


Spring Thaw 2018

CALCIMA

**California Construction and
Industrial Materials Association**

Ontario February 27 Sacramento March 13

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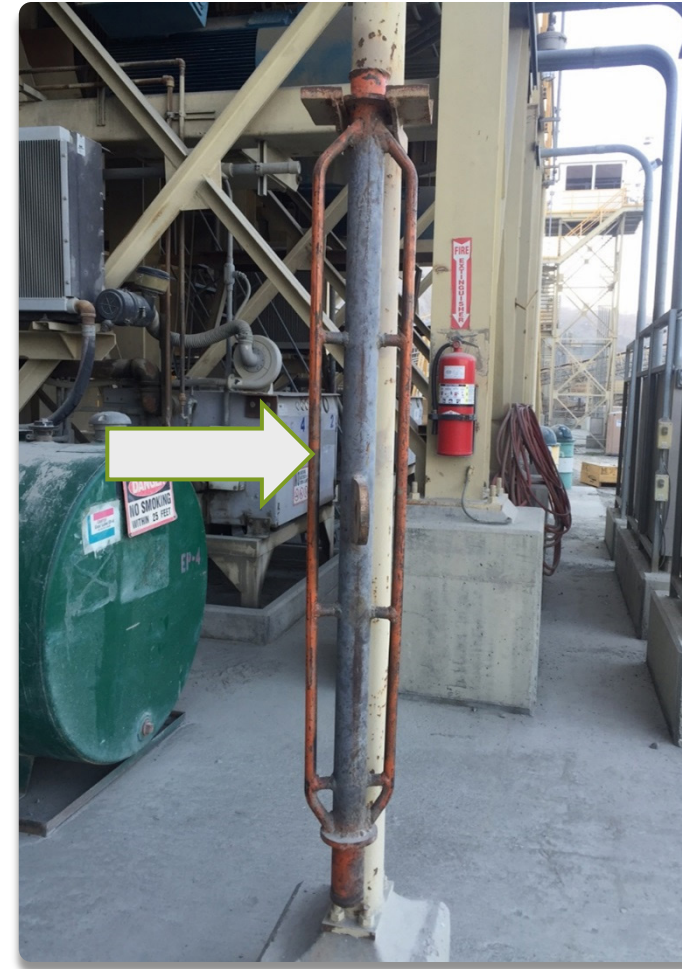


Vulcan Materials Corona Quarry

SAFETY INNOVATIONS AT WORK

Crusher Ram Safety Device

Used for tightening or loosening Nuts on
Mantles of Cone crushers at plant.



In use on Symons 7' Crusher Head Nut



In use on Sandvik CH 660 crusher Head nut.

- This allows the employees to maintain control of this device while suspended from crane
- This replaced having to swing a 20lb sledge hammer to tighten head nut. Reducing torque on the body and reducing the risk of the sledge hammer flying out of employees hands




Stationary Hand Crank



Reasons why we did this:

- Eliminated having to use a ladder and having a fall from heights
- Eliminated having to use a Come O Long and reducing the risk of having a failure of the hook and a line of fire incident
- Overall, this saves time and is a more effective way to move our feeders back to perform maintenance





Safe Access Solution to install Lifting eyebolt and shackle on 7' Symons Crusher Mantle

Old Way vs. New Way

Old Way vs. New Way

Problem: We use to stand on 40 degree angle of the liner



Solution: Have aluminum steps built to fit angle



Results

- ❖ We have a lightweight set of steps that are easy for one person to install and now have safe access to install eyebolt and shackle for crane hook
- ❖ Less chance to have a slip, trip and fall
- ❖ \$500.00 cost to build. Well worth it to save an injury and maintain a happy work culture

Filter cleaning Station



Table used for cutting open used filters for inspection

- Old way was at the elevated height and caused fatigue and stress to body and would also cause oil spillage

Improvements:

- Eliminated oil spills
- Employees fabricated a device which lowered the elevated table to reduce fatigue and reduce potential injuries
- This also has a drain attached to it and now drains directly into a bucket, making oil draining process a much simpler task



Raptor 3000 Air Torque Gun

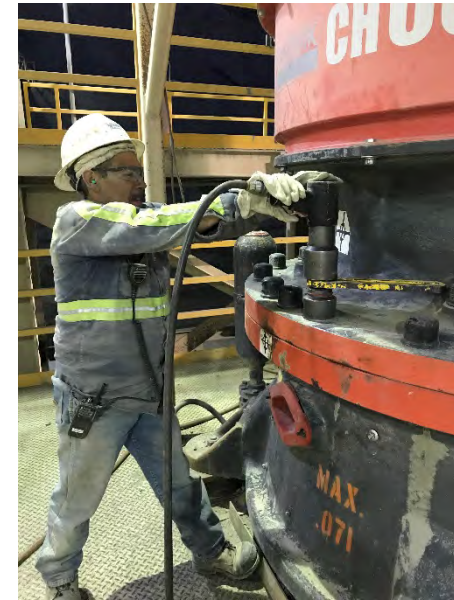


Old Way vs. New Way

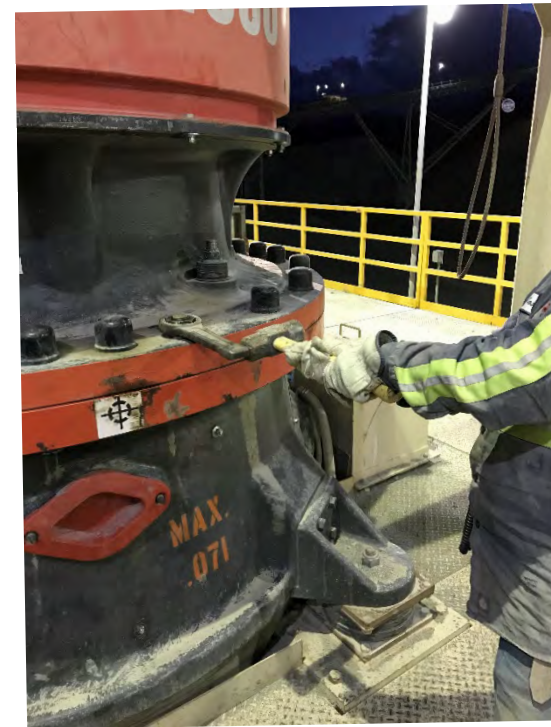
Use of a Knocker wrench



Use of the Raptor gun



Knocker Wrench Set Up and Use




Raptor 3000 Air Torque Gun Set Up



The Benefits

- ❑ Eliminated the use of having to strike metal on metal
- ❑ Reduced the risk of a line of fire incident or a struck by incident
- ❑ Reduced the risk of an ergonomic injury by not having to swing a hammer
- ❑ Made it easier for removal and assembly of Top Shell of Crushers
- ❑ Decreased the time needed to perform this task
- ❑ Allowed employees to be achieve Torque value without having to strain themselves
- ❑ Provided us an opportunity to show employees that safety takes precedence no matter how large or small the task may be



These are a few examples of what our employees at Vulcan Materials, Corona have brought to the table for safety and ergonomics. Always striving for continuous improvement.

THANK YOU FOR ALLOWING US TO SHARE SOME OF OUR IDEAS AND IMPROVEMENTS. HERE'S TO A SAFE 2018