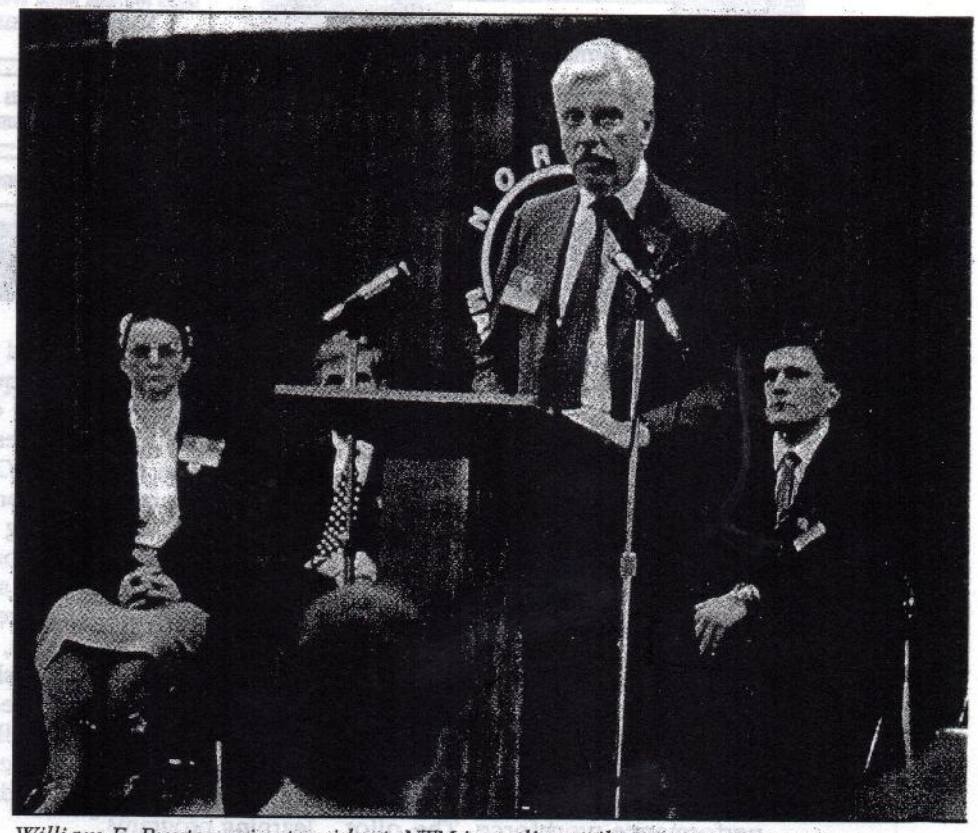
Ohio Manufacturer is Pilot for National Metalworking Skills Standards Program

By Donald B. Dobbins, Editor

Norton Manufacturing Company, Fostoria, OH, has been endorsed as the first national pilot project for the National Skills Standards in Metalworking. The program will train, test and certify Norton employees in various levels of machining classifications, part of the broader metalworking standards section. In addition, the Ohio Department of Development has awarded Norton Manufacturing an Ohio Industrial Training Program Grant of $46,544 to provide initial funding for the project.



William E. Ruxton, vice president, NTMA, outlines pilot program at December 12th announcement.

A Partnership

Norton Manufacturing, the Ohio Department of Development/Ohio Industrial Training Program, Ohio Bureau of Employment Services Office of Workforce Development, Vanguard-Sentinel Vocational School (Fremont, OH), and Terra Community College (Fremont, OH) have formed what is believed to be a unique partnership to train and test Norton employees under the newly developed National Metalworking Skills Standards. In addition, they will analyze the practicality, portability and adaptability of these National Skills Standards.

In partnership with the metalworking industry, the Council of Great Lakes Governors, under the leadership of Ohio Governor George V. Voinovich, officially launched the skills standards project in February 1993. The Great Lakes Governors have made an ongoing commitment to incorporate industry skills standards into the region's workforce development programs. Michigan Governor John Engler, who became Council Chairman earlier this year, has hailed the efforts of Governor Voinovich and Norton Manufacturing to develop skills for the high performance manufacturing workplace.

