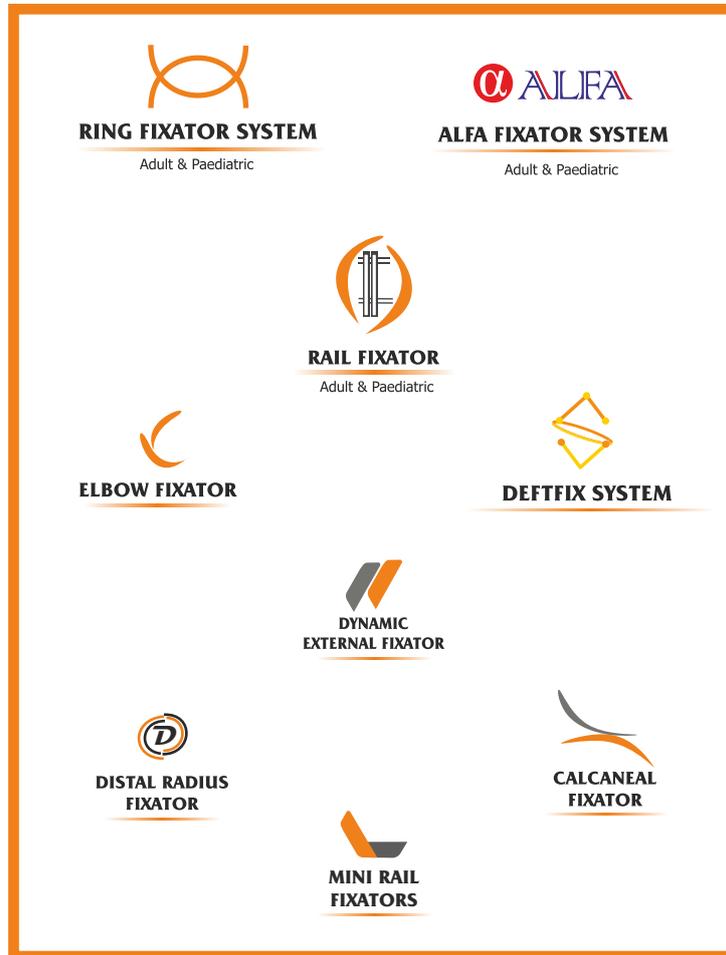


External Fixation System



S.H.PITKAR
ORTHOTOOLS PVT. LTD.

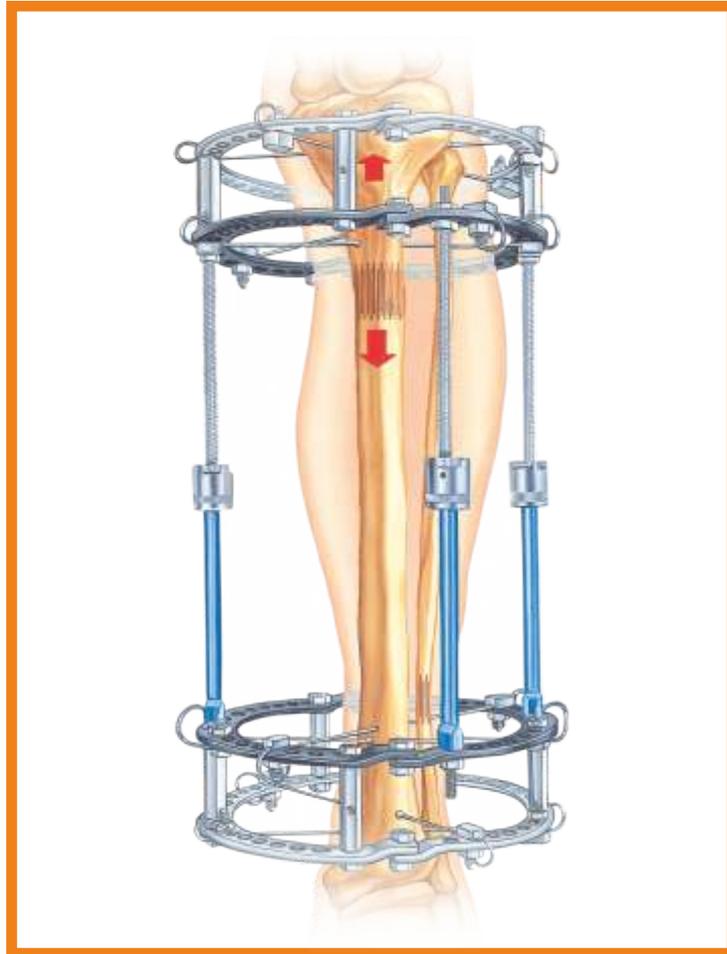
Gat 36 & 37, RMK Industrial Park II, Talegaon MIDC Rd, Jadhavwadi,
Navalakh Umbare, Pune - 410507. Tel: +9175984730/31;
Email: info@pitkar.net ; Web: www.pitkar.com

ISO 13485 and Indian FDA approved company
USFDA 510(K) Approved

External Fixation System

- SHPOPL are known leaders in External Fixation Devices since 1981
- Large vertical of External fixation- starting from traditional designed that are used unilaterally & bi-laterally like Universal 11 mm or 8 mm & 4 mm system with clamps & rods., Ring fixators & Rail fixators (in Long & Paediatric versions), Mini Rails, Distal radius fixators, Deftfix six axis platform on Rings.
- First one to launch traditional ExFix in India. First one to launch & promote Ring & Rail system in 1991 & 1995 respectively.
- Strongly supports Medical education program's (Symposiums) in India & abroad on Ring & Rail Fixation to let surgeons catch up on its learning curve.
- Very prominent Indian & International faculty for such Symposiums.
- First Indian company to launch computerised six axis platform for deformity corrections namely Deftfix.
- All products are CE marked & 510K USFDA Approved.
- Detailed product profile is as follows:
 - The Ring Fixator System
 - Deftfix-Six Axis Correction Apparatus
 - Rail - Modern External Fixation Devices
 - ALFA - Articulated Lengthening Fixation Apparatus
 - Distal Radius Fixator
 - Calcaneal External Fixator
 - Mini Rails
 - Universal 8 & 4mm System
 - 4 & 11mm Universal Tubular Fixator

Ring Fixation System



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Ring Fixation System

- The Traditional Ring Fixator is a very versatile circular External Fixation design allows patients with complex diseases & bony defects to be treated effectively that would have been otherwise unsuccessful with traditional methods.
- Pitkar's Ring Fixator matches to various parts of original Ilizarov fixator thereby conforming part-to-part replacement at affordable rates.
- There are many technical firsts in Pitkar's Ring Fixator like option of Tapered Pins with or without hydroxy appetite coating for its hybrid use, single piece wire with stopper that prevents corrosion at brazed joint, Tensioners that is calibrated to measure accurate tension provided to wires.
- Continuing Medical Education is way of life at Pitkar Orthotools. We strongly recommend use of this fixator after proper training under guidance of trained faculty. Every year, we conduct about 6 courses annually to train Ring fixator users across the globe. From 1993, Pitkar's have trained > 10000 surgeons on ring fixation use for designated indications.

