



Kovatch Castings

Tomorrow Begins With Safety Today

Safety is not just our policy...it's our culture.



“It is management’s responsibility to establish safety policies and practices that are enforced to keep our people safe. You are responsible!”

Doug Kovatch
President
Kovatch Castings, Inc.

OSHA Training



- It is required by OSHA that each year we train on specific safety topics. <https://www.osha.gov/>
- We create a monthly safety training calendar covering the required OSHA topics.
- The majority of the Safety Training is done by our safety coordinator and nurse.
- In Ohio, we are required by law to utilize the State funded Bureau of Workman's Compensation (BWC) to insure our employee's worker compensation claims. The BWC also provides onsite inspections, testing and consultations, along with many training tools and classes.
- Every employee is required to sign the training logs. If an employee missed the training, then make up trainings are done.

Training Calendar (example)



Safety Training Schedule 2018				
Month	Training Topic	Presenter	Location	Training Materials
January	PPE Training in each department. Each area has it's own PPE requirements and the responsible Supervisor or Manager will need to explain the use of each PPE an employee needs to wear while in the work environment	Safety Coordinator	Departments	Training notes from WI - 1610
February	Blood Borne Pathogen and Driving Company Vehicles	Nurse and Safety Coordinator	Upstairs	BWC- Videos for bloodbourne pathogens
March	The Importance of MSDS and Lockout/ Blockout/ Tagout	Safety Coordinator	Departments	WI-1611 Hazardous energy control and where to find SDS

Training Attendance Record



EMPLOYEE MEETING / TRAINING ATTENDANCE RECORD

MEETING TOPIC OR PROCEDURE: _____

Revision Level: _____

Trainer: _____

Date: _____

The following employees have attended:

	NAME (Please print)	SIGNATURE
1.	Danny Maccabee	
2.	Bobby Bouche	
3.	Lenny Feder	
4.	Paul Crewe	
5.	Billy Maddison	
6.	Sonny Koufax	
7.	Happy Gilmore	
8.	Sandy Wexler	
9.		
10.		



2018 Training Topics

Personal Protective Equipment



- Every department has different PPE requirements
- PPE is determined through our Job Safety Analysis (JSA) process.
- Training is job specific.
- Training includes:
 - Expectations.
 - Required PPE.
 - How to properly wear and use.

Job Safety Analysis (JSA)



JOB SAFETY ANALYSIS

DEPARTMENT: Foundry		OPERATION: Pourer		DATE: 11/29/2017		
ACTION PERFORMED	HAZARD IDENTIFIED	RISK	POTENTIAL SEVERITY	CONTROLS IN PLACE	ADDITIONAL CONTROLS SUGGESTED	PROPOSED CONTROLS
Melting Metal	Molten metal can pop in the pot and send molten metal flying in to the air.	Moderate	Moderate	Face shield with safety glasses, aluminized apron and jacket.	No	None
Melting Metal	Looking directly into the pot can hurt your eyes.	Moderate	Moderate	Tinted glasses are given to the Pourer to wear over the safety glasses.	No	None
Working in the foundry	Heat Stress	High	High	Sqwincher packets, Cooling Bandanas, fans and extra breaks are encouraged.	No	None
Pouring Metal	Metal can come into direct contact with skin.	High	High	PPE- Aluminized jacket, Apron or chaps. Gloves, Face shield, Safety glasses, Spats, Steel toe boots.	No	None
Cutting Metal	Cut Hazard	Moderate	High	PPE- Face Shield. Machine Guards. Gloves, Safety Glasses, Jacket/Apron	No	None
Lifting metal from hoppers and barrels	Strain and Sprains	Moderate	Moderate	Annual Lift Training	No	None
Forklift Operation	Could injure someone while operating forklift.	Moderate	High	Forklift operators training	Yes	Blue lights on forklifts to increase pedestrian safety.
Knocking out/Packing Pots	Silica Dust exposure	Moderate	High	Use of PAPR	No	None
PROPOSED CONTROLS				PROPOSED CONTROLS COMPLETED		
1. Blue lights on forklifts to increase pedestrian safety.				Blue lights have been installed on all forklifts.		
SUPERVISOR SIGNATURE & DATE				EH&S COORDINATOR SIGNATURE & DATE		
<i>[Signature]</i> 11-29-17				<i>[Signature]</i> 11-29-17		
SAFETY COMMITTEE MEMBER SIGNATURE & DATE				PLANT MANAGER SIGNATURE & DATE		
<i>[Signature]</i> 11/29				<i>[Signature]</i> 11-29-17		

Foundry PPE



1. Safety Glasses.
2. Hard hat w/face shield.
3. Gloves and mitts.
4. Aluminized Jacket.
5. Aluminized apron or chaps.
6. Steel toe boots w/metatarsal
7. Tinted glasses. (pourer)
8. P.A.P.R for packing pots.

Blood Borne Pathogens



- The Nurse leads this training with both a video and a PowerPoint.
- All employees participate in the proper methodology of putting on and removing safety gloves.

Importance of SDS and Lockout/Tag-out



- We discuss how to obtain SDS sheets at our facility and what kind of information is on the SDS sheets.
- We maintain our SDS sheets on the KCI Server. All employees have access through our company portal page.
- With LO/TO we review the procedure and who can use LO/TO devices.

Back Safety Training



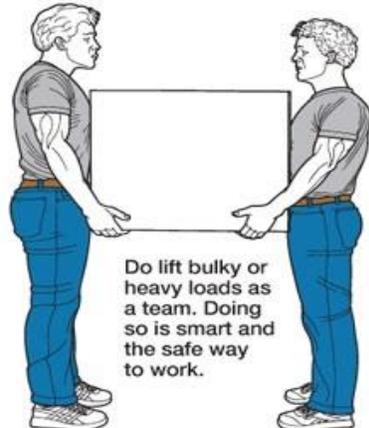
- Training is done by the Nurse and Safety Coordinator and consists of:
 - Proper lifting techniques.
 - Work area stretches.
 - Sitting postures.
 - Video of the top ten do's/don'ts of lifting.
 - Wellness program includes an athletic trainer.

