The most comprehensive portfolio in Limb Reconstruction
A broad portfolio of solutions

Orthofix offers solutions at the forefront of limb reconstruction, whether traumatic, post-traumatic, acquired or congenital deformity correction, or limb lengthening. A comprehensive portfolio of adult and pediatric limb reconstruction solutions combines both products and digital services addressing the needs of today’s patient, surgeon, and care team.
TL-HEX Truelok Hexapod System®

Hardware and associated software for simplified deformity correction and trauma management.

**HARDWARE**

1. **Excellent Stability**
   Unique strut head design increases frame stability

2. **Fast Locking**
   One set screw locks down both struts
   NEW SET SCREW 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 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 patients the "power" to face the challenge.

**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.

**COMIC STRIP**
Two very “normal” pre-teen kids find the rings and the struts and in putting these items together, they enter a magical 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.

**mySuperheroAcademy™**
A quiz area designed to educate pediatric patients during the pre-surgery meetings with the orthopaedic surgeon or the care team members. Four match 3 and eight runner games will entertain patients 10–15 years old. Unlocking code required (printed on the comic strip).

**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 reminders about pin-site care and strut adjustments, mood self-assessment and insights into the treatment.
Care HEXcellence

We are not just suppliers of orthopedic 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

**INFORMATION BROCHURE**
- Adult patients and families

**mySuperheroAcademy™**
- Quiz area is designed to educate pediatric patients during the pre-surgery meetings with the orthopaedic surgeon and the care team members

**KIT FOR KIDS**
- Varied fun games to entertain the young patient and help the surgeon and parents explain the treatment.

**COMIC STRIP**
- Launch “platform” to mySuperheroAcademy™ edugame and to the superhero section in www.limbhealing.com

**mySuperheroAcademy™**
- Four match 3 and eight runner games will entertain patients 10-15 years old.

Some materials/services may not be available in your Country. Please contact your sales representative for availability.
Fitbone™ System

The Fitbone™ intramedullary limb lengthening system was developed in partnership with Professor Baumgart. The product was launched in 1999. Since then, this innovative treatment concept has grown into a global success story. The Fitbone™ TAA intramedullary lengthening system is intended for limb lengthening of the femur and tibia. With appropriate pre-operative planning, it is possible to make limb alignment part of limb lengthening. Reliability | Quality | Experience: Several thousand implants since 1999.

HARDWARE

1. **Precision**
   - Instruments designed not only for lengthening but for optimal limb alignment
   - Protection of soft-tissues with minimally-invasive instrumentation
   - Safe alignment assessment and blocking screw placement with dummy (trial) nail

2. **Power**
   - Reliable power direct to the nail
   - High distraction force independent of nail size
   - No soft-tissue limitation
   - Power transferred to the nail with small portable control set
   - No magnets within the control set

3. **Fit**
   - Bone is reamed to exactly fit the implant
   - No over-reaming necessary
TrueLok Ring Fixation System™

The Ilizarov System has experienced many modifications over the last fifty years. The TrueLok™ Ring Fixation System, developed at Texas Scottish Rite Hospital for Children (TSRHC) in Dallas, Texas, is one of the modern variants of the original fixator, but preserves many of the original principles of Professor Ilizarov.

HARDWARE

1. **Simple and User-Friendly**
   Preassembled hinges and motors help surgeons save time and reduce mistakes.

2. **Stable**
   Plastic metal interface as well as combination of stainless steel fixation elements and aluminum rings increase the frame stability.

3. **Versatile**
   Multiple sizes and components to tailor the frame based on patient’s needs.
TL-HEX™ Trauma System

The TL-HEX TrueLok Hexapod System® Trauma is indicated for temporary and definitive stabilization of closed and open fractures when majority of fracture reduction can be achieved rapidly.

HARDWARE

1. Easy Access to the Fracture
   Quick struts allow great versatility in the application and fast assembly with dedicated speed nuts and bolts

2. Stable Frame
   It is part of TrueLok family and can use the same reliable components

3. Versatile
   It can be converted into a proper Hexapod frame (TL-HEX) at a later stage in outpatient clinic
The TrueLok™ EVO System is a modular circular external fixation system based on Ilizarov principles. TL-EVO consists of external supports (rings and footplates), variable length struts and a variety of connection elements that build the external frame.

The TL-EVO may also be used in hybrid frames with ProCallus Fixator, XCaliber™ Fixators, Galaxy Fixation™ System and Galaxy Fixation Gemini™.

**HARDWARE**

**Versatile, Stable, Simple**
- Standardized operative technique
- Can be used as a bone fragment's reduction tool

**Easy to use**
- Radiolucent rings and struts also provided in pre-assembled frames
- TL-EVO is the first circular fixator on the market available in different folded pre-assembled frames provided in sterile sets
- Dedicated sterile packaging and sterile sets, ready-to-use reduction tool

**MRI Conditional**
- Rings and struts are made mainly of carbon fiber and have been tested according to the ASTM F2503 Standard

**Dynamizable**
- Dynamization is obtained without the need for any additional component

**Radiolucent**
- Rings and struts are made of carbon fiber and their radiolucency allows for easy visualization of the bone and the fracture site
eight-Plate Guided Growth System™ Plus

