2015 Safety Awards

Final Presentation

Laundry chemical exertion risk: In the laundry room at Meadow Ridge Retirement Community, there were several large, heavy totes of chemicals used on a regular basis. There was a high potential for an exertion injury when transferring these totes to their final destination. We switched to much smaller bottles of concentrate material.

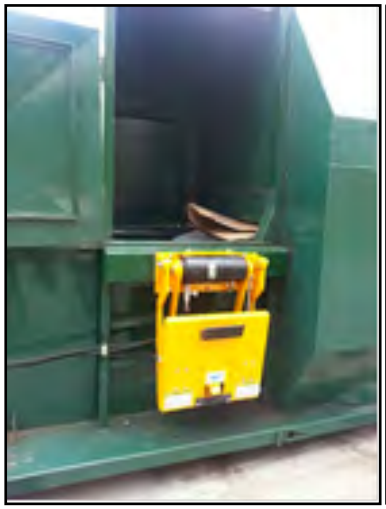
Before

After

The Cypress of Hilton Head Retirement Community had multiple risk factors when throwing out trash, including a trip hazard, slip hazard and exertion hazard.

Before

After



Installation of an electric lift eliminates the need for a ramp, thus eliminating the slip and trip hazard from the ramp and the exertion hazard from having to lift potentially heavy bags of trash.

Fall Hazard: The loading dock (left) at Friendship Village Sunset Hills Retirement Community was not properly guarded, which could have resulted in a fall.

Before

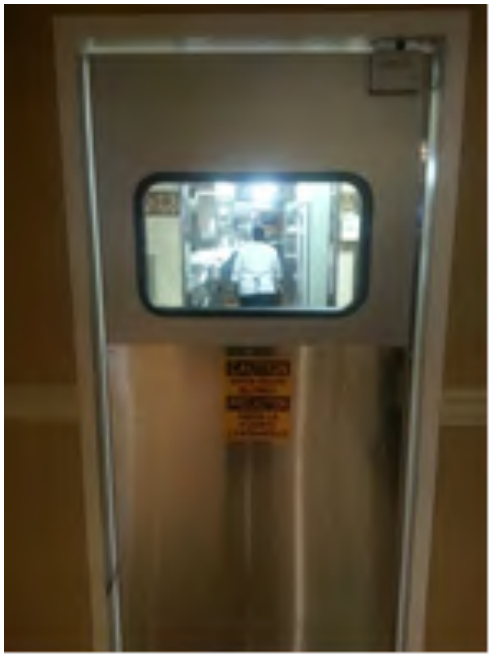
After

A cantilevered dock guard was installed to prevent accidental slips, trips and falls. Because sections of the guard hinge up on hydraulic pistons, it is very easy to use. The gate system lifts straight up almost like a railroad crossing arm and does not use up any valuable floor space to open or close.

Swinging door hazard: The main entrance into the kitchen at Casa de las Campanas Retirement Community opens into a very busy four-way intersection. This door swings both ways and people may be entering from either side. Solution was to install a door with a much bigger window. The window has been replaced with one three times larger. It is now very easy to see people coming from either direction.

Before

After



Blocked fire rated doors - Sagewood Retirement Community was having an issue with fire rated doors being blocked or propped open. They corrected this issue by placing a yellow stripe around the door to help remind people that this area must remain clear.

Before

After

Second Floor Railing

Before

After

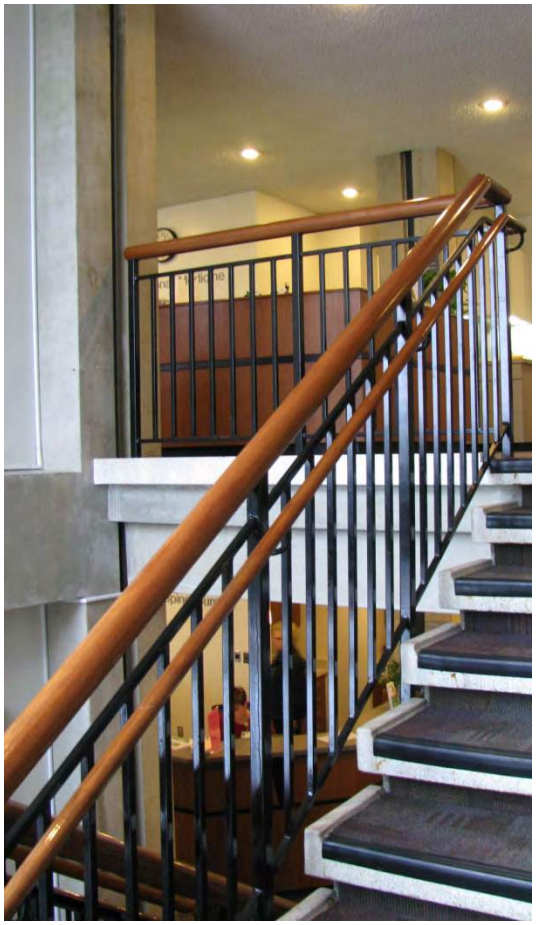
Second Floor Railing

- The second floor railing was grandfathered in at this location, so there was no requirement to update it. We added Plexiglas to as a short term fix so a small child couldn't climb though. The opening between each upright was 10". We felt this was not enough because an object could roll off under the Plexiglas and fall to the floor below. The other problem was the overall height of the railing was 34". The new railing is 42", the spacing between the uprights is 3.25" and there is a kick plate at the bottom to prevent objects from rolling off.

Stair Railing

Before

After



Stair Railing

- Like with the Second Floor Railing the Stair Railing was grandfathered in. We had also added Plexiglas to these as a short term fix. The spacing between the uprights on the stairs was 12”. The height from the front of the stair tread to the rail was 32”. The height of the new railing is 42” and the spacing between the uprights is 3.5”. We feel that these changes increased the safety of visitors and staff.

Emergency Response – Infection Control

- There are diseases out there that require more PPE and disinfecting than is normally used day to day, diseases like Tuberculosis, Whopping Cough and Ebola. We have made up totes that have all of the necessary PPE and disinfectants and supplies needed in case we need them. We have these at all of our departments and locations. The totes also include list of contents, directions for use to include laminated sheets on Donning and Doffing full PPE.

Ergonomic Mice

Ergonomic Mice – Reduce Stress, Reduce Pain and Reduce Injuries

- When you use a standard mouse (Image 1) you are constantly using a pinch grip to control the mouse. The mouse in Image 2 fits the shape of your hand and you can control it without griping the sides. The mouse in Image 3 has your arm and wrist rotated to a neutral position taking stress off of the elbow and shoulder.

Ergonomic Mice (continued)

- The mouse in Image 4 is a ball mouse and can be used to help staff with wrist, elbow and shoulder problems. The mouse in Image 5 supports the wrist reducing wrist and elbow stress.
- All four of the Ergonomic mice eliminate the need to use a pinch grip to control the mouse.
- At the time we replace a mouse with a Ergonomic mouse we also set the mouse speed, scroll speed and double click speed on the computer so they match the user and the programs they are using.

Work Order Coding

BEFORE

MH Equipment
People, Passion, Purpose...

More than 20 locations including these local branches, serving you...

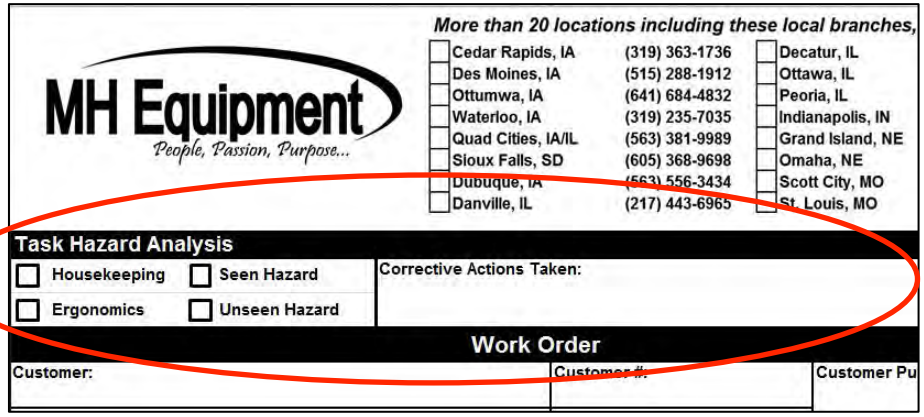
Evansville, IN	(812) 475-8510		Cincinnati, OH	(513) 681-2200
Bowling Green KY	(270) 842-3535		Columbus, OH	(614) 871-1571
Calvert City, KY	(270) 395-0552		Dayton, OH	(937) 890-6800
Lexington, KY	(859) 253-1682		Erie, PA	(814) 455-4455
Louisville, KY	(502) 962-6560		Charleston, WV	(304) 776-6900

Work Order

Customer:		Customer #:		Customer Purchase Order #:
Address:		Phone #:		
Make:	Unit #:	Open Date:	Closed Date:	Work Order #:
Model:	Serial #:	Hour Meter:		

Explanation of Services Performed

AFTER



MH Equipment
People, Passion, Purpose...

More than 20 locations including these local branches,

Cedar Rapids, IA	(319) 363-1736		Decatur, IL
Des Moines, IA	(515) 288-1912		Ottawa, IL
Ottumwa, IA	(641) 684-4832		Peoria, IL
Waterloo, IA	(319) 235-7035		Indianapolis, IN
Quad Cities, IA/IL	(563) 381-9989		Grand Island, NE
Sioux Falls, SD	(605) 368-9698		Omaha, NE
Dubuque, IA	(563) 556-3434		Scott City, MO
Danville, IL	(217) 443-6965		St. Louis, MO

Task Hazard Analysis

☐ Housekeeping	☐ Seen Hazard	Corrective Actions Taken:
☐ Ergonomics	☐ Unseen Hazard	

Work Order

Customer:	Customer #:	Customer Pu

We at MH Equipment strive to create a culture of safety. Our mantra here is *Safe in the Moment*. If you can be safe for one moment, that can lead to one hour, which can lead to one day, one week, one month, one year!

To augment **Safe in the Moment**, we instituted a new program called **Grab the Moment**. Before starting any work, the employee takes a moment to pause and perform a TASK HAZARD ANALYSIS for the task he is about to perform so he can take steps to avoid or correct those hazards to avoid injury.

We revised our Work Orders so that the very first thing the technician fills out is the Task Hazard Analysis associated with the job he is about to perform. The technician identifies the hazard category, then writes steps taken to correct the hazard. This is a great way to keep Safety in front of our employees and also shows our customers that we take safety seriously.

Tire Press Crane

Before **After** **After**

Forklift tires and wheels can weigh anywhere from 25 pounds to well over 100 pounds. To allow their safe lifting by our technicians we installed articulated arm cranes on our tire presses to prevent lifting and straining type injuries. The cranes allow the technicians to mechanically lift the tire and wheel from the ground position and "swing" them onto the press platform without much physical lifting exertion or straining. Once the new tire is installed, the crane is used to remove the tire and wheel from the platform and place them back on the ground to be wheeled away with a dolly.

Ice Melt Jugs

In the Midwest, winter can be treacherous with snow, ice, wind, and drifting. At times inclement weather comes so fast that sidewalks and parking lots get packed with ice and snow making foot travel hazardous. At MH Equipment we have supplied our drivers with a jug of ice melt that they can sprinkle on the ground before getting out of their vehicle to give them some initial traction, and then they can sprinkle the ice melt around their service van . As they perform their jobs throughout the day and return to the vehicle for tools, parts, etc., the ice will be melted and he/she can work around or enter the vehicle safely.

Elimination of Potential Eye Injuries

- Our "Bead Wire" carts have projecting arms that might 'catch' an Employee's face. Initially we painted the ends of arms in Safety Orange but the risk remained. An Employee had the insightful suggestion of an easy "low tech" solution: slicing tennis balls and placing them over the ends. See before & after in photo. Cheap yet VERY effective!

Mitas Tires N.A. Gerald Edgar (641) 257-6482
gerald.edgar@mitas-tires.com
210 Rove Ave., Charles City, IA 50616-3402

Hazard: Employees working on Mi-T-M's production lines were experiencing minor cuts on their hands during the assembly process and near misses when a component would slip out of their hands.

Glove Program

Control: After an evaluation from a local glove distributor, the Safety department agreed upon a cut resistant glove that met our requirements: a cut resistant glove with a non-slip coating but sensitive enough to allow our employees to handle the smallest intricate pieces needed for product assembly. Our employees no longer get cuts on their hands, and the near miss instances have been eliminated. The gloves allow our employees at Mi-T-M to perform their jobs more safely than ever before.

Mi-T-M CORPORATION

Hazard: A Mi-T-M employee welding inside tanks would occasionally get lightheaded while welding. After investigation it was found to be caused from the argon gas the welding produced.

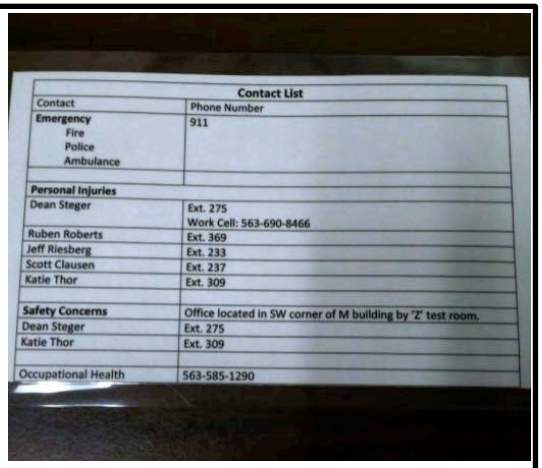
Welding Helmet

Control: The solution the Safety team came up with was to purchase a special welding helmet for the employee. The helmet filters clean air to the employee while he is welding via a face mask. The motor unit lets air travel through pre-filter and particle filter (and gas filter when used) to minimize respiratory hazards. The unit attaches to the employees belt so he is able to move around while he is working. The employee is now able to safely weld inside the tanks without getting lightheaded.

Mi-T-M CORPORATION

Hazard: Previously employees at Mi-T-M, especially on the production lines, had to remember phone numbers and extensions in case of an emergency or had to look through a long list for emergency numbers.

Emergency Contact List



Contact List	
Contact	Phone Number
Emergency	911
Fire	
Police	
Ambulance	
Personal Injuries	
Dean Steger	Ext. 275 Work Cell: 563-690-8466
Ruben Roberts	Ext. 369
Jeff Riesberg	Ext. 233
Scott Clausen	Ext. 237
Katie Thor	Ext. 309
Safety Concerns	Office located in SW corner of M building by 'Z' test room.
Dean Steger	Ext. 275
Katie Thor	Ext. 309
Occupational Health	563-585-1290

Control: Thanks to the safety department, each production line as well as other areas received a laminated card with important numbers and locations to be kept readily available in case of an emergency. The list filters out the numbers that aren't needed for an emergency. The contact list assists in a quicker response time if anything were to happen that immediate assistance was needed.

Mi-T-M CORPORATION

Hazard : Previously Mi-T-M did not have a policy for when fire extinguishers were discharged, ie. Where to put them once used, how to get them filled, and who to notify when they were put to use.

Fire Extinguisher Program

Control: The Safety department developed a policy for discharged fire extinguishers and identified locations to take the discharged fire extinguishers so they get checked over and filled back up. The locations house a cabinet with charged fire extinguishers to exchange with the discharged ones. The new policy prevents employees from being exposed to the risk of not have a fire extinguisher available at all times.

Mi-T-M CORPORATION

Due to bar feeder rails lagged to the floor on our CNC Lathe machine, the bar stock tub or cart had to be positioned about 10 ft. from the end of the lathe. Therefore, the operator would have to carry the 80-100 in. bar to the load end of the CNC Lathe machine and slide it into position. This created ergonomic stress issues for the employee as well as a safety issue for having the bar fed on the outside of the machine. So we engineered a bar stock containment device that would sit within the area of the feeder rails and would enclose the bar completely as it is feed into the machine.

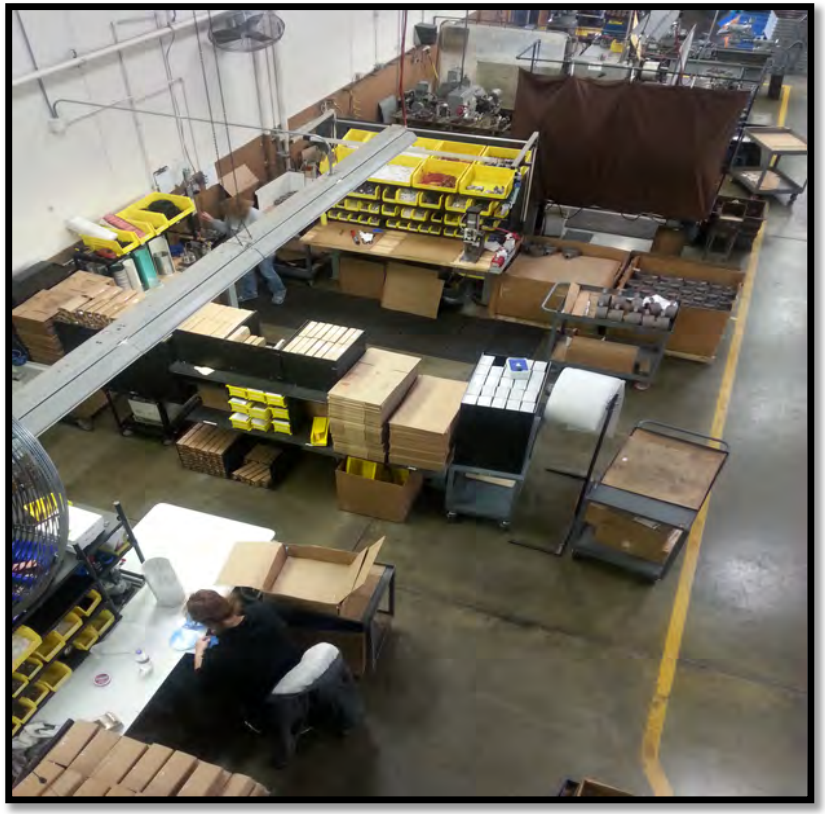
Before

After

Our Ergonomic Task Force Team had identified many ergonomic stressors associated with our 818 and 918 product assembly station. The work benches were not at a proper height, employees were handling parts multiple times throughout the process, etc. The company decided to do a complete overhaul of the assembly station. We got the shop floor employees involved in the process. Adjustable height tables were installed, all parts, tools, and equipment used in that assembly were placed in the proper areas. They are no longer handling parts multiple times, and the ergonomic stressors were eliminated.

