments

Auxiliaries

06.15.05 ø2.5 mm drill stop

06.15.07 ø3.2 mm drill stop

06.60.10 screwdriver insert; T10

06.60.11 screw retaining sleeve

14.60.01 screwdriver handle; quick coupling, PEEK

36.40.10 T10 screwdriver, industrial

04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm

30.10.15 FineTouch claw forceps, long

1103-008 stefan bone holding forceps w/ speed lock 6", Sontec

Organization

83.10.01 KSS Implant & Instrument Tray Set for PAUL

82.10.11 KSS drawer lid; center

82.40.03 KSS drawer; center (for locking B3.2 mm screws)

82.40.04 KSS drawer; center (for locking B4.0 mm screws)

82.11.11 KSS drawer lid; side

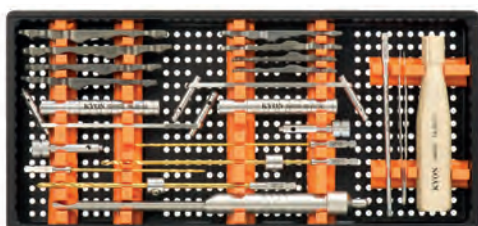
82.41.03 KSS drawer; side (for cortical ø2.4 mm screws)

82.41.04 KSS drawer; side (for cortical ø2.7 mm screws)

82.30.01 KSS tray; general purpose

82.10.01 KSS tray lid

82.20.01 KSS rack (21.0mmH)





# PAUL-2 with KLS<sup>TM</sup> Technology

## Proximal Abducting Ulnar Osteotomy

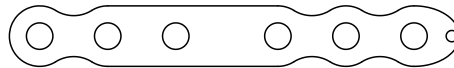
Proximal Abducting Ulnar Osteotomy (PAUL)\* clinical development began with one plate size, PAUL 10, designed for the average Labrador sized patient. We have added three new sizes: PAUL 8, 9 and 11. The number corresponds with the millimeter width of the plate and corresponding ALPS system, i.e. a PAUL 8 plate is 8 mm wide and corresponds with the ALPS 8/9 system. In addition to the difference in width, PAUL plates vary in length by size, accommodating a wide range of medium to large and giant breed patients.

### size - Medium 8 / 9 ( KLS<sup>TM</sup> 3.5 mm )

### Implants

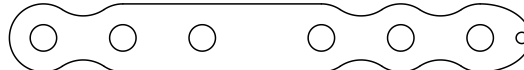
8 mm Plate ( KLS<sup>TM</sup> ø3.5 );  
titanium alloy, for ø3.5 Locking and ø2.4 cortical screws

- 45.08.02 2 mm (4°) step
- 45.08.03 3 mm (6°) step



9 mm Plate ( KLS<sup>TM</sup> ø3.5 );  
titanium alloy, for ø3.5 Locking and ø2.4 cortical screws

- 45.09.02 2 mm (4°) step
- 45.09.03 3 mm (6°) step



ø3.5 mm KLS<sup>TM</sup> Screws;  
titanium alloy; self-tapping, T10 recess  
40.35.08 - 40.35.40 8 - 40 mm ( 2 mm increments )



ø2.4 mm Cortical Screws;  
titanium alloy, self-tapping, T10 recess  
05.26.10 - 05.26.40 10 - 40 mm ( 2 mm increments )



### size - Medium 8 / 9 ( KLS<sup>TM</sup> 3.5 mm )

### Instruments

#### 8 / 9 Specific Instruments

- 36.05.25 ø2.5 mm drill sleeve; KLS<sup>TM</sup> locking ø3.5
- 36.15.18 ø1.8 mm drill sleeve; Cortical ø2.4
- 36.35.35 3.5 KLS<sup>TM</sup> temporary fixation peg for ø1.6 mm k-wire

#### Auxiliaries

- 06.60.10 screwdriver insert; T10
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 36.40.10 screwdriver T10
- 06.50.01 depth gauge, 1.5 to 2.4 mm

