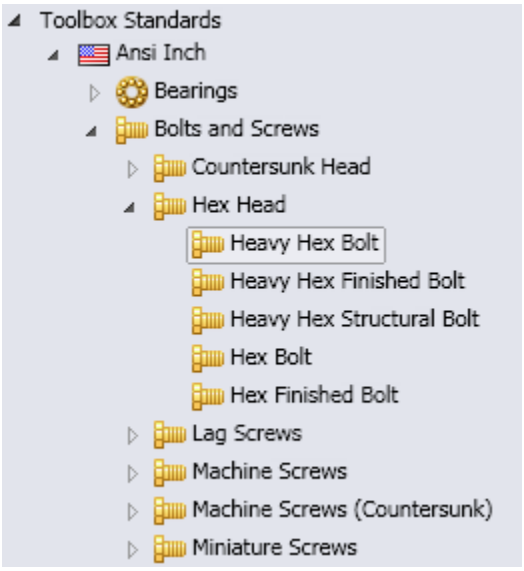
Customizing SolidWorks Toolbox-V2.0

I had posted a blog article on customizing SW Toolbox a while back and shortly after doing so SolidWorks went and changed the interface on me so after some digging here is V2.0

I recently had a customer who called into support and was looking for a way to add some custom features to Toolbox. In particular they were looking for:
"On a number of Hex bolts that I use, I need to have 3 different styles of same size..
Say Ø1/4-20 X 2" Hex Bolts..., (1) Ø1/4-20 x 2" Grade 5, (2) Ø1/4-20 x 2" Grade 8, (3) Ø1/4-20 x 2" Stainless Steel.
Some of my hardware, I need several more styles for given size.. Different color anodizing, coatings, Zinc plate, Chrome, etc...
All these variations of same size have different part numbers on my end.. So the assembly BOM lists which variation goes in the assembly.
I can only get it to list, configure 1 single "style" per size...
How do I get it to list multiple selections (styles) for a given size?"

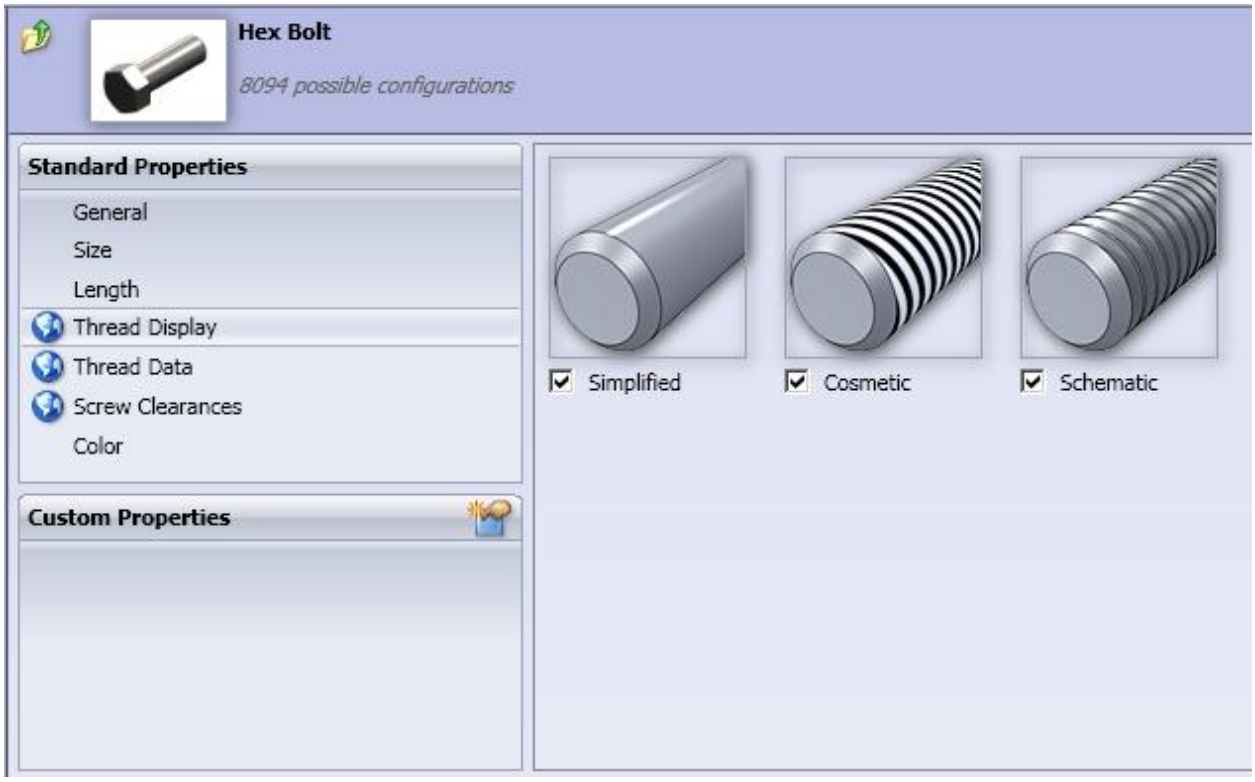
The answer to this can be found in the Configure area of Toolbox under the Customize Hardware area and there are few basic steps to get this set up for your application.

