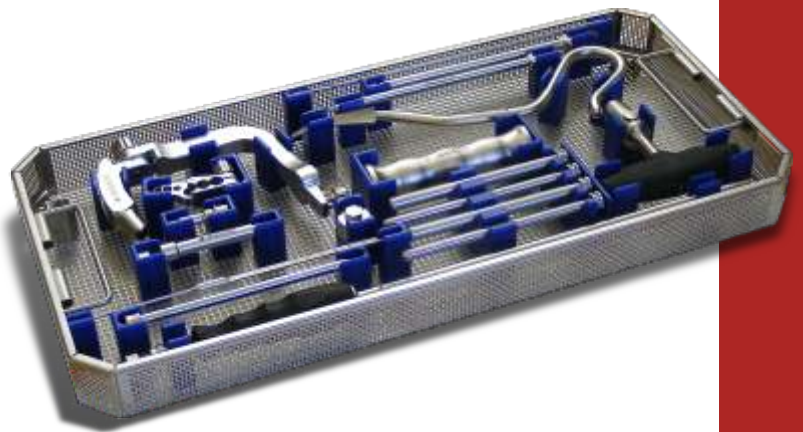




MTT
MULTILOCKING TIBIAL TREATMENT NAILING
IMPLANTS AND OPERATING MANUAL



medimetal[®]
Medical Products Manufacturing and Trading Ltd.

Before starting use the product



Before each use, carefully check the operability of implants and surgical instruments, and ensure they are free of any damage. If you notice any cracks, fractures, deformations, discoloration or any damages that indicate improper storage, imperfect sterilization or prior incorrect treatment, do not use the device. Always carry out the assembly, fitting and operation test of the implants and instruments to be used for the implantation. The product may only be used if the fittings are perfect, the dimensions are accurate, the clamping components work properly and the angles are correctly set.

Requirements regarding the user

The instruments and implants may only be used by qualified surgeons who are familiar with the surgical practice, with the relevant medical literature and are sufficiently experienced in the use of implants and instruments. The operating surgeon is responsible for identifying the correct indication, selecting the implants and conducting the surgical procedure in conformity with the relevant medical practice.

Contraindications

Use of the implant is not recommended if the medical condition of the patient does not allow successful acceptance of the device, or if the recovery of the patient is hindered by causes such as reduced blood circulation, bone system of poor quality or quantity, existing infection, rehabilitation excluded due to the mental condition of the patient etc.

General warnings

Before the surgical procedure, the patient should be informed about the possible disadvantages of implant use. When selecting the implant, the type of the bone fracture as well as the weight and activity level of the patient should always be taken into consideration. Since the solidity of the implant is limited, overloading due to overweight should be avoided. The biomechanical loading of the implant should be as minimal as possible.

The process of recovery should be monitored during the use of the implant. In the event of repeated loading or prolonged bone recovery, the implants may be deformed or dislocated, which should be prevented by timely interventions. Strong and/or repeated deformation of the implant should be avoided. The implants are only for single use, re-implantation is prohibited.

The appropriate type and correct size of the implants must be identified according to the characteristics of the particular case. Before the surgical procedure, the user manuals supplied with the other required devices, e.g. implants, should be carefully studied.

Applied materials

The applied materials are high-quality and high-tensile, nonmagnetic, stainless steel and titanium alloy materials specially developed for implants. Combined use with other materials or products supplied by other manufacturers may lead to harmful processes for which Medimetal Ltd. will not accept any responsibility.

Protection, packaging and preparation for use

The implants are packaged in clean condition, free of any production-related contaminations. Before use, such storage conditions must be ensured that will preserve the integrity of the packaging. The implants should be stored in a clean, dry place, protected from exposure to extreme temperatures and chemicals.

Sterilization

Before use, unpack and sterilize the implant in accordance with the relevant instructions. Do not touch the implant with bare hands. The surgical instruments should be sterilized together with the instrument tray. The instructions provided by the manufacturer of the sterilization equipment must always be followed.

Interactions with medicinal products

It is not known whether the implants interact with medicinal products.



Implants for MTT nailing



System of implants:

Material: steel or titanium alloy

- Multilocking tibial treatment nail (MTT), solid,
diameter 8 - 9 - 10 - 11 - 12 mm, (proximal diameter 12 mm)
cat. nr.: from 14030-08270 to 14030-08420
from 34030-08270 to 34030-08420 (titanium alloy)
from 14030-09270 to 14030-09420
from 34030-09270 to 34030-09420 (titanium alloy)
from 14030-10270 to 14030-10420
from 34030-10270 to 34030-10420 (titanium alloy)
from 14030-11270 to 14030-11420
from 34030-11270 to 34030-11420 (titanium alloy)
from 14030-12270 to 14030-12420
from 34030-12270 to 34030-12420 (titanium alloy)
- Multilocking tibial treatment nail (MTT), solid, diameter 13 mm, (proximal diameter 13 mm)
cat. nr.: from 14030-13270 to 14030-13420
from 34030-13270 to 34030-13420 (titanium alloy)
- Locking screw, diameter 4,9 mm, cat. nr.: from 12200-49020 to 12200-49100
from 32200-49020 to 32200-49100 (titanium alloy)
- End cup, cat. nr.: 12400-08011 and 32400-08011 (titanium alloy)
- Surgical set for locking humeral nailing, cat. nr.: 94030-00000



