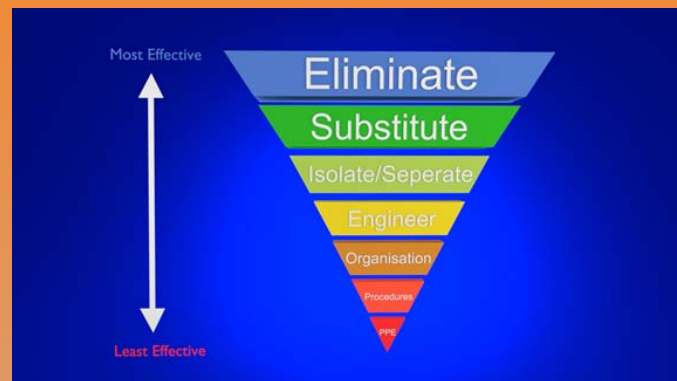
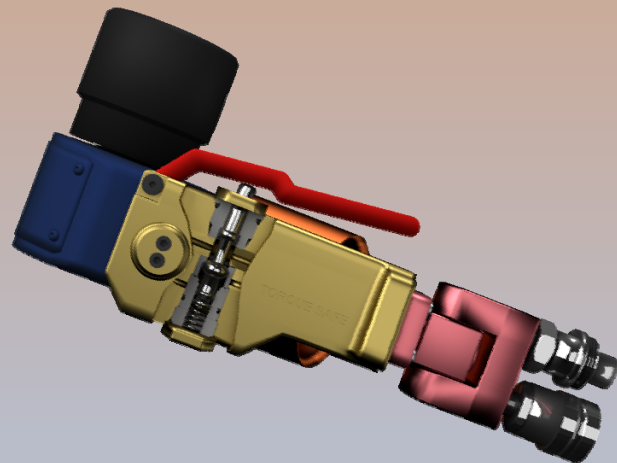


# Greatly Reduces the risk of Hand & Finger Crush Injuries involving hydraulic torque wrenches



Hydraulic Wrench hand crush accidents are primarily caused when another person actuates the tool, instead of the tool operator. Torque Safe™ **eliminates** that safety issue. Giving control back to the person in peril.

**Torque Safe™ is a Simple Solution to a persistent Safety Issue**



For more information, contact your local Torque Safe™ Distributor



UVIT srl - Via F. Busoni 7/A - 20137 Milano (MI) ITALY  
Tel. 0039 02 5516084 - Fax 0039 02 54100 448  
staffuvit@uvit.it - www.uvit.it



Orange Banner HSE Significant Incident (SI) RTIO Pilbara Operations - Preliminary Notice			
Date of Incident	02/12/2014	Time of Incident	1145hrs
Operation (site) responsible for Incident	West Angelas	Incident Number	1000314156
Impression of the MRO (Critical)	High (SI)	Impact Type (HSE)	Safety
Incident Short Description:	Finger of maintainer crushed between hi-torque arm and bolt head		
What happened	<p>At approximately 1145hrs on December 2<sup>nd</sup> 2014, the finger-tip of a MEM maintainer was crushed while using a hi-torque.</p> <p>Two MEM maintainers were loosening the top track frame mounting bolts on a Hitachi EX5500 by using a 10MXT hi-torque.</p> <p>Maintainer 1 was handling the hi-torque, while maintainer 2 was operating the hi-torque control.</p> <p>When the hi-torque was activated by maintainer 2, the left hand ring finger of maintainer 1 was crushed against a 95mm bolt and the reaction arm of the hi-torque.</p>		
Immediate Action Taken	<ul style="list-style-type: none"> <li>the task was stopped immediately and scene secured</li> <li>the injured maintainer was taken to the EMOs for medical attention</li> <li>investigation commenced.</li> </ul>		
Responsible Manager & Position	David Griffin, MEM Manager		
Contact Number (or email)	<a href="mailto:david.griffin@rcolinto.com">david.griffin@rcolinto.com</a>		
Distribution of Notice to:	RTIO Pilbara Operations HSE Notifications		

Torque Safe North America, LLC™

12710 Everhart Pointe Drive  
Tomball, TX 77377 USA

Phone: +1 (832) 461-5853  
[www.TorqueSafeNA.com](http://www.TorqueSafeNA.com)  
[www.torquesafe.com.au](http://www.torquesafe.com.au)



**Introducing the Torque Safe™ Safety Switch for Hydraulic Torque Wrenches.**

**A patented safety solution to prevent Hand Crush incidents**



**Designed & Engineered to significantly reduce & prevent hand crush incidents caused by hydraulic wrenches**





## How Torque Safe Works

### NORMAL OPERATION - HANDLE RELEASED



### A Safety Switch for Hydraulic Wrenches

Anyone who has ever used a hydraulic torque wrench has either suffered a hand crush incident or knows of someone who has had a hand crush incident.

Our Hands enable us to connect in a tactile and meaningful way; to show love and affection for those we care about, to prepare food, get dressed, drive and even shield us from danger.