1. Find the Standard, Fastener Group, Fastener Category, or specific Fastener Type that you want to apply properties to.

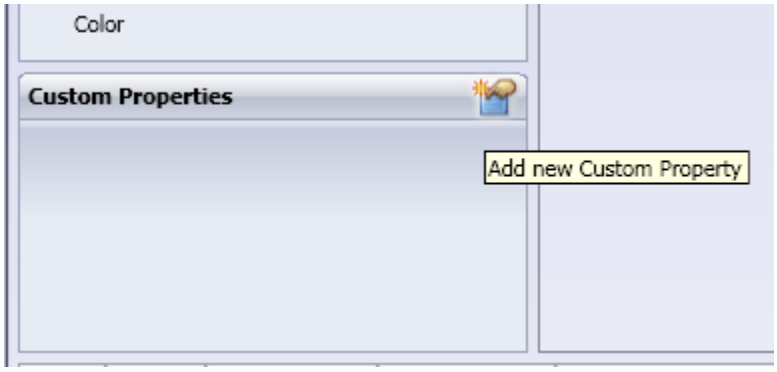


Note: I generally like to create a copy of a standard to make my changes to in case I make a mistake I can easily go back.

2. Next I generally like to remove any features that will not be used to limit the number of configurations that it is possible to create. By going through the Standard Properties you can turn off items in Size, Length, and Thread Display.
   In the screen shots below you will see that we start with 8094 possible configurations and by simply turning off un needed thread displays we can reduce the total by 1/3 for each one turned off.



3. Once we remove all of our unneeded configurations we can define your Custom Properties or edit an existing value.
   a. To add a new property simply select the Add new Custom Property from the Custom Property Name area.



b. After selecting Add new Custom Property the following dialog box will appear. Type in a Property Name and choose your Options and Type.

