



aTOS

cup system

RingLoc®



"One for all, All for one"

Titanium Alloy

Shell components are manufactured from titanium alloy, taking advantage of its high strength and excellent biocompatibility.

Unparalleled Liner Locking Mechanism

A titanium metal ring located on the shell's periphery securely locks into a groove of the polyethylene liner when both components are engaged, providing maximum push-out and lever-out strength.

Three Spikes

Three spikes ensure initial stability. The spikes are free of porous titanium coating to ensure a proper seating of the components and to avoid stress-shielding.

Plasmapatita® Porous Coating

The combination of plasma-sprayed porous coatings both of titanium and HA provides an exceptional primary stability (scratch fit) and an outstanding secondary stability due to bone in-growth.

Full Hemisphere

Provides a uniform transfer of forces to the bone throughout the acetabular vault.

Titanium Plugs

The cup is delivered with pre-mounted threaded titanium plugs. These plugs, easy to insert and remove, completely seal the outer surface of the cup to trap potential backside wear particles and to provide a uniform surface promoting bone ingrowth.

BATCUP®

Dome Screwholes

For 6,5mm low profile self-tapping cancellous screws. The screwholes are presented with a removable sealing plug which avoids particle migration.

SPIDERCUP®

Equatorial Press-fit

The equatorial reinforcement improves the press fit, maximising the primary fixation of the cup. Biological fixation is achieved through the plasma spray titanium and HA coating.

RIMCUP®

Shells

RIMCUP® For use mainly in primary surgeries. Primary fixation through equatorial press fit with additional screw fixation if necessary. The cup is delivered with pre-mounted titanium plugs.

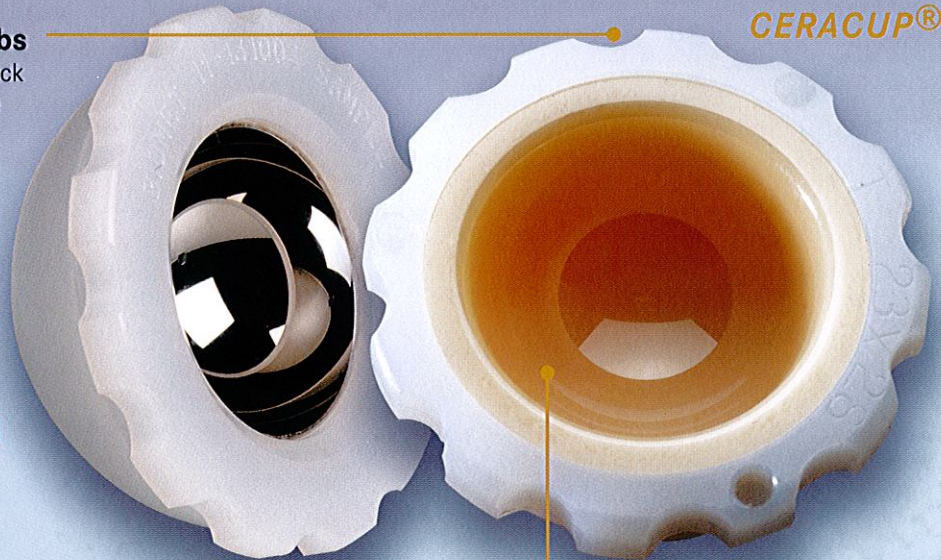
SPIDERCUP® This shell is designed for use as a primary implant. It has 4 holes for surgeries where screw fixation is essential or advisable.

BATCUP® This shell is designed for use as a revision implant or if there is a serious bone defect in the acetabular cavity. The Batcup is fixed to the acetabulum with plates and screws. This system provides maximum fixation and perfect stability. It has 6 holes for the screw insertion and 6 slots for the plates.

Locking Groove Anti-Rotation Tabs

Six to eight tabs on the shell's rim interlock with the notches on the liner to provide maximum stability.

