



**Zimmer®  
Anatomical  
Shoulder™  
Fracture System**



Anatomical Shoulder System Meets Fractures

## Indications

The *Anatomical Shoulder™* Fracture System is intended for use in prosthetic replacement of the proximal humerus and the glenoid articular surface of the scapula during total-, hemi- and fracture shoulder arthroplasty in treatment of the following:

- Complex 3 and 4 part fractures of the proximal humerus with subluxation of the head fragment;
- Complex 3 and 4 part fractures of the proximal humerus with loosening of the spongiosa in the head fragment;
- Complex 3 and 4 part fractures of the proximal humerus with additional cross split of the head fragment;
- Fracture instability after osteosynthesis of 3 and 4 fragments of the proximal humerus;
- Posttraumatic necrosis of the humeral head;
- Posttraumatic arthrosis after humeral head fracture.

The *Anatomical Shoulder* Fracture stem is intended for cemented or cementless use.

## Description of the Implants

Specifically designed for anatomical reconstruction of articular proximal humerus fractures.

*Anatomical Shoulder Fracture Head*

*Anatomical Shoulder Fracture Screw*

*Anatomical Shoulder Fracture Base-Plate*

*Anatomical Shoulder Fracture Stem*

### Anatomical Shoulder Fracture Base-Plate, Head and Screw

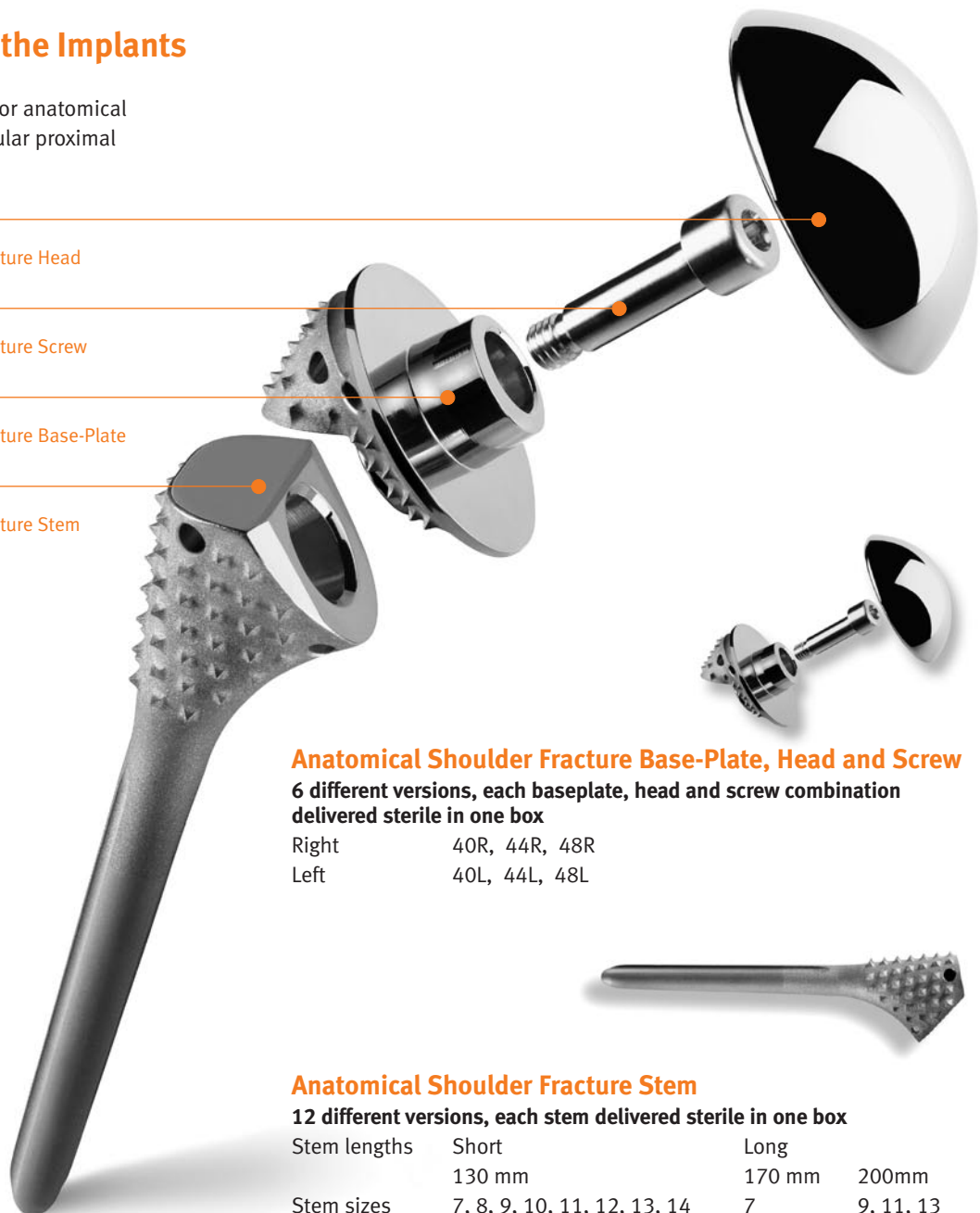
6 different versions, each baseplate, head and screw combination delivered sterile in one box

