

KONZEPT HUMERUS NAILING SYSTEM

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edition
2022

 **Auxein®**

about us

Auxein Medical is an integrated, research based, orthopaedic Implants & Instruments manufacturing company, producing a wide range of quality, affordable generic implants, trusted by healthcare professionals and patients across geographies. It is the Company's constant endeavor to provide a wide basket of generic and innovator products that exceed the highest expectations of our customers in term of quality and safety. The company has world-class manufacturing unit established in India and serves customers in over 60 countries worldwide.

Our Achievements

US FDA 510K APPROVED •

(Arthroscopy, Spine, Nailing, Locking Plates & Screws)

EC Certificate - Class IIa & IIb •

ISO 13485:2016 •

ISO 9001:2015 •

India FDA Approved •

India MDR 2017 •

Orthopaedic Implants

INTRODUCTION

- Konzept Humerus Nailing System, consist of:
- Implants (intramedullary nail, locking screws, end cap or compression screw),
- Instrument set for implantation and extraction after finished treatment.

Intramedullary osteosynthesis of humerus provides stable fixation of fractured shaft of the bone, it is recommended to use in following cases:

- Pathological comminuted fractures,
- Difficult fractures with closed and opened (I grade) damages,
- Malunion of fractures of humeral shaft after treatment with other methods.

This system provides the following methods of intramedullary fixation depending on the type of humerus fracture:

Static Method

Static fixation is used in multi-fragment fractures when the fragments of fractured bone don't cling in the axial line. In this fixation, to lock the nail with screws are used all holes in distal part, and in proximal part of the nail - one round hole or two holes (round and oblong).



Dynamic Method

Dynamic fixation may be used in case of good cortex contact of fragments of fractured bone in transverse and oblique fractures, also in false joints. All distal holes and one proximal hole of the intramedullary humeral nail are used in that fixation. Dynamic fixation enables axial displacement of bone fragments while loading the limb, in this way physiological stimulus is forming to create bone scar and its reconstruction into the lamellar bone.

Dynamic with compression method

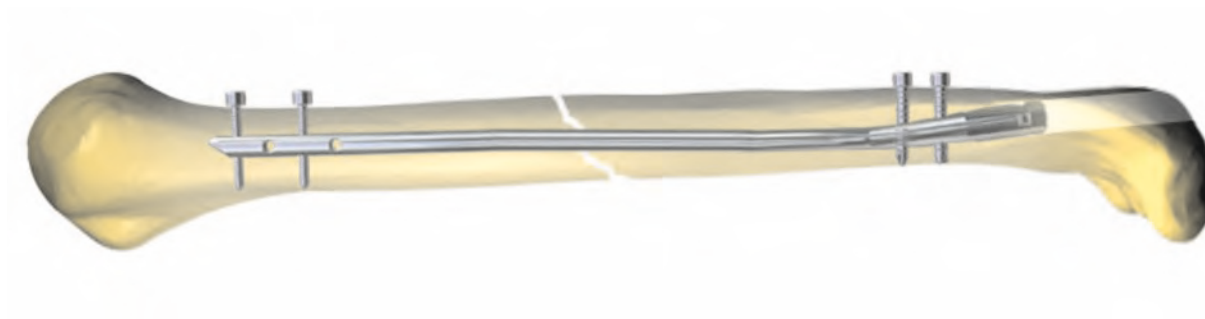
In dynamic with compression method (compressive fixation) the compressive screw is axially screwed into internal threaded hole of the nail shaft in order to put pressure on locking screw which locked the nail. The compressive fixation eliminates all micro-movements in the initial stage of fracture treatment

