

FOOT

**MIS II INSTRUMENTATION
FOR MINIMALLY-INVASIVE
FOREFOOT SURGERY**

 **be POD**

MIS II

INSTRUMENTATION FOR MINIMALLY-INVASIVE FOREFOOT SURGERY

A complete solution

The aim of the surgical approach to Hallux Valgus referred to as "minimally invasive" is the same as that of open-air surgery:

1st shaft

M1:

- to reduce the prominence of the medial side of the 1st metatarsal head;;
- to perform osteotomy of the basis of M1;
- to perform distal osteotomy of M1;
 - with translation or not,
 - with correction of excess DMAA(Distal Metatarsal Articular Angle), by realignment of the distal articular surface of the 1st metatarsal.

MTP joint:

- to perform lateral arthrolysis of the MTP joint (Metatarsophalangeal joint).

P1:

- to perform every type of osteotomies: varisation, derotation, shortening.

Lesser rays

- to perform Distal Metatarsal Mini Invasive Osteotomies (DMMO).
- to perform lesser toes deformities corrections.

The type of surgery is based on the use of specific equipment (Manual instruments, Fluoroscope, and appropriate power system) to allow the use 1 or 3 mm incisions (minimally invasive approaches). The FH ORTHO manual instruments are ideally suited to the specific requirements of this type of surgery: a complete **instrumentation** and a wide range of specific **burrs**.

BURRS

Burrs dedicated to each indications
(see indications board on the back)



Wedge 3,1 x 13 mm - ref. 256 016



Straight Shannon 2,0 x 12 mm - ref. 256 018



Short Shannon 2,0 x 8 mm - ref. 256 019



Long Shannon 2,0 x 12 mm - ref. 256 020



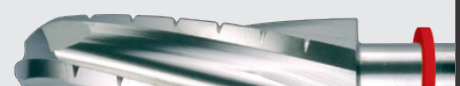
Percutaneous chevron 3,0 x 20 mm - ref. 258 156



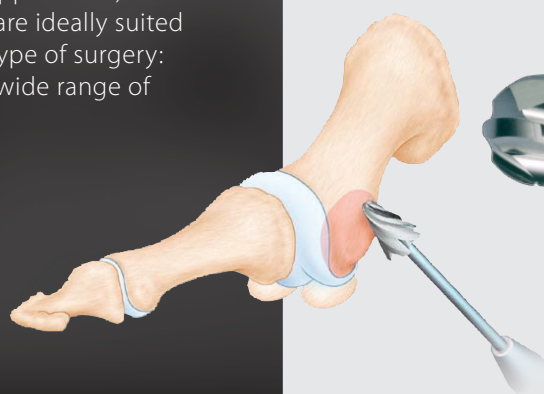
Percutaneous chevron 2,0 x 20 mm - ref. 264 425



Wedge extra 4,1 x 13 mm - ref. 256 017



Brophy 6,0 X 15 mm - ref. 256 021



INSTRUMENTATION

Simple and compact, it consists of 7 essential instruments:

- 2 rasps to extract bone debris.
- Separator and retractors to ease the surgical procedure.

Rasps



Rasp, 1,5 mm width (ref. 258 158)



Rasp, 3 mm width (ref. 258 159)

- The rasps were designed to **extract small bone debris** (and not to rasp the bone) produced when reducing the volume of the 1st metatarsal head by the use of burr.
- They have different orientations (angle: 15°) and are available in **2 widths** (1,5 mm and 3 mm).
- **Anatomic handle** for efficient ergonomomy.

Surgical knife



Beaver handle (ref. 254 327)

- To permit minimal invasive approaches.
- It consists of a blade holder **75 mm** long perfectly adapted to MIS gestures.
- The Beaver blades used have the advantage of permitting an incision in the line of the surgical knife over a width of **between 1 to 3 mm**.