Lifting Techniques



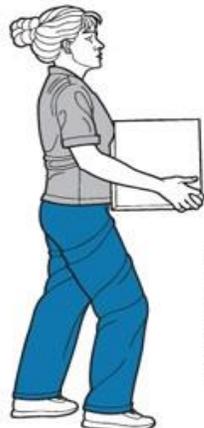
LIFTING DO'S & DON'TS

DO LIFT AS A TEAM



Do lift bulky or heavy loads as a team. Doing so is smart and the safe way to work.

DO TURN WITH LEGS



Do move your legs and feet when turning or lowering the load. Avoid twisting at your waist.

DO USE YOUR LEGS

Do lift the load using your powerful leg and buttocks muscles. Your feet should be wide apart, head and back upright. Keep abdominal muscles tight and the load in close.

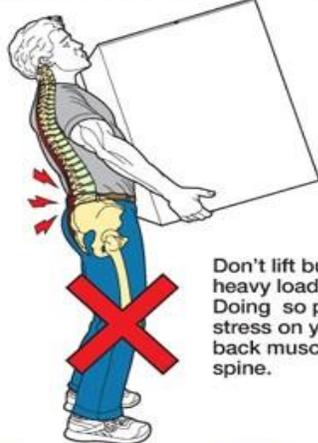


DO USE EQUIPMENT

Do use equipment like hand trucks, dolly's, or forklifts to do the heavy lifting. It's much less work and less risk of injury.



DON'T LIFT BULKY LOADS ALONE



Don't lift bulky or heavy loads alone. Doing so puts great stress on your low back muscles and spine.

DON'T TWIST WHEN LIFTING



Don't twist when lifting, lowering, or carrying any load as this increases your risk of back injury.

DON'T USE YOUR BACK

Don't lift the load with your rear end high and your head low. Use your leg muscles, not your weaker low back muscles.



DON'T LIFT HEAVY LOADS

Don't lift heavy loads when you can use equipment. It is less work and less stress on your low back.



Machine Guarding



- Training videos are provided by the BWC.
- We review our machine guarding procedure.
- The Safety Coordinator and the Maintenance Supervisor attend a machine guarding course offered by the BWC.

Severe Weather/First Aid CPR



- Severe weather training is completed by reviewing the policy and discussing where the shelters are located.
- First aid and CPR training is completed by an outside company.
- All of our first responders are given the option, at company expense, to receive the hepatitis B vaccine.
- AEDs are located in both buildings.

Respirator Testing



- Training is completed by reviewing a PowerPoint and taking a test.
- Employees are required to pass a 3M online medical examination.
- We use powered air purifying respirators and supplied air respirators.
- Dust masks can be used if the employee reads appendix D of the OSHA standard and signs a voluntary respirator form.

Respirators



P.A.P.R.



S.A.R.



Supplied Air Respirators Filters



Forklift



- Training requires the passing of a test covering a forklift safety video and a PowerPoint presentation.
- Driving exams are done with initial training and required every three years or after an accident or near miss.
- Employees must be trained on each type of forklift that is in the facility.
- Regardless of the employee's job history, training has to be done at your facility.

Hazard Communication



- We review the Hazcom procedure and watch a video from the BWC.
- Employees are given access to the Hazcom written procedure.
- Employees are shown how to access our SDS.
- Secondary container labeling is discussed and demonstrated.

Fire Safety



- The Green Fire Department completes fire extinguisher training.
- The Safety Coordinator reviews fire evacuation plan, fire brigade and sweep team procedures.
- We conduct annual fire drills.

Arc Flash



- Maintenance personnel watch two arc flash training videos.
- The maintenance crew attend an NFPA 70E course.
- ARC Flash PPE and Tools are supplied at company expense.

Hearing Conservation



- Summa for Corporate Health sends a mobile testing unit to KCI.
- We test only those employees that are required to wear hearing protection.
- The nurse reviews the results with employees.
- Employees who miss the onsite test are sent to Summa Corporate Health for make up testing.

Mobile Testing Unit (Example)



OSHA Record Keeping



- Recordable Injuries –
 - Death must be reported within 8 hours.
 - Amputations, hospital admission or eye loss must be reported within 24 hours.
 - All other recordable injuries must be entered on the 300 log.
- If only first aid is provided, the incident does not need placed on the 300 log.
- Tetanus shots, drilling of finger or toe nails, eye patches and drinking fluids for heat exhaustion are considered first aid.
Reference 29 CFR 1904.7
- Loss of consciousness is a recordable injury.

OSHA Record Keeping (Continued)



- You can determine if an injury is required to be entered on the OSHA 300 log by what is referred to as The Recordable Decision Tree.
- OSHA 300 A is required to be posted by February 1st every year and is required to stay up until April 30th. The highest ranking position at the company is required to sign the OSHA 300 A summary.
- New rule - By December 1, 2017, if you have 250 or more employees you are required to submit the following to OSHA website: 300 Log, 300 A summary and 301. If you have between 20 and 249 employees you are required to submit the 300 A for 2016.
- Employers are required to display the “Job Safety and Health It’s the Law” Poster in a conspicuous place.
- A loss time incident has a missed day cap of 180 days. Missed work days must be doctor prescribed.

What is the definition of medical treatment? 29 CFR1904.7



"Medical treatment" means the management and care of a patient to combat disease or disorder. For the purposes of Part 1904, medical treatment *does not include*:

