

austofix CHN CANNULATED HUMERAL NAIL

Brochure





The Austofix Cannulated Humeral Nail is based on over 25 years of clinical history and Austofix expertise in the design and manufacture of world-class and innovative trauma devices. Our design objective is to reduce operative times and support efficient and safe procedures resulting in improved patient outcomes.

The Austofix Standard CHN is the preferred treatment option for all surgical neck and multi-part proximal humeral fractures.

The Austofix Long CHN is suitable for any mid-shaft humeral fractures or shaft fractures in isolation. The Long CHN can also be inserted using a retrograde approach for all middle and distal humeral shaft fractures, avoiding damage to the rotator cuff.

CHN Standard

- Cannulated Universal Nail Design
- » Suitable for Left or Right Humeral Fractures
- Anatomical Design
 - » Minimises Bone Loss
- Simplified Inventory Management
 - » Intuitive Proximal Screw Guide for Distal & Proximal Locking
 - » No X-ray Targeting Required
- 170mm Length with High Distal Locking
 - » Optimal for Proximal & Surgical Neck Fractures
- Ø8 & Ø9mm Distal Diameter

CHN Long

- Cannulated Universal Nail Design
 - » Suitable for Left or Right Humeral Fractures
- Anatomical Design
 - » Minimises Bone Loss



- Ezy-Aim Compatible
 - » No X-ray Targeting Required
- 180mm 280mm Length
 - » Optimal for Mid-Shaft & Isolated Fractures
- Suitable for Retrograde Insertion
- » Avoids Damage to Rotator Cuff
- Ø7, Ø8 & Ø9mm Distal Diameter





Features

Nail Features

- Cannulation provides simple insertion over guidewire. Reduces operating time.
- Type II Anodised Titanium (ISO 5832-3). Increased biocompatibility and biomechanical performance.
- Four proximal screw holes for Humeral Head Screws. Provides multiple points of fixation in Humeral Head.
- Multiplanar Humeral Head locking. Two oblique & two lateral proximal locking for superior fixation.
- Ø9mm Proximal Diameter & Ø7*, Ø8
 & Ø9mm Distal Diameters. Allows for smallest possible insertion footprint.
- Anatomical mediolateral bend. 5° for CHN Long & 7.5° for CHN Short provides better anatomic fit, minimising bone loss.
- Intuitive instrument set. Used for both CHN Long & Short, decreasing procedure time and improving patient outcome.
- Retrograde insertion technique*. Optimal for distal shaft fractures & avoids damage to rotator cuff, particularly for younger patients.
- Ezy-Aim compatibility*. Simple to use & eliminates the need for distal X-ray targeting.

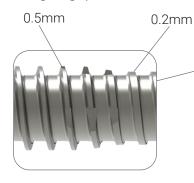
*CHN Long only



Screws

3.5mm/4.0mm Nail Locking Screws

- Used for distal locking.
- Special thread design with 75% of the thread being shallow facilitating insertion and the final 25% expanding to grip the first cortex.



4.3mm Humeral Head Screws

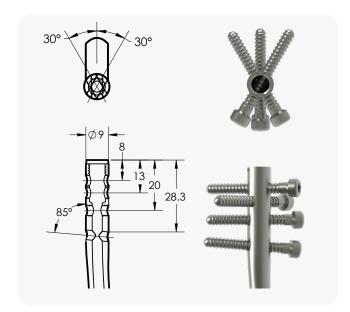
- Used in the four proximal holes of the CHN.
- Contain an anti-backout mechanism and are securely placed in a tapped proximal hole in the Nail.
- Blunt contact tips with low profile heads to reduce tendon irritation.
- Incremental 2.5mm sizes are offered to enable the closest possible placement to the subchondral bone.

Humeral Nail End Cap

- Used to increase Nail length & deter bony ingrowth.
- Lengths: 1, 5, 10, 15, 20mm.

Washer for Humeral Head Screws

• Used to lag fragments to the humeral head and for greater tuberosity fractures.





3.5mm Nail Locking Screw*
(Ø7mm Nail)



4.0mm Nail Locking Screw (Ø8mm & Ø9mm Nails)



4.3mm Humeral Head Screw



Humeral Nail End Cap



Washer for Humeral Head Screw

*CHN Long Only

Design Details

- All implants are made from ISO 5832-3 Titanium.
 - » Made specially to Austofix specifications.
 - » Provides unrivalled strength and rigidity.
- Tight tolerances resulting in a high quality narrower design.
 - » Enables the insertion "footprint" to be the smallest possible.
 - » Preserves the rotator cuff.
 - » Enables early mobilisation.
- Independent cadaver testing shows the Austofix CHN construct to be a superior design.

