

## EXPANDED FUNCTIONALITY IN ELECTRIC BOLTING TOOLS



## Next-Generation Smart Tools Combine Advanced Functionality with Enough Power and Reliability for Even the Toughest Industries

Fueled by advances in Lithium-Ion battery technology, modern smart electric tools offer a host of programmable settings, customizations and user options. This versatility has opened the door to a range of new applications and industries. As a result, tools such as the **LITHIUM SERIES® II Electric Torque Tool** from HYTORC now provide a balance of functionality, power and rugged durability for use on industrial job sites around the world.

### Basic Bolting

First and foremost, any electric bolting tool must be able to produce consistent, efficient, high-powered torque in a range of environments and applications. With the ability to provide up to 5,000 ft-lbs (6779 Nm) of torque, the **LITHIUM SERIES II** Tool eliminates the need for conventional breaker bars and manual torque wrenches, while providing a number of sophisticated bolting features.

- **Torque & Angle Tightening:** The use of torque-and-angle tightening can help reduce uncertainty in the tightening process, eliminating reliance on manual torque tools.
- **Programmable Release Angle:** The release function takes tension off the motor, allowing the tool to be released from the application following a tightening operation.
- **Customizable Fastener Settings:** In addition to traditional fasteners the LITHIUM SERIES II tool now supports left-handed nuts, and is compatible with the HYTORC Washer and the HYTORC Nut for hands-free bolting.
- **Snug Function:** Commonly performed in structural applications, the Snug function enables the tool to pre-tighten a nut and help bring bolting surfaces into alignment prior to precision torque. The Tool allows the user to operate below its calibrated range, since snug operations do not require the same high degree of accuracy as precision torqueing.

## TorcSense™ Technology

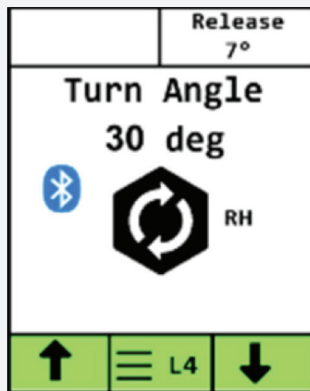


Precise, consistent torque measurement is critical in industrial bolting for consistent fastener tightness. Manual torque wrenches are often inconsistent and unreliable and are highly dependent on the operator's skill. For that reason, HYTORC has developed its innovative TorcSense™ Technology as part of the **LITHIUM SERIES II** Tool's bolting system. This all-new method of torque measurement and closed-loop control system provides more repeatable bolting results ensuring quality, accuracy, and tool longevity. For example, should an operator program the tool to exceed its rated torque capacity, the closed loop system will halt the operation to protect the Tool from damage.

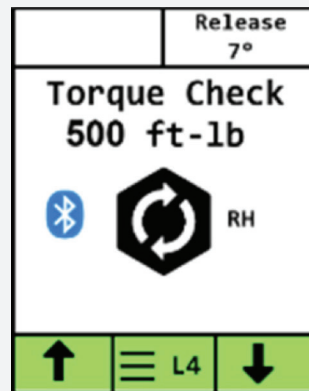
--- Power Loop  
 --- Control Loop

## Advanced Bolting Features

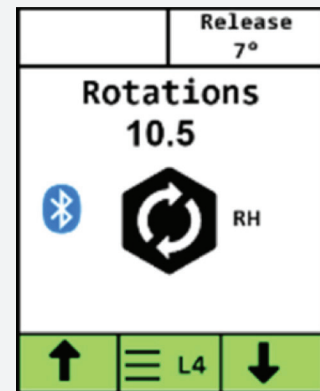
Innovative bolting tools such as the **LITHIUM SERIES II** Tool incorporate a range of advanced bolting features, opening the tool to a host of new applications.



**Turn Angle:** An operator can easily input the desired angle, and a simple trigger pull will accurately and reliably execute precise Turn-of-Nut tightening. By eliminating the potential for human error, this approach greatly increases bolting accuracy and job quality; operations can also be easily documented for work verification purposes.



**Torque Check:** This function allows the user to determine whether a previously tightened nut still meets specification. In a typical application, the user sets the Torque Check value 10% lower than the specification value, then pulls the trigger while monitoring the nut for any movement. The job data file records the Torque Check operation for quality control.



**Rotations:** This function allows a user to set and deliver a specific number of revolutions. This function mainly targets valve applications as valves require a specific number of revolutions to properly open and close.

## Wireless Data Transfer

Many modern industrial bolting tools have internal data storage capabilities that allow for work verification, project management, and quality control. The **LITHIUM SERIES II** Tool has a large data storage capacity and is capable of holding up to 30 separate Job profiles, 100 Job ID's and over 60,000 trigger-pull events.

The development of wireless data transfer between interrelated computing devices, mechanical and digital machines has led to the rapid development of "smart" tools and applications. The digitally connected world of everyday physical devices embedded with wireless connectivity, sensors and other hardware allow wireless communication with other devices. When the **LITHIUM SERIES II** Tool is paired with HYTORC bolting software via Bluetooth® Wireless Technology:

- The user can easily transfer detailed bolting results and job data over the air, reducing the need for a manual wired connection, increasing productivity and convenience.
- The sophisticated bolting software provides an intuitive user interface for tool administration and configuration, allowing an overseer to apply specific settings and parameters wirelessly.
- Allows for convenient firmware updates to the tool as needed.

IN ADDITION TO ACCURATE AND POWERFUL TORQUE CAPABILITIES, MODERN "SMART" BOLTING TOOLS OFFER A RANGE OF FEATURES SUCH AS DATA ACQUISITION, WIRELESS COMMUNICATION AND A HOST OF ADVANCED FEATURES.

THE MOST ADVANCED WIRELESS BOLTING TOOLS, SUCH AS THE **LITHIUM SERIES II** TOOL FROM HYTORC, PROVIDE A BALANCE OF ADVANCED FUNCTIONALITY AND RELIABLE SAFETY FEATURES, SPEED, BATTERY PERFORMANCE, TORQUE CAPACITY, AND OVERALL RELIABILITY AND LONGEVITY. THESE EXPANDED FUNCTIONALITIES EMBODY THE MANY TECHNOLOGICAL ADVANCEMENTS THAT ARE MAKING "SMART" ELECTRIC BOLTING TOOLS MORE CONVENIENT AND VERSATILE THAN EVER.



# HYTORC

**Headquarters:**  
333 Route 17 N., Mahwah, NJ 07430  
+1-201-512-9500

**Phone:**  
1-800-FOR-HYTORC

**Email:**  
info@hytorc.com

**Online:**  
hytorc.com/contact-us