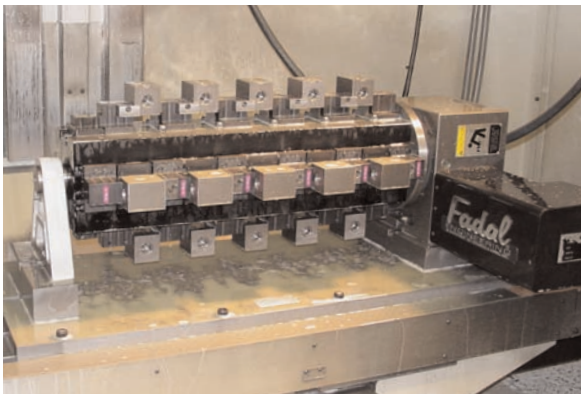
CAROLINA PRECISION MEETS TRIAG CLAMPING SYSTEM

ADVANCED MACHINE & ENGINEERING CO.

Application Note

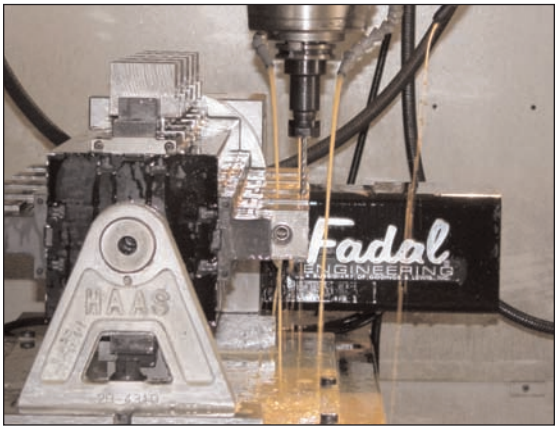


By utilizing a new compact clamping system on its seven Fadal vertical machining centers, one hydraulic motion control system supplier has tracked reductions in its set-up and cycle times between 20%-40%, with an overall improvement in production from 500 up to 1500-2000 parts per month.

Carolina Precision Components of Valdese, North Carolina, a manufacturer of valves and various flow control mechanisms, was seeing its workloads increase dramatically, according to President Randy Walker. "We wanted to find a way to increase our capacity without buying another machining center. We had seen the folks from Advanced Machine & Engineering (Rockford, Illinois) at an IMTS recently and discussed our application with Alvin Goellner, one of their applications engineers. His knowledge and quick grasp of our problem were clear to us, from the outset," Walker says.

This shop had been using standard vises to hold their workpieces, including various iron castings and Dura-Bar continuous cast iron stock, steel forgings and aluminum billets. At that time, each workpiece was positioned in a vise, machined, repositioned, checked and machined again. Goellner and his team from Advanced suggested their Triag compact clamping system with an integrated trunnion would allow continuous three-sided machining and eliminate substantial handling and machine downtime. Since the Triag system could be run with any standard rotary indexer, the implementation of this suggested solution had immediate interest for Walker and his team at Carolina. "We saw the advantages of this system, compared to the others we were considering and certainly compared to how we were doing things at that time. The decision was pretty easy, at that point."

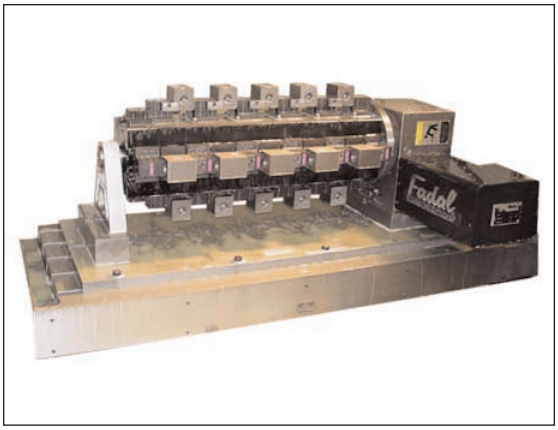
Each workpiece can be machined on three sides with no stoppages, according to Carolina's Vice President and General Manager, Mike Smith, who further commented on this workholding system from Advanced. "On any square block, even large asymmetrical iron castings, we can set up the workpieces and cut in two ops what once took six. Just the time saved in handling is substantial." Smith also noted the range of part sizes run at Carolina runs from 3/4" x 1" square blocks up to 3" x 4" x 8" pieces and the Triag system has been able to accommodate all. He especially commented on the gripper holes designed into the tapped jaw face and the 4-point carbide grippers as being highly reliable in positioning even the heaviest workpieces. "We worked very closely with Alvin Goellner and the folks at Advanced on developing these grippers. They really do the job for us."



Triag compact clamping system with integral trunnion from Advanced Machine & Engineering, for use with any rotary indexer; allows continuous three-sided machining and thereby reduces handling and cycle times

Since the installation of the seven Triag systems on the Fadal VMC's at Carolina, Randy Walker states his company is planning to install the same systems on two new Haas VMC's being purchased presently. He also noted the service and after-sale follow-up from Goellner and his team at Advanced made an impression on him. "They took interest in our business and really wanted to make a difference in how we got things done here. The results have been outstanding."

Walker indicated that they've tracked productivity at the company and noted that it's risen from 500 to 1500-2000 pieces per month, on average, through the use of the Triag clamping and integral trunnion systems.



Triag systems run on seven Fadal VMC's and are being installed on two Haas VMC's at Carolina Precision Components of Valdese, NC

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