Worker Safety: John Deere Proves It's Possible

by Billie Swift

Online only:
The pdf version of the ICSAS's *Industry Guidance on Health and Safety at Work*.
John Deere's environmental practices.

In 1975, Deere & Company declared workplace injuries to be inherently preventable events for which management is responsible. This recognition—looking at workplace injuries as controllable events, or, more important, as events that should be controlled, rather than as inevitable facets of the job—sent Deere on a path to becoming a leader in the pursuit of worker safety.

The company took conscious and active control over—and responsibility for—the health and safety of its employees. The result? A work environment where employees are forty-five times safer while at work than they are after they leave the factory floor.

The First Step: Stop Talking about Safety and Start Managing It
Deere & Company, based in Moline, Illinois, is a leading producer of agricultural, construction, forestry, lawn and turf care equipment. Two of its executives, Ralph Grotelueschen, director of safety standards and environment, and Gary Kopps, manager of occupational safety, lead the company's present- day worker safety program.

When talking with the two of them about their program, their enthusiasm becomes contagious. Listening to them discuss the features and effectiveness of Deere's program is enlivening, to say the least.

When Deere began developing a worker safety solution back in 1975, it first had to define the terms of its problem. To do this, it followed a logical line of reasoning: workplace injuries are accidents; accidents are preventable events; management must take responsibility for preventing accidents.

Ted Wire, the former manager of product and occupational safety, had been active with the National Safety Council and is credited with providing much of the impetus for the development of Deere's management-based, continuous-improvement approach to workplace safety.

Wire's first step was to speak with each factory manager on the causes of accidents within their domain. Together, they reviewed the frequency of past accidents, categorizing them as resulting from acts of God, failures of design or the behavior of people. Acts of God led the pack, but Wire was not convinced.

He took pictures of the work areas where many accidents occurred and showed these to the management teams. He convinced these teams that the majority of injuries were a result of their failure to understand the root causes of accidents. He asserted that a plan of action needed to be developed and carried out, year after year, in order to bring down the number of lost-time injuries.

Wire worked with management to establish an attainable frequency rate and metric, then devised a plan to specifically address and prevent 50 percent to 70 percent of the most frequently occurring accidents. By virtue of design changes, training activities and personal protective equipment, Deere had an astounding decrease in injuries right from the start.

Working through the Problems

The road to Deere's eventual success, however, was not always easy. At times, it struggled, finding itself in ruts or needing to reevaluate its program.

The first problem occurred only a few years after it began implementing its workplace safety program. It happened early in the careers of both Grotelueschen and Kopps, roughly around 1978, and taught them both a valuable lesson.

"A group decided [that] what we would do was be compliant and meet every OSHA (Occupational Safety and Health Administration) standard," says

Grotelueschen. “Promptly, our accident frequency rate went up about fifty percent.”

Rather than blame this stumbling block on OSHA, Grotelueschen and Kopps instead saw this as a failure in attitude and perspective on the part of Deere. When the department decided to meet a standard rather than solve a problem, it had changed its approach, as Grotelueschen explains, “to thinking that we were managing an inanimate program of safety.” Deere had momentarily lost sight of its purpose—the program had become a set of rules to comply with, rather than a commitment to ensuring workplace safety.

“If you wait until a regulation is established,” says Grotelueschen, “and then wait for what the regulation says is the standard of performance, you’re going to be legal, but it will cost you a lot of money. It’s much wiser to be proactive in voluntarily establishing standards or voluntarily preventing problems so regulations are unnecessary.”

After Deere worked out the initial kinks in its program, the results surprised everyone. By the early eighties, Deere was on its way to achieving unprecedented figures in lost-time injuries. Then, in the mid-eighties, came the next problem.

“I think the biggest surprise to us came when all of a sudden we had no improvement,” says Grotelueschen. “It was like we were right back where we started, only we were maybe eighty percent better.”

Up to that point, Deere had been experiencing close to ten years of continuous improvement. Evaluations, frequency rates and metrics revealed that this suddenly static improvement rate was being created by ergonomics-related soft tissue injuries.

At this point, Deere’s commitment to ensuring workplace safety is most apparent. It had accomplished an 80 percent improvement in its lost-time frequency rates—a formidable accomplishment by any measure—and had won many awards. Rather than shying away from the ergonomic challenge, however, Deere kept true to its goal: a zero lost-time frequency rate.

“At that time,” says Grotelueschen, “we were not familiar with ergonomic management programs. Essentially what it required us to do was get experience in the area of ergonomics so we could deal with sprain and strain

injuries."

The Results

More than twenty-five years later, Deere has accomplished an incredible record of safety. Since 1977, John Deere Domestic Facilities have received 440 National Safety Council safety awards, 32 in 2000 alone. It has reduced its lost-time case frequency rate by 93 percent, and as of October 2001, it had reduced that rate by 18 percent. Since 1975, it has reduced its lost-time case severity rate by 95 percent, and as of October 2001, had reduced that rate by 38 percent.

Along with the overall company success, John Deere Domestic Facilities have had many units working in the range of three million hours without a lost-time injury, and two others had amassed eight million hours as of October 2001.

Turf Care, based in Fuquay-Virginia, North Carolina, opened its doors in 1997. Over three million hours later, it had not had a single lost-time injury.

The Iowa, Davenport Works facility, which manufactures heavy-duty equipment, had, as of October 2001, a company-wide record of 8.2 million hours without a lost-time injury, a feat for which it will receive a "major celebration."

These celebrations are a part of what Kopps and Grotelueschen refer to as the final step in the worker safety program.

