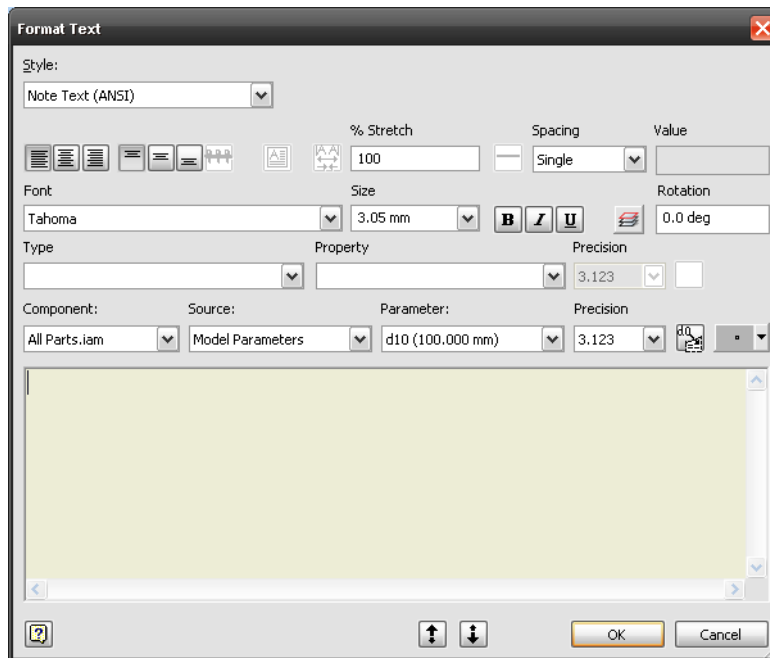


## Acquiring Total Mass in an Assembly Print

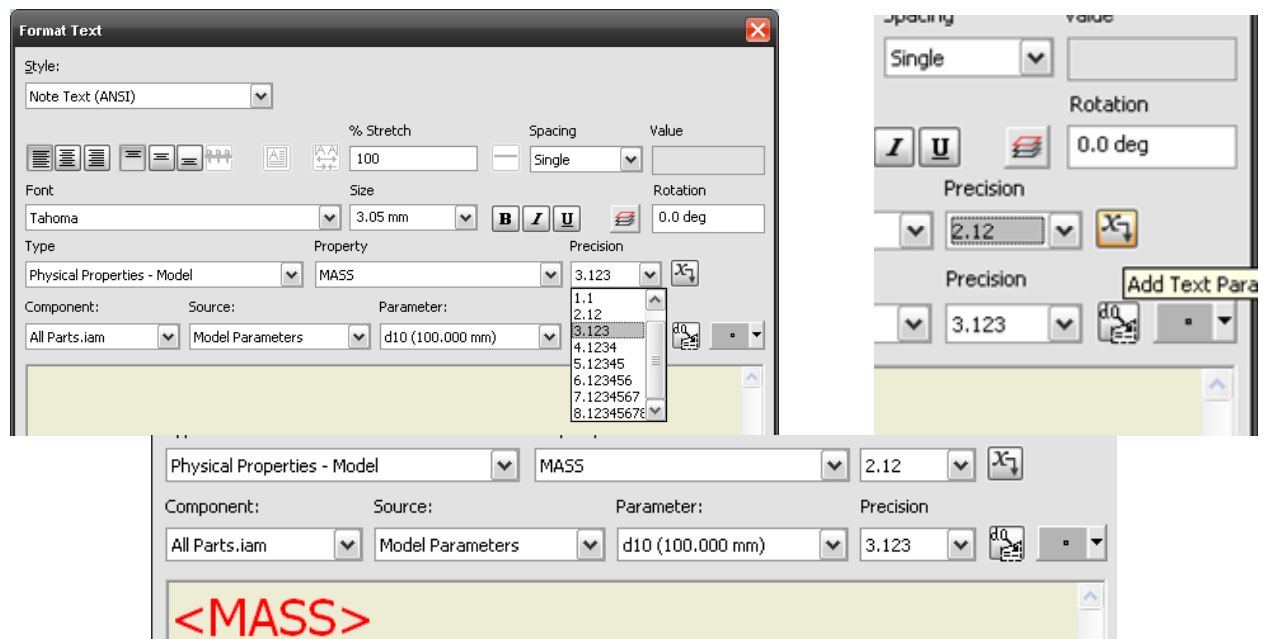
Total Mass of an IAM file is an item a lot of users want on their production prints. Below are two methods to accomplish this goal.

