

WTC MACHINERY Engineered to perform. Built to last.

WTC Machinery is a global leader in designing and building machinery and tooling for heavy equipment repair facilities.



Fast Torque and accurate torque turns.

The powerful EL10000 All Electric Torque Wrench now takes fast, accurate torquing of track shoe bolts to a whole new level. With advanced remote diagnostics and data logging capabilities downtime and customer warranties are minimized.

Remote service is available using a laptop computer to connect to the torque wrench at the customer site. This can save the expense and delay of a service visit.

Advanced Data Storage

In addition, WTC now offers an optional data logging software package for the EL10000 laptop that's sure to boost shop productivity. It records each bolt torque setting, each after-torque turn setting, and the actual measured values obtained from each bolt tightening sequence for each track.

This information is stored in a database, along with the make, model and serial number of the track in question, the service date and time, and any internal job number. Data for a particular machine can then be retrieved whenever the track chain is in need of service, making future repairs and maintenance quicker and easier.

Quite, Accurate Operation

The EL10000 is well known for its lightweight design and air lift, which reduce operator fatigue while providing plenty of down-force for worn bolts. It's entirely electric, making it nearly silent, less than 40 decibels at full running speed of 400 RMPS. The EL10000 is more reliable and more accurate than a hydraulic wrench.



With this wrench there is no need to tourch off warn bolts like this.



Specifications:

Maximum Torque: High Speed Run-Down: Down Force: After Turn Torque Angles: Torque Turn Range: 8,000 lb-ft (11000 N-m) 400 rpm 1,600 lb/f (7,117N) 60, 90, 120, 150, & 180 225 lb-ft to 7,000 lb-ft

Electrical

Electrical Supply: Standard Voltages: 5 Hp (3.7 kW) Three Phase 208V / 55.20A / 60 Hz 220V / 57.96A / 50 Hz 230V / 50.00A / 60 Hz 380V / 52.50A / 50 Hz 415V / 26.25A / 50 Hz 460V / 25.00A / 60 Hz

SECTION 3 – EL10000 Electric Torque Wrench Specifications

DIMENSIONS

Weight1570 lbs (715 kg)	Width	60 inches (1,52 m)
Length 59 inches (1,50 m)	Height	74 inches (1,88 m) above Conveyor centerline
		106 inches (2,69 m) on standard conveyor

ENVIRONMENTAL

 Operating Temperature Range
 50°F to 100°F (10°C to 38 °C)

 Storage Conditions
 0°F to 150 °F (-18 to 65 °C) Non-condensing Moisture

 Altitude
 < 3,280 feet (< 1000 meters) above Sea Level</td>

 Noise Level
 40 dB (A-Weighted)

MAXIMUM TORQUE

8,000 lb-ft (11000 N-m)

Improperly rated tooling (sockets, adapters and extensions) present the risk of flying debris. Always use impact-rated tooling, sized for the maximum bolt torque. Always consider the effects of the after-turn and of rusted or damaged track bolts on the torque rating. Always inspect sockets, adapters and extensions before use, and discard damaged tooling.

OUTPUT DRIVE

1-1/2" (38.1 mm) Square Drive

21,5 kW 3-Phase 50 / 60 Hz

415 V / 30.5 A 460 V / 27.5 A

380 V / 33.3 A 230 V / 55.0 A

220 V / 57.9 A 208 V / 60.8 A

Standard Voltages*:

60 Hz

SOCKET DOWN-FORCE

1,600 pounds (726 kg-F)

MAXIMUM SPEED

400 RPM

ELECTRICAL SUPPLY

50 Hz

AFTER-TURN ANGLES

0°, 60°, 90°, 120°, 150° and 180°

CARRIAGE WHEELS

Standard – match 6" A36 "C" Channel Other sizes available on request

COMPRESSED AIR SUPPLY

Pressure - 80 to 120 psi (5,5 to 8,3 Bar) Flow - 4.0 SCFM (0.06 m^3 /min) min. Air line (by customer) – 3/8" (10 mm) min. ID Air supply should have a shutoff, filter and dryer

*NOTE: The EL10000 connects directly to 460 Volt 60 Hz WYE-connected electrical supplies. Customers with 460/60 electrical should confirm it is WYE-connected, with a center-point earth ground. EL10000 models for other voltages are shipped with transformers to convert to a 460 Volt WYE-connected output.

FESTOON SYSTEM

Festoon Systems (or cable carriers) are available from WTC Machinery for the EL10000. These support the EL10000's power cable and compressed air line, and allow them to travel with the EL10000 as it moves along the conveyor system.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



EL10000 Electric Torque Wrench Features

Controls -

- START Button starts the EL10000 Electric Torque Wrench
- ESTOP Button stops the EL10000
- Display Screen enters settings for the EL10000, and shows the final torque when tightening bolts.
- Pistol Grip Control raises and lowers the Output Shaft, selects tightening or loosening, and shows the status when tightening bolts
- 1-1/2" Square Output Shaft the attachment for impact sockets, extensions and adapters. This moves up and down to clear track pad grousers and then bring the socket down to the track pad bolt.