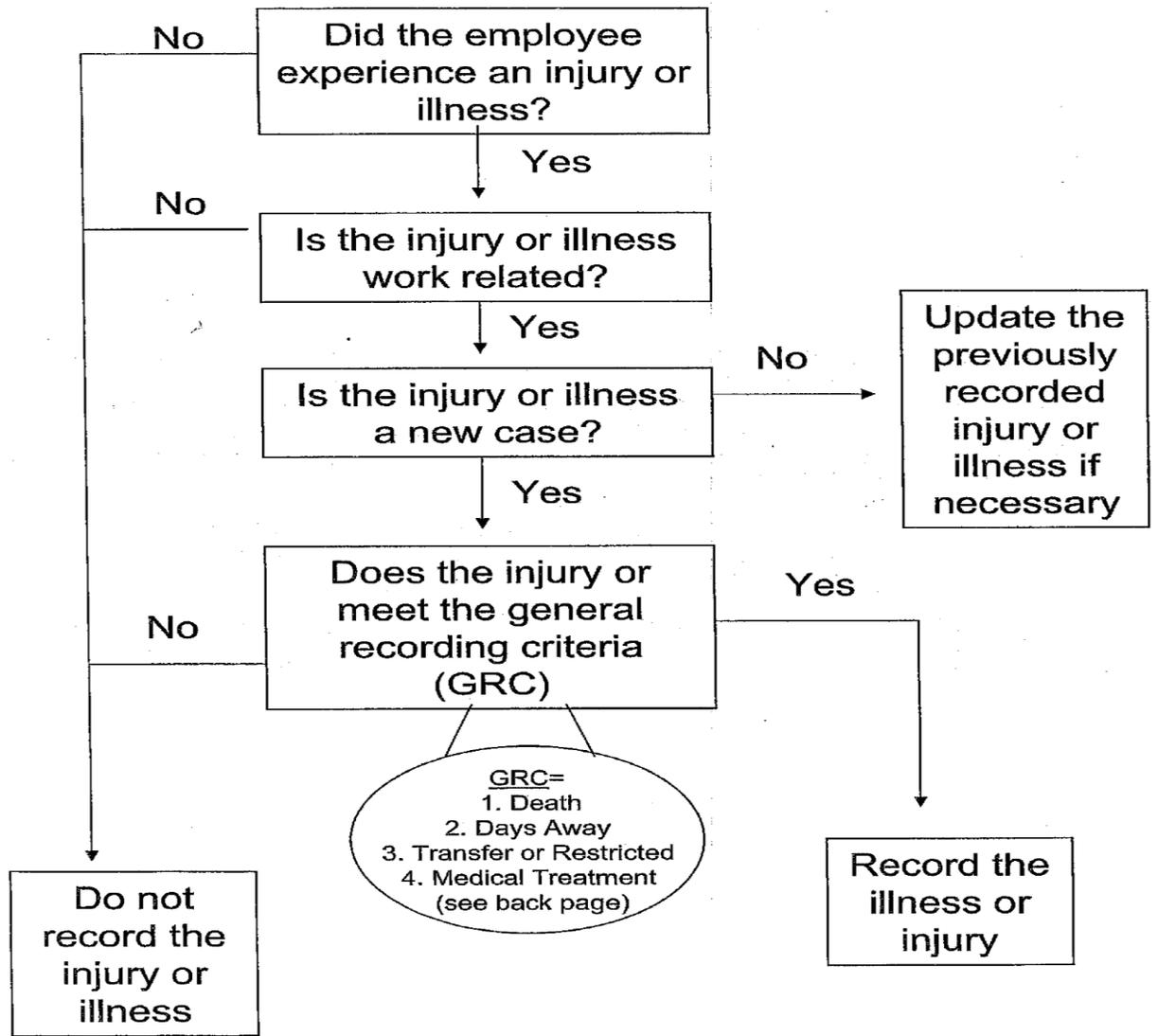
1. Visits to a physician or other licensed health care professional solely for observation or counseling;
2. The conduct of diagnostic procedures, such as x-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes (*e.g.*, eye drops to dilate pupils); or
3. "First aid" as defined below.

What is "first aid"? For the purposes of Part 1904, "first aid" means the following:

- Using a non-prescription medication at nonprescription strength (for medications available in both prescription and non-prescription form, a recommendation by a physician or other licensed health care professional to use a non-prescription medication at prescription strength is considered medical treatment for recordkeeping purposes);
- Administering tetanus immunizations (other immunizations, such as Hepatitis B vaccine or rabies vaccine, are considered medical treatment);
- Cleaning, flushing or soaking wounds on the surface of the skin;
- Using wound coverings such as bandages, Band-Aids™, gauze pads, etc.; or using butterfly bandages or Steri-Strips™ (other wound closing devices such as sutures, staples, etc., are considered medical treatment);
- Using hot or cold therapy;
- Using any non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for recordkeeping purposes);
- Using temporary immobilization devices while transporting an accident victim (*e.g.*, splints, slings, neck collars, back boards, etc.);
- Drilling of a fingernail or toenail to relieve pressure, or draining fluid from a blister;
- Using eye patches;
- Removing foreign bodies from the eye using only irrigation or a cotton swab;
- Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means;
- Using finger guards;
- Using massages (physical therapy or chiropractic treatment are considered medical treatment for recordkeeping purposes); or
- Drinking fluids for relief of heat stress.

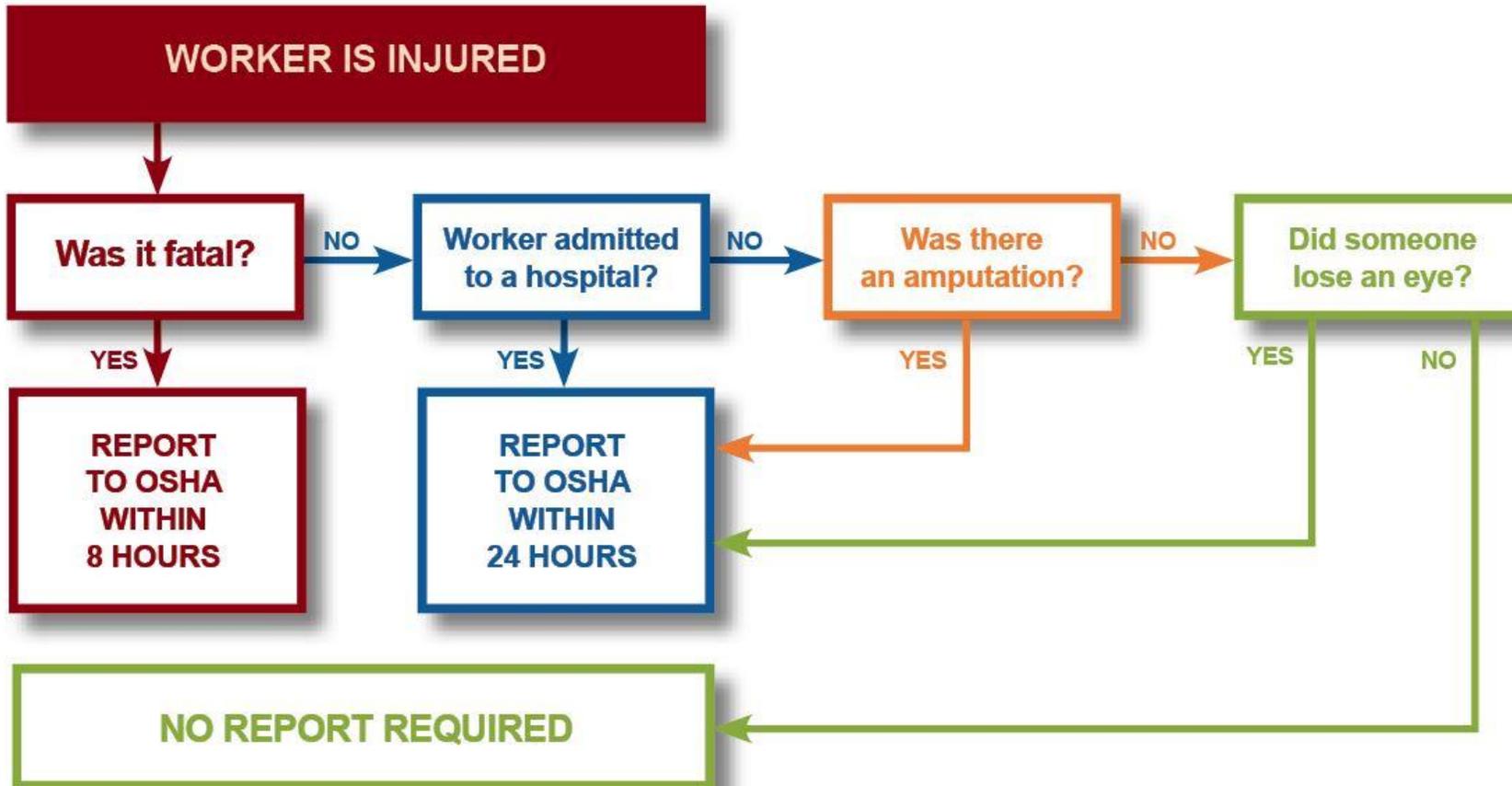
Are any other procedures included in first aid? No, this is a complete list of all treatments considered first aid for Part 1904 purposes.

