# Dual-Platform Shoulder Arthroplasty REVERSE SURGICAL TECHNIQUE



# REFERENCE NUMBERS

#### **HUMERAL STEMS**

A)	REFERENCE	DIAMETER	HEIGHT
	267 360	Ø 06	100
	265 102	Ø 08	120
21	265 103	Ø 08	170
_	265 104	Ø 10	125
- 1	265 105	Ø 12	130
ı	265 106	Ø 14	135
l	267 361	Ø 16	140

#### **POROUS GLENOID IMPLANT**

A	REFERENCE	SIZE
4	267 702	445
Total Control	267 701	44
The same of the sa	267 704	46
THE STREET	267 705	48
2016	268 698	44S-LP*
Carrier Color	267 703	44-LP*
The senses	268 699	46-LP*
NA SIL		

#### **GLENOSPHERES**

REFERENCE	DIAMETER
265 150	Ø 36
265 151	Ø 39
265 152	Ø 42

#### **HUMERAL INSERTS**

	REFERENCE	DIAMETER	HEIGHT
	265 141	Ø 36	00
4	265 142	Ø 36	05
	265 143	Ø 36	10
	265 144	Ø 39	00
	265 145	Ø 39	05
	265 146	Ø 39	10
	265 147	Ø 42	00
	265 148	Ø 42	05
	265 149	Ø 42	10

special sizes for larger anatomies, trauma or revision cases

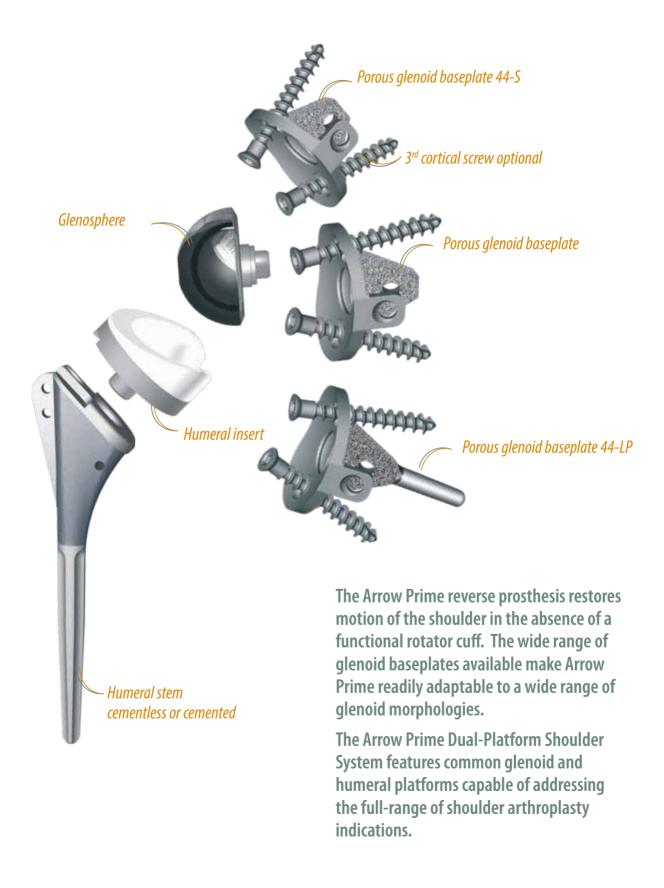
#### **CANCELLOUS BONE SCREW** - steriles -

k	REFERENCE	DIAMETER	LENGTH
Ž,	265161	Ø 5.5	24
7	265162	Ø 5.5	28
	265163	Ø 5.5	32
	265164	Ø 5.5	36
	265165	Ø 5.5	40
	265166	Ø 5.5	45
	265167	Ø 5.5	50

#### **CORTICAL BONE SCREW** - steriles -

	CONTICAL DONE SCHEW - Stellies -				
þ	REFERENCE	DIAMETER	LENGTH		
è	265 168	Ø 4.5	32		
١	265 169	Ø 4.5	34		
	<b>265 170</b>	Ø 4.5	36		
	265 171	Ø 4.5	38		
	265 172	Ø 4.5	40		





# **INDICATIONS**

The ARROW Reverse Shoulder Prosthesis is indicated for patients with severe shoulder arthropathy and a grossly deficient rotator cuff or a previously failed shoulder joint replacement with a grossly deficient rotator cuff. A functional deltoid muscle and adequate glenoid bone stock are necessary to use this device. The humeral stem is intended for cemented or cementless application while the porous glenoid baseplate is intended for cementless application with the addition of bone screws for fixation.

