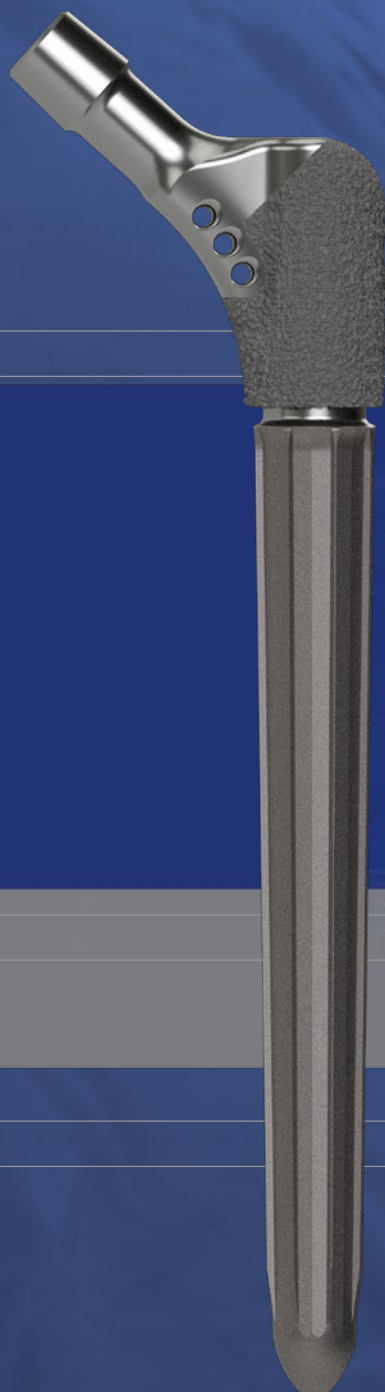


▲-Vizion[®]

FEMORAL REVISION SYSTEM

SMART MODULAR THINKING



Brochure

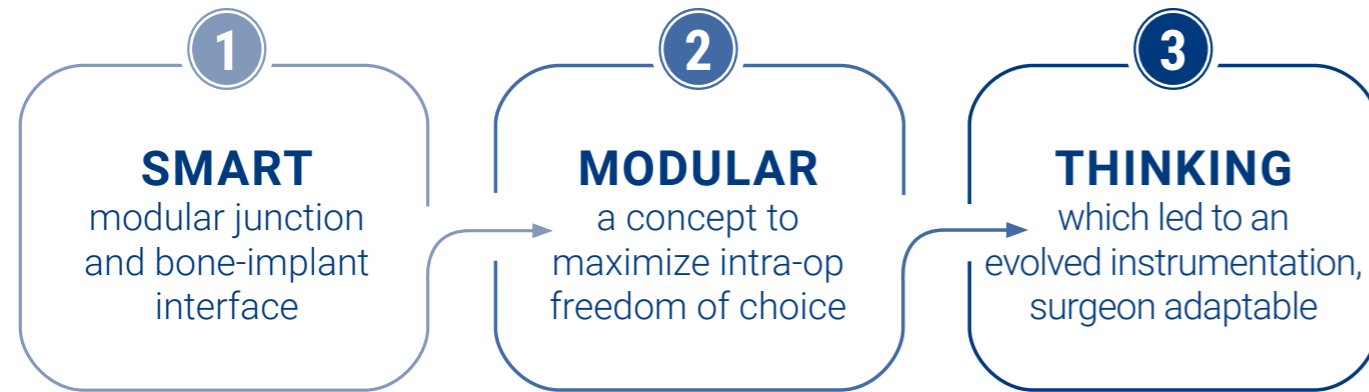
Joint

Spine

Sports Med

edacta
International 

M-Vizion is Medacta's modular femoral revision system designed to address from demanding primary to complex revision cases in a **versatile** and **flexible** manner. M-Vizion has been conceived with a **Smart Modular Thinking** to address the main challenges and surgeon needs in femoral revision surgeries.



1 SMART modular junction and bone-implant interface

SMART MODULAR JUNCTION

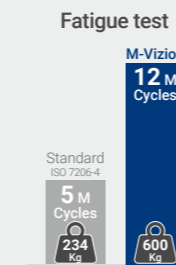
M-Vizion has been conceived with an **exclusive mechanical design** to **increase the taper's resistance** against one of the main concerns, fretting-induced fractures^[1,2,3,4,5], providing for **higher stability** at the modular junction.

EXCLUSIVE MECHANICAL DESIGN^[6]

An improved resistance to fretting-induced fractures thanks to:

High taper mechanical resistance: An in-house, highly controlled **Roller Burnishing** treatment on the distal stem's taper, which allows to harden the taper surface.

