PEDiATRIC SOLUTIONS

Trauma, Deformity Correction, Spine, Craniomaxillofacial, Biomaterials
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The formation of the DePuy Synthes Companies of Johnson & Johnson created an organization inspired to provide the broadest portfolio of pediatric patient care solutions worldwide. Our product offerings provide a complete and robust portfolio addressing patient needs in trauma, deformity correction, spine, and craniomaxillofacial reconstruction. This symbiosis enables us to better serve clinicians and hospitals. We are inspired to help return pediatric patients to active living and fulfilling futures.
2.5 mm LCP® Superior Clavicle Plate*
2.5 mm LCP® Superior Anterior Clavicle Plate*
2.7 mm/3.5 mm VA LCP® Anterior Clavicle Plate*

- Titanium Elastic Nails
- Stainless Steel Elastic Nails

- 2.7 mm/3.5 mm VA LCP® Elbow System*
- 2.4 mm VA LCP® Distal Radius Plate System*
- 2.4 mm LCP® Distal Radius Plate System*
- 3.5 mm and 4.5 mm LCP® Plates
- 3.5 mm and 4.5 mm Curved LCP® Plates

*Also indicated for adolescents (12-21) and transitional adolescents (18-21) in which the growth plates have fused or will not be crossed. Please refer to product insert for full list of indications, warnings, and precautions.
LOWER EXTREMITY FRACTURES

6.5 mm Cannulated Screws
Hip Preservation Surgery Set**
7.3 mm Slipped Capital Femoral Epiphysis (SCFE) Screws
Pediatric LCP® Hip Plate System
Cannulated Pediatric Osteotomy System (CAPOS)
Titanium Elastic Nails
Stainless Steel Elastic Nails
Adolescent Lateral Entry Femoral Nail-EX (ALFN)
3.5 mm and 4.5 mm LCP® Plates
3.5 mm and 4.5 mm Curved LCP® Plates
Pediatric LCP® Condylar Plates
VA LCP® Proximal Tibia Plates*
Medium External Fixation System
2.7 mm/3.5 mm VA LCP® Ankle Trauma System*
2.4 mm/2.7 mm VA LCP® Forefoot/Midfoot System*

*Also indicated for adolescents (12-21) and transitional adolescents (18-21) in which the growth plates have fused or will not be crossed. Please refer to product insert for full list of indications, warnings, and precautions.
2.7 mm LCP® Ulna Osteotomy System*
Hip Preservation Surgery Set**
6.5 mm Cannulated Screws
7.3 mm Slipped Capital Femoral Epiphysis (SCFE) Screws
Pediatric LCP Hip Plate System
Cannulated Pediatric Osteotomy System (CAPOS)
Pediatric LCP Condylar Plates
VA LCP Proximal Tibia Plates*
Medium External Fixation System
2.7 mm/3.5 mm VA LCP Ankle Trauma System*
2.4 mm/2.7 mm VA LCP Forefoot/Midfoot System*

*Also indicated for adolescents (12-21) and transitional adolescents (18-21) in which the growth plates have fused or will not be crossed. Please refer to product insert for full list of indications, warnings, and precautions.
**Contains Class 1 instruments intended for the general population.
VEPTR® Vertical Expandable Prosthetic Titanium Rib
VEPTR II™ Titanium Rib
EXPEDIUM® 4.5 System
EXPEDIUM 5.5 System
EXPEDIUM Favored Angled Screw
External Midface Distractor
Midface Distractor
Maxillary Distractor
Curvilinear Distractor
TRUMATCH® CMF Personalized Solutions
RAPIDSORB® Rapid Resorbable Fixation System
LOCKING CLAVICLE PLATES
- Pre-contoured, anatomic shape
- Available in Superior, Superior-Anterior, and Anterior plate families
- Superior and Superior-Anterior plates feature a lateral extension that accepts 2.7 mm locking screws
- Anterior plates have 2.7 mm VA screws in the lateral extension to target various fracture patterns
- COMBI® holes in shaft provide choice of axial compression or locking ability

2.7 MM/3.5 MM VA LCP ELBOW SYSTEM
- Comprehensive System consisting of five (5) distal humerus plates and three (3) types of olecranon plates
- Options for parallel and perpendicular plating of the distal humerus: Medial, Extended Medial, Lateral, Posterolateral, and Posterolateral Distal Humerus Plates with Lateral Support
- Options for olecranon plating: Proximal Olecranon Plate, Olecranon Plate, and Extra Articular Proximal Ulna Plate
- Low-profile design with rounded plate edges, and recesses for screw heads designed to help reduce soft tissue irritation