***Proper understanding of the device & technique are essential. Physicians/Surgeons are strongly encouraged to obtain instructions from other experienced clinicians to observe proper surgical procedure in initial use of Ring Fixator. SHPOPL conducts various graded symposium for Surgeons & strongly recommend use of apparatus only after proper training. It is expected that Surgeons should use apparatus for specific indications mentions & carefully study all warning & precautions prior to using apparatus.

ADULT RING FIXATOR

Rings



Half Rings

Part No.	Internal Dia.
D 10000080	80
D 10000100	100
D 10000110	110
D 10000120	120
D 10000130	130
D 10000140	140
D 10000150	150
D 10000160	160
D 10000180	180
D 10000200	200
D 10000220	220
D 10000240	240

5/8 Rings

Part No.	Internal Dia.
D 102000100	100 #
D 102000110	110 #
D 102000120	120 #
D 102000130	130
D 102000140	140 #
D 102000150	150
D 102000160	160
D 102000180	180 #
D 102000200	200 #



Titanium Half Rings

Part No.	Internal Dia.
D 219000110	110
D 219000120	120
D 219000130	130
D 219000140	140
D 219000150	150
D 219000160	160
D 219000180	180
D 219000200	200
D 219000220	220
D 219000240	240

Titanium 5/8 Rings

Part No.	Dia.
D 232000100	100
D 232000110	110
D 232000120	120
D 232000130	130
D 232000140	140
D 232000150	150
D 232000160	160
D 232000180	180
D 232000200	200



Aluminium Half Ring

Part No.	Internal Dia.
D 229000140	140
D 229000160	160
D 229000180	180
D 229000200	200
D 229000220	220

Aluminium Foot Ring

Part No.	Dia.
D 231000120	120
D 231000140	140
D 231000160	160
D 231000180	180
D 231000200	200
D 231000220	220



Aluminium Conventional Foot Ring Short Arm

Part No.	Dia.
D 234000120	120
D 234000140	140
D 234000160	160
D 234000180	180
D 234000200	200
D 234000220	220



Aluminium 2/3 Rings

Part No.	Internal Dia.
D 230000140	140
D 230000160	160
D 230000180	180
D 230000200	200
D 230000220	220



Aluminium Conventional Foot Ring Long Arm

Part No.	Dia.
D 235000120	120
D 235000140	140
D 235000160	160
D 235000180	180
D 235000200	200
D 235000220	220

Femoral Components



Italian Femoral Arches

Part No.	Description
D 108000190	90° Small
D 108001120	120° Small
D 108000390	90° Large
D 108003120	120° Large



Aluminium 5/8 Ring

Part No.	Internal Dia.
D254000140	140
D254000160	160
D254000180	180
D254000200	200



Italian Femoral Arches with hole

Part No.	Description
D 228000190	90° Small
D 228001120	120° Small
D 228000390	90° Large
D 228003120	120° Large



Rings with Curved Extremities

Part No.	Internal Dia.
D 105000120	120 #
D 105000130	130 #
D 105000150	150 #
D 105000160	160 #



Arches with Holes

Part No.	Internal Radius
D 110000090	90
D 110000110	110
D 110000120	120
D 110000140	140



Multiple Pin Fixation Clamp

Part No. D 168001000



Pin Fixation Bolt

Part No.	Size
D 166000030	3mm
D 166000040	4mm
D 166000050	5mm
D 166000060	6mm



Single Pin Fixation Bolt

Part No. D 167000000



13mm Nut

Part No. D 150000013



Oblique Support

Part No. D 180001000

Telescopic Rods & Threaded Rods



Telescopic Rods

Part No.	Length
D 114000060	60
D 114000100	100
D 114000150	150
D 114000200	200
D 114000250	250
D 114000300	300 #
D 114000350	350 #
D 114000400	400 #



Graduated Telescopic Rods

Part No.	Length
D 115000060	60
D 115000100	100
D 115000150	150
D 115000200	200
D 115000250	250



Threaded Rods

Part No.	Length
D 111000040	40
D 111000060	60
D 111000080	80
D 111000100	100
D 111000120	120
D 111000150	150
D 111000200	200
D 111000250	250
D 111000300	300
D 111000350	350
D 111000400	400



Threaded Rods - Slotted

Part No.	Length
D 112000040	40
D 112000060	60
D 112000080	80
D 112000100	100



Threaded Rods - Partial

Part No.	Length
D 113000130	130
D 113000170	170
D 113000210	210

Post, Hinges and Universal Joints



Hinges- Female

Part No.	Description
D 123000001	Standard
D 123000002	Low Profile



Hinges - Male

Part No.	Description
D 124000001	Standard
D 124000002	Low Profile



Hinges - 90°

Part No.	Description
D 125000190	Standard
D 125000290	Low Profile



Post - Female

Part No.	Holes
D 121000002	2
D 121000003	3
D 121000004	4



Post - Male

Part No.	Holes
D 122000002	2
D 122000003	3
D 122000004	4



Knurling post male

Part No.	D 242000000
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Cannulated knurling bolt

Part No.	D 243000000
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Universal Joint

Part No.	D 177001000
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Rotational and Translational Device

Part No.	D 179001000
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Plates and Bushing



Curved Plates

Part No.	Holes
D 141000003	3



Short Connection Plates

Part No.	Length	Holes
D 131000235	35	2
D 131000345	45	3
D 131000455	55	4
D 131000565	65	5
D 131000675	75	6
D 131000785	85	7
D 131000895	95	8
D 131009105	105	9
D 131010115	115	10



Connection Plates with Threaded Ends

Part No.	Length	Holes
D 135005135	135	5
D 135007175	175	7
D 135009215	215	9
D 135011255	255	11



Long Connection Plates

Part No.	Length	Holes
D 133008155	155	8
D 133012235	235	12
D 133017335	335	17



Bushing

Part No.	D 142000000
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Twisted Plates

Part No.	Length	Holes
D 140000245	45	2 #
D 140000365	65	3
D 140000485	85	4

Threaded Sockets and Buckles



Threaded Sockets

Part No.	Length
D 148000020	20
D 148000030	30
D 148000040	40
D 148000060	60



Wire Fixation Buckle

Part No. D 169000000



Wire Fixation Bolts

Part No.	Description
D 163000000	Cannulated
D 164000000	Threaded Head
D 162000000	Slotted