The four fixing direction of the proximal end extend the applicability of the MTT nail. On request rigid or dynamical osteosynthes can be created by the energizing slot.



On the distal end we can use four locking planes: AP direction, locking from the two lateral directions, and one antero-lateral fixing. The fixation of distal fractures can be done by the locking holes, which following directly to the end of the nail.

Multilocking tibial treatment nail (MTT), solid

L (mm)	Catalogue number					
	∅ 8		∅ 9		∅ 10	
	steel	titanium alloy	steel	titanium alloy	steel	titanium alloy
270	14030-08270	34030-08270	14030-09270	34030-09270	14030-10270	34030-10270
285	14030-08285	34030-08285	14030-09285	34030-09285	14030-10285	34030-10285
300	14030-08300	34030-08300	14030-09300	34030-09300	14030-10300	34030-10300
315	14030-08315	34030-08315	14030-09315	34030-09315	14030-10315	34030-10315
330	14030-08330	34030-08330	14030-09330	34030-09330	14030-10330	34030-10330
345	14030-08345	34030-08345	14030-09345	34030-09345	14030-10345	34030-10345
360	14030-08360	34030-08360	14030-09360	34030-09360	14030-10360	34030-10360
375	14030-08375	34030-08375	14030-09375	34030-09375	14030-10375	34030-10375
390	14030-08390	34030-08390	14030-09390	34030-09390	14030-10390	34030-10390
405	14030-08405	34030-08405	14030-09405	34030-09405	14030-10405	34030-10405
420	14030-08420	34030-08420	14030-09420	34030-09420	14030-10420	34030-10420

L (mm)	Catalogue number					
	∅ 11		∅ 12		∅ 13	
	steel	titanium alloy	steel	titanium alloy	steel	titanium alloy
270	14030-11270	34030-11270	14030-12270	34030-12270	14030-13270	34030-13270
285	14030-11285	34030-11285	14030-12285	34030-12285	14030-13285	34030-13285
300	14030-11300	34030-11300	14030-12300	34030-12300	14030-13300	34030-13300
315	14030-11315	34030-11315	14030-12315	34030-12315	14030-13315	34030-13315
330	14030-11330	34030-11330	14030-12330	34030-12330	14030-13330	34030-13330
345	14030-11345	34030-11345	14030-12345	34030-12345	14030-13345	34030-13345
360	14030-11360	34030-11360	14030-12360	34030-12360	14030-13360	34030-13360
375	14030-11375	34030-11375	14030-12375	34030-12375	14030-13375	34030-13375
390	14030-11390	34030-11390	14030-12390	34030-12390	14030-13390	34030-13390
405	14030-11405	34030-11405	14030-12405	34030-12405	14030-13405	34030-13405
420	14030-11420	34030-11420	14030-12420	34030-12420	14030-13420	34030-13420

End cup for multilocking tibial treatment nail (MTT)

Cat. no	
steel	titanium alloy
12400-08011	32400-08011



Implants for MTT nailing



Locking screw

Thread diameter: 4,9 mm
 Core diameter: 4,2 mm
 Pitch: 2,75 mm
 Head diameter: 8,0 mm
 Hex width: 3,5 mm

L (mm)	Cat. nr.		L (mm)	Cat. nr.		L (mm)	Cat. nr.	
	steel	titanium alloy		steel	titanium alloy		steel	titanium alloy
20	12200-49020	32200-49020	42	12200-49042	32200-49042	64	12200-49064	32200-49064
22	12200-49022	32200-49022	44	12200-49044	32200-49044	65	12200-49065	32200-49065
24	12200-49024	32200-49024	45	12200-49045	32200-49045	66	12200-49066	32200-49066
25	12200-49025	32200-49025	46	12200-49046	32200-49046	68	12200-49068	32200-49068
26	12200-49026	32200-49026	48	12200-49048	32200-49048	70	12200-49070	32200-49070
28	12200-49028	32200-49028	50	12200-49050	32200-49050	72	12200-49072	32200-49072
30	12200-49030	32200-49030	52	12200-49052	32200-49052	75	12200-49075	32200-49075
32	12200-49032	32200-49032	54	12200-49054	32200-49054	76	12200-49076	32200-49076
34	12200-49034	32200-49034	55	12200-49055	32200-49055	78	12200-49078	32200-49078
35	12200-49035	32200-49035	56	12200-49056	32200-49056	80	12200-49080	32200-49080
36	12200-49036	32200-49036	58	12200-49058	32200-49058	85	12200-49085	32200-49085
38	12200-49038	32200-49038	60	12200-49060	32200-49060	90	12200-49090	32200-49090
40	12200-49040	32200-49040	62	12200-49062	32200-49062	100	12200-49100	32200-49100