## POSITIONING THE PATIENT

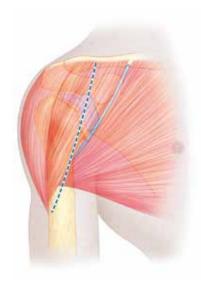
- In a half-sitting position
- ···· Upper limb free





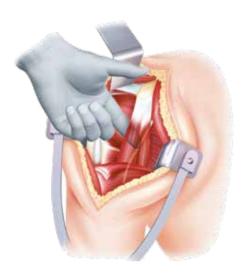
# 1 - APPROACH

# 1.1 - DELTO-PECTORAL APPROACH

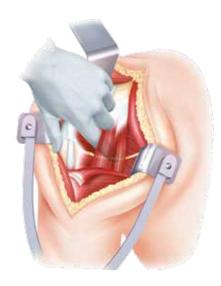


- The deltopectoral incision is made from the clavicle to the superior border of the pectoralis major, along the deltopectoral groove, lateral to the coracoid.
- The cephalic vein is retracted away.



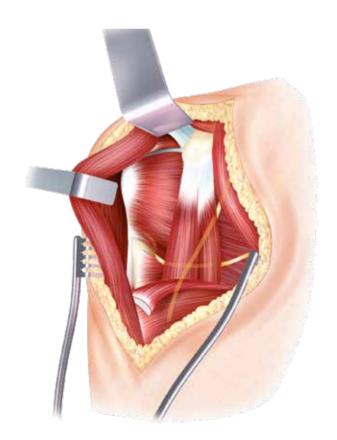


Find the position of the musculocutaneous nerve with the finger, before putting a retractor under the coracobrachialis muscle.

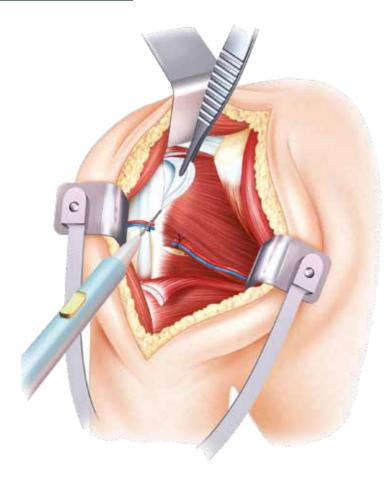


The position of the axillary nerve must be identified before sectioning the subscapularis muscle.

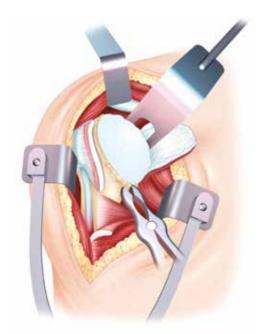
- Free the deep surface of the deltoid by abducting and externally rotating the arm.
- Do not damage the coracoacromial ligament.
- Partially section the pectoralis major tendon for 1 cm (increasing external rotation).



#### SURGICAL TECHNIQUE



Dislocate the head of the humerus in abduction and external rotation with retropulsion of the arm.



- Ligate the anterior circumflex vessels.
- :.... Identify the rotator interval.
- \* The subscapular incision can be made in three ways:
  - by sectioning the subscapularis muscle at the musculotendinous junction and sectioning the articular capsule at the same point;
  - if there is limited preoperative external rotation, by detaching the subscapularis tendon subperiosteally starting from the bicipital groove (identified by the long head of the biceps at the superior border of the pectoralis major);
  - by osteotomy of the lesser tuberosity to reduce the risk of secondary atrophy of the subscapularis.
- In pathological conditions of the long head of the biceps:
  - either a tenodesis is performed in the bicipital groove;
  - or a tenotomy.



- Dislocation is only possible if the anterior-inferior capsule and the coracohumeral ligament have been sectioned.
- Osteophytes on the anatomical neck of the humerus are resected using bone forceps.

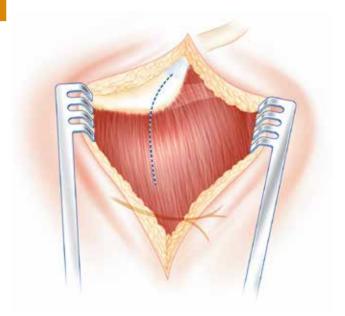


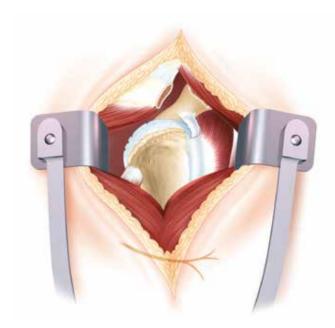
# 1.2 - SUPERO-LATERAL APPROACH

Start the incision at the acromioclavicular joint. Follow the anterior border of the acromion descending onto the lateral surface of the shoulder to 4 to 5 cm from the anterior lateral border of the acromion.

Detach the deltoid from the anterior border of the acromion, together with osteoperiosteal shavings (to assist in its repair), then divide it in the direction of its fibres, without descending too far, avoiding the axillary nerve.

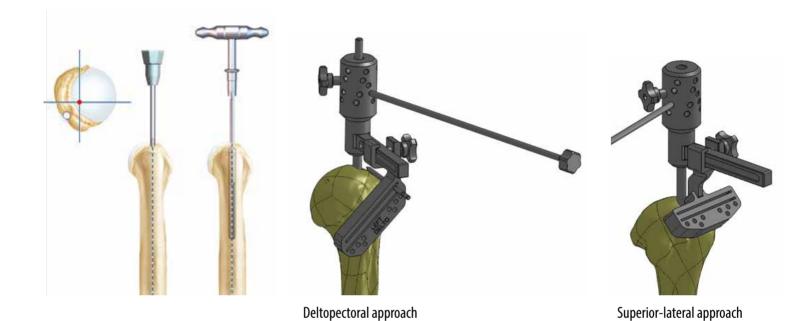
If required, perform an acromioplasty, resecting the coracoacromial ligament. This facilitates the exposure of the bar humeral head.





