

Abetong AB - Division Civil Engineering

Project: Agroetanol, Norrköping

Type of facility: Ethanole and bulk nutrients

Concept used: Abetong TankTM

Background

- **Agroetanol is a company producing ethanol and animal feeding granulate from wheat**
- **The production facility is located in Norrköping and the new plant will produce 150 000 m³ ethanol and 130 000 ton granulate per year**



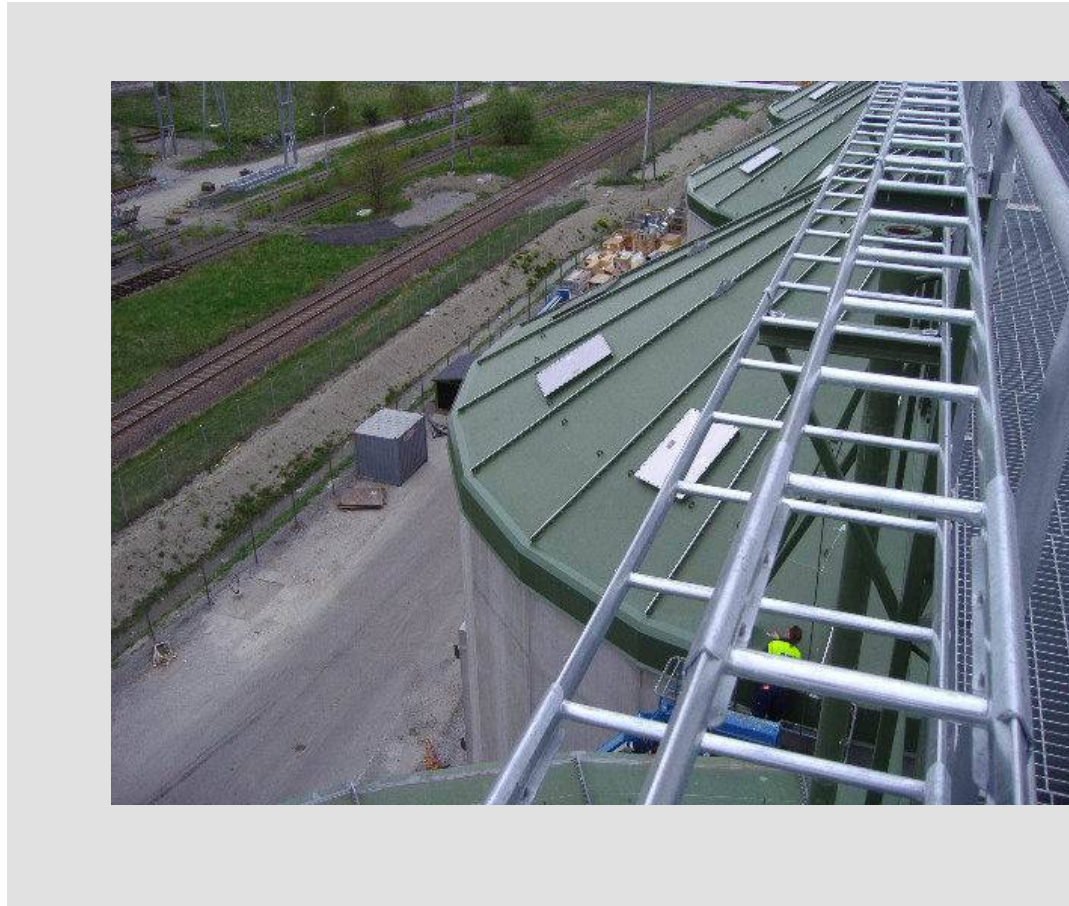
Abetong's part of the project

- Abetong's client was the Finish company BMH Wood Technology Oy
- BMH was contracted for a turn-key delivery of six silos including roofs and unloading system
- Abetong's part consisted of design, production and installation of the walls of the silos including one access opening per silo



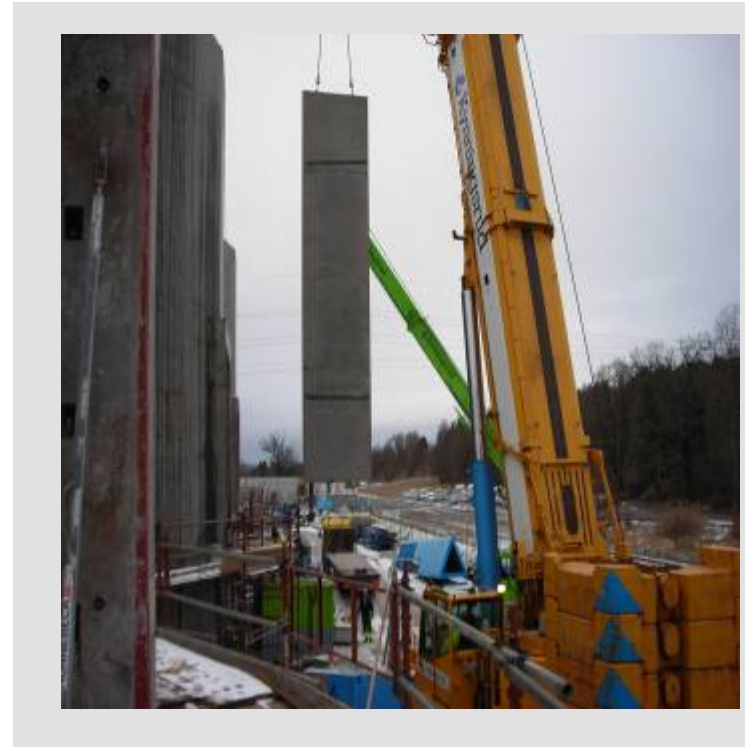
Technical specification-silos

- **Number of silos: 6 pcs**
- **Volume/silo:**
 - Gross, approx. 3 500 m³
 - Net, approx. 3 250 m³
- **Height:**
 - Cylinder part: 11 m
 - Roof: 5,5 m
 - Total height: 16,5 m



Technical specification- panels

- **Number of panels:**
 - 24 pcs/silo = 144 pcs
- **Width:**
 - 2,48 m
- **Height:**
 - 11 130 mm
- **Access opening:**
 - 4 x 4 m. Two pillars and one beam
- **Features:**
 - The structure is pre-stressed vertically and horizontal post-tensioned



Installation

■ Start:

- Preparation works as surveys was performed in December 2007
- Erection started in the second week of January 2008

■ Coordinations:

- The erection work was co-ordinated with BMS:s roof installation
- Abetong erected two silos parallelly
- BMH could start lifting roofs after three weeks

■ Finalizing:

- BMH installed the last roofs in Week 810, after Abetong had finalized the remaining work

