

### Customer Profile

Bateman Engineering N.V. (Bateman) is a technologically driven engineering-project house serving the Power, energy, mining, minerals and metals processing, ferroalloys, mineral salts, environmental protection, bulk-materials handling water and effluent treatment, plants.

Agip Kazakhstan North Caspian Operating Company N.V. is the single Operator of the North Caspian Sea Production Sharing Agreement (PSA) for the development of 11 blocks in the Kazakhstan sector of the Caspian Sea where the giant field of Kashagan has been discovered.

### Bateman is dealing with Power Generation & Utility west of AGIP KOP

#### Contact Details

Contact Name/Tel./ Email will be available on request.

#### Project Statement

Rolta has provided resources in the area like plot plan preparation, general arrangement drawings, extracting isometric drawings, 2D & 3D equipment modeling, civil structures, pipe racks & equipment foundation, routing of the pipe lines, designing & modeling of supports & also isometrics by using Intergraph PDS, and Pelican Forge.

#### Rolta Solution

Rolta initially deputed 10 engineers onsite of various disciplines. Currently, there are 7 engineers at site and so far completed 17,000 man hours of services to Bateman.

In the power generation project, the Rolta team so far completed modeling of:

- Equipments 35 nos.
- Pipe line 800 Nos.
- Isometrics 1250 Nos.

& in Utilities west project

- Equipments 20 Nos
- Pipe lines 500 Nos.
- Isometrics 750 Nos.

#### Solution Architecture

Bateman provided the hard copies of drawings as an input.

Customized 2D Legends included symbols for equipment, and piping components used in plants.

3D modelling of the equipments, piping, civil structure were done. Routing of the piping were done as per the drawings provided by them. Piping isometric drawings were also extracted.

Piping supports were designed and modelled by using Pelican Support

3D shapes of equipment as required with. Equipment included Tanks, Vessels, Pumps, Fans, Heat Exchangers, Heaters, Coolers, Condensers, Air Compressors & Cooling Towers, which are also used in the industries. Equipment specifically required for power plant like, Deaerator, Generator, Furnace boiler were customized.

#### Benefits to Customer

This helped the customer to use the library for the proposed and future plants. These drawings can be used as reference at the time of maintenance & revamping of the plant.

