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FOCUS ON THE **WorkForce**

Lead, Follow or Get Out of the Way

Inspired by Father's Day last month I've been reflecting on some of the things that my father taught me. One of his pearls of wisdom was to always do your best no matter what you end up doing with your life. I have spent the first 32 years of my machine tool career doing just this. For the next 32 years I choose to take that to the next level, and make a difference in everything that I do. I invite you to consider doing the same and I offer a vehicle to help meet this challenge.

Encouraged by customers concerned about the lack of inspired talent entering our industry, I founded an organization named C.H.A.M.P.I.O.N.-NOW. It stands for Change How Advanced Manufacturing's Perceived In Our Nation! The NOW is the call to action. The concept (www.championnow.org) was conceived while I was on a plane to Washington, DC, for a Career & Technical Education (CTE) Foundation Board Meeting. For years people encouraged me to do something with it because it could possibly be the change agent this country needs.

We have an image problem and not enough students and young people consider our industry as the career-building, family-supporting industry that it is. One misconception is that we no longer make anything. Despite the flow of work and products to China, we still manufacture 20% of the world's products in this country. We *are not* and *cannot* be just a service-related economy.

Opportunities abound for those smart enough to recognize them and skilled enough to pursue a career in the technical arena

As an industry, we must find ways to help schools, teachers and parents understand that manufacturing has for the most part been transformed into a clean, safe, challenging work environment. There are many promising STEM programs in high schools such as Project Lead the Way and Computer Integrated Manufacturing that will help students find their way into engineering-related fields. The Society of Manufacturing Engineers' Education Foundation (SME-EF) is leading the

Regardless of your motivation—for your kid's and grandkid's future, the safety and security of your country or just in it for the money—manufacturing is the key to success for all."

My family also played a role in forming C.H.A.M.P.I.O.N.-NOW. We have been in manufacturing since 1925 and we are currently a fourth-generation operation. Along the way we have supported many families by providing middle-class jobs. We are concerned, however, about the future of our industry. There is a crisis in this country due to the lack of a technically skilled workforce. Even with unemployment figures hovering close to double digits, this country still has 600,000 unfilled skilled positions in manufacturing. On top of this skills gap is the fact that the average age of our workers is 50+ and at some point that tribal knowledge is going to walk out the door.

charge with its Partner Response in Manufacturing Education (PRIME) Schools around the country. PRIME schools have strong technical curriculum in place and industry partners willing to advise and mentor students as they proceed through their training.

The SME-EF provides funding and resources to help schools take their programs to the next level. There is not a finer example of something that works and is desperately needed as the *Francis Tuttle Technology Center* in Oklahoma City, OK, a PRIME school. I recently had the privilege to not only meet the administrators of the Center, but also half a



Oklahoma City's Francis Tuttle Technology Center is a PRIME school that offers, among other choices, Manufacturing and STEM career pathways.

dozen of its exemplary students. The program provides long-term, progress-based instruction for students seeking career or technical training. The Center educates both high school and adult students in one location, with the high schools students taking class part-time (tuition free.) Programs are broken out by career pathways, and the two most relevant to our industry are Manufacturing and STEM. Manufacturing includes instruction on Advanced Manufacturing, Precision Machining/CNC and Welding technologies. Students are self-motivated to succeed. One student has already started his own business consulting on the implementation of RFID technology. The STEM career paths include a Biosciences & Medicine Academy and a Pre-Engineering Academy.

Unfortunately these programs alone are not enough. Schools can provide a technical environment with labs and hands-on training in machine shops, but if we don't encourage young people to enroll, these programs and schools will close due to low enrollment. It is proven that kids are primarily influenced by parents and teachers—the very same folks who have an outdated image of manufacturing. Less influential but still another source of career information for students are career counselors—who are even less knowledgeable about our industry. Career counselors used to be a resource for students

as students considered future schooling and/or employment options. But with their ever increasing workloads dealing with changing requirements and paperwork, increasing numbers of students, behavioral and socioeconomic issues and numerous other roadblocks, counselors can't provide much support. Add to that their limited concept of what a manufacturing career can offer and it's no wonder fewer kids are coming our way.

