

TOP 10 MANUFACTURING ERP SOFTWARE



TOP 10 MANUFACTURING ERP SOFTWARE

1

SAP

SAP S/4HANA

6

VAI

VAI ERP

2

Acumatica

Acumatica Cloud ERP

7

DELMIAWorks

DASSAULT Systèmes

3

Epicor

Epicor Kinetic

8

Rootstock Manufacturing ERP

Rootstock Software

4

Microsoft

Dynamics 365
Business Central

9

QAD

QAD Adaptive ERP

5

SYSPRO

SYSPRO

10

IFS

IFS Cloud ERP



HOW THESE RANKINGS WERE GENERATED

This ranking was determined using a number of factors including industry standing, public opinion of software, social media presence, and available software features relevant to the needs of a small business. This ranking should serve as a rough estimate of software suitability, and more in-depth analysis can be taken below or by using our ERP software comparison.

[FIND & COMPARE ERP](#)





MUST-HAVE MANUFACTURING ERP FEATURES

Manufacturers of all kinds use ERP systems. The ERP industry began with MRP (manufacturing requirements planning) and grew to its current state where we now have enterprise requirements planning.

Manufacturing, however, is a very broad subject. Process manufacturing can range from a bakery that produces daily batches of bread and cakes to a petroleum refinery that produces gasoline and other products running all day, every day for months without stopping.

Discrete manufacturing also can range from one company that produces a single engineered-to-order product to another that produces items in long runs that each has a single serial number.

We will look here at modules that apply to any business, and somewhere the application applies but has significant differences in use between industries.

OPERATIONS AND PRODUCTION MANAGEMENT

Operations management is the heart of a manufacturer. Products must be made that work for the customers and meet their needs. Those products must be ready based on a schedule so they arrive when the customer wants a delivery. People and material components or ingredients need to be delivered so that operations can achieve the schedule. Financial management is connected too so that cash to pay the suppliers and employees is available at the right time.

A discrete manufacturer will use a bill of materials to break out all the component parts required for production. Those materials are assembled over time based on a routing or bill of operations, and eventually, they become a finished product.

A process manufacturer mixes ingredients based on a recipe. Combining those ingredients often follows equipment and the capabilities of the machinery but there are steps that must be followed to get the desired finished products. There can be different grades of product at the end where "grade A" yield goes to certain customers and lower grades to other customers.

INVENTORY CONTROL

All manufacturers use and maintain inventory. Inventory often is the single greatest value asset for a manufacturer and it must be controlled and used optimally. They purchase materials based on forecasts or unique order requirements. Perfect inventory moves continuously until the product is completed but perfect inventory is an elusive goal. Management of inventory is necessary for both process and discrete manufacturers.

Inventory not in motion is a waste to be controlled. Inventory can become obsolete when customer demands evolve or when better materials become available. Control of obsolete and excess inventory is a constant effort. Good inventory control allows a manufacturer to dispose of unneeded inventory while it still has some value avoiding the need to scrap material with no value.

Any unnecessary material movement is also a waste. Inventory control requires that materials be kept where they can be moved to and from production with the least effort. Slotting is the term used to describe keeping materials in the optimum location.

PURCHASING AND SUPPLY CHAIN MANAGEMENT

Manufacturing runs on inventory and purchasing is at the core. This module starts with sales order and forecast demands. Then it moves from the product parent demands to the individual component demands to support those products. Next, it schedules those demands based on the production schedule and alerts the supply chain manager when the time is right to place a purchase order on a supplier.

The same module helps that manager watch that order until it arrives on the receiving dock, providing alerts as needed to prompt necessary follow up actions. It also tracks and records all the transactions. Purchasing management systems track incoming material through complex flows. An order might be placed with a distributor who, in turn, places an order on a foreign producer. That order moves from a factory in one country to another factory in another country for completion. It moves onto a ship and to port in the country where the manufacturer operates. It still needs to process through customs and transport showing up at receiving at the time needed.

