

Visit to Graham Engineering Ltd on 11th November 2015

Post event report

27 visitors attended an evening at Graham Engineering Ltd. After a meal of pie and mushy peas, Ian Bannister, Managing Director, gave a brief introduction of the company, which was started in 1970 and employs 180 staff. The markets serviced by the company are 75% Nuclear, 20% Aerospace, and 5% other.

The company had specialised in finding solutions to customers needs with the use of new technology, novel implementation, custom integration.

The tour of the works started with a review of the different nuclear waste containers, with a variety of capacities and designs for low, intermediate and high level waste.

GEL has found that laser welding is ideal for their products, and had installed a 10kW fibre laser welding cell. This was first demonstrated with a square waste container in the 5 Te, 9 axis manipulator. The weld between the container to the top section had been programmed to be completed in one sequence. As the manipulator presented the weld section to the laser head, both moved so that the weld could be completed in one continuous movement. The second part of the demonstration required the cell to be closed while a specimen weld was performed on a test piece. The progress of the very fast weld was monitored on CCTV, and then the cell was opened for a closer weld inspection.

The visit closed with a short question and answer session, and completion of feedback forms. The feedback was very positive, one party having travelled a considerable distance to attend. It is intended to run another event in 2 years time if there is sufficient interest.

Two companies attending the visit expressed interest in hosting further IMechE visits.