

# ACORN TRASER® Dual Mobility Acetabular Cup

# PRODUCT INFORMATION



## **Product Information**

## ACORNTRASER® Dual Mobility Cup



The ACORN TRASER<sup>®</sup> Cup is one of a kind.

Made entirely of titanium alloy by 3D printing, it combines two innovative technologies developed by Permedica: **TRASER**<sup>®</sup> and **BIOLOY**<sup>®</sup>.

## 14 Implant sizes

The **TRASER®** surface with randomized trabecular structure in contact with the bone ensures excellent primary press-fit anchoring and promotes osseointegration<sup>[1]</sup>.

The **BIOLOY®** TiNbN coating on the inner surface of the cup guarantees an optimal tribology for coupling with the joint insert.

The titanium alloy composition makes the ACORN TRASER<sup>®</sup> cup a hypoallergenic solution

The concept of dual mobility involves the use of a metal shell within which articulates a mobile insert, of a diameter perfectly compatible, where the femoral ball head articulates as well. This system allows the use of large diameter heads, thereby permitting a wide Range Of Movement and increasing joint stability.

First introduced in the '70s by Prof. Bousquet, this type of implant has demonstrated in clinical use high joint stability even in the most critical cases.

The cup has an hemispherical geometry with polar deflection and circumferential radial grooves to guarantee optimal press-fit in the equatorial region.



The articular inserts available for  $\emptyset$  22mm and 28mm ball heads are designed to perfectly match the inner socket of each single size of the cup, thus ensuring maximum joint stability.

They are manufactured with the latest generation Ultra High Molecular Weight PE (GUR1020) without Calcium Stearate, also in *VITAL-E*<sup>®</sup> and *VITAL-XE*<sup>®</sup> option enriched with Vitamin E antioxidant.

[1] Ragone V, Canciani E, Arosio M, Olimpo M, Piras LA, von Degerfeld MM, Augusti D, D'Ambrosi R, Dellavia C. In vivo osseointegration of a randomized trabecular titanium structure obtained by an additive manufacturing technique; Journal of Materials Science: Materials in Medicine. DOI 10.1007/s10856-019-6357-0

#### **Order Information**

### ACORN TRASER® Dual Mobility Cup

Class III



reference
39838
39840
39842
39844
39846
39848
39850
39852
39854
39856
39858
39860
39862
39864

### **ACORN Dual Mobility Inserts**

Class III

			UHMWPE	VITAL-E®	VITAL-XE®			UHMWPE	VITAL-E®	VITAL-XE®
	Ø socket 22 mm	size Ø 38mm 40mm 42mm 44mm 46mm 48mm 50mm 52mm 52mm	reference 38838 38840 38842 38844 38946* 38948* 38950* 38952* 38952*	reference 38838E 38840E 38842E 38844E 38946E* 38948E* 38950E* 38952E* 38954E*	reference 38838XE* 38840XE* 38842XE* 38844XE* 38946XE* 38946XE* 38950XE* 38950XE* 38952XE*	Ø socket	size Ø 46mm 48mm 50mm 52mm 54mm 56mm 58mm 60mm 62mm	reference 38846 38848 38850 38852 38854 38856 38856 38858 38860 38862	reference 38846E 38848E 38850E 38852E 38854E 38856E 38856E 38858E 38860E 38860E	reference 38846XE* 38848XE* 38850XE* 38852XE* 38854XE* 38856XE* 38858XE* 38860XE* 38860XE*
0		56mm 58mm	38956* 38958*	38956E* 38958E*	38956XE* 38958XE*		64mm	38864	38864E	38864XE*
		58mm 60mm	38958*	38958E* 38960E*	38958XE* 38960XE*		I	I		
	L	62mm	38962*	38962E*	38962XE*					
and the second se		64mm	38964*	38964E*	38964XE*					

## Information

#### **INTENDED PURPOSE:**

ACORN TRASER® dual mobility cup is an acetabular component utilized in Total Hip Replacement procedures in combination with it's dedicate articular liner, a femoral ball-head and a femoral stem. It is indicated in cases of coxarthrosis, both for primary and/or revisions. Due to it's characteristics, the dual mobility cup is pasrticularly indicated in those cases with low muscle tone where, by using traditional cups, dislocation phenomena could occur. Anchoring of the device is achieved by primary press-fit insertion.

#### MATERIALS:

CUP: Titanium Aluminium Vanadium Ti6Al4V Alloy - ISO5832/3 - ASTM F 2924

*INSERT:* Ultra High Molecular Weight Polyethylene without Calcium Stearate - ISO5834/1/2. Also available in *VITAL-E®* version, UHMWPE added with Vitamin-E (Alpha Tocopherol) anti-oxydant and *VITAL-XE®* (cross-linked)

#### SURFACE FINISHING:

**TRASER**<sup>®</sup>: Randomized trabecular metal structure with average pores SIZE of 650µm.

**BIOLOY®:** TiNbN coating

#### STERILIZATION:

Method: Ethylene Oxyde (EtO) or irradiation (Beta/Gamma rays - minimum dose 25 kGy) or Vaporized Hydrogen Peroxide (VH2O2).

Validity: 5 years (Beta sterilized products) - 10 years (EtO/Gamma/VH2O2 sterilized products).

#### **CLASSIFICATION:**

**Class III** as reported in Directive 2005/50/CE (and related D.lgs 26 april 2007 n.65) concerning re-classification of Hip, Knee and Shoulder joint prostheses which modifies classification criteria of Annex IX of Directive 93/42/CEE and next integrations and amendements. Titanium Aluminium Vanadium Ti6Al4V Alloy - ISO5832/3



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