

Safety in any heavy industrial environment is top priority, and the key to a safer steel production plant is impeccable leadership and constant awareness of the risks. Keeping workers safe is initiated from the top down and there's no room for complacency.

By **Matthew Mogridge***

WORLD Steel's second Steel Safety Day will take place on 28 April 2015. Last year's inaugural event engaged half a million participants, including steel company employees and contractors. "One thing we always make sure of is that people don't forget their contractors," said Henk Reimink, director of safety, technology and environment at the Brussels-based World Steel Association (worldsteel). "In a lot of cases contractors form 20, 30, sometimes 50% of the workforce on site," he added, explaining how they don't necessarily make steel but drive trucks, operate cranes and move coils around the plant.

The Steel Safety Day is preceded by a safety audit. World Steel asks all of its members (global steel producers) to carry out an extensive audit on the five identified main causes of incidents.

Reimink says that the lost time injury (LTI) frequency rate has been dropping steadily year-on-year at a rate of between 15% to 20%. Serious incidents, however, while few and far between, were 'up and down' and not decreasing sufficiently.

"When we looked at serious injuries it was always the same causes that kept popping up," Reimink said, pointing to moving machinery, falling from heights, falling objects, asphyxiation or gassing, and cranes as the chief causes of major breaches in safety.

"We went back six years and it was always the same top five," Reimink explained, and this is why the safety audit was introduced.

Preventing safety incidents is often simple common sense. During plant audits, steelmakers are asked to look for the hazards in their plants, paying particular attention to the top five most



No room for complacency

common causes listed earlier. Questions need to be asked: Are there any confined spaces? Is there a tank that people have to get into to clean or pipework that needs to be opened up? When cleaning or maintaining machinery is it possible to isolate all energy points?

Steelmakers admit that there are risks everywhere and Reimink agrees. "Everything that is moving up and down potentially can catch people out and cause injury and with heavy machinery there is often just one outcome so the means of isolating equipment for cleaning and maintenance is very important," he said.

A lot of steel companies have systems in place, but plenty of situations arise where they are not applied and that is when injuries occur. If an isolation policy exists it might need to be applied in more than just one place and very often risks are not identified until it is too late.

When worldsteel's safety committee collated the information received from 2014's safety audit it found that there was a big gap between the equipment on-site

deemed to be covered by existing systems and procedures and the machinery not covered. "So that's why we're repeating the audit this year and again next year and so on until those top five causes are nailed down to full 100% compliance," he said.

While Steel Safety Day is so-called, it's more than just one day as the planned safety audit needs to cover 100% of a steel plant's employees and not just those working in the factory. "We're also looking at the office workers, the sales guys, those working in distribution centres, truck drivers, the CEO, every single person," said Reimink.

Steel Safety Day is about awareness at every level. Reimink hopes create interest in safety issues and bring about a shift in thinking. "We're moving through people's level of maturity to where every piece of equipment is no longer a threat or something to be afraid of. You need to be aware of the risks. It's all about doing everything safely," he said.

Reimink equates the risk of serious injury at a steel plant with that of serious

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injury on Europe's roads – 1 in 15,000 fatalities. "But every fatality and injury can be prevented and we've seen many plants where they've had five, even 10 to 15 years with zero injuries and that's pretty amazing," he said.

The big problem will always be complacency, especially in plants with outstanding safety records. "That's why the leading indicators that we're slowly working towards are increasingly important because they are designed to prevent injuries and keep everything fresh all the time," Reimink explained.

Keeping safety at the forefront of their mind is crucial and Reimink reports to the worldsteel board every year. Have they participated in Steel Safety Day? Are they improving their safety record? Did they sign up to the safety audit?

In days of old, getting a burn mark or a scar was often viewed as a badge of honour – a rite of passage, no less – and while there are some sites that still run that kind of culture, today's steel industry views a safe workforce as critical and people working in the industry as a very important asset. "If you have people absent it will cost you a lot of money because if the person is not there you've got to put somebody in their place. So you try and make sure that people are safe in their work environment and they want to come to work, they want to be there and they want to participate," Reimink said.

Having a safe environment, he explained, was akin to a licence to operate and in the same way that people expect quality products from steel manufacturers and quality cars from the automotive industry, safety occupies the same realm of reality.

