# The Titanium Cannulated Tibial Nail. Expert Nailing System.

One nail for proximal, diaphyseal and distal fractures

Anatomic bend

Improved stability

Streamlined instruments





## Indications

The Tibial Nail–EX is intended to stabilize fractures of the proximal and distal tibia and the tibial shaft, open and closed tibial shaft fractures, certain pre- and postisthmic fractures, and tibial malunions and nonunions.



### **Titanium Cannulated Tibial Nail Expert System**

## **Advanced solutions**

### Advanced proximal locking options

- Three innovative locking options, in combination with Dual Core Locking Screws, to increase the stability of the proximal fragment for proximal third fractures
- Two state-of-the-art mediolateral (ML) locking options enable primary compression or secondary controlled dynamization

# Improved stability

#### **End Caps**

- Gold End Caps securely lock the most proximal oblique locking screw to create a fixed-angle construct
- Gray End Caps feature a lead-in design for easier end cap insertion
- End caps prevent ingrowth of tissue and facilitates nail extraction
- Self-retaining T40 StarDrive recess for easy pick up and insertion of end cap
- Cannulated
- 0 mm end caps sit flush with nail
- 5, 10 and 15 mm end caps extend nail height if nail is overinserted







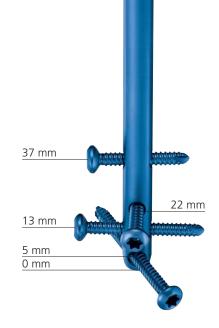


### Advanced nail design

- New anatomic bend for ease of nail insertion
- Titanium alloy\* for improved mechanical and fatigue properties
- Cannulated nails (from 8 mm to 13 mm dia.) for reamed or unreamed techniques, enabling nail insertion over guide wire
- All Synthes 2.5 mm or 3.0 mm balltipped guide wires may be removed through the nail and insertion handle assembly (no exchange tube required)

### Advanced distal locking options

- Distal oblique locking options to prevent soft tissue damage and increase stability of the distal fragment
- Two ML and one anteroposterior (AP) locking options for stability of the distal fragment





# Multidirectional locking options for improved stability

### All Locking Screws:

- Double-lead thread for more contact points enhance stability and ease of insertion
- Thread closer to screw head provides better bone purchase in the near cortex and improved stability
- Titanium alloy\* for improved mechanical and fatigue properties
- Self-tapping blunt tip
- Self-retaining T25 StarDrive recess allows improved torque transmission and increased resistance to stripping relative to a hex recess and secure locking screw pick-up



### **Dual Core Locking Screws:**

- Indicated for the three proximal locking options of all tibial nails
- Dual core design for optimized purchase in cancellous bone
- Unicortical
- Lengths: 30 mm-90 mm

### **Standard Locking Screws:**

- Larger cross section for improved mechanical resistance
- 4.0 mm diameter for 8 mm and 9 mm tibial nails, lengths: 18 mm-80 mm
- 5.0 mm diameter for 10 mm to 13 mm tibial nails, lengths: 26 mm-100 mm



\* Titanium-6% aluminum-7% niobium alloy

### **Clinical Cases**

Case 1

Fracture involving the proximal component













preoperative

Case 3

Fracture involving the distal component



preoperative



postoperative



follow-up (3 weeks after surgery)



follow-up (3 weeks after surgery)



follow-up (3 weeks after surgery)

### **Titanium Cannulated Tibial Nail Expert System**

### **Titanium Cannulated Tibial Nails-EX**

- 8 mm and 9 mm diameters, 255 mm-435 mm length (15 mm increments), blue
- 10 mm-13 mm diameter, 255 mm-435 mm length (15 mm increments), light green

#### Locking Screws, for Titanium Tibial Nails-EX

- 5.0 mm Dual Core Locking Screws, with T25 StarDrive recess, for IM nails, gold 30 mm-90 mm length (5 mm increments)
- 4.0 mm Titanium Locking Screws, with
   T25 StarDrive recess, for IM nails, blue
   18 mm-80 mm length (2 mm increments)
- 5.0 mm Titanium Locking Screws, with
  T25 StarDrive recess, for IM nails, light green
  26 mm-80 mm length (2 mm increments)
  85 mm-100 mm length (5 mm increments)

# Titanium End Caps, with T40 StarDrive recess, for Titanium Tibial Nails–EX

- Titanium End Caps, 0–15 mm extension (5 mm increments), gold
- Titanium End Caps, 0–15 mm extension (5 mm increments), gray



Synthes (USA) 1302 Wrights Lane East West Chester, PA 19380 Telephone: (610) 719-5000 To order: (800) 523-0322 Fax: (610) 251-9056

Synthes (Canada) Ltd. 2566 Meadowpine Boulevard Mississauga, Ontario L5N 6P9 Telephone: (905) 567-0440 To order: (800) 668-1119 Fax: (905) 567-3185

www.synthes.com