

## SAFETY AND HEALTH

### Excellence Recognition Award 2008

#### From the Chairman of the Board

The adoption of the new set of Safety and Health Principles\* by the World Steel Association's Board of Directors provided an opportunity for us to emphasise our belief that clearly defined principles will result in improved safety and health performance.

As Chairman of the Board I am delighted that the Safety and Health Committee has introduced the Excellence Recognition Awards. The industry is committed to the goal of an injury-free, illness-free and healthy workplace. I am confident that these awards represent another positive step towards our goal.

**Ku-Taek Lee**

Chairman and CEO  
POSCO

#### From the Chairman of the Health and Safety Committee

Improvements in safety and health practices in the steel industry are happening all the time. World Steel Association (worldsteel) member companies are committed to make the steel industry a safe and healthy place to work and as such, many efforts are made every year to develop and improve practices and behaviour.

The Safety and Health Excellence Recognition Award is a way to showcase these improvements and share initiatives that we can all benefit from, across the worldsteel membership.

There were 24 entries submitted for assessment this year. Each one addressed the three key criteria:

1. how the practice demonstrates and applies the worldsteel safety and health principles
2. measurable improvement, to quantify the value
3. relevance and applicability to other worldsteel members.

Every submission shows the commitment of member companies to achieve the goal of zero harm.

The support for this initiative demonstrates how focused the steel industry is on achieving its aim. The quality of the submissions demonstrates the innovative nature of worldsteel member companies. worldsteel is proud to recognise efforts to improve safety and health in our industry.

**Mick Cassar**

Vice-President, Occupational Health and Safety  
BlueScope Steel Limited

#### From John Surma, member of the judging panel

Safety and health is at the heart of everything we do. There is nothing more important than the safety and health of the individuals who work in the global steel industry. As industry leaders, it is crucial that we maintain safety and health as our own personal core value and as the primary business driver in our operations.

The Safety and Health Excellence Recognition Award provides a tremendous avenue to recognise member companies for their outstanding efforts to eliminate all incidents and injuries in our industry. Congratulations to the recipients and thank you to all who submitted a wide array of great practices for consideration.

**John P. Surma**

Chairman and CEO  
United States Steel Corporation

\* Go to [worldsteel.org](http://worldsteel.org) or to the worldsteel extranet for the full text of the Safety and Health Principles.

# BLUESCOPE STEEL LTD.

## Forklift Safety Code of Practice

Forklifts are widely used in BlueScope Steel operations, often working in and around steel workers. In 2004, an employee was fatally injured after being hit by a forklift truck. Following this incident, BlueScope Steel developed a "Forklift Code of Practice" to limit the risks of forklift interactions across the business. In particular, it aimed to increase safety by keeping people and moving equipment apart.

The Code of Practice (COP) provides examples of controls that can be used to remove or lower the risks of forklift interactions. It defines minimum standards for forklift trucks in relation to visibility, auditory alarms, mirrors, warning lights and so on. It also provides an audit checklist and coaching and audit sheets to enable sites to easily audit their operations and coach operators in the safe use of forklifts.

BlueScope Steel requires every site to audit their operations using the COP as the standard/criteria, and develop an action plan to close any gaps between current standards and those defined in the COP. A support pack was developed to assist sites in implementing the COP. The support pack is divided into three categories:

- Separation/interaction with forklifts (including traffic management, housekeeping, planning and behavioural aspects)

- Forklift design requirements
- Requirements for wearing high-visibility clothing in areas where forklifts operate.

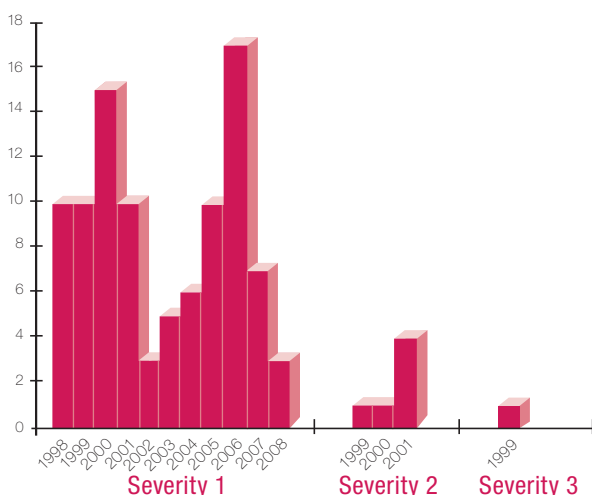
BlueScope Steel has not had a forklift-related fatality since 2004. It has also seen a dramatic decrease in LTIFR and MTIFR since the implementation of the COP.

