

ADDRESSING THE MANUFACTURING SKILLED WORKER SHORTAGE

Q&A With Pete Rice

According to the Manufacturing Institute, retaining a skilled workforce was among the top challenges for employers in the manufacturing sector even before the pandemic, which exacerbated the situation. Pete Rice, CSP, CIH, REHS, a subject-matter expert with ClickSafety, explains the role of safety training in helping employers close the gap.

PSJ: Talk about the types of safety training typically needed in the manufacturing sector and how the different training modes are used.

Pete: Regardless of the industry, there are some basic training requirements that all employers in the nation must comply with. Also, there are several states and U.S. territories that have training requirements beyond what federal OSHA might have. For example, some of the fundamental training that employees must have and employers must provide has to do with their overall injury and illness prevention programs, also known as IIPP or I2P2. For instance, when you go to work, there is a requirement that you be familiarized with the employer's safety and health program. That program might include information surrounding the person responsible for the safety and health training, what training may be required, how to report safety and health incidents and potential hazards, an employer's process for completing inspections, if an incident occurs, or what is done for an investigation. All of those are elements of an overall injury and illness prevention program.

Additionally, all employees must be familiarized with emergency actions, such as what must be done in the event of an emergency, whether a fire, power failure, workplace violence event or chemical spill. Employees must know what to do in the event of an emergency. Workers who handle chemicals need to be familiarized with safety data sheets and labeling requirements. Also fundamental, employees need to be trained on what PPE (e.g., head, eye, ear, hand, foot protection) is required for the job, when to wear it, the manufacturer's instructions and similar. For example, employees need to be trained on when to wear fall protection as well as what type is necessary, and why it may be necessary on certain walking-working surfaces, such as elevated floors, steps, stairways and

ladders. For all employees, no matter what industry they are in, those are some basic training requirements that manufacturing employers must provide.

Beyond that are the specific and unique safety issues that employees must be trained on related to their job. Suppose they are exposed to high levels of noise or heat, or they might be exposed to lead or asbestos. They would need training specifically on those hazards

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unique to their job. In manufacturing, if people are going to be working on or around forklifts, they should be familiarized with the hazards and safe work practices when working near them, similar to working with power processes or in confined spaces. In today's world, you see a lot of robotics. Workers must be trained about how to work on or near robots. So there are many situations that a manufacturing employer needs to train workers for.

As for how the different modes of training may be used, in general, training has historically been presented in the classroom. My first job out of school was in manufacturing and heavy manufacturing, and training was principally conducted in a classroom followed by on-the-job training on the shop floor with the supervisor or lead—a qualified person who guides the worker through hands-on training. But in the past 20 years or so, we've seen the advent of online training. In 1999, ClickSafety, for example, was one of the first to introduce online training, and we started putting together training packages and programs. Through the years and for several different reasons, the popularity of online training has exploded. In today's world, classroom training and hands-on training are often used blended with online training tools.

PSJ: What factors have led to the current shortage of skilled workers in the manufacturing sector?

Pete: There are several reasons for the current shortage and researchers are finding more and more

Pete Rice

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reasons. Much of it is that baby boomers are aging out and leaving the workplace. And COVID-19 did not help because many of those baby boomers who had continued to work went home and decided not to go back to the workplace. Because of demographics, there are fewer younger workers to meet the need, and fewer younger workers are pursuing careers in manufacturing and other skilled trades, especially in construction.

So, we have fewer workers, we have baby boomers leaving and, of course, the pandemic resulted in many motivated employees taking advantage of their time to stay at home by retraining into other careers using those online training methods we referred to. So, many left the manufacturing world in pursuit of other careers. Also, we are seeing employers in bidding wars for talented and experienced workers, so there is a lot of movement within manufacturing and other industries. And some of those skilled workers in manufacturing might be moving from one manufacturing career to another for higher pay and better perceived benefits. There is a lot of competition for quality workers that is leaving a shortage. Another factor that has led to the current shortage is the low unemployment rate, which has led to a smaller pool of skilled applicants.

PSJ: As companies struggle to fill labor gaps, what accompanying challenges can impact safety?

Pete: Fewer skilled and competent workers means fewer eyes and ears to spot safety concerns than might otherwise be found and corrected by a skilled, experienced, qualified and competent person. For example, a new employee is not going to be familiar with the workplace as an experienced person would, and that is a safety concern. And it is not just the employee, but also the supervisors and the leads. If there is a labor shortage, the more experienced worker often will not be on the floor in a manufacturing environment and therefore will not be able to spot potential hazards or work with employees individually to ensure safe work.

In cases where inexperienced workers are hurried into a position that has safety risks, this may create an incident-rich environment, which means that an inexperienced worker or manager working to get product out the door may expose others to greater safety risks. Inexperienced workers are less likely to notice safety hazards and understand and follow safety practices. So, despite having rules and requirements for employees, an inexperienced worker may not understand or know what those rules and practices are, so they're less likely to adopt them and implement them.

Fewer skilled workers also means longer hours: Employees will be on the floor longer, and there will be more overtime, which leads to fatigue. We can all identify with working long hours and getting tired. We get inattentive. We get burned out. We just want the day to be over and we can lose focus. This all has negative impacts on safety and the overall wellness of the employee and the whole organization. And

when I say wellness, I mean employees' health, both physical and mental.

Many employers are using temporary agencies to staff their teams, and those temporary employees are not familiar with the organization's safety program. Without experienced leadership and strong supervision, the risk will be greater. Often, temporary employees do not have the observation skills and training that a traditional full-time employee would otherwise have. So that creates a safety concern.