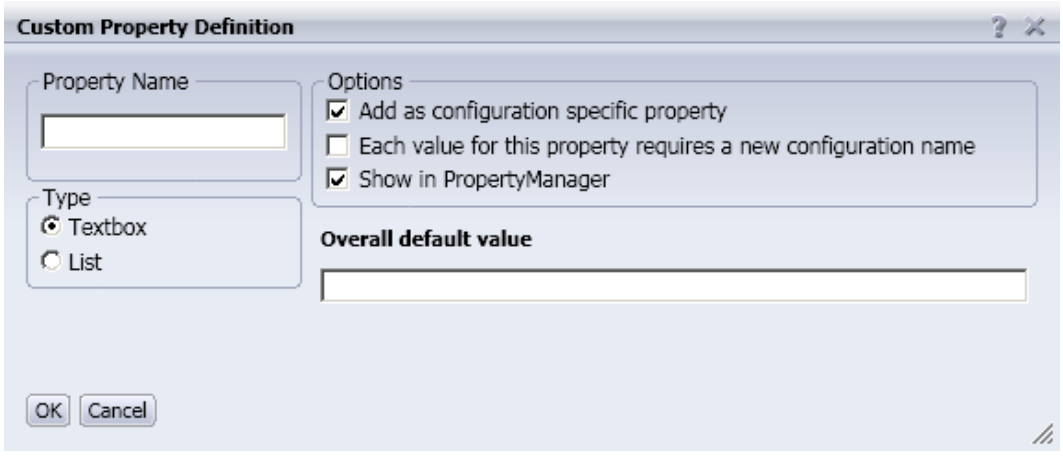
Options

Add as configuration specific property	Creates a configuration-specific property. If cleared, the property is a custom property (not configuration-specific), as shown on the Custom tab of the SolidWorks Summary Information dialog box.
Each value for this property requires a new configuration name	Creates a new configuration name for each unique value of the property. For Textbox properties, the property value is added as a suffix to the configuration name. For List properties, type a suffix for each list value under Suffix.
Show in PropertyManager	Displays the property in the component's PropertyManager in SolidWorks. Selecting or clearing Add as configuration specific property automatically selects or clears this option, but you can override the default.
Overall default value	Specifies an optional default value.

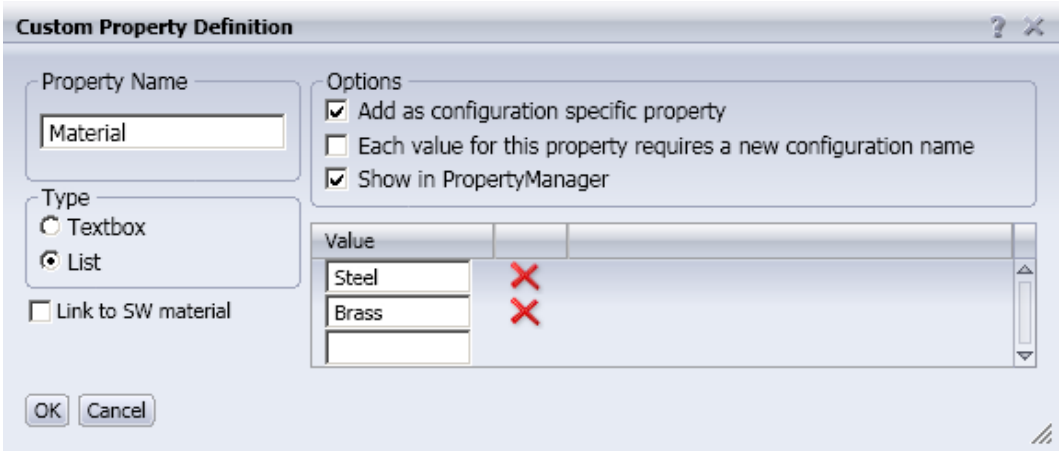
Type

Textbox	Creates a text field property.
List	Creates a property with a list of values.
Link to SW material	List properties only. Creates a list of materials using the SolidWorks Materials library. You can link only one property to SolidWorks materials.

