Surgical Technique

smith&nephew

OR3O°

Dual Mobility with
OXINIUM® DH Liner Technology

In the EU, OR3O is approved exclusively for use with the R3® Acetabular System in primary total hip arthroplasty.

Design surgeon list

Smith & Nephew thanks the following surgeons for their participation as part of the OR3O® Dual Mobility system design team:

Stephen Duncan, MD
University of Kentucky, KY

Edwin Su, MD
Hospital for Special Surgery, NY

OR3O◇ Dual Mobility with OXINIUM◇ DH Liner Technology

Table of contents

Nota Bene:

The technique description herein is made available to the healthcare professional to illustrate the authors' suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the patient. For more information on the products in this surgical technique, including indications for use, contraindications, effects, precautions and warnings, please consult the products' Instructions for Use (IFU).

The purpose of this technique is to provide the user with important information and tips about the implants and instruments in this system. It is expected that the user is familiar with and understands the demands of total hip surgery. However, for appropriate training on the OR3O dual mobility liner and insert with the R3 / REDAPT system, please read this surgical technique manual and the accompanying package insert. Consult your Smith & Nephew sales representative for a review of the system implants and instrumentation.

Once the OR3O liner has been impacted into its mating shell, it should not be reassembled to the shell as early failure may occur; however, the R3 / REDAPT locking mechanism allows the user to assemble a new OR3O liner to a previously assembled R3 Acetabular Shell / REDAPT Modular Shell intraoperatively, or a new poly liner to a previously assembled acetabular shell either intraoperatively or during a revision surgery (See R3 Acetabular System surgical technique 02973 or REDAPT Modular Shell Surgical Technique 15093 for poly liner insertion information). Be advised of the warnings and precautions when using this system particularly of the intraoperative and postoperative considerations noted in the package Insert. The package insert can be located at eIFU- https://ifu.smith-nephew.com/#ProductAnchor

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Device description

The OR3O® Dual Mobility System (Figure 1) is comprised of a diffusion-hardened, oxidized zirconium acetabular liner (OR3O liner), and an insert of highly cross-linked polyethylene (OR3O XLPE insert). The OR3O liner is assembled into an acetabular implant with a locking taper. The outer diameter of the OR3O XLPE insert articulates within the OR3O liner and features an inner articular surface, which engages with Smith & Nephew's 22mm and 28mm femoral heads. These femoral heads are retained within the OR3O XLPE insert by means of a snap fit locking mechanism.

Figure 1

Preoperative planning

Preoperative X-rays should include an Anterior-Posterior (AP) of the pelvis centered over the symphysis and an AP and lateral of the affected hip (Figure 2).

Templating can be done on the affected side, but it is important that the contralateral hip also be templated to verify the size.

To ensure a congruent fit, the acetabular component should be medialized to the medial aspect of the acetabulum, as indicated by the teardrop.

The center of rotation should also be marked for subsequent reference.

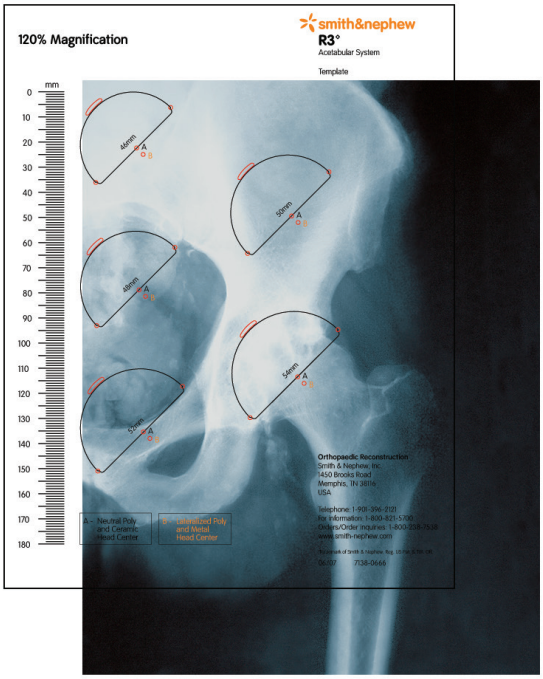


Figure 2

Surgical tips:

To minimize the need of assistance, each of the acetabular retractors can be tied directly to a Charnley retractor.

Dividing the transverse acetabular ligament will allow reaming to begin inferiorly, limiting the tendency of the reamer to migrate superiorly.

Removal of soft tissue and overhanging osteophytes from the foveal notch aids visualization of the quadrilateral plate and the depth that the acetabulum should be reamed.

Acetabular exposure

Complete exposure of the acetabulum is required, regardless of the type of approach. Use the approach with which you are most familiar and achieve the best surgical results.

First, resect the acetabular labrum and place a blunt retractor anteriorly.

After identifying the transverse acetabular ligament, place a blunt retractor around the inferior margin of the acetabulum.

Depending on the exposure, a third retractor can be placed posteriorly following the excision of the labrum.

Remove all overhanging soft tissue and osteophytes in order to visualize the entire acetabular socket.

The acetabulum should be medialized to restore the normal center of hip rotation.

Note: The center of the femoral head will be slightly below the face of the shell resulting in a slightly shorter femoral head length as seen in Table 1, below.

Acetabular Shell Size	Head
44mm	-0.3
46mm	-0.7
50mm	-0.1
52mm	-0.5
56-74mm	-0.6

Table 1

Acetabular reaming

Select an acetabular reamer that is considerably smaller than the templated size of the cup. Generally, reaming 6–8mm lower than the templated size is suitable.

Position the initial reamer in a vertical direction (Figure 3,1) to ensure the reamer is taken down to the medial wall.

