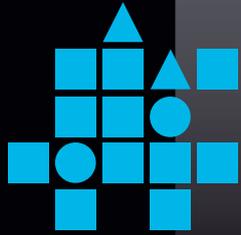


# experience

**AGIE**

PARTNER TO THE BEST



NO. 28

## Frontiers in Manufacturing

### editorial

The Vital Importance of Value Realization

### partner

AllTech Precision – Valencia, CA

Anderson Global – Muskegon Heights, MI

Die Technology – Osseo, MN

Engineering Techniques – San José, CA

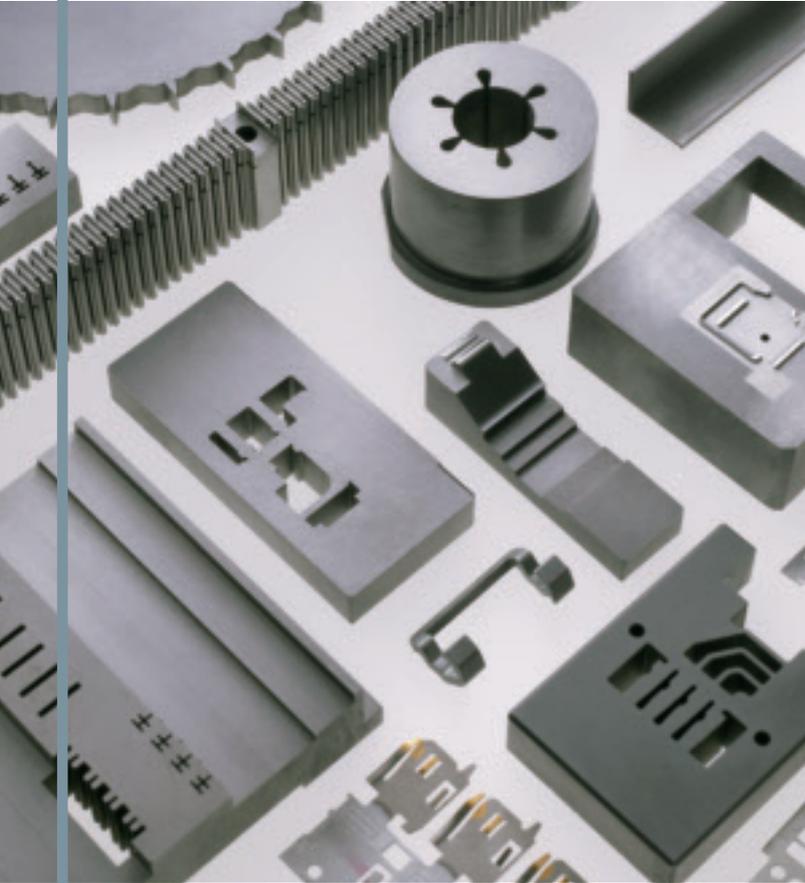
Kenmode – Algonquin, IL

Pennco Tool & Die – Meadville, PA

Ron Witherspoon – Campbell, CA



# PENNCO



Pennco Tool & Die occupies a modern, fully staffed facility of 12,500 square feet. The present home was built to their specifications in 1988, and designed to efficiently house their production equipment and office staff. Pennco expanded their facility in 1998 to include a Wire EDM department. President Philip A. Passilla and Vice President Philip W. Passilla look forward to serving your tooling and machining needs.



# partner

## Pennco Tool & Die Inc.

Country	USA
Production	Custom machining of carbide & steel dies, molds and spare tooling for: <ul style="list-style-type: none"> <li>- electronic</li> <li>- medical and</li> <li>- automotive industries</li> </ul>
Target market	International
Employees	28
Founded	1980
EDM systems	1 Agiecut Progress 2 1 Agie Evolution 2 3 Agiecut 150 HSS
Programming	- Peps from Camtek - Mecanic
Clamping systems	- Mecatool - presetting stations (horizontal and horizontal/vertical)
Measuring, testing	- J & L PC-14A Optical Comparators 4 Digital, 3 Quadra-Check - Sets starrett Grade A Cro-Blox - Sets Mitutoyo Ceramic Blocks - Complete Gauge Pin Sets - Starrett 18" X 24" Surface Plates - Mitutoyo Toolmakers Microscopes - Starrett Digi-Check Height Gauges