Before

After



NATIONAL RAILWAY EQUIPMENT CO
SILVIS IL.

IISC SAFETY AWARD FOR HAZARD CONTROLS

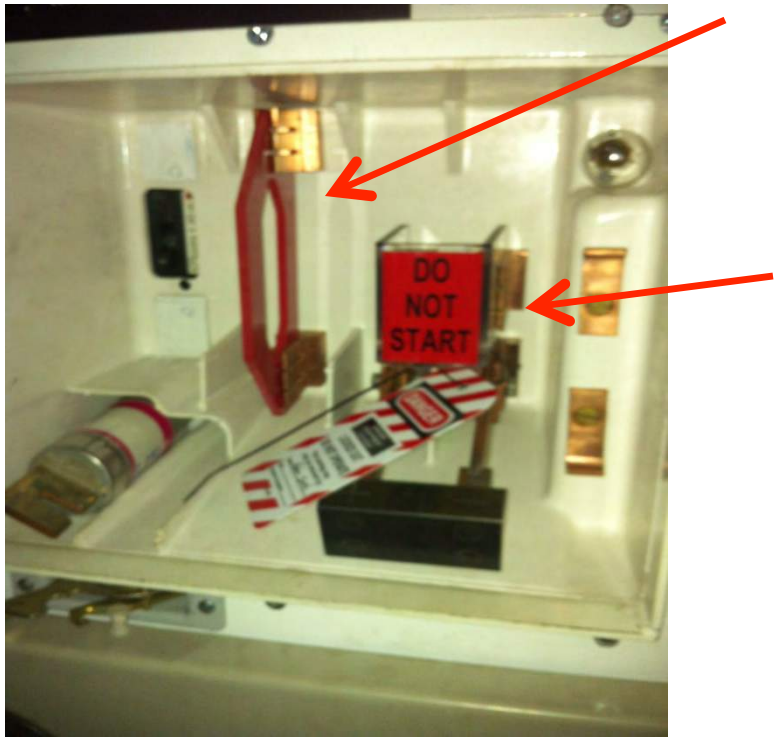
2014 - 2015

Locomotive Lock-Out-Tag-Out

We have implemented in our shops a Locomotive Lock-Out-Tag-Out policy. This will allow workers to perform functions within the locomotive without the danger of someone energizing the system and creating a danger to those working on or around the locomotive.

BEFORE

AFTER



Fire Extinguisher UPGRADES

This shop performed it's own fire extinguisher maintenance. There were many complaints of extinguishers not being replenished causing issues with availability, or not operable. We have brought in a third party to provide our extinguisher needs. We now have reliable, and adequate quantities of fire extinguishers throughout the facility. Picture taken during renovation - All extinguishers ae now identified properly.

NATIONAL RAILWAY EQUIPMENT CO.
DIXMOOR IL.

IISC SAFETY AWARD FOR HAZARD CONTROLS

2014 - 2015

Tornado Fire Alarm Boxes

- Boxes were placed within the facility last year. They are now equipped with horns and flashlights and a copy of our EAP. Workers have been trained on the procedures to follow in the event of a weather or fire emergency within the facility.

Locomotive Lock-Out-Tag-Out

We have implemented in our shops a Locomotive Lock-Out-Tag-Out policy. This will allow workers to perform functions within the locomotive without the danger of someone energizing the system and creating a danger to those working on or around the locomotive

Before

After

Fire Extinguisher Locations

- Although signage and markings met local, state, and federal requirements, we added reflective striping to help identify where our extinguishers are located to take the guess work out of the equation for those areas where the height of the locomotive obstructs the view of the employee.

National Railway Equipment

Mt. Vernon IL.

IISC Safety Award

for

Hazard Controls

2014 - 2015

Locomotive Lock-Out-Tag-Out

We have implemented in our shops a Locomotive Lock-Out-Tag-Out policy. This will allow workers to perform functions within the locomotive without the danger of someone energizing the system and creating a danger to those working on or around the locomotive.

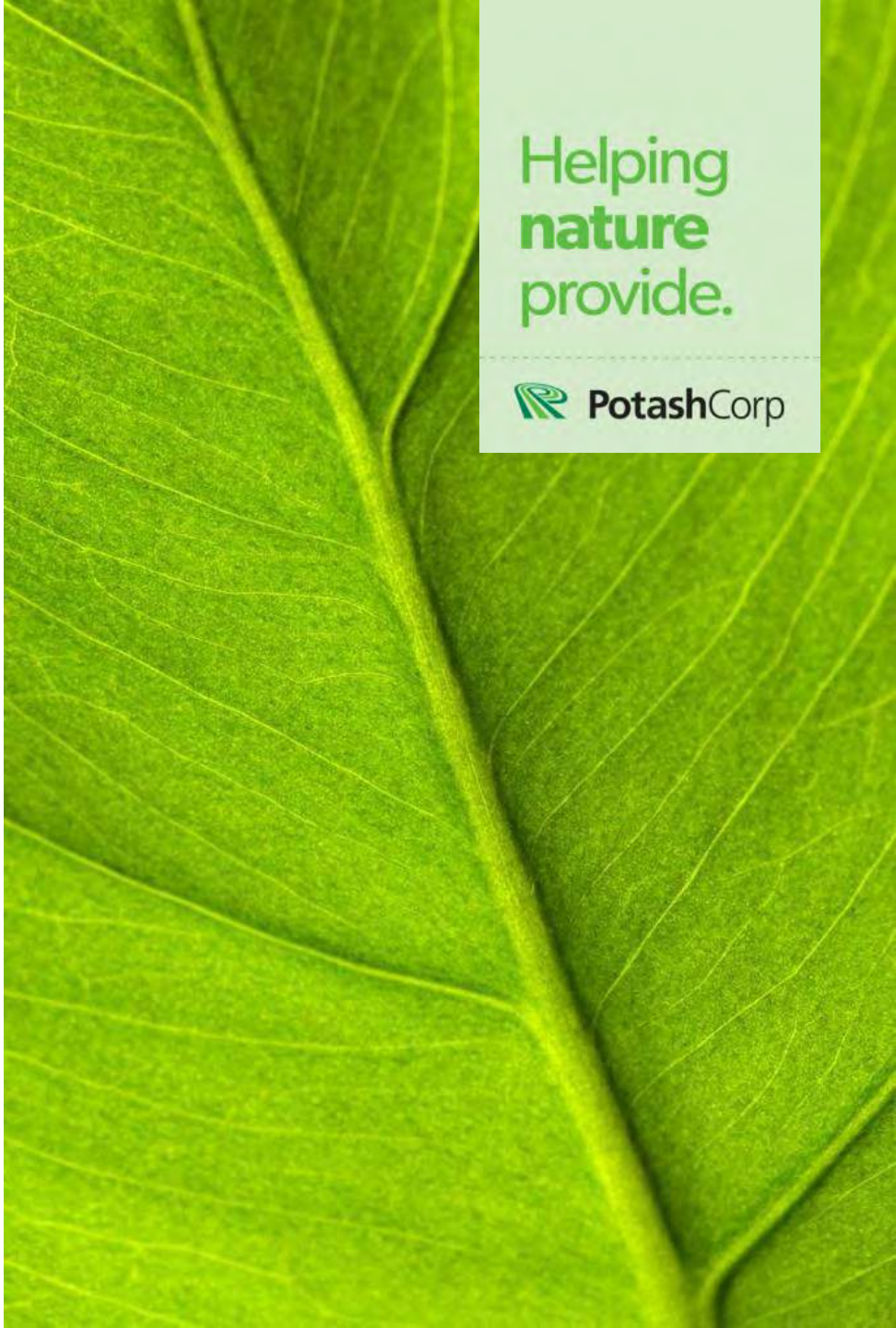
Before

AFTER

Thank You…
From,

•2014 Hazard Control Recognition Program Application

- PCS Phosphate Company, Inc.
- Marseilles Feed Products Operation
- Marseilles, IL



Access Platform

- Drivers and Operators had to climb onto the back of ISO containers to clean and inspect before loading. The exposure to falls and slips required a new plan.

Before – Drivers climbed onto container chassis to access bulkhead.

After – Had contractor fabricate large aluminum platform with stairs.

Fall Protection Life Jackets

•Operators loading barges walk on top of lids to open hatches. Before the new life jackets, they had to wear fall protection harness under, or over life jackets.

•Thanks to the Safety Steering team, we found a self-inflating life preserver (PFD) that met USCG standards and had built in fall protection harness.

•(Pictures are examples, not actual units)

•(Pictures are examples, not actual units)

Job Hazard Assessment

- The New Job Hazard Assessment is a field-level risk assessment tool for operators to use before starting a task.
- Basically the form offers the employee the opportunity to ask and answer two questions:
  - 1) What here could get me hurt?
  - 2) What am I going to do to prevent that?

Job Hazard Assessment — PotashCorp

1. Task Assignment Information

Task:	Supervisor:	Date:	Location:
	Contact #:		Ambulance Pick Up Point:

Worker(s)

Does this job have SERIOUS INJURY AND FATALITY (SIF) potential? ☐Yes ☐No

Has the SIF potential been discussed and actions identified? ☐Yes ☐No

Daily Focus Items

*Are there any distractions which will affect Us/Me today?	☐ Yes	☐ No	
*Am I/Are we ready to work safely?	☐ Yes	☐ No	
*Are there any pressures or limitations which would cause Us/Me to com[illegible]nise my co-[illegible] my safety?	☐ Yes	☐ No	
*Have I communicated [illegible] others [illegible] my ar[illegible] regarding my hazards a[illegible]w m[illegible] will affect them?	☐ Yes	☐ No	☐ N/A
*Have I/We [illegible] a sa[illegible] meeting fr[illegible]g to	☐ Yes	☐ No	

2. Task Planning / Hazard Recognition and Control

Task	Hazard(s)	Plans To Control Hazard(s)

The Work Area has been inspected by the crew leader and to the best of my knowledge it is safe. ☐ Yes ☐ No Signature _____

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Thank you

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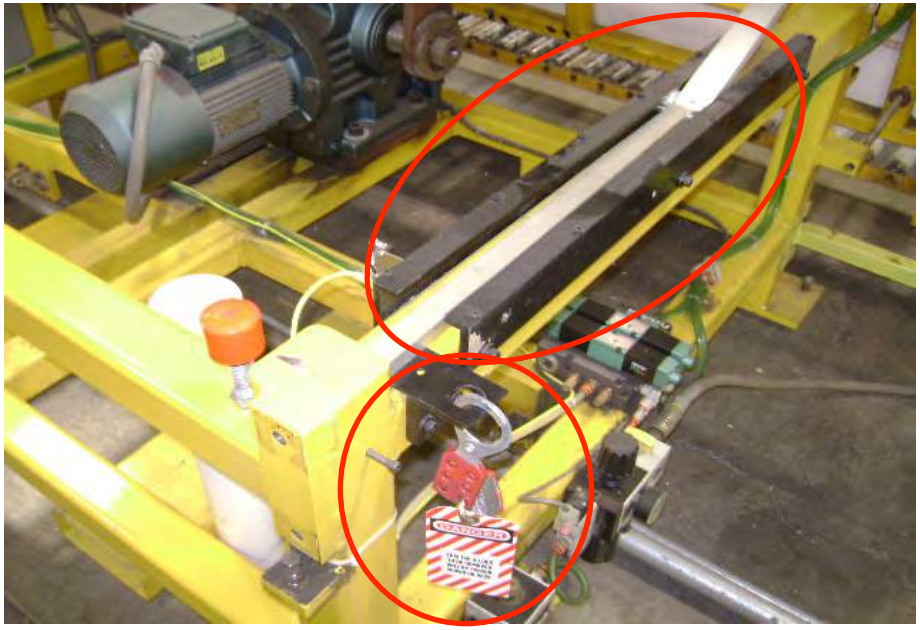
Table Brace Bar

Before

During the clean up process Team Members needed to virtually crawl under a tilt table and its frame, making it hard to conduct the daily cleaning requirements for Safety.

After



A brace bar with a lock out point was installed under the tilt table to ensure that the table top could not be cycled down or self released when the air is locked out during the clean up and any Maintenance activities.

Vertical Extrusion

Before

As our product offering continue to grow, so did the height of our lineal extrusion carts. Team Members were consistently reaching above their heads through out the shift to pull down the extrusion and stage on the saw.

After

Vertical racking was installed in the area, we staged our lower volume color offerings staged in it. This helped us eliminate the reaching for our Team Members. Ergonomic guidelines of > 86 inches was achieved.

Prefinish Trays

Before

Process for traying parts in Prefinish Paint area required lots of bending, reaching and added awareness in avoiding pinch points. Parts were being clamped onto small metal trays which then had to be removed mechanically after process completed.

After

Trays were developed for the parts to be pulled directly from the kitting carts onto the infeed of the Paintline. Ergonomically friendly to use, by snapping the part on and off the tray with a simple pinch and twist of the wrist.

Wrapper Head

Before

Process required Team Member to hold edge board in place causing a potential pinch point. Or the other option was to have another Team Member in the area to help Secure the packaging at the start of the wrapping process.

After

Spring mechanism added to the wrapper to hold the edge board, this freed up the TM's hands, avoided a pinch point and eliminate another Team Member from the area and the risk associated with the process.

Assembly Off Bearer

Before

Team Member needed to lift units off the assembly table, carry a short distance and place onto shipping skid. Ergonomic Concerns included lifting, twisting and frequent size change.

After

Linear Motion and Carriage Guide Rail

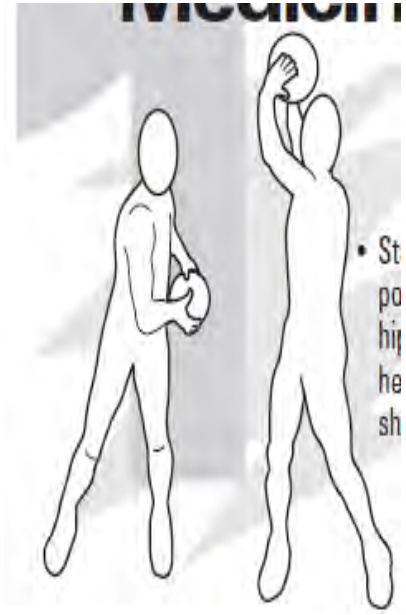
Roller system was built on so that the units can now be loaded onto the skid after passing down the moveable roller system. This is realigned for each unit onto the skid making minimal effort needed from the Team Member.
Eliminating a Bill Brough task of 8.

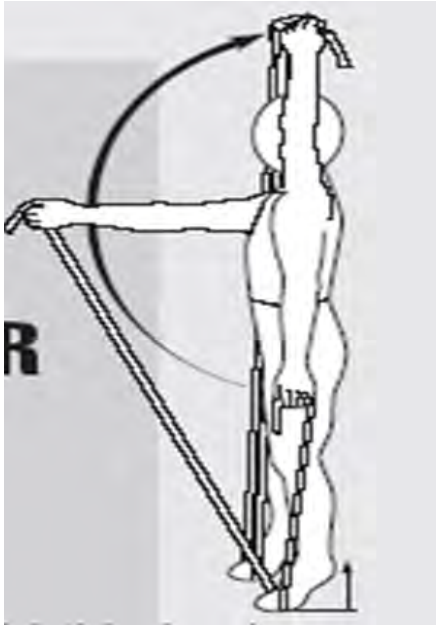
Design Improvement of DVA Racking: The racking system was originally put into place as an ergonomic improvement to our Packout area to eliminate lifting of the windows. The way the racking works is the operator will load a 10 unit rack on to the sled when he/she is ready for it by releasing a braking system.
Hazard: Nothing was stopping the full rack from going forward once the brake system had been engaged and the sled was not in the home position. This would allow the 10 unit rack to proceed forward and drop to the floor possibly causing an injury to someone standing nearby.
Improvement: Brackets were placed on each racking conveyor system. The brackets swing down when the sled slides over them and pops back up when the sled is not in position. They are positioned so that if the team member engages the braking system and the racking moves forward the installed brackets will stop the rack if the sled is not there to catch the rack

Coil Storage Tripping Hazard
Improvement: Metal coil would be kept on pallets on the floor in a designated marked space. The team member would then use a hoist to load the coil on to the machine. Depending on volume the area could get very crowded**.**

Stands were built to keep the coil off the floor.