#### 8 / 9 Drill Bits

- 02.20.04 ø2.5 mm drill bit; quick coupling, 145/120 mm
- 06.10.03 ø1.8 mm drill bit; quick coupling, 125/100 mm

size - Large 10 / 11 ( KLS<sup>TM</sup> 4.5 mm )

Implants

10 mm Plates ( KLS<sup>TM</sup> ø4.5 );  
titanium alloy, for ø4.5 locking and ø2.7 cortical screws

45.10.02 2 mm (4°) step

45.10.03 3 mm (6°) step



11 mm Plates ( KLS<sup>TM</sup> ø4.5 );  
titanium alloy, for ø4.5 locking and ø2.7 cortical screws

45.11.02 2 mm (4°) step

45.11.03 3 mm (6°) step



ø4.5 mm KLS<sup>TM</sup> Screws;  
TAN; self-tapping, T15 recess

40.45.12 - 40.45.58 12 - 58 mm ( 2 mm increments )



ø2.7 mm Cortical Screws;  
titanium alloy, self-tapping, T10

05.36.12 - 05.36.34 12 - 34 mm ( 2 mm increments )



size - Large 10 / 11 ( KLS<sup>TM</sup> 4.5 mm )

Instruments

10 / 11 Specific Instruments

- 36.05.35 ø3.5 mm drill sleeve; KLS<sup>TM</sup> ø4.5
- 36.15.20 ø2.0 mm drill sleeve; Cort ø2.7
- 36.35.45 KLS<sup>TM</sup> ø4.5 mm temporary fixation peg; ø1.6 K-wire

10 / 11 Drill Bits

- 06.10.11 ø3.5 mm drill bit; quick coupling, 145/120 mm
- 38.10.200 ø2.0 mm drill bit; quick coupling, 145/120 mm

Auxiliaries

- 06.60.10 screwdriver insert; T10
- 06.60.08 screwdriver insert; T15
- 14.60.01 screwdriver handle; quick coupling, PEEK
- 36.40.10 screwdriver T10, industrial
- 36.40.15 screwdriver T15, industrial
- 04.20.05 depth gauge; f/ screws 2.7 to 4.0 mm

Forceps

- 30.10.15 FineTouch Claw forceps, long
- 1103-008 stefan bone holding forceps w/ speed lock 6", Sontec

Organization

- 82.10.11 KSS drawer lid; center
- 82.40.09 KSS drawer; center (KLS<sup>TM</sup> ø4.5 mm screws)
- 82.40.06 KSS drawer; center (KLS<sup>TM</sup> ø3.5 mm screws)
- 82.11.11 KSS drawer lid; side
- 82.41.03 KSS drawer; side (cort ø2.4 mm screws)
- 82.41.04 KSS drawer; side (cort ø2.7 mm screws)
- 83.10.07 PAUL-2 KSS Complete tray, 10 pieces
- 36.50.00 surgical instrument fabric case
- 82.30.01 KSS tray; general purpose
- 82.10.01 KSS tray lid
- 82.20.01 KSS rack (21.0mmH)
- 99.10.01 Blue silicone pad (cut to size)





# TPLO Jigs

In addition to the custom instruments for KYON procedures, we have developed a selection of novel jigs, drill guides, forceps and general instruments.

## TPLO Jigs & Sleeves

## Instruments

### TPLO Jigs ( KYON )

- 36.30.01 small w/ 2 sleeves; W = 7cm
- 36.30.02 medium w/ 2 sleeves; W = 10cm
- 36.30.03 large w/ 2 sleeves; W = 14cm

### TPLO Jig Sleeves( KYON )

- 36.33.11 small,  $\phi$ 1.1 mm
- 36.33.20 medium,  $\phi$ 2.0 mm
- 36.33.25 large,  $\phi$ 2.5 mm