Oblique locking of the nail

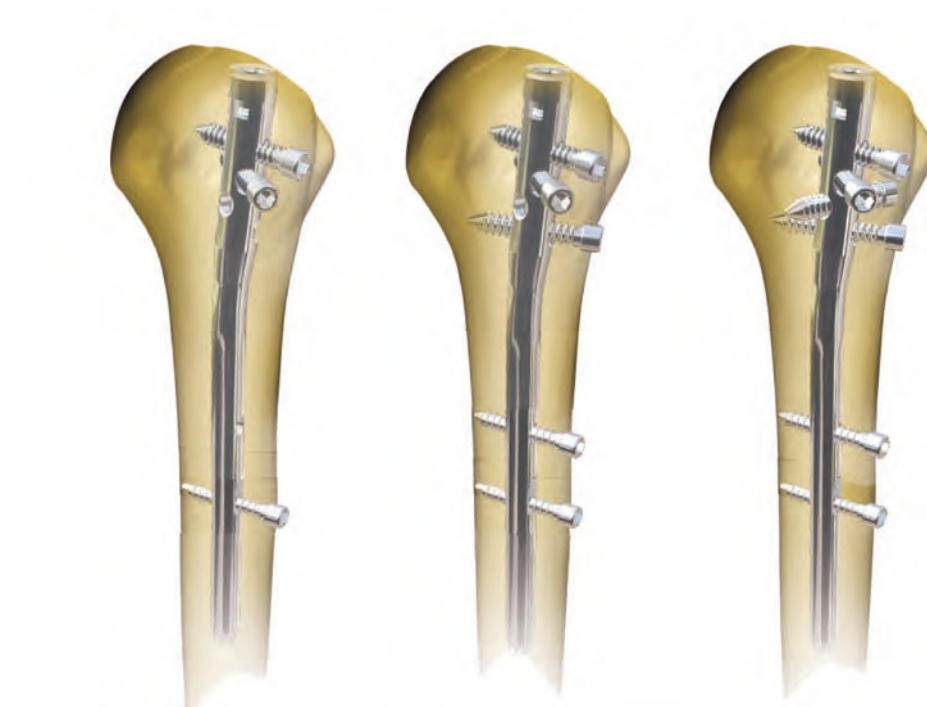


Distal inserting of the nail

Humeral bone fractures located in area of shaft, metaphysis and epiphysis of humeral bone may be also connect using intramedullary Auxein nail inserted from distal epiphysis area.



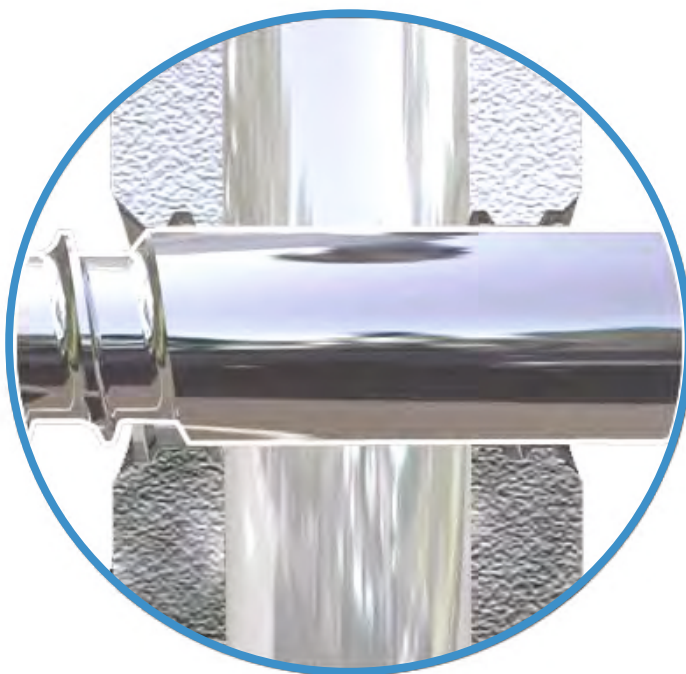
Examples of reconstructive humerus nail:



Reconstructive intramedullary humerus nail is offered in:

- Diameter range from 6 to 9mm (with pitch 1mm);
- Cannulated version;
- Length range from 150 to 215mm in short version and from 220 to 400mm in long version;
- Made of Stainless Steel and Titanium.

Nail design make implantation possible to right and left limb. To the nails in short and long version is used the same target. Locking nail in short version in distal part is performed using holes marked on the target as "RECONSTRUCTION", whereas nails in long version are locked using slider located on target slider (before implantation it is necessary to place slider this way that set blocks led onto holes of the slider freely hit on holes on the nail), or using "free hand" technique. In the proximal part the nail has 4 holes used for fixing damaged fragments of the head of the humerus.