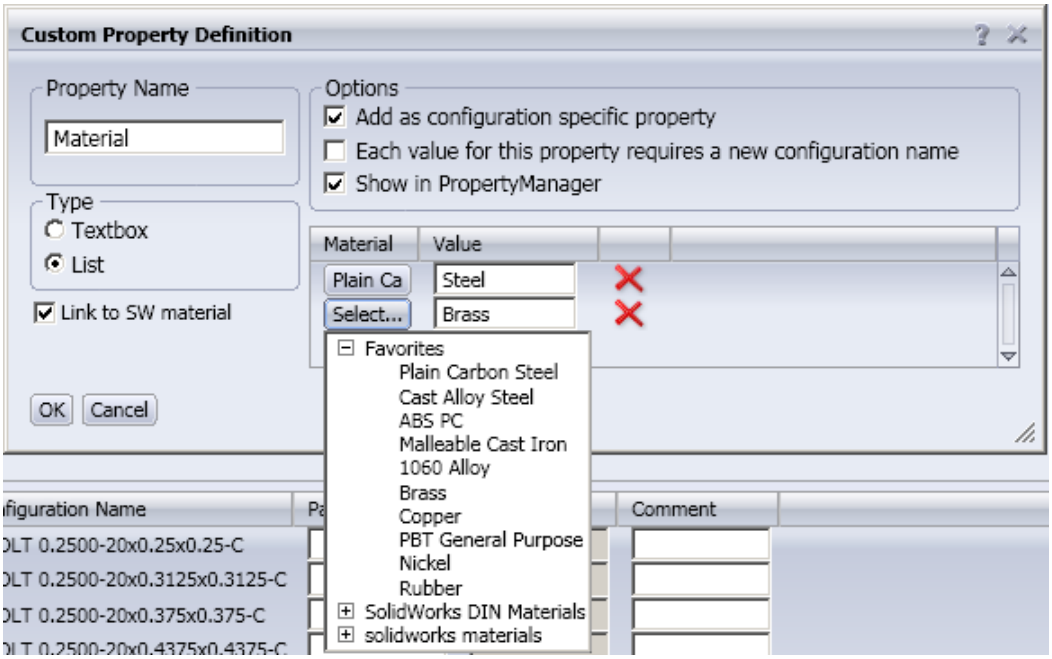
Textbox



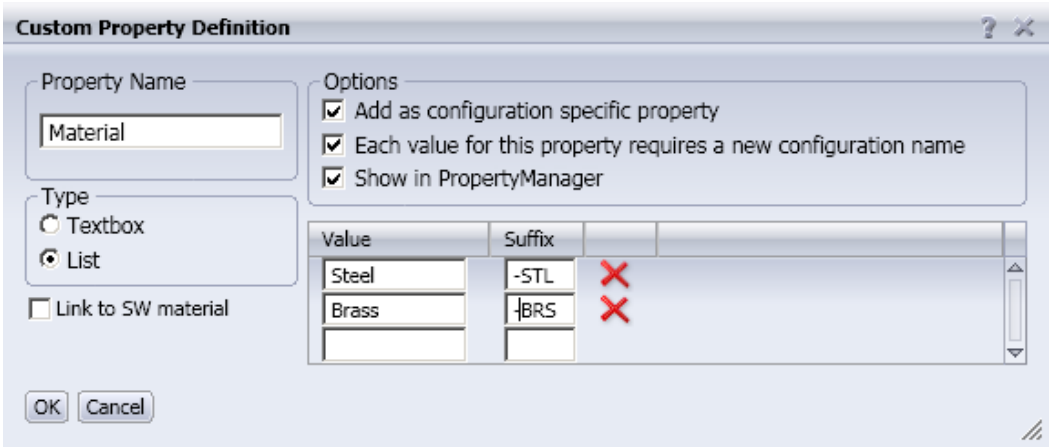
List



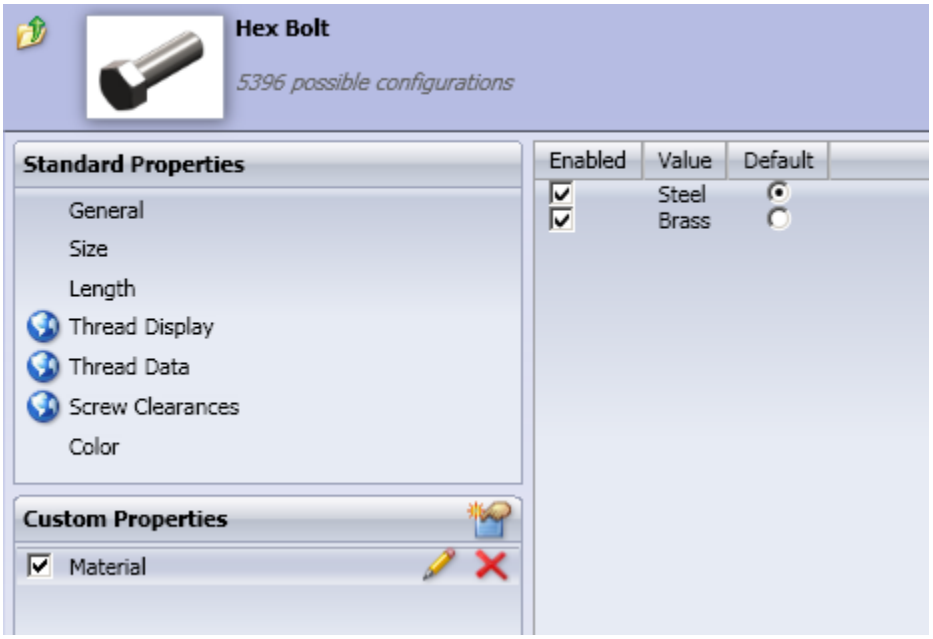
List with Link to SW material checked



List with Each value…option checked



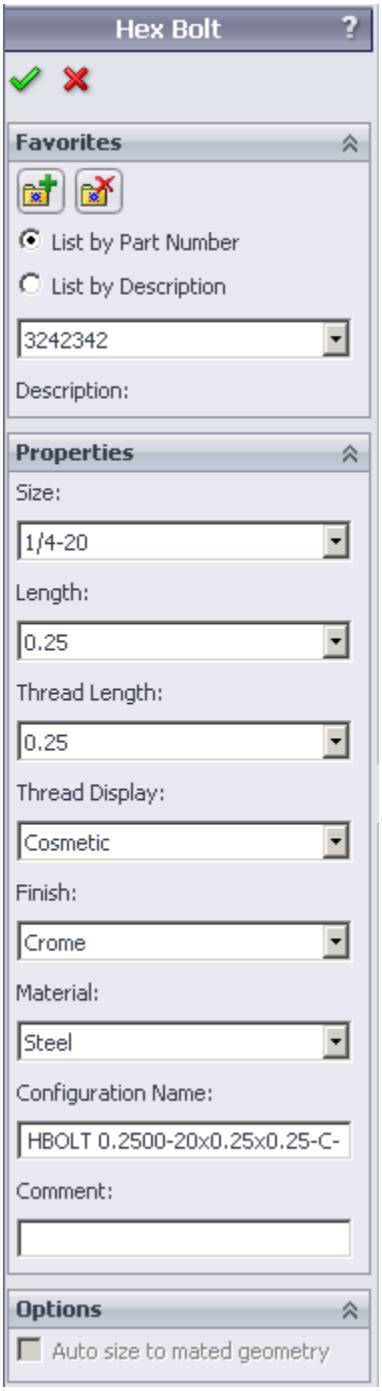
c. One you select OK make sure you turn on your new Custom Property and set what is going to be your default value.



4. If you have any existing custom Part Numbers, Descriptions, or Comments I would suggest that you add them at this time. Also you will notice in the screen shot below that all of our new properties have been applied and we have by looking at the Configuration Names.

