

## Efficiency and easy handling made the difference

Chemical Energy System sold to special steel producer Ovako in Sweden and Finland

Ovako is a European leader in long special steel products operating different plants and facilities in Northern Europe. In 2009, BSE sold one Virtual Lance Burner (VLB) for injection of oxygen and oil to Ovako. Beside minimising the splashing effect during lancing phase and saving of total electrical energy consumption the VLB convinced Ovako also in terms of easy handling. So it was agreed to equip two furnaces at Hofors plant (Sweden) and Imatra plant (Finland) with the BSE Chemical Energy System.

### PROJECT AT HOFORS PLANT

The plant in Hofors operates a 100 t AC OBT furnace equipped with one door manipulator and one oil burner. Cold spots in the OBT furnace and heavy scrap charged created a lot of skulls and long melting times. In order to homogenise scrap melting and increase furnace productivity, Ovako was looking for efficient side wall oxygen tools combined with carbon injection for slag foaming.

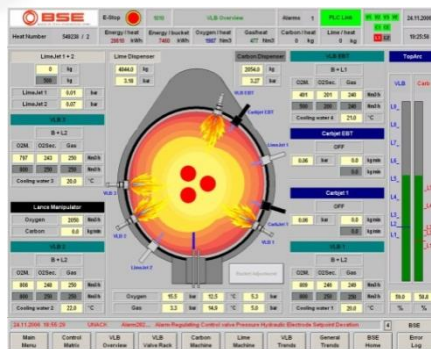
### BSE SCOPE OF SUPPLY

- ⊙ 4 Oil VLB with copper boxes
- ⊙ 4 VLB / boxes for spare shell
- ⊙ Main oxygen valve rack
- ⊙ 2 CarbJets
- ⊙ Carbon injection machine
- ⊙ Automation / control system

### RESULTS / BENEFITS

In November 2011, the system was successfully installed and commissioned with the following outstanding results compared to the situation before:

Delta specific consumption	Performance test
Electricity	<b>-71 kWh/t</b>
Power-on time	<b>-7,39 min</b>



### PROJECT AT IMATRA PLANT

The plant in Imatra is operating a 75 t AC furnace with siphon tapping powered by a 50 MVA transformer.

To allow more time for the side wall lime injection, the scrap melting shall be assisted by side wall VLB oxygen/gas injectors and supported by carbon injection for the foaming slag generation. To save the charging time of lime and to improve its metallurgical efficiency, the lime shall be injected as early as possible from the side wall with two lime injectors (LimeJet).

### BSE SCOPE OF SUPPLY

- ⊙ 3 Gas VLB with copper boxes
- ⊙ Oxygen and gas valve rack
- ⊙ 1 CarbJet
- ⊙ 2 LimeJets
- ⊙ Lime and carbon injection machines
- ⊙ Automation / control system

### RESULTS / BENEFITS

Installation and commissioning of the complete Chemical Energy System is scheduled for the first quarter 2012.

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