

# Okamoto the 'go to' surface grinder for Go Tools

Motivated by his vision of establishing a highly efficient tooling manufacturing business with the highest precision and quality standards, Andrew Millard set up Go Tools Ltd in 2012. By adhering to the business' founding principles, the Rotherham, South Yorkshire-based company soon established an impressive customer base.

In addition to producing diecast tooling for use in zinc, aluminium and magnesium foundries, Go Tools manufactures mould tools for the medical, automotive, packaging, electronics and consumer goods industries. To keep pace with ever increasing demand, over the past decade the company has increased its skilled workforce, regularly invested in advanced CNC machine tools and further expanded its range of in-house proficiencies.

Go Tools' progressive investment policy involves purchasing highly-efficient machine tools that deliver high standards of precision. In addition to helping the business to maintain its hard-won reputation for the quality of its output, the rapid cycle times achieved by the company's cutting-edge production aids allows cost-effective quotes to be tendered and new business to be won.

Go Tools' machine tool investment strategy can be illustrated by the recent



installation of two innovative Okamoto ACC450AV precision surface and profile grinding machines, purchased from DF Precision Machinery Ltd, Okamoto's UK distributor. Explaining the reasons behind installation of the Okamoto grinders and their successful use, Go Tools technical director Steven Barrowcliff says: "Having enjoyed excellent service from two older Jones and Shipman machines, we decided

that, because of their increasing maintenance costs and the growing pressure on our grinding department, we would search for two advanced new surface and profile grinders. The chosen grinders needed to satisfy our high-precision requirements and also be able to further increase our grinding efficiencies.

"Having considered several alternative machines, we concluded that the Okamoto ACC450AV precision surface and profile grinder best met our long list of demanding criteria. To help prove the ACC450AV's capabilities, I witnessed an impressive demonstration of the ACC450AV performing a wide range of demanding grinding tasks. The grinder confirmed its suitability for our needs, and we were happy to place an order for two machines.

"After their installation and operator training, our new Okamoto machines soon began to make a significant contribution to our surface and profile grinding work. In addition to our ACC450AV's high-precision and the outstanding surface finish capabilities, their ease of use and impressive speed and efficiency has resulted in the machines becoming extremely popular with our grinding staff.

"High-standards of surface and profile grinding are critical to the quality of the tools that we manufacture, and these qualities are exactly what our Okamoto machines deliver. We have been so



impressed with our new Okamoto grinders that, to help satisfy ever growing demand for our tools, we are now planning to soon install two additional ACC450AV precision surface and profile grinding machines.”

The advanced Okamoto ACC450AV precision surface and profile grinding machines, as purchased by Go Tools, provide a generous grinding length of 450 mm, across travel of 170 mm and a maximum grinding height, between the machine’s table and a new 205 mm diameter grinding wheel, of 357.5 mm. The foundation of the ACC450AV’s outstanding precision capabilities is the machine’s robust Meehanite casting. In addition to providing exceptional levels of both static and dynamic stiffness, the use of Meehanite delivers excellent damping qualities.



Mike Duignan of DF Precision Machinery Ltd adds: “As Go Tools reflected on the merits of several other alternative surface and profile grinding machines, we were happy that the company decided to purchase two Okamoto ACC450AV machines. So successful have the ACC450AVs been, we are delighted that we will soon be delivering an additional two machines to Go Tools. As exclusive distributor of Okamoto in the UK, we are proud to represent such an excellent and reliable range of profile and surface grinders.”

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To help avoid the negative effects of heat expansion and vibration, and as an additional support to accurate grinding, the machine’s hydraulic unit is isolated from its main structure. A combination of scraped V-V slide ways, the use of low friction Turcite material and the provision of an automatic, gravity-fed lubrication system ensures accurate grinding across the machine’s life and results in minimum maintenance needs.

The ACC450AV’s long list of standard equipment includes a micro cross-feeder that allows fast and simple change over from 0.02 mm to 0.001 mm graduations, while a high-visibility cross-feed digital readout enables all manual adjustments to be easily monitored.

The ACC450AV’s variable speed wheel provides simple variable speed control of the grinding wheel, enabling it to match each workpieces’ material and surface finish requirements. In addition, optimal speeds can be achievable when using CBN grinding wheels. An overhead manual dresser provides a simple yet effective straight line dressing option for vitrified grinding wheels.

A wide selection of coolant and filter systems are available to suit individual users’ needs. In addition, the grinding machine can be supplied with a choice of magnetic chucks, including electro-permanent models that prevent heat build-up during the grinding process.

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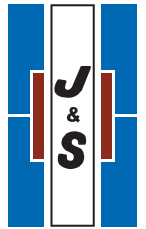
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## The home of high precision

Having spent the previous decade at the heart of the Jones & Shipman / Hardinge management team, Mike Duignan and Alan Fisher established DF Precision Machinery Ltd in 2020. The partners' founding objectives were to use their wealth of experience, related to precision grinding machine sales and applications, to benefit the UK grinding fraternity, also to provide the highest standards of customer care. Key industries now being served are the aerospace, F1, mould, tools & die, bearings and medical sectors, also precision subcontractors.



In addition to offering a range of highly efficient, cost effective grinding solutions and related support services to all potential UK customers, DF Precision Machinery is the official global supplier of Jones & Shipman spare parts and support services. The company holds the extensive J&S OEM records, drawings, and software and offers unrivalled expertise related to Jones & Shipman products.

Over several years, Hardinge has acquired many iconic, world renowned precision grinding brands, including, Kellenberger, Voumard, Hauser, Tschudin, USACH and Jones & Shipman. As exclusive representative in the UK and Ireland for all Hardinge grinding products, DF Precision Machinery boasts an impressive portfolio of solutions. Further complementing these products, the company is also the exclusive distributor of Okamoto grinding products in the UK. In addition to Okamoto's extensive range of surface and profile grinders the renowned manufacturer also offers internal, cylindrical, vertical, and rotary grinding products.

Explaining DF Precision Machinery's ethos, Mike Duignan says: "To ensure the delivery of highly efficient, reliable, precise grinding machines and solutions which provide an attractive ROI for our customers, we must use quality partners. The companies we represent are global leaders in their fields and have built strong reputations through their dedication and commitment to offering first-class products and support.

"We are committed to backing up our impressive product portfolio with first-class levels of service. In addition to providing expert advice related to all aspects of grinding, we are able to help potential customers to specify machines that enable their purchases to match their specific needs and budgets".

"Our Customer First philosophy ensures that all of our customers receive high-quality specialist support from initial sales discussions, through to the provision of long-term preventative and support services that optimise customers' return on investments."

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