Our commitment: The industry is committed to the goal of an injury-free, illness-free and healthy workplace.

1. All injuries and work-related illness can and must be prevented.
2. Managers are responsible and accountable for safety and health performance.
3. Employee engagement and training is essential.
4. Working safety is a condition of employment.
5. Excellence in safety and health drives excellent business results.
6. Safety and health must be integrated into all business management processes.

worldsteel represents approximately 170 steel producers (including 17 of the world’s 20 largest steel companies), national and regional steel industry associations, and steel research institutes. worldsteel members represent around 85% of world steel production. worldsteel acts as the focal point for the steel industry, providing global leadership on all major strategic issues affecting the industry, particularly focusing on economic, environmental and social sustainability.
**Sharing and Learning**

The goal of an injury-free, illness-free and healthy work environment remains the highest priority for our industry. This is even more important in difficult economic times, when it may be tempting to reduce safety resources. Once again, this year’s safety metrics survey highlights excellent results, with many companies approaching world-class standards. This provides a fantastic opportunity to learn from those who have reduced their safety incidents significantly and allows for accelerated improvement – changes can be made with a dramatic effect over a relatively short period of time, for example one to two years, with injury rates halving year-on-year.

This year, the Safety & Health Excellence Recognition process and criteria have been reviewed substantially to ensure that worldsteel members were able to submit their excellent work under additional headings of business systems, health and specific improvement projects. This enabled more submissions to be entered as well as guiding supportive organisations towards improvement across these three areas.

The Safety and Health steering group also specified that in order to be eligible to have their submission considered the companies had to support the Safety and Health Committee (SHCO) activities of sharing serious safety incidents, have a member on the SHCO and support the annual metrics survey for their organisation.

The submissions this year reached a new high with more than 40 received. The first round of judging was carried out to reduce these to a top ten, to be considered by the judges again, from which six submissions were selected for recognition in the three categories. The submissions received resulted in four organisations being recognised, with two companies honoured for two submissions. However, one of the four companies, Ternium, which had two projects recognised as outstanding work by the judges, unfortunately suffered a major incident recently, and has considered it inappropriate to be recognised at this time. The judges have thus issued four recognitions in total this year.

So a great success in the number of submissions, and also the breadth and depth of work improved significantly. The presentations at the SHCO meeting showed the level of maturity, quality, pride and confidence gained from this success. Recognition by peers is one of the best ways to encourage people to continue towards zero injuries.

The four companies recognised show a continuous strong commitment to leadership in safety by setting themselves high safety standards using the six safety and health principles as a cornerstone of their programme. One of the key initiatives created by the SHCO is the anonymous communication of serious safety incidents across the industry. Anonymity allows sharing of the knowledge gained from the incident, the hazard that exists or the potential hazard of a ‘near miss’.

Sharing represents a fantastic learning opportunity and can mean the prevention of a potential recurrence. To make an impact, managers must act on the information received by auditing their own plant or site for similar hazards and their company’s leaders must hold managers accountable for taking action to mitigate the identified hazards.

The six safety and health principles developed by worldsteel members remain a very powerful method of effecting change. Safety and health sharing and learning must never stop, both within an organisation and across the worldsteel membership. There are new ideas developed to eliminate, reduce or control risks – most of the best ideas are simple and are surprisingly easy to implement.

The four recognised organisations can be very proud of the changes that they have made within their business. They have found confidence in their success and will continue their leadership by sharing and learning in the future.

**Henk Reimink**
Director
Safety, Technology and Environment
Industrias Unicon, a pipe producer with 1,650 workers in six locations in Venezuela, joined the ArcelorMittal group in 2008 and has since then decreased lost time injury frequency rates (LTIFR) by 90%. This has been achieved via a combination of focused leadership and a systematic approach to safety improvements which, according to Industrias Unicon, was a difficult process that demanded consistent effort and application.

Industrias Unicon’s safety management system was developed around the promotion of key safety indicators, which have had a very positive impact on the company’s safety levels and performances.

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Industrias Unicon has made major improvements to the three key safety protection barriers (technical, organisational and behavioural) that are in place between workers and equipment hazards. The key to the success of the company’s efforts has been the involvement of everyone in this journey.

