

# BLUESTAR ECM



BLUESTAR PLM®  
PLM inside Dynamics 365

## BLUESTAR ENGINEERING CHANGE MANAGEMENT

### KEY BENEFITS

- Know the design impact of engineering changes
- Know the cost of engineering changes
- Know the feasibility of engineering changes
- Ensure the timely phase-in of new revisions in Microsoft Dynamics 365/AX
- Enforce best practice change procedures
- Increased engineering productivity
- Eliminate the paper trail that usually accompanies engineering changes
- Shorten change cycles
- Improve time to market
- Complete change history
- Reduce scrap & rework

**BLUESTAR PLM features total-integrated engineering change management functionality, enabling users to fully understand the design and dollar impact of engineering changes before they are implemented. This facilitates better business decisions and ensures that drawings and related documentation always reflect the latest changes.**

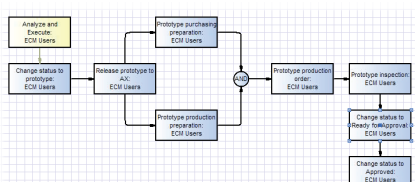
Change management is not just a matter of making changes to BOMs, CAD drawings and auxiliary documentation. It is also a matter of understanding the impact a change will have on your business. Determining the entire impact of an engineering change therefore requires an integrated approach involving CAD, PLM and ERP applications.

BLUESTAR PLM provides the integrated platform for this. It allows users to analyze whether items pending change are used in other product designs which could potentially require revisions as well. A cumulated list of items affected by the change is displayed in an intuitive impact tree providing an optimum overview of any change dependencies.

Once the affected items have been identified, users can preview the downstream impact of the change in terms of which on-hand quantities, purchase order and production orders have been placed against the affected items in Microsoft Dynamics 365 for Finance and Operations, Enterprise Edition & Dynamics AX (365/AX). The system uses this information to analyze the cost and feasibility of a change and enables users to input what-if information in order to reach a conclusion regarding how best to implement the change, e.g. "use up stock", "by next production order", "immediately", etc.

Once the parameters for how to implement the change have been determined, the system can optionally create the necessary revisions of any affected item records and associated documentation, thus ensuring the timely phase-in of any new revisions in the Microsoft Dynamics 365/AX production system.

To ensure that best-practice change procedures are followed and remain traceable, BLUESTAR PLM features a graphical workflow engine which drives the distribution of tasks and information to the right people, at the right time.



## KEY FEATURES

Microsoft Dynamics 365/AX integration & revision control	Adds item and BOM revision control to Microsoft Dynamics 365/AX. This means that items and BOMs can be sold, purchased, stocked and manufactured with revision-specific traceability.
CAD integration	Ensures that the correct revisions of design documentation is always linked to the correct revisions of 365fO & AX items.
Document management integration	Ensures that revision-controlled documents are maintained in relation to specific revisions of 365/AX items.
Where-used design analysis	Enables users to identify the impact an engineering change will have on other product designs expressed as a list of affected items.
Change impact tree	Displays the impact a change may have on other designs (affected items) in a hierarchical tree structure for optimum overview of change dependencies.
Batch revision jobs	Enables automated revision of all impacted designs (affected items) and associated drawings in a single batch job. As a result, it is not necessary to revise every single affected item manually. The change will automatically take effect where needed.
Where-used transaction analysis	Provides an overview of on-hand, on-order and in-production quantities to reveal the downstream impact of a change.
Change cost analysis	Enables the calculation of change costs based on the Where-used transaction analysis and user defined effectivity parameters such as Use up stock, By next production order, Immediately, etc.
Cost forecasts	Calculates the forecasted material cost of a change based on the difference in material cost of current and new revisions and Dynamics 365/AX forecasts.
Route impact analysis	Analyzes which production routes are impacted and may need revision based on which routes are associated with the affected items.
BOM redlining	BOM redlining provides a quick overview of how a revision of a BOM is different from the previous revision.
3D redlining	Enables the graphical comparison of BOM revisions in 3D or dimensional comparison of single part revisions.
BOM comparison tool	Enables users to compare any revision of a BOM to any revision of any other BOM. Color-codes indicate the line-by-line differences on multiple BOM levels. For efficient comparison of large BOMs, a "Show only difference" option provides an isolated overview of the difference only.
Change release management	Ensures that changes are implemented in the production system at the right time based on user defined effectivity parameters.
Workflow automation	Graphical workflows to enforce best practice change procedures across the entire organization. The workflow engine supports sequential and parallel tasks and may incorporate sub-workflows for detailed procedures.
Change notifications	Automatically notifies stakeholders of pending changes to warn downstream users of planned changes.
Approval tasks	Allows for sequential or parallel approvals requiring electronic signatures.
Audit trail	A complete revision-specific change log provides full historic traceability on items, BOMs and documents in terms of what was changed, why it was changed, who changed it, etc..
Engineering change states	Promote engineering changes from Change Request through Change Order, Change Proposal, Implemented, and Closed.
Engineering change priorities	Enables different priorities to be assigned to engineering change records.
Reporting	Analyze change order statistics using native Dynamics 365/AX reporting capabilities.
Change definition	Define changes using either BOM redlining for BOM-centric organizations or using CAD models for CAD-centric manufacturers
Manufacturer changes	Manages an approved manufacturers list and facilitates manufacturer changes.
Configurable system complexity	A flexible setup matrix allows administrators to set up the desired level of complexity of engineering change procedures to facilitate everything from fast track engineering changes needed in one-off productions to extensive change procedures necessary in high volume production with greater change impact and risk.