DISTAL RADIUS PLATES
- Anatomically precontoured plates minimize the need for bending
- Rounded edges and polished plate surfaces minimize soft tissue irritation
- Variable Angle screws provide better screw targeting for various fracture patterns
- Multiple plate portfolio for different patient needs
ELASTIC NAILS: TITANIUM (TEN) AND STAINLESS STEEL (STEN)
- Designed to provide biological, minimally invasive fracture treatment
- Biomechanical principal based on symmetrical bracing action of two elastic nails inserted into the metaphysis, each of which bears against the inner bone at three points to create four properties essential for optimal results
- Six diameters are available, in titanium and stainless steel
- End caps prevent nail migration and reduce likelihood of soft tissue irritation

ADOLESCENT LATERAL ENTRY FEMORAL NAIL-EX (ALFN)
- Lateral entry site facilitates preservation of blood supply to the femur
- Three proximal locking options: two 5.0 mm recon screws, one 4.0 mm 120° antegrade or one transverse 4.0 mm static or dynamic
- Small distal diameter 8.2 mm, 9.0 mm, or 10.0 mm
LOWER EXTREMITY FRACTURES

PEDIATRIC LCP FRACTURE PLATE

- Anatomic plate shape designed for optimal fracture fixation
- Angular stability reduces the risk of primary and secondary loss of fixation
- Initial plate positioning with k-wires allows for intraoperative flexibility
- Variety of plate sizes (3.5 mm and 5.0 mm) and screw lengths allow patient specific fit

3.5 MM AND 4.5 MM CURVED LCP PLATES/STRAIGHT PLATES

- 3.5 mm and 4.5 mm Curved LCP Plates/Straight LCP Plates
- Anatomically contoured for long bones
- COMBI holes provide the choice of axial compression or locking capability throughout the length of the plate
- Limited-contact profile to preserve the periosteum
MINIMALLY INVASIVE REDUCTION AND PLATE INSERTION INSTRUMENTS

- Minimally invasive surgery supports the principles of biological internal fixation by avoiding long incisions and extensive soft tissue stripping associated with conventional techniques.
- Devascularization of the fragments can be minimized by indirect reduction.
- Compatible with the 3.5 mm and 4.5 mm Curved and Straight LCP Plates.

REAMER IRRIGATOR ASPIRATOR

- Single pass reaming with reduced complication.
- Allows for harvesting autogenous bone.
- Removal of infected and necrotic bone and tissue.
- Reduces intramedullary pressure, potential for fat embolization and heat generated during reaming.
VA LCP PROXIMAL TIBIA PLATES

- Available in two bends (small and large bend) to accommodate varying anatomies
- Plate head includes six 3.5 mm VA LCP variable angle locking holes and five K-wire holes with notches
- Plate neck includes two 3.5 mm VA LCP variable angle locking holes for kickstand screws and one elongated hole that accommodates 3.5 mm cortex screws for compression, preliminary fixation, and plate adjustment

2.7 MM/3.5 MM VA LCP ANKLE TRAUMA SYSTEM

- Comprehensive System consisting of five (5) distal tibia plates and one (1) fibula plate
- Multiple options for plating of the distal tibia: medial, anteromedial, anterolateral, and T- and L- distal tibia plates
- Low-profile design, rounded plate edges, and recesses for screw heads designed to help reduce soft tissue irritation
- Compression and Distraction System for fracture reduction
- 2.7 mm Metaphyseal Screws for low-profile fixation
- Two new reduction instruments
LOWER EXTREMITY FRACTURES

MEDIUM EXTERNAL FIXATION SYSTEM
- Modular system with inter-system compatibility
- Clip-on clamps with pin-to-pin or pin-to-bar flexibility
- Clamp functionalities allow customized frames

2.4 MM/2.7 MM VA LCP FOREFOOT/MIDFOOT SYSTEM
- System consists of anatomic- and procedure-specific plates, variable angle locking and cortex screws, and compression feature, to aid in reconstructive foot surgery
- Plates feature variable angle locking holes, with or without the dynamic compression portion
- Compression system has tactile compression and is designed within the plate to minimize additional soft tissue dissection
2.7 MM LCP ULNA OSTEOTOMY PLATE

