JOHNSONPLASTICS PLUS

CerMark

Technical Data Sheet

Factors to Consider When Marking

There are numerous variables that must be considered when seeking the proper settings. Variables include the type of substrate, thickness of the substrate, the laser's wattage, the type of optics it employs, the spot size, and the marking material being used. The amount of LMC product applied to the surface will also influence your color. Generally, if you apply more LMC product you will achieve darker color, less material results in lighter color. With all of these variables in mind, it is hard to make recommendations for power settings to use when marking with the CerMark products. We can recommend a starting point for power and speed, but this may not be the best for your particular application.

Using a Test Marking Grid

We always recommend the use of a test marking grid to optimize your power settings. Bonding of the LMC products and the color they develop will be affected by the power settings used. Using a test power grid will allow you to see the effect of marking settings on the bonding of the material and the color that is developed. For more information on how to use a test marking grid, see the CerMark technical publication "Optimizing Power Settings".

Evaluating the Marking Results

After you have marked the object, you should observe a variation of marks. You should choose power settings for marking that will ensure a good bond and develop the desired color. Keep in mind that bonding and color can also be influence by the amount of material that is sprayed on to the substrate.

Guide to Photos

The photos that follow show examples of ceramic tiles and pieces of beveled glass marked with test power grids using the LMC Series products. The LMC-6001 Premium, LMC-6013 Premium and the LMC-6044 Premium marking materials are shown. These substrates were marked on a 45 watt, 40 i.p.s. max write speed CO2 laser. These can be used as a guide when optimizing power settings on your laser. Please remember your laser may perform differently and your settings may vary from those depicted below. "P" denotes % power, shown on the left and "S" denotes % speed, shown on the bottom.

Typical Marking Settings

CerMark Technical Data Sheet

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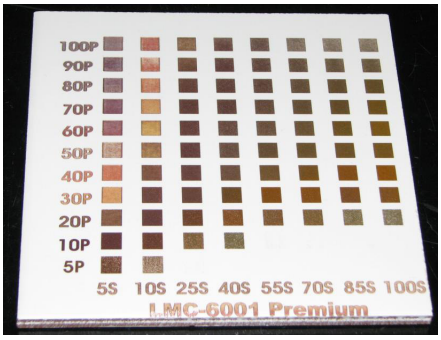
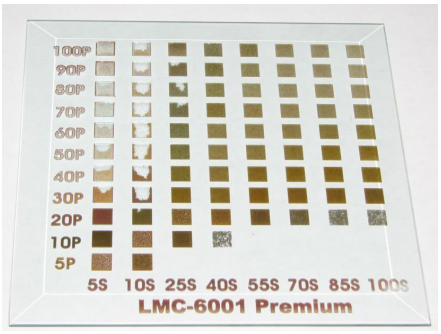


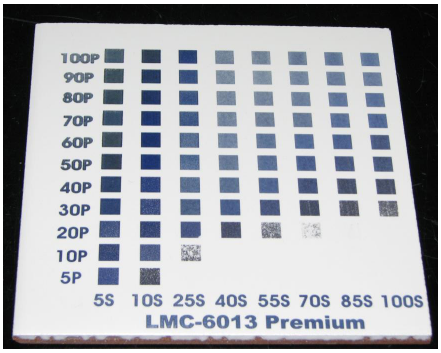
LMC-6001 Bronze Premium Marking Material Power Grid on Ceramic Tile



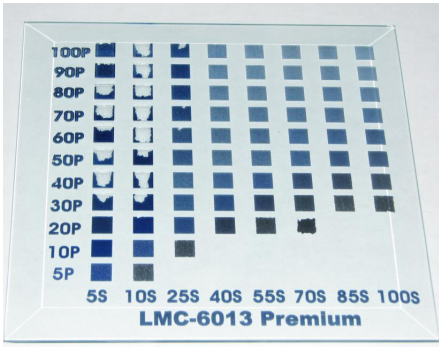
LMC-6001 Bronze Premium Marking Material Power Grid on Glass

CerMark 6001 Tile & Glass - Bronze

250 grams	Covers 2500+ sq. in	SUS119
100 grams	Covers 1000+ sq. in	SUS132



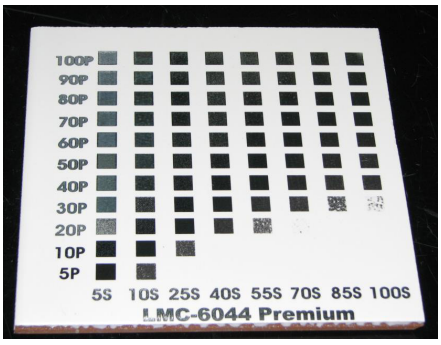
LMC-6013 Blue Premium Marking Material Power Grid on Ceramic Tile



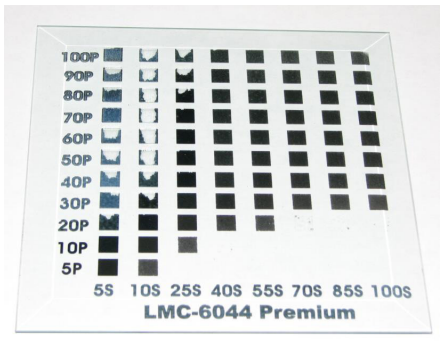
LMC-6013 Blue Premium Marking Material Power Grid on Glass

CerMark 6013 Tile & Glass - Blue

250 grams	Covers 2500+ sq. in	SUS118
100 grams	Covers 1000+ sq. in	SUS131



LMC-6044 Black Premium Marking Material Power Grid on Tile



LMC-6044 Black Premium Marking Material Power Grid on Glass

CerMark 6044 Tile & Glass - Black

25 grams	Covers 250+ sq. in	SUS026
250 grams	Covers 2500+ sq. in	SUS114
100 grams	Covers 1000+ sq. in	SUS130