

LaserLIGHTS ENGRAVING TECHNIQUES

25 - Watt Gantry Co₂ Lasers

Power

Use a power setting of 10% to 20% (Start at 13% for Brushed Brass/Black and Brushed Silver/Black, 18% for Black/Gold and 20% for others).

Speed

Engrave at 100% speed.

Resolution

Use DPI and PPI/Rate settings of 500.

Profiling

Reduce speed to 10% to profile (cut) the material.

Fills

When engraving larger fonts and fills, a better result may be achieved by increasing the spot size by defocusing the beam by 0.10" (lowering the table 0.10").

Galvo Co₂ and nd-YAG Lasers

Power

Use a very low power setting. On more powerful systems it may be necessary to attenuate the beam even at the minimum power setting.

Speed

Start with a speed of 1,500mm/sec. The material can be marked much faster.

Q-Switch

Use the maximum Q-Switch setting or CW if available.

Profiling

Increase power to profile (cut) the material.

Black/Gold

Precise power control is necessary when making the Black/Gold LIGHTS material with nd-YAG. Too much power will ablate the metal backing.

Fills

When engraving larger fonts and fills, a better result can often be achieved by increasing the spot size by defocusing the beam by 0.10" (lowering the table 0.10").

Cutter

Use a sharp carbide tipped plastics cutter.

Engraving

With the nose cone down and light spindle pressure, set the cutter depth at .002" to engrave.