



Comprehensive[®] Reverse
Shoulder System

BIOMET[®]

Comprehensive® Reverse Shoulder System

Simple. Versatile.

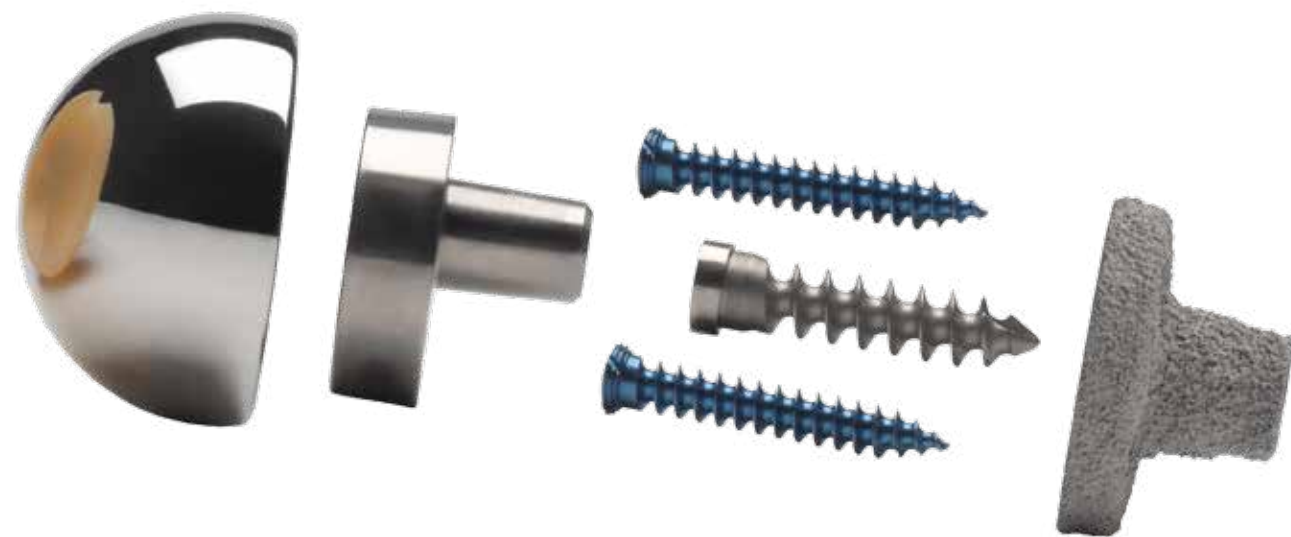
The Comprehensive® Reverse Shoulder System is the next generation reverse shoulder prosthesis, offering unmatched intraoperative flexibility and clinically proven technologies.¹⁻⁵



The Comprehensive® Reverse Shoulder Story

The goal was simple. The Comprehensive® Reverse Shoulder System was designed to provide a complete, seamless system based on the Comprehensive® shoulder platform. Recognizing the limitations of some reverse shoulders, innovation was engineered into each component of the Comprehensive® Reverse Shoulder System.

This unique system minimizes the potential challenges of removing a well-fixed humeral stem by allowing conversion to a reverse shoulder using any of the existing Comprehensive® stems. This includes primary, revision or fracture stems in cemented or uncemented applications.



Biomet's exclusive RingLoc® ArComXL® and E1® technologies have been incorporated into the design of the humeral tray and bearing. This provides a true locking mechanism and also minimizes the potential for wear and oxidative degradation.¹⁻⁸

The glenoid components were designed to eliminate the potential for scapular notching, and at the same time, take advantage of the best glenoid bone available. This was accomplished by combining the baseplate and modular central screw with Biomet's exclusive Versa-Dial® glenosphere.

The Comprehensive® Reverse Shoulder System. Restoring function one patient at a time.

Comprehensive® Reverse Shoulder System

Infinite glenosphere options

The baseplate and modular bi-cortical central screw allow the utilization of the best bone available within the glenoid. With the baseplate in position, the Versa-Dial® glenosphere allows the ability to select both the amount and direction of offset. In most cases, the chosen amount of offset will be positioned inferiorly to help reduce or eliminate scapular notching, although the offset may be positioned in any direction.



