

## Hope Technology Develops New Range of Composite Bicycle Components thanks to New Digital Cutting machine

Hope Technology, one of the UK's leading manufacturers of high precision bicycle components and accessories has just taken delivery of a Blackman and White Genesis automated flatbed cutter to help development of new range of composite bicycle components.



The components currently manufactured by Hope Technology at their Barnoldswick headquarters in Lancashire are predominantly precision CNC machined from aerospace grade alloys. In recent years, however, the bicycle industry has followed the aerospace and automotive industries in adopting modern composite materials such as carbon fibre in the development of top of the range machines for bicycles serving both the competition and leisure markets.

Hope Technology's design engineer Mark Reynolds commented, "Bicycle enthusiasts at all levels are demanding machines that are extremely light but still offer the equivalent or greater strength associated with traditional metallic components. Composites not only meet these demands, but have the added advantage that components can be custom engineered for strength and flexibility dependent on their application."

Accuracy and repeatability are critical when cutting composite fabrics as small differences in



the pattern can change the properties of the finished product. Blackman and White have many years experience working with composites and were able to provide a cutting machine that was easy to use and had the precision and flexibility that would allow Hope Technology to develop their new range of high quality composite components. Mark added, "It was evident from an early stage that a materials cutting machine was required as one of our first purchases for our new composites department. As a UK manufacturer we pride ourselves in keeping everything in-house giving us complete control over every operation. We are big supporters of British manufacture, so it was refreshing to hear that our Genesis machine was being built right here in the UK."

"The new automated cutter not only cuts considerably faster than by hand, but it also allows us to cut intricate shapes with a very high degree of accuracy. Our Genesis cutter marks each individual ply so our operators know the exact laminate sequence and orientation which is crucial to the layup process. Composite materials are expensive, and the software means that patterns can be nested so we make the best use of materials and minimise wastage. It also ensures that every component is identical and will meet our high standards of quality control."

Seat posts are the first components Hope Technology are developing using composite materials, but as the company gains expertise in this technology, more intricate components will be available in composites as well as their traditional CNC'd alloy components.

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## **Editor's Notes**

High resolution image available on request

## More about Blackman & White

Blackman and White (blackmanandwhite.com) is a world class leader in the field of industrial flatbed cutting machines. Blackman and White cutting machines are used across a wide range of industries including marine, automotive, aeronautical, printing, construction and upholstery sectors, Their cutters and plotters range from the Orion, designed for light to medium duty, to the Mastercut heavy duty platform. Blackman & White's innovative Mastercut Versa-Tech series provides laser, knife and routing capabilities cuts thin metal including aluminium, rigid board, Foamex, acrylic and wood up to one inch thick with accuracy greater than 0.1mm. Available with blade, laser cutters or routers, BW Cutters are exported to Europe, the Middle and Far East and throughout the USA.

With over 45 years' successful business in the design and manufacture of cutting machines under its belt, Blackman and White is uniquely placed to offer world-wide service and expertise.

For further information visit www.blackmanandwhite.com

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