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Safety first





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## Create A Safe Environment Health & Safety

If you want your safety program to go beyond mere existence — and into effectiveness — there are a few key rules to follow.

By Jon Minnick, Associate Editor, Manufacturing Business Technology

here are several reasons why safety is an important component in manufacturing. Not only are there direct costs tied to accidents, but indirect costs caused by reduced production, employee morale, and machine downtime. Today's machinery is producing more goods at higher speeds, thus increasing the likelihood of an accident occurring. By identifying hidden dangers, performing regular risk assessments to update standards, and involving company leadership with safety initiatives, manufacturers can go a long way toward improving safety in the workplace.

"Extensive safety programs came about when companies saw incidents occurring that kept workers from doing their job, in turn costing the company more money than just the price of insurance," explains Sean Daswani, senior electrical engineer, Polytron, a global systems integration firm located in Duluth, Ga. "As systems evolve with faster machines, basic systems for safety, like hitting a button to stop the machine, would no

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longer do. Companies needed more integration into a controlled safety system that will protect individuals in these advanced environments."

In the most recent statistics from the U.S. Department of Labor, there were approximately 455,600 injuries and 47,100 illnesses reported in private sector U.S. manufacturing in 2011. Add those figures to the 4,609 deaths reported and it paints a picture of how important workplace safety can be.

"It's just another one of those business risks that you have to manage," says Gene Niewoehner, director of environmental health and safety, MAVER-ICK, a global resource company based in Columbia, III. that devises strategies for companies to enhance productivity through industrial automation and information technologies. "When someone gets hurt, your costs go up. Companies have the legal responsibility to protect employees and, on the corporate side, protect shareholders."

Although manufacturing incidents have been trending downward, there are still too many. Workplace safety is a responsible approach to doing business and reflects on a company's bottom line. Creating a robust safety program doesn't have to be cumbersome, if you know where to look.

### **Hidden Dangers**

The dangers of working in a manufacturing environment aren't always visible or immediate. Injuries may be occurring over long periods of time. For instance, recent lawsuits for Bronchiolitis obliterans, or "Popcorn Lung," have been awarding millions to factory workers who developed the disorder after prolonged exposure to diacetyl fumes from the production of bags of microwave popcorn. The hidden dangers in facilities don't end there.

"Noise hazards are often forgotten about," says Gary Gokey, CSP, Safety Management Group, a full-service workplace safety solutions provider based in Indianapolis, Ind. "I discuss it in my training classes as a hidden safety concern. Hearing injuries aren't as immediate as someone falling off a ladder or cutting their finger. Because the injury isn't as visible, there's not a lot of attention put on hearing injuries that can cause hearing loss over time."

Ergonomics is another forgotten field of concern in manufacturing. Repetitive motions can lead to sprains, carpal tunnel syndrome, or back strains, slowing down production for a company.

"There's a lack of a national standard around ergonomics so companies don't focus on it as much," explains John McDermott, senior safety manager, Grainger, a broadline distributor of industrial supplies. "Identifying and limiting repetitive motions or using anti-fatigue mats at workstations can make a lot of difference."

A great way to bring some of these hidden dangers to light is through risk assessments. They should be triggered every time a new machine is brought in to prevent the machine from being a liability. These assessments should be done in regular intervals to ensure that current safety standards are still effective.

"It's a good idea for companies to reassess their older machines to make sure that they're up to standards and meet the OSHA requirements of today," adds Daswani. "We've seen reassessments on older machines lacking in facilities, but it's starting to gain attention and momentum in manufacturing."

#### **Effective Safety Programs**

The foremost goal for an effective safety program is making sure employees go home as safe as they came to work. For an effective safety program to exist, there are a few key elements that are needed, including the following:

 Regular risk assessments — These assessments should be done every time a new machine is introduced, a new line is set up, and on a periodic schedule to ensure that older machines are still safe.

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- Safety team Individuals should come from different areas of a company to conduct assessments/audits, address concerns, update procedures, implement protective equipment, and facilitate regular training. Also, if employees feel that they can turn to peers to question safety protocols, they're more likely to do so.
- Standards Company-specific standards should be written in easy-tounderstand language and include OSHA requirements.
- Leadership Company leadership should stress safety's importance. A
  company with a safety culture has fewer incidents of employees circumventing procedures or taking more risks. "Employees will mimic their bosses
  and follow the lead," says Niewoehner. "When you have leaders that aren't
  responsive to the needs of the people or listening to their concerns, employees start to take shortcuts, which means that eventually people are going to
  get hurt."

### Continuous Improvement

Fortune 500 companies like DuPont and Johnson & Johnson are very proactive with safety programs because they know the benefits of having one. In working with companies on safety initiatives, Polytron has found that adding safety equipment can increase a machine's cost 10 to 15 percent, but, in turn, yields a number of benefits for those companies. It boosts morale and productivity, as well as lowers insurance costs and workers compensation claims.

"Companies need to realize that the extra costs involved with safety programs can save them money in the long run," adds Daswani. "The price of injuries can create a number of losses that just have to be tacked onto a company's costs in the end."

Every facility is going to have different risks associated with its operations. Being proactive with safety can be as simple as putting together a risk plan, making people aware, and establishing the necessary safety systems. It's also good policy to insist

that all vendors or contractors doing business onsite follow the appropriate company policies.

"You need to have good policies, procedures, and training programs," says Niewoehner. "Polices need to be simple and clear. My experience has shown me that nobody is going to read a 23-page procedure manual. You have to get policy down to a two- or three-page format. You can reinforce those procedures with the larger manual when you get into a situation."

### Implementing Safety

Manufacturers should know that they're not alone in the task of creating a robust safety program in their facilities. They shouldn't be afraid to ask for help and understand that there is a lot of information and many resources available to companies.

"We've seen that through the recent economic conditions that the country has gone through, safety has taken a hard hit," explains McDermott. "A lot of safety professionals have been cut, or the role has been consolidated into another part of the business. Often businesses find themselves at a loss on where to begin. "

Various online resources or service partnerships, with companies like Grainger or Safety Management Group, can certainly help manufacturers identify different types of programs and be helpful for a company. These resources can help organize information and structure the conversation on safety.

Clearly, when companies invest in proper safety with a comprehensive program, they'll see the benefits of that investment later on. The end result is that safety compliance and reporting initiatives become more transparent. They become more impactful and, in essence, safety becomes a principle that is embedded in that business.

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