

Case study – Improving Performance and Wastage Reduction

Abstract : NLMK Group is the largest steelmaker in Russia and one of the most efficient in the world. For their India Plant , Clairviz implemented Smart Factory solution which helped NLMK to achieve Performance Improvement and Wastage Reduction



Problem statement

NLMK has state of the Art Manufacturing Facility at Daman, in Western India, They were facing issue like

- Variation in Planning versus Actual
- Under-utilization of Assets
- Non Optimized Resource Allocation
- Ever changing needs of customers leading to difficulty in compliance to control plans
- Little Visibility into operations due to manual operations
- Variety of Machines from different OEMs leading to integration issues



Description of the solution

Clairviz implemented Smart Factory system by integrating sensors, controllers, scanners for Real Time Tracking and measurement of Production KPI for their CRGO steel processing plant. Solution provides end to end traceability, real time performance monitoring, tracking of WIP, FG Inventory upto dispatch leading to improved performance and reduction in wastage.



Business impact / RoI

The system was deployed in less than 4 months. There was Performance Improvement by over 20%, Wastage Reduction by over 15%, Paperless Shopfloor achieved through Digital Logbooks, Reduction in WIP & FG Inventory . End to End Traceability of Steel Coils was achieved leading to improved OTIF

Case study – Improving Performance and Wastage Reduction

Photographs / Videos of Solution deployed : Add graphical elements such as photographs, videos, client testimonial etc. of solutions deployed.



Case study – Achieving OTIF and End to End Traceability

Abstract : E-Pack Durables is India's second largest AC Manufacturer with 15% Market share. Clairviz helped E-Pack achieve end-to-end traceability and online tracking of components and parts for life cycle management, higher productivity, improving OTIF, improving customer satisfaction and retention



Problem statement

E-Pack is one of the world's largest OEM air conditioner manufacturers, with state-of-the-art factory producing 4,500+ units per day. They make ACs for leading brands like Voltas, Bluestar, Godrej etc. Due to high volume and variety of models and subcomponents E Pack was facing problems in keeping track of Goods in Manufacturing , Inventory and after sales management .



Description of the solution

Clairviz implemented product (Air Conditioner) tracking and machine sensor solution for Traceability of subcomponents and warranties with sub-suppliers and coordination of planning, production, FG and dispatch data. The solution used IOT sensors, Gateways, Scanners across the operator stations in the plant.

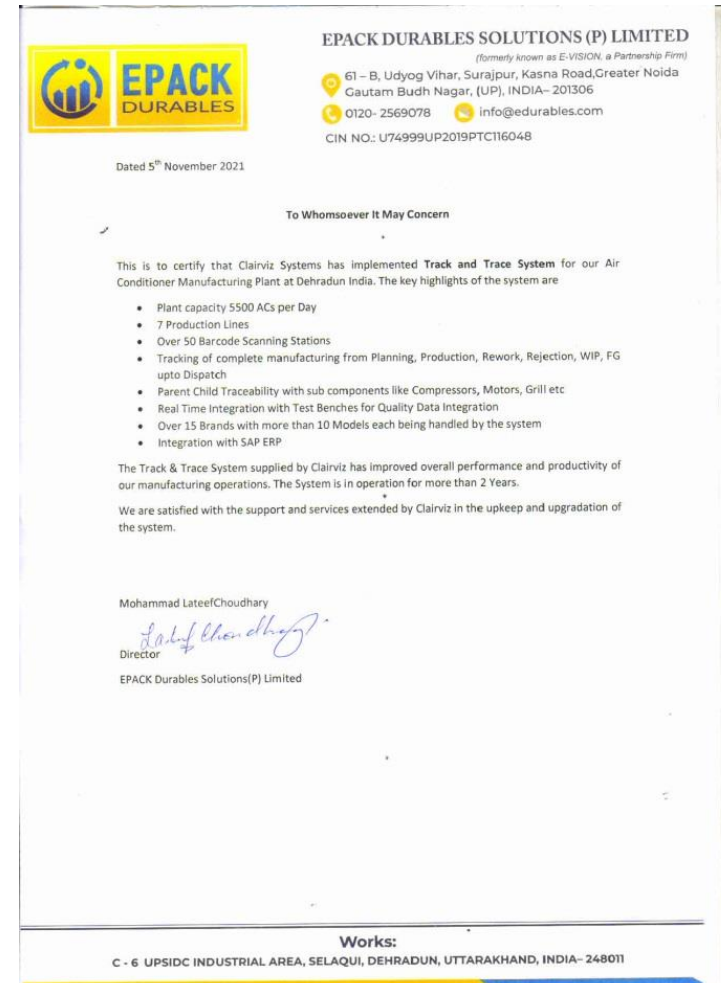


Business impact / RoI

The system was deployed in less than 6 months. There was a direct impact on cost and profit improvement through features like End to End Traceability from subcomponent to Finished Goods, Real time Quality and inspection , Elimination Manual Errors ,Improved OTIF by 15%, Improved Profits with back to back warranty management with suppliers, Comprehensive reports and dashboards

Case study – Achieving OTIF and End to End Traceability

Photographs / Videos of Solution deployed : Add graphical elements such as photographs, videos, client testimonial etc. of solutions deployed.



