

Case Study

ADAM Integrated Industries Inc



Highlights

- ✓ Reduction in staff dedicated to programming
- ✓ From CAD to NC code is 30% faster than systems previously used
- ✓ Material utilization improved by up to 20%
- ✓ SCAP used to auto import CAD files, ready for nesting
- ✓ 100% accurate NC code every time
- ✓ Can import CAD files quickly using SCAP
- ✓ MRP orders list provides easy way to set nesting priorities
- ✓ Return on investment in under a year
- ✓ Can specify 'filler parts' to maximize sheet efficiency
- ✓ Both designers can now nest parts
- ✓ New staff trained internally in 2 hours
- ✓ Local dealer excellent pre and post sales support

A DAM Integrated Industries Inc, based in British Columbia, Canada, was formed in 2006 and provides contract manufacturing services using a Trumpf L2503e laser and FastCut Plasma. The plasma was supplied with a CAM system that could generate NC code for both machines, although it was slow to use and proved problematic, so in 2007 they decided to research the market.

Said Colin McMaster, President; "We had a number of problems with the old software. You had to individually nest parts and then point and click as to where each stop and start would be. Also, the automation did not work, with the head jumping all over the table. On large nests it was easy to double cut holes or miss them altogether. In the end we had to double-check each nest by comparing it to the original CAD file."

They decided to evaluate the market and looked at three systems, one of which was JETCAM. Each company provided comparison nests. Colin added; "Just looking at the nests I could see that JETCAM would meet our needs. Also, as many of our parts are custom it was important that the process from CAD to NC code was fast, and JETCAM was the easiest I'd seen by

far. When comparing JETCAM with a system I'd used previously it was around 30% faster due to SCAP (single component automatic processing). We can automatically import an entire directory of CAD files and apply profiling information, ready for nesting. I also felt that NestOne, the JETCAM dealer had real confidence in the product and that goes a long way in selling it. They had a real willingness to work with us to put together a package that really met our needs rather than just selling us what they could."

The system was installed in 2007. A license of JETCAM Expert, along with Free Form High Performance Nesting (FFHPN) was installed. Although two days of training were booked the operator was trained and generating 100% accurate NC code for both machines by the end of the first day, with the second day purely covering 'what if' scenarios. Further downstream training was provided by the trained member of staff, with a new staff member proficient in the software within two hours.

Shortly after the software was installed one of the programmers left the company. The previous CAM system required a full time



Software: JETCAM Expert Premium
High Performance Nesting
JETCAM Orders Controller
2 x JET-Term

Machines: Zund L-2500 Knife Cutter
Zund L-1200CV Knife Cutter

Installed: November 2008

programmer just for nesting, with the whole CAM process taking two staff in total. As JETCAM was now automating the CAD file import, application of cutting technologies on the part and the nesting, Colin took the decision not to replace the dedicated programmer, instead now allowing two design staff to take ownership of the task without impacting on their existing workload.



In addition to the reduction in labor costs the company also saw a considerable improvement in material utilization, often as much as 20%. FFHPN can be configured to run over a preset length of time to allow the software to get the best efficiency. Colin added; *“The ability to specify a part as a ‘filler’ part within JETCAM stops us from having to think ‘what can I fill that space with’, which has reduced material waste. The process of quoting on jobs has also been made faster, easier and more accurate. CAD files can be imported and nested in seconds, with runtime estimation and*

material utilization information quickly available to calculate cost per part information. We’re also using the component order list, which makes it very easy to monitor existing orders and set priorities for nesting.”

Where previously much of the company’s work would be end-to-end manufacturing, covering welding, fabrication and coating, now the business is far more competitive on laser-only contracts. Colin concluded; “We expect to see a return on investment on JETCAM within 10-12 months. The efficiencies it provides allows us to compete strongly in markets that previously we would not have been successful.”