Connection Bolts

Part No.	Dia
D 149000010	10
D 149000016	16
D 149000020	20
D 149000030	30

BOLTS, NUTS, WASHERS, BLOCKS & WIRES



Nut

Part No.	Description
D 150000006	Nut
D 151000000	Thin Nut
D 152000000	Nylon Insert Nut
D 153000000	Square Nut



Flat Sided Washers

Part No.	Thickness
D 156000020	2.0
D 156000040	4.0



Slotted Washers

Part No.	Thickness
D 157000040	4.0



Spacing Washers

Part No.	Thickness
D 154000015	1.5
D 154000020	2.0



Split Locking Washers

Part No.	Thickness
D 155000020	2.0



Conical Washer Couple

Part No. D 158001000



Star Washers

Part No. D 159001000



Blocks For Half Pins

Part No.	Holes
D 176000001	1
D 176000002	2
D 176000003	3
D 176000004	4
D 176000005	5



Blocks For Half Pins to be used with Sleeves

Part No.	Holes
D 200000001	1
D 200000002	2
D 200000003	3
D 200000004	4
D 200000005	5



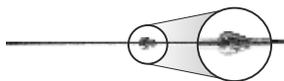
Sleeves

Part No.	Length
D 201000003	3mm
D 201000004	4mm
D 201000005	5mm
D 201000006	6mm



Wires

Part No.	Dia
D 187015300	1.5 Bayonet-Cortical
D 187018370	1.8 Bayonet- Cortical
D 188015300	1.5 Trocar-Cancellous
D 188018370	1.8 Trocar-Cancellous



Wires With Stopper

Part No.	Dia
D 189015300	1.5 Bayonet
D 189018400	1.8 Bayonet

Instruments for Set Screws

Screw Guide	
8 x 6 x 100mm	C 512101000
Drill Guides	
6 x 5 x 80mm	C 513301000
Trocar 6 mm	D 509001000
Set Screw	D 181000000
Straight Screw Driver for Set	
Screws 3mm A/F	D 510001000
90o Screw Driver for Set Screws	
3mm A/F	D 511001000

Basic Instrument set

Box Wrench for Nut	D 505001000
Box Wrench for Bolt	D 500001000
Combination Wrench	
Size	Part No.
10mm	D 502101000
13mm	D 502131000
19mm	D 502191000
Wire Tensioner -	
Mechanical	D 502001000
Wire Tensioner -	
Direct Measuring	D 503001000
Corticotome	
Size	Part No.
3mm	D 504001003
5mm	D 504001005
7mm	D 504001007
9mm	D 504001009
Half Pin Introducer	C 507001000

Containers

Rings 80-130 mm	H 832001000
Rings 140-180 mm	H 833001000
Rings 200-240 mm	H 825001000
Special Rings &	
Arches	H 826001000
Bolts, Nuts &	
Washers	H 827001000
Plates	H 828001000
Wires &	
Instruments	H 829001000
Rods, Posts,	
Support & Hinges	H 830001000
Telescopic Rod	H 831001000
Adult Tibial	
Basic Set	H 858001000
Adult femoral	
Basic set	H 859001000
Blocks for half pin	
components set	H 841001000
Tapered Threaded	
Pins	H 851001000
Basic Instruments	
set	H 854001000

PEDIATRIC RING FIXATOR

Pediatric Rings Fixator System



SS Half Ring

Internal Dia.	Part No.
60mm	E 110000060
70mm	E 110000070
80mm	E 110000080
90mm	E 110000090
100mm	E 110000100
110mm	E 110000110
120mm	E 110000120

Titanium Half Ring

Internal Dia.	Part No.
60mm	E 181000060
70mm	E 181000070
80mm	E 181000080
90mm	E 181000090
100mm	E 181000100
110mm	E 181000110
120mm	E 181000120



Telescopic Rod

Length	Part No.
40 mm	E 129000040
60 mm	E 129000060
80 mm	E 129000080



Oblique Support

Part No.	E 161001000
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Universal Joint

Part No.	E 122001000
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Threaded Rods

Part No.	Length
40mm	E 127000040
60mm	E 127000060
80mm	E 127000080
100mm	E 127000100
120mm	E 127000120
150mm	E 127000150
200mm	E 127000200



Threaded Rod -Slotted

Length	Part No.
40	E 128000040
60	E 128000060



Wire fixation buckle

Part No.	E 177001000
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Bushings

Part No.	E 121000000
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Post Male

Holes	Part No.
2	E 135000002
3	E 135000003
4	E 135000004



Post Female

Holes	Part No.
2	E 136000002
3	E 136000003
4	E 136000004



Hinges Male

Part No.	E 142000001
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Hinges Female

Part No.	E 143000001
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Twisted Plate- 90°

Part No.	E 120000090
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Wire fixation bolt

Type	Part No.
Cannulated	E 146000001
Slotted	E 146000002



Washers

	Part No.
1 mm	E 152000010
1.5 mm	E 152000015
Slotted	E 153000000



Connection Bolts & Nuts M5

mm	Part No.
10	E 150000010
16	E 150000016
20#	E 150000020
Nut M5	E 151000000
Nylon	E 151000001
Triangular Nut	E 154000000



Plate Adapter

Length	Part No.
20mm	E 155000020
30mm	E 155000030



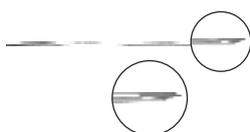
Block for Half Pins

Hole	Part No.
1	E 176000001
2	E 176000002



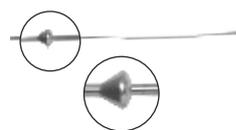
Conical Washer Couple

Part No.	E 178001000
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Wires

Dia	Length	Part No.
1.0	250	E 159010250
1.2	300	E 159012300
1.5	300	E 159015300



Wires: with Stoppers

Dia	Length	Part No.
1.0	250	E 160001250
1.2	250	E 160012250
1.5	300	D 189015300

Instruments



Box wrench 8mm

Part No.	E 500000008
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Combination wrench 8 mm

Part No.	E 501000008
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Wire Tensioner Direct Measuring

Part No.	E 505001000
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Containers for Pediatric Ring Fixation System

Container	Part No.
Pediatric ring & plate	H842001000
Pediatric Components	H843001000



Deftfix™ System

Apparatus for Precise Fracture Reduction
& Deformity Correction



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ISO 13485 and Indian FDA approved company
USFDA 510(K) Approved

Special Features



- SHPOPL – takes pride to present revolutionary software assisted external fixation device Deftfix which is developed in India, in association with leading Orthopaedic surgeons.
- Deftfix, with its user friendly software, offers a world class product at very competitive prices.
- Deftfix provides excellent stability, allows immediate weight bearing and it's user friendly software offers precise correction of complex deformities.

