

NEMI TECHNOLOGY BRINGS THE STONE INDUSTRY INTO THE 21ST CENTURY

BRAXTON - BRAGG CORPORATION HAS ADDED A NEW LINE OF PRODUCTS FOR THE CNC MACHINE FROM NEMI (NORTHERN ENGINEERING AND MANUFACTURING, INC.). THE PRODUCTS INCLUDE THE ONLY DIGITIZER ON THE MARKET WITH A TRACE FUNCTION AND A RANGE OF ADJUSTABLE VACUUM PODS.

"Braxton-Bragg appreciates the quality of the NEMI product line and their responsiveness to the market," said Stephen Spencer, Vice President for sales at Braxton-Bragg. "Their ability to rapidly adapt to the growing CNC market in the stone industry makes NEMI an ideal partner in Braxton-Bragg's development of digital stone tool technology."

NEMI has been developing tools for the CNC machine since the early 1990s. The business got its start when owner Brian Akre was working for another machine manufacturer in Minnesota and got the idea for a digitizer.

"We had a couch with a hundred pieces of curved wood in it, and I needed to figure out the geometry on each of those pieces so it could be replicated," Akre said. It took him two weeks to do it. "I thought to myself, 'There must be a better way to do this.'"

Akre kept working on the problem, using his background in aerospace engineering and manufacturing and his experience working with CNC machines, mostly for metal and wood. He took things apart, including a computer mouse, to analyze how they worked. Finally, he came up with the idea for a digitizer that uses a backboard, probe, and software to trace a part and mathematically calculate its geometry. With this product, the work on the couch that took him more than

two weeks could be done in about an hour.

Akre knew he had a good idea, so in 1993, he and his wife decided to use their savings to design their new product and manufacture it. NEMI started as a job shop, producing custom products for people while working on the design of the digitizer and other products when time and money permitted. Before he had even made a prototype of the digitizer, Akre had his first

customer, a manufacturer of boat parts who knew his work and had confidence in him.

"I knew how to do it in my mind but I hadn't made it yet," Akre said. Nevertheless, the customer paid him up front for the digitizer. "Six weeks later that customer had his digitizer and was pleased. Then we got busy and started designing the product. It really caught on. All of a sudden everyone wanted it."



NEMI founder and DigiCoder™ developer Brian Akre (r) and his son Jason (l) have been in business developing CNC machine tools since the early 1990s. "We work off each other," says Jason. "One of us will design something and the other will manufacture it; then it will be the other way around."

“Right now the stone market is booming. Digital templating and automating are taking off in the stone industry.”

Jason Akre
Shop Manager
NEMI



Jason Akre demonstrates how easy and efficient the NEMI DigiCoder™ is to use. The NEMI DigiCoder™ is currently the only digitizer on the market with a trace function. Templates and parts that used to take two weeks to calculate geometrically may now be produced in as an hour to produce a .DXF file.



Northern Engineering and Manufacturing, Inc. (NEMI) in Zimmerman, Minnesota, got started when owner Brian Akre, an aerospace engineer, used his work experience with manufacturing and CNC machines to develop a digitizer that uses a backboard, probe, and software to trace a part and mathematically calculate its geometry. Within weeks he came up with the NEMI DigiCoder™. "It really caught on," he says. "All of a sudden everyone wanted it."

BY LIZ MCGEACHY
PHOTOS COURTESY OF NEMI

Today NEMI has a 15,000-square-foot, completely computerized facility in Zimmerman, Minnesota, where its employees manufacture all types of products for CNC machines for metal, wood, plastic, and stone. In addition to the digitizer, NEMI makes a wide range of vacuum pods and vacuum tables for holding pieces in place, tool setters, software, and sporting goods like fire rings and snowmobile parts for the many recreational enthusiasts in Minnesota. And they still do custom jobs.

"We sit on a major four-lane highway, so we get a lot of walk-in traffic and do some custom-type stuff," Akre said. "For instance, we make metal fire rings. We might have someone come in and say, 'I'd like a bigger fire ring than you've got,' and we'd tell them to come back in an hour and make it for them."

NEMI is a family business, with Akre's two nephews and his son working with him. His son Jason has been working at NEMI since the business opened when he was about 15 years old. Today he is the shop manager.

"I do a lot of programming and designing and manufacturing – a little bit of everything," Jason added.

Jason admitted that he has had some professional training, but he learned most of what he knows by working one-on-one with his father. He and his father work closely in the development of new products.

"We work off each other," he said. "One of us will design something and the other will manufacture it; then it will be the other way around."

NEMI employees attend several trade shows each year, including AWFS and IWF for the wood industry, IMTS for manufacturing, and Coverings and StonExpo for stone. Its products geared to the stone industry are what drew Braxton-Bragg to recently begin selling the NEMI vacuum pods and digitizer. The pods have adjustable heights that allow them to be integrated on machines with pods of other

manufacturers, and the digitizer meets the needs of businesses interested in more computerized technology, a growing trend in the stone industry.

Jason Akre agrees: "Right now the stone market is booming. Digital templating and automating are taking off in the stone industry."

For more information please visit the website at www.nemi.com, call 763-856-2044 or fax 763-856-3378.

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Vice President of Sales
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