### First Method: Text Object

Start the **Text** command in the Drawing Annotation of your Assembly.



From the Type pull-down in this dialog choose Physical Properties – Model. In the Property pull-down choose MASS and your precision. Choose all your other settings for how you want the MASS value to appear such as Text Style, Color, Size, etc. and then click the Add Text Parameter button next to the precision you chose.

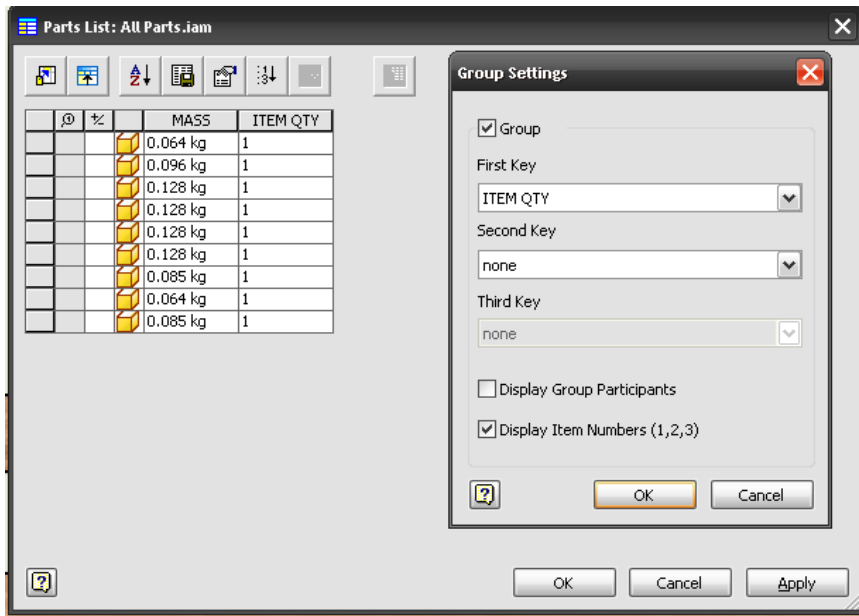


Advantages: You can add the Text Parameter to a Titleblock definition or as a Sketched Symbol for use in everyday work.

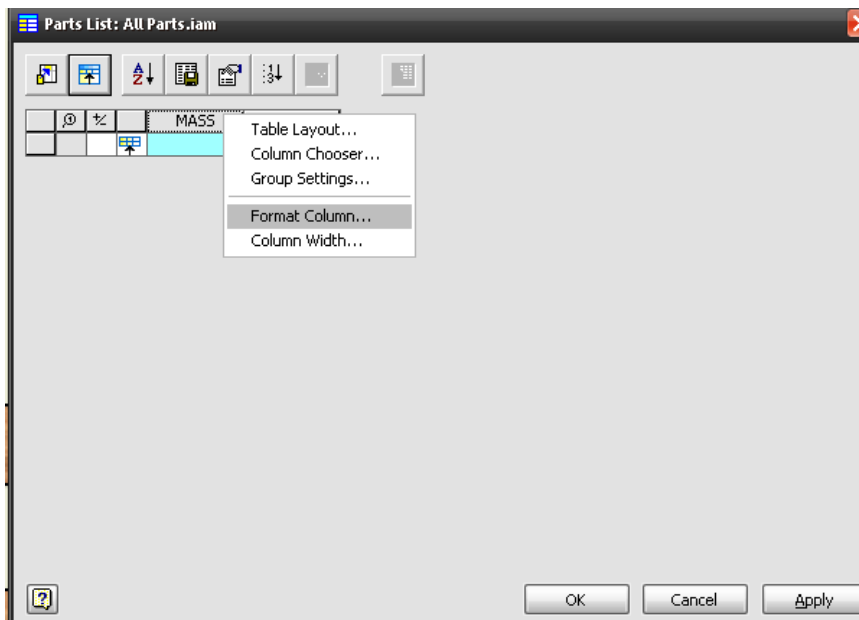
Disadvantage: Some users want the Total Mass in their Parts List and not in a Titleblock or Text object.

