



Unified Management System for Global Manufacturing Production Status



The Global Map, graphically displaying each production site, allows users to drill down to a specific factory and view the status of the entire production lines using the Line Map display.

Jointly Developed by Hitachi Solutions and KUBOTA Systems for Tsukuba Factory of KUBOTA

Factory Visibility Enhanced with the Real-Time Visualization and Monitoring Dashboard Built with RTView® Core™ in Only a Couple of Man-Months by Connecting to the Existing Manufacturing Information

INTRODUCTION

As a core IT company of Hitachi Group, Hitachi Solutions, Ltd. (HITACHI) provides advanced hybrid and integrated solutions, by combining a broad range of IT technologies in diverse industries. In the manufacturing sector, HITACHI provides solutions and consulting services, optimized for customers, including rapid design and cost reduction in the manufacturing operations.

KUBOTA Systems Inc. (KSI) provides abundant system solutions based on its expertise in manufacturing as an IT subsidiary company of Kubota Corporation (KUBOTA).

The “Manufacturing Data Unified Centralization System” developed by HITACHI and KSI uses SL’s RTView Core for its real-time visualization and monitoring.

The system has been developed to enhance the factory visibility for Tsukuba Factory of KUBOTA, a global manufacturer committed to supporting the future of the earth and humanity by contributing products such as agricultural machinery, diesel engines and iron piping.

SYSTEM OVERVIEW

The “Manufacturing Data Unified Centralization System” has been jointly developed by HITACHI and KSI, in only a couple of man-months, using RTView Core to visualize and monitor global production progress status by connecting to the existing manufacturing information database with RTView’s SQL (JDBC) Data Adapter.

The Global Map, graphically displaying each production site, allows users to drill down to a specific factory and view the status of the entire production lines using the Line Map display.

In this Line Map, the production progress status for all the lines are visually displayed by switching between the performance metrics of operational availability or facility, and the lines are alerted in red and yellow colors. The actual production amount vs planned production amount of each manufacturing line is also displayed using numerical counters.

Drilling down on an alerted production line displays its detail production plan and further drill-down allows actual production to be confirmed. Additionally, there are displays for equipment number information, facility management, and profitability information by lines.



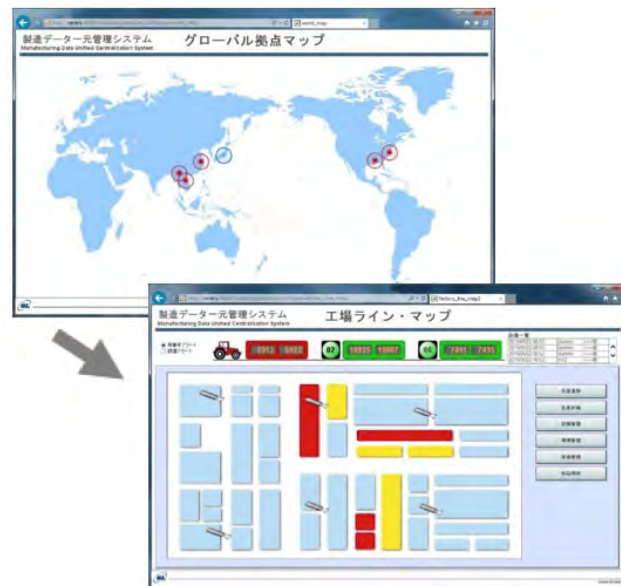
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LEVERAGING THE EXISTING MANUFACTURING DATA

RTView has various adapters for connecting to any data source, simply by using a menu selection within the RTView Builder interface. For this system, the SQL (JDBC) Data Adapter was used to connect to the already existing database that collects all the related production information.

Using the easy point and click RTView Builder, the content-rich, thin-client monitoring dashboard, in-memory data aggregation and analysis, alert thresholds and custom actions can all be customized. Configuration files defined with the Builder can then be deployed transparently without making any changes, in a desktop application or a Web browser.

This “Manufacturing Data Unified Centralization System” is deployed using RTView Display Server, using a content-rich and highly interactive Web thin-client.



Drill down from the Global Map (top) of production sites to the Line Map (bottom) allows monitoring production status of the entire manufacturing lines at a specific factory. (Note: Line layout is simplified and different from the actual.)

SUMMARY

With RTView® Core™, one can instantly connect to an existing database (as an example) and can create a custom, real-time visualization and monitoring system based on the exact requirements of a service or an operation, using custom alerts and automated actions. Furthermore, RTView Builder reduces costs not only in the development of a custom visualization and monitoring system, but also in the ongoing system enhancements and maintenance of adding additional data sources or monitoring displays and features, because no system programming reworks are required.

The collaboration between HITACHI, with its broad experience and significant achievements in factory visibility solutions, and KSI, with their expertise on KUBOTA’s manufacturing floor and IT systems, has enabled them to develop a very powerful “Manufacturing Data Unified Centralization System” using RTView Core in a very short development time. Moving forward, the system is continued to be enhanced by KSI.

About Hitachi Solutions, Ltd. (HITACHI)

<http://www.hitachi-solutions.com/>

About Kubota Corporation (KUBOTA)

<http://www.kubota-global.net/>

KUBOTA Systems Inc. (KSI) is the IT subsidiary company of Kubota Corporation.

<http://www.ksi.co.jp/>