# 2 - HUMERAL PREPARATION

# 2.1 - USE OF THE CUTTING GUIDE



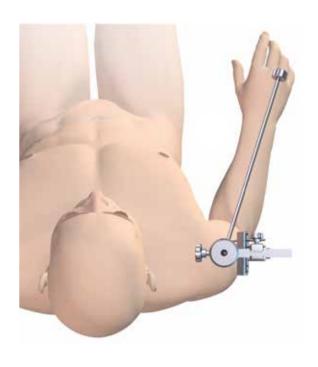
The entry point for the square-point awl (ref. 264 868) is on the summit of the head of the humerus, about 1 cm posterior and medial to the bicipital groove.

Reamers: Ø6 ref. 267 604 Ø8 ref. 267 605 Ø10 ref. 267 606 Ø12 ref. 267 607 Ø14 ref. 267 608 Ø16 ref. 267 609

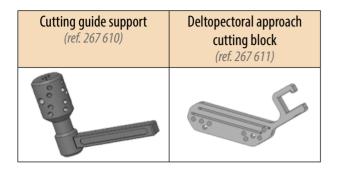
To implant the long humeral stem 08/170mm (ref. 265 103), use the long reamer (ref. 268 108).

Long reamer: 08 - L200 ref. 268 108

If the cortical bone is thick, use of the 6 diaphyseal bit (ref. 261 010) or square-taper bone awl (ref. 264 868) is recommended.







Superior-lateral approach cutting block (ref. 267 612)	Connecting screw (ref. 267 613)

<b>AO pin driver</b> (ref. 269 239)	Threaded pins (ref. 268 016)
c •	

The cutting guide support is to be connected to the definitive humeral reamer. Previously used and left into the humerus.

#### **Cutting guide Pins:**

Threaded pins (Ø3 lg90mm): ref. 268 016 AO Screwdriver: ref. 269 239

Assemble the cutting guide support (ref. 267 610) with the cutting guide specific to the approach used with the connecting screws (ref. 267 613).

The guides can be used for both right and left shoulders.

The deltopectoral cutting guide should be placed so as to be able to read the operative side, right or left.

Place a retroversion rod on the cut guide support at the desired amount of retroversion, aligned with the forearm.

We recommend -10 to -20 for a reverse prosthesis.

The cut guide support (ref. 267 610) is fixed to the diaphyseal reamer.

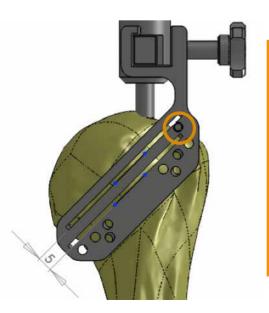
The humeral head resection will be sufficient if the cut terminates at the inferior aspect of the glenoid.

The neck-cut is at a fixed angle of 135°.

A recut is possible 5mm below the first resection (second slot).

When the resection level and retroversion have been determined, use the threaded pins to fix the humeral cutting guide to the proximal humerus (2 to 3 threaded pins (ref. 268 016) are effective at providing good stability).

Use an oscillating saw through the chosen slot of the humeral cutting guide and complete the humeral head resection.



# ANATOMICAL LANDMARK FOR THE HUMERAL RESECTION, « THE PINS TRICK »:

Place a pin into the most superior hole of the cutting guide.

The pin should lie on the top of the greater tuberosity, at the insertion level of the supraspinatus.

The 2<sup>nd</sup> slot has been positioned 5mm below the first one.

The first, more proximal slot is intended for an anatomical prosthesis.

The second, more distal slot, is recommended for a reverse prosthesis if a recut is necessary.

The saw blade is placed into one of the slots, not on the top of the resecting guide.

# 2.2 - FOR REMOVING THE CUTTING GUIDE SUPPORT



- Unscrew completely the connecting screw
- .... Then turn the guide as shown below:

Deltopectoral, left side

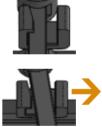


lateral









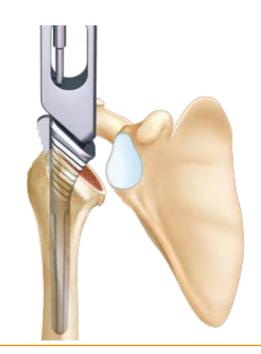
## 2.3 - HUMERAL STEM TRIAL

The depth of resection of the head of the humerus is sufficient if the medial part of the cut bone ends at the bottom of the glenoid cavity.

Carry out metaphyseal reaming with increasing sizes of rasps.

