Item Creation Made Easy... well... kind of

Scott Hendricks – Enceptia

FB5955   This class will cover advanced item-creation techniques for those familiar with the creation of fabrication items. We will walk through a best-practice workflow using the Product Information Editor, price lists, product lists, and labor tables for creating more accurate and complete items.

Learning Objectives

At the end of this class, you will be able to:

- Learn how to build manufacture specific items using the MAKEPAT command

- Understand the relationship between items and their product list, price list, labor cost, and product information tables

- Learn effective workflows for creating Fabrication software items

- Learn how to leap tall buildings in a single bound

About the Speaker

Scott Hendricks heads up Technical Services Delivery for the Fabrication software for Enceptia. He is an experienced instructor and implementation expert for Fabrication CADmep software, Fabrication ESTmep software, and Fabrication CAMduct software. His skills also extend to application development and customization of the Fabrication software, and he is the author of the Enceptia Configuration Pack for the U.S. market, a product that enhances the use of the Fabrication products with Imperial standards. Scott also creates courseware and video training for the Fabrication products. He previously worked for a mechanical, electrical, and plumbing contractor, and he was a union plumber and pipefitter for over 26 years, rising to the position of field supervisor before making the switch to design.
scotthendricks@enceptia.com

Problem

For most users when they first learn how to build native CADmep items, they only concern themselves with dimensional data and tend to ignore all other information that should be attached to an item. Leaving items incomplete, pricing missing and breaking existing reports. All this can be avoided if you follow these steps.

Step 1: Collect data

Dimensional Data

Most of the time this information can be found on the manufactures website in the form of a pdf. In some instances where the dimensional information is insufficient for your needs you may have to download 3D solids and dimension them in AutoCAD. Another alternative is to send the manufacture an email asking for the dimensional information in an Excel format. Once I collect the data I create a folder to store it all for later steps.

Costing Data

Your costing data will come from your costing supplier and should be in good format to pasting into a spreadsheet.

Product Information

This is the information that you will paste into your Product Information Editor. You should able to get most of this information from the data that you have already collected in the previous steps. Some of the information will come from the Product Information Editor itself.

Step 2: MAKEPAT

Run the MAKEPAT command

This can be done by typing "MAKEPAT" in the AutoCAD command line or by holding the Control and Shift buttons while typing "c" on your keyboard in ESTmep to bring up the console and then type "makepat ####" (replacing #### with the pattern number that you wish to build). If you do not know which pattern number you need then one of the best ways is to look in your folders for a similar item and get its pattern number from the item properties.

Step 3: Input data into Excel

Along with this handout I have included a spread sheet called Table Builder that you can use to record your data.

Product Information

When inputting data into the spreadsheet for the Product Information Editor you may want to have the Product Information Editor open so you can see the information of similar items. The most important field in this spreadsheet is the ID field. This **ID must be unique** or you will overwrite existing data in the Product Information Editor. Not all fields will apply to every item and those fields can be left blank.

Price List

Even if your company is not using ESTmep, the short time it takes to enter this data will drastically reduce your setup time when your company does decide to start using ESTmep. You can even leave the Cost column empty if you do not have the current cost. The important part is that you get entries in a costing table so they can be updated.

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Costing

Price List

ID	Cost	Discount	Units	Date	Status
ENC_3000137	2.25	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000138	3.53	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000139	5.33	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000140	8.61	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000141	12.25	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000142	16.94	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000143	25.13	Aquatherm	per (ft)	July 01, 2014	Active
ENC_3000144	31.53	Aquatherm	per (ft)	July 01, 2014	Active

Labor

If you're using a Product List for your labor, enter that information into the spreadsheet also. If you will be using a Breakpoint Table you can skip this part or edit the spreadsheet to record your breakpoint table.