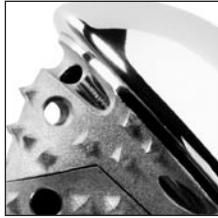
Right	40R, 44R, 48R
Left	40L, 44L, 48L

### Anatomical Shoulder Fracture Stem

12 different versions, each stem delivered sterile in one box

Stem lengths	Short	Long	
	130 mm	170 mm	200mm
Stem sizes	7, 8, 9, 10, 11, 12, 13, 14	7	9, 11, 13

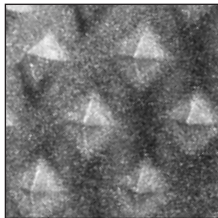




Tuberosity Groove

### Anatomical Design

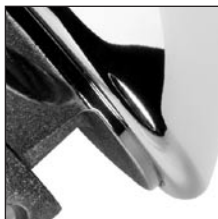
- Anatomically designed proximal portion
- The proximal volume of the prosthesis is optimized to restore normal humeral anatomy for a selected head size
- Round shaped heads
- Special tuberosity groove
- Bone fits anatomically below the head
- Design aids in prevention of impingement and tears



Fracture Spikes

### Fracture Spikes

- For stable anchoring of the tuberosities to the stem
- Increase primary stability
- Provides resistance to tuberosity movement
- Increased surface area for contact with tuberosities



### Effective Medial Base-Plate Design

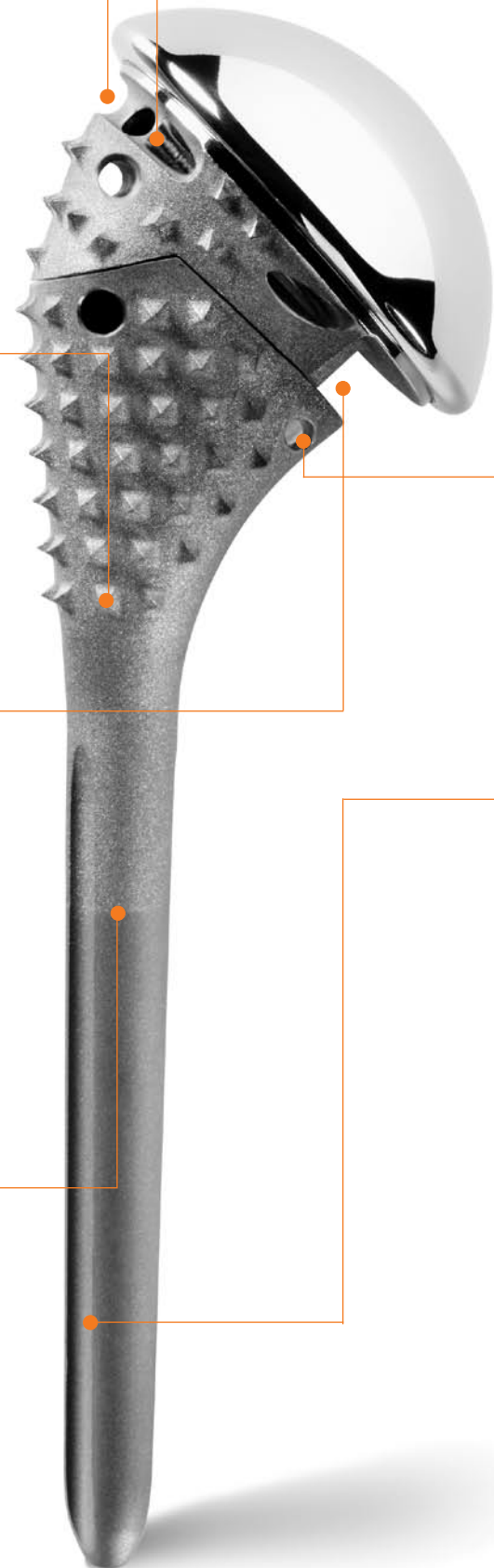
- The base-plate has a special medial clearance in order to preserve remaining humeral bone

