Troubleshooting Tips

A

Problem - The color of the mark is grey or chalky instead of black.

Cause - Sheet is overmarked with too much power, or the laser speed is too slow.
Solution - Power needs to be decreased until the mark is a glossy black.

B

Problem - The color of the mark is tan or red instead of black.

Cause - Sheet is undermarked with too little power.
Solution - Power needs to be increased.

C

Problem - The color of the mark is a dull black (not glossy).
Cause - On the colored finishes (Satin Gold, Satin Brass and Satin Bronze) the mark will be dull black if it is overmarked slightly.
Solution - Decrease the power a small amount.

D

Problem - After fine tuning the power, the color of the mark jumps from tan to grey – never black.

Cause - The DPI (dots per inch) setting is too low.
Solution - AlumaMark marks best at settings of 600 DPI, or higher.

E

Problem - The color of the mark is not consistent across most (if not all) of the sheet.

Cause #1 - The sheet is not perfectly flat.
Solution #1 - The sheet needs to be made flat either by manipulating and bending it to make it lie flat, or by putting weights on top to cause it to lie flat.
Cause #2 - The beam size on many lasers varies as it travels across a large area.
Solution #2 - It is sometimes helpful to lengthen the distance from the beam to the sheet being lased. This is done by lowering the laser bed, thereby taking it out of focus. Usually the out-of-focus adjustment is slight – up to an 1/8".

F

Problem - Power/Speed settings are not consistent from one finish color to another.
Cause - Since satin and gloss silver are more reflective than the others, they tend to require slightly different power settings.
Solution - The colored and matte materials are quite forgiving and will mark nicely over a wider range of settings than will the Satin Silver. Try lowering the power slightly to optimize the mark on silver.

G

Problem - It is difficult to mark a solid black over a large area.
Cause - It is very difficult for a CO2 laser to mark a consistent black over a large area. That type of operation often produces banding.
Solution - The DPI may need to be increased. Your goal is to narrow the distance in the gap between passes of the laser beam. You might also try marking the same file twice.

H

Problem - The black mark wipes or washes off.

Cause - The image is essentially undermarked. The laser is not emitting enough power to turn the AlumaMark image black. The material that is wiping or washing away is ash or dust created in the lasering process.
Solution - Increase the power setting slightly.

I

Problem - The job calls for laser marking a photograph.

Solution - Open the photo you want to reproduce in Corel Draw. Convert it to a bitmap and select the "3D" setting if it is available. The laser software will assign the variable power and speed necessary to achieve a halftone. In some cases, you will achieve a better result using the black and white setting (see photo). The resulting photo will resemble a newspaper print (series of dots to create halftones). Each laser is different therefore some trial and error may be necessary to achieve optimal results.

J

Problem - The matte silver finish does not have any protective overlaminate on it.
Explanation - The adhesive adheres to the matte finish much too aggressively. We ship the matte silver material with interleaving sheets to protect against scratching instead of self-adhesive overlaminate.