CERACUP®



M2A

Ceramic Insert

The CERACUP® liner has a ceramic insert made from BioloX® Forte Alumina of 28mm inner diameter. The union between UHMWPE and the ceramic insert is made using a conical press-fit. The liner has a standard profile and an additional off-set of 2,5mm.

LOW PROFILE



HI-WALL

10°

Inner Diameter

Liners are available in 22mm, 28mm and 32mm inner diameters.

Liners

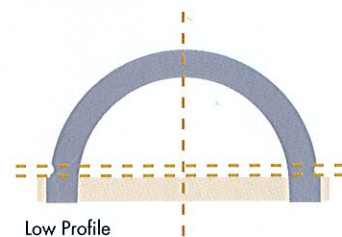
Liners are available from IQL in 3 configurations to ensure joint stability and safe variation of cup positioning.

CERACUP®. The CERAMIC/CERAMIC wear couple obtained by using CERACUP® low profile liner in combination with an alumina femoral head, provides high wear resistance which is specially indicated for young and active patients.

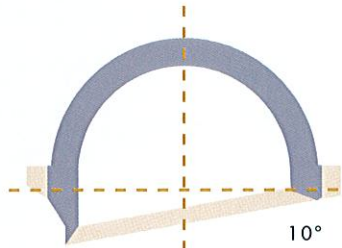
LOW PROFILE. The Low Profile liners are designed for patients with stable joints at trial reduction who require minimal additional stability.

10 DEGREE. The 10 degree liners correct the placement of acetabular components which are placed too vertically.

The ATOS cups are fully compatible with all the Biomet Europe Ringloc® liners (10°, Low Profile, Ceracup, M2A and Hi-wall).



Low Profile



10°

ATOS, the RingLoc® Modular Cup System is the most satisfactory solution to the problems that arise in acetabular reconstruction surgery

The RingLoc® modular system makes it easy for the surgeon to decide intra-operatively which bearing material: ceramic, metal or ArCom™ polyethylene, and which liner geometry: low profile, high-wall or anti-luxation are the most appropriate on a case by case basis. Furthermore, this locking mechanism minimises the risk of shell/liner dislocation and eliminates the micro-movements that potentially generate backside wear.

High Stability

All the ATOS shells (Rimcup®, Spidercup®, Batcup®) feature the Ringloc® locking mechanism. This mechanism securely locks the polyethylene liner into the shell using a titanium ring and proves to be resisting to push-out and lever-out forces well over 4400 KPa (650 PSI). Each shell is designed with between six and eight semicircular tabs on the rim that interlock with the liner, eliminating rotation and inhibiting micro-motion.

Maximum Liner Congruency

The RingLoc® component design provides the highest percentage of polyethylene supported by metal available in a modular acetabular component (see congruity graphic). This shell-to-liner congruency coupled with unparalleled stability significantly reduces the potential of generating back-side wear.

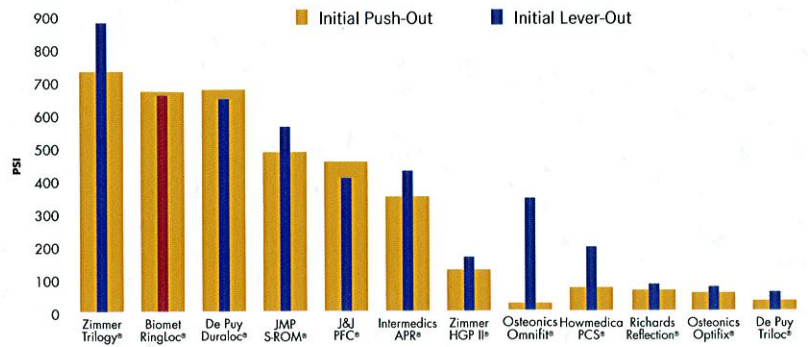
Compression Molded Manufacturing Process

The liners are made out of ArCom™ polyethylene. ArCom™ is the result of an improved polyethylene manufacturing process designed to deliver consistent physical properties and improved wear resistance. This compression molded manufacturing process offers optimal consolidation of the polyethylene resin, higher ultimate tensile strength and improved resistance to wear and discoloration. ArCom™ components are packaged under Argon gas inert atmosphere which significantly reduces oxidation and improves wear resistance.