High conical connection strength: An optimized **high assembly force** (25 Nm or 500 kg of axial force), which reduces micromovements between the proximal and distal components.



The M-Vizion's exclusive mechanical design surpassed the standard fatigue test requirements by more than twice the number of cycles and weight with no sign of cracks on the taper surface, proving M-Vizion is a **robust solution for a wide patient range**.

Fretting Corrosion Evaluation



25 Nm - 500 Kg
Assembly force

AN ENHANCED BONE-IMPLANT INTERFACE AGAINST SUBSIDENCE

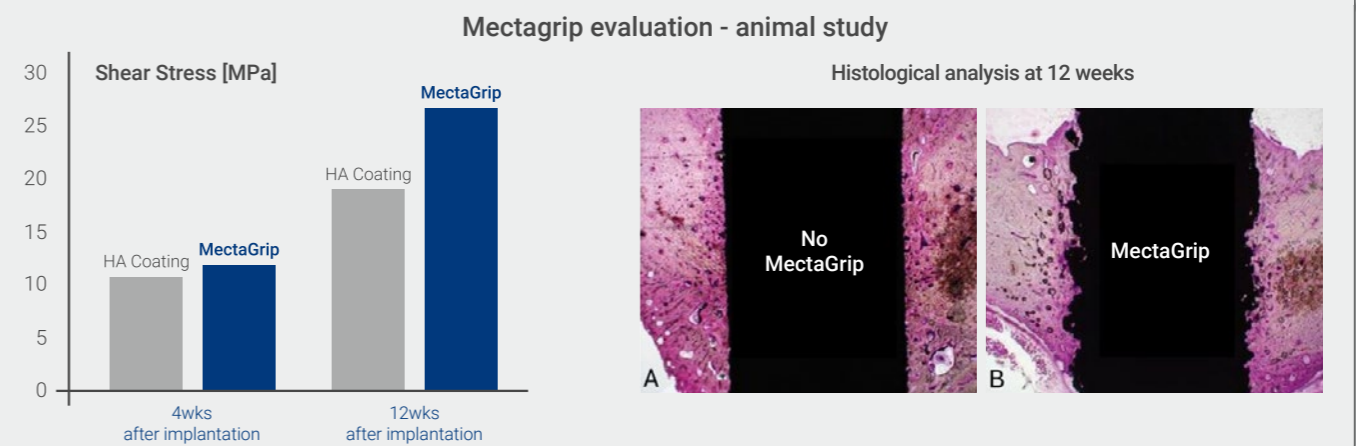
Diaphyseal stability

Achieved thanks to the **Wagner concept** embraced by the M-Vizion on the distal part. A concept with 30+ years of clinical success that allows for an **immediate diaphyseal stability** and for bypassing regions of proximal bone loss^[7,8,9,10].

Improved proximal bone fixation

Possible thanks to the addition, on the proximal body, of the Titanium Plasma Spray **Mectagrip** coating, featuring over 10 years of clinically proven success. In cases where the proximal femur is not too compromised, Mectagrip provides for a **mechanically strong bone-implant interface**, resulting in a potentially improved load transfer^[11].

PROVEN MECTAGRIP COATING^[11]

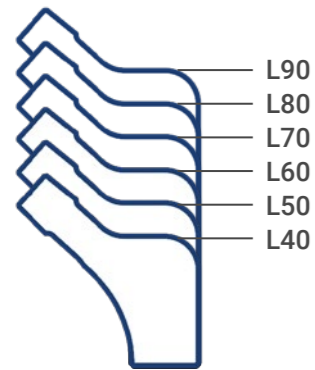


2 MODULAR, a concept to maximize intra-op freedom of choice

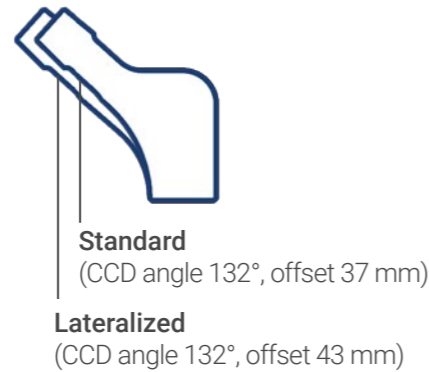
M-Vizion allows for this **personalization** thanks to its modularity. With a **comprehensive product range** that allows for intraoperative **flexibility** and **versatility** while reconstructing the hip joint, the M-Vizion makes it possible to **adapt to different patient anatomies** and surgical scenarios. This enables the surgeon to **reconstruct the hip's center of rotation, anteversion and leg length discrepancy, irrespective of the different defects' scenarios** and where distal fixation is achieved.