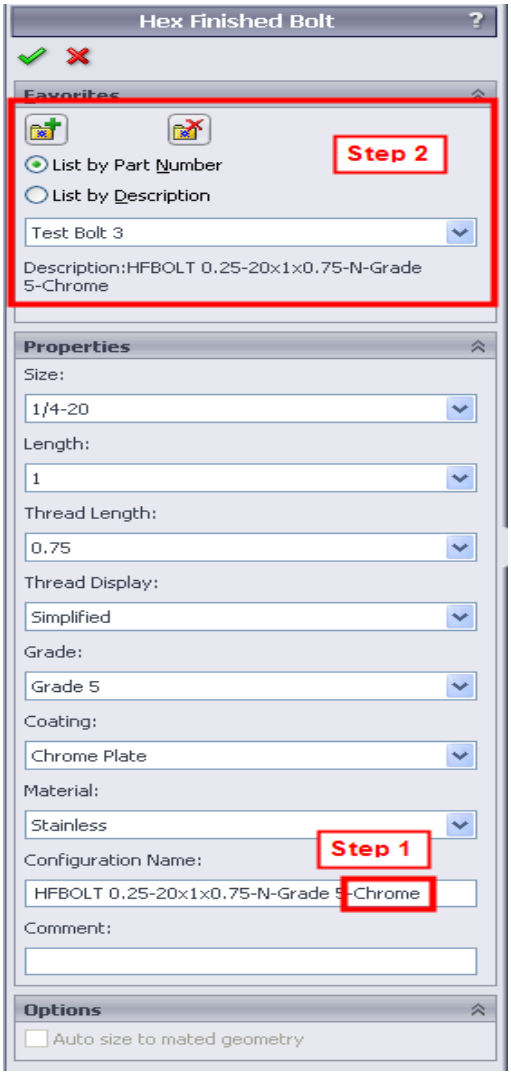
Size	Length	Thread Length	Thread Display	Material	Configuration Name	Part Number	Description	Comment
1/4-20	0.25	0.25	Cosmetic	Steel	HBOLT 0.2500-20x0.25x0.25-C-STL	12345		
1/4-20	0.25	0.25	Cosmetic	Brass	HBOLT 0.2500-20x0.25x0.25-C-BRS	23456		
1/4-20	0.3125	0.3125	Cosmetic	Steel	HBOLT 0.2500-20x0.3125x0.3125-C-STL	78910		
1/4-20	0.3125	0.3125	Cosmetic	Brass	HBOLT 0.2500-20x0.3125x0.3125-C-BRS	62358		
1/4-20	0.375	0.375	Cosmetic	Steel	HBOLT 0.2500-20x0.375x0.375-C-STL	56799		
1/4-20	0.375	0.375	Cosmetic	Brass	HBOLT 0.2500-20x0.375x0.375-C-BRS	33578		
1/4-20	0.4375	0.4375	Cosmetic	Steel	HBOLT 0.2500-20x0.4375x0.4375-C-STL			
1/4-20	0.4375	0.4375	Cosmetic	Brass	HBOLT 0.2500-20x0.4375x0.4375-C-BRS			
1/4-20	0.5	0.5	Cosmetic	Steel	HBOLT 0.2500-20x0.5x0.5-C-STL			
1/4-20	0.5	0.5	Cosmetic	Brass	HBOLT 0.2500-20x0.5x0.5-C-BRS			

Once these values are set you can see the results in your Assemblies when you place a fastener.

