



# Kingsley North, Inc

910 brown street., Norway, MI 49870 \* 1 800 338 9280

[www.kingsleynorth.com](http://www.kingsleynorth.com)

## General Tumbling Instructions

**STEP 1: (80 GRIT)** Fill the tumbler barrel 2/3 to 3/4 full with properly graded and sized stones. If the barrel is not full enough, you won't get the proper tumbling action in the later steps. Add the necessary amount of coarse grit to the stones in the barrel (see chart). After adding the grit, slowly add water until the water level is just touching the bottom of the top layer of stones. Do not overfill, too much water will inhibit the tumbling action. Run the tumbler for 24 hours, and then open the barrel to release any slight gas build-up during the coarse grind. If the slurry appears pasty or very thick, add a small amount of water. Let the tumbler run for an hour and recheck, add water as needed.

The First (coarse) grind is the most important step and will take 7 to 10 days - be patient and don't stop too soon. Note: If the stones are not all smoothly rounded, it is necessary to repeat the coarse grind step using a charge of new grit. The original grit will have broken down too much to provide additional shaping. After the 1st grind, you must clean the barrel and stones thoroughly to remove all traces of the coarse grit slurry. Do not pour slurry into your plumbing system, it will settle in the pipes and harden like cement. There should be no visible grit or slurry left on the stones, you are now ready for step 2.

**STEP 2: (220 GRIT)** Place the cleaned stones in the barrel, inspecting them as you go, and removing any that need more coarse grinding - if you have less than 2/3 barrel full of stones add plastic pellets to make up the additional volume. Add proper amount of water and grit according to table, reseal the barrel, and let it run for 2 to 3 days before checking stones. On the 7th day, they should have a smooth matte finish over their entire surface, if not run for additional 2 to 3 days. Plastic pellets will float to the top, remove and clean them as they can be used again. **\*\*PLEASE NOTE – plastic pellets can be reused, but only in the same grit. For example, if you used them in the 220 grit, set them aside and use them again but only in the 220 stage.\*\*** Use the same cleaning procedure you used in step 1.

**STEP 3: (600 GRIT)** Fine or pre-polish, place stones into the barrel, following previous instructions. Run for about a week, checking progress ever other day. Clean and inspect stones for final polishing stage.

**STEP 4: (MICRO ALUMINA POLISH)** gently place the stones into the barrel to avoid any scratching or chipping. After charging the tumbler with water and polishing compound (see table), add plastic pellets to increase volume to 2/3 - 3/4 full. The pellets will help carry the polishing compound and that will cushion the stones. Polishing should take 5 to 7 days. At this time, remove and inspect several stones. If they look the same when dry as they do when wet, your batch is finished. If, after 7 days, your polished gemstones appear to have a slight film on them, it can be removed and extra shine and luster added by burnishing step. Before burnishing, be sure to thoroughly clean the barrel and stones and recover the plastic pellets.

**Burnishing:** Place your stones into the barrel, add the same plastic pellets and proper amount of powdered soap (**DO NOT** use any liquid detergents, dishwasher powders or any products that contain bleach or additives as these products will damage the barrel and ruin the polish). Add water as in previous steps and run for at least 4 days. This can be done between each of the steps as well to ensure that your barrel and stones are clean before continuing onto the next step.

## TUMBLING COMPOUND QUANTITIES

BARREL SIZE POUNDS	MAX. VOLUME CUPS	COARSE(STEP1)	MEDIUM(STEP2)		FINE(STEP3)	POLISH(STEP4)	SOAP(STEP5)
			TABLESPOONS				
1.5	1-3/4	4	4	5	2	1/2	
3	3	4	4	6	3	1	
4.5	5	8	8	8	4	1 1/2	
6	7	10	10	12	5	3	
12	15	20	20	24	8	4	