

# Norwood Tool Emphasizes Precision, Quality

High quality precision products and the ability to respond to the needs of its customers have transformed the Norwood Tool Company into a world class manufacturer in Dayton, Ohio.

Founded in 1928, as a tooling company, Norwood began by providing precision tooling to a variety of local manufacturers, including Frigidaire, NCR and IBM. As technology changed, Norwood continued to adapt, and began single-hit stamping operations in the 1980's. In 1995, Norwood purchased a 400-ton Minster E2 press and began producing parts from progressive dies.

Just recently Norwood Tool opened a state-of-the-art manufacturing complex in Dayton, with separate facilities housing its stamping operations and tooling operations.

"We currently offer precision progressive dies for OEM customers, precision stampings and precision machining," Norwood Tool President Ken Hemmelgarn said. "We serve primarily the medical, automotive and appliance industries. A lot of our stamping is done with red metals and stainless steel for the medical industry."



*Norwood Tool continues to expand its progressive die stamping capabilities with the addition of Minster P2H and E2 presses.*

Since beginning its stamping operations, Norwood Tool has come to depend on the quality and reliability of numerous Minster Presses.

"Minster presses have been very very reliable for us," Hemmelgarn said. "We want to sell a quality part, so we have quality equipment to run it on."

"Minster is a high quality press and it conveys the high quality image we want to portray," added Chris Jones, General Manager. "I think people

see our 26 Minster presses and that tells them something about our company and its commitment to quality."

But the Minster presses at Norwood Tool offer much more than just a reputation. They prove themselves day-in and day-out.

A new Minster P2H press complete with a Minster integrated material handling line and a Minster Production Management Control runs some of the more difficult jobs at Norwood.

"We're running a complex brass brush holder part on the P2H," Jones said. "Our customer didn't want to give that job to just any stamper. It's a high volume part with a very complex tool, and we're running 40 strokes a minute faster on the P2H than that tool has ever been run before. And even at those higher speeds, we're getting longer die life.

"The hydraulic clutch on the P2H allows us to operate at faster speeds," he added, "and the auxiliary flywheel option allows us to run high tensile strength material like stainless steel without the fear of snap-through damage to the press. The flexibility of the press is great also. With the adjustable shut height, we can run about any job... I think the P2H is the press of the future."

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**Ken Hemmelgarn**  
**President**  
**Norwood Tool Company**



*President Ken Hemmelgarn at Norwood Tool's recently completed manufacturing complex in Dayton, Ohio.*



*This Minster P2H press at Norwood Tool is equipped with a Minster Reel, Straightener, Thread Table and Feed. The line is integrated with the press via Minster's Production Management Control.*

"I'm really impressed with the Minster coil handling equipment," Hemmelgarn said. "It provides great integration with the press, and it's all operated by Minster's (PMC) Control. One man can load a difficult coil and feed it into the press safely. With the integration between the press and feed line, you avoid any accidents... You just can't mess it up."

"I don't operate presses on a daily basis, but with the PMC Control I can run the P2H press without any problems," Jones said. "All of our operators can go up to that machine and feel comfortable running it."

The durability of the Minster presses has helped Norwood Tool build on a very good record of Just-In-Time delivery.

"We ship a half million parts to Mexico every Friday -- week-in and week-out," Jones said. "We haven't missed a delivery in over a year. And when there's concerns about making a delivery, it's never whether or not the press is going to run. That's the last thing we worry about."

"We count on the fact that our Minster presses will run day-in and day-out," he continued. "And when we do have a problem, the Minster serviceman is here that day or the next and we're up and running a day later."

For Norwood Tool, "Minster Service" is much more than a serviceman turning a wrench. With over 100 years of manufacturing experience, Minster has a lot to offer.

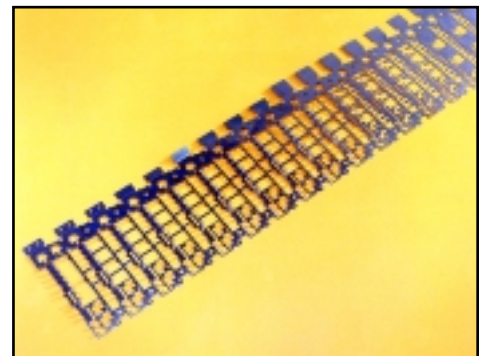
"We work on a lot of special applications with Minster," Hemmelgarn said. "If we're designing a special tool for a special application, the engineers at Minster are able to consult with us on the various capabilities of the presses."

"Minster showed us new palm buttons for our ergonomic problems," Jones said. "That's just one example of how Minster works with us to recommend situations to solve our problems."

Norwood Tool continues to expand its stamping capabilities, but Jones says the backbone of the company remains in tool and die production, especially progressive and transfer dies.

"From concept to production, we believe the OEM's want to get away from making parts," he said, "but our customers have to believe that the tooling support is there to do the tough job. The key is having outstanding tooling power to back up your stamping operation, and we have enough skilled people around to solve any tooling problem that is presented to us. What separates us from other stampers is the depth of our tooling department."

With over 30 full-time tool makers, precision CNC horizontal machining centers and lathes, and 26 Minster presses, Norwood Tool is well positioned to offer its customers high quality products from a prototype to the just-in-time delivery of several million parts.



*Sample of the variety of parts produced on Minster presses at Norwood Tool.*