

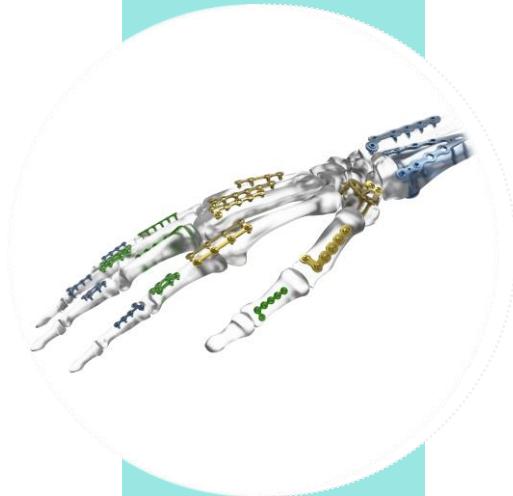
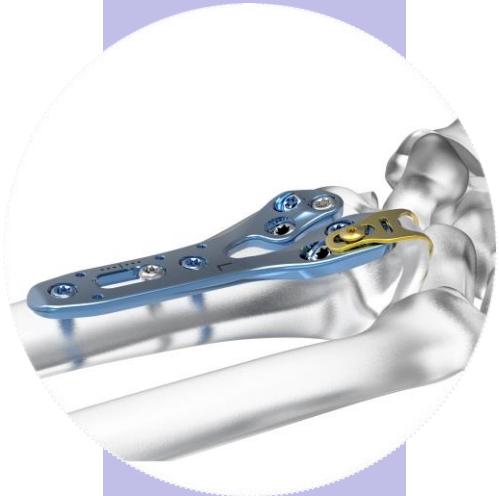
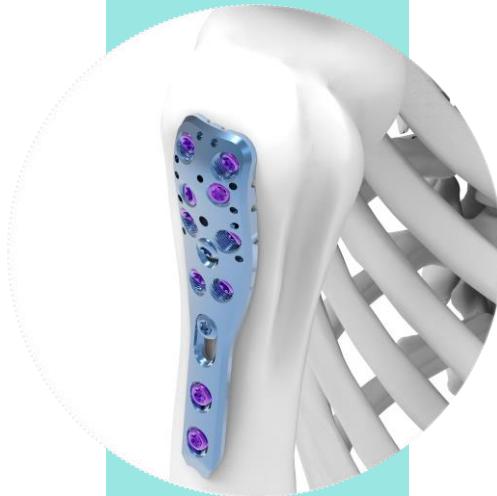
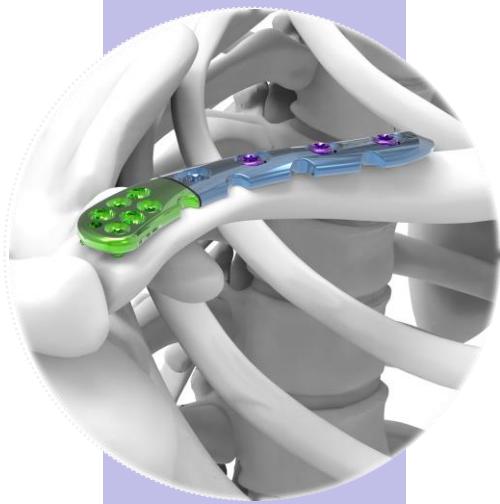


Astrolabe

LIFE AND MOBILITY

Applications Catalog

Trauma & Extremities



Applications Catalog

Trauma & Extremities

The purpose of this catalog is to present the main solutions for the orthopedic treatment of Trauma and Extremities regarding the full range of the Astrolabe products with the addition of the respective indications for use. The catalog is divided according to the musculoskeletal system regions such as: Upper Limb, Lower Limb, Upper and Lower extremities. Therefore, we are representing these same divisions respectively with the application of the product lines: **MultiFix**, **SmartFix**, **LIVTrauma** and **AstroCAN**.

We emphasize that the products in this catalog are not limited to these applications only. These are some of the indications for frequent use.

It's important to reinforce that the proper surgical procedures and techniques are the responsibility of the medical professional. The following guidelines are furnished for information purposes only. Each surgeon must evaluate the appropriateness of the procedures based on his or her personal medical training and experience. For additional information, contact the Astrolabe authorized distributor in your region or through our customer service channels

Customer Service
(+351) 219 672 298

info@astrolabe-medical.com

Check out all the products on the website:

www.astrolabe-medical.com



Product Lines ... 1-2

Upper Limb

- Proximal Humerus ... 3
- Clavicle ... 4
- Humeral Shaft ... 5
- Forearm ... 6
- Radius Head ... 7-8

Upper Extremities

- Distal Radius ... 7-8
- Hand ... 9-10
- Carpal Bones ... 11-12
- Wrist ... 12-13
- Wrist ... 14

Lower Limb

- Knee ... 15
- Hip ... 15 -16
- Femoral Shaft ... 16
- Distal Femur ... 17-18
- Proximal Tibia ... 19-20
- Distal Tibia ... 21-22
- Distal Tibia ... 23-24

Lower Extremities

- Forefoot ... 25-30
- Midfoot ... 31-34
- Rearfoot ... 35-38

Applications by line ... 39-40

MultiFix

AstroCAN



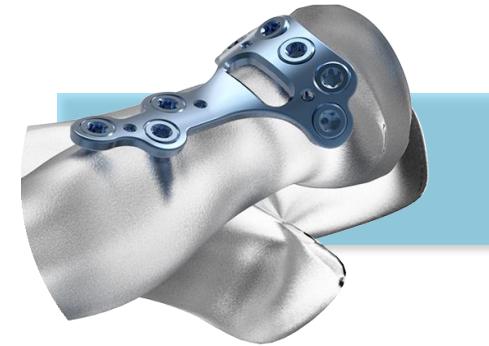
AstroCAN is the Astrolabe cannulated screw family for small and large bone fixation. Main features:

- Titanium alloy;
- Screw diameters from 2.5 to 7.0mm;
- Self tapping design;
- Headed and Headless screws options;
- Low profile head for reduction of soft tissue damage;
- Reverse cutting flutes;
- Driving torx screws;

LIV trauma

LIV trauma is Astrolabe's Most comprehensive locking plate system for fixation of small and large bone fractures, in different types of indications and applications. The system has combi-holes in the body of the plates, which allows the insertion of cortical screws or locking screws in the same hole as well as transverse cancellous screws. The LIV system has an exclusive feature of 54% increase in material (titanium) in the region between holes, providing greater resistance to the implants. Main features:

- Combi-holes locking-system;
- Rounded plate edges, for minimal irritation of the soft tissues;
- Straight plates and anatomic design options;
- Left and Right plate options;
- Pure titanium for plates;
- Titanium alloy for screws;
- Self-tapping screws;
- Driving torx screws;
- External guides for minimally invasive surgical technique for femur and tibia plates;



The **MultiFix** locking plate system is Astrolabe's range of axially stable locking plates for extremities bones and a variety of anatomic region. Containing as integrated parts of the **MultiFix** family :

- **Hallux**
- **LapidoFix**

And which main features are:

- Fixed angle locking system;
- Low profile plates;
- Anatomic design;
- Pure titanium for plates;
- Titanium alloy for screws;
- Self tapping screws;
- Rounded plate edges, for minimal irritation of the soft tissues;
- Cross-drive screws for the 1.2, 1.7 and 2.3mm systems;
- Torx screws for the 2.0, 2.4, 2.7 and 3.5mm systems.

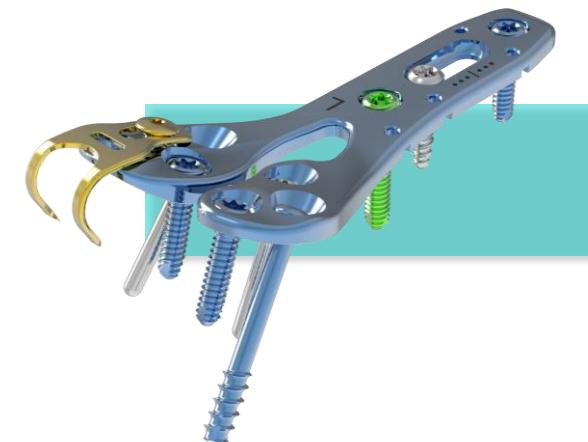
SmartFix

The **SmartFix** locking plate system is the new Astrolabe family of plates that feature variable angle locking technology, which makes it possible to target locking screws according to a specific need or fracture pattern. Containing as integrated parts of the **SmartFix** family:

- **Volar-e**
- **Üthos**

And which main features are:

- Variable angle locking;
- Low profile plates;
- Anatomic design;
- Left and Right plate options;
- Titanium for plates;
- Titanium alloy for screws;
- Self tapping screws;
- Rounded plate edges, for minimal irritation of the soft tissues;
- Driving torx screws;



