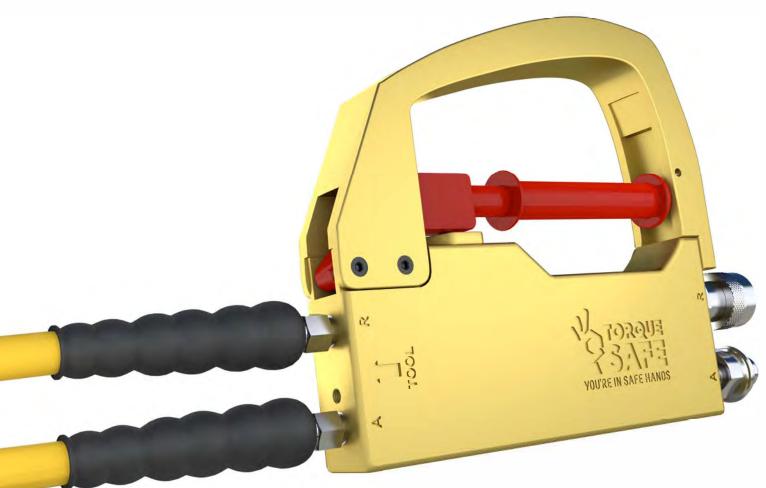




## SAFETY SWITCH FOR HYDRAULIC TORQUE TOOLING



Used in Oil & Gas, Petrochemical & Refining,
Power Generation, Manufacturing, Mining,
Heavy Equipment, Contractors, Marine, Defense
& other industries

Reduce the Risk of Injury

- Improve Tool Handling
- Save Time and Resources
- Reduces Company Liability









## Torque Safe

Torque Safe is a safety switch which has been designed for hydraulic torque wrenches. This provides a safety feature for the technician handling the hydraulic torque head positioning for use. This safety feature has been designed for the handling technician, preventing potential hand crushing injuries. Using a hydraulic torque wrench often requires 2 operators due to positioning of bolts, weight of the hydraulic torque head and sockets. One operator controls the on/off switch and the other operator positions the hydraulic torque head.

Depending on the maintenance or break down task there are often multiple jobs performed in the same areas. When performing these tasks the working environment can be harsh due to noisy, repetitive and slow conditions. These factors have caused distractions and break downs in communication between both operators performing the task resulting in severe injuries.

## "Torque Safe minimizes risk and exposure to hazard at the source."



#### **MEETS ALL STANDARDS**

Designed hand-in-hand with a leader in hydraulic tool production, and the mining companies, the Torque Safe helps prevent injury to technicians without affecting the operation or the torque settings. Once fitted with Torque Safe, the torque wrench becomes a safer, more manageable tool, reducing the potential for hand injuries and increasing productivity by providing greater confidence for users. Torque Safe is a revolution in hydraulic tool safety that no torque wrench operator should be without.

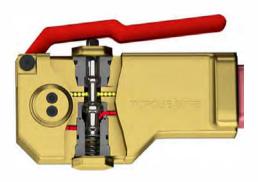


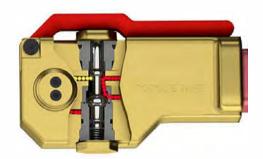






## Design Features





Torque Safe has been designed and manufactured with the latest technology and precision machining available. The valve is handle operated moving an internal spool assembly. With the normal operation (handle released) oil will pass through the valve. On the above diagram the yellow indicates the oil passing through the valve activating the hydraulic torque head. The red in the diagram indicates the return oil passing back through the safety valve 'Torque Safe'.

'Torque safe' activated (handle depressed) in this position oil can no longer pass through the valve and is diverted returning to tank. The safety feature 'Torque Safe' now enables the operator positioning the hydraulic torque head who is at risk, full control of the tooling. With the handle depressed this eliminates any unintentional movement by the second operator who has control of activating the hydraulic torque wrench. The 'Torque Safe' will eliminate any hand crushing incidents. This valve has been designed to not affect the operations of the Torque settings.

## Two Models - Same Safety





**Tool Mounted** 

In-Line









#### **Tool Mounted Version**



Adaptable to most brands of Hydraluic Torque Wrenches

## Increase Safety and upgrade the swivel on your tool at the same time.

What happens to your existing swivel? We use it... We attach it to the end of the Torque Safe swivel. Now you will have:

- 1. The Torque Safe Safety Lever system
- 2. Your tool now has a swivel system that now rotates on three axes (instead of two) thus giving you greater application accessibility
- 3. Your Torque Safe Safety swivel 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.

