Sage 500 ERP

Engineering Change Management

Improve Engineering Management Through Email Notifications and Standardized Approval Processes

Quality control is one of the most important business concerns for manufacturers. Sage can help you control production costs by producing quality parts for your most demanding customers.

Labor operations and material items are constantly changing as new items are developed, and manufacturing processes are streamlined using newer equipment. Consequently, it is more important than ever before to standardize your engineering change management process.

The Sage 500 ERP (formerly Sage ERP MAS 500) Engineering Change Management (ECM) module integrates with email notifications, providing instant visibility and standardized approval methods for routing and bill of material changes.

Any change made to an ECM-controlled routing and bill of material is routed through email to members of an approval group. Each member has a specified amount of time to approve any engineering changes.

Engineering Change Management can also be used to track effective dates and retirement dates for each routing and bill of material.

Engineering Change Management is crucial to quality control and is a requirement for ISO and QS certification.

| Approval Type Standard Type Password Approval must be in sequence Change Remove Prior Approvals | | Desci Approval C E-Mail Add | oordinat | Standard Approval tor homer@soa.com John;admin;Terry;Mary | | |
|---|--------------------|-----------------------------------|----------|--|------------------|----------|
| | | 7 Valid User | | | | <u> </u> |
| | Days To Approve | Password | | E-Mail Address | Valid User Li | ist |
| Seq1 Engineering | 2 | 1 | martin@ | soa.com | admin;ken | 9 |
| Seq2 Plant Manager | 2 | 1 | ned@sc | a.com | admin;marry | 9 |
| Seq3 VP of Operation | 2 | | barney@ | osoa.com | admin;tim,mary | 9 |
| Seq4 Quality Control | 2 | : | sallyc@: | soa.com | admin;sally,mary | |
| Seq5 Purchasing | 2 | [i | ohns@s | soa.com | admin;john,mary | 9 |
| Seq6 Sales | 2 | 1 | terryk@: | soa.com | admin;terry,ken | 9 |
| Seq7 | 0 | | | | | 9 |
| Exchange Mailbox | | | | SMTP Return Address | oduction@soa.com | |



- Gain instant visibility into routing and bill of material changes.
- Improve communications with automatic emails sent to members of up to seven different approval sequence groups.
- Increase efficiency with online approvals of change requests and the ability to enter notes for each approval sequence.
- Use effective dates and retirement dates to eliminate guesswork about which version of a routing/bill of material to use.
- Analyze and monitor engineering change information to gain insights into how material and labor changes will affect production costs and pricing.

SAGE 500 ERP SOLUTIONS

- Financials and Project Accounting
- Manufacturing and Distribution
- CRM and E-Business
- Human Resources and Payroll
- Customization and Integration
- Business Intelligence



"Sage 500 ERP has improved our inventory systems, reduced manual processes and given us the exact information we need for managing our manufacturing operations. It's been responsible for a lot more smiling faces—including mine."

> Melissa Wilson Customer Service Manager Arc-diversified, Inc.

Sage 500 ERP | Engineering Change Management

Routing/Bill of Material Control

Engineering changes are linked to a unique routing and bill of material.

- Control changes made to labor operations, move times, queue times, setup hours, or other labor-related data for each routing.
- Manage changes made to new raw materials or substituted component items.
- Create new change requests when multimedia files are updated. ECMs may include new machine setup videos or material handling instructions.
- Use change requests to track changes made to engineering drawings. You can also create hyperlinks to show relationships between current and previous drawings using the built-in CAD viewer.

Multiple Approval Sequences

An engineering change request may include multiple approval sequences.

- Each engineering change may contain up to seven different approval levels.
- Members of each sequence may check an approval box online providing updated access to change request status.
- Notes can be entered for each approval sequence.

Email Integration

Engineering change requests may be automatically emailed to members of each approval sequence.

- Email notifications can be used with any MAPI-compatible email system such as Microsoft Exchange.
- Email messages are sent to every member of up to seven different sequence groups.
- If the approvals must be made in order, then the email notifications are sent to members of the next sequence group after the previous group has approved the change.
- Multiple email addresses may be entered for each sequence level.

Effective/Retirement Dating

Engineering changes may have both effective and retirement dates.

- Changes may contain an effective date. This is the date that the new routing/bill of material version will take effect and the old version will become inactive.
- You can specify a retirement date for each change as well. For example, you may want to set a retirement date for a routing/ bill of material if you know that you will be using a substitute part only for a specified time.

Quality Control

Most quality control programs require engineering change management.

- Change management helps manufacturers meet stringent quality control standards set forth in ISO/QS certification programs.
- The Sage 500 ERP ECM system improves the production process by closely monitoring changes made to production standards and costs.
- Reduce the quantity of items that are scrapped or the number of times that orders are returned because the finished goods contained outdated or defective component items.

Engineering Audits

Track changes to and from previous versions of engineered parts.

- The ECM module provides an audit trail to trace a product backward or forward through its engineering life cycle.
- · Compare routings and bills of material to older or newer versions.
- Trace backward or forward from the current version to the original part estimate.

Business Insights

Analyze and monitor engineering change information to gain insights into how material and labor changes will affect production costs and pricing.

- Organize, analyze, and graph rolled-up bill of material and routing costs to determine how changes will impact finished goods cost and price structures.
- Use the built-in alerting capabilities to send email alerts to managers, purchasing, sales, production, and other departments that may be affected by engineering changes.

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