

# STAMPINGS



**CELINA, OHIO** 

#### IT ALL STARTED WITH OSCAR PAX AND HIS LITTLE MACHINE SHOP BACK IN 1948



The building shown (right) is where it all began. This is the original building where Oscar E. Pax started PAX MACHINE WORKS back in 1948...more than 28 years ago.

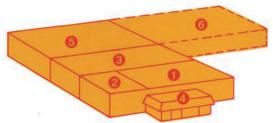
Oscar E. Pax (left), May, 1903 - May, 1969, founder of PAX MACHINE WORKS. In the early days the firm functioned as a machine shop specializing in general repair work for local Celina area industry. Encouraged by the support of local industry, the firm grew and prospered with the post-war boom.



In 1957, one of Oscar Pax's nine sons, Francis, joined the firm returning from a tool and die training program which soon lead to the firm's expansion first into tools and dies then stampings. Today, PAX MACHINE WORKS, INC., is one of northwestern Ohio's most modern and complete stamping facilities. Our growth and success through the years is made possible by dedicated people and loyal customers who like our way of doing things. The following pages present a graphic story about PAX...its people, facilities, and capabilities.



PAX management: (left to right) Marvin A. Pax, David E. Pax, Francis J. Pax, and John C. Pax.



The above diagram depicts the firms steady expansion through the years to its present size of more than 34,000 sq. ft. of plant area.

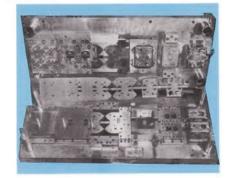
1 - Relocated in new plant	1961
2 - First plant addition	1968
3 - Second plant addition	1969
4 - Office addition	1972
5 - Third plant addition	1976

6 - Projected future expansion

## FROM DESIGN TO FINISHED PRODUCT... PAX PEOPLE MAKE THINGS HAPPEN!

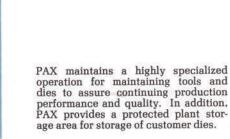


A view of our design engineering department.



Progressive die which produces two electrical terminal boxes per stroke of press.

Since the very beginning, we have attempted to produce the finest stamping that our capabilities can provide and we have taken great pride in that fact. From the die design to the finished stamping, PAX people realize that their job is an integral part in the production of finished products which are known nation wide and enjoy a fine reputation. PAX people know that without care and pride in workmanship, an inferior product will result and if that happens, we all stand to loose.





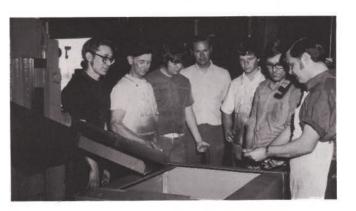
Personnel in PAX tool room examining finished die.



A few of the many types of stampings produced by PAX.



From the front office to the plant dock; everyone is well aware of the importance of the customers order.



Personnel of the press room examining finished stampings.

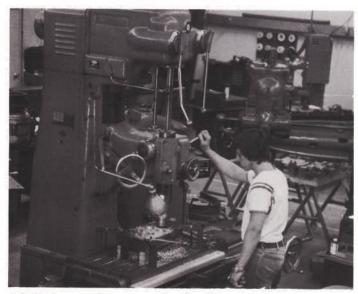
Nothing happens until the stamping design has been accomplished. PAX provides its customers with the capabilities for getting the complete job done under one roof.

### **MORE THAN 50 YEARS OF COMBINED** DIE MAKING AND DESIGN EXPERIENCE

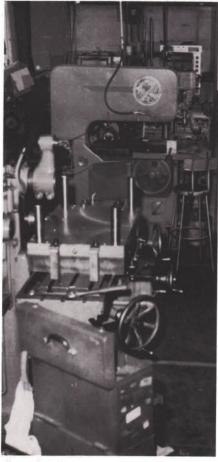


A die section is being prepared for grinding by a highly qualified member of the PAX firm.

You may never meet the guys who design and build your dies or produce your stampings, but if you did, we think you would be proud of them as we are. And you know, there just doesn't seem to be a whole lot of these people around anymore.



A jig boring operation on a portion of a die section.



The tool production area is a vital part of PAX. Here is a partial view.

Fifty years of experience in die making and design certainly can be topped by other firms... but when you consider the fact that PAX is a young company founded just over 25 years ago... you realize that we have people who have the "know how." people are "imagineering" and always come up with ways and means for doing a job better ... and more efficiently.

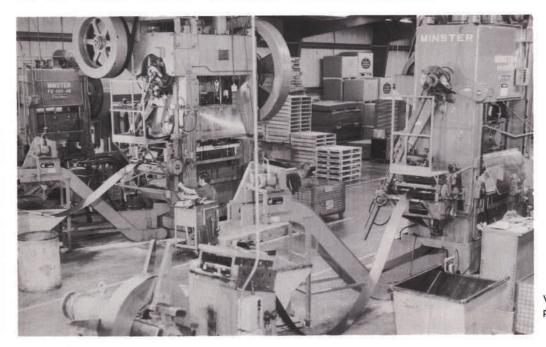
#### **OUR CAPABILITIES FOR OUR TOOL & DIE FACILITY**

- 2 Thompson Surface Grinders
- 2 Lathes
- 1 Hammond Surface Grinder
- 1 Do-All 36" Band Saw
- 1 Shaper
- 2 Arc Welders

- 2 Bridgeport Mills
- 1 Gardner Surface Grinder
- 1 Marvel #8 Band Saw
- 1 Brown & Sharp Mill
- 1 Sonnen Honning Machine
- 1 American Radial Drill
- 1 Cleerman Jig Borer/with digital readout

We also have a complete line of small precision tools and heat treating facilities.

