

FIXING THE FIXER PROBLEM: STEMMING THE LOSS

By Preston Ingalls

The United States has been experiencing a severe shortage of skilled workers for some time. Nearly one-third of all Americans—76 million people—were born between 1946 and 1964. These Baby Boomers are retiring in record numbers over the next 5 years. We are currently only able to provide five to six replacements for every ten skilled workers we lose to retirement.

Let's focus on the shortage of mechanics and skilled tradespeople. Manpower, Inc., one of the largest placement firms in the world, gave its projected "Top 10 Hardest Jobs to Fill," as reported by U.S. employers for 2008, as the following:

1. Engineers
2. Machinists and Machine Operators
3. Skilled Trades
4. Technicians
5. Sales Representatives
6. Accounting and Finance Staff
7. Mechanics
8. Laborers
9. IT Staff
10. Production Operators

Also, according to the 2008–2009 Bureau of Labor Statistics, there is a projected growth of 7 to 12 percent between 2006 and 2016 for heavy equipment mechanics in the construction and heavy civil industry. This means a serious shortfall in this field.

No doubt, Baby Boomers have been the best trained and educated generation in our country's history. Despite the pending losses through retirement, we have not been preparing our students appropriately. According to the National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education, there has been a sharp decline in students taking industrial arts classes, which feature fabrication of objects in wood and/or metal using a variety of hand, power, and machine tools. Many also cover topics like small engine repair, automobile maintenance, and technical drawings. According to the National Center for Educational Statistics, between 1982 and 1998, students taking vocational classes dropped from 14.1 to 3.9 percent, while students taking technology classes increased dramatically. The rationale is, of course, that we are moving away from manufacturing and toward service and information. However, the flaw is that we are not enticing enough kids to assume blue-collar jobs, such as being a mechanic, welder, or machinist.

Immigrants—legal and illegal—already constitute almost half of the workers in Los Angeles County and are expected to account for nearly all of the growth in the nation's working-age population by 2025 because native-born Americans are having fewer children.

But a new study by the Washington-based Migration Policy Institute, based largely on U.S. Census data, noted that 60 percent of the immigrant workers struggle with English and one-third lack high school diplomas.

Joel Leonard is a contributing editor to *Plant Services Magazine* and has spoken to numerous government officials and industry leaders in the United States, Canada, and Europe about the maintenance crisis. He recently created the MPACT Skilled Maintenance/Facilities JobFair, placing more than 1,100 people in the maintenance sector. He says, "Many complain that our society's view of the maintenance of yesterday hasn't caught up with the realities of today, and as a result, business growth is stalled. The biggest issue in the maintenance world is the marketing of maintenance. We have to educate our society about the true purpose and function of maintenance."

Leonard points out that if we don't address the shortage of skilled personnel, it's going to affect the overall economy. Our ability, as a nation, to produce will stall without the skilled personnel.

Another major advocate of taking immediate action is Bob Williamson, contributing editor to *Maintenance Technology* magazine. In the August 2008 issue of *Maintenance Technology*, Williamson points out that an overemphasis by educators and parents on a college degree, as well as the move back of manufacturing from Mexico and China due to disappointments in productivity and quality, is driving the demand up for skilled tradespeople. Williamson says, "Today, we have conditions in place—and intensifying—that are beginning to damage capital-intensive businesses, our infrastructure (power, utilities, and pipelines), and construction projects." We will be unable to repair them.

Our computers have rightly taken over many of the mechanical tasks we performed in the past, but the downside is that we are not breeding a generation that will maintain our equipment. We are currently feeling the pain. Recruiting capable mechanics, welders, and other skilled tradespeople is becoming more difficult, and we are seeing exceptional turnover in these fields because they know they can easily find employment elsewhere.

TURNING THE TIDE

So what can be done to address the problem? Here are some ways to stem the loss:

- **Show the relationship of the use of technology to today's mechanic.** Most Millennials are probably not aware of the use of computers in today's maintenance and service professions.
- **Try attracting women.** Women now make up 48 percent of the workforce and make an excellent recruitment area.

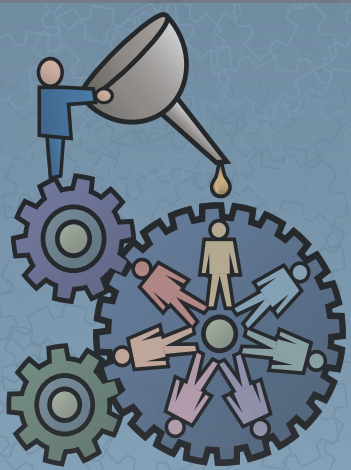
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- **Develop high-quality recruitment campaigns in high schools showing the projected shortage and the wage ranges of these positions.** Many may be swayed to change their original career choices when they see the attractiveness of job and financial security offered without the requirement for an expensive 4-year degree.
- **Offer training and education to attract Hispanics, who make up a fast-growing segment of the population and can provide an excellent recruitment pool.** This would require Spanish recruitment materials.
- **Establish apprenticeship programs.** Apprenticeship programs provide a structured “grow-your-own” method to acquire talent. All states provide assistance in establishing apprenticeship programs.
- **Increase awareness through article writing to help build support.** We need to get out of the box and explore alternatives, but this means increased visibility.
- **Resist the constant tendency to cut vocational programs in schools.** It is already difficult to attract teachers who can and are willing to teach vocational classes, but it will be even more difficult when they see a moving target on their backs at every budget review.
- **Increase the use of operator-performed maintenance using programs like Total Process Reliability (TPR) or Total Productive Maintenance (TPM).** Operators can be trained to perform many of the traditional maintenance tasks and can relieve some pressure on fewer mechanics or technicians.

Here are some additional steps that can help companies keep the employees they have:

- **Take a look at the company’s hiring practices.** How well are the best matches for a job identified?
- **Make sure to pay in the top 10 percent to retain employees.** Conduct frequent comp studies of the area to ensure the company is paying well.
- **Keep ’em happy.** Use the Gallop Poll’s Q12 questions to find out if folks at the company are happy in their jobs. Be proactive. Administer a survey at least once a year to uncover any potential issues that could lead to dissatisfaction.
- **Examine the company’s benefits.** Are they competitive or just fair? Benefits have a financial value. Has management shared that value with employees?
- **Make sure employees are clear on the vision of the company.** Do they understand their roles and responsibilities? If not, why not?
- **Provide a robust training program.** Ensuring that the company spends at least 6 percent of payroll on training will help close the gap with employees’ competencies, and will ensure that the company has qualified employees. People want to know their managers care about their development and growth.
- **Ensure that the rewards are appropriate for the job.** Stop rewarding for wrong behavior (overtime for breakdowns); reward the right behavior (goal attainment, increased uptime, pay for skills, etc.).
- **Meet with employees.** Ask how they are doing. What issues are they facing? Management should show they care, as it can make a real difference in how employees perceive the job. ♦



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