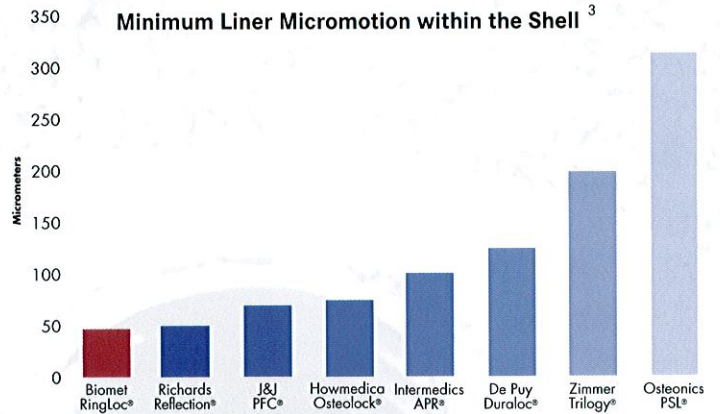




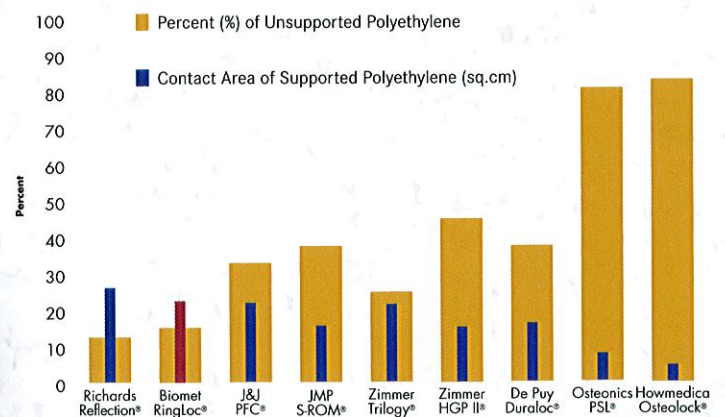
Push-Out / Lever-Out Strength^{1,2}



Minimum Liner Micromotion within the Shell³



Congruity^{4,5}



1. Data derived from Trondonsky S, Postak PD, Froimson AI, Greenwald AS: Performance Characteristics of Two-Piece Acetabular Cups, Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons, 59th Annual Meeting, San Francisco, CA 1992.

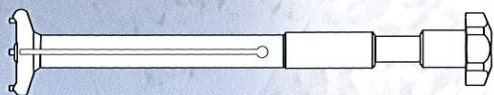
2. Data derived from Postak PD, Trondonsky S, Froimson AI, Greenwald AS: Performance Characteristics of Two-Piece Acetabular Cups Series II, Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons, 62nd Annual Meeting, Atlanta, GA 1996.

3. Data derived from Fehring TK, Smith SI, Braun ER, Mobley CE, Wang PL, Griffin WL: Motion at the Modular Acetabular Interface: A Competitive Study, Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons, 62nd Annual Meeting, Atlanta, GA, 1996.

4. Data derived from Rosner BI, Postak PD, Greenwald AS: Cup/Liner Conformity of Modular Acetabular Designs, Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons, 61st Annual Meeting, Orlando, Florida, 1995.

