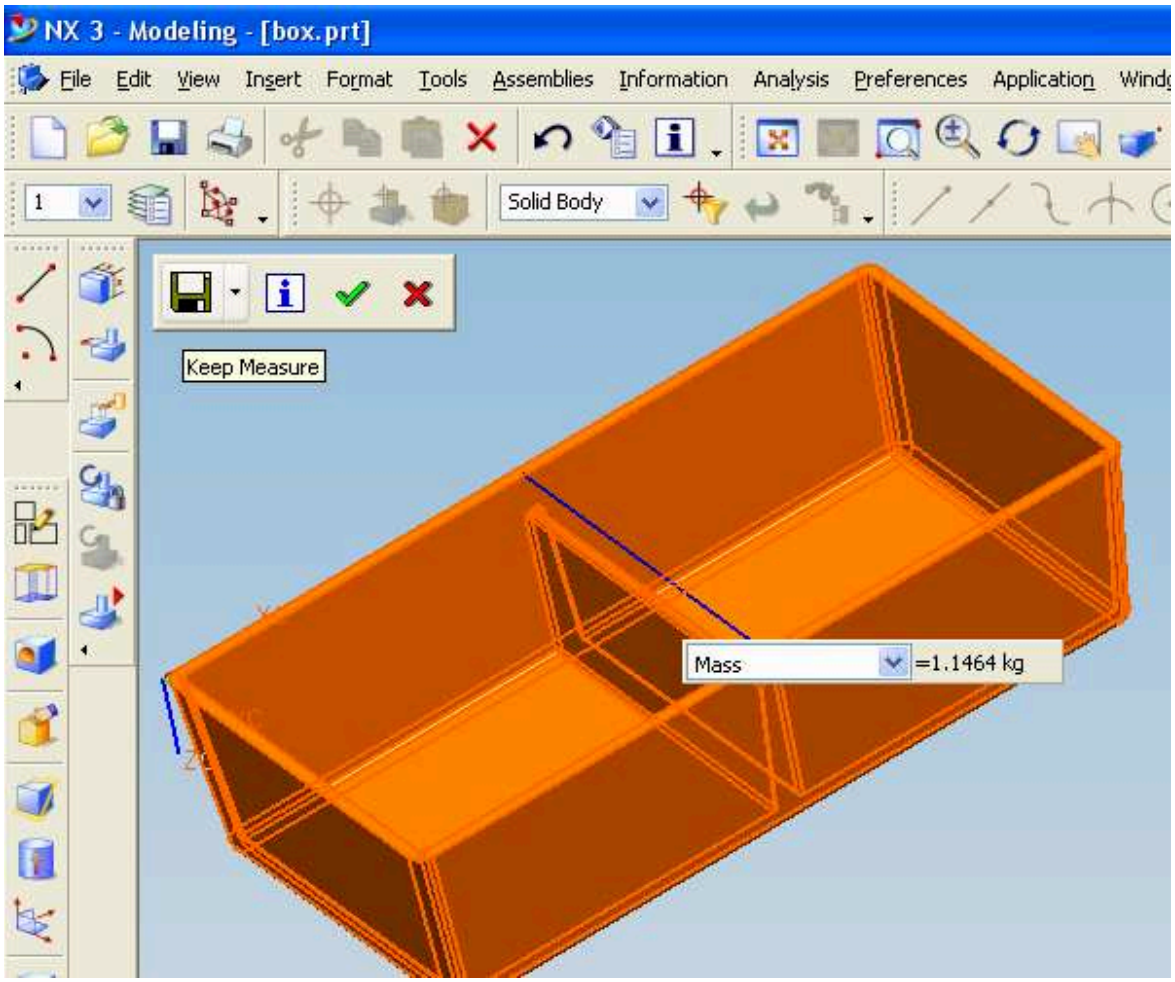
>> NX

Create Associative Mass Part Attribute for Parts List

For using the weight data in a parts list, you need a part attribute holding the solids mass property. To achieve this we create a part attribute from an existing expression using a KF function within the expression editor.

In the first step we create the expression through the ***Body Measurement functionality***.

