**Tibial Preparation**

Assemble the tibial alignment guide by attaching the ankle clamp to the alignment guide base. Insert the appropriate alignment guide rod (0°, 3° & 5° slope) into the base. Attach the tibial cut guide to the alignment rod. Place the ankle clamp over the distal tibia so that the clamp is just proximal to the malleolus. Proximally position the cut block against the front of the tibia. Adjust the alignment guide so that it is positioned parallel to the long axis of the tibia.

*It is recommended that the tibia be resected with a neutral tibial slope. The PS tibial inserts incorporate a 6° posterior slope. The CR tibial inserts incorporate a 3° posterior slope.*

Attach the depth gauge stylus to the cutting guide and determine the resection depth by placing the stylus on the lowest level of the least affected area on the tibial plateau. The resection line is now 10mm below the normal bearing surface. Secure the cutting block with pins through the neutral holes and make the proximal tibia cut through the slot. If the resection depth needs to be adjusted, the cut guide can be positioned ± 2mm. (An optional depth gauge stylus can be used to resect only 1 mm from the most affected side of the tibia.) Care should be taken to ensure that enough tibial bone is resected to allow for equal flexion and extension gaps.

Note: The tibial tray and 10mm insert have a combined thickness of 10mm.

The StelKast Proven Gen-Flex Knee System requires a 1.27mm (.050 inch) thick saw blade.
**Femoral Preparation**

5 to 10 mm anterior to the intercondylar notch, use the 8mm IM drill bit to locate the midline of the femoral canal. Over ream the entry point to allow for adequate decompression of the medullary contents during insertion of the T-Handle. Insert the T-Handle into the canal and remove.

**Distal Femoral Resection**

Choose the appropriate IM alignment guide (5°, 6°, or 7°) to match the pre-operatively determined valgus angle. Orient the block so that the correct side (left or right) is on the top. Insert the alignment rod into the right or left position, which corresponds to the operative knee of the patient. Insert the IM alignment guide assembly into the femoral canal.

Ensure that the IM alignment guide block is flush against the distal femur. Place the distal cutting guide assembly into the IM femoral alignment guide. The distal cutting guide block should sit flush against the assembly to provide for a 10 mm distal femur resection. The block can be adjusted to take additional bone in 2mm increments. Secure the guide with the thumbscrews and set the block flush against the distal femur. Pin the distal femoral cut block and remove the IM alignment assembly. If the resection level needs to be adjusted the distal cut guide can be moved to give ±2 mm cut. (A slap-hammer can be used to disengage the IM alignment guide from the femur.) Make the distal cut through the cut slot, which will give a 10mm distal resection. Remove the cut block and pins.
Sizing the Femur
Place the A/P Sizer flush against the resected distal femur with the feet under the posterior condyles. Close the A/P sizer using hand pressure while placing the stylus on the crest of the anterior cortex. To avoid notching do not over tighten the knob. Measure the femoral A/P size. If the sizer indicates between sizes, the smaller size is selected to avoid overstuffing the knee in flexion. To set external or neutral rotation of the femoral component when using the distal Femoral Cut first approach, either the 3-degree or neutral bushing should be placed on the A/P sizing guide. For the 3-degree bushing, the surface marked “right” or “left” should be facing the surgeon matching the operative knee of the patient. Use the femoral peg drill bit to drill through the guide holes in the bushing which prepares the holes in the distal femur for the fixation pins on the femoral resection blocks.

Remove the A/P Sizer.

Anterior and Posterior Resections
Select the femoral resection cut guide that corresponds to the size indicated by the A/P sizer. Place the cut guide flush against the distal femur. The blocks can be secured with handles or pins. Make the posterior, posterior chamfer, anterior, and anterior chamfer cuts.

Flexion/Extension Gaps
After making the posterior and anterior femoral resections, it is recommended that the flexion/extension blocks be used to check if adequate bone was resected. Attach the base block that measures approximately 20mm to the tibial trial tray handle to facilitate measuring the flexion and extension gaps. If resections are adequate then replace femoral cut block and make the chamfer cuts.
Box Cut (PS Knee only)
Place the appropriate size femoral box cut guide on the femur and secure with handles or pins. The medial/lateral (M/L) position of the box cut guide will define the final M/L position of the femur. Make the box cut with a narrow oscillating saw. *(Note: as an option, chamfer cuts can also be made at this time.)*

Patella Preparation

Determine the proper size of patella button to be implanted. Using the caliper, measure the patella thickness by referencing the highest point of the articular surface. The patella should measure this thickness when the implant is in place. Resect the patella. It is suggested that a minimum for 10mm of patellar bone should remain after resection.

