

CASE STUDY: AQUACUT LTD

THE BRIEF

Aquacut is made up of unique craftsmen with decades of experience for processing a wide range of building materials such as porcelain, stone, metals, glass and composites to create functional and beautiful building finishes.

Some of their services vary from waterjet cutting, edge profiles and polishing, fabrications, signs and motifs, swimming pools, furniture cladding, etching, painting and much more.

Their client base is spread across the world and some of their bespoke commissions include airports, large retail outlets, showrooms, large hardscape projects, hotels, office complexes, food and coffee chains and domestic properties.

THE APPROACH

Due to their growing success and company growth, Aquacut wanted to explore the opportunity and possibilities for an expansion and remodel of their current site in Appleton, Warrington. This included not only expanding the ground floor, but building and extending their facilities and space on the first floor as well for multi-purpose working areas including storage, office space and even meeting rooms.

As part of this research, Aquacut wanted to assess what their operational and storage space could look like if they were to knock down existing walls, as part of their proposed expansion.

THE BENEFITS

The Virtual Engineering Centre (VEC) worked with Aquacut as part of this planning process, ensuring the company were well informed and knew all of their options, prior to making an investment or irreversible commitment.

The Industrial Digitalisation team at the VEC used a LiDAR scanner for collecting point cloud data of the existing factory and proposed areas for expanding. This data was then processed and output for the VEC's visualisation suite where Aquacut could visualise and virtually explore numerous floorplans and room layouts, with the VEC making recommendations for obtaining the greatest efficiency levels.

Aquacut commissioned all new racking throughout their warehouse facility which is designed to deliver 50% more storage capacity as the company also believe the investment will enable them to contain costs on energy use as they are planning to install rain harvesting capability to reduce their reliance on water from their water company.

This virtual demonstrator can be used for continuous improved assessment and understanding in addition to planning including financial and future decision making, should they wish to further modify or change the space again.

"Aquacut has been going from strength to strength and we have seen a really positive growth across the company which has meant we have needed to expand our site and facilities to meet the increase in growing demand."

"The help and support from the Virtual Engineering Centre through the CW4.0 has been invaluable to us as we have been able to quickly explore a number of options which will enable us to confidently make well-informed business decisions" and will really reduce any time being wasted through any future transitional period."

- Stuart Middleton, Aquacut Limited