Product Description



DeftFix Strut

Small	D 247011000
Medium	D 247021000
Large	D 247031000



Lables of Strut (Set of 6 nos.)

Part No.	D 252000000
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X-Ray Marker for DeftFix strut

Part No.	D 253000000
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C Plate

Part No.

for SS Ring	D 250000000
for Aluminum Ring	D 248000000
for Pediatric Ring	E 182000000



Y Connector

Part No.

for SS Ring	D 251000000
for Aluminum Ring	D 249000000
for Pediatric Ring	E 183000000

Special Features

- ➔ Deftfix combines new generation designs with innovations to create advanced Six Axis hardware and software system.
- ➔ Quick and easy application.
- ➔ Standard Ilizarov rings & 5/8 rings can be used.
- ➔ No fixed places of strut fixation to the rings.
- ➔ Dual mode Struts: Fast strut mode and gradual mode.
- ➔ Easy in use software provides mathematically precise correction and protection from the user's error.
- ➔ Simplified distal preference planning
- ➔ Joint Orientation Line or Mid-Diaphyseal Planning
- ➔ Bone and Soft Tissue Distraction Rate calibration
- ➔ 3D Animation of corrections
- ➔ Multi-step correction Schedule
- ➔ Optimized patient schedule in clicks split up to 4 times / day



Advanced User Friendly Software

- ➔ Cloud Based Software
- ➔ Uses standard orthopaedic terminology.
- ➔ Works directly with the x-rays.
- ➔ Incorporates tools for Joint Line based or mid-diaphyseal line based planning and visualization.
- ➔ Takes care of the danger of tractional damage of main vessels and nerves, hypoplastic regenerate formation caused by the odd distraction rate of deformity correction.
- ➔ Offers latest technology to increases the quality of work & has in built protection against human error.

What is DEFTFIX ?

 DEFTFIX is a software based deformity correction and fracture reduction platform, designed for the treatment of open and closed fractures, limb lengthening, deformity and angular correction, non-unions, malunions, arthrodesis and pseudo arthrosis of long bones.  DEFTFIX can be used with any standard Iliza-rov rings & is also fully compatible with standard Ilizarov system components. The system is easy to apply, offers good mechanical stability and precise correction in all planes, using a user friendly cloud based software.

How does the DEFTFIX work?

Parameters from the frame and x-rays are inserted into the specially designed  DEFTFIX software. Using special tools the software automatically calculates deformity correction and visualizes the final position of the distal bone fragment (where it will be after deformity correction). Finally the patient receives a mathematically precise schedule regarding what changes of length must be made to each of the struts to achieve deformity correction.

The  DEFTFIX can also be used for the reduction of any shaft fractures. It is first fixed to the bone & with the struts in their fast strut mode, the fracture is acutely reduced under direct vision or C-Arm control. On achieving the fracture reduction the struts are locked. If any additional adjustment required it may be gradually performed, utilizing the user friendly software to achieve the desired

Wide Range of Indications

Deformities:

- Diaphyseal and meta-diaphyseal deformities of any complicity
- Complex deformities of the midfoot and forefoot

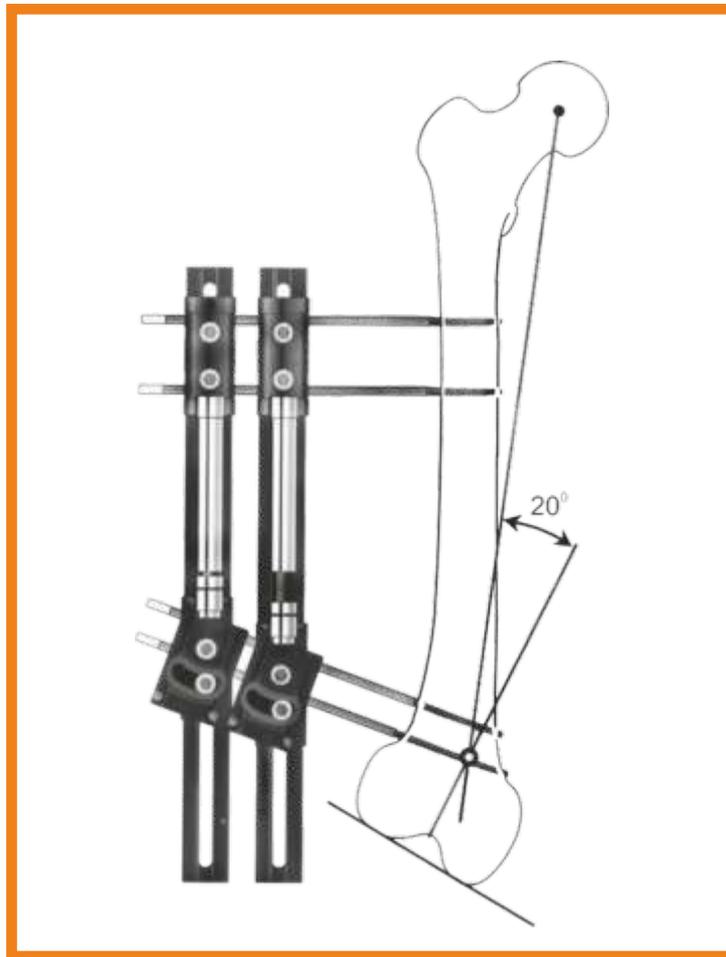
Fractures (excluding intraarticular):

- Closed fractures
- Open fractures
- Open fractures with soft tissues loss

Post-traumatic deformity

- Non-unions
- Malunions

Rail Fixation System



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Rail - Modern External Fixation Devices

- ➔ SHPOPL offer comprehensive solutions in Modern External Fixation Devices for various applications including temporary fixation program. The various devices available are Dynamic External Fixator, Rail Fixator, Pediatric Rail Fixator and Distal Radius Fixator under this series.
- ➔ These modern external fixator devices has been conceptualized using blood less surgery technique and minimal disruption of soft tissues that contribution to external callus formation.
- ➔ These devices allow the treatment of patient with complex bony defects and permit conversion from static to dynamic mode by activating integral telescopic facility in terms of CD Unit.
- ➔ These modern devices actually enhance bone formation by means of weight bearing and intermittent axial loading at fractures.
- ➔ The devices are used with 6mm tapered threaded pins that permit tightening of the pins at given places in case of loosening of pins. These pins are available with options of hydroxy-apatite coating to enhance the quality of bone formation.