Intramedullary Cannulated Humerus Nail

	Stainless Steel	Titanium	Dia x Length
Ø6mm	6082-6.0-180	TI-6082-6.0-180	Ø6mm x 180mm
	6082-6.0-200	TI-6082-6.0-200	Ø6mm x 200mm
	6082-6.0-220	TI-6082-6.0-220	Ø6mm x 220mm
	6082-6.0-240	TI-6082-6.0-240	Ø6mm x 240mm
	6082-6.0-260	TI-6082-6.0-260	Ø6mm x 260mm
	6082-6.0-280	TI-6082-6.0-280	Ø6mm x 280mm
	6082-6.0-300	TI-6082-6.0-300	Ø6mm x 300mm
	6082-6.0-320	TI-6082-6.0-320	Ø6mm x 320mm
Ø7mm	6082-7.0-180	TI-6082-7.0-180	Ø7mm x 180mm
	6082-7.0-200	TI-6082-7.0-200	Ø7mm x 200mm
	6082-7.0-220	TI-6082-7.0-220	Ø7mm x 220mm
	6082-7.0-240	TI-6082-7.0-240	Ø7mm x 240mm
	6082-7.0-260	TI-6082-7.0-260	Ø7mm x 260mm
	6082-7.0-280	TI-6082-7.0-280	Ø7mm x 280mm
	6082-7.0-300	TI-6082-7.0-300	Ø7mm x 300mm
	6082-7.0-320	TI-6082-7.0-320	Ø7mm x 320mm
Ø8mm	6082-8.0-180	TI-6082-8.0-180	Ø8mm x 180mm
	6082-8.0-200	TI-6082-8.0-200	Ø8mm x 200mm
	6082-8.0-220	TI-6082-8.0-220	Ø8mm x 220mm
	6082-8.0-240	TI-6082-8.0-240	Ø8mm x 240mm
	6082-8.0-260	TI-6082-8.0-260	Ø8mm x 260mm
	6082-8.0-280	TI-6082-8.0-280	Ø8mm x 280mm
	6082-8.0-300	TI-6082-8.0-300	Ø8mm x 300mm
	6082-8.0-320	TI-6082-8.0-320	Ø8mm x 320mm
Ø9mm	6082-9.0-180	TI-6082-9.0-180	Ø9mm x 180mm
	6082-9.0-200	TI-6082-9.0-200	Ø9mm x 200mm
	6082-9.0-220	TI-6082-9.0-220	Ø9mm x 220mm
	6082-9.0-240	TI-6082-9.0-240	Ø9mm x 240mm
	6082-9.0-260	TI-6082-9.0-260	Ø9mm x 260mm
	6082-9.0-280	TI-6082-9.0-280	Ø9mm x 280mm
	6082-9.0-300	TI-6082-9.0-300	Ø9mm x 300mm
	6082-9.0-320	TI-6082-9.0-320	Ø9mm x 320mm



End Cap For Intramedullary Humerus Nail

Stainless Steel	Titanium
6083.100	TI-6083.100



Compression Screw For Intramedullary Humerus Nail

Stainless Steel	Titanium
1219.000	TI-1219.000



4.5mm Locking Bolt For Humerus Nail

Length(mm)	Stainless Steel	Titanium
20	6001.020	TI-6001.020
24	6001.022	TI-6001.022
26	6001.024	TI-6001.024
28	6001.026	TI-6001.026
30	6001.028	TI-6001.028
35	6001.030	TI-6001.030
40	6001.035	TI-6001.035
45	6001.040	TI-6001.040
50	6001.045	TI-6001.045
55	6001.050	TI-6001.050
55	6001.055	TI-6001.055
60	6001.060	TI-6001.060
65	6001.065	TI-6001.065
70	6001.070	TI-6001.070



Ø4.5mm Proximal Screw

Length(mm)	Stainless Steel	Titanium
25	1221.025	TI-1221.025
30	1221.030	TI-1221.030
35	1221.035	TI-1221.035
40	1221.040	TI-1221.040
45	1221.045	TI-1221.045
50	1221.050	TI-1221.050
55	1221.055	TI-1221.055
60	1221.060	TI-1221.060
65	1221.065	TI-1221.065
70	1221.070	TI-1221.070



