

Company Name Boneham & Turner
Industry Precision Engineering

Location Nottinghamshire, UK
Product Sylvac Scan F60L

APPLICATION BACKGROUND

Based in Nottinghamshire, UK, Boneham & Turner is a fourth-generation, family-owned precision engineering solutions provider established in 1918.

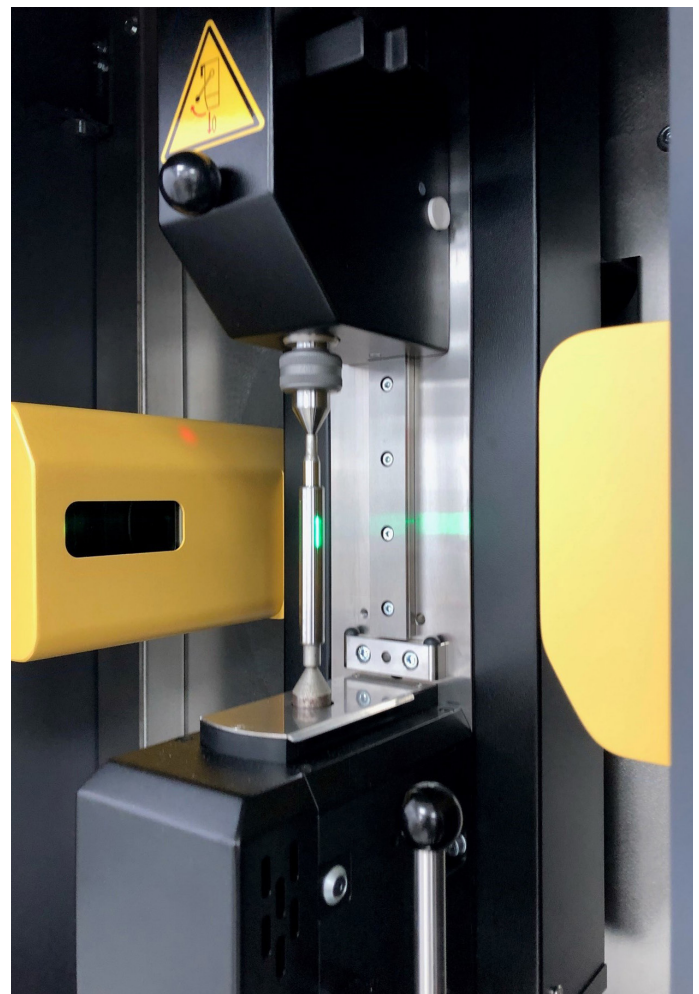
The company serves the aerospace, defence, motorsport, composite and yellow goods industries by manufacturing and supplying drill bushes, dowel pins, both simple and complex shims for the manufacture and assembly of jigs and fixtures, work holding, hydraulic systems and machine-building.

THE CHALLENGE

The inspection of micro-pins had always proven to be a time-consuming challenge for the production and quality teams at Boneham & Turner. In fact, the limitations of the previous inspection process meant that the company were forced to decline work on occasion.

Having worked with the University of Nottingham for many years in research and design, as well as offering Graduate Placements, and a member of Midlands Aerospace Alliance, Boneham & Turner have attended various courses and networking events which have proved highly beneficial in terms of new business but also improved knowledge.

To improve its inspection capabilities, Boneham & Turner applied for funding through the Aerospace Unlocking Potential project, provided through the European Regional Development Fund Revenue Agreement, to help fund the purchase of the Sylvac Scan equipment.





THE SOLUTION

Boneham & Turner invested in a Sylvac Scan F60L optical measurement machine, supplied by Bowers Group, to increase its ability to offer more complex parts within its tooling and precision-engineered component operations.

Used by quality personnel, machine operatives completing first-off checks, as well as the engineering team for samples and R&D, the Sylvac Scan F60L is designed to measure even the most demanding of cylindrical parts, making it perfect for the complex parts manufactured by Boneham & Turner.

With a brand-new camera and optics offering superior image processing and fast inspection times, the optical measurement machine uses Reflex One-Click technology with part recognition and auto measure, allowing measurement with one click of a button.

Quick-release tooling for making rapid part changeovers, combined with sophisticated software delivers immediate visual results, assisting in providing essential efficiencies in a busy working environment.

Boasting a small footprint that fits perfectly within the new inspection lab, the Sylvac scanner is used daily as part of the standard inspection procedure at Boneham & Turner. Primarily measuring a range of micro-pins that start at approximately 1mm diameter and 3mm long, the F60L has been praised for its ease of use and simple learning process amongst the team whilst proving to be an extremely precise piece of inspection kit for the company.

The project has enabled Boneham & Turner to innovate in both metrology and new products and services. Not only has it established a new measurement process, but it has also enabled new products to be made and inspected. The team are even looking to re-shore some components, as they are now able to offer the full level of inspection required for mission-critical parts.

COMMENT

Stacy Denton-Beaumont, Operations Manager at Boneham & Turner said: "Quality is absolutely paramount to our customers – supporting industries such as aerospace, defence, military and F1, there is zero room for defects, in both time and cost. We have an outstanding record for perfect quality and investing in equipment such as the Sylvac demonstrates our commitment to continuous improvement in our metrology capabilities.

The Sylvac-SCAN F60L has vastly improved our scope of metrology. As an AS9100 Rev D certified manufacturer, we pride ourselves on offering outstanding quality to our valued customers and core markets. With its Swiss precision engineering, the Sylvac SCAN F60L offers an efficient, exact, and effective inspection method, complimenting the current catalogue of equipment here at Boneham & Turner Ltd.

Having a Technology Manager designated to us from MAA made the project run a great deal smoother and it was on their recommendation that we began looking at a Mark Forged Mark II 3D Printer. This was supplied by Additive X, who also did the training and over the past 6 months have been incredibly supportive with many of our projects."

