

Micro Processing of Carbon Fiber Reinforced Plastic (CFRP)

with an Ultra-short Pulse Laser

- Feature1 Cutting with no fiber peeling or fluff is possible
- Feature2 High-quality processing with the thermal impact from the ultra-short pulse laser suppressed to the minimum
- Feature3 Groove processing and sequence etching are also possible in addition to piercing and complete cutting

Drilling Examples

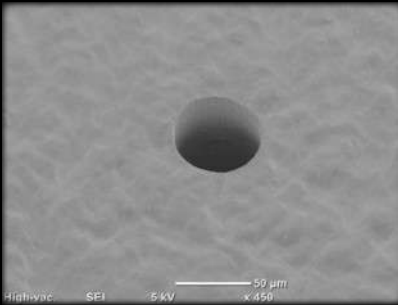


Plate thickness: 0.7 mm
Hole diameter: $\Phi 50 \mu\text{m}$

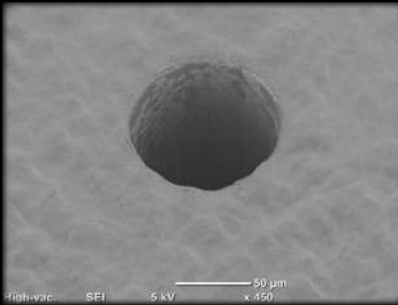


Plate thickness: 0.7 mm
Hole diameter: $\Phi 100 \mu\text{m}$

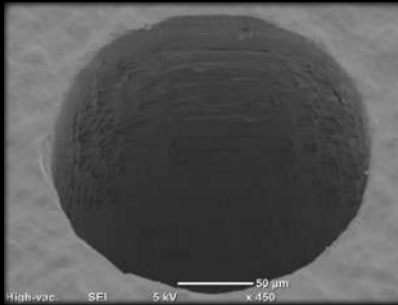


Plate thickness: 0.7 mm
Hole diameter: $\Phi 200 \mu\text{m}$

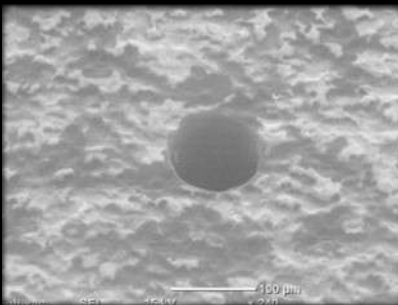


Plate thickness: 2 mm
Hole diameter: $\Phi 100 \mu\text{m}$

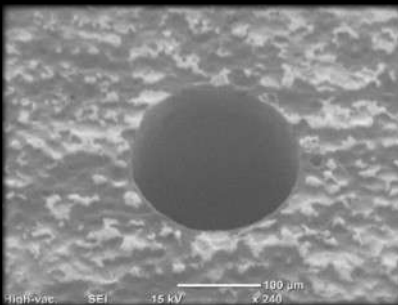


Plate thickness: 2 mm
Hole diameter: $\Phi 200 \mu\text{m}$

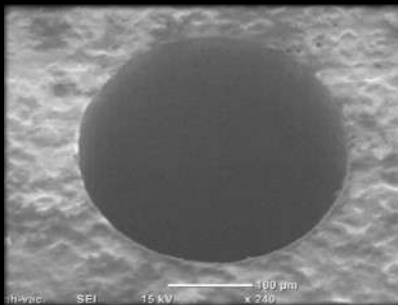
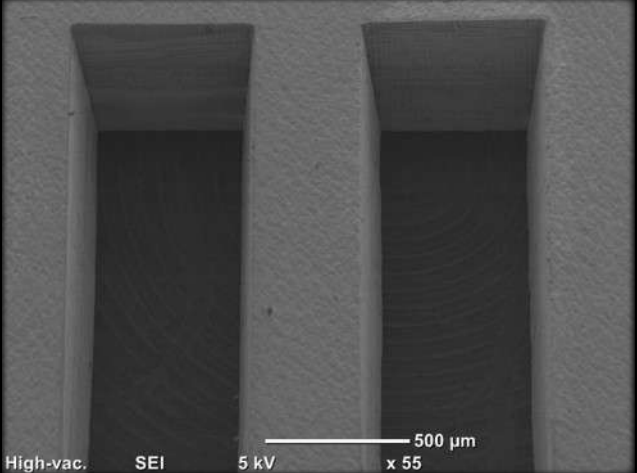


Plate thickness: 2 mm
Hole diameter: $\Phi 300 \mu\text{m}$

Cutting Examples

Input Side



Output Side

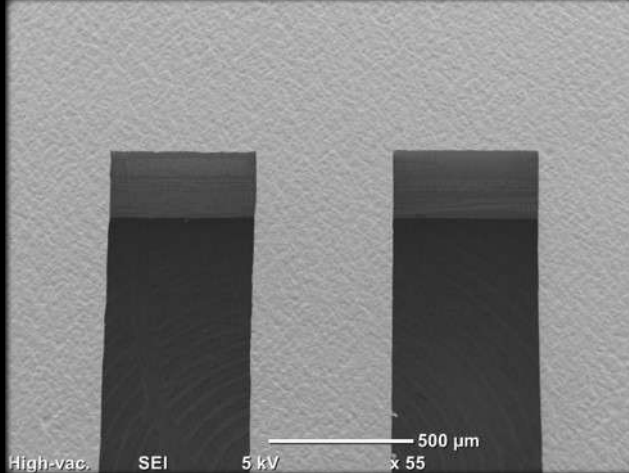


Plate thickness: 0.7 mm L/S: $500 \mu\text{m} / 500 \mu\text{m}$



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