



**Zimmer®  
Anatomical  
Shoulder™  
Inverse/Reverse  
System**



Simple Solution for a Complex Procedure

# The Anatomical Shoulder™ Systems A Comprehensive Approach.

*Zimmer Anatomical Shoulder Systems are designed to offer maximum flexibility in the management of difficult cases requiring hemi or total arthroplasty. The humeral component of the Primary System is compatible with the innovative Inverse/Reverse system—which therefore requires the implanting of only one humeral stem. This addresses a wide variety of surgical needs and provides for simplified revision and better long-term functionality and pain reduction.*



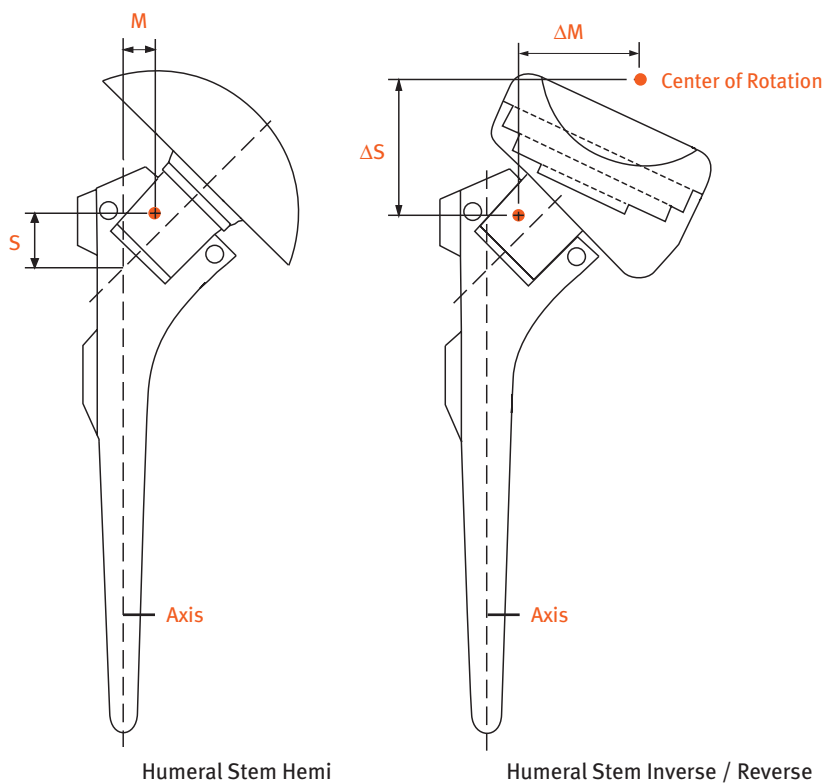
- The Primary and Inverse/Reverse systems provide two options for locating the center of rotation. With the Inverse/Reverse system, the COR is shifted medially and superiorly.
- Both systems offer either a cemented or press-fit humeral stem and glenoid fixation.
- Anatomical designs allow for maximum bone purchase.
- Wide range of sizing options provide optimum fit for patients of various sizes.



Simple Solution for a Complex Procedure

## Multiple Procedures. One Humeral Stem.

In the case of an irreparable rotator cuff, the *Anatomical Shoulder Inverse/Reverse System* offers the potential for pain relief and restoration of function using the original humeral stem for primary, revision or fracture reconstructions. Eliminating the need to remove a well-fixed stem greatly simplifies and shortens revision surgery.



### A proven biomechanical concept.

The *Anatomical Shoulder Inverse/Reverse* design is based on the principle of kinematic balancing of the shoulder based on the model initiated by Grammont.<sup>1</sup> The geometry reverses the normal relationship between the scapular and humeral components. By moving the center of rotation medially, the lever arm of the deltoid muscle is increased and the humerus is lowered. This allows the deltoid to compensate for rotator cuff deficiency. The stabilizing of the Inverse/Reverse shoulder relies on the passive and active tension provided by the deltoid muscle and the fixed fulcrum point provided by the glenosphere.





**Polyaxial Screws** offer variable angulation to a maximum of 30° in all directions and lock at the desired angle.

**Glenoid Fixation**, with a bone-preserving convex design, provides the option for either press-fit or cement fixation.

**Glenoid Head** design features an oval taper for secure fixation and is available in 36mm or 40mm diameters.

**PE Inlays** provide antirotational properties and are available in two diameters and three different thicknesses.

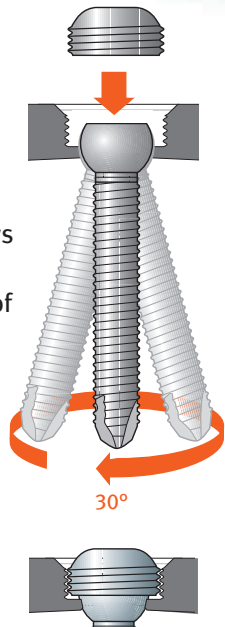
**Humeral Cup** selections cover range of lateralization, height and version adjustments with four offset and four version cup options.

