



PLANT PROJECTS PORTFOLIO

LIST OF SERVICES



REGISTERED POINT CLOUD

For clients that want to complete their own post production we can scan and supply a registered point cloud.



WEBPANO SERVICE

WebPano is web-based service for viewing 360-degree panoramic images and scan data, which allows the user to take measurements and pick 3D coordinate values.



PLANT DESIGN MODELS

We can convert point clouds to Aveva PDMS, CADWorx and Open Plant models. ISO drawings and P&ID can be fully synchronised with the model.



3D CAD MODELS

We offer a range of 3D CAD models, in different formats and levels of detail to suit your needs.



BIM READY MODELS

We can convert point clouds into Revit, AECOSim or ArchiCAD models based upon your specific requirements and specification.



CLASH DETECTION

We offer a clash detection analysis, comparing either the design model to cloud or cloud to cloud.



GENERAL INFO

PERSONNEL

- Offices in London, Stavanger, Lviv & Kraków (our main office)
- Over 70 full-time employees
- 5 departments: Site, Plant, BIM, CAD, IT
- Operating Worldwide

EQUIPMENT

- 3 scanners Z+F Imager 5010
- 3 Scanners Z+F Imager 5010C
- 2 scanners Leica RTC360
- 1 scanner Riegl VZ400
- 3 Leica Total Stations (1200 series)
- 2 Leica Total Stations (1100 series)
- 2 GPS receivers
- 2 drones with RTK systems
- In-house server infrastructure

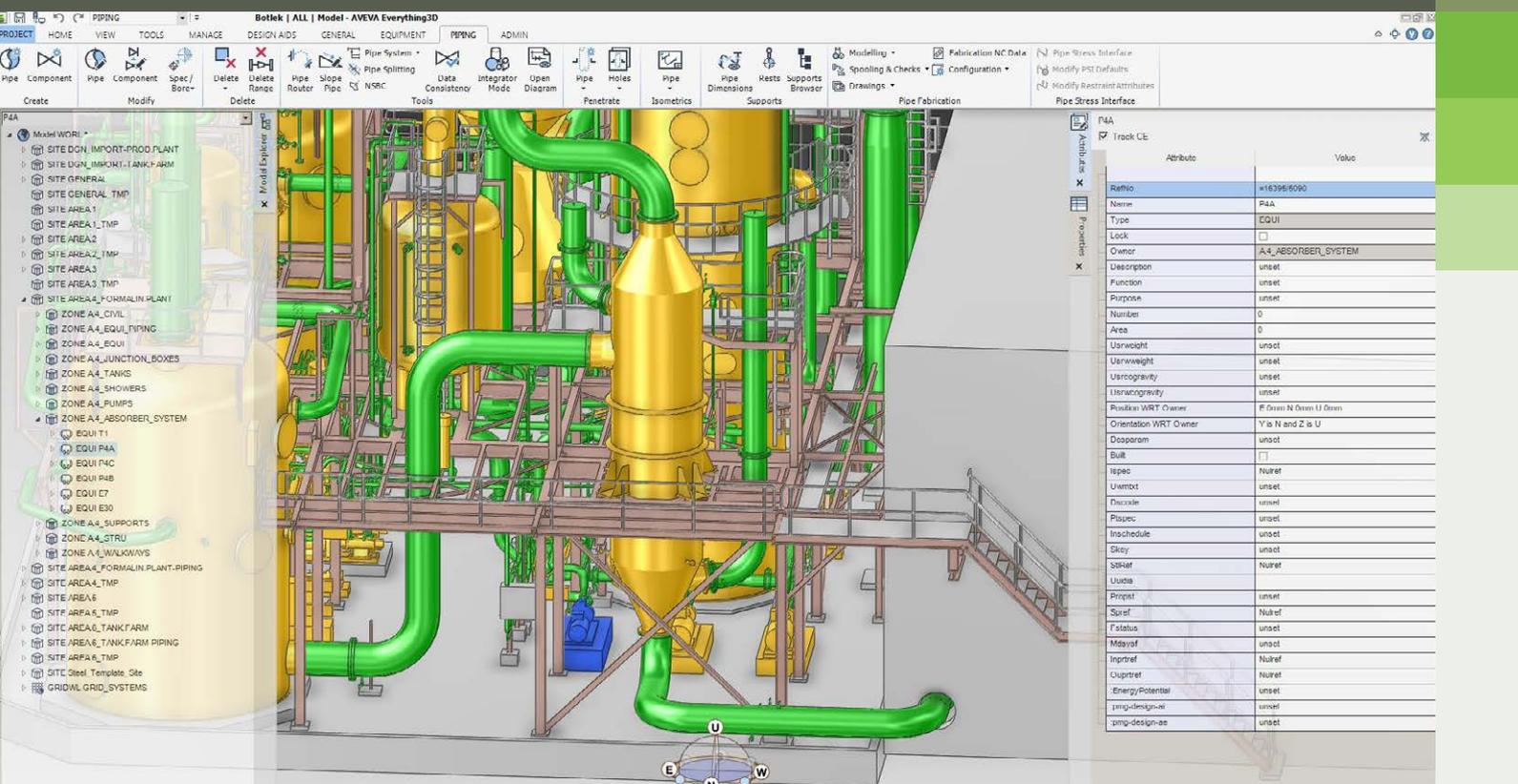
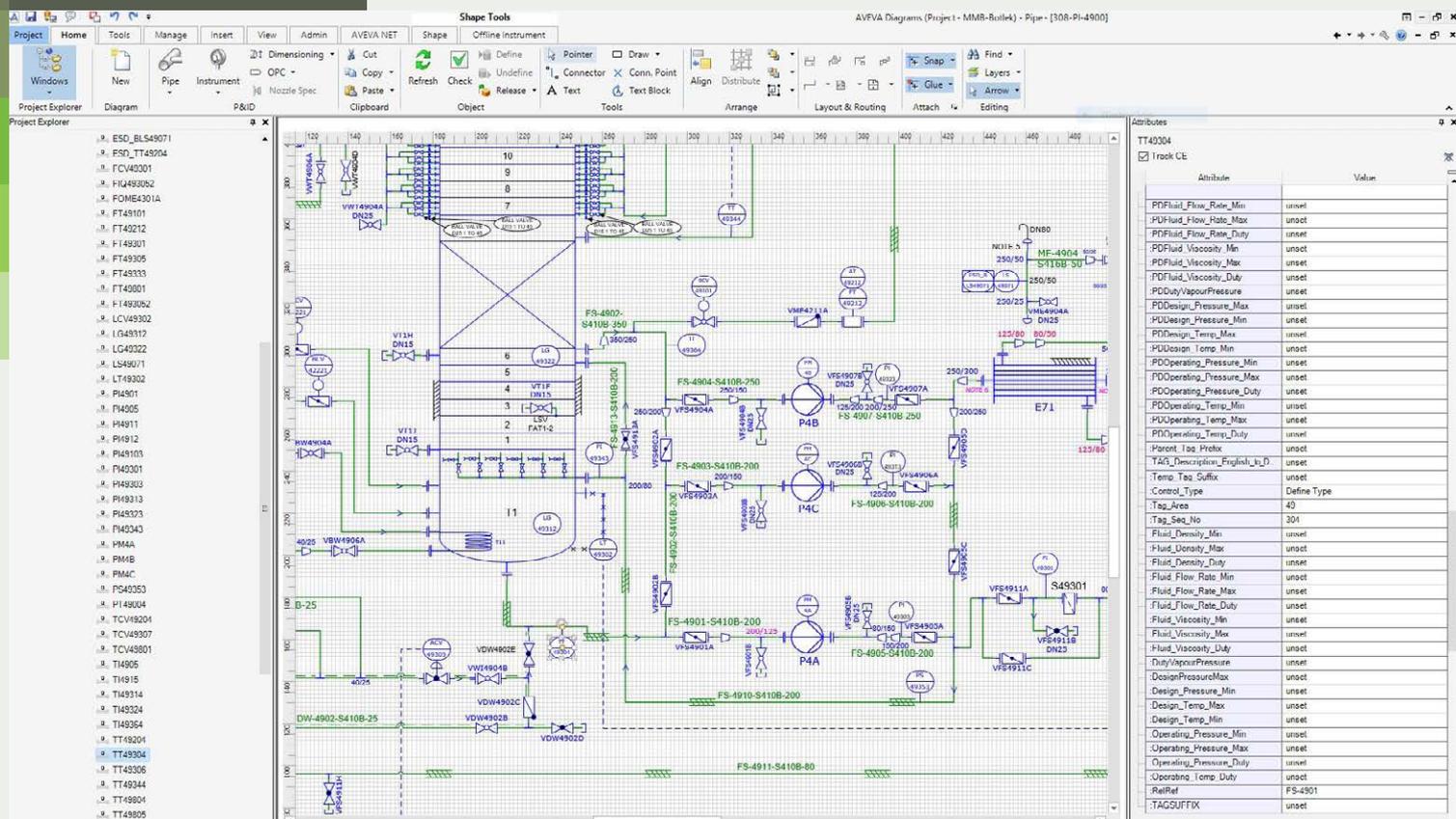
CAD/CAE SOFTWARE SKILLS

- Bentley MicroStation, main CAD software
- Bentley OpenPlant
- Bentley OpenBuildings (AECOSim)
- Autodesk Revit
- Autodesk AutoCAD Plant 3D
- AVEVA PDMS
- AVEVA E3D
- AVEVA Diagrams
- AVEVA Engineering
- SolidWorks

