INSTRUMENTATION FOR MINIMALLY-INVASIVE FOREFOOT SURGERY
A COMPLETE SOLUTION

8 specific burrs have been designed depending on their shape they enable the surgeon to perform osteotomies or bone resections.

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.

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 and hammer toe corrections.

BURRS

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

- Wedge 3.1 x 13 mm - ref. 268 437
- Wedge extra 4.1 x 13 mm - ref. 268 438
- Straight Shannon 2.0 x 12 mm - ref. 268 439
- Short Shannon 2.0 x 8 mm - ref. 268 440
- Long Shannon 2.0 x 12 mm - ref. 268 441
- Percutaneous chevron 3.0 x 20 mm - ref. 268 447
- Percutaneous chevron 2.5 x 14 mm - ref. 268 448
- Percutaneous chevron 2.0 x 20 mm - ref. 268 449

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 recommended.
**RASPS**

- 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 ergonomy.

![Rasp, 1.5 mm width (ref. 258 158)](image1)

![Rasp, 3 mm width (ref. 258 159)](image2)

**SEPARATOR**

- 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.

![Use of fluoroscopy to monitor the position of raspatory](image3)

**SURGICAL KNIFE**

- 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.

![Beaver handle (ref. 254 327) + Beaver blade 3 mm (ref. 266 510)](image4)

**RETRACTORS**

- Percutaneous bone lever is designed to displace easily (lateral translation) the 1st shaft osteotomy, by percutaneous approach.

![Percutaneous osteotomy bone lever (ref. 258 163)](image5)

- Retractors are used to create a "working area" by exposing the metatarsal head for osteotomy procedure by mini-open approach.

![Bottom retractor (ref. 258 161)](image6)

![Top retractor (ref. 258 162)](image7)
OSTEOTOMIES

**268 437**
**WEDGE BURR 3.1 x 13 mm MIS**
Metatarsal osteotomy with substantial level of correction (10 to 20°). To flatten and thin thinner bone; to contour in certain cases.

**268 439**
**STRAIGHT SHANNON BURR 2.0 x 12 mm MIS**
Primary metatarsal osteotomy of M1 or osteotomy of P1, neutral level of correction (< 10°).

**268 440**
**SHORT SHANNON BURR 2.0 x 08 mm MIS**
All surgical bone procedures of the lesser toes (R2 to R3) : claws of toes, butt, clinodactyly, shortening, soft com.

**268 441**
**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)

**268 447**
**PERCUTANEOUS CHEVRON BURR 3.0 x 20 mm MIS II**
Percutaneous chevron type osteotomy, with shortening effect.

**268 448**
**PERCUTANEOUS CHEVRON BURR 2.5 x 14 mm MIS II**
Percutaneous chevron type osteotomy.

**268 449**
**PERCUTANEOUS CHEVRON BURR 2.0 x 20 mm MIS II**
Percutaneous chevron type osteotomy, without shortening effect.

BONE RESECTION

**268 438**
**WEDGE BURR EXTRA 4.1 x 13 mm MIS**
To shave and reduce (the medial part of the M1 head) as primary procedure; cheilectomy of Hallux Rigidus.

INCISION

**268 450**
**BEAVER BLADES (ROUNDED) 1 mm be POD (BOX x 24)**
Small incision of 1mm for lateral rays.

**268 451**
**BEAVER BLADES (ROUNDED) 3 mm be POD (BOX x 25)**
Incision / Arthrolysis / Tenotomy.

**268 452**
**BEAVER BLADES (POINTED) 3 mm be POD (BOX x 25)**
Incision / Arthrolysis / Tenotomy.