



Our other major activities involve:

- implementation of oil industry projects
- implementation of pharmaceutical industry projects
- erection of remote heating systems
- maintenance and overhauling of industrial plants
- prefabrication and site erection of piping systems
- manufacture of industrial equipment, meeting the requirements of chemical, petrochemical and pharmaceutical sector



Implementation of a bio- and household waste fuelled power plant project including site erection of mechanical equipment and piping system

Wien-Pfaffenau



Project data:



Customer:
Kraftanlagen München

Designer:
Siemens AG

Time of implementation:

Prefabrication:
from October 2006 until March 2007

Site erection:
from January 2007 until October 2007

**Halbo's scope of responsibility:**

With both main units of the waste incinerators (Bio-waste unit – customer: AXIMA WIEN and household waste incineration unit – customer: Kraftanlagen München) Halbo's responsibilities involved in the prefabrication and site erection of piping, also the installation of mechanical equipment during the period of 12 months, coordinating the work of

Austrian and German sub-contractors. Maintaining close collaboration with project owners we have wide ranging and competent experience as contractor in fields. It requires coordination of mechanical and other specialty work, including the manufacturing and installation of various units.

**Description of the project:**

The erection of the piping system at the new power plant required 9 months. We faced extraordinary challenges with the placing and fixing of a DN 1400 flue-gas duct onto the ceiling at an elevation of 40m – the constructors failed to leave an external opening normally used for placing equipment inside of buildings, so the use of cranes as normal had been impossible. We installed the combined length of 5000m, mainly carbon steel piping with DN 150 as average diameter – the largest diameter had been DN 1400. At hot spots, pipes of P11 had also been installed. The percentage of errors with 6400 welded connections had proved to be merely 0.34.

During the peak periods of the erection and commissioning of the project 45 personnel from Halbo had been present at the site, working a total of 45 000 man hours without any accident.

Performance data:

Project management:

We have successfully adapted ourselves to the project management system of the owner as well as to the material handling and WSD documentation systems of SIEMENS AG and LINDE AG.

- Progress: 687 isometric sections
- Pressure tests: 35 pressurized circuits
- Quality: welding of 6400 welds with inspection (NDT) of 3820 welds respectively.

Performed work:

- Prefabrication and site erection of pipe sections; installation of equipment
- Material handling (integrated with that of the owner)
- Prefabrication and site erection of 300 t pipes
- Erection of 79 t pipe-support and steel constructions
- Pressure testing
- Documentation
- Quality assurance and inspections
- Labour safety:
 - observation of SCC** provisions
 - stipulations of the relevant contract