PLANT PROJECT DELIVERABLES

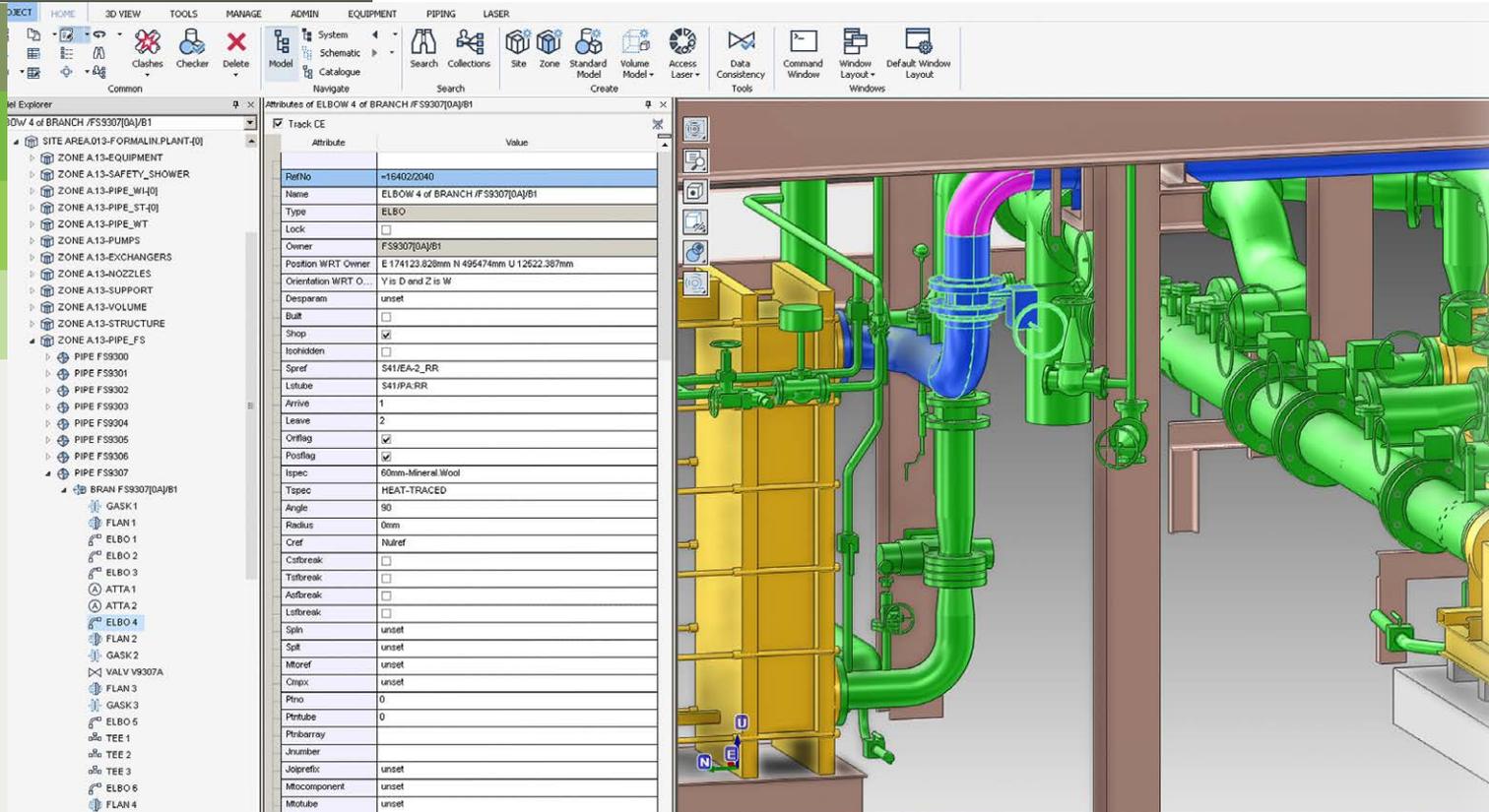
3D MODEL WITH INTELLIGENT ELEMENTS

- We work in both AVEVA PDMS and OpenPlant, although other CAE software formats are possible upon request.
- You will not need to manage this software on the client side, as we provide reports in free software such as Autodesk NavisWorks.



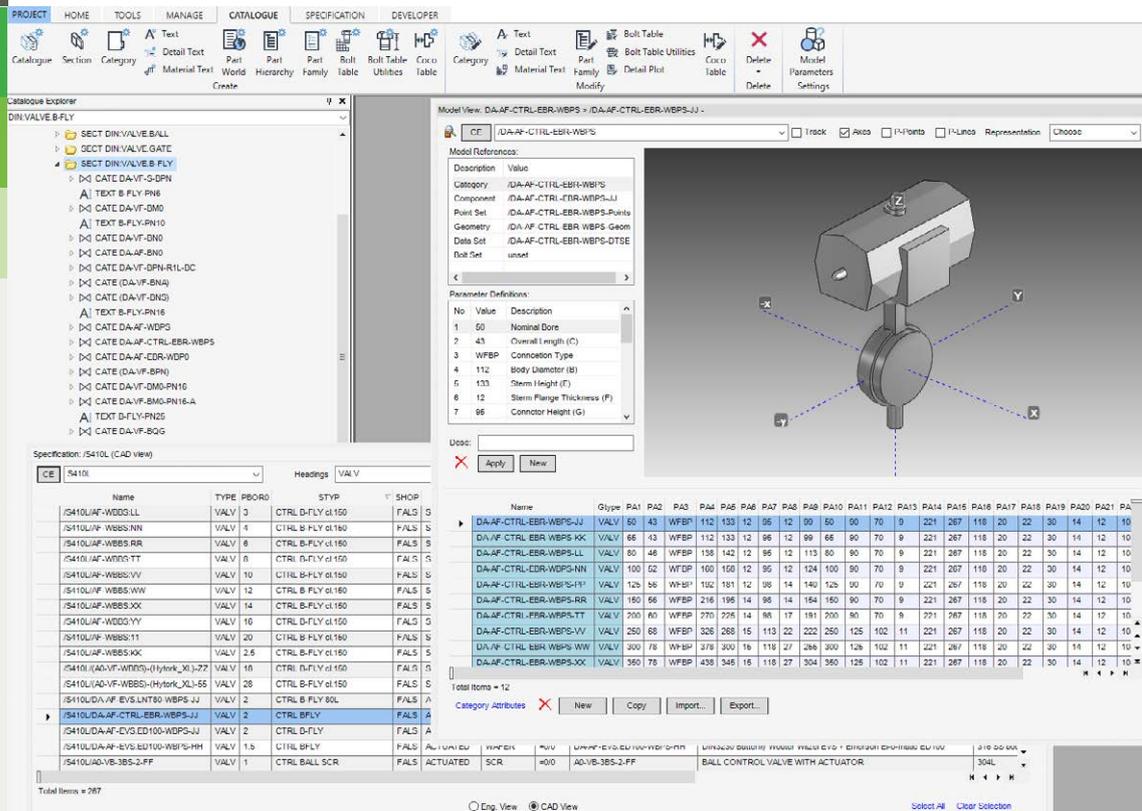
INTELLIGENT 3D MODEL

- We deliver As-built intelligent models.
- We can also create new design models based upon client instructions.



