

# SensiTiN™ DM CONVERTER

COBALT-FREE MODULAR DOUBLE MOBILITY



Brochure

Joint

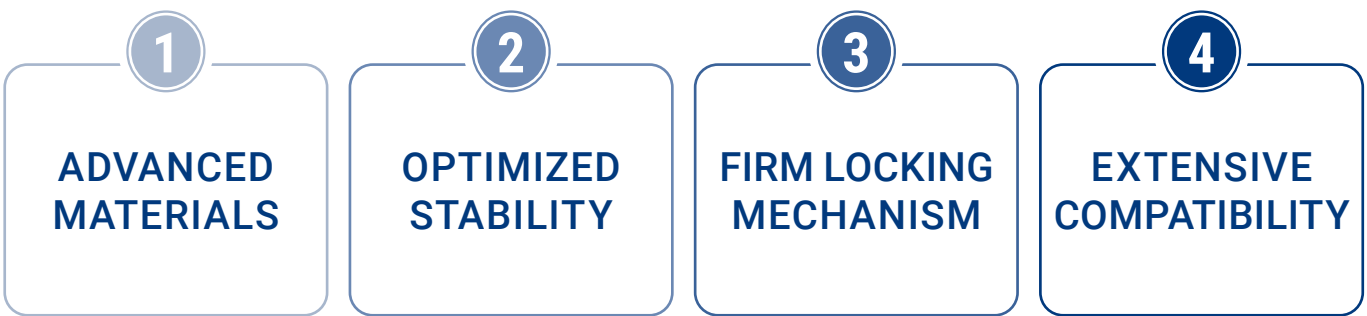
Spine

Sports Med

**Instability** is still a major challenge and a significant issue for both primary and revision total hip arthroplasties, and **Double Mobility (DM)** devices can provide a viable solution.<sup>[1-3]</sup>

To date, most of the Double Mobility Converters on the market are made of **Cobalt-Chromium alloy**, with several papers reporting **corrosion of the taper connection**.<sup>[4,5]</sup>

Medacta's focus on improving the **patient's well-being** through **innovative solutions** has led to the development of the **SensiTiN Double Mobility Converter**, a High Nitrogen Stainless Steel completely **cobalt-free** modular DM device with an outer Titanium Nitride coating to **improve corrosion resistance**.

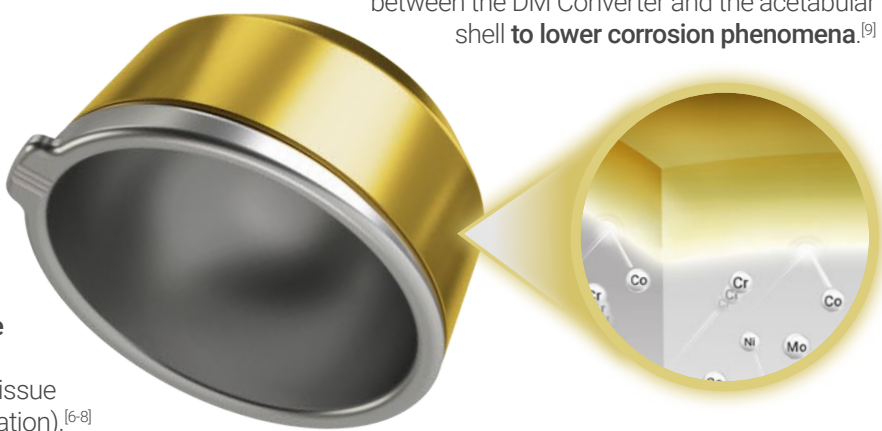


## 1 ADVANCED MATERIALS

### BULK MATERIAL:

#### HIGH NITROGEN STAINLESS STEEL

A well-known and performing material with 50 years of successful clinical history in Double Mobility for a completely **Cobalt-free device**, which eliminates any potential issue coming from high Cobalt blood levels (soft tissue necrosis, osteolysis and pseudotumor formation).<sup>[6-8]</sup>



