

# Annex B1-1

## Report on the construction of the pilot plant



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Linda Werner (PM/Technical Manager)	St1 Refinery AB / Technical Department	

### Report on the construction of the pilot plant

The construction of the pilot plant was done mainly by the refinery's Project Department and led by Greger Nilsson, an experienced Construction Engineer employed by St1 Refinery.

For the design part and drawings produced, two subcontractor companies were hired. Contractor firm *Rördesign* was responsible for the piping construction and Contractor firm *VBK* did the steel drawings. In total there were 3 external consultants in the project for drawing the pilot plant tie-ins to the refinery.

The software used for the drawings was a CAD program.

Approximately 50 so called plot plans, schemes and isometrics were produced to enable the pilot plant to be built.

All drawings were according to the refinery's standard and followed the procedures of Design Engineering Practice (DEP) and the Swedish legislation for pressurized equipment (PED). The Euro codes were also followed, all in line with construction and design practice within a refinery.

The refinery Inspection department did the quality checks of the drawings and granted the acceptance to pass the drawings on to the next project phase e.g. installation.

Regarding construction for civil engineering the consultant company VBK was used a contractor. Responsible from St1 Refinery was Carl-Sixten Ullgren who managed the contracts and the external resources along the whole project for the civil engineering actions. VBK had 2 persons working on site with the construction of the tie-in points into the refinery and one person working from their base office in Gothenburg with strength calculations.

The construction went well. The only challenge was to get the information, from the supplier of the ethanol plant, in time to enable the construction of the tie-in points to the refinery.