Protech II, a human resources software system from Proactive Technologies, Denver, CO), has been selected to assist with this project. The system will enable Norton to create, structure, monitor and implement a system for on-the-job

Skills Standards Program

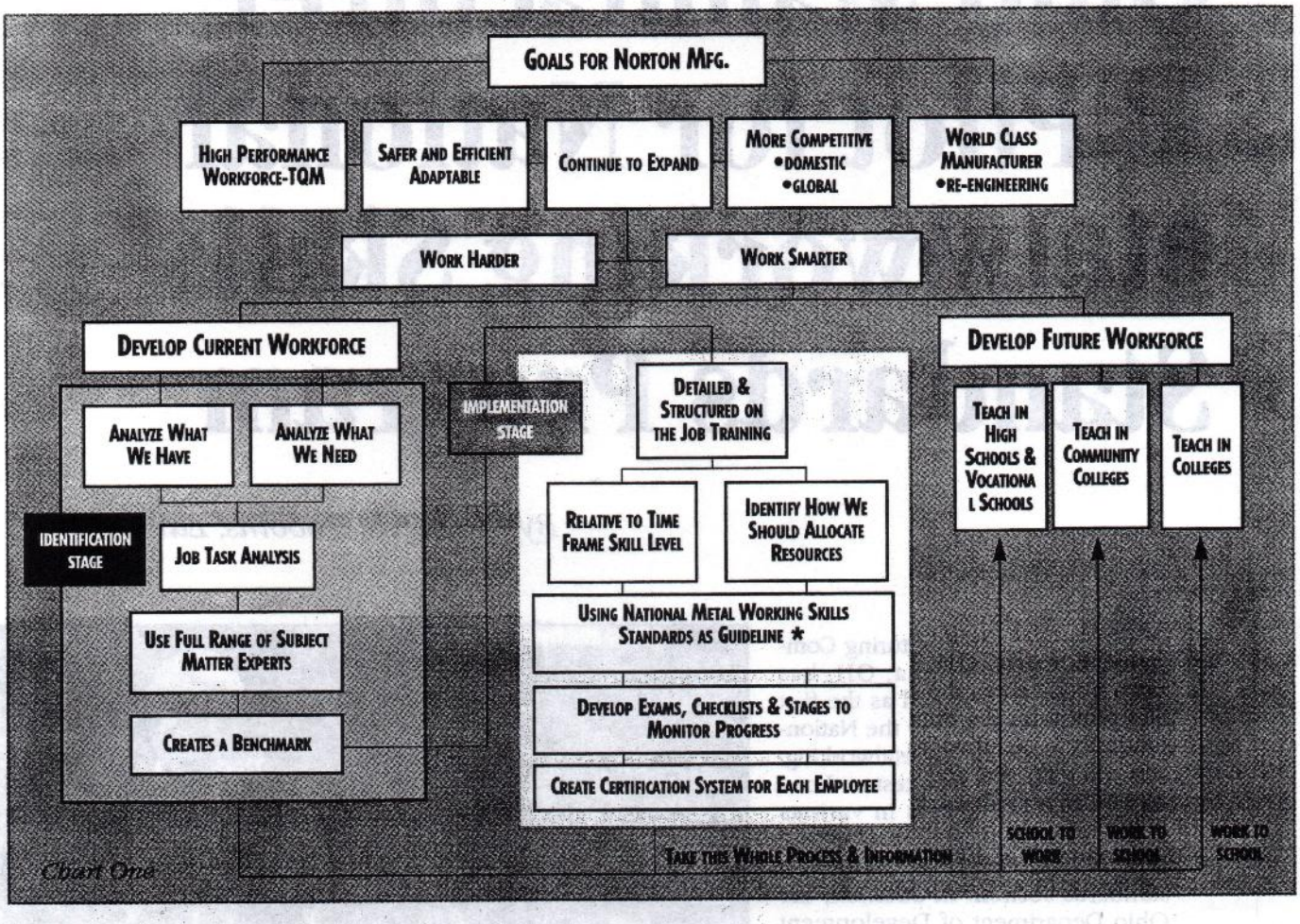


Chart One

training, job task analysis and job certification. Protech II also allows direct linkage between Norton Manufacturing, Vanguard-Sentinel Vocational School, Terra Community College and various government agencies for optimal business and education communication.