Applications

Shoulder

Proximal Humerus Plate 3,5 mm

LIV trauma



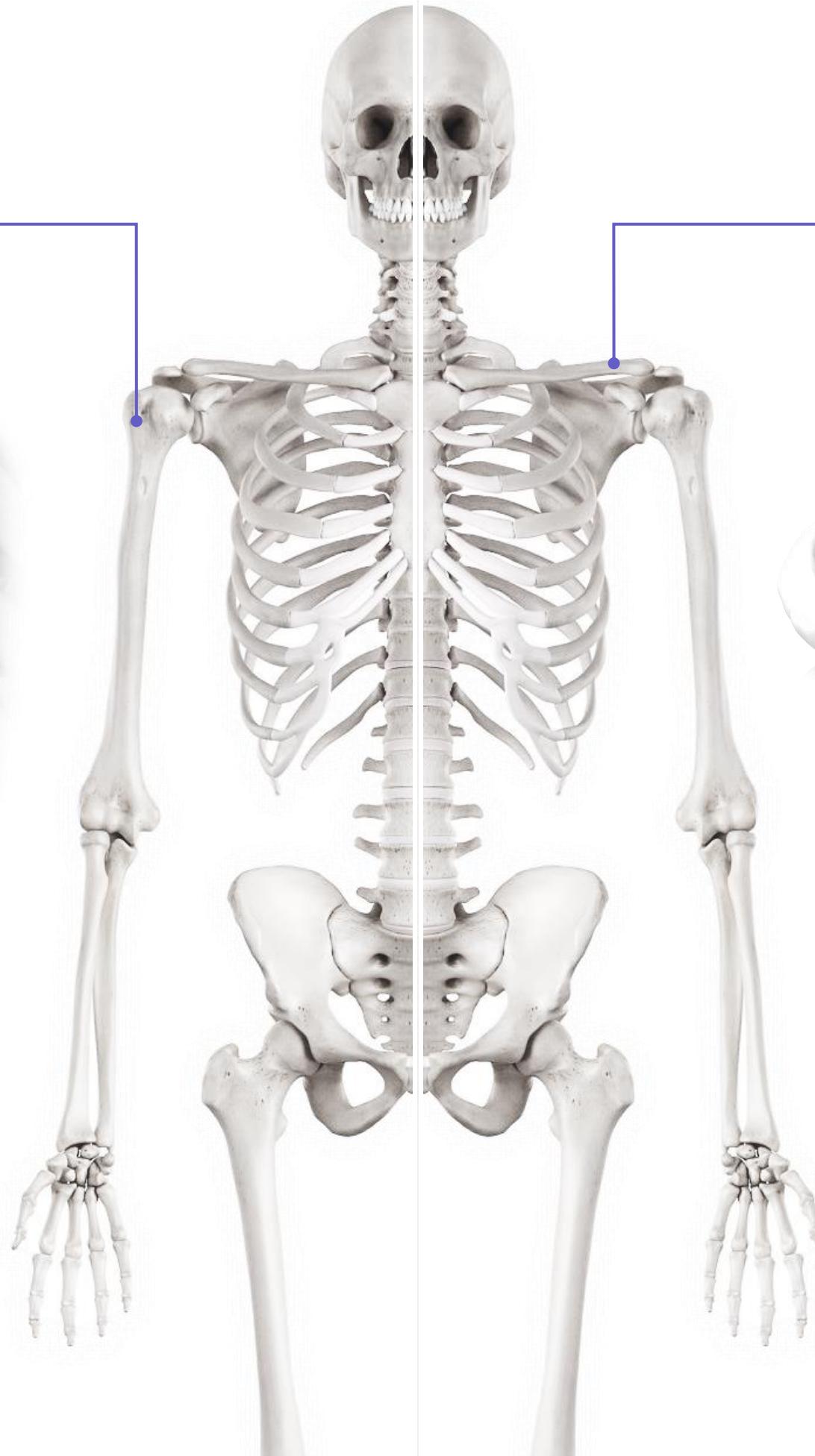
Proximal Humerus Plate
Small Fragments Ø3,5 mm

