FIELDORTHOPAEDICS

PRODUCT BROCHURE

STERILE NX NAIL SYSTEM

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INTRODUCING

THE STERILE NX NAIL SYSTEM





ORTHOPAEDICS IS CHANGING

In the context of rising health expenditure and resource constraints, care providers are looking for ways to manage the complexities, costs and environmental burden associated with orthopaedic procedures.^{1,2}

Terminally sterilised, single-use instrumentation is an innovative means of optimising the entire perioperative process with improved process reliability and predictability driving time and cost efficiency, which has a clear advantage in trauma scenarios² with emergency patient arrivals³.

Field Orthopaedics is dedicated to hands and focused on developing innovative products for this unique speciality. The NX Nail has been purposely designed by a dedicated team of engineers and world-renowned surgeons for extra-articular neck and shaft fractures.

The introduction of terminally sterilised implants and single-use instrumentation means the NX Nail System can support hospitals and surgeons in managing the complexities associated with Orthopaedic procedures.

A SIMPLER WORKFLOW PROCESS

A smart, cost effective approach to implant fixation is here to reduce costs while maintaining high standards of care.



WHY USE STERILE SINGLE-USE INSTRUMENTATION?

Efficient

- Avoid equipment failure and sterilisation delays with reliable product performance and quality in every case.⁴
- Eliminate reprocessing and reduce supply chain waste with streamlined purchasing and inventory management processes.⁵
- Improved OR utilization with no change in technique, no additional procedure time and less perioperative set-up/clean-up to increase patient flow.^{5,6}

Effective

- New pristine instruments for every case.⁵
- Terminally sterilized instruments significantly reduce the risk of contamination and potential for surgical site infection.²
- Reliable and predictable processes improve resource utilization and reduce unanticipated costs.⁶

Environmentally Friendly

- A greener and more sustainable alternative to reusable trays.⁵
- 35% reduction in carbon footprint with no repeated washing or steam sterilisation required.⁵
- Potential to break down and repurpose almost everything in the set including packaging, plastic and stainless steel with active hospital recycling programs.⁵

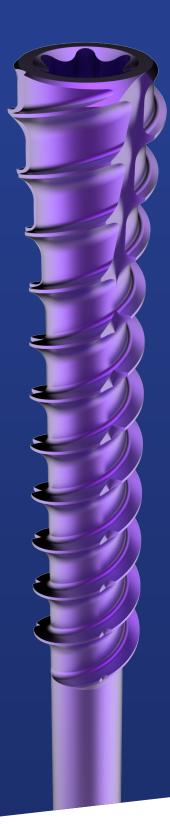
WHY USE THE NX NAIL?

Designed for extra-articular neck and shaft fractures.

DESIGN FEATURES

Compaction Taper Head

- Designed from statistical shape models of real CT scans to be anatomically contoured and maximise engagement.
- Engineered to circumferentially displace and compact cancellous bone to increase relative density and load the bone.
- Strong fixation generated by interference fit between implant threads and bone for rotational control and longitudinal stability.
- Features a constant screw pitch for controlled advancement.



Smooth Shaft

- Facilitates passage through the narrow isthmus.
- Respects the viscoelastic properties of bone with no diaphyseal fixation or isthmus stuffing required.

- Barrie

• Reduced endosteal irritation and disruption to blood supply, with no reaming or cortical contact required.

Precision Leading Tip

- Fine thread pitch provides distal fragment control.
- Designed for ultra-low insertion torque.
- High precision, multi-start, self-cutting design.
- Features a constant screw pitch for controlled advancement.