Training to Compete

Norton Manufacturing's primary interest in establishing the model for the National Skill Standards in Metalworking stems from its desire to solidify its competitive position in the marketplace while developing a high-performance workforce. The pilot project will allow them to augment worker competency, increase job efficiency and improve job safety. The Norton National Metalworking Skills Standards Pilot Project is expected to serve as the model for future National Skills Standards implementation projects across various industries.

The National Tooling and Machining Association has led the industry effort, which is specifying both broad academic and specific technical competencies required for all skilled metalworking occupations. Governor Engler notes that the pilot program created by Ohio and Norton Manufacturing represents a major step in transforming the way the Great Lakes states prepare, train and retrain workers. "Skill standards developed in this initiative, and in other industry partnerships, will give workers more marketable skills, and companies a more skilled workforce. In addition, they will provide a firm foundation for Great Lakes youth apprenticeship and lifetime learning programs."

The Great Lakes region—the manufacturing hub of North America—is home to half of the nation's metalworking industry, with approximately half a million jobs in metalworking occupations. In an unprecedented commitment, the Great Lakes states have agreed to incorporate the skills standards in school-to-work and adult worker programs. The states are working with the metalworking industry to develop a system of portable worker credentials, and to identify pilot sites, such as Norton Manufacturing Company, which can demonstrate how worldclass skills standards can make Great Lakes companies even more competitive.

The Council's recent report, North America's High Performance Heartland: Developing Sustainable Economic Advantage for the Great Lakes Region, describes the key role of advanced workforce skills in expanding the high performance manufacturing already underway.

Explaining the Program

William E. Ruxton, vice president, NTMA outlined the program to those in attendance at the December 12 announcement:

"When you come down to what's happening here today, it really relates to quality. Someone once said, if you tug at any single thing in nature, that you find out it's attached to the rest of the world. Increasingly I find that if you tug at any single

Skills Standards Program

thing in business or industry it comes back to overall quality.

"The skill standards project that we have been working on with the U.S. Department of Labor is a very exciting one because it puts the emphasis where it really belongs. If you think about our professional way of training and educating skilled metalworkers, it's basically been apprenticeships, vocational/technical schools at the high school or secondary level and more recently community colleges.

