JuniOrtho™
paediatrics powered by ORTHOFIX®

JuniOrtho™ is a range of products and resources created by Orthofix, dedicated to children and young adults with bone fractures and deformities

**You can't always see the hero inside...**

ORTHOFIX®

# A broad portfolio of solutions

The JuniOrtho™ team is committed to thinking, planning and engineering products and services for kids and young adults. We believe that adapting standard adult products to children is simply suboptimal and we are changing that. We offer innovative and minimally invasive solutions for surgeons to help improve the quality of life of our patients.

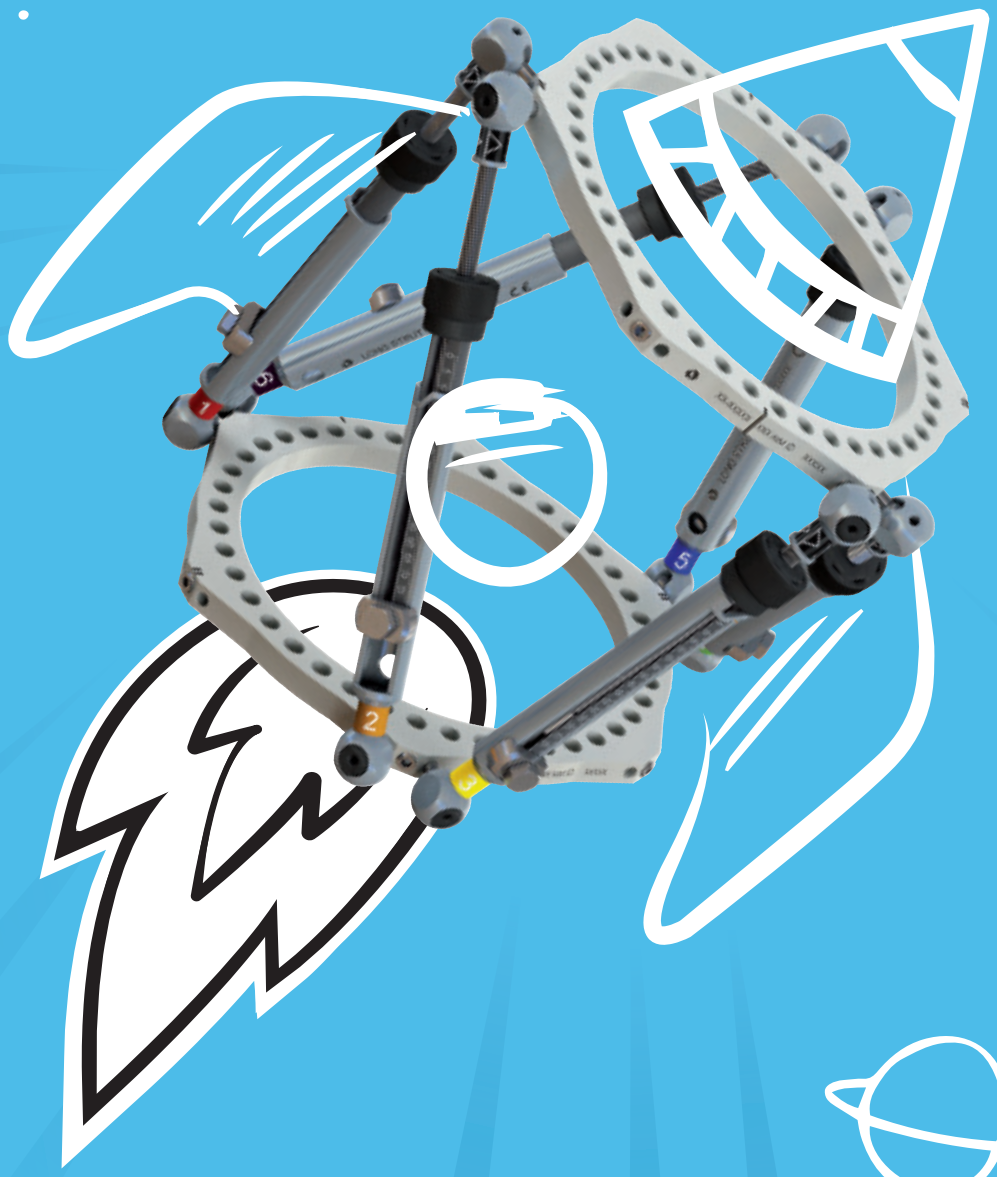
Our orthopaedics products are designed to address the lifelong bone-and-joint health needs of patients. Our well-rounded product lines offer comprehensive solutions within both the limb reconstruction and trauma specialties.

