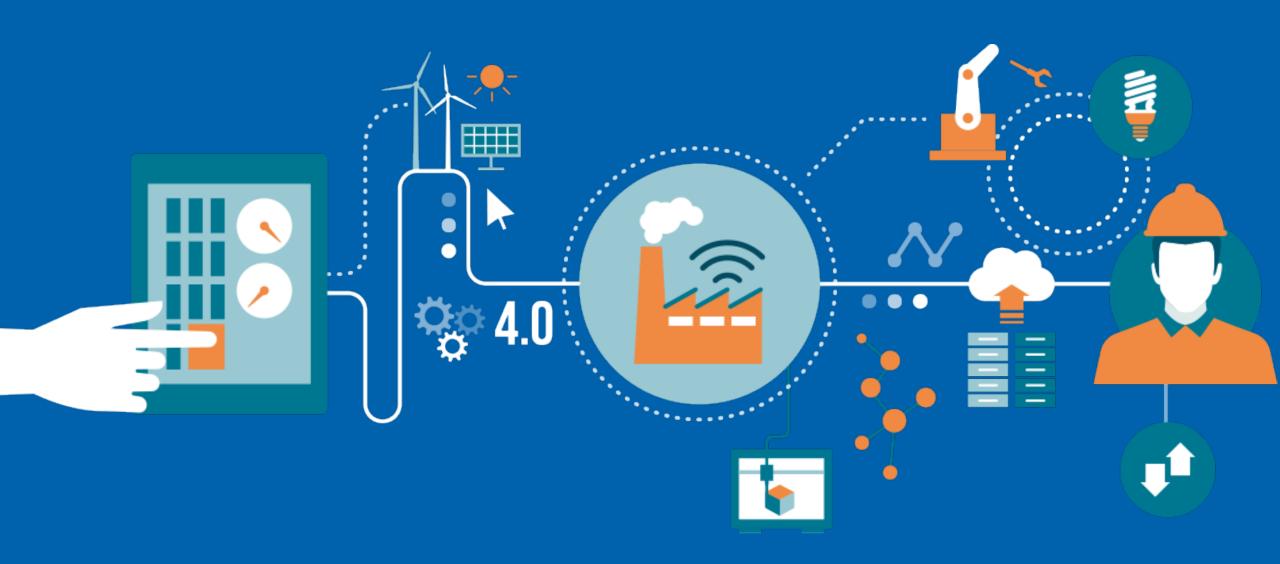


Case Study: Smart Machine Monitoring Solution





OEM Partner: Twin Engineers

Background: Twin (Bringing New Possibilities into Reality) Engineers Pvt. Ltd. offers specialist technology in three areas – Fluid Filling, Meter Mix Dosing and Robotic Dispensing. Twin is the only company in the world that offers solutions across all these three areas and has been a market leader in its chosen niche since the last two decades. Twin's offerings include 80+ machines, highly specialized custom systems and an extensive range of automation solutions to enable greater productivity.

Problem Statement:

Twins after sales & service team lacked visibility into their own machines such as

- Machines Location
- Machines Performance
- Maintenance schedules
- Achines abuse by unskilled operators resulted in increased warranty costs for the client

Therefore, Twin engineer was looking for ways to gain real-time live visibility of their machine remotely and reduce in cost of field maintenance by doing remote digital diagnostics. The solution also needed to be flexible and scalable for multiple different machine variants.

hiotron

Solution: At Twin Engineers, IoT is not a buzzword, its what they put into practice

From the first 'made in India' 2K Adhesive Pack Pump to India's first IoT Ready Pack Pump, it has been a phenomenal journey.

Like most of the Twin's machines, the 2k Adhesive Dispensing Pump too had a characteristic start. Troubled with high prices and poor service of imported Adhesive Pumps, a leading Solventless Laminator manufacturer requested Twin to undertake the development in India. We jumped in.... and there has been no looking back.

By always staying a step ahead of customer's expectationsthe Next-Gen Pack Pump is now recognized globally.

With over 500+ installation around the world, the PackPump has earned appreciation from customers around the world.



INTERNET OF THINGS

Twin enabled its Pack-pump Machine for remote Assessment, Diagnostics, Prognostics, Edge intelligence and more.....



Remote Diagnostic Reduction in cost of field maintenance by doing remote digital diagnostics.



Predictive Maintenance our customers to move from reactive to predictive maintenance



99.9% Uptime 99.9% Guarantee uptime to customers.



Full Transparency Bringing transparency & enhances customer satisfaction.



