



Osteo-x[®]

External fixation, distraction and reduction of small bones

Surgical Technique



- Simple application
- Compact and lightweight to ensure comfort for the patient
- Manufactured from PEEK and carbon fibre
- Radiolucent to aid viewing of the fracture site
- Pre-assembled and sterile, ready for immediate use

The Osteo-x® external fixator is a device used for the fixation and distraction of small bones, primarily in the hand. It incorporates four K-wires which are driven into the bone and placed to provide three dimensional stability. The displacement between the blocks can be set prior to attachment and the distraction/compression adjusted by rotating the threaded shaft with the supplied tool.

With the exception of the K-wires, the device is manufactured from high quality polymer and carbon which makes it compact, lightweight and radiolucent.

The simple nature of Osteo-x® reduces operative time as it is supplied fully assembled and sterile packed.

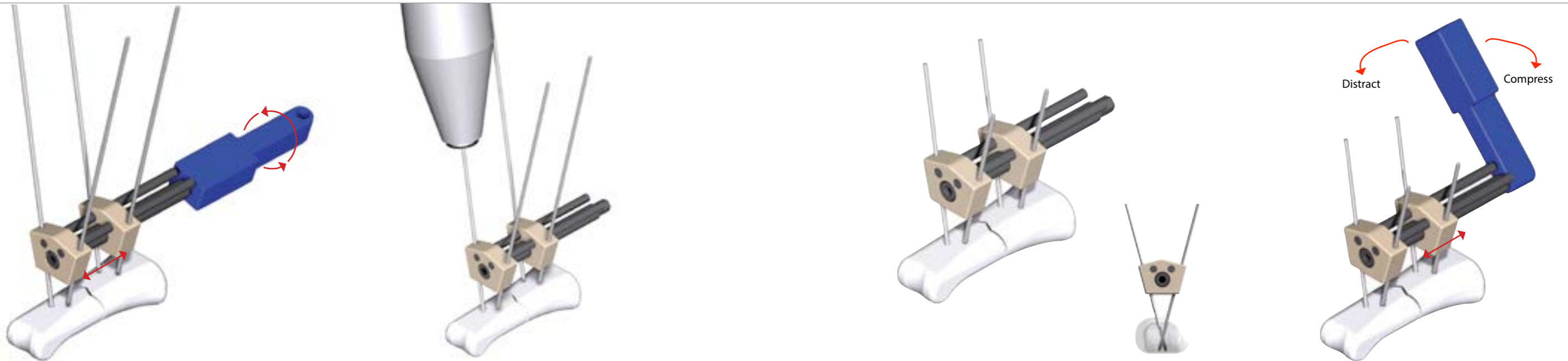
Indications

The Osteo-X external fixator is designed for fracture fixation and distraction of bones in the hand/wrist.

- Small hand and wrist bone fractures
- Limb lengthening

Contraindications

- Infection
- Insufficient bone quantity
- Poor bone quality/osteoporosis
- Allergic reaction to device materials
- Uncooperative patient
- Potentially successful conservative treatment



1 Preparation

Before securing the device careful positioning should be considered, such that following fixation it is possible to access the protruding thread of the fixator, in order to distract or compress the bone. Impingement of the thread against the hand during full range of motion should be avoided where possible - as should extending the thread beyond the finger tips.

An open insertion technique is recommended in order to avoid damage to soft tissues.

Osteo-x® should be used dorsally. It should be placed radially on the 1st, 2nd and 3rd digits and on the ulna aspect of the 4th and 5th digits.

Soft tissue should be retracted out of the way so that the K-wire tips can be placed against the bone.

The adjustment tool is used to set the device size to the necessary length.

2 Inserting the K-wires

Using a wire-driver, the K-wires should be driven into the bone in a single motion.

Irrigation may be used to reduce heat build up in the K-wire.

The first K-wire implanted should fix the smaller fragments to aid manipulation and alignment. The larger fragment should be fixed using the second K-wire to be driven in. The remaining K-wires may be placed in any order.

3 Trimming the K-wires

Ideally the K-wires should cross in the centre of the bone, although this is not necessary for the Osteo-x® fixator to function.

Repeated adjustment of the K-wires can damage the bone and device and should be avoided unless necessary.

Following placement, the K-wires can be cut down in size, although sufficient length should be left protruding to enable a wire driver grip to remove them.

4 Adjusting the compression

The adjustment tool can be used to compress or distract the bone. Caution should be used when compressing, so that the bone does not buckle.

One full turn of the threader shaft will result in a change of 0.5mm displacement between the two blocks.

Close the wound in the usual manner.

Product

Catalogue No.	Description
OSTX-ADJ-SP	Osteo-x [®] Sterile Adjustment Tool
OSTX-ASM-SP	Osteo-x [®] External Mini Fixator



Related Products

ChiroKlip[®] - protecting the protruding ends of K-wires

Catalogue No.	Description
ChiroKlip [®]	ChiroKlip [®] - Sterile - 1 box (50 per box)
Quantity discounts available	