**A flexible solution begins with the stem.**

With the stem seated below the resection line, the humeral head is able to be optimally positioned to provide a more anatomical correction. This stem position also allows unobstructed access to the glenoid and provides the unique opportunity to revise a *Primary Anatomical Shoulder* prosthesis to the *Inverse/Reverse* system without the need for stem removal.

**Better control for better bone purchase.**

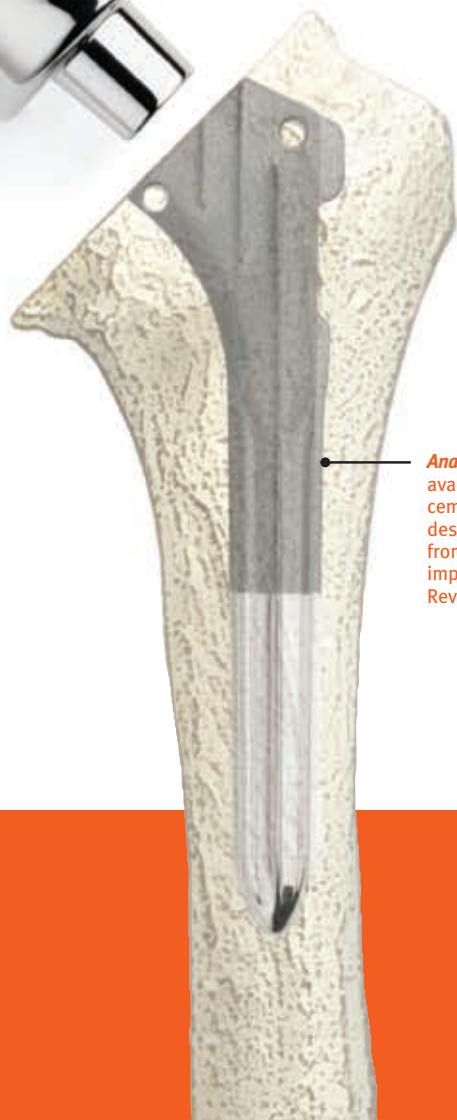
The polyaxial screw connection allows precise alignment with the patient's anatomy and simplifies the process of capturing fixation within the glenoid. The screw position can be freely adjusted within a 30° arc and locks in the chosen position with the locking screw cap for optimal glenoid fixation.



Polyaxial screw placement within 30° subsequent locking option, for optimum system stability.

Locking cap provides optimal system security.

**Anatomical Shoulder Stem**, available in either cemented or press-fit design, provides modularity from *Primary* or traditional implantation to the *Inverse/Reverse* System.



## Anatomical Shoulder System Implants

Prod. No.	Description	Size/Specification
01.04201.072	Humeral Stem Uncemented	7mm x 100mm
01.04201.092	Humeral Stem Uncemented	9mm x 110mm
01.04201.102	Humeral Stem Uncemented	10.5mm x 110mm
01.04201.122	Humeral Stem Uncemented	12mm x 110mm
01.04201.142	Humeral Stem Uncemented	14mm x 110mm
01.04211.072	Standard Stem Cemented	7mm x 100mm
01.04211.092	Standard Stem Cemented	9mm x 110mm
01.04211.122	Standard Stem Cemented	12mm x 110mm
01.04211.142	Standard Stem Cemented	14mm x 110mm
01.04215.072	Standard Long Stems (Revision)	7mm x 200mm
01.04215.092	Standard Long Stems (Revision)	9mm x 210mm
01.04215.122	Standard Long Stems (Revision)	12 mm x 210mm
01.04215.142	Standard Long Stems (Revision)	14mm x 210mm
01.04223.018	Inverse/Reverse Screw System	4.5mm x 18mm
01.04223.024	Inverse/Reverse Screw System	4.5 mm x 24mm
01.04223.030	Inverse/Reverse Screw System	4.5mm x 30mm
01.04223.033	Inverse/Reverse Screw System	4.5mm x 33mm
01.04223.036	Inverse/Reverse Screw System	4.5mm x 36mm
01.04223.042	Inverse/Reverse Screw System	4.5mm x 42mm
01.04223.048	Inverse/Reverse Screw System	4.5mm x 48mm
01.04223.100	Inverse/Reverse Humeral Cup	0° retro
01.04223.106	Inverse/Reverse Humeral Cup	0° retro +6 (medial offset)
01.04223.110	Inverse/Reverse Humeral Cup	+10° retro
01.04223.111	Inverse/Reverse Humeral Cup	-10° retro
01.04223.120	Inverse/Reverse Humeral Cup	+20° retro
01.04223.121	Inverse/Reverse Humeral Cup	-20° retro
01.04223.190	Inverse/Reverse Humeral Cup	9mm 0° retro
01.04223.196	Inverse/Reverse Humeral Cup	9mm 0° retro +6 (medial off.)
01.04223.200	Inverse/Reverse Glenoid Fixation	
01.04223.236	Inverse/Reverse Glenoid Head	36mm
01.04223.240	Inverse/Reverse Glenoid Head	40mm
01.04223.360	Inverse/Reverse Humeral PE-Inlay	36mm x 0mm
01.04223.363	Inverse/Reverse Humeral PE-Inlay	36mm x 3mm
01.04223.366	Inverse/Reverse Humeral PE-Inlay	36mm x 6mm
01.04223.400	Inverse/Reverse Humeral PE-Inlay	40mm x 0mm
01.04223.403	Inverse/Reverse Humeral PE-Inlay	40mm x 3mm
01.04223.406	Inverse/Reverse Humeral PE-Inlay	40mm x 6mm

