

Batch Property Material Training(Material)

Batch Property Material_Training(Material).zip



Batch Property Material - Overview

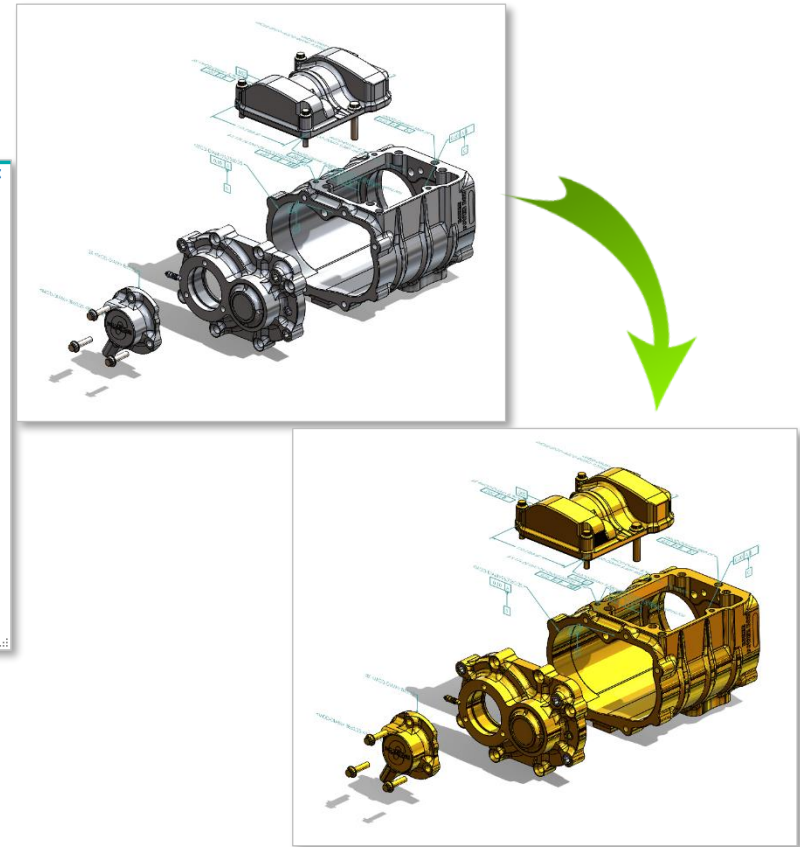
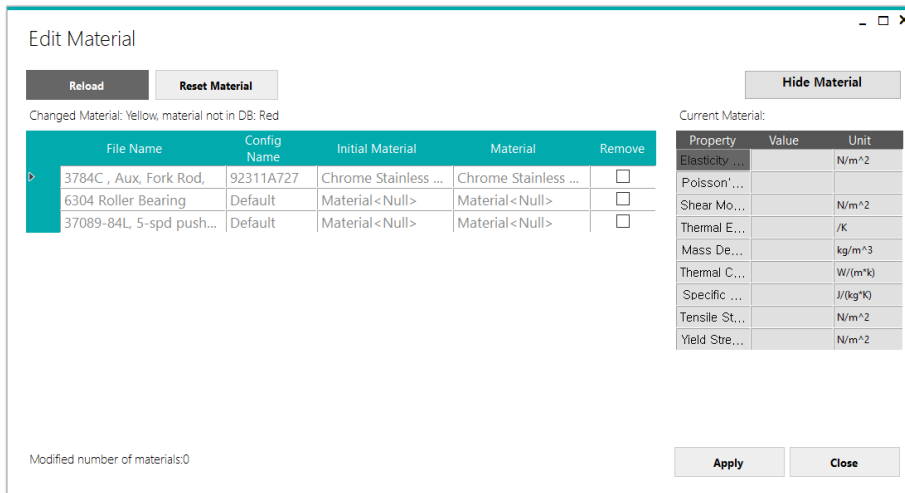
Main Functions

- Efficiently edit, modify, and delete the properties listed on material database
- Edit the properties that correspond to the part for Assembly in a single operation
- Easy to check material properties and input as property value

Benefits

- Reduce the repetitive task associated with editing material properties

Course Objective: Follow the simple step-by-step instructions and learn how to use Batch Property Material.

