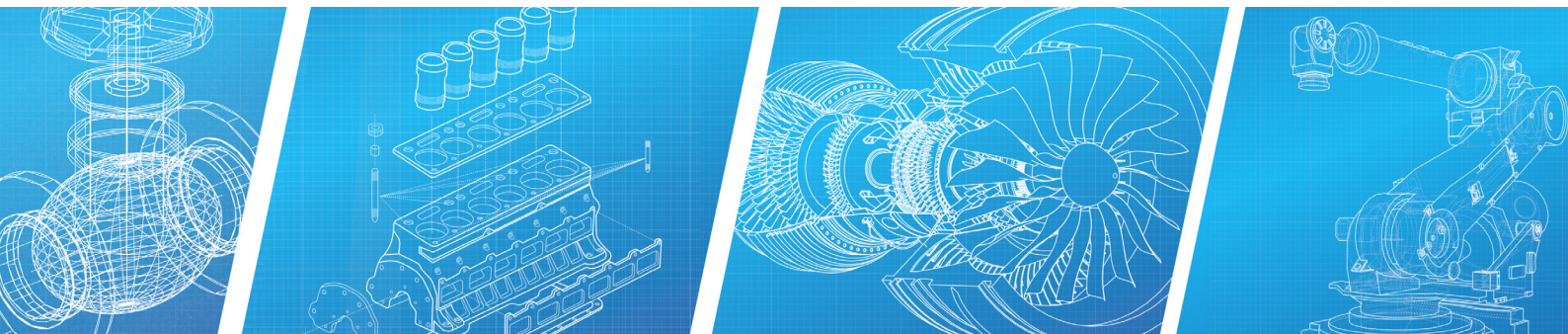


Bowers Group Case Study



Hewland Engineering Ltd

BOWERS GROUP



Company Name Hewland Engineering Ltd

Location Berkshire, UK

Industry Automotive

Product DigiMic

APPLICATION BACKGROUND

Berkshire-based Hewland Engineering Ltd's history walks proudly alongside the heritage of motorsport, manufacturing bespoke and OEM Gearboxes for racing applications, Internal Combustion and EV sectors in performance vehicles, and in the marine and aviation sectors.

Founded in 1957 by Mike Hewland, Hewland Engineering Ltd prides itself on a fundamentally exceptional transmission technology product and the ability to continuously adapt to the market demands of the motorsport industry.

At the heart of this philosophy is their purpose-built premises in White Waltham, Berkshire, housing more than 120 staff, together with the very latest in precision engineering and manufacturing equipment.

The firm continues to thrive thanks to ongoing investment in all areas of the company, from machinery to advanced design tools. Their dedicated design, engineering and commercial teams ensure that every client gets the attention and service they require, ensuring they get the best possible performance from their chosen transmission.

THE CHALLENGE

Hewland's dedicated Advanced Engineering and Design Group is tasked with ensuring that all technical considerations are to the highest standard, therefore it is essential that projects are completed with precision accuracy. For this, they need the most accurate precision measurement equipment.



THE SOLUTION

Bowers Group's newly launched DigiMic digital micrometer has impressed the quality team at Hewland Engineering, who are reporting improved efficiency within their quality and inspection processes.

Bowers Group's newly launched DigiMic digital micrometer is used by Hewland Engineering to measure diameters and widths of metal components, such as layshafts, pinion shafts, gears, hubs, clutch shafts, drive shafts and many other gearbox components, the DigiMic has already proven its reliability with pinpoint accuracy.

The DigiMic boasts an impressive accuracy of 2 μ m max permissible error and 2 μ m max error range. Ergonomically designed to fit comfortably in the hand, the device is an exceptionally robust micrometer perfect for shop floor use. Manufactured with an IP67 protection rating, the extra-large digital display makes reading data straightforward with the user having an immediate visual confirmation of measurement in hand.

Feedback from Hewland Engineering has indicated that the DigiMic has helped achieved an accurate thickness of gears and bearing journal diameters within its .010mm tolerance. It offers them an easy- to-use device with a large, clear digital screen, with the weight of the micrometer providing a substantial, high-quality feel. The Bluetooth connectivity to Sylvac software means that reporting has never been easier, making the creation of control plan reports more efficient by recording digital data rather than handwriting results. The 'favourite button' has also proven to be useful in transferring and storing data to the Sylvac Anywhere software.

The bi-directional communication capability of the DigiMic enables users to link the device with a range of IoT ready products, including Sylvac's Sylcom software products which range from a free app enabling data collection on a smartphone or tablet, to a comprehensive multi-gauge package making data capture for every dimension on the part easy and reporting efficient.

COMMENT

Adrian Jarych, QHSE Engineer at Hewland, said: "As a quality engineer and inspector I find the DigiMic really useful for everyday component inspection work. It's easy to turn on, easy to calibrate, and it's ready to use. The thimble is smooth, and the accuracy is great. The parts we produce are used in the manufacturing of motorsport and automotive transmissions and gearboxes where precision is key. I feel confident of the accuracy and know I'm getting trustworthy readings from the DigiMic."

Adrian explained: "I have used the SylcomLite software where I found useful capabilities to familiarise myself with the software. With Bowers' recommendation, I shall trial the Pro version of Sylcom and use this to kickstart digital recording of results for control plans."

