TUMBLING INSTRUCTIONS

How do I proceed to use the rotary tumblers?

There is several 4-step media packages available to use with your tumbler. Each of the four steps requires one week to complete to complete the tumbling cycle.

You never pour any used media down the drain (it will turn to cement).

When you purchase your tumbler a book comes with the tumbler. This will explain how much media to use with the size tumbler that you purchased. For LORTONE tumblers turn to page 10.

You will find that pellets are mention in the book. They are used as a filler. If you do not have a complete load you may add the plastic pellets to complete the load. For polishing the pellets are used for a filler as well as a buffer to keep the rocks or slabs from hitting together and chipping. If you use pellets in the grinding cycles NEVER use the same pellets in the polish cycle.

NEW: Something better than using pellets is to use ceramic. The ceramic comes in small and medium sizes. The cost is almost twice of that of the pellets, but well worth it. They do the same work as what pellets do but in addition they add that extra polish to your stones. They last longer and are easier to retrieve after the polish cycle. Recommend there use mainly in the polishing cycle. For those of you that make spheres you would use one of the larger tumblers {12 lb tumbler}, and add some of the larger ceramic cylinders along with cerium {or other polish if you prefer}, and you will get that great polish on those hard to polish spheres. This save time as well as the amount of polish that you use.

Always clean your rock from all grit after each cycle.

TUMBLING COMPOUND QUANTITIES

TABLE I

3# BARREL 60/90; 4 Tbsp	120/220; 4 Tbsp	FINE; 5 Tbsp	Pre-Polish; 5 Tbsp	Polish; 5 Tbsp
4.5# BARREL 60/90; 8 Tbsp	120/220; 8 Tbsp	FINE; 8 Tbsp	Pre-Polish; 8 Tbsp	Polish; 8 Tbsp
6# BARREL 60/90; 10 Tbsp	120/220; 10 Tbsp	FINE; 10 Tbsp	Pre-Polish; 12 Tbsp	Polish; 12 Tbsp
12# BARREL 60/90; 20 Tbsp	120/220; 20 Tbsp	FINE; 20 Tbsp	Pre-Polish; 24 Tbsp	Polish; 24 Tbsp

How do I use vibrating tumblers?

The vibrating tumbler does the job in five days verses thirty days for the rotary tumblers. The RAYTECH tumbler uses one table spoon of grit and water for twelve hours and then you add the same amount for another twelve hours. At this time you remove all of the media and clean your rock and start over. Use this method for each step. BE SURE TO WATCH YOUR MOISTURE LEVEL IN HOT WEATHER

Why doesn't my rock polish?

Not all rock will polish. If your rock looks like it is polished when it is wet, then you can figure that most of your rock will polish the same.

If you had some rock's with pits in them, they could have carried some grit to the polish cycle and this will keep your rocks from polishing. If you have a few rocks that still have these pits in them, just remove the rocks and add them to the next load.

MATERIALS: Materials that appear different... Shiny as opposed to dull, Translucent as opposed to Opaque, or Opaque with color and or a pattern. If stones are wet when picked up, but turn dull and dry almost immediately, chances of polishing are slim. These could be decorative, but not tumbling materials. If collecting in a dry area, take along a spray bottle filled with water. Pre-select tumbling materials, spraying to determine whether you have a collectable stone. The large sized material will have to be reduced by crushing or breaking.

How do I use Ultra Sonic Tumblers?

There are so many ways to use these tumblers that a person is better off purchasing the book "How to Tumble Polish Rocks into Gems" by Edward Smith. \$15.00 This book covers rotary as well as vibratory tumbling and explains the use of both wet and dry polishing. A highly recommended book.

Why are there so many ways to tumble rocks ...?

If you were to ask 100 different people "how to tumble rocks?", you will get 100 different answers.

You have to first determine what you are going to tumble and then go from there. One of the hardest rock to tumble are Apache Tears. They have to all be the same size and you have to follow the tumbling instructions to a tee. You go through all of your grinding cycles and for the final polishing cycle you must use one of the better polish's. Tin Oxide is one that is commonly used.

You have to have the same type of material (and hardness) in each load that you tumble. Remember if some of your rocks do not get smooth like you think they should, just pull them out and add them to your next load.

What is the best polish?

The Best Polish

There is not one polish that is best for everything.

<u>Pro-Polish</u> is a polish that if you have not tried you <u>should Pro-Polish</u> polishes much like <u>Tin Oxide</u>, but at half the price. This 1/2micron range fine grade alumna polish works on most materials, including many problem stones.

Tin Oxide can help you put that super polish on Opal and many Quartz family stones.

Most Quartz type stones and Glass polish very well with our <u>Optical Grade Cerium Oxide</u>. For a more brilliant finish, you may want to try <u>Super Cerium</u> (also known as French Cerium), our ultra high purity <u>Cerium Oxide</u> (it's white!).

Lapis, Jade, and Rhodonite polish very well with <u>Chrome Oxide</u> (yes we know it is a messy Green, but it does the job on these hard to polish stones). Chrome Oxide also works well on Quartz.

<u>Sapphire Powder</u> is the equal in every way to the old Linde A and B. Used mainly for faceting, it is also becoming a standard for polishing cabs by many professional cutters.

 \underline{CPP} is designed for use in a rotary tumbler. \underline{CPP} works on most stones, soft or hard. \underline{CPP} is very low priced!

For what do to tumble brass or Apache Tears....?

VIKING K-G CARRIER

FOR LOAD CUSHIONING AND METAL BRIGHTNESS- Ideal for the ammo reloader for burnishing brass casings. Can also be used for al stages in stone tumbling, except rough grind, to cushion the tumbler load when using the wet method. Ideal for Apache Tears. Can be used dry after polishing to burnish to the perfect finish.

Grits for Tumbling

For most stones in a barrel (rotary) tumbler, we recommend a four step process. Coarse grinding is done with $\underline{60/90}$. Medium grinding uses $\underline{120/220}$. The fine grind works well with $\underline{500F}$. CPP polish does the job on most stones, hard or soft. The "split" grits, $\underline{60/90}$ etc., work as well as the more expensive straight graded grits for most tumbling. A great way to get this series is with our $\underline{4\ STEP}$ GRIT KIT. It comes packed in four re-closeable plastic jars proportioned to grind and polish $\underline{10}$ - $\underline{14lbs}$ of rock.