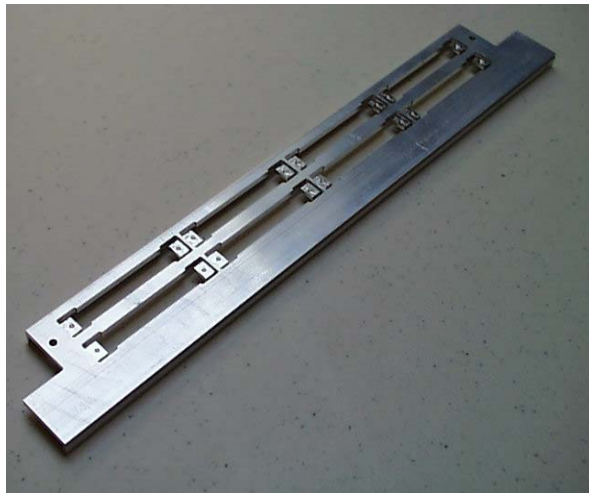




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Application Notes

Part: 40mm Front Panel
Material: 0.100" aluminum extrusion
Machine Used: M5 - 4750
Features Utilized: 600 watt h/f spindle, automatic tool change unit and
pneumatic clamps
Software Used: Datron Macro Programming Language
Total Cycle Time: 4:42 total machining time



Machining Details:

Tool 1: 3mm (.118") high speed end mill at 45,000 rpm x 200 i.p.m. feed rate - ends & rough connectors - 110 seconds

Tool Change: 21 seconds

Tool 2: 1.5mm (.059") single flute end mill at 48,000 rpm x 60 i.p.m. feed rate - holes, sharpen corners and finish connectors - 108 seconds

Tool Change: 22 seconds

Tool 3: 82 degree countersunk bit at 25,000 rpm x 40 i.p.m. - 2-56 holes - 21 seconds

Summary of the Application:

This sample perfectly demonstrates the advantages of using Datron systems for front panels. The high frequency spindle provided an excellent cycle time with no need for secondary processes like deburring, de-greasing, or cleaning. Quick-Change pneumatic clamps allowed for machine set-up in less than one minute with a part change time of a few seconds. Using the included on-line macro language, the part was programmed in less than 30 minutes without additional CAD/CAM software. An optional Z Probe could also be utilized if exact depth or engraving is required. This sample clearly shows why Datron is the world leader in CNC machines for front-panel and enclosure applications.