Preventative Ergonomic Project: Ergonomics is a project that we focus on every year and as a continuous effort we looked a: **Are the general stretches right for everyone?**





We partnered with a physical therapist and we took a look at our current stretch routine and saw that 2 lines use a bit more core than the other lines . We implemented power band and medicine ball stretches into their routine. This will help build and maintain their core muscles.

Iowa-Illinois Safety Council Safety Award Program

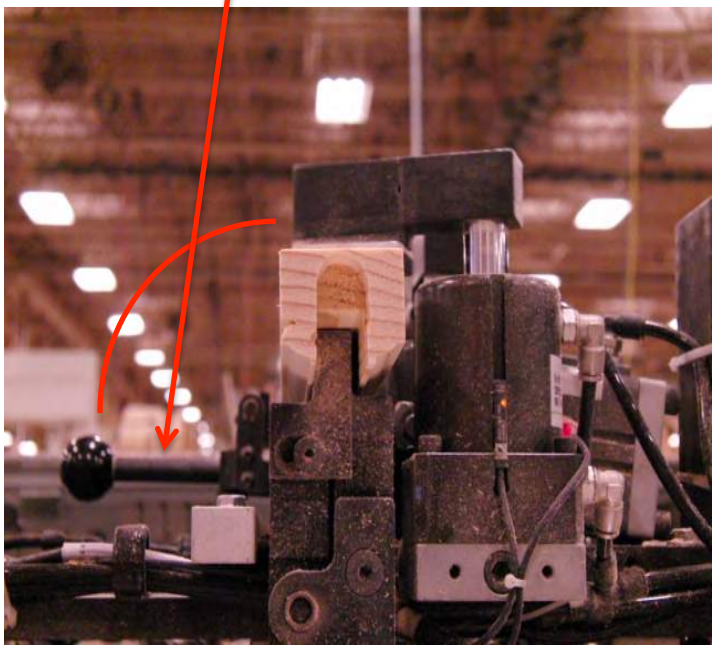
Pella Corporation – Shenandoah Operations

2014

Clamping System on CNC

The clamp lever was too high for the CNC operators. The action of reaching up over the first clamp to the release handle caused a lot of stress on TM upper back and forearm. Eliminated the manual clamp. Team member now sets part in place and uses a flesh senor button to engage the clamps

Before

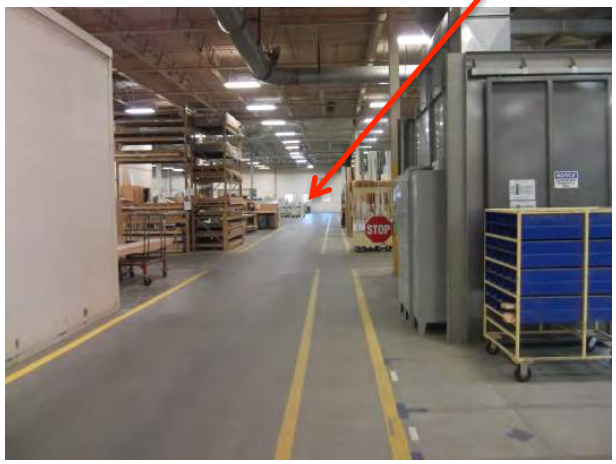


After

Forklift Approach Light

Forklifts would approach intersection. Pedestrians may not see or hear a forklift emerging from rack aisles or backing up.
As the forklift travels, a bright blue light glides across the floor about 15 feet ahead of or behind it (depending on the mounting location), Lets pedestrians know that a fork truck is approaching. Since the light moves only when the vehicle does, pedestrians can also understand whether or not the vehicle is stationary or on the move

Before



After

Iowa-Illinois Safety Council Safety Award Program

Pella Corporation – Pella, IA Operations

2015

Hand Sanding – Prefinish Cells

In our Prefinish cells the common practice of hand sanding was needed for every part to rough up the material before the final finish coat was applied.

Adding an automatic flap sander eliminated all the manual hand sanding within the Prefinish cell.

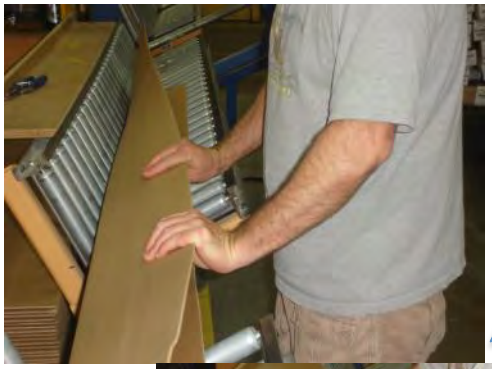
Before

After

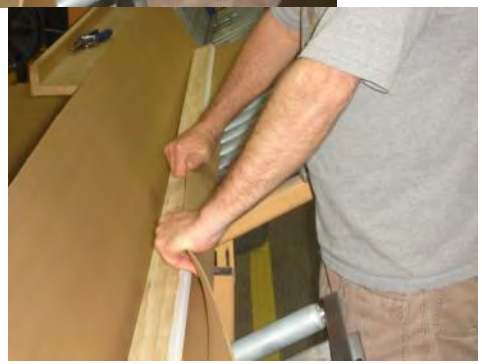
Cardboard Box Making

When making a cardboard box, folding the cardboard was very difficult when forming the box around the material. There were numerous finger and wrist movements and operators were complaining about the fatigue in their fingers and hands at the end of the shift.
A tooling change was made with our vendor to improve the perforation/crease, and the cardboard can now be easily folded by the operators. Fatigue at end of shift with this process has been eliminated.

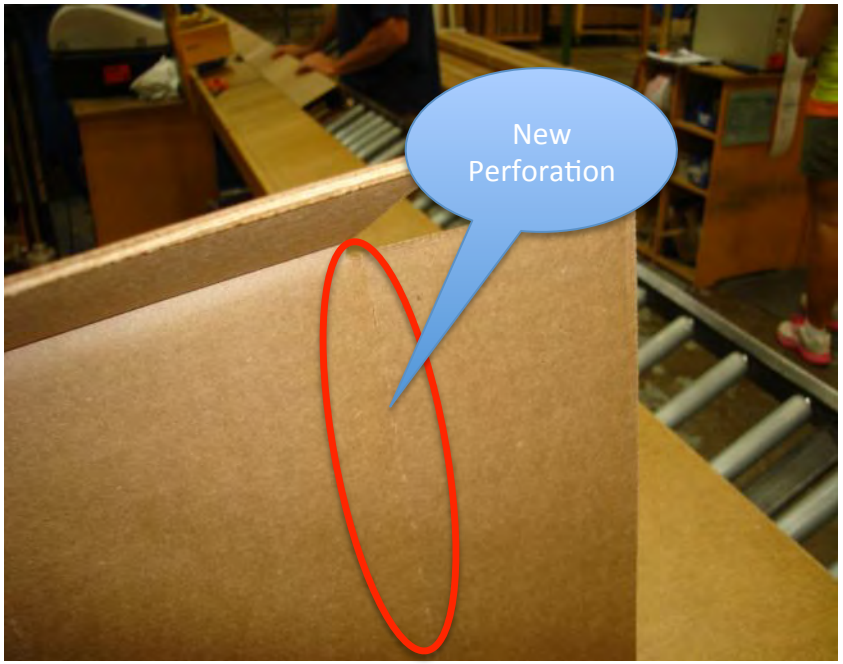
Before



Perforation was non existent



After



Compressed Air Couplers

Team members in our Value Add processes have to frequently switch staple guns for their job duties. Previously, team members would have to grasp/pinch the traditional air line coupler every 2-3 minutes to release the air when switching staple guns. Therefore, a team member in the Plant wanted to find something that was easier to disconnect than a traditional air line coupler.

Prevost Couplers were purchased and installed on the air line instead of the traditional couplers. This requires the team member to simply push the button on the coupler and it releases away from the male end of the gun automatically. No gripping or pulling motion is needed with this new quick release.

Before

After

Glass Disposal

Previously, when disposing of damaged or scrap glass, forklift drivers would remove a glass strap on the A-frame and then position the scrap glass load over the glass recycling hopper. Forklift drivers would have to "shake" the glass off of the A-frame into the hopper by rocking their lift truck back and forth. When the glass did not fall off the A-frame by rocking the fork truck, team members would then stand on the railing by the hopper and manually tip the glass from the A-frame into the hopper. This was an unsafe practice that we did not want to continue.

The Engineering Support Techs, with input from the lift truck drivers, designed and built a Glass Dumping "L" Frame. Two "L" Frames racks were built that a lift truck can move by the narrow end of the rack down when traveling in an aisle and can be picked up in the center when dumping scrap glass into the recycling hopper. The "L" Frame rack has a handle (pinned in position except for the dumping process) at the rear of the "L" Frame which is attached to a counterbalance. When the handle is pulled, the plywood front moves forward, tipping the glass into the scrap hopper. The driver is safely behind the "L" Frame rack with this new process and no "shaking" is required.

Before

After

Iowa-Illinois Safety Council Safety Award Program

Pella Corporation – Sioux Center Operations

2015

LF Sash Replacement Test Rack

Previously, team members picked up boxed units that could weigh between 43 – 100 pounds off table and carry around a test rack/air tester to value add (30 feet).

Test rack physical and programmable limitations were modified to accommodate larger replacement boxes. Team member now turns box on air table and slides it onto a conveyor. The boxed unit is then conveyed by machine to value add.

Improvement eliminated approximately 455 “lift and carries” per year.

Before

After

AS2 Replacement Sash Box Build

Creating a box to ship replacement sash to customers requires corner stapling. Team members staple approximately 170 corners per shift.

Previous stapling technique required team member to use open grip stapler requiring 35 pounds of grip force.

New stapling process uses a powered grip stapler reducing grip force to 4 pounds. An 88% reduction in grip force.

Before

After

Knife Grinding

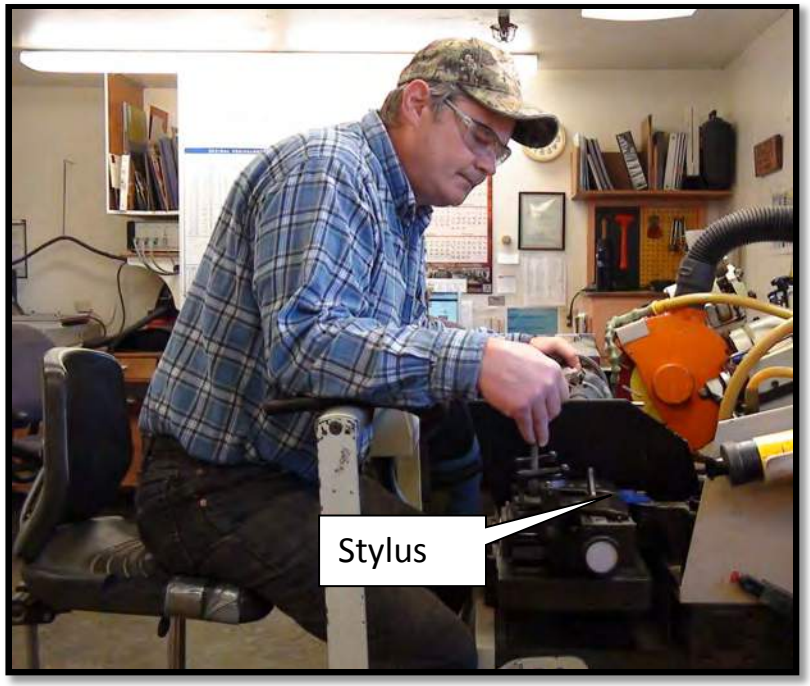
Team member had to lean over and look to his side to view stylus that followed grinding template. Team member experienced back, shoulder and neck discomfort and strain.

Bill Brough before score = 50

Video camera and TV installed to see the stylus. Team member now sits more comfortably with better body position, looking straight ahead at the screen.

Bill Brough after score = 38 (24% improvement)

Before



After

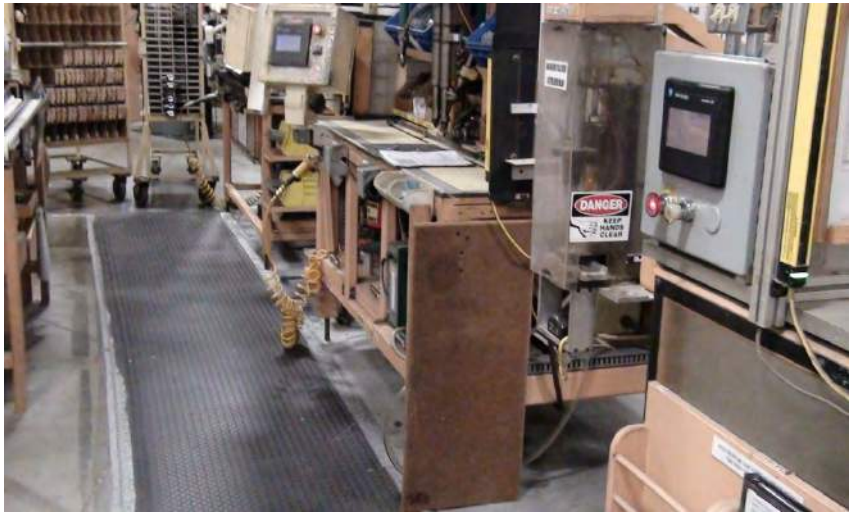
A1 Head/Sill Ergonomics

Continuous Improvement (CI) event improved ergonomics in head & sill prep area prior to window assembly. CI team identified new layout and adjusted table heights to minimize number of times parts were carried, touched or twists in cell.

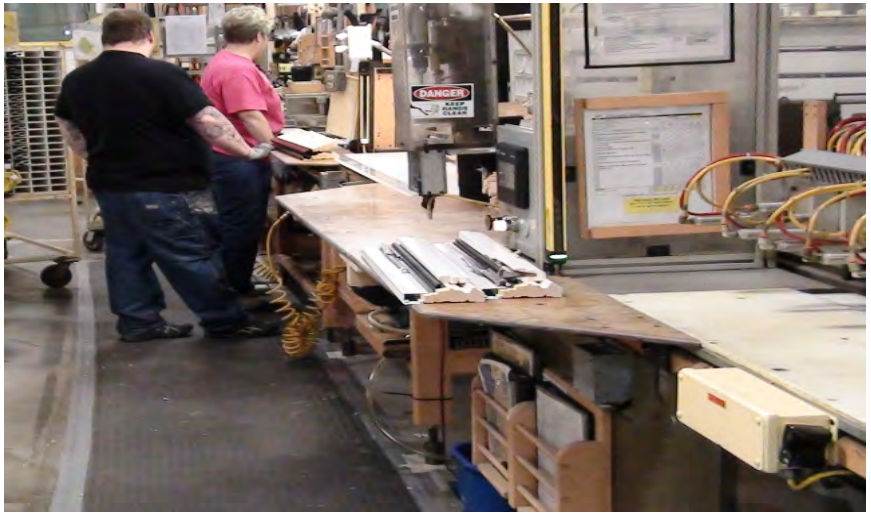
Event Metric	Before	After	% Improve
Bill Brough score	64	37	42%
# of touches*	13	7	46%
# of carries*	6	2	66%
# of twists in cell*	4	0	100%

*Per window assembly.

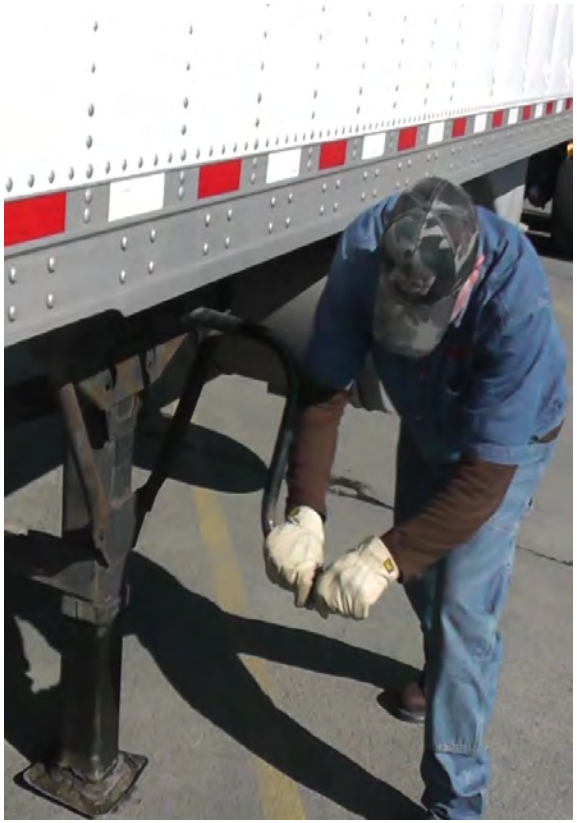
Before



After

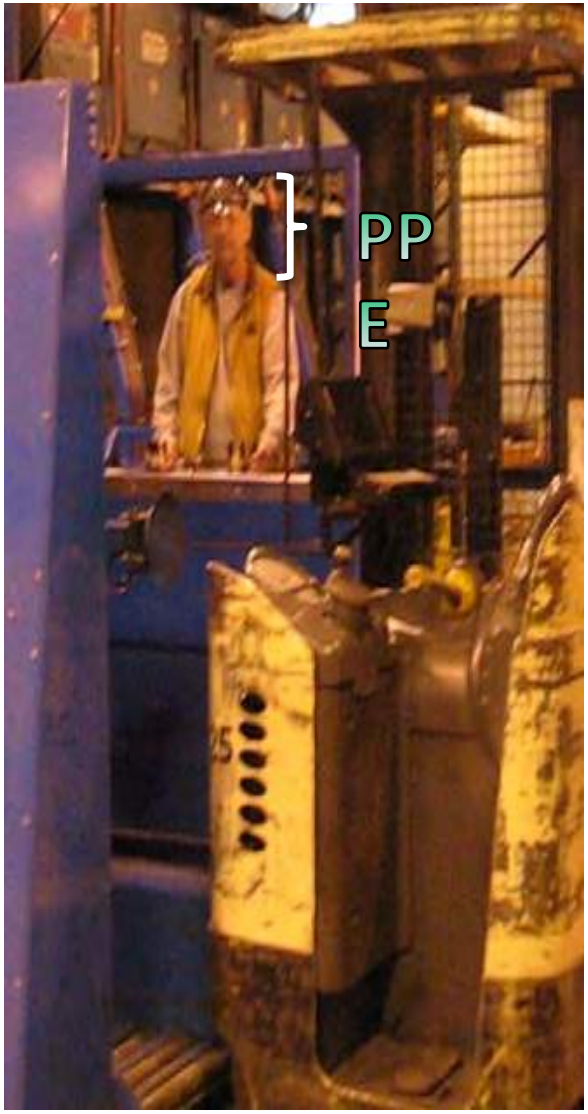


Before: The frequency and severity of near misses and injuries from drivers cranking the dolly handle escalated over a few years. We determined that a change in trailer specs led to more dock walk and binding on the dolly legs, making it harder to crank and more likely to kick back.



