Sidus™ Stem-Free Shoulder

Surgical Technique

zimmer

Personal Fit. Renewed Life.™

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Enhanced Simplicity

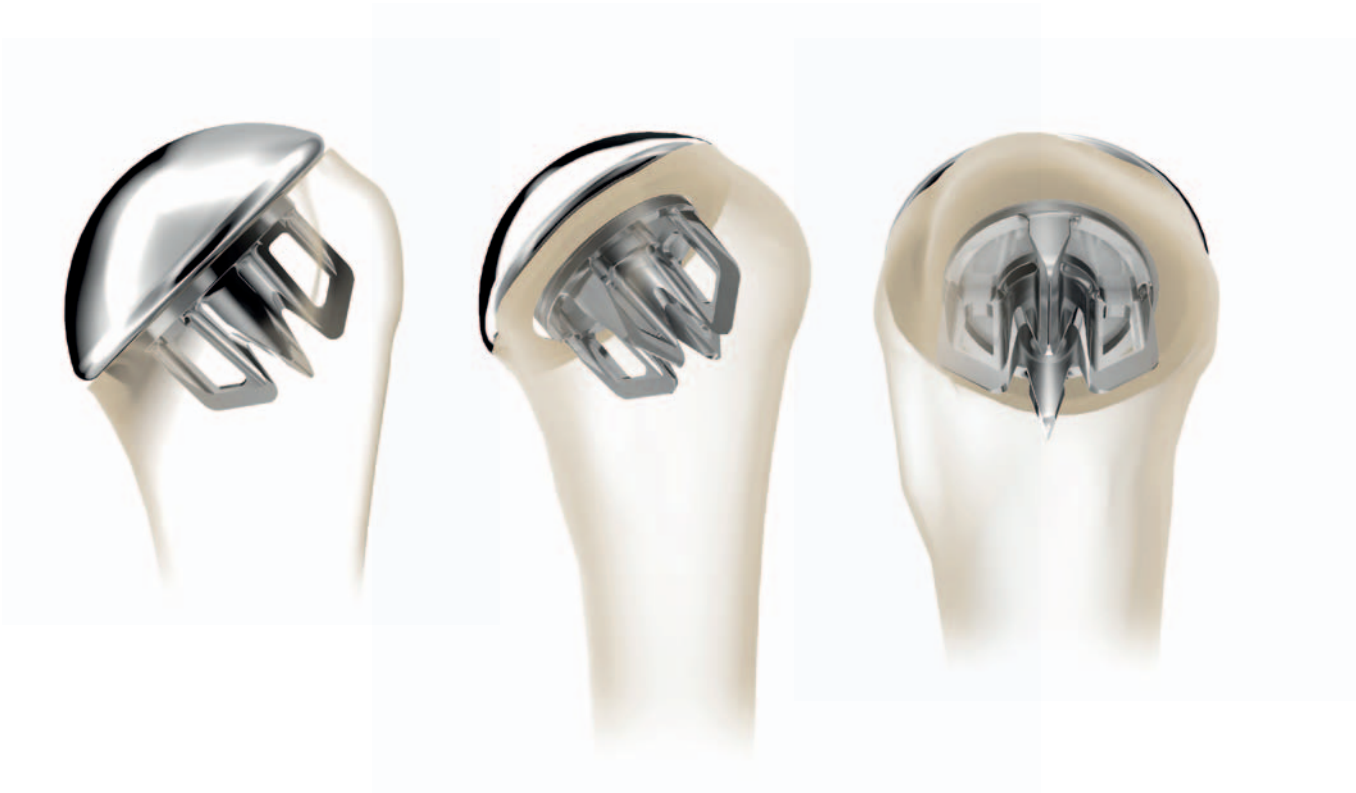
Bone-preserving with a secure fixation

The *Sidus* Stem-Free Shoulder arthroplasty system offers an anatomical shoulder joint reconstruction without procedural complexity.

Consideration of the long term care of the patient is essential. The *Sidus* Stem-Free Shoulder "Humeral Anchor", by virtue of its minimal profile, enables future options for revision or upgrade to an inverse/reverse solution, while also eliminating the potential for many of the intra-operative problems reported for traditional stemmed designs.

The position of the Humeral Anchor in the *Sidus* Stem-Free system is entirely independent of the location of the humeral canal, allowing for an anatomically driven reconstruction, and a straightforward strategy for challenging pathologies.

The *Sidus* Stem-Free Shoulder arthroplasty system uses a straightforward timesaving surgical technique that enables placement of the device in just a few steps – saving valuable OR time (versus traditional solutions) without compromising functional outcomes.



Sidus Stem-Free Shoulder *Humeral Heads*

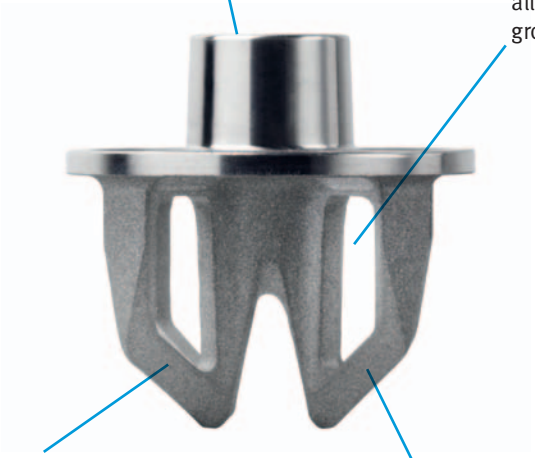
- Proven CoCr alloy (CoCr28Mo6) *Protasul*®-21WF material construction, mirror finish
- Head sizes and head dimensions derived from the human anatomy for the best possible replacement
- Humeral Heads in 11 sizes to cover the resected humeral surface and optimally position the humeral head replacement with respect to the greater tuberosity.
- Proven female taper connection
- Compatible with *Anatomical Shoulder*™ Glenoids

Sidus Stem-Free Shoulder Humeral Anchor

Four windows for free view of humerus and facilitating revision

Proven male taper connection with the possibility to use a wide range of additional head dimensions from the proven *Bigliani/Flatow*® Shoulder System

Four open-fin press-fit design delivering protected anchoring and rotational stability while allowing for bone through-growth



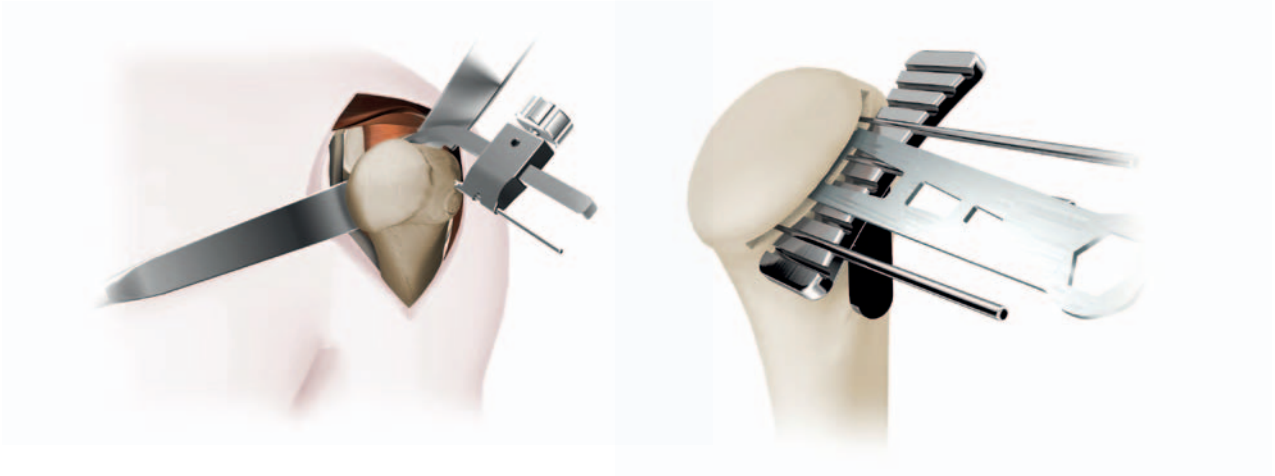
Anti lever-out surfaces on each fin designed to resist shear loads

Rough blasted surface structure fixation to promote bone on-growth, as well as to increase the friction between the implant and bone and thereby improve primary stability.

