# -- acumed

# Anatomic Radial Head Solutions 2

Treatment Options for Simple to Complex Fractures

# **Product Overview**





# Anatomic Radial Head Solutions

#### **Treatment Options for Simple to Complex Fractures**

Acumed offers comprehensive solutions for a variety of elbow fractures, including cannulated screws, plating, and arthroplasty with an anatomic implant. Acumed created the first anatomically shaped radial head on the market and has continued to evolve that system, replacing broaches with reamers, adding long stems, and enhancing the instrumentation.

The Acutrak  $2^{\circ}$  Headless Compression Screw (Mini and Micro sizes) and the Radial Head Plating System also add to the surgeon's toolkit for elbow fixation.





# Acutrak 2<sup>®</sup> Headless Compression Screw

Acutrak 2 screws are designed for the fixation of small bones and fracture fragments, in place of a headed screw or an equivalent-size headless screw.



#### Mini and Micro Sizes

Acutrak 2 Mini has a 3.5 mm diameter tip and a 3.6 mm tail

Acutrak 2 Micro has a 2.5 mm tip and a 2.8 mm tail

#### **Headless Screw**

Headless screw design is intended to minimize soft tissue irritation

#### **Patented Thread Pitch**

Fully threaded, continuously variable thread pitch allows each thread along the entire length of the screw to aid in the reduction and compression of the fracture

#### **Designed to Ease Insertion**

Self-cutting and self-tapping screw is designed to facilitate insertion into hard bone

#### **Expanded Surgical Options**

Acutrak 2 Mini and Micro Instruments may be included in the base of each radial head prosthesis tray to provide more surgical options. Acutrak 2 screws are available for individual order sterile or nonsterile packaged

# Radial Head Plating System

The system offers a straightforward solution when the radial head is salvageable. Two lengths and two head curvatures provide options for varying patient anatomy and fracture patterns. Radial head plates may be included in the base of each radial head prosthesis tray to provide more surgical options.



#### Strategic Screw Angles

Converging and diverging locking screw angles are engineered to provide support and help capture fracture fragments

#### **Precontoured Plates**

Anatomically precontoured plates are designed for the fixation of radial head fractures



# Anatomic Radial Head Solutions 2

Anatomic Radial Head Solutions 2 is more comprehensive than ever with the addition of upgraded instrumentation, more standard and long stem sizes, and an 18 mm head option, increasing the total head and stem combinations to 924.

#### **Anatomic Radial Head Prosthesis**

The only anatomically shaped radial head implant is designed to mimic the radiocapitellar joint contact of a native radial head, which may help avoid cartilage erosion<sup>1, 2</sup>

**4**......

#### Complete Range of Long Stems With lengths from 50–65 mm and diameters

With lengths from 50–65 mm and diameters from 6–12 mm, in 1 mm increments, long stems are included in the system for distal fractures and revision following failed radial head arthroplasty

# **Enhanced System Trays**

In a continued effort to provide the most comprehensive radial head fracture solution on the market, Anatomic Radial Head Solutions 2 offers our Anatomic Radial Head prosthesis, Radial Head Plating System, and Acutrak 2 System in one tray.

Features include:

- Rigid container system compatibility
- Full tray modularity, allowing for three packaging options for size- and weight-restricted markets
- Updated caddies and instrumentation, including K-wire measuring gauges for enhanced ease of use





#### **Canal Reamers\***

Reamers replaced broaches for canal preparation. Reamers may allow for a larger stem diameter than broaches and may decrease risk of fracture compared to broaches<sup>3</sup>

#### **Innovative Instrumentation**

A radiolucent targeting guide is included to assist with threading the locking drill guide into the proximal locking holes

#### **Radius Retractor Instrument**

The radius retractor is intended to facilitate reaming, trialing, and insertion of the anatomic radial head

\*The original Anatomic Radial Head System with broaches is still available upon request.



A radial head fracture has been fixed with Acutrak 2<sup>®</sup> Mini headless compression screws, designed to minimize soft tissue irritation. Screws in the Radial Head Plating System are designed to sit flush with the plate for minimized hardware prominence.



In conjunction with our Elbow Plating System, the Anatomic Radial Head Solutions 2 system offers long stems designed to accommodate some of the most complex injuries to the elbow. Contouring of the medial side of the head has been further defined to track against the radial notch of the ulna. The implant's medial surface has also been contoured to better replicate the lateral trochlear ridge facet, which may help avoid cartilage erosion.<sup>3</sup>

#### Acutrak 2<sup>®</sup> Mini or Micro



**Fracture Type** Salvageable Radial Head Fracture<sup>\*</sup> Exposure and Reduction



Guide Wire Insertion Determine Screw Length



\*For reference only. For full surgical instructions, see the current Acutrak 2 Supplemetal Use Guide–Hand and Wrist.

#### Radial Head Plate



Ther reference only. For full surgical instructions, see the current Radial Head Plating System Surgical Technique.



#### Standard Stem



**Fracture Type** Nonsalvageable Radial Head Fracture<sup>‡</sup>



#### Long Stem



current Anatomic Radial Head Solutions 2 Surgical Technique.

