

Quality Float Works, Inc.

Testimony

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Quality Float Works, Inc.**

Before the

**Commerce, Manufacturing and Trade Subcommittee
of the Energy and Commerce Committee**

***on* “Our Nation of Builders: Training the Builders of the Future”**

November 15, 2013

COMMENTS OF QUALITY FLOAT WORKS, INC.

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OF THE ENERGY AND COMMERCE COMMITTEE

NOVEMBER 15, 2013

Chairman Terry, Ranking Member Schakowsky and distinguished members of the committee, thank you for the opportunity to appear today to testify on behalf of Quality Float Works, Inc., at this hearing on “Our Nation of Builders: Training the Builders of the Future.”

My name is Sandra Westlund-Deenihan, and I am the CEO and design engineer of Quality Float Works, Inc., located in suburban Chicago.

In 1915, my grandfather started a manufacturing company out of his home on the southwest side of Chicago. A metal spinner by trade, he used his expertise to make hollow metal float balls used to level liquid controls. Today, more than 98 years later, our company has become the premier manufacturer of floats and assemblies used in gas, oil, plumbing and agricultural applications across the globe. Quality Float Works, Inc., remains a third-and fourth-generation family-owned and operated business—I run the company with my son, Jason Speer.

In 2003, through entrepreneurial diversification efforts, Quality Float Works, Inc., made a historic shift by diversifying its product line with the launch of our Quality Float Valve Division. Float valve assemblies are mainly used to purify and desalinate water, among other applications, in developing nations. The company currently exports products to locations including Australia, Belgium, Canada, China, Germany, Indonesia, Ireland, Kuwait, Mexico, Nigeria, Oman, Kingdom of Saudi Arabia, Singapore, Vietnam and several locations throughout the United Kingdom and Latin America.

In 2011, Quality Float Middle East, our first international distribution center, launched in Dubai, UAE (United Arab Emirates) and we are looking to the Gulf Cooperation Council (Middle East, Gulf Countries) to fuel future growth while also exploring business in Panama, Chile and Africa. In fact, in 2013, the U.S. Small Business Association honored us with the Illinois Small Business Exporter of the Year award. We have weathered the recent economic storm by expanding our reach abroad and entering untapped markets that can benefit from U.S. products.

I am happy to report that due to our efforts to diversify and expand globally, Quality Float Works is thriving. Overall sales have increased roughly 200 percent over the past decade with international sales skyrocketing from 3 percent to 37 percent of total receipts.

Quality isn't just in our name, but it's also in our products. Our floats are engineered to the most exacting standards and built with the know-how of skilled craftsmen. Moreover, we custom-design many floats and have built a best-in-class reputation among customers and the industry. To maintain this level of quality, we need a workforce with the skills and knowledge to understand precision instrumentation and production.

The skills gap is an ever-present issue for my company. With approximately 25 employees at our Chicago facility, every open position represents a significant challenge to production and hinders potential growth opportunities. At one point last year, I had three machinist job openings available for more than 10 months. Some quick math will tell you this translates to more than 10 percent of my workforce. Not having the talent I need available results in consequences to the business. Quality Float Works has enough business right now to merit hiring a second shift, but I am unable to find enough people with the basic skills necessary to manufacture a quality product.

Our customers demand and expect precision manufacturing, and precision manufacturing requires a basic knowledge of science, technology, engineering and mathematics (STEM) competencies—even for entry-level line workers. For example, some of our products are used in oil and gas separators. The floats are used in a trunion, which separates the oil from water. The float sits in the middle of the structure, so if it malfunctions, replacement takes many hours, which equates to downtime and other potential liabilities for our company. This impacts everyone's bottom line. One of the challenges I face as an employer is recruiting a workforce with basic STEM competencies. It always amazes me how many times I've had to teach a member of my team how to use a ruler, utilize fractions and decimals – or even how to tell time on a non-digital clock.

We also see a significant skills gap in the areas of welding and machining. I cannot simply hire someone who knows how to weld. I need someone who understands the science of welding—the temperature of the heat, cleanliness of the metal, speed, correct electrodes and the proper gas can all affect the outcome of the weld. A condition called porosity could exist if the welder does not fine-tune the right combinations of the elements for the job. The consequences yield corrosion, allowing leaks to occur in the float. This again is a liability issue involving damage to equipment, liquids spilled and potential personnel involvement. Some of our floats are used on aircraft carriers and ships to keep water off the decks of the carrier. If the float malfunctions, water on the deck of a carrier could put the life of a pilot at risk. To ensure my team is best equipped to prevent these production hazards, I need them armed with a deep level of knowledge, such as an American Welding Society Credential, a manufacturing industry-recognized credential that provides a consistent profile for the skills of a potential employee. Credentialing ensures – the science is there; the knowledge is there. Credentialed employees provide an immediate benefit the moment they join my team.