Screw Options

- Modular 6.5 mm central screw allows for compression and increased fixation within the glenoid vault
- Central screws are available in lengths of 20–50 mm, in 5 mm increments
- 4.75 mm fixed angle locking and non-locking screws are available
- Non-locking peripheral screws provide for 12 degrees of flexibility
- All peripheral screws are available in lengths of 15–45 mm, in 5 mm increments



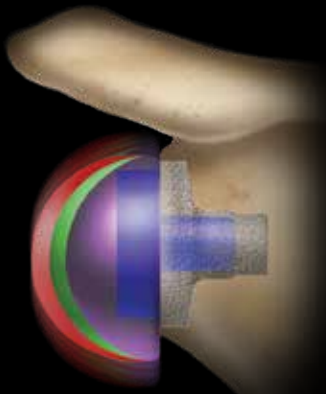
Standard

Mini



Glenoid Baseplate

- Hydroxyapatite (HA) over PPS® Porous Plasma Spray provides biologic fixation
- Modular design allows for proper orientation of peripheral screw holes prior to impaction
- Low-profile 25 mm (Mini) and 28 mm (Standard) diameters
- Four identical peripheral locking screw holes
- Central boss provides for enhanced fixation and resistance to shear forces



Glenospheres

Versa-Dial®

- Infinite offset options between 0.5 and 4.5 mm and can be positioned in any direction*
- Medialized or lateralized center of rotation (Standard, +3 mm, +6 mm)
- Available in 36 mm and 41 mm

Comprehensive® Reverse Shoulder System

Unmatched humeral stem options

The Comprehensive® Reverse Shoulder builds on the foundation of the Comprehensive® Shoulder System. It is designed for use as a primary reverse prosthesis when there is grossly deficient rotator cuff, or to convert to a reverse from a well-fixed Comprehensive® primary, revision or fracture stem.

Standard Stem

122 mm length
4-20 mm diameters
with 1 mm increments



Comprehensive® Shoulder Stems

- Utilize the same Comprehensive® platform stems (micro, mini, standard, fracture and revision)
- Can be used as primary reverse or conversion
- Uncemented or cemented use
- PPS® Porous Plasma Spray coating proximally to enhance biologic fixation (MacroBond® coating on fracture stem)
- 45°/135° neck-shaft angle
- 69 stem sizes available



Mini Stem

83 mm length
4-20 mm diameters
with 1 mm increments

Micro Stem

55 mm length
4-20 mm diameters
with 1 mm increments

Revision Stem

194 mm length
4-14 mm diameters
with 2 mm increments

Fracture Stem

122 mm length
4-14 mm diameters
with 2 mm increments

Humeral Trays

- Exclusive RingLoc® technology offers a true locking mechanism between the humeral tray and bearing
- RingLoc® technology allows for removal and exchange of the bearing without disruption of the humeral tray or stem
- Available in standard, +5 mm and +10 mm
- Six suture slots provide for additional attachment points in complex fractures or revisions
- Compatible with all humeral bearings and glenospheres



Humeral Bearings

- E1® and ArComXL® polyethylene bearing options
- Available in standard, +3 mm and +3 mm retentive
- Includes 12° angle, making the neck-shaft angle 33°/147°
- Anti-rotation tabs

References

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4. Rosner, B.I. *et al.* Cup/Liner Incongruity of Two Piece Acetabular Designs: Implications in the Generation of Polyethylene Debris. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 60th Annual Meeting. New Orleans, LA. 1994.
5. Trodonsky, S. *et al.* Performance Characteristics of Two-piece Acetabular Cups. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 59th Annual Meeting. San Francisco, CA. 1992.
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7. Teramura *et al.* Reduced biological response to wear particles from UHMWPE containing vitamin E. 55th Annual Meeting of the Orthopaedic Research Society; Poster No. 2377.
8. Bladen, CL. *et al.* The Anti-Inflammatory Properties of Vitamin E Significantly Reduce TNF- α Release from Primary Human Monocytes after Stimulation with UHMWPE Wear Particles. International UHMWPE Meeting, Philadelphia, PA. 2011.

*Offset range is limited to 1.5 to 3.5 mm for 36 mm standard glenosphere.

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