



DATRON DYNAMICS, INC.
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Application Notes

Part: Double Gang Audio Plate
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: 4 minutes and 12 seconds + 55 seconds for the bevel



Machining Details:

Tool 1: 30 degree x .012" 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: 30 seconds
Engraving time: 1:50 minutes
Tool change: 23 seconds
Milling time: 1:29 minutes

Bevel: 55 seconds

Summary of the Application:

The production of these plates could be machined out of a large size sheet, minimizing operator interfacing. Multiple panels could be milled, drilled, beveled and engraved in one complete step. On this particular sample, the countersunk holes were done with the "countersink" command in the Datron software. This is an optional feature that can be used in lieu of a countersunk bit. The Datron software also offers many canned cycles for features required by the panel industry such as, "D" Holes, drilling and tapping, pockets and rectangles with notches in the corners for square part incising. This panel is an excellent example of why the Datron machine is a world leader in the panel machining industry.