# Targeting Guides



## C-Shaped Drill Guide

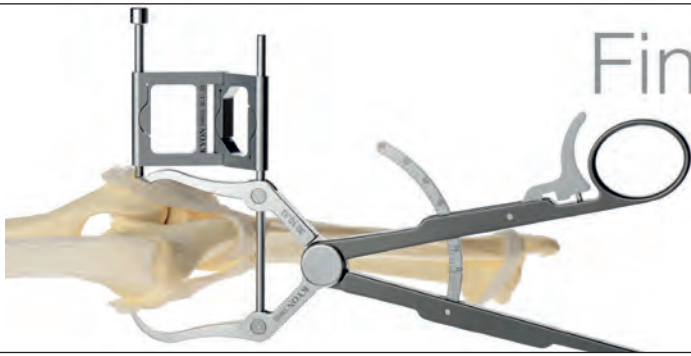
## Instruments

### C-Shaped Targeting Drill Guide

- 12.10.03 C-shape guide, aluminum with hard metal coating
- 12.10.04 drill sleeve  $\phi$ 3.8 mm
- 12.10.05 orientation pin, stainless steel
- 12.10.06 locking lever, PEEK
- 12.10.07 K-wire sleeve in sleeve  $\phi$ 1.2/ $\phi$ 3.8, stainless steel
- 12.10.08 K-wire sleeve in sleeve  $\phi$ 1.6/ $\phi$ 3.8, stainless steel







# Fine Touch Locking Instruments

The Fine Touch friction-lock is resistant to the wear and tear routinely seen in ratcheted locks, especially the finer, micro-ratchet types. Release of the lock, even under full load, is easy and causes no damage to the mechanism. The smooth, low opening and closing force and near-absent resistance within the system when being put into function, provides extremely fine tactile feedback of tissue resistance.

## Fine Touch Targeting Drill Guides

### Targeting Forceps

- 30.10.33 large - max span 70 mm, L 185 mm
- 30.11.33 hinge
- 30.12.01 ø1.25 mm sleeve; L 55 mm
- 30.12.02 ø1.6 mm sleeve; L 55 mm
- 30.12.03 ø2.0 mm sleeve; L 55 mm

### Point-to-Point Forceps

- 30.10.02 medium; curved - span 43 mm, L159 mm
- 30.10.03 large; curved - span 60 mm, L 176 mm
- 30.10.12 medium; straight - span 40 mm, L 159 mm
- 30.10.13 large; straight - span 60 mm, L 176 mm

### TTA Forceps & TTA-2 Spreaders

- 30.10.40 TTA forceps - max span 64 mm, L 175 mm
- 30.10.45 TTA-2 spreaders - 7.5 -15 cages, 175mmL

### “Claw” Bone-to-Plate Forceps

- 30.10.04 small - max span 20 mm, L 113 mm
- 30.10.14 short - max span 40 mm, L 159 mm
- 30.10.15 long - max span 55 mm, L 175 mm

### Plier Forceps

- 30.10.20 plier forceps - max span 20 mm, L 139



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# General Instruments



In addition to the custom instruments for KYON procedures, we have developed a selection of novel jigs, drill guides, forceps and general instruments. f

