

Electronics, Printed Circuit Board Scrubbing

Printed circuit board manufacturing is a complex industry requiring numerous processing steps to produce single or multi-layer printed circuit boards.

The unique abrasive/polishing characteristics of Navajo Brand® pumice can be used during printed circuit board manufacturing.

Brush scrubbing with pumice has been the industry standard for many years. The use of nylon brushes with a suspension of pumice in water results in excellent surface topography. Navajo Brand® pumice, with its narrow particle size and Mohs hardness of 5.5 – 6.0, provides uniform abrasion/polishing.

During the core preparation step, the raw materials are thin fiberglass epoxy cores covered with copper foil on each side. The cores are often processed through several surface preparation steps to promote adhesion of a resistant coating to the core. These surface preparation steps may include subjecting the cores to weak acid solutions, pumice scrubs and water rinses, which clean and lightly abrade the copper foil surfaces.

During the panel preparation step, the panels are subjected to anti-oxidant baths, cleaners, and pumice scrubs, similar to the core preparation.

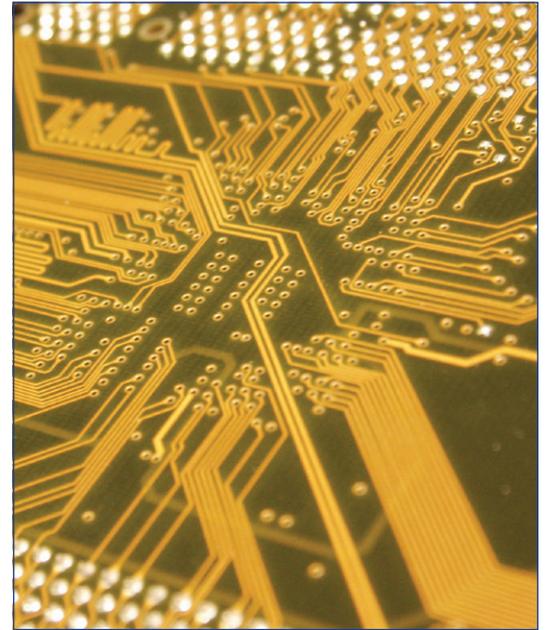
Mechanical scrubbing methods include abrasive brush scrubbing and pumice scrubbing. Brush scrubbing removes a thin layer of surface copper, thus ensuring a clean surface, but tends to impart stress to a thin core material by deforming it during the scrub. Brush scrubbing can also produce a surface not compatible with fine-line circuit designs.

Scrubbing with Navajo Brand® pumice imparts less or no stress to the material and produces a favorable surface.

Navajo Brand® pumice has several products for this application.

Recommended Products

NB 012	12-Micron Average Particle Size
FFFF	90% Finer than 44 microns (325 Mesh)
FFF	80% Finer than 44 microns (325 Mesh)
FF	75% Finer than 44 microns (325 Mesh)
FF	75% Finer than 44 microns (325 Mesh)
#0	50% Finer than 44 microns (325 Mesh)



Additional Information at www.CRMinerals.com

To place an order or obtain additional information, please contact CR Minerals at 505-428-2940, or contact your local distributor.

CR Minerals is a worldwide supplier of pumice products to many diverse markets. It operates a state of the art processing facility in Ohkay Owingeh, New Mexico.

Although the information and suggestions in this publication are believed to be correct, CR Minerals makes no representations or warranties as to the accuracy or completeness of this information.