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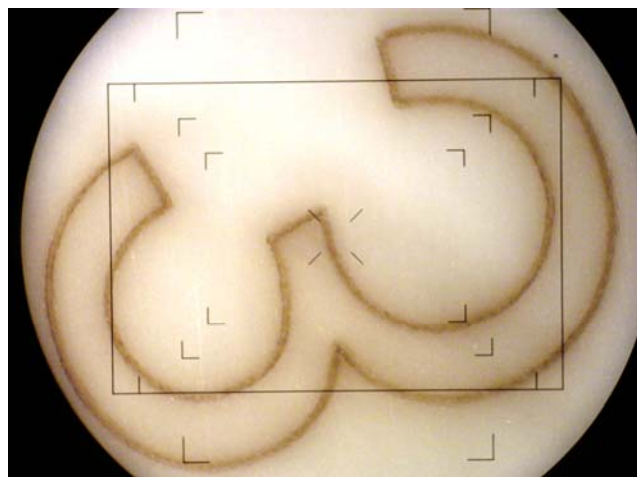
## Marking Silicon Carbide and Ceramic with a 355 nm DPSS Laser

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The many advantages of ceramic and silicon carbide include light weight, high hardness, resistance to wear, strength retention at high temperature and high thermal conductivity. These characteristics make these materials ideal for many semiconductor and industrial applications.

The nature of the material and the intended applications present many challenges when it comes to marking these materials. Due to contamination and surface damage, ink printing and IR lasers are often not suitable options for marking these materials.



Marking silicon graphite and ceramic with the 355 nm DPSS UV laser offers several advantages over the conventional IR laser approach, such as smaller line widths, higher contrast and virtually no damage to the substrate material due to the short UV wavelength.

The quasi-CW repetition rates of the Series 3500 laser system enhances the process quality and increases process throughput.

Laser Model	Average Power	Rep Rate	Scan Rate
3510-30	1 Watt @ 355 nm	30 kHz	0.5 to 5 meters/sec