ALERE® ERP

TIW Technology

ALERE KEY POINTS

ALERE is an ERP solution that delivers sophisticated features not commonly found in mass-market packages. Complex processes provide maximum benefit when presented in a manner that simplifies their use. The acquisition and implementation costs of ALERE are usually very affordable. Ongoing costs are reasonable since it is not based on the number of users.

Often sought capabilities included with ALERE, such as Document Management, do not require additional investment. Customizations in ALERE are simplified by its advanced architecture. More importantly, the modifications made by a company are easily transitioned to new product versions.

PLATFORM

- Client/Server and LAN
- One codebase throughout ALERE's product offerings
- Multi-tier object-orientated architecture - multi-level product customization – data-driven definition elements - user hooks/custom code - languages – lingoes
- Inheritance modification strategy allows customizations to be ported to new product releases

COMMON PRODUCT DESIGN

- Adherence to APICS (American Production Inventory and Control Society) standards
- MDI (Multiple Document Interface) with dynamic screen sizing
- Real-time processing including general ledger and data collection
- Hyperlinks internally for data elements, screens, documents, and externally for websites, PDFs, video, etc.
- Document management
- Data drill down
- Data browsers search with conditional statements, sort data, print or export data, retain preferences by user, and have "persistence," which allows detailed examination of multiple records with one instance of the browser
- Fetch© search tool with desktop availability and provides access to entire data spectrum
- Automatic notifications based on defined event triggers and using native email capability
- Single point of entry for companies and all related information for prospects, customers, suppliers, etc. supported
- Multi-currency throughout supporting exchange rates, exchange variances, and rate history backed by graphs
- Data archiving that provides continuous company history, with optional data reduction, for data mining
- User-defined fields and notes allowing easy customization for collecting company or industry-specific data
- Screen and reporting engines that support printing, PDF creation, export to Excel, and email

ORDER

- Work orders are transactionally based on providing accurate, real-time documentation and in support ISO standards
- "Express Orders" instantly issue materials, post-labor, apply overhead and post finished goods to inventory
- "Standard Orders" may be created manually, from a sales order, or by the material planning process
- A standard work order documents what to make, the configuration, the route, a material list, and what lot/serial/traits are used
- An order start quantity will calculate the projected finish quantity, or conversely, entering a projected finish quantity will calculate the required the start quantity
- Route steps and material information may be edited on an order by order basis
- The standard order may be processed using manual or bar code transactions
- Transactions include labor, operation step start and stop, work in process (WIP), components issued, value of scrap, tracking and recording fixed and variable overhead, etc.
- Work orders may be classified based on assembly, make, rework, maintenance, or service activity
- Generate material pick lists for an entire job or individual operation step
- Orders may be printed with bar codes to support data acquisition
- Analytical tools for examining productivity and performance

ROUTE

- A route details the method of manufacture of a particular item

- Create as many master routes as required, each with revision support and drawing assignment
- Each route may contain as many as 998 individual operation steps
- Define standard operation steps and add them to a library where they can be used to shorten the time to create routes
- An operation step consists of a work center, cycle times, instructions, yield, batch size, and overlap and scheduling options
- Cycle times can be in days/hours/minutes/seconds or engineered minutes
- Labor grades and percent operator usage factors can be assigned to set up and cycle times
- A yield, or shrink factor, allows each step to account for increases or decreases in WIP quantities
- Each step has a batch size to set how many of the item is processed per cycle time
- An operation step overlap option permits schedule compression
- Individual operations may be excluded from scheduling
- The operation step description allows multiple hyperlinks to documents, videos, drawings, etc.
- The master route header and each operation step contain user-definable fields and notes
- Routes may be associated with individual items
- Each operation step may be assigned BOM components and material from inventory
- Use the actual route performance on work orders to update master routes
- Routing information is appended to work orders where steps may be edited during production
- Copy and edit routes to speed the creation of new master routes
- Work orders may be used to copy and create routes

