

PRODUCTION DEPT.

Topic Production Monitoring System by IIOT

Mitsubishi Heavy Industries –
Mahajak Air Conditioners Co., Ltd.



The robot line consists of 3 press machines and 4 picking robots. The control system is divided into The system of the Press machine and the system of the Robot and will have a Master PLC as the main body to process data. By connecting all machines and robots will be connected via CC-LINK, collecting data on machine and robot operations. and display the working status through the HMI screen



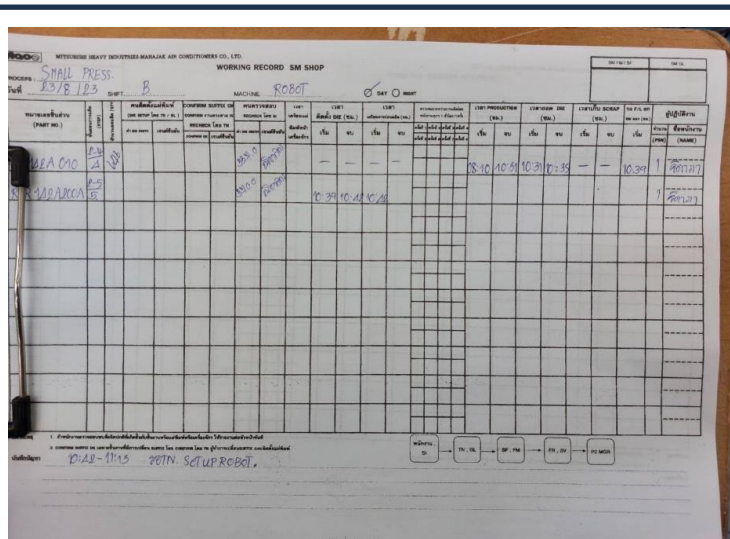
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- 1.set up time
- 2.operating time
- 3.machine Breakdown
- 4.production quality
- 5.machine alarm (ERROR code)
- 6.Lost time



Use the information obtained to analyze and correct lost time in process to improve and make the production line work at full efficiency.

- To Store data in cloud or local software (store data in SD card in PLC) PLC gather data from machines and send to PC (by FTP Function)
- To get data from 3 robot and 3 Press machine by PLC LINK of MITSUBISHI IQ-R(2plc)
- To monitor data on local Web browser by IP Address



Before Employees record time on paper and place it in Excel.

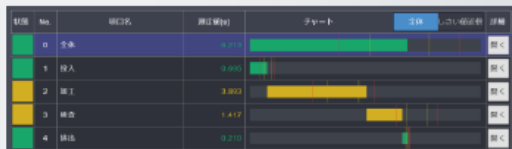


After record data with IOT

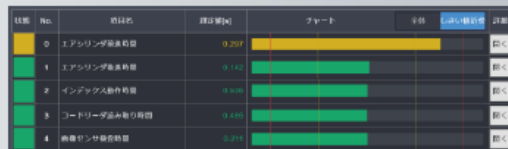
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■ Cycle time monitoring



■ Timing monitoring



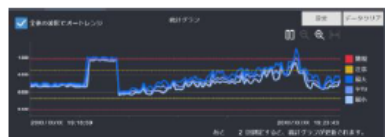
■ Waveform upper/lower limit monitoring



Variations/historical trends can be checked immediately
[History table]



Histogram

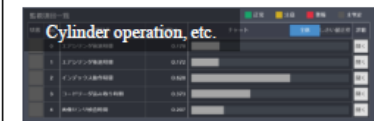
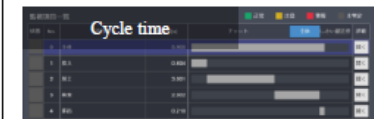


Statistical graph

Setting without using PLC software
[WEB Browser Settings]



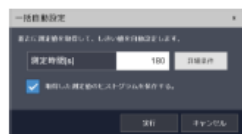
By simply configuring the device
Immediate visualization



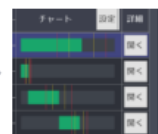
Set all thresholds with one switch [Set all automatically]



Threshold not set



Set and execute the measurement time



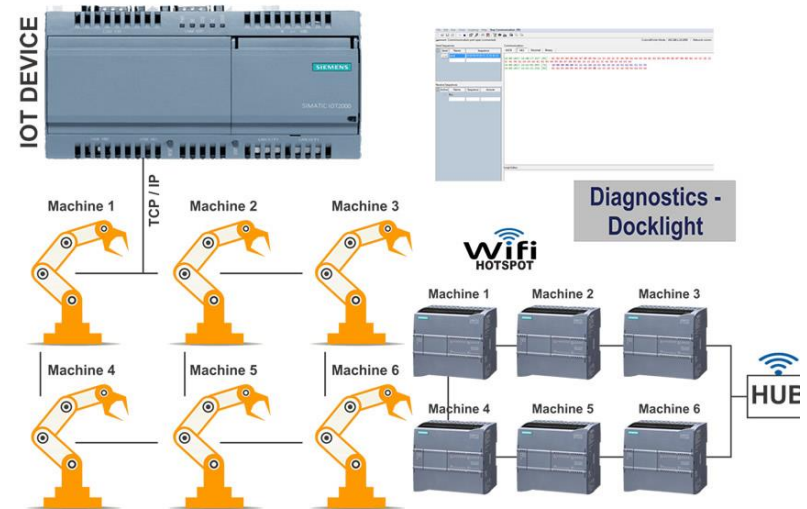
Set threshold automatically

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Dashboard



IIOT & PLC



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