Many years ago I stated to friends and coworkers that this country needed a TV program to change the misperceptions of today's manufacturing in this country. "How It's Made" is a great program, but only addresses those of us already in the manufacturing sector. It isn't something that would inspire a young person to enter our field. The industry has moved toward high-technology automated processes implemented in a safe, clean environment that have driven the US to be the most productive, efficient economy in the world. These processes require highly skilled people to implement, program, manage and innovate going forward. These are the careers that are screaming for applicants, these are the positions we need to fill.

A little over a year ago I met Jeremy Bout, owner and producer of *Edge Factor* (www.edgefactor.com). We share the vision for improving the image of manufacturing but he

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has the talent and dedication to produce videos that show the sizzle and dramatic flair of these careers. When I met Jeremy he was fighting to gain the financial momentum necessary to continue his dream to make a difference that is desperately needed then and is needed even more so now. We agreed to combine some resources to work together and then added the SME Education Foundation to the team shortly after. We started down the road to collectively make a difference in changing the perception of manufacturing in this country. Here is my challenge: We need to stop talking. We need to start acting. We need to lead, follow, or get out of the way. We need to act in a way that will set this country up for success. We need to act so that the next generation and those that follow can succeed in professions that offer good-paying, challenging careers. We cannot continue to allow our children to go to college and come out debt-ridden and unable to find a

Iverson & Co. (Des Plaines, IL). Each attendee was interested in and supportive of the priorities outlined in this article. We have started the process of getting people behind this cause. Organizations in attendance included the Society of Manufacturing Engineers, Manufacturing Engineering Media, Gardner Publications, Sandvik Coromant, the Association of Manufacturing Excellence, The Manufacturing Institute, the Reshoring Initiative, the Tooling & Manufacturing Association, the Chicago Manufacturing Renaissance Council, the Fabricators & Manufacturers Association, the Foundry Educational Foundation, the Cast Metals Institute, Sound Quest Productions, the Automation Federation, the National Center for Manufacturing Education, *Edge Factor* and C.H.A.M.P.I.O.N.-NOW.

Our collective mission is to conduct a C.H.A.M.P.I.O.N.-NOW National Manufacturing Day that would impact the entire country. *Edge Factor* would provide the inspirational video



Edge Factor's Jeremy Bout makes his case at the Alliance meeting at Iverson & Co.

job. If we don't act now then we need to stop complaining and accept the fact that our industry will not lead this country out of the national debt crisis and the economic uncertainty.

Making things can do this, however not without our generation doing what is required to bring in the next talented, inspired, and passionate generation. We need to allow them to follow *professional* opportunities. These are not vocational careers. They are professional manufacturing careers that are also full of entrepreneurial opportunities. In Europe these skilled people are viewed and respected as the most esteemed professional craftsmen. Why aren't we sending the same message?

On May 2 SME-EF initiated a C.H.A.M.P.I.O.N.-NOW Alliance meeting of industry leaders. It was hosted by my family at

to see for themselves the world-class operations that we know are the backbone of manufacturing. This would allow us as industry leaders to begin changing and improving perceptions in the minds of the general public.

So HOW do you act? How do you make a difference? You Lead—lead by financially supporting both the C.H.A.M.P.I.O.N.-NOW and *Edge Factor* projects. Go to either website; go to the SME Education Foundation and make donations so that these good, needed actions continue. You can FOLLOW—by engaging with our alliance.

Or you can get out of the way, and allow those of us inspired by our fathers to do our best and make a difference for our country and our youth of tomorrow.

Let's ALL be a C.H.A.M.P.I.O.N.—NOW! **ME**

highlighting what today's manufacturing technologies look like and why they are relevant to everyday life. Plant tours and open houses could be held around the country—allowing the public inside