СР Піп

Digital Revenue Stream Creating new Digital revenue streams - recurrent and predictable



Real-time insights Providing Unique Real-time insights to product development





Alert Reports/Graphs

Buzzers/Alarms/SMS/Email triggered for any machine fault/process noncompliance in the form of reports.



Shift from Breakdown to **Preventive Maintenance**

Move from breakdown maintenance to Preventive/Predictive maintenance their by reducing unplanned downtime & cost of operation & help customers to arrest revenue losses due to unexpected Downtime.



hiotron

Remote Live Monitoring & Controlling Dashboard & Mobile Application Parameters

OEE (Overall Equipment Performance)

- Availability
- Productivity
- Quality

Down Time Analysis

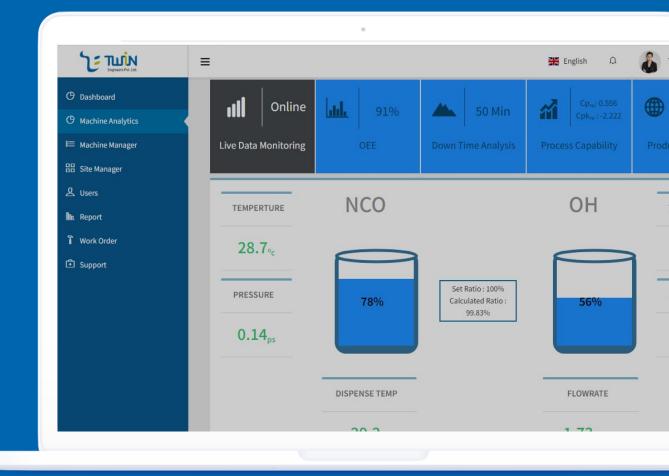
- Fault Pareto Repeat alarms
- Fault Pareto Downtime contribution
- Fault Category pie chart
- SMS/Alerts to trigger maintenance

Process Capability

- % Accuracy
- Cp, Cpk
- Critical Process parameters trending

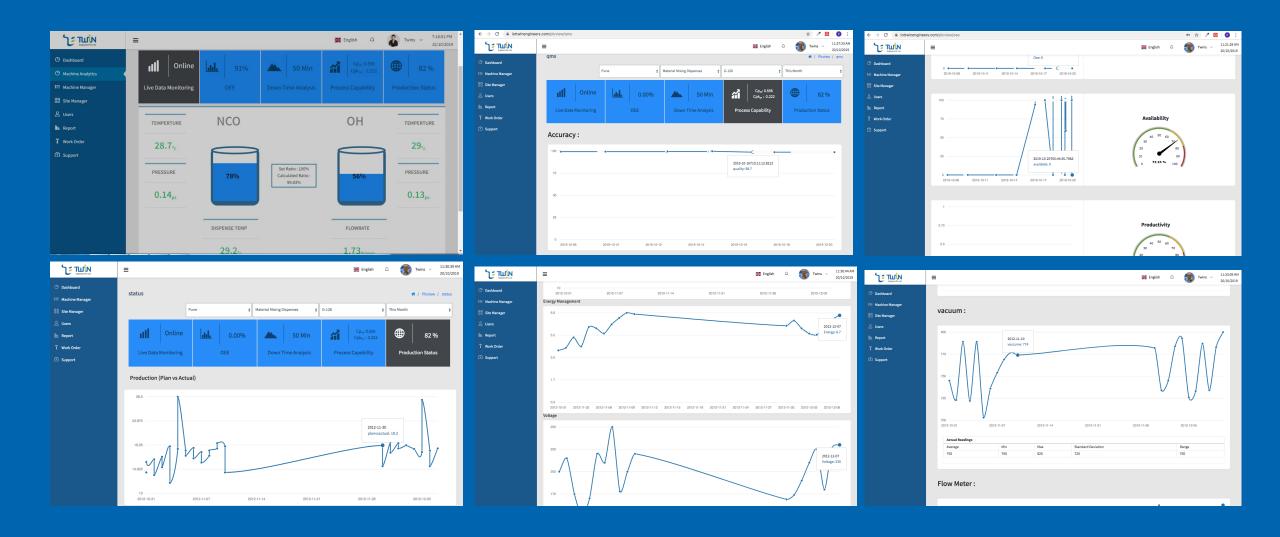
Production Performance

- Plan vs Actual output
- Energy consumption



hiotron

Remote Live Monitoring & Controlling Dashboard & Mobile Application Parameters





THANKS FOR WATCHING