

## RJ HERBERT

### CASE STUDY

Assembling 80,000 components could drive you up the wall. . .

R J Herbert is a privately owned company which has focused on innovative design and efficient project management. Since 1975, they have developed into one of Europe's leading manufactures and suppliers of fresh vegetable grading and packing equipment, in addition to which they supply solutions for food processing; airport baggage handling; industrial high-speed packing; and automated handling systems.

Recently, R J Herbert designed and installed Europe's biggest carrot sorting and packing house, covering over three hectares of floor space.

Matt Hunter, Engineering Manager at R J Herbert, explains how the company came to deploy SolidWorks Office Professional and Premium software, supplied by NT CADCAM, to successfully design and manage such prestige projects – which, typically, can incorporate up to 80,000 components.

"Before 2000, we were using Concerto, which is chiefly a 2D design package. Even though Concerto offers a Z axis it lacks the true parametric and solid modelling capabilities that are vital for the visualisation of these complex and large scale projects. We were reaching critical mass with the system and would have required further engineers to keep up with the demands of the increasing complexity of our equipment."

Simple mistakes taken by misreading a 2D drawing in R J Herbert's industry could have the potential to result in costly installation errors, such as a conveyors blocking access routes for fork lift trucks or a roof height proving too low for the intended layout!

SolidWorks' leading 3D visualisation enables the design engineers to build the customer's packing equipment specification accurately into the site survey parameters.

Hunter comments, "SolidWorks is intuitive to use and capable of handling the massive quantity of detail quickly. 3D modelling has helped save significant amounts of time - sometimes worth several weeks – as well as ensuring huge cost savings by providing clear visualisation of the customer's requirements which gives our team full confidence in getting the manufacturing and onsite installation right first time."

The success of clear presentational material for the customer means SolidWorks 3D images will be integrated over the next 12 months by R J Herbert's sales team as standard practice and considered to play a critical role in their continued success.

Manufacturing is also benefiting from the introduction of SolidWorks. Originally, a high number of components like supports for conveyors and machinery shields and guards were constructed bespoke by skilled fitters on the shop floor.

Hunter says, "These parts are now modelled easily and quickly by the design team and are fully itemised on parts lists. For instance, the design team can ensure that guards are quicker and easier to fit using pressings and fixtures and eliminate many welding operations. This has also yielded an aesthetic return by modernising the appearance of our machinery."

SolidWorks PDM systems accurately keep track of the huge number of components and their revision, automatically updating assemblies and parts lists, which has saved hours of drawing office checking and updating.

"Since 2000," Hunter says, "we have adopted one seat of SolidWorks Office Premium and seven seats of SolidWorks Office Professional with three more seats to be implemented in the next six months. With our rapid growth and use of SolidWorks, combined with the scale and complexity of the projects we push into the system, NT CADCAM's support has been vital. Sometimes we can spend a considerable amount of time in contact with NT CADCAM's hotline and the response is always quick, constructive and professional."