Short & Long Plates



Ø 3,5 Ø3,5

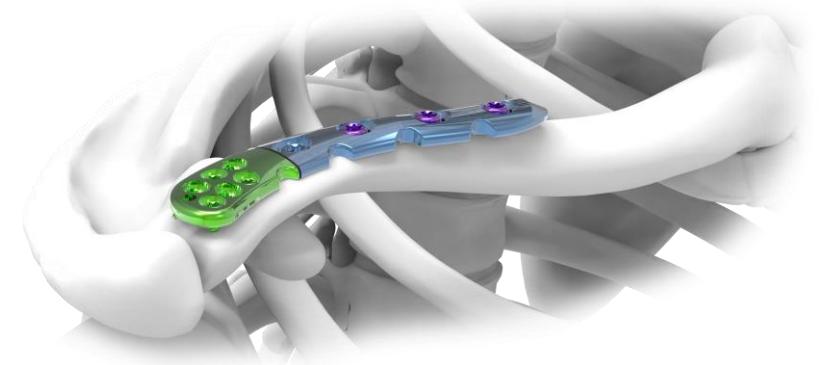
Cortical and Locking Screws



Clavicle Plates 2,7/3,5 mm

LIV trauma

Clavicle Superior Lateral Plate
Small Fragments Ø2,7/3,5mm



Clavicle Anterior Superior Plate
Small Fragments 3,5mm



Ø 2,4 Ø3,5

Cortical Screws

Ø 2,7 Ø3,5

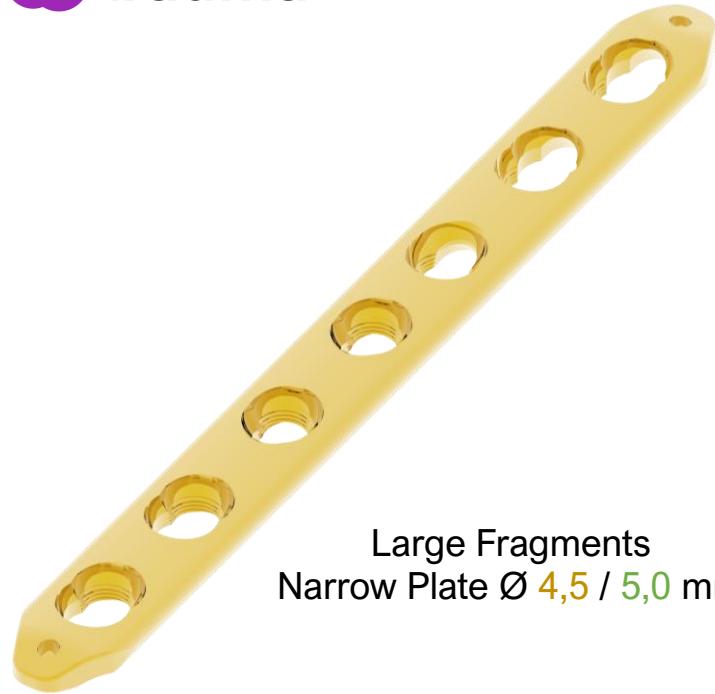
Locking Screws

Applications

Arm / Forearm

Narrow Plate 5,0 mm

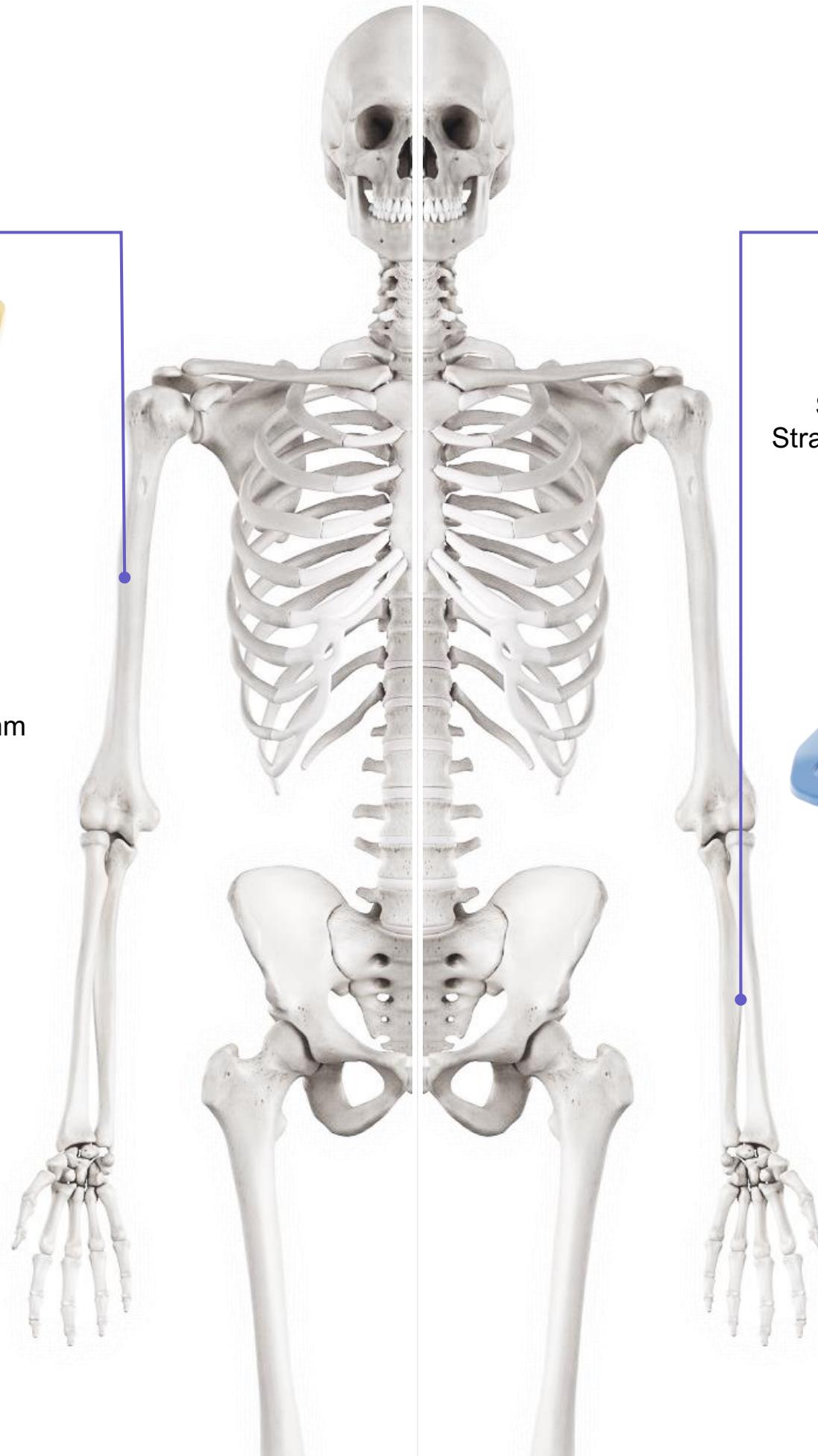
LIV trauma



Large Fragments
Narrow Plate Ø 4,5 / 5,0 mm

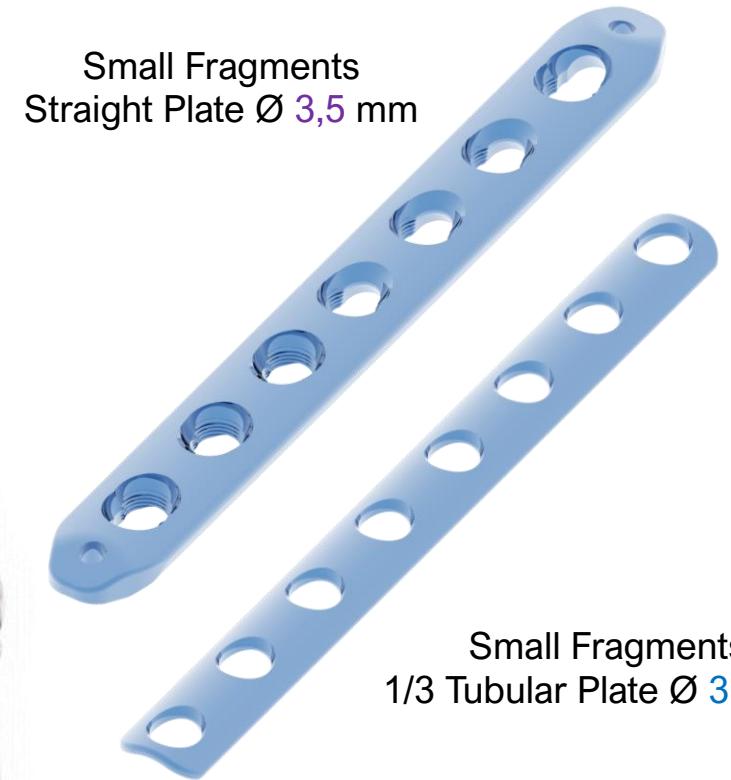


Ø 4,5 Ø 5,0
Cortical and Locking Screws



Straight Plate 3,5 mm
1/3 Tubular Plate 3,5 mm

LIV trauma



Small Fragments
Straight Plate Ø 3,5 mm

Small Fragments
1/3 Tubular Plate Ø 3,5 mm



Ø 3,5 Ø 3,5
Cortical and Locking Screws

Applications

Elbow / Wrist



Small Plates
SMA Ø 2,7 mm

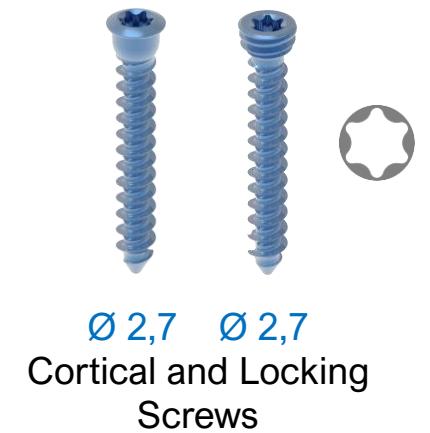
Radial Head Plates 2,7 mm

MultiFix

Radial Head Plate
RLS Ø 2,7 mm



Radial Head Plate
RLS Ø 2,7 mm



Distal Radius Plates 2,7 mm

MultiFix

Distal Radius
Plate
RSS Ø 2,7 mm



Distal Radius
Dorsal Plate
DRP Ø 2,7 mm

Distal Radius Volar Plate
Anatomical Plate
RSS Ø 2,7 mm



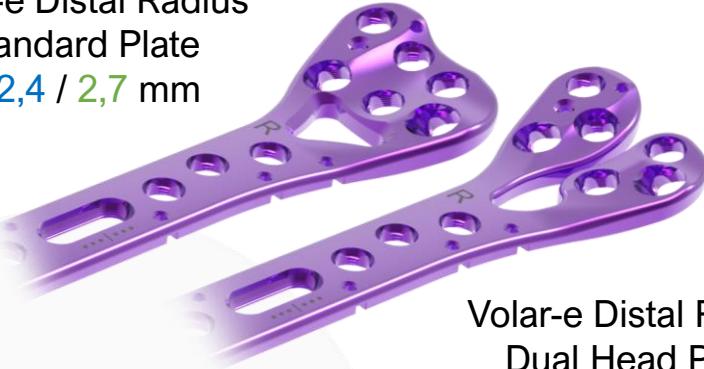
Distal Radius
Volar Plate
Universal Plate
RSS Ø 2,7 mm



