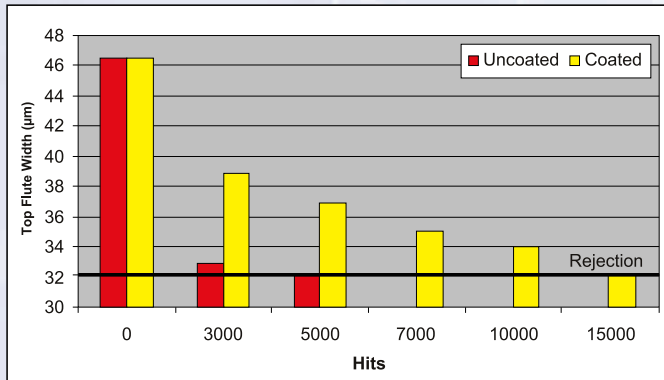


ta-C Coating Helps To Prolong Lifespan of PCB Drill Bits By More Than 3 Folds

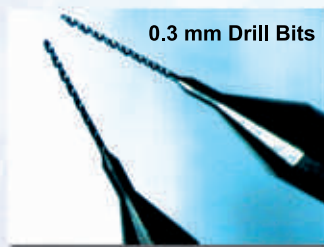
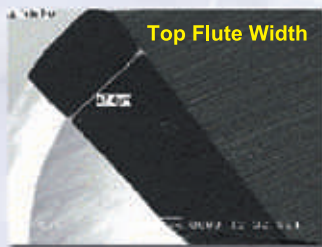


Drilling of Double Sided Cu Clad / Fiber Reinforced Substrate

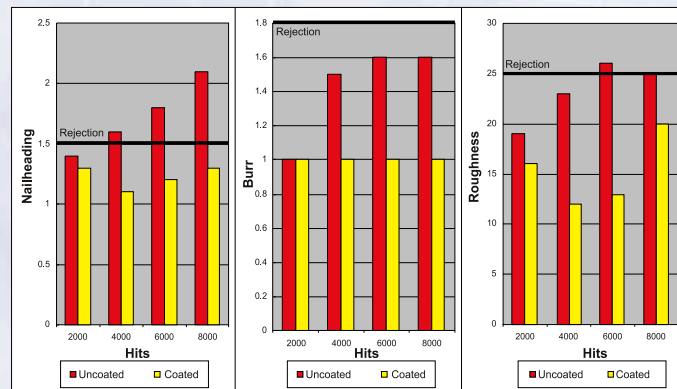


Testing Conditions

Workpiece : 2 layers, 1/2 oz Cu, 0.8 mm thickness, BT, 1 lot 30 panels
Tool : Carbide drill bit with 0.3mm diameter
Spindle Speed : 60,000 rpm
Process : Continuous drilling without repointing
CTQ : Top flute width
Rejection Criteria: 30% wear on top flute



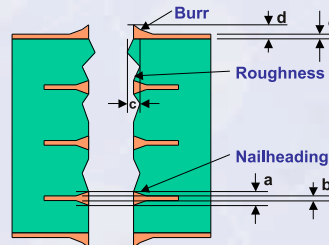
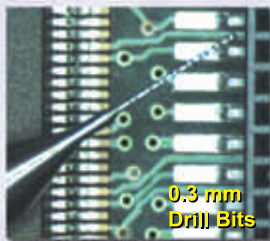
ta-C Coating Extends Lifespan Of Drill Bits By More Than 3 Folds



Drilling of 16 Layers Cu Clad / Fiber Reinforced Substrate

Testing Conditions

Workpiece : 16 layers, 1/2 oz Cu, 2.1mm thickness, High Tg FR4, 1 lot 30 panels
Tool : Carbide drill bit with 0.3mm diameter
Spindle Speed : 120,000 rpm
Process : Repoint every 2000 hits
CTQ : Nailheading, burr and roughness



ta-C Coated Drills Pass All Criteria Even After 3 Times Of Repoint



Nanofilm Technologies International Pte Ltd

Block 28, Ayer Rajah Crescent, #02-02/03/04, Ayer Rajah Industrial Estate, Singapore 139959
 Tel: (65) 6872 6890 (Main), (65) 6872 2193 (Sales), Fax: (65) 6872 5093

E-mail: enquiry@nanofilm.com.sg

Website: www.nanofilm-systems.com