

CONE-CONICAL

Restoring Biomechanics

Your Choice of Distal Stem Solutions

Three Distal Stem options are available addressing distal fixation; distal diameter, construct length, and stability. All stem designs, regardless of stem length, allow for insertion of the distal stems independent of the proximal body.

The Distal Stem designs are the foundation for restoring hip joint mechanics combined with a variety of proximal geometries to help you establish the balance between motion and stability.

Fluted Distal Stem

- Highly-polished Fluted Distal Stem is designed to provide immediate diaphyseal rotational control
- Distal Tri-Slot enhances stem flexibility
- Independent proximal body and distal stem sizing
- Available in bowed and straight stem designs

Plasma Distal Stem

- Plasma Distal Stem is designed to provide immediate fixation and rotational control
- Circumferentially plasma-sprayed
- PureFix HA coated
- Independent proximal body and distal stem sizing
- Available in bowed and straight stem designs

Conical Stem

- Designed to provide immediate diaphyseal fixation and rotational stability
- Independent proximal body and distal stem sizing
- Heavy grit-blasted surface
- Available in bowed and straight stem designs

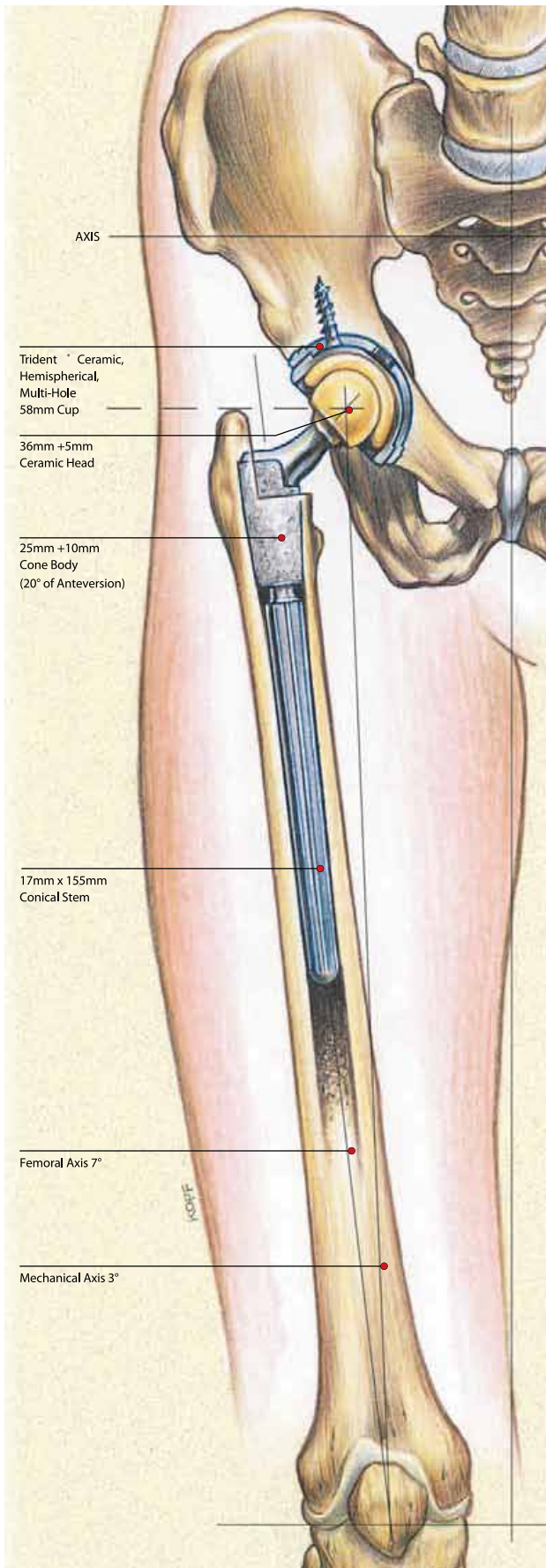
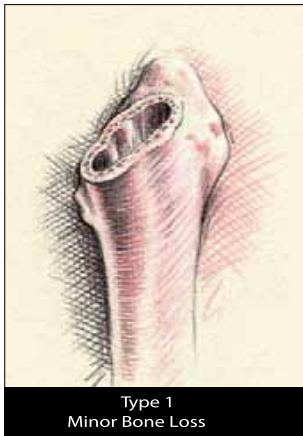


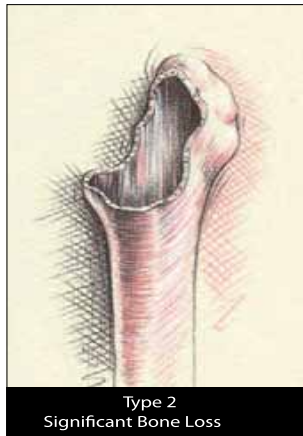
Photo of actual Wagner stem retrieval (cross-section) at 5.5 months after implantation, 65 year old, 85kg patient.††