Applications

VolarE

Volar-e Distal Radius
Standard Plate
Ø 2,4 / 2,7 mm



Volar-e Distal Radius
Dual Head Plate
Ø 2,4 / 2,7 mm



Volar-e Ulnar Plates
Ø 2,4 / 2,7 mm

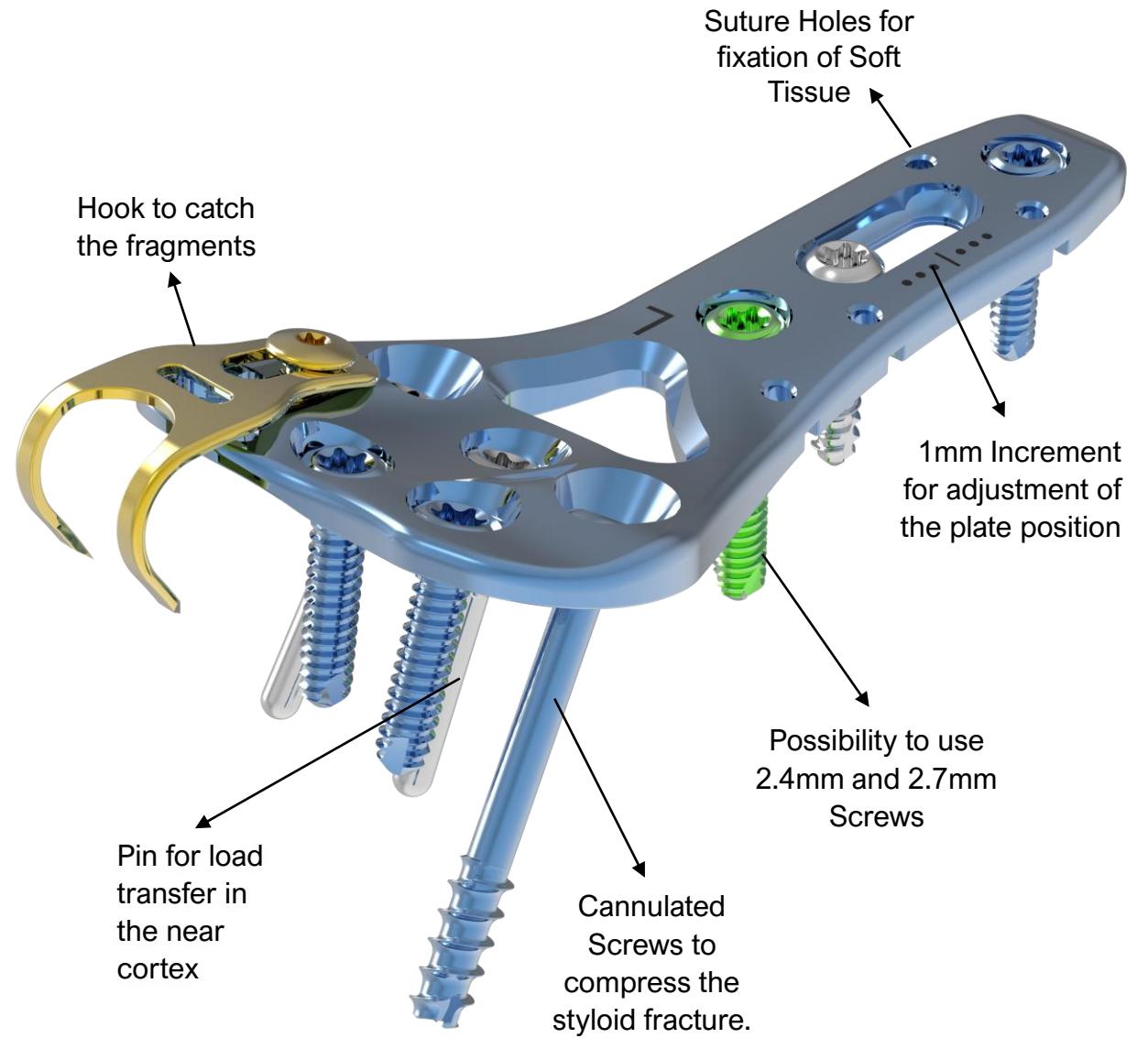
Multiple Guiding
Systems



**Different types of plates for all types
of Distal Radius fractures**

Volar-e

SmartFix



Applications

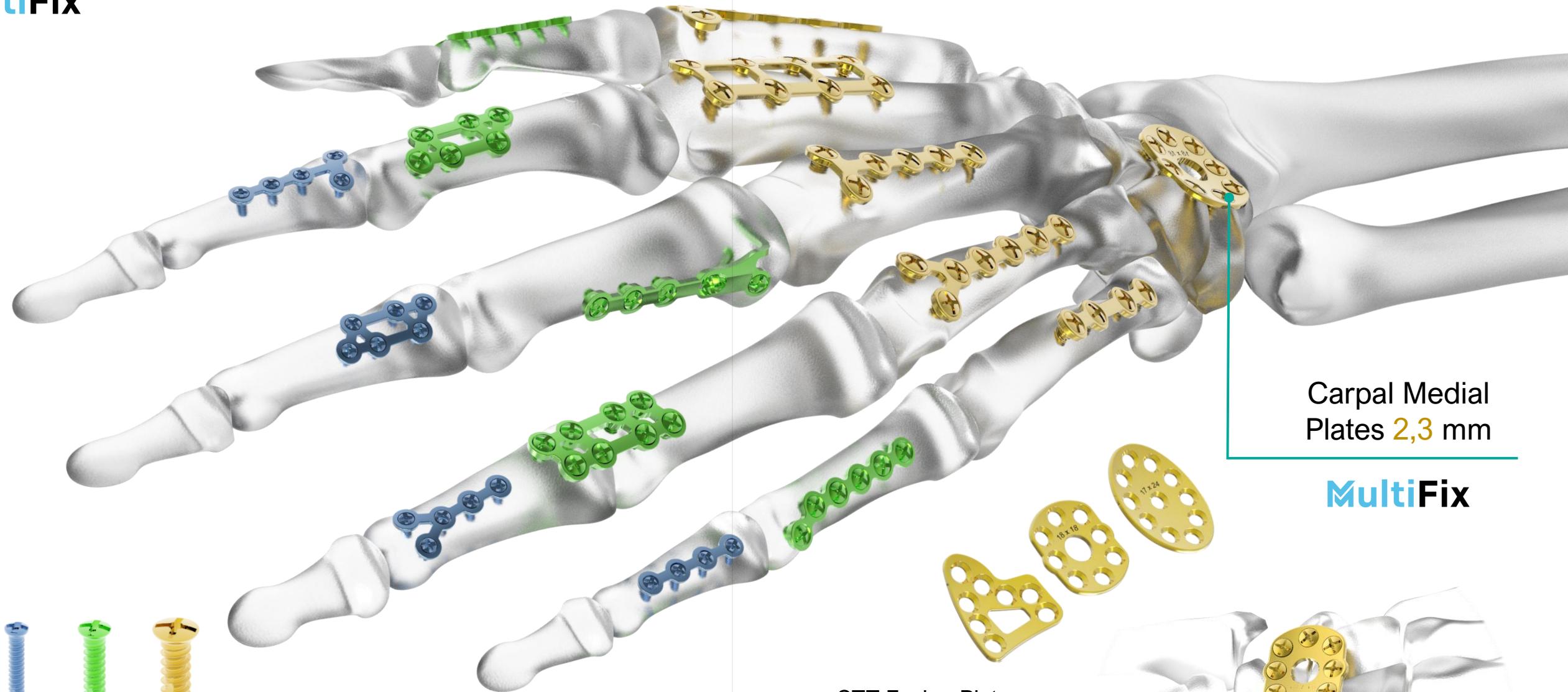
Hand

COMBO-HAND

MultiFix

Comprehensive Plating System

Ø 1,2 / Ø 1,7 / Ø 2,3



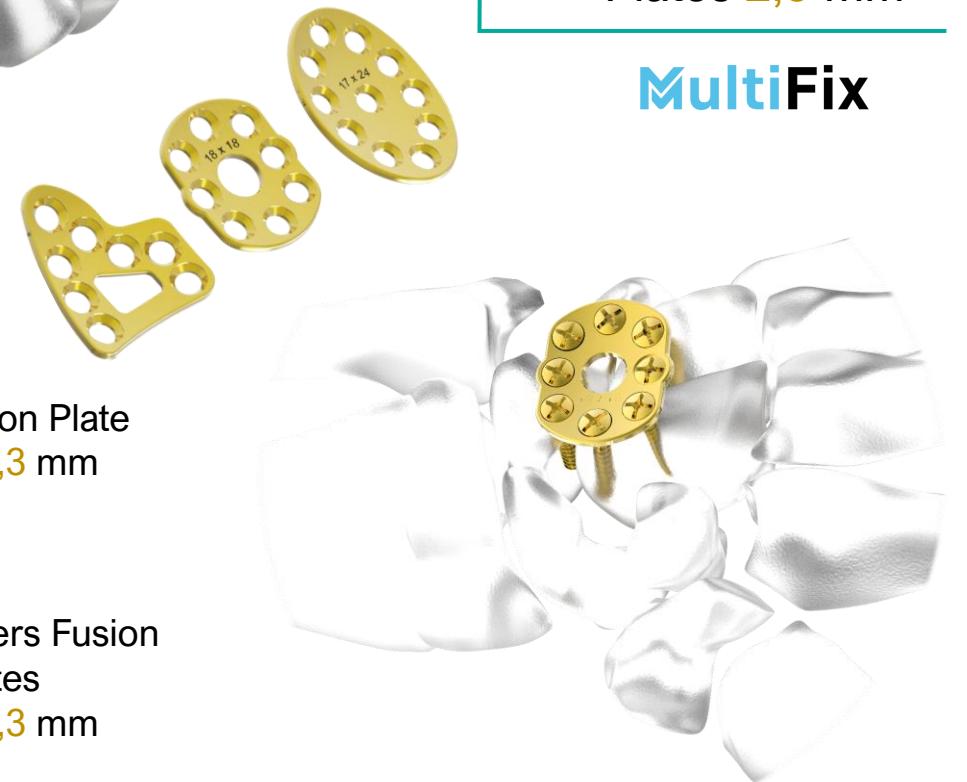
Carpal Medial Plates 2,3 mm

MultiFix



STT Fusion Plate
CMS 2,3 mm

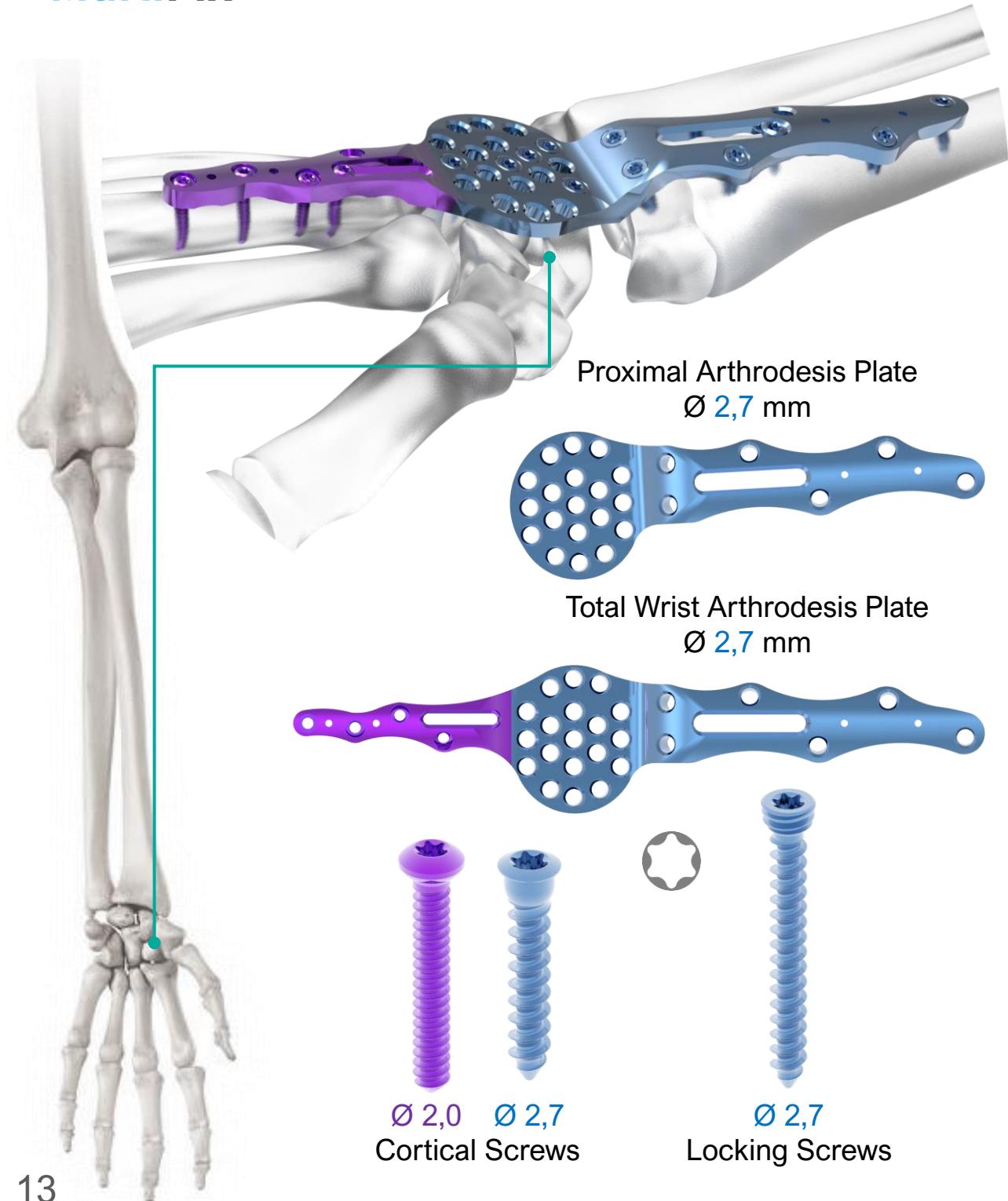
Four Corners Fusion Plates
CMS 2,3 mm



Wrist

Radiocarpal Arthrodesis

MultiFix



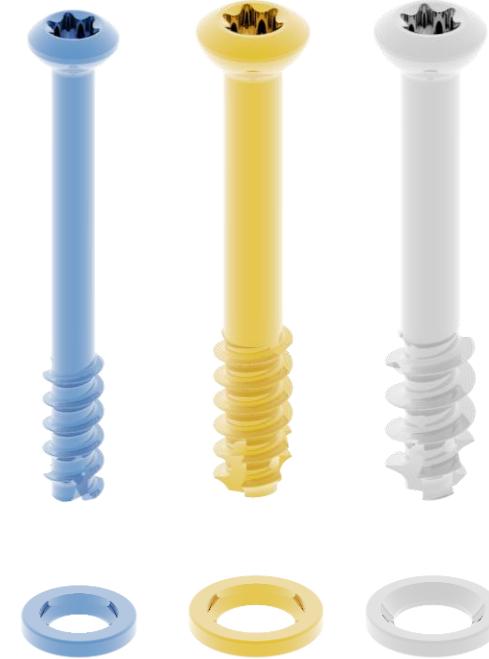
Cannulated Screws

Upper Extremities Applications

AstroCAN

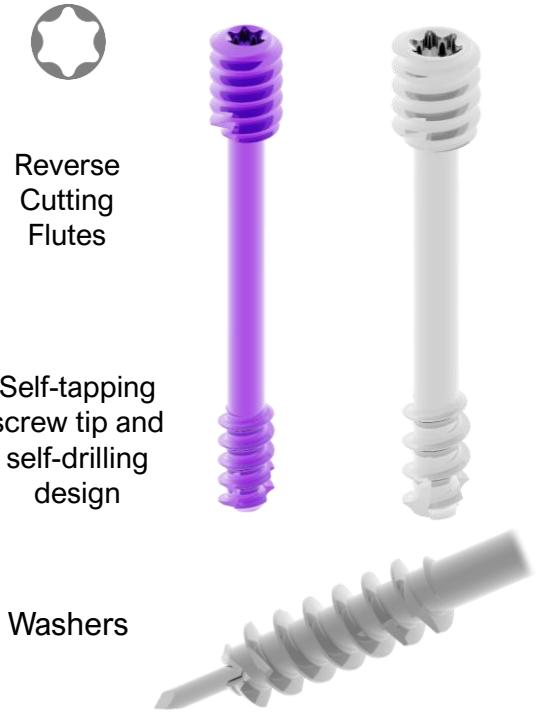
Cannulated Bone Screws - CBS

Ø 2,7mm Ø3,5mm Ø4,0mm



Cannulated Compression Screws - CCS

Ø2,5mm Ø3,0mm



Main Indications	CBS Ø2,7	CBS Ø3,5	CBS Ø4,0	CCS Ø2,5	CCS Ø3,0
Proximal Humerus		x	x	x	x
Distal Humerus	x	x		x	x
Proximal Radius	x			x	x
Ulnar Styloid				x	x
Radial Styloid				x	
Scaphoid				x	x
Carpal Arthrodesis				x	x
Phalanges & Metacarpals Fx	SI			SI	