Direct the second reamer and all subsequent reamers in approximately 40°– 45° of abduction and 15°– 20° of anteversion for final position of the acetabular component (Figure 3,2).

Preserve subchondral bone to provide good support for the prosthesis. This might mean the reamer will not be medialized all the way to the inner wall. One might suggest leaving some remaining subchondral bone and removing the medial bone that is osteophyte and is covering fatty tissue.

Frequently palpate the posterior and anterior walls of the acetabulum during the reaming process as these walls will determine the largest acetabular size that can be accommodated. Avoid allowing the reamer to drift posteriorly where the bone might be less dense and the path of least resistance for the reamer.

To press-fit an R3® Acetabular Shell or REDAPT® Modular Shell in healthy, dense bone, the acetabulum can be reamed line-to-line or under-reamed by 1mm based on implant size and surgeon experience. In cases of reduced or poor bone quality, the surgeon should always evaluate the implant site and determine the level of press fit and ream appropriately. R3 Acetabular Shells are available in even sizes; therefore, the last reamer to be used should be either an even size for line-to-line reaming or an odd size for under-reaming by 1mm.

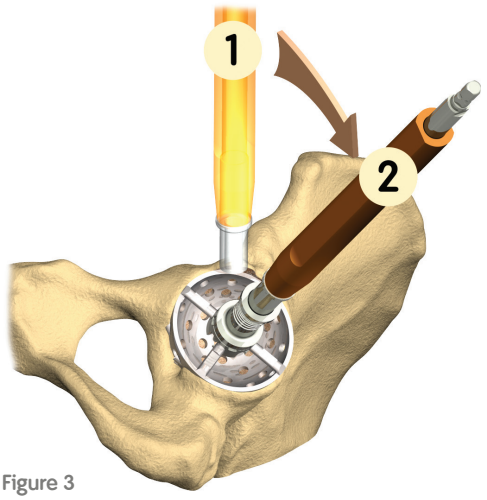


Figure 3

Surgical tips:

- Each successive reamer must be fully seated within the acetabulum. Failure to do so will result in lateralization of the trial and exposure of the porous coating. If lateralization occurs, go back to a smaller reamer and begin again, checking each size to ensure that the reamers are fully seated.
- Increasing the reamer size by 2mm is recommended, although in smaller patients 1mm increments may be preferred.
- Mark the medial wall with an electric cautery prior to using the last reamer. If the last reamer does not remove the mark, repeat reaming, dropping back a size if necessary.

Instrument tips:

- The acetabular reamer has an open back, which helps visualize reaming and allows easy access to bone chips. This style of reamer is hemispherical and when fully seated it should be covered by the rim of the acetabulum.
- Gently rock reamer handle back and forth approximately 5° for last size used only to ensure rim is accurate for the desired press-fit.

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Acetabular trialing

After the preparation of the acetabulum, the trial shell should be inserted to verify size and position of the cup. Use a trial acetabular shell that is the same diameter as the last reamer used. The surgeon should note the appropriate orientation of the acetabular trial to position the cup correctly. The trial should be congruent with the reamed acetabular cavity and bottom out without significant force required to seat it (Figure 4).

A trial liner cannot be inserted into a trial shell for trial reduction.

Select appropriate type and size component based on anatomical and biomechanical factors such as patient age and activity levels, weight, bone and muscle conditions.

Generally the largest cross-section component that will allow adequate bone support to be maintained is preferred. Muscle looseness and/or malpositioning of the components may result in loosening, subluxation, dislocation, fracture of components and/or bone. Firmly seat all components and check for component looseness during surgery.

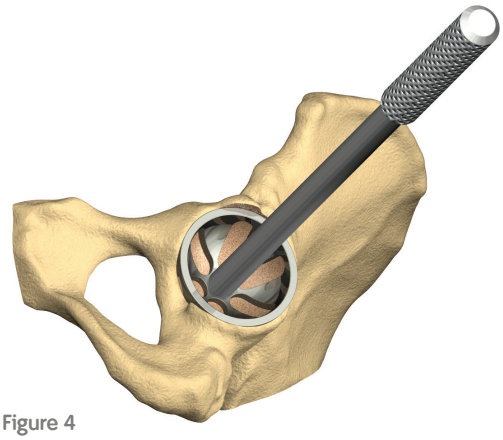


Figure 4

Surgical tips:

The bone at the edge of the trial shell can be marked with an electric cautery to help in final component positioning.

Instrument tips:

The trial shells are the exact size specified. They can be used to assess the accuracy of reaming or can be press-fit into the acetabulum if using a larger size than the final reamer.

Acetabular shell insertion

Select the appropriate acetabular implant, attach the shell to the cup positioner/impactor and insert it into the acetabulum (Figure 5).

Rotate the X-Bar shaft so that it is in line with the liner removal slot. For the three hole cup this positions the three holes in the superior direction.

Position the X-Bar so that the vertical bar is perpendicular to the long axis of the body and the appropriate crossbar (left or right) aligns with the long axis of the body (Figure 6).

Firmly tap the inserter with a mallet until the cup is fully seated.

Gently toggle the impactor handle to assess the stability and contact of the shell.

Remove the X-Bar, then disengage the impactor handle and look through the impactor hole to judge the distance between the medial wall and the shell.

If the cup is firmly seated, there should be no gap between the shell and the medial wall and no apparent movement in the component.

Note: The position of the acetabular shell and associated range of motion are critical for implant longevity. The surgeon should use the suggested position values as a guideline while making every effort possible to avoid rim contact between the shell and stem.