## General & Orthopedic Instruments

## Instruments

### General and Orthopedic Instruments

|           |   |
|-----------|---|
| 1100-678  | Hohmann elevator, 6mm wide, 6 1/4 (mini)              |
| 1100-671  | Hohmann elevator, 8 mm wide, 8 1/2"                   |
| 02.30.16  | Hohmann retractor, 4 teeth, 12 mm wide                |
| 02.30.17  | Hohmann retractor, 6 teeth, 20 mm wide                |
| 12-9300   | Castroviejo Caliper, straight, 20mm scale             |
| 117-560   | Beaver Chuck Handle, round 3k, 0cm                    |
| 1100-6691 | Stifle Thrust Lever, 8 1/4"                           |
| 1100-6692 | Stifle Thrust Lever, 11"                              |
| 335-275   | Periosteal Elevator, phen handle, straight round edge |
| 412-438   | Dandy Nerve Hook, straight shaft, 9"                  |
| 1103-284  | Hand Surgery Osteotome, straight 8mm, 5"              |
| 315-544   | Classic Lempert Rongeur, curved, 2.5mm, 6 1/4"        |
| 02.30.18  | Finger Meyerding retractor                            |
| 02.30.19  | Hattspoon, 23 cm long / bone curette                  |
| 1100-670  | Army Navy   |
| 1100-660  | large Senn Retractor, sharp 4 pt.                     |
| 417-048   | Inge Neroma Retractor w/ cross over tip, speedlock    |
| 1100-628B | Gelpi Retractor, 5 1/2"                               |
| 1100-630A | long curved Gelpi                                     |
| 1100-668  | Senn Retractor Sharp 6 1/4"                           |
| 1100-244  | Metzenbaum  |
| 1100-254  | Mayo scissors   |
| 1100-490  | Miller Rasps  |
| 1100-631A | Deep Gelpi  |
| 1100-672E | Bone Lever  |
| 1100-866  | #3L blade handle                                      |
| 115-452   | Crile Forceps Curved                                  |
| 136-632   | 7" forceps 1x2  |
| 315-612   | Ruskin rongeur  |
| 04.30.01  | hammer; 100 g   |

### General and Orthopedic Instruments

|           |  |
|-----------|--|
| 1100-462S | Deluxe Mallet w/ 1" nylon & SS Head, 7 3/8"        |
| 345-228   | Putti Rasp   |
| 77-0450   | Straight Rasp Gallagher                            |
| 77-0452   | Convex Rasp Gallagher                              |
| 1103-41A  | 8" point-to-point bone clamp forceps w/ speed lock |
| 1103-41B  | 6" point-to-point bone clamp forceps w/ speed lock |

### Depth Gauges

|          |   |
|----------|---|
| 04.20.05 | depth gauge; f/ screws 2.7 to 4.0 mm, measuring up to 60 mm |
| 06.50.00 | depth gauge; f/ screws 1.0-1.6 mm, PEEK                     |
| 06.50.01 | depth gauge; f/ screws 1.5 to 2.0 mm, measuring up to 38 mm |

### Screwdriver Handles (quick-coupling)

|          |  |
|----------|--|
| 06.60.00 | screwdriver handle; x-small; PEEK        |
| 14.60.01 | screwdriver handle; small, L 110 mm PEEK |

### Screwdriver Inserts (quick-coupling)

|          |               |
|----------|---------------|
| 04.20.07 | 2.5 mm hex    |
| 04.20.08 | cross-head    |
| 06.60.03 | Torx 4 (T4)   |
| 06.60.04 | Torx 6 (T6)   |
| 06.60.07 | Torx 8 (T8)   |
| 06.60.10 | Torx 10 (T10) |
| 06.60.08 | Torx 15 (T15) |

### Screwdriver Insert Accessories

|          |                        |
|----------|------------------------|
| 06.60.06 | screw forceps          |
| 06.60.11 | screw retaining sleeve |

Drill Stops

|          |         |          |         |
|----------|---------|----------|---------|
| 06.15.01 | ø1.1 mm | 06.15.07 | ø3.2 mm |
| 06.15.02 | ø1.5 mm | 16.20.34 | ø3.4 mm |
| 06.15.03 | ø1.8 mm | 12.12.38 | ø3.8 mm |
| 06.15.04 | ø2.0 mm | 16.20.42 | ø4.2 mm |
| 06.15.05 | ø2.5 mm | 16.20.47 | ø4.7 mm |
| 02.20.12 | ø3.0 mm | 06.15.09 | ø5.0 mm |

