



3DXpert™ for SOLIDWORKS®

Lattice Design

Infills - Evaluation

Introduction

3DXpert for SOLIDWORKS includes tools for creating optimized structures, using Lattices and Infills. Infills are structures that support the inner volume of the body and save sintering time.

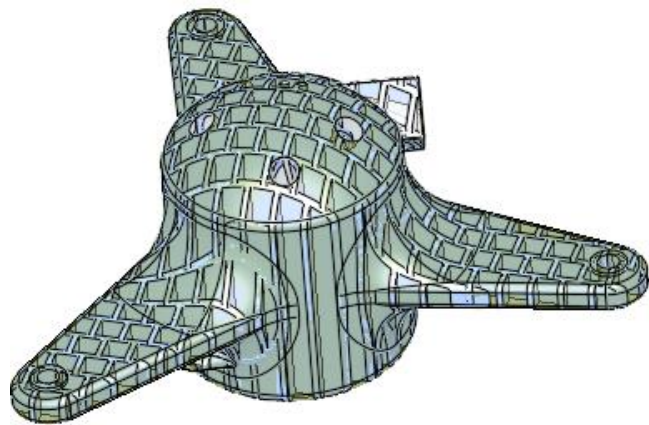
This is another way (together with Lattice) to fill a body with pattern based shapes.

In this document, we will describe the various Infill types and the 3DXpert for SOLIDWORKS lattice Evaluation mode.

3DXPert for SOLIDOWRKS offers three Infills types: Solid Infill, Conformal Infill and Wall Infill.

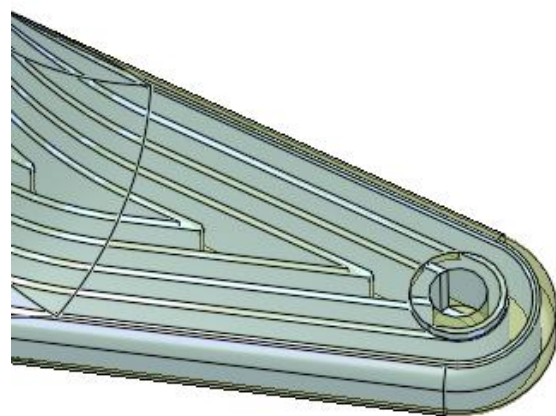
The Infill Types Available in 3DXpert for SOLIDWORKS

Solid Infills creates a solid inner structure based on the selected predefined pattern.



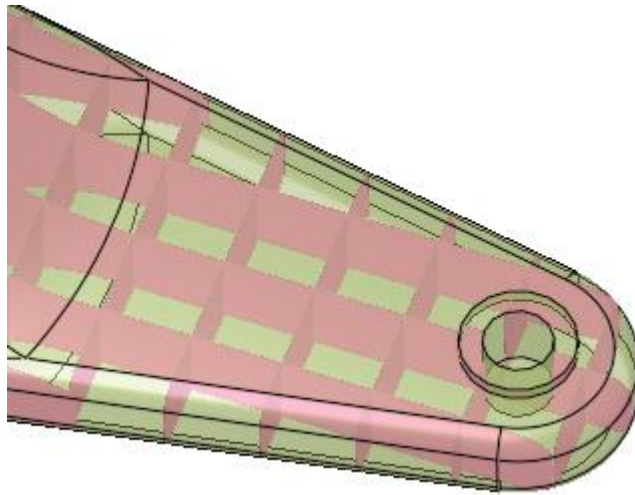
Solid Infills

Conformal Infills creates a conformal Infill instead of a pattern. In this type, we can either uses the shape (silhouette) of the object (default option) or use a user defined reference contour.



Conformal Infills

Wall Infills adds a wall Infill that will get recognized as Wall Support in slicing.