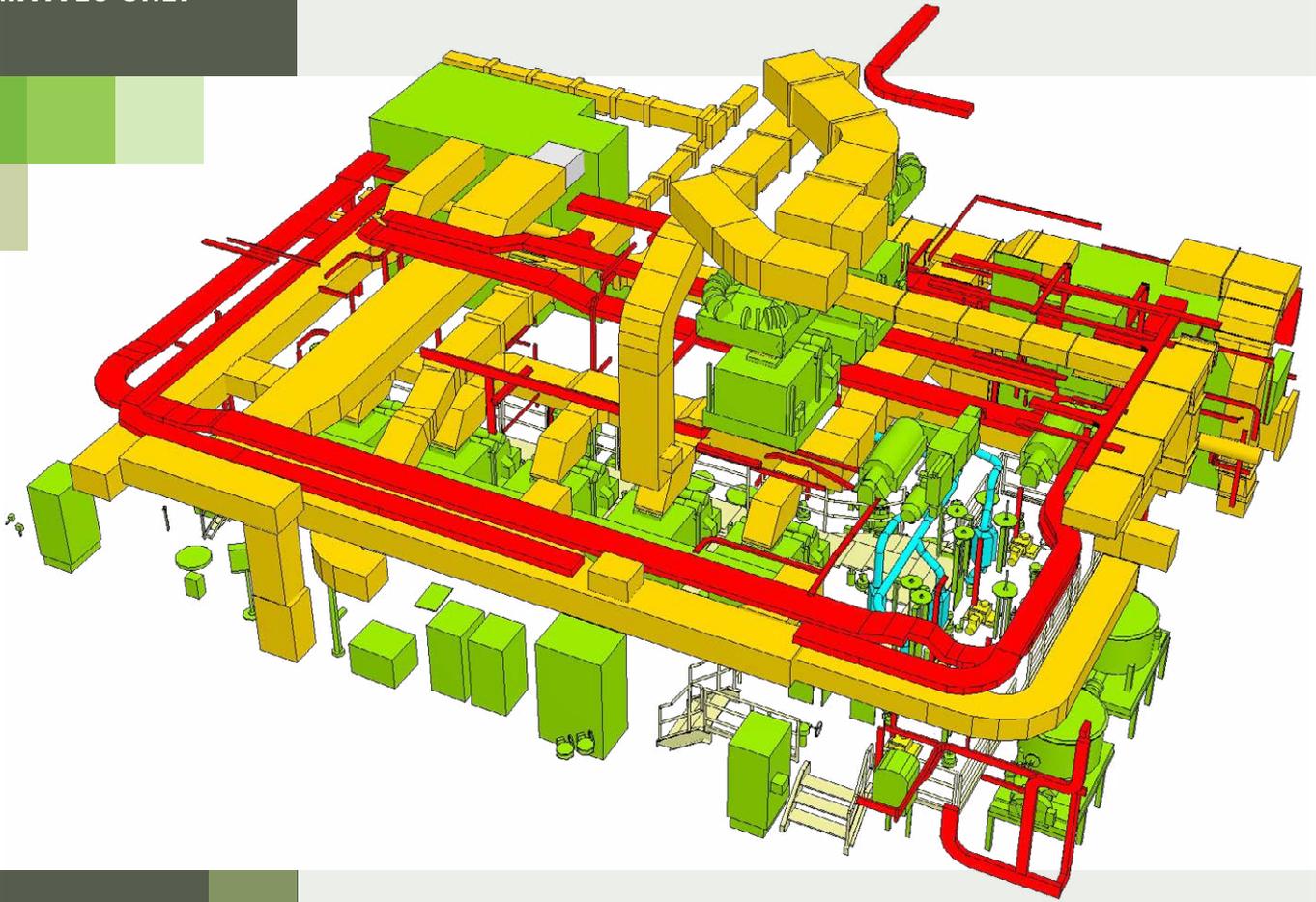
CATALOGING ELEMENTS

- We do not need to rely upon default catalogues as we can create from scratch or update an existing database.



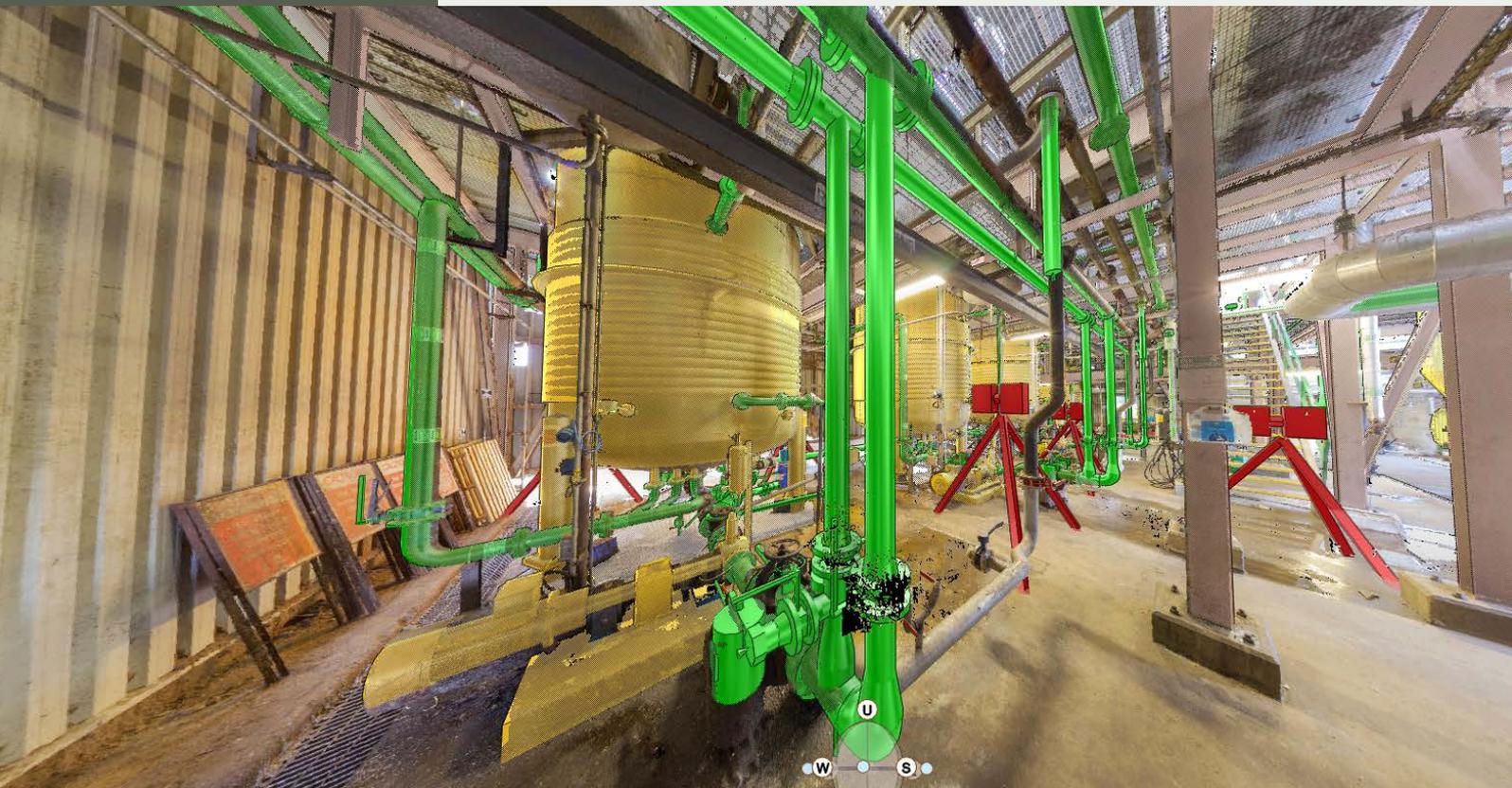
3D MODEL WITHIN CAE SOFTWARE WITH CAD PRIMITIVES ONLY

- For design purposes we can deliver a lightweight 3D model, created solely from simple solids (primitives) and to be used primarily for clash detection.



POINT CLOUD (LFM FORMAT)

- For design purposes we can deliver point clouds in any format compatible with CAE software (usually LFM). This is a cost effective solution for clients who have the resources to perform design tasks with point clouds.



PLANT PROJECTS RELATED VIDEOS:



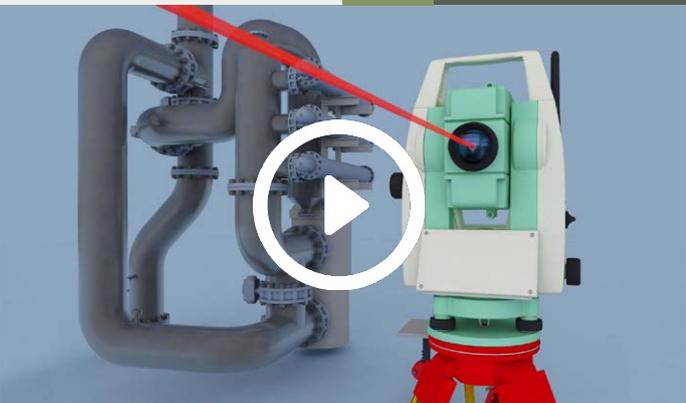
3DELING'S WORKFLOW FOR DIGITISING INDUSTRIAL BROWNFIELD SITES

At 3Deling we are regularly engaged in industrial projects where there is a need to update systems within existing installations. The process begins with laser scanning the existing site, creating as-built documentation and then working with the client through the design process and finally clash checking design against as built in a virtual environment.



3DELING - LASER SCANNING SITE WORKFLOW PROCESS

The full process of scanning and processing the sample object (here the industrial object). Works begin with field planning, cloud development, texture modelling and finishing new installations before detecting possible conflicts. Followed by generating 2D drawings that conform to ISO standards.



DIMENSIONAL CONTROL · INDUSTRIAL MEASUREMENT SERVICES

A great majority of as-built spool surveys are interpreted from point clouds. However some applications require a greater accuracy level, in this instance we offer a range of Total Station measurement services. Our Total stations are controlled remotely using ATR sensor software and dedicated stand alone prisms. This approach allows the task to be handled sufficiently by one Surveyor.

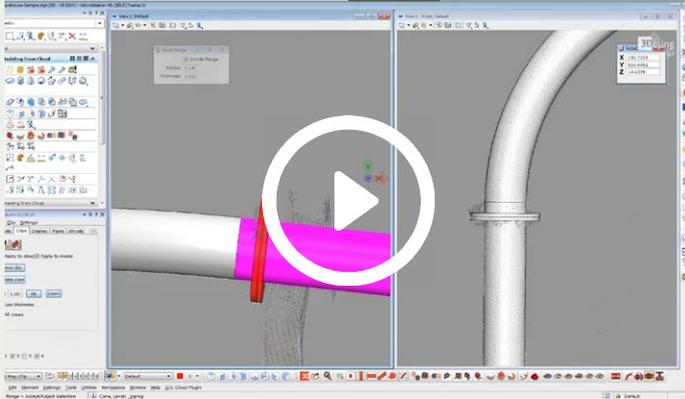
CUSTOM IT SOLUTIONS

3DL CAD – POINT CLOUD PLUGIN FOR BENTLEY MICROSTATION

- Custom point cloud format
- Pipe fitting algorithms
- Point cloud clipping algorithms
- Structure fitting algorithms

3DL VIEWER – STANDALONE POINT CLOUD VIEWER

- Custom point cloud format
- Point cloud processing algorithms
- Support for panoramic imagery
- 3D model display
- Custom features



CUSTOMIZED SOFTWARE SOLUTIONS TO SUPPORT SCAN DATA PROCESSING, 3D MODELING AND HANDLING THE POINT CLOUD BY PROFESSIONALS

All of our applications that support scan data processing, 3D modeling and point cloud data are presented using plug-ins that operate within the Microstation interface & 3DL viewer.

