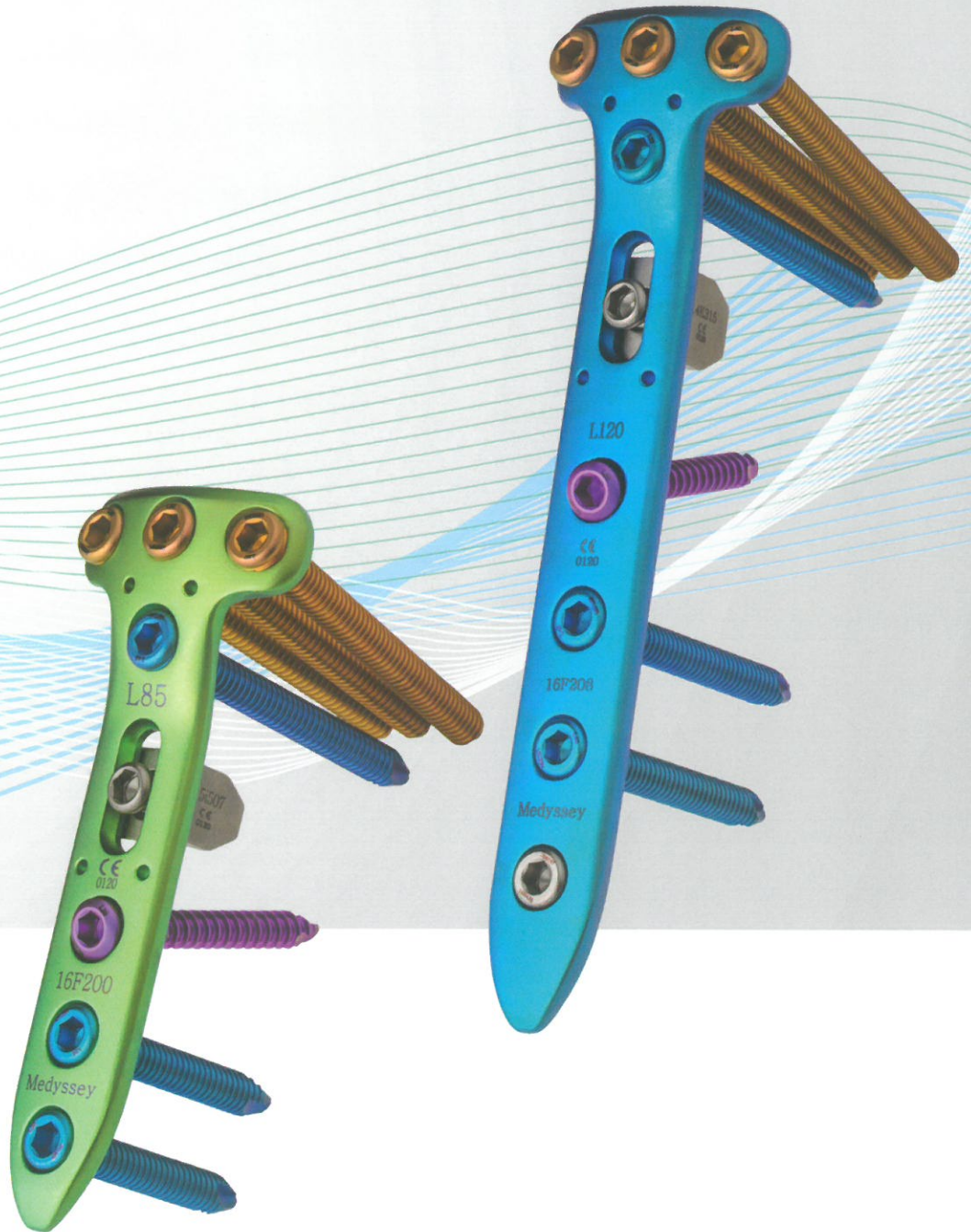


HTO T-Plate / Ti-Plate

# MEDYFIX™

HIGH TIBIAL OSTEOTOMY SYSTEM

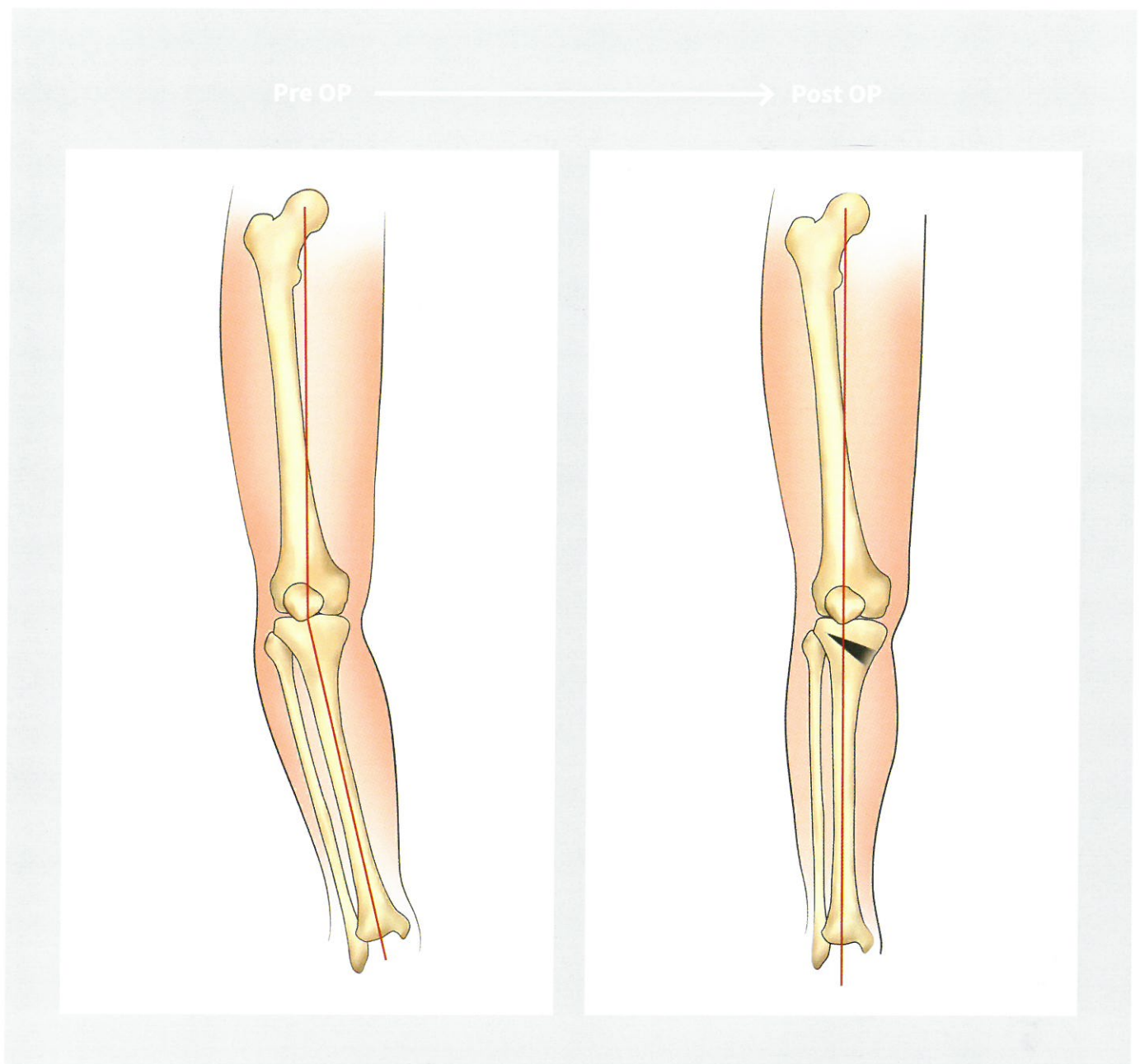


# M E D Y F I X

## High Tibial Osteotomy(HTO)

is an established treatment for unicompartmental arthritis of the knee with malalignment. The classic procedure for correcting varus deformity is the lateral closed wedge osteotomy.