MACHINE

- A work center can be a machine, a group of machines, a person, an area, an outside vendor
- Work centers are used to define factory capacity, which is used to develop schedules
- The work center capacity is defined in days and hours available or can be set as infinite capacity
- Efficiencies are individually assigned and factor into scheduling
- An hourly overhead rate can be assigned to a work center
- Up to ten alternate work centers may be established and organized in order of preference
- Capture downtime and estimate date and time work center is expected to be available
- Assign reasons for downtime for analysis
- Create and generate preventative maintenance orders automatically
- Material planning and scheduling take into account preventative maintenance orders

SCHEDULE

- Fast finite scheduling with synchronized material planning
- Forward or backward schedule individual work orders
- Use forward scheduling for "build to stock" orders
- Use backward scheduling for "build to order" jobs
- Simultaneously schedule forward and backward orders
- Scheduling resolution which can be set to "next hour" or "next minute"
- 999-day schedule horizon
- Optionally include unreleased work orders in the trial schedule
- Overlap operation steps on work orders to shorten the time it takes to complete a job
- An overlap algorithm ensures continuous production without start/stop operation step interruptions
- Lock individual work order schedules to prevent bumping
- Run trial schedules as often as required to meet testing inquiries
- Use "implemented" schedules to control day-to-day production activity
- Implemented schedules automatically update work order completion dates
- Present schedule information on a graphical board by either work order or work center
- Drag and drop manual scheduling on the visual board within scheduling constraints
- Drill down on the visual board to actual work orders
- Do graphical work center load analysis by work order, item, or customer
- Operation steps that should have been completed are noted through error warnings

BOM

- Construct indented bills on a single screen using a graphical interface
- Each bill can be up to twenty-five levels deep
- Form, fit, or function changes to a bill can be assigned revision numbers and active/inactive dates
- Material substitutions on a bill are supported using active/inactive dates for the components
- Update in-process work orders when there are revisions to bills
- An advanced BOM structure permits Component, Modular, Variable, Alternate, Phantom, and Kit type bills
- Modular/Variable bills can compress thousands of bills to a single indented bill
- Component bills have "Add/Delete" capability, which allow children to have negative quantities
- Modular bills consist of child records representing option choices rather than components
- Variable bills are designed to allow the parent part to have a variable quantity based on its unit of measure
- Alternate bills are reference bills that contain a list of items that can be used interchangeably with the parent part
- Phantom bills describe a transient assembly or component which can be stocking or non-stocking
- Kit bills specify a group of components that can be configured, packaged, and shipped
- BOM's become material lists when appended to work orders which can then be edited
- Sales order configuration rules are defined by using Modular and Variable BOM types
- Items with options may be pre-configured and assigned item numbers
- Images and descriptions of products are stored in bills
- Disassemble and return to inventory items from sales orders or assemblies in the process of being manufactured
- Using "Material Orders" instantly issue components and post the finished goods to inventory
- Mass replace a no longer available component with a replacement component across a range of BOMs
- MRP, Net Requirements, costed BOMs, and lead time roll-up reports

PLAN

- Single-pass MRP system through all indented bill levels
- Push/Pull planning recommends work order and purchase order changes
- Material planning permits either a "bucketless" or "bucketed" presentation of data
- Capability to run MRP for single items or sales orders
- Sales quotes may be optionally included in MRP
- Material requirements may be synchronized with production scheduling to exceed JIT requirements
- Both actual and potential material shortages are readily identified
- Planning creates a list of recommended work orders and purchase orders which may be pushed into the system
- Recommended orders may be automatically generated as "live" or "pending" orders in the system
- Planned orders may be grouped by order periods and suppliers
- Recommended purchase orders may be automatically emailed to suppliers

COST

- Forecast finished good costs based on the item, quantity, route, and BOM using inventory average, last or standard costs
- Perform cost roll-ups for a range of items using multiple costing options
- Compare cost roll-ups to current inventory standard costs and selectively update those costs
- Track actual material, labor, and overhead work order costs and review variances against projections
- Define multiple fixed and variable overhead costs methods using seven overhead algorithms
- Set up and associate costs to labor grades base on training and experience
- Assign labor grades to set up and cycle operations on route steps
- Calculate projected labor costs