FOR MANUFACTURING ENTERPRISES

Manage today rather than reporting yesterday.

ICE-ERP is an agile, modern ERP solution unifying sales orders, material and capacity planning (MRP & CRP), shop floor tracking, inventory management, shipping, and pre-accounting into a single enterprise platform.

Advanced Production & CRP

Work orders, shop floor clocking, MRP, and Capacity Requirements Planning in one flow.

Pre-Accounting & Finance

Accounts receivable/payable, e-invoicing, banking, and actual job costing integrated natively.

Layered Architecture

Core code is protected; customer-specific logic runs in an isolated customization layer.

Primary Objective: Understand your current production, capacity scheduling, inventory, and commercial workflows; demonstrate through a targeted demo session where ICE-ERP brings immediate operational value.

Production-Centric ERP Completing the Commercial Lifecycle

ICE-ERP focuses on governing real shop-floor operations and their immediate financial reflections rather than mere document filing. Work orders, machine capacities, work centers, operators, inventory, shipments, and receivables flow through a single digital spine.

Real-time shop floor to office data

Actual operational durations, operator and machine clocking, work center allocation, completed quantities, and scrap records are gathered directly from shop-floor touch screens.

Advanced planning: MRP & CRP

Material Requirements Planning (MRP) resolves component shortages, while Capacity Requirements Planning (CRP) analyzes machine load vs. capacity, identifies bottlenecks, and levels schedules.

Seamless manufacturing to accounting integration

Material consumption, finished goods receipts, lot/serial tracking, shipping, and e-invoicing operate with bi-directional integrity on a single database.

Core + customization architecture

The standard product core remains intact while customer requirements reside in an independent extension layer. Version updates deploy smoothly without breaking bespoke code.

Who Benefits the Most?

- Manufacturers tracking work orders and machine loads in spreadsheets or disjointed tools
- Teams unable to foresee capacity bottlenecks (CRP) and raw material shortages (MRP)
- Enterprises suffering from communication lag between the shop floor and accounting
- Producers whose dynamic bills of materials, routings, and variants exceed standard ERP limits
- Businesses seeking to govern inventory, purchasing, production, shipping, and finance in one system
- Companies with custom operational flows fatigued by heavy upgrade cycles of legacy ERPs

Core Functional Modules

The scope below summarizes the active module architecture of ICE-ERP and the operational and financial capabilities delivered to industrial manufacturers.

Sales & CRM

Quotations, Orders & Customer 360

Leads, customer accounts, opportunity pipelines, customer-specific dynamic price lists, tiered discount rules, freight charges, staged delivery schedules, and inventory reservations.

Advanced Planning

MRP & Capacity Requirements Planning (CRP)

Net material requirement calculation, automated purchase and production suggestions. Backward scheduling, machine load vs. capacity analysis, bottleneck identification, and workload balancing.

Manufacturing & MES

Work Orders, Operations & Shop Floor Kiosks

Multi-level work orders, routing operations, touchscreen industrial kiosks, barcode scanning, operator/machine clocking, operation splitting, yield reporting, and scrap tracking.

Engineering & Configurator

Bills of Materials (BOM), Routings & Variants

Multi-level dynamic product recipes, standard and alternate routings, work center assignments, component characteristics, rule-based product configurator, and mathematical formula engines.

PLM

Product Lifecycle & Engineering Change

CAD drawing repository, revision versioning, Engineering Change Requests (ECR) and Orders (ECO), item lifecycle states (design, active, phase-out), and First Article Inspection (FAI / AS9102).

Pre-Accounting & Finance

Receivables, Payables, Banking & Invoicing

Customer/vendor sub-ledgers, aging analysis, electronic invoicing integration (e-Invoice / e-Waybill), cash/bank transactions, payment plans, and seamless export to fiscal systems.

Inventory & Warehouse

Multi-Warehouse, Bin Locations & Lot/Serial

Site and bin-level real-time stock balances, component reservation locks, lot/batch and serial number traceability, safety stock alerts, barcode cycle counting, transfers, and consignment stock.