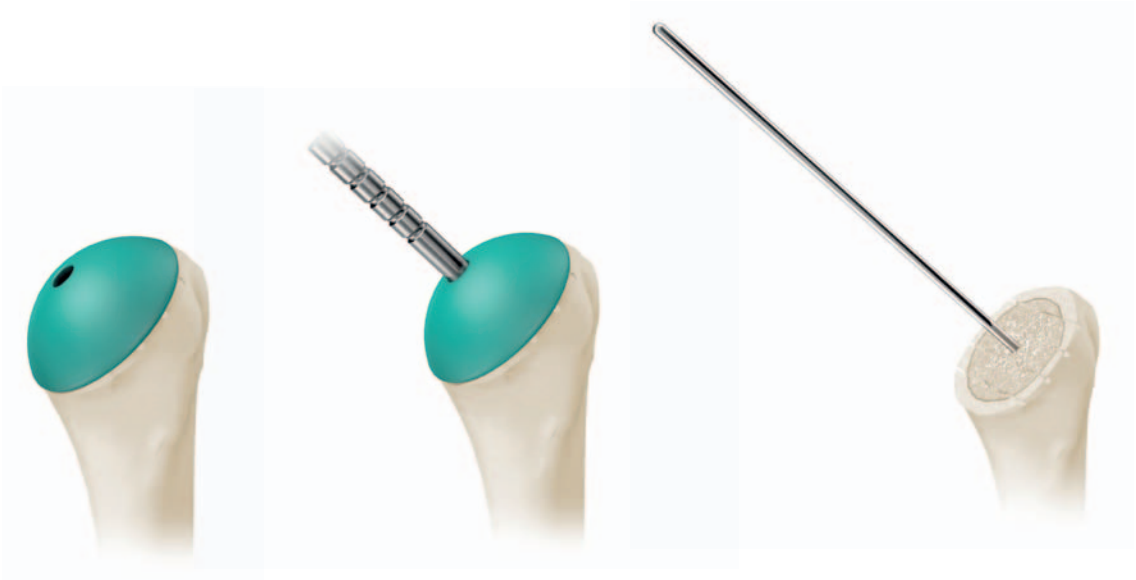
- Proven osteophilic Titanium Alloy (TiAl6V4), *Protasul*-64WF construction promotes long lasting osseointegration
- 3 Humeral Anchors diameters, 24, 28 and 32mm for an optimal fit
- 4 thin open star flange anchors designed to preserve bone
- One piece design for the minimization of disassociation risk
- Osteotome slots to minimize impact on bone during revision surgery
- Compatible with the *Bigliani/Flatow* Standard Humeral Heads, therefore compatibility with the proven *Bigliani/Flatow* and *Trabecular Metal*™ Glenoids is possible

Key Surgical Steps

1. Head identification and resection

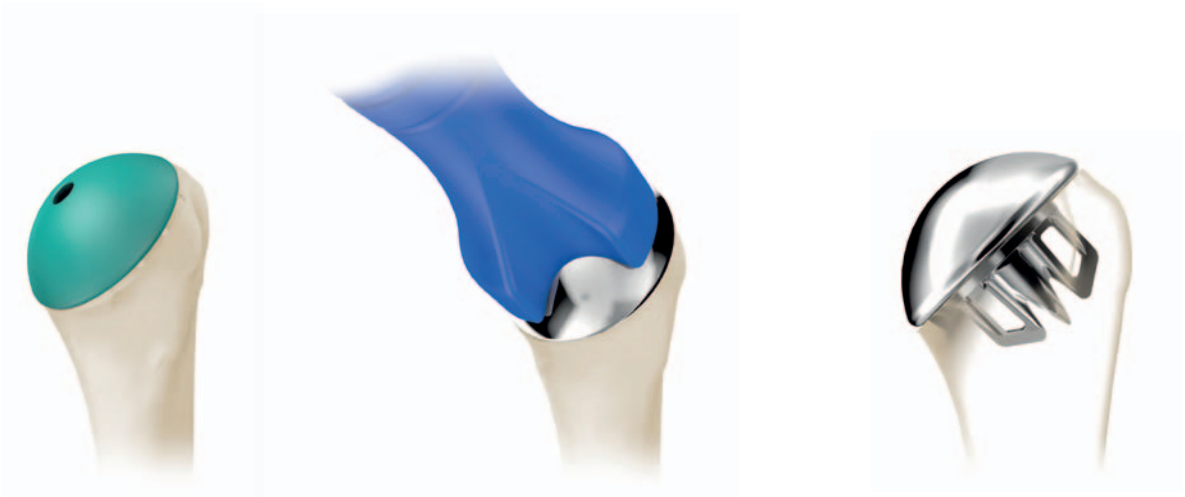


2. Head size determination and positioning



3. Anchor size determination, preparation and implantation

4. Head preparation and implantation



Key Revision and Intra-operative Correction Surgical Steps

1. Head removal

2. Anchor removal

Indications and Contraindications

General Information

The *Sidus* Stem-Free Shoulder is indicated for uncemented use in hemi or total shoulder arthroplasty, replacing the shoulder joint of patients suffering severe pain or disability. Patient conditions of non-inflammatory degenerative joint disease (NIDJD), such as avascular necrosis and osteoarthritis and inflammatory joint disease (IJD), such as rheumatoid arthritis (conditions consequent to earlier operations), provided there is an adequate bone stock to support the fixation of the implant.

Indications

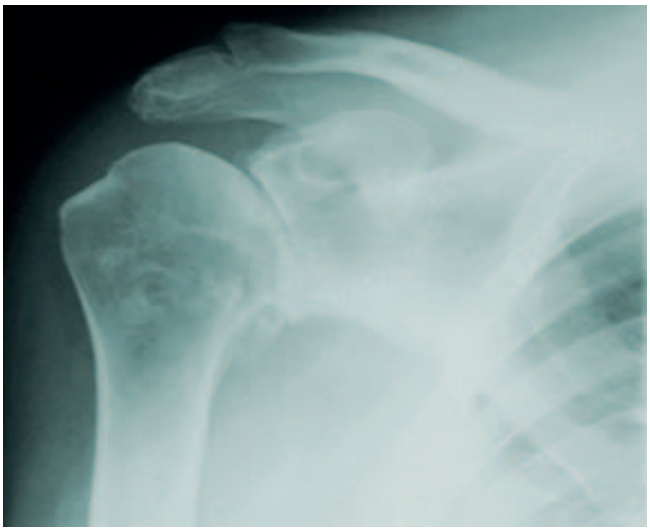
- Osteoarthritis
- Posttraumatic arthrosis
- Rheumatoid arthritis without humeral metaphyseal defects
- Focal Avascular Necrosis of the Humeral Head
- Previous surgeries of the Shoulder that do not compromise the fixation

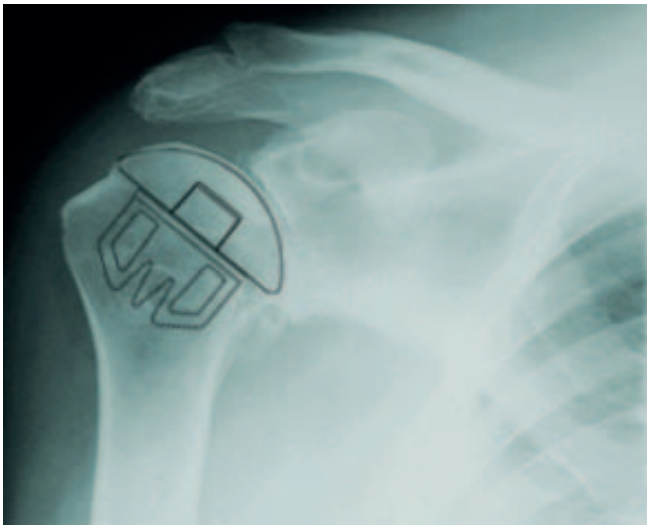
Contraindications

- Soft or inadequate humeral bone (including Osteoporosis and extensive Avascular Necrosis or Rheumatoid arthritis) leading to poor implant fixation
- Metaphyseal bony defects (including large cysts)
- Post-traumatic tuberosity nonunion
- Signs of infection
- Irreparable cuff tear
- Revision from a failed stemmed prosthesis
- Charcot's shoulder (neuroarthropathy)

Preoperative Templating

Preoperative evaluation of the Humerus using the *Sidus* Stem-Free Shoulder templates helps determine the size of the prosthesis and level of the head resection. The goal is to make a resection that matches the anatomy of the patient.





X-Ray templates:
Sidus Stem-Free Shoulder Humeral Anchor, REF 06.02281.000
Sidus Stem-Free Shoulder Humeral Head, REF 06.02282.000

Patient Positioning and Exposure

Patient Positioning

The patient should be placed in a beach chair on the edge of the operating table (Fig. 1).

The involved shoulder should extend laterally over the edge of the table so the arm can be brought into full extension and adduction. An armrest is optional.

The upper part of the operating table has to be open on the homolateral side to allow shoulder extension (shoulder table).

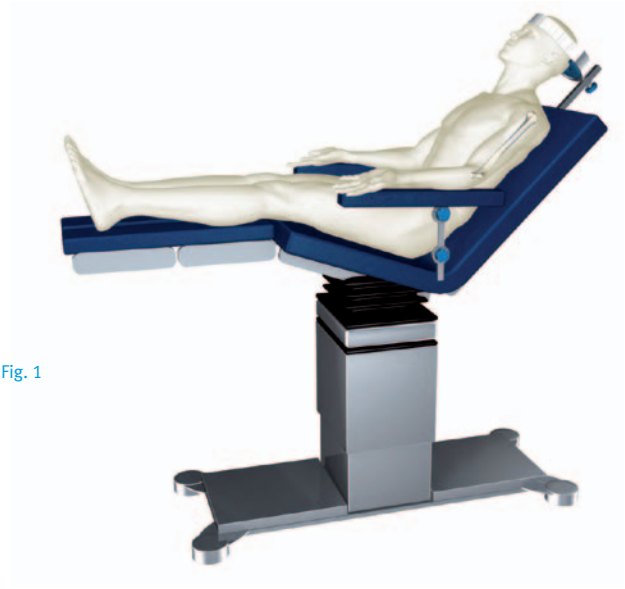


Fig. 1

Initial Incision

The incision should start in front of the ac joint 1 to 2cm lateral from the tip of coracoid running straight downwards to the humeral delta insertion (Fig. 2).