Reconstruction Nail, Cannulated

Stainless Steel	Titanium	Dia x Length
6092-6.0-150	TI-6092-6.0-150	Ø6mm x 150mm
6092-7.0-150	TI-6092-7.0-150	Ø7mm x 150mm
6092-8.0-150	TI-6092-8.0-150	Ø8mm x 150mm
6092-9.0-150	TI-6092-9.0-150	Ø9mm x 150mm



Reconstruction Cannulated Intramedullary Humerus Nail

	Stainless Steel	Titanium	Dia x Length
Ø6mm	6092-6.0-200	TI-6092-6.0-200	Ø6mm x 200mm
	6092-6.0-220	TI-6092-6.0-220	Ø6mm x 220mm
	6092-6.0-240	TI-6092-6.0-240	Ø6mm x 240mm
	6092-6.0-260	TI-6092-6.0-260	Ø6mm x 260mm
	6092-6.0-280	TI-6092-6.0-280	Ø6mm x 280mm
	6092-6.0-300	TI-6092-6.0-300	Ø6mm x 300mm
	6092-6.0-320	TI-6092-6.0-320	Ø6mm x 320mm
Ø7mm	6092-7.0-200	TI-6092-7.0-200	Ø7mm x 200mm
	6092-7.0-220	TI-6092-7.0-220	Ø7mm x 220mm
	6092-7.0-240	TI-6092-7.0-240	Ø7mm x 240mm
	6092-7.0-260	TI-6092-7.0-260	Ø7mm x 260mm
	6092-7.0-280	TI-6092-7.0-280	Ø7mm x 280mm
	6092-7.0-300	TI-6092-7.0-300	Ø7mm x 300mm
	6092-7.0-320	TI-6092-7.0-320	Ø7mm x 320mm
Ø8mm	6092-8.0-200	TI-6092-8.0-200	Ø8mm x 200mm
	6092-8.0-220	TI-6092-8.0-220	Ø8mm x 220mm
	6092-8.0-240	TI-6092-8.0-240	Ø8mm x 240mm
	6092-8.0-260	TI-6092-8.0-260	Ø8mm x 260mm
	6092-8.0-280	TI-6092-8.0-280	Ø8mm x 280mm
	6092-8.0-300	TI-6092-8.0-300	Ø8mm x 300mm
	6092-8.0-320	TI-6092-8.0-320	Ø8mm x 320mm
Ø9mm	6092-9.0-200	TI-6092-9.0-200	Ø9mm x 200mm
	6092-9.0-220	TI-6092-9.0-220	Ø9mm x 220mm
	6092-9.0-240	TI-6092-9.0-240	Ø9mm x 240mm
	6092-9.0-260	TI-6092-9.0-260	Ø9mm x 260mm
	6092-9.0-280	TI-6092-9.0-280	Ø9mm x 280mm
	6092-9.0-300	TI-6092-9.0-300	Ø9mm x 300mm
	6092-9.0-320	TI-6092-9.0-320	Ø9mm x 320mm



End Cap For Reconstruction Cannulated Intramedullary Nail

Stainless Steel	Titanium
6084.00	TI-6084.00



Ø3.5mm Locking Bolt For Humerus Nail

Length(mm)	Stainless Steel	Titanium
20	1222.020	TI-1222.020
22	1222.022	TI-1222.022
24	1222.024	TI-1222.024
26	1222.026	TI-1222.026
28	1222.028	TI-1222.028
30	1222.030	TI-1222.030
35	1222.035	TI-1222.035
40	1222.040	TI-1222.040
45	1222.045	TI-1222.045
50	1222.050	TI-1222.050
55	1222.055	TI-1222.055
60	1222.060	TI-1222.060
65	1222.065	TI-1222.065
70	1222.070	TI-1222.070