The Recordable Decision Tree





OSHA ACCIDENT-REPORTING PROCESS



How do I report? Call 800.321.OSHA (6742) or your local OSHA office, or report on-line at www.osha.gov/report_online.

Temporary/New Employee Safety



- KCI developed a temporary employee training tri-fold.
- The tri-fold is reviewed with the new employee the first day of work.
- The supervisor and safety coordinator review their portion of the tri-fold with the employee.
- Once the tri-fold is completed, the employee prints name, signs and dates.

Temporary Employee Tri-Fold (Front)



Attendance Policy for Temporary Employees.

Point system for attendance:

Kovatch Castings expects employees to be on time for work and here the days and hours you are scheduled.

- Arriving late or leaving early. 1/2 or 1. (Must work at least ½ scheduled hours to avoid 1 full point)
- Leaving without supervisor's approval (i.e. walking off the job). 2 points
- No call no show or unauthorized absence. 2points.
- Single day call off. 1 point.

Temporary employees with a total of 3 attendance points are not eligible for hire with KCI. If employee accumulates 4 points the assignment will be terminated.

What we expect from you.

- Injuries and property damage are to be reported as soon as they happen. Report to your supervisor or EH&S coordinator.
- ***Safety is a priority***, you are to wear all required personal protective equipment at all times.
- Employees should respect one another and work together as a team.



We *invest* in people and *cast* our pledge to exceed customer expectations!

X _____
Staffing Agency Employee Name (print)

X _____
Staffing Agency Employee Signature

X _____
Date

KOVATCH CASTINGS, INC.

Staffing Agency Employee Orientation.



KOVATCH CASTINGS, INC.
3743 Tabs Dr.
Uniontown, Ohio 44685

Temporary Employee Tri-Fold (Back)



Welcome (Supervisor)

We are confident that you will find our Company a dynamic and rewarding place to work and we look forward to a productive and successful association. We consider the Employees of Kovatch Castings to be one of our most valuable resources.

Let's Get You Set Up!!

Your Work Area:

You will be assigned to the _____ department and will be trained to work as a _____.

Your Supervisor's name is:

Time Clock and Badge:

It is important that you bring your time card to work every day. Time cards are used for several functions during the course of your day:

- Clocking in and out of work.
- Clocking in and out at lunch.
- Clocking in and out of job assignments.

How to call off if need occurs.

Phone# (330)-896-9944 EXT: (212) You must speak with someone. Do not leave a message.

Let's Take A Tour

- Where to park.
- Employee entrance.



- Smoking policy and smoking areas.
- Break and lunch times.
- Restroom locations.
- Where the nurse's office is located.
- Supervisor's office location.
- Lunch room and vending machines.
- Discuss emergency exits and what to do and where to go for a plant evacuation. (Fire) and storm shelter locations.
- Dress Code (Clothing and Shoes)
- Cell Phones

Safety and Security (EH&S)

- Personal protective equipment (PPE) required throughout plant.
- Additional PPE required for your specific department.
- How to get the PPE you need.
- Days and time the nurse will be in the plant.
- Respirator testing if required for your department.
- Proper lifting techniques.
- Where to find our Safety Data Sheets.
- Location of first aid cabinets.
- How to report an injury.
- Location of eye wash station in your department.
- How to use the plant paging system for an emergency.
- Use of compressed air

OVER →

Safety section of the Tri-Fold



Safety and Security (EH&S)

- Personal protective equipment (PPE) required throughout plant.
- Additional PPE required for your specific department.
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Supervisor Safety Walkthrough

