



## Mazak takes latest 5-axis hybrid machine to Southern Manufacturing

Yamazaki Mazak is set to showcase the latest addition to its 5-axis range of hybrid machining centres at Southern Manufacturing 2018 (FIVE Farnborough, 6-8 February).

The VARIAXIS j-600/5X AM, which made its European debut at EMO, employs a Wire-Arc AM (Additive Manufacturing) head on a 5-axis vertical machining centre to enable high-speed additive and subtractive manufacturing on one combined platform.



The Wire-Arc AM torch is mounted on the machine's headstock to deposit material layer-by-layer and grow near-net-shape 3D forms. The system quickly deposits material due to the use of wire instead of metal powder.

The VARIAXIS j-600/5X AM is capable of high accuracy and productivity from the 12,000rpm main spindle and the wide B-axis spectrum of rotation (+90° to -120°). The machine is equipped with a highly rigid and accurate structure, utilising roller linear guides on all linear axes and roller gear cams on both rotary axes.

Equipped with SmoothX, the world's fastest CNC, the VARIAXIS is easily programmable for both the machine and the welding automation. The j-600/5X AM is well-suited to a wide variety of machining applications, including both production and repair of parts.

Alan Mucklow, Managing Director UK & Ireland Sales Division, comments: "Hybrid machining has multiple advantages, including a considerable reduction in total machining process time, decreased waste material, as well as less time spent on material preparation, such as forging and casting. In addition, one of the biggest advantages of Mazak's AM technology is the capability to add different material onto a substrate. This gives machine tool users the opportunity to manufacture components which may not have been previously possible, by coating or adding different material onto an original component.

"This will be the first time that we have taken an additive manufacturing machine to Southern Manufacturing. The UK's general subcontracting has shown an exceptional level of resilience in recent years, and many manufacturers are reaping the rewards of diversifying their sector portfolios. Additive manufacturing can open up an entirely new avenue of work given the production efficiencies it can offer compared to a purely subtractive application, and Mazak is delighted to now be in a position to offer three different hybrid machining solutions to the UK subcontractor market."

For more information on the VARIAXIS j-600/5X AM, please visit: [www.mazakeu.co.uk](http://www.mazakeu.co.uk).

**Photo caption:** The VARIAXIS j-600/5X AM employs a Wire-Arc AM (Additive Manufacturing) head on a 5-axis vertical machining centre to enable high-speed additive manufacturing.