

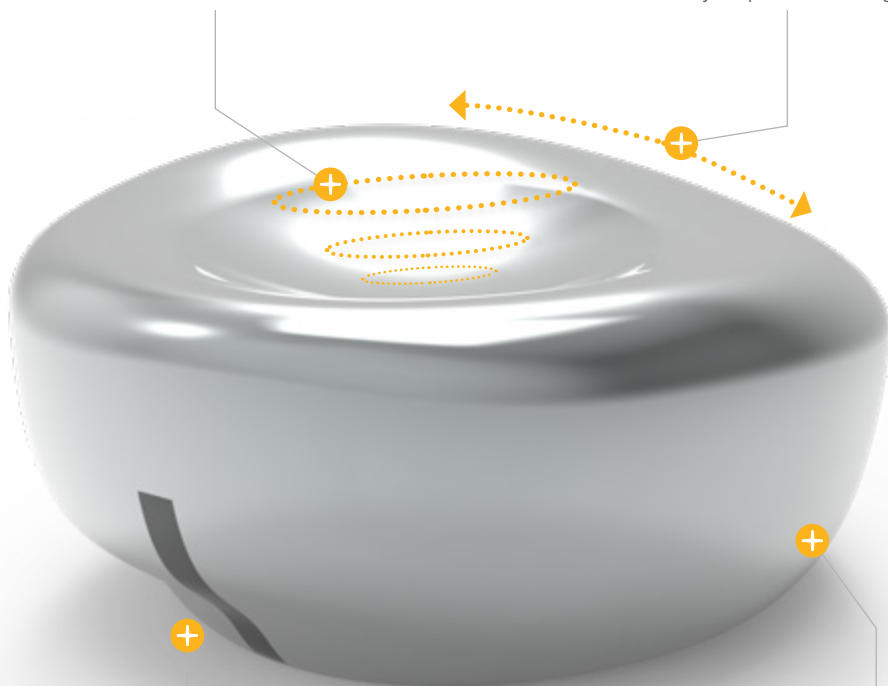


Anatomic Radial Head Solutions 2

## Next Generation Product Comparison A Head-to-Head Analysis

The dish depth increases with head diameter, which is **designed to help improve radiocapitellar wear characteristics** over nonanatomic heads and the first generation Acumed Anatomic Radial Head<sup>1,2</sup>

The implant's medial surface is **contoured to better replicate the lateral trochlear ridge facet**, which may help avoid cartilage erosion<sup>2</sup>



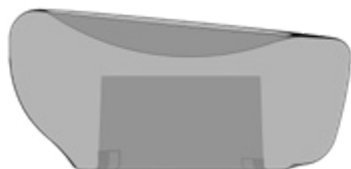
The radial head is **available in six sizes** ranging from 18 to 28 mm, in 2 mm increments

Contouring of the medial side of the head has been further refined to **track against the radial notch of the ulna**<sup>2</sup>



# The Anatomically Accurate Radial Head Prosthesis, Refined

The first and only prosthesis intended to replicate the patient's native radial head has been refined with additional evidence-based anatomic features, as well as a wider implant range. Originally released in 2006, the prosthesis has been used in thousands of radial head procedures over multiple system generations and product line improvements.



ARH Head (Generation 1)



ARH Solutions 2 Head (new)

## Biomechanically Superior Design

Several biomechanical studies have discussed the potential long-term value of an anatomically shaped radial head prosthesis.

The geometry of radial head implants strongly influences their contact characteristics. In a direct radius-to-capitellum axial loading experiment, an anatomically designed radial head prosthesis had lower and more evenly distributed contact pressures than the nonanatomic implants that were tested.<sup>1</sup>

The [ARH Solutions 2] head better mimics native radial heads in terms of radiocapitellar contact and mean pressures when compared to nonanatomic heads. Compared to nonanatomic heads, the [ARH Solutions 2] heads better match native radial heads regarding contact with the lateral trochlear ridge. They are also less likely to yield contact pressures that can be harmful to cartilage as compared to symmetrical circular prostheses.<sup>2</sup>

## References

1. Sahu D, Holmes DM, Fitzsimmons JS, et al. Influence of radial head prosthesis design on radiocapitellar joint contact mechanics. *J Shoulder Elbow Surg.* 2014;23(4):456-462.
2. Bachman DR, Thaveepunsan S, Park S, Fitzsimmons JS, An KN, O'Driscoll SW. The effect of prosthetic radial head geometry on the distribution and magnitude of radiocapitellar joint contact pressures. *J Hand Surg Am.* 2015;40(2):281-288.



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