

Minster straight sides give Pax Machine Works “more production capacity and more reliability”

Pax Machine Works, Inc., in Celina, Ohio, is one of northwestern Ohio's most modern and complete stamping plants. The enviable growth record of the company (see box) is based on a simple philosophy – care and pride in workmanship.

Their four Minster straight sides (two P2's & two E2's) are an integral part of that philosophy. Says Pax President, Francis Pax, “Our Minsters have given us the ability to produce high quality stampings that can compete with inhouse operations – and still make a profit for us.”

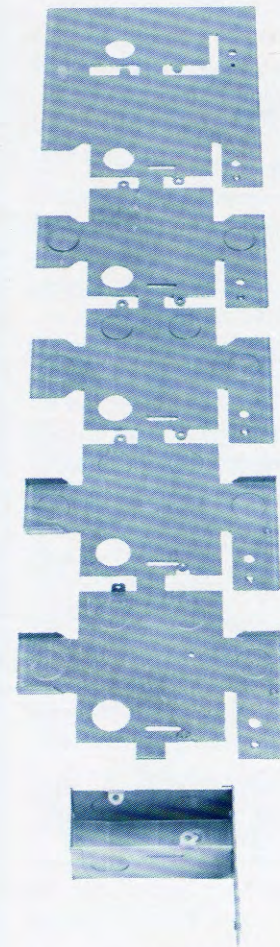
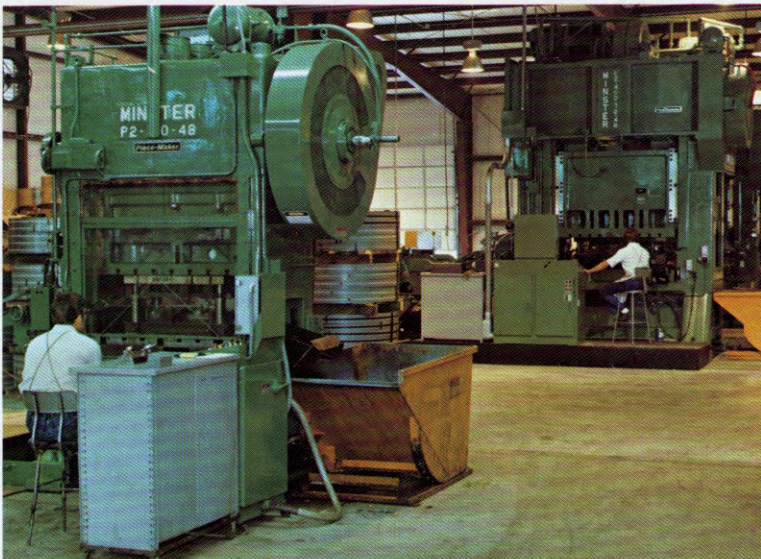
Pax Machine Works' specialty is in

precision, medium to high volume stampings for a wide variety of industries. They are well-known for their fast delivery, and Francis Pax attributes part of that reputation to the Minster presses at Pax... “A Minster can stand there and punch out stampings day after day without downtime. The rigidity of Minster's construction has always impressed us.”

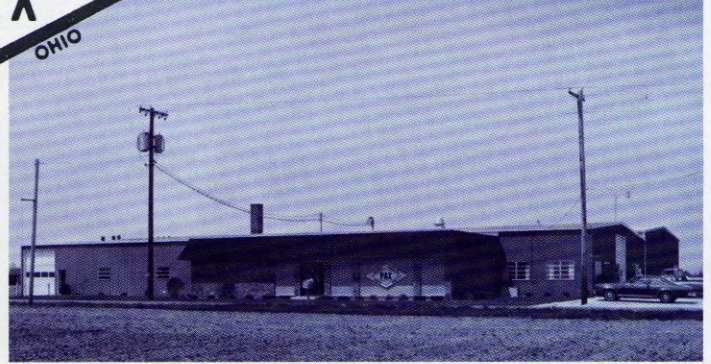
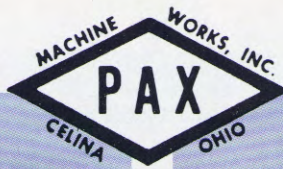
An example of the high-volume stamping at Pax is in production of a variety of metal inserts for automobile body isolation mounts. The insert pictured right is produced in a 5-out die, and Pax

has reached production levels of up to one-million per day. To date, 144,500,000 have been produced.

Before Pax purchased their latest machine, (the E2-400) they considered other builders in addition to Minster, but as Francis Pax put it, “We chose Minster because they give us more production capacity and more reliability. They're the only ones who will give us the press speeds we need to hold the competitive edge we have.” Judging from the growth record of Pax Machine Works, more and more people are coming to appreciate that competitive edge.