5. Data derived from Rosner BI, Postak PD, Greenwald AS: Cup/Liner Incongruity of Two Piece Acetabular Designs: Implications in the Generations of Polyethylene Debris, Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons, 60th Annual Meeting, New Orleans, LA, 1994



GENERAL INSTRUMENTATION

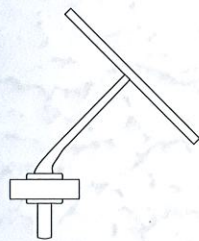


2002-28 Cup Positioner

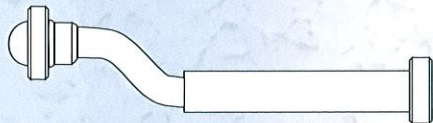


2050-02 Straight Impactor-Extractor

-  2050-22 22 mm Head for Impactor
-  2050-28 28 mm Head for Impactor
-  2050-32 32 mm Head for Impactor



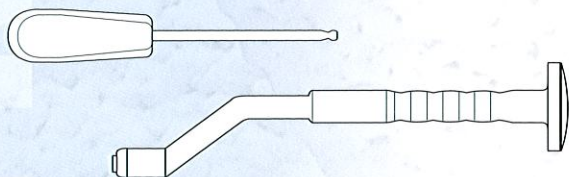
2050-03 Positioning Guide



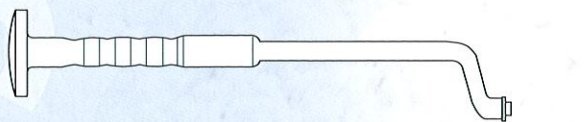
2050-16 Cranked Liner Impactor 28 mm



2011-22 Hudson Adaptor



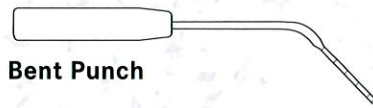
2050-04 Cranked Shell Impactor
(Includes screwdriver)



2050-08 Cranked Impactor Posterior Approach

2050-82 General Instrumentation Cup Case
(Empty)

SCREW INSTRUMENTATION



2059-03 Bent Punch



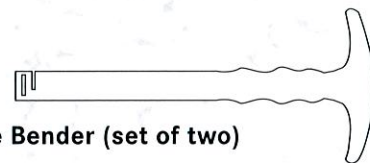
2059-04 3,2mm Drill Guide



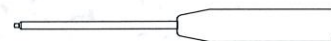
2059-06 Flexible Depth Gauge



2059-12 3,5 mm Universal Joint Screwdriver



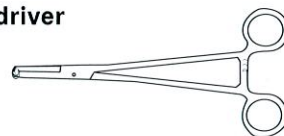
2061-06 Plate Bender (set of two)



2061-14 Plug Inserter



Hex Screwdriver
2903-80 2,5 mm
2903-70 3,5 mm



2059-14 Screw Holder Clamp



2059-16 Flexible Drill Holder

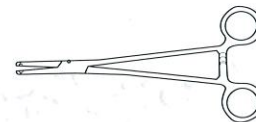


2059-18 3,2mm x 45 Drill



2059-20 3,2mm x 60 Drill

2061-04 Plate Holder Clamp



2050-90 Screw Instrumentation Case
(Empty)

**RIMCUP®
SPIDERCUP®**



Trial Shell	Ø Inner	Size
2047-44	44	21
2047-46	46	22
2047-48	48	23
2047-50	50	23
2047-52	52	23
2047-54	54	24
2047-56	56	24
2047-58	58	25
2047-60	60	25
2047-62	62	26
2047-64	64	26

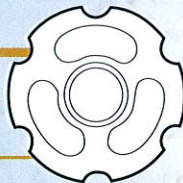
BATCUP®



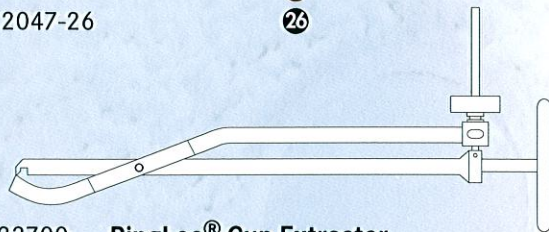
Trial Shell	Ø Inner	Size
2069-52	52	21
2069-56	56	22
2069-60	60	23
2069-64	64	24
2069-68	68	24

Impactation Plate

Size



2047-21	21
2047-22	22
2047-23	23
2047-24	24
2047-25	25
2047-26	26



423700 RingLoc® Cup Extractor

2047-86 Trial Case (Empty)