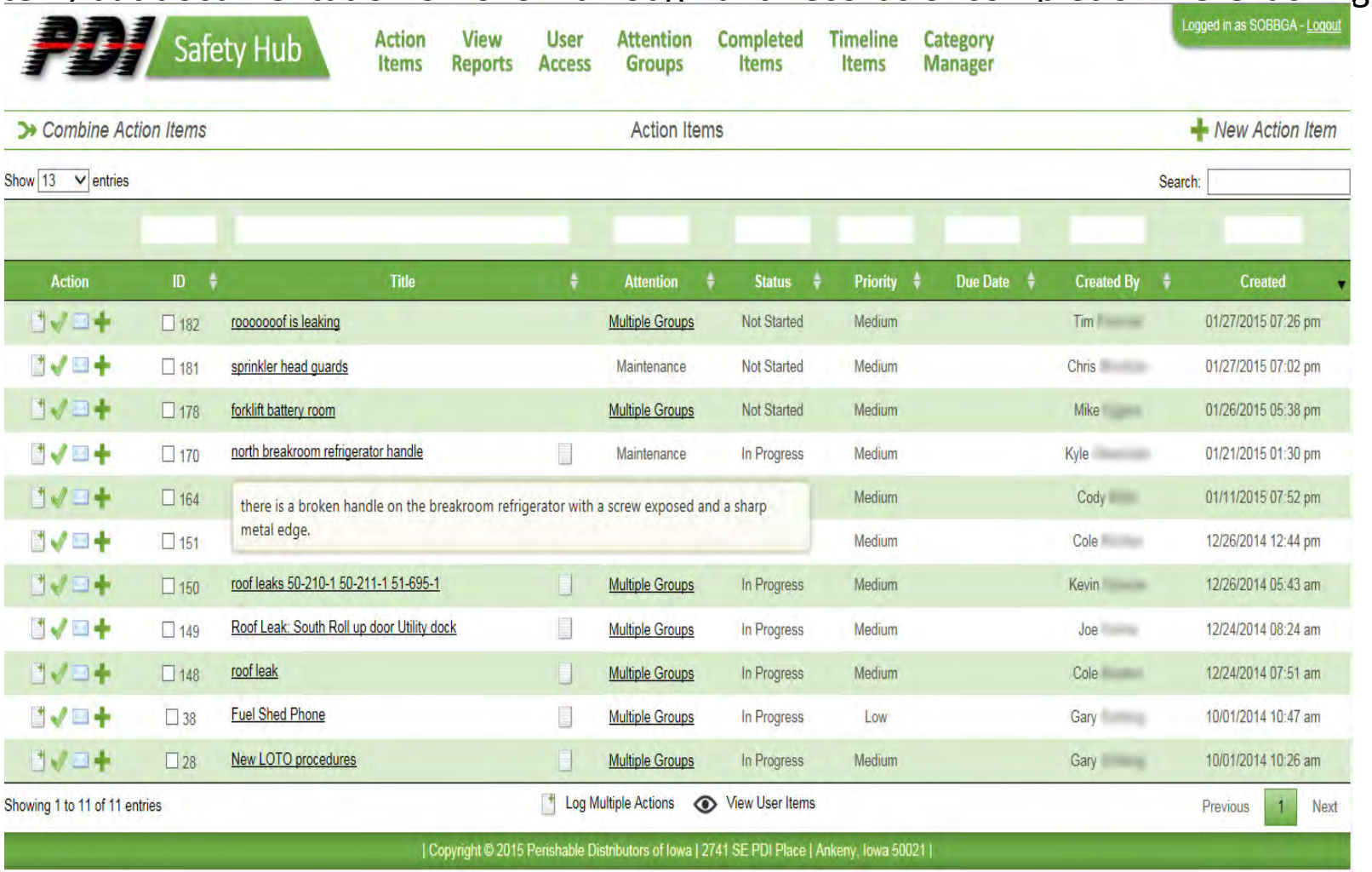
After: We began retrofitting all trailers purchased in the last few years with a ride height lock mechanism, effectively preventing dock walk and binding on the dolly legs. This system was also included in the specs of all new trailer purchases, and we have not had any accidents or injuries involving the dolly handle since.

Before: PPE was required for forklift battery changes to protect the operator from acid



After: A large Plexiglas shield was installed on the battery changing machine between the operator and the batteries being changed, eliminating the hazard and the need for PPE.

Before: Employees could report safety concerns through our warehouse management system, but documentation of follow through and records of completion were lacking.



After: The Safety Hub was created to manage the workflow of safety concerns, providing visibility to all responsible parties, and a place for documentation of corrective action taken. This has resulted in better accountability and a much more timely resolution of safety concerns.

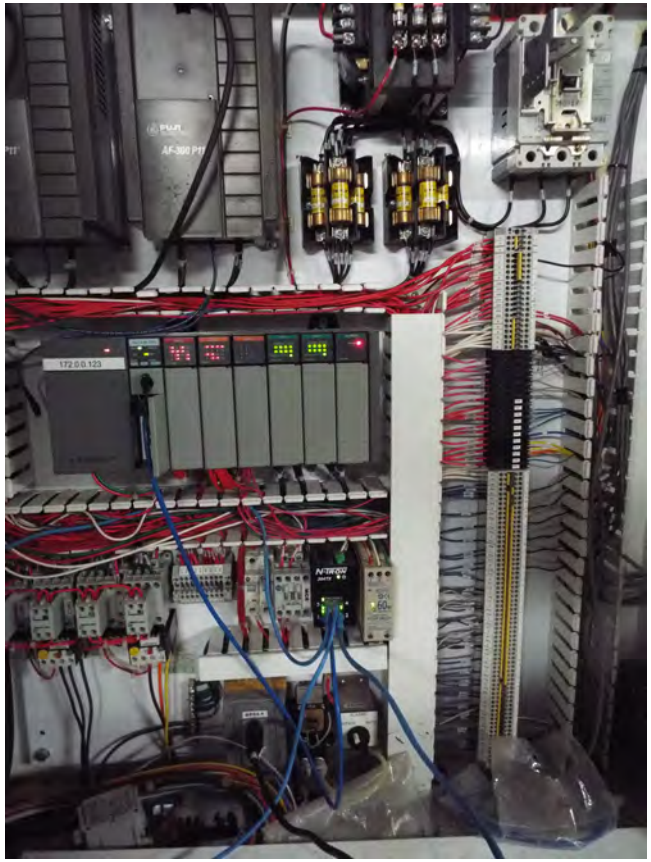
Project: Cyclone Walkways

Team Members had to use tall ladders to work on elevated equipment. This put them at risk because they were not able to use 3 points of contact when handling parts.

A walkway was built so that team members could easily reach the equipment they needed access to work on.

Project: Electrical Cabinet

Contractors had to open electrical control panels to hook up their diagnostic equipment. This put them at risk of coming into contact with the 460V and being electrocuted.



Ports were installed on the outside of the control panels so the panels do not have to be opened at all. Therefore eliminating the electrical hazard.

Project: Equipment Hoist

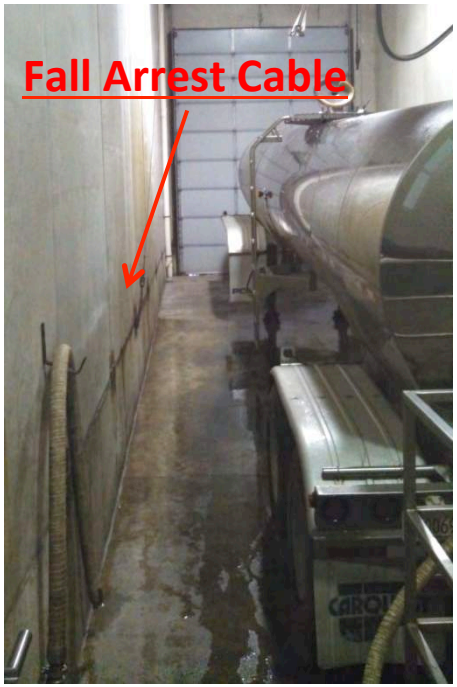
Team Members had to carry heavy equipment up several flights of steep stairs. This made them more vulnerable to injuries.

A hoist was installed so that heavy equipment can be easily hoisted up. Now team members have their hands free to use handrails while climbing the steep stairs.

Potential Fall Hazard due to Icy/Wet Tanker Trucks

BEFORE

Previous operations for tanker access required the use of a fall arrest harness and tanker ladders. With only one harness, training new personnel was difficult. Winter weather made tanker ladders icy and hazardous.



AFTER

A custom engineered mezzanine was contracted and installed with a drop down stairway with integrated protective fall cage for tanker hatch access, allowing safe operations and ease of training new personnel. Total cost Approx. $24,000.

Skin Laceration Hazards From Damaged/Sharp Metal Edges

BEFORE

12 Year Old aluminum trays had sharp edges and damaged corners which were significant skin laceration hazards during use. Homemade racks had sharp edges and pinch points.

AFTER

Various replacement options were researched and a suitable food grade smooth edge fiberglass tray was found. 600 New trays and 27 custom stainless steel carts were procured to completely replace/retire unsafe equipment. Total cost Approx. $100,000.

Unprotected Ladders and Roof Openings

BEFORE

Two 20’ Ladders for Roof access and the rooftop access holes were unprotected, resulting in potential fall hazards.

AFTER

Added Ladder Cage And Rooftop Guard

Two New Ladder Cages were procured and welded/ bolted to existing access ladders. Gated Guard Cages were procured and installed on the roof surrounding the access openings.
Total Cost Approx. $5000.

Exits, Exterior Structures, Hydrant Identification and Signage Program

safety is a mindset - not just company & osha compliance

Before – 38 Unidentified Doors

- Door numbering systems recommended in large industrial buildings and venues such as schools
- Emergency responders can access doors closest to scene
- Exits audited to location, direction, description, discharge and security; assigned a number per sequence guidelines
- Emergency services on site to review the plan and provide input.

After – Exit ID & Signage Program

- Enhancement of EAP
- Identify areas more specifically for auditing, training, work orders, shipping and receiving.
- New addition areas signed appropriately
- Authorized personnel placed as part of plant Food Defense Program

Structures & Hydrants

- Exterior structures' safety risks assessed
- Recognized Gas Transfer Station located across highway as hazard, added to EAP
- High-visibility poles put on all 7 hydrants

Building a Culture of Safety
INJAM – It's Not Just About Me

Safety Culture – Safe at Work – Safe at Home

Before – Low Safety Mindset

A Near Miss – Updated LOTO Policy

- Updated LOTO policy necessitated immediate training. Trainers took the opportunity to share 2014 IISC Speaker Tony Crow's tragic story about losing his eyesight and video about a man losing his life for not following LOTO procedures. Open discussion was held, followed by the plant manager stating…

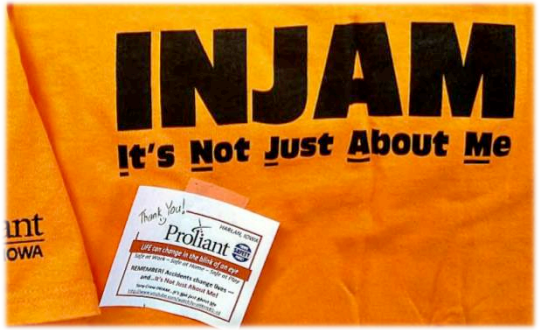
"Guys, I don't want to be making a call to your loved ones that you got hurt (or worse) today."

The Plan of Attack

- That session was so well received; all employees were attentive and moved by the emotional content. Going forward the plan is to interject personal and timely subjects into required training sessions.
- During the safety session, the trainer wearing an Flame Orange INJAM shirt asked if there were any questions and the guy in the back says "Yeah, how do I get an INJAM shirt?". The safety team worked with Tony and Cheryl Crow to obtain shirts and each employee received one in recognition of National Safety Month.
- The Safety Team is contemplating camo with orange print or orange camo for 2015. The workforce has almost doubled in the last twelve months. More mindsets to reset.

Today – More Conscientious Workforce, Teamwork Attitude

- Production Operator: "I've had a few people ask me about my shirt and I've explained INJAM. Whenever I think about it, safety glasses comes to mind. Constantly making sure my crew has them on. I think all new employees should hear Tony Crow's story."
- Maintenance: "Safety first, not only yourself, but everyone around."
- Production Supervisor: *(Suffered Recordable Injury)* "INJAM means safety is also for home, not just at work. The whole family is affected not just the person with an injury."



First Aid, CPR, AED & Emergency Preparedness

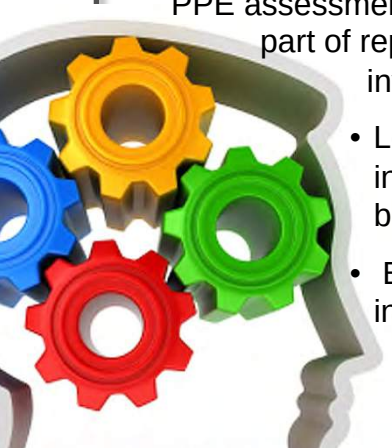
safety is a mindset - not just company & osha compliance

Before –

- No staff trained as first-aid responders
- Inadequate and excessive amounts of non-mandatory first aid supplies

Burn Hazards –

- The most frequently identified hazard in JHA and PPE assessments are burns. Burn have also been part of reported accidents and near miss investigations in 2014 specifically.
- Local emergency responders came into the plant and provided basic burn treatment education classes
- Burn stations and blankets were installed in high burn hazard areas



Sudden injuries or illnesses, some life-threatening, occur at work

After –

- Twenty-five Emergency Action Team Members sent to HeartSaver, First Aid, and CPR/AED Training

- Centrally located First Aid stations, adequately and continuously re-supply stations, installed AED units as well as grab ‘n go first aid and burn kits

- Donated unnecessary and non-compliant such as non-metal detectable items to local Cub Scouts

Pallet Stacking

safety is a mindset - not just company & osha compliance

Before –

- Excessive stacking of twenty-five plus pallets

After –

- Company safety guideline less than fifteen high

We had to gear up in protective wear to open a processor with a manual winch system. The close proximity of the opening of the processor with the winch was the hazard. Now we have installed an electric winch system that can be opened from a safe distance

Before

After

Proliant in Harlan IA
2014 SAFETY IMPROVEMENTS
Completed

- ✓ Wearing ear muffs instead of ear plugs
- ✓ Changing from bump caps to hard hats
- ✓ Completed Voluntary First Aid/CPR/AED Training Program
- ✓ Risk Control- Physical Capacity & Baseline Hearing Testing.
- ✓ Implemented pallet stacking policy (15 high)
- ✓ Improved alert notification system by installing an intercom instead of air horns
- ✓ Perform a Job Hazard Analysis and PPE Hazard assessment

Excessive Height
25+ pallets

Correct Height
15 pallets

Employees were loading and unloading materials on mezzanine without proper guarding in place. New barriers were installed to protect employees when loading and unloading materials.

Roller tubes were originally loading and transported to paint room on square carts, in which they were not secured. New carts were designed and built to hold roller tubes in place when transporting and painting.

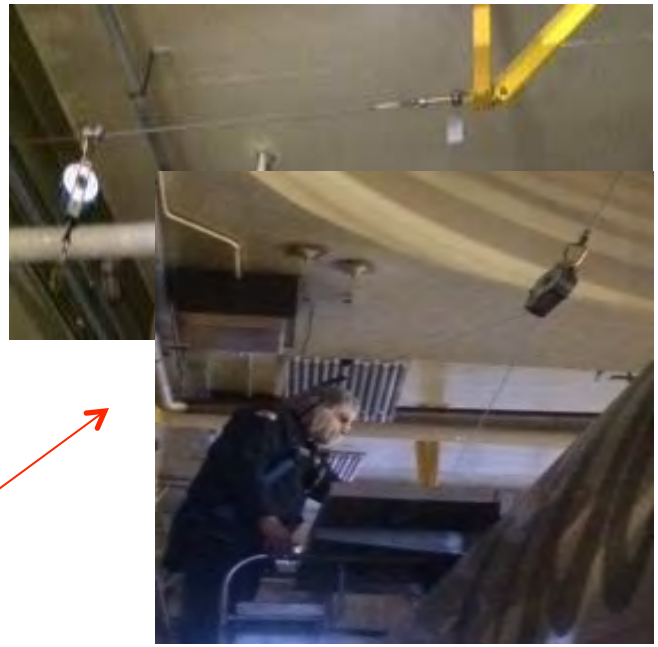
Loadout Fall Protection Improvements

The Loading area did not have permanent fall protection systems. There was a portable ladder which needed two men to spot in order to access the trailer domes. Permanent stairs to the railcar loading platform area were deficient in design which may have caused ergonomic issues. There were concerns of major injuries if not rectified.