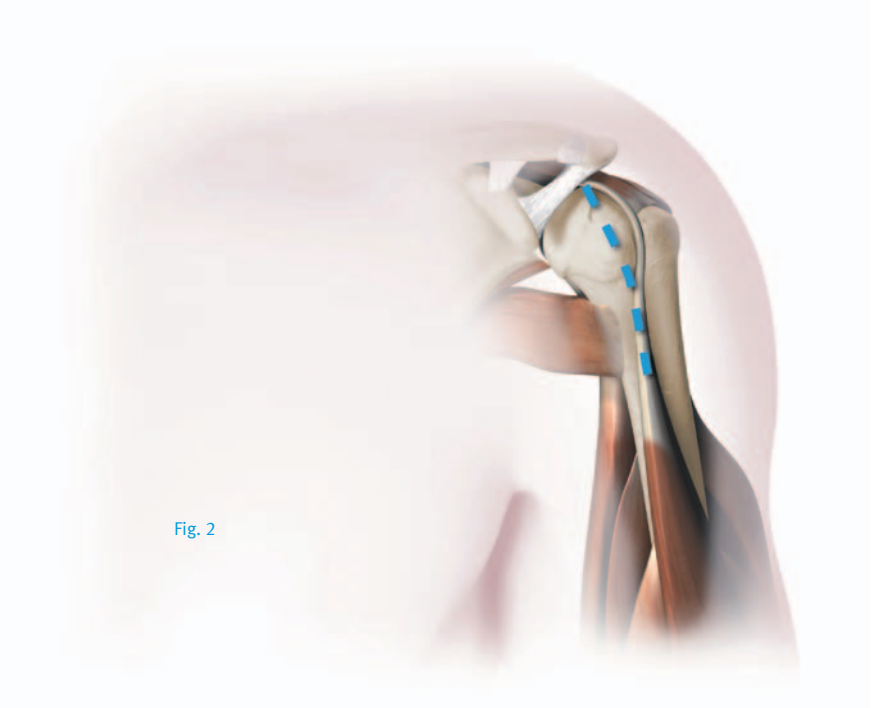


Fig. 2

1. Humeral Head Identification, Preparation and Resection

With the humeral head fully exposed remove any unwanted osteophytes to restore the Humerus to near native anatomy. The humeral head should be resected exactly at the level of the anatomical neck.

Two humeral head resection techniques are possible with *Sidus* Stem-Free Shoulder Instrumentation: a freehand cut and an alignment guide “Supraspinatus” resection technique (Fig. 3).

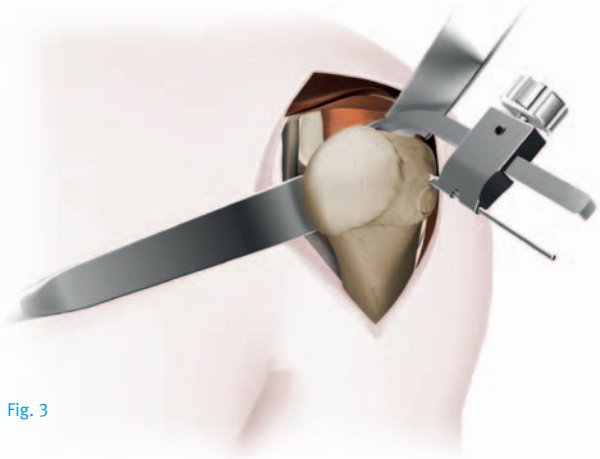


Fig. 3

In the superior and anterior superior aspects, the anatomical neck corresponds to the insertions of the tendons of the cuff supraspinatus and uppermost section of the subscapularis.

In the inferior aspect, there is a smooth transition between the cartilage of the head and the cortical bone of the Humerus.

In the posterior aspect, in the region of the infraspinatus and teres minor, is the sulcus, which is a groove of 6 to 8 mm in length, without cartilage or attached tendons. The resection must start exactly on the cartilage.

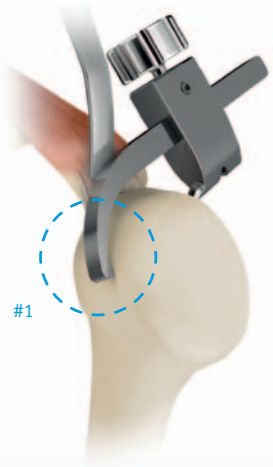


Fig. 4

Note: Do not resect the cartilage-free area.

Positioning of the Alignment Guide “Supraspinatus”

The superior part of the cut should be at the medial border of the insertion of the supraspinatus tendon #2 (Fig. 5). The Kirschner Wire (K-Wire) should exit at the posterior edge of the cartilage medial to the bare area #1 (Fig. 4). After defining the position, the displaceable part of the Alignment Guide "Supraspinatus" can be fixed with the screw #3 (Fig. 5).

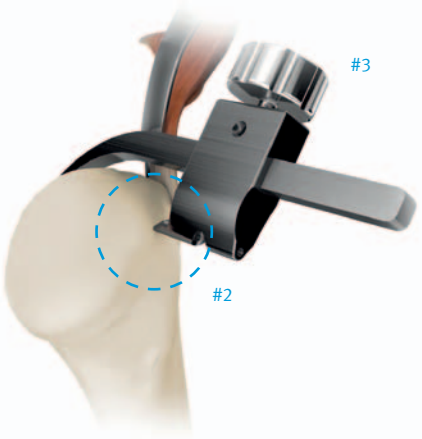


Fig. 5

Place now the K-Wire 2x100 mm into the Alignment Guide “Supraspinatus” (Fig. 6).

Use the Pin Retractor 2 mm to place the K-Wire.

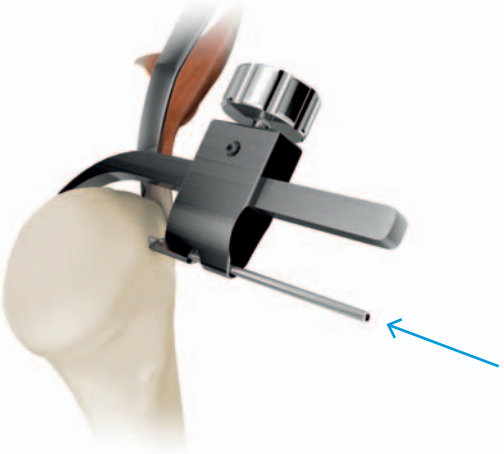


Fig. 6

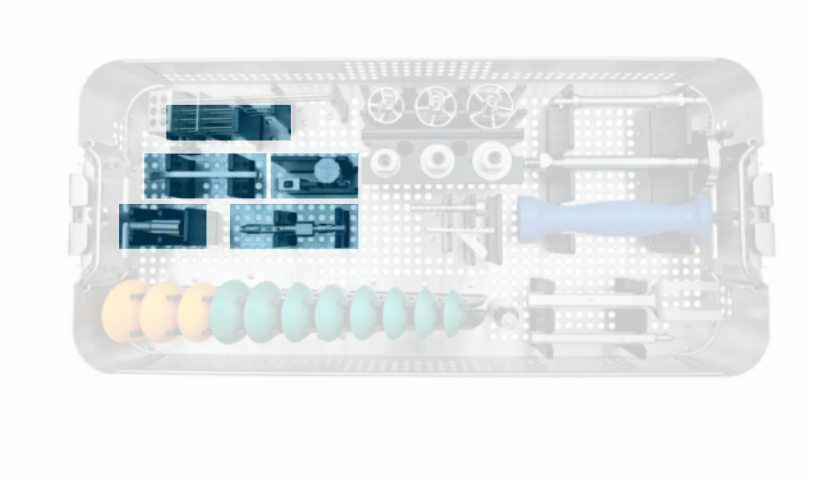
Remove the Alignment Guide “Supraspinatus”.

The first K-Wire 2x100 mm, the Supraspinatus-Pin, defines the retroversion (Fig. 7 and Fig. 8).

Fig. 7

Fig. 8

Trays and Instruments



The “Resection Guide” is mounted over the 1st K-Wire (Fig. 9), the “Supraspinatus-Pin” ‹ which identifies the retroversion ›.

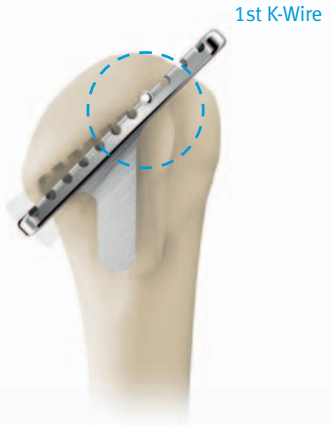


Fig. 9

Inclination angle identification

Align the position of the 2nd K-Wire by identifying the correct inclination angle. Due to patient requirements, there are 2 mm K-Wires in 100 mm and 70 mm lengths.
The “Supraspinatus attachment” will additionally guide you laterally. Use the Pin Retractor 2 mm to place the K-Wire.

Fig. 10

Set additional 3rd and 4th K-Wire to your requirements (Fig. 11 and 12).

Use the Pin Retractor 2 mm to place the K-Wire.

Fig. 11

Note: If you have any problems to remove and unlock the Pin Retractor 2 mm, use the “two hex key” from the Head Distractor .

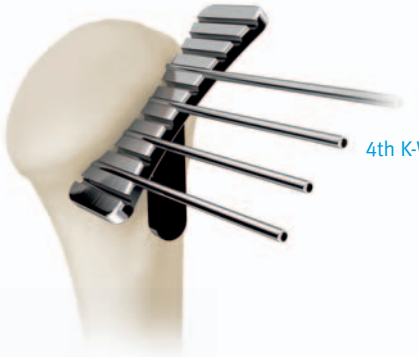


Fig. 12

Resect the Humeral Head, guided by Resection Guide and the K-Wires (Fig. 13 and 14).

Note: Do not use a saw blade with downward facing teeth.