- The technical barrier, principally by removing unsafe working conditions (3,600 examples of such conditions were eliminated in five years, with $19.2 million spent on health and safety improvements and 263 Kaisen health and safety-related projects)
- The organisational barrier, with the implementation of fatality prevention standards, the Hazard Identification and Risk Assessment (HIRA) process and the incidents investigation and resolution process
- The behavioural barrier, with the “STOP” programme (165 certified auditors made 9,425 STOP safety observations during 2011-2012), shop floor audits (143 trained employees made 50,615 preventive observations between 2011-2012) and the ‘Shared Vigilance’ programme, which has changed the culture of the organisation into one in which everyone looks out for each other
ArcelorMittal Lazaro Cardenas has implemented a safety management programme for contractors who honour the Fatality Prevention Standards (FPS) of ArcelorMittal. Following this programme ensured the avoidance of any fatalities and reduced the lost time injury frequency rate (LTIFR) five-fold between 2009 and 2012.

This practice is applied to contractors’ adherence (access control, safety induction to the workplace) to the safe performance of their activities, through the certification of the necessary safety competences. The programme utilises six main operational standards.

1. Mandatory safety training

Eight hours’ safety induction plus eight hours of induction in the work area are mandatory for every contractor. Additional training hours are also obligatory if required for the job in question (working at height, confined spaces, isolation procedures, crane operation and manoeuvres).

2. Access control

An Information Management System (IMaS) has been set up to ensure that only the approved workers have access to the sites, in order to control in real time the number of people on a specific plant. An administrator nominated by each contractor company is responsible for any employee’s movement via the IMaS external web access.

3. Operational control risk

A Hazard Identification and Risk Assessment (HIRA) must be undertaken before performing any task and before work permits are delivered. In addition, a medical exam is taken before any critical work (such as working at height or in confined spaces).

4. Contractor’s safety supervisor

A safety supervisor is required for every 50 workers, or fewer if the job is high risk (based on the HIRA). Each safety supervisor must have had appropriate academic instruction and must undertake 250 hours’ health and safety training.
5. ‘Golden ACES’

Workers are nominated as ‘Golden ACES’ to ensure that appropriate safety systems are in place, jobs are properly executed and to assist area management in conducting daily safety reviews. In addition, they recommend appropriate action, check adherence to safety standards, provide safety talks, verify safety competences of personnel involved and stop any work that is not being performed safely.

6. Safety evaluation performance

The performance evaluation is part of the payment process for services rendered. A 5% penalty is applied (as established in every contract), whenever a non-compliance with safety regulations is reported. New contracts may be assigned to contractors whose bids are more costly if, because of safety, assigning the contract to a provider with a better safety performance is deemed justified.

Where did the company start and what was its vision?

**BEFORE**

- Contracts awarded without any safety considerations
- Non-compliance with legal requirements by contractors (no worker’s affiliation to social security/medical insurance)
- Contractors provided low quality and/or insufficient personal protective equipment (PPE) for workers
- Formal safety training was neither provided nor was it required, ineffective access control for contract workmen to industrial facilities

**AFTER**

- Zero incidents and accidents for contract workmen
- Contracts awarded based on proven safety performance
- Contractors’ safety-management systems and programmes similar to that of Arcelor Mittal’s (including PPE)
- All contractor personnel trained in safety before entering premises
- All contractors’ personnel performing as well as or better than own employees in safety aspects
The ongoing progress towards zero accidents has been based on improvements in physical conditions/critical risk control, on implementing an effective safety system and through the establishment of behavioural management (see Fig. 1).

Figure 1: Evolution strategy of the company’s safety management, based on the barriers concept

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<th>CHAPTER</th>
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| 1. Conceptual alignment | Understand the main related concepts as part of safety management | • Safety as value  
• Focus on the basis of the pyramid |
| 2. Organisational maturity versus leadership action | Identify typical characteristics of each stage on Bradley curve but understand that leaders shall take adequate actions based on each situation | • Understand Bradley curve  
• Leaders adapting actions (situational) |
| 3. Operational discipline | Build operational discipline through understanding human factors and managing recognitions and sanctions in a balanced manner | • Operational discipline x process stabilisation  
• Consequences management |
| 4. Gerdau practices – for leaders and operators | Methodology recommended in Gerdau plants, for leaders and operators, in order to build safe behaviour | • Leaders observe behaviour, generating reflection and compromises  
• Operators develop practice to increase risk perception and interaction between them |
| 5. Managing safe behaviour | Understand how to manage behaviour, based on proactive KPI’s, leader efforts and safe behaviour demonstrated by the team | • Proactive action by leaders must be measured  
• Monitoring safe acts demonstrated by attitudes |
| 6. Critical analysis – assessment by plant | Methodology developed for carrying out critical analysis on each plant, allowing identification of his gaps and improving opportunities to build his action plan | • Data analysis to identify gaps in the leaders’ actuation of the three barriers  
• All initiatives are considered |
| 7. Step by step implementation | Understand how to organise the development of the behavioural issue – a road map | • Leaders can’t delegate responsibilities  
• Understand routine x improvement actions |
| 8. Conclusions | Resume of main points, giving an overview of the contribution of each part, developing a safe and healthy environment | • Behaviour as part of the safety process |
| 9. Annexes: Examples for analysis | Examples of different plants and processes concerning the main subjects | • Real situations  
• No misalignments |

