



Post-Machining Industrial Deburring Solutions

When safe and cost effective solutions matter

From start to finish, Osborn has your back with innovative solutions.

As the global leader in surface treatment and finishing solutions, Osborn knows that it's about more than just a product. With Osborn, you have a partner; an expert in your field that is dedicated to providing you the right solutions to do the job at hand **better**, **faster**, and **safer**.



Cost savings, improved efficiency, optimal results. Osborn's Advanced Technology Brush System products, or ATB®, are specifically designed for automated deburring. Our experts can assist you in finding the perfect product for your particular application.







ATB® is a time saver.

ATB® is designed for direct adaptation to tool holders (e.g. HSK/SK, combination mandrels, collets, surface chucks). It is designed to be used on machining centers and CNC machines under the same operating conditions as the cutting tools (e.g. use of cooling lubricants, emulsions, water). The deburring process can begin immediately after the upstream machining process, even on the same machining center / CNC machine. Thanks to its tool holder compatibility, the ATB® can be stored directly in the tool magazine of the machining center. In contrast to traditional cutting tools, ATB® brushes are flexible with non-geometric cutting edges. They provide consistent and controlled wear, stable operation, and consistent deburring until the end of their service life.

We will be happy to assist you! Our application engineers have extensive experience in integrating our ATB® brushes into machining centers, CNC machines and robotic cells. On request, we will work directly with your machine builders or robotic and automation specialists to ensure everything works together as intended. Contact us at marketsupport@osborn.com to speak with our experts!

FEATURES

Unmatched life. Superior performance.

These long life brushes reduce set-up time and cost per part. Additionally, the performance of the brushes provide a high level of accuracy and repeatability.

Endless possibilities Brush diameters ranging from 2" to 14" can be paired with abrasive grains including aluminum oxide, silicon carbide, ceramic, and diamond. Available in different fill diameters, trim lengths, and fill densities to match the perfect brush to your specific deburring application.







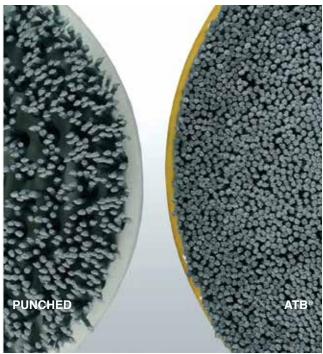


Various mounting options

Designed for direct adaptation to different tool holders.







Maximum fill density

Unlike molded brushes, the Max Density ATB® material is firmly cast into the body of the ATB® brush. There are approximately 4 times more bristles, and increasing performance and service life.



Support collar

An optional flexible support collar can be added to ensure stability with longer filaments at high speeds.



*Color may vary

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FEATURES



Features and benefits at a glance.

Many Diameters and Patterns A wide range of diameters are available. In addition, both the fill length and the fill pattern can be individually adapted. With our individualized options, we can find you the best solution for your deburring application. An increase in the fill length can, for example, increase the service life and flexibility in order to deburr challenging components. Changing the fill pattern can increase the aggressiveness depending on the need.



Resin Molded Body

The fill material is firmly cast into the bodies of our ATB®.

Benefit ATB® can be run faster while maintaining its fill integrity, highly precise design with a high level of tilting rigidity while remaining lightweight.

Maximum Bristle Density

A maximum bristle density with up to 4 times more bristles.

Benefit Longer service life, more aggressive brushing action. Even very complex components can be deburred quickly and effectively.

High Tech Filaments

Nylon threads impregnated with abrasive grit (e.g. silicon carbide or ceramic) are the ideal fill material for deburring. Other materials are also available on request (e.g. diamond grain).

Benefit The nylon bristles are temperature resistant up to 320°F. The use in combination with coolants, emulsions or water is possible and is recommended especially for higher speeds and thin workpieces.

Dimensionally Stable and Flat

The surface of ATB® brushes are flat, providing maximum surface contact for optimal efficiency.

Benefit Even edge rounding can be achieved, wear characteristics are consistent and controllable. There is uniform contact and repeatability.

Direct Adaptation to Tool Holders

For example HSK-/SK, face mill arbors and shell mill mounts.

Benefit No separate handling/clamping. The ATB® brush can be stored in the tool magazine of the BAZ / CNC, deburring can be started immediately after the machining process without removing the part.

APPLICATIONS

Your all round talent for automated deburring.

Osborn ATB® are primarily used for deburring, edge blending and finishing. They are manufactured to tight tolerances and precision standards. They produce a particularly uniform finish in which the shape of the workpiece is not changed.



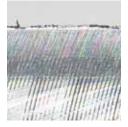
Which components can be machined with Osborn ATB®?

- · Sheet metal, stamped and fine-blanked parts
- · Precision parts, ground and lapped parts
- · Contour-rich components
- · Drawn, laser-cut or milled parts
- · Parts from forming technologies

Typical applications

Examples of typical applications include the deburring of cylinder heads, engine blocks, turbine blade dovetails, hydraulic and pneumatic components, valve plates, contact and sealing surfaces and toothed components.





Before Brushing: Clear burr formation on the edge. Grooves on the surface.





After Brushing: Burrs were reliably removed and the edges rounded. The surface has an even, brushed appearance.

Additional Information Do you require a more detailed overview on our ATB® brush portfolio? Download our brochure at: osborn.com



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