Consumables

Drill Bits; quick-coupling

|           |  |
|-----------|--|
| 06.10.00  | ø0.7 mm drill bit; L 85/60 mm                                  |
| 06.10.01  | ø1.1 mm drill bit; L 85/60 mm                                  |
| 06.10.02  | ø1.5 mm drill bit; L 85/60 mm                                  |
| 38.10.150 | ø1.5 mm drill bit; L 110/85 mm                                 |
| 06.10.03  | ø1.8 mm drill bit; L 125/100 mm                                |
| 38.10.180 | ø1.8 mm drill bit; L 145/117 mm                                |
| 04.20.03  | ø2.0 mm drill bit; L 102/75 mm                                 |
| 38.10.200 | ø2.0 mm drill bit; L 145/120 mm                                |
| 02.20.04  | ø2.5 mm drill bit; L 145/120 mm                                |
| 06.10.06  | ø2.7 mm drill bit; L 100/75 mm                                 |
| 02.20.03  | ø3.0 mm drill bit; L 145/120 mm, 3 lipped                      |
| 06.10.07  | ø3.2 mm drill bit; L 145/120 mm, 3 fluted                      |
| 06.10.11  | ø3.5 mm drill bit; quick coupling, 145/120 mm                  |
| 12.12.02  | ø3.8 mm drill bit; L 155/130 mm, cannulated for ø1.6 mm k-wire |
| 10.11.01  | ø3.8 mm drill bit; L 120/95 mm, cannulated for ø1.2 mm k-wire  |
| 10.10.01  | ø3.8 mm drill bit; L 155/130 mm                                |
| 02.20.02  | ø4.5 mm drill bit; L 145/120 mm, 3 lipped, flat end            |
| 06.10.09  | ø4.5 mm drill bit, L 110/85 mm                                 |
| 06.10.10  | ø5.0 mm drill bit, L 110/85 mm                                 |
| 02.10.01  | ø6.0 mm drill bit; L 195/170 mm, 3 lipped                      |

K-Wires

|          |   |
|----------|---|
| 04.60.43 | K-wire, 0.045" (1.25 mm) diameter, 6" (150 mm) long (6) |
| 04.60.44 | K-wire, 0.062" (1.6 mm) diameter, 6" (150 mm) long (6)  |

Saw Blades

|          |   |
|----------|---|
| ZMS-131  | "40 mmL x 19.1 mmW, Zimmer/Linvatec; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm"  |
| ZMS-133  | "40 mmL x 14 mmW, Zimmer/Linvatec; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm"    |
| ZMS-137  | "25.5 mmL x 14 mmW, Zimmer/Linvatec; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm"  |
| ZMS-143  | "25.5 mmL x 9.4 mmW, Zimmer/Linvatec; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm" |
| ZMS-132  | "25.5 mmL x 5.8 mmW, Zimmer/Linvatec bladeT=.38 mm, cutT=.63 mm, 7.1 teeth/cm"  |
| 04.61.01 | "50 mmL x 9 mmW, Synthes Colibri; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm"     |
| 04.61.02 | "50 mmL x 10 mmW, Zimmer/Linvatec; bladeT=.38mm, cutT=.63 mm, 8.7 teeth/cm"     |
| 04.61.03 | "50 mmL x 10 mmW, Stryker; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm"            |
| 04.61.04 | "50 mmL x 10 mmW, 3M Mini Driver; bladeT=.38 mm, cutT=.63 mm, 8.7 teeth/cm"     |

# KYON

## Custom Trays & Organization



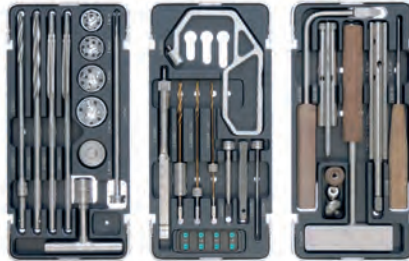
In addition to the custom instruments for KYON procedures, we have developed a selection of novel jigs, drill guides, forceps and general instruments.