"Free the child's potential, and you will **transform** him into the world"

Maria Montessori

# TL-HEX TrueLok Hexapod System®

It consists of hardware and associated software for simplified deformity correction and trauma management.



# TL-HEX TrueLok Hexapod System®

## Hardware

### 1 Excellent Stability

Unique strut head design increases frame stability

### 2 Fast Locking

One set screw locks down both struts

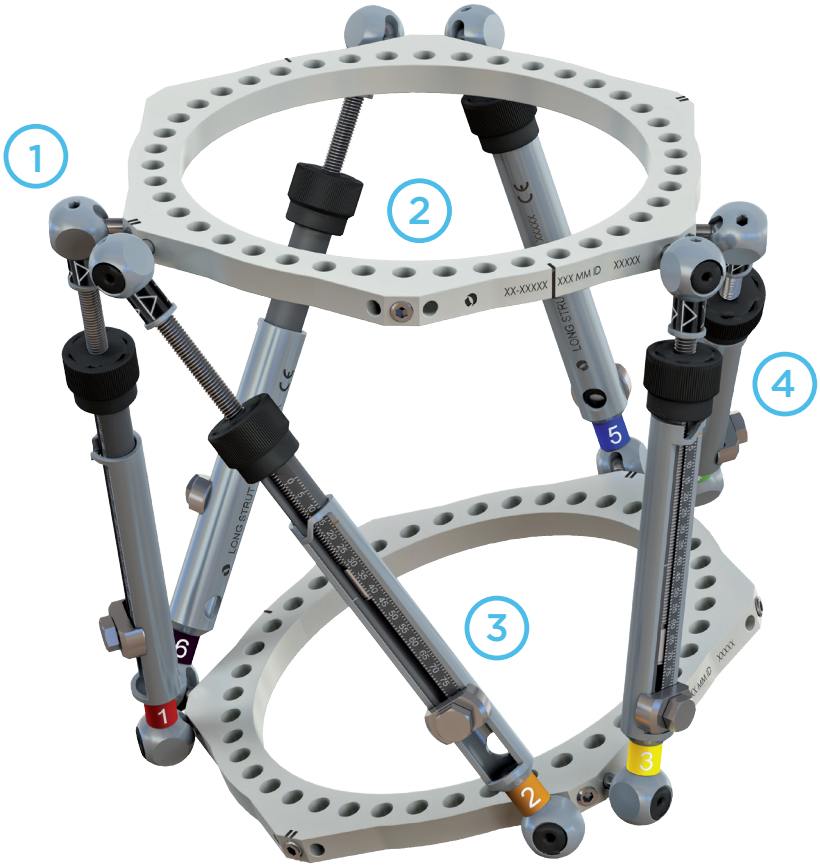
NEW SET SCREWS DESIGN

### 3 Rapid Adjustment

TL-HEX Struts consist of two telescoping aluminum tubes, which can be locked together at various lengths using the side locking bolt and clamp washer

### 4 Easy Adjustment

Simple pull and click method for patient adjustment





## Software

The intuitive and user friendly web-based TL-HEX software is empowering all surgeons who want a comprehensive support throughout pre/intra/post operative phases.

The **HEX-ray** Integrated Module is designed to facilitate pre-operative planning and post-operative correction by uploading of digital x-ray images into the software:

- Measurement calculation
- Frame templates in preplanning
- Automatic data input into TL-HEX software

# Patient Support Tools

Treatment with the TL-HEX TrueLok Hexapod System™ is not exactly child's play. However, playing games can support the treatment process and give kids the "power" to face the challenge. JuniOrtho™ Paediatrics powered by Orthofix® has developed a set of tools specifically designed for paediatric patients.

3-6 years old

## KIT FOR KIDS

Varied fun games to entertain the young patient and help the surgeon and the parents explain their treatment. It should be delivered by the surgeon or care team members and it includes tips for parents and caregivers.


7-12 years old

## COMIC STRIP

Two very "normal" pre-teen kids find the rings and the struts and in putting these items together, they enter a magic world where they have the chance to become superheroes. The story of Tommy and Linda does not exactly reflect the TL-HEX treatment. It is intended as the launch "platform" to mySuperheroAcademy™ edugame.

10-15 years old

## mySuperheroAcademy™

A quiz area designed to educate paediatric patients during the pre-surgery meetings with the orthopaedic surgeon or the care team members. 4 match3 and 8 runner games will entertain patients 10-15 years old. Unlocking code required (printed on the comic strip).

