



SAFETY AND HEALTH CONFERENCE: NEW TECHNOLOGY AND INNOVATIONS

10-12 SEPTEMBER 2013 | HILTON GARDEN INN ATLANTA DOWNTOWN, ATLANTA, GA., USA

TUESDAY 10 SEPTEMBER 2013

4 p.m.
Registration

5 p.m.
Reception

10 a.m. IMPROVING OPERATOR OSHA COMPLIANCE AND SAFETY WITH THE USE OF TECHNOLOGY

Jim Gaskell, Crown Equipment Corp.
Defines how technology can be used for vehicle access control, OSHA compliance, operator licensing, safety, equipment utilization and productivity.

11 a.m. PLANT SECURITY AND WORKPLACE VIOLENCE

Dave Fowler, Personal Safety Training Inc.

Noon
Lunch

WEDNESDAY 11 SEPTEMBER 2013

7 a.m.
Registration and Continental Breakfast

8 a.m. KEYNOTE PRESENTATION: SAFETY LEADERSHIP

Ian Sadler, MCC International
The role good leadership plays in the maintenance of a safe working environment.

9 a.m. SAFETY LEADERSHIP AND MOBILE EQUIPMENT

Malcom Dunbar, Edw. C. Levy Co.
This presentation discusses the importance of safety leadership principles when designing systems using heavy mobile equipment.

9:45 a.m.
Break

1 p.m. 2012 DON B. DAILY MEMORIAL FUND GRANT RECIPIENT: LORAIN COUNTY COMMUNITY COLLEGE — CUSTOMIZING OCCUPATIONAL SAFETY TRAINING FOR THE STEEL INDUSTRY

Duncan Estep, Lorain County Community College
An electric arc or an arcing fault is a flashover of electrical current through the air from one exposed conductor to another. From an employee hazard standpoint, there is the potential for exposure from a high level of heat from the flash, potentially resulting in serious burn injury as well as electrical shock hazard. This problem exists in the steel industry, where a large quantity of electrical energy is used in the manufacture of steel. The demand for a continuous supply of power resulting from manufacturing operations has brought about the need for electrical workers to perform maintenance on exposed live parts of electrical equipment. Personal protective equipment (PPE) can provide heat protection from an arc flash up to 40 Cal/cm². Any hazard above that amount represents an extreme danger potential. Engineering solutions must be employed to reduce the arc discharge duration for any arc flash hazards to a safe level. This presentation outlines a strategy to reduce a specific hazard in conjunction with steel manufacturing.

1:30 p.m.

**2012 DON B. DAILY MEMORIAL FUND GRANT
RECIPIENT: MILWAUKEE SCHOOL OF ENGINEERING —
DESIGN OF AN ACTIVE WARNING SYSTEM FOR FALL
PROTECTION**

*Fred Karsten and Adam Resnick, Milwaukee School of
Engineering*

The goal of this project was the development and construction of an integrated sensing system to warn a ladder user of actions that may result in a fall. The sensing system, coupled with a microcontroller, would be used detect conditions such as improper setup, overreaching and overloading, and issue a warning signal to the user. This would allow the system to prevent a fall, rather than protect the worker after a fall occurs. The test-bed for this system was a step-ladder, but the results could be generalized to a variety of ladders, scaffolding or other climbing apparatus used in an industrial environment. The system was designed, prototyped and tested by a mechanical engineering student design team at Milwaukee School of Engineering, with the support of the Don B. Daily Memorial Fund to Promote Steel Industry Safety and Health. The system was successfully constructed, prototyped and calibrated.

2 p.m.

**2012 DON B. DAILY MEMORIAL FUND GRANT
RECIPIENT: GEORGIA INSTITUTE OF TECHNOLOGY —
FIELD TRIALS OF REAL-TIME PROACTIVE WARNING
AND ALERT TECHNOLOGY**

Statistics in the steel manufacturing environment demonstrate that the steel industry is one of the most dangerous industries in which to work. Two of the most frequent fatalities in the steel manufacturing environment relate to material handling or transportation equipment. The focus of this research is to demonstrate that many emerging location tracking technologies still lack in providing real-time proactive alerts that ultimately protect personnel from potential hazards. Proposed is a reliable, mobile and cost-efficient system that alerts ground workers of nearby hazards — for example, moving heavy equipment. Thus, the proposed system works before a hazardous event occurs, and will alert not only the worker in real time, but also the equipment operator. Logged data can also be used for post-event analysis, education and training.

2:30 p.m.

Break

2:45 p.m.

**HAND SAFETY AND HAZARD IDENTIFICATION RISK
ASSESSMENT**

Joanne Zaraliakos, U. S. Steel Canada

3:45 p.m.

Break

4 p.m.

CONTRACTOR QUALIFICATION PROCESS

Debbie Chavis, Gerdau Calvert City Mill

Provides Gerdau's example of how contractors are pre-qualified before working on-site so the safest contractor can bid on projects.

5 p.m.

Adjourn

7 a.m.

Continental Breakfast

8 a.m.

WELLNESS AND HOME SAFETY

Butch Collins, Gallatin Steel

This presentation will look at the type and cause of incidents that occur off the job and in the home. Also discussed will be home safety and wellness activities for both employees and their families.

8:45 a.m.

OVERHEAD CRANE OPERATIONS

Ted Blanton, NACB Group Inc.

This session will cover significant changes to overhead crane (OHC) operations and techniques used to better train and qualify new and current OHC operators.

9:30 a.m.

Break

9:45 a.m.

IN-PLANT SAFETY WALKWAYS

Jim Christina, Gerdau Long Steel North America

Discussion on walkway best practices in Gerdau's North American mills and the methodology in designing them.

10:30 a.m.

SAFETY MAINTENANCE — WORK REQUESTS

Butch Collins, Gallatin Steel, and Jim Alesia, Steel Dynamics Inc.

11:15 a.m.

FALL PROTECTION

Matt Squires, Honeywell Safety Products

Noon

Lunch

1 p.m.

TOUR OF GERDAU CARTERSVILLE MILL



5 p.m.

Return From Tour and Adjourn

