

Libertas® Acetabular Cup System

The Libertas® Modular Shell has been designed to accept Highly Cross-Linked Ultra-High Molecular Weight Polyethylene liners. The liners accommodate a range of Cobalt Chrome or BioloX® Delta Ceramic heads in varying size and neck-length /offset combinations. The shell is manufactured in Titanium alloy (Ti6Al4V-ELI) with an external Ti-Growth® Titanium plasma spray coating.

Screw holes in the shell are provided to enhance fixation when necessary into the acetabular bone.

THE PRESS FIT CONCEPT

The Libertas® Modular Shell is designed to be implanted into the acetabulum with a tight fit just below the equator of the shell (Fig. 1). This is achieved by over-sizing the shell proximally, with the shell diameter in this area being 1.3mm larger in relation to the reamed cavity in the bone.

Upon impaction, the exterior surface of the Modular shell has been designed to pre-stress the bone in the oversized area, to prevent unwanted preferential apical loading. For this reason, the shell has been designed with a relatively flat base (Fig. 2). The LIBERTAS® shell press fit is designed to occur just below the acetabular bone margin, and this further assists in the retention of the shell.

As an example, a size 52mm shell is designed to have a diameter of 53.3mm at the equator, and 51mm at the apex. Under normal conditions, when implanting a 52mm shell, a 52mm reamer is used.



Fig. 1



Fig. 2

PREOPERATIVE TEMPLATING

Templating for cup size is an important step in planning for THR, and X-ray overlays are available with 15% magnification.

A full AP pelvis X-ray (Fig. 3), and AP and Lateral x-rays (Fig. 4) of the hip taken at 1 meter distance, aid with offset and leg length management. The overlay should be placed over the AP X-ray at 45 degrees of abduction, and with the center of rotation over the acetabular anatomical center.

Templating is especially important in dysplasia and revision hip surgery. A CT scan may be used to assess unusual conditions in the acetabular roof not always apparent on plain X-rays.



Fig. 3



Fig. 4

NOTE

Templating preoperatively is a guide only, and final component sizing and positioning needs to be assessed at surgery.

WARNING AND PRECAUTIONS

In Libertas® Acetabular Cup System, the porous titanium coated Modular Shell must not be implanted with cement.

Libertas® Hip System



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Carefully read all instructions and be familiar with the surgical techniques prior to use.

Please see the package insert for complete device description, product selection information, indications, contraindications, precautions, adverse effects, warnings, materials, sterilization and patient guidance associated with the Libertas® Total Hip System.

CAUTION: THIS DEVICE IS RESTRICTED TO SALE BY OR ON THE ORDER OF A LICENSED PHYSICIAN

WARNINGS: THE LIBERTAS® CEMENTED FEMORAL STEM IS INTENDED FOR CEMENTED USE ONLY.
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