

# Case Study

## Wagner Machine Co



### Highlights

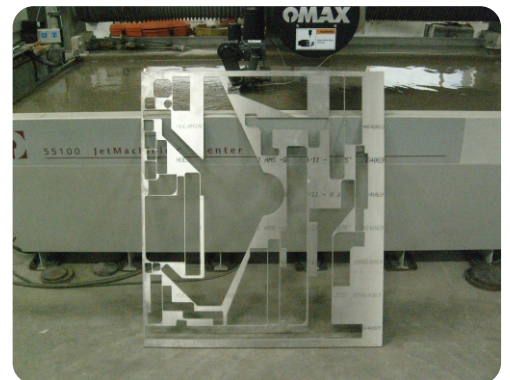
- ✓ 600% improvement in nesting time, often saving 3 hours per day
- ✓ Material utilization improved by 50% or more
- ✓ Highly optimized nests generated in minutes
- ✓ Software optimized specifically for OMAX machines
- ✓ Single system driving both machines
- ✓ Can maximize throughput on the smaller machine
- ✓ Trained in half a day, with only 4-5 calls to support since
- ✓ Material load/unload times reduced
- ✓ Customer requested updates received next release of the software
- ✓ Excellent support
- ✓ System will pay for itself within 6-12 months

**W**agner Machine Co, based in Champaign, Illinois provides precision CNC machine shop services spanning a wide variety of cutting technologies. They purchased an OMAX 2652 Waterjet cutter in 2003, which has a maximum cutting table of 26" x 52". The supplied CAM software was capable of automatic nesting of simple components, but did not have the ability to automatically perform dissimilar part nesting.

Said Kurt Wagner, Project Manager; *"Initially the software supplied with the machine met our needs but as the business grew we found that we were spending several hours a day nesting. As we could not autonest we were creating nests in our CAD software manually and exporting a complete DXF nest for the CAM system to program. This worked well initially but was very time consuming."*

Wagner came to the conclusion that they required automatic nesting, especially with the planned purchase of the larger 55100 OMAX waterjet. Said Kurt; *"We researched the CAM market in 2007, with price and service being our*

*initial considerations. At that time we did not look at JETCAM. Of the systems we did test none of them could come close to the nests that we could generate manually. In 2007 we purchased the 55100 and OMAX suggested that we evaluate JETCAM."*



Wagner sent OMAX's US partner NestOne Solutions a series of DXF components for a planned job and requested a benchmark comparison. Kurt added; *"I emailed the DXFs to NestOne and received the comparison back in about 30 minutes - the same nest was taking us 2-3 hours to do manually, as complicated nests require more efficient nesting. I could immediately see that the nest was substantially better than my own - I'd estimated that I would need 3 sheets but the JETCAM nest only required 1*



**Software:** JETCAM Expert Premium  
High Performance Nesting

**Machines:** OMAX 2652 Waterjet  
OMAX 55100 Waterjet

**Installed:** August 2007

*and 1/3rd. NestOne even provided the DXF nest, which I could then use to cut the nest!”*

Wagner purchased JETCAM Expert in August 2007, along with JETCAM’s Free Form High Performance Nesting module. Installation was performed in the morning, with training taking the remainder of the day. Of the training Kurt said; *“We were pretty much up and running after the afternoon’s training and were immediately able to create nests and accurate NC code. With any software product you always wonder if you are going to get hung out to dry after you buy the product, but the after sales support from NestOne has been excellent. It is also very useful to be able to speak to the same staff that performed on-site training, as they know our setup. Three months down the line and we’ve only made four or five calls to support, all of which were answered straightaway.”*

A knock-on effect of a reduction in material waste is that less sheets are required. As each sheet can take 15-20 minutes to load and unload this further maximizes the throughput of each machine and operator.

Wagner also benefited from the close technical relationship between JETCAM and OMAX. *“We sent a request to JETCAM to see if they could match the DXF layer colors to match those of the OMAX control, which they did through collaboration with OMAX, which was received in the next release.”*

Since purchasing JETCAM Expert, not only has Wagner reduced their programming time and material utilization, but they have also increased the flexibility of both machines. Kurt concluded; *“When we initially looked at nesting, price was our biggest consideration. After seeing the efficiency of JETCAM it was a non-issue, especially as the cost in comparison to anything that came close was competitive. JETCAM will pay for itself within 6-12 months based on material savings alone, but it has given us greater capacity on the 2652 waterjet and freed up staff - we can now program, nest AND cut the parts in the same time that it took just to program and nest them before. often saving 3 hours per day.”*