

All of the operations and materials covered in these instructions are potentially hazardous. Every care must be taken to follow the correct Health & Safety measures when using these instructions.

**HEALTH AND SAFETY**

- Ceramic Chips 1kg Ref.TB951
- Steel Pins 1kg Ref.TB953
- Mixed Steel Shot 2kg Ref.TB955
- Mixed Steel Shot 1kg Ref.TB955A
- Steel Balls Dia. 3mm 1kg Ref.TB956
- Stainless Steel Balls Dia. 2mm 1kg Ref.TB957
- Stainless Steel Balls Dia. 3mm 1kg Ref.TB958

**MEDIA**

Barrel polishing lubricant. Lubricates steel shot for free fall whilst burnishing. Dilute with water 1- 5. Supplied in 1 ltr container. Weight 1kg Ref. TB943

**ROTOL**

- A bright burnishing compound for a bright polished finish for use with steel media Weight 1kg Ref. TB941 - Weight 50kg Ref. TB941A
- A fast cutting abrasive compound for a high speed deburring and smoothing, producing a clean and matt finish for use with ceramic chips or plastic media Weight 1kg Ref. TB942

**COMPOUNDS**

- Our barreling machines are used in conjunction with a range of finishing media to enable either a bright polished or clean and matt finish to be obtained.
- The treatment of articles direct from the raw state (e.g. gold castings direct from the investment) is usually carried out by a 2 stage process comprising 'grinding' with an abrasive compound, then polishing with a bright burnishing compound.
- The first part of this process is carried out using ceramic chips (abrasive bodies of triangular form) and the polishing action, using hardened steel shapes.

**BARRELLING MEDIA**

4. Place the jewellery in the barrel in a ratio of one part jewellery to ten parts burnishing shot. **Never mix different metals in the same load.** The exact number of pieces will depend on the barrel configuration e.g. flat water like discs can be put into the barrel in a much higher ratio than rings with an open design or hooks that will catch on each other. The aim is that each piece of jewellery should move independently through the shot: if there are too many pieces they can become tangled with each other, for a solid mass and prevent the burnishing shot from doing its work. **We don't recommend the barreling of stone set pieces as these may be damaged in the barreling process.**
5. After each cycle discard the mixture and rinse the shot. After several cycles it may be necessary to run a cleaning cycle again to ensure the shot has not become contaminated. This point cannot be over emphasized. If the foam is not snowy white metallic dirt will be deposited on the work pieces preventing a polish from taking place. Most problems are caused by lack of cleanliness. Therefore - keep the media clean keep the work pieces, clean, keep the machinery clean i.e. **KEEP EVERYTHING CLEAN!**
6. Steel shot must also be kept clean and never allowed to oxidize or rust. Always keep shot under a solution of water and Barreling powder. For prolonged periods of inactivity add 25cc ammonia to this solution.
7. Please note the barreling unit TB93 is fitted with a **heat overload** to prevent damage to the motor. This unit should **NOT** be run for periods of more than 1 hour at a time (the overload cut-out may stop the unit to allow it to cool down) NB It may be necessary to run the barreling process in several stages.