

## Foremen Play Key Role in Reducing Eye Injuries at U.S. Pipe

### *On-Site Safety is a Top Priority for Workers On the Job*

(Chattanooga, TN) Attention to safety should be a top priority on any work site. So it follows that the people who manage the daily work load should also manage on-site safety—rather than leaving it solely up to the safety manager or the owner of the company.

Roger Shepherd, general foreman of the grinding department at U.S. Pipe and Foundry of Chattanooga, Tennessee, says safety is a big part of his job. “On any given day, I’d say I spend at least an hour working on some aspect of our safety program,” he adds. “It’s an ongoing priority.”

The plant has about 750 employees, producing ductile iron fittings, hydrants and valves. It is one of three original plants in the U.S. Pipe system, which was founded in 1899. The company has undergone numerous mergers and acquisitions in the hundred years since then. The current owner is Walters Industries, Inc.

More employees are being added as the plant creates a second shift and increases production. Employees at U.S. Pipe become attuned to safety considerations the day they arrive on the job. First, they attend a daylong orientation on all aspects of the job, with a large portion devoted to safety.

“Then, we assign an experienced employee with at least a couple of years worth of experience to help train the employee,” says Shepherd. “We’re very fortunate to have some employees who have been here 15 years or longer. The senior employee teaches the new hire to gauge the castings, what to grind and what not to grind. We train new employees for a week or two. Then we put them in the workflow and observe them. At that time they’re not completely trained, because we make so many different kinds of castings that it takes a while before they see them all.”

Safety remains an ongoing priority during this time, Shepherd says. “A new employee will get to thinking he knows what he’s doing, so he’ll take a

shortcut,” he continues. “You have to explain why that shortcut may lead to an injury, and what the consequences--for him as well as for his co-workers--may be. You have to help them so that they don’t become careless.

“For example: we have a rule that employees must wear leather shoes in the grinding department. But this morning an employee who works in an-

them, and they know it.”

Shepherd, as general foreman, says that U.S. Pipe places 90 per cent of the responsibility for safety on his shoulders. The plant’s safety director, Adrian Long, agrees.

Long recalls that the foundry’s most frequently reported safety problem--up until a few years ago--was foreign matter in workers’ eyes.

“This type of injury has dropped dramatically, primarily through the efforts of our foremen,” Long says. The improvement can be seen in the plant’s record of visits to its first aid room. In



**Grinders at U.S. Pipe wear the L-901 Helmet with a wide-view lens that helps to reduce eye injuries.**

other area of the plant came into the grinding department wearing tennis shoes. I asked my foreman to send him back for the proper footwear. Even though he was wearing footguards and other personal protective equipment (PPE), his shoes were still tennis shoes and were not appropriate for this particular work area.”

Younger employees joining the company need special observation and reminding. “When you’re young you take more chances,” he adds. “The more experienced guys know their PPE is well-designed, appropriate for the application and reliable. It will protect

January 1980, there were 294 eye-related visits recorded during the month. But in January 1990, the number had declined to 235, and in January 2000, it had dropped to only 57.

“Our success in reducing eye injuries in the grinding department came when we decided to switch from using air-purifying, half-facepiece respirators to the durable 3M Whitecap general purpose helmet with a powered air purifying respirator (PAPR) system,” says Kurt Reiffenstein, who was the plant safety director for 27 years before retiring recently. The Whitecap helmet has a liftable faceshield and is designed for

tough work environments—chipping, grinding, cutting, welding, blasting and abatement.

And in 1998, when 3M was developing its new L-901 headgear, the Chattanooga plant served as a test site. The L-901 with a PAPR system features full hardhat protection, a liftable, wide-view lens, and a flame-retardant shroud to help protect the worker's shoulders and chest from sparks and other particles. 3M gave four of the lightweight systems to veteran employees who wore them for several shifts in the grinding area and then provided feedback. "These workers didn't want to relinquish the new helmets and return to using their Whitecap helmets," recalls 3M sales representative Don Evans with a smile. "But when we introduced the market version of the L-Series helmets, the employees who helped with the evaluation were very happy with the comfort of the final product."

