Single Quality Solution
Smart Connected Assembly

Start Up

Traceability

Optimization

Production

Maintenance

SMART CONNECTED ASSEMBLY

Quality Assurance

Error Proofing
Atlas Copco is a total solutions provider.

The advent of Industry 4.0 brings rapid changes and new challenges. With our Smart Connected Assembly you maintain quality control in complex production systems and increase uptime in production critical operations.

The Single Quality Solution is an error proofing software that helps achieving zero defects and reducing cost of rework, scrap or warranty claims.

Four core values of the Single Quality Solution

- Human Interaction
- Improved Productivity
- New Product Introduction
- Reduction in Defects
The Single Quality Solution (SQS) is a comprehensive solution that drives quality, process reliability and transparency, as well as product safety at assembly stations. SQS guides operators through the assembly process leaving no room for error or oversight.

It is capable of managing the assembly process of many different products or variations of products and is ideally suited for subassembly stations, backup stations and repair areas.
Your benefits

- Step-by-step visual operator guidance error proofs the assembly process and reduces the need for rework

- Improved productivity and lower production costs are the perfect recipe for increased customer satisfaction

- Single Quality Solution ensures that all fasteners are torqued with the appropriate tool, the correct program, and the right socket to improve product quality and eliminate waste of materials

- Data collection records the results of all assembly tasks for traceability purposes and ensures compliance with product safety standards

- Single Quality Solution handles many different product types or multiple variants of the same product and greatly increases flexibility of a single assembly station

- Traceability and part verification ensure the correct parts are being used

- Greatly reduces training time for new operators

- Integrated configurator which has a user-friendly interface that does not require programming skills to set up and configure new products and processes
Functions

Tool interlock
- Enables and disables DC tools and wrenches via the controller
- Automatic program or job selection

Visual operator guidance
- Step-by-step visual operator guidance
- Guarantees that everything is done right the first time, every single time

User access control
- Prevents unauthorized system access
- Enforces user roles and privileges

Part verification and documentation
- Identifies parts by means of serial numbers or product IDs
- Ensures the correct parts are being used to build a product

Digital IO capability
- Enables easy connectivity of external IO devices, eliminating the need for a PLC

Basic pick-to-light/pick-by-light
- Visually guides operators in picking parts from bins
- Based on digital IO capability

Data collection
- Traceability of all assembly actions (torque, parts, digital I/O, manual confirmation) and missed tasks
The Single Quality Solution is a very good fit for high volume/high mix manufacturing environments where an offline repair station is required. Thousands of assembly routines can be maintained for different products in a single station. The correct assembly routine is automatically chosen for every product variant. For an added benefit a Single Quality Solution can be mounted on a tool cart. This avoids long transport of the product to the rework station. Instead, the station can be quickly moved to wherever needed.

**Standalone repair station**

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The solution for visualization and control on the shop floor

As a complementary product to the Single Quality Solution the HLTQ (Hard Line Terminal) series are state-of-the-art devices for your industrial purposes.

You can choose between 6 standard models that are pre-configured and available on stock, or a customized version which can be configured individually based on available options.

Training station

New operators require training on tools and product assembly. Experienced workers may require training on new tools or new products. Whatever the case, the Single Quality Solution is a great platform to train a company’s workforce on tools or assembly routines for new and existing products. When mounted on a tool cart, the Single Quality Solution can be brought to wherever the training is needed rather than making the workforce travel to the training site.

Prototype or sub-assembly station

Both sub-assembly and new product development are a breeze with the use of Single Quality Solution. SQS helps simplify and debug the assembly processes for final production. It records tightening data for process analysis and optimization. With the user friendly configuration SW installed on the same system as the visual operator guidance, processes and adjustments are very easy to configure and test.
## Ordering number

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Committed to sustainable productivity

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call - Sustainable Productivity.

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