It is important to protect the shell's rim and inner taper from any damage during implantation. If repositioning of the shell is required, it should be performed using the shell positioner. Use of a punch, osteotome or other instrument on the shell's rim could result in shell damage and compromise the ability to lock the liner into the shell.

Note for REDAPT° Modular Shell:
Unlike a primary case where adequate host bone is available and predictable landmarks are available for visual confirmation, revision cases will require the surgeon to assess stability of the cup using tactile methods. The cup should be securely fixed and unable to be moved or repositioned without significant force being applied.

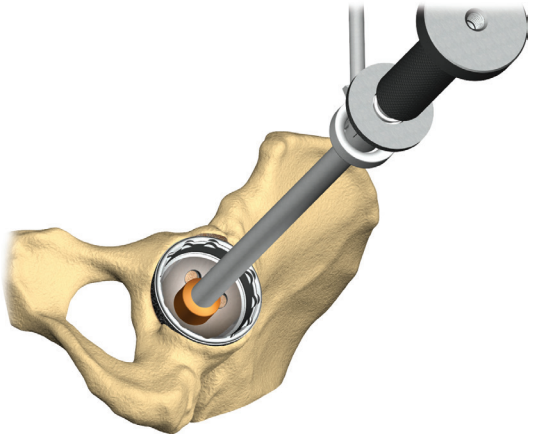


Figure 5

Surgical tips:

- The change in pitch that occurs as the shell is seated against the medial wall is often audible. A depth gauge can be inserted through the screw holes and apex hole to determine the adequacy of shell seating.
- The use of the slap hammer may be helpful in extracting the shell

Instrument tips:

- The plastic tip on the cup impactor is removable for cleaning.
- The X-Bar is to be used as a reference for cup positioning and when appropriately positioned measures 45° of abduction and 15° of anteversion in the lateral position.

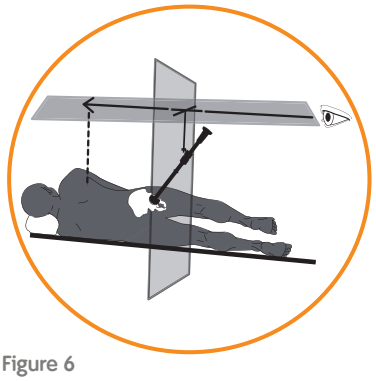


Figure 6

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Acetabular screw insertion

Screws can be used to augment fixation and further secure the cup. For screw fixation, each screw hole must be pre-drilled. It is important to make sure that all screws are fully seated. Screws protruding above the inner surface of the acetabular shell may interfere with proper insertion of the OR3O® liner.

R3 Acetabular Shell screw insertion

Acetabular screws work in compression, which allows the shell to fully seat in the acetabular cavity.

Using the variable angle drill guide, adjust the angle of the tip to align with the selected screw hole and press firmly in the shell (Figure 7). After drilling the hole, use the depth gauge to verify appropriate screw length(s).

Use the screw forceps to hold the screw. Attach the ball-joint or flexible screwdriver shaft to the end of the screw. Then introduce the screw into the hole and screw it into place using the ratcheting screwdriver handle.

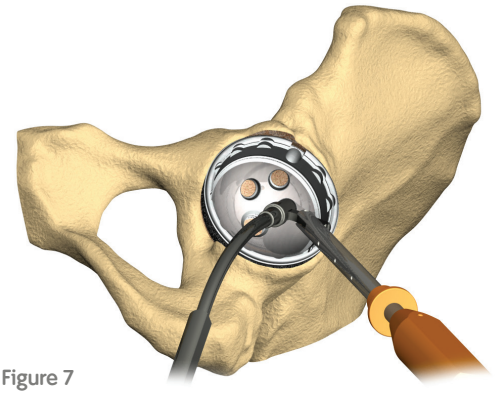


Figure 7

Surgical tips:

- Screws have been shown to be a reliable method of assuring fixation; however, it is important to avoid neurovascular complications by proper screw placement, avoiding the anterior/superior or anterior/inferior quadrants.

REDAPT◇ Modular Shell screw insertion

When drilling to prepare for screw holes, the REDAPT Drill Guide (71355121) must be used (Figure 8). If the tip is not fully seated, damage to the locking tabs may occur, the limits of angulation may be exceeded and the locking strength of the screws may be affected (Figure 10). After drilling the hole, use the depth gauge to verify appropriate screw length(s). The hole pattern of the REDAPT Modular Shell provides multiple opportunities for fixation to host bone. Care should be taken to orient the cup so that the hole pattern aligns with desired points of fixation. Each hole can accept either a spherical head screw or a REDAPT Locking Screw (Figure 9).

Spherical Head Screws

Use the screw forceps to hold the screw. Attach the ball-joint or flexible screwdriver shaft to the end of the screw. Then introduce the screw into the hole and screw it into place using the ratcheting screwdriver handle. Make sure the screw is fully seated within the screw hole so that it will not impinge on the REDAPT Modular Shell.

Locking Screws

The Torque Limiting Driver (71354299) should always be used to ensure a secure fit and prevent over-tightening. Over-tightening may result in damage to the locking screw tabs on the cup.

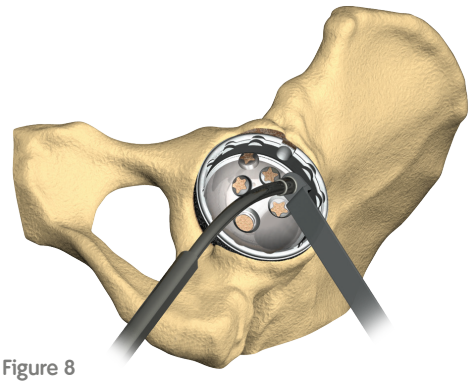


Figure 8

Surgical tips:

The REDAPT drill guide has two different tip angles. When using this guide, use whichever end of the drill guide provides optimal access to ensure it is fully seated in the selected screw hole.