Labor Table

ID	Time	Units
ENC_3000137	0.07	per (ft)
ENC_3000138	0.06	per (ft)
ENC_3000139	0.07	per (ft)
ENC_3000140	0.09	per (ft)

Product List

The product list in Table Builder will need to be edited to reflect the item you are building, items will require a different number of columns depending on which pattern you are building. Building your product list here will insure that your ID numbers match on your item, the Product Information Editor and the costing tables.
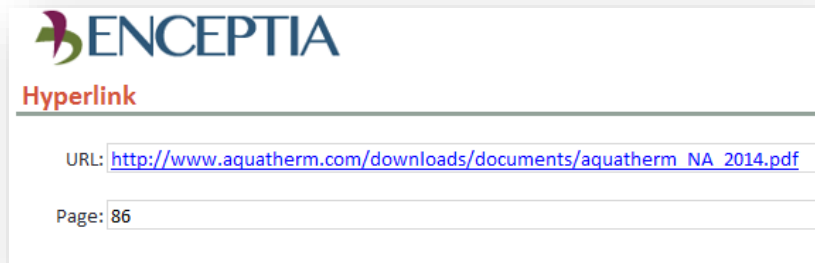
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Product List

Name	Diameter	Order	Weight	ID
1"	1	2670112	0.19	ENC_3000137
1-1/4"	1.25	2670114	0.29	ENC_3000138
1-1/2"	1.5	2670116	0.45	ENC_3000139
2"	2	2670118	0.72	ENC_3000140
2-1/2"	2.5	2670120	1	ENC_3000141

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Link

Record the link to the manufactures dimensional data pdf and the page number for that item. You will be using this in later steps.
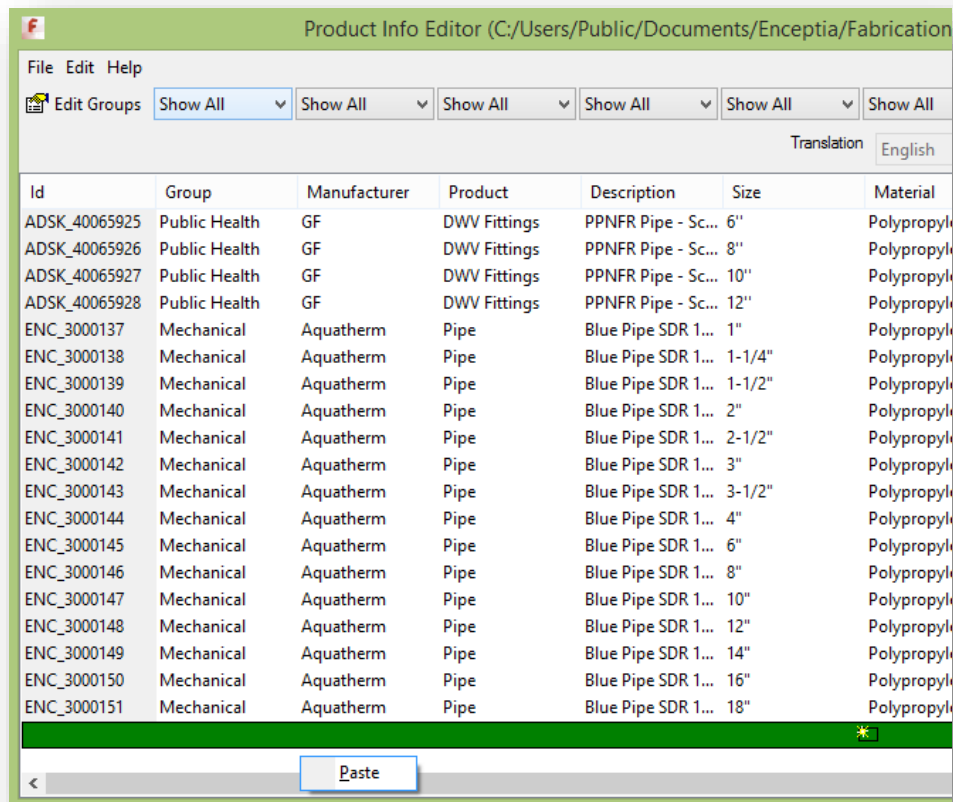

Step 4: Paste data into the Product Information Editor

Copy the product information table from Table Builder including the headers. Open your Product Information Editor, you can find it on your start menu in Windows 7 or in Windows 8 pressing the Windows key on your keyboard and typing product information. Scroll to the bottom of the Product Information Editor right click on the green bar at the bottom and select paste.