### Custom Trays

### Organization

#### THR Instrument Trays

- 02.40.01 REAMERS
- 02.40.02 DRILL GUIDE
- 02.40.03 AUXILIARIES
- 02.40.08 TRIALS
- 02.01.00 REAMERS & CUP TRIALS



#### TTA Trays

- 04.40.02 TTA implant tray 1.0; aluminum
- 04.41.02 TTA implant tray 2.0; aluminum (extended TTA sizes)



#### PGR Tray

- 14.90.01 trials, instruments, screws



#### ALPS Trays

- 06.91.01 ALPS 5 / 6.5 implant tray
- 06.91.11 ALPS 5 / 6.5 instrument tray
- 06.91.02 ALPS 8 / 9 implant tray
- 06.91.12 ALPS 8 / 9 instrument tray
- 06.90.03 ALPS 10 implant tray
- 06.91.13 ALPS 10 / 11 instrument tray

### AESCULAP Containers & Accessories

#### Sterile Container Lids; mini

- 80.00.01 blue; aluminum
- 80.00.02 silver; aluminum
- 80.00.03 gold; aluminum
- 80.00.04 green; aluminum
- 80.00.05 red; aluminum



#### Sterile Container Accessories

- 80.02.01 permanent filter for 80.00.--
- 80.02.02 silicone pad insert for 80.01.--
- 80.02.03 sterile container locks, blue; (100pcs)



#### Sterile Container Base; mini

- 80.01.01 sterile container base; aluminum, 30 mm high (1 tray)
- 80.01.02 sterile container base; aluminum, 57 mm high (2 trays) (KSS only)



# KSS

## KYON Sterilization System



In addition to the custom instruments for KYON procedures, we have developed a selection of novel jigs, drill guides, forceps and general instruments.

### Complete KSS Trays

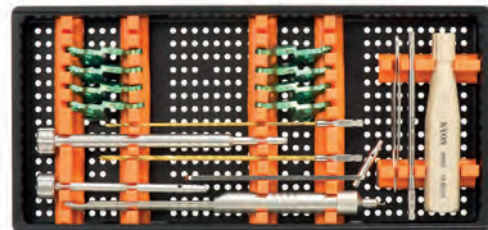
### Organization

#### DPO

- 83.10.03 "1 x 82.10.01 - tray / rack lid
- 1 x 82.30.05 - tray for DPO
- 1 x 82.20.01 - drawer rack
- 1 x 82.10.11 - center drawer lid
- 1 x 82.11.11 - side drawer lid
- 1 x 82.40.05 - center drawer; KLS™ 4.0 mm screws
- 1 x 82.41.08 - side drawer; CSS 3.0 mm screws"

#### TPLO 4 / 5 / 6:

- 83.10.06 "1 x 82.10.01 - tray / rack lid
- 1 x 82.30.08 - tray for TPLO 4/5/6
- 1 x 82.20.01 - drawer rack
- 2 x 82.11.11 - side drawer lid
- 1 x 82.41.13 - side drawer; KLS™ 1.5 mm screws
- 1 x 82.41.10 - side drawer; KLS™ 2.0 mm screws
- 1 x 82.41.06 - side drawer; cortical 1.0 mm screws
- 1 x 82.41.12 - side drawer; cortical 1.5 mm screws"



#### TPLO 7 / 9:

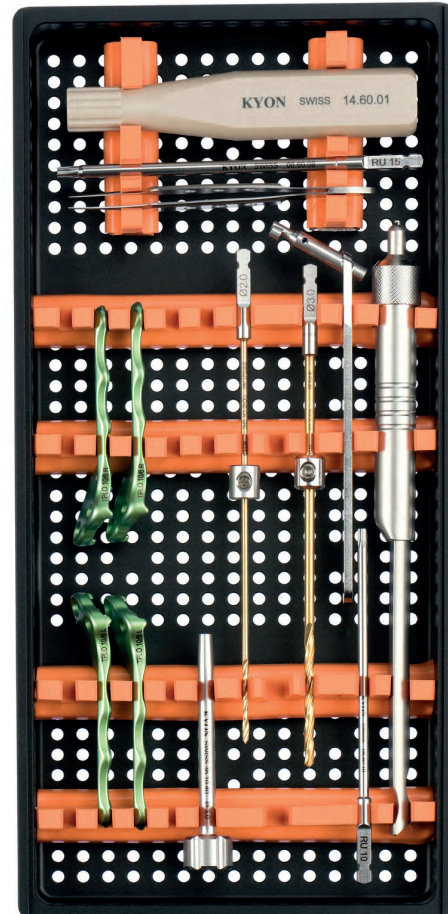
- 83.10.05 "1 x 82.10.01 - tray / rack lid
- 1 x 82.30.09 - tray for TPLO 7/9
- 1 x 82.20.01 - drawer rack
- 1 x 82.10.11 - center drawer lid
- 2 x 82.11.11 - side drawer lid
- 1 x 82.40.06 - center drawer; KLS™ 3.5 mm screws
- 1 x 82.40.07 - center drawer; KLS™ 3.0 mm screws
- 1 x 82.41.03 - side drawer; cortical 2.4 mm screws
- 1 x 82.41.11 - side drawer; CSS 2.0 mm screws"