PROXIMAL BODY RANGE

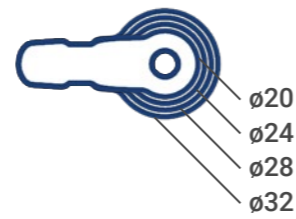
6 Lengths (10 mm increment)



2 Offsets



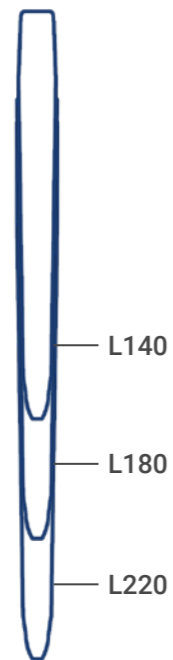
4 Diameters



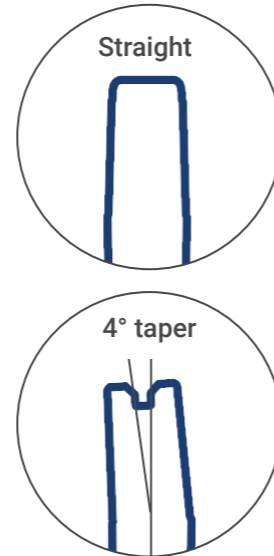
DISTAL STEM RANGE

3 Lengths

17 size diameters (1 mm increment)
Diameters from 12 mm to 28 mm



Straight & 4° taper



HIGH FLEXIBILITY

A total length from 193 to 323 mm, with different possible combinations to address different femurs.

DESIGN FEATURES

LOCKING SCREW

Surface coating: TiNbn
To avoid the cold welding effect

PROXIMAL BODY

Mectagrip
For enhanced proximal fixation

3 holes
Compatible with cerclage cables, allow for the reconstruction of the great trochanter through the implant, increasing stability and bone restoration

Short 12/14 taper
Reduced risk of liner wear

Rounded Shoulder
Easier reassembly of the Greater Trochanter

Mirror polished neck
Minimized soft tissue damage and liner wear

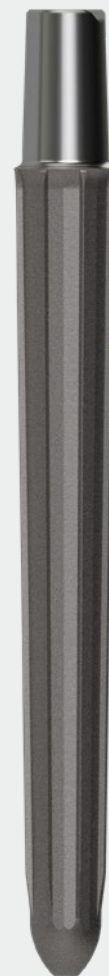
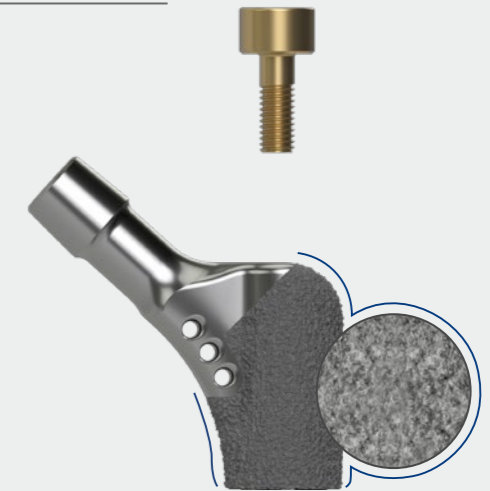
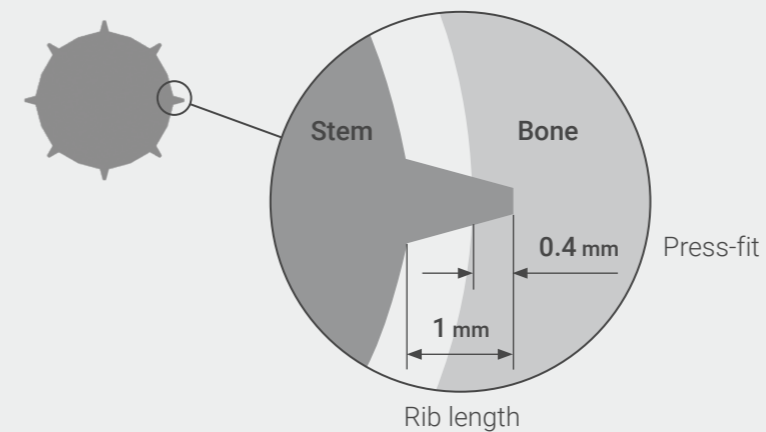
DISTAL STEM