Wall Infills


Working in Evaluation Mode

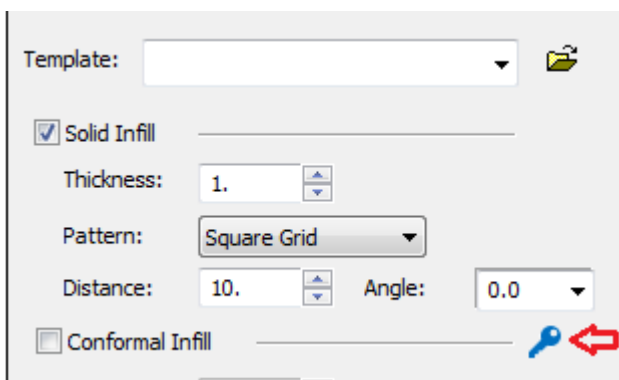
When working with a Standard license, you can create a Solid Infill, which you are able to slice and export to other software.

You can create additional Infill types (Conformal and Wall Infill types), however, in the Standard package, the additional Infill types are available in Evaluation mode.

In Evaluation mode, you can create, save, edit and view the Conformal and Wall Infill types. However, you cannot slice or export them.

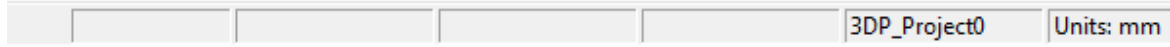
To enable slicing and exporting of the additional Infill types, upgrade your 3DXpert for SOLIDWORKS to either Advanced Lattice Design ADD ON or the Professional package.

When invoking the Infill tool with the Standard license, a blue Lock sign  appears next to all the options that are in Evaluation mode, which means that you can create, save, edit and view them, but you cannot slice or export:

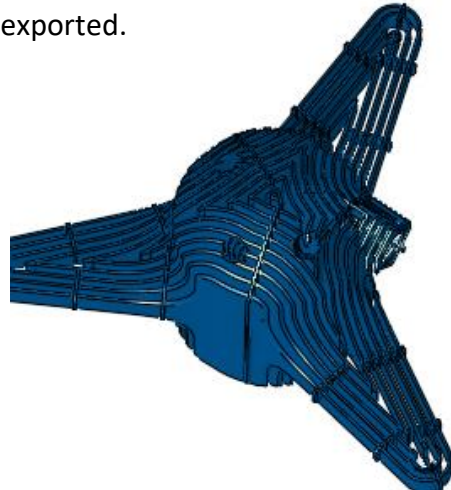


Whenever using an Evaluation feature, an “Evaluation Feature” note will appear at the bottom of the screen:

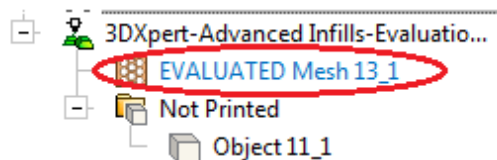
Evaluation Feature



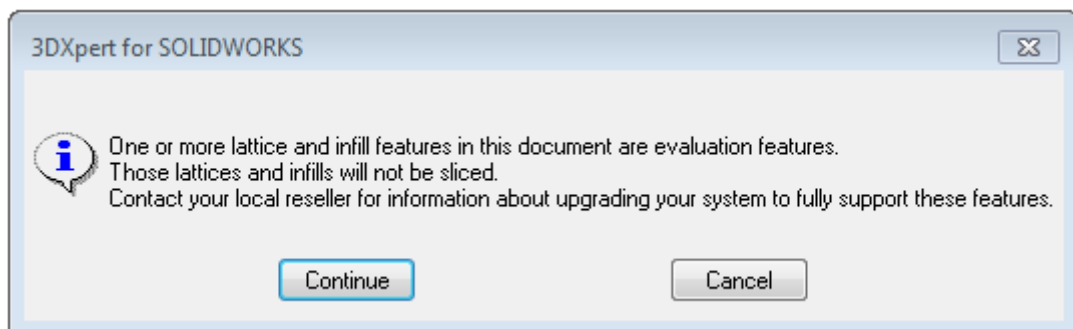
The Infill that you create with Evaluation features is colored in blue, which indicates that the Infill cannot be sliced or exported.



The Infill feature is also colored in blue and the word EVALUATED is added in the prefix.



Attempting to slice Infill that is in Evaluation mode, 3DXpert for SOLIDWORKS will show the following message:



End of Exercise.