INFIMACS II® Data Sheet

Integrated Financial and Manufacturing Control System

Engineering Change Control

FUNCTIONS

- Bill of Material and Routing Change Control
- ECO History and Reports
- Engineering Revision Level Control
- Future/Past ECO Configuration
- Document Change Control

FEATURES

General

- ECO Approval Stages: Planned, Released, Implemented
- Documentation In/Out Control
- Reason Codes
- ECO History Inquiry
- ECO History Reports

Bill of Material Change Control

- Component ECO Control
- Component ECO History
- Engineering Revision Level Update
- Add, Change, Delete Based on ECO Number
- Reports Based on ECO
- Number or Effective Date

Routing Change Control

- Operation ECO Control
- Operation ECO History
- Add, Change, Delete Based on ECO Number
- Reports Based on ECO Effective Date

BOM Processes Controlled by ECO

- Master Production Schedule (MPS)
- Material Requirements Planning (MRP)
- Work Orders
- Subcontract Requisitions and Purchase Orders
- Configured Sales Orders
- Estimating
- Design Engineering

SUMMARY

Engineering Change Control enforces discipline and management control over modifications to bills of materials and shop floor routings. Component and operation changes pass through an authorization and approval process and are logged into an ECO history database. MRP and other programs retrieve component and routing configurations based on ECO effective dates. ECO numbers can be overridden manually to invoke future or past ECO configurations.

Engineering Change Control provides "As Designed" revision history. Inquiry screens and reports show the revision details, including the initial entry dates, items affected, approval stage, documentation status and extensive narrative. Downstream "As Designed, As Built, As Delivered" reports show the bill configurations defined by the ECO revisions.

All INFIMACS II programs that use bill of material and routing master records to "explode" or "extract" components and operations contain ECO capabilities. For example, Master Production Scheduling and Material Requirements Planning explode bills of materials to create the component demands for each work order and subcontract PO requisition. These configurations are based on the release date of the orders compared with the ECO effective dates on the bills.

You can use the ECO feature to automatically retrieve future or past design configurations. For example, when preparing to explode components for a work order, subcontract requisition or PO, or configured sales order, you can specify the ECO number associated with the desired future or past design. The BOM explosion process will retrieve the appropriate components, based on the specified ECO's effective date (rather than the order's release date).

Engineering Change Control

INFIMACS II also provides the option to utilize the ECO control feature in a "Soft ECO Control" environment. By de-activating the feature in the system control record, it is still possible to use the tracking and reporting capabilities without actually enforcing the ECO control over bills, routings and the various programs that perform the explosion logic. This method provides visibility to the change process, without requiring the additional approval and management controls.