



Property of WilloWare Incorporated

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DS0146
GP Manufacturing BOM Import



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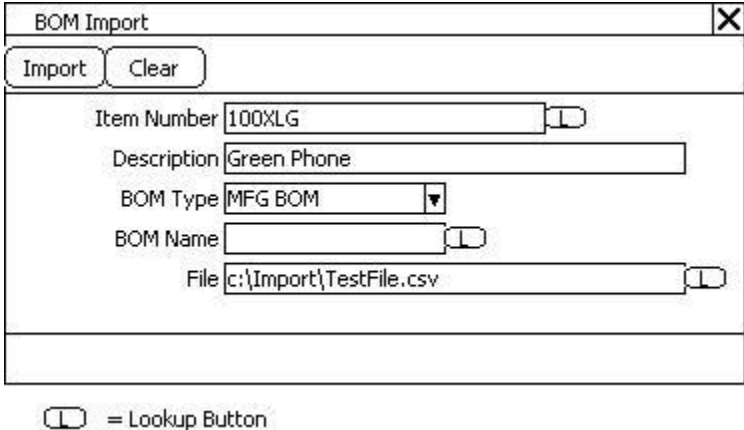
Problem Definition

<i>Problem Definition</i>	CCDA
<p>ACMECO is using engineering software to create and manage Bills of Materials (BOM), and using Dynamics GP for manufacturing. Significant user time is required to manually re-key this information into the Dynamics GP BOM, and also presents an opportunity for errors to be introduced.</p>	

Solution Overview

<i>Solution Overview</i>	CCDA
<p>A BOM Import utility will be created in Dynamics GP that performs the following:</p> <ul style="list-style-type: none">• Allows user to select a spreadsheet (XLS) for import.• Validates the item numbers in the import to ensure they already exist in the Item Master• Validates sub-components to ensure that sub-component BOMs already exist prior to importing a parent BOM• Creates a new BOM• Replaces an existing BOM with a new import• Checks the Manufacturers Part Number(s)	

Design Features

BOM Import	CCDA												
<p>The new BOM Import window will be access from Tools >> Utilities >> Manufacturing >> BOM Import.</p> 													
<table border="1"> <thead> <tr> <th>Field</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>Item Number</td> <td>The user will enter, or select from the lookup, the parent Item Number. This Item Number must already exist in Dynamics GP</td> </tr> <tr> <td>Description</td> <td>Auto-populates when Item Number is selected</td> </tr> <tr> <td>BOM Type</td> <td>Defaults to MFG BOM. User can select MFG BOM, ENG BOM, or ARCH BOM. If user selects ARCH BOM then a BOM Name must be provided.</td> </tr> <tr> <td>BOM Name</td> <td>Not editable unless BOM Type = ARCH BOM. The user can enter or select an Archive BOM Name.</td> </tr> <tr> <td>File</td> <td>User selects the XLS file to be imported (see file definition below).</td> </tr> </tbody> </table>	Field	Function	Item Number	The user will enter, or select from the lookup, the parent Item Number. This Item Number must already exist in Dynamics GP	Description	Auto-populates when Item Number is selected	BOM Type	Defaults to MFG BOM. User can select MFG BOM, ENG BOM, or ARCH BOM. If user selects ARCH BOM then a BOM Name must be provided.	BOM Name	Not editable unless BOM Type = ARCH BOM. The user can enter or select an Archive BOM Name.	File	User selects the XLS file to be imported (see file definition below).	
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	<p>Note: the screen mock-up shows CSV in the filename, it should be XLS. The import will be a Microsoft Excel spreadsheet.</p>	
<p>IMPORT</p>	<p>Clicking Process will confirm that user is ready to import the BOM. It will first check if a BOM exists for the parent item. If so, the user will be asked if they want to replace it (the BOM lines will be deleted). If a BOM Header does not exist for the parent item & BOM Type, the user will be asked if they want to create a new default header with default values (blank values can be edited later by the user). The import will then proceed to the Validation Checks described below.</p>	
<p>CLEAR</p>	<p>Clears the window</p>	

The import file (XLS) will have the following columns (in this order):

- BOM Position Number (1 to 9999)
- Component Part Number
- Qty per (max 5 decimals). Must match GP Qty Decimals for the Component Item
- Manufacturers Part Number
- Reference Designators (see below)

There first row will contain Column Names. The Column Names do not have to match what is given here, but the column data must match (i.e. the first column must contain Position Numbers).

If the Component Part is a made item, the import will assume the MFG BOM is being used. The BOM Category will be retrieved from the MFG BOM setup.

The Component Part's Unit of Measure will always be the item's Base Unit of Measure.

The import process will check that the Manufacturers Part Number in the Import File matches an MPN in GP (GP supports multiple MPNs for a component part).s If not, the item & BOM will still be imported, but the item will appear on the Error Report noting that the MPN does not match. The user will manually fix the MPN if needed.

All other values will be defaulted as blank/zero.

Reference Designators: This field can contain one or more reference designators. The following formatting will be supported:

- Single value, such as: P1
- Multiple values separated by commas. There can be no spaces. Everything between successive commas will be treated as one reference designator. For example: P1,P3,P5,D1,D10
- Ranges separated by dashes. There can be no spaces. For example: P1-P10. This will be translated into: P1,P2,P3. . .P10.
- Combination of the above. For example: P1,P5-P10,D4,D5
- A single reference designator may contain up to 20 characters

Given that this is a user entered text field, there are a large number of possible errors that could occur in the formatting. The system will attempt to parse the reference designators based on the rules above. In the even any errors are encountered, the Reference Designator import will have a fall-back method of parsing the string into 20-character pieces, and importing the Reference Designator field in that manner.

Validation Checks

Prior to importing the XLS file and making changes to the system, the following validations will be performed:

- The Component Item Numbers must exist in GP
- All items must be Item Type = Sales Inventory
- If the Parent Item is Standard Cost, all components must be Standard Cost. If the Parent Item is Actual Cost, components can have any valuation method.
- Each Item must have an Item Engineering record
- If the component item's Replenishment Method = MAKE, then it must have a MFG BOM already created in GP.
- BOM Position Number: there cannot be duplicates in the import file, and it cannot exceed 9999.
- Quantity: the decimal places cannot exceed the item's Decimal Places Quantity (i.e. if the Item is set to 1 decimal place and the import specified 1.25 it will generate an error).

If any of the above checks fails, it will generate an Error Log report, and the import will not occur. The error checking process will run to completion so that the Error Log shows all of



the errors in the import file. The import will not be allowed to proceed if there are any errors.	
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