## Anatomical Shoulder System Instruments

Prod. No.	Description	Size/Specification
<b>ANSH800</b>	Inverse/Reverse Set	
	Contains the following:	
01.00029.031	Lid	
01.04239.010	Base (empty)	
01.04239.020	Inverse/Reverse Insert for Tray (empty)	
01.04239.100	Guiding Instrument for Glenoid Inverse	
01.04239.110	Milling Cutter for Glenoid Inverse	
01.04237.111	Replacement Screw for Guide Instrument (Set of 2)	
01.04239.120	Holding Forceps for Glenoid Fixation	
01.04239.130	Drill Guide for Glenoid Inverse	
01.04239.135	Centering Pegs for Glenoid Inverse	
01.04239.140	Drill for Glenoid Inverse	
01.04239.150	Impactor for Glenoid Fixation	
01.04239.160	Extractor Instruments for Glenoid Head	
01.04239.170	Drill Guide for Inverse/Reverse Screws	
01.04239.180	Drills 3.3 for Inverse/Reverse Screws	
01.04239.300	Impactor Inverse	
01.04239.310	Impactor PE Inlay	
01.04239.320	Extractor Instrument for Humeral Cup	
01.04239.400	Milling Cutter for Humeral Inverse (Primary)	
01.04239.500	Milling Cutter for Humeral Inverse (Revision)	
01.04239.510	Bushing for Milling Cutter	0° retro
01.04239.520	Bushing for Milling Cutter	+10° retro
01.04239.530	Bushing for Milling Cutter	-10° retro
01.04239.540	Bushing for Milling Cutter	+20° retro
01.04239.550	Bushing for Milling Cutter	-20° retro
01.04239.560	Screws for Bushing for Milling Cutter	
01.04239.600	Trial Humeral Cup (Set of 2)	0° retro
01.04239.610	Trial Humeral Cup (Set of 2)	0° retro +6mm
01.04239.620	Trial Humeral Cup (Set of 2)	+10° retro
01.04239.630	Trial Humeral Cup (Set of 2)	-10° retro
01.04239.640	Trial Humeral Cup	+20° retro
01.04239.650	Trial Humeral Cup	-20° retro
01.04239.660	Trial Humeral Cup	+9 0° retro
01.04239.670	Trial Humeral Cup	+9 0° retro +6mm
01.04239.700	Trial Humeral PE Inlay	36mm x 0mm
01.04239.710	Trial Humeral PE Inlay	36mm x 3mm
01.04239.720	Trial Humeral PE Inlay	36mm x 6mm
01.04239.730	Trial Humeral PE Inlay	40mm x 0mm
01.04239.750	Trial Humeral PE Inlay	40mm x 6mm
01.04239.740	Trial Humeral PE Inlay	40mm x 3mm
01.04239.800	Trial Glenoid Head	36mm
01.04239.810	Trial Glenoid Head	40mm
02.00024.022	Torque Wrench	
02.00024.023	Hexagonal Screw Driver	
02.00024.121	Locking Screw Holder	3.5mm

## Anatomical Shoulder System Kit Numbers:

ANSH0100	Pegged Glenoid Instrument Case 3
ANSH0101	Keeled Glenoid Instrument Case 5
ANSH500	Removable Head Instrument Case 1
ANSH600	Removable Head Instrument Case 2
ANSH700	Revision Instrument Case 4
ANSH800	Inverse/Reverse Instrument Case

### Reference:

1. Grammont P.M., Baulot E.; Delta Shoulder Prosthesis for Rotator Cuff Rupture; Orthopedics 1993; 16:65-68

Contact your Zimmer representative or visit us at [www.zimmer.com](http://www.zimmer.com)