Many surgeons choose to place a non-locking screw first, then proceed to locking screws. At least one, non-locking screw should be placed prior to placing locking screws.

Screws have been shown to be a reliable method of assuring fixation; however, it is important to avoid neurovascular complications by proper screw placement, avoiding the anterior/superior or anterior/inferior quadrants.

Inspect each screw to ensure that screw heads are flush or below the inner diameter of the REDAPT Modular Shell.

The use of radiographic imaging may facilitate precise screw placement.

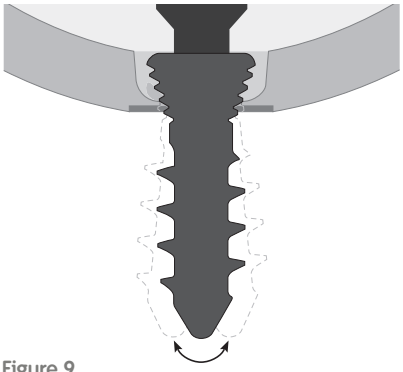


Figure 9

Instrument tips:

The tip of the REDAPT drill guide must be fully seated in the screw hole.

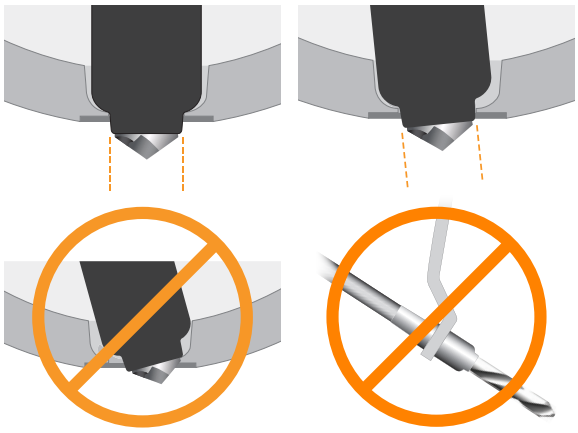


Figure 10

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Acetabular trial liner insertion

Assembly

To assemble, the trial liner should be placed by hand into the shell until the anti-rotation tabs are flush with the rim of the shell. Using a screw driver in conjunction with the ratchet handle, turn the screw clockwise until the screw has bottomed out (Figure 11).

Note: Do not overtighten, as this may damage the trial liner.

Make certain that any screws are flush or below the inner face of the shell prior to inserting the trial liner.

Tightening the liner without first aligning the anti-rotation tabs with the peripheral shell scallops may damage the trial liner.

Figure 11

Disassembly

To disassemble, turn the screwdriver counter-clockwise until the trial liner becomes disengaged from the shell. The trial liner can then be retrieved by hand or with a surgical instrument from inside the wound (Figure 12).

Note: Do not implant the trial liner.

Figure 12

OR3O◇ trial head and insert assembly and trialing

Select the appropriate sized XLPE insert trial and corresponding 22mm or 28mm inner diameter femoral head trial. Assemble the inner diameter head ball trial onto the trunnion and then the XLPE insert trial (Figure 13).

Note: XLPE insert sizes 36, 38, and 40mm all use 22mm inner diameter femoral heads. XLPE insert sizes 42-52mm use 28mm inner diameter femoral heads.

Alternative Technique:

The trial insert and trial femoral head can be assembled in situ. Place trial insert into acetabular assembly. Place trial femoral head onto trial neck and reduce into trial insert.

Note: A suture may be looped through the hole in the apex of the trial insert, leaving the proximal end of the suture outside of the wound and within the sterile field for easy retrieval of the trial after usage.

Figure 13

Range of motion, correct leg length and offset should be assessed at this stage. If different neck length is required, remove the trial head from the trial neck and trial insert (see disassembly procedure) (Figure 14).

Repeat the trial head assembly procedure.

Figure 14

The same trial procedure should be repeated with the definitive stem before impacting the definitive OR3O XLPE insert and femoral head onto the stem (Figure 15).

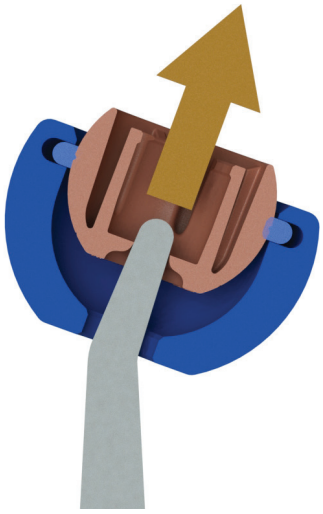
Note: Do not implant the trial femoral head or trial insert.

Figure 15

Trial head disassembly

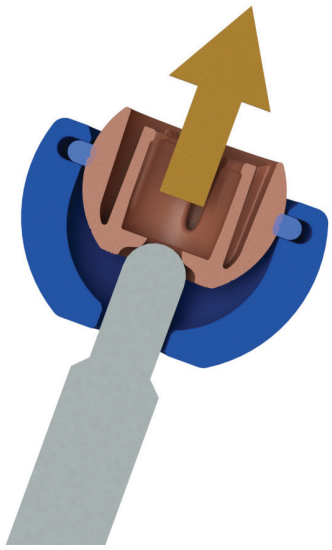
If not possible to manually remove the trial femoral head from the trial insert, use the R3◇ hole cover impactor (73-2117) (Figure 16).

