

APPLICATIONS BULLETIN

Does NanoClear® Coat the Aperture Walls?

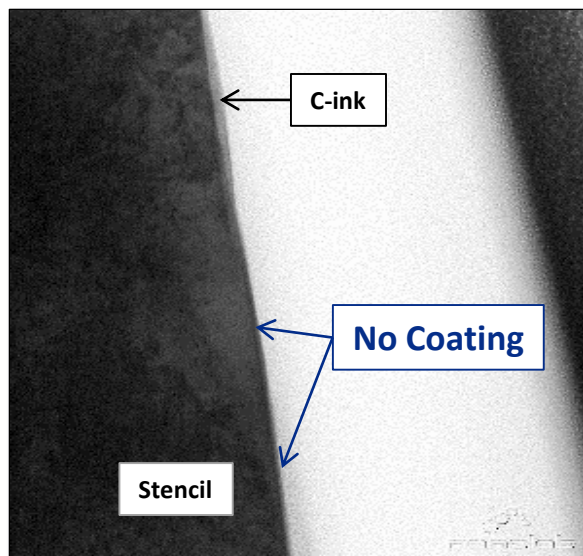
YES

NanoClear® coats both the PCB contact surface AND the aperture walls. Transmission Electron Microscopy (TEM) analysis is used to detect it and quantify the thickness of the nanolayer.

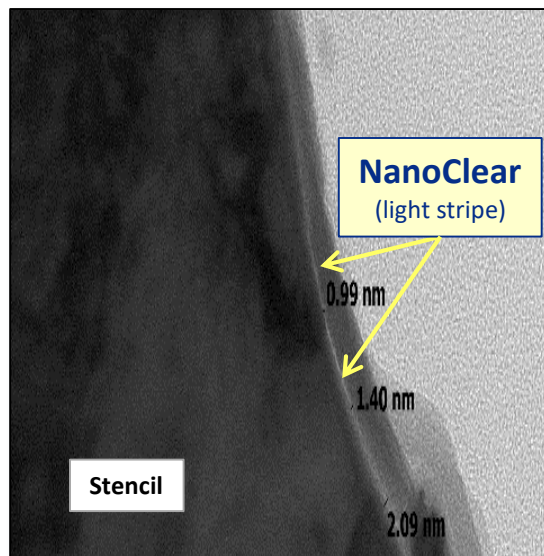
To test for *nanoclear* on aperture walls, samples were taken from a stencil before and after coating.

To prepare the samples for the tests, a layer of chromium was applied to the stencils with nanocoating. Carbon-based ink and platinum are then applied to all stencil samples.

The TEM images below show the sidewalls with and without coating:



Uncoated stencil
Side wall
No coating is visible



Side wall after coating
NanoClear is visible
Measures 0.99 to 4.76 nm thick

TEM analysis confirms presence of *nanoclear* on aperture walls
Thickness is approximately 1-5nm – a true nanocoating!

Download the [TEM analysis](#)

See Also [Can NanoClear Contaminate Solder Paste or Pose a Reliability Risk to Solder Joints?](#)