2° taper
Get primary anchoring

Grit Blasted surface
Provides for potential long-term stability through bone fixation

Bullet-Shaped tip
Easier stem insertion

Wagner-type cross section
8 longitudinal ribs for an immediate stability and enhanced fixation

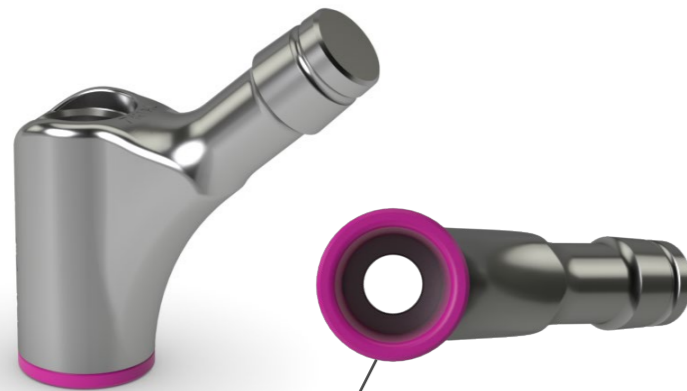


3 THINKING, which led to an evolved instrumentation, surgeon adaptable

M-Vizion features a **straightforward instrumentation**, engineered to **simplify the surgical technique** and maximize **efficiency, confidence and reproducibility**.

STREAMLINED TRIALS

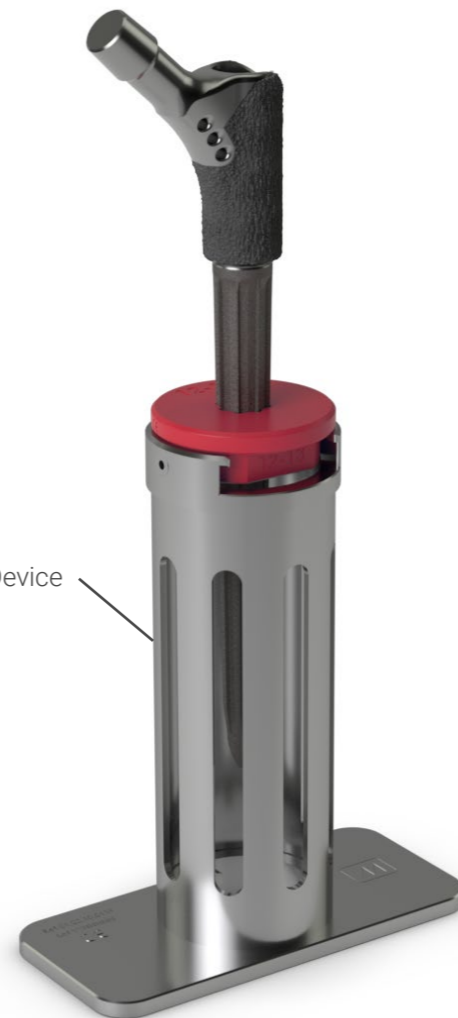
allowing to reduce the surgical steps and surgical time.



The **Trial Proximal Body** has been designed with a **plastic sleeve**, which allows to **trial the proximal body directly on the final stem**. The inner plastic sleeve protects the cone of the final implant.

IN VIVO AND BACKTABLE ASSEMBLING OPTIONS

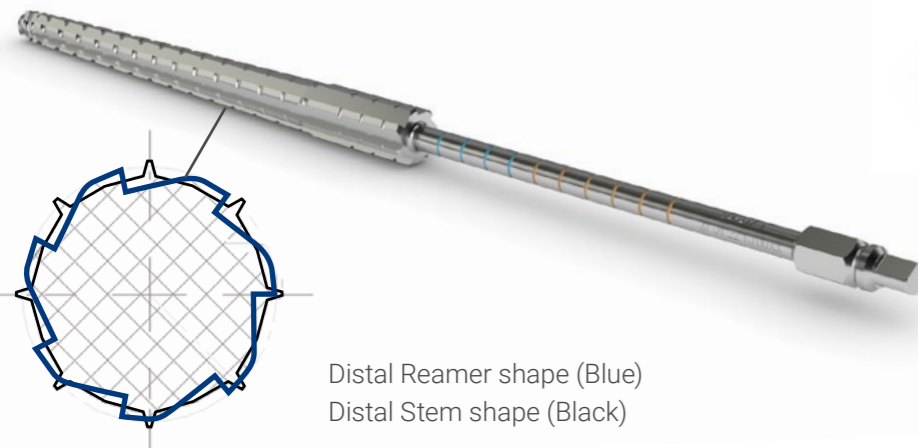
allowing to chose the preferred surgical technique.