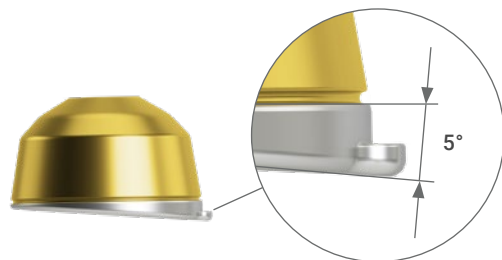
### OUTER COATING: SENSITIN

A Titanium Nitride ceramic-like coating placed on the converter's taper, acting as an electrochemical barrier between the DM Converter and the acetabular shell to **lower corrosion phenomena**.<sup>[9]</sup>

## 2 OPTIMIZED STABILITY

**5° raise** to provide **185°** of liner coverage, **further increasing the Jumping Distance**, thus **reducing the risk of luxation**.<sup>[9]</sup>

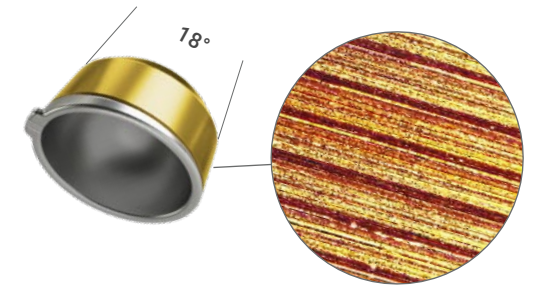
The **5° raise** is based on the **successful experience** with Versafitcup DM and Mpac DM.



## 3 FIRM LOCKING MECHANISM

Effective locking system of the SensiTiN DM Converter liner to **minimize micromotions** at the shell-converter interface,<sup>[9]</sup> featuring:

- **18° taper, clinically and mechanically proven** connection system widely and successfully used on the market
- Micro-threads on the tapered surface to further increase **converter stability** within the shell



## 4 EXTENSIVE COMPATIBILITY

**SensiTiN DM Converter** has been optimized to be **fully compatible** with **all** of the **Medacta fixed-bearing acetabular cups**, further enriching the current Medacta Personalized Medicine offering.

**SensiTiN DM Converter** further **expands** the **current Medacta Double Mobility portfolio**, creating a **COMPLETELY COBALT-FREE DM SYSTEM**.

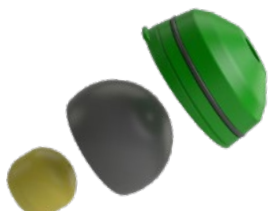
With SensiTiN DM Converter the surgeon can select the right implant for each specific patient, safely addressing instability and risk of dislocation in a wide range of patients, from primary to revision.



# SensiTiN™ DM CONVERTER

## SMART INSTRUMENTATION

**One tray is enough!** To implant the SensiTiN DM Converter, only **one single level tray** is needed, to be combined with each of Medacta's acetabular cup standard sets.



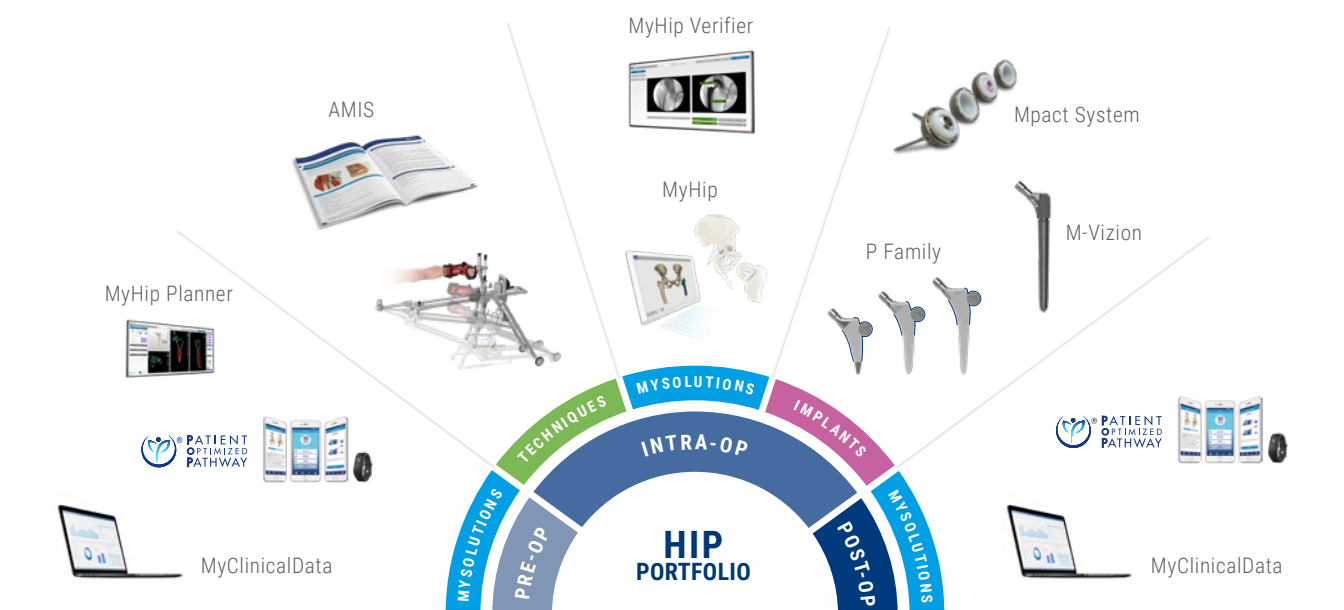
A complete **trial system** is available in any standard set, to intraoperatively check for hip stability and length.

