

Accelerating Operational Excellence through a Unified Low-Code Platform for a Global Pump & Valve Manufacturer

Client Profile

A leading global manufacturer of pumps and valves serving industries such as water, energy, infrastructure, process manufacturing, and industrial operations.



ITHENA's LCNC platform unified plant operations, automated manufacturing workflows, and delivered real-time operational insights. It **enhanced productivity, improved traceability, reduced ownership costs, and enabled faster, data-driven manufacturing decisions.**



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CHALLENGES



The client struggled with:

- Manual, paper-based workflows and disconnected systems across plants
- Time-intensive manual tracking and documentation for valves and components (15–20 minutes per unit)
- Limited real-time visibility into shop-floor KPIs and pump testing parameters constrained proactive, data-driven decision-making
- High reliance on paper records for heat code traceability and inspection checklists increased error risk and reduced auditability
- Disparate legacy applications across plants increased licensing, maintenance costs, and vendor dependency

SOLUTIONS



ITHENA's unified **Low-Code No-Code (LCNC) platform**, featuring an integrated suite of **targeted mini-apps** developed and deployed rapidly, empowered the client with:

1

Production Order & Time Booking:

Automated operator time logging with seamless synchronization to the central SAP ERP system via Robotic Process Automation (RPA) bots

2

Final Inspection to Dispatch:

Enabled end-to-end traceability of the valve lifecycle from warehouse putaway to dispatch, with automated generation of gate passes and loading slips

3

Digital GEMBA (iGEMBA):

Digitized shop-floor management with real-time Safety, Quality, Delivery, and Cost (SQDC) KPI dashboards and a Kaizen (continuous improvement) action-tracking board

4

Real-time Monitoring & Online Witness:

Enabled customers to witness pump testing remotely through live data streams and video feeds through a web-based platform

5

Unified Namespace (UNS):

Connected shop-floor IoT systems, PLCs, and enterprise SAP data into a single source of truth for manufacturing analytics

OPPORTUNITY FOR IMPACT



37%

Reduction in total cost of ownership (TCO)

100%

End-to-End traceability

34%

Higher operational efficiency

4 wk

Rapid development and deployment