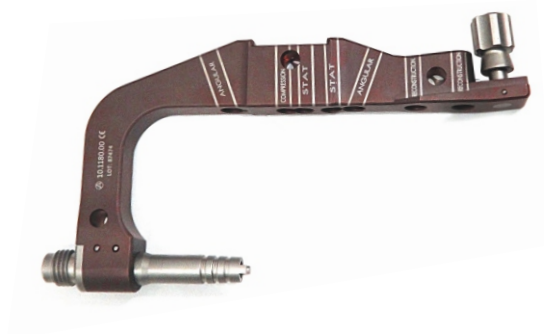


Ø4.5mm Locking Bolt For Humerus Nail

Length(mm)	Stainless Steel	Titanium
20	6001.020	TI-6001.020
22	6001.022	TI-6001.022
24	6001.024	TI-6001.024
26	6001.026	TI-6001.026
28	6001.028	TI-6001.028
30	6001.030	TI-6001.030
35	6001.035	TI-6001.035
40	6001.040	TI-6001.040
45	6001.045	TI-6001.045
50	6001.050	TI-6001.050
55	6001.055	TI-6001.055
60	6001.060	TI-6001.060
65	6001.065	TI-6001.065
70	6001.070	TI-6001.070



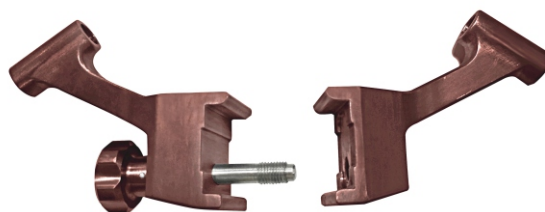
10-1180-00 Humeral Target B for Konzept Humerus Nail



10-1181-00 Distal Target D for Konzept Humerus Nail



10-1182-00 Angular Reconstruction Target for Konzept Humerus Nail



10-1183-00 Connecting Screw M7x1spec. Length 95mm, for Konzept Humerus Nail



10-1184-00 Connecting Screw M7x1spec. Length 101mm, for Konzept Humerus Nail



10-1185-00 Set Block Ø3.5/4.5mm for Konzept Humerus Nail



10-1186-00 Protective Guide Ø6.5/9mm for Konzept Humerus Nail



10-1187-00 Drill Guide Ø6.5/3.5mm for Konzept Humerus Nail



10-1188-00 Drill Guide Ø6.5/2.8mm for Konzept Humerus Nail



10-1189-00 Drill Guide Ø6.5/4.5mm for Konzept Humerus Nail



10-1190-00 Trocar Ø6.5mm for Konzept Humerus Nail



10-1191-00 Target D for Konzept Humerus Nail



10-1192-00 Short Trocar Ø7mm for Konzept Humerus Nail



10-1193-00 Drill Guide Short Ø7/3.5mm for Konzept Humerus Nail



10-1194-00 Drill Guide Ø7/2.8mm for Konzept Humerus Nail



10-1195-00 Impactor-Extractor Rod for Konzept Humerus Nail



10-1196-00 Mallet for Konzept Humerus Nail



10-1197-00 Connector M7/M16 for Konzept Humerus Nail



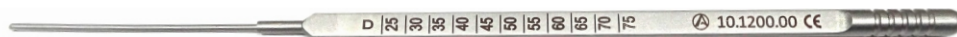
10-1198-00 Screwdriver, Hex 3.5mm, for Konzept Humerus Nail



10-1199-00 Socket Wrench, Hex 11mm for Konzept Humerus Nail



10-1200-00 Screw Length Measuring Device for Konzept Humerus Nail



10-1201-00 Guide Rod Ø1.8mm x Length 500mm for Konzept Humerus Nail



10-1202-00 Handle Guide Rod for Konzept Humerus Nail



10-1203-00 Teflon Pipe Guide for Konzept Humerus Nail



10-1204-00 Drill with Scale Ø2.8mm x Length 240mm, for Konzept Humerus Nail



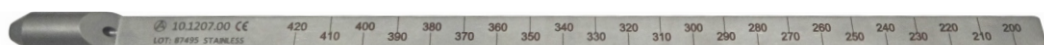
10-1205-00 Drill with Scale Ø3.5mm x Length 240mm, for Konzept Humerus Nail



