



**NEW**

# Expert ETW-E Series

Cordless Electronic Torque Wrenches



Productivity  
**redefined**

# Expert ETW-E Series

Cordless electronic torque wrenches

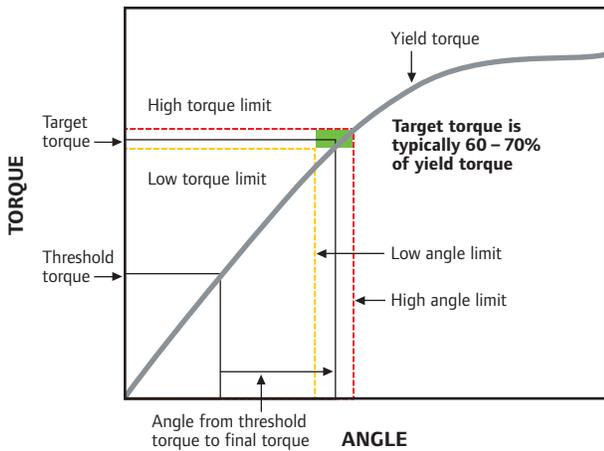
ETW-E Series wrenches are in a class of their own — complete fastening systems built into compact hand-held packages, and available in three torque ranges: **25, 75, and 180 Nm**. They are far more capable than standard operator-dependent torque wrenches, and are the perfect backup and supplement to powered precision fastening tools.

Based on the highly regarded Sensor I wrench — for more than 20 years, the industry standard for portable tightening systems — ETW-E Series wrenches are indispensable for developing, meeting, and verifying virtually any tightening specification for bolted assemblies, whether in a laboratory or on a production line. They perform advanced tightening strategies including **closed-loop torque control, angle control, and yield control**, and can **record and store data** and then **download the results to a PC** via the included ETW-Connect software.



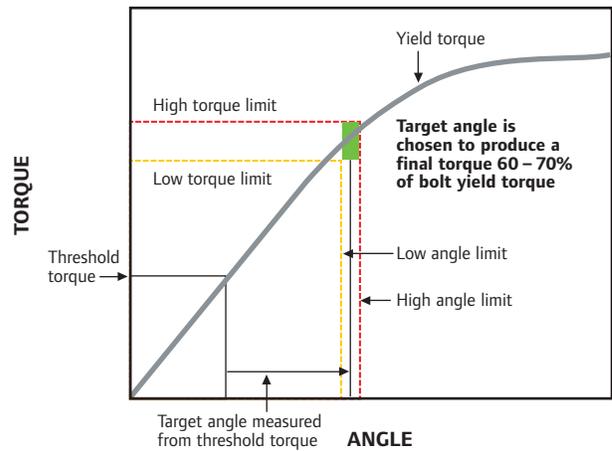
# ETW-E tightening strategies

## Torque control with angle monitoring



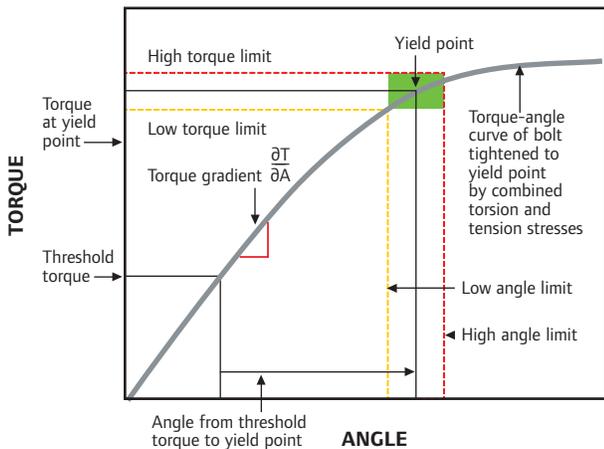
- Yellow light is on when final torque or angle fall below the set low torque or angle limits
- Green light is on when final torque or angle fall between the set low and high torque and angle limits
- Red light is on when applied torque or angle fall above the set high torque or angle limits