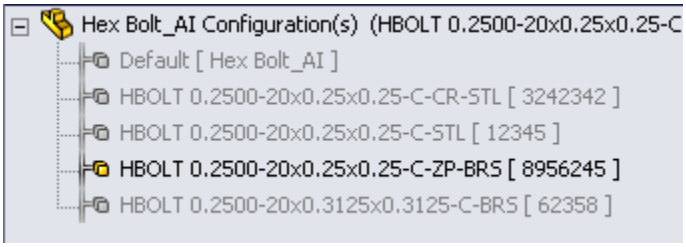


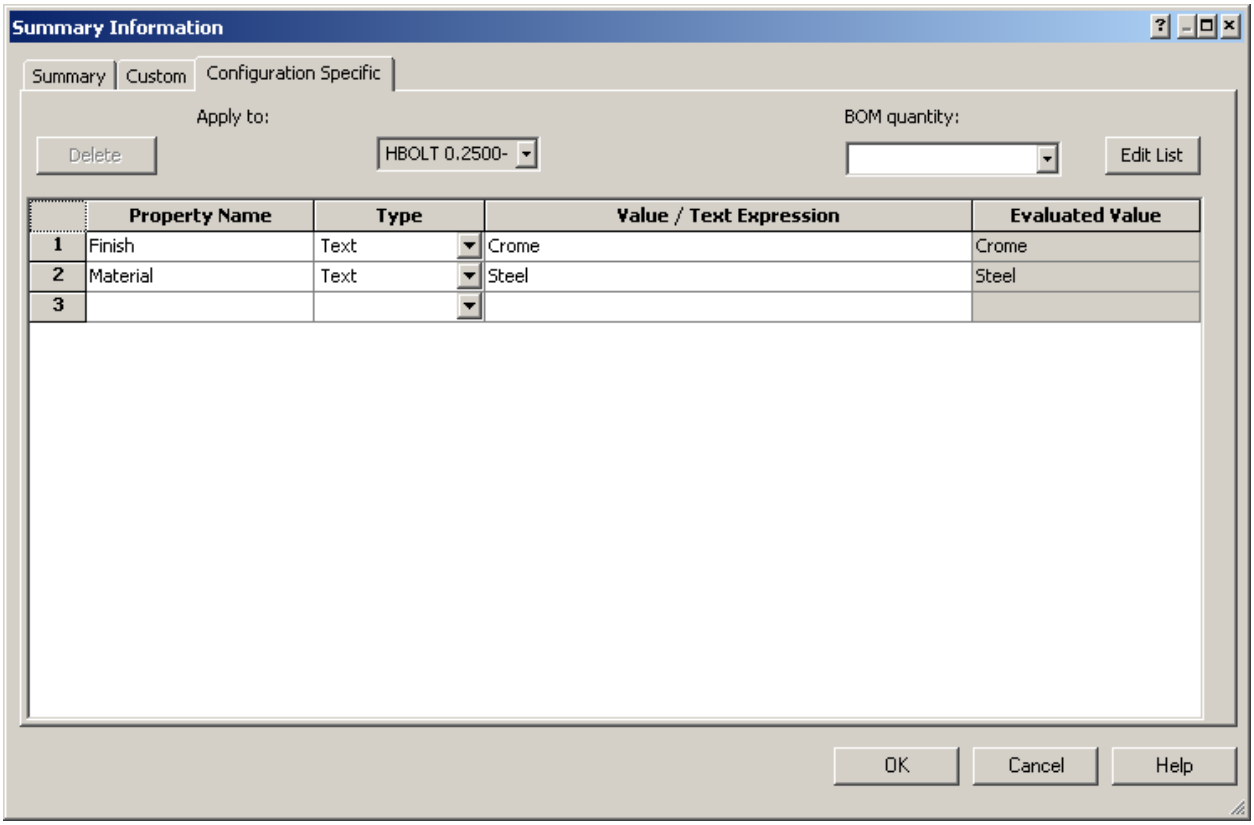
You can choose a fastener by an existing Part Number or by specifying all of the properties. If you chose a fastener that does not have a Part Number assigned to it you have the ability to add the part number at this time and it will update the rest of the database.

Note: In versions prior to SW2009 SP3.0 you we are limited to only 1 property that would generate a configuration name and suffix. To eliminate the possibility of overwriting an existing configuration name you will need to first add additional suffix(s) to the Configuration Name, then use the Add/Update button to Create your companies specific part number for that configuration.

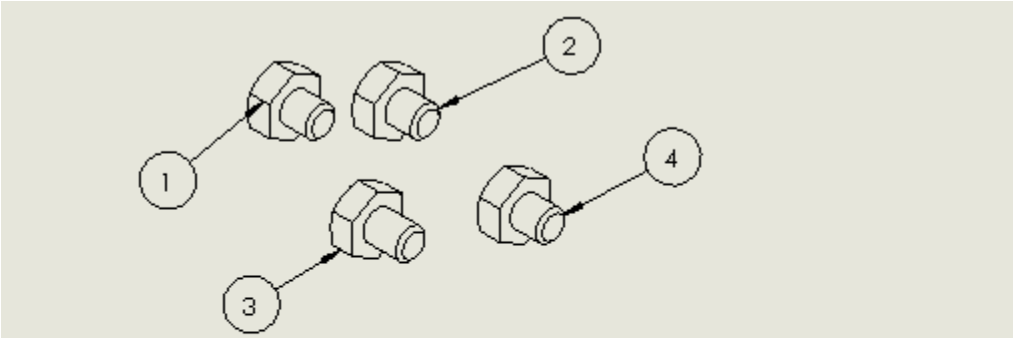


If you open the part file you can see the configurations that have been generated as well as each Configurations Specific Properties.





Lastly you can see the results at the drawing level once the BOM is configured to add the additional columns.



ITEM NO.	PART NUMBER	Finish	Material	QTY.
1	3242342	Crome	Steel	1
2	12345	Crome	Steel	1
3	62358	Crome	Brass	1
4	8956245	Zinc Plated	Brass	1

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