Surgical Technique



Dual Mobility with OXINIUM° DH Liner Technology



# Design surgeon list

Smith & Nephew thanks the following surgeons for their participation as part of the OR30° Dual Mobility system design team:

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# OR30° Dual Mobility with OXINIUM° DH Liner Technology

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#### 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

# **Device description**

The OR30° Dual Mobility System is comprised of a diffusion-hardened, oxidized zirconium acetabular liner (OR30 liner), and an insert of highly cross-linked polyethylene (OR30 XLPE insert). The OR30 liner is assembled into an acetabular implant with a locking taper. The outer diameter of the OR30 XLPE insert articulates within the OR30 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 OR30 XLPE insert by means of a snap fit locking mechanism.



# Surgical technique

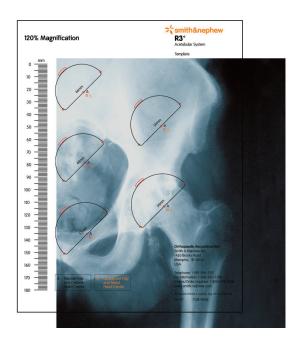
# Preoperative planning

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.

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.



#### 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:

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

## 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 (1) to ensure the reamer is taken down to the medial wall.

Direct the second reamer and all subsequent reamers in approximately  $40^{\circ} - 45^{\circ}$  of abduction and  $15^{\circ} - 20^{\circ}$  of anteversion for final position of the acetabular component. (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.



#### 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.

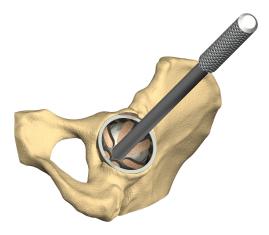
# Acetabular trialing

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.

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.



#### 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.

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.

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.

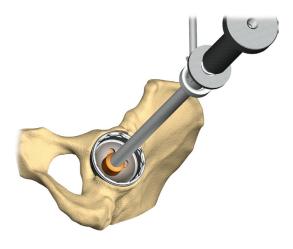
If the cup is firmly seated, there should be no gap between the shell and the medial wall and no apparent movement in the component.

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<sup>°</sup> 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.

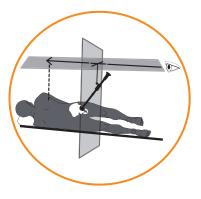


#### Surgical tips:

- 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.



## 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 OR30° 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. 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.



#### 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. 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. 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.

#### **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.



#### 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.

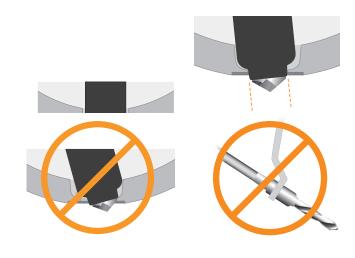
Inspect each screw to ensure that screw heads are flush or below the inner diameter of the REDAPT Modular Shell.

The use of radiographic imaging may facilitate precise screw placement.



#### Instrument tips:

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



# 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.

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.



#### 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.

Note: Do not implant the trial liner.



# OR30° 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.

**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.

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).

Repeat the trial head assembly procedure.

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

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







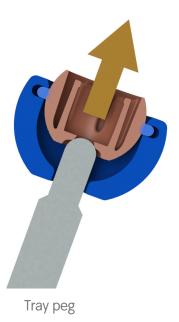
# Trial head disassembly

If not possible to manually remove the trial femoral head from the trial insert, use the  $R3^{\circ}$  hole cover impactor (73-2117).

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



Hole cover impactor



## Acetabular liner insertion

Before inserting the OR3O° OXINIUM° DH Acetabular Liner, lavage any unused holes and 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.

# 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.

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.

# 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)

# **Notes:** Consider gauze or sterile packing to cover the acetabular liner during femoral preparation.

#### Liner removal

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

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



#### 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.



Use extreme care in handling and storage of OR30° implant components. Damage to components may lead to premature failure of the component. Before use of OR30 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.

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 1

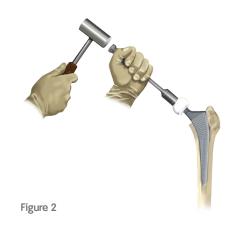
**Note:** Turn the T handle until the ball head is completely locked within the XLPE insert.

- 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.

**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.



# 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 and into the acetabulum with minimal risk of scratching the insert on the edge of the acetabular shell.

Refer to figures on the right which demonstrate the technique of using the femoral head reducer.

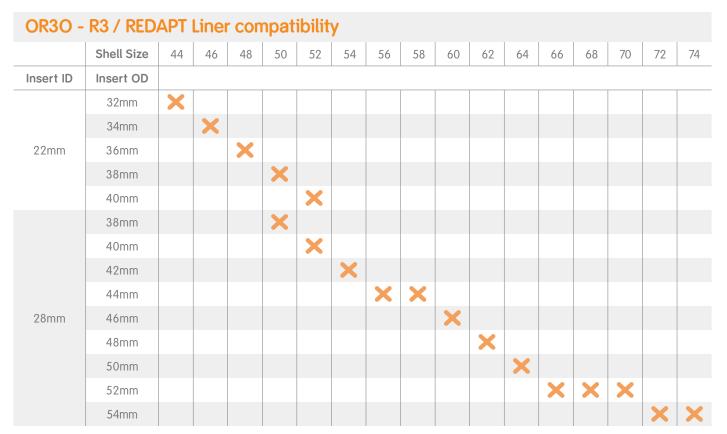
Note: Do not impact femoral head reducer.



