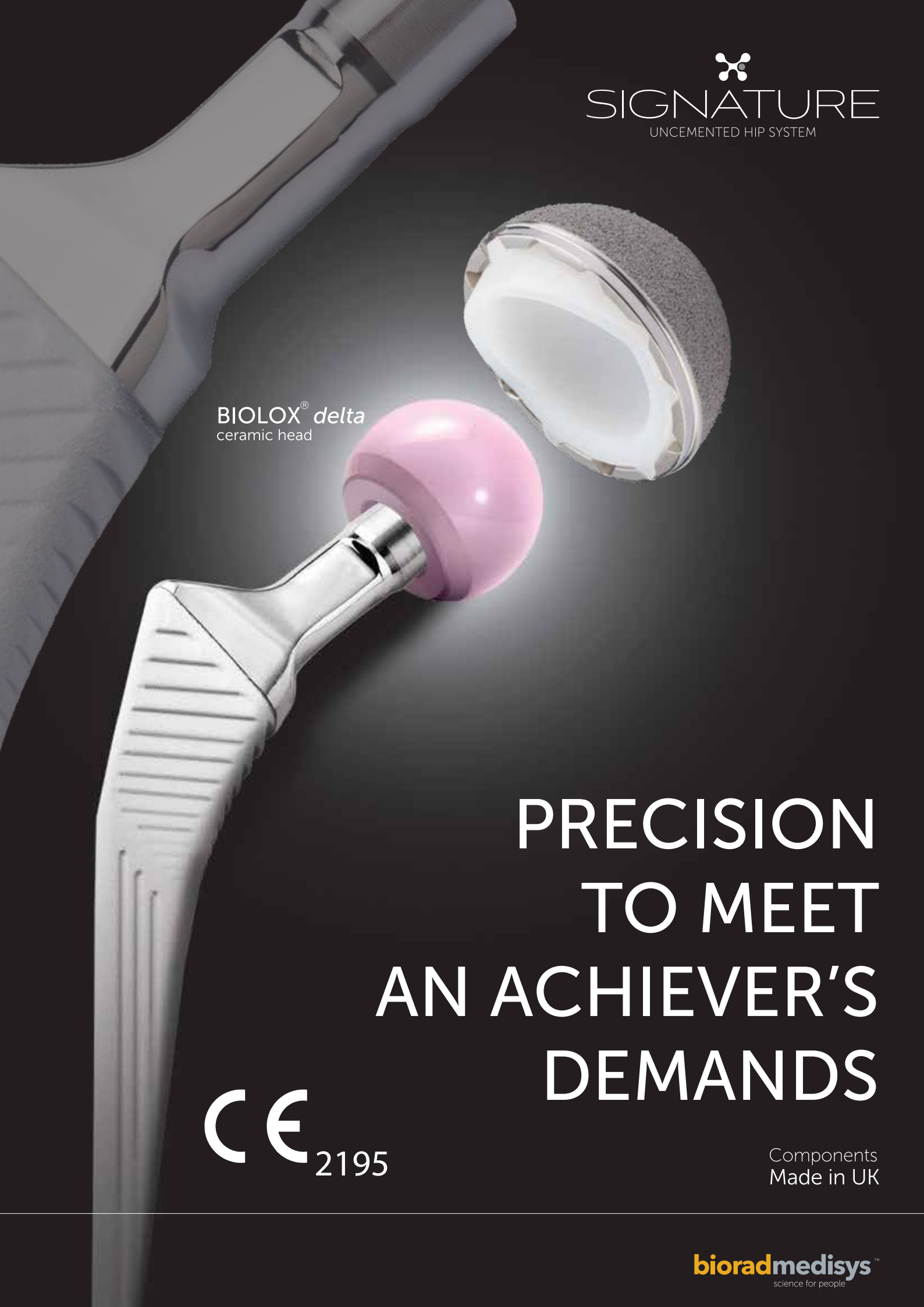
SIGNATURE
UNCEMENTED HIP SYSTEM



PRECISION TO MEET AN ACHIEVER'S DEMANDS

CE 2195

Components
Made in UK

bioradmedisys™
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[7]
- 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, 46, 48, 50, 52, 54, 56, 58, 60

LINER

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

- 20° hooded liner prevents posterior dislocation
- 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

SIGNATURE 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.

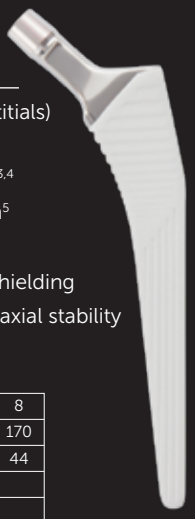
- Lowest wear rate
- Outstanding biocompatibility and excellent stability in vivo
- Diamond-like hardness of the material & Exacting Sphericity
- High resistance to third-body wear
- Sizes (mm) 28, 32, 36
- Neck length options: Small (-4), Medium (0), Large(+4)

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

STEM



Material Specs: Forged Ti6Al4V ELI (Extra Low Interstitials)

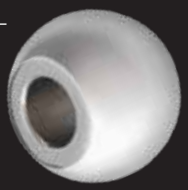
- Fully HA coated stem with coating thickness 150 +/- 50 microns induces rapid osteointegration[1,2,3,4]
- Optimised neck geometry increases range of motion[5]
- Range of Motion upto 148°
- Double tapered stem design avoids proximal stress shielding
- Vertical and Horizontal grooves provide rotational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

* Note: Head Offset mentioned is for Sizes (mm): 28, 32, 36 (0)

FEMORAL METAL HEAD



Material Specs: CoCrMo Alloy

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

SIGNATURE BIPOLAR

Material Specs: CoCr with Highly Cross Linked Polyethylene

- Self-centering design
- External surface polished to reduce friction & for better movement
- Internal Head Sizes (mm)
  For OD: 39 – 43 = 22.2 (-2.5,0,+2.5)
  For OD: 45 - 53 = 28 (-4, 0, +4)
  (2mm increments in OD)

Case References for Signature Hip System

CASE 1 — SIGNATURE IN AVN-LT HIP

Patient Name: Shankar Vasant Koli, 32/M
Diagnosis: AVN - Lt Hip
Operative Done: Total Hip Replacement for AVN - Lt Hip
Implant Used: Uncemented stem sz.3, Cup & Liner sz.56, Metal Head sz.36 (O) with 20mm Bone Screw

PRE-OP

POST-OP

CASE 2 — SIGNATURE IN BILATERAL PROTRUSIO ACETABULI

Patient Name: Gurubasu Pujari, 40/M
Diagnosis: Bilateral Protusio Acetabuli
Operative Done: Bilateral Total Hip Replacement
Implant Used: Each side Acetabular cup 44mm, Liner - 44mm, Metal Head 28(-4), Stem sz.2 with 1 bone screw.

PRE-OP

POST-OP

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, Nicole1te 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)

bioradmedisys™ science for people

bioradmedisys.com
Biorad Medisys Pvt. Ltd.

Corporate Office
Survey No.: 48/3 & 48/7, Pashan Sus Rd, Sus Village, Taluka Mulshi, Pune - 411021. MH, India.

Follow us on