



SIGNATURE

UNCEMENTED HIP SYSTEM

BILOX<sup>®</sup> *delta*  
ceramic head

PRECISION  
TO MEET  
AN ACHIEVER'S  
DEMANDS

CE 2195

Components  
Made in UK

**bioradmedisys**<sup>™</sup>  
science for people

# SIGNATURE HIP REPLACEMENT SYSTEM

## ACETABULAR CUP

**Material Specs:** Forged Ti6Al4V ELI (Extra Low Interstitials)

- True hemispherical design with a greater area of rim interface contact offering better stability<sup>7</sup>
- Asymmetric sintered Titanium 700 +/- 50 microns coating of high porosity, as per ASTM standards
- Cluster hole design for better screw fixation & stability
- Internal surface highly polished to avoid friction with Liner
- Sizes (mm): 44-60 (2mm increment)



## LINER

**Material Specs:** Highly Cross Linked Polyethylene (XLPE), minimizes wear & increases durability

- Option of Neutral & 20° Hooded liner
- Star Shaped profile to avoid rotational movement of the liner with the acetabular cup
- Sizes (mm): 44, 46, 48(28/32), 50, 52, 54, 56, 58, 60



CUP SIZES	44	46	48	50	52	54	56	58	60
LINER	28	28/32			32/36				

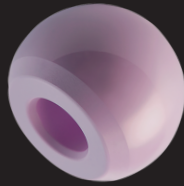
Sizes in mm

## BIOLOX® delta HEAD

**Material Specs:** Fourth Generation Advanced Ceramic

BIOLOX® delta, the only ceramic with 11 years of successful clinical experience and with more than 5 million implanted components.

- Lowest wear rate
- Outstanding biocompatibility and excellent stability in vivo
- Diamond-like hardness of the material & Exacting Sphericity
- High resistance to third-body wear
- Sizes (mm) 28, 32, 36
- Neck length options: Small, Medium, Large



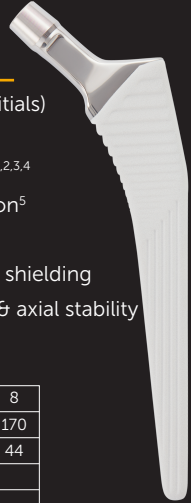
## STEM

**Material Specs:** Forged Ti6Al4V ELI (Extra Low Interstitials)

- Fully HA coated stem with coating thickness 150 +/- 50 microns induces rapid osteointegration<sup>1,2,3,4</sup>
- Optimised neck geometry increases range of motion<sup>5</sup>
- Range of Motion upto 148°
- Double tapered stem design avoids proximal stress shielding
- Vertical and Horizontal grooves provide rotational & axial stability
- 12/14 neck taper

Stem Size	0	1	2	3	4	5	6	7	8
Length	115	130	140	146	150	154	161	166	170
Head Offset	38	39	39	41	41	42	42	43	44
Neck Length	38.5								
Neck Angle	135°								

Stem Length, Head Offset & Neck Length in mm



## FEMORAL METAL HEAD

**Material Specs:** CoCrMo Alloy

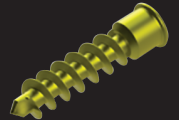
- Skirtless design maximises range of motion
- Sizes (mm): 28, 32, 36 (-4, 0, +4)



## BONE SCREW

**Material Specs:** Forged Ti6Al4V ELI (Extra Low Interstitials)

- Self-Tapping design
- Sizes: 20, 25, 30, 35, 40, 45 & 50 (mm)  
Diameter: 6.5 Ø



Forged Titanium (Ti6Al4V ELI) & Cobalt Chrome (CoCr) is imported from Orchid.



The asymmetric porous Titanium plasma spray coating for the acetabular cup is achieved at the world-class facilities of DoT GmbH (Germany)



The highly cross-linked poly (XLPE) imported from Orthoplastics, (UK) is compliant with ISO5834 & ASTM F 648 international standards.