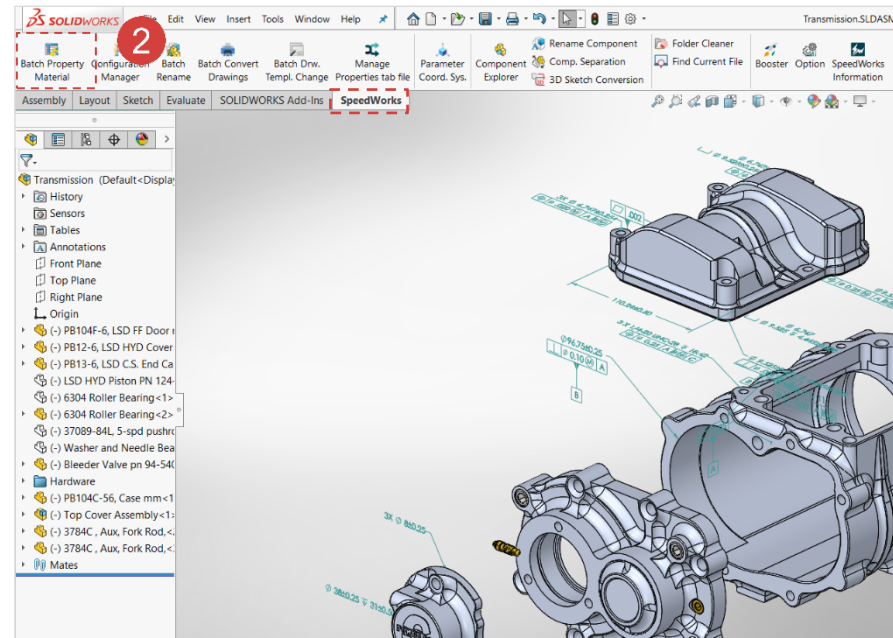
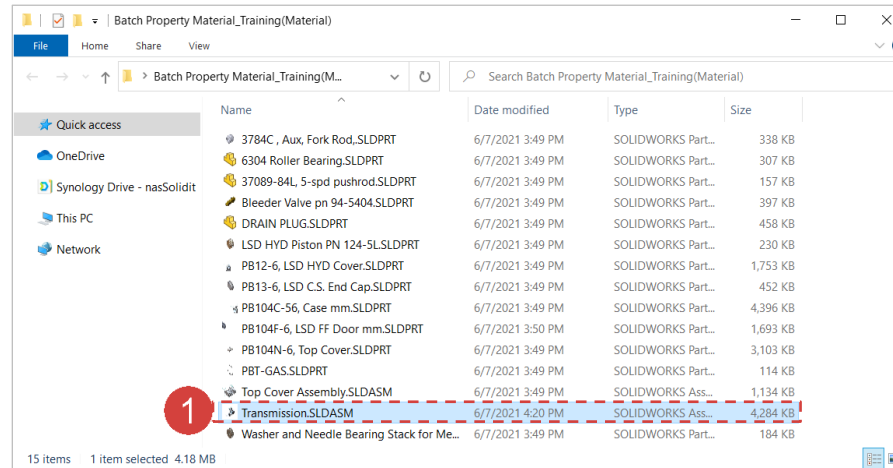


Batch Property Material - Execute

Work on the part with the red circle (1) following instructions by yourself.
The part with the black square (1) is an additional explanation or a reference.

