

Cost-Effective Three-Dimensional Computer Generated Images

Three-dimensional images of small scale assets were produced during the front-end engineering phase of various refurbishment projects. Common computer aided design and visualisation software was used to produce low cost rendered images and dynamic walk-through visualisations, as well as the traditional two-dimensional engineering drawings.



Three-Dimensional Models

Finished Facilities

Figures: comparison of three-dimensional images and constructed installations

Benefits

- simple three-dimensional images allow end-users to contribute to the design phase of projects without having to visualise assets from two-dimensional layout drawings
- effective end-user input to the design phase reduces the risk of change during the construction and commissioning phase of projects
- more efficient design, construction and commissioning phases contribute to reduced project duration
- three-dimensional images allow consideration of safety-related ergonomic issues such as workspace layout, kinetic handling and traffic movements
- three-dimensional images can be used for operator training