Download on the App Store

18+ years old

## myHEXplan™

**Adult patients and families**

A successful treatment with TL-HEX is not simply a matter of correct strut adjustment. The TL-HEX patient is supported from the first day after surgery until the device removal, through all the treatment phases, with struts adjustment and pin-sites care reminders, mood self-assessment and insights into the treatment.

Download on the App Store

# Care HEXcellence

We are not just suppliers of paediatric products – we immerse ourselves in the process and offer help and support before, during and after surgery.

### LIMBHEALING.COM

**Adult patients and families**

- Description of limb deformities
- Treatment options
- TL-HEX treatment description
- Patient testimonials
- Resources
- Surgeon locator

18+ years old

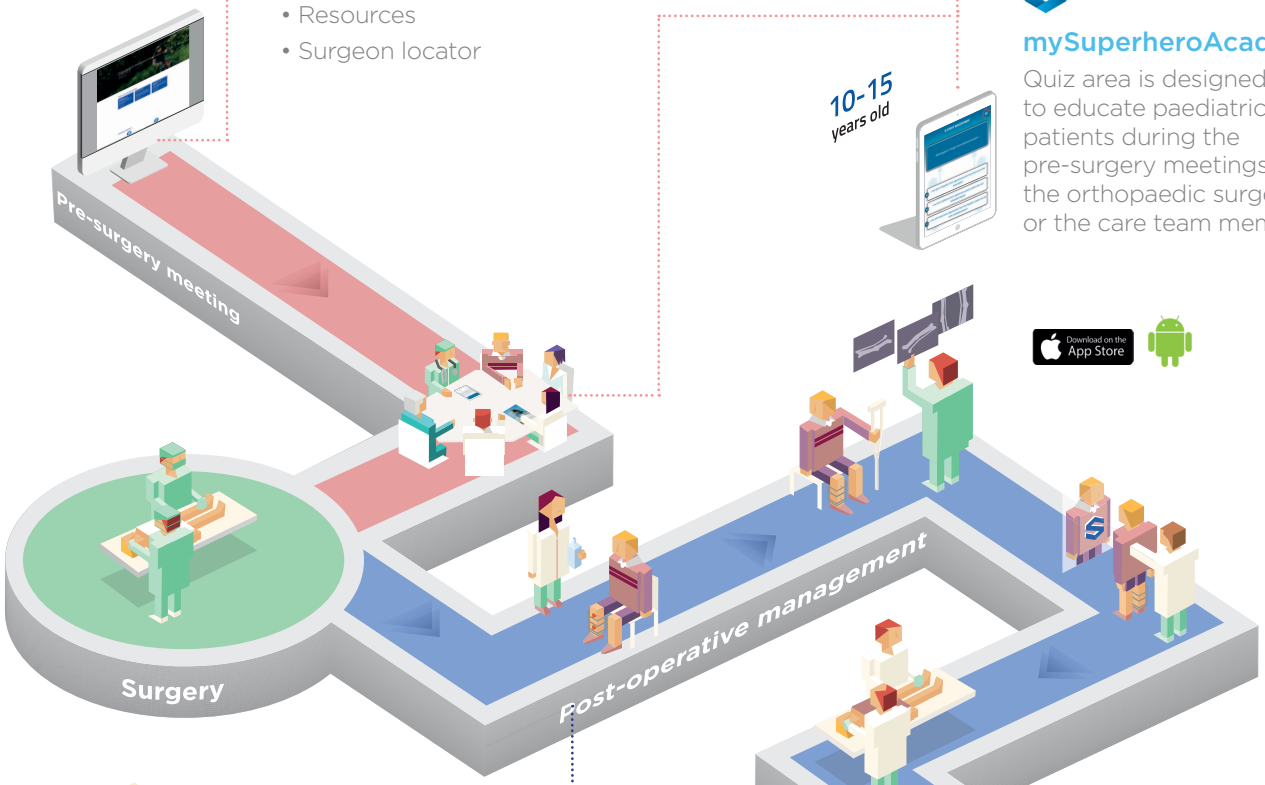
### INFORMATION BROCHURE

**Adult patients and families**

### mySuperheroAcademy™

10-15 years old

Quiz area is designed to educate paediatric patients during the pre-surgery meetings with the orthopaedic surgeon or the care team members




Download on the App Store

3-6 years old

### KIT FOR KIDS

Varied fun games to entertain the young patient and help the surgeon and parents explain their treatment.