Case study – Achieving Zero Defect and Improved Capacity Utilization

Abstract : Clairviz helped Aditya Birla Insulators(World's 2nd Largest Insulators Manufacturer) to improve capacity Utilization by 25 % and achieve zero defect while manufacturing through Data Science based Factory Performance Analytics



Problem statement

Aditya Birla Insulators was facing challenge of Quality Rejections and lower capacity utilization at their manufacturing facilities. Their plants were more than 25 years old and it was difficult to capture relevant data for Decision Making. Also it was important not to disturb existing process for implementing any new solution



Description of the solution

Clairviz deployed their Osprey Smart Manufacturing Platform. The first step was IOT enablement. All the old machines and equipment were retrofitted with New generation sensors and Gateways to capture the critical data. Through data science based algorithms, the complete process was analyzed and improvement insights were generated



Business impact / ROI

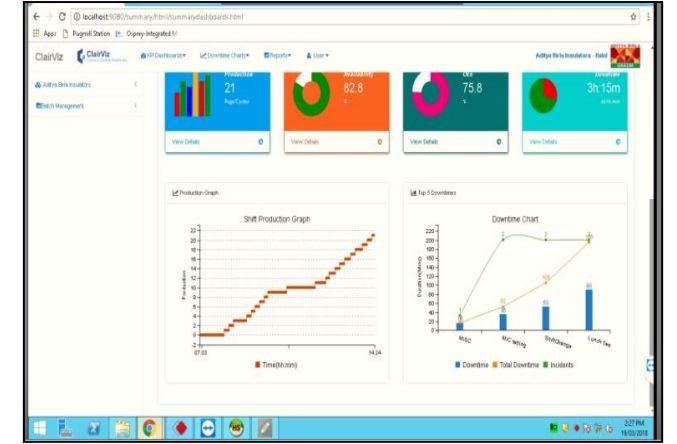
The system was deployed in less than 3 months. The following benefits were achieved

- Increased Capacity Utilisation by 25 %
- Zero Defect through Data Science Algorithms
- Paperless Production
- Improved Efficiency, Profitability
- Integration with ERP (Oracle)

There was direct impact on bottom-line improvement by over 15%. ROI was less than 6 Months

Case study – Achieving Zero Defect and Improved Capacity Utilization

Photographs / Videos of Solution deployed : Add graphical elements such as photographs, videos, client testimonial etc. of solutions deployed.



IOT Enablement

Data Insights

Case study – IoT & Digitalization for improved uptime, asset utilization and efficiencies

Abstract : HPCL , Oil Storage Business used Clairviz Digital Maintenance Management System to improve equipment uptime and adherence to safety guidelines in operations



Problem statement

As a part of their day-to-day operations, the plant maintenance team carries out following set of activities- Carry out Preventive, Scheduled, Breakdown maintenance activities on different times for each equipment. However Manual data management was causing missed activities and decrease in overall efficiencies .



Description of the solution

Clairviz DOMMS helped in complete Digitization of Manual Reporting & Tracking System, Scheduling and Task Management. IOT based alerts and notifications ensured right information in realtime.

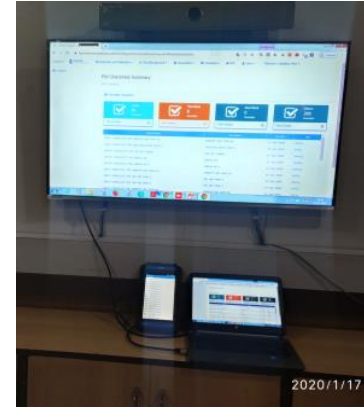


Business impact / RoI

Clairviz DOMMS has improved compliance to safety procedures and significantly reduced the workload of plant operations team. Timely maintenance has ensured improved equipment uptime by over 10%. Overall costs of maintenance also reduced substantially due to timely alerts and notifications

Case study – IoT & Digitalization for improved uptime, asset utilization and efficiencies

Photographs / Videos of Solution deployed : Add graphical elements such as photographs, videos, client testimonial etc. of solutions deployed.



Top 10 Industry 4.0 Use cases

Manual data & process management

Solution: Shop floor digitisation using AI and analytics
Business benefit: Process improvement, paperless operation, high productivity and efficiency

Manual inventory management

Solution: Paperless inventory management using AI & Analytics
Business benefit: Lower material management cost

Frequent machine failures

Solution: Predictive maintenance using IoT, AI and Analytics
Business benefit: Planned shutdown, lower production loss, lower machine failure cost

High Energy Cost

Solution: Smart Energy Management using AI, ML and IoT solutions
Business benefit: Improved energy efficiency

Product quality issues

Solution: Computer Vision/IoT Solutions for Quality Inspection
Business benefit: Better quality control

Low market reach

Solution: VR based plant visits
Business benefit: Better customer reach

IoT security

Solution: Cybersecurity based solutions
Business benefit: Data protection, User access control, better security

Compliance Management

Solution: Computer vision and AI based solutions
Business benefit: Safety & Compliance

Managing worker health & safety

Solution: AI & IoT based remote monitoring of worker's health
Business benefit: Better worker mgmt.

Remote customer / expert support

Solution: AR/VR based solutions
Business benefit: Quick problem solving, remote outreach