Before

No Fall Protection inside Load-out area

After



A JSA was performed which assessed different equipment or ergonomic changes that could be used to eliminate issues. The solutions:

- A permanent Fall protection harness was installed to access the trailer domes safely eliminating to have a spotter with the old rolling ladder.
- Ladder to the railcar loading platform was modified with a platform at the bottom of the stairs. Prior to the modification the steps were too far apart making climbing hard to do.

Loadout Improvements

The loading area had many manual tasks which eventually lead to a lost time accident.
Two of the most serious…..
1. Bending to lift and connect a 3" hose full of heavy syrup, weighing approximately 100 pounds, to connect to piping
2. Numerous trip hazards due to multiple hoses laid across the floor.

Before

After

A JSA was performed which assessed different equipment/ergonomic changes that could be used to eliminate issues. The solutions:

- an "A"-Frame loading system that would eliminate the need for lifting and moving hoses.
- Product transfer previously done by hose were hard piped in order to eliminate lifting and connecting heavy hoses.
- These improvements provided more space in the room to mitigate trip hazards.
- Ergonomics training to reinforce the best lifting and bending techniques.

Ladder access to multi-story buildings (Before)

-Typically a small opening was left open/unguarded for ladder access, or

-Ladders are set up through the cable guardrails which creates a tripping hazard.

Safer ladder access for multi-story buildings

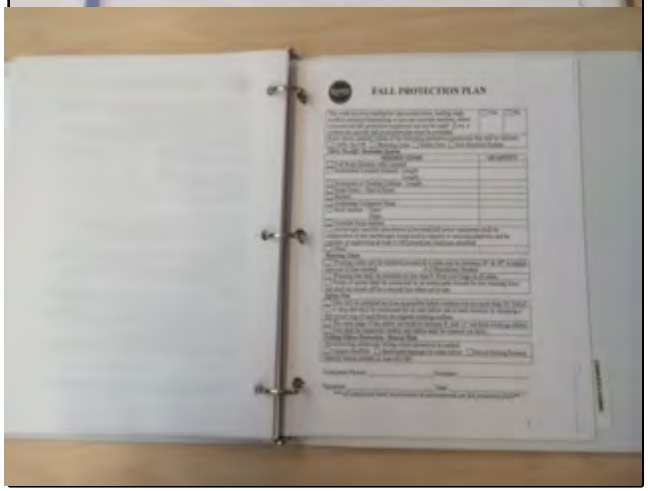
- **When a ladder is necessary, then an offset wooden guardrail system is installed.**

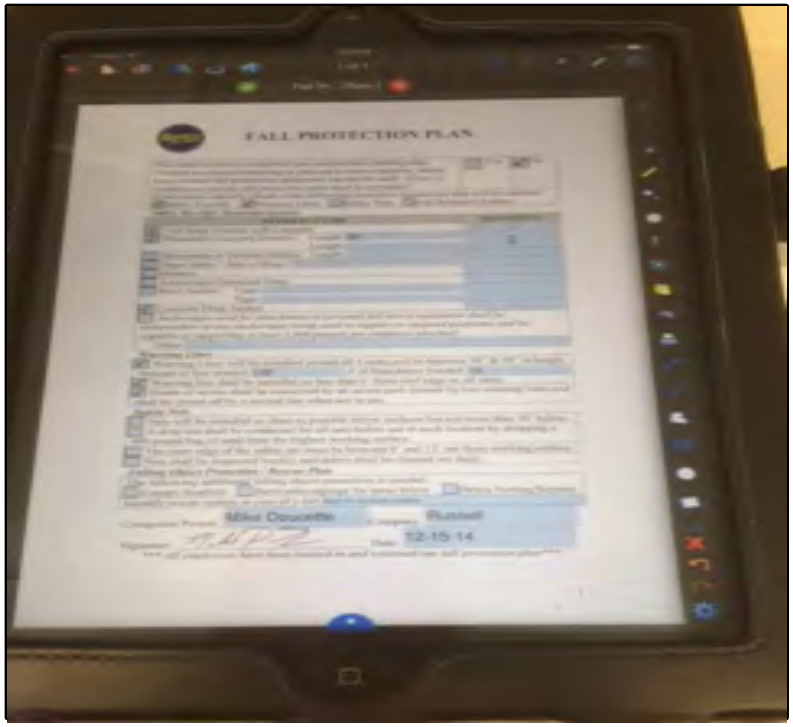
- **Eliminates tripping hazard of climbing through cable guardrails and does not leave an unguarded opening where someone could unintentionally back through.**

Safety Planning/Forms (Before)

- Hard copies of all safety forms were provided at jobsites

- Inefficient and not immediately available.



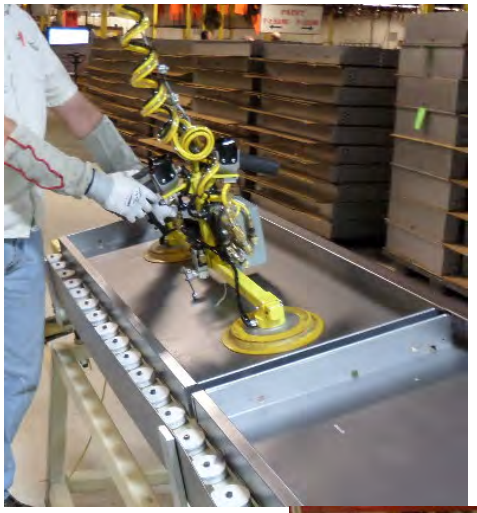


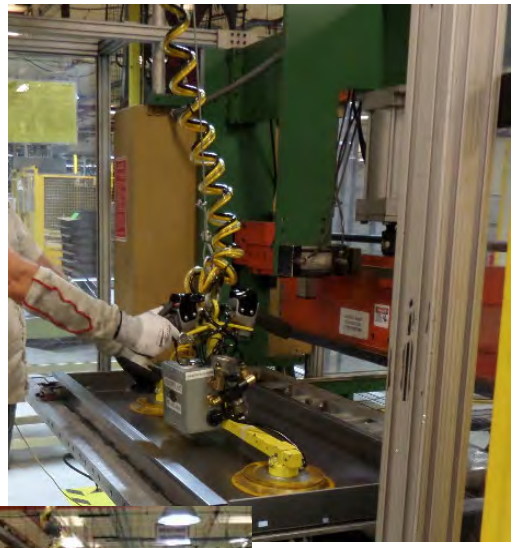
Safety Planning/Forms (After)

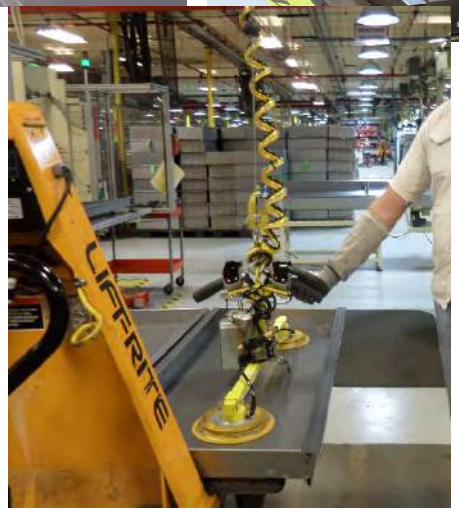
- **All safety forms have now been recreated as electronic editable pdf's.**
- **This allows project team to access and complete all safety related forms in the field on their mobile device.**
- **Immediate access anywhere at any time.**

Snap-on Tools – Algona, Iowa:

Ergo Improvement: Large Drawer Area – Drawer Cell







Employees had to pick up large, heavy, awkward drawers off of the conveyor and transfer them into the multi-spot drawer welder to be welded. This had the hazard of injuring shoulders, backs, arms with the awkward, heavy lifts and also had the potential of operators sustaining lacerations when handling oversized drawers.

Addition of the Indutrol Manipulator now picks up the large, heavy, awkward drawers off conveyor, places drawer into the multi-spot drawer welder where stiffeners are added to the drawer for support. (Note: drawers can weigh 50+ pounds). Manipulator eliminated the lifting /ergo hazard

SAFETY RECOMMENDATIONS and NEAR MISS REPORTING SYSTEM

Previous System

Suggestion Box

Anonymous submittals

Single location within facility

"Complaint" box

No accountability

Poor tracking

Current System

Employees submit recommendations and near miss reports via company intranet.

Over 200 locations throughout the facility

Immediate notifications to "Decision Makers" and "Project Completers"

Trained all employees on system

Promotes employee engagement

228 hazards recognized and eliminated

Results

- Recognized hazards are promptly mitigated
- Easy tracking of leading indicators
- Employees see results
- Cannot measure the event that did not happen

Report a Safety Concern Intranet Reports Website 5:41:41 AM

Tools > Sukup Plant > Report a Safety Concern

EXAMPLE

ID: 1536

Name: Doe, Jane
Plant Location: Cent. Fan Assembly
Area Supervisor: Jon Q. Public
Comment:
CONCERNED ABOUT TEST CORDS BEING ON THE FLOOR WHEN WET AND ALSO THEY ARE A TRIP HAZZARD. (required field)

Recommendation:
NOT SURE MAYBE PUT ON A REEL OR SOMETHING required

Type of Concern:
- ❑ **Safety Concern**
- ❑ Near Miss

Investigating Emp: Safety Director
Date Investigated 2/4/15
Date Resolved: 2/5/15
Completed By: Electrical Maint.
Resolution:
Install cord reels

Recent Submittals for: Doe, Jane ID Plant Location Comment Date Reported
1536 CENT FAN CONCERNED ABOUT TEST CORDS BEING ON THE FLOOR WHEN WET AND ALSO THEY ARE A TRIP HAZZARD. 2/4/15

Product Assembly Improvement

Original Process

Product frame is assembled on table and hoisted to floor

Hazards include:

- Struck – by
- Fall from elevation

Product is manually flipped on side for further assembly.

Hazards include:

- Strains
- Lacerations
- Struck -by

Employees work on the floor

Hazards include:

- Cumulative trauma
- Fatigue
- Strains
- Repetitive Motion

Improved Process

Frames are assembled on adjustable lift table.

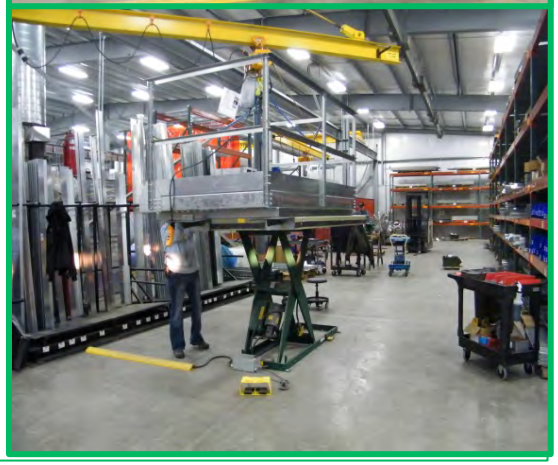
Hazards eliminated:

- **Struck- by**
- **Fall from elevation**

New process allows employee to work at various heights

Hazards eliminated:

- **Strains**
- **Lacerations**
- **Struck –by**
- **Cumulative Trauma**
- **Repetitive Motion**



Results:

Eliminated multiple hazards
Work station is adjustable to any size person
Employees can choose to stand or sit
Transformed task from 2 person job to a single person
Assembly time was reduced by 50%

Material Handling Improvement

Original Process

Installing 200 lb. sprockets, shaft, and bearings in conveyor head assemblies. Bodies were elevated on a stack of pallets.

Hazards Include:

- Strains
- Fall from elevation
- Struck – by
- Crushing
- Lacerations

Improved Process

Designed under hook lifting device for lifting sprockets, shaft, and bearings. Allows utilization of hoist to raise load. Placed body assembly on lift table, operators adjusts to required height.

Hazards Eliminated:

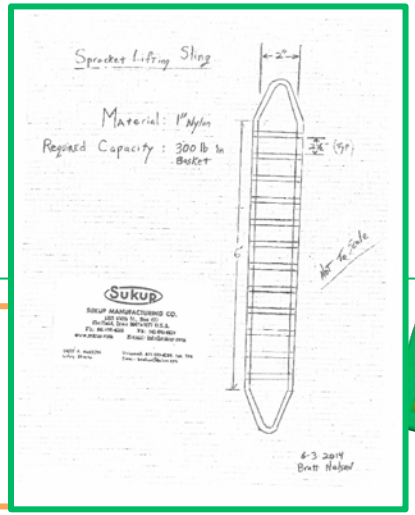
Strains

Fall from elevation

Crushing

Lacerations

Struck - by



Results

Eliminates multiple hazards

Task transformed from 3 person job to 1 person

Decreased assembly time by 25%

Product Processing Improvement

Original Process

Process required that welds on product be touched up with aerosol spray paint. Product was placed on saw horses, requiring 2 people to manually flip the unit to paint each side.

Hazards Include:

- Potential Chemical Exposure
- Strains
- Cumulative Trauma
- Housekeeping
- Fractures from falling object

Improved Process

Installed paint booth to capture paint fumes and overspray. Fabricated fixtures that allow the painter to effortlessly rotate the parts during processing. Added PPE as additional safeguard.

Hazards Controlled:

- Chemical Exposure
- Strains
- Cumulative Trauma
- Falling objects

Results:
Eliminates /controls multiple hazards
Task transformed from 2 person job to 1 person
Moved from 20 cases of aerosol cans to 1 gallon of paint per week.

Product Packaging Improvement

Original Process

Operator was required to tighten wire ties using a manual, swiveling hand tool. Bundles of steel were palletized in boxes at floor level.

Hazards Include:

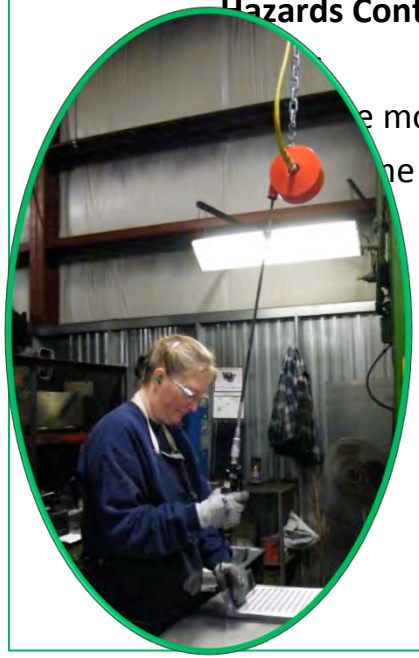
- Strains
- Repetitive motion injury
- Falls at same level (trip)

Improved Process

Manual wire tie tool was replaced with a pneumatic tool suspended from air line tool balancer. The pallets are now raised on an adjustable table to accommodate the operator.

Hazards Controlled:

- e motion injury
- ne level (trip)



Results:
Eliminates multiple hazards
Less Fatigue
More efficient work station

When loading semi trailers with bulk seed, a box is filled, the fork lift operator would then lift the box up on the stand and stay there to keep it held in place. Another employee would then pull open the slide gate to let the seed out. An automatic system was developed and installed by our maintenance department. The gate can be opened safely from the fork lift through a button/ cord system that's connected to the plunger on the box. This removes the employee that had to manually open the gate before, keeping them away from any potential hazards.

Before

After

Bulk Box Flipping Station

Problem

For years the process for nesting and de-nesting bulk boxes was to either use a forklift attachment, or manually set up the box. This creates great potential for strains

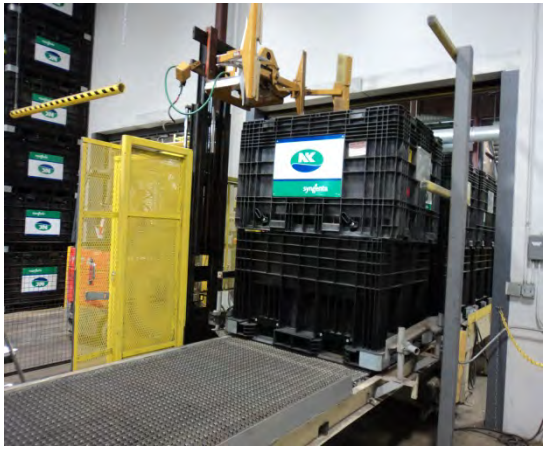
and sprains.

- **30,000 boxes flipped annually**

Solution

The solution was to design and build an automatic box nesting/de-nesting station. Boxes are loaded onto a conveyor line where they are automatically transferred to a "flipping" station. With a push of a button the box is nested/de-nested.