That is why I support the America Works Act, which prioritizes industry-recognized credentials such as WIA, TAA and Perkins.

It would be easy for me, as the CEO of a company, to complain about the quality of applicants, blame the education system and put the onus on someone else to fix it, but I know that's not going to change anything. We need to find solutions that get results—both short and long term.

Through all of the work I have done at both the state and national levels, I have realized we are often leaving talent “on the table” and walking away from potential workers by making judgments about students too early in the educational pipeline. I believe mentoring is essential to success. One of my best employees was someone I met through a school-to-work program we're involved with through a relationship we've developed with a local high school. His parents had given up on him. He had been fired for not showing up at his last job and was fast approaching the same fate in the fast-food position he was trying to maintain. I asked one question: “Does he like to work with his hands?” He did, so we brought him onboard through the work-study program and nurtured his learning process. He graduated from high school in 2009, earning several A's his senior year. He has a career path, earned an apprenticeship and received his certification in MIG and TIG welding—continuing his work for Quality Float Works as a certified welder. Nontraditional learners are often ideal candidates for the types of jobs we need to fill, and I believe it takes the involvement of business leaders, and a partnership with our educational system, to recognize and take advantage of those opportunities when they arise.

When it comes to STEM-related careers, women may be, perhaps, our most underutilized resource. In the past 20 years, the rate of women in engineering has increased only 3 percentage points, still putting us below 20 percent of total graduates in the field. We are leaving half of the nation's intellectual capital untapped. This is unacceptable, especially when you consider that the United States is trailing the world on producing scientists and engineers.

As Chair of the Illinois State Board of Education's Gender Equity Advisory Committee and board member of the National Alliance for Partnerships in Equity Education Foundation (NAPE-EF), I have supported and advocated for a public/private partnership to increase underrepresented populations in advanced secondary STEM classes. For the past three years, I have worked with NAPE-EF in collaboration with my local school district to secure funding through a grant program sponsored by Motorola Solutions Foundation's Innovation Generation program. Our public/private partnership was awarded \$50,000 to fund the STEM Equity Pipeline – a program to engage administrators, counselors and faculty from five area high schools in intensive professional development to increase access, success and post-secondary transition of girls and other underrepresented groups in STEM. We have had great success in our first few years—results show a significant increase in advanced placement (AP) STEM testing and an increase of females enrolling in AP chemistry and math. Technical education enrollment also rose heading into this last school year as well as overall interest in nontraditional STEM-related careers after graduation. As a female engineer,

it is a passion of mine to be a role model for our young women—our next generation of engineers and manufacturers.

For all these reasons, I am thrilled to be serving on the newly created National Association of Manufacturers (NAM) Board of Directors–level Task Force on Competitiveness & the Workforce. Announced in October and chaired by General Electric, the task force is taking a serious look at the impact of workforce problems, skills gaps and STEM education programs across the country. I believe we all need to be operating from the same playbook in order to change the situation, and I am proud my association, the NAM, is committed to success in this area.

Conclusion

The skills gap is real and poses a serious economic threat to American competitiveness. The bottom line is that if we as employers can't find quality applicants for jobs, it impacts our business and our profitability—something businesses are very concerned about. But please understand, this is not just about educating students to fill our positions. It's also about making sure our children have the opportunity and the tools to get a quality education, find a good, high-paying job and have the ability to achieve their dreams. Unless we and industry leaders engage ourselves personally in the solution, nothing is going to change. We need to partner with our schools and tell them what we need to create a system that meets the immediate needs of employers today; adequately train and prepare the workforce of the next five to ten years; establish a solid educational foundation for our children; and mentor young people on the benefits of manufacturing and STEM-related careers.

Modern manufacturing is no longer a dirty job, but as leaders in the industry, I believe we need to get our hands dirty to fix the skills gap problem. Industry-recognized credentials and mentoring—business leaders getting engaged with educators—have worked for me in Illinois. By definition, Quality Float Works, Inc. is a small business, but we are determined to make a large impact by changing our education and skills pipelines to create more opportunities for the next generation of the United States workforce.