

# **Product Overview**





## Acumed® Total Wrist Fusion Plating System

The Acumed Total Wrist Fusion Plating System is designed for wrist arthrodesis due to deformities associated with degenerative arthritis, brachial plexus palsies, and spastic disorders. This five-plate system features both innovative and traditional designs. Specifically, four of the five plates are positioned on the second metacarpal, which may help reduce extensor tendon irritation. Additionally, the fifth plate is a neutral option that is placed on the third metacarpal and is developed for use with a proximal row carpectomy. All plates have a 15° dorsal bend, established as a balance between anatomic resting position, hand function, and grip strength.



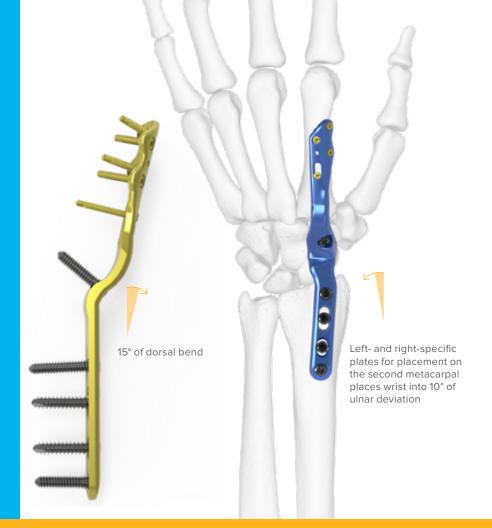
Neutral plate for placement on third metacarpal with an associated proximal row carpectomy

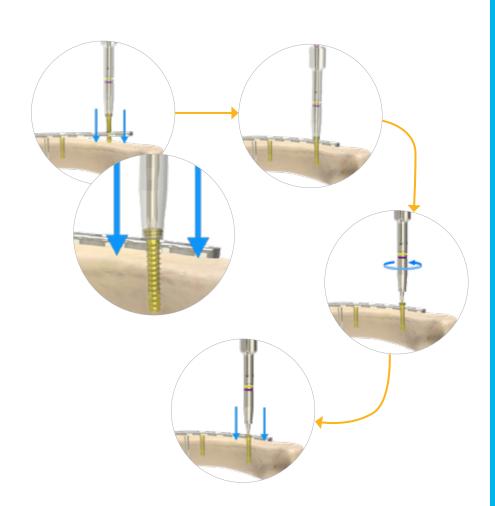
Carpal cross-screw is designed to offer additional implant stability

Converging distal screw construct is designed to assist with pullout resistance

### **Total Wrist Fusion**

The left- and right-specific plates were designed to sit on the second metacarpal based on published literature that found that plate design is less important than plate position with regard to hardware removal rates. Plate placement in relation to extensor tendon location is important, and this is why Acumed included left- and right-specific second metacarpal plates in the system. Additionally, the left- and right-specific plates place the wrist in a slight ulnar deviation that may improve grip strength.<sup>1</sup>





# **Key Instruments**

#### **SaveLock Compression Sleeve**

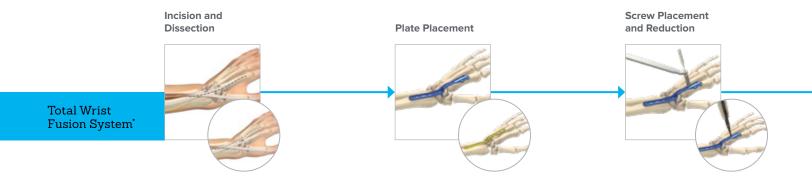
The instrument covers the threads on the head of the Hexalobe MultiScrews while compressing the plate to the bone when inserting the screw. The sleeve is threaded over the screw head only and prevents these threads from engaging the plate when inserting the screw shaft into the bone.



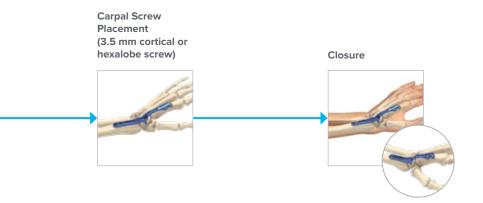
A 42-year-old patient with a brachial plexus injury resulting in partial paralysis of the shoulder, elbow, and hand was treated with the Acumed Total Wrist Fusion Plating System.



A patient elected for total wrist arthrodesis following hand replantation in order to improve grip strength



<sup>\*</sup>For reference only. For full instructions, see the current Total Wrist Fusion System Surgical Technique.



(>) ( <b>X</b> )	Product Product Portfolio	Product in Portfolio (2) Partial Offering Product Not in Operation Portfolio Development	Acumed	DePuy Synthes	Stryker	Smith & Nephew
		Superior Clavicle Plates	<b>→</b>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
		Anterior Clavicle Plates	<u></u>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
	apula	Hook Plates	×	<b>&gt;</b>	<b>&gt;</b>	×
	c]e\ga	Scapula Border Plates	<b>&gt;</b>	×	×	×
Jqer	Clavio	Glenoid Plates	<u></u>	×	×	×
noys		Acromion Plates	<u>&gt;</u>	×	×	×
		Clavicle Screws/Pins	<u></u>	×	×	×
	Si	Proximal Humeral Nails	<u></u>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
	nweun	Proximal Humeral Plates	<u></u>	<b>&gt;</b>	<b>&gt;</b>	<b>S</b>
	Н	Midshaft Plates	×	>	<b>&gt;</b>	<b>S</b>
	sna	90/90 Plates	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
	ewnH [	Parallel Plates	<u></u>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
	Dista	External Fixation	×	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
	gull	Olecranon Plates	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
wodi	J lsmix	Coronoid Plates	<u></u>	×	×	×
1	ькох	Proximal Ulna Nails	•	<b>&gt;</b>	×	×
	рез	Radial Head Plates	<u></u>	<u>&gt;</u>	<b>&gt;</b>	×
	aH lsib	Radial Head Replacement, Short Stem	<b>&gt;</b>	×	×	×
	Ва	Radial Head Replacement, Long Stem	<b>&gt;</b>	×	×	×
		Uina Plates	<u></u>	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>
	кечкш	Anatomic Midshaft Volar Radius Plates	<b>&gt;</b>	×	×	×

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Dorsolateral Midshaft Radius Plates Una Nails Radius Nails Badius Nails Uniar Shortening Plates Volar Distal Radius Plates Dorsal Distal Radius Plates Consal Distal Radius Plates Wrist Spanning Plates Wrist Spanning Plates Wrist Fusion Wrist Fusion Wrist Fusion Wrist Fusion Wrist Fusion Plates Continuous Compression Specialty Hand Plates Continuous Compression Fusion Partial Thread	×	×	×	×	×	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>	×	×	×	×	<b>&gt;</b>	<b>♦</b>	$\bigcirc$	$\bigcirc$	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>	×	<b>&gt;</b>	<b>♦</b>	<b>&gt;</b>
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#### Reference

1. Field J, Herbert TJ, Prosser R. Total wrist fusion: a functional assessment. J Hand Surg Am. 1996;21B(4):429-433.

### Competitor Data Sources

DePuy Synthes website https://www.depuysynthes.com/

Stryker website https://www.stryker.com/us/en/index.html

Smith & Nephew website https://www.smith-nephew.com/

All websites accessed on February 1, 2018

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