



Subcontract Case Study 09/2017

Company: Frazer Nash Manufacturing Ltd

..... Axiom too

Subcontact Case Study

Frazer Nash Manufacturing Ltd  
Axiom too



Boasting a proud heritage stretching back nearly 100 years, [Frazer-Nash Manufacturing Limited](#) is a precision engineering and manufacturing company that has earned a reputation for technical innovation and for delivering high-quality value for money projects. Serving a domestic and international customer base that is predominantly involved in the demanding food industry, Frazer-Nash Manufacturing has grown its business by supplying imaginative solutions to customers who have challenging requirements that cannot be satisfied by standard products or sourced from catalogues.

The Frazer Nash name boasts a rich and varied history, from manufacturing cars in the 1920's and building powered turrets for use on bombers such as the Lancaster during World War II, to producing innovative postal mechanisms and complex aerospace components in the 1960's.

In 1990, the Frazer-Nash group was split up and a number of "baby Nashes" were born, formed from a significant portion of the group's manufacturing and design departments, Frazer-Nash Manufacturing is one of these "off-springs".

Frazer-Nash Manufacturing now has a wide range of advanced manufacturing capabilities that are best suited to low to medium volume manufacture, from traditional milling and turning, through to grinding and wire EDM. A recent investment in a Renishaw Additive Manufacturing machine has further extended the company's wide range of manufacturing competencies.

As increased levels of production began to place a strain on Frazer-Nash Manufacturing's inspection department, a search was recently made for a CNC driven Coordinate Measuring Machine (CMM). After considering several alternatives an [Axiom too CMM](#) was purchased from Aberlink. Frazer-Nash Manufacturing Managing Director Paul Mortlock explained. "We pride ourselves on our quality, we are ISO 9001 certified and offer 100% inspection on manufactured items, we also provide certificates of conformance and full traceability on our work when appropriate.

"Having evaluated several other makes and models of advanced CMMs, we decided that the CNC version of Aberlink's Axiom too CMM was ideal for our needs. As our production volumes are continuing to grow, the high precision specification of the Axiom too, and its ability to rapidly inspect multiple parts in a fully automatic CNC mode, were major factors in our choice.

"Due to the Axiom too's ease of use, following an initial short training course our operators quickly mastered the CMM's basic operations and were able to perform a range of inspection routines. After becoming more familiar with the machine, a follow-up Aberlink training session then enabled our operators to master the CMM's more advanced features.

"Now, our quality staff are able to quickly measure one-off parts in a manual mode, or use a pre-written program to inspect larger batches of components in an automatic CNC mode. Also, when we produce repeat batches of smaller parts, we can quickly recall the relevant stored program, load a large batch of parts onto our Aberlink CMM, and start a fully automatic mass inspection routine.

Subcontact Case Study

Frazer Nash Manufacturing Ltd  
Axiom too

“After investing heavily in enhancing our manufacturing capabilities, with the purchase of equipment such as our new, advanced additive manufacturing machine, our Aberlink CNC CMM will allow our busy inspection department to keep pace with increased throughput and to inspect our high-accuracy parts to the required levels of precision. Also, the Axiom too’s ability to generate in-depth inspection reports and documentation will help us with our traceability records.”

The cost effective Axiom too is the best-selling CMM from the largest UK owned Coordinate Measuring Machine manufacturer. Aberlink’s popular Axiom too CMM is available in both manual and CNC variants in a range of capacities and is described by Aberlink as the ‘complete inspection centre’. The recently upgraded CMM is ideal for use in either controlled environments such as inspection departments, or within less than perfect shop-floor conditions, as it boasts an aluminium bridge with a very low thermal mass. Thanks to the Axiom too’s use of advanced materials, the machine’s reduced inertia also results in class leading speed of operation.

Borrowed from the laser optics industry, the CMM’s sturdy table consists of an advanced granite/aluminium honeycomb construction, this technology, provides natural damping and further improves the machine’s thermal properties. Despite the Axiom too’s generous X-Y-Z measuring volume (640mm x 600-900-1200-1500mm x 500mm), the machine’s compact design occupies a relatively small footprint, with the controller and all peripherals housed within the Axiom too’s workbench.

The Axiom too utilises Aberlink’s renowned 3D software, ensuring greater user productivity and profitability. A welcome bi-product of any Aberlink CMM inspection routine is that a simultaneous picture of the measured component is created on the computer screen. Dimensions between the measured features, mirroring those that appear on the component drawing, can then be simply picked off as required. In essence this ‘smart’ software represents an intelligent measuring system that is able to automatically recognise and define the various features being measured. [Aberlink 3D is the easiest to use and most intuitive CMM software currently available.](#)

Visit us at: [www.aberlink.com](http://www.aberlink.com) email: [sales@aberlink.com](mailto:sales@aberlink.com)  
or call: +44 (0)1453 884461 for more information.