Innovative Instrumentation



Nail Holder & Proximal Screw Guide

The CHN Nail Holder and Proximal Screw Guide enable fast and efficient insertion of the Nail and Humeral Head Screws.

- Significant reduction of operating procedure time.
- Reduction of inventory.

When used with the Standard Nail, the CHN Proximal Screw Guide is used for distal Locking Screw fixation.

- No X-ray for distal targeting required.
- Greatly improved patient outcome.

Easy to assemble. Short Locking Sleeves ensure accurate alignment and stable fixation of Humeral Head Screws.

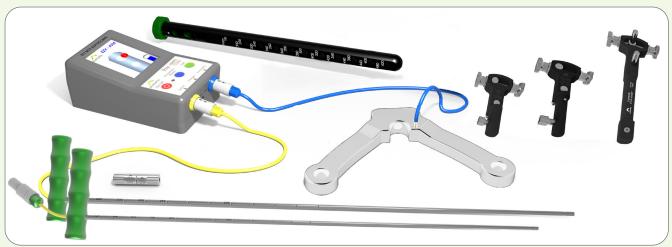
Ezy-Aim Distal Targeting System

The CHN Long Nail utilises the Ezy-Aim Distal Targeting System for the fixation of distal Locking Screws.

Ezy-Aim removes the need for X-ray distal targeting, reducing patient dose and operating time, improving patient outcome.

Please refer to the Ezy-Aim Distal Targeting System Surgical Technique for instructions on how to calibrate the CHN Long Nail for distal hole targeting.





CHN Nails

CHN Long - Titanium		
Nominal Length	Product Code	
Ø7		
180	130718	
200	130720	
220	130722	
240	130724	
260	130726	
280	-	
	Ø8	
200	130820	
220	130822	
240	130824	
260	130826	
280	130828	
	Ø9	
200	130920	
220	130922	
240	130924	
260	130926	
280	130928	

CHN Standard - Titanium		
Product Code	Nominal Diameter Nail Length	
130817	Ø8	170
130917	Ø9	170

Single Use Items

Guidewire		
Product Code	Description	
512525	2.5 x 250mm K Wire (Twin Packed)	
533900	3.0 x 900mm Ball-tip Guidewire	

Drill	
Product Code	Description
513224	3.2 x 240mm Drill (for 3.5mm Screw) (Long CHN Nail Only)
513724	3.7 x 240mm Drill (for 4.0 & 4.3mm Screw)



A DOSSUBLIN REFERENCE (0):

Implants

4.0mm Locking Screw		
Product Code	Screw Length	
364020	20	
364025	25	
364030	30	
364032	32.5	
364035	35	
364037	37.5	
364040	40	
364045	45	
364050	50	
364055	55	
364060	60	
364065	65	
364070	70	

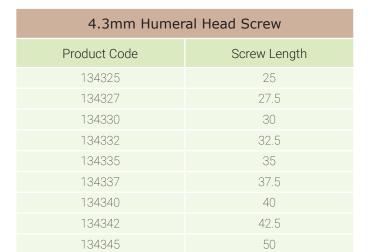


4.0mm Locking Screw		
Product Code	Screw Length	
364020	20	
364025	25	
364030	30	
364032	32.5	
364035	35	
364037	37.5	
364040	40	
364045	45	
364050	50	
364055	55	
364060	60	

3.5mm Locking Screw		
Product Code	Screw Length	
133520	20	
133525	25	
133530	30	



M7 End Cap		
Product Code	Cap Length	
190701	1	
190705	5	
190710	10	
190715	15	
190720	20	







Washer for Humeral Head Screws
Product Code
134301





As a leading manufacturer and designer of orthopaedic medical devices Austofix is dedicated to continuous innovation, excellence and patient safety.

Austofix has extensive experience and expertise in developing new medical devices from concept to a fully commercialised product with regulatory approval for worldwide distribution. With a team of world-class research and development specialists Austofix identifies emerging techniques and innovations within the field of orthopaedic to develop world-class solutions.

By focusing on the specific needs of orthopaedic surgeons, Austofix products assist the surgeon in performing accurately, efficiently and safely leading to better health outcomes for the patient. Austofix success can be measured through the excellent clinical results and positive surgeon feedback.



This has led to Austofix emerging as one of Australia's key contributors to the world-wide medical technology industry.

Legal Manufacturer

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