For too long, horrific hand injuries from the use of hydraulic torque wrenches have robbed people of the ability to relate to the world through touch. Inflicting untold personal pain and stress upon the individual and their families., such injuries also inflict a high cost to businesses in higher insurance costs, work stoppages and time lost. There is a whole industry consisting of lawyers specializing in hand crush lawsuits. Then there is the expense of replacing employees.

Designed hand in hand with a leading mining company, TORQUE SAFE helps prevent these injuries by giving control back to the person handling the tool.

Once fitted with the torque safe, the torque wrench becomes a safer and far more manageable tool. Thus reducing the potential for hand injuries and increasing productivity due to the higher confidence of the users.

### AN AFTERMARKET SAFETY RETROFIT FOR HYDRAULIC TORQUE WRENCHES

Torque Safe is a replacement for the OEM Swivel on Hydraulic Torque Wrenches. It was born in the mines of Australia when a contractor who's crew was working on a large piece of machinery, went to requisition a Hydraulic Torque Wrench from the Tool Room and he found that the Hydraulic Torque Wrenches were in quarantine.

When he inquired as to why, he was told that someone had **suffered a hand crush injury which had resulted in amputation.** The operator Of the Hydraulic Wrench was positioning the tool while his hand was on the reaction arm of the tool. The Hydraulic Wrench Pump operator thought that the Tool Operator was ready, and actuated the tool from the pump while the tool operators hand was still in a perilous position, causing his hand to be **crushed under thousands of pounds of pressure.** The jobsite was shut down for days for the investigation, resulting in additional loss of revenue etc.

The Torque Safe system was born. We designed a solution that gave the operator of the tool control over the tool & when it is actuated. Depressing a dead-man safety lever will divert the oil harmlessly back to the pumps reservoir. The tool can't be actuated with the lever depressed. The tool operator controls when the tool is to be actuated. When he is ready the operator simply releases the lever and the tool works as is normal. Communication errors between tool operator and pump

Working in conjunction with the mining company's engineering dept., the design was perfected. 3-D modeling & FEA, the prototype, testing etc., were all done in partnership with their engineering department. Once the units were field tested and proven, Torque Safe went into production and supplied the mine with the safety switch swivel. The word then spread to the entire mining industry in Australia & beyond. Other industries such as Oil & Gas picked up on it, and the rest is Hydraulic Torque Wrench safety history.

Torque Safe North America, LLC . Was formed in 2016. The Torque Safe Equipment is now manufactured and assembled entirely in the USA, for the Americas and European markets.

Compact •Low Profile •Robust

### INCREASE SAFETY AND UPGRADE YOUR EQUIPMENT IN ONE PURCHASE

What happens to your existing swivel?

We use it... We attach it to the end of the Torque Safe swivel.

Giving added value to your existing tooling of:

- 1. The Torque Safe Safety Lever system which gives control to the person handling the tool**
- 2. Your tool now has a swivel system that now rotates on three axis (instead of two) thus giving you greater application accessibility**
- 3. Your Torque Safe Safety Swivel also has a pressure relief system in case of over-pressurization on the return stroke, leading to longer tool life, increased operator safety and less damage to internal tool parts.**

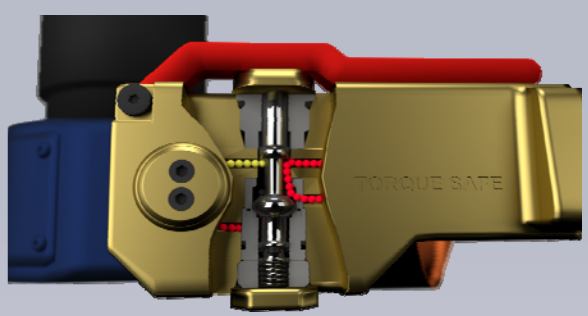


**All Torque Safe™ Safety Switch Swivels come with an internal relief valve which prevents over-pressurize on the return side. This will give greater safety margin to the operator and prevent damage to the tool due to over-pressurization, a leading cause of hydraulic wrench damage & failures. This feature saves downtime & money spent on**

## Protect your people & Torque Safe

The Torque Safe can be retrofitted to most models and brands of Hydraulic Wrenches.

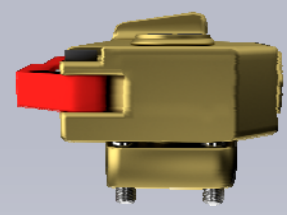
Torque Safe transforms the wrench into a safer tool thus creating a revolution in Hydraulic Wrench Safety. So much so, that no



When the "Dead Man Safety Lever" is depressed, the flow of oil is diverted from the tool, preventing the tool from actuating, thus preventing injury.



MEETS ALL EXPECTATIONS



Models available for most Hydraulic Wrench brands

- |          |               |               |     |           |
|----------|---------------|---------------|-----|-----------|
| Hytorc   | Atlas Copco   | Titan (CP)    | SPX | Torsion X |
| Torc LLC | Energac       | Plarad        | ITH | Hi Force  |
| Wren     | Hedley Purvis | & many others |     |           |