WEBPANO SERVICE

WEBPANO FEATURES:

- Share point cloud data via intuitive easy-to-use interface with no CAD or 3D skills required
- Virtual, photo-realistic visits to project site from anywhere, anytime
- Users can view, pan, zoom, measure and markup
- No plug-in required, free experience from any browser on any device
- Hosted on our local server infrastructure.



WEBPANO SERVICE

WEBPANO offers a free, no-installation required way to view and easily interact with their data from anywhere. Simple, point-and-click navigation, snapshots and markups lets anyone experience the scene as if they were there - no CAD or 3D skills required. Even GeoTags and Hyperlinks are as simple as a click or tap of the finger on touch screen devices. TruView Enterprise is localised in a variety of languages to accommodate global users.

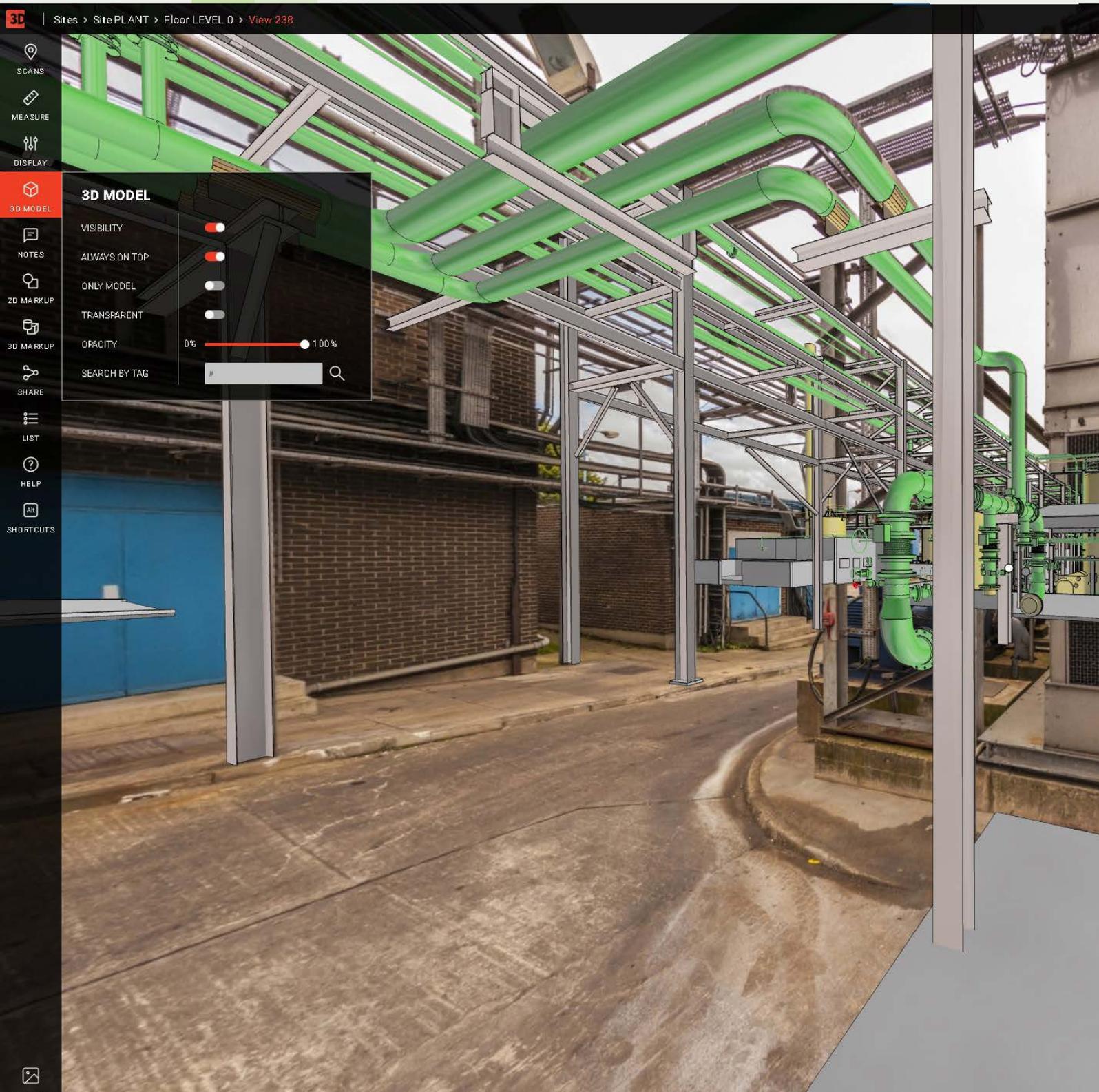
WEBPANO SERVICE

WEBPANO – CUSTOM ONLINE SERVICE FOR SHARING AND VIEWING SCAN DATA AND 3D MODELS.

- Demo plant login details:
webpano.3deling.com

login: demo-plant@3deling.com

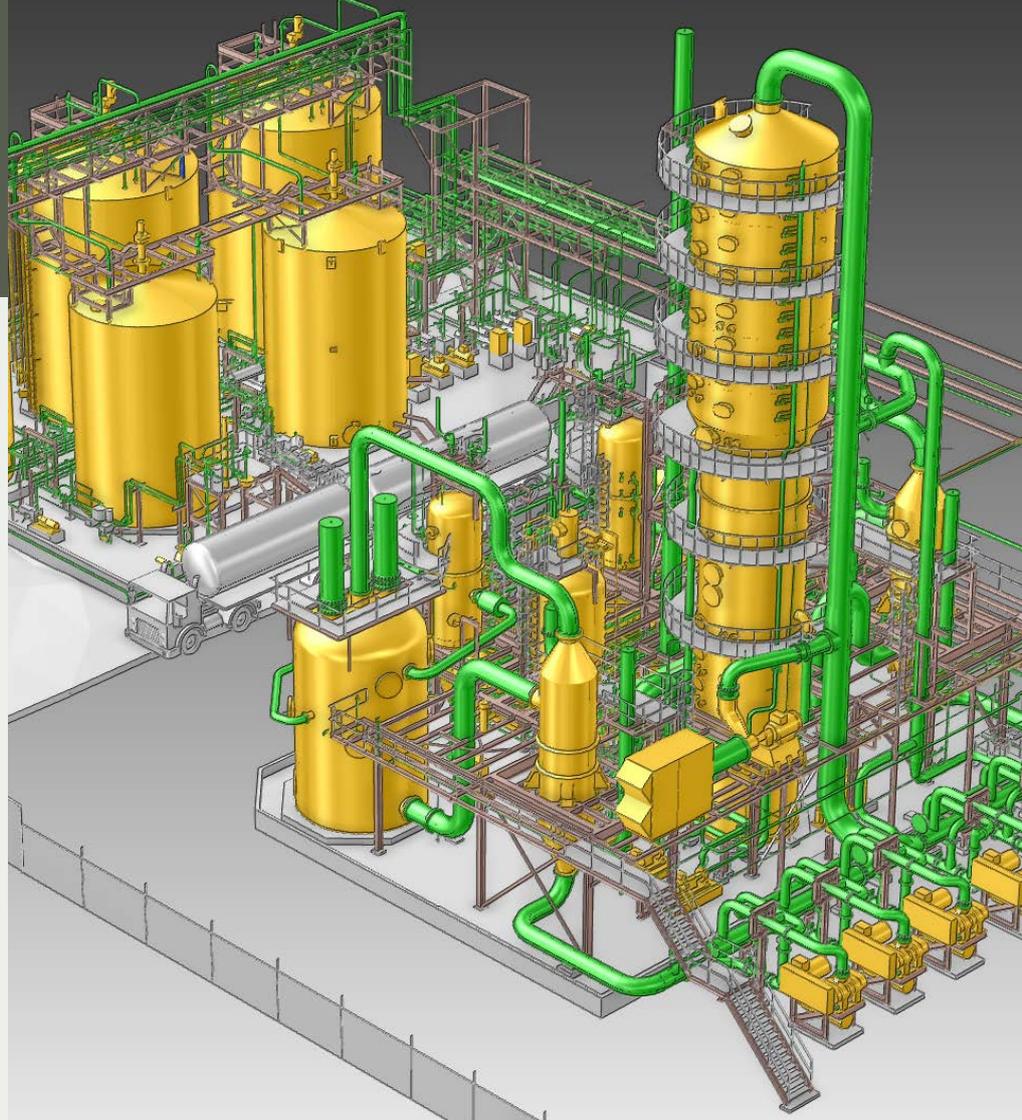
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PLANT PROJECT EXAMPLES