Note: The pegs in the tray can also be used to aid in disassociation of the trial insert from the trial head if needed (Figure 17).



Hole cover impactor

Figure 16



Tray peg

Figure 17

Acetabular liner insertion

Before inserting the OR3O® OXINIUM® DH Acetabular Liner, lavage any unused holes and optionally insert the screw hole covers. Using the angled hole cover inserter, place screw hole covers over any remaining screw holes and then impact with the peg impactor.

OR3O liners include an apex peg to aid in appropriate liner seating. The liner is introduced by hand into the shell. When the liner is appropriately positioned the apex peg will register within the apex hole cover (Figure 18).

Due to the use of an alignment peg on the backside of the OR3O liner, no apex hole cover can be used with the system.

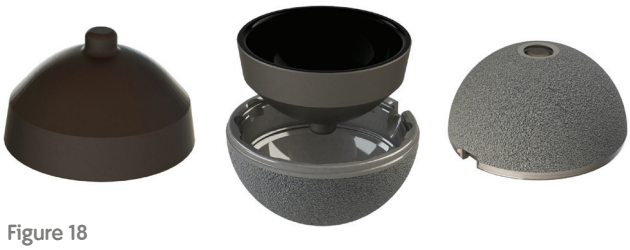


Figure 18

Surgical tips:

- Several light taps on the impactor followed by a subsequent harder and final blow will aid in liner seating. The final mallet blow should be the heaviest.
- Should an adjustment of a OR3O liner be necessary after initial impaction, a new OR3O liner must be used.
- The OR3O liner can be removed by placing the liner removal tool in the removal slot and prying or impacting if necessary.

Insert hard bearings only after ensuring the inner taper of the shell is clean and dry. The liner must be checked for proper orientation. Verification of proper liner orientation in the shell should be confirmed by both a visual check to see that the face of the liner is parallel to the shell face and a manual check with the fingers to feel that the liner does not rock within the shell.

Once orientation has been confirmed, impact the liner into place using the appropriate sized liner impactor head placed on the shell positioner/impactor. Inspect the liner/shell interface for proper seating (Figure 19).

Do not impact the liner if it is not oriented properly, as this can damage the OR3O liner.

Once the OR3O liner has been impacted into its mating shell, it should not be reassembled to the shell. However, the R3® locking mechanism allows the user to assemble a new OR3O liner or new R3 poly liner to a previously assembled R3 Acetabular Shell intraoperatively, or to assemble an R3 poly liner to an existing R3 Acetabular Shell during a revision surgery. (See R3 Acetabular System surgical technique 02973 or REDAPT Modular Shell Surgical Technique 15093 for poly liner insertion information)

Note: Consider gauze or sterile packing to cover the acetabular liner during femoral preparation.

Figure 19

Liner removal

The OR3O liner can be removed by placing the liner removal tool in the removal slot and prying or impacting if necessary (Figure 20).

If for some reason the liner removal slot is not accessible, the liner may be removed by levering through the anti-rotation splines.

Figure 20

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Use extreme care in handling and storage of OR3O° implant components. Damage to components may lead to premature failure of the component. Before use of OR3O implants, carefully examine each component for indications of damage that may have occurred during shipping or prior in-hospital handling. All surfaces should be smooth without pitting, scratches or other surface irregularities.

The OR3O liner should not be implanted if the liner is damaged (if damaged as a result of the shipping process, if dropped on the floor or if scratched by an instrument). Replace OR3O liner if the liner is damaged during the implant procedure or postoperative timeframe.

Implant assembly – Femoral head assembly

Inserting the XLPE insert

The XLPE insert corresponding to the cup size is combined with the ball head by using the insert ball head press (75017089).

Place the insert on the plastic holder and put the ball head (OXINIUM®) on the hole of the insert. Push the top part of the instrument downwards until the head and insert are enclosed.

Then turn the T handle until the ball head is completely locked together with the insert and can move freely (Figure 21).

It is advisable to position the upper part of the instrument as low as possible.

After the ball head is seated, the T handle assembly can be lifted free of the insert and femoral ball.

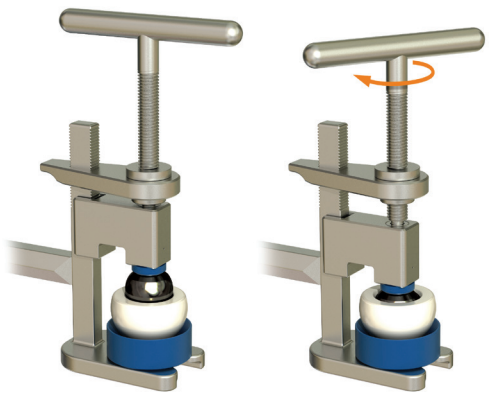


Figure 21

Note: Turn the T handle until the ball head is completely locked within the XLPE insert.

- Two audible popping noises should occur prior to the ball head being completely locked within the insert.
- A properly locked femoral head should rotate freely within the poly if fully seated.
- If resistance exists between the ball head and XLPE insert, rotate the ball head until any trapped air is released between the ball and insert.

Clean and dry the stem taper with a clean, sterile cloth. Place the prosthetic femoral head on the neck taper and firmly impact with the femoral head impactor and a mallet several times (Figure 22).

Note: In the case of revision, do not re-use modular femoral heads.

It is recommended to use the 71362806 femoral head impactor when impacting the XLPE insert.