7-12 years old

### COMIC STRIP

Launch "platform" to mySuperheroAcademy™ edugame and to the superhero section in www.limbhealing.com

10-15 years old

### mySuperheroAcademy™

4 match3 and 8 runner games will entertain patients 10-15 years old.

18+ years old

### myHEXplan™

**Adult patients and families**

Deformity correction journey on your mobile device

Download on the App Store

### Patient testimonial

Pin-site care

Prescription

Struts adjustment

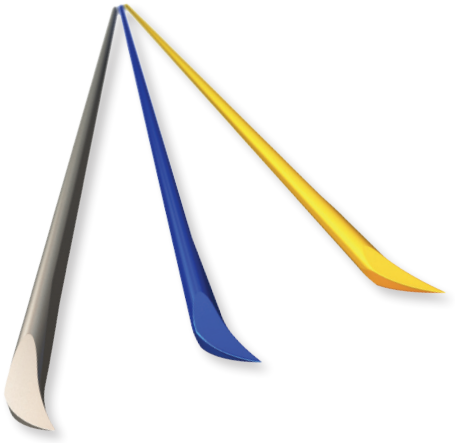
Time-lapse

Diary

Some materials/services may not be available in your Country. Please contact your sales representatives for availability.

## MJ-FLEX The New Metaizeau Nail™

An intramedullary implant system specifically designed for Elastic Stable Intramedullary Nailing (ESIN) fracture fixation.



## LRS paediatric

The Paediatric LRS system aims to treat successfully congenital and post-traumatic deformities in children.

## Galaxy Fixation™

Galaxy fixation is a modular external fixation system for fracture treatments of lower and upper limbs.

## AGILE Nail™

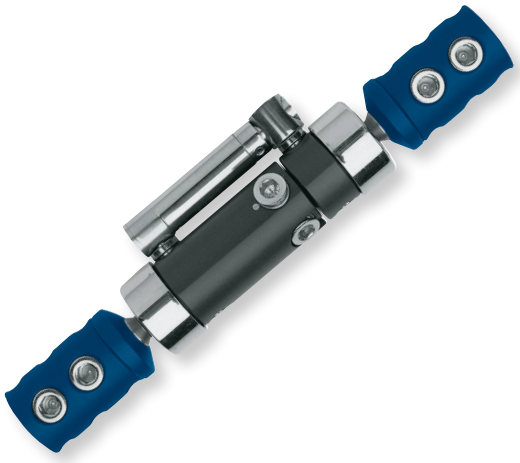
Designed to address femoral fractures and deformity correction procedures. It consists of antegrade intramedullary nails for the femur with respective end-caps and locking screws.

## The eight-Plate Guided Growth System +™

An extra-periosteal plate that uses the robust growth potential of the child's physis to gently guide correction of angular deformity.

## Small DAF

A modular system intended as a mean for stabilization of bone segments in a broad range of indications, including fractures and angular corrections (hemicallotasis).



# Indications

## TL-HEX TrueLok Hexapod System®

DEFORMITY CORRECTION TRAUMA

The TL-HEX system is intended for limb lengthening by metaphyseal or epiphyseal distractions, fixation of open and closed fractures, treatment of non-union or pseudoarthrosis of long bones and correction of bony or soft tissue defects or deformities.

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## AGILE Nail™

DEFORMITY CORRECTION TRAUMA

The Agile Nail is intended for insertion in the medullary canal of a femur for the alignment and the stabilization of fractures and for the correction of deformities. It is indicated for the treatment of subtrochanteric fractures and of femoral shaft fractures, in pediatric patients, with the exception of newborns and infants, and in adult patients with an appropriate medullary canal. The indications include: prophylactic nailing of impending pathologic fractures; fixation of femurs that have been surgically prepared (osteotomy); nonunions and malunions; reconstruction following tumor resection and grafting and bone lengthening and shortening.

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## eight-Plate Guided Growth System +™

DEFORMITY CORRECTION

Indicated for gradually correcting angular growth deformities in growing children. Specific conditions/diseases for which the device will be indicated include: valgus, varus or flexion, extension deformities of the knee (femur and/or tibia); valgus, varus, or plantar flexion deformities of the ankle; valgus or varus deformities of the elbow (humerus), and radial or ulnar deviation, flexion or extension deformities of the wrist (radius).

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## LRS paediatric

DEFORMITY CORRECTION

Limb reconstruction and lengthening due to fresh fracture, nonunion with major soft tissue defect, and bone loss with shortening.

