**Knit Surface**

Use the **Knit Surface** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867837540.image tool to combine two or more faces and surfaces into one.

Note the following about knit surfaces:

* Edges of the surfaces must be adjacent and not overlapping.
* Surfaces do not need to be on the same plane.
* Select the entire surface body, or select one or more adjacent surface bodies.
* Knit surfaces absorb the surface bodies you used to create them.
* Create a solid body when the knit surfaces form a closed volume, or leave as a surface body.
* Select **Merge entities** to merge faces with the same underlying geometry.
* Select [**Gap Control**](http://help.solidworks.com/2012/English/SolidWorks/sldworks/r_Knit_Surface_PropertyManager_Gap_Control.htm) to view the gaps or modify the knitting tolerance.

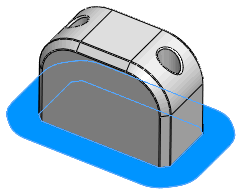
**To knit surfaces:**

|  |  |
| --- | --- |
| 1. Click **Knit Surface** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867837540.image on the Surfaces toolbar, or click **Insert**, **Surface**, **Knit**.   In the PropertyManager, under **Selections**: | http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867837212.image  Create adjacent, non-intersecting surfaces |
| 1. Select faces and surfaces for **Surfaces and Faces to Knit** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867839072.image. 2. Select **Try to form solid** to create a solid model from enclosed surfaces. 3. Select **Merge entities** to merge faces with the same underlying geometry. | http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867838290.image  Select the faces to knit |
| 1. Select [**Gap Control**](http://help.solidworks.com/2012/English/SolidWorks/sldworks/r_Knit_Surface_PropertyManager_Gap_Control.htm) to view edge pairs that might introduce gap problems, and to view or edit the knitting tolerance or gap range. | View the **Knitting tolerance**. Modify it if required.  The gap range depends on the knitting tolerance. Only gaps within the selected gap range are listed. You can modify the gap range if required. |
| 1. Click **OK http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292866746861.image**.   The result is a single surface listed in the FeatureManager design tree as **Surface-Knit**<*n>*.  http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292866717234.image There is no difference in the appearance of the faces and surfaces after knitting. | http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867838619.image |

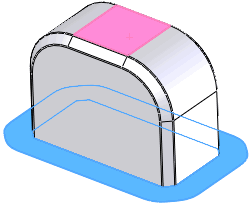
**To use the Seed faces option:**

To knit surfaces with the **Seed faces** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867839634.image option, you must use [**Radiate Surface**](http://help.solidworks.com/2012/English/SolidWorks/sldworks/HIDD_DVE_RADIATE_SURFACE.htm).

1. Create a radiated surface.



1. Click **Knit Surface** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867837540.image on the Surfaces toolbar, or click **Insert**, **Surface**, **Knit**.
2. In the PropertyManager, under **Selections**:
   1. Select the radiated surface for **Surfaces and Faces to Knit** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867839072.image.
   2. Click in **Seed faces** http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292867839634.image, then select a face on the model to knit with the radiated surface.



1. Click **OK http://help.solidworks.com/2012/English/SolidWorks/sldworks/doc1292866746861.image**.

The seed face and all adjacent faces are knitted to the radiated surface.