SI = Sometimes indicated due to anatomical variances

Applications

Hip / Femur

DHS / DCS Plates

LIV trauma



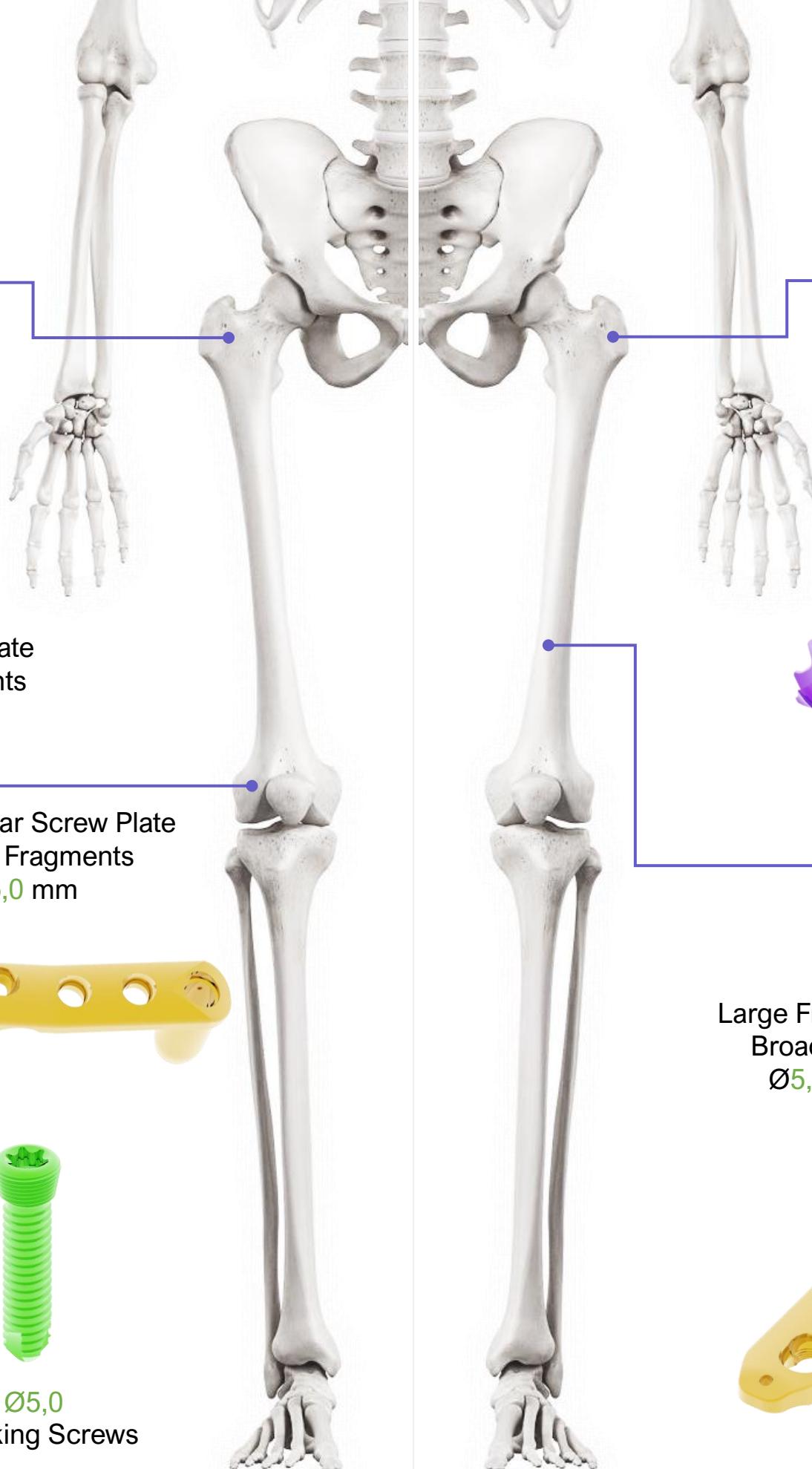
Dynamic Hip Screw Plate
DHS – Large Fragments
Ø 4,5 / 5,0 mm

Dynamic Condylar Screw Plate
DCS – Large Fragments
Ø 4,5 / 5,0 mm

Lag Screw Ø12,7
w/ Compression
Screw



Ø 4,5 Ø 5,0
Cortical and Locking Screws



Cannulated Screws

7,0mm Cannulated Screw

AstroCAN



16mm Thread
32mm Thread
Fully Threaded



Washer

Broad Plate 5,0mm

LIV trauma

Large Fragments
Broad Plate
Ø 5,0mm



Full Range of
Plate Sizes

Applications

Femur Knee

LISS-LCP Femur

LIV trauma



LISS-LCP Distal Femur Plate
Large Fragments
Ø 4,5 / 5,0 mm



Ø 4,5 Ø4,0 Ø5,0
Cortical and Locking Screws



Ø 6,5 Ø6,5 Ø6,5
Cancellous Screws



Ø 5,0
Periprosthetic Plug Spacer
Screws

Cannulated Screws

For Knee

AstroCAN

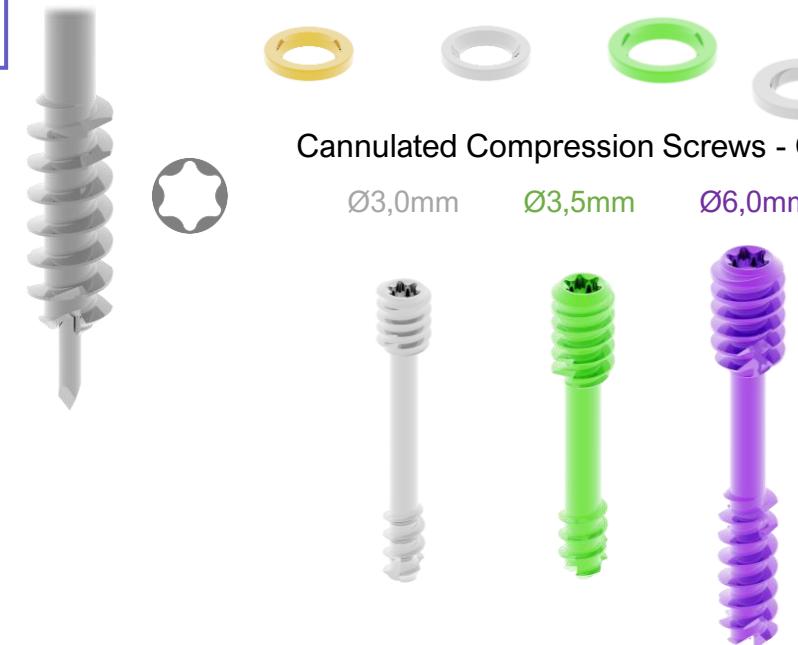
Cannulated Bone Screws - CBS

Ø3,5mm Ø4,0mm Ø4,5mm Ø7,0mm



Cannulated Compression Screws - CCS

Ø3,0mm Ø3,5mm Ø6,0mm



Main Indications

	CBS Ø3,5	CBS Ø4,0	CBS Ø4,5	CBS Ø7,0	CCS Ø3,0	CCS Ø3,5	CCS Ø6,0
Femoral Condyles			x	x			x
Patella	x	x			x	x	
Tibial Plateau		x	x	x		x	x

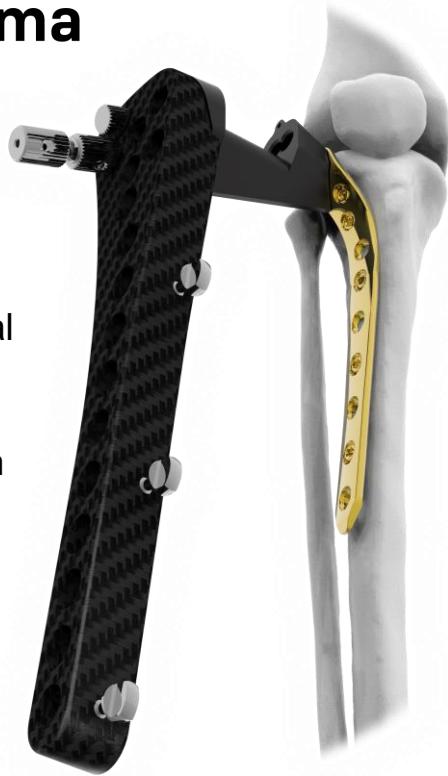
Applications

Femur Knee

LISS-LCP Tibia

LIV trauma

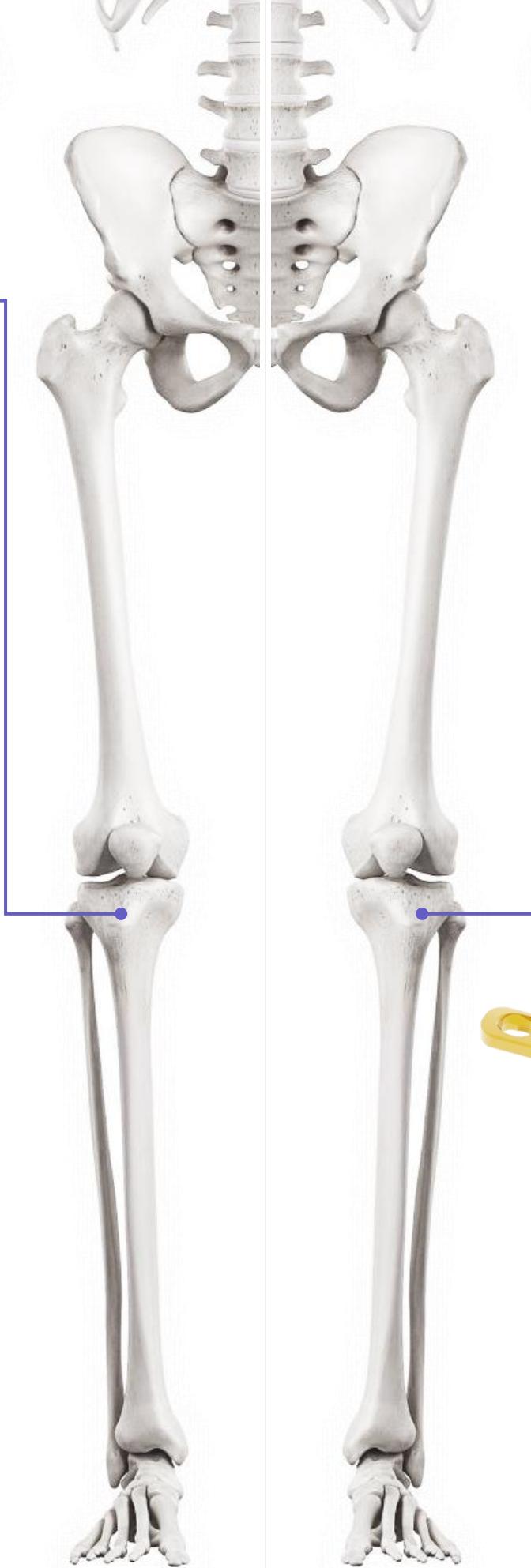
LISS-LCP
Proximal Lateral
Tibia Large
Fragments
Ø 4,5 / 5,0 mm