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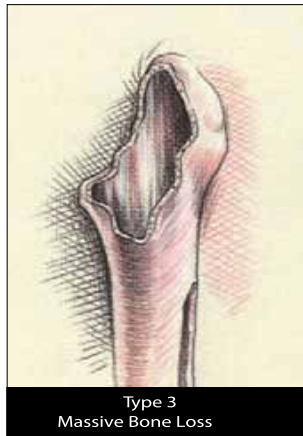
Features



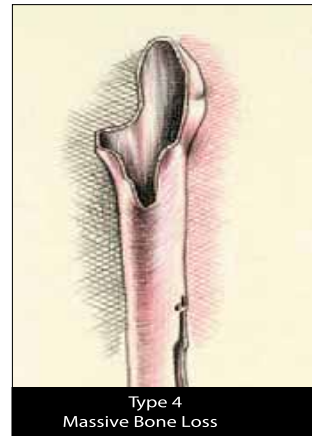
Type 1
Minor Bone Loss



Type 2
Significant Bone Loss



Type 3
Massive Bone Loss



Type 4
Massive Bone Loss

Stability

Crucial to the success of any surgery is the stability of the implant, and of the muscles surrounding the hip joint. Restoration Modular is designed to help you achieve fixation in a range of revision scenarios and varying bone types. The system provides you with the unique ability to restore hip biomechanics, using a selection of options to address leg length, offset, range of motion, acetabular components, and anteversion.

Efficiency

Restoration Modular is designed to enhance intraoperative efficiency in a number of ways. It

provides the versatility to address intraoperative challenges including leg length discrepancies and soft-tissue tensioning, while catering to a variety of femoral anatomies, all at your surgical approach preference.

The intuitively designed instrumentation allows you to simply and effectively prepare the bone, accommodating a range of technique options and nuances. The instrument designs are based upon familiar, proven techniques, speeding the mastery of surgical procedure.

The instrumentation is also designed to allow you to effectively implant the device to best restore hip biomechanics.



Plasma Stem

Cone Body

Conical Stem

MT3 Body

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Plan

Choice Matters

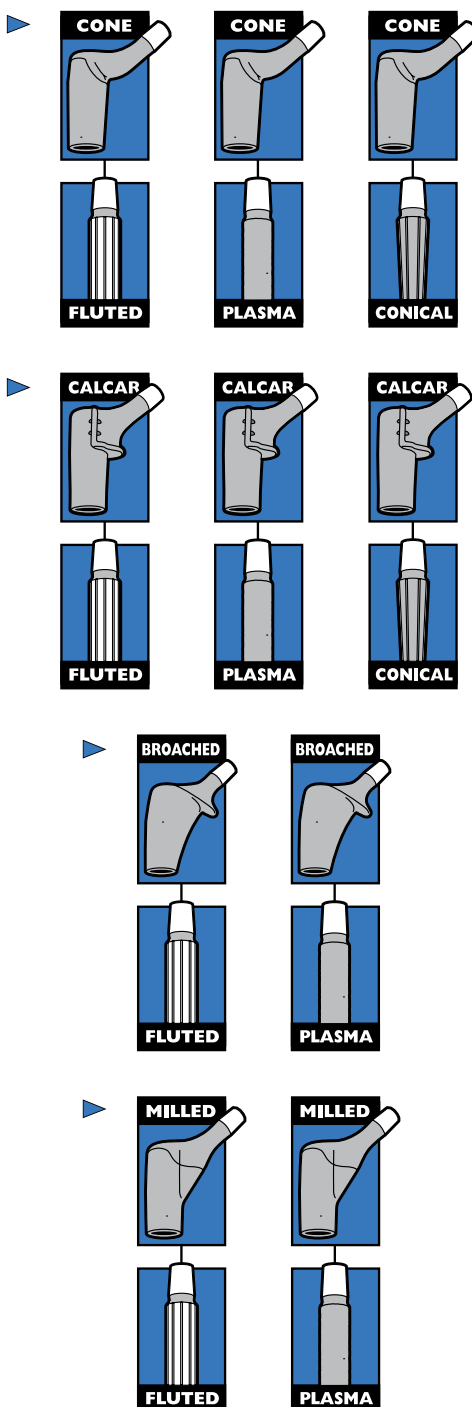
Simply stated, in revision hip surgery you have many needs – so does your patient. Choices to answer these needs are the core benefit of the Restoration Modular System. In fact, Restoration Modular was engineered to offer more choices than any other revision hip system on the market. Restoration Modular offers 78 proximal body options and 308 distal stem options, complemented by a host of acetabular options, all of which provide the first step to clinical success for you and your patient. With a range of options to choose from, you can build the right construct that will best match the patient’s needs.

How do you preoperatively plan?