The diaphyseal rasp chosen to serve as the trial humeral prosthesis is left in place to protect the proximal humerus during preparation of the glenoid.

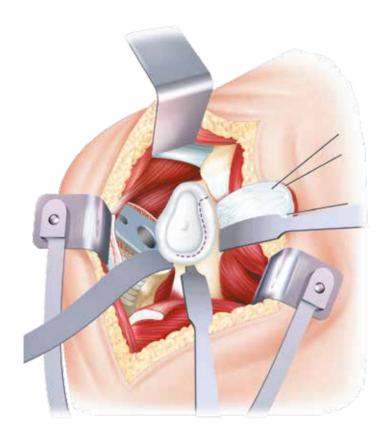
Arrow broach handle:	ref. 267 614
Humeral broaches: Ø6 lg 100mm	ref. 266 222
Ø8 lg 120mm	ref. 264 447
Ø8 lg 170mm	ref. 268 100
Ø10 lg 125mm	ref. 264 448
Ø12 lg 130mm	ref. 264 449
Ø14 lg 135mm	ref. 264 450
Ø16 la 140mm	ref. 267 357





# 3 - PREPARATION OF THE GLENOID

## 3.1 - GLENOID GUIDE FOR GLENOID GUIDE PIN POSITIONING



Capsulectomy and circumferential excision of the labrum (360°) helps to expose and delimit the glenoid.

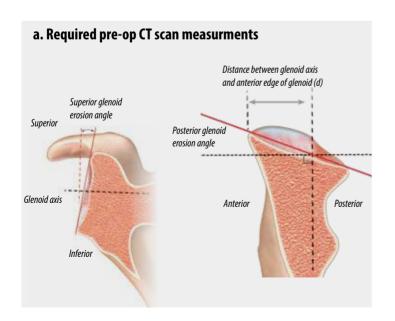
The retractors are positioned below, behind, and in front of the glenoid.

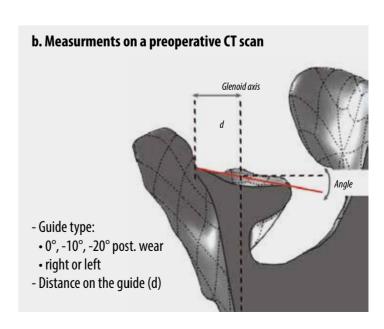
Retractor: ref. 261 059



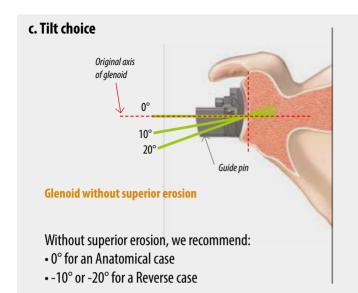
It is sometimes useful to remove a retractor during reaming or glenoid impaction.

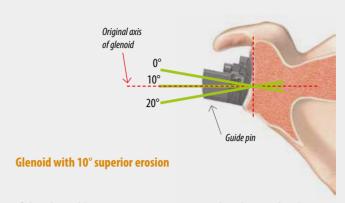
Glenoid guides	Stylus glenoid guide
(ref. 269 086 to 269 091)	(ref. 269 092 and 269 093)
00 000	





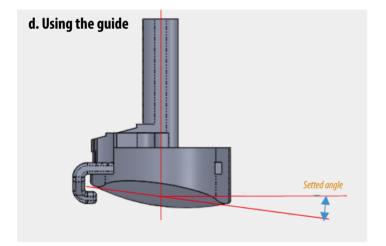
#### SURGICAL TECHNIQUE

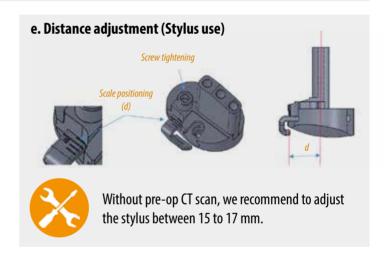


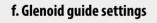


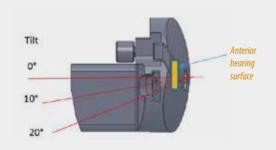
If the glenoid has a 10° superior erosion, the tilt must be choice at:

- 10° to have a tilt of 0°
- 20° to have a tilt of 10°









The glenoid guide could be connected to M5 handle (*ref.* 267 667) or to the blue handle (*ref.* 261 844).



The guide is placed on the glenoid surface.

The bearing surface must be in contact with anterior glenoid part.
The guide pin (ref. 269 138) is inserted with the previously selected tilt.



A scale at the inferior aspect of the guide corresponds to the determined size of the glenoid implant based upon the colored glenoid templates.



We recommend to place the guide size flush to the inferior margin of the glenoid.



# 3.2 - GLENOID REAMING



Ablate the glenoid cartilage using the "bow-tie" glenoid reamers to provide a perfect fit with the convex bottom of the porous glenoid baseplate.

Bow-tie reamers: 44 ref. 267 650 46 ref. 267 651 48 ref. 267 652 50 ref. 267 653

- Leave the subchondral bone intact.
- Start the reamer several millimeters from the glenoid cavity to minimize risk of fracture.