A **removal hook** to easily disengage the DM Converter from the shell easily connects to the generic multi-function handle, for a quick and straightforward liner disengaging procedure.



## PERSONALIZED SOLUTIONS IN HIP REPLACEMENT

Medacta Hip Offering embraces a **Personalized Medicine Vision** with a comprehensive platform for a personalized care experience with an **Holistic Approach**. **Innovative implants, surgical techniques and technologies** bring value throughout the **entire patient journey**.



## REFERENCES

[1] <https://aoanjr.sahmri.com/annual-reports-2020>. [2] F. Farizon, R. de Lavison, J. J. Azoulai, G. Bousquet. Results with a cementless alumina coated cup with a dual mobility: a twelve years follow-up study. Int Orthop. 1998; 22(4) : 219-224. [3] C. Batailler, C. Fary, R. Verdier, T. Aslanian, J. Caton, S. Lustig. The evolution of outcomes and indications for the dual mobility cup: a systematic review. [4] M.S. Abdelal, E. Zachwieja, P.F. Sharkey. Severe Corrosion of Modular Dual Mobility Acetabular Components Identified During Revision Total Hip Arthroplasty. Arthroplasty Today 8 (2021) 78-83. [5] R. Civinini, A. Cozzi Lepri, C. Carulli, F. Matassi, M. Villano, M. Innocenti. Patients Following Revision Total Hip Arthroplasty With Modular Dual Mobility Components and Cobalt-Chromium Inner Metal Head are at Risk of Increased Serum Metal Ion Levels. The Journal of Arthroplasty 35 (2020) S294-S298. [6] J.M. Kolz, C.C. Wyles, D.W. Van Citters, R.M. Chapman, R.T. Trousdale, D.J. Berry. In Vivo Corrosion of Modular Dual Mobility Implants: A Retrieval Study. The Journal of Arthroplasty 2020; 35 (11): 3326-3329. [7] K.A. Sonn, R.M. Meneghini. Adverse Local Tissue Reaction due to Acetabular Corrosion in Modular Dual-Mobility Constructs. Arthroplasty Today 6 (2020) 976-980. [8] W.C. Witzleb, J. Ziegler, F. Krummenauer, V. Neumeister, K.P. Guenther. Exposure to chromium, cobalt and molybdenum from metal-on-metal total hip replacement and hip resurfacing arthroplasty. Acta Orthopaedica 2006; 77:5, 697-705. [9] I. De Martino, G.K. Triantafyllopoulos, P.K. Sculco, T.P. Sculco. Dual mobility cups in total hip arthroplasty. World J. Orthop 2014; 5(3): 180-187.

All trademarks are property of their respective owners and are registered at least in Switzerland.

This document is not intended for the US market.

Please verify registration status and availability of the devices described in this document with your local Medacta representative.



**Medacta International**  
Strada Regina, 34 - 6874 Castel San Pietro - Switzerland  
Phone +41 91 696 60 60 - Fax +41 91 696 60 66  
Info@medacta.ch - www.medacta.com

**SensiTiN™ DM Converter Leaflet**  
ref: 99.70C.11  
rev. 00  
Last update: September 2022

swiss  
made

