A centerless wheel must be both trued and dressed to prepare it to grind properly.

**AT’s Wheel Adapter Mounting Service**

Abrasive Technology provides a wheel adapter mounting service to all customers purchasing our centerless grinding wheels. This service is offered to customers to assure that the wheel O.D. is round and concentric to the mounting surface of the spindle. Failure to perform this operation prior to initial startup may cause the wheel to wear out prematurely not providing the customer with the expected results.

Centerless wheels range in size from 12” (304.8 mm) diameter x 4” (101.6 mm) thick to 24” (609.6 mm) diameter x 20” (508 mm) thick. Wheel costs may range from $2,000 to as much as $50,000. By providing this wheel mounting service, AT can ensure that our products are used correctly.

**Common Truing Technique**

- The mounted wheel and wheel adapter assembly should be installed on the spindle of the grinder.
- Verify the wheel runout by checking with a dial indicator on the outside diameter of the wheel. Peripheral runout should not exceed .002” (0.05 mm) and is best when it is .001” (0.025 mm) or less.
- Feed soft cold rolled steel rod through the operation and repeat the process as many times as is necessary to bring the grinding surface of the wheel to truth with the spindle.
- The larger the diameter of the diamond wheel and the greater the presence of runout, the longer the truing operation takes.

**Dressing the Wheel After Truing**

- Several aluminum oxide dressing sticks 1” (25.4 mm) x 1” (25.4 mm) x 8” (203.2 mm) long (AT Part # SJ990001) may be required to perform this operation successfully.
- Soak the aluminum oxide dressing sticks in water prior to dressing the wheel for about 20 minutes. A wet stick will create an abrasive slurry on the surface and open the diamond wheel exposing diamond crystals from beneath the surface of the bond.
- Turn the diamond wheel switch “on” and then jog switch to the “off” position. The inertia of the rotating wheel will keep it spinning for a considerable length of time. Feed the dressing stick into the wheel working evenly back and forth along the width of the wheel. Once the wheel slows to a very low RPM, remove dressing stick from wheel surface and repeat the “on-off” spindle jog procedure and begin dressing with the stick again. This process may take 3 to 4 dressing sticks to expose the diamond so it will cut properly. As the diamond becomes more exposed for cutting, the pressure used to feed the dressing stick will be greatly reduced.
- When dressing with the stick is completed turn the machine grinding coolant on and wash the abrasive slurry from the surface of the wheel. At this point, the sparkle of diamonds should be visible to the eye.

For further questions about this process, please contact Glen Rosier at AT’s Johnson City facility at 1.423.232.4700