

A Durable Industry

Oh-Penn region forges a reputation in advanced manufacturing

Story by Betsy Williams Photography by Antony Boshier

Reinvention is nothing new in the Oh-Penn region. Businesses and workers proved adept some 30 years ago at retooling following the decline of the steel industry, and the region has done the same in the past decade in response to auto industry downsizing.

"Persistence is in our genetic code," says Mike Garvey, president of M-7 Technologies in Youngstown, Ohio.

M-7 Technologies knows a thing or two about persistence and reinvention. Launched in 2004, M-7 Technologies' roots date to 1918 and the founding of a family-owned company that produced bronze castings for the U.S. steel industry. M-7 has transformed itself into a national leader in using laser scanning equipment that produces computer images of indoor and outdoor spaces. Designers can take these images and create models for highly advanced production sites or create plans for restoring historically sensitive buildings.

ADVANCED MANUFACTURING: BUILDING ON A LEGACY

M-7 is part of a sophisticated advanced manufacturing hub

that is building on the region's historical and emerging strengths in hard materials such as steel, and now electronics, semiconductors, powdered metals and auto production.

"Our education providers give our region its edge," Garvey says. "To be competitive in today's economy requires a knowledgebased workforce. Competent educational institutions and training facilities are vital to providing that workforce. We have 15 universities in less than an hour's drive, as well as topnotch vocational and skilled-trade schools and some of the best high

A technician repairs a part at M7 Technologies in Youngstown, Ohio.



From left: A technician analyzes a part at M7 Technologies; LED lights made by Appalachian Lighting Systems in Elwood City, Pa.

schools in the two states."

That access to a skilled workforce and abundance of training facilities and programs coupled with major transportation assets have made the region a desirable locale for advanced manufacturing.

General Motors invested \$350 million in its Lordstown Complex in Trumbull County, Ohio, in 2010 to begin production of the Chevy Cruze. The region has also drawn major investment from auto suppliers, including Flauricia, Magna International and Leetonia's Mitsubishi Heavy Industries, which designs tire presses and tire-related machinery to serve the auto industry.

In Trumbull County, Delphi Packard engineers and manufactures components and systems that together make up the power and signal distribution system of vehicles. In Struthers, Ohio, AstroShapes operates a state-of-the-art aluminum extrusion and finishing operation. RTI International Metals, a producer of titanium used in aerospace applications, maintains its research and design center at its Niles, Ohio, complex. Patriot Special Metals built a \$64 million specialty steel mill in Mahoning County, Ohio, to make alloys for parts in wind turbines/generators, nuclear reactor components and aerospace applications.

OH-PENN: BUSINESS FRIENDLY

Michael Dolan II, chief financial officer of Appalachian Lighting Systems in Elwood City,





Pa., also praises the training programs that ensure a skilled workforce. A startup company that specializes in developing and manufacturing high-power, ultraenergy-efficient lighting fixtures, ALS has developed product lines that include next-generation streetlights, warehouse lighting, sign illumination, parking lot and garage lighting, tunnel lighting, indoor office lighting and other specialty lighting systems.

ALS is an advanced

manufacturing company that sees benefits from the growth in this industry cluster and the ability of established firms to retool.

"We have and are finding more high-tech firms in the region with component production capabilities that are working with us now to provide some of our components," Dolan says. "Some of these firms presumably used to be feeders of components to the auto industry. They are still here and looking and hungry for replacement and new customers. Having local vendor partners as part of your supply chain when you are a manufacturer is always better than ones that are long distances away, or even worse, overseas."

"This region has been widely touted as one of the best places in the United States to start a business," Garvey says. "Good stuff is going on here. We have a very business-friendly environment."