### 3.3 - KEEL PREPARATION





..... Use the guide suited to the selected size.

Drill guides	Baseplate sizes
Metal-Back drill guide 44S ref. 268 470	44S & 44S-LP
Metal-Back drill guide 44/46/48	44/46/48
ref. 268 471	44-LP/46-LP

Drill alternatively the two holes.

Use the quick-release peripheral drill shaft (ref. 269 242) and the two quick-release peripheral drills Ø 5 mm (ref. 269 240).



#### DRILLING PROCEDURE

Insert a quick-release drill into the quick-release peripheral drill shaft.

Drill the inferior hole until the stop is engaged.

Remove the driver from the joint while leaving the drill in place, working as an anti-rotation peg.

Repeat the technique with the second quick-release drill for the superior hole.



Quick release peripheral drill shaft

ref. 269 242

#### SURGICAL TECHNIOUE

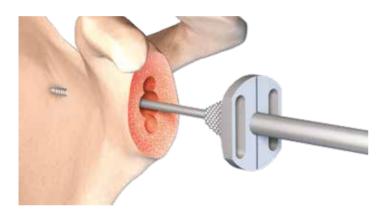




Remove the keel drill guide and use the cannulated tapered reamer (ref. 269 131) to complete the central hole preparation.



**In case of sclerotic bone**, it is recommended to remove any bone bridges with a rongeur.

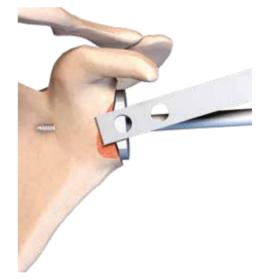


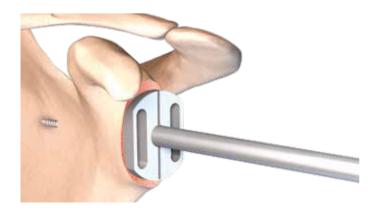
Use the cannulated punch to create the keel footprint.



Repeat progressive back and forth impactions, until the shield of the punch is in contact with the glenoid bone surface.

	Instruments matching table		-
ref. 269 133	Cannulated glenoid punch 44S	MB 44S & 44S-LP	~
ref. 269 134	Cannulated glenoid punch 44	MB 44 & 44-LP	
ref. 269 135	Cannulated glenoid punch 46	MB 46 & 46-LP	
ref. 269 136	Cannulated glenoid punch 48	MB 48	







Use the oscillating saw to achieve an economical cut for the baseplate's anterior winglet. Follow the edge of the punch's shield.



#### Long post baseplates



Perform the post preparation with the Ø5mm long cannulated drill bit (ref. 267 649).

Drill until the stop ring is in contact with the bone surface.



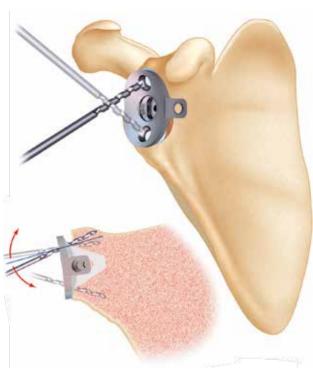
Finish the keel preparation with the use of the trial baseplate.



Perform a trial fitting using the handle (ref. 267 667). Check the primary stability and contact of the porous glenoid baseplate with the entireity of the glenoid surface.

Trial porous glenoid implants: S44S ref. 264 101 S44S-LP ref. 269 056 S44 ref. 261 088 S44-LP ref. 264 951 S46 ref. 261 089 S46-LP ref. 268 988 S48 ref. 261 090

# 4 - DEFINITIVE IMPLANTS : POROUS GLENOID BASEPLATE



- 5 PROSTHESIS TRIALS
  - 5.1 TRIAL GLENOSPHERE
- Remove the screw from the trial glenosphere.
  Put the trial glenosphere in place with the glenosphere handle (*ref. 261 101*).

Fix the trial glenosphere to the definitive porous glenoid baseplate using the trial screw.

Trial glenosphere : Ø36 ref. 261 092 Ø39 ref. 261 093 Ø42 ref. 261 094

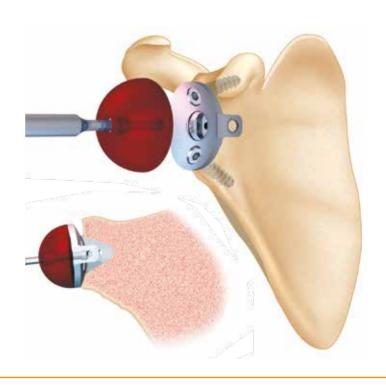
If the optional anterior-posterior screw is necessary: see the technique on page 19.

- \*\* Connect the definitive porous glenoid baseplate to the baseplate insertion handle (ref. 261 101), and then impact it using the impactor handle (ref. 264 459) assembled with the white impactor tip (ref. 267 659). Drill for the superior and inferior screws with the 3.2 mm drill bit. (ref. 267 115).
  - The superior Ø5.5mm cancellous screw aims the base of the coracoid process.
  - The inferior Ø5.5mm cancellous screw aims the pillar of the scapula.