Manufacturers who outsource production use purchasing management tools as well. The outsource producer needs to maintain inventory, and purchasing needs to know it is on hand or available when needed. Often components are consigned to that producer – physically moved and stored at the producer's site while still owned by the manufacturer. The producer uses jobs or work orders within their shop and the manufacturer should track progress toward completion and return of the finished work

so that the order can be checked and delivered to the customer who is waiting. That outsource producer must follow prescribed processes and quality standards and purchasing management allows that within ERP.

SALES AND ORDER MANAGEMENT

Customers place orders for products they need. Those customer purchase orders become sales orders at the manufacturer. ERP signals operations to schedule work and purchasing to order component materials needed to fulfill those customer demands. ERP also alerts sales management informing them if the order is on schedule providing an opportunity to alert the customer when there is any risk. ERP records all the transactions required with links to the sales order demand. This allows for intelligent reporting.

Sales orders can be exact repeats of previous orders or they can be unique, quoted items ordered on a one-time basis.

SUPPLIER RELATIONSHIP MANAGEMENT

SRM or supplier relationship management comes as a part of your ERP. This module is where we track requests for quotations from suppliers, and keep a rating of those quotes to enable better quote management in the future.

SRM is also an important part of a manufacturer's quality assurance system. The manufacturer requires suppliers to maintain quality standards and international certifications. Those certifications and standards are kept in SRM and alerts come whenever updates are needed.



WHY NOT CREATE YOUR OWN COMPARISON?

With our free comparison engine you can build your own side-by-side comparison of leading ERP solutions. Narrow down your shortlist using filters including:

- Software Features
- Industry
- Delivery Platform

FIND & COMPARE ERP





Microsoft Dynamics 365 Business Central

OVERVIEW

PRODUCT NAME

SAP S/4HANA

Acumatica Cloud ERP

Epicor Kinetic

Microsoft Dynamics 365 Business Central (formerly Microsoft Dynamics NAV)

BUSINESS SECTORS

DISTRIBUTION



GOVERNMENT & NPO



MANUFACTURING



RETAIL



SERVICES



MOBILE CAPABILITIES

ANDROID APP



IOS APP



WEB APP



INDUSTRY

AEROSPACE & DEFENSE



AUTOMOTIVE



CHEMICAL	✓	✓	✗	✓
CONSTRUCTION	✓	✓	✓	✓
COSMETICS	✓	✓	✗	✓
ELECTRONICS	✓	✓	✓	✓
ENERGY/POWER/UTILITIES	✓	✓	✗	✓
ENGINEERING	✓	✓	✓	✓
FASHION	✓	✓	✗	✓
FINANCIAL SERVICES	✓	✓	✗	✓
FOOD & BEVERAGE	✓	✓	✗	✓
LOCAL GOVERNMENT	✓	✗	✗	✓
MEDIA	✓	✓	✗	✓
MEDICAL & HEALTHCARE	✓	✓	✓	✓
METALWORKING	✓	✓	✓	✓
OILFIELD	✓	✓	✗	✓
PACKAGING	✓	✓	✓	✓
PAINT & ADHESIVES	✓	✓	✗	✓
PHARMACEUTICAL	✓	✗	✗	✓

PLASTICS & RUBBER	✓	✓	✓	✓
PRINT & DESIGN	✓	✓	✗	✓
RENTAL	✓	✓	✗	✓
TELECOMMUNICATIONS	✓	✓	✗	✓
WOODWORKING	✓	✓	✓	✓
CANNABIS	✗	✓	✗	✗
EDUCATION	✗	✗	✗	✗
NONPROFIT	✗	✗	✗	✗
SYSTEM HOSTING				
CLOUD	✓	✓	✓	✓
INSTALLED ON PREMISE	✓	✓	✓	✓
ERP SOFTWARE FEATURES				
BILLING	✓	✓	✓	✓
BUSINESS INTELLIGENCE/ANALYTICS	✓	✓	✓	✓
COSTING	✓	✓	✓	✓
CRM	✓	✓	✓	✓
CUSTOMER SERVICE	✓	✓	✓	✓