1 Execute **Transmission.SLDASM** file among example files.

2 Click **[SpeedWorks]tab - [Batch Property Material]**.

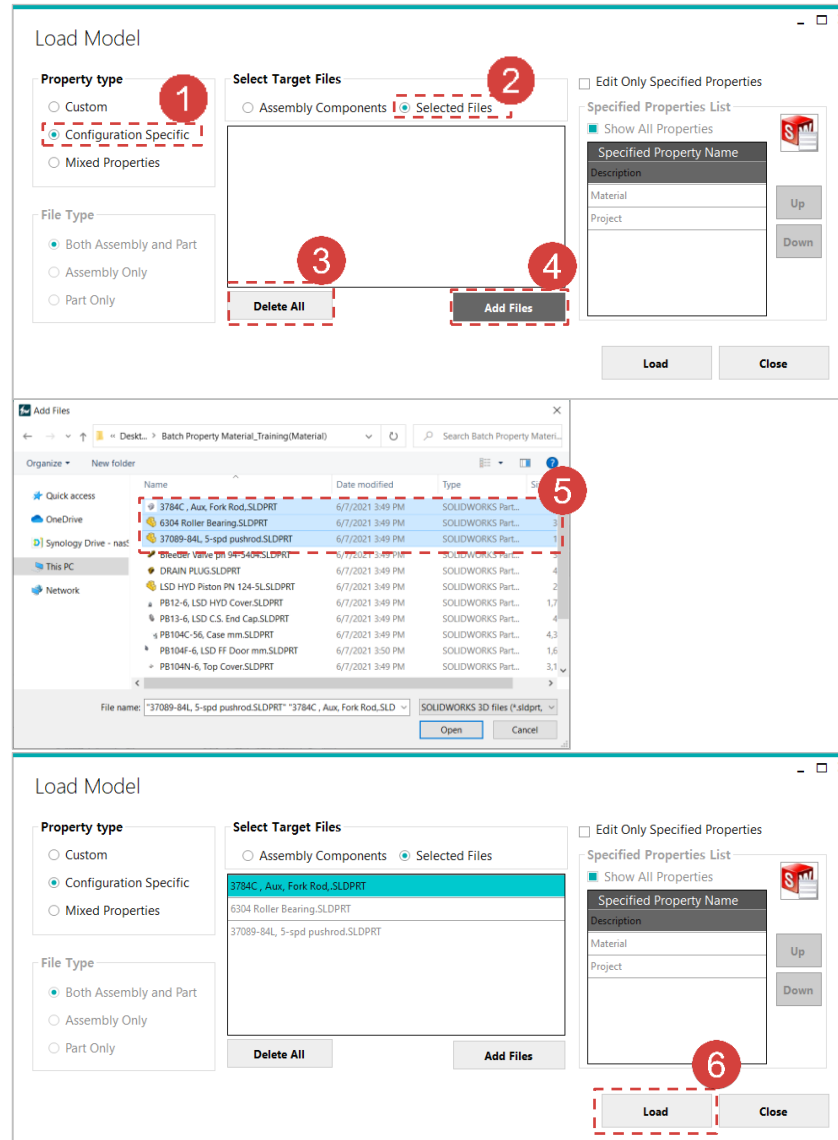


※ You can download example files at Support page in SpeedWorks Homepage(<http://speedworks.info>).

Batch Property Material - Load Model

Work on the part with the red circle (1) following instructions by yourself.
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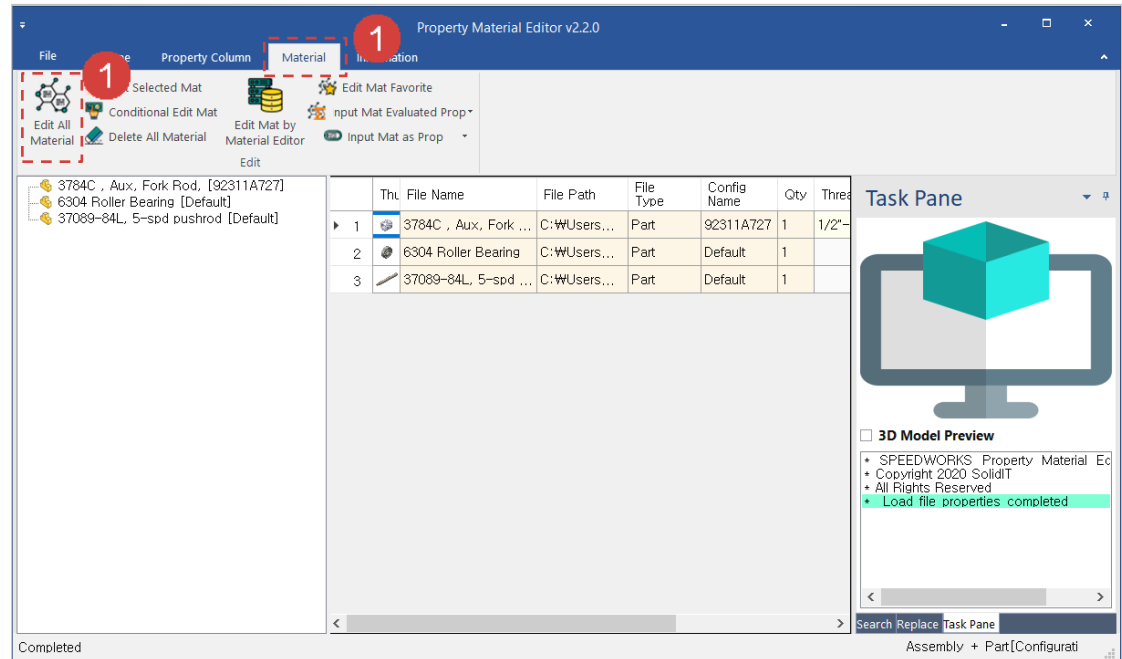
- 1 [Property Type]: check [Configuration Specific].
- 2 [Select Target File]: check [Selected Files].
- 3 If there exist files on the list, click [Delete All] button.
- 4 Click [Add Files] button.
- 5 Select target files: **3784C , Aux, Fork Rod.SLDPRT, 6304 Roller Bearing.SLDPRT, 37089-84L, 5-spd pushrod.SLDPRT.**
- 6 Click [Load] button.



