

PRECICE®

ADJUSTABLE SOLUTIONS
FOR ORTHOPEDICS

Antegrade and Retrograde Femur Operative Technique



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INTRODUCTION

Contributing Surgeons

Shawn C. Standard, M.D.
Head of Pediatric Orthopedics
International Center for Limb Lengthening
Sinai Hospital
Baltimore, MD

John E. Herzenberg, M.D.
Director
International Center for Limb Lengthening
Sinai Hospital
Baltimore, MD

Stuart A. Green, M.D.
Clinical Professor
Department of Orthopaedic Surgery
University of California, Irvine Medical Center
Irvine, CA

The PRECICE® Intramedullary Limb Lengthening System is indicated for limb lengthening of the tibia and femur.

This Surgical Technique offers guidance but, as with any such technique guides each surgeon must consider the particular needs of each patient and make appropriate clinical decisions as required.

All non-sterile devices must be cleaned and sterilized before use. Multi-component instrument assemblies must be disassembled prior to cleaning. Please refer to the corresponding Instructions For Use.

It is the surgeon's responsibility to discuss all relevant risks with the patient prior to surgery.

INTRODUCTION

THE PRECICE® INTRAMEDULLARY LIMB LENGTHENING SYSTEM

is the latest advancement in distraction osteogenesis. Interaction between magnets in the device and an External Remote Controller (ERC) allow for precise, adjustable and customizable distraction throughout the lengthening phase of treatment.

Following osteotomy and during the lengthening phase, the PRECICE implant is gradually lengthened based on the patient's requirements with the hand-held ERC. The physician's lengthening prescription can be entered into the ERC. When the desired length is achieved, intramedullary fixation continues to provide stability throughout the consolidation phase.

PRECICE SYSTEM COMPONENTS

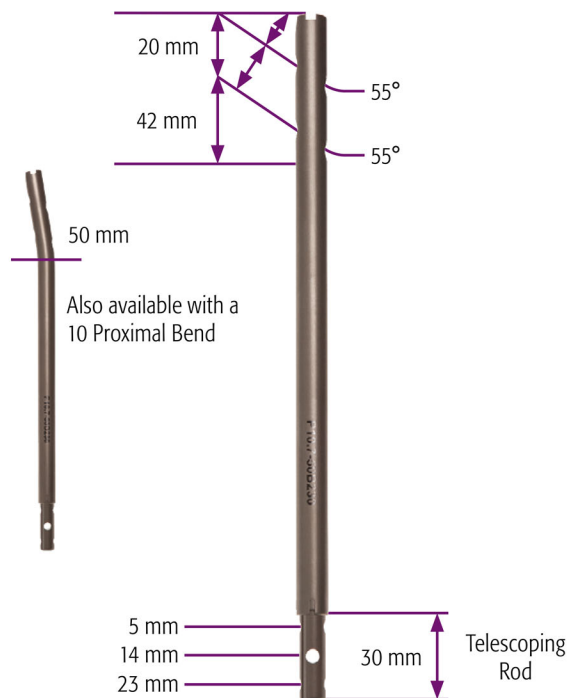
The Intramedullary Limb Lengthening System comprises the following components:

- Intramedullary Nail
- Proximal and Distal Locking Screws
- End Cap (Optional)
- Instrument Tray
- External Remote Controller (ERC)



TECHNICAL DETAILS

ANTEGRADE FEMUR



RETROGRADE FEMUR



- 8.5 mm nails have a proximal geometry of 10.7 mm located 40 mm from the top of the nail.
- 10.7 mm and 12.5 mm nails have a consistent diameter throughout.

Intramedullary Nails

Diameter 8.5, 10.7, and 12.5 mm
Sizes 150–365 mm

Telescoping Rod Diameter (Male)

8.5 mm Nail	=	6.5 mm
10.7 mm Nail	=	8.5 mm
12.5 mm Nail	=	10.0 mm



Locking Screws



3.5 mm Locking Screws
Length = 20–60 mm



4.0 mm Locking Screws
Length = 20–60 mm



5.0 mm Locking Screws
Length = 20–75 mm

End Cap

Sizes



Standard

PREOPERATIVE PLANNING

LIMB LENGTH DISCREPANCY CALCULATION

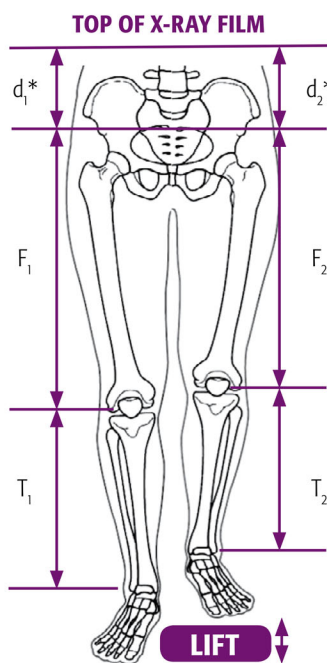
Careful preoperative evaluation and planning, proper surgical technique, and extended postoperative care are essential for success of limb lengthening procedures.

Preoperative evaluation is performed to determine:

- Limb length discrepancy
- Osteotomy location of femur
- Intramedullary diameter
- Soft tissue assessment
- Required implant length

DIAMETER (mm)	LENGTHS (mm)	LOCKING SCREWS (mm)	MAXIMUM DISTRACTION (mm)	PROXIMAL BEND
8.5, 10.7, and 12.5	150, 160, 165, 170, 175, 190, 215, 230, 245, 275, 305, 335, 365	3.5, 4.0, and 5.0 3.5 and 4.0 mm : 20 - 60 mm 5.0 mm : 20 - 75 mm	30, 50, and 80	10° or straight

Digital templates for the PRECICE® implants can be found in TraumaCad® software. As an alternative, the Limb Length Discrepancy Calculation can aid in calculating femoral limb length discrepancies and determine which PRECICE implant is needed. Tibial and femoral lengths calculate segmental differences which helps to determine which segment to address.



CONTRALATERAL LIMB (mm)		TREATMENT LIMB (mm)	
$d_1 =$		$d_2 =$	
$F_1 =$		$F_2 =$	
$T_1 =$		$T_2 =$	

*d1 and d2 are measured from the sacroiliac (SI) joint line reference line to the top of the x-ray image; use a magnification marker on x-ray to improve the accuracy of measurements

$$\text{Limb Length Discrepancy} = (d_2 - d_1) + \text{LIFT} =$$