The Mobile Equipment Serious Incident (Level 4) Analysis showed that in 2001/2002 there were 10 serious mobile equipment-related incidents. This reduced to three in 2007/2008 and so far there have been none in 2008/2009.

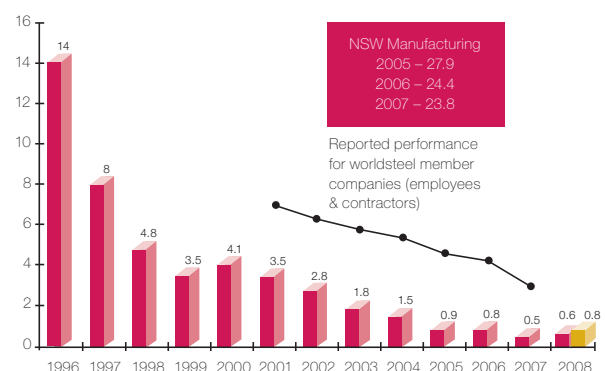
The "Actual Injury Rates – Forklift Incidents" graph below shows forklift incidents in the Illawarra area (NSW, Australia). It shows an increase in reporting for 2005 and 2006 after the COP implementation and a subsequent reduction in injuries for 2007 and 2008.

This initiative is highly relevant to all members who use forklifts or mobile equipment within their operations. The COP can be applied to any manufacturing, distribution or logistics sites and to all types of mobile- and materials-handling equipment. Bluescope Steel can provide a Support Guide and a copy of the COP to worldsteel members interested in implementing a similar programme.

Actual injury rates - forklift incidents



Lost time injury frequency rate



# NUCOR CORPORATION

## Continuous Safety Improvement

Nucor Corporation's attitude toward safety could not be clearer. Safety is the top priority of every team member. With the ultimate goal of zero injuries and illness, Nucor has created systems to drive continuous improvement in safety and health. These include the Safety Incident Reporting Network (SIRN), SharePoint and audit programme.

The SIRN programme allows all divisions to share incidents, best practices, and corrective actions on a company-wide basis. When an incident report is entered into the SharePoint portal, the system alerts all other facilities that an incident has occurred.

SharePoint is an internal website where useful information, recommendations and best practices can be displayed and shared. It has proven to be a fast and effective way to disseminate information and promote discussion across all divisions.

Finally, all Nucor divisions are audited every three to five years. Nucor has defined five different types of audit depending on the needs of the division being audited. Every division also has a Safety Coordinator or Director and twice a year, all safety personnel gather to share information and best practices, discuss new trends and receive training.

To demonstrate the importance of safety, Nucor created the President's Safety Award, for outstanding achievement in the prevention of on-the-job accidents. The standards are high: for a division to win the award, it must post rates that are 67% lower than the national average for other steel companies.

It is not hard to understand why safety receives so much attention at Nucor. For one thing, it is smart business. Groups with great safety records also tend to perform equally well when it comes to quality, costs, timeliness, and productivity. Having a healthy and productive workforce that works safely can have a positive effect on all aspects of business. A healthy and safe workforce creates a culture that breeds success.

Nucor's continual improvement system has created a proven track record of improved safety statistics. See the table below.

All of Nucor's safety practices (SIRN, SharePoint and internal audit) can be easily adopted by any company. Nucor is happy to benchmark its safety programme with other steel companies. It believes that while other steel companies may be competitors in the steel business, they can still be partners in safety.