Ø 4,5 Ø 4,0 Ø 5,0
Cortical and Locking Screws



Ø 5,0
Periprosthetic Plug Spacer
Screws

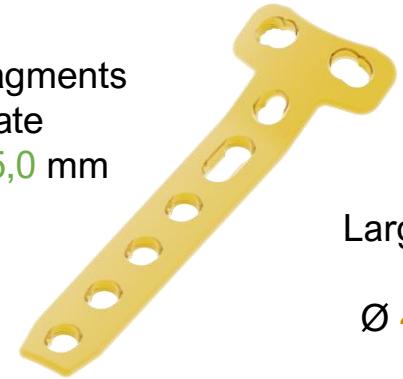


T and L Plates 5,0mm
Reconstruction Plate 5,0mm

LIV trauma



Large Fragments
T Plate
Ø 4,5 / 5,0 mm



Large Fragments
L Plate
Ø 4,5 / 5,0 mm

Large Fragments
Support Plate
(For medial Fixation)
Ø 4,5 / 5,0 mm



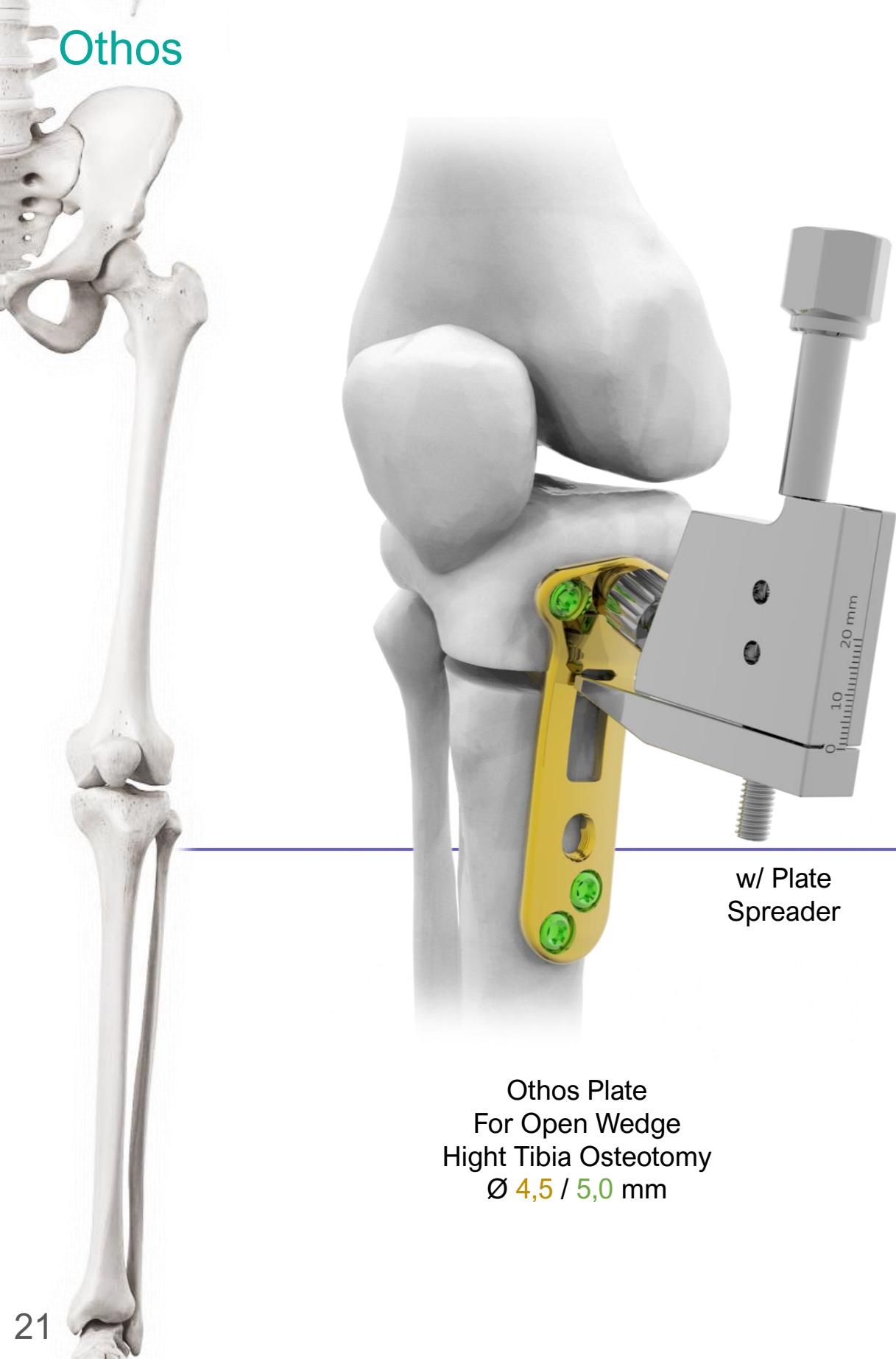
Large Fragments
Reconstruction Plate
Ø 4,5 / 5,0 mm



