

Micro-Mesh™ Cushioned Abrasive



The Micro-Mesh™ "cushioned" abrasives are surface finishing products which provide superior finishes for a wide range of materials.

FEATURES:

- 'Cushioned' Abrasive achieves Superior Finishes
- Available in many Sizes and Styles
- Less Loading
- Long Life
- Uniform Scratch Pattern
- Low Heat Build-up
- No Resin Deposit

The Micro-Mesh products enhance the performance, life and appearance of materials and products in virtually every industry. These "cushioned", long lasting fine abrasives provide the ultimate finishes and desired results to manufacturers, scientists, hobbyists and consumers. Micro-Mesh finishing products are now available in a wide selection including sheets, rolls, discs and many more. For added convenience, numerous "Kits" are available which are designed for specific applications.

For Use On:

Plastics	Stainless Steel	Copper
Aluminium	Other Metals	Paint
Wood	Polymers	

Micro-Mesh Formats and Sizes

Micro-Mesh is available in a wide range of formats including sheets, rolls, belts and triangles. They are also available attached to a wide range of stiff backed products including the handy file boards. In addition Micro-Mesh is available in discs and triangles (available in unbacked, PSA sticky backed and with loop backing) for use with power driven tools.

A number of pre-packaged kits for specific applications are also available, including kits for acrylic finishing, wood finishing, metal finishing and a general universal hobby kit. Each kit contains a combination of Micro-Mesh Regular, Micro-Mesh MX and /or Micro-Gloss specifically designed for an application.

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Applications:

- Restoring Aircraft Windows to Optical Clarity
- Polish and Clean Materials, Plastics and Painted Surfaces
- Polish Stainless Steel, Copper and Aluminium
- Wood Finishing and Restoration
- Metal Finishing
- Door Hardware
- Musical Instruments
- Painted Metals
- Plumbing Fixtures
- Acrylic Baths and Sinks
- Kitchen Worktops
- Bowling Balls
- Car Paint Finishing
- Helmet Face Plates and Safety Shields
- Gel-coated Fibreglass Boats, Hot Tubs etc.
- Plastic Models
- Gun Stocks and Barrels
- Acrylic Art
- Fingernails
- Jewellery
- Guitars and Violins

Scientific Applications:

- Mass Spec and SEM Source Cleaning
- Polishing MS Probes
- Surgical Tools

Fine Finishes

From medical devices to engine components, musical instruments and countless other manufactured parts, Micro-Mesh is the optimum finishing medium. Micro-Mesh provides superior surface qualities and reduced steps on a wide range of materials.

Micro-Mesh is made with a flexible cloth backing, topped with a layer of especially formulated latex. Silicone carbide or aluminium oxide crystals are bonded with a flexible glue. The various sizes of abrasive grit are adhered on the cloth backing in such a manner that the crystals are held in a resilient matrix, as opposed to a hard matrix (such as what is normally used in sandpaper or emery cloth). When contact pressure is applied to the workpiece, Micro-Mesh crystals recede and rotate slightly to present their sharp cutting edges evenly across the surface, cutting together on the same plane with a positive rake. Because the crystals can move back into the cushion, a very fine scratch pattern is produced with a relatively large crystal. The result is a uniform, even surface pattern that requires fewer aggressive steps to produce the final finish. The larger crystals and the flexible glue bond result in longer lasting material that resists loading and heat build up. The result is reduced polishing time and production of the finest uniform scratch pattern with the most economical process.

Polishing Procedures

The normal procedures for polishing with Micro-Mesh involves the use of a range of abrasive sheets. By beginning with the coarser grits and successively using finer grits, mirror finishes can be obtained. The starting grit size is determined by how deep the scratches or imperfections are on the item being polished. A wide range of grit sizes from 80 microns down to less than 2 microns are available. Three (3) Grades of Micro-Mesh are now available

- Micro-Mesh Regular (silicone carbide grit with standard backing) -
The standard grade of Micro-Mesh used for the majority of operations on plastics, paints, wood and most metals and polymers. It is used to produce a uniformly smooth surface and bring the surface to a high gloss finish. Available in grades 1500 to 12000 (30 to 2 microns).
- Micro-Mesh MX (silicone carbide grit with heavier backing) -
This grade of Micro-Mesh is similar the standard grade except that it has a slightly stiffer cloth backing and has several coarser grits available. Primarily used on metals to bring the surface to a micro finish. Using a combination of one or more of the MX series, a sub 1.0 micro-inch RA can be achieved. Available in grades 80MS to 1200MX 945 to 3 microns).
- Micro-Mesh Aluminium Oxide (aluminium oxide grit) -
This grade of Micro-Mesh was designed specifically for finishing aluminium and other solid surfaces. Available in grades 1500 AO to 12000 AO (30 to 2 microns).