***Proper understanding of the device & technique are essential. Physicians/Surgeons are strongly encouraged to obtain instructions from other experienced clinicians to observe proper surgical procedure in initial use of Modern External Fixation Devices. SHPOPL conducts various graded symposium for Surgeons & strongly recommend use of apparatus only after proper training. It is expected that Surgeons should use apparatus for specific indications mentioned & carefully study all warning & precautions prior to using apparatus.

ADULT RAIL FIXATOR SYSTEM

Rail Fixation System



Rail

Length	Part No.
240 mm	C 163000240
300 mm	C 163000300
400 mm	C 163000400



Central Clamp

Part No. C 165001000



End Clamp

Part No. C 164001000



Swivel Clamp

Part No. C 166001000



Metaphyseal Clamp

Part No. C 221001000



Ball & Socket Clamp Standard

Part No. C 167001000



T-Ball & Socket Clamp

Part No. C 176001000



Advanced CD Unit

Length	Part No.
40 mm	C 243402000
80 mm	C 243802000
100 mm	C 243002000



Graduated Swivel Clamp

Part No. C 180001000



Central Clamp

Part No. C 165001000



Dyna Ring Clamp

Part No. C 183001000



T Clamp

Part No. C 168001000



Sandwich Plate

Part No. C 182001000



Bolt for Sandwich Plate

Part No. C 185000000

PEDIATRIC RAIL FIXATOR SYSTEM

Pediatric Rail System



Rail Pediatric

Length	Part No.
150 mm	C 208000150
200 mm	C 208000200
250 mm	C 208000250
300 mm	C 208000300



Central Clamp Pediatric

Part No. C 210001000



End Clamp Pediatric

Part No. C 209001000



Swivel Clamp Pediatric

Part No. C 211001000



CD Unit Pediatric

Part No. C 174001000



T Clamp Pediatric

Part No. C 218001000



T Ball & Socket Clamp Pediatric

Part No. C 219001000

Other Mini External Fixation Devices



Mini Rail Fixator Horizontal Axis

Part No. C 226001000



Mini Rail Fixator Vertical Axis

Part No. C 227001000



Long Mini Rail System

Part No. C 225000170



Standard Mini Rail System

Part No. C 225000100



Short Mini Rail System

Part No. C 225000070



Half Pin

Size	Part No.
Ø3X15X70	C 231015070
Ø3X25X70	C 231025070
Ø3X30X100	C 231030100

INSTRUMENTS FOR RAIL FIXATION SYSTEM

Instruments for Adult Rail Fixation System

Trocar	C 514001000
Drill Bit	
3.2 x 200 mm L	C 529000000
4.8 x 200 mm L	C 530000000
Template for End & Central Clamp	C 527001000
Template for Swivel Clamp	C 528001000
Drill Guides	
6 x 3.2 x 40 mm	C 513001000
6 x 3.2 x 80 mm	C 513101000
6 x 5 x 40 mm	C 513201000
6 x 5 x 80 mm	C 513301000
Drill Guides	
5 x 2 x 43 mm	C 561001000
5 x 2 x 83 mm	C 561101000
Screw Guide	
8 x 6 x 60 mm	C 512001000
8 x 6 x 100 mm	C 512101000
Allen Key 6 mm	C 531000000
Half Pin Introducer	
D Type	C 538001000
Container for Rail Fixator System	
For Appliances	H 847001000
For Instruments	H 848001000

Instruments for Pediatric Rail Fixation System

Template for Pediatric End & Central Clamp	C 562001000
Template for Pediatric Swivel Clamp	C 563001000
Half Pin Introducer D Type	C 538001000
Allen Key 5 mm	C 539000000
Screw Guide 8x6x60 mm	C 512001000
Drill Guide 6x3.2x40 mm	C 513001000
Drill Bit 3.2x200 mm	C 529000000
Container	H 865001000

OTHER MODERN EXTERNAL FIXATION DEVICES

Dynamic External Fixator



Drill Guide	
6 x 3.2 x 40 mm	C 513001000
6 x 3.2 x 80 mm	C 513101000
6 x 5 x 40 mm	C 513201000
6 x 5 x 80 mm	C 513301000
Container	
For Appliances	H 849001000
For Instruments	H 850001000

Dynamic External Fixator

Description	Part No.
Large	C 154031000
Medium	C 154021000
Small	C 154011000



T-End Clamp

Part No.	C 175001000
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Self Adjusting Clamp with Medium Dynamic External Fixator

Part No.	C 187001000
----------	-------------



Elbow Clamp

Part No.	C 215001000
----------	-------------

Instruments for Dynamic External Fixator

Half Pin Introducer	
D Type	C 538001000
Template for large & medium Dynamic External Fixator	C 511001000
Template for Small Dynamic External Fixator	C 511101000
Allen Key 6mm Manipulating	C 531000000
Forcep	C 515001000
Trocar	C 514001000
Screw Guide	
8 x 6 x 60 mm	C 512001000
8 x 6 x 100 mm	C 512101000

Distal Radius External Fixator



Distal Radius Fixator

Part No.	C 545001000
----------	-------------

Instruments for Distal Radius External Fixator System

Jig for Distal Radius Fixator	C 546001000
Trocar	C 548001000
Half Pin	
Introducer 4mm	C 547001000
Drill Sleeve	
4 x 2.5mm	C 549001000
Screw Guide	
6x4mm	C 550001000
Drill Bit 2.5mm	C 551000000
Allen Key Universal	
A/F 3mm	C 543000000
Container	H 869001000

Calcaneal Fixator System



Calcaneal Fixator

Part No. C 230001000



Half Pin Dia 3 mm

Part No.	TL	Length
C231015070	15 mm	70 mm
C231025070	25mm	70 mm
C231030100	30mm	100 mm

Instruments for Calcaneal Fixator



Straight Screw Driver For Set Screw

Part No. D510001000



90 Degree Screw Driver For 4mm Allen Bolt

Part No. C590001000



Half Pin Introducer 3mm Half Pin

Part No. C589001000



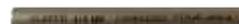
Guide Wire Dia 1.5x150mm

Part No. C303015015



Guide Wire Sleeve 3/1.5mm

Part No. C583000000



Guide pin sleeve 4/3mm

Part No. C584000000



Allen Key Universal

Part No. C543000000



Container for Calcaneal Fixator Instrument Set

Part No. HA 01701000

ALFA Fixation System

Articulated Lengthening Fixation Apparatus



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USFDA 510(K) Approved

ALFA - Articulated Lengthening Fixation Apparatus

- ➔ SHPOPL offer comprehensive solutions in Modern External fixation devices for various applications including temporary fixation program. The latest addition in this series is ALFA fixator system-Articulated Lengthening Fixation Apparatus.
- ➔ ALFA External Fixation device has been developed with Dr. Dror Paley - an eminent reconstructive surgeon from USA. The ALFA system allows combination of modular rail and ring components which are intended to be used on adult or pediatric patients as required such as correction of long bone deformities, limb lengthening and various other applications. The ALFA External Fixator has advance attachments that can be attached for extension and versatile clamping designs.
- ➔ These modern external fixator devices have been conceptualized using blood less surgery technique and minimal disruption of soft tissues that contributes to external callus formation.