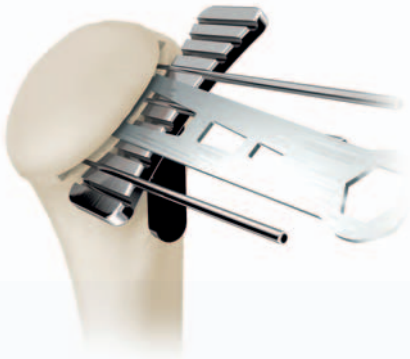


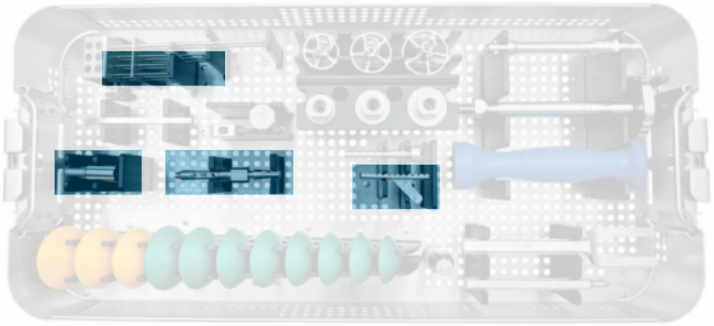
Fig. 13

Remove the Resection Guide and the K-Wires, clean the resection area. Use again the Pin Retractor 2 mm.

Note: For TSA (Total Shoulder Arthroplasty) please continue on page 28.

Fig. 14

Trays and Instruments



2. Head Size Determination and Positioning

Choose a Trial Head size (38–52) that covers the resected humeral osteotomy (Fig. 15).

Table 1 lists the range of *Sidus* Stem-Free Shoulder Humeral Heads and Humeral Anchors with the optimal combination between head and anchor (Tab. 1).

Fig. 15

Sidus Stem-Free Shoulder **HEAD**	**Diameter** Height	**38** 13	**40** 14	**42** 15	**44** 16	**44** 16	**46** 16	**48** 17/20	**50** 18/21	**52** 19/23
Sidus Stem-Free Shoulder **ANCHOR**		**S**				**M**			**L**	

Tab. 1 * For compatibility between *Bigliani/Flatow* Standard Humeral Heads and the Humeral Anchor please refer to page 34

Insert the Central Pin Positioner for Trial Head through the selected Trial Head (Fig. 16).

Fig. 16

Place the Trial Head assembly back to the osteotomy (Fig. 17).

Fig. 17

Insert the Central Pin 3.2 mm (Fig. 18).

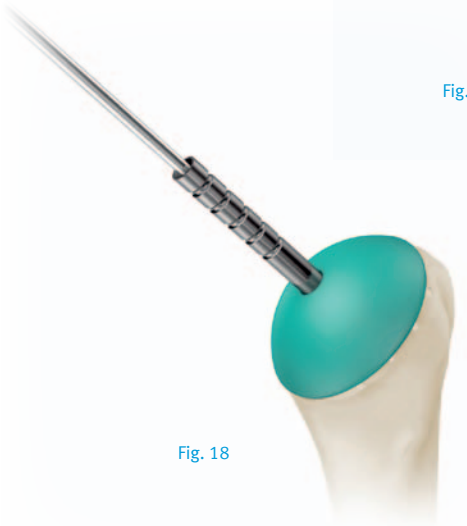
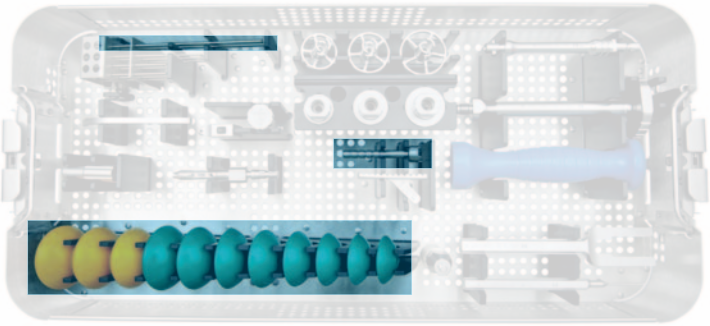


Fig. 18

Remove Trial Head assembly (Fig. 19).

Fig. 19

Trays and Instruments



3. Anchor Size Determination, Preparation and Implantation

Determine first the size of the Anchor by using one of the Anchor sizer and countersink S/M/L. Place them over the 3.2 mm Central Pin.

Fig. 20
Size small

To determine the size, the inner open ring should cover most of the cancellous bone (blue) without involving the cortex, the outer ring (orange) should be centric to the resected humeral surface (green) (Fig. 21a).

In this example, Fig. 21 with size medium Anchor sizer, would be the ideal solution.

Fig. 21
Size medium

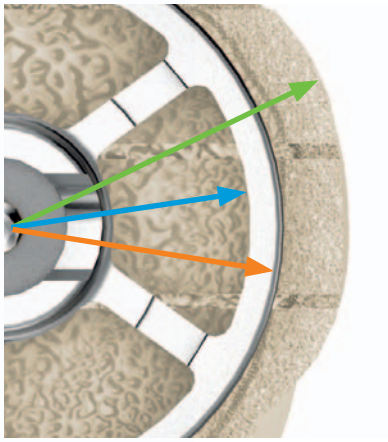


Fig. 21a

Note: Undersizing of the anchor must be avoided as this can contribute to unfavourable conditions for long term fixation.

Fig. 22
Size large

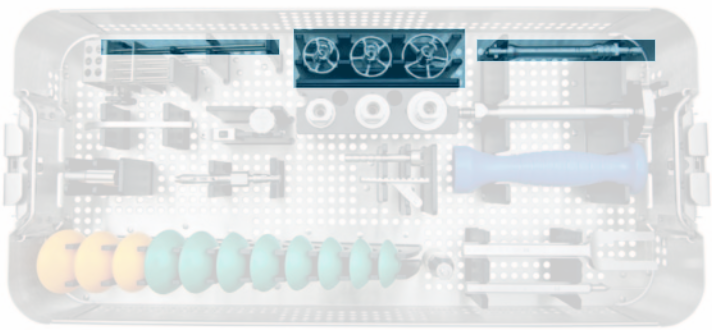
Using the selected Anchor Sizer and Countersink, start to countersink over the Central Pin, using the Countersink Shaft (Fig. 23).

Fig. 23

The counter bore depth of cut is limited and the collar counter bore will bottom out (Fig. 24).

Fig. 24

Trays and Instruments



Assemble the Humerus Puncher with the Impactor/Extractor (Fig. 25).

Use the size defined previously with the Anchor sizer and countersink S/M/L.

Fig. 25

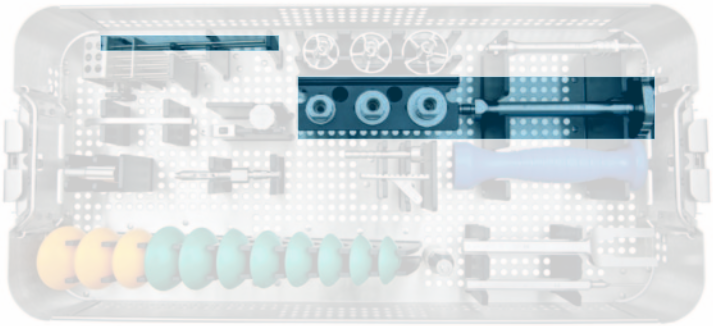
With controlled force, use a hammer to impact the Humerus Puncher over the Central Pin (Fig. 26 and 27).

Note: Be aware high impact force may cause breakage to the humerus.

Fig. 26

Fig. 27

Trays and Instruments



Stop impacting when the Humerus Puncher sits flush within the countersunk area (Fig. 28 and 28a).

With controlled force, use a hammer to remove the Humeral Puncher over the Central Pin (Fig. 28b).

Note: If you have difficulty to remove the Humerus Puncher from the Impactor/ Extractor, use the two hex key from the Head Distractor.

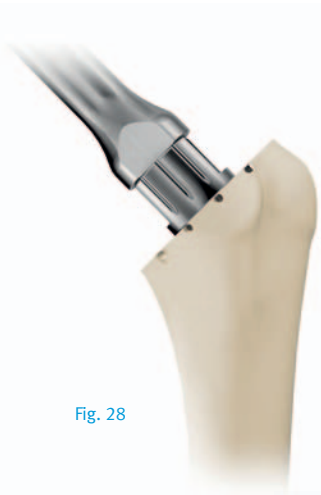


Fig. 28

Fig. 28a

The Humerus is now finally prepared for the implantation of the Humeral Anchor (Fig. 29).

Note: Now, check the proximal Humerus bone quality.

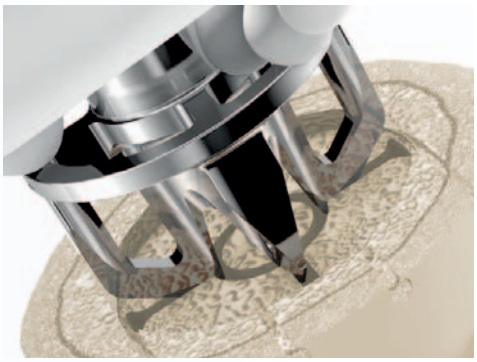
To achieve a good outcome, the patient must have adequate bone stock to support the fixation of the implant. If you have any doubt about bone quality affecting the stable fixation of the anchor, you must use a stemmed shoulder prosthesis. The *Anatomical Shoulder* System may offer the appropriate solution.