Place the drill guide on the patella and note the appropriate size. Drill through the guide, 3 holes in the triangular pattern for the 3-peg patella or 1 center hole for the single peg patella using the appropriate patella stop drill.

*Note: All diameter patellae are interchangeable with all femur sizes*

Tibial Sizing

Attach the tibial trial tray to the tibial trial tray handle and place the trial against the resected proximal tibial surface. Position the trial tray. To check alignment with the ankle, insert the alignment rod through the trial tray handle. Evaluate coverage of the tibia.

*CAUTION: The tibial tray size must be compatible with the tibial insert and matching femoral component size selected. Ensure compatibility of the tibial tray size with the tibial insert and femur size by referring to the Proven Gen-Flex Knee System Sizing Chart (see page 8)*

After ensuring adequate coverage and rotation of the tray, pin the tibial trial tray to the proximal tibia. (Tibial preparation can be performed now or after trial reduction.)
Trial Reduction

Place the trial femur onto the prepared femur using the femoral impactor clamp to assist in positioning. Insert the selected size and thickness trial insert into the trial tray. **Note: The insert size must match the size of the femoral component.** Position the patella trial. Perform the trial reduction and check for the following:

- Stability in flexion and extension
- Range of motion
- Patella tracking

Final Femur Preparation (CR Knee only)

After trial reduction, with the CR femur trial in the correct medial/lateral position, the peg holes may be drilled for the cruciate retaining femur.

Final Tibial Preparation

Remove the femoral trial and the tibial insert. For cemented keel preparation, drill through the tibial tray with the cemented keel drill to the depth of the stop. For a hybrid keel assemble the bushing to the tibial tray and drill with the cementless keel drill bit. Using the threaded handle and the appropriate cemented or cementless punch, impact the punch through the tray until the punch is fully seated. Remove the trial tray.
Implant Selection

Select the implants corresponding to the trials used in the trial reduction.

**CAUTION:** The femoral component size must match the size of the tibial insert. Ensure compatibility of the tibial insert size with the tibial tray size by referring to the Proven Gen-Flex Knee System Sizing Chart (see page 8).

Packaging of the implants is color coded to assist in determining size interchangeability. The color coding of the femur, insert, and tibial tray must match.

All diameter patellae are interchangeable with all femur sizes.

Assemble the femoral implant to the femoral impactor/extractor and the tibial tray to the threaded tibial impactor. Cement the components. Use the patella clamp to cement the all-poly patella in place. Remove all excess cement.

Once the cement is cured, a trial reduction can be performed with a trial insert to verify the correct thickness.

Ensure that the tibial tray is clean and free of soft tissue that could prevent the insert from locking. Slide the insert from the anterior to posterior until the posterior tabs of the insert engage the posterior undercuts of the tibial tray. With finger pressure, press the anterior edge of the insert to engage the locking mechanism. (If an impactor is used, avoid damaging the locking mechanism by lightly tapping the impactor.) Complete seating of the insert is verified by circumferential inspection of the tray.

Close the incision using standard techniques.
## Proven Gen-Flex™ Knee System

### Sizing Chart

<table>
<thead>
<tr>
<th>Femur</th>
<th>Insert</th>
<th>Tibia Implant</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Femur 1" /></td>
<td><img src="image2" alt="Insert 1" /></td>
<td><img src="image3" alt="Tibia (1T-1F)" /> <img src="image4" alt="Tibia (2T-1F)" /></td>
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<tr>
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<td><img src="image6" alt="Insert 2" /></td>
<td><img src="image7" alt="Tibia (1T-2F)" /> <img src="image8" alt="Tibia (2T-2F)" /> <img src="image9" alt="Tibia (3T-2F)" /></td>
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<td><img src="image12" alt="Tibia (2T-3F)" /> <img src="image13" alt="Tibia (3T-3F)" /> <img src="image14" alt="Tibia (4T-3F)" /></td>
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