The Configure Import window will apear. Check the **Data Contains Field Names** box and verify the column mapping in the Requirements window. Select OK when finished and close the Product Information Editor.
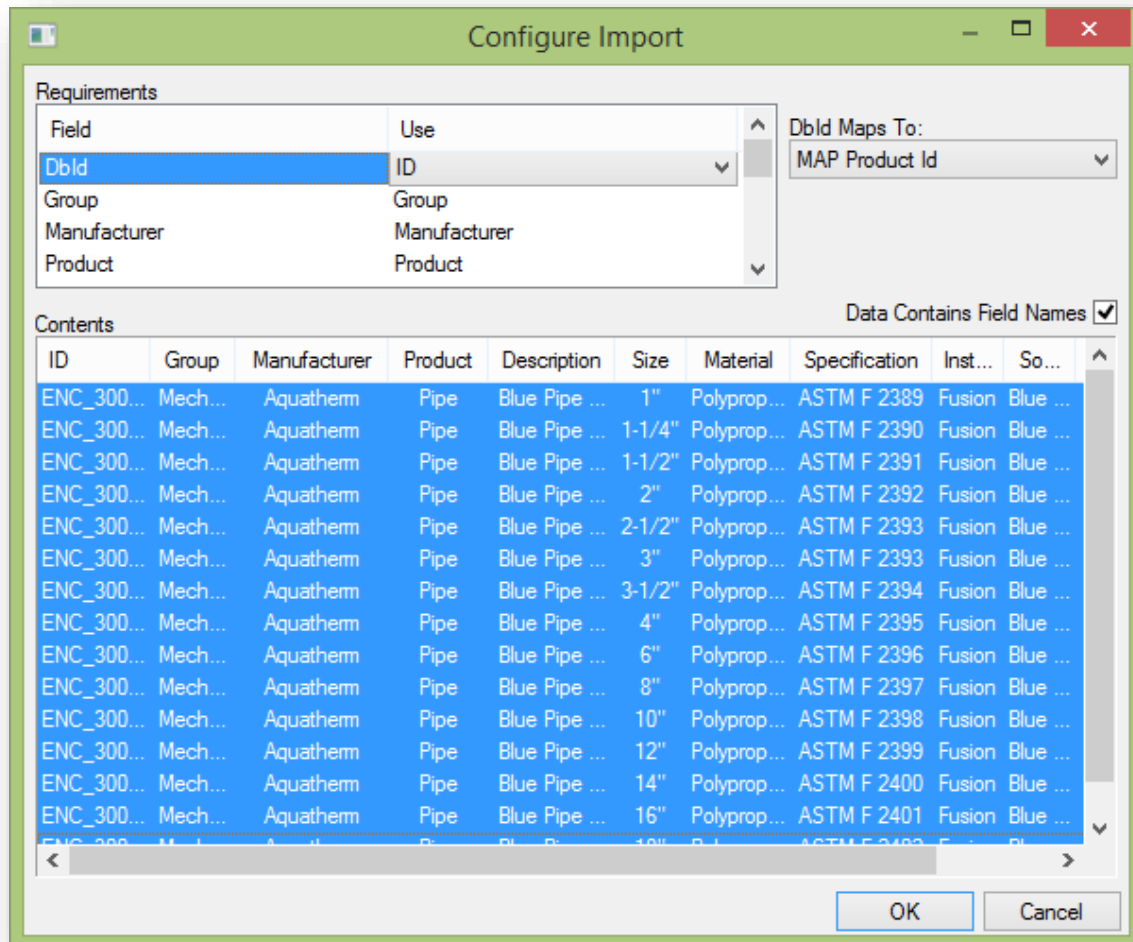
In the Product Information Editor click on edit in the menu bar and select Show Suppliers and repeat the last step copying and pasting the supplier information from Table Builder to the Product Information Editor.