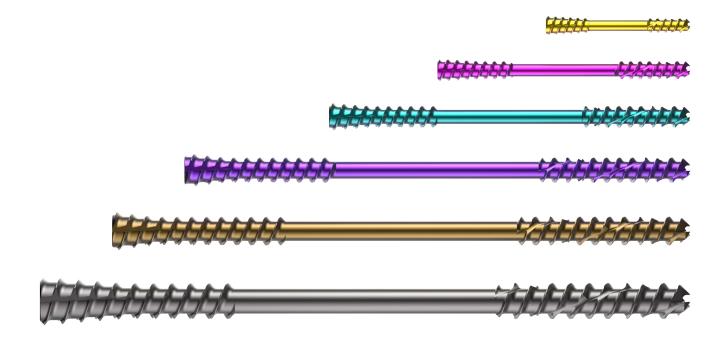


Titanium Alloy

- Made from biocompatible Ti-6AI-4V ELI that avoids common metal allergies and is resistant to corrosion.
- Provides strength and facilitates a large size range.
- Has a modulus closer to bone than other medical grade alloys.

Non-Compressive Design

- Matching thread pitch on the head and tip, provides a neutral compression profile.
- Embodies the AO principles of relative stability.⁷
- Maintains length, restores version, and controls angulation while bridging the fracture and controlling micromotion for indirect healing and callus formation.^{8,9,10}



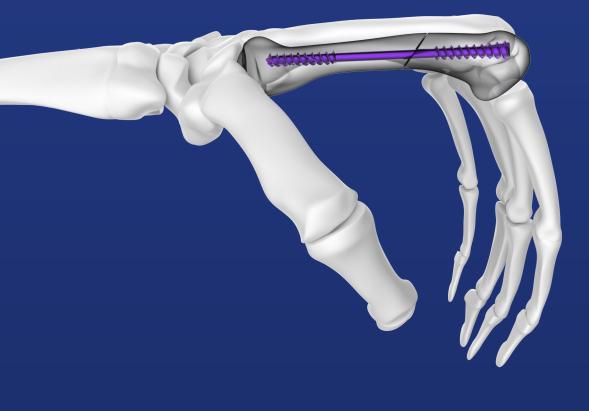
BENEFITS OF THE NX NAIL DESIGN

- The partially threaded design with a wide head, narrow waist and smooth shaft makes it suitable for working through a narrow isthmus while capturing a wide head.
- Restores axial alignment and prevents angulation while providing rotational control and longitudinal stability⁷ with the interference fit of the compaction taper and distal fragment control from the leading tip.
- Provides rigid fixation, stability and an environment for bone healing which accelerates return to function and mobility.^{7,10}
- The minimally invasive surgical technique and lack of hardware profile facilitates early active motion and avoids complications associated with soft-tissue adhesions.^{7,10,11}
- Manufactured from titanium alloy, the NX Nail offers an extensive size range and variety of lengths to suit a range of anatomy.



A RELIABLE ALTERNATIVE TO K-WIRES AND PLATES¹²

- Intramedullary fixation is emerging as a reliable alternative to K-wires and plates with minimal complications and a short learning curve.¹²
- A minimally invasive surgical approach avoids extensive softtissue dissection¹² while buried hardware avoids adhesions.¹³
- Provides rigid fixation for early mobilization¹², making it suitable for high-demand patients requiring short recovery before return to work and daily activities.¹⁴
- Avoids pin complications such as lack of rigid fixation, fracture distraction, migration and reliance on patient compliance.^{11,15}
- Avoids plate complications such as stiffness, plate prominence, adhesions and chronic pain syndromes¹⁵, and reducing the risk of re-operation to remove hardware.¹⁶



CLINICAL USES

COLOUR	SIZE	LENGTH	IMAGE
GOLD	2.0mm	12 - 40mm	******
MAGENTA	2.5mm	12 - 60mm	*******
TEAL	3.0mm	25 - 70mm	********
PURPLE	3.5mm	25 - 70mm	**********
BRONZE	4.0mm	35 - 80mm	1999999999999
GREY	5.0mm	35 - 90mm	Annomic Manna M

PHALANX	
INDICATION	P1 & P2
SIZE RECOMMENDATION	2.0 - 3.0mm
LENGTH RANGE	2.0: 12 – 40mm
	2.5: 12 – 60mm
	3.0: 25 – 70mm

METACARPAL	
INDICATION	Thumb, 2nd, 3rd, 4th, 5th
SIZE RECOMMENDATION	2.0 - 4.0mm
LENGTH RANGE	2.0 - 12 - 40mm
	2.5: 12 – 60mm
	3.0: 25 – 70mm
	3.5: 25 – 70mm
	4.0: 35 – 80mm



ULNA	
INDICATION	Ulna
SIZE RECOMMENDATION	3.5 - 5.0mm
LENGTH RANGE	3.5: 25 – 70mm
	4.0: 35 – 80mm
	5.0: 35 – 90mm

WHY CHOOSE THE STERILE NX NAIL SYSTEM?



