



MILANO - ITALY

# ***MiniFix***

***External Minifixator for Hand and Foot***





MILANO - ITALY

# MiniFix

***External Minifixator for Hand and Foot***

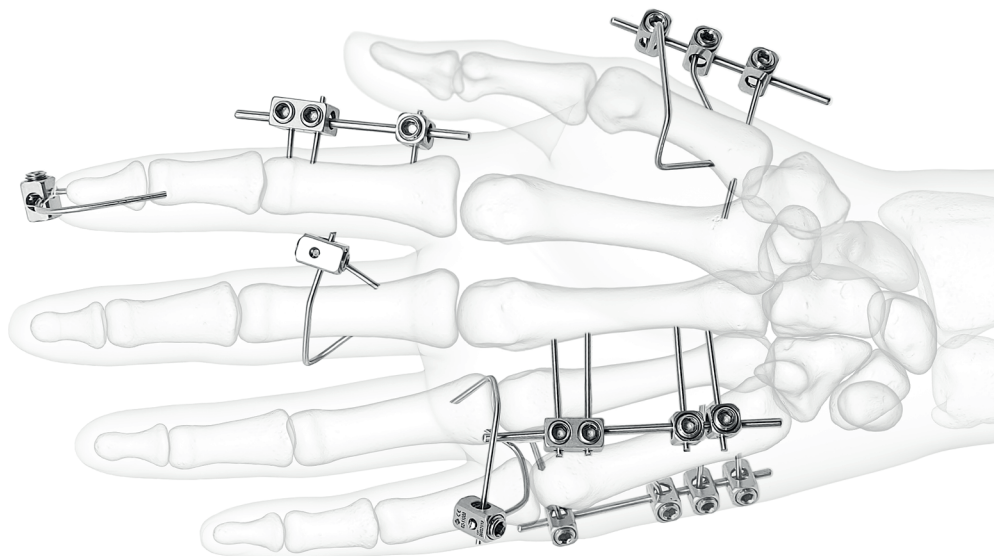
## INTRODUCTION

MiniFix is a functional external minifixator. It is particularly suitable for stabilizing fractures of little skeletal regions, specifically regarding to hand and foot. The size of Kirschner wires included in the set is between 1.1 and 1.6 mm. In this way, wires result suitable for metacarpal/metatarsal bones and for phalanxes.

The set is composed of mini clamps with single or double configuration. The term configuration refers to the two congruent holes for insertion of intra-bone wire and holding bar. Combination of these connected elements, closed by a locking screw, guarantees stability.

MiniFix is versatile: its free assembly allows the surgeon to “build” it during surgical intervention as it results suitable for fracture stabilization. For example, it is possible to use either one clamp or more clamps (with double configuration too) for stabilizing intra-bone wires, in order to obtain a square assembly with high stabilization efficiency.

These simple characteristics allow MiniFix to be the ideal instrument for ensuring stability of basic or more complex fracture reduction regarding hand and foot, with a minimally invasive surgical procedure.





MILANO - ITALY

# MiniFix

*External Minifixator for Hand and Foot*

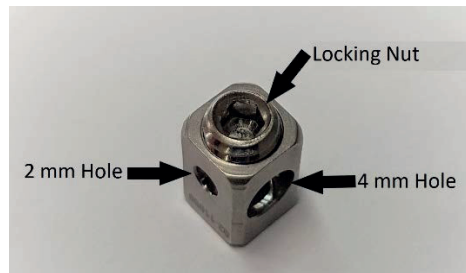
## COMPONENTS DESCRIPTION

### Clamps

The shape of the clamp is a 10x5x5 mm parallelepiped. The clamp presents two through holes whose diameters are 2 and 4 mm respectively.

Both the holes could be exploited for connection of transfixing wires and/or support rods.

Blocking the complex wire-rod is ensured by locking nuts, which could be placed in the upper or lower side of the clamp. Locking nut closure is achieved with a 2.5 mm hex key. In order to avoid a holding loss, fixing the grub screw on the transfixing wire and not on the rod is recommended. If a clamp is blocking two transfixing wires, it is suggested to apply two locking nuts.