Separator



Periosteal elevators (ref. 258 160)



Periosteal elevators (ref. 272 280)

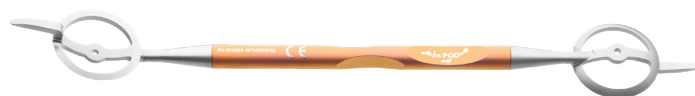
NEW

- To elevate the soft tissues and create a **"working" area**.
- To work directly in contact with the bone.
- 1 elevator and 1 raspatory assembled in one unique instrument.

Retractors



Percutaneous osteotomy bone lever (ref. 258 163)



Percutaneous osteotomy bone lever (ref. 272 282)

NEW



Hindfoot percutaneous osteotomy bone lever (ref. 272 281)

NEW











Top retractor (ref. 258 162)



Top retractor (ref. 258 162)

- **Percutaneous bone lever** is designed to displace easily (lateral translation) the 1st shaft osteotomy, by percutaneous approach.
- **New percutaneous osteotomy lever** with a plate drilled in its center for inserting a temporary fixation pin with a maximum diameter of 1.8 mm. Two concave ends with a diameter of 25 mm, with 2 different inclinations (0-15°).
- **New hindfoot percutaneous osteotomy bone lever** designed for lateral or medial translation of vertical or chevron calcaneal osteotomies.
- **Retractors** are used to create a "working area" by exposing the metatarsal head for osteotomy procedure by mini-open approach.

SINGLE USE INSTRUMENTS

Ref.	MIS burrs (box of 5)	Indications
Osteotomies		
 256 016	Wedge burr 3,1 x 13 mm MIS	Metatarsal osteotomy with substantial level of correction (10 to 20°). To flatten and thin tiner bone ; to contour in certain cases.
 256 018	Straight Shannon burr 2,0 x 12 mm MIS	Primary metatarsal osteotomy of M1 or osteotomy of P1, neutral level of correction (< 10°).
 256 019	Short Shannon burr 2,0 x 08 mm MIS	All surgical bone procededures of the lesser toes (R2 to R3): claws of toes, butt, clinodactyly, shortening, soft corn.
 256 020	Long Shannon burr 2,0 x 12 mm MIS	Metatarsal osteotomy of M1 or osteotomy of P1 allowing the maximal correction of angle (10°). DMMO (Distal Metatarsal Mini Invasive Osteotomy) - Contouring of metatarsal heads (R2 to R5).
 258 156	Percutaneous chevron burr 3,0 x 20 mm MIS II	Percutaneous chevron type osteotomy, with shortening effect.
 264 425	Percutaneous chevron burr 2,0 x 20 mm MIS II	Percutaneous chevron type osteotomy, without shortening effect.
Bone resection		
 256 017	Wedge burr extra 4,1 x 13 mm MIS	To shave and reduce (the medial part of the M1 head) as primary procedeeure; cheilectomy of Hallux Rigidus.
 256 021	Brophy burr 6,0 X 15 mm MIS	Bone resection

The power system and burrs:

A handpiece should be used. 8 specific burrs have been designed. Depending on their shape they enable the surgeon to perform osteotomies or bone resections.

- Single use;
- Individually sterile packed;
- Protection by a silicone ring;
- Easy identification thanks to the color coded;
- Connection possibility : rounded end for Jacob chuck;
- Rotation rate: 1500 to 8000 RPM (max); the use of a torque reducer is highly recommanded.

Ref.	MIS II bePOD
258 158	Rasp 1,5 mm thickness MIS II bePOD
258 159	Rasp 3 mm thickness MIS II bePOD
258 160	Elevator raspatory MIS II bePOD
258 161	Bottom retractor MIS II bePOD
258 162	Top retractor MIS II bePOD
258 163	Percutaneous osteotomy bone lever MIS II bePOD
271 686	Beaver hexagonal handle 7,5 cm D. 0,5 cm
258 164	Box for MIS foot instruments MIS II bePOD

GROUPE
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