

# Advanced Laser Machining: Power, Precision, and Efficiency

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As industrial picosecond lasers continue to evolve, advancements in laser technology are driving significant improvements in micromaterials processing. This presentation explores innovative techniques in laser machining of stainless steel and copper using high-power ps-laser pulses. By employing specialized beam-shaping technology, high-quality results with impressive material removal rates could be achieved. Typically, high efficiency is achieved with single pulses at very fast scanning speeds. However, by using pulse-bursts, we can scale the laser power while maintaining excellent quality at more manageable speeds. We will also discuss how the latest innovations are shaping the future of industrial laser applications, optimizing both speed and quality for a wide range of materials.