Ø 6,5
Cancellous
Screws

Applications

Othos



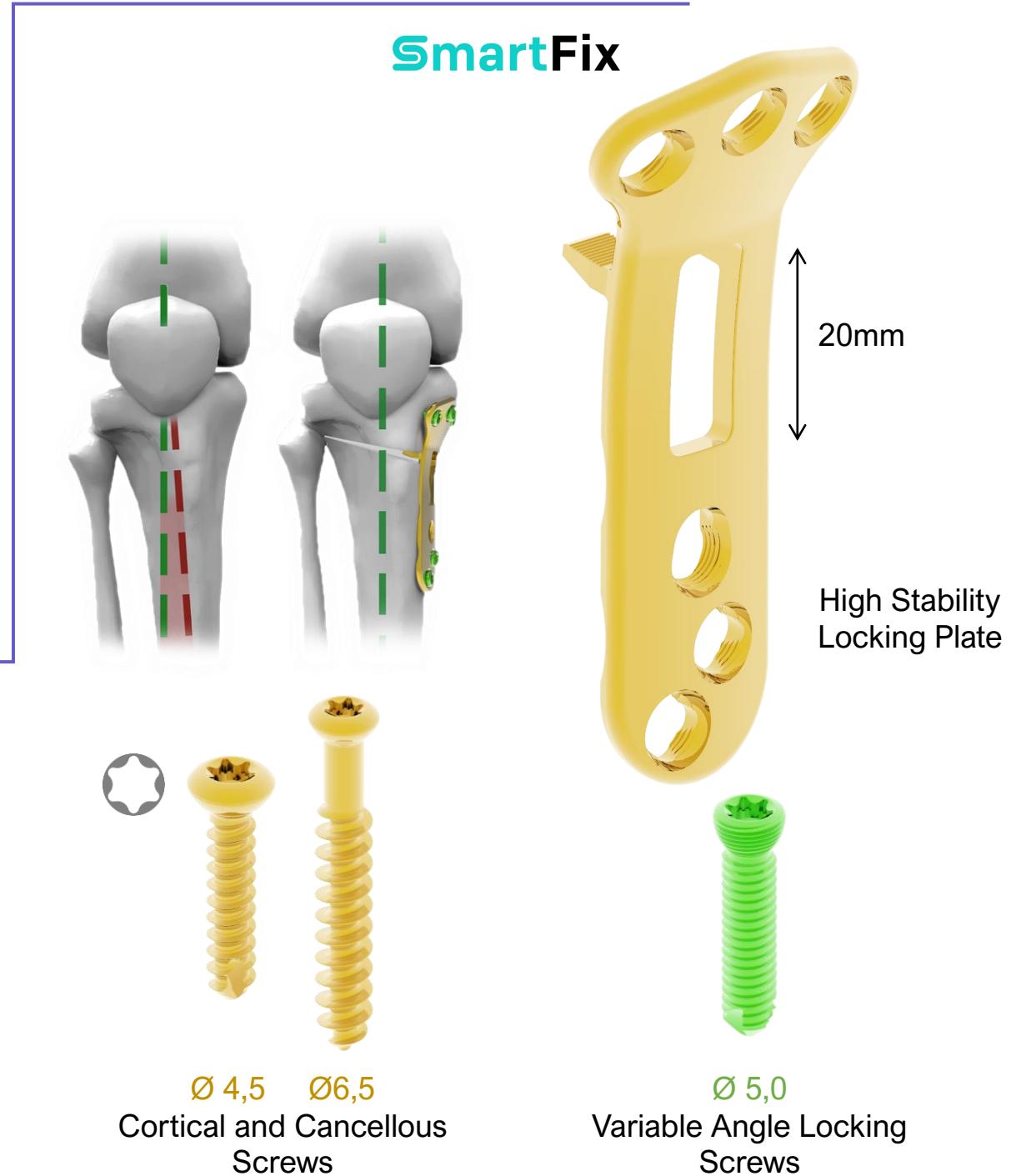
w/ Plate
Spreader

Othos Plate
For Open Wedge
High Tibia Osteotomy
Ø 4,5 / 5,0 mm

One size plate for a addition
osteotomy up to 20mm

Othos

SmartFix



20mm

High Stability
Locking Plate



Ø 4,5 Ø 6,5
Cortical and Cancellous
Screws

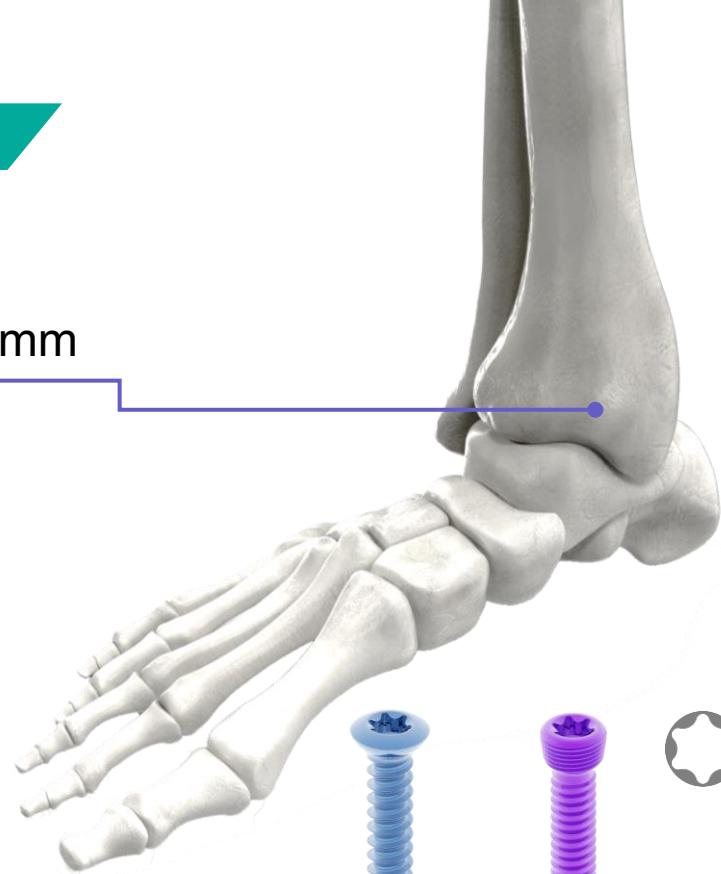
Ø 5,0
Variable Angle Locking
Screws

Applications

Ankle

Medial Distal Tibia 3,5mm

LIV trauma



Ø 3,5 Ø3,5
Cortical and Locking Screws

Malleolus Plate 3,5mm

MultiFix



Medial/Lateral Plate
Ø 3,5 mm



Ø 3,5 Ø3,5
Cortical and Locking Screws



Metaphyseal 3,5 / 4,5 mm

LIV trauma



Ø 3,5 Ø4,5 Ø 3,5
Cortical Screws Locking Screws

Distal Fibula 2,7 / 3,5mm

LIV trauma



Ø 2,4 Ø3,5 Ø 2,7 Ø3,5
Cortical Screws Locking Screws

Distal Fibula Lateral
Small Fragments
Ø 2,7 / 3,5 mm

Distal Fibula
Posterior
Small Fragments
Ø 2,7 / 3,5 mm

Applications

Foot

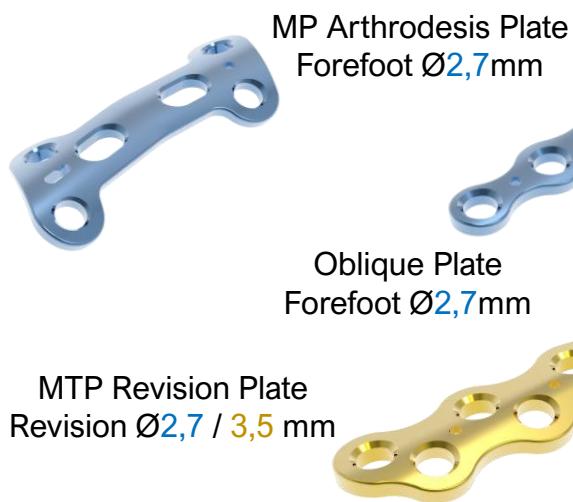
Forefoot Procedures

MultiFix

1st Metatarsophalangeal Arthrodesis

A first MTP arthrodesis can be performed in cases of arthritis (hallux rigidus) or deformity. The goal is to fuse (or permanently stiffen) the first metatarsal and proximal phalanx.

Plating Systems



Screws & Staples Solutions

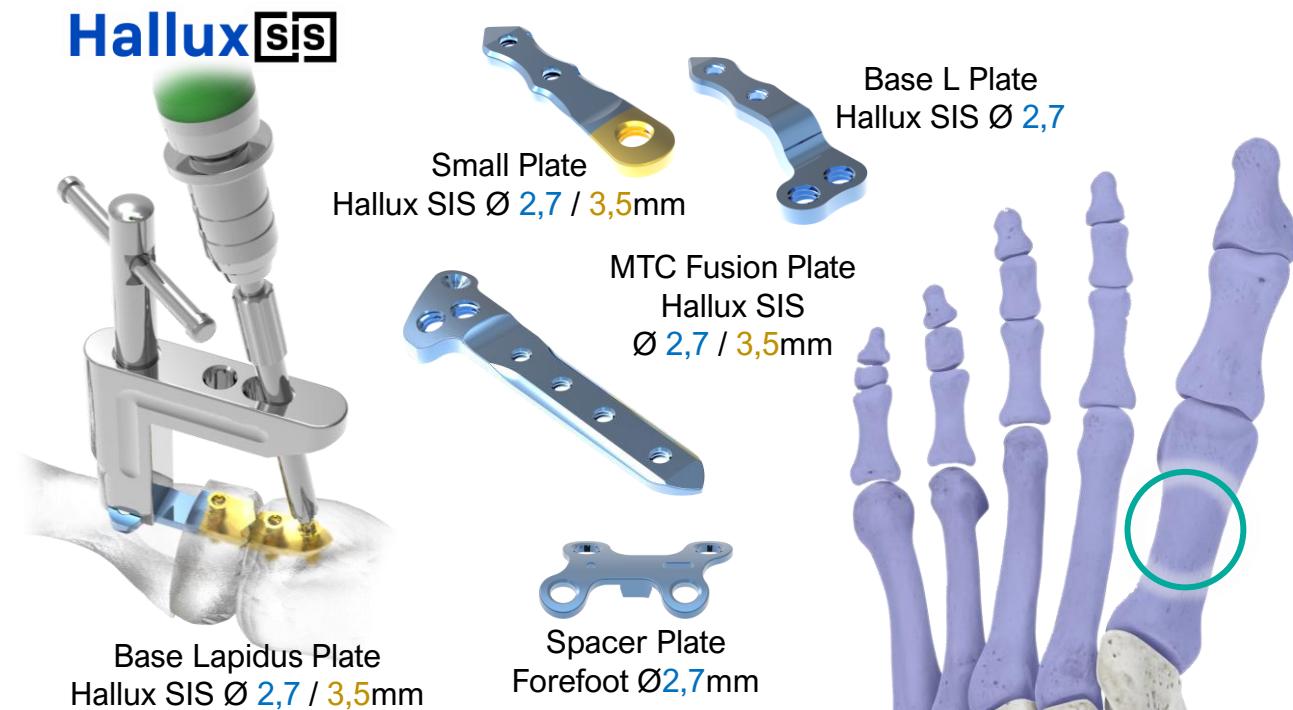


Comprehensive Plating and Screws Solutions

Hallux Valgus (Bunion)

There are many procedural techniques to correct a hallux valgus deformity, including osteotomies and arthrodesis.

Plating Systems



Screws & Staples Solutions



Applications

Foot

Forefoot Procedures

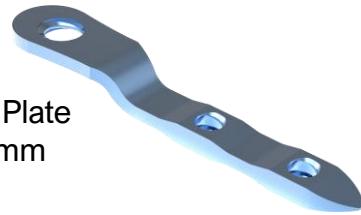
MultiFix

Bunionette (Taylor's Bunion)

A bunionette is an abnormal protuberance on the lateral side of the fifth toe. Surgical treatment can require a corrective osteotomy.

Plating Systems

Subcapital 5th MT Plate
Hallux SIS Ø2,7mm



Snap-Off Screw Ø2,0
Forefoot Ø2,7mm



Mini-Staples
Forefoot Ø2,7mm

Screws Solutions



CCS Ø2,5 / Ø3,0mm
Forefoot Ø2,7mm



Conical Head Screw
Conical Ø2,7mm



Comprehensive Plating and Screws Solutions

Jones Fracture (Bunion)

There are many procedural techniques to correct a hallux valgus deformity, including osteotomies and arthrodesis

Plating Systems



Oblique Plate
Midfoot Ø2,7mm



T Plate
Midfoot Ø2,7mm

Screws Solutions



Cannulated Screw
Partial Thread
CBS Ø4,0mm



Cannulated Screw
Partial Thread
CBS Ø4,5mm



Applications

Foot

Forefoot Procedures

MultiFix

Interphalangeal joint arthrodesis

Arthrodesis of the great toe's interphalangeal joint is a common procedure in order to treat a variety of conditions.

Hammertoe correction (DIP/PIP Joint)

Hammertoe correction of the PIP joint or Mallet toe correction of the DIP joint commonly involves arthrodesis of the affected joint.

Metatarsal shortening (Weil Osteotomy)

Metatarsal shortening osteotomies are often used to correct angular deformities or toe dislocations, most commonly seen in hammertoes or claw toes.



Screws & Staples Solutions



Mini-Staples
Forefoot Ø2,7mm



CCS Ø2,5
Forefoot Ø2,7mm



Conical Head Screw
Conical Ø2,7mm



Snap-Off Screw Ø2,0
Forefoot Ø2,7mm

Comprehensive Plating and Screws Solutions

Metatarsal Fractures

The five metatarsal bones are the long bones of the midfoot . A metatarsal fracture occurs when one of these long bones is broken. This may be due to sudden injury (an acute fracture), or due to repeated stress (stress fracture).