Batch Property Material –Material Editor

Work on the part with the red circle (1) following instructions by yourself.
The part with the black square (1) is an additional explanation or a reference.

- 1 Click **[Material]** tab – **[Edit All Material]** button to execute material editor.



Batch Property Material - Composition

Work on the part with the red circle (1) following instructions by yourself.
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1 Detailed information on the selection is displayed in the [Current Material] list.

1 This window is used to edit the material properties.

2 [Reload]: Load current file containing the updated material properties.

3 [Reset Materials]: Reload material information from the original file

4 [Hide/Show Material]: Hide/Show [Current Material] list from [Edit Material] window.

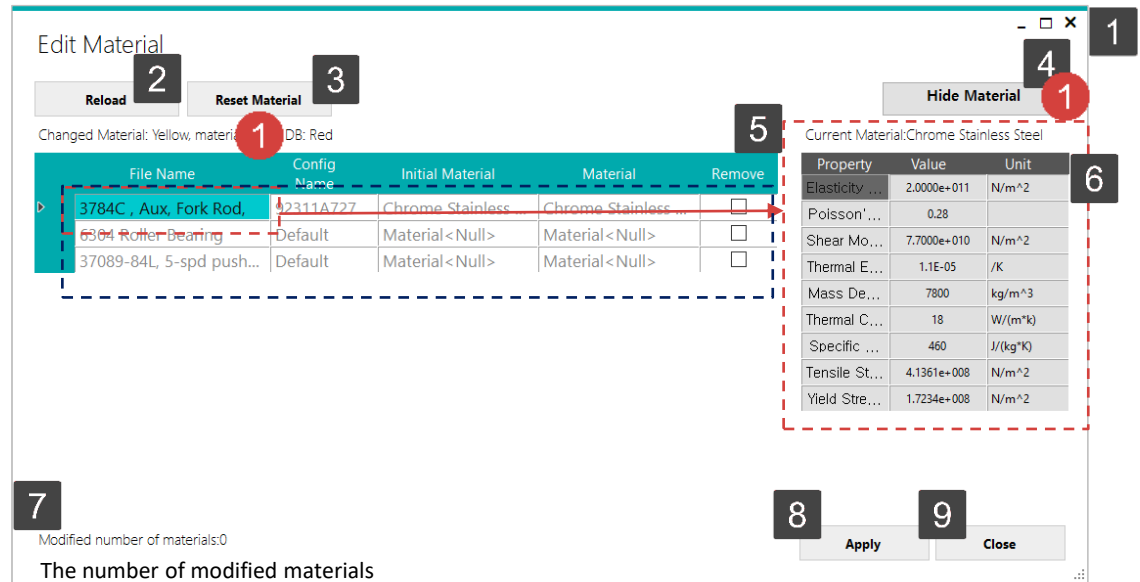
5 [File Information]: [Current Material] list allows users to edit or delete each property for the selected material.

6 [Material Details]: Material properties for the selected material are displayed on [Current Material] list

7 [Modified number of materials]: The number related to how many materials have been modified is displayed.

8 [Apply]: Apply every modification to current file.

