MANUFACTURING'S MISSING GENERATION

We have all heard about the young convenience store clerk who cannot make correct change for a simple transaction. Most of us have undoubtedly experienced it. Now try to imagine the dilemma that the Advanced Manufacturing industry is facing with respect to the critical shortage of technically skilled workers to run their multi-million dollar machine tools!

The challenge is to attract the right people into manufacturing, train them appropriately so they will be able to make complex components that end up in aircraft or medical devices that we all depend on.

The glaring lack of basic manufacturing skills education is impacting U.S. manufacturing in a significant way. One of the fundamental reasons that these needs are not being met is that we do not seem to focus or guide our youth to consider careers in manufacturing. Our schools (teachers and guidance counselors), parents and our society in general do not seem to understand the opportunities that do exist in manufacturing today.

Instead, most of the focus is directed on convincing our youth that they all need to go to college whether they are interested, qualified or whether they can afford it. The result is a generation, some of them well educated, that possesses skills that are not in demand.

Many colleges continue to push majors that have poor job prospects even in a good economy. Their graduates are not positioned to take advantage of the numerous opportunities that do exist. They find themselves in meaningless jobs with no clear path to progress while our manufacturing base, willing to compensate employees well, is in desperate need of people with technical skills.

According to a report recently published by Georgetown University, ""Hard Times, College Majors, Unemployment, and Earnings: Not All College Degrees Are Created Equal", unemployment is higher among recent graduates in nontechnical fields of study, such as the arts (11.1 percent) and humanities and liberal arts (9.4 percent). FULL REPORT (Kathie, the link is below.)

http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/Unemployment.Final.pdf

What so many companies are realizing is that the main problem that needs to be addressed is—a young person does not seem to be interested in becoming a machinist.

- Is it a lack of awareness and a lack of knowledge of the industry and its opportunities?
- Where are the people going to come from to be a part of the future of these businesses?
- Can we provide them the information that can attract them into this industry in sufficient numbers to support this vital infrastructure?
- Can the situation be reversed before it is too late?

A major change needs to be made or, in the not too distant future, Massachusetts, New England and our entire country will lose another industry. More manufacturing may go to overseas competitors.

We find ourselves struggling and wondering how to address this problem. Manufacturing companies are willing to invest in skills development, however, every business needs a payback to justify any investments. There is a long term need and a desire by business to develop a workforce that is adequately trained in sophisticated systems and technology. There is also a need for a stable workforce that will allow companies to make the necessary investments in order to keep up with the rapid evolution of new technology.

To accomplish this, employers need an educated, committed workforce that will be around for 15 to 20 years or more. They need younger workers that are willing to take up the challenge in this exciting industry.

How do we get younger workers involved?

- It has to start early. Educations must participate and learn about manufacturing opportunitites and then share this knowledge with their students to create awareness.
- There must be outreach to parents and students by industry and related organizations.
- A challenging, meaningful curriculum must be developed that will attract students and provide them with the relevant technical skills that are in demand. This curriculum must include real world examples to allow students to connect the theory with practical applications.

We need collaboration with business, educators, government and parents. Everyone with a stake in our economic future must step up and participate. We need to solve the problem of manufacturing's missing generation.