- ***Analysis => Measure Bodies...***
- Select the body
- Change the dynamic pull-down menu to ***Mass*** to see the actual value
- Select the ***Keep Measure button*** of the toolbar (NX3, NX4)

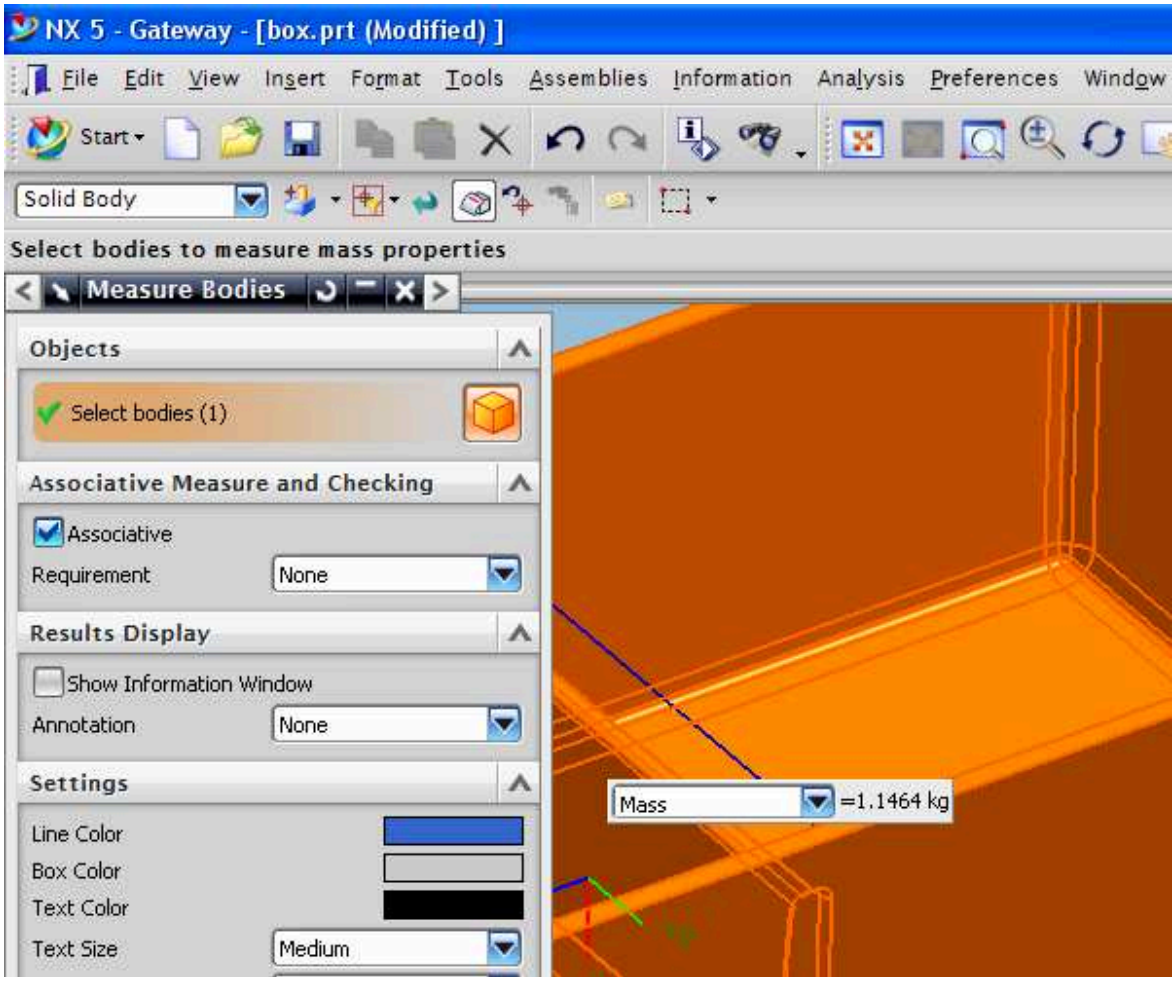


In NX5 you want to turn on the option ***Associative*** instead and confirm the dialog:

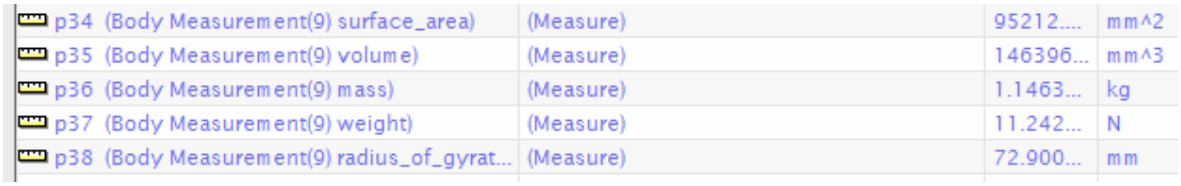
Continued Next

Go to Table of Contents

Continued from previous



Now you will find a new feature in your part navigator and the associated expressions in your Expression Editor:



The last step is letting the system create a part attribute for you.