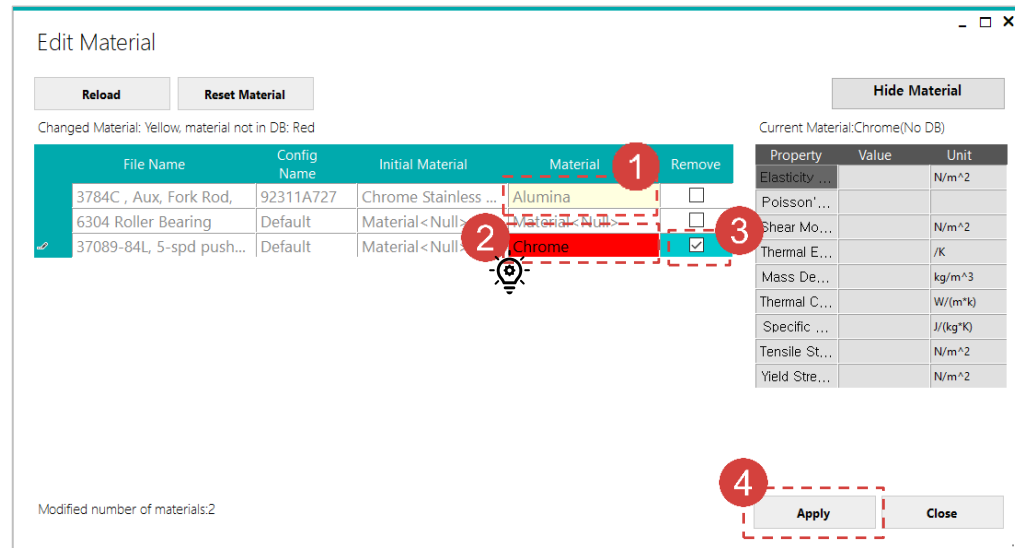
9 [Close]: Close window without saving changes.



Batch Property Material - Edit Material

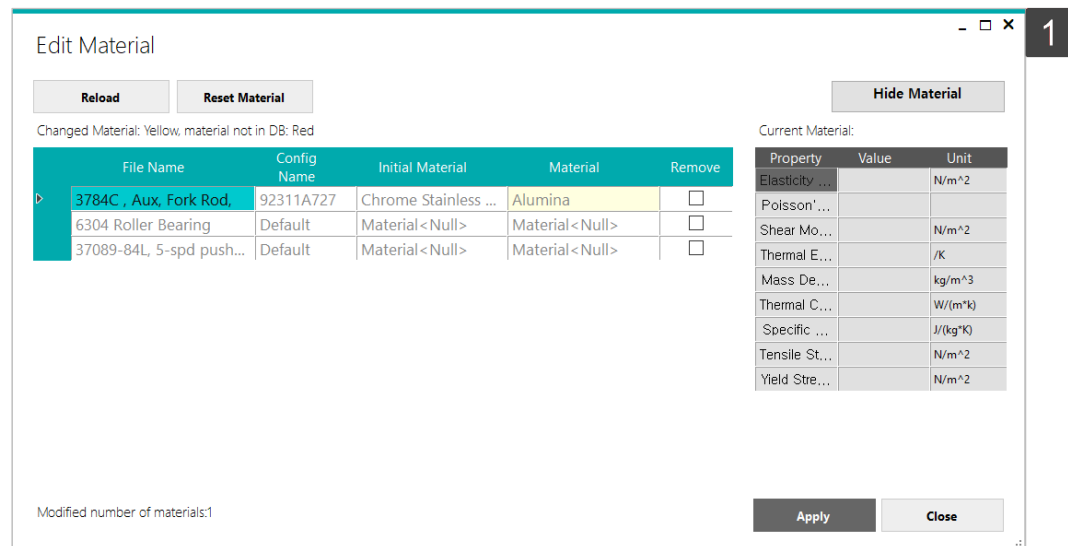
Work on the part with the red circle (1) following instructions by yourself.
The part with the black square (1) is an additional explanation or a reference.

- 1 Double-click material of **3784C,Aux, ForkRod** and input '**Alumina**'.
- 2 Change **37089-84L, 5-spd pushrod** material to '**Chrome**'. The color of current cell will become red after editing the material.
- 3 To remove material '**Chrome**', check [Remove] box which is next to red cell.
- 4 Apply current setting to model file by clicking [Apply].



