

Mx-ERP

Manufacturing ERP for Process, Discrete & Engineered-to-Order Plants

Plan Better. Produce Better. Control Cost Better. Deliver Profitably.

BUILT FOR

Edible Oil • Rice Milling • Ethanol Distilleries

Machine Manufacturing • Conveyor Belt Systems • Heat Sensors

Mx-ERP

MANUFACTURING ERP | CONTROL • VISIBILITY • PROFITABILITY



One integrated platform connecting Finance, Procurement, Inventory, Production, Quality, Sales, HR and Management Intelligence.

OVERVIEW

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Mx-ERP is a manufacturing ERP suite that brings operational and financial data together, so management can see what is being purchased, produced, held, sold and earned — from a single system rather than a monthly reconciliation of separate ones.

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The Mx-ERP Proposition

One data foundation across procurement, inventory, production, quality, sales and finance — giving management batch, SKU, job and order-level visibility of cost, yield and margin as work happens, not after it closes.

SECTION 01

A Manufacturing ERP Built Around Your Factory

Process, discrete, assembly-led and engineered-to-order plants run on different logic. Mx-ERP is one product foundation, configured around the operating model of each business rather than forced into a single template.

BUILT FOR PROCESS, DISCRETE, ASSEMBLY-LED & ENGINEERED-TO-ORDER MANUFACTURING

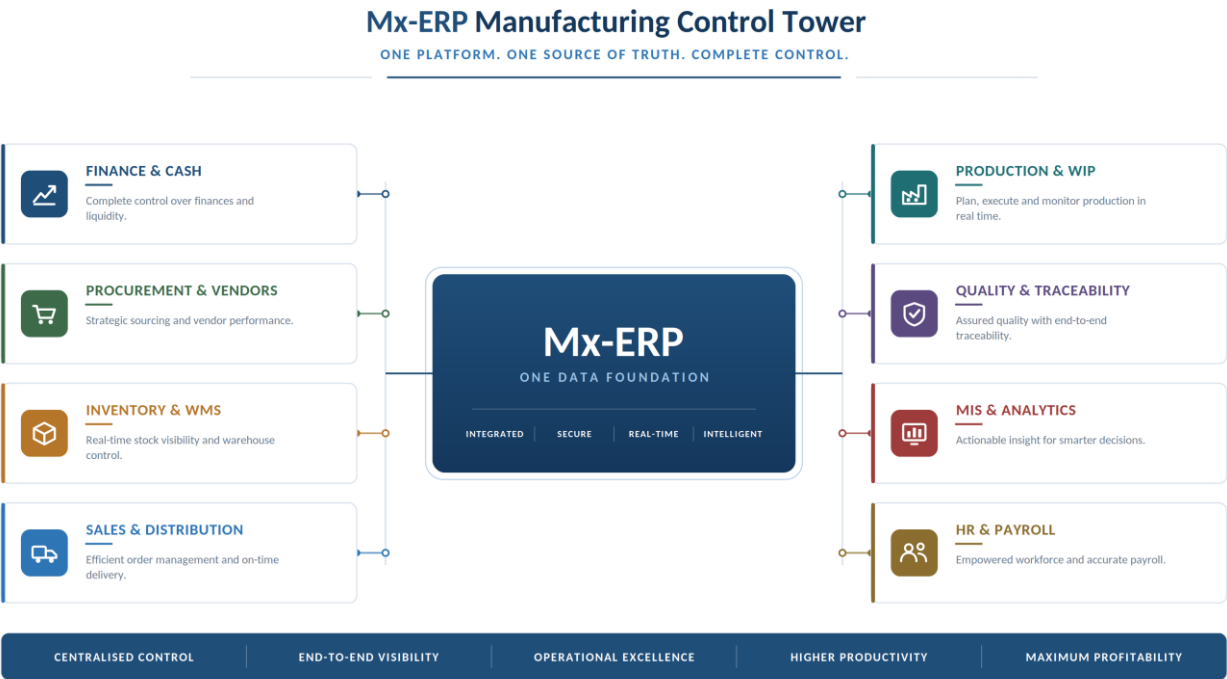
EDIBLE OIL Raw material → processing Yield • by-product • batch cost	RICE Paddy → milling → grading Yield • quality • lot control	ETHANOL Feedstock → fermentation → distillation Litres per tonne • tank stock
MACHINE MANUFACTURING BOM → routing → WIP → assembly Job costing • delivery	CONVEYOR BELT SYSTEMS Design → fabrication → erection Order BOM • site • commissioning	HEAT SENSORS Assembly → calibration → certification Serial traceability • test records