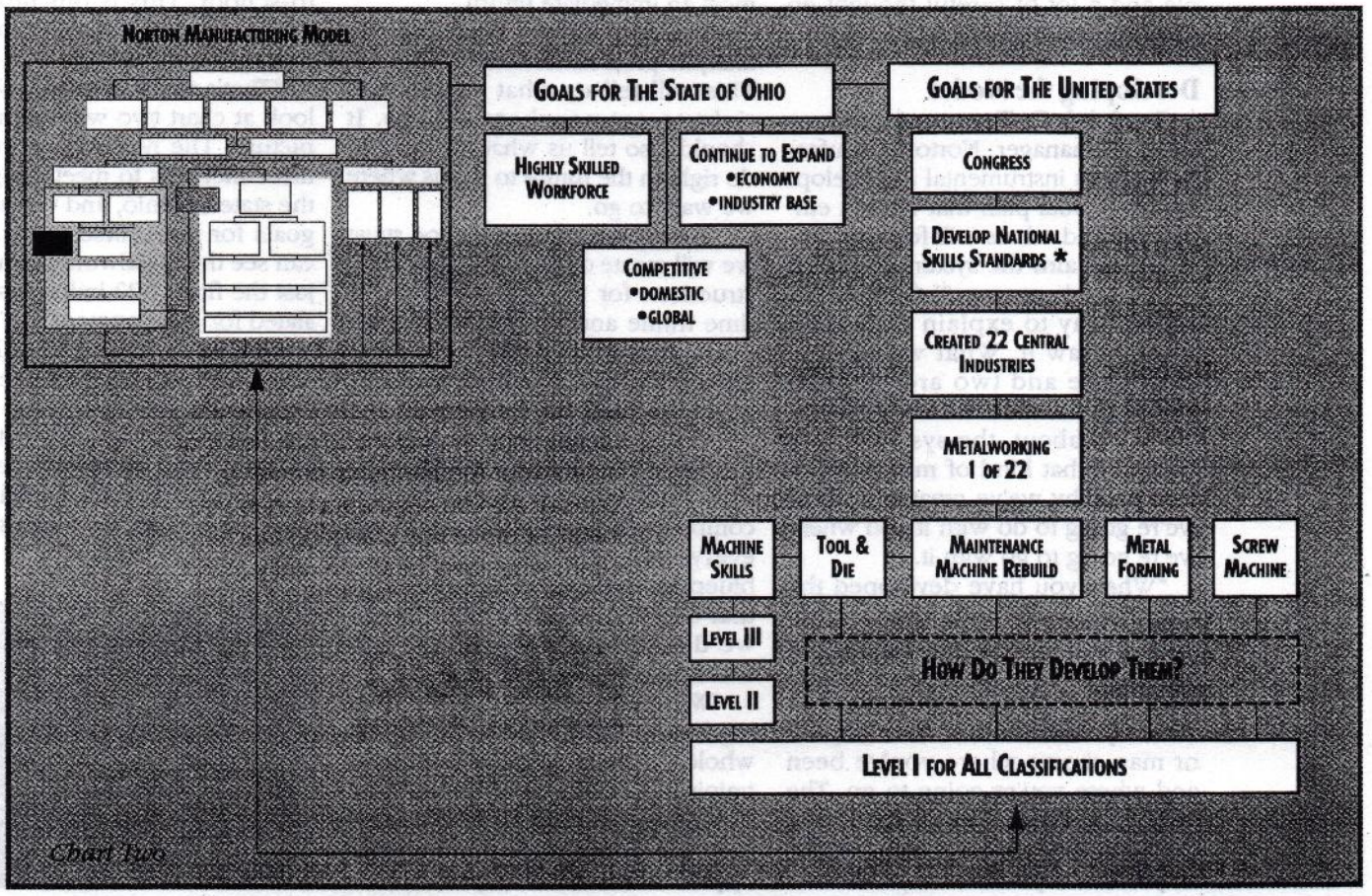
"Those are good viable systems but they have their shortcomings. For example, the apprenticeships, which are modeled on systems that have existed for hundreds of years in Europe are basically time based. So you have to have four years in. You have to have 144 hours of classroom instruction per year. Exact time, but it does not take into consideration an individual's ability to learn. Some people may be able to learn a particular task faster than others. Others may have already learned it in their own experience. And, it may take other people longer to learn a particular task.

"We do not have a single system of apprenticeships in America, but rather a patchwork quilt. A machinist apprenticeship at an aerospace company in New England may not have the same exact content as a machinist apprenticeship at an automotive plant in Michigan or Ohio, or elsewhere. The course content, the way it's taught, the quality of instruction and the method of classroom instruction all may be different.

"There are people working in industry at the journeyman level who have never had the benefit of completing a formal apprenticeship program and gaining a certificate. And, even if they do have a certificate, that certificate may not mean anything in the eyes of another employer. What our skill standards offer is a very practical solution to those kinds of problems. It benefits everyone involved. It benefits educators, the people who are charged with providing the training, who now have a way of making the training and curriculum they provide responsible to industry's needs.

"Industry now has a very precise way of identifying exactly what those needs are and if they need to be customized for a particular job or a particular set of skills. They now can be customized. And workers tend to benefit from this. If you've been like many other people who have been acquiring your skills and crafts for a period of years without the benefit of a formal scheme of instruction, whether it's an apprenticeship or some other method, you now have the opportunity to get certified and recognized for the skills that you have.

"You can also use a system of skill standards to identify things that you may need to learn or need to become proficient in, in order to advance yourself. So this is a project



that we've been working on for more than two years. We have had countless meetings around the country—mostly in the Great Lakes states, but on the East and West Coast as well.