1 Updated window after deleting material 'Chrome'

- 💡 When Material is modified and it is different from initial Material, then the cell will be changed to yellow. If changed Material is not in material database, the color of cell will be changed to red.
- 💡 Be aware. When the Material which user newly define is not existed in the material database for user's SOLIDWORKS, the color will be turned into red. This is also affected by the name of Material.



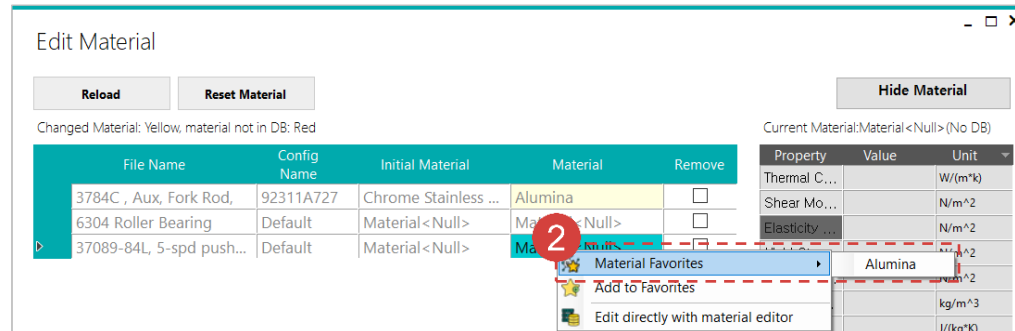
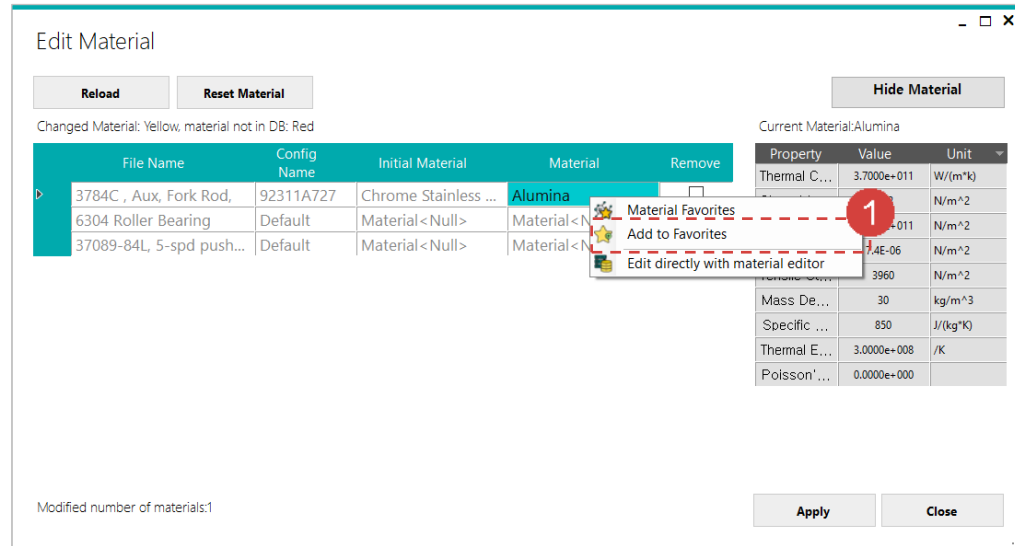
Batch Property Material – Favorite function

Work on the part with the red circle (1) following instructions by yourself.
The part with the black square (1) is an additional explanation or a reference.

