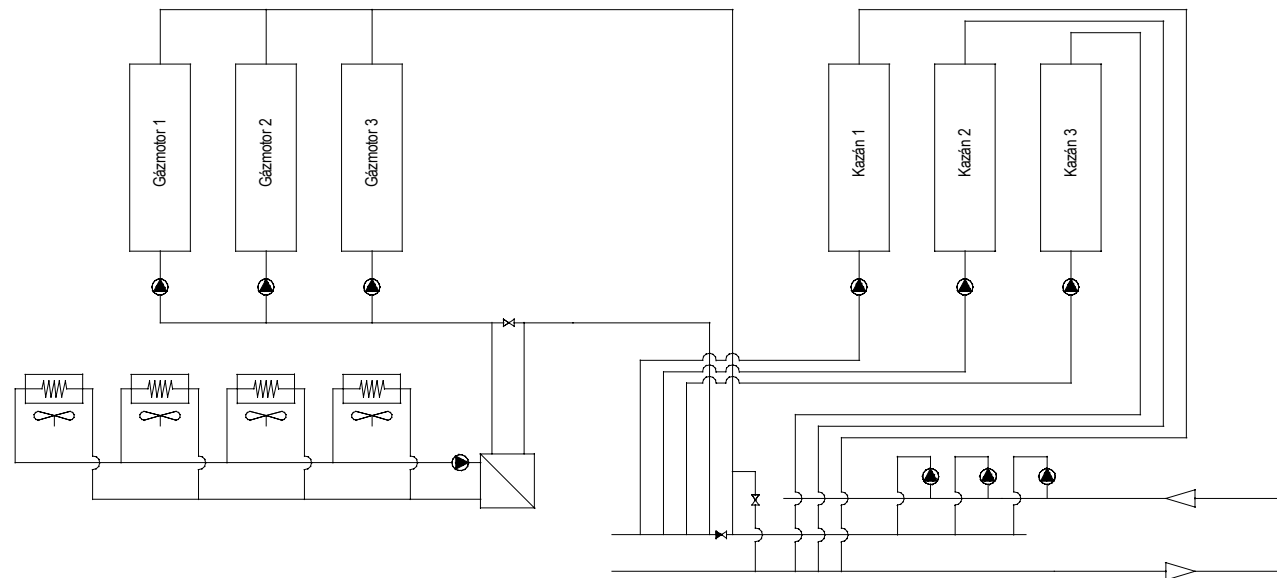


**Customer:** Kazincbarcika  
**Contractor:** Sinergy Ltd.  
**Income:** HUF 2500 M  
**Deadline:** 15th of October 2002.  
**The length of construction:** 14 month

**Main diagram:**



**Description:**

The heating plant dispose of 58,2 MW thermal output due to its 3 pieces of 3,4 MW thermal power gas engines, and 3 pieces of 16 MW thermal power boiler. It dispose of 9,6 MW electrical power due to the 3,2 MW gas engines. The utilization of the produced heat is done by heating of district heating water. Connection of the gas engines can be linear with the boilers, or can be independent from them. The continuous electrical power generation are assured by the force coolers equipped with noise absorbing wall in the operation without heat-removal. The gas engine rooms are separated and noise insulated, which dispose of its own operating an emergency ventilation system. The exhaust gas system of the gas engines has rupture discs, for the protection against overpressure. The heating plant has equipment for the district water and boiler feed make up, which were mounted in the boiler room.

The connection of the main equipments is shown above.

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 2002\_Kbarcika\_2003\_04\_04\_v003



## Project Information

### Kazincbarcika Heating plant



**The task:**

The construction of connected heat-electricity producing heating power plant, to supply with thermal energy the heating system of Kazincbarcika.

**The content:**

The full range of designing, architectural, mechanical, electrical constructing, commissioning of the heating plant.



**The main parameters of the heating plant:**

Electrical output: 9,6 MW  
 Thermal output: 58,2 MW  
 Heating water mass flow: 787t/h

**Main equipments:**

**Gas engine:** 3 pcs  
 Supplier: Wartsila  
 Type: 18VW220SG  
 Electrical power: 3,2 MW  
 Thermal output: 3,4 MW  
 Electrical efficiency: 39,7 %  
 Thermal efficiency: 42,2 %

**Boiler:** 3 pcs  
 Supplier: Alstom  
 Type: Megatherm HF16/16  
 Thermal output: 16 MW  
 Thermal efficiency: 94,4 %

**Water treatment:**  
 Supplier: CWG  
 Capacity: 12 m3/h

**DISTRICT WATER SYSTEM**

Hot water system water capacity: 1600 m<sup>3</sup>  
 District heating water mass flow: 787 t/h  
 Number of circulating pumps: 3 pcs  
 Capacity of the circ. pumps: 400 m<sup>3</sup>/h

**DISTRICT WATER PREPARATION**

Number of equipment: 1 pcs  
 Max. capacity: 12 m<sup>3</sup>/h

**Electrical system (LV and MV):**

Supplier: Siemens



**FORCE COOLER**

Number of coolers: 4 pcs  
 Thermal output: 6.000 kW

