

STwrench: The Electronic Multi-Purpose Wrench

Add value to your assembly processes with the STwrench—Atlas Copco’s electronic multi-purpose wrench. The STwrench is a lightweight, ergonomic tool that will improve your productivity and accuracy. In addition, due to its modular design, you can build the STwrench to meet your specific requirements and create a user-friendly tool that best suits your applications. Whether you use it to tighten your joints with high torque accuracy, perform joint analysis to set the correct tightening parameters for production, or properly check residual torque to monitor your tightening processes, the STwrench will work for you.

The Ultimate Purpose Wrench

Used for Production

- ▶ For manual assembly operations
- ▶ Applications with limited space
- ▶ For repair stations
- ▶ Tube nut tightening
- ▶ As a backup tool

Used for quality

- ▶ For residual check
- ▶ For joint analysis and quality control
- ▶ Joint analysis with trace export, zoom, and yield point detection

Value

- ▶ Same error proofing, traceability, and quality as an electric tool
- ▶ Higher accuracy
- ▶ Higher torque range
- ▶ Higher accuracy
- ▶ Less set-up time
- ▶ Operator independency

STwrench

The innovation for superior productivity: The Patents

- ▶ Tag reading and writing
- ▶ smartHEAD
- ▶ RBU
- ▶ Residual torque algorithm
- ▶ Power



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Ergonomic Tool

- ▶ Lightweight tool: the operator needs to work a shift with it

Increased productivity

- ▶ Even under demanding conditions
- ▶ To work efficiently with open-end applications
- ▶ To be used as a backup tool
- ▶ To access difficult spaces

Accuracy/Quality Control

- ▶ To apply the most precise torque value
- ▶ To check the last torque present on the joint
- ▶ For safety-critical joints

Modularity

- ▶ Easy maintenance

User Friendly

- ▶ Easy setup
- ▶ Clear and direct feedback

The smartHEAD – Patented Added Value

Unique in the market

Fast Exchange

- ▶ Fast connector
- ▶ Automatic recognition of calibrated values

Fewer Backup Tools

- ▶ One controller for many wrenches
- ▶ Easy and cheap to store

Evolutivity

- ▶ Easy to upgrade: From Torque to Torque + Angle

Modularity

Modularity

- ▶ Tag
- ▶ smartHEAD
- ▶ Connectivity modules
- ▶ RBU
- ▶ Barcode Module
- ▶ Battery

Value

- ▶ Easy to maintain and service
- ▶ Easy to upgrade

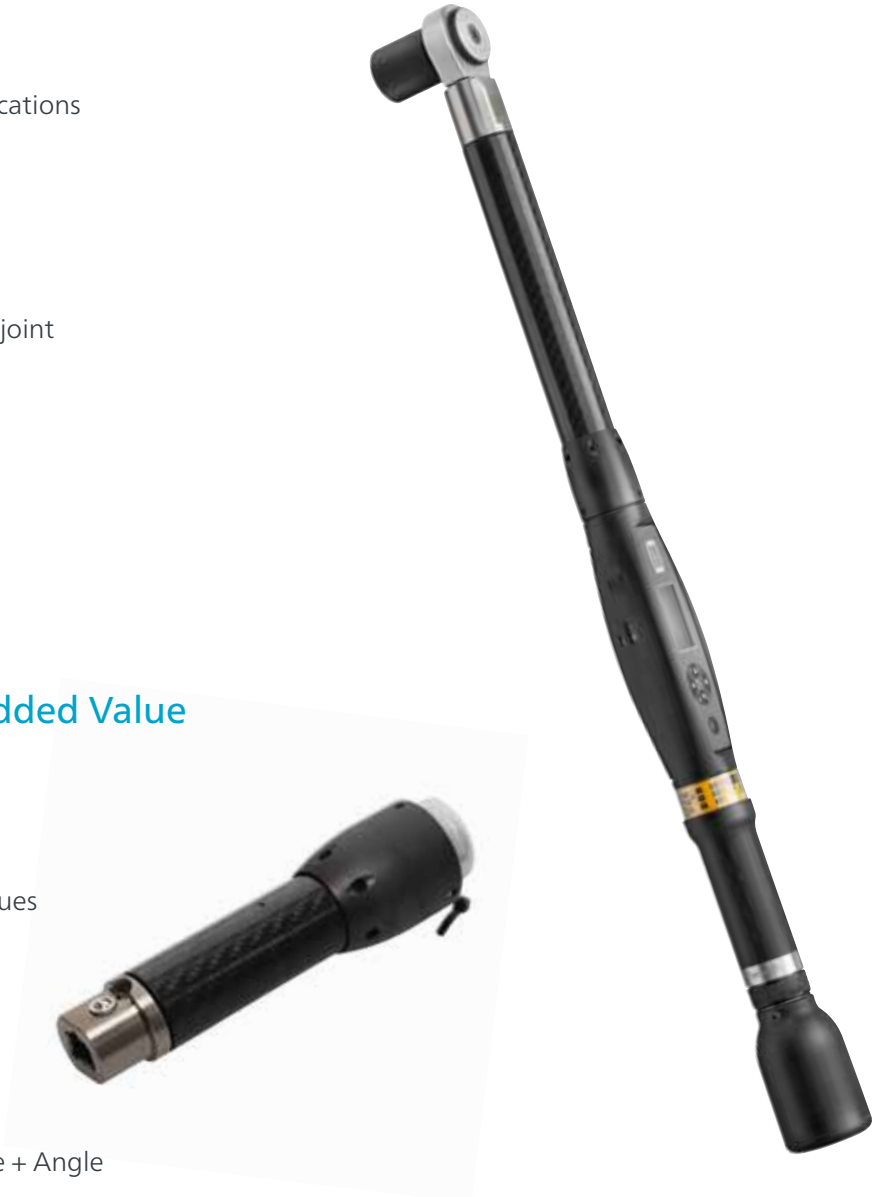
Tag Recognition

Tag recognition

- ▶ Can be configured from TTBLM
- ▶ Contains an RFID to store the information
- ▶ Contains the Pset information
- ▶ Extension correction factors can be written in the TAG
- ▶ Up to 255 tags

Value

- ▶ It is the perfect end-fitting tool
- ▶ Limits physical operator mistakes



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Barcode

Barcode

- ▶ The module can be integrated into the wrench
- ▶ 4 code management
- ▶ Printer function from TTBLM
- ▶ Can be used with any smarHEAD or RBU

Value

- ▶ The possibility to guarantee the right selection of the P-set
- ▶ Traceability
- ▶ No operator dependency

Operator Feedback

- ▶ Vibration
- ▶ Buzzer
- ▶ LED rings



STwrench for quality

Residual Check – To find the minimum torque that can rotate the bolt to verify what is the last torque value present on the joint.

Patented time gradient

- ▶ The STwrench continuously calculates the Torque/Angle or Time gradient
- ▶ Operator independency

The Residual Point Algorithm

The STwrench algorithm - Designed to automatically detect the residual point in real-time.

Value

- ▶ An Atlas Copco patent
- ▶ Unique in the market
- ▶ The most precise way to measure the residual torque

Flexibility

The modular tool that can satisfy your production needs and quality processes

Ergonomics

A lightweight tool that allows the operator to work for more time

Easy to Use

The STwrench is easy to use in Free Mode or with the programming option with TTBLM

Customer Value Added

Proved savings on the customer's processes

Accuracy

High accuracy for assembly in production and for the residual torque measurement

Traceability

Results can be seen and stored in any of the previously described AC software solutions. This can also be used to export the data with Smart Excel.



Atlas Copco Tools and Assembly Systems

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atlascopco.com