Fig. 28b

Fig. 29

Align the Humeral Anchor S/M/L over the 3.2 mm Central Pin. Press, by hand, the Humeral Anchor into the previously prepared cuttings (Fig. 30).

Fig. 30



Start impaction, by using the Anchor and Head Pusher (Fig. 31).

Fig. 31

Due to the open areas of the Anchor and Head Pusher you are at every time aligned with the current position of your Humeral Anchor (Fig. 32).

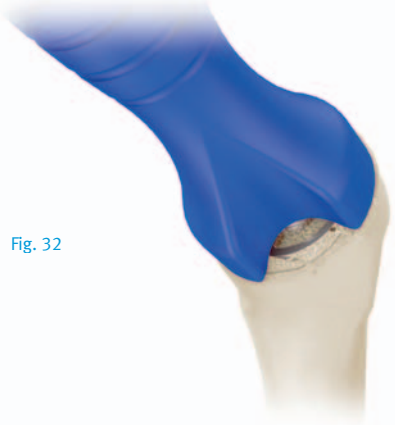


Fig. 32

The Humeral Anchor S/M/L should be flush with the countersunk area after impacting.

When the Humeral Anchor is flush with the countersunk area, remove the Central Pin (Fig. 33).

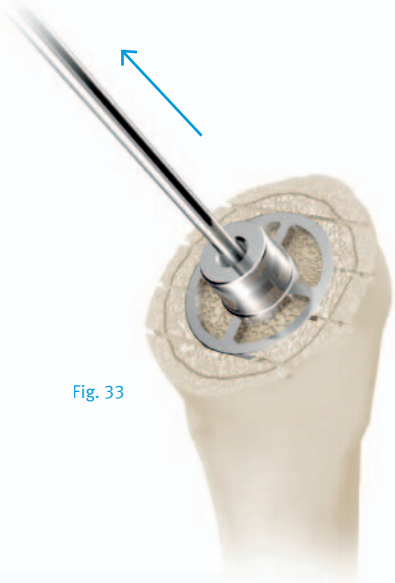
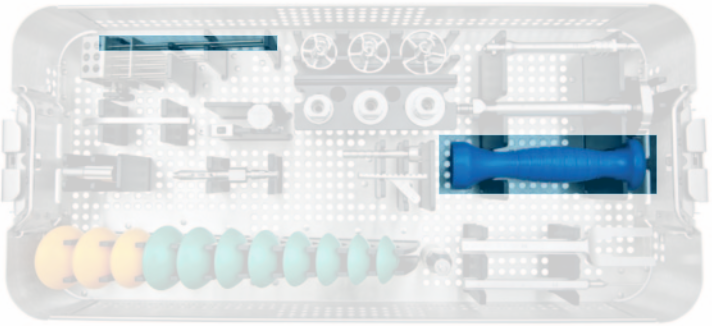


Fig. 33

The Humeral Anchor is now in place (Fig. 34).

Fig. 34

Trays and Instruments



4. Head Preparation and Implantation

Place the Trial Head on the Humeral Anchor and conduct the trial reduction (Fig. 35).

Now use a burr or a rongeur to remove any residual osteophytes or any bone extending beyond the periphery of the humeral head. This relieves impingement with the Scapula.

It is important to balance soft tissue tension with the appropriate trial humeral head in place. It should be possible to fully internally rotate the arm across the chest so that the hand of the involved shoulder easily rests on top of the opposite shoulder, without elevating the involved shoulder off the table.
It should also be possible to externally rotate the arm and still reapproximate the subscapularis tendons to the cut surface of the neck of the humerus.
If the fit of the Humeral Head is so tight that the functional internal or external rotation or posterior subluxation cannot be obtained, then further soft tissue release posteriorly is required.

Note: All taper surfaces must be dry, clean and free from surface damage to achieve a good taper connection.

Remove the Trial Head and place (Fig. 36) the definitive Humeral Head.

Fig. 35

Fig. 36

Impact the definitive Humeral Head, by using the Anchor and Head Pusher (Fig. 37). The Head sits flush on the osteotomy plane.

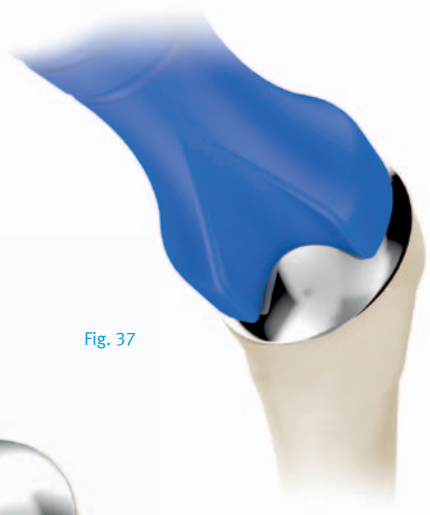


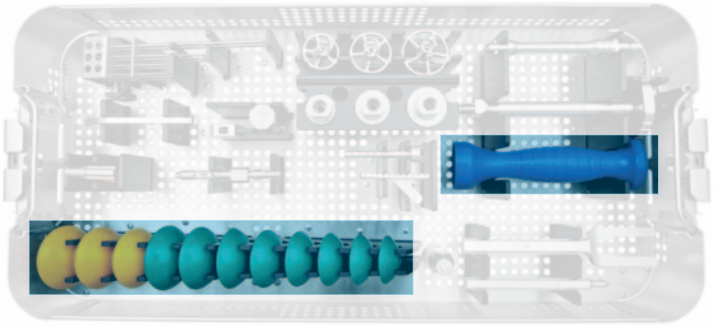
Fig. 37

Fig. 38

The *Sidus* Stem-Free Shoulder is now implanted (Fig. 38 and 39).

Fig. 39

Trays and Instruments



Revision/Intra-operative Correction Surgical Steps

1. Head removal

To remove the Humeral Head (Fig. 40), slide the Head Distractor between the collar of the Humeral Anchor and the undersurface of the Humeral Head (Fig. 41).

Firmly tap the end of the instrument to loosen the Head (Fig. 42).

This instruments can be used to remove either Trial Head or the Implant Head.

Fig. 40

Fig. 41

Fig. 42

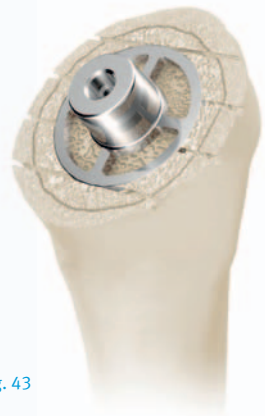


Fig. 43

2. Anchor removal

To remove the Shoulder Humeral Anchor (Fig. 43):

1. Use the Fixation Release (Chisel) in any of the four (4) osteotome slots on the Humeral Anchor to reduce or release any bone connected to the Anchor (Fig. 44 and 44a).

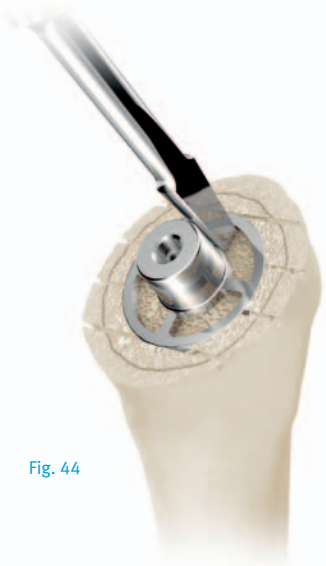


Fig. 44

Fig. 44a

2. Thread the Revision Connector to the Humeral Anchor. Attach the Impactor/Extractor to the Revision Connector. Gently tap the Impactor/Extractor with a hammer to remove the Humeral Anchor from the bone (Fig. 45).

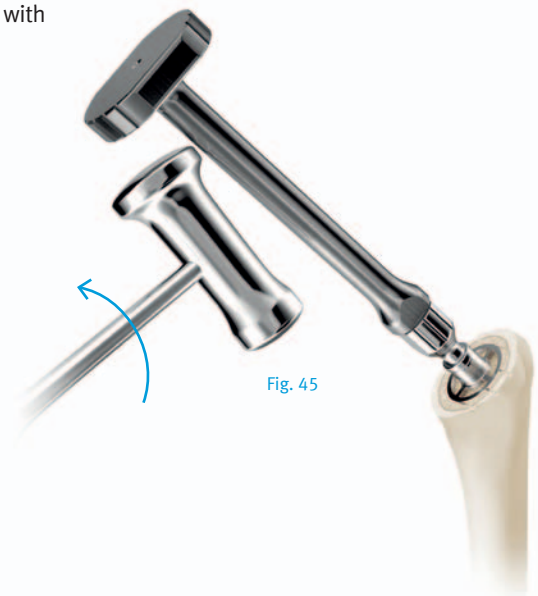
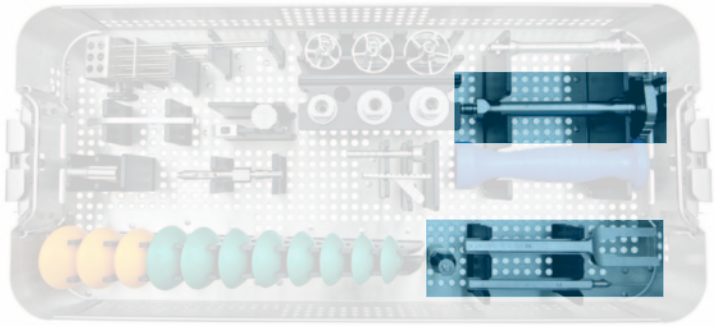


Fig. 45

The Implant is now removed (Fig. 46).