- ***Tools => Expression***
- Create a new expression with the following formula:

  NX3:
  mass_attr =
  ug_setAttrValue_(ug_askCurrentWorkPart(), "PART_ATTRIBUTE", "MASS", stringValue(p36))

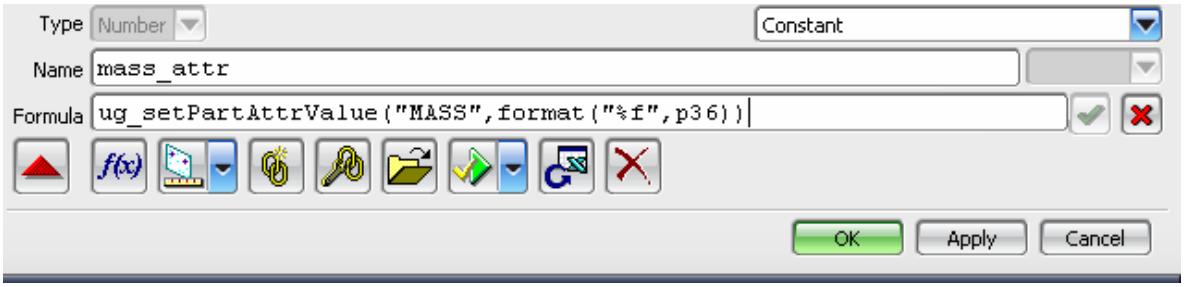
  NX4/NX5:
  mass_attr =
  ug_setPartAttrValue("MASS",format("%f",p36))

Continued Next

Go to Table of Contents

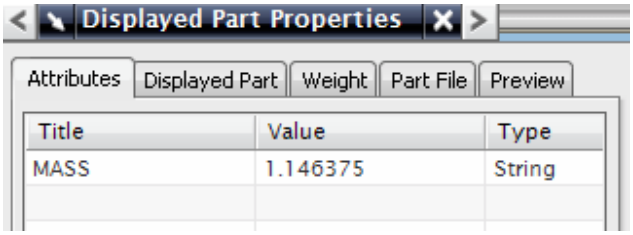
>> NX

Continued from previous



Of course you can also use any other value from the body measurement, for example "***volume***".

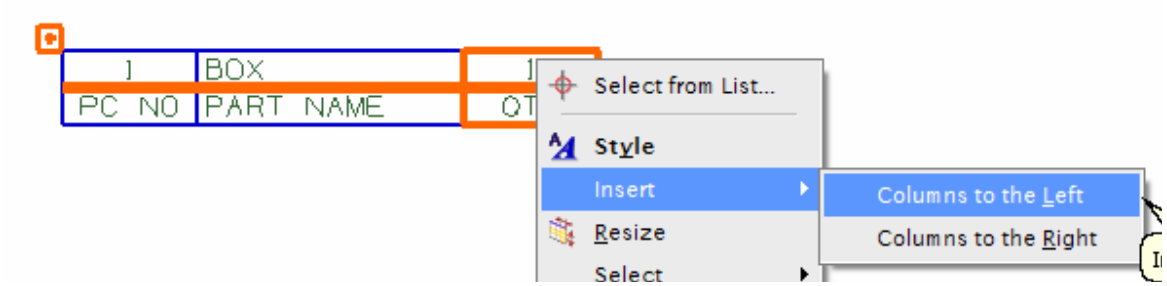
Open the ***File => Properties dialog*** and check the new part attribute.



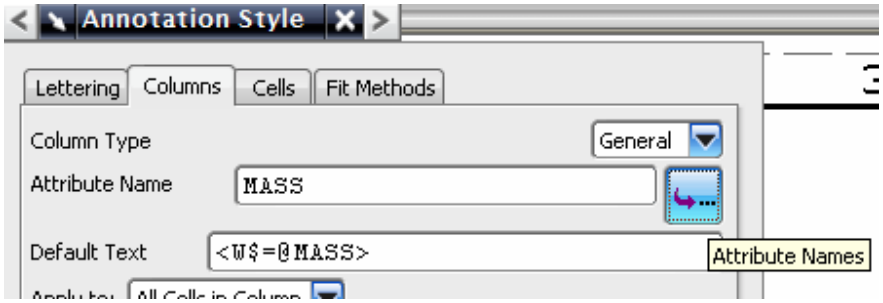
In NX3/NX4 you may have to call ***Tools => Update => Update for external change*** after changing the model dimensions. This is not necessary for NX5 anymore and the expression and part attribute is fully associative.