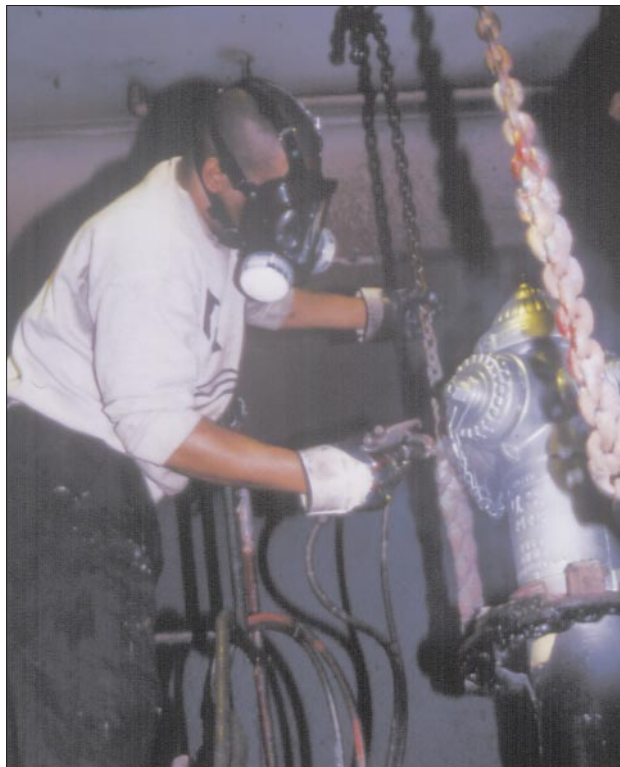
Shepherd adds that the lightweight headgear is popular because of its greater comfort, can be worn by employees with beards, and because the PAPR unit directs a constant flow of filtered air over the worker's head and face, increasing comfort and helping boost productivity because workers take fewer breaks.

U.S. Pipe is reinforcing the importance of eye protection for employees in all departments. That has become easier now that newer, more stylish designs of safety eyewear are available. "Foundry workers are style-conscious," says Reiffenstein. "They're no different from anyone else in that regard. Safety glasses

used to be unattractive, with side shields and heavy bows. The new designs provide the same level of protection, and the younger crew likes them. I guess it's a matter of finding what's important to them and what provides the appropriate level of protection for a particular application."

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**Painters at U.S. Pipe prefer the comfortable 7000 Series full facepiece respirator because the low-profile design improves visibility.**

tive safety program that features promotional items such as coffee mugs, sweat shirts and beach towels with company logos as rewards for strong safety records. Long says the rewards are based on reviews of each department's safety record compared with the same period a year earlier. "People seem to like the program," he adds.

"They're proud to work here and they're proud to display something that says they have a strong safety record."

"At U.S. Pipe, in our view, everybody is responsible for safety," states Long. "We train our foremen, and they oversee safety because they know what to look for. The plant manager is also a big help, because he attends all of the safety meetings. And he backs us up when we need to invest money in safety programs."

Safety planning at U.S. Pipe includes a monthly executive safety meeting. In attendance, along with Long and the plant manager, are plant superintendents, general foremen and the head of engineering.

Long says he also frequently meets with safety representatives of the plant's unions, which include United Steelworkers of America, the International Association of Machinists and Aerospace Workers and its Patternmakers Division, the International Brotherhood of Electrical Workers, and the Office and Professional Employees International Union.

Long and Reiffenstein believe that safety improvements help employees to be more productive. "I can't put a number to it," says Long. "But if you keep people on the job, that improves productivity. It's just common sense. And if you keep an employee on the job longer, he or she will produce more."

Reiffenstein adds that productivity may also be affected by the higher morale prompted by better safety equipment and by a commitment to education and training. "We don't want workers

to develop the idea that we don't care about their safety and welfare—that they're just a machine," he says. "When they become aware that we're spending a lot of money on the latest equipment and devoting a substantial amount of time to have a safer work environment, they have a better attitude."

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