PRODUCT DESIGN	✓	✗	✓	✗
FINANCIALS & ACCOUNTING	✓	✓	✓	✓
HR	✗	✗	✓	✗
INVENTORY MANAGEMENT	✓	✓	✓	✓
ORDER MANAGEMENT	✓	✓	✓	✓
PLANNING & SCHEDULING	✓	✗	✓	✓
PROJECT MANAGEMENT	✓	✓	✓	✓
PURCHASING	✓	✓	✓	✓
QUALITY CONTROL	✓	✗	✓	✗
SALES	✓	✓	✓	✓
SHIPPING & DISTRIBUTION	✓	✓	✓	✓
SUPPLY CHAIN MANAGEMENT	✓	✓	✓	✓
WAREHOUSE MANAGEMENT	✓	✓	✓	✓
ASSET MANAGEMENT	✓	✓	✓	✓
DOCUMENT MANAGEMENT	✓	✓	✓	✓
CUSTOMER SUITABILITY				
ENTERPRISE (1000+ EMPLOYEES)	✓	✗	✓	✗

MEDIUM SIZE (251-1000 EMPLOYEES)	✓	✓	✓	✓
SMALL BUSINESS (1-250 EMPLOYEES)	✗	✓	✓	✓
ADDITIONAL PRODUCT INFO				
MULTI LANGUAGE	✓	✓	✓	✓
MULTI CURRENCY	✓	✓	✓	✓
CUSTOMIZABLE	✓	✗	✗	✓
SUPPORT SERVICES				
ACCOUNT MANAGER	Data currently unavailable. Click here to suggest data for this product	✓	Data currently unavailable. Click here to suggest data for this product	✓
API SUPPORT		✓		✗
EMAIL		✓		✓
IN-SYSTEM		✗		✗
LIVE CHAT		✗		✗
PHONE		✓		✗
SUPPORT TICKETS		✓		✓
REVIEWS				
REVIEW SCORE				
OTHER INFORMATION				

IMPLEMENTATION TIMEFRAME			24 weeks	
PRICING	Pricing not known	Consumption based pricing model, only pay for the resources used.	~\$175/user/month (5-user min.)	30-day free trial available, Essentials: \$70/user/month, Premium: \$100/user/month. Paid annually.
TRAINING COSTS				
SUPPORT COSTS				
ADDITIONAL INFORMATION			Minimum implementation fee: \$50,000	



OVERVIEW

PRODUCT NAME	SYSPRO	VAI ERP	DELMIAWorks Manufacturing ERP (Formerly IQMS)	Rootstock Manufacturing ERP
BUSINESS SECTORS				
DISTRIBUTION	✓	✓	✗	✗
GOVERNMENT & NPO	✗	✗	✗	✗
MANUFACTURING	✓	✓	✓	✓
RETAIL	✗	✓	✗	✗
SERVICES	✗	✓	✗	✗
MOBILE CAPABILITIES				
ANDROID APP	✗	✗	✗	✗
IOS APP	✗	✗	✗	✗
WEB APP	✗	✓	✓	✓
INDUSTRY				
AEROSPACE & DEFENSE	✓	✗	✓	✓
AUTOMOTIVE	✓	✓	✓	✓