Procurement & SCM

Requisitions, RFQs, Purchase Orders & Inspection

Department purchase requisitions, supplier RFQ comparison matrices, tiered approval hierarchies, purchase orders, receiving workbenches, and quarantine inspection holds.

Quality Assurance

QA/QC, Inspection Plans & NCR Management

Control plans, tolerance limits, receiving (IQC), in-process (IPQC), and final (FQC/OQC) inspections, Non-Conformance Reports (NCR), disposition workflows (Scrap/Rework/Return), and deviations (Waivers).

Costing & Trade

Actual Job Costing, Valuation & Foreign Trade

Work center hourly rates, actual job cost accumulation (materials FIFO, direct labor clocking, allocated overheads), inventory valuation. Import/export tracking with landed cost expense distribution.

End-to-End Workflow from Order to Delivery & Accounting

ICE-ERP replaces fragmented files by establishing a single operational and financial data backbone across all departments.

1. Sales Order
Customer, product configuration, pricing, delivery terms, and reservations are logged.

2. Planning
MRP resolves component shortages; CRP balances machine loads and bottleneck dates.

3. Production
Work order operations run; shop floor kiosks record labor, machine time, and scrap.

4. Quality & Stock
Inspections are recorded; backflush/manual issues deduct stock; finished goods enter.

5. Shipping
Picking, packing lists, serial allocation, and electronic delivery notes are generated.

6. Pre-Accounting
Invoices are issued, sub-ledgers update, and actual job costing reconciles automatically.

For Production & Planning Managers

- **With CRP:** Which machine/work center is overbooked? Where are bottlenecks?
- **With MRP:** What raw material is needed and when? When should POs be released?
- Real-time tracking of operational progress, machine time, and operator clocking
- Scrap rate tracking and planned vs. actual quantity yield comparisons

For General Managers, CFOs & IT Leaders

- Real-time accounts receivable balances, billing accuracy, and cash flow forecasts
- Accurate actual job costing with detailed material, labor, and overhead cost structure
- Modern, high-speed web architecture built on .NET 10, Blazor Server, and EF Core
- **Layered Architecture:** Secure client-specific customizations that never break core updates

Recommended Topics for Initial Assessment

- Current pre-accounting and inventory tracking workflows
- Production scheduling and capacity methodology (MRP / CRP evaluation)
- Shop floor data capture, clocking, and progress reporting mechanisms
- Product BOM structures, routing alternatives, and configurator complexity
- Inventory accuracy, lot/serial traceability, and multi-warehouse requirements
- End-to-end integration between sales, purchasing, shop floor, and invoicing

Scalable Packages for Every Manufacturing Tier

Core Edition

For Growing SMEs: Inventory, warehousing, purchasing, sales, production (work orders/BOM/routings), pre-accounting, and fixed assets. Up to 15 full users.

Pro Edition

For Mid-Sized Producers: Everything in Core plus MRP, Quality Management (IQC/FQC/NCR), product configurator, and project management. Up to 30 users.

Premium Edition

For Advanced Enterprises: Everything in Pro plus Capacity Planning (CRP), CRM, actual job costing, quality deviation waivers, AI queries, and Web APIs. Unlimited users.

Flexible Deployment: Cloud SaaS or On-Premise

ICE-ERP is offered as either **Cloud SaaS** (monthly base + user subscription) or **On-Premise Private Deployment** (perpetual license + annual update & support agreement) based on corporate infrastructure preferences. Implementation, tailored training, and go-live consulting are delivered by senior architects.

Schedule a Targeted Demo & Process Evaluation

Let's review your production, capacity scheduling, inventory, and pre-accounting workflows together and conduct a focused demo tailored to your operational realities.

Founding Team & Solution Contact

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Consultation Proposal

A 25-30 minute online or on-site process assessment and focused demo with your plant manager, planning head, finance lead, or IT director.