- Smooth, low-profile plate with rounded edges and tapered ends with a thick center to bury lag screw designed to minimize risk of soft tissue irritation
- COMBI holes accept 2.7 mm Locking and 2.7 mm Cortex screws allowing for flexible screw placement (lag screw, neutral, locking)
- Parallel saw blades, specific to oblique or transverse cut and amount of shortening, allow surgeon to create osteotomy in one cut (compatible with DePuy Synthes Power Tools only)
- Drill templates allow for pre-drilling of plate fixation holes before cut is made, ensuring correct rotational alignment; 2.0 mm, 2.5 mm, 3.0 mm, 4.0 mm, and 5.0 mm shortening lengths
- Saw guide attaches to drill template and offers assisted guidance during oblique cuts
- Compression/distraction instrument allows for adequate compression to promote proper bone union. Also allows for shortenings >5 mm with freehand technique
6.5 MM CANNULATED SCREWS
- High thread-to-core ratio for pullout resistance
- Reverse-cutting threads for removal
- Stainless steel and titanium

7.3 MM SLIPPED CAPITAL FEMORAL EPIPHYSIS (SCFE) SCREWS
- 10 mm or 20 mm threads offer option to cross physis or gain compression
- Cannulated shaft screw design (with shaft same diameter as threads) facilitates screw insertion and removal
- 9.8 mm diameter head with STARDRIVE™ recess minimizes risk of screw head stripping during insertion or removal

HIP PRESERVATION SURGERY SET
- Instruments designed specifically for periacetabular osteotomy and hip impingement procedures
- Osteotomes can withstand hammer blows and include etch lines for measuring depth
- Aluminum retractors are lightweight and have radiolucent properties. Femoral head templates are transparent to aid with reshaping of the femoral head
PEDIATRIC LCP PLATES

- Angular stability reduces the risk of primary and secondary loss of correction
- Initial plate positioning with K-wires allows for intraoperative flexibility and correction
- Variety of plate sizes (2.7 mm, 3.5 mm and 5.0 mm), angles (90° – 150°) and screw lengths allow optimal patient fit
- 130° plate length up to 175 mm for fracture fixation
- Calcar screw for added fixation

CANNULATED PEDIATRIC OSTEOTOMY SYSTEM (CAPOS)

- Osteotomy plates are offered in a variety of sizes for optimal patient fit
- Cannulated chisels and guide wires simplify surgical technique
- Saw guides improve the accuracy of the osteotomy and reduce surgical time
DISTRACTION OSTEOREGENSES (DO) RING SYSTEM

- Allows angular corrections, lengthening and compression
- Modular, for multiple frame options
- Transfixation wires and external fixation pins attach to rings
### Variable Angle LCP Hole
Four columns of threads in locking hole provide four points of locking between the VA LCP Plate and the variable angle locking screw, forming a fixed-angle construct at the desired screw angle.

### Variable Angle Locking Screws
- Threaded, spherical screw head profile
- Rounded shape facilitates various angles in the plate
- Self-retaining STARDRIVE recess designed to improve torque transmission and provide resistance to stripping

### Variable Angle LCP COMBI Hole
Many of the variable angle plates feature a variable angle COMBI hole that combines a dynamic compression hole with a variable angle locking screw hole. This provides the flexibility of selecting either axial compression or variable angle locking in the same hole.

### Locking Screws
- Threaded conical screw head profile
- For use in variable angle locking holes in the predefined nominal angle

### Variable Angle LCP Elongated COMBI Hole
Elongated COMBI hole aids in reduction and plate positioning, providing more versatility for the surgeon.

### Cortex Screws
- Can be used for traditional compression and fixation
VEPTR AND VEPTR II VERTICAL EXPANDABLE PROSTHETIC TITANIUM RIB

- Mechanically stabilize and distract the thorax
- Deliver multiple construction options allowing you to adjust for optimal correction
- Create expansion within the thorax
- Replace components through less invasive surgery
- Increase thoracic volume
- Obtain thoracic symmetry
EXPEDIUM 4.5 SPINE SYSTEM

- Lowest implant profile in Depuy Synthes Spine thoracolumbar portfolio
- Shorter and lighter instruments for smaller anatomies and delicate surgery
- Multiple implant options to address multiple spine pathologies
- Interconnectivity to other EXPEDIUM Spine Systems for diverse options
EXPEDİUM 5.5 SPINE SYSTEM

- Solutions for rigid posterior fixation of the thoracolumbar regions of the spine
- This system combines simplicity and versatility allowing the surgeon to design the construct based on intra-operative developments and patient anatomy
- Offers significant and unique design innovations, giving the surgeon a versatile system with maximum flexibility
EXPEDIUM FAS SPINE SYSTEM