INDUSTRY	TYPICAL CONTROL PRIORITIES	MX-ERP FIT
Edible Oil	Raw material quality, yield, batch processing, by-products, landed cost and profitability	Yield and batch control, procurement, quality, costing, traceability
Rice	Paddy procurement, grading, milling yield, lot control, by-products, packing and dispatch	Procurement, batch and lot production, QA, inventory, sales
Ethanol	Feedstock quality and landed cost, fermentation and distillation yield, tank stock, by-products, statutory registers and OMC dispatch	Batch and tank control, yield per tonne, lab and QC, costing per litre, dispatch
Machine Manufacturing	BOM, routing, job and work order, material planning, WIP, machine and labour allocation, job costing	BOM, routing, shop floor, WIP, costing, sales
Conveyor Belt Systems	Order-specific design, long-lead components, fabrication, site erection and commissioning, project cost control	Engineered BOM, order costing, procurement, fabrication WIP, site dispatch, service
Heat Sensors	Component-level BOM, tight specification, calibration and test records, serial and lot traceability, warranty returns	Configurable specification, QA and calibration records, serial traceability, costing, after-sales

One ERP foundation — configured around the operating model of each manufacturing business.

SECTION 02

One Integrated Manufacturing Architecture



BUSINESS LAYER	CORE CAPABILITIES	MANAGEMENT OUTCOME
Finance & Cash	General ledger, AP/AR, bank reconciliation, P&L, cash-flow forecasting	Financial control
Procurement & Sourcing	PR, RFQ, vendor and broker rating, contract purchasing, gate inward	Purchase discipline
Inventory & WMS	Batch and lot control, bins, expiry and shelf life, transfers, min-max alerts	Stock visibility
Production & Processing	BOM, routing, shop-floor control, machine and labour allocation, job progress	Production control
Quality Assurance	Incoming and in-process inspection, lab and calibration results, CoA, reject management	Quality & compliance
Sales & Distribution	Orders, credit limits, pricing, dispatch planning, e-invoice and e-way bill	Faster fulfilment
HR & Payroll	Attendance, shifts, time office, PF and ESI, payroll	Workforce administration
MIS & Business Intelligence	Role-based dashboards, custom reporting, mobile executive visibility	Faster decisions

SECTION 03

From Raw Material to Finished-Goods Profitability

The physical flow and its financial impact are tracked in one connected system, so cost is assembled as material moves rather than reconstructed at period end.

CONTROL POINT	EDIBLE OIL, RICE & ETHANOL	MACHINES, CONVEYORS & SENSORS
Input Control	Vendor, farmer and feedstock lots, quality, moisture, impurity or fermentable content, weight and landed cost	Purchased components, specification, supplier receipt, lot and serial capture where required
Production Control	Batch processing, fermentation and distillation, yield, shrinkage and by-products	BOM, routing, work order, fabrication and assembly WIP, job progress
Quality	Incoming and in-process quality gates, lab results, reject control	Incoming and in-process inspection, calibration and test records
Costing	Material, labour, utility, freight, broker and handling allocations	Material, labour, production overhead, freight and site expense allocation
Output	Finished goods and spirit grades, by-products, lot, batch and tank, dispatch	Completed machines, conveyor systems and sensors; WIP, dispatch and commissioning
Profitability	Batch, SKU and per-litre margin visibility	Job, order and product margin visibility

THE VALUE CHAIN IN MX-ERP

INPUT	PLAN	PRODUCE	ASSURE	STOCK	SELL	COLLECT	MEASURE
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SECTION 04

Edible Oil & Rice Processing

Especially relevant where yield, quality, batch traceability and variable input costs drive the margin.

CAPABILITY	BUSINESS NEED	MX-ERP APPROACH
Yield Management	Output varies with input quality and processing conditions	Input-to-output conversion with yield-deviation visibility
Quality Adjustment	Moisture, impurity and quality grades affect value	Digital quality records and controlled adjustments
Supplier & Broker Settlement	Commissions, deductions, freight and weight adjustments	Settlement logic with supplier and broker ledgers
Batch Traceability	Material and finished goods must be traceable by lot and batch	Backward and forward traceability
By-Product & Wastage	Processing generates shrinkage, scrap and by-products	Capture by-products and update inventory
Dynamic Costing	Freight, processing and overheads affect true cost	Activity-based and landed-cost allocation
Quality Gates	Clearance is required before a batch progresses	Digital QA gates and reject management

RESULT

Better yield visibility • Tighter procurement • Auditable traceability • Accurate batch and SKU profitability

SECTION 05

Ethanol Manufacturing

Distillery operations where the product is measured in litres per tonne of feedstock, held in tanks rather than on racks, and released against statutory records as much as commercial ones.