Fig. 46

Trays and Instruments



Glenoid Preparation Surgical Steps

Anatomical Shoulder Glenoid

Glenoid Preparation

Sidus Stem-Free Shoulder in combination with the *Anatomical Shoulder* Glenoid (Fig. 47) (Tab 2). After removal of all the glenoid osteophytes (Fig. 48), a ring retractor is inserted and the proximal humerus levered out posteriorly. The inferior capsule must be incised carefully preserving the axillary nerve. Attention should be paid that the axillary nerve is protected. The caudal capsule is incised and the glenoid exposed.

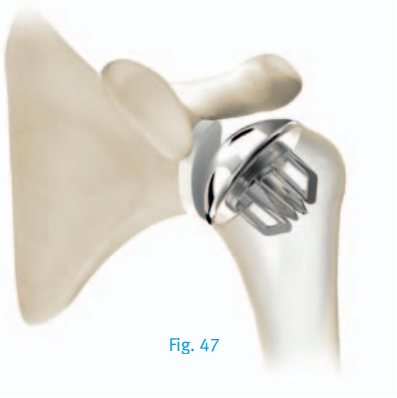


Fig. 47

Humerus head-	glenoid "mismatch" in mm		
∅	S	M	L
38	6.5	8	10
40	6.5	8	10
42	6	7.5	9.5
44	5	6.5	8.5
46	3.5	5	7
48	2.5	4	6
50	2	3.5	5.5
52	1	2.5	4.5

preferred combination

Tab. 2

Set the correction of version determined from the preoperative CT scan on the positioning guide. Identify the optimal position for the guide pin and introduce the Guiding Pin/Kirschner Wire

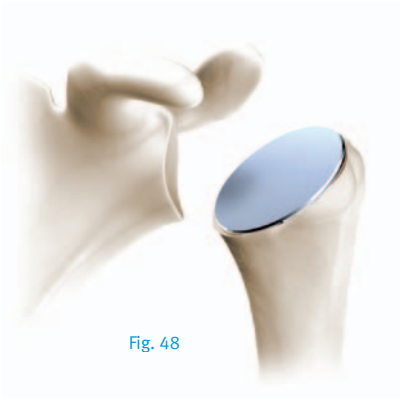


Fig. 48

Introduce the Guiding Pin/Kirschner Wire into the Guiding Instrument for Glenoid.

The laser marking on the 3 mm Kirschner Wire (a) must disappear slightly into the eyelet of the positioning guide (Fig. 49).

After this, remove the positioning guide over the 3 mm Kirschner Wire.

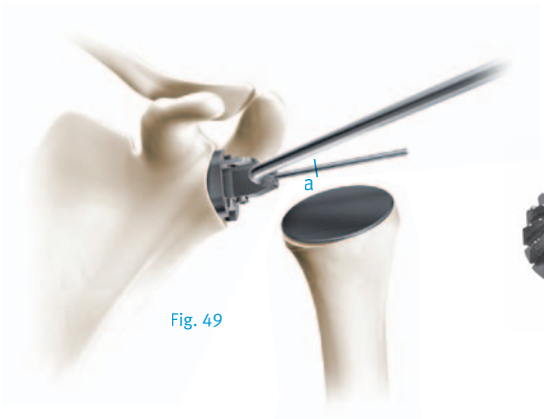


Fig. 49

The reamer and then the handle are mounted on the guide wire. For sclerotic glenoids the separate reamer (Fig. 49a) may be used to start the reaming process.

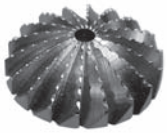


Fig. 49a
Sclerotic reamer

If it is not impossible to insert the Kirschner Wire, drill a hole in the center of the glenoid with the glenoid drill and then machine the glenoid using the handle with the center locator (Fig. 50).

Now ream the glenoid on the basis of the reamer size and ream in the new alignment of the articulating surface (Fig. 50).

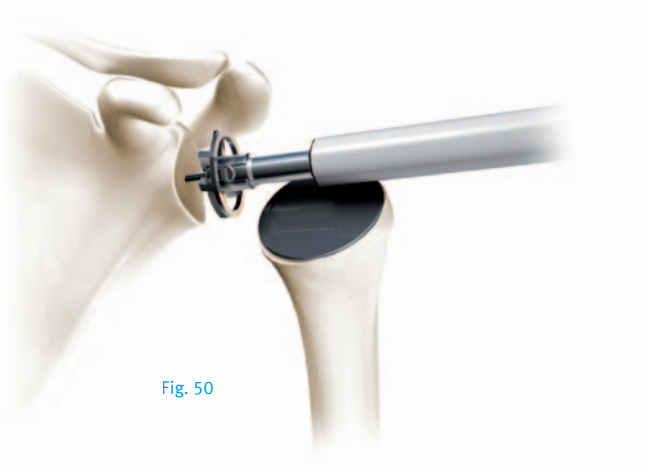


Fig. 50

The size of the last-used reamer corresponds to the size of the glenoid.

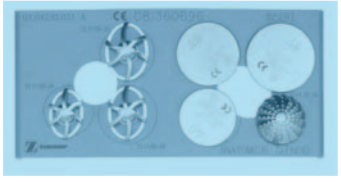
If selection of the prosthetic components is difficult, it is generally preferable to err towards smaller heads and towards larger glenoids.

Note:
All sizes of Glenoids can be combined with all sizes of Humeral Heads (see “the Glenoid Component” Tab. 2).

Optional:
If the need of an exact inferior/superior and/or retroversion correction is identified during pre-operative planning with CT-scans, the optional 3D Guiding Instrument (with 5° steps laser marks) can be used.

Continue with the pegged glenoid preparation on page 30 or with the Keeled Glenoid preparation on page 32.

Trays and Instruments



Glenoid Components with 4-Peg Anchoring

Now guide the Glenoid Drill Guide (left and right version) with the central hole along the 3 mm Kirschner Wire and place it on the surface of the glenoid.

The Glenoid Drill Guide can be secured in place by means of a drilled centering peg (Fig. 51).

Fig. 51

The proximal hole, with a diameter of 6.2 mm, is now drilled with the glenoid drill.

Care should be taken to ensure that drilling is continued as far as possible with the Glenoid Drill Guide (Fig. 52).

The drill can be used with either the flexible or the rigid shaft.

Fig. 52

The proximal drilled hole is then fixed with a centering pin and one of the two distal holes is drilled. The second hole is then fixed with a centering pin while the second distal hole is drilled (Fig. 53).

Fig. 53

The third drilled hole is now fixed and the 3 mm Kirschner Wire and the centering pins are removed (Fig. 54).

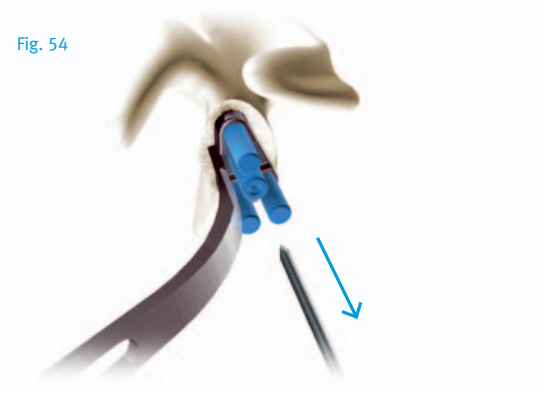


Fig. 54

Now drill the central hole (Fig. 55).

Fig. 55

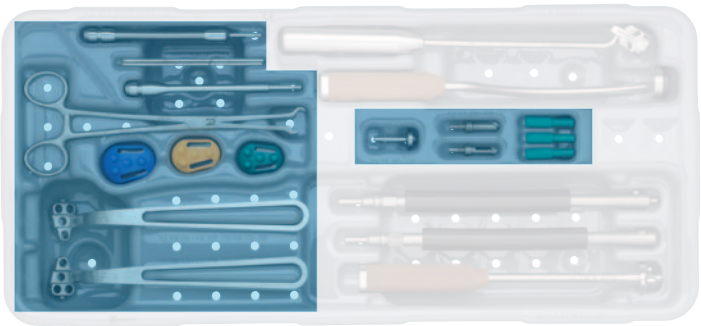
Engage all the holes with the countersink in order to enable seating of the glenoid component (Fig. 56).

Fig. 56

Now insert the Glenoid Trial prosthesis into the prepared glenoid, using the holding forceps (Fig. 57).

Fig. 57

Trays and Instruments



Glenoid Component with Keel

Now guide the Glenoid Drill Guide with the central hole along the 3mm Kirschner Wire and place it on the surface of the glenoid.

The Glenoid Drill Guide can be secured in place by means of a drilled centering peg (Fig. 58).

Note: The Glenoid Drill Guide is available in two sizes: S/M for the Keeled Glenoid sizes S and M, and size L for the Keeled Glenoid size L. Both sizes are available in left and right version.

The proximal drilled hole is then fixed with a centering pin and the distal hole is drilled (Fig. 58). The second hole is then also fixed with a centering pin. The 3 mm Kirschner Wire and the centering pin are removed.

Now drill the central hole approximately 5mm into the glenoid (Fig. 58). Remove the two pins afterwards. Now drill the central peg until you have reached the Glenoid Drill Guide stop.

To help ensure optimal preparation of the bone to the keel glenoid, as a final step the bone is processed into a keel with a rasp (Fig. 59). This step gives optimal concentration of the bone.

If drill guide of sizes S or M were used, use Rasp size S and M. The rasp of size L is used, if the size L drill guide was used.