#### TPLO 10

- 83.10.04 "1 x 82.10.01 - tray / rack lid
- 1 x 82.30.07 - tray for TPLO 10
- 1 x 82.20.01 - drawer rack
- 1 x 82.10.11 - center drawer lid
- 2 x 82.11.11 - side drawer lid
- 1 x 82.40.05 - center drawer; KLS™ 4.0 mm screws
- 1 x 82.41.05 - side drawer; KLS™ 4.0 mm long screws
- 1 x 82.41.08 - side drawer; CSS 3.0 mm screws
- 1 x 82.41.09 - side drawer; CSS 3.0 mm long screws"

#### PAUL-2 Complete Tray

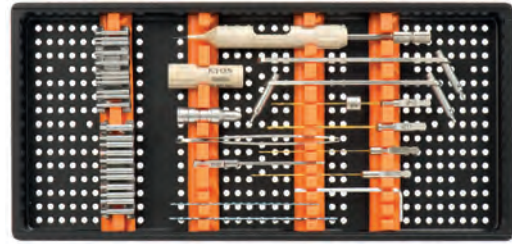
- 83.10.07 1 x 82.10.01 - tray / rack lid
- 1 x 82.30.03 - tray for PAUL-2
- 1 x 82.20.01 - drawer rack
- 1 x 82.10.11 - center drawer lid
- 1 x 82.11.11 - side drawer lid
- 1 x 82.40.06 - center drawer; KLS™ 3.5 mm screws
- 1 x 82.40.09 - center drawer; KLS™ 4.5 mm screws
- 1 x 82.41.03 - side drawer; cortical 2.4 mm screws
- 1 x 82.41.04 - side drawer; cortical 2.7 mm screws



## Complete KSS Trays

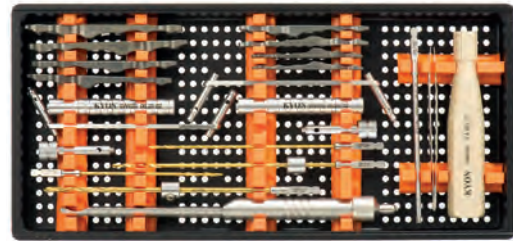
### ALPS 3.5 / 4

- 83.10.02 "1 x 82.10.01 - tray / rack lid
- 1 x 82.30.04 - tray for ALPS 3.5/4
- 1 x 82.20.01 - drawer rack
- 2 x 82.11.11 - side drawer lid
- 1 x 82.41.07 - side drawer; locking B1.6 mm screws
- 1 x 82.41.06 - side drawer; cortical 1.0 mm screws"



### PAUL Complete Tray

- 01.11.15 1 x 82.10.01 - tray / rack lid
- 1 x 82.30.03 - tray for PAUL
- 1 x 82.20.01 - drawer rack
- 1 x 82.10.11 - center drawer lid
- 1 x 82.11.11 - side drawer lid
- 1 x 82.40.03 - center drawer; locking B3.2 mm screws
- 1 x 82.40.04 - center drawer; locking B4.0 mm screws
- 1 x 82.41.03 - side drawer; cortical 2.4 mm screws
- 1 x 82.41.04 - side drawer; cortical 2.7 mm screws



