Manufacturing Execution & Operations

Connect the Shop Floor. Improve Every Shift.

Connect machines, work orders, quality and maintenance so your team can see losses, coordinate action and improve execution during the shift.

A REPEATABLE FOUNDATION. CUSTOMIZED BY YOUR EXPERTS.

One Operations Foundation for Your Factory

Neuclon builds the connected data foundation, execution tools, dashboards and approval workflows. Process Owners and Subject Matter Experts customize screens, business rules and agents in natural language, within IT's permissions and guardrails.

CONNECT

Bring together work orders, machine states, counts, scrap and quality checks through ERP links, PLC gateways or operator screens.

UNDERSTAND

Track output against target, OEE and downtime reasons. Use loss Pareto charts and history to focus each shift on its biggest gaps.

APPROVE & ACT

Route downtime and quality exceptions to owners. Agents prepare maintenance alerts and shift summaries; people review key actions.

Support the Full Manufacturing Lifecycle

01	**PREPARE**	Bring work orders, machine assignments and shift targets into one view.
02	**EXECUTE**	Record order progress, production counts and scrap at the point of work.
03	**MONITOR**	Capture machine states and downtime; escalate prolonged stops.
04	**ASSURE QUALITY**	Record checks, flag failures and coordinate containment and follow-up.
05	**IMPROVE**	Prioritize losses, prepare shift handovers and track corrective actions.

APP ECOSYSTEM

Odoo · Outlook · Teams · OneDrive

ERP · MES · CMMS · WMS

PLC / Edge · SQL · APIs

Start with Neuclon's MES app or extend an existing MES. Connections depend on APIs, gateways and scope; machine control remains in validated plant systems. App logos identify third-party products, not endorsements.

Built for the People Who Run the Factory

Start with one line or cell. Agree the baseline and loss definitions, validate data capture, and review results with the team before expanding.

PERSONA & USE CASE	EXAMPLE SUCCESS METRIC[1]
Plant Manager Compare losses by line and shift; focus improvement work on availability, performance and quality.	**Overall Equipment Effectiveness** 60% → 70% | +10 percentage points
Production Supervisor Track work-order progress and output against target; coordinate responses before the shift ends.	**Schedule Adherence** 85% → 95% | +10 percentage points
Quality Engineer Capture checks and scrap reasons, contain failures and track corrective actions to closure.	**First-Pass Yield** 92% → 96% | +4 percentage points
Maintenance Manager Use stop history and downtime alerts to prioritize repairs and coordinate preventive maintenance.	**Unplanned Downtime** 100 → 80 hours/month | 20% less
Operations Director Compare site and line performance; scale effective improvements and verify their financial impact.	**Conversion Cost per Good Unit** $20 → $19 | 5% reduction

[1] Illustrative targets, not customer results or guarantees. Match product mix, shifts and measurement periods. OEE = Availability × Performance × Quality; define planned production time and ideal cycle times before the pilot.

Make the Business Case Measurable

$300K
ANNUAL GROSS BENEFIT

$180K
ANNUAL NET BENEFIT

150%
ILLUSTRATIVE ANNUAL ROI

ILLUSTRATIVE ANNUAL VALUE MODEL

Scrap materials: $1.2M × 20% reduction	**$240,000**
Overtime: $400K × 15% reduction	**$60,000**
Gross benefit $300K − all-in cost $120K	**$180,000 net**

ROI = $180K ÷ $120K = 150%. Full year at target; excludes ramp-up. Cost includes software, integration, training and operation; not a quote. Scrap excludes labor; capacity is not monetized. At 50% benefit realization, ROI is 25%.

Your Experts Define the Next Improvement.

“Flag any machine stopped over 20 minutes and draft the shift handover.”