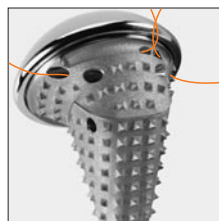


Extra Rough Blasted Proximal Surface

### Surface

- Extra rough-blasted proximal surface with fracture spikes specially developed for proximal humeral bone
- Smooth-blasted distal surface
- Material: Optimized material composition, Ti Alloy, CoCr, with a long-term historical experience
- Allows for cemented or non-cemented use

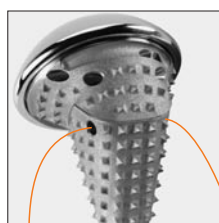




Base Plate Suture Holes

### Base Plate Suture Holes

- Due to the position of the Fracture suture holes, an anatomical repositioning of the greater and lesser tuberosity below the head, restoring the original anatomy is possible
- Fracture suture holes optimized for secure fixation
- Fracture suture holes manufactured to provide smooth surface for suture contact/passing
- Additional lateral hole for optional suture support



Stem Suture Holes

### Stem Suture Holes

- To provide final stable fixation of the tuberosities to the *Anatomical Shoulder Fracture Stem*
- One medial, one lateral
- Medial hole for cerclage effect around tuberosities



Distal Anchoring Safety

### Distal Anchoring Safety

- 3 grooves for rotational stability, press-fit or cemented
- The two lateral grooves are for defined orientation
- Tapered stem design, for stem removal and homogeneous distribution of forces



Right and Left Option

### Right and Left Option

- In respect to the shoulder anatomy, physiology, and the greater and lesser tuberosities
- Allows for version adjustment to match patient anatomy



### Convertible to an Anatomical Shoulder Inverse/Reverse System, without Stem Removal

Such revision might be necessary in case of a severe rotator cuff tear. This may simplify revision surgery since the need to remove a well-fixed stem is eliminated.



## Implants for Anatomical Shoulder Fracture System

Prod. No.	Description
<b>Anatomical Shoulder Humeral Fracture Stems 130mm Cemented/Uncemented</b>	
01.04207.072	Humeral Stem Fx 7-130mm
01.04207.082	Humeral Stem Fx 8-130mm
01.04207.092	Humeral Stem Fx 9-130mm
01.04207.102	Humeral Stem Fx 10-130mm
01.04207.112	Humeral Stem Fx 11-130mm
01.04207.122	Humeral Stem Fx 12-130mm
01.04207.132	Humeral Stem Fx 13-130mm
01.04207.142	Humeral Stem Fx 14-130mm
<b>Anatomical Shoulder Humeral Fracture Stems Long Cemented/Uncemented</b>	
01.04217.072	Humeral Stem Fx 7-170mm
01.04217.092	Humeral Stem Fx 9-200mm
01.04217.112	Humeral Stem Fx 11-200mm
01.04217.132	Humeral Stem Fx 13-200mm
<b>Anatomical Shoulder Fracture Humeral Heads</b>	
01.04227.400	Humeral Head Fx, Left ø40mm
01.04227.405	Humeral Head Fx, Right ø40mm
01.04227.440	Humeral Head Fx, Left ø44mm
01.04227.445	Humeral Head Fx, Right ø44mm
01.04227.480	Humeral Head Fx, Left ø48mm
01.04227.485	Humeral Head Fx, Right ø48mm

