

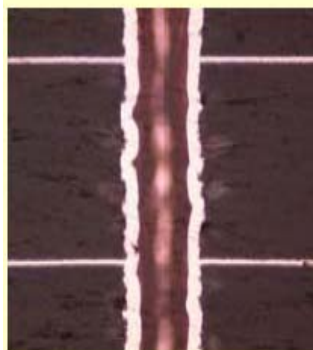
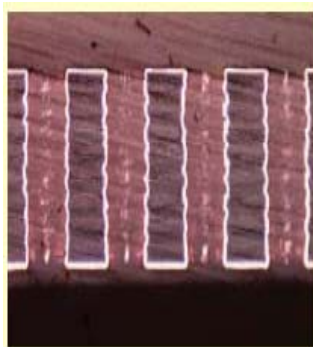
## ENTRY LUBE SHEET .012" (ELS 012)

**ELS 012** was designed specifically for PWB micro drilling. It is constructed of an aluminium skin and a water soluble lubricant. The lubricant dissolves during the drilling process, and covers the tool upon penetration. As a result, the friction heat is dramatically reduced:

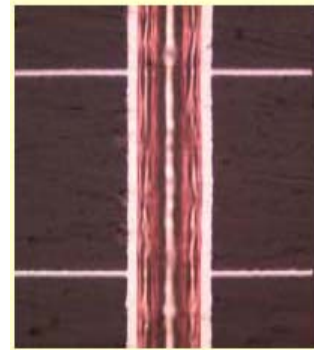
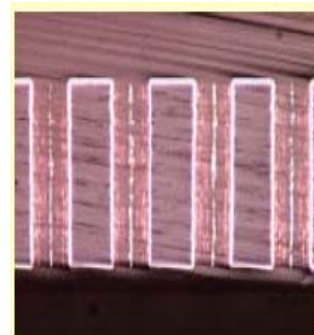
- extends tool life
- increases stack heights

**ELS 012** will generate smoother hole-walls and provide these additional advantages:

- provides better hole position accuracy
- reduces the penetration of plating solutions
- lowers overall drilling costs



HOLE WALL ROUGHNESS  
Drilled without ELS 012



HOLE WALL ROUGHNESS  
Drill with ELS 012

Rev 032907