# Implant constructs



# OR30° liner compatibility

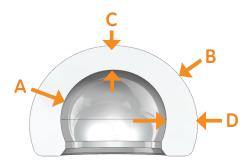


#### Note: OR3O Liner - REDAPT Shell Compatibility not available in the EU

## Poly thickness

#### OR3O° XLPE insert

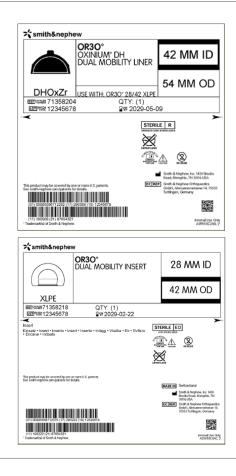
Load bearing thickness			
ID	OD	Minimum	Hemisphere
Α	В	С	D
(mm)	(mm)	(mm)	(mm)
	32	4.2	4.6
	34	4.7	5.6
22	36	5.5	6.6
	38	6.5	7.6
	40	7.5	8.6
	38	4.3	4.7
	40	4.8	5.7
	42	5.6	6.7
	44	6.6	7.7
28	46	7.6	8.7
	48	8.6	9.7
	50	9.6	10.7
	52	10.6	11.7
	54	11.6	12.7



## 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 as illustrated on the right.

**Note:** Additionally, OR3O OXINIUM° DH liner compatibility to OR3O XLPE inserts is noted on the OR3O liner label. The liners are intended for use only with OR3O XLPE inserts.



# Catalog information

Cat. Item	Description
OR3O Liners	
71358251	OR30° 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

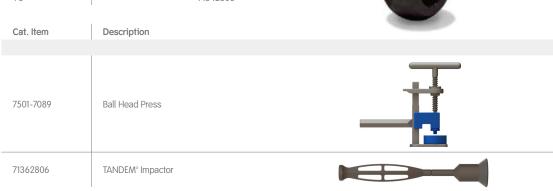
Neck length	22mm	28mm
CoCr Head Sizes 12/	/14 Taper	
-3		71302803
+0	71302200	71302800
+4	71302204	71302804
+8		71302808

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









Cat. Item	Description	
OR3O Trial Liners		
71353371	OR30° 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 Inse	erts	
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	- Million of an Annual Mark
71353354	Generic Half Tray Lid	
71353355	Generic Full Tray Lid	

Cat. Item	OD mm	
R3° No-Hole Ace	etabular Shells	
Small size shells		
71331844	44	_
71331846	46	
R3 No-Hole Ace		
Standard size sh	nells	
71331848	48	_
71331850	50	
71331852	52	
71331854	54	
71331856	56	
71331858	58	
71331860	60	
71331862	62	
71331864	64	
R3 No-Hole Ace	tabular Shells	
Large size shells		
71331866	66	
71331868	68	
R3 Three Hole A	cetabular Shells	
Small size shells		
71335544	44	_
71335546	46	
R3 Three Hole A	cetabular Shells	
Standard size sh	nells	
71335548	48	
71335550	50	
71335552	52	
71335554	54	
71335556	56	
71335558	58	
71335560	60	
71335562	62	
71335564	64	
R3 Three Hole A	cetabular Shells	
Large size shells		
71335566	66	_
71335568	68	
R3° Multi Hole A	cetabular Shells	
Standard size st	alls	

#### Standard size shells

48
50
52
54
56
58
60
62
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 – Sta	ndard 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
	62
71360762 71360763	63
71360764	64
R3 Trial Shells – Larg	
71360765	65
71360766	66
71360767	67
71360768	68
71366524	69
71366525	70
71366526	71
71366527	72
71366528	73
71366529	74
REDAPT <sup>®</sup> Modular She	ell
71352348	48
71352350	50
71352352	52
	54
71352354	
71352356	56
71352358	58
71352360	60
71352362	62
71352364	64
71352366	66
71352368	68
71352370	70
71352372	72
71352374	74



# \*\*

Cat. Item	Description
R3° Liner Impactor I	leads
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	r
MT-2201	X-Bar	
71362298	Screw Forceps	
71362295	Ball Joint Screwdriver	
71364477	R3 Variable Angle Drill Guide	
71362279	Reamer Handle	

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)

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		



Cat. Item		Description		
Implants				
Cat. no. 71332515 71332520 71332530 71332530 71332540 71332540 71332550 71332555 71332550 71332560 71332565 71332565	Length 15mm 20mm 25mm 30mm 35mm 40mm 45mm 50mm 55mm 60mm 65mm	Spherical Head Screws		
REDAPT <sup>°</sup> Lo	ocking Head	d Screws*		
71354502		15		
71354503		20		
71354504		25	Allow - A A A A A A A	
71354505		30		
71354506		35	مر	
71354507		40	Man a a a a a a a a a	
71354508		45		
71354509		50		
71369894		R3° Screw Hole Cover	0	
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		
/1301090		Reamer Tray		
71362211		R3 Main Instrument Tray		
71362219		R3 MIS Instrument Tray		

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

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.

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