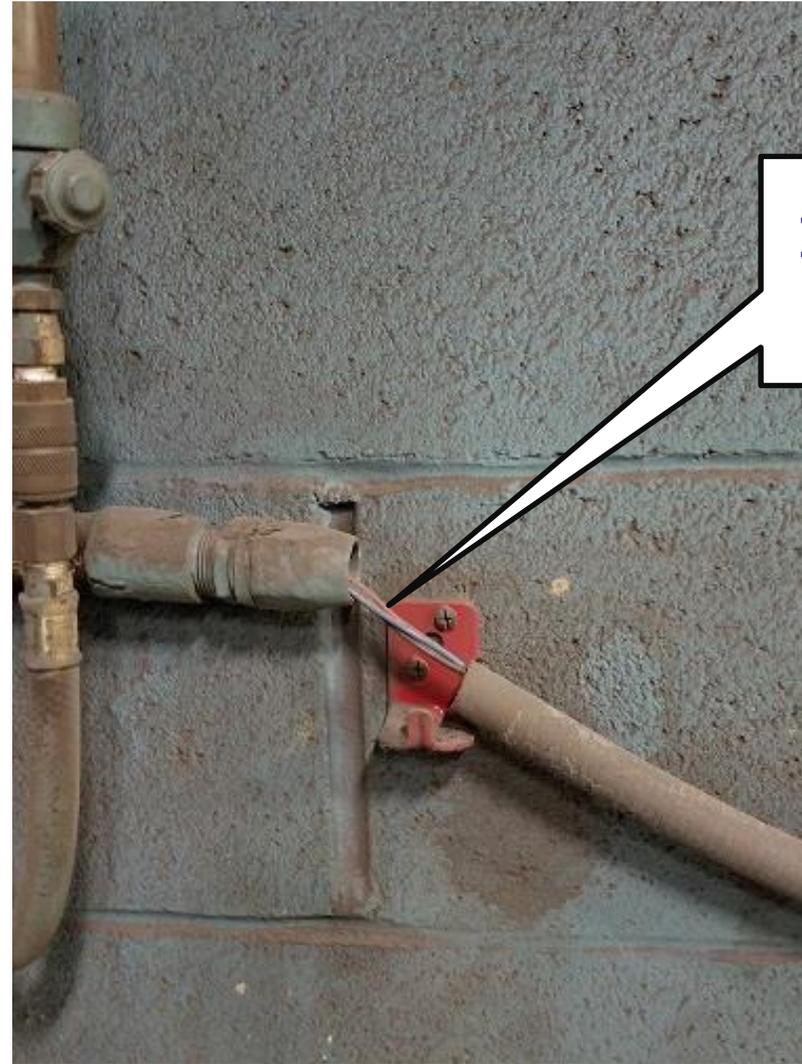


- Monthly, the safety coordinator leads a facility walkthrough with the department supervisors and the Director of Operations.
- A list of safety items needing attention is maintained.
- The list contains:
 - The department.
 - Location of the safety issue.
 - What the safety issue is.
 - Who is responsible for addressing the issue.

Miscellaneous safety issues



**Unrestrained
Electrical
Cord.**



**Exposed
Wires**

Electrical Panel Clearance



**Railing
installed to
insure the
36”
minimum
distance is
maintained.**



**Painted
and taped
floors
define and
meet the
minimum
standard
of 36” in
front of
the panels
and 30”
minimum
width.**

Secondary Container Labeling.



Product ID: _____

Signal Word: DANGER WARNING N/A

HEALTH	FIRE			
		<input type="checkbox"/>	<input type="checkbox"/>	
SPECIFIC HAZARD	INSTABILITY			
		<input type="checkbox"/>	<input type="checkbox"/>	
				
<input type="checkbox"/>				

Hazard Statement: _____

Precautionary Statement: _____

Personal Protective Equipment: _____

Secondary labels need to be used if you are transferring a product from its original container to secondary container or if the original label is missing.

Mill and Drill Press Guards



Magnetic
Chuck Guards
for Drill
Presses and
Milling
Machines



Continue to Improve by Expanding Your Knowledge

- Invite outside safety professionals into your facility.
- Send your safety representative to additional training.
 - Webinars.
 - Safety Congress Exposition.
- Take advantage of your resources.
 - BWC Video Library and Classes.
 - OSHA website. <https://www.osha.gov/>
 - Safety Supply Vendors.

Keep Employees Involved



- Safety Committee Meetings.
- Employees Suggestion Program.
- Safety Slogan Contests.





INVESTMENT CASTING INSTITUTE

HEALTH and SAFETY REPORT

Investment Casting Institute Surveys

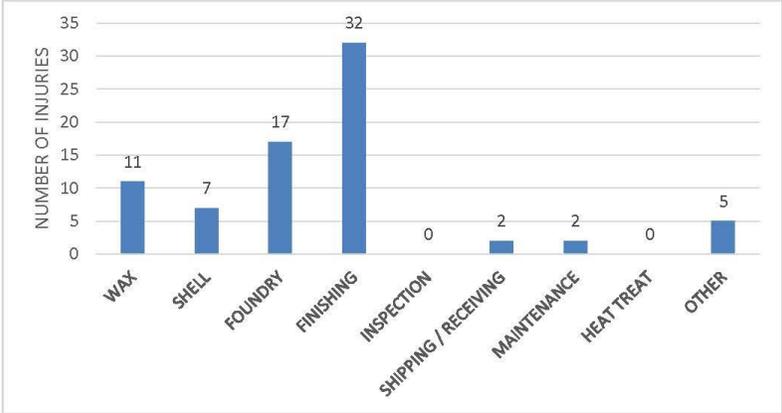
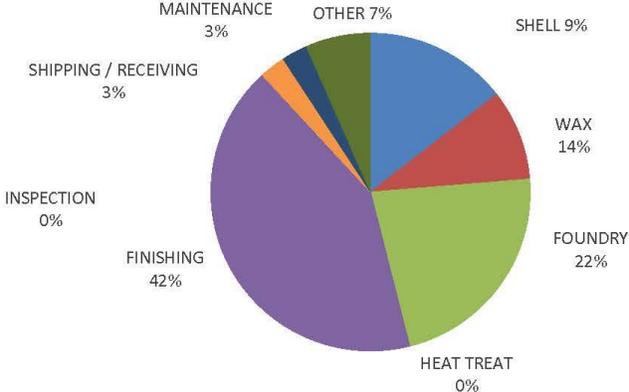


- Monthly Statistics
- How's Business Report
- Sales and Profit Report
- Industry Compensation Practices
- Health and Safety Report