Open wedge osteotomy is interesting because its procedure is simple and there is no need for fibular osteotomy, or TF joint disruption, so personal nerve injury risk can be eliminated. The other advantages of open wedge osteotomy include restoration of anatomy of the diseased medial side, which will provide better bone stock for later TKA, the ability to achieve predictable correction in coronal and sagittal planes, tightening the loosely MCL.





# Advantage



## HTO open wedge T-plate

1. Familiar and smaller anatomical design
2. Early weight bearing (2 weeks)
3. Stronger support of the osteotomy site (Wedge spacer)
4. Guide of screw insertion (Cannulated screw)
5. Easy removal of screws
6. Stronger plate (Titanium Alloy)

## HTO open wedge Ti-plate

1. Two types (Low Profile/Locking)
2. Product minimization for easy surgery ( $\leq 42\text{mm}$ )
3. Small incision, Simple fixation  $\rightarrow$  Shorter operation time
4. Prevent increase in posterior slope
5. Convenient for combined surgical procedures

## Indications

1. Unicompartmental osteoarthritis with a well-maintained range of motion in a stable knee-classic indications
  - Less than 65 years old
  - Non obese patient
  - Less than  $10^\circ$  to  $15^\circ$  of flexion contracture
  - At least  $90^\circ$  flexion
  - Less than  $15^\circ$  of varus or valgus deformity
2. Varus deformed knee which combined ligament surgery is necessary for.
3. Pain in the medial aspect of the knee resulted from varus deformity with meniscus defects, articular cartilage defects, or osteochondritis dissecans.