## Angle control with torque monitoring



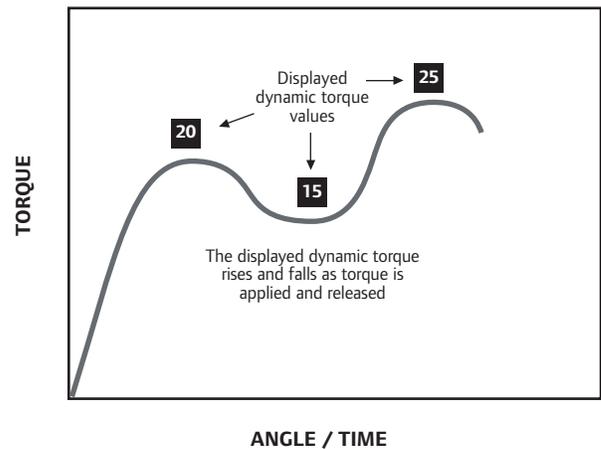
- Yellow light is on when final torque or angle fall below the set low torque or angle limits
- Green light is on when final torque or angle fall between the set low and high torque and angle limits
- Red light is on when applied torque or angle fall above the set high torque or angle limits

## Yield control with torque and angle monitoring



- Yellow light is on when yield torque or angle fall below the set low torque or angle limits
- Green light is on when yield torque or angle fall between the set low and high torque and angle limits
- Red light is on when yield torque or angle fall above the set high torque or angle limits

## Dynamic torque tracking



Lights are not active in this mode

# Advanced tightening strategies in a com



## Interchangeable head design

Ratchet, box, open end, flare nut, and hex drive heads available.

## Data storage

Up to 1,500 final tightening values per application set-up (2,500 max) and up to 10 tightening traces can be stored in the system.

## Three torque capacities —

Choose from 25, 75, and 180 Nm.

## Tri-color LED display and buzzer

LED provides visual and audible indication of cycle status.

## Additional features

- Right- and left-hand operation
- Low battery indicator
- Onboard diagnostics
- Seven onboard languages:
  - Czech, English, French, German, Italian, Spanish, Swedish
- Contact-less angle measurement
- Password protection
- ETW-Connect software
- Multiple torque units of measure: Nm, Ncm, kgm, kgcm, ft-lb, in-lb

# compact cordless package



## Backlit LCD display

Enables easy programming and monitoring of values.

## Simple main menus

Easy set-up menus for fast programming.

## Integral RS232 port

Port allows for direct connection to computer for downloading data.

## Lightweight design

Unit weighs only 2.2 lb (1 kg).

## Battery operation

ETW-E Series uses a rechargeable NiMH battery pack.

## Tightening Data Chart

- Statistics can be saved for up to 30 samples in each of 50 possible subgroups
- Sample statistics include mean, standard deviation, Cp, Cpk, R, Cm, Cmk, and Cam
- Tightening data can be transferred to a PC via the included RS232 cable
- Saved traces are uploaded directly into Microsoft Excel for easy creation of charts and graphs

|    | A                     | B       | C      | D | E     | F      | G |
|----|-----------------------|---------|--------|---|-------|--------|---|
| 1  |                       |         |        |   |       |        |   |
| 2  | Characteristic Name   |         | TORQUE |   | Angle | Torque |   |
| 3  | Reading               | 1       |        |   | 1     | 2.3    |   |
| 4  | Subgroup              | 2       |        |   | 2     | 2.45   |   |
| 5  | Date                  | 8/19/05 |        |   | 3     | 2.61   |   |
| 6  | Time                  | #####   |        |   | 5     | 2.76   |   |
| 7  | Threshold Torque      | 1.25    |        |   | 6     | 2.92   |   |
| 8  | Cycle End Time        | 5.0 s   |        |   | 7     | 3.02   |   |
| 9  | Measurement Type      | Torque  |        |   | 9     | 3.14   |   |
| 10 | Display Units         | N m     |        |   | 10    | 3.26   |   |
| 11 | Measurement Direction | Right   |        |   | 12    | 3.38   |   |
| 12 |                       |         |        |   | 13    | 3.47   |   |
| 13 |                       |         |        |   | 14    | 3.55   |   |
| 14 |                       |         |        |   | 17    | 3.64   |   |
|    |                       |         |        |   | 18    | 3.73   |   |



