

Improved manufacturing traceability and quality for an engine manufacturer in the Aerospace Industry.

Torque tightening solutions for the manufacture of critical components for the Aerospace manufacturing industry.

In the Aerospace industry, where precision manufacturing and the assurance of the highest possible quality is paramount, the requirement for accurate torque measurement is critical.

Crane Electronics offer a series of torque measurement and management tools and systems for the assessment of the manufacturing and assembly processes, with regard to torque application on joints and fasteners.

In the Aerospace industry, our torque equipment is utilised during the production of aircraft and of critical components such as engines, wings and fuselages. Members of Production, Quality and Engineering teams need to deliver accurate measurements and traceable control of assembly data, and our solutions provide a one-stop shop for this very process

When one of the world's largest aerospace engine manufacturers wanted to improve and enhance the torque traceability process of their jet engine manufacturing, Crane Electronics were at hand to provide a suitable solution.

The engine manufacturing process requires each individual fastener and joint to be tightened precisely to the correct torque specification, which then needs to be individually checked, verified and recorded for traceability and quality purposes.

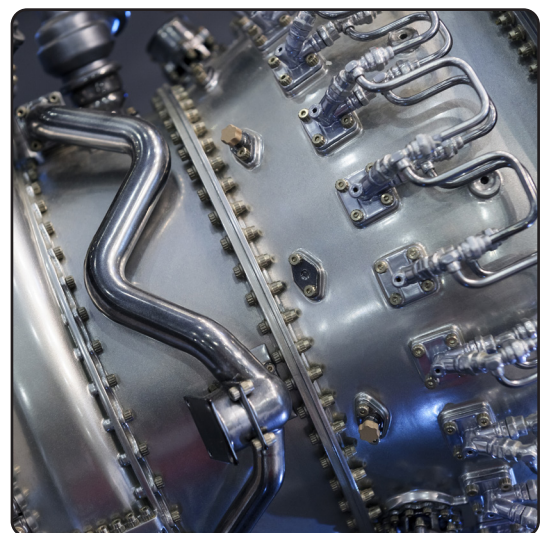
The client currently used older, mechanical torque wrenches, which while they still provided a solution to tightening critical joints, they were not delivering the efficiency and traceability they required. The process had become slow and inefficient, with hundreds of individual fasteners having to be logged manually by their engineers.

The client approached Crane Electronics, who were on hand to demonstrate the innovative IQWrench2 digital torque wrench.

Customer: One of the world's largest aerospace engine manufacturers with locations across the globe.

The Challenge: To provide complete traceability for their torque tightening process and maintain and improve the high-quality finish of their products.

Crane Products: Implementing a series of IQWrench2 digital torque wrenches; a torque tightening tool with added data collection capabilities for assembly process and quality auditing applications.



Our torque measurement solutions are utilised across the aerospace industry in a number of critical applications including the manufacture of jet engines.

The IQWrench2 offers all of the features of a high specification torque wrench but with built in torque data collection and auditing capabilities, which were ideal for improving on the client's existing process.

The IQWrench2 allowed the client to ensure that each fastener was correctly tightened to the specified torque level, eliminating any potential quality issues during the final test stage of build. The digital torque wrench also allowed the client to pre-program each individual joint directly onto the wrench to ensure that no fastener or bolt could be missed, thus ensuring that all tightened joints would have their relevant data recorded and logged for future reference and complete traceability.

On high-quality, critical assets such as jet engines, the torque tightening process is critical. The IQWrench2 gave the customer complete peace of mind that components such as high-pressure fuel pipes were secured correctly with zero chance of any inaccurate fasteners.

The customer was delighted with the results of the IQWrench2 digital torque wrench, including the fact that they are FOD (Foreign Object Damage) compliant. The success of the initial sales has led to the supply of over 300 wrenches to the client globally.

Ian Brown, Sales Manager at Crane Electronics Ltd, comments:

"Traceable fastening operations can be of particular benefit in the search for zero-defect assembly, particularly within the Aerospace manufacturing industry and this is a perfect example of that fact.

We pride ourselves on providing innovative solutions to our customers and helping them to deliver peace of mind in the quality of their products and components."

Crane Electronics plays a crucial role in the Aerospace industry, delivering solutions for assembly tool testing, auditing the assembly process capability and final assembly quality verification.

For more information about how we can provide a solution for your business, please contact us online at www.crane-electronics.com or alternatively, email us at sales@crane-electronics.com.



The IQWrench2 digital torque wrench in use during jet engine production audits, testing the torque applied to critical fasteners.



Locations

UK - Watling Drive, Hinckley, Leicestershire LE10 3EY, UK

USA - 1260 11th Street West, Milan, Illinois 61264, USA

Germany - Im Rank 5, 73655 Plüderhausen, Germany