PROCESS	MX-ERP CONTROL	MANAGEMENT VISIBILITY
Feedstock Procurement	Molasses, grain or syrup receipts with weighbridge, quality parameters and landed cost	Input cost per tonne
Storage & Tanks	Tank-wise stock of feedstock and spirit grades with dip, temperature and density readings	Accurate tank position
Preparation	Milling, slurry and mash preparation with consumption against the batch	Input consumed per batch
Fermentation	Fermenter-wise charge, yeast, chemicals and fermentation efficiency	Fermentation performance
Distillation	Output of RS, ENA and anhydrous ethanol by batch and shift, with steam and power drawn	Distillation yield
Yield & Recovery	Litres per tonne of feedstock, actual against standard, with deviation reasons	Yield deviation, early
By-Products	DDGS and wet cake, fusel oil, technical alcohol and spent wash captured into inventory	By-product realisation
Quality & Lab	Sample-wise lab results, strength and specification compliance, certificate of analysis	Release with evidence
Statutory Records	Denaturing, bond and permit-linked registers maintained against every movement	Documentation readiness
Dispatch	Tanker loading, sealing and quantity capture against customer or OMC orders	Dispatch control
Costing	Feedstock, steam and power, chemicals, labour and overhead allocated per batch	Cost and margin per litre

FEEDSTOCK-TO-DISPATCH FLOW

FEEDSTOCK	PREPARE	FERMENT	DISTIL	STORE	TEST	DISPATCH	RECONCILE
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RESULT

Litres-per-tonne yield visibility • Tank and batch reconciliation • By-products captured into stock • Cost per litre by batch

SECTION 06

Machine Manufacturing

For manufacturers needing control from the customer order through BOM, material, WIP, assembly, quality and dispatch.

PROCESS	MX-ERP CONTROL	MANAGEMENT VISIBILITY
Sales / Order	Order management, pricing and credit-limit verification	Order book and delivery commitments
BOM & Material Planning	Bill of materials and component requirements	Material availability and shortages
Procurement	PR, RFQ, vendor evaluation and purchase orders	Purchase status and supplier performance
Routing	Process routing and operation sequence	Planned versus actual operations
Shop Floor	Machine and labour allocation with live job progress	Capacity, WIP and job status
Quality	Incoming and in-process inspection, reject control	Quality holds and release
Inventory	Stores, bins, transfers and stock thresholds	Component and finished-goods position
Costing	Direct material, labour and machine or production overhead allocation	Job and product profitability
Dispatch	Order fulfilment and dispatch planning	On-time delivery

ORDER-TO-PROFIT FLOW

ORDER	BOM	MATERIAL	WIP	ASSEMBLY	QUALITY	DISPATCH	PROFIT
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SECTION 07

Conveyor Belt Systems

Engineered-to-order material handling, where every order carries its own design, its own bill of materials and a share of site work — and where the margin is decided long before the final invoice.

PROCESS	MX-ERP CONTROL	MANAGEMENT VISIBILITY
Enquiry & Estimation	Cost estimate built from an indicative BOM, with a margin check before the quotation goes out	Quote-stage margin
Order & Design Release	Sales order linked to the approved drawing and design revision	Scope and revision control
Engineered BOM	Order-specific BOM for structures, idlers, pulleys, drives and belting	Material requirement per order
Long-Lead Procurement	Motors, gearboxes and belting tracked against required-by dates	Delivery risk, early
Fabrication & WIP	Cutting, welding and assembly stages captured as job progress	Shop load and job status
Belting & Components	Width, grade, ply and length tracked by roll and lot	Correct issue and offcut control
Site Dispatch	Consignment-wise dispatch of structures, components and belting	What has actually reached site
Erection & Commissioning	Site activity progress, installation checklist and handover record	Project completion status
Service & Spares	Warranty, AMC and spare-part supply against the installed system	After-sales revenue
Order Costing	Material, fabrication labour, freight and site expense allocated to the order	Order-level margin

ENQUIRY-TO-COMMISSIONING FLOW

ENQUIRY	DESIGN	BOM	PROCURE	FABRICATE	DISPATCH	ERECT	COMMISSION
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RESULT

Estimated versus actual cost per order • Long-lead visibility • Controlled design revisions • Site progress matched to dispatch

SECTION 08

Heat Sensors & Instrumentation

Precision assembly where the product is defined by its specification and proved by its calibration record — and where a single serial number must trace back to the element it was built from.

