Easy, low-cost energy optimization.

Contributing to energy-saving operations and reduced greenhouse gas emissions by accurately controlling energy supply and demand at overseas ironworks and plants with in-house power generation facilities.

【Benefits】

- Lower initial investment enables installation at an early stage
- Visualization of areas where energy conservation can be improved enables optimal operations
- Automatic generation of optimal models from plant information and past operating data records
- Easy operation using Excel sheets

【System features】

Equipped with functions to visualize possible energy savings and guidance on optimization of operations. Applicable to factories that utilize by-product fuels and boilers.

*CPS: An abbreviation for cyber-physical system, an advanced system that connects information technologies to physical devices and machines.
**[Functional overview]**

<table>
<thead>
<tr>
<th>Function</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modeling</strong></td>
<td>Create models easily by entering the plant configuration, supply and demand plan, facility information, and restrictions into Excel sheets.</td>
</tr>
<tr>
<td><strong>Online visualization</strong></td>
<td>Estimate the effects of installation using analysis tools. Use computer algebra technology to clearly visualize comparisons with existing conditions.</td>
</tr>
<tr>
<td><strong>Demand forecast</strong></td>
<td>Automatically predict the future energy balance by understanding the operating state from plant data</td>
</tr>
<tr>
<td><strong>Optimal operations</strong></td>
<td>Create energy allocation plans and output guidance for optimal operations as graphs</td>
</tr>
</tbody>
</table>

**[Installation example]**

Support for optimization of operations is possible if any one of these applies:

- Multiple fuels can be supplied to multiple boilers.
- Reusable energy is generated during product manufacturing processes. (For example: by-product gas, by-product oil, etc.)
- The generated main steam can be supplied to multiple turbines.

For needs such as these:

- We want to get started quickly and cheaply.
- We can get by with only guidance.
- We want to do it easily using Excel software.
- We want to try doing it by ourselves.

**[System configuration]**

System for optimizing the energy usage of steelworks dealing with large amounts of energy

- Optimum usage of generated by-product gas
- Optimal operation of boilers and turbines
- Minimization of power reception

### Application scope

- Holder level forecast
- Boiler load distribution
- Optimal fuel distribution
- Optimal power generation distribution
- Power reception forecast
- Power reception optimization
- Power reception demand
- Power load in steelworks
- Private power generation
- Continuous casting
- Product factory

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