- Combines the benefit of a side-loading screw with the ease of a top-tightening system, to perform multi-plane corrections faster with fewer implants and instruments
- Dual locking mechanism provides the versatility of a polyaxial screw with the control of a monoaxial screw, enabling the correction to be performed with any method with just one screw type
EXTERNAL MIDFACE DISTRACTOR
Distraction of the maxilla, midface, and cranium in adult and pediatric patients
- Preassembled components for quick device assembly in OR
- Numerous adjustments and vector control
- Anterior headframe slides forward along mounting plate
- Headframe expands and closes symmetrically as a single unit
- Variable positioning of vertical rod along front of headframe
- Threaded tip design on cranial pins to reduce pin loosening
- Cranial pin placement on multiple horizontal planes to resist downward titling of the headframe

MIDFACE DISTRACTOR
Internal distraction of cranial and midfacial bones in adult and pediatric patients
- Multiple anterior footplate design to achieve desired vector
- Footplate spans zygomaticomaxillary suture for central midface advancement
- Variable positioning of posterior footplate for placement in good quality bone without limiting advancement capability

MAXILLARY DISTRACTOR
Internal distraction of the maxilla in adult and pediatric patients
- Multiple anterior footplate heights to avoid tooth roots during screw placement
- Multiple posterior heights with two offsets for correct positioning in intraoral cavity
- Attaches to maxilla or dental splint
- Made of stainless steel for rigidity to maintain planned vector
CURVILINEAR DISTRACTER

Internal distraction and bone transport of mandible in adult and pediatric patients including neonates
- Advances and rotates the mandible along a curve to achieve both chin advancement and ramus lengthening.
- Prevents an anterior open bite secondary to distraction.
- Closes an existing anterior open bite.
- Tab indicates a half turn with activation instrument.
- 5 radii of curvature plus a straight distractor.
- 2.0 mm and 1.3 mm sizes.
- Flexible extension arms removed easily by an axial pull without a surgical procedure.
- 2.0 mm footplates accept locking screws for added stability.

PREOPERATIVE PLANNING

As a part of TRUMATCH CMF Personalized Solutions, *DePuy Synthes CMF* has an offering of patient specific products and services that can facilitate a surgeon’s treatment plan. Included in this offering is PROPLAN CMF® Virtual Surgical Planning, a computer-aided surgical planning service for preoperative case visualization, which includes surgical guides to transfer the plan to the operating room.

PROPLAN CMF Virtual Surgical Planning

- Live interactive planning session with a knowledgeable clinical engineer
- Surgeons to make critical clinical decisions preoperatively
- 2D and 3D visualization of preoperative patient anatomy and condition
- Cephalometric analysis
- Simulation of skeletal osteotomies
- Visualization of movement of osteotomized bone to desired post treatment position
- Identification of potential bone interferences
- Virtual placement of the distractor to determine the proper distractor size and placement
- Visualization of the clinical plan to validate the planned, clinical result
- Soft tissue simulation and (3D) photomapping

In addition to virtual case planning, PROPLAN CMF Virtual Surgical Planning products and services include anatomic bone models, surgical guides, and PROPLAN CMF Connect.

- Bone models are useful for bending distractor footplates preoperatively
- Surgical guides function as cutting and drilling guides to accurately transfer the plan to the OR
- PROPLAN CMF Connect is a web-based interface to manage and track PROPLAN CMF Virtual Surgical Planning cases
RAPIDSORB RAPID RESORBABLE FIXATION SYSTEM

Resorbable fixation of cranial bone in adult and pediatric patients
- Implants maintain fixation for 8 weeks during the critical bone healing phase
- Stable reconstruction which completely resorbs in approximately 12 months
- Radiolucent material
- Wide variety of plates, meshes, clamps, and screws
Preshaped orbital floor plate can be quickly and easily contoured.

Contourable mesh permits optimal anatomic conformity without cutting or kinking.

The solid sheet allows customization of hole size and location.

Straight row mesh can be cut into desired plate geometries.
DePuy Synthes Companies of Johnson & Johnson
Mobile Application for iPhone®, iPod touch®, and iPad®
Download the DePuy Synthes Mobile App for more information on our upper extremity products. Available through iTunes.

www.depuysynthes.com

www.SynthesSurgeon.com*

*User login is required. Register for free on the home page.

Please visit the DePuy Synthes Companies of Johnson & Johnson website for more information on our products.

CAUTION: Federal law restricts these devices to sale by or on the order of a physician.