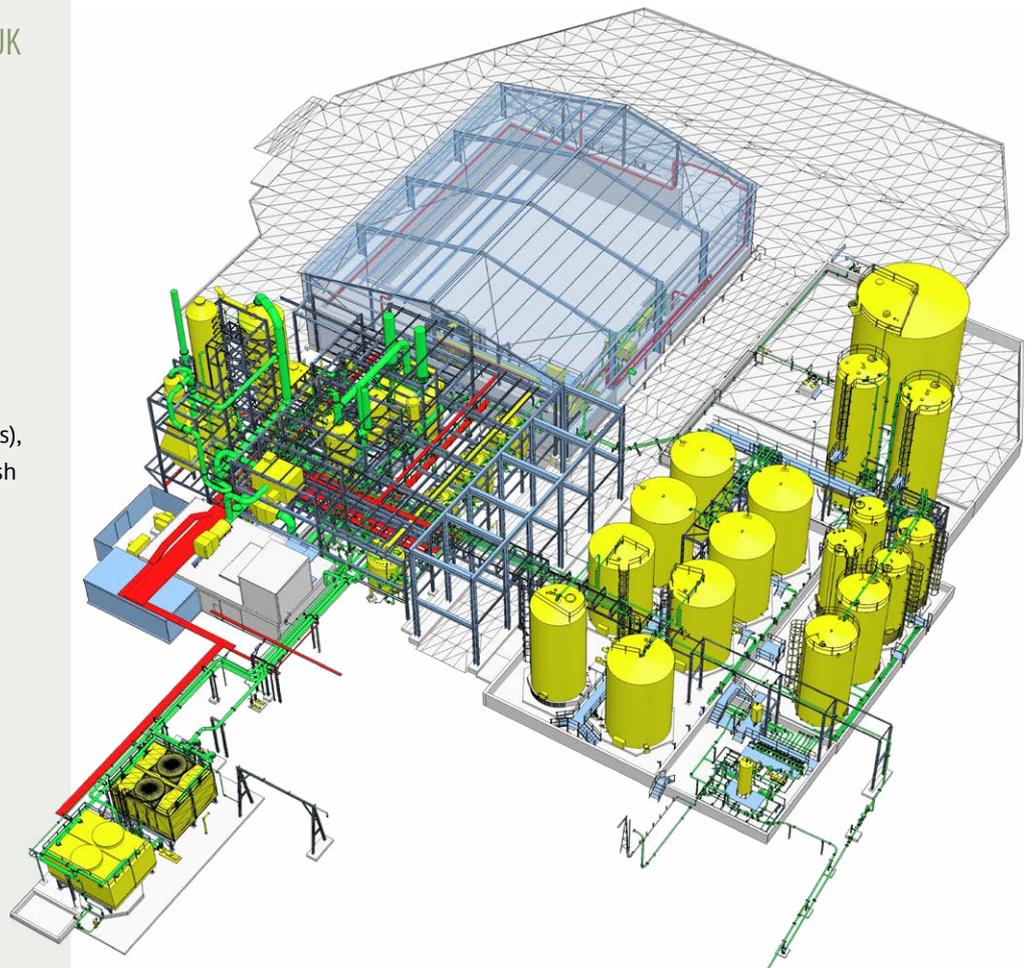
CHEMICAL PLANT - NETHERLANDS

- Service delivery since 2014
- Site area: 5000 m2
- As-built intelligent model based on scan data and provided documentation
- Support in design work and maintenance
- 3D model, Isometric drawings (as-built and construction purposes), GA drawings, P&ID, BOM lists, clash detection
- Creation of: project, databases, catalogue and specifications, UDA
- Aveva Administration, Aveva Catalogue, Aveva Everything3D, Aveva Diagrams, Aveva Engineering



CHEMICAL PLANT - SCOTLAND, UK

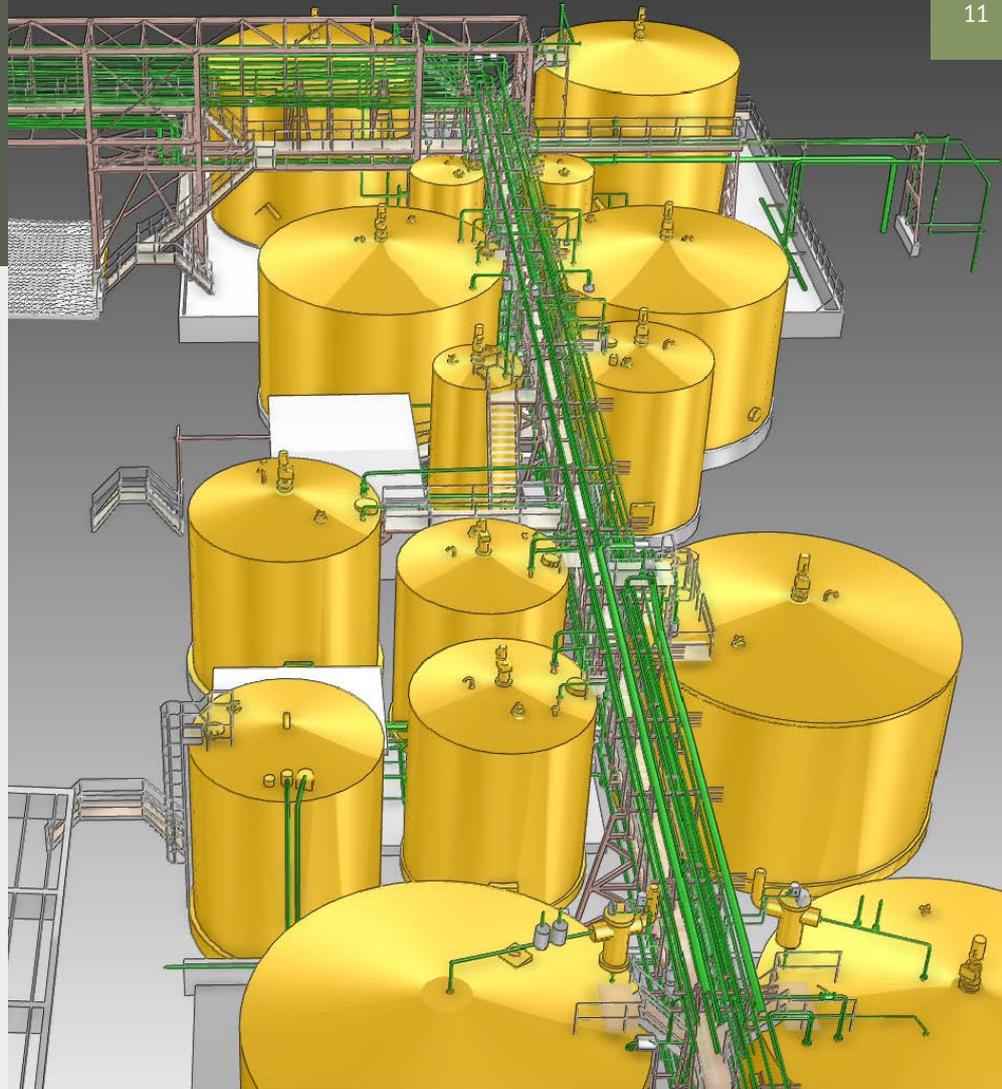
- Service delivery since 2014
- Site area: 11000 m2
- As-built intelligent model based on laser data and provided documentation
- Support in design work and maintenance
- 3D model, Isometric drawings (as-built and construction purposes), GA drawings, P&ID, BOM lists, clash detection, spatial analysis
- Creation of: project, databases, catalogue and specifications, UDA
- Aveva Administration, Aveva Catalogue, Aveva Everything3D, Aveva Diagrams



