

Atlas Copco



Did you know -
Transformation to
Smart Tools

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1 Atlas Copco's electric, smart tools are a scalable solution

- ▶ The [PF Ecosystem](#) offers solutions from entry-level error-proofing and basic data collection to full-scale systems, including operator guidance and data analytics
- ▶ Using customizable licensing, we can meet your specific application needs
- ▶ As product-mix and processes change within your manufacturing, Atlas Copco solutions and tools can be moved and integrated as needed, making line balancing easy
- ▶ Multi-tool support reduces hardware and associated costs while promoting a smaller station footprint that allows you to expand production and capacity when needed



2 Electric smart tools improve ergonomics

- ▶ Electric smart tools offer [better ergonomics](#) as they are significantly quieter than traditional pneumatic tools and reduce the physical impact on the operator compared to traditional screwdrivers, wrenches, and torque bars
- ▶ Atlas Copco offers many low-reaction tools and low-reaction tightening strategies that help to reduce the reaction force assumed by the operator, thus greatly reducing operator injury and fatigue
- ▶ These low-reaction tools and strategies also reduce the need for traditional reaction hardware, which ultimately reduces hardware costs
- ▶ Atlas Copco offers safety triggers and handle accessories that help provide additional operator safety
- ▶ Electric smart tools are easy to program and provide instant onboard operator feedback, creating a better operator experience
- ▶ By eliminating the need for airlines, electric tools can reduce trip hazards on the production floor. When using cabled electric tools, customizable cable management devices provide overhead cable storage, eliminating cables on the shop floor



3 Electric smart tools help maintain high productivity

- ▶ Electric tools offer high cycle PM, reducing downtime for maintenance
- ▶ [High-speed tightenings](#) reduce cycle times
- ▶ The multistep advanced tightening strategy provides customizable tightenings with up to 10 programmable steps all with a single trigger pull
- ▶ Immediate OK/NOK reporting on Atlas Copco's electric smart tools, eliminates additional process time and hardware involved with final torque checks
- ▶ Atlas Copco's electric smart tools can be programmed to handle several tightening programs, reducing the need to use multiple torque tools per station



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4 Error-proofing with electric smart tools reduces scrap and rework

- ▶ Programmable tightening strategies and immediate operator feedback ensure tightenings are performed 'OK', reducing the need for rework
- ▶ The ability to monitor and control angle limits within a tightening provides bolt-level error-proofing
- ▶ Forced Order and Batch programming allow tightenings based on your production requirements, ensuring all tightenings are performed before the part moves out of the station
- ▶ Defined final torque information helps reduce and eliminate over-tightened and under-tightened bolts that can lead to costly recalls
- ▶ Advanced tightening strategies monitor screw seating to reduce scrap associated with screw misalignment and incorrect [clamp force](#)

5 Electric smart tools provide exceptional traceability

- ▶ There is clear OK/NOK reporting as well as data collection, which sets electric smart tools apart from pneumatic, manual, and non-reporting retail tools
- ▶ Smart tools collect data that can be analyzed to find errors caused by operator influence so that additional training and direction can be provided
- ▶ Collected tightening data helps uncover opportunities for process improvement and cost savings
- ▶ Tightening data at the part or VIN number level can be saved for future use and investigation



Ergonomics, Productivity
& Flexibility
+Traceability

High Torque
Monitor joint behaviour
Less maintenance
Less down-time in production
No reaction force



Atlas Copco Tools and Assembly Systems

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