The ALFA Fixator offers:

- Compatibility with DEFTFIX and Ring External Fixators
- Provides simplified joint spanning, allowing range of motion and protection of adjacent joints during lengthening
- Provides the speed and familiarity of Rancho Cube style fixation, without the fiddle factor of sandwich clamps.
- ➔ These devices allow the treatment of patient with complex bony defects and permit conversion from static to dynamic mode by activating integral telescopic facility in terms of CD unit.
- ➔ The devices are used with 6 mm Tapered threaded Pins that permit tightening of the pins at given place in case of loosening of pins. These pins are available with options of hydroxy-apatite coating to enhance the quality of bone formation.

***Proper understanding of the device & technique are essential. Physicians/Surgeons are strongly encouraged to obtain instructions from other experienced clinicians to observe proper surgical procedure in initial use of Modern External Fixation Devices. SHPOPL conducts various graded symposium for Surgeons & strongly recommend use of apparatus only after proper training. It is expected that Surgeons should use apparatus for specific indications mentioned & carefully study all warning & precautions prior to using apparatus.

ADULT ALFA FIXATION SYSTEM

ALFA Fixator System



ALFA Standard 3 Hole Clamp

Part No. C 250001000



ALFA Standard Clamp - Hinge Connection

Part No. C 251001000



ALFA Stacked 5 Hole Overhang Clamp

Part No. C 252001000



ALFA Stacked 5 Hole Clamp

Part No. C 252002000



ALFA Stacked 3 Hole Clamp

Part No. C 252003000



ALFA Rail Arc Clamp

Part No. C 253001000



ALFA Standard 1 Hole Clamp

Part No. C 254001000



ALFA A-P Angle Attachment Clamp

Part No. C 255001000



ALFA Rail End Cap- Female

Part No. C 256000000



ALFA Rail End Cap - Male

Part No. C 257000000



ALFA Rail Hinge - Female

Part No. C 258000000



ALFA Rail Hinge - Male

Part No. C 259000000



ALFA Rail Arc Rotation End

Part No. C 260000000



ALFA Rail

Part No.	Size mm
C 261000150	150mm
C 261000200	200mm
C 261000250	250mm
C 261000300	300mm
C 261000350	350mm
C 261000400	400mm



ALFA Rail Bolt M6 Cannulated

Part No.	Size mm
C 262000000	28mm
C 263000000	38mm



ALFA Rail Bolt M6

Part No.	Size mm
C 264000000	27mm
C 265000000	30mm



ALFA Arch

Part No.	Size
C 266000090	Small 90°
C 266000120	Medium 120°
C 266000180	Large 180°



ALFA Locking Nut M6X6mm

Part No.	C 267000000
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ALFA Rail Bolt M6X7mm

Part No.	C 268000007
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ALFA Rail Set Screw M6X7.5mm

Part No.	C 269000075
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ALFA Proximal Left/Distal Right Angular Correction Clamp

Part No.	C 313001000
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ALFA Proximal Right/Distal Left Angular Correction Clamp

Part No.	C 321001000
----------	-------------



ALFA T-20 Star Rail Bolt M6 cannulated

Part No.	Size mm
C 314000000	28 mm
C 315000000	38 mm



ALFA T-20 Star Rail Bolt M6

Part No.	Size mm
C 316000000	27 mm
C 317000000	30 mm



ALFA T-20 Star Rail Bolt M6X7MM

Part No.	C 318000007
----------	-------------



ALFA T-20 Star Rail Set Screw M6X7.5MM

Part No.	C 319000075
----------	-------------



ALFA Compression And Distraction Device

Part No.	C 270001000
----------	-------------



ALFA Rotation end connector

Part No.	C 271000000
----------	-------------

Instruments for ALFA Fixator System



Drill Guides

Part No.	Description
C 513201000	6 X 5 X 40 mm
C 513301000	6 X 5 X 80 mm
C 513001000	6 X 3.2 X 40 mm
C 513101000	6 X 3.2 X 80 mm



Guide wire sleeve

Part No.	Description
C 575001000	5 X 1.8 X 40mm
C 576001000	5 X 1.8 X 80mm



Allen Key 6mm

Part No.	C 531000000
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Half Pin Introducer D Type

Part No.	C 538001000
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90° T20 Star Screw Driver

Part No.	C 593001000
----------	-------------



T20 Star Straight Screw Driver

Part No.	C 594001000
----------	-------------



Drill Bit

Part No.	Description
C 529000000	3.2 X 200 mm
C 530000000	4.8 X 200 mm



Drill Bit cannulated

Part No.	Description
C 574000000	3.2 X1.8X 200 mm
C 573000000	4.8 X1.8X 200 mm



Container for ALFA fixator Instrument Set

Part No.	H 980001000
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PEDIATRIC ALFA FIXATION SYSTEM

ALFA Pediatric Fixator System



ALFA Pediatric Standard 3 Hole Clamp

Part No. C 280001000



ALFA Pediatric Standard Clamp - Hinge Connection

Part No. C 281001000



ALFA Pediatric Stacked 3 Hole Overhang Clamp

Part No. C 282001000



ALFA Pediatric Rail Arc Clamp

Part No. C 283001000



ALFA Pediatric Standard 1 Hole Clamp

Part No. C 284001000



ALFA Pediatric A-P Angle Attachment Clamp

Part No. C 285001000



ALFA Pediatric Rail End Cap - Female

Part No. C 286000000



ALFA Pediatric Rail End Cap - Male

Part No. C 287000000



ALFA Pediatric Rail Hinge - Female

Part No. C 288000000



ALFA Pediatric Rail Hinge - Male

Part No. C 289000000



ALFA Pediatric Rail Arc Rotation End

Part No. C 290000000



ALFA Pediatric Rail

Part No.	Size mm
C 291000150	150mm
C 291000200	200mm
C 291000250	250mm
C 291000300	300mm



