Jewelry Prefinishing & Finishing Update

A review of the Foredom® BL-1A Bench Lathe Kit and Foredom and 3M® Wheels and Accessories

By Mark B. Mann

Prefinishing: The use of abrasives to remove a layer of metal, coarse tool marks and other imperfections.
Finishing/Buffing: the use of coarse compounds in combination with wheels to cut down a surface.
Polishing: the use of fine compounds in combination with wheels to add color and luster to the final stage of finishing.

Understanding and using updated materials will help you in accomplishing your prefinishing and finishing requirements professionally and efficiently. Here's a brief overview of some new and established products:

The Foredom Bench Lathe Kit includes two tapered spindles (attached to the 5/16" motor shaft on both sides), a wheel mandrel (B) and a collet holder with two collets (A). The motor is a workhorse and performs well for prefinishing and finishing. It features a dial controlled variable speed from 1,800 to 7,000 RPM. The high torque 1/6 horsepower motor is well-suited for use with brushes, buffs and a variety of abrasive wheels ranging in size from 1/4" to 4" in diameter.

The tapered spindles are removed easily, and the wheel mandrel is available for use with abrasive wheels, wire brushes and miscellaneous accessories that have 1/4" holes. The permanently lubricated sealed-ball-bearing and dust-proof motor housing provides maintenance-free operation. The base is made of heavy-duty cast iron with four mounting holes.

The unit is less than 6 inches high and 13 inches wide with the tapered mandrels installed. Its compact size makes it an ideal motor for mounting on your workbench or at a side bench within your workstation.

Featured from Foredom’s extensive selection of accessories is an assortment of cotton, muslin, felt, chamois, and treated buffs. Foredom also supplies tripoli, red rouge. A new addition to the line: blue and white platinum polishing compounds. Also available: a wide selection of de-burring, grinding and finishing wheels.

For more information contact:

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3M® abrasive products for jewelers include:

- Mounted on the left side of the motor and clustered below it is a selection of 3-inch 3M Radial Bristle Discs ideal for cleaning, fire-scale removal, semifinishing, blending, texturing and surface reduction. They eliminate the need for wheels that require messy compounds.

- 3M Flex Diamond Bands, shown in several grits on expandable rubber head mandrels, are good for inside ring cleanup, shaping and pre-finishing. The 3/32” mandrel mounts in Foredom’s Collet Holder and can be installed on the motor shaft.

- 3M Trizact Bands feature a pyramid-shaped aluminum oxide abrasive surface that cuts metal smoothly, reducing buffing and finishing time.

- Featured in the right corner of the photograph are Diamond Discs similar to the Flex Diamond Bands. They’re used for precision prefinishing of flat-edged surfaces.

- Shown mounted on the right side of the motor is a 3” XK Metalworking Wheel. These wheels are much harder and cut faster for general surface flat reduction, sprue and mold line removal.

Foredom and 3M prefinishing and finishing products suit most jewelry making applications. These products used in tandem with the Foredom Bench Lathe make performing prefinishing and finishing tasks for the bench jeweler easier and quicker while improving quality and reducing waste.

This bench jeweler has several rounded wide 14k yellow gold bands to prefinish. Here he’s using a 3M Radial Bristle Disc. Prior to this step, he used the 3M XK Wheel to remove the sprue. The Foredom Lathe is mounted on a small board so it can be moved from one bench to other shop locations for various needs.

Among the optional equipment provided by Foredom for the Bench Lathe Kit are small left and right dust collection hoods with standard size dust collection hose connectors on the rear. These compact units are heavy-duty and have rubber pads on the bottom. They can be placed at any location at the jeweler’s work or wax bench. The Handler Super 62 II compact dual dust collector system attaches to the back of the Foredom hoods.

The Tool Tips here are from an article which first appeared in the June 2003 issue of Professional Jeweler Magazine.

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