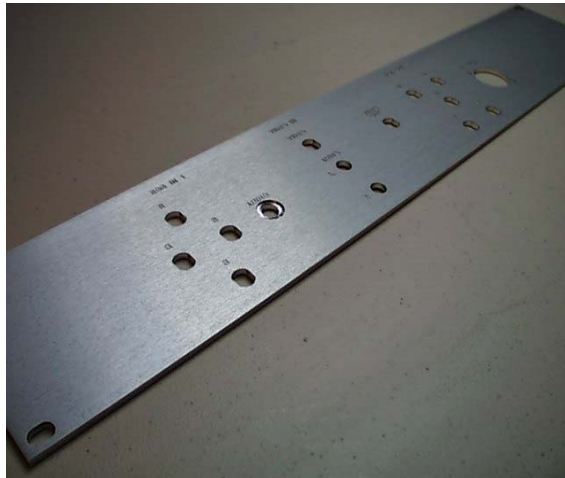




DATRON DYNAMICS, INC.
 454 Route 13
 Phone: 603-672-8890
 Fax: 603-672-8067

Application Notes

Part: 19" Rack Mount Panel
Material: 1/8" 6061 T6 Aluminum (supplied by customer)
Machine Used: M5 4750
Features Utilized: Z Probe, Automatic Tool Changer and 60,000 RPM Spindle
Software Used: PrimCam & Datron Macro Programming Software
Total Cycle Time: 7 minutes and 22 seconds



Machining Details:

Tool 1: 20 degree x .008" tip engraving tool at 40,000 rpm – 30 i.p.m.

Tool 2: .120" dia. high speed end mill at 45,000 rpm – 200 i.p.m.

Probing: 47 seconds

Engraving time: 5:00 minutes

Tool change: 20 seconds

Milling time: 75 seconds

Summary of the Application:

Instead of a several step process to manufacture a panel, the entire process can be engraved and machined in one step. We are able to offer a complete turn-key solution for the customer. We are also able to offer a clean burr-free part that requires no de-greasing operation afterwards. The customer also has the flexibility to mount a larger sheet of aluminum within the 30" x 40" working volume of the M5 machine for batch production requirements. The M5 offers an efficient solution for panel making with it's compact size, minimal power consumption and low maintenance operation. Features such as the high frequency spindle and Z Probe make the Datron machine perfect for the panel business.