1 Right-click Material cell of **3784C, Aux,ForkRod** ,
and then click **[Add to Favorites]**

2 Right-click Material cell of **37089-84L, 5-spd pushrod** **[Material Favorites]** , and then click
'Alumina'

1 It is the result of modifying Material with **[Add to Favorites]**.



File Name	Config Name	Initial Material	Material	Remove	1
3784C , Aux, Fork Rod,	92311A727	Chrome Stainless ...	Alumina	<input type="checkbox"/>	
6304 Roller Bearing	Default	Material<Null>	Material<Null>	<input type="checkbox"/>	
37089-84L, 5-spd push...	Default	Material<Null>	Alumina	<input type="checkbox"/>	

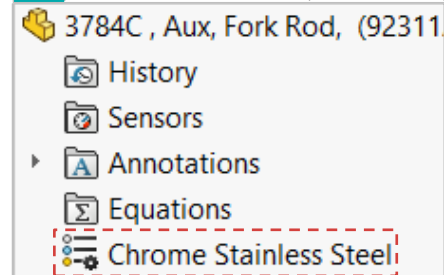
Batch Property Material – Check the result

Work on the part with the red circle (1) following instructions by yourself.
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1 The Material for 3784C, Aux, Fork Rod, is
'**Chrome Stainless Steel**' before editing.

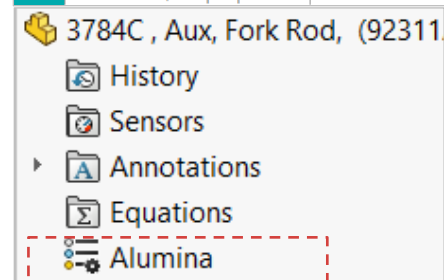
2 The Material for 3784C, Aux, Fork Rod, is
changed as 'Alumina' now.

File Name	Config Name	Initial Material	Material	Remove
3784C , Aux, Fork Rod,	92311A727	Chrome Stainless ...	Chrome Stainless ...	<input type="checkbox"/>
6304 Roller Bearing	Default	Material<Null>	Material<Null>	<input type="checkbox"/>
37089-84L, 5-spd push...	Default	Material<Null>	Material<Null>	<input type="checkbox"/>



<Before Edit Material>

File Name	Config Name	Initial Material	Material	Remove
3784C , Aux, Fork Rod,	92311A727	Chrome Stainless ...	Alumina	<input type="checkbox"/>
6304 Roller Bearing	Default	Material<Null>	Material<Null>	<input type="checkbox"/>
37089-84L, 5-spd push...	Default	Material<Null>	Alumina	<input type="checkbox"/>



<After Edit Material>

Batch Property Material – Insert Mass Property

Work on the part with the red circle (1) following instructions by yourself.
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- 1 Click **[Property Column] tab – [Add Column]**.
Enter **'Material'** in **[Property Name]** and then click **[Apply]**.
- 2 Select cells in Material column by dragging, click **[Material] tab – [Input Mat Evaluated Property]– [Material]**.
- 3 Click **[Home] tab – [Apply Model Properties]** for applying changes to current file.

💡 This explanation is related to editing the material properties.

1 **[Value / Text expression]** shown in **[Summary Information]** window is used to define the **[Material]**. These values will be shown as **[Evaluated Values]** in SOLIDWORKS.

2 Click **SOLIDWORKS – [File]–[Properties]– [Configuration Specific]**. Then properties related to current file will be displayed in **[Summary Information]**.

The screenshots illustrate the steps to add and evaluate material properties in SolidWorks:

- Property Material Editor v2.2.0:** The 'Add Property Item' dialog shows 'Material' being added to the list. The 'Apply' button is highlighted with a red circle (1).
- Property Material Editor v2.2.0:** The 'Material' column is selected in the main table. The 'Input Mat Evaluated Property' button is highlighted with a red circle (2).
- Property Material Editor v2.2.0:** The 'Home' tab is active, and the 'Apply Model Properties' button is highlighted with a red circle (3).
- Summary Information window:** The 'Configuration Specific' tab is selected. The 'Apply to' dropdown is set to '92311A727'. The 'BOM quantity' is set to 'None'. The table shows the evaluated values for the material properties.

Th	File Name	Material
1	3784C , Aux, Fork ...	"SW-Material@3784C , Aux, Fork Rod.,SLDPRT"
2	6304 Roller Bearing	"SW-Material@6304 Roller Bearing,SLDPRT"
3	37089-84L, 5-spd ...	"SW-Material@37089-84L, 5-spd pushrod,SLDPRT"

Property Name	Type	Value / Text Expression	Evaluated Value
1 Thread	Text	1/2"-20	1/2"-20
2 Calc Scale	Text	3.5	3.5
3 Material	Text	"SW-Material@3784C , Aux, Fork Rod.,SLDPRT"	Alumina
4 <Type a new property>			