### Stabilization rods

Stabilization rods are aimed at connecting two or more clamps in order to guarantee mechanical stability of the system.

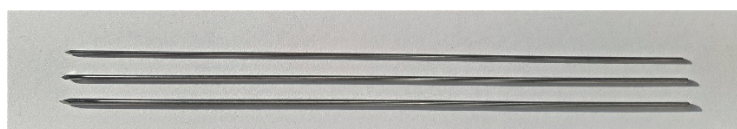
Rod has a 2mm diameter, while its length could be 50 or 60 mm.

The rod could be indifferently inserted in the big or the little hole of the clamp.



### Intrabone wires

Wires are available with three different sizes (1.1, 1.4 and 1.6) and 155 mm length. Wires present a  $\frac{3}{4}$  singletip. If required, threaded wires with 1.4 or 1.6 mm diameter are available. They are particularly suitable for reaching free segments to be reduced.





MILANO - ITALY

# MiniFix

**External Minifixator for Hand and Foot**

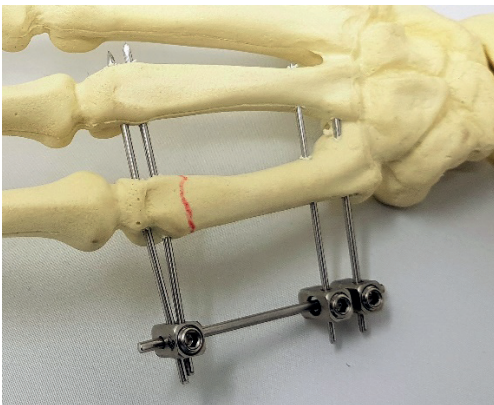
## GENERAL INFORMATION

In order to achieve a proper stability of the fracture through an external fixator, it is recommended to consider the mechanical principles on which this method is based.

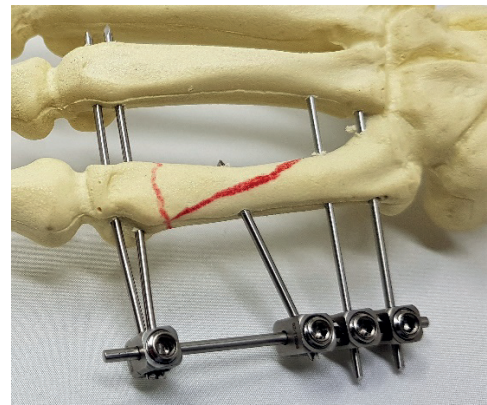
It is possible both to insert intrabone wires after having achieved fracture reduction and to use wires for obtaining the desired reduction. In order to improve rotational stability, the insertion of two parallel wires for each bone fragment is suggested, if possible.

It is advised to completely insert intrabone wires before stabilizing them with the transverse rod.

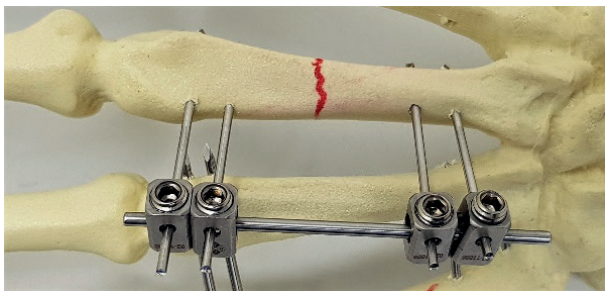
## APPLICATION EXAMPLES-METACARPALS



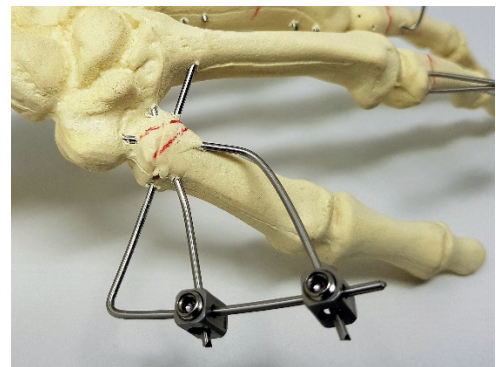
Subcapital fracture of the fifth metacarpal



