Bone-Cement Delivery System
Operating Instruction (using spindle drive)
1. **Step 1:**
   a) Syringe
   b) Syringe cap
   c) Luer-cap
   d) Mixing device
   e) Plunger
   f) Spindle nut
   g) Spindle

2. **Step 2:**
   Remove the luer-cap from the syringe cap. Attach the container with liquid by turning the container clockwise onto the syringe cap.

3. **Step 3:**
   Aspirate the liquid from the container by pulling the plunger. Repeat if necessary.

4. **Step 4:**
   Remove the container by turning counter clock-wise while fixing the syringe cap with two fingers. Close syringe by attaching the luer-cap to the syringe cap.

5. **Step 5:**
   Remove the plunger sleeve from the mixing device by pushing the handle with the thumb and two fingers.

6. **Step 6:**
   Mix the biomaterial by moving the mixing device back and forth while simultaneously rotating. Be sure to mix the material at both very ends of the syringe.

7. **Step 7:**
   Break off mixing grip.

8. **Step 8:**
   Attach the spindle nut to the back end of the syringe. Be aware of hearing two clicks while attaching both sides of the spindle nut.

9. **Step 9:**
   Rotate the spindle clock wise while attaching it to the spindle nut.

10. **Step 10:**
    To vent air slowly rotate spindle until all air is removed.

11. **Step 11:**
    Attach accessory to the syringe.

12. **Step 12:**
    Rotate spindle to dispense mixed biomaterial.