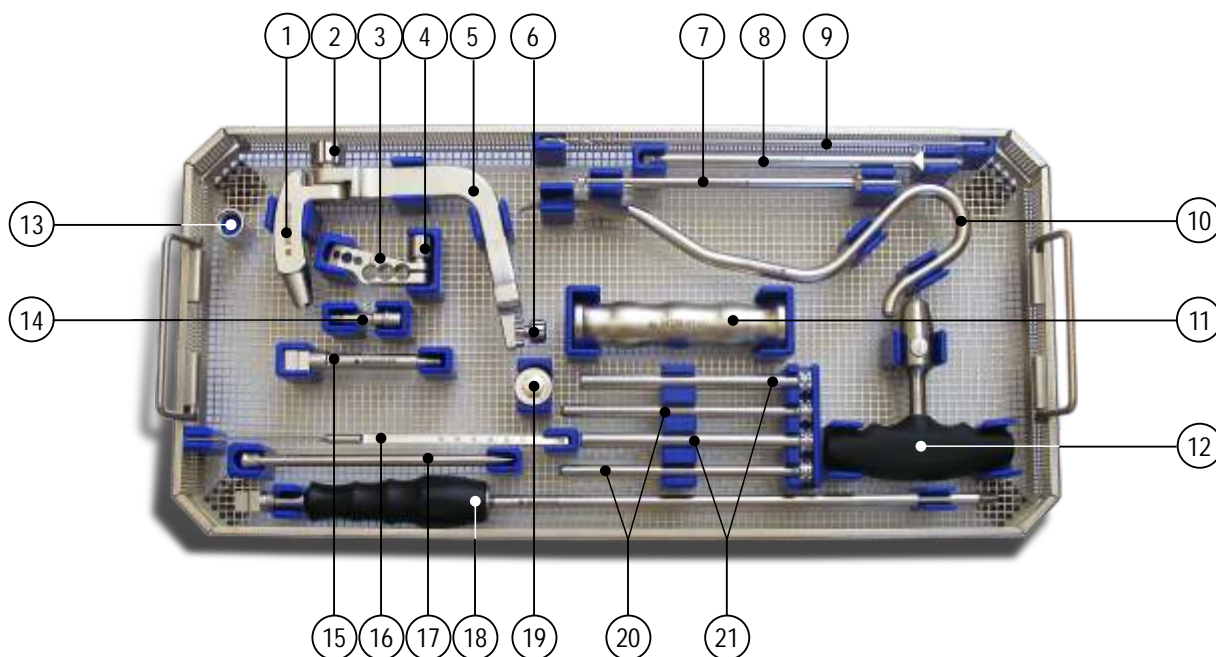
Surgical instruments for MTT nailing

Surgical set

Tray for MTT (Multilocking Tibial Treatment) nailing instrument set with instruments:

Cat. nr.: 94030-00000

(Empty tray with instrument holder, cat. nr.: 94030-10000)



Pos.	Cat. no.	Description	pcs
1.	94030-00100	Nail holder aiming device	1
2.	94030-00400	Aiming arm clamp screw	1
3.	94030-00300	Aiming arm attachment	1
4.	94030-00500	Screw for clamping of the sleeve	1
5.	94030-00200	Aiming arm	1
6.	94030-00600	Aiming arm attachment clamp screw	1
7.	94030-01300	Screw driver, quick couplung, 3,5 × 200 mm	1
8.	94030-00800	Wrench with round end, quick coupling, 8 mm	1
9.	99010-40280	Spiral drill with three faceted chuck, 4 × 280 mm	1
10.	94010-00500	Awl	1
11.	94500-01100	Slide hammer	1
12.	99000-00006	T-wrench with quick coupling, cannulated	1
13.	94500-01004	Fixation sleeve for removal device	1
14.	94030-00700	Nail clamping device	1
15.	94030-01400	Attachment for hammer guide	1
16.	94030-01200	Length gauge	1
17.	94030-01100	Pointer	1
18.	94500-01000	Hammer guide shaft	1
19.	94500-02500	Bumper for hammer guide	1
20.	94030-01000	Drill guide sleeve, 8/4,2 mm	2
21.	94030-00900	Soft tissue protector, 10/8,2 mm	2



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