Year	I&I Rate (US calc.)	LTI Rate (US calc.)
1998	8.70	2.00
1999	7.08	1.83
2000	6.61	1.22
2001	6.16	1.61
2002	5.14	1.33
2003	3.70	0.82
2004	3.28	1.18
2005	2.94	1.08
2006	3.07	1.51
2007	1.78	0.91
2008 year-to-date	1.66	0.77

For Corus, the safety and health of its staff and contractors has always been a priority. In 2003, it announced eight key principles for health and safety. This was followed up in 2005 with an improvement plan on 'ownership and accountability'.

To ensure that management was ready to lead in health and safety and to recognise it as an absolute priority, a major part of the improvement plan was the development of a training programme for senior staff. During 2005, 25 training courses were held for 400 senior managers. Both the CEO and Executive Committee invested much of their own time, attending the courses, leading discussions, challenging managers and being challenged themselves.

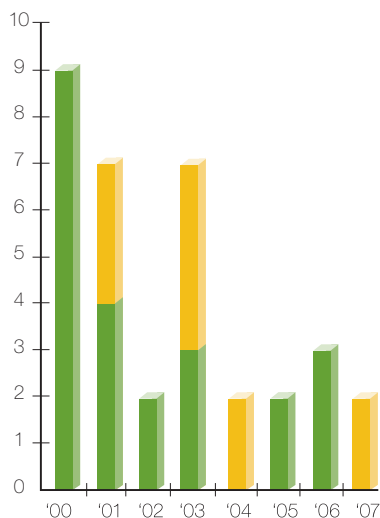
The course covered policy development and implementation, contractor safety, creating health and safety plans, behaviour and leadership, and commitment. In a great example of employee engagement and training, one of the commitments of the Corus IJmuiden steel plant Works Manager was to set up a safety programme for Corus' five steel plants.

The 'Felt Leadership' programme was sponsored, developed and led by the five steel plant Works Managers. In total, 673 steel plant managers have already been trained and, in total, 3,000 managers will attend the programme. A clear example of Corus' commitment to training, this also demonstrates how employee engagement can be achieved and delivered to a far greater audience than ever envisaged.

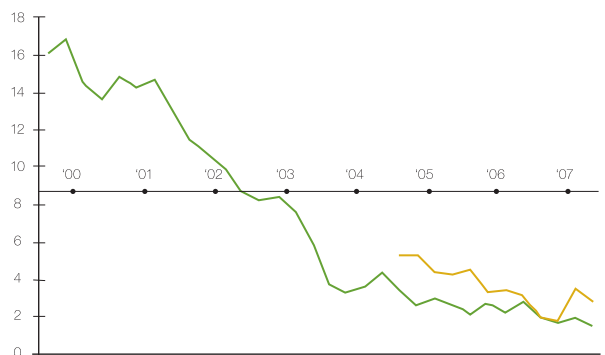
It is difficult to identify an absolute and direct link between a training programme and an improvement in injury metrics. However, feedback from employee surveys on the demonstrated commitment of Corus' leadership teams to health and safety has improved dramatically, with employees and contractors truly feeling and believing that health and safety is the absolute priority.

The diagram below shows numbers of fatalities and below lost time injury frequencies (number per million hours worked) for employees (green) and contractors (yellow).

### Fatalities



### Lost Time Injury Frequency Rate



Corus has already shared the strategy and content of its Safety and Health Excellence Programme with a number of other steel companies. As a result, Corus is now working with ArcelorMittal, which is considering running a similar programme for all their senior managers.

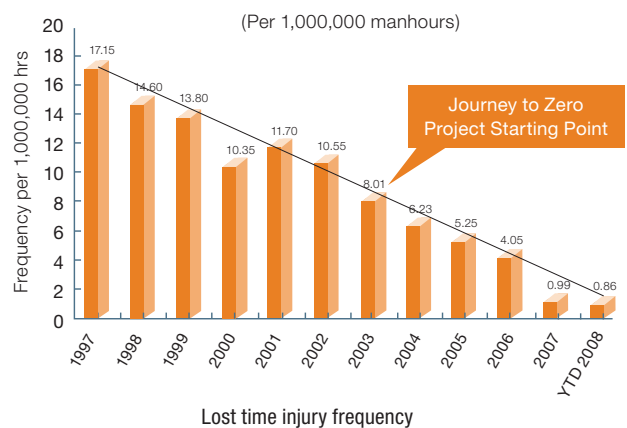
In addition, the Director of Health and Safety presented a detailed description of the course to the Committee on Safety and Occupational Health in June 2008. This generated considerable interest from other attendees and worldsteel is proposing to run a pilot course based on the programme.