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

HARDWARE

1. **New Design**
   Central dome for easier application on the growth plate

2. **Lower Profile**
   3.5mm vs 4.1mm

3. **Extended Screw Angle**
   60° vs 24° of eight-Plate Guided Growth System™

4. **Multiple Size Options**
   eight-Plate: 12mm, 16mm and 20mm
   Quad-Plate: 16mm and 22mm

5. **New Screw Diameter: 3.5mm**
   Length: 12mm, 14mm and 16mm

6. **New Screw Length: 4.5mm**
   Solid and Cannulated Screws
   - Solid Screw Lengths: 24mm and 32mm
   - Cannulated Screw Lengths: 16mm, 24mm, 32mm and 36mm
LRS ADVANCED

The Orthofix Limb Reconstruction System™ (LRS) is a series of modular monolateral external fixators used in reconstructive procedures for treatment of short stature, bone loss, open fractures, non-union, and angular deformities.

HARDWARE

1. Simple to Use

2. Great Flexibility
   Versatility - multiple clamps available

3. Multiple Corrections
   Varus/valgus, lengthening, bone transport

4. Ergonomic Design
   For greater comfort for the patient

5. Radiolucency
   Where it is needed

6. Universal Rails
   They can be used both for right and left limb

7. Designed with double grooves
   To connect the clamp on both sides

8. Compatible
   With TrueLok and TL-HEX Systems
LRS Pediatric® System

The Pediatric LRS System aims to successfully treat congenital and post-traumatic deformities in children.

**HARDWARE**

1. Multiple Lengths Available

2. Small Size
   Specifically developed for pediatric applications

3. Fully Weight-Bearing
   Under surgeon discretion
UNYCO + TL-HEX Systems

UNYCO and TL-HEX combination allows for CHAOS (Computer Hexapod Assisted Orthopedic Surgery) in tibial application taking advantage of unicortical screws and TL-HEX versatility.

HARDWARE

1. **Easy Access to the Fracture Site**
   - The specific frame configuration and the unicortical pins allow for easy plate or nail introduction

2. **Accurate**
   - SW can be used to correct and reduce the fracture intraoperatively

3. **Versatile**
   - Unicortical pins can be inserted leaving the medullary channel undisturbed for easy nail access

4. **Minimally Invasive**
   - Final reduction can be done in one stage avoiding a second surgery, furthermore unicortical pins are applied only on one cortex of the bone
JuniOrtho™ Plating System (JPS)

A complete plating system developed to address the specific demands of advanced deformity and trauma reconstruction of the lower extremities.

**HARDWARE & SOFTWARE**

1. **Accurate**
   - When accuracy matters, count on JuniOrtho™ Plating System and OrthoNext™ JPS Software Module
   - Pre-planning with OrthoNext™ Software allows a virtual deformity analysis, providing physicians with a prospective view
   - Accurate calibration, measurements and templating

2. **Predictable**
   - When surgical efficiency is critical, the individualized guided workflow provides accurate replication of the planned surgical procedure
   - When minutes matter... JPS ensures your product selection is made easy with color-coded and sterile packed implants and consumables

3. **Fit**
   - As comfort and safety matter, JPS offers lower profile plates designed to reduce soft tissue irritation without compromising strength

4. **Multiple Sizes Available**
   - 3.0mm, 3.5mm and 5.0mm
The OrthoNext™ platform system is web-based, easy to use and designed to assist medical professionals in the preoperative work of orthopedic surgery.

The JPS pre-planning software module is under the umbrella of the OrthoNext™ platform system and allows the surgeon to:

- Perform the pre-planning when and where he/she prefers (thanks to the personal account free of charge)
- Perform accurate calibration, measuring and templating
- Have a detailed report to replicate the pre-planning in OR
- Have an optimized inventory sent to OR (thanks to pre-operative templating)
- Have an appropriate instrument selection (thanks to the adjustable tray)
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.

HARDWARE

1. **Diameter**
   From 7mm up to 10mm

2. **Early Weight Bearing**
   As tolerated by the patient and under surgeon discretion

3. **Titanium Alloy Implants**
   To avoid allergic reaction to nickel

4. **Small Proximal Diameter**
   Of the nail to reduce the invasiveness (9.5mm – 10mm in the 10mm nail)

5. **Lateral grooves**
   To relieve the insertion pressure

6. **5-10° Proximal Bending**
   To facilitate the lateral insertion of the nail and to reduce the impact on the growth plate

7. **Procurvation Design**
   For easy insertion (R=1000mm)
Please refer to the “Instructions for Use” supplied with the product for specific information on indications for use, contraindications, warnings, precautions, adverse reactions and sterilization.

Electronic Instructions for use available at the website http://ifu.orthofix.it

Electronic Instructions for use - Minimum requirements for consultation:
• Internet connection (56 Kbit/s)
• Device capable to visualize PDF (ISO/IEC 32000-1) files
• Disk space: 50 Mbytes

Free paper copy can be requested from customer service (delivery within 7 days):
tel +39 045 6719301, fax +39 045 6719370,
e-mail: customerservice@orthofix.it

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician.
Proper surgical procedure is the responsibility of the medical professional.
Operative techniques are furnished as an informative guideline.
Each surgeon must evaluate the appropriateness of a technique based on his or her personal medical credentials and experience.