## 'Best-in-class' wire EDM for world-class manufacturer



Brandauer takes delivery of two state-of-the-art wire EDM machines from GF Machining Solutions.

Brandauer's Managing Director David Spears (Left), Sales & Marketing Director, Rowan Crozier (Centre) and Toolroom Manager, Leigh Cresswell (Right) pictured with one of the new GF Machining Solutions' CUT 3000 wire EDM machines installed in the state-of-the-art EDM manufacturing cell.

Leading international precision contract presswork and stampings specialist, Brandauer & Co Ltd, has recently commissioned two new, advanced wire EDM machines from GF Machining Solutions.

The machines, both AgieCharmilles CUT 3000 models, were installed at the company's Birmingham facility in June 2013, in a specially-constructed, thermally-controlled EDM manufacturing cell where they sit alongside a number of previously-acquired EDM spark erosion and hole-drill machines...also purchased from GF Machining Solutions.

The new cell is a real centrepiece for the company. Visible from Brandauer's revamped reception area, it reinforces unequivocally, to customers and visitors alike, that they have entered a world-class manufacturing facility.

Comments David Spears, Brandauer's Managing Director:

"First impressions count.

"We deliberately positioned our reception area adjacent to the new EDM cell so that visitors can see, from the outset, our world-class, state-of-the-art manufacturing operations."

The stars of the cell are the two new CUT 3000 machines.

## CUT 3000

The CUT 3000 machines are amongst the most advanced in GF Machining Solutions' wire EDM machine product portfolio. Their rigid, thermally-stable design and construction deliver exceptional accuracy (+/- 1 micron), and equally impressive surface finishes (Ra 0.05µm).

CUT 3000 machines are also equipped with GF Machining Solutions' IPG digital generator technology for fast, reliable and responsive machining, powerful and sophisticated controls and a range of onboard SMART Technology functions that include:

Variocut: which adapts and optimises (in-process) the power and duration of the spark to work-piece conditions (i.e. work-piece height), and ensures that problems, such as wire breakage, do not occur.

This, plus the machines' duo wire capability (the machines can handle different diameter wires from 0.05 to 0.30 mm), and their AWC (Automatic Wire Change) feature provide Brandauer with improved manufacturing flexibility, increased productivity (as the machines can be set-up quickly and left to run unattended), and a more reliable manufacturing process.

Says Leigh Cresswell, Toolroom Manager:

"Our work demands exceptional and repeatable accuracies. We are quite literally chasing the micron.

"To manufacture parts and intricate part features to the exacting tolerances and finishes we require, and our customers demand, means we need machines that can deliver – day-in...day-out.

"That's why we invested in the CUT 3000 machines."

Machine use and application

Brandauer's new CUT 3000s are being used to machine complex progression tools which, in turn, are used by the company to manufacture high-volume, high-precision pressings for a diverse range and growing number of customers in the global medical devices, automotive, electronics, telecommunications, aerospace and domestic appliance sectors...to name but a few.

An example of the scope, scale and success of Brandauer's design and manufacturing expertise in this area is its work with a leading controls, safety cut-out and connector customer whose products are found in every modern kettle sold and used in the world today.

Working closely with this customer to improve the reliability, efficiency and performance of its products, Brandauer has helped re-design, develop and deliver a new manufacturing process and, by using its skill, know-how and application of high-speed insertion techniques is supplying millions of precision pressings to this customer every year.

But it's not just in the manufacture of complex tools where the new CUT 3000 machines are being used or where their potential can be realised.

The investment in the new machines has also enabled Brandauer to further strengthen its position as a manufacturer of complex, high-precision and highly-specialised EDM machined parts (prototypes, one-offs and small batch series) for a range of customers in new sectors. A recent example is Brandauer's first foray into the food packaging sector. A serious component development issue resulted in this particular customer approaching the company to urgently support the development of a more reliable and robust component manufacturing process.

Working closely with the customer Brandauer, using its EDM expertise, it's relationships with nonferrous metal suppliers and knowledge of the metal forming and fabrication processes, was able to recommend a new and much more reliable manufacturing solution.

Explains Rowan Crozier, Sales & Marketing Director:

"Wherever feasible we work with customers on projects from concept to completion.

"We work hand-in-hand with our customers' in-house production teams advising them from the outset on different materials, component design, production techniques and treatments; testing etc.

"We are also on hand to advise and respond with the optimum solutions to issues concerning stockholding, packaging and delivery."

## For further information please contact

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