The introduction of terminally sterilized implants and single-use instruments makes the already efficient and effective NX Nail a compelling option for your extra-articular fracture needs.

Always ready and available to support emergency arrivals or back-to-back cases, the sterile NX Nail system offers simplicity and performance to maximise patient outcomes.

Simplicity

- Reduced perioperative set-up and clean-up.⁶
- Easy to follow colour coding convention.
- A quick and simple alternative to K-wire and plate fixation.

Performance

- Engineered to provide increased engagement and fragment control for rigid stability.¹⁷
- Comprehensive size range to treat a range of patient anatomy.
- Reliable product performance with new instruments for every case.⁵

Outcome

- Minimally invasive approach with limited soft tissue disruption and early active mobilization.¹²
- Reduced risk of contamination and surgical site infection.²
- Increased OR utilization, reduced costs and a greener alternative to reusable trays.^{5,6}

INSTRUMENT CATALOGUE

Size Specific Sterile Instrument Kits

Size specific single-use sterile instrument kits are available for each of the six NX Nail diameters and identified by colour.

CAT NO.	REF NO.	DESCRIPTION
NXI20s	960-001	2.0mm NX Nail Instrument Kit – Sterile
NXI25s	960-002	2.5mm NX Nail Instrument Kit – Sterile
NXI30s	960-003	3.0mm NX Nail Instrument Kit – Sterile
NXI35s	960-004	3.5mm NX Nail Instrument Kit – Sterile
NXI40s	960-005	4.0mm NX Nail Instrument Kit – Sterile
NXI50s	960-006	5.0mm NX Nail Instrument Kit – Sterile



Sterile Accessory Instruments

In addition to the single-use size specific instrument kit, a single-use sizing template and single-use individual drill bits are available as accessories.

CAT NO.	REF NO.	DESCRIPTION
NXSGs	961	NX Nail Sizing Template – Sterile
NXD150s	963-001	1.5mm Thermally Hardened Cannulated NX Drill Bit – Sterile
NXD175s	963-002	1.75mm Thermally Hardened Cannulated NX Drill Bit – Sterile
NXD200s	963-003	2.0mm Thermally Hardened Cannulated NX Drill Bit – Sterile
NXD240s	963-004	2.4mm Thermally Hardened Cannulated NX Drill Bit – Sterile
NXD275s	963-005	2.75mm Thermally Hardened Cannulated NX Drill Bit – Sterile
NXD350s	963-006	3.5mm Thermally Hardened Cannulated NX Drill Bit – Sterile



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Individual Single-Use Sterile Drill Bits

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IMPLANT CATALOGUE

2.0mm RANGE		
CAT NO.	DESCRIPTION	
NXNC2012s	2.0 x 12mm NX Nail Implant-Sterile	
NXNC2014s	2.0 x 14mm NX Nail Implant-Sterile	
NXNC2016s	2.0 x 16mm NX Nail Implant-Sterile	
NXNC2018s	2.0 x 18mm NX Nail Implant-Sterile	
NXNC2020s	2.0 x 20mm NX Nail Implant-Sterile	
NXNC2022s	2.0 x 22mm NX Nail Implant-Sterile	
NXNC2024s	2.0 x 24mm NX Nail Implant-Sterile	
NXNC2026s	2.0 x 26mm NX Nail Implant-Sterile	
NXNC2028s	2.0 x 28mm NX Nail Implant-Sterile	
NXNC2030s	2.0 x 30mm NX Nail Implant-Sterile	
NXNC2032s	2.0 x 32mm NX Nail Implant-Sterile	
NXNC2034s	2.0 x 34mm NX Nail Implant-Sterile	
NXNC2036s	2.0 x 36mm NX Nail Implant-Sterile	
NXNC2038s	2.0 x 38mm NX Nail Implant-Sterile	
NXNC2040s	2.0 x 40mm NX Nail Implant-Sterile	