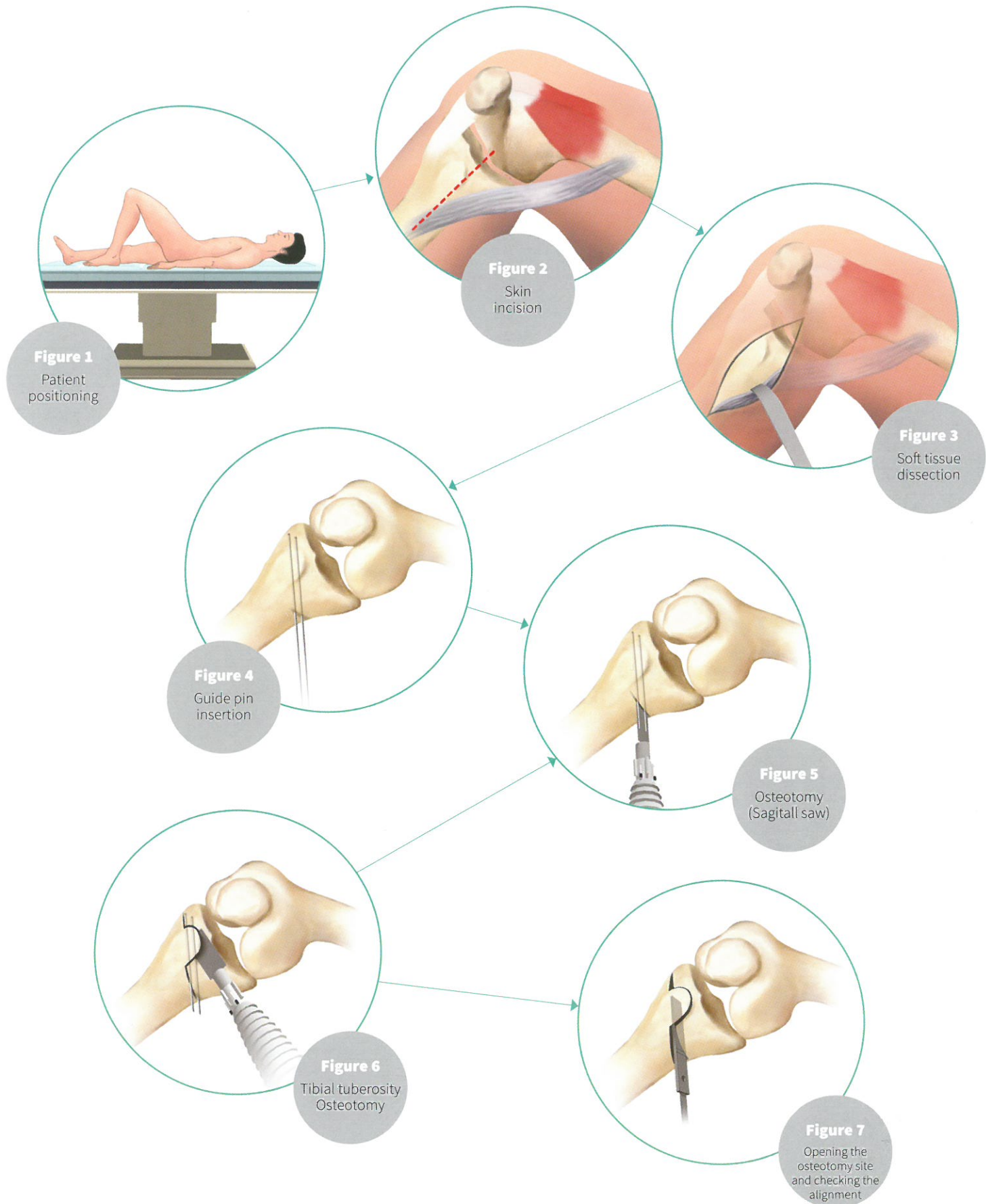
These conditions often require HTO to unload the affected compartment in either a combined or staged procedure.

## Mechanical properties of orthopedic alloys developed and used as orthopedic implants

Alloy designation	Elastic modulus		Yield strength		Ultimate tensile strength	
	GPa	106psi	MPa	ksi	MPa	ksi
Pure Titanium	105	15	692	100	785	115
Ti-6Al-4V ELI	110	16	850	125~130	960~970	140~141

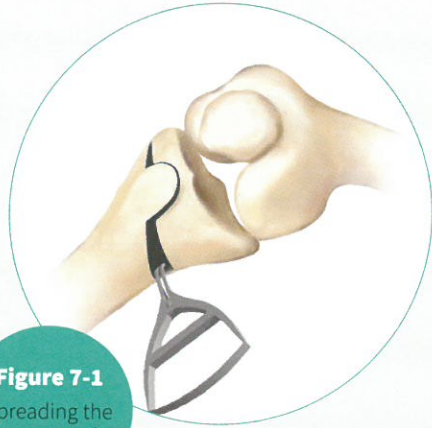
※ Ti-6Al-4V ELI: Titanium-6Aluminum-4vanadium ELI (Extra Low Interstitial) Alloy for Surgical Implant Applications.