It would be wrong to try and pinpoint 'accident black spots' because they don't exist. Good leadership must consider the wider business and be the same for each site.

The question of leadership starts with the CEO. Reimink says that the success of safety programmes in action depends upon whether the person at the top asks appropriate questions. "Just by walking into the plant and asking an operator when the last injury occurred – 'do you know about it, do you understand what happened, were you briefed on the incident?' – is important to raise awareness," Reimink said.

It's not just about plant safety. Senior staff must be mindful of safety at home. "If you see a senior manager mowing his lawn without safety boots on or standing on a ladder cleaning his gutters without the ladder being secured, or if the CEO drives at 50km/hr across the site when there's a 10km/hr speed limit, what message does that send out?"

Ultimately it's about a duty of care that goes hand-in-hand with managing

a business well, said Reimink. "It's the same as making sure the quality is right or making sure your operation is running efficiently, it's part of the culture of your business," he said.

Reimink would not be drawn on the number of Serious Safety Occurrences (SSOs) recorded in 2014, but he did say 'not a huge amount'. The World Steel Association's Safety and Health Committee, over which Reimink presides, encourages global steelmaker members to log SSOs as they occur, the aim being to identify risks and hazards rather than name and shame the companies concerned.

Members of worldsteel's Safety and Health Committee set priorities and develop initiatives for years to come; there's



an annual survey, Steel Safety Day, safety audit support and safety recognition and, when a steel plant informs the committee of 10 or more Lost Time Injuries (LTIs) a call is made to the plant and a site audit is offered.

"If I get a good report [from a steel plant] and I go to the factory and walk through the door and trip over a hose or there's half an inch of dust everywhere, something is not right. A lot of the systems in place are spot on and comply with every regulation in the book, but when you walk into the plant it's a different story," said Reimink.

He has a kind of sixth sense where plant hazard identification is concerned. "When you walk into a plant you can usually tell if the safety metrics match the condition of a plant," he said and then he offers assistance, explains how similar plants are in better shape and suggests a few site visits to illustrate best practice. "They will say 'this is the best I can do' and that they need new equipment and I'll say that some plants have older equipment in better condition," he added.

Reimink – or a member of his committee

– will invite another industry such as a cement or chemical factory owner to present their safety experiences. After all, safety is an education process and the same themes are applicable to other industrial sectors.

Workshops are organised in different regions of the world where the committee thinks there is a need to build awareness 'for our processes and definitions', Reimink said. "It's about helping people make improvements," he said. How the steelmaker reacts to the committee's suggestions depends on the style of leadership.

Steel companies approach the subject of safety differently. When the word 'safety' is mentioned, the immediate thought is how to avoid fatal or near fatal accidents, but many incidents are less severe. This is reflected in the initiatives of some of the world's biggest steelmakers recognised by worldsteel as part of its 2014 Safety & Health Recognition programme at last year's World Steel conference in Moscow.

Tata Steel Europe Netherlands focused on hand injuries with its Time Out for Hand Injuries initiative while ArcelorMittal Tubarao in Brazil zoned in on quality of life and the health issues surrounding smoking.

"We always talk about safety and health, but the latter has taken a back seat for a while whilst focusing on injuries," said Reimink, expressing how automation had dramatically reduced the level of physical work for employees and contractors.

Other steelmakers recognised by worldsteel at last year's conference were: Celsa Huta Ostrowiec of Poland for its Brother's Keeper programme where employees form into groups and look out for one another; Essar Steel Hazira of India for its sustainable Health, Safety and Environment Management System; Gerdau Brazil for its Safety Behaviour Management System; and Ternium of Argentina and Mexico for its Logistics Safety Preventive Action Plan.

While Reimink is happy with the direction in which the steel industry is travelling with regard to safety, he is aware that the quest for greater safety is relentless and never-ending. "You can never take the pressure off and I suspect it will never be possible to do that," he said.

Reimink said that the industry had reached many different levels of maturity regarding safety, but if the leadership or leaders change the safety culture will likely change also. "We constantly have to engage people to get it right and it is difficult to accept for some leaders, but they should integrate safety as part of their work. It is not an additional task but part of their daily role. Only then will our ultimate goal of zero injury be most likely to be fulfilled," he said. ■