ARROW screw barrel ref. 261 846
ARROW drill sleeve ref. 264 479
Hexagonal screwdriver ref. 261 100
ARROW length gauge ref. 269 241



Don't hesitate to add bone graft from the head between base plate and the glenoid in case of superior bone erosion.





## 5.2 - HUMERAL INSERT TRIAL

#### Impact the trial humeral insert onto the trial rasp.

Impaction handle: ref. 264 459 Humeral impactor tip: ref. 267 696

Trial humeral inserts:

 36/00
 ref. 264 495
 39/00
 ref. 264 498
 42/00
 ref. 264 501

 36/05
 ref. 264 496
 39/05
 ref. 264 499
 42/05
 ref. 264 502

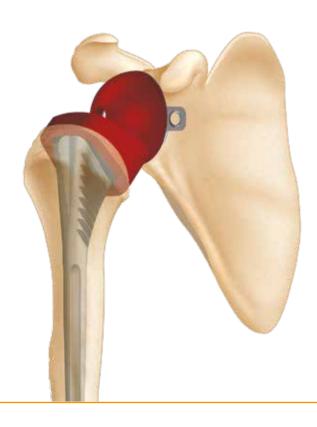
 36/10
 ref. 264 497
 39/10
 ref. 264 500
 42/10
 ref. 264 503

#### **Compatibility table**

POROUS GLENOID BASEPLATE	GLENOSPHERE	HUMERAL INSERT
445 / 44	Ø36	36/00; 36/05; 36/10
44S-LP / 44-LP	Ø39	39/00; 39/05; 39/10
46 / 46 LD	Ø39	39/00; 39/05; 39/10
46 / 46-LP	Ø42	42/00; 42/05; 42/10
48	Ø42	42/00; 42/05; 42/10



### 5.3 - FULL TRIAL TEST



Reduce the joint:

Movement must not be restricted (gleno-humeral mobility  $0^{\circ}$ - $70^{\circ}$  without moving the scapula). Test elbow to body rotation and abduction to  $90^{\circ}$ . If there is any decoaptation, glenoid conflict (posterior, anterior, inferior) must be investigated.

- Slight laxity between the glenosphere and the humeral cup is nevertheless desirable.
- "tension" in the implant will limit active post-operative mobility and means that the humerus should be recut.

  Reduce the prosthesis by adducting the arm.
- Check the stability of the prosthesis in abduction.
- External and internal rotation: Check that there is no internal or posterior conflict during adduction of the arm and ER1.

# 6 - DEFINITIVE IMPLANTS

# 6.1 - DEFINITIVE GLENOSPHERE

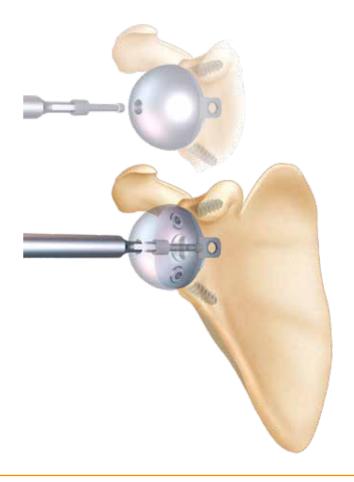
1. After ensuring the plastic cap is tight, assemble to the glenosphere positioner/impactor (ref. 269 137), aligning the arrow of the positioner with the notch on the glenosphere.

The orientation of the morse taper is in line with the arrow. Twist the top handle clockwise relative to the bottom handle to tighten mechanism to the glenosphere.

Once the glenosphere is fully locked to the baseplate turn the top handle counterclockwise 1 full turn relative to the bottom handle to disengage from glenosphere.



2. Secure the definitive glenosphere in place using the hexagonal screwdriver (ref. 261 100) and screw.







## 6.2 - DEFINITIVE STEM AND INSERT

The cup is held in place by impacting the morse cone and its under-surface, locking into the shape of the humeral plate.



- Cement the diaphyseal portion of the humeral stem if the bone is osteoporotic or press-fit the humeral prosthesis without cement with shavings of metaphyseal cancellous bone.
- The standard humeral insert is impacted after the contours of the plate have been cleaned.
- Test the prosthesis in abduction, external and internal rotation; check that there is no internal conflict during adduction of the arm.

Impaction handle: ref. 264 459 Humeral insert impactor tip: ref. 267 696

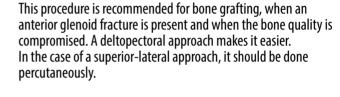
# OPTIONAL

### FITTING THE ANTERIOR-POSTERIOR SCREW

Porous glenoid baseplate sight

Drill sleeve

Screw barrel



Put the anterior-posterior guide for the porous glenoid baseplate in place using the anterior-posterior guide handle (ref. 261 844).