Figure 2: Content of the Manual of Behavioural Management for Occupational Safety
In 2010, the company executive committee, aware that safe behaviour contributes to the development of an accident-free environment, created a ‘Strategic Project’ in order to consolidate the company’s best practices with proven results within several locations/countries. A manual was assembled to guide and define how the organisation should move forward. The work, developed by a working group with representatives of all business divisions, was carried out through concept evaluation/structuring and proven successful practices description, as well as the development of a critical analysis model.

The result is structured in a manual of Behavioural Management for Occupational Safety (see Fig. 2). The results show:

- An increase on the pyramid basis through operators’ involvement (see Fig. 3)
- A significant reduction in the lost time injury frequency rate (LTIFR) from 3.0 to 1.0 in the past five years (including contractors)
- Improvements in the safety culture towards the interdependent zone of the Bradley curve, which represents the direct relationship between safety culture strength and safety performance – as safety culture improves and permeates an organisation, injuries decrease. (see Fig. 4)
The occupational health Service of Tata Steel Europe (TSE) provides an integrated approach to achieving optimum health, underpinned by the three pillars of prevention, promotion and reintegration. This approach acknowledges the two-way relationship between work and health. In addition to a focus on the effects of the working environment on the health of workers, TSE recognises the influence of the workers’ state of health on their ability to perform their tasks effectively.

**Prevention**

In order to prevent injury and work-related illness, a comprehensive occupational health service is provided within TSE, with a focus on specialist advice to help management understand the impact that the working environment can have on overall employee health and well-being. Health surveillance, appropriate to the hazard and potential risks to workers’ health, identified through the risk-assessment process, assists with the evaluation of control measures and therefore offers additional protection for workers’ health. The aim is to improve the working environment through the reduction of risk exposure. This is primary prevention, which aims to prevent the onset of disease.

Health surveillance includes hearing conservation and vibrating tool user programmes. Services include mental health and peer support groups, help with quitting smoking, WORKSMART (a task analysis and worker ‘potential match’ process), drug and alcohol rehabilitation support, a physiotherapy service and weight-loss support groups.

**Promotion**

TSE offers a ‘Health 4 Life’ assessment to each employee that includes blood pressure and cholesterol testing in addition to weight and abdominal girth measurement, to assess their 10-year coronary heart disease and stroke risk.

The uptake for voluntary Health 4 Life checks has increased by more than 250% since 2010 and is increasing year-on-year. Data from randomly selected 2011 Health 4 Life results from across the workforce was analysed (approximately 10% of workforce). The analysis identified obesity, inactivity and undiagnosed hypertension as the main priorities, all of which are known coronary heart disease and stroke risk factors. The identified risks are a national problem and addressing these issues with our workforce is a priority.

Health champions volunteer to engage with colleagues on health-related issues. Since 2010, there has been a seven-fold increase and the number of volunteers is growing all the time.

This dedicated work group includes representatives such as occupational health professionals, communications team members, facilities managers, safety representatives and shop-floor employees.
Reintegration

TSE holds monthly health promotion events and activities and also offers a weekly ‘health bus’ service, which was introduced to improve access for male workers who, culturally, are known to often delay seeking medical advice.

‘Wheels on Wednesday’ is a service in which the health bus visits the site and offers a ‘drop-in’ opportunity for workers.

Leadership and management is a critical success factor in reducing absences and assisting with the reintegration of individuals into the workplace, as well as health-promotion services. By accessing available health-promotion opportunities and initiatives offered by our team, line managers can have a positive impact on the health of their work teams, which can lead to a reduction in sickness absence.

Our managers have a responsibility to identify links between individuals’ health and their performance, and to access appropriate support from occupational health for such individuals promptly. Our company policies and management processes support the rehabilitation of workers, either to remain in work or return to the workplace after illness or injury in a timely fashion. This is supported by evidence that suggests that work is good for health and challenges the assumption that illness is incompatible with being in work.

Conclusion

The practice of delivering health-promotion initiatives that meet the needs of the workforce can be applied to all worldsteel member organisations. Sound business decisions cannot be made without genuine consideration for people’s health. It is well recognised that positive well-being increases an individual’s motivation and performance. This, in turn, is good for the long-term future of the business.