



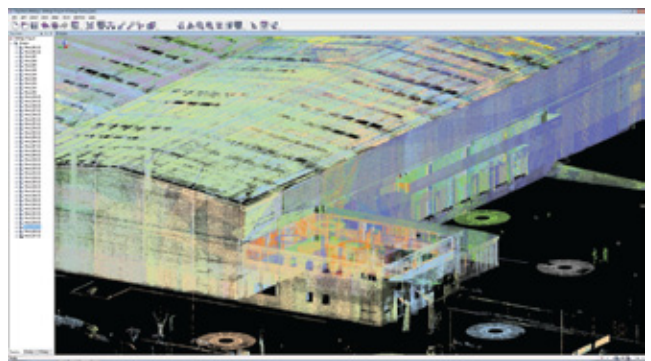
An accuracy of 15mm was required for the geometric model. The interior space measured approximately 110m x 65m.

The scanning of the site took one day using a Faro Focus. A total of 60 scans were taken, with 4 datums taken per scan.

Once the data was captured, it was processed back at 3D Scanners offices in Coventry, using PolyWorks 3D Metrology software.

3D Scanners have recently undertaken a project for a company which is expanding rapidly within the food industry.

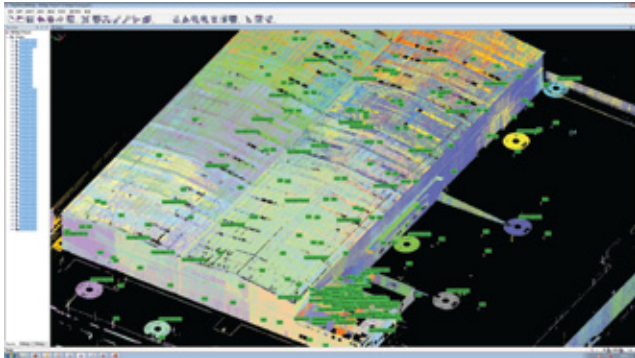
3D Scanners were approached by this newly set up company, to help with the space planning of their newly aquired site. The founders of the company were very forward thinking in their approach to space planning and realised that the most economical way of planning their new site was to use a long range scanner to capture the data ie. the exterior space, loading bays, exterior walls, interior walls, units, doors, beams, windows and electrical points/cables. This data could then be used to produce a 'workable' 3d model for space planning.



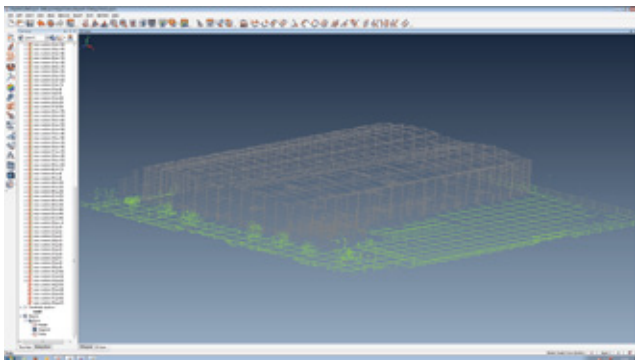
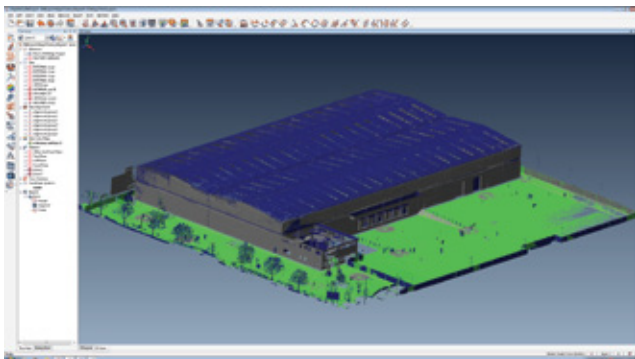
The mass point cloud contained approximately 120 million points and took 5 days to mesh into a

polygon model.

The scan was aligned using the datums which had been taken at the time of the scan. The screenshot above shows the aligned point cloud within PolyWorks Modeler.



PolyWorks Inspector was then used to abstract cross sections from each of the different areas within the factory.



Above: Screenshot of PolyWorks Inspector showing the crosssections imported for use in SolidWorks.

The cross sections were imported a group at a time into SolidWorks with their matching polygon model as a visual reference. The cross sections were used as a template to create the individual parts.

Each part was then imported into an assembly, which could be used by the customer for space planning. It took 10 days to model up all of the parts. The whole assembly consisted of 470 parts.

### Finished SolidWorks model