"All of our John Deere facilities make no hesitation to properly recognize employees when they reach a milestone," says Kopps. "What this does is let all employees know that this is the kind of behavior that is respected; it's the kind of behavior that makes us successful; and more importantly, it's the kind of behavior where nobody gets hurt."

Deere keeps track of its many facilities on a monthly scorecard called the Green Sheet. The Green Sheet combines all of the important safety metrics from each factory, ranks them and sends them out to everyone in the company, from the chairman of the board to the employees on the floor.

"Everyone knows where each facility ranks in every one of our key metrics," says Kopps. "When you are at the bottom of this scorecard it is not a very

good idea to stay there very long."

Being a member of a working environment where safety is such a high priority boosts the morale of the workers.

"What we're finding today is that anytime you improve the workplace, you're improving the sense of well-being of the employees and their personal satisfaction," says Grote- lueschen. "Receiving all the National Safety Council awards adds an extra incentive because they can now take pride that they are the safest workers in our industry. Finally, there is the confidence that, if you're working at John Deere, you're going to come home at night with the same physical capabilities you left with in the morning."

As Kopps explains, accomplishing these results requires a common goal and a determination to see it through to the end.

"When you create a vision," he says, "and you focus all your activities towards that vision, people will aspire to that and do all the right things to make that happen."

The Importance of Management

The most important element for success, as Wire first postulated back in 1975, is ensuring the commitment of management—from every level.

During a speech at the John Deere Occupational Safety & Health Conference in October 2001, Robert Lane, chairman and CEO of Deere & Company, had this to say about Deere's philosophy:

"I subscribe to the school being formulated by a growing number of experts that safety and health are inextricably linked to bottomline results. . . . Employees bring a spirit and a will to work, not just their bodies. To achieve peak performance in other areas, they must feel their employer cares and respects them as important and valuable human beings."

Having a dedicated staff, from the wage employee to the CEO, is vital to success. Kopps thinks one reason some companies may have difficulty implementing a safety program of their own is that they do not understand the importance of getting everyone to approach the issue from the proper standpoint and to realize the myriad positive results.

"I think, from my experience," says Kopps, "a lot of people may not do as good a job as they would like to because they don't speak in management's language and communicate to them in ways that they can see the benefits—and I'm not just talking about money. Like Ralph said, we found that when you improve the safety performance, there's many, many benefits; increased efficiency is one of them but, certainly, increased morale. People know that you care and this becomes a great team-building endeavor."

Deere's efforts to link all employees have attracted the attention of other companies that come to benchmark its performance. "One of the things that they are very impressed with after they visit us is the amount of involvement that everybody in the whole John Deere organization has with the safety process. You've got to have that kind of synergy and effort going on or you will have conflicting goals taking place."

As an example, Deere's general managers have weekly meetings at all of its facilities. According to Kopps, the number one thing they talk about is safety performance: "Where are we? Are we on track with our safety goals? What can we do to improve?" The general manager holds all of his operation managers accountable for this improvement; and the safety staff and environmental health professionals are responsible for supplying the management team with information to effectively manage safety.

"Why are we where we are?" Kopps asks. "It's because safety performance is held accountable to the right people—the management team—because they drive all the process activities."

International Success

While John Deere Domestic Facilities have accomplished great results at its American facilities, its success is not isolated to the United States.

"I am privileged to visit all of our facilities in the world," says Kopps. "After a visit, I feel proud to be associated with the John Deere organization because, on the whole, every facility—I don't care whether it's in Europe or South America or Canada or here in the United States—each unit has safety as a main process to aspire to."

While promises of safety on a worldwide level are often met with skepticism, Deere is up to the challenge.

"When we rolled out our management system in Mexico," says Grotelueschen, "I think the only people that believed it would work were the general manager at the Mexican factory and the Deere safety people. [But] the first two years we put this program [in Mexico] we saw a seventy percent improvement, so we know this process works anywhere around the world."

Sharing Best Practices

Grotelueschen is quick to point out other companies that are "making equal improvements." He notes two examples, DuPont and Intel, and explains how DuPont and Deere have worked rather closely, sharing effective workplace policies and achieving similar results.

"DuPont has a long history," says Grotelueschen. "They're doing the same thing we're doing. They are using a continuous improvement program that's management driven. They've got a good management system in place, they're attacking the root causes of accidents and they're preventing them. Recently, we have used the DuPont STOP program for training, and it was very helpful in creating safety awareness and providing a proactive attitude towards fellow employees in preventing accidents."

Another example of successful companies working together to improve workplace safety is the Industry Cooperation on Standards and Conformity Assessment's *Industry Guidance on Health & Safety at Work*—a set of guidelines to implementing a system similar to the Deere program. (A copy can be found at the end of this article, on page 16.)

The Next Goal: Safety at Home and on the Job

In-house statistics show that Deere employees are forty-five times safer when they are at work than they are when they are outside of the factory. Its next goal is to make sure employees are safe off-the-job as well.

"Each facility will set forth process activities to make their people aware of the off-the-job statistics," says Kopps. "Those facilities will then conduct safety awareness sessions and distribute metrics that will monitor their off-the-job progress. We are going to require in our goals and objectives form for fiscal 2002 that facilities put some metrics together to monitor off-the-job performance." These are the same steps that started Deere off in the right direction in 1975.

"We've stuck pretty much to the basics. We set goals and objectives each

year and ask all stakeholders to sign something verifying that that specific action plan will be completed. If this is done, it is no surprise that accidents decrease."

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