10-1206-00 Drill with Scale Ø4.5mm x Length 240mm, for Konzept Humerus Nail



10-1207-00 Nail Length Measuring Device for Konzept Humerus Nail



10-1208-00 Insertion Target Ø9.0mm for Konzept Humerus Nail

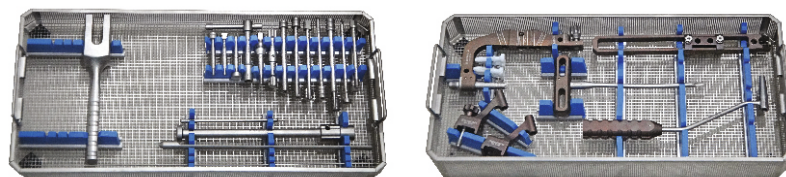


10-1209-00 Curved Awl Ø8.0mm for Konzept Humerus Nail



10-1210-00

Instrument Trays for Konzept Humerus Nailing Instrument Set



7-106-01

Aluminium Sterilization Container, 560mm x 270mm x 150mm



40-5020-000 Konzept Humerus Nailing Instrument Set



40-5020-000 Konzept Humerus Nailing Instrument Set

Code	Set Consisting of	Units
10-1180-00	Humeral Target B for Konzept Humerus Nail	1
10-1181-00	Distal Target D for Konzept Humerus Nail	1
10-1182-00	Angular Reconstruction Target for Konzept Humerus Nail	2
10-1183-00	Connecting Screw M7x1spec. Length 95mm, for Konzept Humerus Nail	1
10-1184-00	Connecting Screw M7x1spec. Length 101mm, for Konzept Humerus Nail	1
10-1185-00	Set Block Ø3.5/4.5mm for Konzept Humerus Nail	2
10-1186-00	Protective Guide Ø6.5/9mm for Konzept Humerus Nail	2
10-1187-00	Drill Guide Ø6.5/3.5mm for Konzept Humerus Nail	2
10-1188-00	Drill Guide Ø6.5/2.8mm for Konzept Humerus Nail	2
10-1189-00	Drill Guide Ø6.5/4.5mm for Konzept Humerus Nail	1
10-1190-00	Trocar Ø6.5mm for Konzept Humerus Nail	1
10-1191-00	Target D for Konzept Humerus Nail	1
10-1192-00	Short Trocar Ø7mm for Konzept Humerus Nail	1
10-1193-00	Drill Guide Short Ø7/3.5mm for Konzept Humerus Nail	1
10-1194-00	Drill Guide Ø7/2.8mm for Konzept Humerus Nail	1
10-1195-00	Impactor-Extractor Rod for Konzept Humerus Nail	1
10-1196-00	Mallet for Konzept Humerus Nail	1
10-1197-00	Connector M7/M16 for Konzept Humerus Nail	1
10-1198-00	Screwdriver, Hex 3.5mm, for Konzept Humerus Nail	1
10-1199-00	Socket Wrench, Hex 11mm for Konzept Humerus Nail	1
10-1200-00	Screw Length Measuring Device for Konzept Humerus Nail	1
10-1201-00	Guide Rod Ø1.8mm x Length 500mm for Konzept Humerus Nail	1
10-1202-00	Handle Guide Rod for Konzept Humerus Nail	1
10-1203-00	Teflon Pipe Guide for Konzept Humerus Nail	1
10-1204-00	Drill with Scale Ø2.8mm x Length 240mm, for Konzept Humerus Nail	2
10-1205-00	Drill with Scale Ø3.5mm x Length 240mm, for Konzept Humerus Nail	2
10-1206-00	Drill with Scale Ø4.5mm x Length 240mm, for Konzept Humerus Nail	1
10-1207-00	Nail Length Measuring Device for Konzept Humerus Nail	1
10-1208-00	Insertion Target Ø9.0mm for Konzept Humerus Nail	4
10-1209-00	Curved Awl Ø8.0mm for Konzept Humerus Nail	1
10-1210-00	Instrument Trays for Konzept Humerus Nailing Instrument Set	2
7-106-01	Aluminium Sterilization Container, 560mm x 270mm x 150mm	1



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