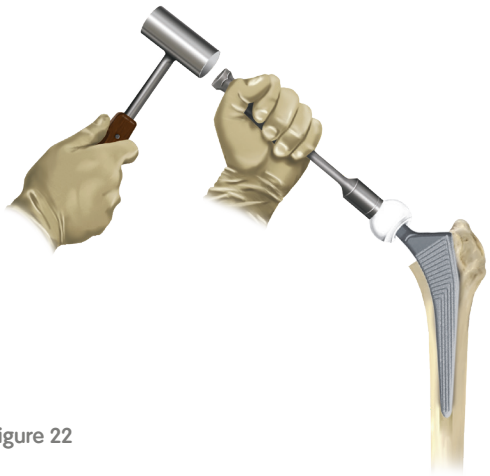
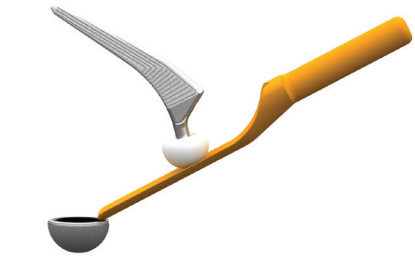


Figure 22

Femoral head reduction

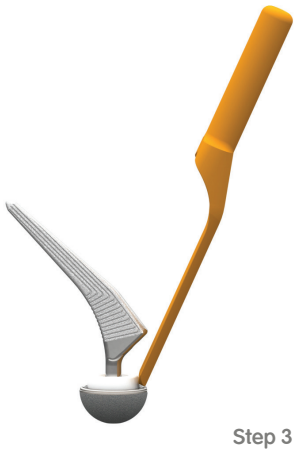
To aid in the reduction of the femoral head into the acetabulum when using the femoral head trial or the femoral head implant, a femoral head reducer may be utilized. To utilize the femoral head reducer, place the tip of the reducer at the entrance to the acetabulum and position the femoral head onto the femoral head reducer. While reducing the femoral head, the femoral head reducer allows the femoral head to slide along the tool (Step 2&3) and into the acetabulum with minimal risk of scratching the insert on the edge of the acetabular shell (Figure 23).

Note: Do not impact femoral head reducer.



Step 1

Step 2



Step 3

Figure 23

Implant constructs

OR3O® Dual Mobility Liners

Shells

R3® 0-Hole Acetabular Shells
R3 3-Hole Acetabular Shells
R3 Multi-Hole Acetabular Shells
REDAPT® Modular Acetabular Shells*

Inserts

OR3O Dual Mobility Inserts

OR3O Dual Mobility Inserts

Femoral Heads

OXINIUM® Femoral Heads
CoCr Femoral Heads*

Liners

OR3O Dual Mobility Liners

* Combination not available in the EU
In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

OR3O liner compatibility

OR3O - R3 / REDAPT Liner compatibility

× Indicates compatibility

	Shell Size	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74
Insert ID	Insert OD																
22mm	32mm	×															
	34mm		×														
	36mm			×													
	38mm				×												
	40mm					×											
28mm	38mm				×												
	40mm					×											
	42mm						×										
	44mm							×	×								
	46mm									×							
	48mm										×						
	50mm											×					
	52mm												×	×	×		
	54mm															×	×

Note: OR3O Liner - REDAPT Shell Compatibility not available in the EU

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Poly thickness

OR3O° XLPE insert

Load bearing thickness

ID	OD	Minimum	Hemisphere
A	B	C	D
(mm)	(mm)	(mm)	(mm)
22	32	4.2	4.6
	34	4.7	5.6
	36	5.5	6.6
	38	6.5	7.6
	40	7.5	8.6
28	38	4.3	4.7
	40	4.8	5.7
	42	5.6	6.7
	44	6.6	7.7
	46	7.6	8.7
	48	8.6	9.7
	50	9.6	10.7
	52	10.6	11.7
	54	11.6	12.7

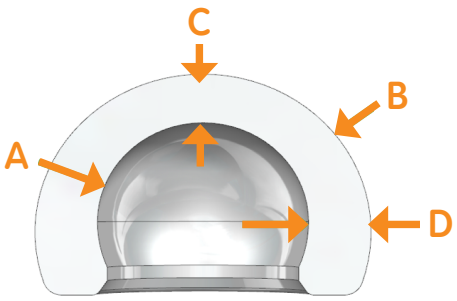


Figure 24

Label compatibility

Note: Black bars on the device labels highlight the mating dimensions of the OR3O liner inner diameter and OR3O XLPE insert outer diameter (Figure 25).