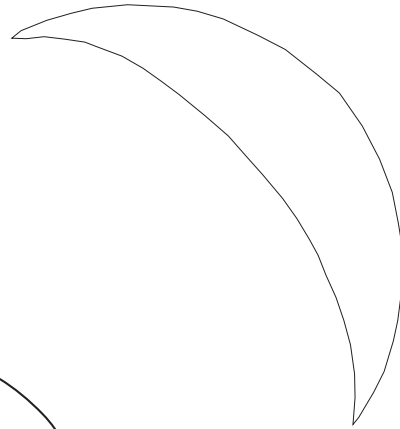
The HA coating for the stem is achieved at the world-class facilities of Plasma Biotol the leading company in medical coating technology.



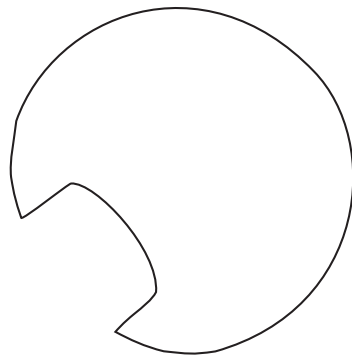
We undertake Germany based Endolab's specialised product validation and in-vitro simulation testing to ensure perfection to the smallest details.

\*The logos belong to the companies of Orchid, Orthoplastics, Endolab, Dot and Plasma

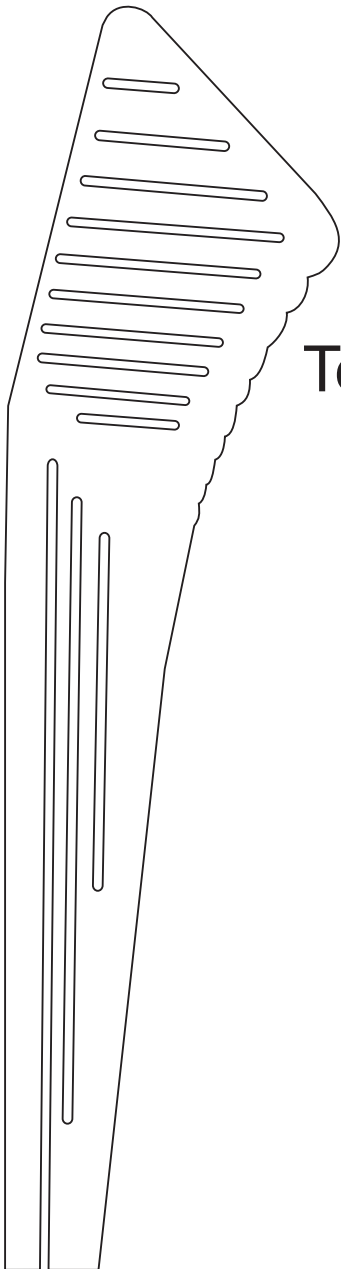
1. International Orthopaedics (SICOT) (2011) 35:189–194 Twenty-year results of the cementless Corail stem Jean-Pierre Vidalain
2. Hardy D, Frayssinet P. Hydroxyapatite-coated femoral arthroplasties: A long term study through 29 Corail prostheses explanted during a ten-year survey. Surgical Technology International X. 2003
3. Six-year Results Of Hydroxyapatite-coated Total Hip Replacement Rudolph G. T. Geesink, Nicol1te H. M. Hoefnagels From the University Hospital, Maastricht, The Netherlands
4. Vidalain JP. CorailStem Long-Term Results based on the 15-Years ARTRO Group Experience. Fifteen Years of Clinical Experience with Hydroxyapatite Coatings in Joint Arthroplasty, Ed. Springer, 217-224; 2004.
5. Sychterz CJ, Claus AM, Engh CA. What we have learned about long-term cementless fixation from autopsy retrievals. Clin Orthop Relat Res. 2002 Dec; (405):79-91
6. Key engineering materials volume 529-30 (2013) pp 279-84 Comparison of polyethylene wear between highly cross linked (XLPE) and annealed UHMWPE against ceramic heads in total hip arthroplasty.
7. Cups of a true hemispherical design are more stable than low-profile designs (J. Arthroplasty, Vol. 7, No. 3, 1992)



**Texture**



**Gloss/Standard**



**Texture**