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## MJ-FLEX The New Metaizeau Nail™

TRAUMA

The MJ-FLEX is indicated to treat:

- upper extremity and clavicle fractures in all patients except newborns and infants;
- lower extremity fractures in pediatric patients, except newborns and infants, where the flexibility of the implant is paramount not to disrupt the growth plate;
- lower extremity fractures in small adults where the medullary canal is narrow.

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## Galaxy Fixation™

TRAUMA

The Galaxy Fixation System is intended to be used for bone stabilization in trauma and orthopaedic procedures, both on adults and all paediatric subgroups excepts newborns as required.

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## Small DAF

TRAUMA

Bone fractures.

| | Benefits to Surgeon | Benefits to Patient |
|---|---|---|
| TL-HEX | • Simple: it provides simplified Hardware and Software for both Deformity and Trauma management.<br>• Stable: it provides exceptional stability due to its unique aluminum-stainless steel and metal-plastic interface.<br>• Versatile: the distinctive strut design allows performing acute and gradual adjustment in deformity correction and complex trauma procedures. | • Stability with proven limited movements at the bone site may enhance the bone healing and pain reduction<br>• 0.5mm increments in the correction permits a gradual correction of the deformity<br>• Aluminium rings make the system lighter<br>• Dedicated support material for patients<br>• No need of a second surgery for removal (compared to internal fixation) |
| AGILE Nail | • Diameter from 7 up to 10mm<br>• Titanium alloy implants<br>• Procurvation design for easy insertion<br>• Optimized and lean instrumentation<br>• Jig with patented locking mechanism | • Minimally invasive (small diameter for nails and screws)<br>• Early weight-bearing as tolerated by the patient and under surgeon discretion<br>• Titanium alloy implants to avoid allergic reaction to nickel<br>• 10° proximal bending to facilitate the lateral insertion of the nail and to reduce the impact on the growth plate<br>• Small proximal diameter of the nail for reduced invasiveness |
| eight-Plate Plus | • Plates sizes: 12, 16 and 20mm<br>• Cannulated and solid screw options<br>• Titanium alloy implants<br>• Optimized and lean instrumentation<br>• Central “dome” designed to aid application and removal across the growth plate | • Minimally invasive<br>• Early weight bearing as tolerated by the patient and under surgeon discretion<br>• Titanium alloy implants to avoid allergic reaction to nickel<br>• Low profile plates |
| LRS paediatric | • Flexibility - versatility<br>• Stability and safety in corrections<br>• Short learning curve | • Small sizes specifically developed for the patient comfort<br>• Compression distraction unit with simple turning mechanism<br>• No need of a second surgery for removal (compared to internal fixation) |
| MJ-FLEX | • Developed to allow a direct visual control of the alignment of the nail tip in the medullary canal, thus potentially reducing exposure to the image intensifier during insertion of the nail and the surgery time<br>• The flat surface allows to bend the nail on a proper plane<br>• Dedicated instrumentation for a streamlined optech<br>• A great variety of nails in several diameters both in titanium and stainless steel | • Stability of the osteosynthesis in all planes due to the superior medullary canal filling than standard cylindrical nails<br>• Developed to limit X-ray exposure during insertion due to the unique shape that allows visual control of nail orientation<br>• A minimal invasiveness of the device |
| Galaxy Fixation | • For temporary and definitive fracture fixation<br>• Quick and ready to use: sterile kits, sterile single-packed components, instrument and implant trays<br>• Cylindrical self-drilling bone screws with 4 and 5mm thread diameters<br>• Ergonomic: specific paediatric clamps and rods<br>• FlexibleVersatile: compatibleility with Orthofix circular and monolateral external fixation devices | • Galaxy Fixation components are designed to fit specific paediatric anatomy<br>• Mechanical performance and low profile frames<br>• Minimally invasive approach<br>• Designed to allow early weight bearing (at surgeon discretion) and functional recovery<br>• Easy device removal |
| Small DAF | • Telescopic Compression/Distraction Unit to cover a wide range of applications<br>• Compatible with other Orthofix systems for complex surgeries<br>• Ball and socket mechanism for clamp orientation and stability | • Small sizes specifically developed for the patient comfort<br>• Compression distraction unit with simple turning mechanism<br>• No need of a second surgery for removal (compared to internal fixation) |

# References


## TL-HEX TrueLok Hexapod System®

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## MJ-FLEX The New Metaizeau Nail™

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## Small DAF

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ORTHOFIX®

ORTHOFIX Srl
Via Delle Nazioni 9, 37012 Bussolengo (Verona), Italy
**Telephone** +39 045 6719000, **Fax** +39 045 6719380
**Web** www.orthofix.com

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