"These are national standards. But the impetus on the initiative for developing them has come from the Great Lake states and we have put a lot of effort into distilling the thoughts of many people from industry at all levels from company owners down to supervisors and people on the shop floor. We've had organized labor participate. We've had educators and people from government at all levels.

"It was about a year ago that I had the privilege of being at a meeting where Governor George Voinovich and also Governor Evan Bayh of Indiana met and we talked about this project in its earlier stages. At that point we did not have nearly the work done that we have at this point. Right now, we are really at the launch. We now are seeing the fruits of two years of effort by a lot of people and a lot of careful thought go into implementation."

Developing the Model

Randolph D. Toscano Jr., human resource manager, Norton Manufacturing, was instrumental in developing the model plan that Norton employees and others will follow.

He explains the system based on two flow diagrams: "I figured the easiest way to explain the model was to draw it. What we have in charts one and two are almost a blueprint format for what this project is all about, the system we've created, what kind of model we've created, why we've created it, what we're going to do with it and where we're going to go with it.

"When you have developed the system, you can take it back to another company, another industry or another state. You can show them what you did and how you got to where you are now. The blueprint or map shows where you've been and where you're going to go. The ideas and concepts are broken down in phases that show the steps necessary to accomplish the objectives.

"Since this is industry driven, we've started with Norton Manufacturing goals. Those goals are to become a high performance workforce using total quality management principles. Then we want to be safer, more efficient and adaptable. We want to continue to expand, obviously. We want to be more competitive in both domestic and global markets. And, we want to be a worldclass manufacturer. I used the word re-engineering because it's really the underlying thought of looking at something and rather than fixing it, changing it to make it better. It's really looking at how we can use training to make the system better.

"If we accomplish these five goals we will continue to grow and create a learning organization. We can accomplish this by working both harder and smarter. We work smarter by developing our current workforce and, at the same time, developing our future workforce. Our current workforce is of the most importance initially because we should see almost an immediate return.

"We do this by following the analysis projects shown in the chart. This will tell us what we've done right to get us where we are. It should also tell us what we need to do right in the future to get us where we want to go.

"During the implementation stage we will create detailed on-the-job instructions for training relative to a time frame and a skill level. Obviously we're not going to set goals that we can't accomplish, especially for our employees.

"This also is going to identify how we should allocate our training dollars. How we should allocate our company dollars. Rather than taking everybody and fitting them into a blueprint reading class, if we know that they have those skills already, we don't have to spend that time and money to find that out.

"What we're doing here is working harder. We have to change that whole definition of what on-the-job training is. Now, to accomplish this, on-the-job training is a combination of classroom training and machine application. That's important because, if we're going to start to send our employees back to school they have to know why, right up front.

"The National Metalworking Skills Standards come in at this point. We have structured this on-the-job training program to where I use the guidelines and see where they mesh with our in-house experts. Next we have to develop a series of exams, checklists and stages to monitor progress. We would be doing on-the-job training whether we had the National Skills Standards or not. But what the National Skills Standards does is give us the recognition that each employee needs. What we've done is create a credentialing system for each employee.

"So we're going to do all this for our existing workforce. How do we make it pay off for our future workforce? You take this whole process of analyzing and implementing and you take it into the high schools, the vocational schools, the community colleges and the colleges. The buzz words are school-to-work and work-to-school. This is our next stage. This is planting the seeds for the future.

"That's at the industry level. If we look at chart two we see the bigger picture. The next stage is to apply these methods to meet the goals for the state of Ohio, and ultimately the goals for the United States. As you can see the metalworking industry is just the first of 22 industries that are slated for development.

"We've broken these skills down into level one, two and three to cover the various elements of the machining skills. The next step is to develop level one, two and three classifications for the other metalworking disciplines using the steps shown in chart one as a model." **MF**

Metalforming Skill Standards

PMA members are involved in the development of duty and skill standards for stamping, spinning and roll forming. Please write 300 to receive information on these skill standards when they are published.