CHEMICAL	✓	✗	✗	✗
CONSTRUCTION	✓	✗	✗	✓
COSMETICS	✓	✓	✓	✓
ELECTRONICS	✓	✓	✗	✓
ENERGY/POWER/UTILITIES	✗	✗	✗	✗
ENGINEERING	✗	✗	✗	✓
FASHION	✗	✓	✗	✓
FINANCIAL SERVICES	✗	✗	✗	✗
FOOD & BEVERAGE	✓	✓	✓	✓
LOCAL GOVERNMENT	✗	✗	✗	✗
MEDIA	✗	✗	✗	✗
MEDICAL & HEALTHCARE	✗	✗	✗	✓
METALWORKING	✓	✗	✓	✓
OILFIELD	✗	✗	✗	✗
PACKAGING	✓	✓	✓	✓
PAINT & ADHESIVES	✓	✓	✗	✓
PHARMACEUTICAL	✓	✓	✗	✓

PLASTICS & RUBBER	✓	✓	✓	✓
PRINT & DESIGN	✗	✗	✗	✓
RENTAL	✗	✓	✗	✗
TELECOMMUNICATIONS	✗	✗	✗	✗
WOODWORKING	✓	✗	✗	✓
CANNABIS	✓	✗	✗	✓
EDUCATION	✗	✗	✗	✗
NONPROFIT	✗	✗	✗	✗
SYSTEM HOSTING				
CLOUD	✓	✓	✓	✓
INSTALLED ON PREMISE	✓	✓	✓	✗
ERP SOFTWARE FEATURES				
BILLING	✓	✓	✓	✓
BUSINESS INTELLIGENCE/ANALYTICS	✓	✓	✓	✓
COSTING	✓	✓	✓	✓
CRM	✓	✓	✓	✓
CUSTOMER SERVICE	✗	✓	✗	✓

PRODUCT DESIGN	✗	✗	✗	✓
FINANCIALS & ACCOUNTING	✓	✓	✓	✓
HR	✗	✗	✓	✗
INVENTORY MANAGEMENT	✓	✓	✓	✓
ORDER MANAGEMENT	✓	✓	✓	✓
PLANNING & SCHEDULING	✓	✓	✓	✓
PROJECT MANAGEMENT	✗	✗	✓	✓
PURCHASING	✓	✓	✓	✓
QUALITY CONTROL	✓	✓	✓	✓
SALES	✓	✓	✓	✓
SHIPPING & DISTRIBUTION	✓	✓	✓	✓
SUPPLY CHAIN MANAGEMENT	✓	✓	✓	✓
WAREHOUSE MANAGEMENT	✓	✓	✓	✗
ASSET MANAGEMENT	✓	✓	✓	✓
DOCUMENT MANAGEMENT	✗	✓	✓	✗
CUSTOMER SUITABILITY				
ENTERPRISE (1000+ EMPLOYEES)	✗	✓	✗	✓

MEDIUM SIZE (251-1000 EMPLOYEES)	✓	✓	✓	✓
SMALL BUSINESS (1-250 EMPLOYEES)	✓	✓	✓	✗
ADDITIONAL PRODUCT INFO				
MULTI LANGUAGE	✗	✓	✓	✓
MULTI CURRENCY	✓	✓	✓	✓
CUSTOMIZABLE	✗	✗	✗	✗
SUPPORT SERVICES				
ACCOUNT MANAGER	✓	✓	✓	
API SUPPORT	✗	✓	✓	
EMAIL	✓	✓	✓	
IN-SYSTEM	✗	✓	✗	
LIVE CHAT	✗	✓	✓	
PHONE	✓	✓	✓	
SUPPORT TICKETS	✓	✓	✓	
REVIEWS				
REVIEW SCORE				
OTHER INFORMATION				

Data currently unavailable.
[Click here](#) to suggest data for this product

IMPLEMENTATION TIMEFRAME	24 weeks	12-18 Months		3-6 Months
PRICING	\$200 Cloud/SaaS. Pricing is based on per user, per month, per module. Bundle pricing is available. Minimum 1-year contract, billed and auto-renewed annually. License cost is per user, per module, including an initial license fee and annual license based on percentage of initial license fee.	Cost varies based on the number of users	\$2,900	Not Available
TRAINING COSTS			Dependent on selected training option	
SUPPORT COSTS			No additional fee is required for technical support. Unlimited chat, phone and email support is offered as part of the annual maintenance fee.	
ADDITIONAL INFORMATION				