3.0mm RANGE		
3.0 x 25mm NX Nail Implant-Sterile		
3.0 x 30mm NX Nail Implant-Sterile		
3.0 x 35mm NX Nail Implant-Sterile		
3.0 x 40mm NX Nail Implant-Sterile		
3.0 x 45mm NX Nail Implant-Sterile		
3.0 x 50mm NX Nail Implant-Sterile		
3.0 x 55mm NX Nail Implant-Sterile		
3.0 x 60mm NX Nail Implant-Sterile		
3.0 x 70mm NX Nail Implant-Sterile		

4.0mm RANGE		
NXNC4035s	4.0 x 35mm NX Nail Implant-Sterile	
NXNC4040s	4.0 x 40mm NX Nail Implant-Sterile	
NXNC4045s	4.0 x 45mm NX Nail Implant-Sterile	
NXNC4050s	4.0 x 50mm NX Nail Implant-Sterile	
NXNC4055s	4.0 x 55mm NX Nail Implant-Sterile	
NXNC4060s	4.0 x 60mm NX Nail Implant-Sterile	
NXNC4070s	4.0 x 70mm NX Nail Implant-Sterile	
NXNC4080s	4.0 x 80mm NX Nail Implant-Sterile	

2.5mm RANGE		
CAT NO.	DESCRIPTION	
NXNC2512s	2.5 x 12mm NX Nail Implant-Sterile	
NXNC2514s	2.5 x 14mm NX Nail Implant-Sterile	
NXNC2516s	2.5 x 16mm NX Nail Implant-Sterile	
NXNC2518s	2.5 x 18mm NX Nail Implant-Sterile	
NXNC2520s	2.5 x 20mm NX Nail Implant-Sterile	
NXNC2525s	2.5 x 25mm NX Nail Implant-Sterile	
NXNC2530s	2.5 x 30mm NX Nail Implant-Sterile	
NXNC2535s	2.5 x 35mm NX Nail Implant-Sterile	
NXNC2540s	2.5 x 40mm NX Nail Implant-Sterile	
NXNC2545s	2.5 x 45mm NX Nail Implant-Sterile	
NXNC2550s	2.5 x 50mm NX Nail Implant-Sterile	
NXNC2555s	2.5 x 55mm NX Nail Implant-Sterile	
NXNC2560s	2.5 x 60mm NX Nail Implant-Sterile	

3.5mm RANGE

3.5 x 25mm NX Nail Implant-Sterile
3.5 x 30mm NX Nail Implant-Sterile
3.5 x 35mm NX Nail Implant-Sterile
3.5 x 40mm NX Nail Implant-Sterile
3.5 x 45mm NX Nail Implant-Sterile
3.5 x 50mm NX Nail Implant-Sterile
3.5 x 55mm NX Nail Implant-Sterile
3.5 x 60mm NX Nail Implant-Sterile
3.5 x 70mm NX Nail Implant-Sterile

	5.0mm RANGE
NXNC5035s	5.0 x 35mm NX Nail Implant-Sterile
NXNC5040s	5.0 x 40mm NX Nail Implant-Sterile
NXNC5045s	5.0 x 45mm NX Nail Implant-Sterile
NXNC5050s	5.0 x 50mm NX Nail Implant-Sterile
NXNC5055s	5.0 x 55mm NX Nail Implant-Sterile
NXNC5060s	5.0 x 60mm NX Nail Implant-Sterile
NXNC5070s	5.0 x 70mm NX Nail Implant-Sterile
NXNC5080s	5.0 x 80mm NX Nail Implant-Sterile
NXNC5090s	5.0 x 90mm NX Nail Implant-Sterile

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FIELDORTHOPAEDICS

Get in touch with your local sales representative today to discuss how NX Nail can meet your hand trauma needs.

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