

MASTER ABRASIVES

Master provides new finishing film solutions from Nanolap

When it comes to finishing applications, Master Abrasives offers a range of products along with expert application advice via its team of technical sales representatives. Having now been appointed the UK distributor for the US based abrasive lapping & microfinishing film manufacturer, Nanolap Technologies, Master will now also be able to offer lapping and polishing solutions required for demanding surface finishing applications.

Established in 2006, Nanolap Technologies manufactures its own products in its US manufacturing facility. Its main products can be categorised into three groups: abrasive lapping film, abrasive microfinishing film, and abrasive slurry. The precision films are used in a range of metal and glass finishing applications including, bearings, automotive engine components (camshafts, crankshafts, etc.), HVOF sprayed rolls, Tungsten Carbide rolls, and many more industry applications where precision surface finishes are required.



The range of Nanolap's products are available in Aluminium Oxide, Silicon Carbide, Cerium Oxide, Silicon Dioxide, and Diamond grits, from 0.1 to 100 microns, depending on the abrasive chosen. These films can be converted into discs, sheets, tapes, and rolls, with or without pressure-sensitive adhesive (psa). The abrasives are selected according to application requirements to optimise the precision polishing operation, which the technical team at Master Abrasives can help to assess and advise on.

Specific applications for lapping and microfinishing, include roll polishing, for which Aluminium Oxide and Diamond grits are recommended to ensure an even scratch pattern and durability under high or low pressures.

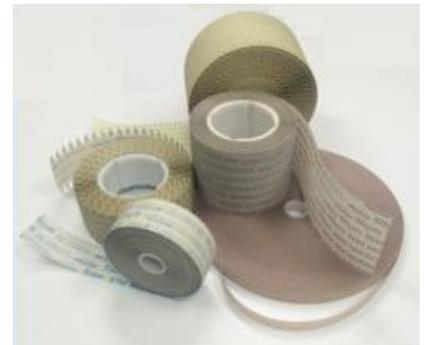


Nanolap's comprehensive line of abrasive slurries and pastes has a range of particle sizes 0.1µm and coarser, using Aluminium Oxide, Silicon Carbide, Diamond, and Cerium Oxide powders. Physical and chemical properties (abrasive particle size, crystal phase, purity, viscosity, pH) are tightly controlled to maximise product performance for each lapping and polishing application. These polishing slurries are suitable for a broad range of surfacing applications, such as ophthalmic, automotive, metal polishing, glass polishing, and plastic polishing. The advantages of Nanolap's

polishing slurries include excellent dispersion properties for a controlled surface finish and fast material removal rate. They also have a long life, produce low levels of foam, and are easy to clean.

Nanolap Technologies uses environmentally friendly production techniques with the use of the latest coated abrasive manufacturing technology. When it comes to quality, a thorough process is applied throughout Nanolap's manufacturing procedure from the incoming of raw materials to the finished goods. For example, composition analysis of the bond and a particle size analysis to confirm proper size distribution of the grain are stages in the quality control process that ensure consistent high quality of Nanolap products and consistent surface finishes. Nanolap holds an extensive stock of popular materials to meet demand and can produce product in short time frames. For the customers benefit, the industry standard colour coding system is used to identify the micron size of the product quickly, for example 9 micron is produced in a blue material, and so forth.

For new customers and processes, free of charge trial materials are available and the potential for a turnkey process exists with the option of performance testing. This also brings benefits to customers with existing processes, as the technical experts at Nanolap can simulate the process in-house to analyse how applications can be improved. For more information, contact Master Abrasives to discuss your finishing application requirements and arrange your free of charge trial sample.



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