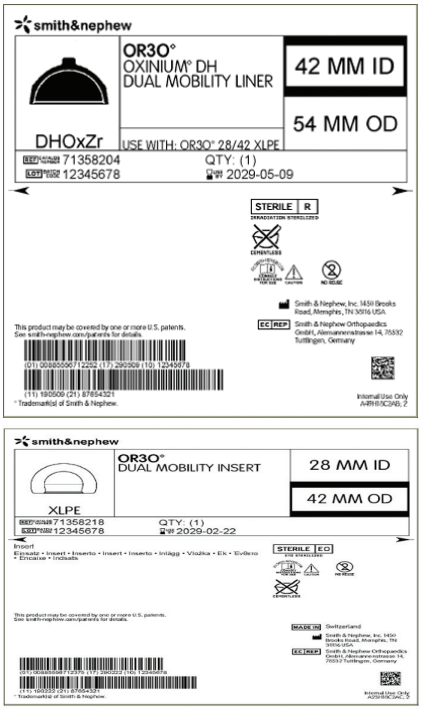


Figure 25

Catalog information

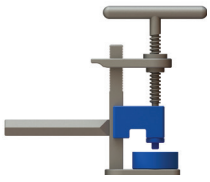
Cat. Item	Description
OR3O® Liners	
71358251	OR3O Dual Mobility Liner 32/44
71358252	OR3O Dual Mobility Liner 34/46
71358201	OR3O Dual Mobility Liner 36/48
71358202	OR3O Dual Mobility Liner 38/50
71358203	OR3O Dual Mobility Liner 40/52
71358204	OR3O Dual Mobility Liner 42/54
71358205	OR3O Dual Mobility Liner 44/56
71358206	OR3O Dual Mobility Liner 44/58
71358207	OR3O Dual Mobility Liner 46/60
71358208	OR3O Dual Mobility Liner 48/62
71358209	OR3O Dual Mobility Liner 50/64
71358211	OR3O Dual Mobility Liner 52/66-70
71358212	OR3O Dual Mobility Liner 54/72-74
OR3O XLPE Inserts	
71358253	OR3O Dual Mobility XLPE Insert 22/32
71358254	OR3O Dual Mobility XLPE Insert 22/34
71358213	OR3O Dual Mobility XLPE Insert 22/36
71358214	OR3O Dual Mobility XLPE Insert 22/38
71358216	OR3O Dual Mobility XLPE Insert 22/40
71358215	OR3O Dual Mobility XLPE Insert 28/38
71358217	OR3O Dual Mobility XLPE Insert 28/40
71358218	OR3O Dual Mobility XLPE Insert 28/42
71358219	OR3O Dual Mobility XLPE Insert 28/44
71358221	OR3O Dual Mobility XLPE Insert 28/46
71358222	OR3O Dual Mobility XLPE Insert 28/48
71358223	OR3O Dual Mobility XLPE Insert 28/50
71358224	OR3O Dual Mobility XLPE Insert 28/52
71358225	OR3O Dual Mobility XLPE Insert 28/54

Neck length	22mm	28mm
CoCr Head Sizes 12/14 Taper*		
-3		71302803
+0	71302200	71302800
+4	71302204	71302804
+8		71302808

*Combination not available in the EU

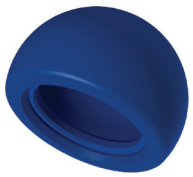
OXINIUM® Classic Head Sizes 12/14 Taper		
-3		71342803
+0	71342200	71342800
+4	71342204	71342804
+8		71342808

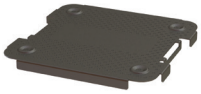
Cat. Item	Description
7501-7089	Ball Head Press
71362806	TANDEM® Impactor



All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

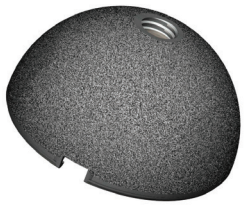
Cat. Item	Description
OR3O° Trial Liners	
71353371	OR3O Dual Mobility Trial Liner 32/44
71353372	OR3O Dual Mobility Trial Liner 34/46
71353301	OR3O Dual Mobility Trial Liner 36/48
71353302	OR3O Dual Mobility Trial Liner 38/50
71353303	OR3O Dual Mobility Trial Liner 40/52
71353304	OR3O Dual Mobility Trial Liner 42/54
71353305	OR3O Dual Mobility Trial Liner 44/56
71353306	OR3O Dual Mobility Trial Liner 44/58
71353307	OR3O Dual Mobility Trial Liner 46/60
71353308	OR3O Dual Mobility Trial Liner 48/62
71353309	OR3O Dual Mobility Trial Liner 50/64
71353311	OR3O Dual Mobility Trial Liner 52/66-70
71353312	OR3O Dual Mobility Trial Liner 54/72-74
OR3O XLPE Trial Inserts	
71353373	OR3O Dual Mobility Trial Insert 22/32
71353374	OR3O Dual Mobility Trial Insert 22/34
71353313	OR3O Dual Mobility Trial Insert 22/36
71353314	OR3O Dual Mobility Trial Insert 22/38
71353316	OR3O Dual Mobility Trial Insert 22/40
71353315	OR3O Dual Mobility Trial Insert 28/38
71353317	OR3O Dual Mobility Trial Insert 28/40
71353318	OR3O Dual Mobility Trial Insert 28/42
71353319	OR3O Dual Mobility Trial Insert 28/44
71353321	OR3O Dual Mobility Trial Insert 28/46
71353322	OR3O Dual Mobility Trial Insert 28/48
71353323	OR3O Dual Mobility Trial Insert 28/50
71353324	OR3O Dual Mobility Trial Insert 28/52
71353325	OR3O Dual Mobility Trial Insert 28/54
Global Femoral Trial Heads	
75100843	28mm XS Global Femoral Trial Head
75100844	28mm S Global Femoral Trial Head
75100845	28mm M Global Femoral Trial Head
75100846	28mm L Global Femoral Trial Head
75100839	22mm S Global Femoral Trial Head
75100840	22mm M Global Femoral Trial Head



OR3O Trays		
71353389	OR3O Dual Mobility Trial Liner Tray	
71353388	OR3O General Instrument Tray	
71353354	Generic Half Tray Lid	
71353355	Generic Full Tray Lid	

All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

Cat. Item	OD mm
R3° No-Hole Acetabular Shells – Small size shells	
71331844	44
71331846	46
R3 No-Hole Acetabular Shells – Standard size shells	
71331848	48
71331850	50
71331852	52
71331854	54
71331856	56
71331858	58
71331860	60
71331862	62
71331864	64
R3 No-Hole Acetabular Shells – Large size shells	
71331866	66
71331868	68
R3 Three Hole Acetabular Shells – Small size shells	
71335544	44
71335546	46
R3 Three Hole Acetabular Shells – Standard size shells	
71335548	48
71335550	50
71335552	52
71335554	54
71335556	56
71335558	58
71335560	60
71335562	62
71335564	64
R3 Three Hole Acetabular Shells – Large size shells	
71335566	66
71335568	68
R3° Multi Hole Acetabular Shells – Standard size shells	
71338663	48
71338664	50
71338665	52
71338666	54
71338667	56
71338668	58
71338669	60
71338671	62
71338672	64
R3 Multi Hole Acetabular Shells – Large size shells	
71338673	66
71338674	68
71338675	70
71338676	72
71338677	74