Spiroid fracture of the fifth metacarpal with stabilization interfragmentary wire



Truncated fracture of the metacarpal



Fracture of the thumb basis (Bennet or Rolando) with or without trapeziometacarpal subluxation



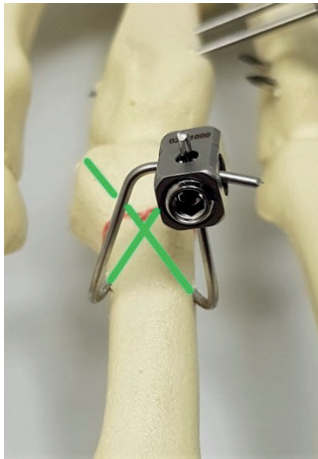


MILANO - ITALY

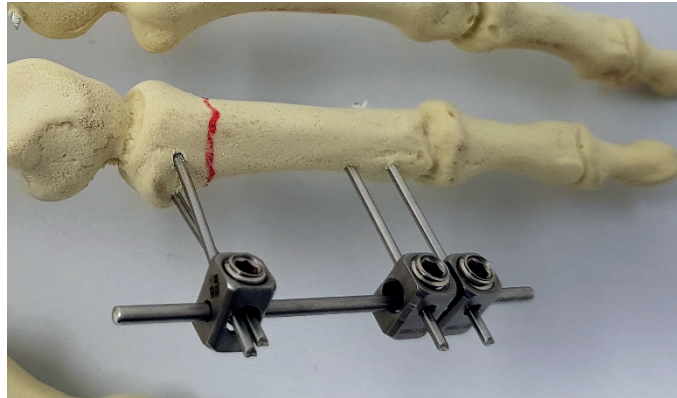
# MiniFix

**External Minifixator for Hand and Foot**

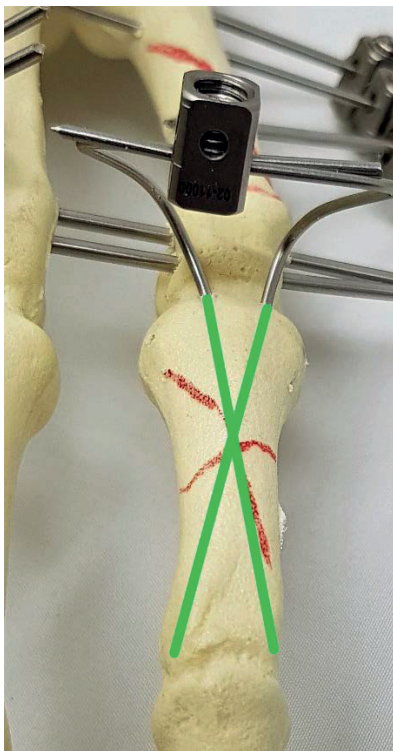
## APPLICATION EXAMPLES-PHALANXES



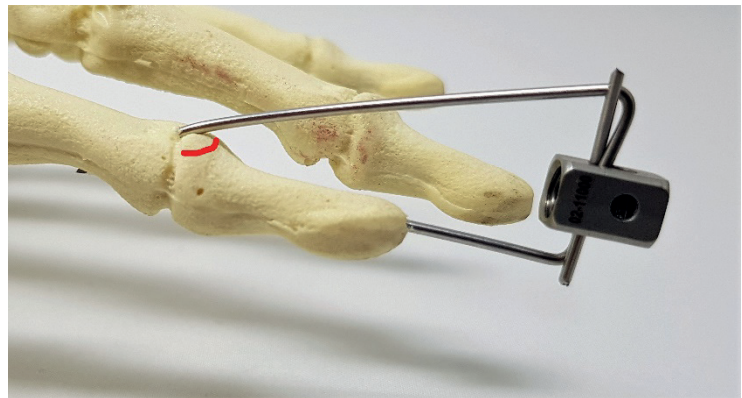
Fracture of the basis of the first phalanx  
Crossed disto-proximal wires (intrafocal mounting)