To use this part attribute in your parts list, just add a new column:

- Select a column where you want to insert the new one
- ***MB3 => Insert => Columns to the Left/Right***



- Select the new column
- ***MB3 => Style***
- Select the ***MASS attribute*** from the list

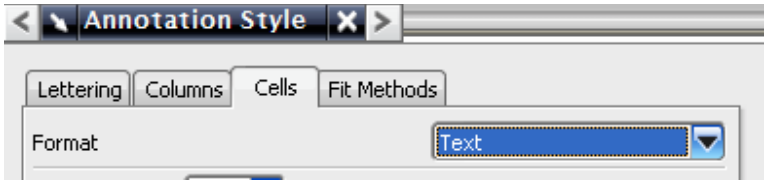


Continued Next

Go to Table of Contents

Continued from previous

- Make sure that the cell format is set to ***Text***, otherwise the value may be rounded.



Final Result:

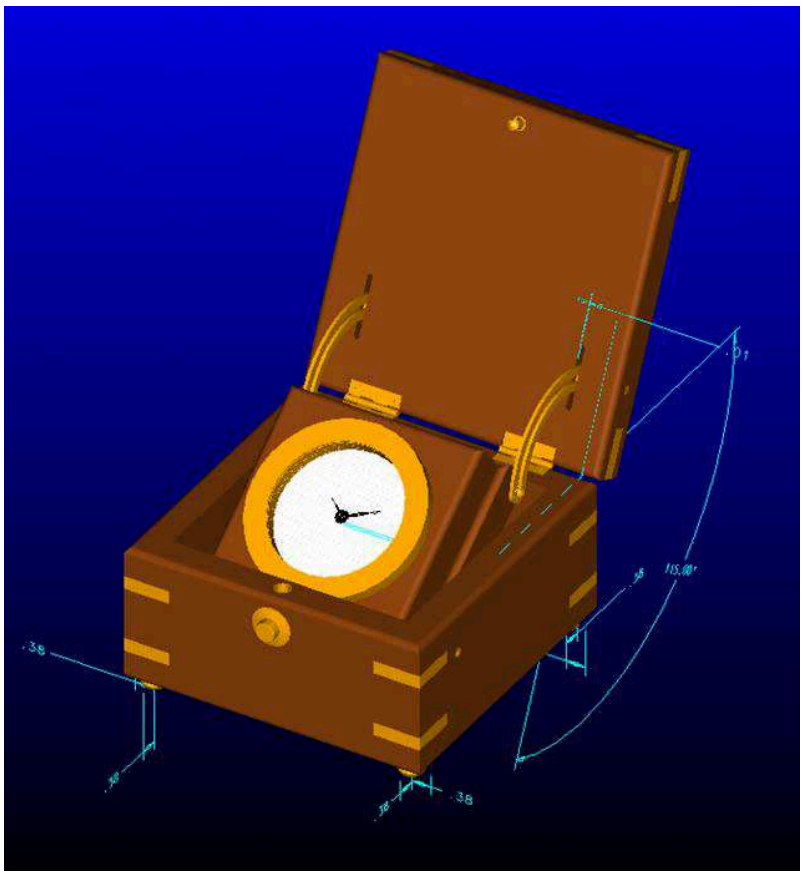
1	BOX	1	1.146375
PC NO	PART NAME	QTY	MASS

Frank Berger

The Implications of Using or Not Using a Subassembly Configuration on the Behavior of I-deas Master Assembly

There is some confusion on the part of Master Assembly users concerning the significance of using or not using a configuration from a subassembly in the definition of the configuration of a parent assembly. There are several things to consider, but the biggest two considerations are the design intent and the behavior of a constraint network when that constraint network is solved. This article will attempt to explain the significance of using or not using a subassembly configuration in the definition of a parent assembly's configuration.

Consider the following simple clock in a box assembly:



Continued Next

Go to Table of Contents