

Graduating with Honours

One of the country's leading engineering learning establishments, the University of Southampton's Faculty of Engineering and the Environment, has acquired a Sodick SLC600G wire EDM to help boost the capability of its main workshop. Supplied and installed by Sodi-Tech EDM, the machine replaces an ageing model to not only improve reliability, but also reduce cycle times by as much as 30%.

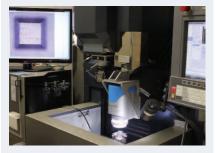
The University of Southampton has a proven track record of excellence in engineering. Its undergraduate engineering degree courses have been ranked in the UK's top five by both the Guardian University Guide 2016 and The Complete University Guide 2016. One of the underlying reasons for such accolades is the main workshop, a world-class centre for education, research and enterprise.

The workshop comprises turning, milling, drilling, grinding, sawing, laser cutting, 3D printing and EDM capabilities, primarily to support third year undergraduate projects, but also to help Masters students during individual and group research projects and PhD students and staff conducting research. Investment in the workshop facilities has been very extensive over the last few years.

Based on the latest digital innovations in generator technologies and the use of advanced electrode materials, the Sodick SLC600G wire EDM offers considerable advances in cutting speed, accuracy and surface finish. Along with linear motors and absolute linear scales in the X, Y, U and V axes, the machine features a 10 year warranty on positioning accuracy and a host of advanced functionality.

Closed Loop

Alicona Manufacturing, in collaboration with Makino, has developed a closed-loop manufacturing (CLM) measuring solution for use during spark erosion. Based on True Adapt™ CLM, the system comprises a Makino EDM machine integrated with an Alicona optical 3D measurement sensor. During EDM production, parts are checked in situ by the sensor to evaluate possible deviations from the target geometry - if there is any discrepancy the CLM system automatically modifies and verifies the process parameters for subsequent machining.



Mark Raleigh, Co-CEO of Alicona Manufacturing, commented: "The integrated measurement sensor verifies what the machine is currently doing. As a result the production accuracy is increased. The main CLM application clearly lies in mould and tool making. Our area based, dense and high resolution metrology allows better control of the production process than a simple tactile point measurement."