•Built in house $5K ($200K market)



Steve Pope – 300 American Ave.
Jefferson IA (515) 351-8178
steve.pope@syngenta.com

Cash For Knives

HSE Safety - CASH for Utility Knife Program

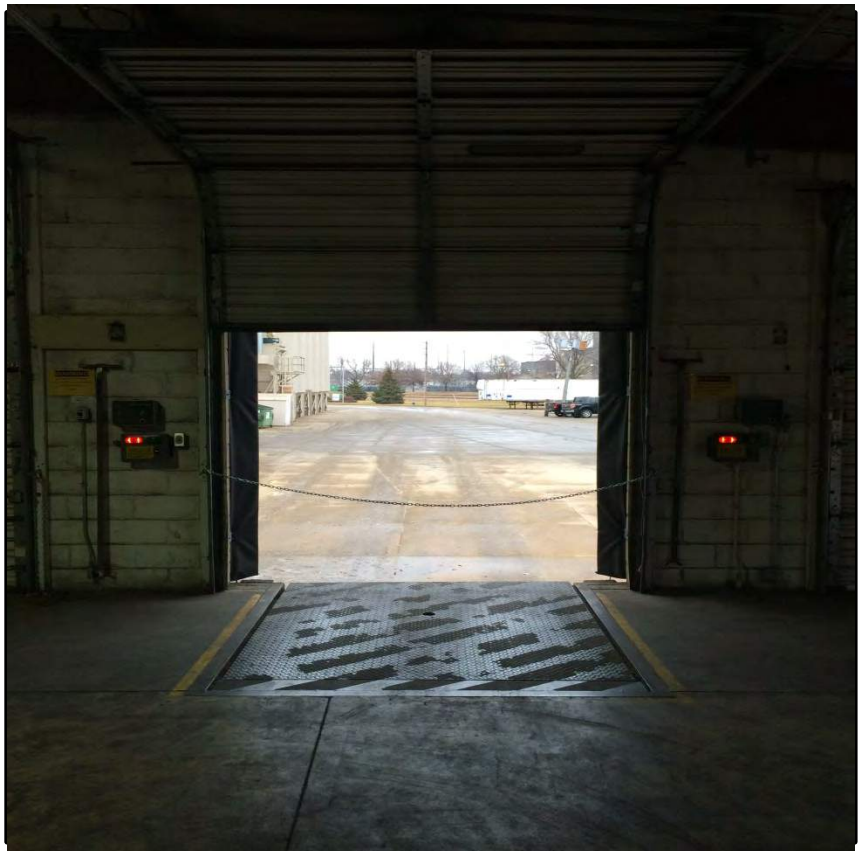
The use only of a self-retracting safety utility knife is required on this Syngenta site.

For every non-compliant utility knife turned in to HSE, you will receive a safety replacement knife, and $5 safety bucks.

Steve Pope – 300 American Ave.
Jefferson IA (515) 351-8178
steve.pope@syngenta.com

Loading docks had insufficient guards protecting workers from a potential fall hazard. All the chains were removed and Rite Hite Dok Guardians were installed at all of our loading docks. Not only does this protect our workers from falling off the dock, but it can also stop a lift (up to 10,000 lbs) traveling up to 4 mph with little to no damage to the guardians.

Before



After

A standard wheelbarrow is difficult to handle safely on uneven terrain and is easily overloaded. Strained backs and shoulders are common injuries associated with lifting and pushing the loaded wheelbarrow. Sudden stops from hitting something unexpectedly and jabbing handles into stomach has also contributed to many injuries. We modified a farm cart with 2 large wheels. We added a platform with a bin to hold materials. The large wheels allow the cart to be easily pulled over rugged, uneven terrain and increase the stability of the cart. The load is balanced over the wheels, which reduces the effort needed to move the load. The effort required to lift a load of concrete cylinders (150 lbs) is reduced from 40 lbs to 8 lbs when using the cart.

Before

After

Slips, trips, and falls are injuries that can occur just about anywhere and normally result in significant injury and costly claims. On one of our bigger projects, we had a great amount of dirt work and underground work to be completed as part of the process of feeding underground cables to the structure. The job required workers to walk through dirt/mud, rough terrain, and up and down sloped entrances to get in and out of trenches as well as low-lying work areas. This created a hazard since employees were subject to slipping and falling as well as strains and sprains.

As a hazard control solution, we implemented the use of handrails to aid in access to the work areas. These were going to be temporary and in mass quantities so needed to be simple, quick and easy to install, and cost effective. Therefore, we came up with the handrails as seen in the picture.

The handrails were constructed of mostly scrap unistrut and a few nuts and bolts. It was quick and easy to install with a post pounder and hand tools. The edges were also taped to prevent any cuts.

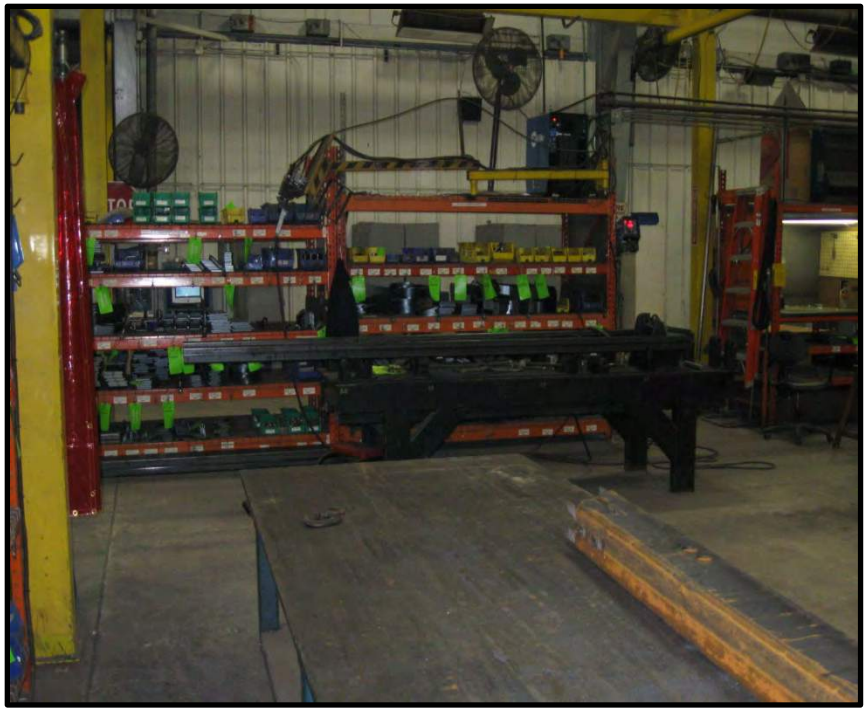
Overall, by using material around the job and minimal cost and effort, we were able to implement a hazard control that aided greatly in reducing slips, falls, strains, and sprains by providing a form of stability to workers on the job.

At the end of our repack line boxes of repacked product have to be stacked on a pallet for shipment. Box weights run 50 - 60 lbs.

During this offseason Tim Klaver, our Specialty Production Manager installed a vacuum lifting system to eliminate the repeated exposure to back injuries from manually lifting the boxes and stacking the heavy boxes on a pallet.

There are two Welding Cells in this Welding Bay. Employees were exposing each other to weld flash when welding simultaneously. A weld curtain was attached to a swinging bar that can be swung into place and the weld curtain extended to eliminate accidently exposure to weld flash.

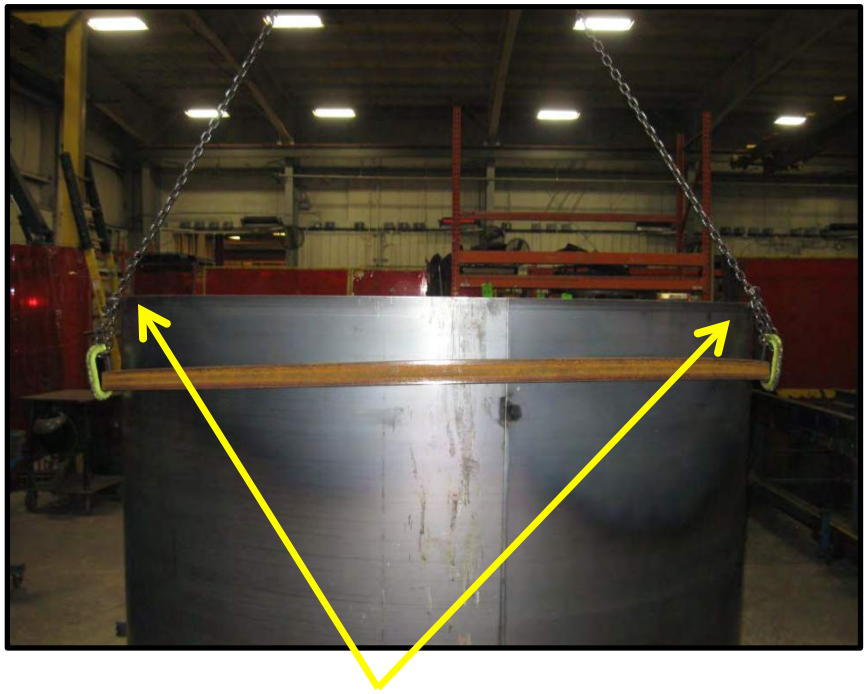
Before



After

During the process of placing / lowering a reinforcement ring around a steel tank, the chains would slip and be damaged during the process. A spreader bar was designed and constructed by a Welder to safely lower the ring on to the steel tank.

Before



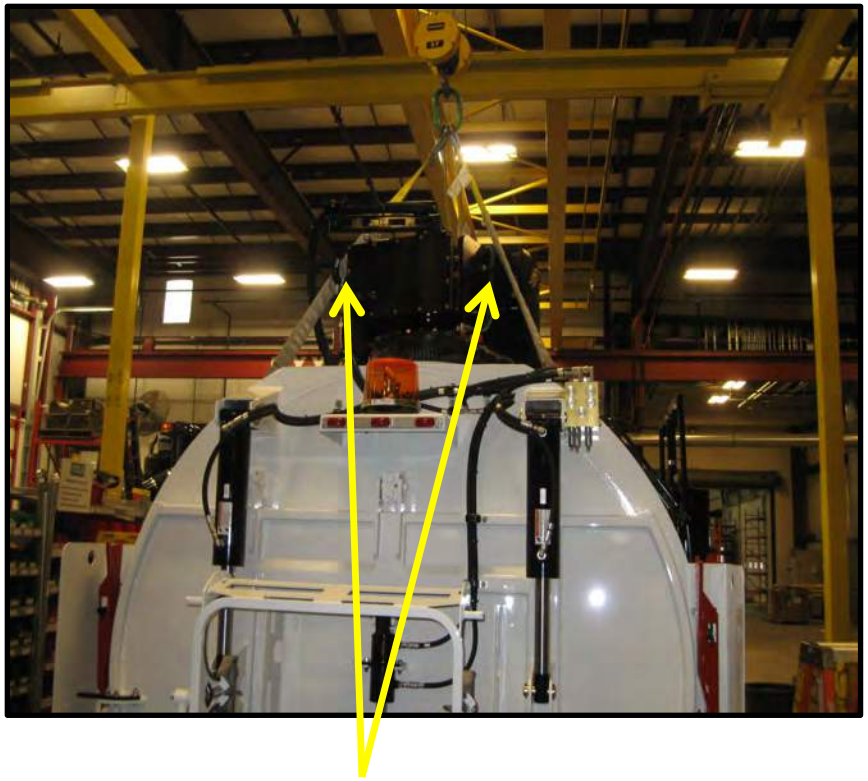
Chains were being damaged at these locations.

After

Spreader bar designed to eliminate contact between chain and steel tank

During the process of lifting then lowering a 3,000 lbs. debris body on to a truck chassis the nylon straps were being damaged by sharp edges. A lifting "T-Bar" was designed to safely lift the debris body with chains without contacting sharp edge.

Before



Nylon straps were contacting sharp edges during the lifting process

After

Designed a T-bar to lift the debris body. Lift chains no longer come in contact with turret or debris body



2015 Valero Renewables Fort Dodge, Iowa IISC Hazard Control Recognition Program

Authors: Austin Hayek – Safety Committee Leader
Mark Wescoat – HSE Manager
Troy Shaner – Plant Manager
Kyle Sheppard - HSE Specialist

VALERO renewables

LED Lighting Upgrades **VALERO RENEWABLES FORT DODGE, IOWA**

Upgrading the general and task lighting throughout the facility has accomplished not only Safety improvements like visibility of walking working surface, but also reduced energy requirements with more efficient cost effective LED lighting.

Potential injury cost - $10,000 Mitigation cost - $2,000 per light Energy Efficiency - $200 saving per year

Before

After

Steam Wand Upgrade **VALERO RENEWABLES FORT DODGE, IOWA**

High pressure steam is used throughout the distillation area for removing ice and snow build-up, thawing frozen or plugged lines and clean-up of leaks and spills. The original shop-made device did not provide safety features to prevent burns, such as insulted handles and grips and emergency shut offs.

Second and Third Degree burn cost- $5,000 Mitigation cost - $10,000

Before/After

Dust Removal Vestibule in Grains Receiving Building **VALERO RENEWABLES FORT DODGE, IOWA**

Dust build-up from corn receiving and DDG load-out areas could be transferred to the basement which can cause build-up and potential for explosion. Placing this removable structure over the stairwell entrance not only prevents dust from entering the basement , but is also sided with clear panel siding to allow for natural lighting on the stairs for safe entrance and egress.

Safety concern – Dust buildup and explosion hazard Mitigation cost - $10,000

Before installation

After with semi clear siding

Automated Deluge Fire Protection System **VALERO RENEWABLES FORT DODGE, IOWA**

The ethanol loading facility was originally equipped with a manually activated deluge system that required an operator to manually crank open a post indicating valve, which was slow and left the operator in the area of the potential fire. The system was upgraded to a fully automatic fire protection deluge system.

Potential Hazardous Ignition due to a Fire in Ethanol Rail Load-out: $200,000/day Mitigation cost: $100,000


Van Meter Application for IISC
Safety Award

We had a lot of injuries to our drivers last year involving slips and falls due to icy conditions. This year we purchased safety traction shoes for every driver to try to prevent these injuries from happening and keep our drivers safe and healthy.

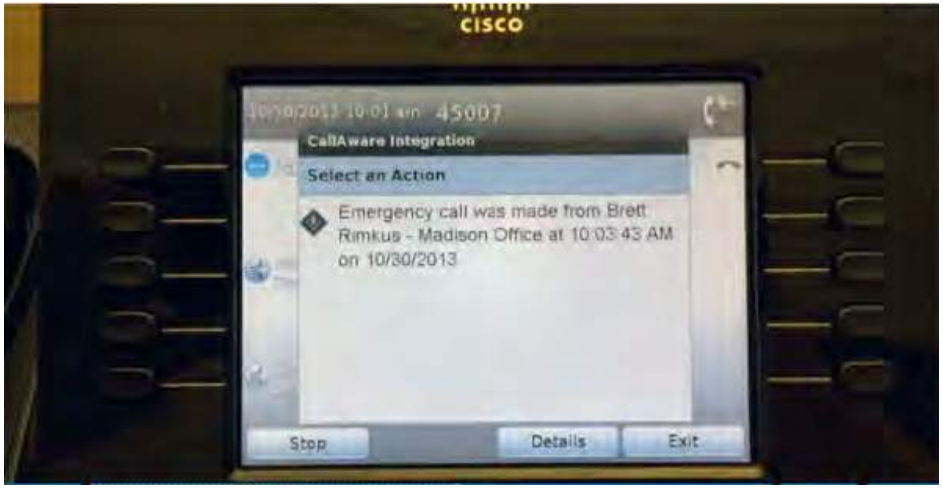
Before (Problem)

- After (Solution)

In past years we have had trouble hearing tornado or fire sirens in our building because of the location of our speakers. This year we implemented a new system called Informacast, which allows you to broadcast the alert over every employee's phone, as well as our speakers in the warehouse.