### Pennco Tool & Die Inc.

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USA

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[www.penncotool.com](http://www.penncotool.com)

Contact - Phil Passilla, President  
- Phil Passilla Jr., Vice President



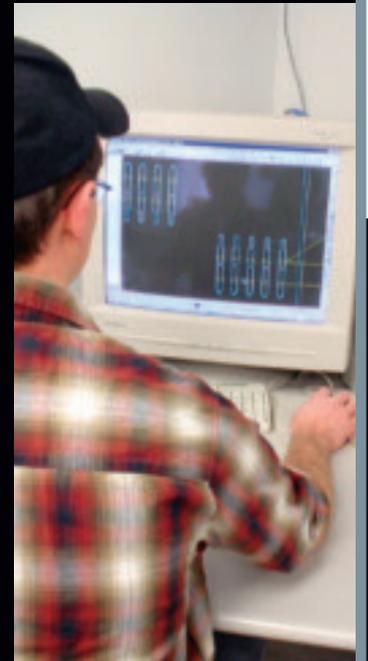
# Wire cutting is the cutting edge of precision tooling

## Supplier of high precision

Pennco Tool & Die, Inc. was founded in 1980 and is located in the heart of the tool & die capital of the USA, Meadville, Pennsylvania. Specializing in close tolerance form grinding and Wire EDM of both carbide and steel, they maintain a highly skilled work force of Journeymen Tool and Die makers and additional support staff capable of machining carbide and steel to a tolerance of  $\pm .00005$  inch. Meadville is proud of its heritage of toolmaking excellence. This evolved from the need for precision tooling used to mass produce the Talon zipper which was pioneered and successfully produced in Meadville in the early 1940's. In the late forties and early fifties, there were only about a dozen shops in the Meadville area. Today there are approximately 140 shops that supply and service tooling needs around the world. Pennco is a full service facility for steel, carbide and other machinable materials. Our distinction is the precision form grinding and Wire EDM of carbide die parts. Today with incorporation of Wire EDM, we have created a reputation for quality, reliable service and quick turn around times. Pennco is considered one of the leaders in their industry.



Pennco utilizes three generations of Agie wire-cut equipment, running around the clock with only one manned shift.