OVERVIEW

PRODUCT NAME

QAD Adaptive

IFS Cloud

BUSINESS SECTORS

DISTRIBUTION

×

✓

GOVERNMENT & NPO

×

×

MANUFACTURING

✓

✓

RETAIL

×

×

SERVICES

×

✓

MOBILE CAPABILITIES

ANDROID APP

×

✓

IOS APP

×

✓

WEB APP

✓

✓

INDUSTRY

AEROSPACE & DEFENSE

×

✓

AUTOMOTIVE

✓

✓

CHEMICAL		×	✓
CONSTRUCTION		×	✓
COSMETICS		✓	✓
ELECTRONICS		✓	✓
ENERGY/POWER/UTILITIES		×	×
ENGINEERING		×	✓
FASHION		×	×
FINANCIAL SERVICES		×	×
FOOD & BEVERAGE		✓	✓
LOCAL GOVERNMENT		×	×
MEDIA		×	×
MEDICAL & HEALTHCARE		✓	×
METALWORKING		✓	✓
OILFIELD		×	×
PACKAGING		✓	×
PAINT & ADHESIVES		✓	×
PHARMACEUTICAL		✓	×

PLASTICS & RUBBER	✓	✓
PRINT & DESIGN	✗	✗
RENTAL	✗	✗
TELECOMMUNICATIONS	✗	✓
WOODWORKING	✗	✗
CANNABIS	✗	✗
EDUCATION	✗	✗
NONPROFIT	✗	✗
SYSTEM HOSTING		
CLOUD	✓	✓
INSTALLED ON PREMISE	✗	✓
ERP SOFTWARE FEATURES		
BILLING	✓	✓
BUSINESS INTELLIGENCE/ANALYTICS	✓	✓
COSTING	✓	✓
CRM	✓	✓
CUSTOMER SERVICE	✓	✗

PRODUCT DESIGN		✗	✓
FINANCIALS & ACCOUNTING		✓	✓
HR		✗	✓
INVENTORY MANAGEMENT		✓	✓
ORDER MANAGEMENT		✓	✓
PLANNING & SCHEDULING		✓	✓
PROJECT MANAGEMENT		✓	✓
PURCHASING		✓	✓
QUALITY CONTROL		✓	✓
SALES		✓	✓
SHIPPING & DISTRIBUTION		✓	✓
SUPPLY CHAIN MANAGEMENT		✓	✓
WAREHOUSE MANAGEMENT		✓	✓
ASSET MANAGEMENT		✓	✓
DOCUMENT MANAGEMENT		✓	✓
CUSTOMER SUITABILITY			
ENTERPRISE (1000+ EMPLOYEES)		✓	✓

MEDIUM SIZE (251-1000 EMPLOYEES)	✓	✓
SMALL BUSINESS (1-250 EMPLOYEES)	✗	✓
ADDITIONAL PRODUCT INFO		
MULTI LANGUAGE	✓	✓
MULTI CURRENCY	✓	✓
CUSTOMIZABLE	✗	✗
SUPPORT SERVICES		
ACCOUNT MANAGER	✓	
API SUPPORT	✓	
EMAIL	✓	
IN-SYSTEM	✓	
LIVE CHAT	✓	
PHONE	✓	
SUPPORT TICKETS	✓	
REVIEWS		
REVIEW SCORE		
OTHER INFORMATION		

Data currently unavailable.
[Click here](#) to suggest data for this product

IMPLEMENTATION TIMEFRAME	1-6 months	
PRICING	From ~ \$250/user/month	Not Available
TRAINING COSTS		
SUPPORT COSTS		
ADDITIONAL INFORMATION		

TOP 10 MANUFACTURING ERP SOFTWARE
