

DROs help with old and new

From restoring the Flying Scotsman to the training of tomorrow's engineers, manual machines fitted with modern DROs show their worth, as Andrew Allcock reveals

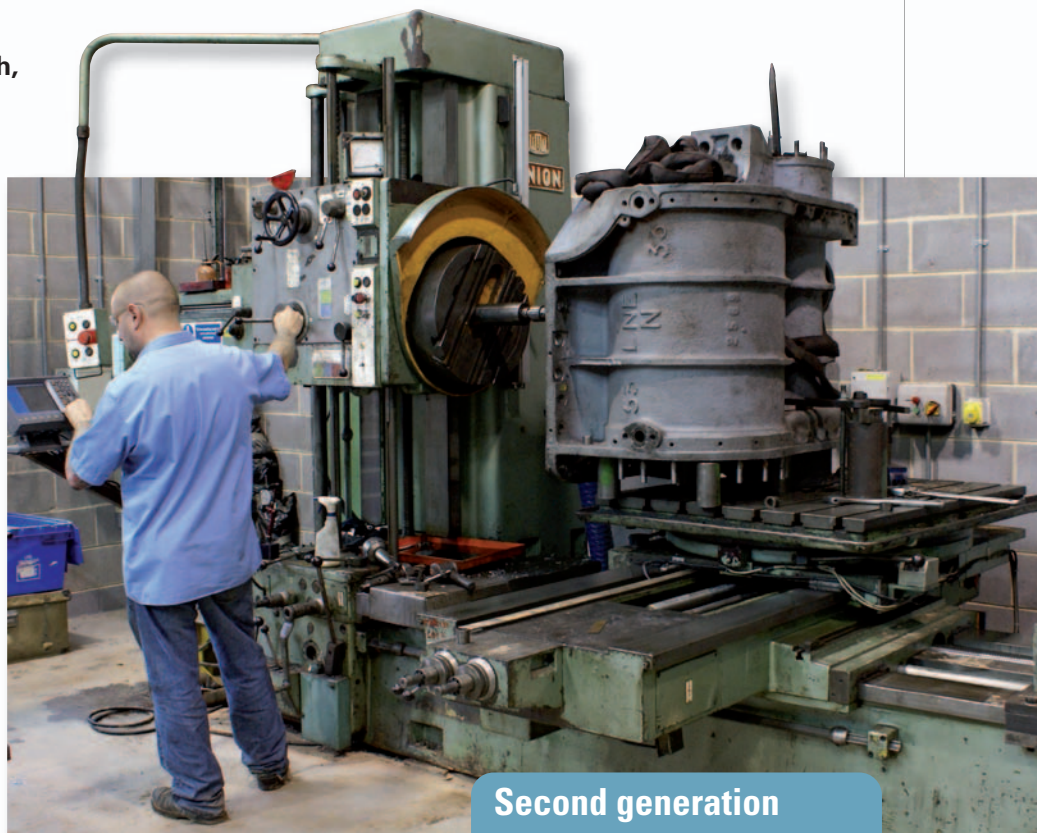
Eighty-six years after it first rolled out of the workshops, the legendary Flying Scotsman steam railway locomotive will take to the rails again, it is expected.

Work to restore the engine has been undertaken at the National Railway Museum (NRM) in York, and as part of a Corporate Partnership agreement, Heidenhain digital readouts were supplied and installed to a manual lathe and a manual horizontal borer in the NRM workshop is making life much easier for the restoration team.

One of the parts needed was a replacement cylinder block. This came from a locomotive of the same class as the Flying Scotsman that went for scrap 40 years ago, and it is the last of its kind. While it looks the same, the holes that take the securing bolts are not an exact match with those in the engine's frame – a borer fitted with Heidenhain DRO offered the necessary capability to modify the part, while related bolts have been machined on the manual lathe, also fitted with Heidenhain DRO.

From restoring the past to preparing for the future, and as part of a £41 million investment in a new faculty that provides purpose-designed classroom and workshop facilities, North Glasgow College has just completed the retrofit of 22 Anilam digital readouts to the portfolio of manual lathes and milling machines utilised by students as part of the college's engineering skills programme.

The machines take in 12 Colchester Student lathes, and six Ajax and four Bridgeport milling machines to which the Anilam Wizard 411 DROs have been



The NRM is breathing new life into a steam legend

successfully retrofitted.

After working closely with local Anilam agent Scotmech, the college's senior lecturer in construction technologies, Charlie Inglis, comments that the immediate effect of the Anilam Wizard DROs is that they will provide students "with an easy-to-follow and instant method of tool/workpiece location and measurement in relation to a range of machining applications".

The DROs offer a choice of 1-, 2- or 3-axis control, and have standard functionality for tool offsets, sub datums, linear patterns (row, frame, array), PCD calculations (full and partial), vectoring, plus a variety of canned functions.□

Second generation

In October last year, Leicester based Newall Measurement Systems launched a new second generation linear encoder – the Spherosyn 2G. Designed for the conventional machine tool market, the Spherosyn 2G is quicker to install, requires no maintenance and comes with a five-year warranty on the encoder and a lifetime warranty on the scales. It is the only encoder on the market to offer such a warranty, it is claimed.

The Spherosyn 2G has the same foot print as the older Spherosyn and the same signal, making it compatible with the many thousands of the older Spherosyn encoders in the field and any of the Newall DRO displays.