

MICRO SURFACE PLASTICS CUTTING TIPS

Brands like Scott, IPI and Rowmark are the most common

Micro surfaced Plastic is an Acrylic, ABS mixed material that can be difficult to laser cut clean if not done correctly. When cutting Micro surfaced plastic there are some problems, Flames can scorch the surface, fumes and super heated debris can stain and distort the engraving, smoke can produce a haze around the cut and the cut edges can be sticky and gooey when running any material 0.06" (1/16") or thicker. Here are three methods to give you professional results.

First Method (Most Common)

Remove protective film then place into machine, tape or clamp the edges down so that it cannot move then engrave but do not cut, always cut as a separate file. Before cutting mask the material with a Transfer tape and squeegee it down so that there is no air bubbles (This is why we tape the edges so that the material does not move when masked after the engraving is complete) then cut the plastic. Masking will protect the surface from debris and residue and flames when cutting and protects the engraving from fingerprints and residue keeping it clean and new looking and can be left on until given to the customers.

Second Method

Leave the protective film on the Plastic and cut out blanks then cut a fixture and peel the film from each piece and place into fixture and then engrave.

Third Method

This method works very well for textured plastic where you cannot mask as well as all others if masking is not an option. Remove protective film, take some standard household Dish soap and rub a thin film of soap onto the surface of the plastic then let dry (very quick). Place into the machine and engrave and cut in the same file, remove cut parts and wash off the soap with water, any residue and debris from the cut will stick the soap and wash right off, this process also works on acrylic.

Edges

Soft or "gooey" edges from the melted plastic will solidify in about a day, this is normal; leaving the mask on the cut part will keep any of that edge residue from getting on the engraving. You can clean plastic using Goo Gone Brand cleaner and it will greatly reduce the sticky edges and the odor.

Source for Transfer tape

<http://www.denversignsupply.com/> under application tape, we recommend the 12" X 300' TransferRite Ultra 6592 High Tack (\$24.89).

Contact applications@ulsinc.com for any questions.