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DATRON Is the Right Machine for DataPro.

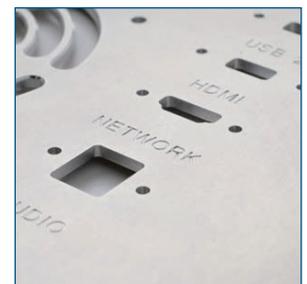
DataPro International Inc. is a leading supplier of panel-mount connectivity solutions ranging from panel-mount cables and couplers to customized wallplates, panels, rugged cases and enclosures. With over a decade of industry experience milling and engraving aluminum products, DataPro can confidently say that DATRON is the right machine for the job.

DataPro's popular Online Plate Designer allows engineers and non-engineers alike to customize a wide variety of plates and panels through a simple web-based interface. Requiring no experience in CAD or 3D modeling, it shows a graphical representation of the final product, and orders can be placed immediately. On the back end, as soon as an order is placed, custom software automatically generates GNC code, and the plate is ready to be machined within minutes. For more complex projects, DataPro offers expert engineering and design services, working with customers on both initial design and manufacturing process development.



A custom panel that provides access to the electronics housed within a ruggedized Pelican case. Making custom panels like this represents an area of specialization for DataPro International.

Today, DataPro offers a host of streamlined machining and design services, but it started out with more humble beginnings. Founded in a Seattle garage in 1985, DataPro began as a manufacturer of data cables, then grew to specialize in bulkhead-mount cables. Having noted the growth of this niche (manufacturing electronic devices), the logical next step was to produce the plates and panels that the cables were being mounted to. So in 2007, DataPro added CNC machining to their capabilities by purchasing a small countertop hobbyist mill, capable of producing basic wall plates. As demand grew for these services, DataPro began upgrading their machining equipment and software. After outgrowing a number of machines including a Sherline, and Haas TM1 and TM2s, DataPro began looking for a machine to help them overcome specific production bottlenecks.



They began their search at trade shows, investigating a range of devices for milling and engraving panels. Ironically, they were not even at a "machining" show when they had a very serendipitous encounter. Lead Machinist Ilya Pasumanskiy recalls, *"At the NAB Show (a convention encompassing the convergence of media, entertainment and technology) we met with BTX, a company that utilizes DATRON. They had a booth at the show and we were asking them about their manufacturing processes and they were gracious enough to tell us that they were using DATRON."*

Pasumanskiy quickly scheduled a flight to visit DATRON Dynamics in Milford, NH, and after spending several days with their application engineers and machines, his hunch was confirmed. He says, *"I was darn sure at that point that DATRON was the right technology for us so we went ahead with the purchase and we've been using it every day since then."*



Lead machinist, Ilya Pasumanskiy, positioning the spindle of the DATRON machine using its hand-held remote.



The first benefit they noticed was that the clean-up time, required after each machining cycle, was cut to almost zero with the DATRON. DataPro's machine prior to the DATRON used a vacuum table and an oil-based flood coolant, so the machined parts came out with an oily residue that had to be "degreased". That was a secondary operation that had to be done by hand, which added significant time and labor costs. Additionally, the machine and vacuum table had to be cleaned. Since the basic premise of vacuum workholding is air intake, high volumes of oil used for flood coolant can jeopardize the functionality of the vacuum table if not managed carefully. Pasumanskiy says, *"With the DATRON we have virtually eliminated cleanup because the lubricant simply evaporates leaving clean parts that don't need to be degreased."*



The higher spindle speeds of the DATRON allowed DataPro to dramatically reduce the machining time of precision engraved panels and significantly reduced the number of units that had to be reworked. Before he found the DATRON, Pasumanskiy comments, *"We got through the work that we had, but we definitely couldn't step up to the next level because we were bottlenecked by the capabilities of the machinery."*

DataPro's machinists also found that DATRON's probing with Z-correction can dramatically speed up setup. *"On other machines, if we had to engrave something large I would often need to sweep the entire engraving area with an indicator to be able to identify the variance, then compensate for it in my program. DATRON's Z-correction does all of that automatically."*



A finished aluminum panel shown on a vacuum table integrated onto the bed of the DATRON high speed machining center.

DATRON's Z-correction also results in less rework and less re-engraving areas because it maintains an even engraving depth (to 0.0005"). *"We had integrated probing back then, but not with advanced probing capabilities like DATRON's Z-correction field – which meant that we couldn't control the depth of our engraving if there were surface irregularities in the material."*

For CAD/CAM software, DataPro uses HSMWORKS for SOLIDWORKS and Fusion 360. When asked about the ease of getting programming help or support for the DATRON machine, Pasumanskiy sums it up by saying, *"We have had great experiences with DATRON's service and I see a lot of your application guys as my friends. I like talking to them, they're always really responsive and they always know how to solve my problem."*

With the DATRON, the possibilities are endless. DataPro is now specializing in panels for and modification of Pelican cases and other brands of ruggedized cases that are often customized to house electronics and other components. In addition to its core business, DataPro has begun offering general machining services and has used the DATRON to tackle a wide variety of projects. They even use the DATRON machine to make their own injection molds. Bringing this work in house has reduced their costs and improved turnaround time since they are not relying on an outsourced vendor.

DataPro has streamlined their plate production and has been able to significantly grow their business thanks to the purchase of the DATRON machine.