#### Installation

Most customers have the ability and confidence to install their own Torque Safe swivel. It's simple and fast, however, if you desire that we install them instead, Installation of Torque Safe is as simple as providing us with your hydraulic torque wrench. We have trained and specialized technicians to install, test and commission your tool in a modern fully equipped hydraulic testing facility.









#### In-Line Version



Works with any make or model Hydraulic Torque Wrench. Allows the operator to change tools as he wishes and still have optimum safety. Works "in-line" between the Hydraulic Wrench & Hydraulic Pump.

# Available with either steel "Reverse DEAD MAN" or "True DEAD MAN" Safety Lever for hands free operation.

Benefits of an in-line model:

- 1. The Torque Safe can be used on hydraulic wrench models that do not have a swivel
- 2. The in-line model is better adapted for smaller hydraulic wrenches where the tool mounted model may be cumbersome.
- 3. True hands free reverse dead man keeps hands off the tool when pressurised
- 4. In addition to eliminating hand crush accidents, it will reduce the chance of oil injection incidents.
- 5. Safety locks on safe position until released. Acts as a tag-out lock out system for the hydraulic wrench, protecting the operator from accidental actuation of the wrench.

#### Installation

The In-Line Torque Safe can be installed on any hydraulic wrench simply by using the quick connects. This model is ideal for those customers who have a fleet of hydraulic wrenches or multiple sizes and brands.









## The Torque Safe Story

Hydraulic wrenches revolutionized the bolting business. These tools are capable of generating a controlled torque in a very compact package, but like any power tool, when used incorrectly the result can be catastrophic injury or worse.

Everyone familiar with Hydraulic Torque tools knows about the dangers of hand crush injuries. They're more common than we care to think. Historically hand and finger injuries make up nearly 50% of incidents in the Oil & Gas industries and sometimes this figure can reach up to 80% of all recordable incidents According to the International Association of Drilling Contractors 2014 statistics. Hand & finger injuries were attributed to about 43% of all recordable incidents on drilling rigs. This figure had increased from 41% in 2013 and 40% in 2012.

The torque safe hydraulic torque wrench safety switch was developed by Luke Gosden. Mr. Gosden runs a successful Mechanical Services firm in Australia, catering primarily to the mining industry. After one of his associates had a devastating hand crush injury resulting from hydraulic wrench misuse, Gosden deduced it crucial that a simple and safe solution be developed. For too long, horrific hand injuries resulting 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 individuals and their families, such injuries also reduce business efficiency through medical costs, company liability and the expense of replacing injured workers. Often times, the site is closed down while the cause of the accident is being investigated, causing additional revenue loss to the company.

If at all possible, the person handling the tool should be the one actuating the tool. However many if not most times the tools are used, this is not the case. Many times remote actuation is a necessity due to the large equipment the tools are used on. Larger tools definitely require two people. Most hand crushes occur when the operator of the actuator button is someone other than the person handling the tool. Communication between the two is of the utmost importance. That's not always easy in loud areas and or areas where the tool is not visible to the actuator operator.

The best way to handle this hazard is to eliminate the problem. With Torque Safe the ultimate control of tool actuation is in the hands of the person handling the tool. The tool can only be actuated once the tool operator releases the safety lever.

Designed hand-in-hand with a leader in hydraulic tool production, and the mining companies, the TORQUE SAFE helps prevent injury to technicians without affecting the operation or the torque settings. Once fitted with TORQUE SAFE, the torque wrench becomes a safer, more manageable tool, reducing the potential for hand injuries and increasing productivity by providing greater confidence for users. TORQUE SAFE is a revolution in hydraulic tool safety that no torque wrench operator should be without

"With Torque Safe the ultimate control of tool actuation is in the hands of the person handling the tool."









## Torque Safe Expansion

Torque Safe has continued to grow and raise industry awareness about the possible dangers of using hydraulic torque wrenches.

Since the inception in 2015, Torque Safe has expanded globally and set up a large distribution network. Peter Rosa, who has over 40 years bolting experience and was one of the owners of Titan Torque Wrenches, has been appointed master Distributor of USA. Pete formed the company Torque Safe North America and has been busy appointing distributors all over the world.

#### Torque Safe Achievements

Torque Safe has many achievements which include the world's very first safety device for hydraulic torque wrenches. A large amount of granted patents across the world a patent pending's.

We pride ourselves in working closely with our customers and understanding there needs and are willing to adapt our products to suit their specific needs if required.

#### **Our Customers**

Some of our customers include:

# RioTinto 38 bhpbilliton

SIEMENS







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