Facility maintenance management system

Maintenance Station

Shifting facility maintenance management from a routine operation to a value-added operation

- Helping you in realizing a usable system from the preparation of an operation flow
- Saving labor and streamlining the maintenance operation through unified management of facility information
- Simple start of IoT-enabled facility maintenance service
**Maintenance Station** is a solution that helps you introduce "Usable facility maintenance management system" from the preparation of a maintenance operation flow.

**Maintenance Station**

Maintenance Station is a facility management solution that optimizes various facilities and operations in a unified manner. The solution uses various data on the facility, operations, faults, and so forth to provide a better work plan that optimizes the work items, timings, and methods of operation. The solution provides better operation efficiency and safety, reduced costs, a longer life of the facility, and a **safe and secure** environment.

**Function overview**

The solution consists only of truly necessary functions in a simple manner based on our abundant experiences and track record in the support of facility maintenance management.

<table>
<thead>
<tr>
<th>Facility Management</th>
<th>- Manage the layer structure (by locations and process phases) and attributes of facilities, as well as part information associated with facilities.</th>
</tr>
</thead>
</table>
| Inspection management | - Register and manage data entries on facility maintenance operations (periodic inspection, preventive operations, etc.).  
- Tablet devices help you in on-site remote operations. (Offline data entry is also possible.) |
| Fault management    | - Write a fault handling instruction in the event of a sudden fault.  
- View fault records of a specific facility from accumulated operation instructions of individual facilities.  
- Fault handling data includes the phenomenon, cause, factors, and treatment of each incident, which help you investigate past problems (knowledge and know-how management). |
| Cost management      | - Maintenance operation costs (time and money) are recorded for individual facilities. |
| Replacement parts/   | - Manage spare parts of facilities (for replacement cycles, last replacement dates, etc.).  
- Manage parts in individual stockrooms to track the spare part stocks. |
| inventory management | |
| Aggregation/analysis | - Support the formats of the existing standard forms for data outputs.  
- Support the preparation of data analysis forms with flexible incorporation of pivots and macro into data sheets. |

**Saving labor and streamlining the maintenance operation through unified management of facility information**

The solution helps you optimize your maintenance operations through unified management of various facility management information. Shift from a **routine operation** to a **value-added operation**

**Issues**

- Too busy with routine operations to plan any improvement
- It is troublesome to manage stock conditions of parts and spare items at different sites.
- Facility device information, maintenance skills, and know-how belong to individuals, and are not inherited or shared.

**Solve them by Maintenance Station!**

Because of unified management of various information,

- Operations will be streamlined, so that you can secure some time for more creative jobs.
- **Maintenance Station** enables inventory management of multiple sites.
- All information and know-how are accumulated, so that they can be shared by the members.

**We help you visualize operations and plan improvement measures.**
Introduction of Maintenance Station starts with defining a maintenance operation flow with you. We will be able to provide a usable system by sharing with you the current operation analysis results and objectives, and by defining masters in accordance with a redefined operation flow.

### Issues
- A system that we introduced before did not match the actual operation flow, and is no longer used.
- A packaged system is hard to use with unnecessary functions.
- A system that we introduced before did not match the actual operation flow, and is no longer used.

### Solve them by Maintenance Station!
- We will survey on-site operations in detail and help you in defining an operation flow, which is the hardest part.
- We will define masters that match the actual operations to realize a system of a simple configuration without unnecessary functions. *Customization is possible as necessary* (*for on-premises deployment*)
- Tablet devices and a wireless LAN facilitate on-site operations.

### Deployment timeline

- **Operation design** (definition of operation flow)
- **Registration of masters**
- **Design of modifications**
- **Production for modifications**
- **Overall test**

*The timeline varies depending on the modification content.*

### Simple start of IoT-enabled facility maintenance service

**Maintenance Station** helps you streamline the site operations using IoT.

- Unexpected sudden failures happen due to aging of devices.
- They say, "Introduce IoT." But I do not know what to do.

### Solve them by Maintenance Station!
- Prevent failures through the improved accuracy of abnormality symptom diagnosis, predictions, and forecasts.
- Realize IoT by introducing a facility maintenance service that interconnects operation data of site facilities.

---

**Fuji Electric IoT solution**

Small, Quick Start & Spiral-up

Combine and exploit different IoT data using BI and other tools to support the detection of abnormalities and symptoms, for which you have been relaying on reports and human knowledge.

Realize an IoT-enabled facility maintenance service
**Installation records**

**Abundant installation cases and know-how of facility maintenance management**

We will clarify the operation flow and make a system plan based on our experiences and know-how that we gained through the support of facility maintenance management for many companies.

**System configuration**

![System Configuration Diagram]

**Operating environment**

<table>
<thead>
<tr>
<th>Servers</th>
<th>Operating environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>• Microsoft Windows 2012 Server R2&lt;br&gt;• Microsoft Windows 7 / 8.1 / 10&lt;br&gt;• Red Hat Enterprise Linux</td>
</tr>
<tr>
<td>Application server</td>
<td>• Tomcat 8.0</td>
</tr>
<tr>
<td>Database</td>
<td>• PostgreSQL 9.X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client</th>
<th>Operating environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>• Microsoft Windows 7 / 8.1 / 10</td>
</tr>
<tr>
<td>Browser</td>
<td>• Microsoft Internet Explorer 11&lt;br&gt;(9, 10 can be used with a compatible display)</td>
</tr>
</tbody>
</table>

* The company names and product names listed in this document are the trademarks or registered trademarks of each company.