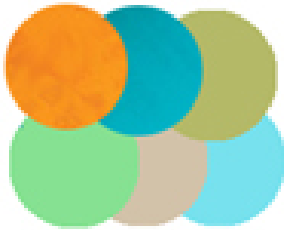


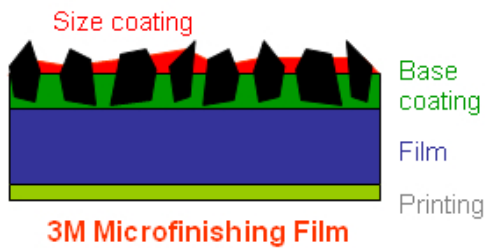


DIAMOND MICROFINISHING FILM DISCS

Diamond Microfinishing Film abrasives (DMFF) are a new tool available from PSI to the Materials Scientist. DMFF products, manufactured by the 3M Company, can replace traditional abrasive papers commonly used in the Metallurgical Laboratory. The unique features of this wet or dry product enable the user to achieve the basic requirements of finish and flatness on a wide range of material samples. With DMFF, these goals will be reached with greater speed, reliability and more consistent results.



Excellent finish is achieved by the precision grading system used to select the diamond abrasive particles for each grade. Classified by the more accurate micron grading system, particle size grading is held to much tighter tolerances than conventional abrasive products. This results in a higher density of the specified particle size available to do the grinding required. This controlled uniformity of particle size, combined with electrostatic coating of the polyester film backing, provides an unexcelled grinding product.



Product flatness is achieved and maintained through the grinding steps by the consistent 5 mil caliper of the dense, polyester backing. Unlike the traditional paper products, the abrasive particles cannot "recede" into the backing. This feature results in shorter grind times and longer life because the abrasive particles remain at the "cutting" interface. Shorter grind times mean less heat generation in the material ground. Longer life means improved economics.

GRADE COMPARISON CHART			
COLOR	MICRON	ANSI	FEPA
Orange	125	120	120
Teal	74	200	200
Yellow	45	280	320
Green	30	400	600
Beige	20	500	1000
Blue	9	1200	2000

Metallographers can choose the Diamond Microfinishing Film discs with either a Plain Back or with a Pressure Sensitive Adhesive Backing. Plain Back Discs are generally held in place with paper holding bands which fit over and around the circumference of the wheel. Pressure Sensitive Adhesive (PSA) backings consist of adhesive applied to the disc back and a release liner left in place until immediately prior to application to the grinding wheel. PSA discs enable full use of the abrasive face and offer convenience in application and removal.

The life of DMFF discs can be prolonged by use of the PSI Magnetic Management System, which allows reuse of the discs and promotes a smooth transition between grinding and polishing steps. Contact us for more information about the PSI Magnetic Management System.

When finer grinding is required, Diamond Lapping Film can be used. It's ability to polish the most difficult hard and mixed hardness materials quickly, without pull-out and with incredible flatness, makes Diamond Lapping Film a product metallographers with difficult materials should investigate.

If your work can benefit from flatter, more consistent finishes combined with shorter grinding cycles and longer abrasive life, you should consider Diamond Microfinishing Film abrasives from PSI.