

## Back to the Basics

BY JIM WARREN

The traditional concept of apprenticeships and internships is one answer to the skilled labor shortage.

**EVEN IN THE CURRENT ECONOMIC CLIMATE**, manufacturers across the country—regardless of size, specialty, or location—are reporting a dire shortage of skilled workers such as welders, fabricators, laser operators, electricians, press brake operators, and machinists.

To illustrate, a survey of the Fabricators and Manufacturers Association, International's (FMA) members conducted recently revealed the biggest challenge they face is the dwindling supply of skilled workers, cited by some 40% of those polled, far surpassing other concerns.

The annual talent shortage survey by Manpower, Inc. on the 10 most difficult jobs to fill corroborates the FMA's findings. The poll states that engineers, machinists, and skilled trade workers were the three positions most challenging to fill in 2008.

It may surprise many that one resolution to this shortage, and a tactic to attract the next generation of workers, is a concept employers have used for centuries: the apprenticeship and its cousin, the internship. Their value has never been so significant and appreciated; young people are exposed to the exciting opportunities in manufacturing while companies have a chance to recruit, evaluate, and hire needed employees.

Two firms exemplify how to leverage this strategy: Midwest Metal Products, a precision sheet metal fabrication company based in Cedar Rapids, Iowa, and BEGNEAUD Manufacturing, a precision sheet metal job shop located in Lafayette, La.

### Internships: A Gateway to the Future

Midwest Metal Products has employed high school students for several years through a paid internship program, with the ultimate goal of getting interns to work for the company full-time after they complete schooling.

During the 2007-08 school year, Midwest Metal employed two students who worked part time and attended classes in the press brake department at the local trade school, Kirkwood Community College. Based on the success of the program, Midwest Metal has increased the number of interns at the plant each year.

"You can't beat on-the-job training coupled with classroom training," said Bob Burgin, plant manager at Midwest Metal. "These students learn valuable skills throughout the year and oftentimes become full-time employees at our plant."

BEGNEAUD offers a summer internship program for both high school and college level students. The company works in liaison with the local schools to create a custom-

ized program for each student's specific area of study.

"We typically employ three interns per summer, and past students have participated in a variety of niches at the company, including engineering, industrial technology, IT, marketing, mechanical engineering, and even product design," said Andrée Begneaud, co-owner of BEGNEAUD.

The company also offers an internship exchange program. Last May, a trade student from France worked on an assigned project to identify international businesses that might be interested in working with BEGNEAUD.

"Like many in the industry, finding skilled labor and retaining employees are major concerns for our company," said Begneaud. "We're always short of welders/fabricators because it's a constant skill-building position, and we also seek workers who operate press brakes, cut with saws, and work with hand tools."

"The internship is designed to get more young people interested in working at our company while fulfilling their educational requirements," she added.

### Learning by Mentor

To further meet the demand for skilled labor, some employers encourage apprenticeships as a means of encouraging prospective employees and young people to enter the field. Others issue signing bonuses and incentives to skilled workers trained in apprenticeship programs.

Midwest Metal offers an apprenticeship program to as many as three local high school students per year through a program developed through the Iowa Department of Labor (DOL).

"The apprenticeship program is another pipeline to our future workforce," said Burgin. "The mentors provide these students a wealth of knowledge gained over the years and 'hands-on' training in a real-world environment."

BEGNEAUD also offers an in-house apprenticeship program that introduces employees to every metalworking process at the company on a rotating basis. Currently, four employees are involved in an apprenticeship and partner with an experienced operator or skilled craftsman mentor for three months for each specific practice.

"This initiative gives individuals the opportunity to experience all of the processes at our company and instills a well-rounded knowledge of our operation," said Mark Faul, apprentice trainer with BEGNEAUD. "It helps identify the area in which they excel so we can guide them in that direction and then ultimately offer a position at the company."

## Advanced Apprenticeships

Based on the success of the in-house apprenticeship, BEGNEAUD Manufacturing has developed a registered apprenticeship program with the Louisiana DOL similar to the in-house program but more structured. This paid program consists of 2,900 hours learning all of the different processes at the company and 155 hours of classroom instruction. It must be completed within 2½ years.

“Not only do we compensate the apprentices but they also are eligible to receive a grant from the state government,” said Paul Bihm, apprenticeship program coordinator with BEGNEAUD. “Upon successful completion, employees will receive a certificate from the DOL for passing the course, and we will have the first opportunity to employ them.”

To develop the program, Bihm reviewed several current apprenticeship courses and reviewed the National Institute of Metalworking Skills program for guidance in designing the apprenticeship.

Bihm then submitted a summary of the curriculum to the Louisiana DOL and worked with a compliance officer to receive approval to commence. The first session, which includes two apprentices, began in early February.

“This program is the first advanced manufacturing apprenticeship in Louisiana, and state officials are enthusiastic about our offering,” said Bihm. “By establishing a registered program that complements our long-standing in-house apprenticeship program, we are creating a win-win for both Louisiana and for BEGNEAUD.”

“We also are featured on a student-accessible database that lists companies offering apprenticeship programs throughout the country, so young people can research our program and apply if interested,” he added.

## Reaching Educators and Students

Reaching prospective interns and apprentices is half the battle. Education priorities today rarely position manufacturing as a preferred career choice. This is one conclusion reached by the U.S. Department of Labor when one of its economic reports stated, “Too few young people consider manufacturing careers and often are unaware of the skills needed in an advanced manufacturing environment. Similarly, the K-12 system neither adequately imparts the necessary skills nor educates students on manufacturing career opportunities.”

Burgin agrees. “Our biggest challenge is getting high school counselors and principals to realize that manufacturing is a viable option for these students,” he said. “For some reason, manufacturing is not a good buzz word in the schools.

“At the same time, parents don’t want their kids working in manufacturing environments,” said Burgin. “Yet, as high school students tour our clean, modern factory, they are thrilled to see the futuristic lasers and robotics.”

Burgin believes that the industry as a whole can improve its labor prospects by reaching out to local schools.

“If more companies partner with schools and arrange factory visits that lead to apprenticeships and internships, the word will spread,” he said. “Students don’t come looking for us. We need to reach out and help them realize they can operate the most advanced, sophisticated equipment in the world at a highly competitive wage.” **MSC**

*Jim Warren is FMA’s director of education.*