

Micro-Abrasive Blasting Solutions for PEEK Parts

PolyEtherEtherKeton (PEEK) is a strong, lightweight material that can be easily machined. It's ability to withstand high temperatures and harsh chemicals have made it ideal for aerospace and semiconductor applications. It's biocompatibility and chemical resistant nature have made it a standard for developing medical components.

Efficient Burr Removal

Though easily machined, this process typically generates multiple fine burrs that have to be removed manually. An operator may then spend 1-2 hours picking burrs out of intricately machined components. Scaping with knives or filing can also actually lift up new burrs, complicating the process.

Micro-abrasive blasting can be effectively used to eliminate the laborious process of manual deburring. The fine abrasive stream quickly strips off the burrs without damaging the delicate features machined into the parts.

For most applications a very soft abrasive is required to avoid damaging the surface finish of the implant. We typically recommend sodium bicarbonate. It has the cutting effectiveness required to deburr the parts without cutting or burning the surface. With micro-abrasive blasting a specific process needs to be followed to ensure that the surface is not etched or burned.



Improving the Strength of Bonded PEEK Components

The blasting process can also be used to improve bond strength for components. This is done by creating a fine texture on the surface of the PEEK component. Selectively roughening critical areas increases the bond strength dramatically without impacting tightly tolerated features.

BEFORE BLASTING



AFTER BLASTING



Reliable Equipment and Superior Technical Support

The Systems Approach

The blaster unit mixes the abrasive with clean, dry air and is the center of a micro-abrasive blasting system. For optimal performance, the work area must provide good operator visibility and containment of spent abrasive particles.

Comco offers complete systems for cost-effective and reliable micro-abrasive blasting that include the blaster, work station, dust collector and air dryer.



Comco's Application Lab

Many factors contribute to the best micro-abrasive blasting process: type and size of abrasive, size and shape of nozzle, air pressure time and blast time.

Comco's Application Engineers have the expertise and complete test facilities to determine the most efficient process to improve your production efficiency and product quality. They can assist you in establishing the best settings to ensure your blasting process delivers the consistent results you require.



Integrating Micro-Abrasive Blasting with Automation

Comco also designs semi-automated systems for high-volume production. By integrating a variety of splitters and nozzles with powerful blasters, Comco can provide the optimal solution to meet your production requirements.



**Contact us today at 800-796-6626
and discover the MicroBlasting solution to your production problems!**

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