ALFA Pediatric Arch

Part No.	Size
C 292000090	Small 90°
C 292000120	Medium 120°
C 292000180	Large 180°



ALFA Rail Bolt M6 Cannulated

Part No.	Size mm
C 262000000	28mm
C 263000000	38mm



ALFA Rail Bolt M6

Part No.	Size mm
C 264000000	27mm
C 265000000	30mm



ALFA Rail Set Screw M6X7.5mm

Part No.	Size mm
C 269000075	



ALFA Locking Nut M6X6mm

Part No.	Size mm
C 267000000	



ALFA Rail Bolt

Part No.	Size mm
C 268000007	M6X7mm
C 293000005	M6X5mm



ALFA T-20 Star Rail Bolt M6 cannulated

Part No.	Size mm
C 314000000	28 mm
C 315000000	38 mm



ALFA T-20 Star Rail Bolt M6

Part No.	Size mm
C 316000000	27 mm
C 317000000	30 mm



ALFA T-20 Star Rail Bolt M6X7MM

Part No.	Size mm
C 318000007	



ALFA T-20 Star Rail Set Screw M6X7.5MM

Part No.	Size mm
C 319000075	



ALFA T-20 star Rail bolt M6X5MM

Part No.	Size mm
C 320000005	



ALFA Pediatric proximal left /distal right 2 hole angular correction clamp

Part No.	Size mm
C 322001000	



Guide wire sleeve

Part No.	Description
C 575001000	5 X 1.8 X 40mm
C 576001000	5 X 1.8 X 80mm



Allen Key 6mm

Part No.	Size mm
C 531000000	



ALFA Compression and Distraction Device

Part No.	Size mm
C 27001000	

INSTRUMENTS FOR PEDIATRIC ALFA FIXATION SYSTEM

Instruments for ALFA Pediatric Fixator System



Drill Guides

Part No.	Description
C 513001000	6X3.2X40mm
C 513101000	6X3.2X80mm
C 513201000	6X5X40mm
C 513301000	6X5X80mm



Guide Wire Sleeve

Part No.	Description
C 575001000	5 X1.8 X40mm
C 576001000	5 X1.8 X80mm



Allen Key 6mm

Part No.	Description
C 531000000	



Half Pin Introducer D Type

Part No.	Description
C 282001000	



90deg T 20 Star Screw Driver

Part No.	Description
C 593001000	



T 20 Star Straight Screw Driver

Part No.	Description
C 594001000	



Drill Bit

Part No.	Description
C 529000000	3.2X200mm



Drill Bit Cannulated

Part No.	Description
C 574000000	3.2X1.8X200mm



Container for ALFA Pediatric Fixator Instrument Set

Part No.	Description
H 989001000	

Traditional External Fixator System



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Traditional External Fixation Devices : SH 8 & 4 mm Fixator

- ➔ The Traditional External Fixation devices is one of the mainstays of operative fracture treatment. These devices (like tubular system in 11mm, 8mm and 4mm) can be used for definitive treatment of many fractures as it provides relative stability that helps callus formation. In Polytrauma, it is essential part of damage control surgery for rapid stabilization of fractures.
- ➔ The system in traditional types typically consists of Rod & clamp. The pins gets tightened over a clamp which is woven in the rod.

8MM UNIVERSAL EXTERNAL FIXATION SYSTEM

8mm Universal External Fixation System



Fixing Element 8mm Hole with Centrally Tapped Bore

Part No. C 189000080



Fixing Element 8mm Hole with Untapped Central Bore

Part No. C 190000080



Fixing Element 8mm Hole Open Type with Centrally Tapped Bore

Part No. C 212000080



Fixing Element 6mm Hole with Centrally Tapped Bore

Part No. C 189000060



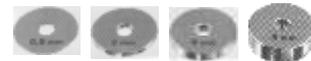
Fixing Element 6mm Hole with Untapped Central Bore

Part No. C 190000060



Bolts

Length	Part No.
Short 20 mm	C 192000200
Medium 25 mm	C 192000250
Large 35 mm	C 192000350



Spacer Disc

Dia	Part No.
1.2	C 191000012
2.0	C 191000020
4.0	C 191000040
8.0	C 191000080

Guide Rods in SS

Length	Part No.
150 mm	C 207000150
200 mm	C 207000200
250 mm	C 207000250
300 mm	C 207000300
350 mm	C 207000350
400 mm	C 207000400

Instruments for 8mm External Fixator System



Screw Guide 8x6x100
Part No. C 512101000



Drill Guide
Part No.
6x3.2x80 C 513101000
6x5x80 C 513301000



Allen Key
Part No. C 539000000



Trocar 6 mm
Part No. C 514001000



Drill Bit 200mm Long
Part No.
3.2mm C 529000000
4.8mm C 530000000



Half Pin Introducer
Part No.
"D" Type C 538001000
Universal C 552001000



Open Compressor
Part No. C 544001000



Container for 8mm External Fixator
Part No. H 857001000

4mm Universal External Fixator System for Small Bones



Fixing Element 4mm Hole with Centrally Tapped Bore
Part No. C 198000040



Fixing Element 4mm Hole with Centrally Untapped Bore
Part No. C 199000040



Fixing Element 2.5mm Hole with Untapped Central Bore
Part No. C 200000025



Spacer 0.5mm
Part No. C 201000005



Bolt M4
Part No. C 202000015

Instruments for 4mm External Fixator System



Allen Key Universal 3mm
Part No. C 543000000



Drill Bit 2.5 x 80 mm

Part No. C 542000000



Drill Bit 1.8 x 80 mm

Part No. C 541000000



Sleeve

Size	Part No.
6 x 4 mm	C 554001000
4 X 2.5mm	C 555001000
2.5 x 1.8 mm	C 559001000
4 x 2.6 mm	C 558001000



Trocar

Size	Part No.
2.5mm	C 556001000
1.8mm	C 560001000



Parallel Screw Jig for 4mm & 2.5mm

Part No. C 553001000



Half Pin Introducer Universal

Part No. C 552001000



Container for 4 mm External Fixator

Part No. H 860001000

11MM & 4MM TUBULAR SYSTEM

Tubular System : 11mm



Single Adjustable Clamp

Part No. C 108001000



Universal Clamp for 2 pins

Part No. C 119001000



Single Open Clamp

Part No. C 110001000



Tube to Tube Clamp

Part No. C 116001000



Twin Adjustable Clamp

Part No. C 109001000



Trans Tibia Clamp

Part No. C 114001000



Tubular Rods 11mm

Length	Part No.
100 mm	C 113010100
150 mm	C 113010150
200 mm	C 113010200
250 mm	C 113010250
300 mm	C 113010300
350 mm	C 113010350
400 mm	C 113010400
450 mm	C 113010450
500 mm	C 113010500