# **Determine Collar Determine Head Trial Implant** Diameter Height Insertion Implant Assembly **Implant Insertion** Select Trial Implants and **Determine Head Trial Implant** Implant Assembly Assemble Diameter Insertion **Implant Insertion**

	Product i Product N Portfolio	Product in Portfolio	Acumed	DePuy Synthes	Stryker	Smith & Nephew
_		Superior Clavicle Plates	>	$\bigcirc$	$\bigcirc$	$\bigcirc$
		Anterior Clavicle Plates	>			
	eInqa	Hook Plates	×	>	$\bigcirc$	×
	cJe/Sc	Scapula Border Plates	>	∢	×	×
Jder	Clavi	Glenoid Plates	>	$(\mathbf{X})$	∢	×
noyS		Acromion Plates	>	$(\mathbf{X})$	∢	∢
		Clavicle Screws/Pins	>	$(\mathbf{X})$	∢	∢
	SI	Proximal Humeral Nails	>			
	ກມອານາງ	Proximal Humeral Plates	>	>	>	>
	H	Midshaft Plates	×	<b>&gt;</b>		
	รณส	90/90 Plates	S		$\bigcirc$	
	əmuH l	Parallel Plates	>	>		
	Dista	External Fixation	×	>	×	
	Enla	Olecranon Plates	>	>	$\bigcirc$	
wodl	J lemix	Coronoid Plates	>	∢	×	×
I	Prox	Proximal Ulna Nails	٠		×	∢
	pe	Radial Head Plates	>	$\bigcirc$		×
	əH lsib	Radial Head Replacement, Short Stem	>	∢	×	∢
	еЯ	Radial Head Replacement, Long Stem	>	∢	×	$(\mathbf{X})$
		Ulna Plates	>	$\bigcirc$	$\bigcirc$	$\bigcirc$
	rearm	Anatomic Midshaft Volar Radius Plates	>	$(\mathbf{X})$	$\bigcirc$	×

∢	$\bigcirc$	$\bigcirc$	$\bigcirc$	×		×	×	$\mathbf{x}$	$\mathbf{x}$	∢	∢	$\bigcirc$	∢	>	>	×	∢	∢	$(\mathbf{X})$			$\bigcirc$
×	∢	×	∢	×				∢	∢	∢	×								$\mathbf{X}$	$\bigcirc$		
$\mathbf{X}$	∢	∢	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\overline{\mathbf{X}}$	∢	$\overline{\mathbf{X}}$	∢	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$(\mathbf{X})$	$\bigcirc$	$\bigcirc$	∢	$\bigcirc$	$\bigcirc$	$\bigcirc$
>	>	>	>	>	>	>	>	>	>	>	>	>	>	۲	>	>	>	>	>	×	>	>
Dorsolateral Midshaft Radius Plates	Ulna Nails	Radius Nails	Distal Ulna Plates	Ulnar Shortening Plates	Volar Distal Radius Plates	Dorsal Distal Radius Plates	Radial Styloid Plate	Dorsal Rim Plates	Dorsal Lunate Plates	Volar Lunate Plates	Wrist Spanning Plates	External Fixation	Wrist Fusion	Nitinol Staples	Hand Fracture Plates	MCP Fusion Plates	External Fixation	Specialty Hand Plates	Continuous Compression	Differential Pitch	Partial Thread	Full Thread
Dorsolateral Midshaft Radius Plates		Radius Nails	Distal Ulna	Shortening	Volar Distal Radius Plates	Distal Radius		Dorsal	Lunate		Spanning Plate	External Fixation	-	Nitinol Staples		MCP Fusion	External Fixation	Specialty			Partial Thread	

Upper Extremity Competitor Product Comparison\*



Acumed Headquarters 5885 NE Cornelius Pass Road Hillsboro, OR 97124 Office: +1.888.627.9957 Office: +1.503.627.9957 Fax: +1.503.520.9618 www.acumed.net

#### ELB00-08-C | Effective: 2019/05 | © 2019 Acumed® LLC

### References

- 1. Sahu D, Holmes D, Fitzsimmons J, 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.
- 3. Shukla DR, Shao D, Fitzsimmons J, et al. Canal preparation for prosthetic radial head replacement: rasping versus reaming. J Shoulder Elbow Surg. 2013;22(11): 1474–1479.

These materials contain information about products that may or may not be available in any particular country or may be available under different trademarks in different countries. The products may be approved or cleared by governmental regulatory organizations for sale or use with different indications or restrictions in different countries. Products may not be approved for use in all countries. Nothing contained on these materials should be construed as a promotion or solicitation for any product or for the use of any product in a particular way which is not authorized under the laws and regulations of the country where the reader is located. Specific questions physicians may have about the availability and use of the products described on these materials should be directed to their particular local sales representative. Specific questions patients may have about the use of the products described in these materials or the appropriateness for their own conditions should be directed to their own physician.

Acumed<sup>®</sup> and Acutrak 2<sup>®</sup> are registered trademarks of Acumed LLC