Plating Systems



Straight Plate
Midfoot Ø2,7mm



T Plate
Midfoot Ø2,7mm



Oblique Plate
Midfoot Ø2,7mm



Clover Plate
Midfoot Ø2,7mm



Applications

Foot

Midfoot Procedures

MultiFix

1st TMT joint Arthrodesis (Lapidus)

The Lapidus procedure is a fusion of the first TMT joint intended to eliminate joint movement and correct deformity around the first metatarsal.

Plating Systems



Universal Plates
Midfoot Ø2,7mm
Rearfoot Ø3,5mm

LapidoFix



Screws & Staples Solutions



Comprehensive Plating and Screws Solutions

Lisfranc

A Lisfranc injury involves dislocation or subluxation of one of the metatarsals from the rest of the intact foot.

Plating Systems



Screws & Staples Solutions



Applications

Foot

Midfoot Procedures

MultiFix

Medial Column Arthrodesis

A medial column arthrodesis involves removing the joints between the navicular, medial cuneiform, and first metatarsal to reduce motion, correct deformity, and eliminate pain.

Plating Systems



Screws Solutions



Comprehensive Plating and Screws Solutions

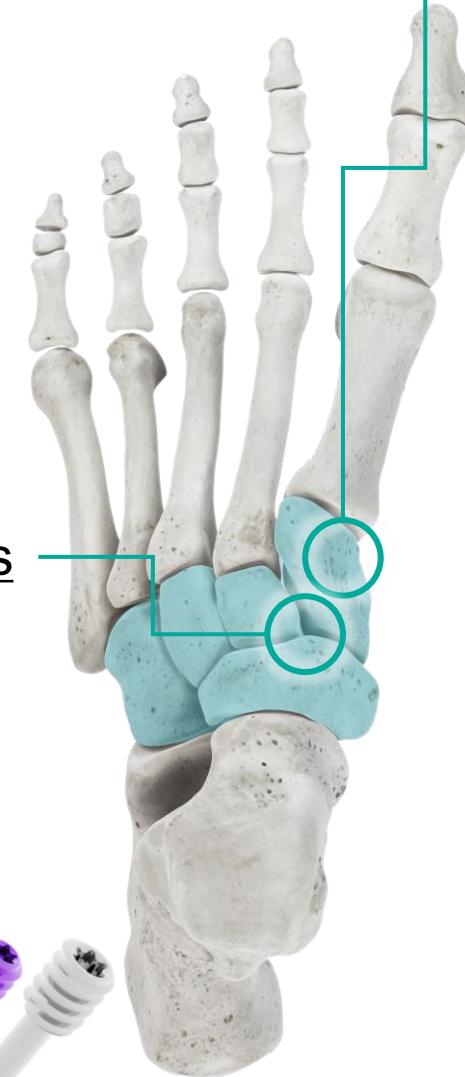
Medial Cuneiform Osteotomy (Cotton)

A cotton osteotomy is a medial cuneiform opening wedge osteotomy. It is commonly used in conjunction with other procedures to aid in the correction of flatfoot.



Navicular Cuneiform Arthrodesis

Navicular Cuneiform (NC) joint fusion can be performed to relieve arthritis or deformity related pain.



Applications

Foot

Rearfoot Procedures

MultiFix

Evan's Osteotomy

The Evans osteotomy is a lateral column lengthening osteotomy, preserving the calcaneocuboid joint.



Spacer Plate
Forefoot Ø2,7mm



Spacer Plate
Rearfoot Ø3,5mm



H Plate
Rearfoot Ø3,5mm



Medial Displacements Osteotomy

Calcaneal sliding osteotomies are commonly performed to correct hindfoot deformity. The calcaneus can be translated in either a medial or lateral direction.



Spacer Plate
Rearfoot Ø3,5mm



Cannulated Screw
CBS Ø7,0mm



Cannulated
Compression Screw
CCS Ø6,0mm

Comprehensive Plating and Screws Solutions

Talo-Calcaneal Arthrodesis (Subtalar)

The subtalar joint (talocalcaneal joint) is a common source of arthritis, often seen in hindfoot deformity, inflammatory conditions, or following calcaneus fractures. An arthrodesis in this location fuses the joint to eliminate movement, thus helping to correct deformity and improve symptoms.

Screws Solutions



Cannulated Screw
CBS Ø4,0mm



Cannulated Screw
CBS Ø4,0mm



Cannulated Screw
CBS Ø7,0mm



Cannulated
Compression Screw
CCS Ø3,5mm



Cannulated
Compression Screw
CCS Ø6,0mm



Applications

Foot

Rearfoot Procedures

MultiFix

Talonavicular Arthrodesis

Talonavicular joint arthrodesis has been utilized for a variety of pathologies, including: arthritis, deformity, inflammatory conditions, and instability in the hindfoot

Plates & Screws Solutions



Universal Plate
Rearfoot Ø3,5mm



Cannulated Screw
CBS Ø4,0mm
CBS Ø4,5mm



Cannulated Screw
CBS Ø7,0mm



Cannulated
Compression Screw
CCS Ø3,5mm
CCS Ø6,0mm



Comprehensive Plating and Screws Solutions

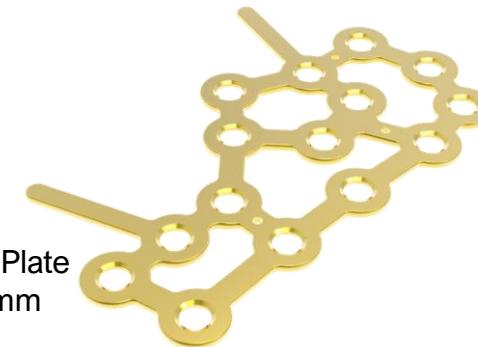
Calcaneal Fracture

Fractures of the calcaneus or heel bone most often occur after falls from heights or motor vehicle collisions. Treatment of calcaneal fractures may require surgery.

Plating Systems



Calcaneus Plate
Rearfoot Ø3,5mm



Multifragmented Plate
Rearfoot Ø3,5mm

Screws Solutions



Cannulated Screw
CBS Ø4,0mm
CBS Ø4,5mm



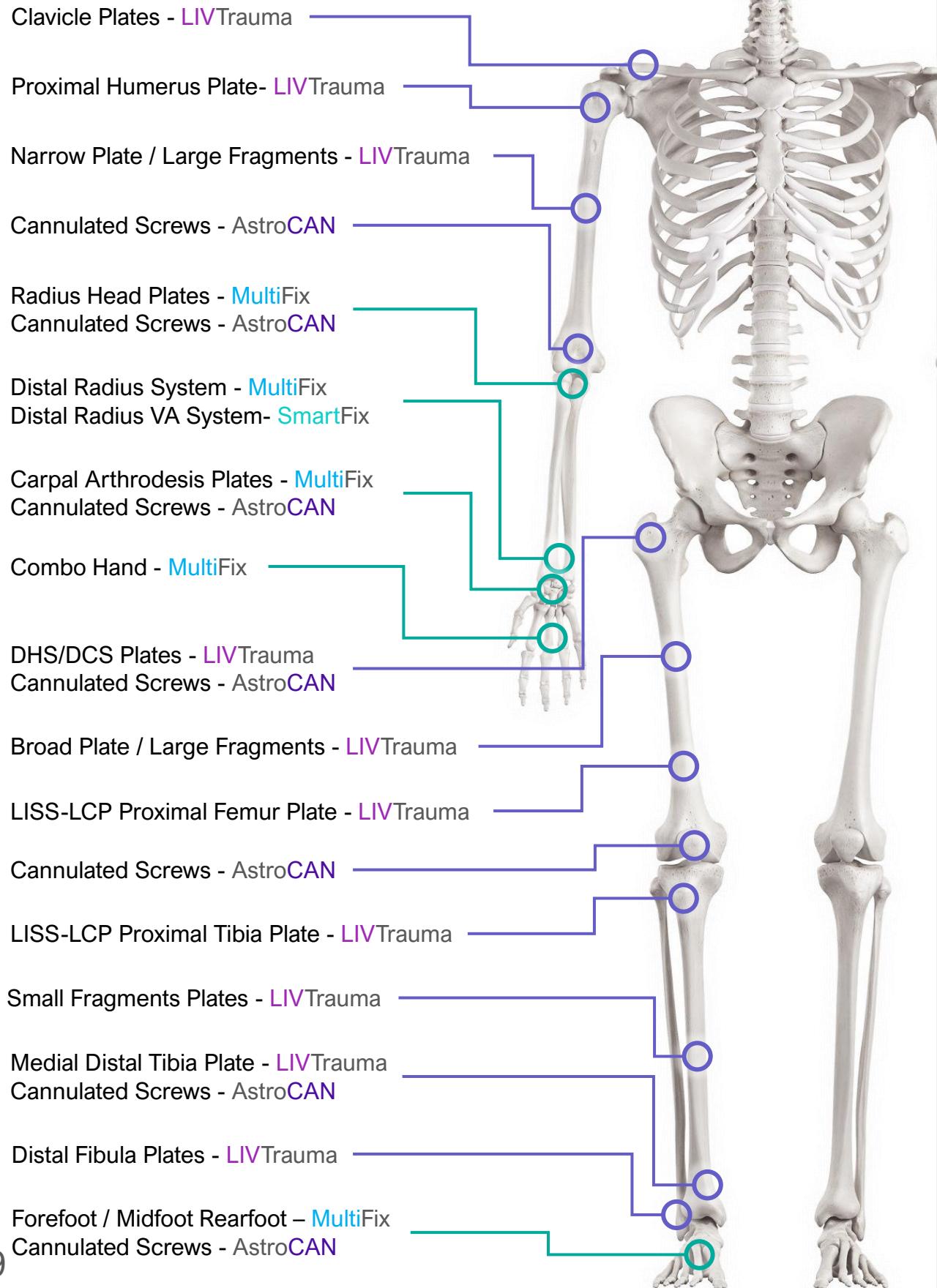
Cannulated Screw
CBS Ø7,0mm



Cannulated
Compression Screw
CCS Ø3,5mm
CCS Ø6,0mm



Summary of applications by line



Astrolabe
LIFE AND MOBILITY

For additional information,
contact the Astrolabe
authorized distributor in your
region or through our customer
service channels.

Customer Service
(+351) 219 672 298
info@astrolabe-medical.com

Check out all the products on the website:
www.astrolabe-medical.com