Instruments for Tubular System: 11 mm

Screw Guide	
8x6x100	C 512101000
Drill Guide	
6x3.2x80	C 513101000
6x5x80	C 513301000
Allen Key	C 539000000
Trocar 6mm	C 514001000
Drill Bit 200mm Long	
3.2 mm	C 529000000
4.8 mm	C 530000000
Half Pin Introducer	
D Type	C 538001000
Universal Open	
Compressor	C 578001000
Spanner 11mm	A 702001000
Container for 8mm	
External Fixator	H 857001000

4mm Tubular System



Tubular Clamp

Length	Part No.
4x4 mm	C 136001000
4x2.5 mm	C 137001000

Connecting Bar 4mm

Length	Part No.
80 mm	C 138004060
100 mm	C 138004100
150 mm	C 138004150
200 mm	C 138004200
250 mm	C 138004250
300 mm	C 138004300

Instruments for Tubular System 4mm

Allen Wrench	
Universal 3mm	C 543000000
Drill Bit	
2.5 x 80 mm	C 542000000
Drill Bit	
1.8 x 80 mm	C 541000000
Sleeve	
6 x 4 mm	C 554001000
4 x 2.5 mm	C 555001000
2.5 x 1.8 mm	C 559001000
4 x 2.6 mm	C 558001000
Trocar	
2.5 mm	C 556001000
1.8 mm	C 560001000
Parallel Screw Jig	
for 4mm & 2.5mm	C 553001000
Half Pin Introducer	
Universal	C 552001000
Container for 4 mm	
External Fixator	H 860001000

TAPERED PINS & HALF PINS



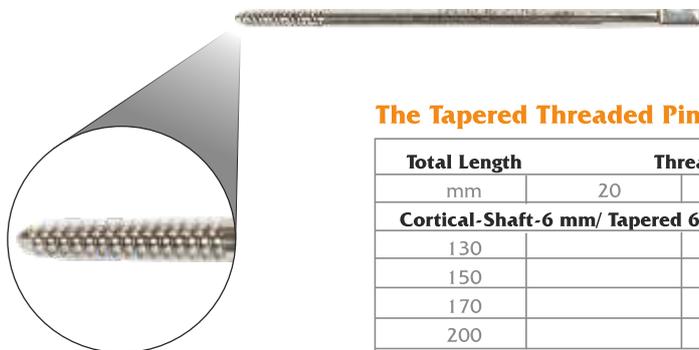
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TAPERED PINS & HALF PINS

Half Pins



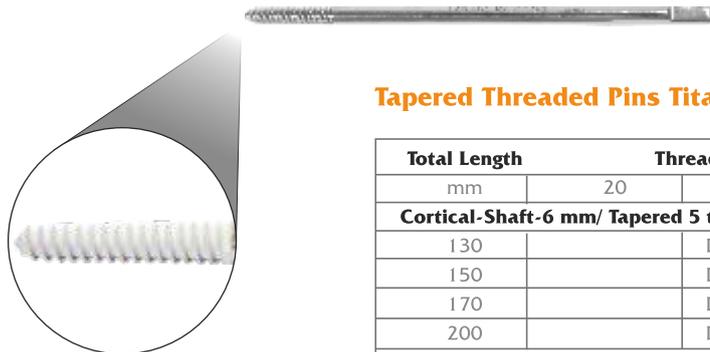
The Tapered Threaded Pins

Total Length mm	Threaded Length in mm				
	20	30	40	50	60
Cortical-Shaft-6 mm/ Tapered 6 to 5 mm/ Drill bit 4.8 mm					
130		D195130306	D195130406	D195130506	
150		D195150306	D195150406	D195150506	
170			D195170406	D195170506	D195170606
200			D195200406	D195200506	D195200606
Cortical-Shaft 6mm/ Tapered 4.5 to 3.5 mm/ Drill bit 3.2 mm					
100	D195100205	D195100305			
120		D195120305	D195120405		
Cortical-Shaft 4mm/ Tapered 3.5 to 3.0 mm/ Drill bit 2.5 mm					
	18	20	25	30	
50	C 186050184				
60		C 186060204	C 186060254		
70		C 186070204	C 186070254		
80		C 186080204	C 186080254	C 186080304	
100		C 186100204	C 186100254	C 186100304	



Tapered Threaded Pins With Hydroxy Apatite Coating

Total Length mm	Threaded Length in mm				
	20	30	40	50	60
Cortical-Shaft-6 mm/ Tapered 6 to 5 mm/ Drill bit 4.8 mm					
130		D196130306	D196130406	D196130506	
150		D196150306	D196150406	D196150506	
170			D196170406	D196170506	D196170606
200			D196200406	D196200506	D196200606
Cortical-Shaft 6mm/ Tapered 4.5 to 3.5 mm/ Drill bit 3.2 mm					
100	D196100205	D196100305			
120		D196120305	D196120405		
All screws are made of stainless steel in accordance to ISO-5832-1 or ASTM-F-138-97.					



Tapered Threaded Pins Titanium

Total Length mm	Threaded Length in mm				
	20	30	40	50	60
Cortical-Shaft-6 mm/ Tapered 5 to 6 mm/ Drill bit 4.8 mm					
130		D205130306	D205130406		
150		D205150306	D205150406		
170		D205170306	D205170406	D205170506	D205170606
200		D205200306	D205200406	D205200506	D205200606
All screws are made of titanium in accordance to ISO-5832-3.					



Half Pins - SS

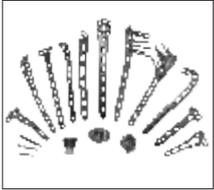
Total Length mm	Threaded Length in mm				
	16	32	50		
Half Pin Dia 5mm / Drill bit 3.5 mm					
180	D203018016	D203018032	D203018050		
Half Pin Dia 3.5mm X 4mm / Drill bit 2.1 mm					
100				C206000000	
Half Pin Dia 2.5mm / Drill bit 1.8 mm					
100				C205000000	



Half Pins - Titanium

Total Length mm	Threaded Length in mm				
	15	25	30		
Half Pins Dia 3mm / Drill bit 1.6 mm					
70	C231015070	C231025070			
100			C231030100		

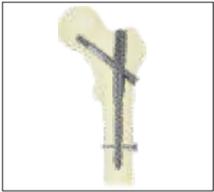
Other Products



Trauma Plates & Screws



Spinal System



Intramedullary Nails & Screws



Solar Modular Hip System



External Fixators



Arthroscopy System

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