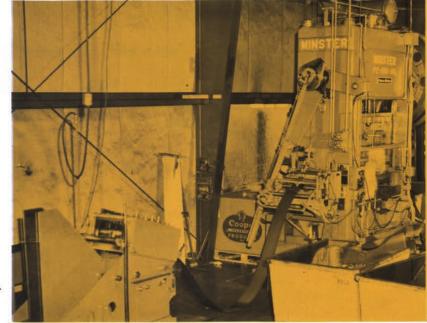
#### PAX...SMALL, BUT WITH VERY BIG STAMPING CAPABILITIES



The maximum thickness and width we are able to run is .140 thick x 24" wide with a 14" feed length. In addition to our present capacity we have recently installed a new Minster E 2 - 300-72" x 48". This 300 ton press will have a variable operating speed of from 60 to 120 strokes per minute with an 8" stroke.

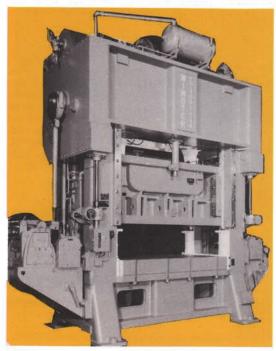
View of plant show Minster and Bliss stamping presses.

You have probably noted, as you browsed through this brochure, we offer some big capabilities in stamping equipment. All presses are equipped with high speed, automatic systems (coil reels, straighteners, and feeders) enabling continuous operation which assures minimal down time. Our equipment is also equipped with tonnage monitors as well as error detection devises in order to provide maximum safety for both presses and the dies being run.



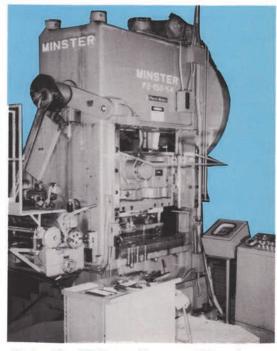
Minster 100 ton press with automatic teed support equipment.

#### PRECISION...MEDIUM TO HIGH VOLUME STAMPINGS ...OUR SPECIALTY



The latest addition to our plant equipment is this Minster E2 - 300, offering 60 to 120 strokes per minute.

Every stamping plant has an efficiency in production where they can best perform. In our case, medium to high volume case, meatum to high volume production stamping runs is our specialty. We know what our equipment can produce in these runs because we know our equipment. Whether it be steel, aluminum, copper to stainless we are cap-able of running all types of metals for getting your job. In addition, our recent plant expansion enables us to handle greater raw material inventories for faster production and shipping.



Minster P2 - 150-54, provides up to 120 strokes per

#### HERE ARE OUR PRESS CAPABILITIES

BLISS 6300A

SSDC

SSDC

300 Ton Capacity

SSSC

60 Ton Capacity

Purchased 1969 Bed area F-B 42"

R-L 54"

Purchased 1968 Bed area F-B 16" Stroke 4"

MINSTER 40-4

R-L 16"

Stroke 6"

Shut height 17"

Shut height 9"

Strokes per minute 45-90

150 Ton Capacity

MINSTER E2 - 300-72" x 48" SSDC 300 Ton Capacity

MINSTER P2 - 150-54 Purchased 1973

R-L 54"

Purchased 1976 Bed area F-B 48"

Bed area F-B 40" Strokes 6"

Shut height 17"

Stroke 8"

R-L 72" Shut height 19"

Strokes per minute 50-120

Strokes per minute 60-120

Strokes per minute 80-160

MINSTER P2 - 100-48 SSDC

100 Ton Capacity

Purchased 1967

Stroke 4"

Bed area F-B 31"

R-L 48"

Shut height 13"

Strokes per minute 80-215

## PAX PROVIDES IN-PLANT SUPPORT EQUIPMENT FOR THE TOTAL JOB



Along with our press facilities, we are able to deburr parts and to apply rust preventatives to protect the parts until used. The equipment used includes two Roto-Finish Spiratron finishing machines; one with a capacity of 12 cubic feet and our latest addition with a capacity of 40 cubic feet.



Warehouse area for steel storage and finished product.



Die storage area tor protecting your valuable dies. Photo gives you an example of the size dies commonly used by PAX.

All of these facilities are supported up by many years of combined know-how in tool engineering, design and tool building fields and our production processes provide our customers with the most economical and quickest means of manufacturing quality metal stampings.

# CENTRALLY LOCATED...PAX CAN DELIVER STAMPINGS TO YOUR DOCK, OVERNIGHT.





## **MACHINE WORKS**

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