Component placement critically affects the performance and longevity of total hip replacements. Because of the array of revision components available, limitations of observation imposed by anatomic orientation and radiographic techniques make preoperative planning a critical element of revision hip surgery. Selection of the correct size, and position of the acetabular and femoral components is best done through preoperative planning:

- Assess defect and anatomic landmarks
- Determine head center
- Determine offset
- Determine best articulating surface
- Determine appropriate geometry, length, and diameter of femoral component
- Assess intramedullary canal defects and leg length discrepancies
- Consider activity level and other environmental variables
- Select best prosthesis

All of these factors need to be considered, and often adjusted intra-operatively, in order to best match the patient’s needs. Restoration Modular, in combination with the Trident Acetabular System, and the Dall-Miles Cable System, provides you with a range of choices to address these variables, and cater to an array of revision scenarios.



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Size options

Cone Body Sizes and Head Offsets with V40™ Femoral Heads available in 22mm, 26mm, 28mm, 32mm, & 36mm

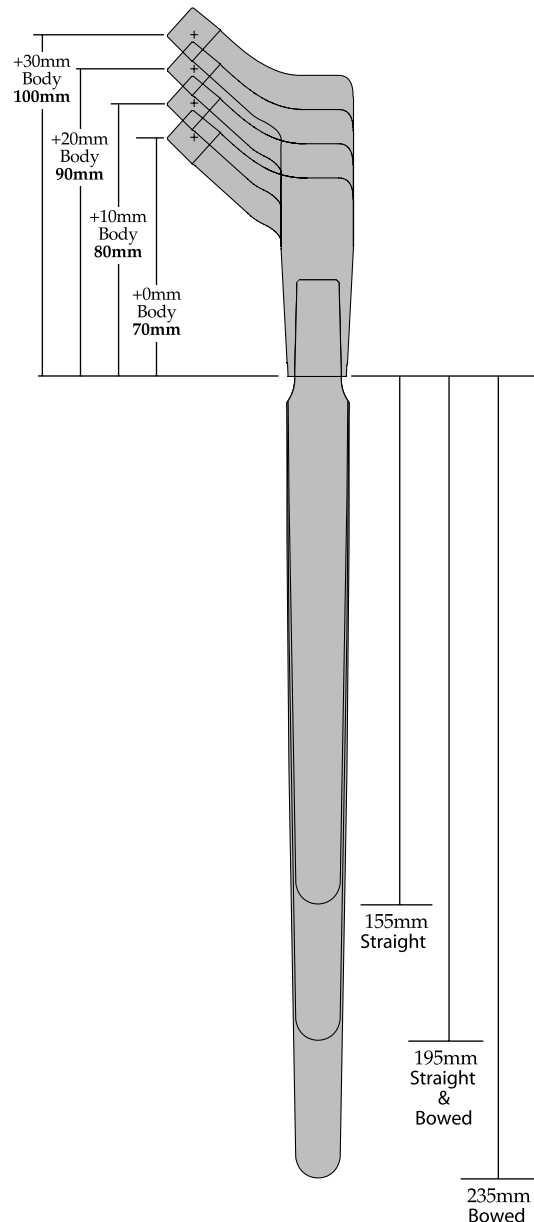
Cone Body Sizes	-4mm*	+0mm (Std.)	+4mm	+8mm	+12mm
19mm	31mm	34mm	37mm	40mm	43mm
21mm	33mm	36mm	39mm	42mm	45mm
23mm	37mm	40mm	43mm	46mm	49mm
25mm	41mm	44mm	47mm	50mm	53mm
27mm	41mm	44mm	47mm	50mm	53mm
29mm	41mm	44mm	47mm	50mm	53mm
31mm	41mm	44mm	47mm	50mm	53mm

*Not available in 22mm or 26mm diameter head.

Cone Body/Conical Distal Stem Sizes†

Cone Body Sizes	Neck Angle	Distal Stem Lengths (mm)	Distal Stem Diameters
19mm	132°	155mm, 195mm, 235mm	14mm – 28mm in 1mm Increments
21mm	132°		
23mm	132°		
25mm	132°		
27mm	132°		
29mm	132°		
31mm	132°		

†Measured to outside of flutes, 120mm up from distal tip.



Cone Body/Conical Distal Stems Combined Overall Lengths**

Conical Distal Stem Sizes	Cone Body Lengths			
	70mm +0mm (Std)	80mm +10mm	90mm +20mm	100mm +30mm
155mm Length 14mm-28mm dia. (Straight)	225mm	235mm	245mm	255mm
195mm Length 14mm-28mm dia. (Straight & Bowed)	265mm	275mm	285mm	295mm
235mm Length 14mm-28mm dia. (Bowed)	305mm	315mm	325mm	335mm

**Femoral head neck length options will increase overall stem lengths – range -4mm, +0mm (Std), +4mm, +8mm, and +12mm. Head Center (+0mm Std.) to Distal Stem Tip

Alumina Ceramic Head Compatibility

Size	Offsets Available
28mm	-4mm, +0mm (Std), +4mm
32mm	-4mm, +0mm (Std), +4mm
36mm	-5mm, +0mm (Std), +5mm

***36mm Ceramic Heads offered with -5mm, +0mm, & +5mm only.