James Jones & Sons Ltd

The project developed a 2D/3D visualization and engineering platform for I-Joist structures and timber products. The software provides users with 3D drawing/ modelling tools and methods for manipulating 3D objects in an intuitive manner to allow the assembly of full structures from standardised components with the ability to store archive and visualize large amount of data or projects.

Challenge

With a move to the Eurocode design standards slated for 2015 and a government statement that all of their projects from 2016 will have to be designed using Building Information Modelling (BIM), new, modern software is essential for any company in the UK's construction industry. It is with these points in mind that the partners have undertaken this project, aiming at having a full, 3D BIM CAD application, allowing JJI-Joists to be designed in several use-cases including walls, floors and roofs.

Results

The KTP project has provided a well designed, flexible base architecture for future software developments. The opportunity to start from scratch using a range of state of the art tools and techniques has freed up the developers to work productively on new functions and features. This puts the company in a position to not only keep up with competitors but stay ahead of them, even with a comparatively small development team.

Benefits

The knowledge acquired during the course of the KTP project has reinforced the company strategy of investing in a diverse set of flexible design tools to ease the design process for all professionals involved in the designing and specifying of JJI-Joists and associated products. These tools are of huge strategic importance to the Timber Systems Division.

James Jones & Sons remains the second biggest saw miller in the UK with the Timber Systems Division continuing to provide engineered timber I-joists into the construction industry in particular the domestic house building sector.

"Without the KTP scheme it is highly doubtful that we would have been able to employ a software developer of this calibre for general development work and the knowledge and understanding of the whole team would be way behind the level that we now enjoy."

Ross Brown
Engineering Manager

Innovate UK