# Surgical Technique

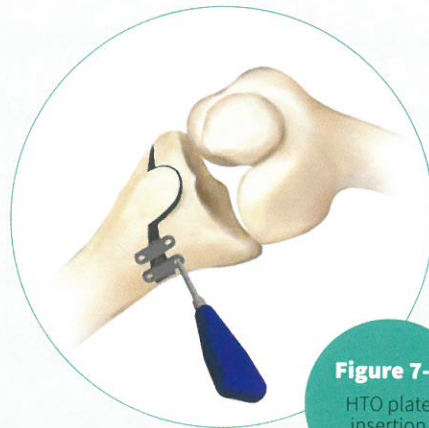




## MEDYFIX Ti-plate

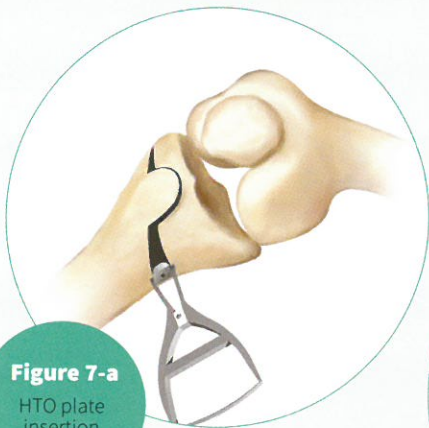


**Figure 7-1**  
Spreading the  
osteotomy site

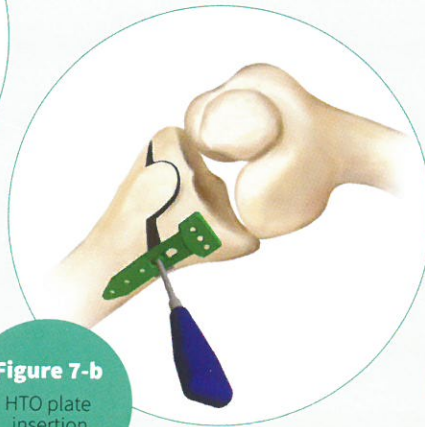


**Figure 7-2**  
HTO plate  
insertion  
[Wedge plate]

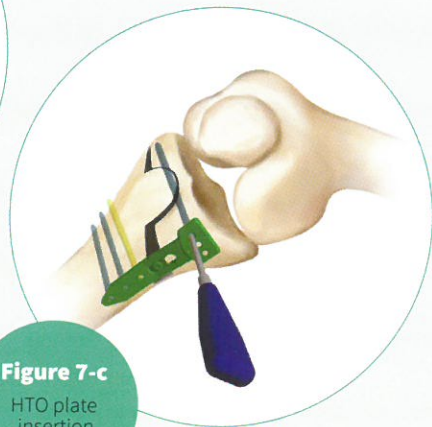
## MEDYFIX T-plate



**Figure 7-a**  
HTO plate  
insertion  
[Wedge]



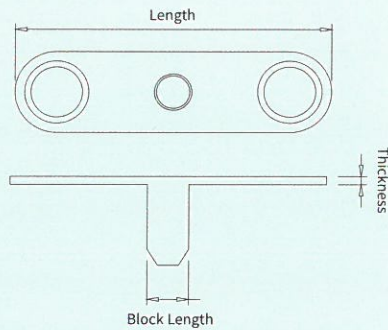
**Figure 7-b**  
HTO plate  
insertion  
[Plate]



**Figure 7-c**  
HTO plate  
insertion  
[Screw]

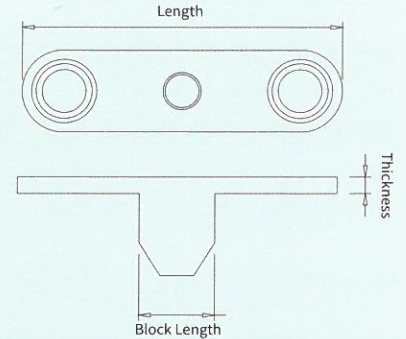
# Specification

**1.**  
**MEDYFIX**  
**Ti-Plate**  
(Low Profile Type)



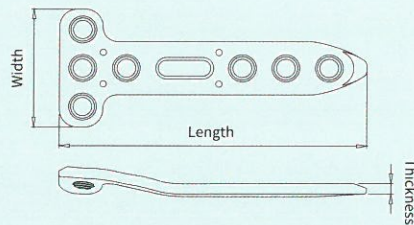
Product Model	Length	Block Length	Thickness
OIO2110 ~ OIO2145	38.0	5.0 ~ 12.0	1.0
OIO2150 ~ OIO2160	42.0	13.0 ~ 15.0	1.0