Employers are pressured to get products out the door, and that leads to unsafe behaviors such as cutting corners, taking shortcuts, multitasking and rushing. We have known for decades that these factors or triggers create hazards leading to injury and illness. It is an insidious cycle; we want to be as efficient as possible, but we must be cautious of these factors that can create unsafe or unhealthy conditions and behaviors.

PSJ: What can manufacturers do differently with training programs to get new hires up to speed quickly without shortcutting safety?

Pete: I think of new technologies that are being developed in the manufacturing sector as well as all industries to improve performance and productivity. Some of these technologies are really innovative and they are also available to train new workers more rapidly and effectively. One of these new technologies is online learning solutions. They're significantly on the rise and they are increasing for a reason: Employers are seeing the value in online and virtual training. You can have many people in a virtual classroom, which certainly has value. Manufacturers that have multiple operations in different locations may have multiple trainers if they are doing classroom-led type training. But in that case, one concern is the message to the employee may not be uniform from one site to another. With online learning, there is an opportunity to present a uniform message. Whether that person is in Cleveland, Chicago or Los Angeles, the message is uniform and clear, which is important when working at a corporation that has multiple offices or different manufacturing plants. A uniform message helps everyone work from the same playbook.

Employers have the option of developing custom content as well. Online learning can be generic, but many employers have chosen to take that generic message and customize it to their particular location or their particular type of manufacturing. For example, we worked with a number of employers in the San Francisco Bay area where each facility has unique manufacturing needs and unique safety needs. They chose to develop custom content for that particular location and those particular hazards. That is pretty innovative.

A big benefit of online training for safety professionals is that when we bring a new person on board, on day one we can set that person up with online training, and the new employee can immediately start to get the safety message with the expectations

that the employer has. They do not need to wait for a class to begin. They do not have to wait for an instructor to arrive or a group to develop. On day one, they can immediately be assigned and start to take that online training to get the message. That is important because as soon as you get that person trained, you can put them out onto the manufacturing floor with a supervisor who will go over those unique hands-on types of practices that the employee needs to learn.

One thing I would like to make clear is that a lot of employers do have training plans, and it really is a strategy, and it should be documented and targeted at their objectives and the type of work they do. The training plan provides a playbook for whoever is responsible—human resources, the safety department—to follow before that person works on the factory floor. And once on the floor, that employee will be observed and mentored about whatever the safety requirements might be for them to be successful.

PSJ: Many companies tap alternative talent pools such as people with special needs, retirees and second-chance workers. What training challenges in these cases should safety managers consider?

Pete: There's not an easy answer. OSHA does not discriminate relative to the talent pool. Whether that is a temporary worker or a worker with special needs or retiree coming back or a second-chance worker, they are nearly all protected under the OSH Act and employers are responsible for providing a safe and healthful workplace for all workers independent of whatever talent pool they come from. OSHA believes that training is the employer's responsibility, and it is an essential part of a safety and health program to protect workers. But OSHA expects employers to provide that training and information in a method and a manner that the employee is going to understand. For example, with a person with special needs, the employer is going to be challenged to come up with tools, mechanisms and procedures to ensure that the employee will be able to recognize safety hazards, as well as understand what is needed for the employee to be safe (e.g., follow safe work practices). Or for a worker who speaks English as a second language or who may not understand English at all, that person may be trained in their primary language to understand the hazards and safe work practices.

PSJ: What trends are you seeing in strategies manufacturers are using to retain talent, and how might safety training play a role?

Pete: The human resources organization Robert Half Talent Solutions has identified why people are leaving, which plays into how safety training could play a role. Salary is one of the biggest reasons. But often employees today are feeling overworked and they might feel unsupported. They might experience limited opportunities for career development, and fewer opportunities when production is prioritized over employees. A need for better work-life

balance, concerns about the company's direction of financial health, dissatisfaction with the company culture—there are a number of reasons that employees are leaving.

Most of our opinions and judgments are created within the first day of employment. Retention strategies begin on day one, so that day is critical. If you can incorporate safety and safety training on day one, it can go a long way to promote not only safety, but also communicate that the employer sincerely cares about the employee's success.

There are many benefits of building a culture of safety by holding yourself and coworkers accountable, especially early. Often, when a new employee comes in, their brains are like a sponge. They are a little bit nervous about this new job. If you can make safety one of those most important elements on day one, it's going to impact more than just accountability. The employee might think, "Hey, this employer really takes this stuff seriously." So, it's setting the expectation that "People are looking out for me. This company is serious. They're looking out for me and it's my responsibility to look out for others and my responsibility for safety at this facility." Onboarding and orientation on the first day are super important.

Safety training promotes not only workplace safety and health, but if packaged and presented correctly, it also is going to promote compliance with the rules. It's going to promote career development and professional growth. In today's world, employees can pursue certifications via online and virtual methods. Employees feel good about these certifications, for one thing, but also it certainly promotes their career development. When they have an OSHA 10 and an OSHA 30 certification, that helps the employer and the employee. Workers can complete certification workshops online. I have seen it referred to as an "upskill." When workers have safety upskills, they are really gaining competencies that benefit them and their organizations in the long term. And if a person feels good about an employer, they will generally think twice before moving on to the next company.

PSJ: Anything else to add?

Pete: There are several different methods for safety training. A blended method seems to work well for a lot of manufacturers as well as employers in other industries, and that is a blend of online, classroom and hands-on, as well as on-the-job training with a supervisor or lead. But if it is done effectively, it will minimize incidents, promote compliance and save costs. It will minimize the risk for legal issues. It promotes a relationship with clients, the public and the community. But really, what is important is that it promotes a culture of caring and goodwill between the employee and the employer, and it is hard to put a dollar value on that. If an employee feels good about an employer and recognizes that this employer cares about their safety success 24/7, that is huge. **PSJ**



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