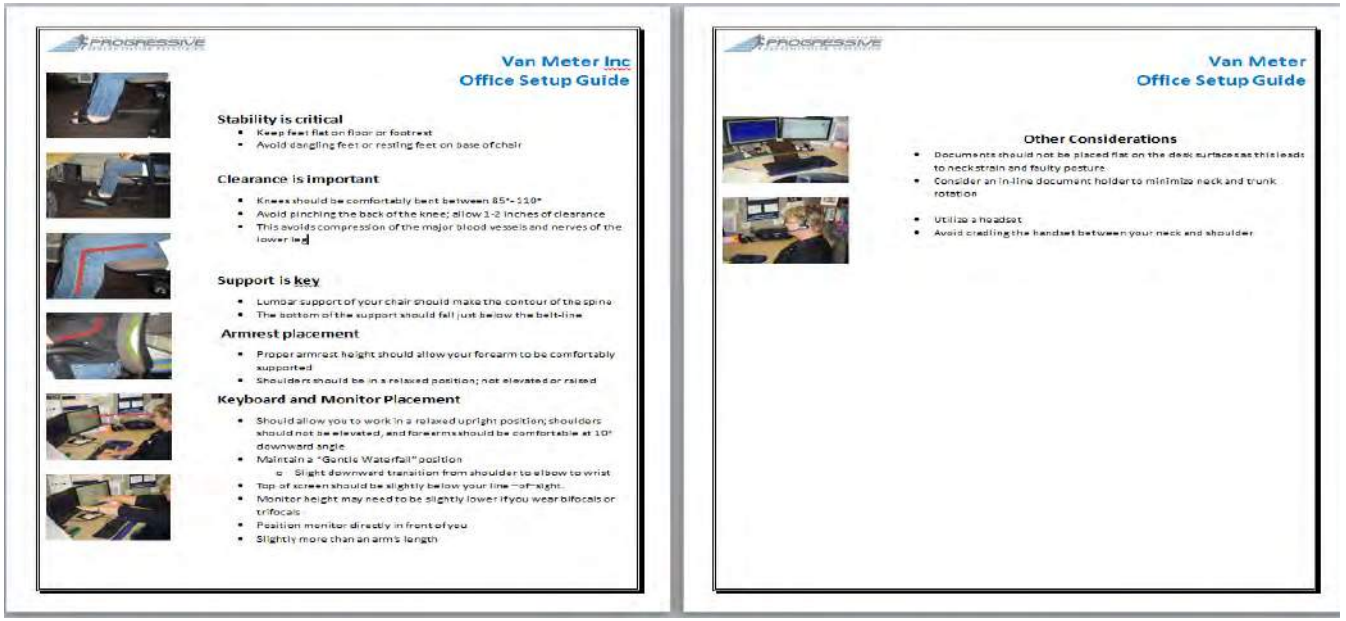
- Before (Problem)

- After (Solution)



This year we had an Ergonomics consultant come in to train and evaluate groups of our employees. Employees spent about 30 minutes going through training and then a month later the consultant came back to make sure what the employees had been taught was being implemented

- After (Solution)



Van Meter Inc
Office Setup Guide

Stability is critical
- Keep feet flat on floor or footrest
- Avoid dangling feet or resting feet on base of chair

Clearance is important
- Knees should be comfortably bent between 85°- 110°
- Avoid pinching the back of the knee; allow 1-2 inches of clearance
- This avoids compression of the major blood vessels and nerves of the lower leg

Support is key
- Lumbar support of your chair should make the contour of the spine
- The bottom of the support should fall just below the belt-line

Armrest placement
- Proper armrest height should allow your forearm to be comfortably supported
- Shoulders should be in a relaxed position; not elevated or raised

Keyboard and Monitor Placement
- Should allow you to work in a relaxed upright position; shoulders should not be elevated, and forearms should be comfortable at 10° downward angle
- Maintain a "Gentle Waterfall" position
  - Slight downward transition from shoulder to elbow to wrist
- Top of screen should be slightly below your line of sight.
- Monitor height may need to be slightly lower if you wear bifocals or trifocals
- Position monitor directly in front of you
- Slightly more than an arm's length

Van Meter
Office Setup Guide

Other Considerations
- Documents should not be placed flat on the desk surface as this leads to neck strain and faulty posture
- Consider an in-line document holder to minimize neck and trunk rotation
- Utilize a headset
- Avoid cradling the handset between your neck and shoulder

During the busy season, we use a lot of temporary help. In the past, we have had temps come in through the front doors by our First Impressions Team. To minimize our risk, if one of those temps became disgruntled, we had temp badges activated for them that only let them in one door. If they are terminated their badges are deactivated and they can no longer enter the building.

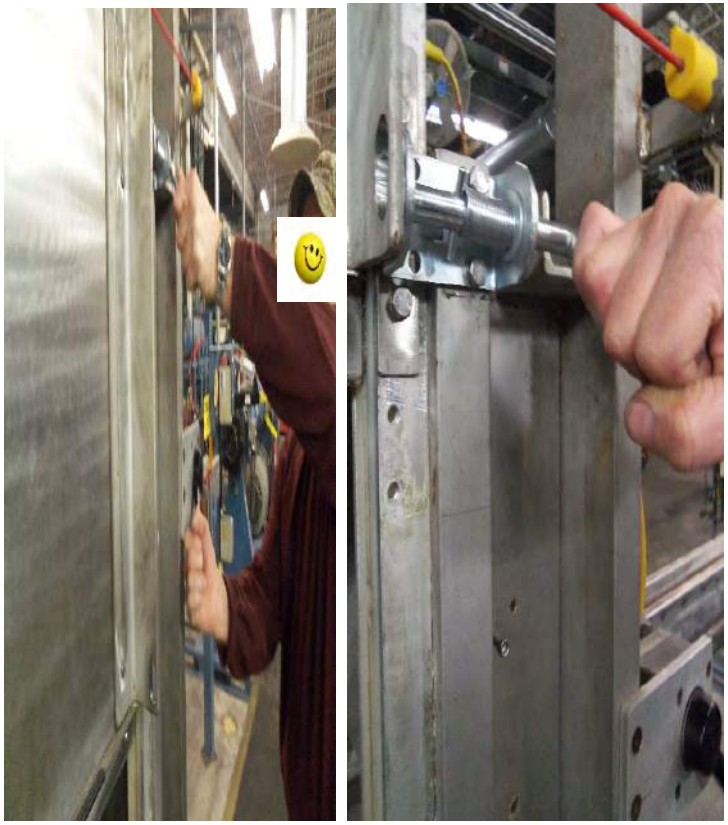
- After (Solution)

Associates had to reach above shoulder height to manually push and or pull a release pin while simultaneously activating the air release with the opposite hand to lower the overhead cooling drum door.

An air assisted latch was installed that automatically latches when raised, locking the door in place. The same air assist pin is released when the associate activates it, lowering the door.

This modification eliminated an ergonomic concern of reaching above shoulder height to push and pull the spring loaded pin in an awkward position and alleviated the possibility of a sprain or strain injury while performing this activity.

Before



After

Associates had to manually remove a die nut to change a die. Back strains were reported due to the weight of the wrench and the force required to remove the die nut. An impact wrench was added with the use of a counter balance so associates wouldn't have to lift the weight of the impact wrench. Back strains were eliminated after implementation.

Before

After

Associates had to manually remove a the pin holder and move it to a table near them. The pin holder weighs approximately 70 pounds. A pin holder swing arm was installed that attached to the pin holder eliminating the need for manual lifting. The swing arm allows the associate to shift the pin holder out of the work area to complete their task and swing it back into place when job is completed.

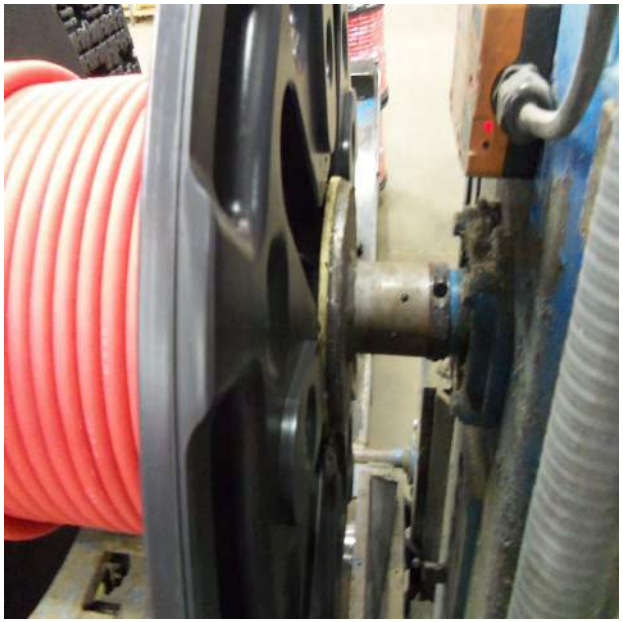
Before

After

When loading a reel the associate had to make sure the reel flange notches were lined up with the drive arm which rotated during operation and could catch an associate. A flange was added to secure the reel in place and the drive arm was removed eliminating the hazard of rotating parts. This change improved the process while making it safer.

Before

After



Safety Solution Hazard Recognition

Before

Associates would discover hazards and periodically report them to management to formulate a corrective action.

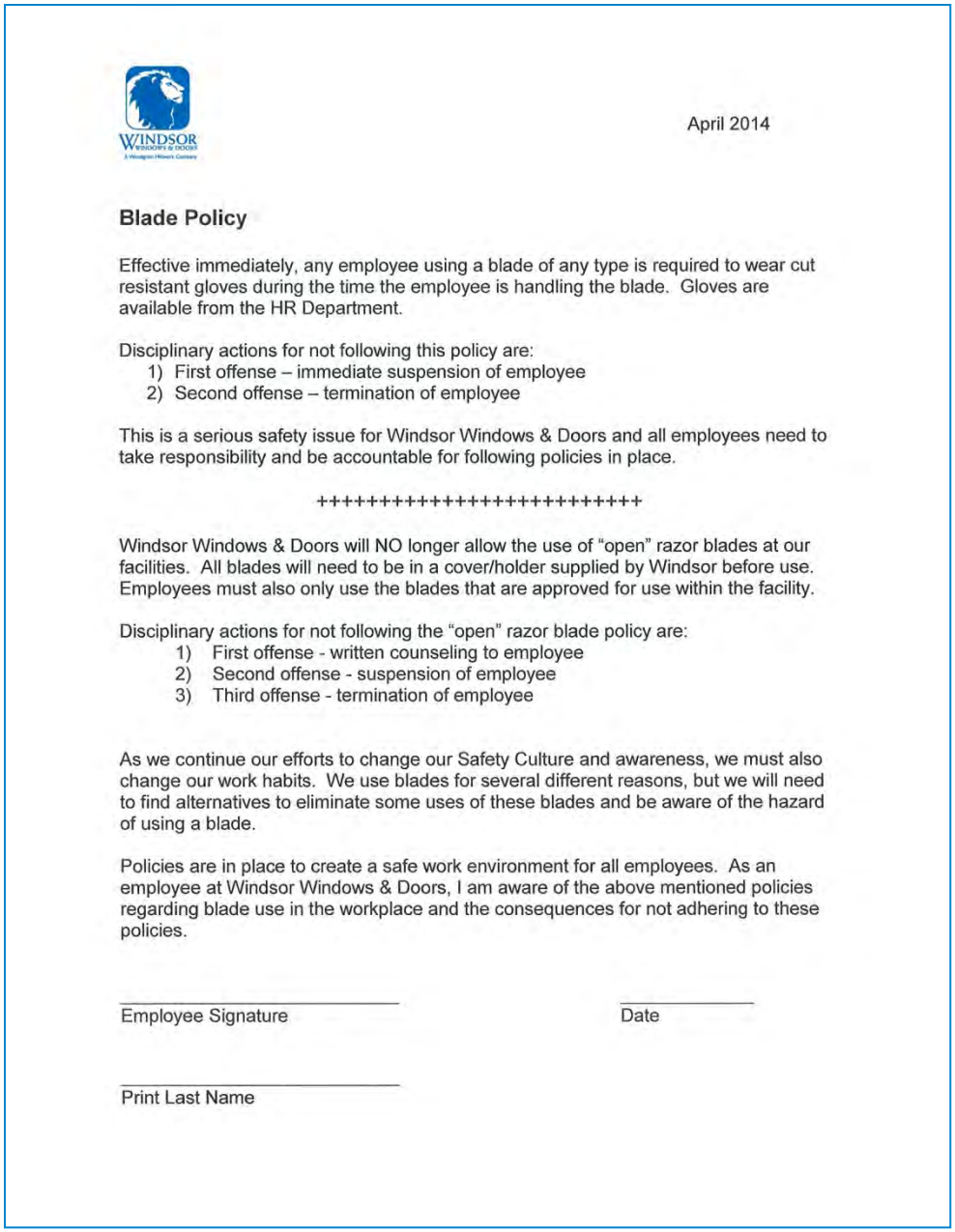
After

A Safety Solution program was developed and implemented to promote positive reinforcement for demonstrating safe work practices and taking active measures in Hazard Recognition and Prevention. Associates actively identify at risk behaviors or unsafe conditions and take an dynamic role in reporting them as well as working with a team to devise a solution. Associates are involved with the safety solution from the beginning to its completion.

The program has been implemented for 8 months and has identified and corrected over 300 Safety Solutions while implementing hundreds of hazard controls and significantly reducing the possibility for injury.

New Blade Policy

Effective in 2014, Windsor introduced a blade use policy. In 2013, there were 6 recordable incidents due to lacerations to the fingers/hands. The new blade policy was put in place to insure employee safety when using designated blade utensils and lower the risk of lacerations. It is now mandatory to wear cut resistant gloves when using the approved blade tool.



WINDSOR WINDOWS & DOORS

April 2014

Blade Policy

Effective immediately, any employee using a blade of any type is required to wear cut resistant gloves during the time the employee is handling the blade. Gloves are available from the HR Department.

Disciplinary actions for not following this policy are:

1) First offense – immediate suspension of employee
2) Second offense – termination of employee

This is a serious safety issue for Windsor Windows & Doors and all employees need to take responsibility and be accountable for following policies in place.

++++++++++++++++++++++++++

Windsor Windows & Doors will NO longer allow the use of "open" razor blades at our facilities. All blades will need to be in a cover/holder supplied by Windsor before use. Employees must also only use the blades that are approved for use within the facility.

Disciplinary actions for not following the "open" razor blade policy are:

1) First offense - written counseling to employee
2) Second offense - suspension of employee
3) Third offense - termination of employee

As we continue our efforts to change our Safety Culture and awareness, we must also change our work habits. We use blades for several different reasons, but we will need to find alternatives to eliminate some uses of these blades and be aware of the hazard of using a blade.

Policies are in place to create a safe work environment for all employees. As an employee at Windsor Windows & Doors, I am aware of the above mentioned policies regarding blade use in the workplace and the consequences for not adhering to these policies.

_____ _____

Employee Signature Date

_____

Print Last Name

Designated cut resistant safety gloves and company approved utility knives reduced lacerations to ZERO once the policy was put into place in 2014.

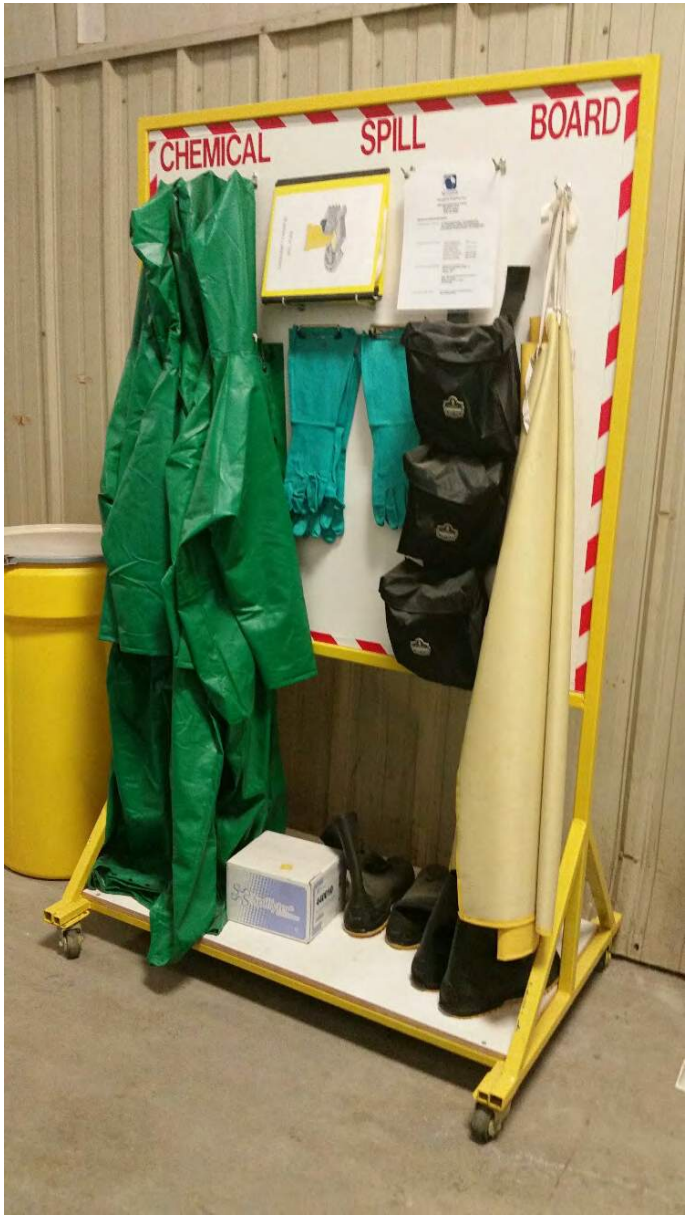
In 2014, Windsor Windows & Doors added a new Powder Coat Paint Line to the facility. The company began painting raw aluminum on site to meet the demands of production.

Employees load the raw aluminum per schedule and the process continues -- aluminum is lifted from cradles for better ergonomics.

With all production lines, we must be assured that all safety procedures and policies are in place prior to the line starting production. This includes first aid kits, lock out tag out, signage, hazardous communications, etc.

CHEMICAL SPILL PLAN –

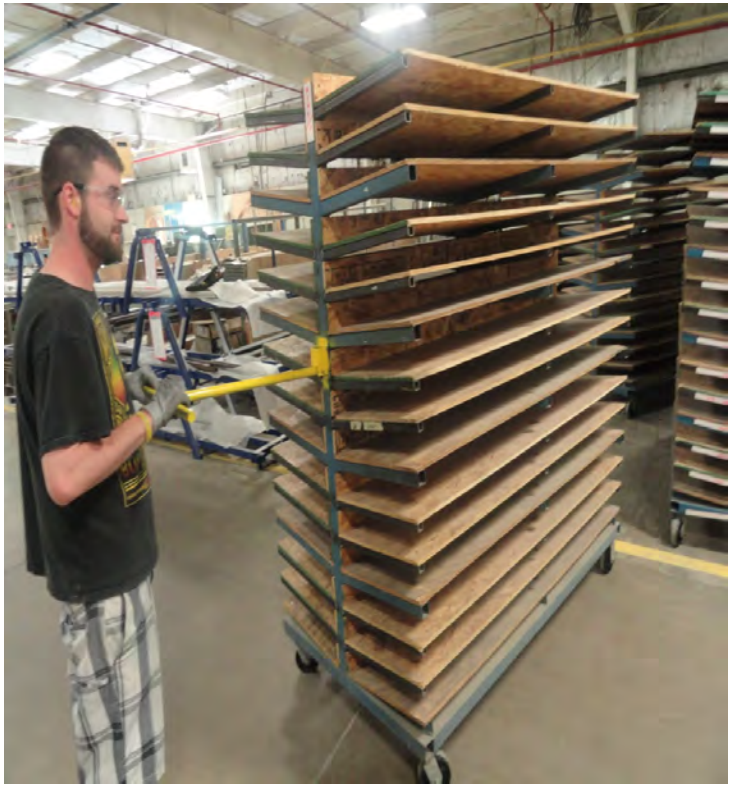
Due to the chemicals used on the Powder Coat Paint Line, a **Chemical Spill Plan** was put in place. Employees have been trained on proper PPE needed when working with/handling these chemicals and have been trained how to clean and handle a potential hazard chemical spill.



