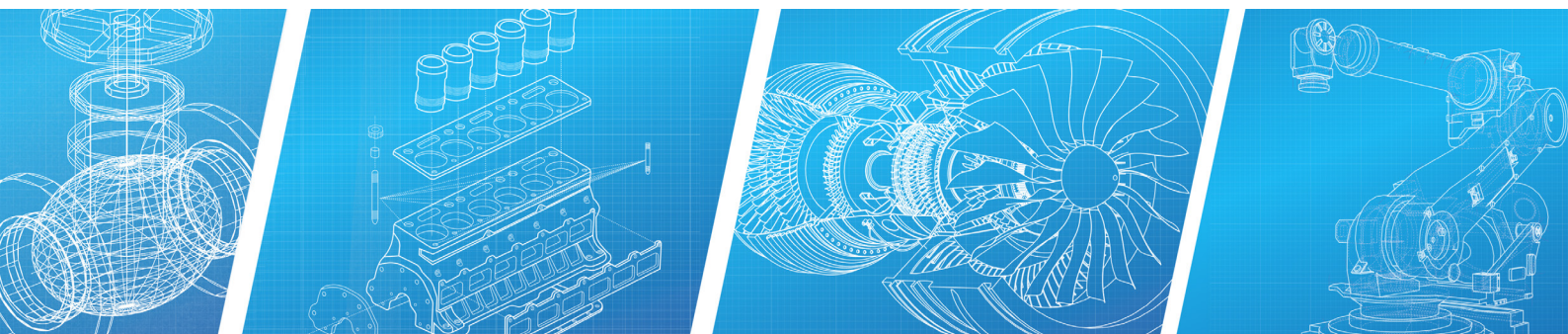


Hack Engineering



Company Name	Hack Engineering	Location	Barcombe, East Sussex
Industry	Engine Build, Workshop, Machine Shop and Parts Supply	Product	Moore & Wright Precision Measurement Tools

APPLICATION BACKGROUND

Based in Barcombe, East Sussex, Hack Engineering originated as a supplier of high-end performance parts for BMW, before undertaking exponential growth of the business that led to the opening of its first workshop, engine building facilities, part supply operations, and the creation of its own-branded machine shop.

Founded in 2013 by Ben Koflach, the business aim of Hack Engineering was to offer knowledgeable, reliable parts supplies in the UK. With vast experience working in the historic motorsport industry, Ben invested his skills forward into opening the first Hack Engineering workshop in 2016, increasing stockholding offering Vanos rebuilds and other engine work for BMW M cars.

Technical Director, Alex Lester, joined as a business partner in 2018, bringing with him a wealth of machining and engine reconditioning knowledge, forming the basis of Hack Engineering Machine Shop. By moving machine work in-house, engine-building became ever more prominent in the company's offering, and it has continued to rapidly grow ever since.

THE CHALLENGE

Accurate measurement of engine components is critical to a quality engine build. When parts are machined or ordered incorrectly, it can have an adverse effect on both the performance and longevity of the engine, often resulting in a rebuild process that can hamper the profitability of the project.

It is important to ensure that accuracy, precision and resolution is achieved throughout all aspects of the build, something that can be enhanced by choosing the correct, high quality tools, like the Moore & Wright Range of workshop tools.





We are always of the opinion that anyone can build an engine. But building an engine that lasts and performs at its optimum involves patience, careful measuring, and extreme cleanliness.

Being able to offer an engine that not only performs well, but also offers longevity is one of our core beliefs. This all comes down to blueprinting each component. Whether it is piston to bore wall measurements or measuring and calculating the movement in BMW's variable valve system, VANOS, the quality of the machining, blueprinting and assembly are critical. It all comes down to the measuring equipment used.

As always Bowers support is the best, a complete understanding of measuring and measuring processes is felt whenever advice or support is needed.

THE SOLUTION

The team at Hack Engineering use the Moore & Wright vernier caliper for carrying out through process measurements. Of all the measuring tools at Hack Engineering the vernier caliper is the one most regularly used.

Every person in the business has access to a Moore & Wright vernier caliper, and even the parts department is regularly seen using one to assist customers with double checking component dimensions. Not only is quality increased, but the wastage of parts is also reduced as measurements can easily be taken throughout various manufacturing processes.

COMMENT

Alex Lester, Technical Director at Hack Engineering said: In my opinion, no engineer's toolbox is complete without a vernier caliper. It's the first measuring tool to own when setting out in this trade! Without one, you may as well just guess a number. There are so many inferior verniers out there, and with the heavy use ours get we decided to get one of the best. The Moore & Wright vernier caliper is the perfect tool for carrying out through process measurements and for quick sanity checks. It feels good in the hand and offers repeatable measuring time and time again.

When dealing with performance engines, having the right equipment not only makes the job more efficient but also allows you to offer the customer a service and a product that makes you stand out from the rest.

