Revolution Cement Mixing System

The latest advanced cartridge mixing and delivery system
**Revolution**

*Cement Mixing & Delivery System*

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**Universal Mixing and Delivery**
The Revolution is the most advanced cement mixing and delivery system. This simple, universal mixer quickly and consistently mixes up to three batches of ANY type of bone cement safely and conveniently. The result is ONE part number for all cement needs.

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**Simplicity Matters**
The Revolution requires fewer steps to load, mix, and transfer cement. The rotary handpiece reduces variability and results in consistent mix times, while the built-in charcoal filter reduces harmful fumes.

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**Results Matter**
The mixing blade provides unmatched mix quality. One edge scrapes the cartridge wall forcing cement to the center, eliminating unmixed powder. The opposite edge smears the cement against the cartridge wall, bringing bubbles to the surface and reducing porosity.

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*Revolution*
*Cement Mixing System*
0606-553-000
The Revolution is designed for use with a rotary handpiece. The rotary handpiece quickly and consistently provides a superior mix every time, reducing many of the variables that can negatively impact mix quality.

**Cement Injection Gun**

The dual speed cement injection gun provides unsurpassed convenience and power, allowing the user to easily inject high viscosity or late injection cements. The cradle simplifies cartridge loading and increases strength.

**Pre-Packaged Kits**

The Revolution Cement Mixing System is offered in several kit configurations, including the following:

**Total Knee Mixing Kit 0606-583-000**

For total knee applications, this kit consists of a Revolution Cement Mixing System and a Cancellous Nozzle with Tibial Pressurizer Tip.

**Total Hip Mixing Kit 0606-593-000**

For total hip applications, this kit consists of a Revolution Cement Mixing System, a Breakaway Femoral Nozzle, and an Advanced Femoral Pressurizer.
The revolution line-up includes a large selection of nozzles for accurate placement of cement, even in difficult to access areas.

A new, anatomically correct femoral pressurizer design ensures maximum cement intrusion into bone interstices.
Revolution
Step-by-Step Instructions

**Step 1**

Connect nitrogen source to vacuum pump. Set nitrogen pressure to 70-100 psi. **WARNING:** Do not operate pump outside the recommended pressure range.

**Step 2**

Pour bone cement powder and liquid monomer into the cartridge following the bone cement manufacturer’s protocol. **NOTE:** If three batches of Simplex® P Cement are to be used, the order of loading must alternate between powder and liquid for each batch.

**Step 3**

Remove loading funnel and secure the lid assembly onto the cartridge by pushing it down and simultaneously turning it clockwise, ensuring the lid locks into position.

**Step 4**

Attach the vacuum tube to the lid assembly on the cartridge, and then attach the vacuum tube to the vacuum pump. Apply vacuum pressure until the gauge reads 20-22 in Hg.

**Step 5**

Attach a rotary power tool to the mixing shaft. Mix for 30 seconds moving the mixing shaft to the FULL UP and FULL DOWN positions. Remove the rotary power tool from the mixing shaft. If not using a rotary power tool, snap mixing handle onto mixing shaft. Mix for 30 seconds moving the mixing shaft to the full up and full down positions while rotating shaft 180 degrees per stroke.

**Step 6**

Remove the vacuum tubing from the lid assembly on the cartridge.

**Step 7**

Press and rotate the blade release button. Slowly withdraw the mixing shaft while rotating to remove the mixing shaft from the cartridge. **NOTE:** The mixing blade will remain in the cartridge.

**Step 8**

Attach desired application nozzle to the cartridge lid by pushing it down and simultaneously turning it clockwise, ensuring the nozzle locks into position.

**Step 9**

If not already removed, remove the base from the cartridge and place the filled cartridge into the cradle of the cement injection gun, making sure that the rod on the gun is pulled back fully. **Note:** Hold the injection gun and cartridge in the vertical position until the nozzle is filled.