The glenoid test prosthesis is inserted into the prepared glenoid using the holding forceps (Fig. 60).

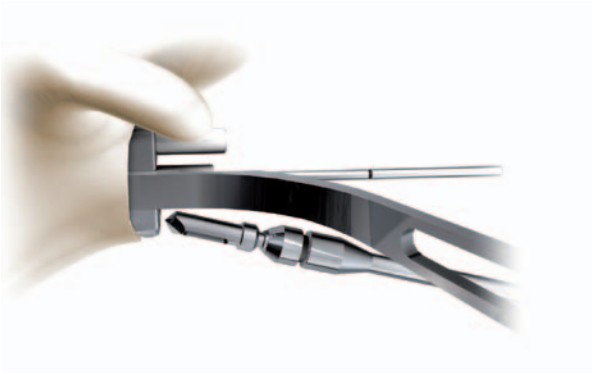


Fig. 58

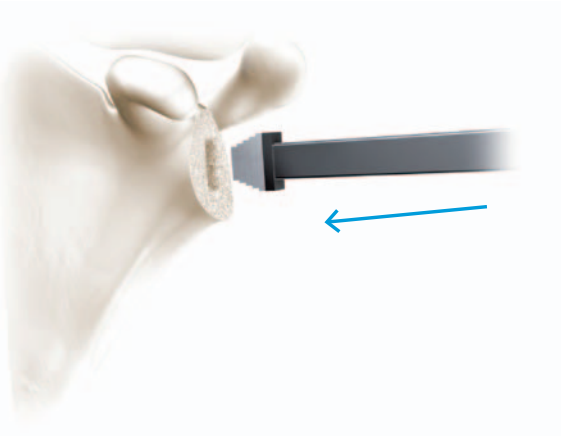


Fig. 59

Fig. 60

Cementing

The glenoid trial prosthesis is used to test whether the seating is stable (Fig. 61).

The glenoid surface and the anchoring holes are now carefully cleaned and dried. The anchoring holes are filled with bone cement and the cement is pressed into the anchoring holes with a clean compress or using the instruments shown in in (Fig. 62 and 63). Glenoid Cement Setting Instrument for pegged glenoid can be used for all three sizes S, M and L (Fig. 62).

The Glenoid Cement Setting Instrument for a Keeled Glenoid consists of a handle and two pressurization adapters in size S/M and L (Fig. 63).

The anchoring holes are then filled where necessary and cement is applied to the glenoid surface and the back side side of the implant.

The implant is then cemented into place using the glenoid impactor (Fig. 64).

Note: Do not use the Impactor on the implant while the cement is hardening.

The excess cement is immediately and carefully removed with a knife blade.

Note: Continue the Surgical Steps with chapter “Head Size Determination and Positioning” on page 16.

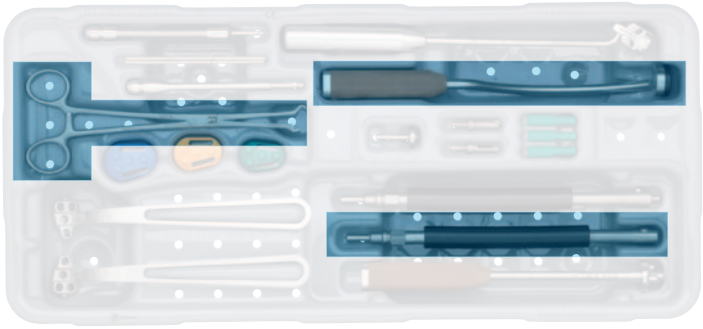
Fig. 61

Fig. 62

Fig. 63

Fig. 64

Trays and Instruments



Optional – Further Combination Possibilities

Compatibility Matrix

Sidus Stem-Free Anchor

Sidus Stem-Free Anchor

REF	Description/Size
01.04555.110	S
01.04555.120	M
01.04555.130	L

Bigliani/Flatow Shoulder Standard Heads

Bigliani/Flatow Shouler Standard Heads

REF	Description/Size	REF	Description/Size
00-4300-056-42	42 mm x 56 mm	00-4300-046-33	33 mm x 46 mm
00-4300-056-39	39 mm x 56 mm	00-4300-046-30	30 mm x 46 mm
00-4300-056-36	36 mm x 56 mm	00-4300-046-27	27 mm x 46 mm
00-4300-056-33	33 mm x 56 mm	00-4300-046-24	24 mm x 46 mm
00-4300-056-30	30 mm x 56 mm	00-4300-046-21	21 mm x 46 mm
00-4300-052-36	36 mm x 52 mm	00-4300-046-18	18 mm x 46 mm
00-4300-052-33	33 mm x 52 mm	00-4300-046-15	15 mm x 46 mm
00-4300-052-30	30 mm x 52 mm	00-4300-040-27	27 mm x 40 mm
00-4300-052-27	27 mm x 52 mm	00-4300-040-24	24 mm x 40 mm
00-4300-052-24	24 mm x 52 mm	00-4300-040-21	21 mm x 40 mm
00-4300-052-21	21 mm x 52 mm	00-4300-040-18	18 mm x 40 mm
00-4300-052-18	18 mm x 52 mm	00-4300-040-15	15 mm x 40 mm

Bigliani/Flatow Shoulder cemented Glenoids

Bigliani/Flatow Shouler cemented Glenoids

REF	Description/Size
00-4300-080-00	BF Glenoid with Keel 40 mm
00-4300-081-00	BF Glenoid with Keel 46 mm
00-4300-082-00	BF Glenoid with Keel 52 mm
00-4300-085-00	BF 40 mm Pegged Glenoid
00-4300-086-00	BF 40 mm Pegged Glenoid
00-4300-087-00	BF 40 mm Pegged Glenoid

Trabecular Metal Glenoid

Trabecular Metal Glenoid

REF	Description/Size
00-4326-040-00	40 mm
00-4326-040-46	40 x 46 mm Articular Surface
00-4326-046-00	46 mm
00-4326-046-40	46 x 40 mm Articular Surface
00-4326-046-52	46 x 52 mm Articular Surface
00-4326-052-00	52 mm
00-4326-052-46	52 x 46 mm Articular Surface
00-4326-052-56	52 x 56 mm Articular Surface

Additional Surgical Technique and Instrument Sets

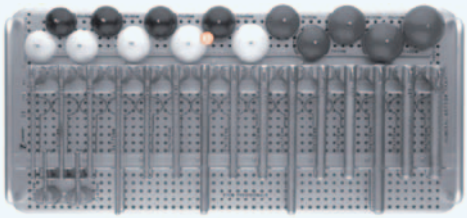
Surgical Technique

For the use of the *Bigliani/Flatow* Humeral Standard Head in combination with the *Sidus* Stem-Free Anchors, all surgical steps are identical aside from the use of the B/F Humeral Heads Provisionals.

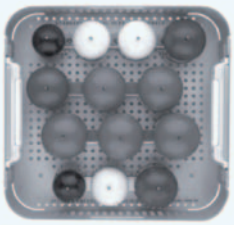
Use the *Bigliani/Flatow* Humeral Head provisionals without Central Pin Positioner for Head Size Determination and Positioning Page 16.

Instrument Sets

Bigliani/Flatow Humeral Instrument Set (KT-4300-000-02),



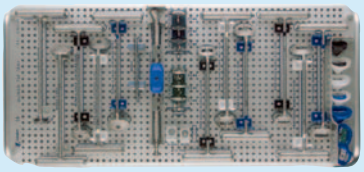
Optional Set, Expanded Humeral Head Provisionals Expanded Head Provisional Set (00-4300-000-24)

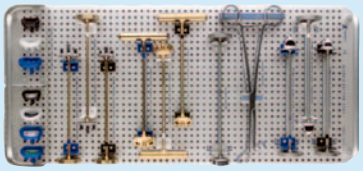


***Sidus* Stem-Free Shoulder Anchor**		**Small** 01.04555.110					**Medium** 01.04555.120					**Large** 01.04555.130				
***Bigliani/Flatow* Humeral Head**	∅ 40	15	18	21	24	27										
	∅ 46	15	18	21	24	27		24	27	30	33					
	∅ 52		18	21	24		21	24	27	30			33	36		
	∅ 56											30	33	36	39	42

Tab. 3

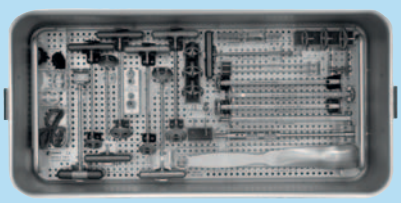
Lit.No.:
97-4301-106-00





Bigliani/Flatow Glenoid Tray
KT-4300-0001

Lit.No.:
97-4301-204-00



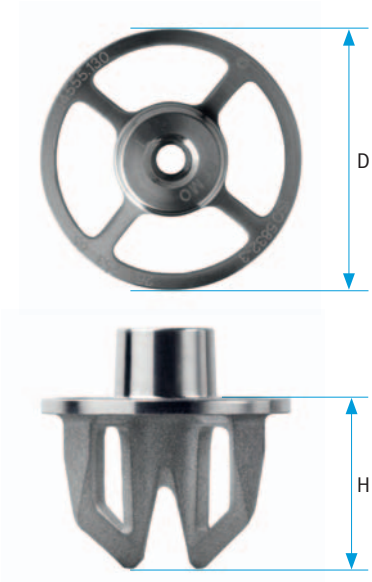
Trabecular Metal Glenoid Tray
00-4327-000-02

Postoperative Treatment

It is the responsibility of the doctor to decide which postoperative treatment is appropriate depending on each patient's health condition with the understanding that an uncemented implant will generally perform better when load activities in the first few weeks are not too aggressive. The following outlines recommendations which are generally made by surgeons. From the first day after the operation the patient may take the arm out of the immobilizing dressing several times a day to stretch his elbow. On the day of the operation pendulum exercises may be started, on the first day with passive flexing exercises, best performed using a cord passed over a roller. Depending on the intra-operative findings, active exercises may be started from the third week. If the rotator cuff was sutured or reconstructed, an abduction splint may be necessary for 4 to 6 weeks.

