# **PCB Production Optimization Solution**



This solution provides, in a timely manner, information useful for production operations in printed circuit board (PCB) production lines, where there is demand for high-mix, low-volume production. The solution makes possible mass customization with high efficiency and high quality.

As the first step of overall optimization, we will respond to the following needs of customers: TTACHI

プリント基板生産最適化ソリューション



Identify the production progress and the operating status of equipment in real time.



Check the status of the shop floor from a remote location.



Detect equipment abnormalities as soon as possible, address them quickly, and improve the operating rate.

Blend JUKI's advanced products and Hitachi's operational know-how to achieve the digital transformation (DX) of manufacturing sites

### Managing production progress and results

▼Check the production progress

Visualize the difference between the production plan and the production results ▼Check the operating status of equipment



Visualize the location and status of a problem

- By identifying differences between productions plan and production results in real time, you can implement countermeasures and improvements in a timely manner to prevent or rectify delays in delivery.
- By ascertaining the operating status of production line equipment from a centralized location, you can promptly address equipment-related

#### Managing automated warehouses

▼Check the status of equipment in automated warehouses



Visualize the status of equipment in automated warehouses

- By checking the availability of space in each automated warehouse, you can quickly identify places where parts can be stored.
- You can monitor the status of automated warehouses (including information about storage statuses, errors, and warnings) from a remote

Visualization



The PCB production optimization solution was implemented in Hitachi's Omika Works. The World Economic Forum (WEF) designated Omika Works a "Lighthouse and recognized it as an advanced factory for its business achievements.

https://www.hitachi.com/New/cnews/month/2020/01/200110.html



Countermeasures



JaNets

**JaNets** 

## **PCB** production line



- JaNets (Juki Advanced Network System) is implementation integration system software developed by JUKI Corporation.

  Lumada refers to a collection of digital innovation solutions by Hitachi, Ltd.

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