PLANT PROJECT EXAMPLES

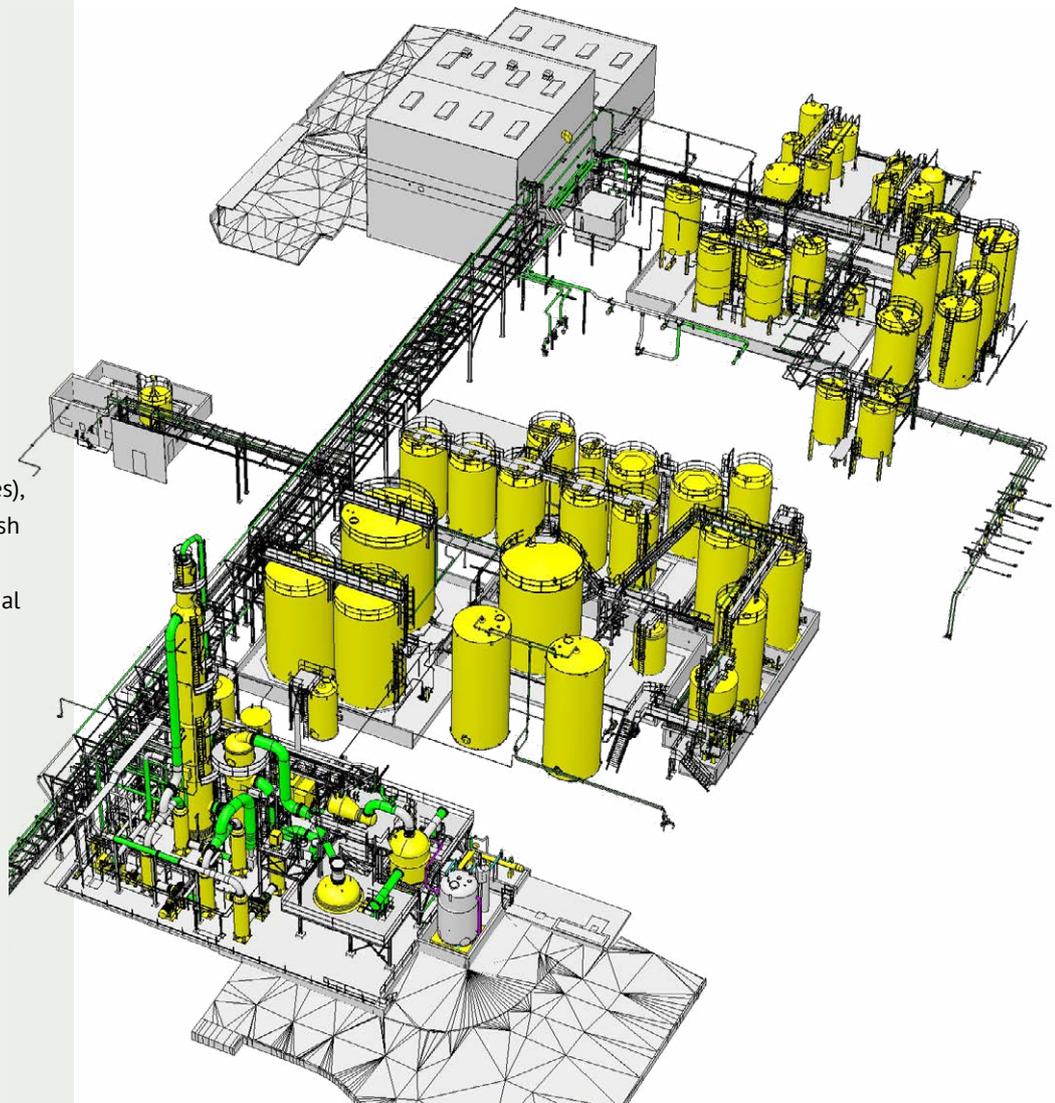
CHEMICAL PLANT - FINLAND

- Service delivery since 2013
- Site area: 120000 m²
- As-built intelligent model based on laser data and provided documentation
- Support in design work and maintenance
- 3D model, Isometric drawings (as-built and construction purposes), GA drawings, P&ID, BOM lists, clash detection, spatial analysis
- Creation of: project, databases, catalogue and specifications, UDA
- Aveva Administration, Aveva Catalogue, Aveva Everything3D, Aveva Diagrams



CHEMICAL PLANT - UK

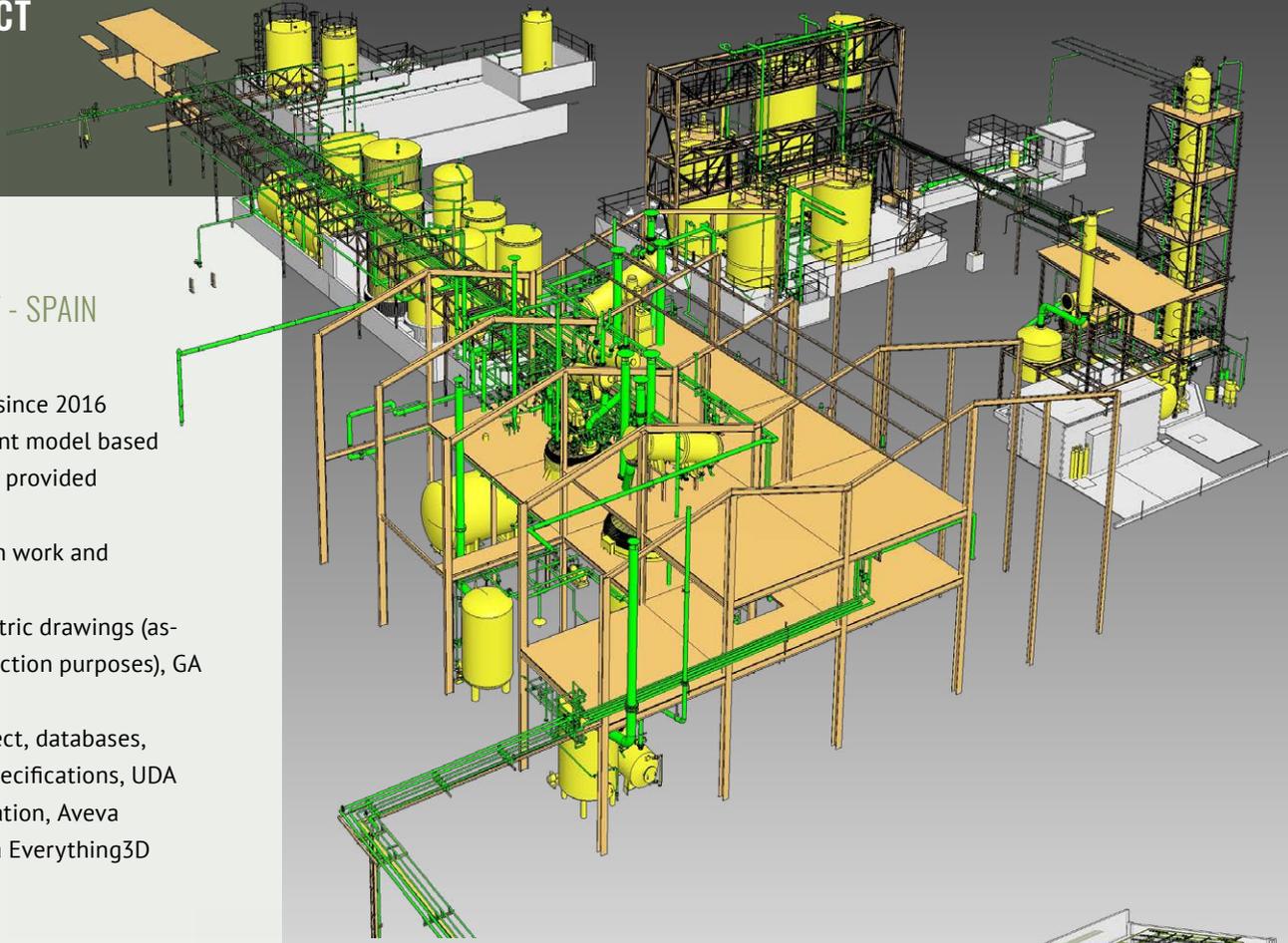
- Service delivery since 2013
- Site area: 30000 m²
- As-built intelligent model based on laser data and provided documentation
- Support in design work and maintenance
- 3D model, Isometric drawings (as-built and construction purposes), GA drawings, P&ID, BOM lists, clash detection, spatial analysis
- Modelling of Atex Zones and spatial analysis
- Creation of: project, databases, catalogue and specifications, UDA
- Aveva Administration, Aveva Catalogue, Aveva Everything3D, Aveva Diagrams



