

Fischer X Ray analyser provides batch conformity for major fastener supplier

Batch conformity over hundreds of tiny items was the pressing requirement of KLX Aerospace Solutions Ltd, as it was set as a condition of a new aerospace contract. Many marketplace options were considered from handhelds to more automated desktop solutions before deciding on the fully programmable, automated Fischer XDLM® 237 with its test report functionality.

In the past, there had been no customer demand in the UK for X Ray Fluorescence (XRF) performance testing of parts, either during the receipt inspection process or in support of the product investigation cycle. However, following the successful award of a major new contract more recently, one of the conditions was testing a specific range of parts using XRF. Evidence of XRF test completion must also be available to the Customer upon request, demonstrating part compliance with requirements.

Seeking a solution

KLX Aerospace Solutions Quality Assurance and Inspection team undertook a detailed and thorough review of the various options and manufacturers of XRF test equipment available in the market place. This included technical demonstrations at the UK facility in Burgess Hill of a variety of XRF instruments; from handheld to more programmable and automated desktop solutions.

Batch conformity

Based on the small size of the parts to be tested, often in the region of 2mm in diameter, and the number of parts requiring testing reaching many hundreds to demonstrate batch conformity, the fully programmable and automated Fischerscope XDLM® 237 with its



Parts pre-loaded onto a fixture

intuitive software and electronic record and hard copy XRF test report functionality was selected as the most appropriate solution for the business. The Fischerscope® XDLM® 237 now sits proudly in the KLX Aerospace Solutions UK Quality Assurance department.

An XRF testing service

The ability to offer an XRF testing service to KLX Aerospace Solutions' existing and potential customers is seen as a positive contribution to the full range of service provision offered by the organisation.

In the first 9 months since the acquisition of the Fischerscope XDLM 237 KLX Aerospace Solutions

XRF tested in excess of 50,000 individual parts, validating the chemical composition of each part aligned to the requirements of the relevant part specification.

Due to the number of parts requiring XRF testing to demonstrate batch conformity, KLX Aerospace Solutions designed and had manufactured a full suite of fixtures to which the parts are pre-loaded prior to placement on the programmable, automated X-Y table of the XDLM 237. These fixtures have the ability to hold many hundreds of individual parts at one time.

This makes the programming of the part specific needs easier, allowing the KLX Aerospace Solutions Quality Control Inspection Team to undertake other duties whilst the testing is taking place fully unattended.

Why Fischer Instrumentation was chosen

Fischer Instrumentation demonstrated a flexible approach throughout the entire process. The speed of quotation and delivery of the XDLM® 237 was aligned to expectation and whilst awaiting delivery and installation also provided an XRF testing service. Without the dedicated support from Fischer's Paul Cave and the rest of the Fischer team in the early phase of the project, KLX Aerospace Solutions would not have been able to provide the required XRF testing support to its new Customer.

About KLX Aerospace

KLX Aerospace Solutions is the world's leading distributor of aerospace fasteners and consumables and full-service provider of inventory management solutions for the commercial, business jet, and military markets worldwide.

With a large range of aircraft hardware and chemicals and more than 1 million part numbers in stock from more than 3,000 suppliers, KLX Aerospace Solutions offer a market leading service to the industry. All products are factory-new, fully traceable to the original manufacturer and delivered through a global network.

The UK Quality Assurance Manager at KLX Aerospace Solutions manages a team of experienced and qualified Customer Quality Assurance Engineers and Quality Control Inspectors to assure KLX customers are provided with the products and levels of service and support commensurate with the demands of the aviation industry.



The XDLM control panel