Backtable Device

MILLIMETRIC GRADED REAMERS

allowing for a step-by-step accurate and precise preparation, respecting the bone. Tapered reamers correspond to implant diameter (press-fit excluded) and are available in 1 mm steps.



Distal Reamer shape (Blue)
Distal Stem shape (Black)

The M-Vizion Femoral Revision System is part of the **Medacta Hip Revision Platform**, a comprehensive offering with a **wide range of implants** for femur and acetabulum, complemented and empowered by **tailored Educational Opportunities** and **advanced, minimally-invasive instrumentation**.

TAILORED EDUCATION PROGRAM

The M.O.R.E. Institute offers effective and continuous education to surgeons, with the aim to improve patient outcomes and surgical proficiency. The M.O.R.E. Institute was built and has been growing, around the concept of sharing experience within the international medical community. It has become a unique and global education platform, tailored to everyone's needs.

The M-Vizion Educational Program can count on an evergrowing network of revision experts all over the world, and offers dedicated and various activities (Learning centers, Reference center visitations, user meetings, symposia) for continuous education and discussion.



M.O.R.E.
INSTITUTE

MEDACTA HIP REVISION INSTRUMENTS

Medacta offers a complete range of advanced instruments to facilitate failed implants and cement removal, developed to be uniquely compatible with the AMIS technique.

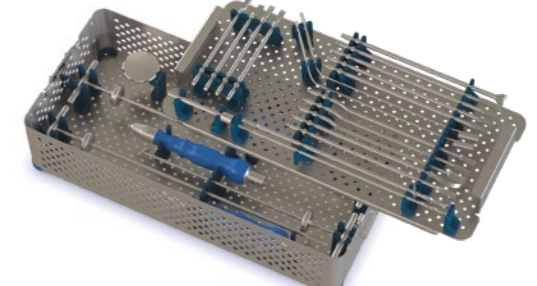
CUP REMOVAL SYSTEM & SINGLE-USE MECTABLEDES



STEM REMOVAL SYSTEM



CEMENT REMOVAL SYSTEM



Additional service for a complete revision package.

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[1] Krull A, Morlock M, Bishop NE Factors influencing taper failure of modular revision hip stems 2018 Apr;54:65-73. [2] Pontus N Svensson I Fatigue Fracture in Dual Modular Revision Total Hip Arthroplasty Stems: Failure Analysis and Computed Tomography Diagnostics in Two Cases The Journal of Arthroplasty Volume 29, Issue 4, April 2014, Pages 850-855. [3] Slover J, Bendo A, Forman J Fatigue Failure of Newer Generation Modular Revision Femoral Stem Following Fracture Healing - Bulletin of the Hospital for Joint Diseases. [4] Konan S, Garbuz DS, Masri 1 BA Duncan CP, Modular tapered titanium stems in revision arthroplasty of the hip: The Risk and Causes of Stem Fracture. [5] Sulje Z, Crnogaca K, Fracture of Revision Modular Femoral Stem - MOJ Orthopedics & Rheumatology Volume 6 Issue 6 - 2016. [6] Data on file Medacta. [7] Baktr A, Karaaslan F, Gencer K - Femoral Revision Using the Wagner SL Revision Stem: A Single-Surgeon Experience Featuring 11-19Years of Follow-Up - The Journal of Arthroplasty 30 (2015) 827-834. [8] D. Regis, A. Sandri, I. Bonetti, M. Braggion, P. Bartolozzi - Femoral revision with the Wagner tapered stem - J Bone Joint Surg Br 2011;93-B:1320-6. Received 1 October 2010; Accepted after revision 2 June 2011. [9] Gutierrez del Alamo J, Garcia-Cimbrello E, Castellanos V, Gil-Garay E, Radiographic Bone Regeneration and Clinical Outcome With the Wagner SL Revision Stem - The Journal of Arthroplasty Vol. 22 No. 4 2007. [10] Bohm P, Bischel O - Femoral Revision with the Wagner SL Revision Stem - THE JOURNAL OF BONE & JOINT SURGERY - JBJS.ORG. [11] Walsh et al. Bone ongrowth and mechanical fixation of implants in cortical and cancellous Journal of Orthopaedic Surgery and Research (2020) 15:177.



**REDEFINING BETTER
IN ORTHOPAEDICS
AND SPINE SURGERY**

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M-Vizion®
Leaflet

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