PLANT PROJECT EXAMPLES

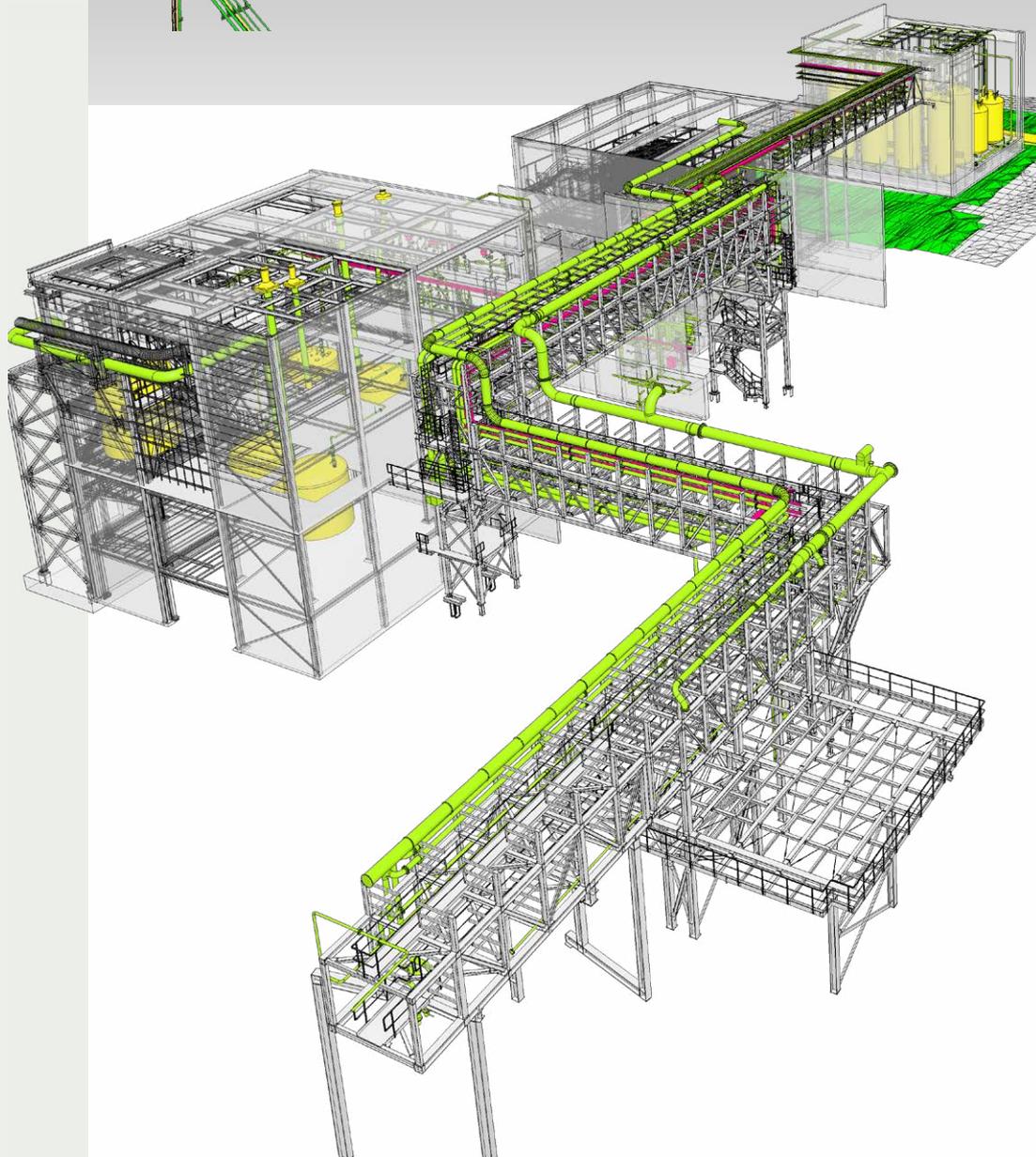
CHEMICAL PLANT - SPAIN

- Service delivery since 2016
- As-built intelligent model based on scan data and provided documentation
- Support in design work and maintenance
- 3D model, Isometric drawings (as-built and construction purposes), GA drawings
- Creation of: project, databases, catalogue and specifications, UDA
- Aveva Administration, Aveva Catalogue, Aveva Everything3D



CHEMICAL PLANT - GERMANY

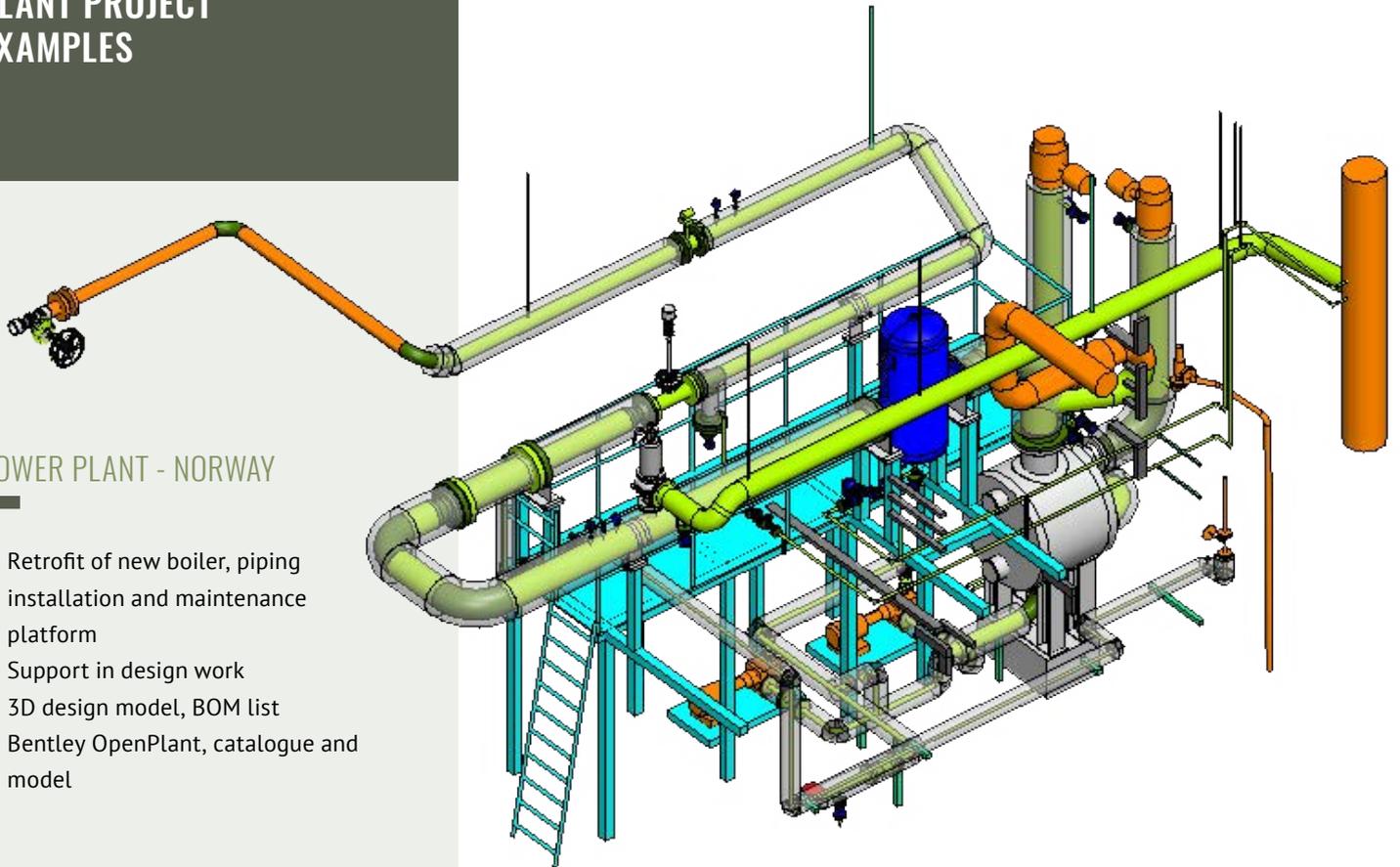
- Service delivery since 2018
- As-built intelligent model based on scan data and provided documentation
- Support in design work and maintenance
- 3D model, Isometric drawings (as-built and construction purposes)
- Creation of: project, databases, catalogue and specifications, UDA
- Aveva Administration, Aveva Catalogue, Aveva Everything3D



PLANT PROJECT EXAMPLES

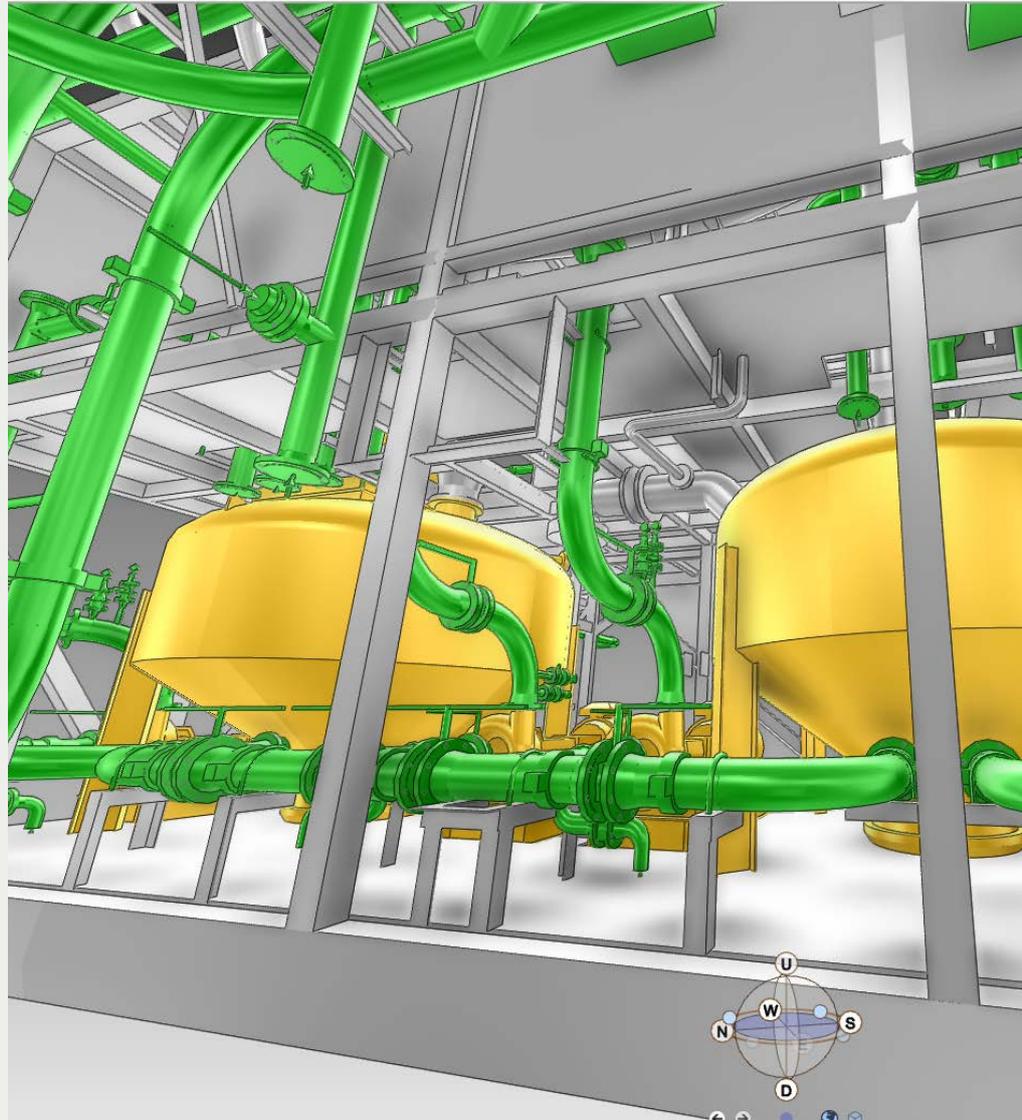
POWER PLANT - NORWAY

- Retrofit of new boiler, piping installation and maintenance platform
- Support in design work
- 3D design model, BOM list
- Bentley OpenPlant, catalogue and model



