REDEFINING THR: THE AMIS® SYNERGY

The anterior approach, strengthened by years of clinical experience, is the only technique which follows a path both **intermuscular and internervous** and therefore lowers the risk of damaging periarticular structures such as muscles, tendons, vessels and nerves.

Medacta® International is the world leader for educating and supporting surgeons in their pursuit of Anterior Minimally Invasive Surgery (AMIS®). **Reference Centers, located throughout the world**, provide the necessary AMIS® educational experience and Medacta® offers **continuous support for surgeons**, as well as constantly improving and developing the industry's most specialized instrumentation platform.

Using Mpact® System you can enter Medacta® International's world of AMIS®.

Discover:

- The definitive MIS approach: AMIS®;
- Dedicated AMIS® instrumentation;
- The **AMIS® Mobile Leg Positioner**: the original extension table included as part of the instrumentation that makes the surgery easier and reproducible;
- The **AMIS® Education Programme** based on Medacta's proven educational methods.

AMIS®

The AMIS® Mobile Leg Positioner will be supplied as part of the instrumentation to help ensure effective and reliable positioning of the leg during surgery. Traction, adduction and hyperextension have never been so easy.

REFERENCES

[1] C Anderson Engh, Cementless acetabular components,JBJS (Br), vol. 72-b, No. 1, Jan 1990, 53-60. [2] S. J. Incavo, F. A. Di Fazio, J. G. Howe, Cementless Hemispherical Acetabular Components, JoA Vol. 8, no. 8, 1993, 573-80. [3] P. Robotti, A. Sabbioni, L. Glass, B. George, Macroporous Titanium Coatings , by Thermal Plasma Spray, ITSC 2013, International Thermal Spray Conference, May 13–15, 2013, Busan, Korea. [4] Friction testing of the Mpact and Versafitcup coating samples. Data on file Medacta. [5] Mpact liner wear test. Data on file Medacta. [6] Push-out, lever-out and torsion test on the Mpact shell. Data on file Medacta. [7] J. E. Biemond et al, In vivo Assessment of Bone Ingrowth Potential of 3-Dimensional E-Beam Produced Implant Surfaces and the Effect of Additional Treatments by Acid-Etching and Hydroxyapatite Coating, J. Biomat. Appl, published on line January 27, 2011, 0885328210391495. [8] R. Ferro de Godoy et al., In vivo Evaluation of Titanium Macro-Porous Structures Manufactured Through an Innovative Powder Metallurgy Approach. Proceedings eCM XIII: Bone Fixation, Repair & Regeneration, June 24–26, 2012, Davos, Switzerland. [9] A. Goodship et al, In-vivo Assessment of the Ingrowth Potential of Engineered Surface Topographies Produced by Spark Plasma Sintering, Proceedings 9th World Biomaterial Congress, June 1-5, 2012, Chengdu, China. [10] Michael DR, MD, Review of the Evolution of the Cementless Acetabular Cup, ORTHOSuperSite December 1, 2008.

swiss made

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Mpact® Leaflet
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Mpact® SYSTEM

HEMISPHERICAL CEMENTLESS CUP SYSTEM

EVOLVING SAFETY

Brochure

Hip | Knee | Spine | Navigation

Medacta International

HEMISPHERICAL CEMENTLESS CUP SYSTEM

MPACT® SYSTEM

Mpact® offers a system of hemispherical press-fit acetabular shells in titanium alloy that provides different solutions according to patient needs, addressing primary and revision indications.
Cementless hemispherical shell design with porous coating surface treatment has a long and successful clinical history.[1, 2]
The Mpact® shells follow this philosophy, enhancing primary and biological secondary stability thanks to Mectagrip, highly porous plasma spray coating.[3]

EVOLVING SAFETY

OPTIMAL PRIMARY AND SECONDARY STABILITY
Thanks to the coefficient of friction, pore size and distribution of Mectagrip[3, 4]

LOCKING SYSTEM FOR THE LINER
Which minimizes micro-movements, preventing backside wear[5,6]

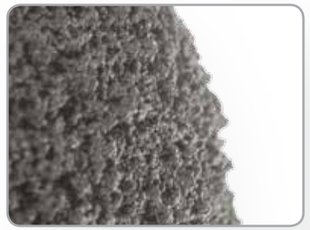
EASY INSTRUMENTATION
For a straight forward surgery for any preferred approach

MULTIPLE SHELL VERSIONS
Available to secure adequate fixation to the available bone stock

OPTIMIZED FEMORAL HEAD/SHELL DIAMETER RATIO
Head 36 mm available from shell size 52 mm

MECTAGRIP TECHNOLOGY

Mectagrip is the porous coating treatment applied to the Mpact® shells, consisting of a layer of commercially pure titanium deposited through a special Vacuum Plasma Spray technique (VPS). The VPS method used to deposit the Titanium porous coating on the implant shows potential advantages:



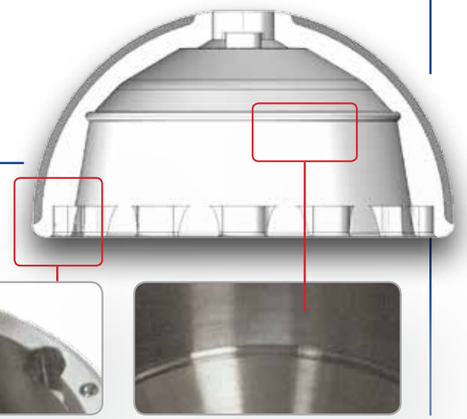
Pure titanium composition for optimal biocompatibility;

High friction coefficient increasing grip at the bone interface with bone[4];

Favourable environment for bone:[3,7,8,9]
- pore sizes of 100-350 µm
- open pores with high porosity level
- continuous interconnected pores.

ADVANCED LOCKING MECHANISM

Locking systems for the polyethylene liners:
- A **clipping system** placed out of the equatorial weight bearing area in the thickest region of the liner. This design reduces stresses at the liner/shell interface and minimizes the risk of the liner rim fracture should impingement occur.[10]
- The match between **anti-rotation tabs** in the liner and indentions on the shell limits rotational micro-movement and potential backside wear.[5,6]



PRODUCT RANGE

TWO-HOLE SHELL from size 46 mm to size 66 mm

MULTI-HOLE SHELL from size 46 mm to size 76 mm

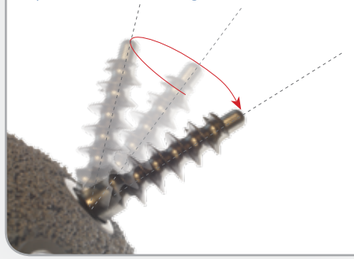
RIM-HOLE SHELL from size 56 to size 76 mm

POLYETHYLENE LINERS are available in Highcross crosslinked UHMWPE both in flat and hooded version.

CANCELLOUS BONE SCREWS
in lengths of 15 mm to 70 mm

CORTICAL BONE SCREWS
in lengths of 25 mm to 55 mm.

The maximum screw angle allowed for cancellous bone screws round the radial position is 22 degrees.



REVISION OPTIONS

The MULTI-HOLE SHELL allows for the use of cancellous bone screws in 12 to 17 locations (size dependant) on the dome and equatorial region.

The RIM-HOLE SHELL allows use of cancellous and cortical bone screws