Fracture of the basis of the first phalanx  
Mounting outside the fracture



Truncated fracture P1 -  
Proximodistal intramedullary mounting



Fracture of the basis of P3 – (mallet finger) –  
Ishiguro treatment (blocked with a clamp for a better stability of the system)



MILANO - ITALY

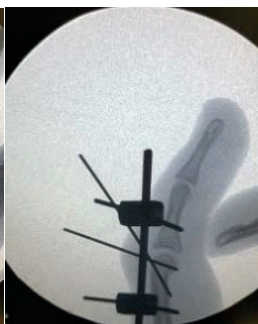
# MiniFix

*External Minifixator for Hand and Foot*

## CLINICAL CASES



Preoperative XRAY

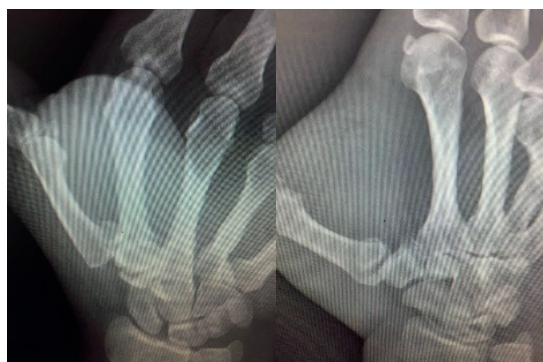


Intraoperative XRAY



Postoperative picture

### Case 2 – Fracture at metacarpal base 1<sup>st</sup> finger



Preoperative XRAY



Intraoperative XRAY

### Case 3 – Metacarpal fracture 5<sup>th</sup> finger



Preoperative XRAY



Intraoperative XRAY

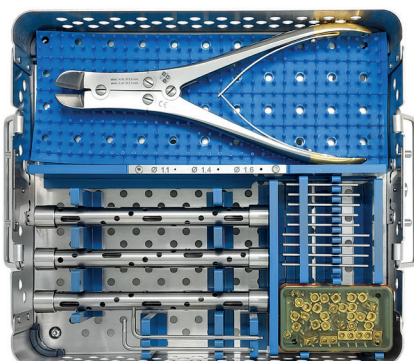


MILANO - ITALY

# MiniFix

**External Minifixator for Hand and Foot**

## CODES AND DESCRIPTION

CODES	DESCRIPTION	Q.TY/PKG
02-2400	MiniFix set contains the following items which are also available in single codes:	
	02-11000	mini clamp 1 hole (5 pieces packaging) 5
	16-111/NS	Pinfix pin-wire 1,1 x155mm - not sterile (8 pieces packaging) 1
	16-114/NS	Pinfix pin-wire 1,4 x155mm - not sterile (8 pieces packaging) 1
	16-116/NS	Pinfix pin-wire 1,6x155mm - not sterile (8 pieces packaging) 1
	01-9020	rod 50x2.0mm (5 pieces packaging) 1
	01-9021	rod 60x2.0mm (5 pieces packaging) 1
	05-202000	hexagonal key 2.5mm 1
	05-209249	wire cutter up to 3.0mm 1
	05-2000	sterilization box 1
	Assembled following CEE 93/42 art.12 paragraph 2	
Codes not included in the set		
16-1515/NS	Pinfix mini screw stainless steel 155/15 d.1,6mm thread 15mm - not sterile (4 pc/pk)	
16-1520/NS	Pinfix mini screw stainless steel 155/15 d.2,0 mm thread 20mm - not sterile (4 pc/pk)	
02-12000P	Locking screw (20 pc/pk)	
02-11001	mini clamp 2 holes (5 pieces packaging)	

*Thanks to Dr. Simonetta Odella and Dr. Pierluigi Tos for their active contribution for realizing this technique.*

Dial Medicali srl  
Viale Berbera 45 - 20162 Milano - Italy  
Tel. +39.02.89828078 - Fax +39.02.66104021

[www.dialmedicali.com](http://www.dialmedicali.com)

REV 08/2022