Deburring the internal bores of an air-cooled cylinder head.

## Bore-Rx<sup>™</sup> Brushes

are designed for automated applications in CNC machining centers and dedicated machines. They are ideal for removing burrs from internal edges and finishing bores. Since they eliminate off-hand deburring, they improve part-to-part consistency and reduce direct labor content. Bore-Rx brushes are available in sizes ranging from 7/8" to 4" and can be readily adapted into a machining center's tool changer using an end-mill holder or 3/8" collet.

### Bore-Rx Brushes - Silicon Carbide - 3/8" stems

Diameter	Filament Dia./Grit	Face Width	Overall Length	Max. RPM	ltem Number
7/8"	.022"/120	3/4"	4-3/4"	8,000	17206
1"	.022"/120	3/4"	4-3/4"	8,000	17208
1-1/4"	.022"/120	3/4"	4-3/4"	8,000	17210
1-1/2"	.022"/120	1"	5"	8,000	17212
2"	.022"/120	1"	4-1/4"	6,000	17215
2-1/2"	.040"/80	1"	4-3/4"	6,000	17217
3"	.040"/80	1"	5-1/4"	6,000	31011
4"	.040"/80	1"	6-1/4"	6,000	31013

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets. Bore-Rx extension holder is available. Contact Application Engineering at 888-299-APPS (2777).

## Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 7/8" to 2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. Contact Application Engineering at 888-299-APPS (2777) for more information.

# Operating Parameters For Nylox® Bore-Rx Brushes

Brush Diameter	Recommended RPM	Recommended Feed Rate
5/8" - 7/8"	3000	20"/min
1" - 1-1/2"	3000	20"/min
2" - 2-1/2"	2000	20"/min
3" - 4"	1500	20"/min

### **Tool Paths for Crosshole Deburring**

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

• Diameter of Interpolation = Hole Dia. - 0.975 x Brush Dia.

### **Tool Paths for Bore Finishing**

Nylox brushes can be used to improve the surface finish of bores. The best tool path normally involves helically interpolating the bore. The above recommendations for speed, feed and diameter of interpolation are also valid for bore finishing. The use of coolant is highly recommended in order to achieve maximum surface finish improvement.



17208

17215



31013







**Reusable Arbor** 

