



A Yokogawa Commitment to Industry

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## SUCCESS STORY

# Heat Supply Plant in Hakata Shimo-Kawabata Area NISHI NIPPON ENVIRONMENTAL ENERGY CO.,INC

**Location:** Hakata, Japan

**Order Date:** March 2000

**Completion:** April 2000

**Industry:** Power

Nishi Nippon Environment Energy Co., Inc. was founded in 1990 with the concept of a full, safe and comfortable urban life by harmonizing the global environment with energy-savings. Also, as a total energy industry corporation, which is promoting the efficient use of heat energy for the region, it is developing a broad business on the theme of civic improvement in the 21st century by preparing a stable city infrastructure.

### **Background of Introducing CENTUM CS1000**

Regional heat-energy supply plant produces and supplies heat-energy that is requested from each building in the region. Compared to individual heat-energy facilities, this is more efficient and makes it possible to unify operation management allowing both energy-savings and labor-savings.

Most of the facilities are heat-pumps, turbo refrigerators, absorbing refrigerators, boilers and ice storage heat tanks, and it supplies heat-energy to 31 buildings such as hotels and theaters. Since these facilities respond to sudden load changes and 24-hour continuous operation, a stable energy supply and continuous operation is mandatory. Therefore, a CENTUM CS1000 control solution, which has superior reliability and excellent control capability, was adopted.

### **Benefit from Introducing CENTUM CS1000**

Efficient control operations with 1 second cycle scans and a multi-graphic simultaneous display with full trend functions allowed the company to reduce the over-all power demand and to supply a stable supply of energy that quickly adjusts to load changes was seen after the CENTUM CS1000 was installed.

- Summary of Supply facilities system

System scale : 3360RT (ton of refrigeration)

Boiler : 6000Kg x 2

Supply : 24-hour

Consumers : 31 buildings such as hotels, theaters, museums, and shops

## From customer

Nishi Nippon Environment Energy Co., Inc. comments that with support from Yokogawa Electric Co. and Shinkawa Electric Co., Ltd. (Agent of Yokogawa Electric Co.), network engineering with on-site instruments, total coordination of remote operations and the ability to deal with sudden load changes was successfully completed. It provides for a 24-hour supply of energy and also minimizes maintenance costs.

Mr. Okumura, plant operator, said, "Operability by mouse is very comfortable. Also, it is easy to use CENTUM CS1000 because of powerful graphics, one sec. trend updates, one sec. display updates and multi window displays. Multi window displays make it easy to quickly monitor the response from the operation."

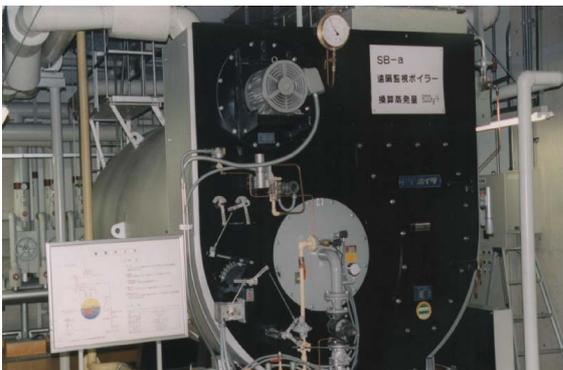
Since customer demand changes by the minute, the demands on energy providers are severe. However, the CENTUM CS1000 made it possible for Nishi Nippon Environmental Energy Co. Inc. to supply a stable supply of energy by using a limited number of operators."



Control room



Refrigeration facility



Boiler



Refrigeration unit

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**System:** CENTUM CS 1000  
**Total I/O:** 2,500  
**System Configuration:** 3x HIS, 9x PFCD, 2x PC for management (collecting data and management)