## KSS Parts

### KSS Universal Components

- 82.10.01 lid; general purpose (for tray and rack)
- 82.10.11 drawer lid; center
- 82.11.11 drawer lid; side
- 82.20.01 rack
- 82.30.01 container tray

### Container Tray & Silicone Inlays

- 82.30.03 PAUL
- 82.30.04 ALPS 3.5/4
- 82.30.05 DPO
- 82.30.06 mini THR
- 82.30.07 TPLO 10
- 82.30.08 TPLO 4/5/6
- 82.30.09 TPLO 7/9

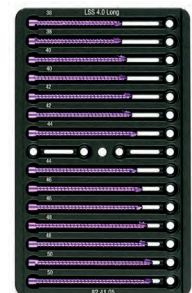
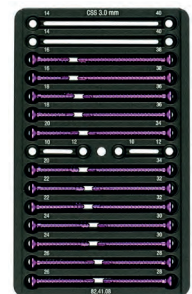
### CENTER DRAWERS

- 82.40.03 locking B3.2 mm screws
- 82.40.04 locking B4.0 mm screws
- 82.40.05 KLS™ ø4.0 mm screws
- 82.40.06 KLS™ ø3.5 mm screws
- 82.40.07 KLS™ ø3.0 mm screws
- 82.40.08 locking B4.0 mm, cortical ø2.4, ø2.7 mm
- 82.40.09 KLS™ ø4.5 mm screws



### SIDE DRAWERS

- 82.41.02 locking B2.4 mm screws
- 82.41.03 cortical ø2.4 mm screws
- 82.41.04 cortical ø2.7 mm screws
- 82.41.05 KLS™ ø4.0 mm long screws
- 82.41.06 cortical ø1.0 mm screws
- 82.41.07 locking B1.6 mm screws
- 82.41.08 CSS ø3.0 mm screws
- 82.41.09 CSS ø3.0 mm long screws
- 82.41.10 KLS™ ø2.0 mm screws
- 82.41.11 CSS ø2.0 mm screws
- 82.41.12 cortical ø1.5 mm screws
- 82.41.13 KLS™ ø1.5 mm screws
- 82.41.14 cortical ø3.5 mm screws
- 82.41.15 KLS™ ø4.5 mm long screws





# KYON

## Manuals, Guides & Exercises



### Printed Materials

#### Manual w/ Brochure

|          |       |
|----------|-------|
| 99.99.01 | THR   |
| 99.99.01 | TTA   |
| 99.99.01 | TTA-2 |
| 99.99.01 | TPLO  |
| 99.99.01 | Ruby  |
| 99.99.01 | ALPS  |
| 99.99.01 | PGR   |
| 99.99.01 | PAUL  |

#### Planning Templates & Guides

|          |                    |
|----------|--------------------|
| 99.99.01 | Standard THR & PHR |
| 99.99.01 | Mini THR & PHR     |
| 99.99.01 | TTA & Mini TTA     |
| 99.99.01 | TTA-2              |
| 99.99.01 | TPLO               |
| 99.99.01 | Ruby               |
| 99.99.01 | ALPS               |
| 99.99.01 | PGR                |
| 99.99.01 | PAUL               |

### Bone Model Exercises

#### Bone Model Exercises

|          |                               |
|----------|-------------------------------|
| 99.99.01 | THR                           |
| 99.99.01 | TTA                           |
| 99.99.01 | TTA-2                         |
| 99.99.01 | TPLO                          |
| 99.99.01 | Ruby                          |
| 99.99.01 | PGR                           |
| 99.99.01 | PAUL                          |
| 99.99.01 | ALPS 4 - canine distal radius |
| 99.99.01 | ALPS 6.5 - feline tibia       |
| 99.99.01 | ALPS 8 - feline femur         |
| 99.99.01 | ALPS 8 - canine radius        |
| 99.99.01 | ALPS 10 - canine femur        |





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