AP GUIDE	POROUS GLENOID IMPLANT
<b>S44</b> - ref. 261 840	44S / 44S-LP / 44 / 44-LP
<b>S46</b> - ref. 261 841	46 / 46-LP
<b>S48</b> - ref. 261 842	48

Introduce together the screw barrel (ref. 261 846) and the drill sleeve (ref. 264 479).

Drilling is done with the graduated drill bit (ref. 267 115). You can use the depth gauge (ref. 269 241) or use the direct reading on the graduate drill (ref. 267 115).

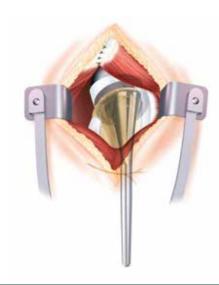
Use a cortical screw 2mm longer than what was measured.

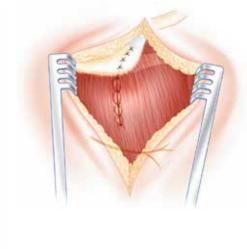
Remove the drill sleeve to introduce the cortical screw.



# 7 - CLOSURE

- Reinsert the anterior fibers of the deltoid on the acromion (facilitated by the osteo-cancellous shavings).
- Bring the fibers of the deltoid back together.
- Close the skin on two levels with a drain in place.





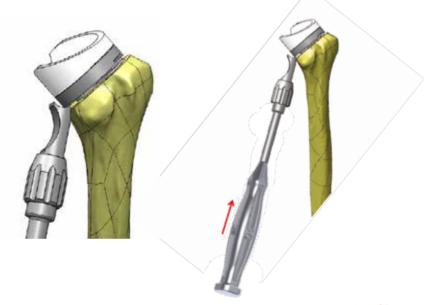
# 8 - POSSIBLE POST-OPERATIVE TREATMENT

- Removal of the drain after 48 hours or no drain.
- Sling with neutral rotation to be worn for 15 days.
- Physical therapy is started immediately: passive elevation in the plane of the scapula with isometric contraction of the deltoid when the arm is raised. Assisted active elevation from the 4th week.

# 9 - PROSTHESIS REMOVAL

## 9-1 - HUMERAL INSERT

Remove the humeral insert using the head extractor tip (ref 261 014) fitted to the impactor handle (ref 264 459).

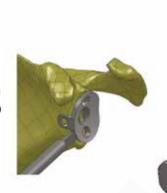




# 9-3 - POROUS GLENOID IMPLANT

Remove all the screws with the hexagonal screwdriver (ref. 261 100).

Put the osteotome (ref. 261 103) between glenoid baseplate and bone and lever up to extract glenoid baseplate.





Remove the stem with the broach handle (ref 267 114).







Ref.	Designation	
267841	Arrow tray - Humeral stem PRIME	
267802	Arrow Top	
264868	Square taper bone awl	
261054	Reamer handle	
267604	Reamer D6	
267605	Reamer D8	
268108	Long Reamer D8 lg 200	
267606	Reamer D10	
267607	Reamer D12	
267608	Reamer D14	
267609	Reamer D16	
267610	Cutting Guide Support	2
267611	Deltopectoral approach cutting block	E

Ref.	Designation	
267612	Superior-lateral approach cutting block	20
267613	Cutting guide connceting screw	
261053	Retroversion rod	
269239	AO pin driver	
267614	Arrow Broach Handle	1000
266222	Arrow Humeral broach Ø6	
264447	Arrow Humeral broach Ø8	
268100	Arrow Humeral broach Ø8 L170	
264448	Arrow Humeral broach Ø10	60
264449	Arrow Humeral broach Ø12	
264450	Arrow Humeral broach Ø14	
267357	Arrow Humeral broach Ø16	
264459	Impactor handle	-
261043	Head impactor tip	
261014	Head extractor	
261845	Protector for stem	



Ref.	Designation
267842	Arrow tray- humeral head PRIME
267802	Arrow top
261015	Off-centred humeral trail head Ø44 H16
261016	Off-centred humeral trail head Ø44 H18
261017	Off-centred humeral trail head Ø46 H16
261018	Off-centred humeral trail head Ø46 H18
261019	Off-centred humeral trail head Ø46 H21
261020	Off-centred humeral trail head Ø48 H16
261021	Off-centred humeral trail head Ø48 H18
261022	Off-centred humeral trail head Ø48 H21
261023	Off-centred humeral trail head Ø50 H17
261024	Off-centred humeral trail head Ø50 H19
261025	Off-centred humeral trail head Ø50 H21
264090	Off-centred humeral trail head Ø52 H19
264091	Off-centred humeral trail head Ø52 H21

Dof	Docianation
Ref.	Designation
261026	Centered humeral trail head Ø40 H15
261027	Centered humeral trail head Ø40 H17
261028	Centered humeral trail head Ø44 H16
261029	Centered humeral trail head Ø44 H18
261030	Centered humeral trail head Ø46 H16
261031	Centered humeral trail head Ø46 H18
261032	Centered humeral trail head Ø46 H21
261033	Centered humeral trail head Ø48 H16
261034	Centered humeral trail head Ø48 H18
261035	Centered humeral trail head Ø48H21
261036	Centered humeral trail head Ø50 H17
261037	Centered humeral trail head Ø50 H19
261038	Centered humeral trail head Ø50 H21
264092	Centered humeral trail head Ø52 H19
264093	Centered humeral trail head Ø52 H21
261039	Centered humeral trail head Ø54 H19
261040	Centered humeral trail head Ø54 H21
261041	Humeral head sizer Ø40, 44, 46
261042	Humeral head sizer Ø48, 50, 52, 54
261109	Head holder