Carriage Wheels – guide the EL10000 on conveyor system outer rails and carry the weight of the Wrench

Outrigger Wheels –center the EL10000 on the conveyor system, and resist the torque of the EL10000

Travel Handwheels - move the EL10000 along the conveyor system

Main Carriage Pull Handles - move the EL10000 along the conveyor system

Torque Carriage Handles - move the Torque Carriage side-to-side

Air Pressure Adjustment and Gauge - set the incoming air supply pressure

Data Port – provides power and Ethernet connection for a laptop computer, used for remote troubleshooting, and for optional Data Collection



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There are two basic configurations of three-phase power, Delta and Wye, and understanding the difference between them is important for the safe operation and maximum lifespan of three-phase equipment, like the WTC Machinery EL10000 Precision Torque Wrench.

In a Wye (Y) connection - also called a "star" connection - each of the three phases are connected to a single point – the "neutral" (see the drawing, below.)

In a Delta connection, the three phases are connected like in a triangle, and don't normally have a neutral point.

The EL10000 requires a 460 Volt, Wye (Y) connected electrical supply. For customers with an existing 460 volt supply, it's important to verify if the supply is Wye (Y) connected - or if it is Delta connected. WTC Machinery can provide a transformer for customers with Delta connected 460 supplies.

For customers with voltages other than 460 Volts, WTC can provide a transformer to convert to 460 Volts, and this transformer also converts the supply to the Wye configuration.

The other important factor of the three-phase electrical supply is "Phase Balance" – this checks that the voltage of the three phases are nearly equal.

To check the phase balance of a Wye connected supply, measure the voltage from each of the phases to the neutral point (L1 to Neutral, L2 to Neutral, and L3 to Neutral), and compare the three voltages. On Delta connected supplies, measure the voltages between pairs of phases (L1 to L2, L2 to L3, and L3 to L1), and compare the three voltages.

In either case, the three voltages should be within 4% of each other – larger differences ("Phase Imbalance") will shorten the life of three-phase equipment like the EL10000 Precision Torque Wrench.

Please contact your local electrician for more details.



MACHINERY, LLC

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MANUFACTURERS/BENEFICIARY'S WARRANTY CERTIFICATE WTC MACHINERY, LLC WARRANTY

WTC MACHINERY, LLC warrants its products to be free from defects in material and workmanship under normal use and service for a period of twelve (12) months after date of shipment. WTC MACHINERY, LLC undertakes to be responsible for any defect that may arise due to faulty raw materials, design, workmanship and defective parts and to replace them without extra cost. Freight charges are the customer's responsibility. Our warranty is not transferable.

WTC MACHINERY, LLC shall have the option of requiring the return of all parts claimed defective. Parts proved to be defective, due to defect in workmanship and/or material, shall be either repaired or replaced free of charge, F.O.B. our designated factory. All parts warranty claims are subject to inspection by WTC MACHINERY, LLC and acceptance at the factory

Our warranty does not obligate us to bear the cost of labor or transportation charges in connection with the replacement or repair of defective parts and the removal and/or remounting of the parts repaired or replaced under this warranty, unless specifically authorized in writing by WTC MACHINERY, LLC. All parts returned to the factory must be shipped freight prepaid; no collect freight will be accepted by the factory. Forms authorizing such returns for inspection must accompany all returns.

This warranty shall not apply to products not manufactured by WTC MACHINERY, LLC.

Outside purchased equipment and accessories (not of WTC manufacture) are warranted only to the extent of the original equipment manufacturer's warranty and subject to their allowance to WTC MACHINERY, LLC. In this respect, our warranty obligations must conform and be limited to the warranty extended to WTC MACHINERY, LLC by its suppliers as extended to the customer.

We shall, in no event, be liable for consequential damages or contingent liability arising out of the failure of any unit or part to operate properly, or that is subject to:

- Ordinary operating wear, abuse, misuse, or overloading;
- · Repairs or alterations by parties other than WTC MACHINERY, LLC;
- The use of improper fluids, contaminated fluids or improper filtering;
- The use of improper voltage hookup in the electrical connections of any equipment;
- Negligence, accident or damages due to deterioration during periods of storage by the purchaser prior to installation and operation;
- Damages occurred in shipment after leaving factory en route to customers' delivery point, as title to
 equipment passes to customer when loaded onboard for shipment, f.o.b. factory, and customer must place
 his own claim against damaged goods directly to the shipping company and not against WTC MACHINERY,
 LLC, its factory, or any of its personnel.
- Damages due to circumstances beyond the control of WTC MACHINERY, LLC and in connection with fulfilling any obligation under this warranty.

To the maximum extent permitted by applicable law, in no event shall WTC Machinery, LLC be liable for indirect, special, incidental or consequential damages resulting from personal injury, loss of business profits or business interruption from the use of its products, or from the inability to use its products.

This warranty is exclusive and is in lieu of all other expressed and implied warranties, including but not limited to implied warranties or merchantability and fitness for a particular purpose. WTC MACHINERY, LLC shall not be subject to any other obligations or liabilities whatsoever with respect to equipment manufactured or supplied by WTC MACHINERY, LLC, or services rendered to it.