2047-80 X-Ray Templates for RIMCUP® and SPIDERCUP®

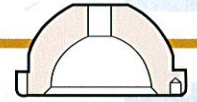
2069-80 X-Ray Templates for BATCUP®

10°



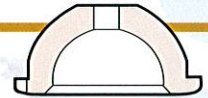
Trial Liner	Ø Inner	Size
2074-21	28	21
2074-22	28	22
2074-23	28	23
2074-24	28	24
2074-25	28	25
2074-26	28	26

CERACUP®

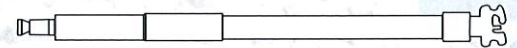


Trial Liner	Ø Inner	Size
2075-23C	28	23
2075-24C	28	24
2075-25C	28	25
2075-26C	28	26

LOW PROFILE

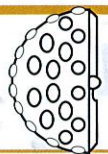


Trial Shell	Ø Inner	Size
2073-21	28	21
2073-22	28	22
2073-23	28	23
2073-24	28	24
2073-25	28	25
2073-26	28	26



2014-77 Universal Reamer Handle

Reamer Head Spare (Universal Handle)



2014-44	44	2014-58	58
2014-46	46	2014-60	60
2014-48	48	2014-62	62
2014-50	50	2014-64	64
2014-52	52	2014-66	66
2014-54	54	2014-68	68
2014-56	56		

2050-84 Acetabular Reamers Case (Empty)

SHELLS

RIMCUP®		
Shell	Ø	Size
1045-44	44	21
1045-46	46	22
1045-48	48	23
1045-50	50	23
1045-52	52	23
1045-54	54	24
1045-56	56	24
1045-58	58	25
1045-60	60	25
1045-62	62	26
1045-64	64	26



SPIDERCUP®		
Shell	Ø	Size
1047-44	44	21
1047-46	46	22
1047-48	48	23
1047-50	50	23
1047-52	52	23
1047-54	54	24
1047-56	56	24
1047-58	58	25
1047-60	60	25
1047-62	62	26
1047-64	64	26



BATCUP®		
Shell	Ø	Size
1069-52	52	21
1069-56	56	22
1069-60	60	23
1069-64	64	24
1069-68	68	24



RingLoc Spare	Size
105421	21
105422	22
105423	23
105424	24
105425	25
105426	26



Cancellous Screw	Ø	
1061-12	6,5	12mm
1061-15	6,5	15mm
1061-18	6,5	18mm
1061-21	6,5	21mm
1061-24	6,5	24mm
1061-27	6,5	27mm
1061-30	6,5	30mm
1061-35	6,5	35mm
1061-40	6,5	40mm
1061-45	6,5	45mm



- 1061-06 Sealing PLug (Set of three)
- 1061-07 Sealing Cylinders (Set of three)
- 1061-08 Locking Screw
- 1061-09 One Hole Straight Plate
- 1061-11 Three Holes Straight Plate
- 1061-13 Right L Plate
- 1061-14 Left L Plate
- 1061-16 Bent Plate
- 1061-17 T Plate

LINERS

10°		
Liner	Ø	Size
1074-21	28	21
1074-22	28	22
1074-23	28	23
1074-24	28	24
1074-25	28	25
1074-26	28	26



CERACUP®		
Liner	Ø	Size
1075-23C	28	23
1075-24C	28	24
1075-25C	28	25
1075-26C	28	26



LOW PROFILE

Liner	Ø	Size
1073-21	28	21
1073-22	28	22
1073-23	28	23
1073-24	28	24
1073-25	28	25
1073-26	28	26



OPTIONAL

10°		
Liner	Ø	Size
1076-21	32	21
1076-22	32	22
1076-23	32	23
1076-24	32	24
1076-25	32	25
1076-26	32	26
1077-21	22	21
1077-22	22	22
1077-23	22	23
1077-24	22	24
1077-25	22	25
1077-26	22	26



On request only

1047-20 Apical Plug