Standing along Canada's northernmost shores, the lifelike 'Inukshuk' people statues convey the importance of personal contribution and cooperation. They are also used by ArcelorMittal Dofasco as a symbol of the company's 'Journey to Zero' safety and health ambition. Since its introduction in 2003, ArcelorMittal Dofasco has seen a steady improvement in its safety statistics.

Engaging people at all organisational levels and strategically integrating improvements to its health and safety practices have been crucial to Journey to Zero's success. Improvements were identified by comparison with world-class benchmarks. A strategy was then developed to close the gaps and integrate them into the business planning process. New approaches were also taken to help achieve step changes.

Some of the campaign's aims have focused on integrating safety and health into ArcelorMittal Dofasco facilities and its employees' behaviour, and to make working safely a condition of employment. So far, more than 200 people have participated in no fewer than 27 projects. They include improved accident investigations, development and communication of safety rules, clarified leadership responsibilities and obtaining OHSAS 18001 registration.

Since beginning its Journey to Zero campaign, ArcelorMittal Dofasco's lost time injury frequency has seen an improvement of more than 90%, going from 8.01 (per 1,000,000 man-hours) down to 0.86.



There are major benefits to any organisation willing to implement a programme of this magnitude. However, to do so a company needs to achieve several things. The first is total leadership buy-in at all levels, starting from the top down. This has to be followed with the willingness and tenacity to get all employees involved and to make sure that the sufficient resources are assigned to achieve the desired results.

And throughout the entire project, there must be the firm belief that improvement is both required and achievable.

# SABIC-SAUDI BASIC INDUSTRIES CORPORATION (HADEED)

## The SABIC Safety Management Plan

SABIC-Saudi Basic Industries Corporation (HADEED) started operations in 1983 and today produces 5 million tonnes of flat and long products with further expansion planned. All employees, whether direct or contract hire, are required to follow and comply with the requirements and expectations of the SABIC Safety Management Plan (SSMP).

The SSMP covers four focus areas: Leadership, People, Systems and Assets and 13 Safety Performance Elements. The Safety Performance Elements integrate regulatory requirements, behavioural strategies and regional cultural aspects into the overall plan. To ensure a systematic approach to planning, implementing and measuring safety performance, the SSMP has been implemented throughout SABIC through training, awareness, involvement of employees and contractors, and by keeping the safety message at the forefront of everything the company does.

Safety is also first on the agenda in SABIC meetings and Safety Committees/Meetings are structured to involve all levels of employees. Safety Action Memos, Near Miss Reporting and Behaviour Audits are all initiatives successfully introduced as ongoing SSMP improvements.

In 2008, the SSMP has been extensively reviewed. Safety performance data capture and analysis is being

improved through the development of new safety, health and environment software. There will also be an enhanced focus on contractor interaction through the Partners in Safety initiative.

SABIC measures safety improvements through both lead and lag indicators. Lead indicators such as Safety Action Memos, Near Miss Reports and Behavioural Safety Audits continue to improve in both quantity and quality.

The main lag indicator is Incidence of Recordable Cases. This includes Lost Time Injuries, Light Duty Injuries and Medical Treatments calculated using the US OSHA method. In 1998 (pre-SSMP), SABIC's Incidence of Recordable Cases was 2.2. In July 2008, the incidence rate was 0.66, an improvement of 70%. Equally important, neither SABIC nor its contractors have experienced a single fatality in the last six years.

The SSMP could be adapted for use by any worldsteel member as the components are fundamental to any safety and health management system. SABIC welcomes visits from any worldsteel member company to demonstrate how its management has readily accepted that safety is their responsibility and how they use the various tools to complement and fulfil their responsibilities.

