

## Computer Graphics as Stainless Steel Output

### Project Description

A history of hand-held graphics might include Tarot cards, playing cards, the *carte de visite*, business cards, credit cards, and more recently telephone cards. While each of these subsets has a differing history and function, they also have shared attributes that continue to attract our interest. Proportions, scale, content, cost, and techniques of production all merge with more recent communication functions. Borrowing from these physical and conceptual traditions suggests possibilities for an artist using digital typography to create a kind of permanent ephemera. Incorporating stainless steel output offers an option for the designer to employ a technology similar to computer chip technology and to investigate the conversion of digitized art to artifact.

The cards examine the discrepancy between the technology of chemical machining, high-resolution digital output, non-corrosive steel material, and the language of the street: doggerel, the vernacular, the pun, a japer, or the sadness of an epitaph-in-waiting. The computer unleashes the typographic possibilities. Reversing type, customizing the fully etched openings in the metal, low embossed textures, shaping the perimeter, and scaling graphic elements are just a few of the options made possible by the digital process.

### Procedure

A template was created in Freehand 7.0 that defined the format for 21 traditional business cards arranged in a grid on a tabloid-sized sheet. A space 1/8-inch wide was used to separate the individual cards. The final design was proofed on the laser printer before being used to create the film output on a Linotronic film recorder. Two tabloid-sized pieces of positive film output were generated, one emulsion down for the front side of the cards and one emulsion up for the back side exposure of the .007 inch stainless steel metal plate. After exposure and development, the metal plate was submerged in acid for chemical machining. The final etched sheet contains the cards, held in place by tiny screws or connecting points. At this point, the cards are broken out of the sheet by hand and touched up with 600-grit emery cloth to smooth the edges.

### Conclusions

A computer equipped with graphics software can be used to facilitate design and execution of art that combines text and images for output on metal surfaces using chemical machining technology. Further applications are likely – for example, limited-edition artist books with metal pages, light fixtures with metal shades that project light and shadow through the openings, and folded-metal, free-standing sculpture with surface engraving. Text and design are used to evoke expressive and conceptual issues such as: material as metaphor, the vernacular context, new cards of identity, and corporate hand-held art. A blueprint for a miniature samizdat ... or maybe just another business card.



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