Two new improvements towards safe production:

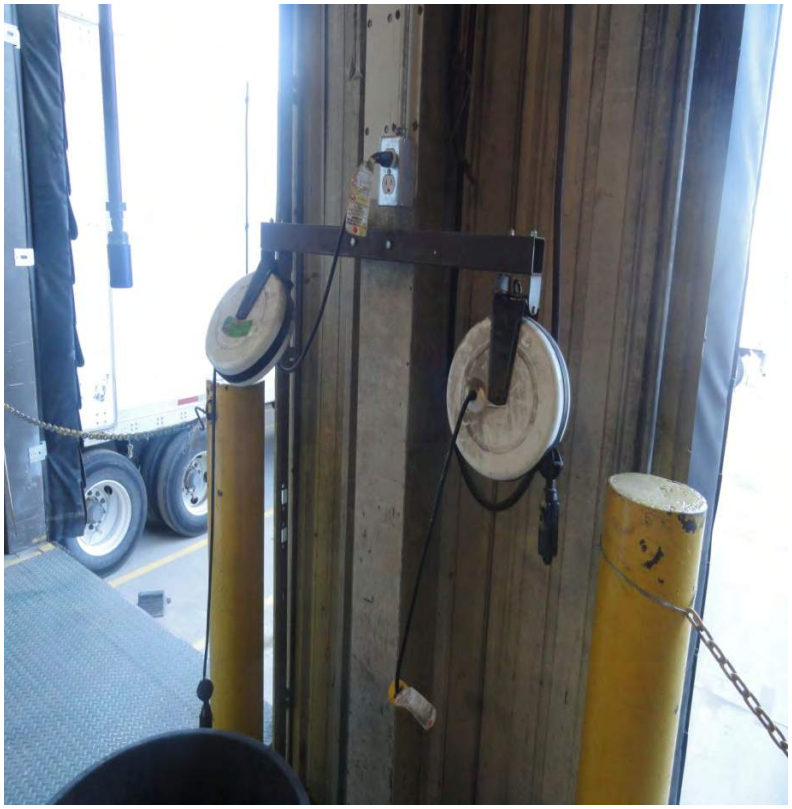
- New brushes on equipment to keep the material from coming out.

- Handles on carts to keep the feet away to protect the toes.



Windsor Windows & Doors continuously makes improvements for a safer work environment for all --- removing old electrical reels with more efficient safer reels.

Before



After

Thank you~

Windsor Windows & Doors

West Des Moines, IA

Installation of PalletPal Spring Level Loader

Before

After

Material Handlers palletized 10-pack boxes of satellite dishes manually. This required frequent lifting of 45 lb. boxes above shoulder height and carrying of the boxes around the pallet to stack on the far corners of the pallet. Installation of the PalletPal eliminated the walking and carrying due to the rotating turntable, and reduced above-the-shoulder lifting due to the spring-adjusted height of the platform.

Adjustable Height Work Stations

Adjustable height work stations are made by placing a pneumatic cylinder in line between the base and assembly fixture of the work station. Adjustable height allows employees of different heights to work with their backs and upper extremities in neutral postures during assembly operations. The height of the work station is easily altered with an actuating lever so that the height of the work station can be changed to optimize posture for each step of the assembly operation.

Laminated Safety Instructions for Die Installation

Mechanical power press guarding and safety feature set-up varies by die configuration, material feeding system, and pressed part configuration. Failure to properly configure the press guarding and safety features exposes the operator to amputation hazards. Explicit instructions and photos for guarding and safety feature set-up are laminated with a magnetic strip applied on the back. The instructions are attached to the die in storage, and when the die is installed in the press, the instructions are posted on the press to ensure easy confirmation that proper set-up was performed.

2014 IISC Safety Award Application Charles City Winnebago Ind. Facilities

Winnebago Industries, Inc.

1100 11th Street

Charles City, Iowa 50616

Modified carts keep shins from hitting lower bar when walking and provide better body position.

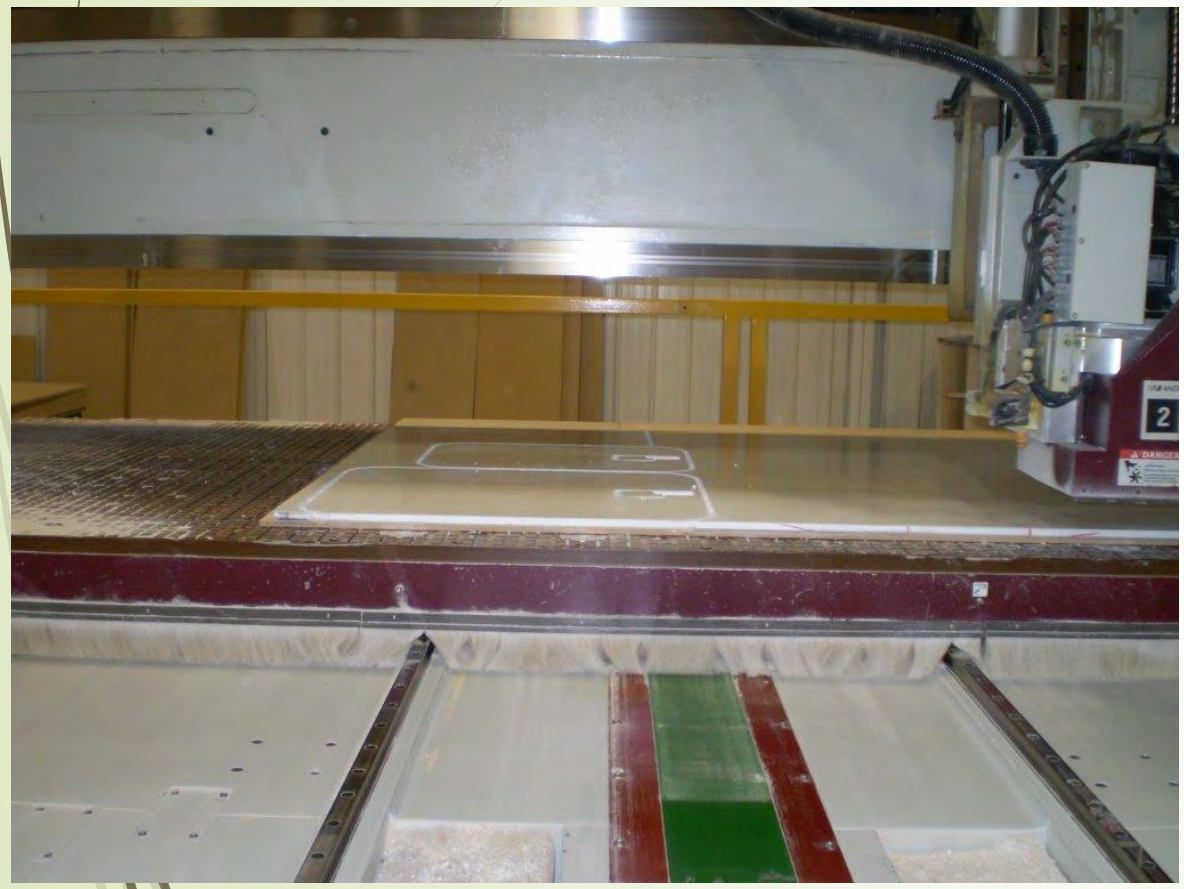
With handle extensions

Without extensions

Cleaning Ceiling above Sanding Booth for Combustible Dust Control.

Issues with debris flying from back of router. Added Plexiglass guard. Changed CNC program.

Before – Open railing



After – Railing height extended – Added Plexiglass.

Improved Dust Control
Sanding with HEPA-Vacuum-Equipped Sanders.
Work Stations Located in Sanding Booth.
Respirators No Longer Needed.

Parts Staging Improvement.
Large Scrap is used for making smaller parts.

Before – Poor Organization, Trip Hazard

After - Easier Access.
Off the Floor.
Easier Housekeeping.

Thank You for This Opportunity

2014 IISC Safety Award Application

WINNEBAGO INDUSTRIES, INC.

605 W. CRYSTAL LAKE ROAD

FOREST CITY, IOWA

Press Improvements

Incorporated air clamps into tooling to hold onto parts and eliminate hands in hazard area during down-stroke of press.

Installed “Ultra-touch” electronic hand controls for ergonomic and safety improvements. Foot pedal actuates clamps before press stroke is initiated by hand controls.

Slip-Resistant paint was used to cover areas where slippery floors were a problem.

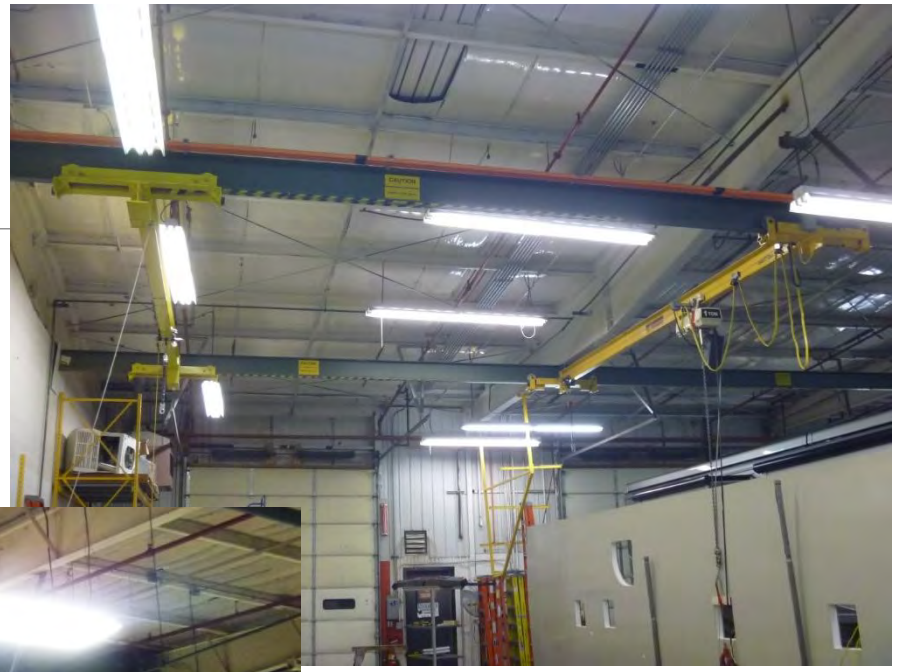
Plastic parts trays were catching fire from welding sparks getting under the flame resistant blankets used for cover.

Steel racks replaced plastic trays to prevent further fires.

Adjustable work stations continue to be a priority for ergonomics purposes. Several types of tops are put on these stations for a variety of applications.

Adjustable slide-out rails for varying sizes of work

Dedicated fall protection systems allow safe work on tops of motorhomes, allowing total access and replacing step ladders and portable platforms



Remote-Controlled Cab Flipping Hoist & Fixture – Eliminated manual turning over of welded cab frame

1.

2.

3.

4.

Thank You For This Opportunity

Family owned and based in Chicago, World's Finest® Chocolate has over 60 years of experience and prides itself on being one of nine American companies that manufactures chocolate directly from the bean. The most modern machinery, dedicated employees and the finest ingredients allow World's Finest® Chocolate to consistently deliver the perfect balance of flavor, texture and color. We are proud to make our chocolate right here in the USA.

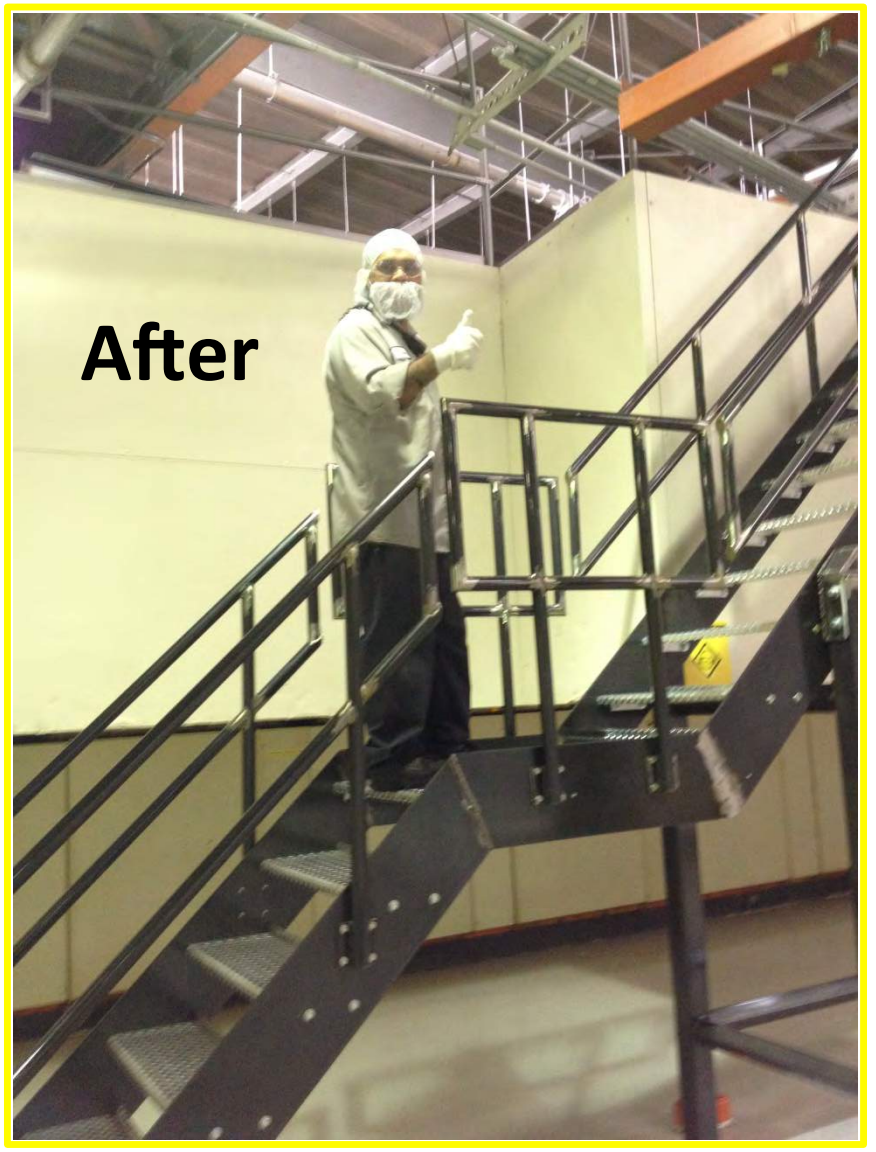
Bill Egan
Safety and Risk Manager
began@wfchocolate.com
773-890-2202

Member

In our panning processes, we use a confectionary glaze to finish chocolate covered almonds. The glaze is flammable due to alcohol added to assist in the application of the glaze. The past practice was to receive the glaze in 55 gallon steel drums. The glaze was transferred into a manageable size container and carried to the production department. Working with our purchasing and product development team, the vendor changed to a plastic pal container that we can safely store and transfer in labeled containers.

Our facility has a 300 car parking deck on the roof level above our warehouse. Access is gained by driving up a ramp to the parking deck. When leaving, of course you drive down the ramp. At the bottom of the ramp is a walk-way to the parking area for workers not able to use the parking deck. On occasion, workers would walk across the opening to the parking deck as cars were leaving, a risk of a pedestrian vs. car accident was obvious. New blacktop was installed, additional safety barriers and pavement markings were added to force pedestrians away from the ramp entrance/exit creating a much safer situation.

Over the past 2 years we have phased out several vertical ladders replacing them with staircases. The vertical ladder imposed so many risks, our safety committee, operations teams and engineering department proposed a capital plan to replace all of the vertical ladders in our facility. To date, we have replaced 11 vertical ladders with staircases. As noted by one of our operators, this change is very welcomed.



In our product line we personalize chocolate bars for our customers at the rate of as many as 750,000 bars a day. This requires boxes and boxes of labels that need to be moved to the production line to coordinate with our orders. The boxes can be heavy and awkward. We had used narrow shelves on rollers and realized this was a tip over hazard. Working with our operations team, our continuous improvement department and the safety committee, a new, wider, lower and safer transfer cart was built replacing all of the old narrow carts.

One of our most popular products is the chocolate bar filled with creamy caramel. The caramel comes to us in 600 pound fiber drums which are next to impossible to move. The safety committee worked with our lead operator and engineers from the TAWI Corporation and had a “one of a kind” vacuum lift built to safely lift and transfer the 600 pound drums while just using the finger tip controls of one have. This improvement was so successful we purchased another vacuum lift system for our shell moulding line where we make our famous chocolate/caramel whirls.

- THE END