## Pennco Tool &amp; Die, Inc.

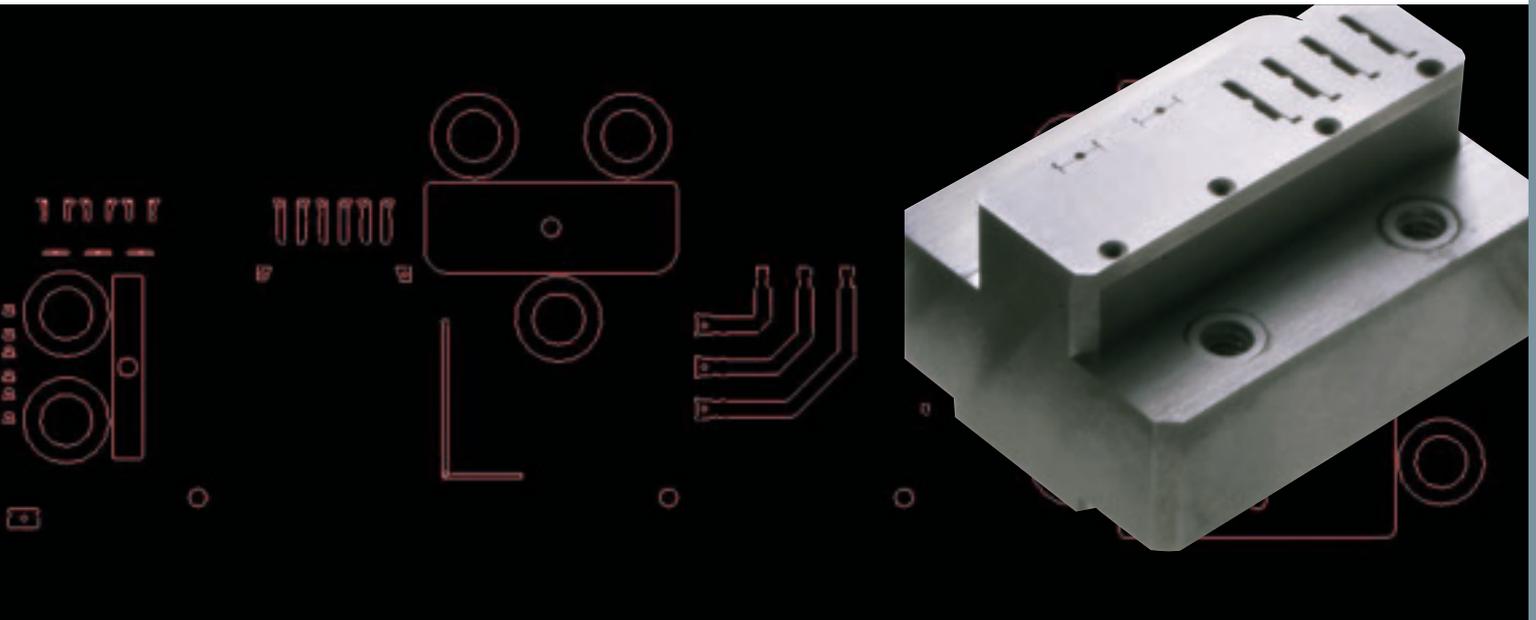
**Identical, interchangeable  
spares for the precision  
stamping die industry**

Whether Pennco tooling finds eventual application in the automotive, electronics, or medical industry, it all must meet the same requirements. Phil Passilla, Jr., notes, «When you build spare tooling, they must exactly match the originals and be reliably interchangeable.» The carbide die stripper shown on page 23 is a case in point. Part of a 10-year development project, Pennco is the sole supplier to their customer, using wire EDM and form grinding to produce a 50 millionth inch clearance between punch and stripper. «Almost all of our work is close tolerance, fine finish tooling – 70 percent of it in carbide,» Phil Passilla, Jr., states. We feel Agie machines are the best for burning carbide, he adds. They hold tolerances over time, minimize cobalt depletion and result in the best straightness and dimensional tolerances with surface finishes down to 0.2 Ra (7 RMS).

**A large network**

«With a 140-shop market to choose from, Meadville is a big network,» Phil Passilla, Jr., explains, «and we all work together, whether it's machining, plating, welding or other processing technology. This kind of access helps all of us turn around jobs very quickly, which in turns makes us more competitive as individual businesses and as a group. Our Agiecut Progress is the latest example of new technology and its impact on Pennco. It attracts the toughest jobs in the area, with other shops sending EDM work they can't handle to us.»





## The tool data

Designation	Die stripper
Designation of finished product	Spare tooling for the stamping industry
Material of tool	Carbide
Type of wire	Cobra Cut A
Number of cuts	1 main cut, 4-6 trim cuts
Precision of positioning	$\pm 0.000040''$
Roughness	Ra 0.2 (7 RMS)



Pennco Tool & Die, Inc. chose Agie wire machines over their competition for several reasons. The main reason being that Pennco's customers require high accuracy and super fine finishes for their carbide die tooling, which the Agie machines deliver. Also, we have found Agie to be very dependable, offer excellent service, and continually update their technology. Pennco is very satisfied with the Agie products and will continue using them in the future.

Phil Passilla,  
President of Pennco Tool & Die, Inc.



We would like to thank Pennco Tool & Die, Inc., especially Phil Passilla, President, and his son Phil Passilla Jr., Vice President, as well as EDM Product Manager Jim Knox of Boldt Machinery, Inc. for their kind support and friendly cooperation with this report.

Responsible  
Sales Engineer:  
Jim Knox,  
Boldt Machinery