2016 TOTAL REPORTED INJURIES

BY DEPARTMENT

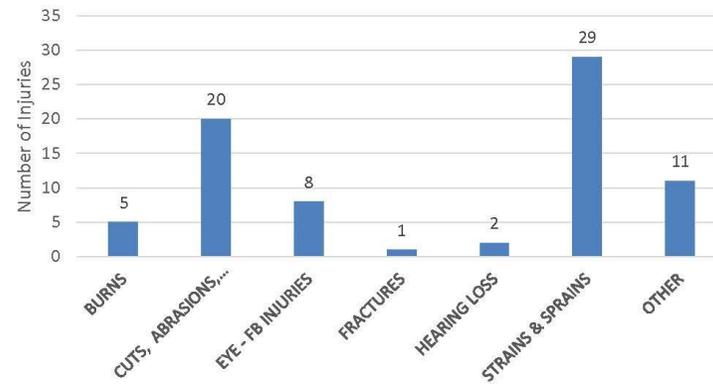
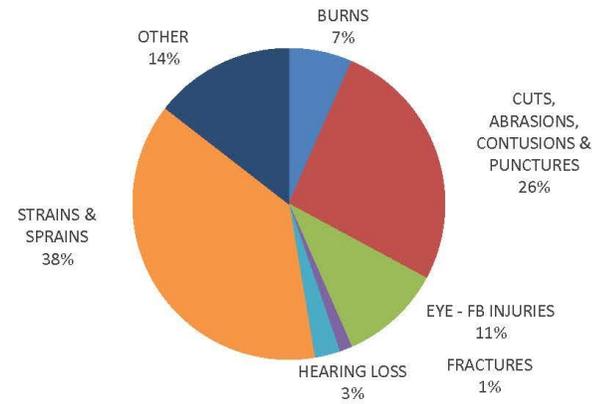
TOTAL INJURIES: 76



2016 TOTAL REPORTED INJURIES

BY INJURY TYPE

TOTAL INJURIES: 76



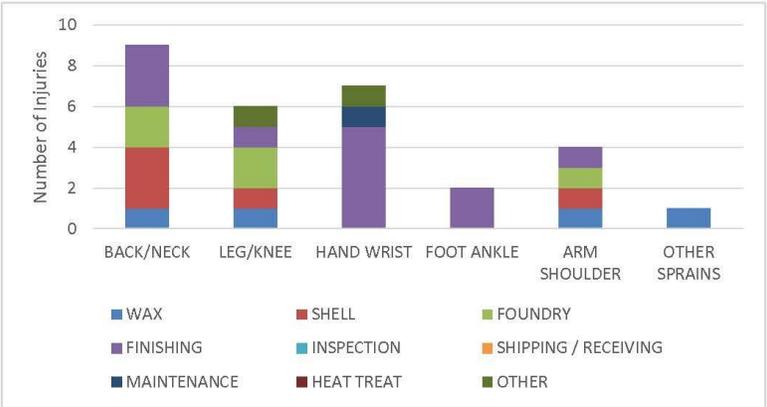
2016 TOTAL REPORTED SPRAINS & STRAINS

BY TYPE

TOTAL INJURIES: 29



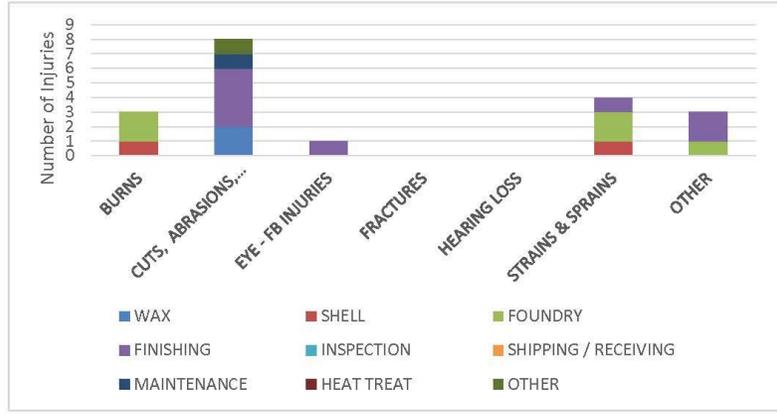
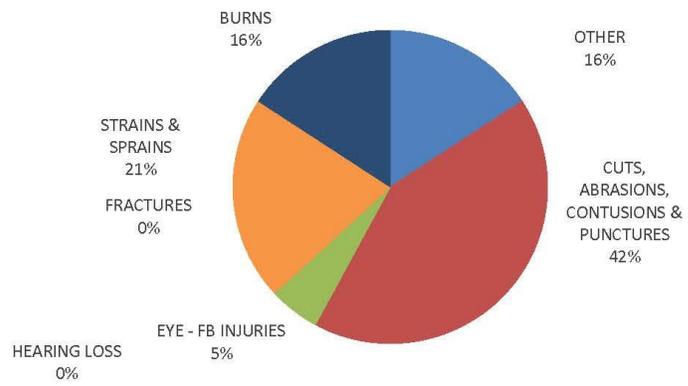
* Note: Other sprains include cervical sprains, hernias and sprains of the thorax.



2016 TOTAL LOST TIME INJURIES

BY TYPE

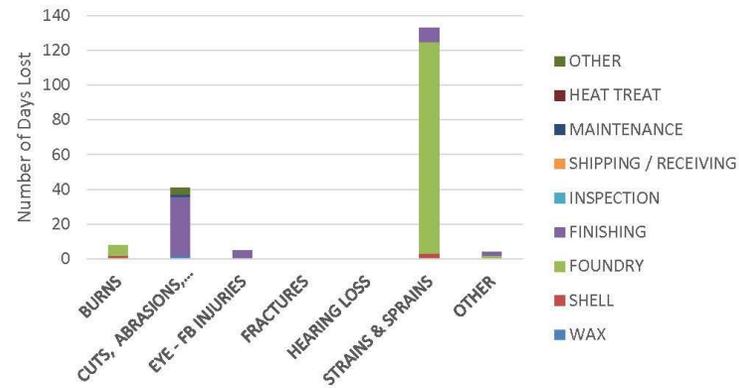
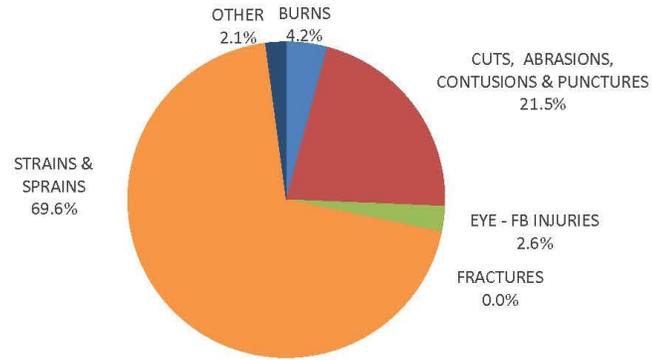
TOTAL INJURIES: 19