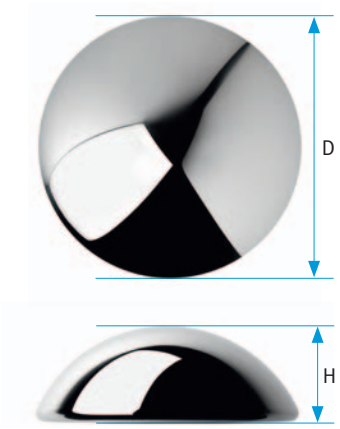
Implant Overview

Sidus Stem-Free Shoulder Humeral Anchor



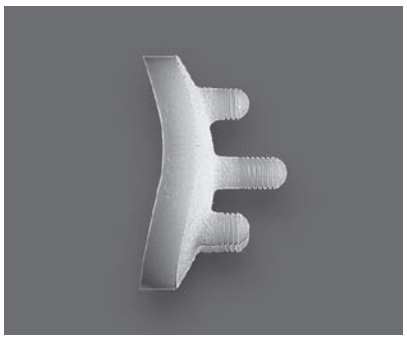
Size	D mm	H mm	REF
S	24	16	01.04555.110
M	28	19	01.04555.120
L	32	22	01.04555.130

Sidus Stem-Free Shoulder Humeral Head



D mm	H mm	REF
38	13	01.04555.380
40	14	01.04555.400
42	15	01.04555.420
44	16	01.04555.440
46	16	01.04555.460
48	17	01.04555.480
48	20	01.04555.485
50	18	01.04555.500
50	21	01.04555.505
52	19	01.04555.520
52	23	01.04555.525

Anatomical Shoulder Glenoid



Pegged Glenoid, cemented

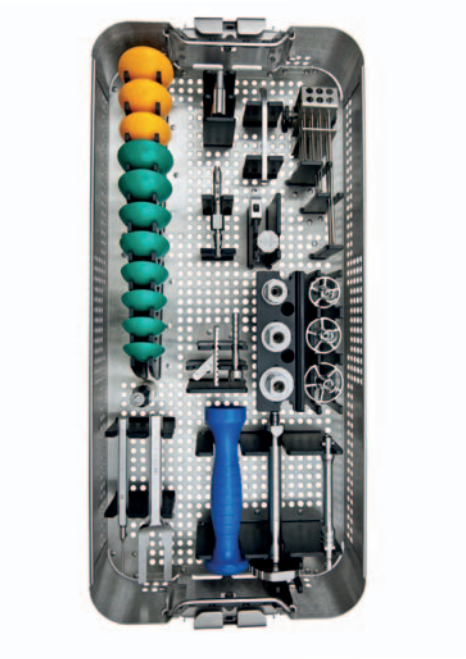
Size	REF
S	01.04214.340
M	01.04214.370
L	01.04214.400

Keeled Glenoid, cemented

Size	REF
S	01.04214.345
M	01.04214.375
L	01.04214.405

Instrument Overview

Humeral Preparation



Sidus Stem-Free Shoulder
Instrument Tray (complete)
REF
ZS01.04555.000

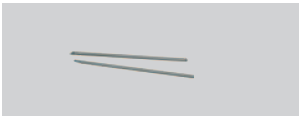
Sidus Stem-Free Shoulder
Tray Lid
REF
00-5900-099-00

Sidus Stem-Free Shoulder
Tray (empty)
REF
01.04555.600

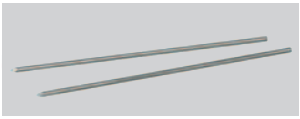
Alignment Guide
“Supraspinatus”
REF
01.04555.620

Resection Guide
REF
01.04555.630

Kirschner Wire 2x100 mm
REF
01.04555.640



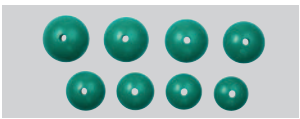
Kirschner Wire 2x70 mm
REF
01.04555.650



Gentral pin 3.2 mm
REF
01.04555.660

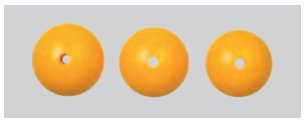
Central pin positioner
REF
01.04555.670

Impactor/Extractor
REF
01.04555.680



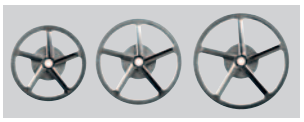
Trial head

Size	REF
38-13	01.04555.690
40-14	01.04555.700
42-15	01.04555.710
44-16	01.04555.720
46-16	01.04555.730
48-17	01.04555.740
50-18	01.04555.760
52-19	01.04555.780



Trial head

Size	REF
48-20	01.04555.750
50-21	01.04555.770
52-23	01.04555.790



Anchor sizer and countersink

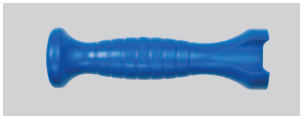
Size	REF
S	01.04555.800
M	01.04555.810
L	01.04555.820

Countersink shaft

REF
01.04555.830

Humerus puncher

Size	REF
S	01.04555.840
M	01.04555.850
L	01.04555.860



Anchor & head pusher

REF
01.04555.870

Head distractor

REF
01.04555.880

Fixation release

REF
01.04555.890

Revision connector

REF
01.04555.900

Pin retractor 2 mm

REF
01.04555.910

Instrument Overview

Instrument tray glenoid (complete)
REF
ZS01.04230.030

Tray cover
REF
01.00029.029

Tray (empty)
REF
01.04230.031

Drill guide for right glenoid
REF
72.09.10-21

Drill guide for left glenoid
REF
72.09.10-11

Glenoid trial prothesis S, convex
REF
52.09.00-05

Glenoid trial prosthesis M, convex
REF
52.09.00-06

Glenoid trial prosthesis L, convex
REF
52.09.00-07

Countersink for glenoid
REF
72.11.20-10

Centering peg for glenoid
REF
72.11.20-11

Drill ∅ 6.2 mm for glenoid
REF
72.11.20-13

Handle for cutter for glenoid
REF
72.09.01-30

Handle for milling cutter glenoid
REF
72.11.20-01

Glenoid cement setting instrument
REF
01.04230.801

Holding forceps for glenoid
REF
72.11.20-05

Rigid shaft
REF
75.80.08

Guiding instrument for glenoid, 3D
REF
01.0236.250*

* Not included in ZS01.04230.030

Humeral cut protection, ∅ 40 mm
REF
72.11.20-40

Kirschner Wire for glenoid
REF
72.09.01-20

Flexible shaft
REF
75.80.04

Guiding instrument for glenoid
REF
72.09.01-10

Humeral cut protection, ∅ 44 mm
REF
72.11.20-44

Impactor for glenoid
REF
72.11.20-04

Screw for guiding instrument for glenoid
REF
01.04237.111

Glenoid reamer S
REF
01.04236.534

Humeral cut protection, ∅ 48 mm
REF
72.11.20-48

Glenoid reamer M
REF
01.04236.537

Glenoid reamer L
REF
01.04236.540

Sclerotic milling cutter S
REF
72.11.10-34

Instrument tray keeled glenoid (complete)

REF

ZS01.04230.035

Small tray cover

REF

01.00029.032

Tray (empty)

REF

01.04230.038

Drill guide for keeled glenoid S & M

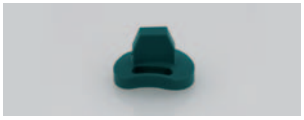
REF

01.04237.211

Drill guide for keeled glenoid L

REF

01.04237.212



Glenoid trial prosthesis L, keeled

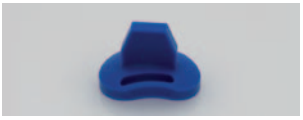
REF

01.04237.110

Glenoid trial prosthesis M, keeled

REF

01.04237.120



Glenoid trial prosthesis S, keeled

REF

01.04237.130

Glenoid cement setting instrument S & M

REF

01.04237.215

Glenoid cement setting instrument L

REF

01.04237.216

Handle glenoid cement setting instrument

REF

01.04237.217

Rasp for glenoid S & M

REF

01.04237.213

Rasp for glenoid L

REF

01.04237.214

Zimmer Shoulder Solutions

Early Stage → Last Salvage

Durom®
Shoulder
Cemented
Resurfacing
Cup

Sidus
Stem-free
Shoulder

Variable head/stem
angles; cemented
4-pegged Glenoid

Multiple fixed head/
stem angles,
42°, 45° and 48°;
compatible with a
press-fit *Trabecular*
Metal Glenoid Fixation

Anatomically
fixed head/stem
angle; anatomical
repositioning
of tuberosities

The convertible
Anatomical Shoulder
Inverse/Reverse
system allows the
combination either
with a convex,
bone preserving
design, or with a
premium ingrowth
Glenoid fixation

Bipolar fixed
head/stem angle;
“last salvage”
shoulder solution

Disclaimer

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Please refer to the package inserts for important product information, including, but not limited to, contraindications, warnings, precautions, and adverse effects.

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