PROCESS	MX-ERP CONTROL	MANAGEMENT VISIBILITY
Product Configuration	Sensor type, range, sheath material and length, connection head held as specification attributes	Order-to-specification accuracy
BOM & Components	Thermocouple wire, RTD elements, sheaths, ceramics, connectors and cable	Component availability
Incoming Quality	Element and raw material inspection with lot capture at receipt	Input quality control
Assembly	Work-order-based assembly, welding and potting stages	WIP and job status
Calibration & Test	Calibration against a reference standard, with pass, fail and deviation recorded	Test compliance
Serial Traceability	Serial and lot lineage from sensing element to dispatched sensor	Backward and forward traceability
Certification	Calibration and conformity certificates issued with the dispatch	Documentation readiness
Inventory	Component bins, min-max levels and shelf life where applicable	Stock control
Warranty & Returns	Return, re-calibration and replacement handled against the serial number	Field performance visibility
Costing	Material, labour, calibration and overhead per batch or order	Product-level margin

SPECIFICATION-TO-SUPPORT FLOW

SPECIFY	BOM	ASSEMBLE	CALIBRATE	CERTIFY	SERIALISE	DISPATCH	SUPPORT
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RESULT

Serial-level traceability • Auditable calibration records • Certificates issued with dispatch • Warranty visibility by product

SECTION 09

Management Intelligence — One Version of the Truth

Each view answers a specific management question, and each is driven by live transactions rather than a compiled report.

MANAGEMENT VIEW	KEY INDICATORS
Plant / Factory	Production throughput, utilisation, yield deviation, quality holds
Inventory	Stock value, batch, lot and tank position, min-max alerts, ageing and shelf life where applicable
Procurement	Open PR, RFQ and PO, supplier performance, material availability, long-lead status
Sales	Order book, fulfilment, credit exposure, dispatch position
Finance	Receivables, payables, cash position, P&L and forecast
Profitability	Batch, SKU, job and order-level cost and margin visibility
Alerts	Material shortage, yield deviation, quality hold, calibration due, overdue receivable, cost variance, dispatch risk

One screen. One version of the truth. Faster management decisions.

SECTION 10

Technology, Security & Integration

AREA	MX-ERP POSITIONING
Platform	Relational SQL database architecture with high-performance APIs
Deployment	Cloud-native with SSL and automated backups; hybrid and on-premise options available
Security	Encryption in transit and at rest, granular role permissions, automated cloud snapshots
Scalability	Designed for plant expansion and multi-plant configurations
Hardware Integration	APIs for weighbridges, barcode scanners, calibration equipment and IoT sensors
Business Integration	Banking, Tally and legacy accounting, e-invoice and e-way bill, biometric attendance, logistics platforms
Mobile	Executive access for approvals, alerts and live operational KPIs

SECTION 11

Implementation Framework

PHASE	INDICATIVE FOCUS
1. Discovery & Blueprinting	Requirement mapping, SOP alignment and gap-fit analysis
2. Configuration & Customisation	Core setup and industry-specific workflows
3. Data Migration & Integration	Master and opening data migration, commissioned interfaces
4. Testing & Training	User acceptance testing, stress testing and role-based training
5. Go-Live & Hypercare	Controlled cutover, parallel run and post go-live support

Reference framework: approximately 8 – 10 weeks, subject to scope, data readiness, integrations and client inputs.

SECTION 12

Why Mx-ERP for Manufacturing

BUSINESS PRIORITY	MX-ERP ADVANTAGE
Control the factory	Procurement, inventory, production, quality and finance on one data foundation
Control material cost	Track purchase, landed cost, stock and consumption
Control production	BOM and routing, batch processing, fabrication and assembly WIP, job progress
Control quality	Incoming and in-process inspection, lab and calibration records, CoA and reject management
Control profitability	Allocate direct and indirect cost to batches, SKUs, jobs or orders
Control traceability	Digital lineage across lots, batches, serial numbers and movements
Control decisions	Role-based dashboards, MIS and exception alerts
Scale operations	Architecture designed for plant expansion and multi-plant configurations

SECTION 13

Business Outcomes

OUTCOME	WHAT MANAGEMENT GETS
Higher visibility	An integrated operational and financial picture
Lower leakage	Fewer manual calculations and reconciliation gaps
Better working capital	Improved demand, inventory and cash-flow visibility
Faster decisions	Exception-led dashboards and alerts
Audit readiness	Digital records and traceability across transactions

SECTION 14

About ACG Infotech Limited

Enterprise software since 1993 — ERP, HIS and CRM.

COMPANY SNAPSHOT	DETAIL
Established	1993
Headquarters	Noida, Uttar Pradesh, India
Certifications	CMMI Level 3 • ISO 9001:2015 • ISO 27001:2013 • ISO 20000-1:2018
Core Expertise	Manufacturing ERP, supply chain, CRM and domain-specific business applications
Deployment Experience	Over 1,000 deployments globally across process manufacturing, food processing, trading and infrastructure

SECTION 15

Ready for a Working Demonstration?

A demonstration can be configured around your own plant scenario — showing the complete flow from procurement and batch, job or order creation through quality, calibration, costing, dispatch and management MIS.

ACG Infotech Limited

Noida, Uttar Pradesh, India Web www.acgil.com

MX-ERP MANUFACTURING CYCLE

PLAN	SOURCE	PRODUCE	ASSURE	STOCK	SELL	COLLECT	ANALYSE
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