Step 5: Paste data into Pricing and Labor Tables

This can be done in the same manor that you pasted the information in the last step. Copy from Table Builder and paste into your tables.
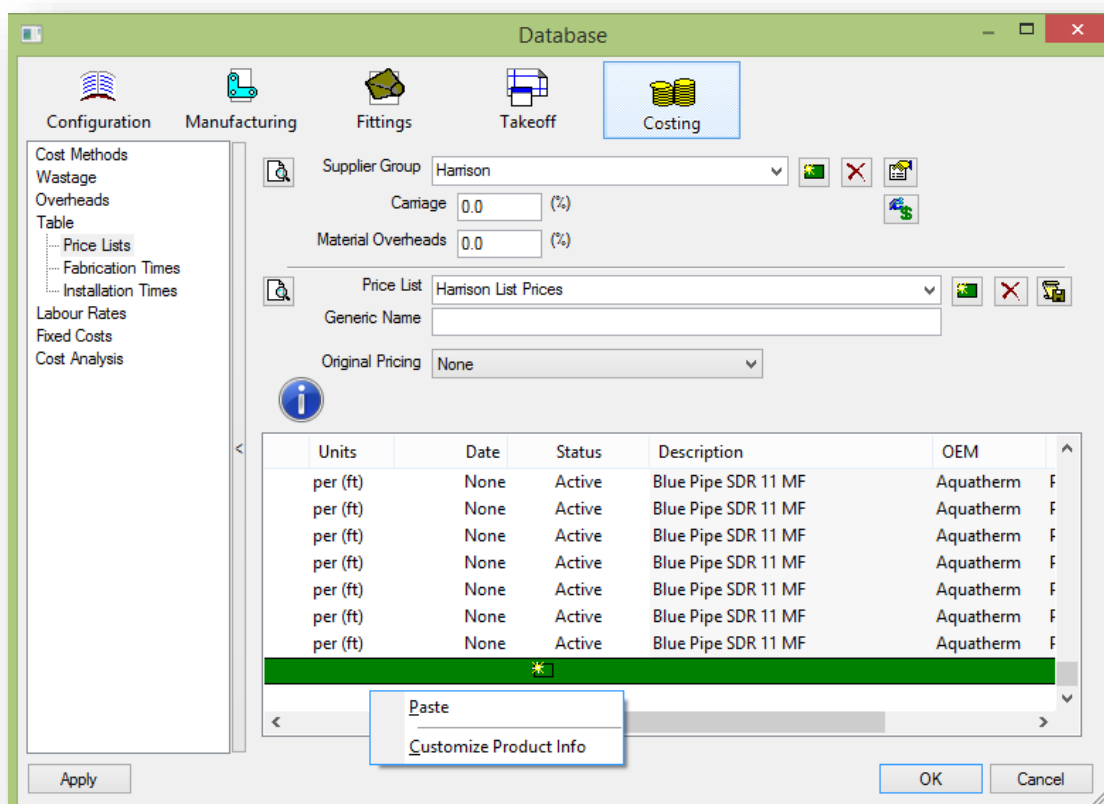
Step 6: Product list item

Copy and paste your product list from Table Builder to the items product list.

Step 7: Attach hyperlink

I have also included two script files in the download. One to add a link and one to remove a link. Links on items can be accessed through the properties or by selecting an item, right clicking and selecting Data Links.

To use the scripts:

1. Place the item you would like to add a link to in the model, if it is product listed you can insert one of any size.
2. Place the scripts in your database in the **Scripts** folder of your database.
3. At the AutoCAD command line type EXECUTESCRIPT, in ESTmep or CAMduct right click on your item in the list view and select Execute Script.
4. Input the requested data and the item in the drawing and the item in your folders will be updated.

Conclusion

Building items correctly and completely can be time consuming and at times frustrating but following these steps should simplify the task.