2016 TOTAL DAYS LOST TIME

BY INJURY TYPE

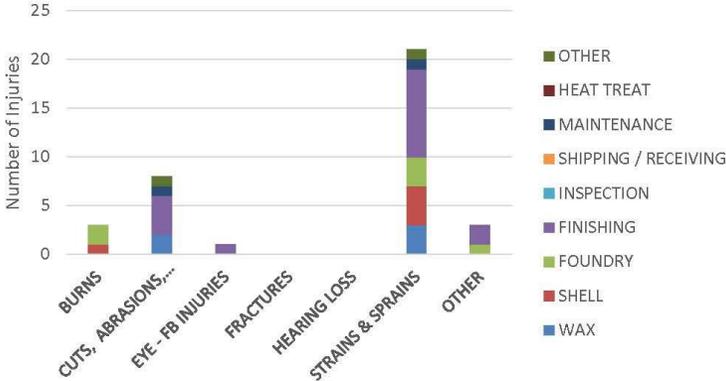
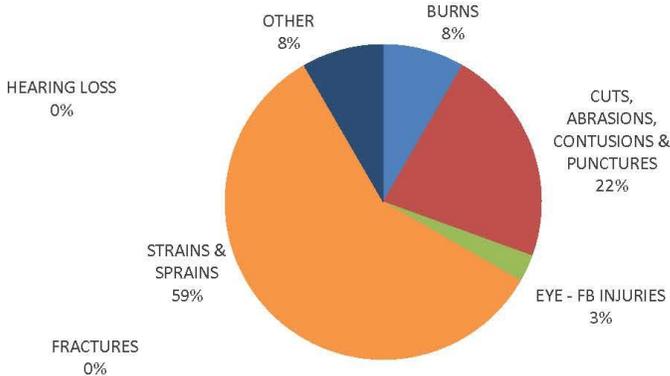
TOTAL DAYS: 191



2016 TOTAL RESTRICTED DUTY INJURIES

BY TYPE

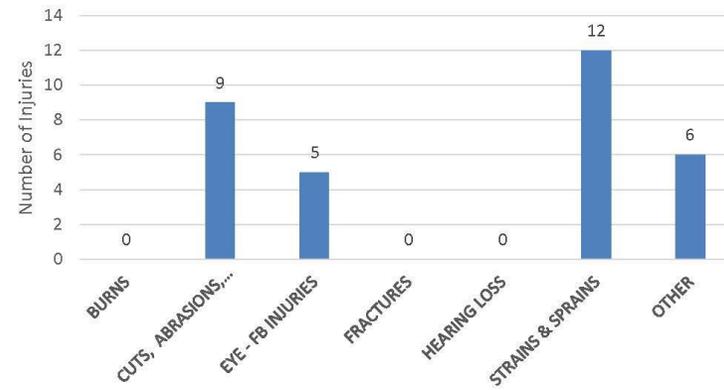
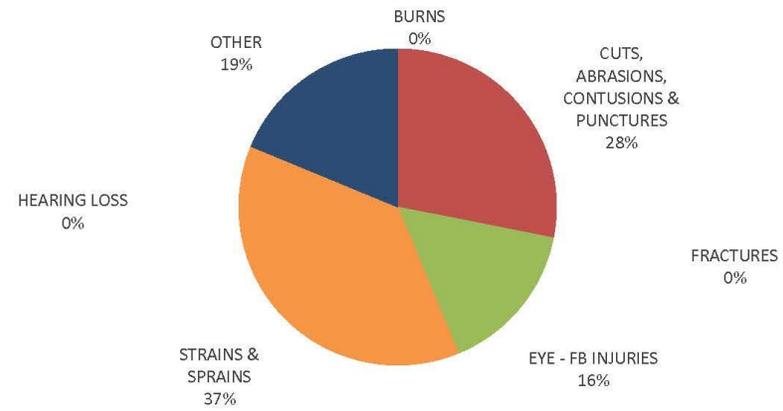
TOTAL INJURIES: 36



2016 INJURY TYPE

FINISHING

TOTAL INJURIES: 32



2016 Incidence Rate

The following formula has been used to calculate incidence rate of injuries on an industry basis, as well as on a company basis.

$$\text{Incidence rate} = (\text{Number of injuries and illnesses} \times 200,000) / \text{Employee hours worked}$$

(The 200,000 hours in the formula represents the equivalent of 100 employees working 40 hours per week, 50 weeks per year, and provides the standard base for the incidence rates.)

When considering the entire body of data represented as a single entity, the Incidence Rate was

Incidence Rate - Overall Investment Casting Industry		
<u>Total Reportable</u>	<u>Lost Time</u>	<u>Restricted Duty</u>
0.89	0.78	1.44

a more meaningful representation of this data comes from analyzing the data on a company by company basis. The following is a statistical summary of that analysis:

Incidence Rate - Company by Company Analysis			
	<u>Total Reportable</u>	<u>Lost Time</u>	<u>Restricted Duty</u>
Average:	2.7	3.0	3.3
25th Percentile:	0.0	0.0	0.5
Median:	2.9	2.0	1.9
75th Percentile:	3.8	3.5	5.6



OSHA Log 300 - How to Determine LWDII/DART Rates and TRC Rates

OSHA Log 300 Instructions for Calculations:

Company Name, Job, SIC or NAICS & Calendar year should match your OSHA 300a Log. Fill in the blanks for H, I, J & Exposure hrs. using your OSHA 300a Log. The TRC & DART calculations will automatically figure once blanks H, I, J & Exposure hrs. are filled in.