**Second Method: Parts List Rollup**

Create a second parts list from base view and select columns that can easily be combined into a single line item in the new Parts List. Then choose the Group Settings in order to create the row merge.



After your group is completed, Right Mouse Button on the Mass Column and choose Format Column.



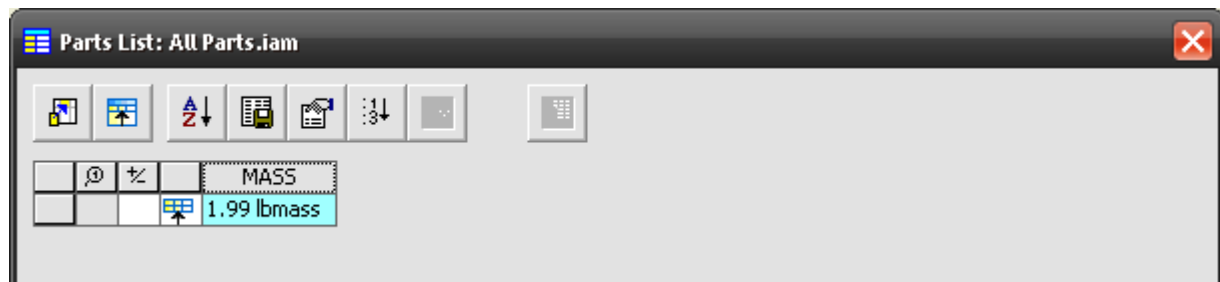
From here choose the Substitution Tab and select “Enable Value Substitution”. Choose the property and for “When rows are merged, value used is” set to Sum of Values. Apply the default units or choose your own as I have done in the below figure.

The image shows the 'Format Column : MASS' dialog box with the 'Substitution' tab selected. The 'Enable Value Substitution' radio button is chosen. Under 'When exists, use value of', 'MASS' is selected in the dropdown. Under 'When rows are merged, value used is', 'Sum of Values' is selected in the dropdown. The 'Apply Units Formatting' radio button is also selected. In the 'Format' section, 'Decimal' is chosen for 'Format' and '2.12' for 'Precision'. In the 'Units' section, 'Mass' is chosen for 'Unit Type', 'lbmass' for 'Units', and '. Period' for 'Decimal Marker'. The 'Unit String' checkbox is checked. The 'Display' section shows a preview of the formatted value '8.10' and '0.10'. At the bottom are 'OK' and 'Cancel' buttons.

Now simply remove the unwanted column you used for grouping (in this case Item Qty) using the Column Chooser at the top of the window in the Parts List dialog

The image shows the 'Parts List Column Chooser' dialog box. It has two main sections: 'Available Properties' and 'Selected Properties'. The 'Available Properties' list includes: AUTHOR, AUTHORITY, BASE QTY, BASE UNIT, CATEGORY, CHECKED BY, CHECKED DATE, COMMENTS, COMPANY, COST CENTER, CREATION DATE, and DESCRIPTION. The 'Selected Properties' list includes: MASS and ITEM QTY. There are 'Add ->' and '<- Remove' buttons between the two lists. At the bottom are 'Delete', 'New Property', 'Move Down', 'Move Up', 'OK', and 'Cancel' buttons.

From here you can continue to format the rest of the Parts List as well, including removing the Heading or changing the name in the title for the Parts List.



MASS
1.99 lbmass

Advantages: Be able to show in a Part List styling the Total Mass of the Assembly that is continually calculated from total amount of parts in an assembly. This can also be set up as a Part List style so it can be shared in the Styles Library or saved in a template as a local style.

Disadvantages: Takes a little more setup than the first method, and requires a good understanding of the Styles Library, Part List Rollup, and Bill of Material.