**2.**  
**MEDYFIX**  
**Ti-Plate**  
(Locking type)



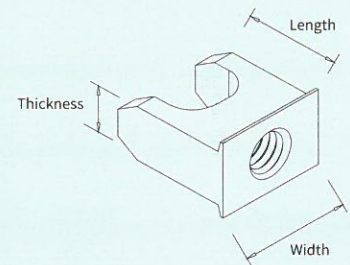
Product Model	Length	Block Length	Thickness
HP305 ~ HP312	38.0	5.0 ~ 12.0	2.0
HP413 ~ HP415	42.0	13.0 ~ 15.0	2.0

**3.**  
**MEDYFIX**  
**T-Plate**



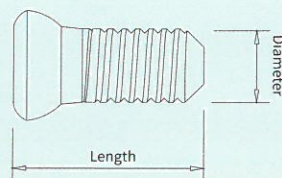
Product Model	Length	Width	Thickness
HTP32085	85.0	32.0	3.0
HTP32120	120.0	32.0	3.0

**4.**  
**Open**  
**Wedge**  
**Spacer**



Product Model	Length	Width	Thickness
HTW1105 ~ HTW1117	11.0	5.0 ~ 17.0	10.0
HTW1405 ~ HTW1417	14.0	5.0 ~ 17.0	10.0

**5.**  
**Wedge**  
**Spacer**  
**Screw**



Product Model	Diameter	Length
HTWS0704 ~ HTWS1304	Ø 4.0	7.0 ~ 13.0

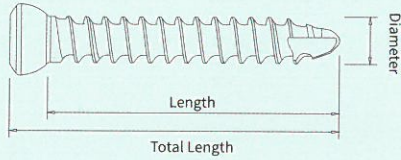
**6.**  
**T-Plate**  
**Spacer**



Product Model	Length
HTSP4965	5.0

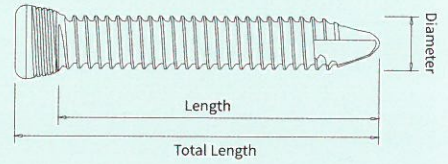


7.  
Cortical  
Screw  
(Ø4.5)



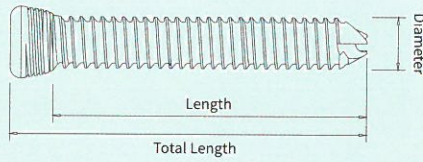
Product Model	Diameter	Length	Total Length
HCOA4526 ~ HCOA45100	Ø 4.5	26.0 ~ 100.0	29.6 ~ 103.6

8.  
Locking  
Screw



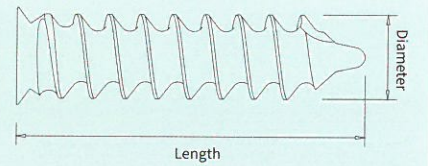
Product Model	Diameter	Length	Total Length
HTS5017 ~ HTS50100	Ø 5.0	17.0 ~ 100.0	20.6 ~ 103.6

9.  
Locking  
Cannulated  
Screw



Product Model	Diameter	Length	Total Length
HTCS5017 ~ HTCS50100	Ø 5.0	17.0 ~ 100.0	20.6 ~ 103.6

10.  
Ti-Plate  
Screw  
(Low Profile Type)



Product Model	Diameter	Length
OIO2110 ~ OIO2160	Ø 6.5	10.0 ~ 60.0

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Products shown are protected

by Korea Patent Numbers : 20-0399039, 20-0410476, 10-2007-0011197, 20-0299664, 20-0208706

by U.S. Patent Numbers : US6.723.128.B2

by Japan Patent Numbers : 3148465

as well as other pending U.S. and foreign patent applications.

MDAD-CL-MX-00 Rev.00 (14-0302)



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