Ref.	Designation	
267843	Arrow tray - glenoid PRIME	
267802	Arrow top	
261059	Retractor	
267110	Glenoid inserter	3-3
261077	Glenoid template Ø44	
261078	Glenoid template Ø46	
261079	Glenoid template Ø48	
261080	Glenoid template Ø50	
269086	Glenoid guide 0° post wear - right	
269087	Glenoid guide 0° post wear - left	
269088	Glenoid guide -10° post wear - right	0 931
269089	Glenoid guide -10° post wear - left	
269090	Glenoid guide -20° post wear - right	
269091	Glenoid guide -20° post wear - left	
269092	Glenoid guide stylus - right	
269093	Glenoid guide stylus - left	

Dof	Designation	
Ref.	Designation	
267650	Cannulated reamer XS-S / 44	
267651	Cannulated reamer M / 46	
267652	Cannulated reamer L / 48	
267653	Cannulated reamer XL / 50	
269147	Drill Handle	
267654	Full PE Driling Guide	1
269242	Quick-Release Peripheral Drill Shaft	
261070	Cemented trial glenoid Ø44	
261071	Cemented trial glenoid Ø46	
261072	Cemented trial glenoid Ø48	
261073	Cemented trial glenoid Ø50	
264459	Impaction handle	-
267659	Cemented/Metal-Back Glenoid Impactor tip	
261103	Chisel	
261844	Jig handle	
261840	Jig size 44 for glenoid base	
261841	Jig size 46 for glenoid base	9
261842	Jig size 48 for glenoid base	
261100	Screwdriver	



Ref.	Designation	
267844	Arrow tray - metalback glenoid PRIME	
267802	Arrow top	
267667	Trial MB Handle	
268470	Metal-back drill guide 44S	
268471	Metal-back drill guide 44-46-48	
269133	Cannulated glenoid punch 44S	
269134	Cannulated glenoid punch 44	A
269135	Cannulated glenoid punch 46	
269136	Cannulated glenoid punch 48	
264101	Trial metalback glenoid base 44S	
261088	Glenoid metal back trial size 44	
261089	Glenoid metal back trial size 46	G.
261090	Glenoid metal back trial size 48	
269056	Trial metalback glenoid base size 44S-LP	
264951	Trial metalback glenoid base size 44-LP	
268988	Trial metalback glenoid base size 46-LP	

Trial cementless glenoid 44S  Trial cementless glenoid 44S  Trial cementless glenoid 46  Trial cementless glenoid 46  Trial cementless glenoid 48  Zef836 Trial cementless glenoid 48  Zef836 Trial cementless glenoid 48  Zef836 Screw barrel  Depth gauge  Zef1108 Screw holder  Zef1101 Metal-Back Baseplate handle  Lumeral trial insert 636 H00  Zef4495 Humeral trial insert 636 H05  Zef4496 Humeral trial insert 638 H10  Zef4497 Humeral trial insert 639 H00  Zef4498 Humeral trial insert 639 H00  Zef4499 Humeral trial insert 639 H00  Zef4500 Humeral trial insert 642 H00  Zef4501 Humeral trial insert 642 H00  Zef4502 Humeral trial insert 642 H10  Zef666 Humeral trial insert 642 H10  Zef6666 Humeral trial insert impactor tip  Zef1092 Glenosphere trial Ø39  Zef1093 Glenosphere trial Ø39  Zef1094 Glenosphere trial Ø42  Clenoscheva peritience/			
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<ul> <li>Ø42 H05</li> <li>Humeral trial insert Ø42 H10</li> <li>Humeral insert impactor tip</li> <li>Glenosphere trial Ø36</li> <li>Glenosphere trial Ø39</li> <li>Glenosphere trial Ø42</li> <li>Glenosphere trial Ø42</li> <li>Glenosphere trial Ø42</li> </ul>	264501	Ø42 H00	
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261093 Glenosphere trial Ø39  261094 Glenosphere trial Ø42  Glenosphere positioner/	267696	Humeral insert impactor tip	
261094 Glenosphere trial Ø42  Glenosphere positioner/	261092		
Glenosphere positioner/	261093		T.
	261094		
	269137		

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#### Single use unstruments - Sterile delivery

Single use unstruments. Stellie delivery		
Ref.	Designation	
267115	Drill bit Ø3,2	
268016	Extended cutting guide pins (x4)	
269132	Cannulated tapered reamer	<b>→</b>
269138	Threated pin Ø3 L170	
269148	Cannulated drill bit Ø5	
269240	Quick-release peripheral drill Ø5 (x2)	
269149	Cannulated long drill bit Ø5	****



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