OFFSHORE OIL RIGS AT NORTHERN SEA

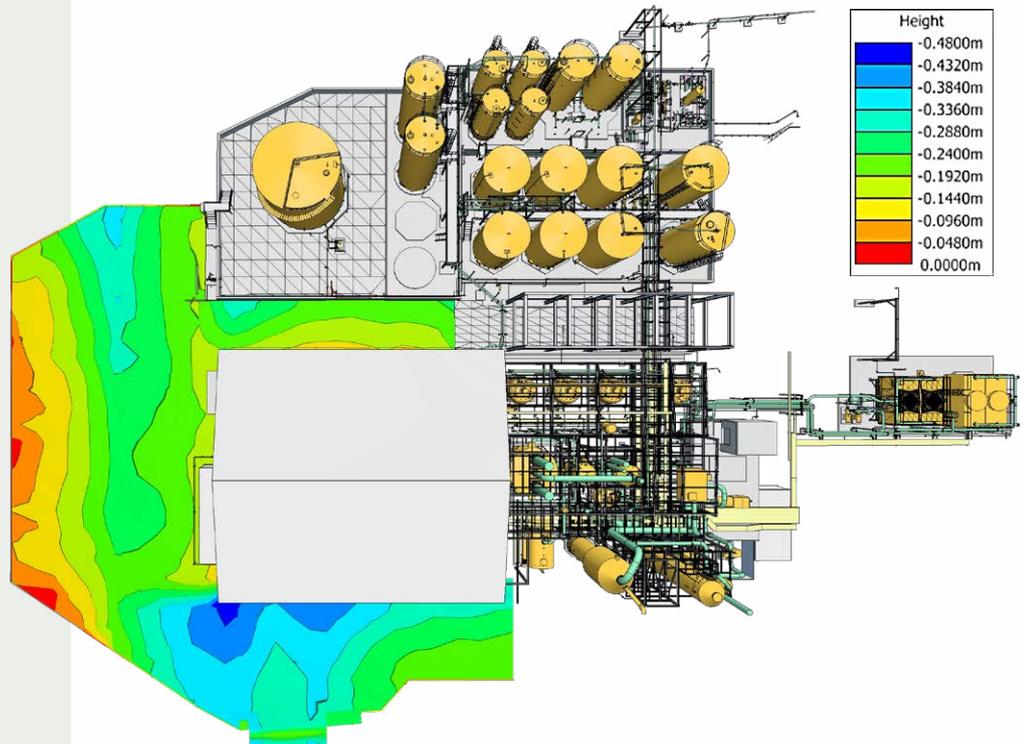
- Several projects of similar nature
- As-built intelligent model of specified part of oil rig
- Support in design work, clash detection
- Design model
- Isometric drawings for design purposes, BOM lists
- Creation of project, databases, catalogue and specifications
- Aveva Administration, Aveva Catalogue, Aveva Everything3D



PLANT PROJECT EXAMPLES

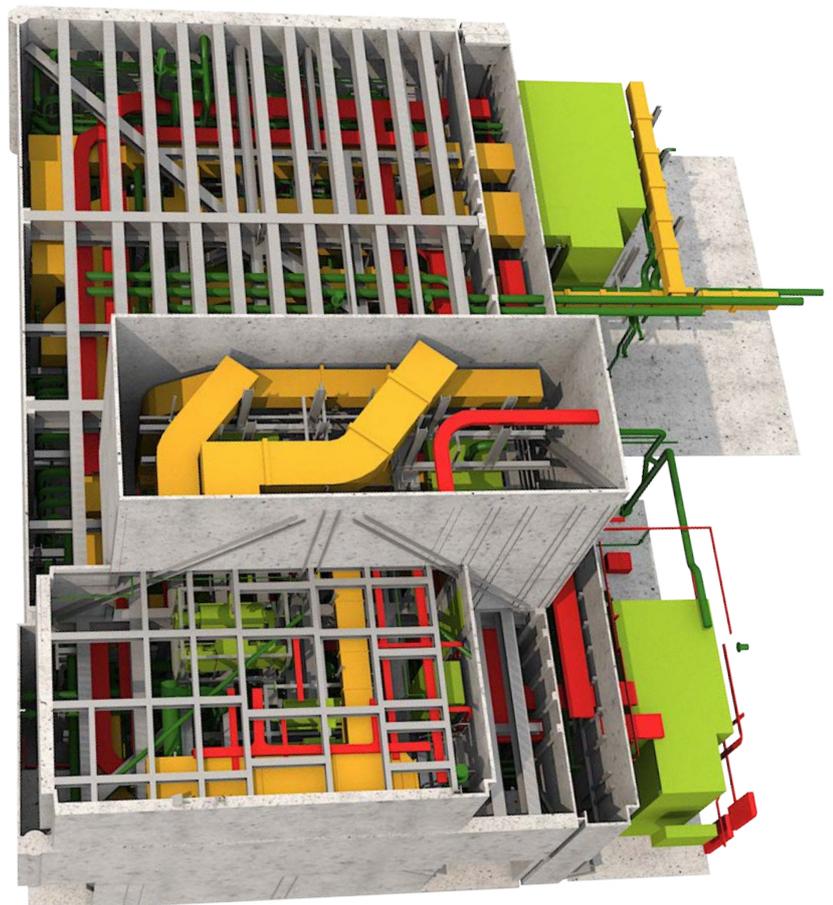
CUSTOM PURPOSE - SPILLAGE SPATIAL ANALYSIS

The objective of this analysis was to determine the spillage range of toxic fluids should an accident occur during transportation.



OIL RIGS MULTIPLE LOCATIONS INCLUDING MIDDLE EAST

- Model for design purposes
- Several projects
- “Dumb” (geometry only) model based on scan data
- Creation of projects and databases
- Aveva Administration, Aveva Everything3D



PLANT PROJECT EXAMPLES

CHEMICAL PLANT IN GERMANY

- Service provided since 2018
- As-built intelligent models based on scan data and provided documentation
- Aveva Global, Aveva Administration, Aveva PDMS, Aveva Everything3D

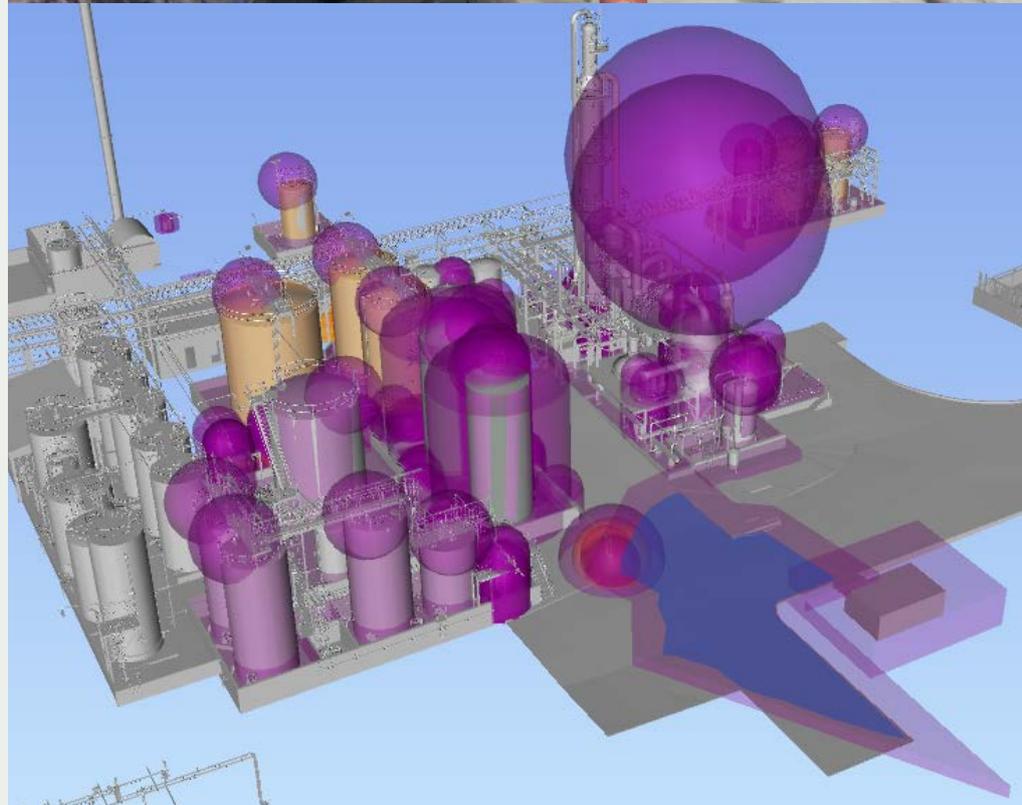
HYDRO POWER PLANTS

- Model for design purposes
- Several projects
- “Dumb” (geometry only) models based on scan data
- Creation of projects and databases
- Aveva Administration, Aveva Everything3D

DEFINING ATEX-ZONES

- Client's objective was to analyze and define possible areas on site at risk of possible explosions.

We have generated special information based on the type of the medium transported in the pipes with possible leakage spots.



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