Cat. Item	OD mm
R3 Trial Shells – Standard size shells	
71360739	39
71360740	40
71360741	41
71360742	42
71360743	43
71360744	44
71360745	45
71360746	46
71360747	47
71360748	48
71360749	49
71360750	50
71360751	51
71360752	52
71360753	53
71360754	54
71360755	55
71360756	56
71360757	57
71360758	58
71360759	59
71360760	60
71360761	61
71360762	62
71360763	63
71360764	64
R3 Trial Shells – Large size shells	
71360765	65
71360766	66
71360767	67
71360768	68
71366524	69
71366525	70
71366526	71
71366527	72
71366528	73
71366529	74
REDAPT° Modular Shell*	
71352348	48
71352350	50
71352352	52
71352354	54
71352356	56
71352358	58
71352360	60
71352362	62
71352364	64
71352366	66
71352368	68
71352370	70
71352372	72
71352374	74

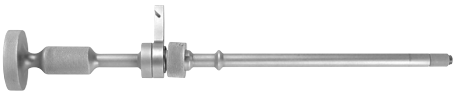
* Combination not available in the EU

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

Cat. Item	Description	
R3° Liner Impactor Heads		
71366436	36	
71366438	38 – 42	
71366444	44 – 48	
71366451	50 – 54	
R3 MIS Instruments		
71368569	Offset Shell Impactor	
71366052	Offset X-Bar	
71363077	Offset Impactor Tip	
71364073	Offset Reamer Handle	
Femoral Head Reducer		
71363076	Femoral Head Reducer	

Note: The femoral head reducer does not automatically ship with femoral heads. The femoral head reducer must be ordered separately.

Instruments		
71364450	R3° Straight Shell Impactor	
71368570	R3 Impactor Replacement Tip	
71364451	R3 Depth Gauge	
MT-2201	X-Bar	
71362298	Screw Forceps	
71362295	Ball Joint Screwdriver	
71364477	R3 Variable Angle Drill Guide	
71362279	Reamer Handle	

All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

Cat. Item	Description	
Instruments		
Cat. Item Length 71362915 15mm 71362925 25mm 71362935 35mm 71362950 50mm	Flexible Screw Drills (Single Use)	
71362291	Captured Flexible Screwdriver Shaft (Single Use)	
71362292	Captured U-Joint Screwdriver Shaft (Single Use)	
71380666	R3 Surgical Templates (not shown)	
71366021	R3° Liner Removal Tool	
73-2117	Hole Cover Impactor	
71362297	Trial Shell Handle	
71362290	Flexible Screwdriver	
71362294	Ratchet Handle	
71367541	Small Slap Hammer	
73-2133	Hole Cover Inserter	
71362293	Straight Screwdriver Shaft	
71362781 71362782 71362783	Power Adaptors (not shown)	

All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

Cat. Item	Size mm
Reamer Domes – Standard size	
71362742	42
71362743	43
71362744	44
71362745	45
71362746	46
71362747	47
71362748	48
71362749	49
71362750	50
71362751	51
71362752	52
71362753	53
71362754	54
71362755	55
71362756	56
71362757	57
71362758	58
71362759	59
71362760	60
71362761	61
71362762	62
71362763	63
71362764	64
71362765	65
71362766	66
71362767	67
71362768	68
71362769	69
71362770	70
71362771	71
71362772	72
71362773	73
71362774	74

All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

Cat. Item	Description
Implants	
Cat. no. Length	
71332515 15mm	
71332520 20mm	
71332525 25mm	
71332530 30mm	
71332535 35mm	
71332540 40mm	Spherical Head Screws 
71332545 45mm	
71332550 50mm	
71332555 55mm	
71332560 60mm	
71332565 65mm	
71332570 70mm	
REDAPT® Locking Head Screws*	
71354502	15
71354503	20
71354504	25
71354505	30 
71354506	35
71354507	40
71354508	45
71354509	50
71369894	R3® Screw Hole Cover 
7112-9401	Small Outer Case
7112-9402	Lid for Outer Case
71362213	R3 Trial Shell Tray
71361076	R3 Jumbo Trial Liner Tray
71361090	R3 Jumbo Trial Shell and Reamer Tray
71362211	R3 Main Instrument Tray
71362219	R3 MIS Instrument Tray
71362212	R3 Primary Reamer Dome Tray

* **Note:** REDAPT locking head screws are for use only with the REDAPT Modular Shell.

All implants are provided sterile and are for single use only. Unless otherwise noted, all instruments are provided non-sterile and are intended for re-use and resterilization. Refer to the instructions for cleaning and sterilizing reusable surgical instruments that are provided with Smith & Nephew instrument sets.

In the EU, OR3O is approved exclusively for use with the R3 Acetabular System in primary total hip arthroplasty.

Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Smith & Nephew representative or distributor if you have questions about the availability of Smith & Nephew products in your area.

Smith & Nephew, Inc.
1450 East Brooks Road
Memphis, TN 38116
USA

Telephone: 1-901-396-2121
Information: 1-800-821-5700
Orders/Inquiries: 1-800-238-7538

www.smith-nephew.com

15264 V5 71381776 REVD 09/25