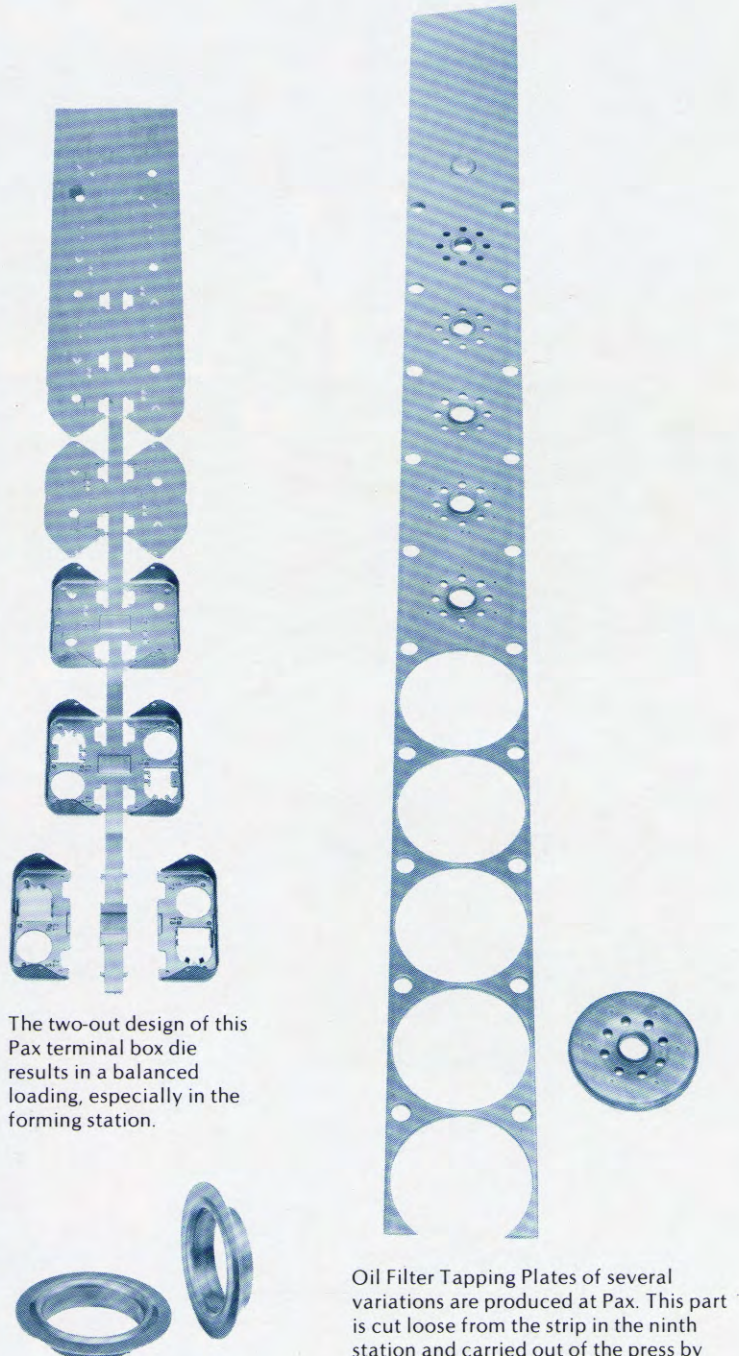
This terminal box is produced in 16 ga. steel at 80 spm in Pax's P2-150. The box is formed and cut off in the last station. Knock-outs in finished box must be able to be knocked out using 1/4" punch and the tap of a hammer so that the sides of the box are not deformed – a condition that Pax has been able to meet. Slugs for the knock-outs are pushed out (except for the tab) and then pushed back flush in the strip.



The plant where Pax Machine Works began ... and today's spacious and modern facility (the original building still stands on the family farm).

CHRONOLOGY: 30 Years of Continuing Growth

- 1948: Oscar E. Pax starts Pax Machine Works in a small building on his farm near Celina, Ohio. His machine shop specializes in repair work for local industry, and the company prospers with the post-war boom.
- 1957: One of Oscar's nine sons, Francis, returns from an apprenticeship in diemaking and begins to turn the firm's efforts toward tools and dies.
- 1960: The company buys a much needed die tryout press -- a used Minster No. 5 O.B.I.
- 1961: Pax relocates in new plant.
- 1963: Production of stampings for the furniture industry is begun, and Pax buys a second Minster O.B.I. (this time a No. 7). At this time, however, the company is still primarily a builder of dies and special machines.
- 1967: The company's real turning point to high-volume, progressive die stampings with the purchase of a new Minster P2-100. Says Francis Pax, "When we purchased the new P2-100, we had no idea of the tremendous increase in die life that we'd realize over an O.B.I. We were very pleased with the volume of high quality production we got with the P2."
- 1968: First addition is made to the new plant - 2400 sq. ft.
- 1969: Second new plant addition - 9,600 sq. ft.
- 1972: New office area is added.
- 1973: New P2-150 purchased.
- 1976: Third addition made to plant - 12,800 sq. ft. New E2-300 purchased.
- 1978: New E2-400 purchased. Francis Pax: "Our purchase of increasingly larger equipment is due, in part, to being able to quote on larger stampings. But also, in going larger, these presses provide a back-up for us if we need to run a job from one of the larger machines. We do, though, have a gap between the 150 and 300 we'd like to fill...."



The two-out design of this Pax terminal box die results in a balanced loading, especially in the forming station.

Auto body isolation mount inserts are high-volume parts at Pax.

Oil Filter Tapping Plates of several variations are produced at Pax. This part is cut loose from the strip in the ninth station and carried out of the press by the strip skeleton. Sophisticated photo-electric cells and solid state controls are used to be sure of proper part position and to avoid double hits.