## Instruments for Anatomical Shoulder Fracture System

Prod. No.	Description	Set Qty.
<b>ANSH 0305</b>	<b>Anatomical Shoulder Fracture Instruments Complete</b>	<b>1</b>
01.04237.310	Anatomical Shoulder Fx Alignment rod	2
01.04237.066	Anatomical Shoulder Fx Rasp Extension 6.5 [7pf]	1
01.04237.086	Anatomical Shoulder Fx Rasp Extension 8.5 [9pf/7ce]	1
01.04237.106	Anatomical Shoulder Fx Rasp Extension 10.5 [11pf/9ce]	1
01.04237.126	Anatomical Shoulder Fx Rasp Extension 12.5 [13pf/11ce]	1
01.04237.146	Anatomical Shoulder Fx Rasp Extension 14.5 [13ce]	1
01.04237.400	Anatomical Shoulder Fx Humeral Trial Head, Left 40mm	0
01.04237.405	Anatomical Shoulder Fx Humeral Trial Head, Right 40mm	0
01.04237.440	Anatomical Shoulder Fx Humeral Trial Head, Left 44mm	0
01.04237.445	Anatomical Shoulder Fx Humeral Trial Head, Right 44mm	0
01.04237.480	Anatomical Shoulder Fx Humeral Trial Head, Left 48mm	0
01.04237.485	Anatomical Shoulder Fx Humeral Trial Head, Right 48mm	0
01.04237.500	Anatomical Shoulder Fx Screw for Humeral Trial Head	0
01.04237.600	Anatomical Shoulder Fx Adapter	0
01.04237.610	Anatomical Shoulder Fx Humeral Stem Setting Instrument	0
01.04237.700	Anatomical Shoulder Fx Ruler	0
72.11.20-06	Torque Wrench for Humeral Head	0
72.11.20-09	Nut for Torque Wrench, 4.5mm	0
72.01.00-01	Impactor for Humeral Stem	0
5331	Hexagonal Wrench, 5mm	0
109.02.020	Hexagonal Screwdriver 2.5mm	0
01.04237.065	Anatomical Shoulder Fx Rasp 6.5 [7pf]	1
01.04237.075	Anatomical Shoulder Fx Rasp 7.5 [8pf]	1
01.04237.085	Anatomical Shoulder Fx Rasp 8.5 [9pf/7ce]	1
01.04237.095	Anatomical Shoulder Fx Rasp 9.5 [10pf/8ce]	1
01.04237.105	Anatomical Shoulder Fx Rasp 10.5 [11pf/9ce]	1
01.04237.115	Anatomical Shoulder Fx Rasp 11.5 [12pf/10ce]	1
01.04237.125	Anatomical Shoulder Fx Rasp 12.5 [13pf/11ce]	1
01.04237.135	Anatomical Shoulder Fx Rasp 13.5 [14pf/12ce]	1
01.04237.145	Anatomical Shoulder Fx Rasp 14.5 [13ce]	1
01.04237.155	Anatomical Shoulder Fx Rasp 15.5 [14ce]	1
01.04237.180	Anatomical Shoulder Fx Spring for Rasp	5
01.04237.190	Anatomical Shoulder Fx Screw for Rasp	5
01.04237.200	Anatomical Shoulder Fx Handle for Rasp	1
01.04237.310	Anatomical Shoulder Fx Alignment rod	2
01.04237.066	Anatomical Shoulder Fx Rasp Extension 6.5 [7pf]	1
01.04237.086	Anatomical Shoulder Fx Rasp Extension 8.5 [9pf/7ce]	1
01.04237.106	Anatomical Shoulder Fx Rasp Extension 10.5 [11pf/9ce]	1
01.04237.126	Anatomical Shoulder Fx Rasp Extension 12.5 [13pf/11ce]	1
01.04237.146	Anatomical Shoulder Fx Rasp Extension 14.5 [13ce]	1
01.04237.400	Anatomical Shoulder Fx Humeral Trial Head, Left 40mm	0
01.04237.405	Anatomical Shoulder Fx Humeral Trial Head, Right 40mm	0
01.04237.440	Anatomical Shoulder Fx Humeral Trial Head, Left 44mm	0
01.04237.445	Anatomical Shoulder Fx Humeral Trial Head, Right 44mm	0
01.04237.480	Anatomical Shoulder Fx Humeral Trial Head, Left 48mm	0
01.04237.485	Anatomical Shoulder Fx Humeral Trial Head, Right 48mm	0
01.04237.500	Anatomical Shoulder Fx Screw for Humeral Trial Head	0
01.04237.600	Anatomical Shoulder Fx Adapter	0
01.04237.610	Anatomical Shoulder Fx Humeral Stem Setting Instrument	0
01.04237.700	Anatomical Shoulder Fx Ruler	0
72.11.20-06	Torque Wrench for Humeral Head	0
72.11.20-09	Nut for Torque Wrench, 4.5mm	0
72.01.00-01	Impactor for Humeral Stem	0

## Standard Instrument Kits for Anatomical Shoulder System

Prod. No.	Description
ANSH 0100	Pegged Glenoid Instrument Case 3
ANSH 0101	Keeled Glenoid Instrument Case 5
ANSH 500	Removable Head Instrument Case 1
ANSH 600	Removable Head Instrument Case 2
ANSH 700	Revision Instrument Case 4
ANSH 800	Inverse/Reverse Instrument Case

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



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