Industrial Automation

Customer Profile:
A leading manufacturer of Bearings with a manufacturing plant located at Surendranagar, Gujarat

Business Challenges:
The customer faced a number of productivity and automation challenges:

- *Production Line Inefficiencies:* The customer faced issues of low output from their production lines as compared to the capabilities of the machine. Also the productivity varied across shifts. They were not able to pinpoint the cause(s) - input material quality, machine downtimes, operator error or other issues.
- *No M2M communication:* The customer had multiple machines on various PLC, SCADA and HMI systems. Each machine worked in a silo with no Machine-to-Machine (M2M) communication. Machines had no onboard data storage capabilities giving the customer limited or no production reporting or logs needed to handle production issues
- *Production Reporting:* Production reporting process was manual. Staff members submitted hand written production reports after each shift, with no formal handover between teams. These information silos made it difficult to assess issues and production trends. Management often had to adjust output forecasts causing slippages in customer deliverables.

Business Requirements:
To alleviate these challenges the customer needed to:

- Assess the root cause for the low productivity by monitoring each stage of the assembly line
- Collect data points in real time to help take faster remedial action
- Send alerts via email and SMS to Shift Manager in case of issues
- Collect data from each machine, convert it to a standard format and facilitate inter-machine communication
- Eliminate the need for paper based manual productivity reporting
- Generate and analyze production reports to assist data driven decision making

Solution Details:

- iolytics' team worked with the customer to install our Intellimon Fixed Asset Management solution
- On-off cycles, cycle time, machine output, idle times etc data from PLCs was collected and uploaded to the cloud
- Customer, with minimal training from iolytics, set up production schedule along acceptable ranges for each data input captured. For example, the customer had setup production schedule along with expected outputs per machine.
- Shift Manager and other stakeholders received alert SMS and emails if data was out of acceptable range. This helped take corrective action in real-time.
- Customer was offered add-on energy monitoring solution to measure energy consumption for individual machines and the entire plant
- Redundant data storage options like Flash Memory and SD memory provided with the IntelliMon systems ensured zero data loss in cases of network failures
- System generated productivity reports helped with better decision making and delivery forecasts

iolytics provides turnkey Industrial IoT solutions that enable our Enterprise customers to quickly roll out their IoT strategies. To know more about our offerings visit us at www.iolytics.in or call us at 9699722088.