COMPANY NAME: _____
SIC\NAICS: _____
CALENDAR YEAR: _____

TOTAL NUMBER OF RECORDABLE CASES (TRC)

$$\frac{(H) + (I) + (J) * 200,000}{\text{Exposure Hrs}} = \text{TRC}$$

Example: [(H + I + J) x 200,000 / Exposure hrs. = TRC

TOTAL NUMBER OF CASES WITH DAYS AWAY/RESTRICTED/TRANSFERRED (DART)

$$\frac{(H) * 200,000}{\text{Exposure Hrs}} = \text{DART}$$

Example: [(H + I) x 200,000 / Exposure hrs. = DART

Total Recordable Cases (TRC) -
TRC

Days Away/Restricted/Transferred (DART) -
DART

Prepared by: _____

Date: _____

METAL CASTING INDUSTRYIncidence Rates of Nonfatal Occupational Injuries & Illnesses per 100 Full Time Workers ⁽²⁾

	OSHA <u>RECORDABLE</u> INJURY & ILLNESS CASES							CASES with <u>Days Away</u> , <u>Restricted</u> or <u>Transferred</u> (<u>DART</u>)				
	NAICS ⁽¹⁾	2012 ⁽⁵⁾	2013 ⁽⁶⁾	2014 ⁽⁷⁾	2015 ⁽⁸⁾	2016 ⁽⁹⁾		2012 ⁽⁵⁾	2013 ⁽⁶⁾	2014 ⁽⁷⁾	2015 ⁽⁸⁾	2016 ⁽⁹⁾
All Manufacturing	31 - 33	4.3 (-2.3%)	4.0 (-7.0%)	4.0 (NC)	3.8 (-5.0%)	3.6 (-5.3%)		2.4 (NC)	2.2 (-8.3%)	2.2 (NC)	2.2 (NC)	2.1 (-4.5%)
Primary Metal Manufacturing	331	6.2 (+1.6%)	5.2 (-16.1%)	5.2 (NC)	5.1 (-1.9%)	4.5 (-11.8%)		3.5 (NC)	2.8 (-20.0%)	2.9 (+3.6%)	2.8 (-3.4%)	2.6 (-7.1%)
Foundries (All)	3315	9.5 (-1.0%)	7.7 (-18.9%)	7.8 (+1.3%)	6.7 (-14.1%)	6.1 (-9.0%)		5.1 (-5.6%)	3.8 (-25.5%)	4.4 (+15.8%)	3.7 (-15.9%)	3.7 (NC)
Ferrous Metal Foundries (Iron & Steel Foundries)	33151	10.7 (NC)	8.6 (-19.6%)	8.0 (-7.0%)	7.2 (-10.0%)	6.0 (-16.7%)		5.7 (-8.1%)	3.9 (-31.6%)	4.2 (+7.7%)	3.8 (-9.5%)	3.2 (-15.8%)
Iron Foundries (Ductile, Gray, Malleable)	331511	11.5 (+5.5%)	9.9 (-13.9%)	8.4 (-15.2%)	7.2 (-14.3%)	6.1 (-15.3%)		5.9 (-1.7%)	4.2 (-28.8%)	4.0 (-4.8%)	3.7 (-7.5%)	3.2 (-13.5%)
Steel Investment Foundries	331512	6.3 (-13.7%)	4.7 (-25.4%)	5.6 (+19.2)	4.3 (-23.2%)	4.4 (+2.3%)		3.7 (-21.3%)	2.7 (-27.0%)	3.5 (+29.6%)	2.6 (-25.7%)	3.1 (+19.2%)
Steel Foundries (Except Investment)	331513	Not Listed	8.0 ---	8.9 (+11.3)	9.1 (+2.2%)	6.9 (-24.2%)		Not Listed	4.2 ---	5.2 (+23.8%)	4.6 (-11.5%)	3.2 (-30.4%)
Nonferrous Metal Foundries	33152	7.8 (-3.7%)	6.4 (-17.9%)	7.6 (+18.8%)	6.1 (-19.7%)	6.3 (+3.3%)		4.3 NC	3.6 (-16.3%)	4.7 (+30.6%)	3.5 (-25.5%)	4.3 (+22.9%)
Aluminum Die-Casting Foundries	331521	8.6 (+10.3%)	7.1 (-17.4%)	Not Listed	Not Listed	Not Listed		4.9 (+16.7%)	4.3 (-12.2)	Not Listed	Not Listed	Not Listed
Nonferrous (Except Aluminum) Die-Casting Foundries	331522	5.1 ---	3.8 (-25.5%)	Not Listed	Not Listed	Not Listed		2.1 ---	1.4 (-33.3%)	Not Listed	Not Listed	Not Listed
Nonferrous Metal Die-Casting Foundries	331523	Not Listed	Not Listed	6.9 ---	6.2 (-10.1%)	5.3 (-14.5%)		Not Listed	Not Listed	4.3 ---	3.6 (-16.3%)	3.5 (-2.8%)
Aluminum Foundries (Except Die-Casting)	331524	8.7 (-8.4%)	7.6 (-12.6%)	8.2 (+7.9%)	6.6 (-19.5%)	7.0 (+6.1%)		5.2 (-13.3%)	4.3 (-17.3%)	5.1 (+18.6%)	4.3 (-15.7%)	4.4 (+2.3%)
Copper Foundries (Except Die-Casting)	331525	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed		Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Other Nonferrous Foundries (Except Die-Casting)	331528	4.4 (+4.8%)	3.8 (-13.6%)	Not Listed	Not Listed	Not Listed		2.1 (+16.7%)	1.8 (-14.3%)	Not Listed	Not Listed	Not Listed
Other Nonferrous Metal Foundries (Except Die-Casting)	331529	Not Listed	Not Listed	8.3 ---	5.5 (-33.7%)	7.8 (+41.8%)		Not Listed	Not Listed	4.7 ---	2.5 (-46.8%)	6.0 (+140.0%)
Switchgear and Switchboard Apparatus Manufacturing	335313	2.7 (+3.8%)	2.3 (-14.8%)	2.4 (+4.4%)	2.2 (-8.3%)	3.5 (+59.1%)		1.6 (+23.1%)	1.3 (-18.8%)	1.0 (-23.1%)	1.1 (+10.0%)	2.6 (+136.4%)

⁽¹⁾ North American Industry Classification System (NAICS) - United States 2002⁽²⁾ The incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as: (N/EH) x 200,000, where

N = Number of Injuries and Illnesses

EH = Total Hours Worked by All Employees during the Calendar Year

200,000 = Base for 100 Equivalent Full-time Workers (working 40 hours per week, 50 weeks per year.)

NC = No Change

⁽⁵⁾ Includes % Increase (+) / Decrease (-) From 2011⁽⁷⁾ Includes % Increase (+) / Decrease (-) From 2013⁽⁹⁾ Includes % Increase (+) / Decrease (-) From 2015⁽⁶⁾ Includes % Increase (+) / Decrease (-) From 2012⁽⁸⁾ Includes % Increase (+) / Decrease (-) From 2014



Thank you
Questions?