

CASE STUDY: CREWE PRECISION ENGINEERING LTD

THE BRIEF

Based in Nantwich, Crewe Precision Engineering Ltd and its sister company G&R Engineering (Nantwich) Limited, work with an array of companies, creating and manufacturing bespoke parts and products, based on the wants and needs of their clients.

This tailored service means that Crewe Precision Engineering Ltd uses several different machines and raw materials to manufacture and make hundreds of components in a variety of sizes.

Crewe Precision Engineering Ltd is an innovative company, consistently looking for new ways of innovating and interested in exploring how emerging tools could be adopted and utilised to support them in overcoming some of their existing challenges and developing their business model.

Crewe Precision Engineering Ltd has a large 2-floor facility with a dedicated space for 3D printing capabilities. Their management team was keen to explore how to maximise the existing space. In particular, the teams wanted to explore how they could alter the layout to improve the health and safety of their workers by keeping floors clean and tidy, in addition to introducing an audit process for older machinery.

THE APPROACH

The Industrial Digitalisation team at the Virtual Engineering Centre (VEC) completed a Matterport and Point cloud scanning activities at the facility, capturing all machinery, storage space, offices, communal areas and even some of the 3D prints. The management team can use this virtual representation to view their working space, making quick and easy observations which the building layout may have previously obstructed.

THE BENEFITS

Crewe Precision Engineering Ltd was impressed with the scan results and believes this technology will enable them to make quick and well-informed decisions using the birds eye view perspective, offering enhanced vision, and understanding.

The company was really interested in how detailed and accurate the scan was from half a day's worth of scanning and ways in which the scan could offer even greater realism through further hand-held photogrammetry scanning for particular items and machinery.

The outcome of the scanning enabled the management team to identify cluttered areas, which if given greater attention and altered appropriately, could transform the space.

Crewe Precision Engineering Ltd can now share the scan results with the wider team, collaborating to identify improved layouts for even more efficient ways of working, avoiding potential lag times and improving the workflow for their teams.

"The scanning of our facilities via the VEC team has been invaluable to the whole of the Crewe Precision Engineering Ltd team. We have been able to see our facility like never before and simplify our decision-making as this unique perspective has offered greater clarity. We have started assessing alternative layouts to optimise our processes and systems even further."

- Christopher Reade, Company Director at Crewe Precision Engineering Ltd