azbil

ENEOPT™utility

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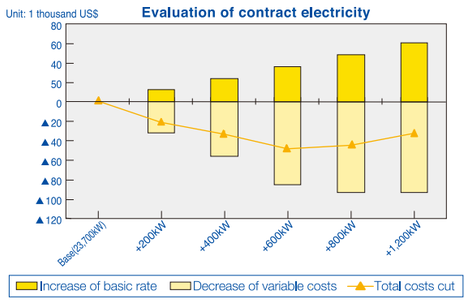
Utility Optimization System

Contributes significantly to reduction of CO_2 and energy costs by achieving efficient operation of utility facilities.

Other Utility Optimization System applications

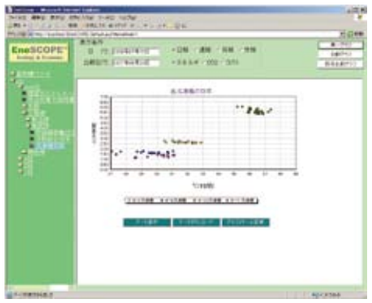
» Use as an offline tool

- Estimate the economic effects of new investment
- Reevaluate electricity or gas contract



» Use with an energy management and analysis system

- Updates of equipment characteristics and predictive maintenance
- Energy management



Implementation procedure

		Customer	Azbil Corporation
Step 1	Benefits estimate	Preparation for our plant visit Data and explanation of current operation	Estimate of magnitude of energy savings
		Evaluation	
Step 2	Feasibility study (FS)	Various data on operation and characteristics data for current equipment	Energy savings estimate by offline simulator
		Evaluation	
Step 3	System installation	Confirmation of detailed system specifications	System configuration and testing
		Delivery	
Step 4	Operational support and maintenance	In operation	Maintenance and enhancement

Please, read 'Terms and Conditions' from following URL before the order and use.

http://www.azbil.com/products/bi/order.html

Azbil Corporation
Advanced Automation Company

Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

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URL: http://www.azbil.com/

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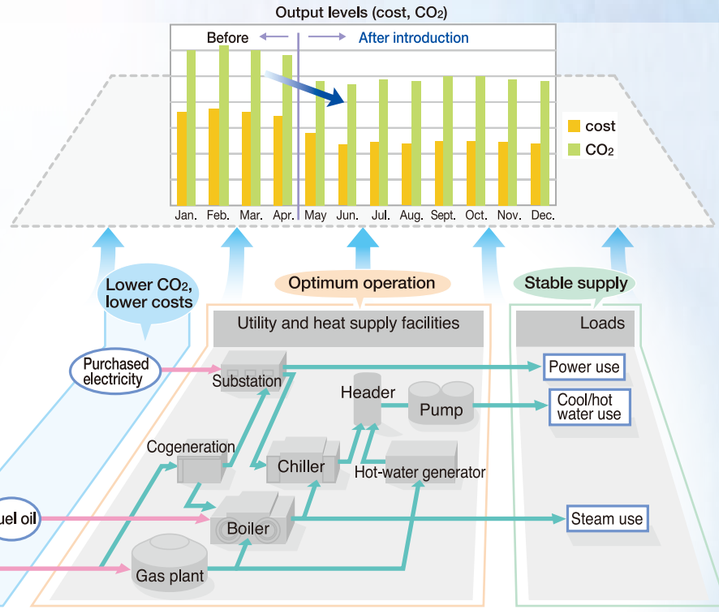
What does ENEOPT™ utility do?

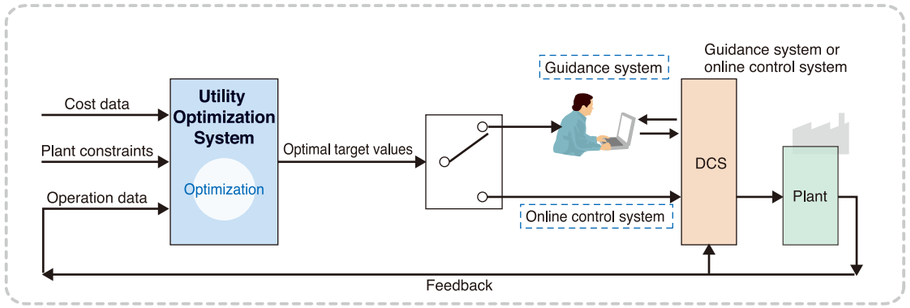
ENEOPTutility provides total optimization control (RENKEI control) of utility facilities so that the efficiency of the entire facility improves, reducing energy costs and CO_2 emissions. It does not require expensive new equipment, and can be expected to provide a good return on investment due to its control and optimization technology. Today, all companies are pressured by stricter demands for reduced CO_2 emissions. This system, with its very high return on investment for CO_2 reduction, can help customers to meet the challenge.



Utility Optimization System applies demand prediction, optimization, and control technologies to facilities with a complex configuration.

- Monitoring of current equipment efficiency and facility status
- Selection of the optimum equipment and load allocation, taking into account the total cost of the whole facility and the amount of CO_2 emissions
- Optimum heat storage operation, based on demand forecasting after considering the difference between day and night power costs

In past implementations of Utility Optimization System, energy costs and CO_2 emissions have been reduced by 2–5 %.



Target applications

Utility systems for the following

- Automobile and semiconductor manufacturing and other assembly plants
- Refineries, petrochemical plants, and other process industries
- Pulp and paper plants
- Food processing plants
- District heating and cooling facilities
- Large buildings

Widely applicable!

» Utility Optimization System usually delivers a large benefit when:

- There is a large difference in demand load between morning, daytime, evening, and holidays.
- A wide variety or number of utility devices like boilers, turbines, and chillers are used, and there are many operational options.
- Many machines operate with inefficient partial loads.
- There is a large difference between day and night power costs, and a thermal storage tank is available, allowing energy cost reduction by means such as a night heat storage system.
- A large amount of energy consumption.

Actual results from an automobile plant application

For an automobile plant with a high air-conditioning load, this system predicted the utility demands from the weather data, and calculated the optimum use of boilers, cogeneration, chillers, and thermal storage tanks to satisfy the demand. Using online control of the chillers, and boiler control by operators prompted by the guidance system, energy costs and CO_2 emissions were reduced. In this case, the prediction accuracy was within 1 % and the costs and CO_2 emissions were cut by about 5 %.