# Specifications and Accessories

## Specifications

| MODEL                         |                                  |           |
|-------------------------------|----------------------------------|-----------|
| Torque Capacity<br>Nm (ft-lb) | ETW-E25                          | 25 (18)   |
|                               | ETW-E75                          | 75 (55)   |
|                               | ETW-E180                         | 180 (133) |
| Torque Units                  | Nm, Ncm, ft-lb, Kgm, Kgcm, in-lb |           |
| Overload Capacity             | 125% max capacity of wrench      |           |
| Torque Accuracy               | + / - 0.5% capacity of wrench    |           |
| Angle Range                   | 0 – 3,000°                       |           |
| Tightening Direction          | CW & CCW                         |           |
| Operating Temperature Range   | 41° – 104° F (5° – 40° C)        |           |
| Storage Temperature Range     | 32° – 122° F (0° – 50° C)        |           |
| Temperature Stability         | + / - 0.1% per °C                |           |
| Humidity Range                | 5% – 75% non-condensing          |           |
| Sealing                       | IP54                             |           |
| Weight – lb (kg)              | 2.2 (1)                          |           |
| Length – in (mm)              | 18.4 (468)                       |           |
| Width – in (mm)               | 1.9 (48)                         |           |
| Depth – in (mm)               | 1.5 (38)                         |           |
| Power Source                  | Rechargeable NiMH cell pack      |           |

## Accessories

| DESCRIPTION               | PART NUMBER  |
|---------------------------|--------------|
| PC software               | ETW-CONNECT  |
| PC cable                  | ETW-EDB9     |
| 1/4" square ratchet head  | ETW-E25-R04  |
| 3/8" square ratchet head  | ETW-E75-R06  |
| 1/2" square ratchet head  | ETW-E180-R08 |
| Universal battery charger | ETW-EBC      |
| Rechargeable battery pack | ETW-EBP      |
| Carrying case             | ETW-ECC      |
| Colored boots (red)       | ETW-BOOT-RD  |
| (green)                   | ETW-BOOT-GN  |
| (yellow)                  | ETW-BOOT-YL  |

Each wrench comes with a carrying case, rechargeable battery pack, battery charger, PC cable, operating manual, ETW-Connect software, and calibration certificate.



# Other calibration equipment and services

Ingersoll Rand offers additional tools to optimize your fastening strategies.



### ETA Series Expert Torque Analyzers

Designed for use with a broad range of transducers to dynamically measure and record the torque output of all types of fastening tools — plus full statistical and data download capability.



### ETT Series Expert Torque Testers

Our torque testers are recommended for most hand screwdrivers, wrenches, or power tools, and are ideal for testing output torque on assembly tools in lab, repair crib, or production line settings.



### ETW-A Torque Audit Wrenches

These wrenches give an accurate measurement of the residual torque on a previously tightened threaded fastener, and can also be used to tighten fasteners to a preset high-low range.



### ETA Series Stationary Transducers

Mountable to a table or cart, our stationary transducers span the range from 1.5 to 1000 Nm (1.1 to 738 ft-lb), and will work with a variety of tools to measure torque and angle of rotation.



### ETA Series Rotary Transducers

Ingersoll Rand transducers feature a patented wrap-around brush system that reduces the chance of noise in the signal and eliminates the possibility of contact loss. Rotary transducers can be used right on the job.



### ETA Series Joint Simulators

Our joint simulators are useful in tool cribs to preset tools for production and test capabilities under controlled joint rates. They're also ideal for simulating a variety of hard or soft joints. Available in ranges up to 1000 Nm (738 ft-lb).



## Services

Ingersoll Rand delivers world-class service for precision fastening systems.

- Equipment calibration
- Audit services
- Repairs
- Joint analysis

**For more information, contact your local Ingersoll Rand distributor, call us at (866) 284-5509, or visit us online at [irtools.com/contact](http://irtools.com/contact).**

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