

# 3" Rapid Z™-DRUM with Template Bearing

## INSTRUCTIONS

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### Introduction

Thank you for purchasing the NSI Solutions 3" Rapid Z™-DRUM with Template Bearing. The Rapid Z™-DRUM is a 3" vacuum brazed grinding drum designed to quickly grind and smooth stone and quartz. These drums are designed to be used in sequence after the Rapid Z™-CUT. The coarse grit drum will quickly clean up the rough surface left by the Rapid Z™-CUT. The fine grit drum will quickly smooth the surface left by the coarse grit drum so it is ready to polish. Please read these instructions thoroughly before using this tool. Keep these instructions in a place where operators can access it easily.



### Use Proper Safety Gear

To prevent damage to eyes from flying debris, wear protective glasses or face shield. Be sure to wear waterproof safety boots, appropriate hearing protection and dust protection as required.



### Caution

Before each use, inspect the Rapid Z™-DRUM for damage. Never use a Rapid Z™-DRUM that has damaged components.



### Caution

The Rapid Z™-DRUM is designed for wet use only.



### Caution

**Maximum RPM 8500**



### Caution

Always be sure that the grinder is switched off and unplugged from power (either electric or air) before installing/removing the Rapid Z™-DRUM or attempting to perform any inspection or maintenance.

### Tools Needed For Assembly/Disassembly

- 5/16" Allen (hex) wrench
- Vise

### Instructions

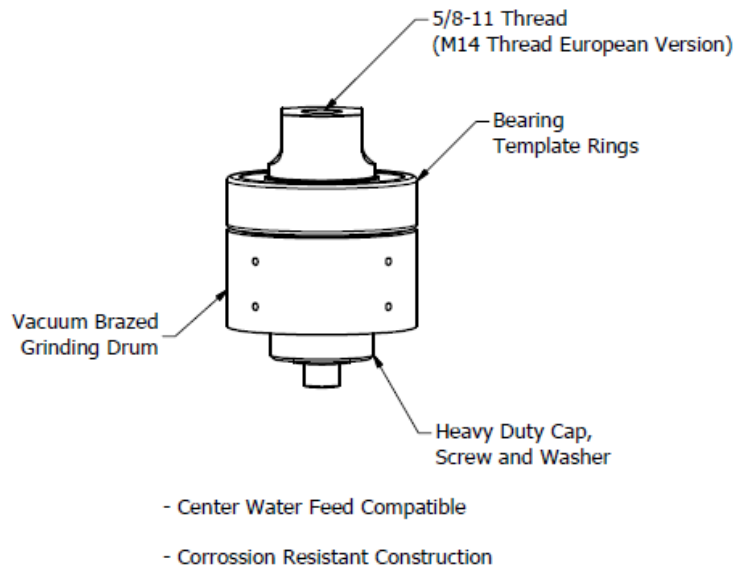
1. The Rapid Z™-DRUM mounts to a male 5/8-11 thread (M14 thread on European version). Prior to use, ensure it is mounted tightly.
2. The Rapid Z™-DRUM is designed for wet use only. Use either center water feed or a sufficient external water spray. Ensure enough water is used to avoid creating dust.

3. Make sure the machine height is adjusted so that the bearing rides against the template and the drum is aligned with the stone to be ground.
4. With the Sink BULL™ or other grinding machine in place on the template, and the water running, start the motor. Work the drum around the template, grinding away stone, until the bearing contacts the template around the entire periphery. The coarse grit drum will grind away stone almost flush to the template leaving approximately .020" (.5mm) proud of the template.
5. After the coarse drum has been worked completely around the template switch to the fine grit drum and repeat the process. The fine drum will leave a surface flush to the template which is ready to polish.
6. As the diamonds begin to dull grinding will become harder. At this point the drum can be reversed to extend its life. This can be accomplished as follows (see Figure 1 & 2):
  - a. Clamp the Rapid Z™-DRUM upside down in a vise.
  - b. Using a 5/16 Allen wrench remove the socket head cap screw, washer and cap from the arbor.
  - c. Remove the drum, flip it over so "2" is visible and reinstall on the shaft (ensure the key stays in place).
  - d. Reinstall the cap, washer and socket head cap screw and tighten.
7. After the Rapid Z™-DRUM has been used in both directions and is completely dull the drum portion can be replaced using the same process listed in step 6 above. The drums are marked with a "1" on one side and a "2" on the second side. A new drum should be installed with side 1 visible. After it is reversed side 2 will be visible. When side 2 is dull the drum should be replaced.

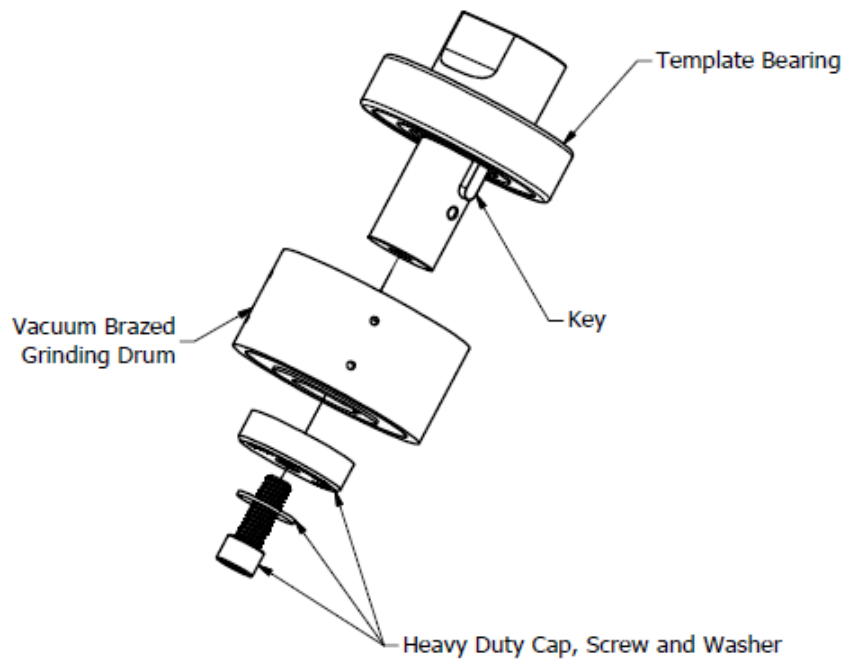
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### Cleaning

The ball bearing template follower will last longer if it is blown dry, with compressed air, after each use.



**FIGURE 1 – 3” Rapid Z™-Drum with Template Bearing (Assembled)**



**FIGURE 2 – 3” Rapid Z™-DRUM with Template Bearing (Exploded)**