

Atlas Copco

SQS3

REWORK

# Tevva error proofs battery pack production.

Leading eTruck manufacturer utilises Atlas Copco joining technology



## Leading eTruck manufacturer utilises Atlas Copco joining technology for error-proof battery pack production

Chelmsford-based Tevva is a leading innovator in eTruck technology which enables fleet operators to switch their urban delivery vehicles from diesel to electric to meet the requirements for ultra-low emission zones. Tevva's UK designed and manufactured eTrucks are at the forefront of 'clean freight' zero emission vehicles in the 7.5 to 14 tonne range.

Tevva is unique in being both an eTruck manufacturer and an industrial manufacturer of traction battery packs that are designed and built to meet the specific operational needs of its eTruck customers. As safety-critical components, batteries demand a robust and error-free assembly process that is fully traceable.



To support this objective, Tevva called on Atlas Copco Tools and Industrial Assembly Solutions to review the company's existing battery assembly process and identify areas where enhancements could be implemented in line with Tevva's philosophy of continuous improvement to deliver high quality solutions for its expanding customer base.

Working in close collaboration with Tevva, Atlas Copco's engineers identified various potential quality issues due to the use of hand tools with limited calibration for the manual application of fasteners in the battery assembly process. Operator guidance to ensure error-proof production and quality assurance were also found to be areas that could be enhanced and improved.



To address this, Atlas Copco designed and installed a fully integrated Smart Connected Assembly solution for the Tevva's battery production based around two Stations each equipped with a corded Tensor electric assembly tool and positioning system with an additional cordless tool both connected to a Power

Focus 6000 controller utilising Virtual Stations for each tool. These are supported by Atlas Copco's Scalable Quality Solution (SQS) error-proofing software which provides full operator guidance throughout the battery production process to ensure error-proof assembly and process reliability by eliminating oversight.



Based on the success of the battery assembly solution, Tevva is now investigating further areas within the eTruck production process where Atlas Copco's assembly technology and expertise can add further value.



**Tevva's Operations Director, Richard Lidstone-Scott, said:**

"Tevva's business model and core areas of focus, namely: Innovation, quality, business agility and health and safety is mirrored by Atlas Copco's approach and their Smart Connected Assembly ethos which is particularly important to us. Total quality and error-proofing are crucial to us in areas such as battery pack assembly where Atlas Copco has taken a key role in developing an assembly solution that helps us to achieve these goals."

**Tevva's Power Production Supervisor, Matt Keeling, added:**

"From the outset, Atlas Copco helped us to resolve quality issues in the battery assembly process. This resulted in the legacy manual fastening process being replaced with a fully integrated Atlas Copco smart tooling solution with two SQS workstations."

**Tevva's Engineering Technician for Power Production, James Evenden, concludes:**

"There are many advantages to the Atlas Copco tooling system. In particular, the amount of detail that we can incorporate when integrating the Atlas Copco tooling, such as operator guidance and traceability throughout manufacture."

Atlas Copco Tools and Industrial Assembly Solutions covers every aspect of assembly, including tightening solutions, adhesive dispensing, self-pierce riveting and flow drill fastening, as well as battery joining, sound dampening, sealing and quality inspection technology.





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