



**3DXpert**

# **Materials Update Procedure**

**Tutorial\_V1 - Updated: 13,0500,1488,1555(SP5)**

## Introduction

When creating a 3D Printing project in 3DXpert, you have to specify the name of the printer on which the part will be built and the exact material (metal powder) name that will be used.

The material name is not just a name. It designates a set of files, a database, which includes the exact technology parameters (scanning parameters, laser parameters and in some printers, layering parameters). Thus, for each different material you can expect a different scan path result.

For each of its available printers, 3D Systems supplies certified material databases with specific scan path and laser parameters for the relevant materials (powder).

These databases were tested and approved by 3D Systems.  
Each database is referred also as Buildstyle.

## Licensing

Each material database, which is certified, is protected by a license.

Still, you can download from the 3DXpert Printers and Materials update server any of the materials available for your printer.

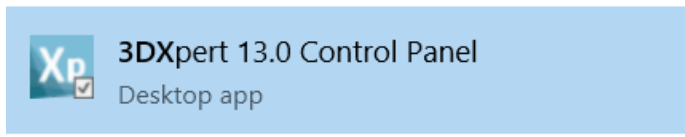
That said, you cannot use them in 3DXpert, unless you have a matching license.

## Update a Material Database

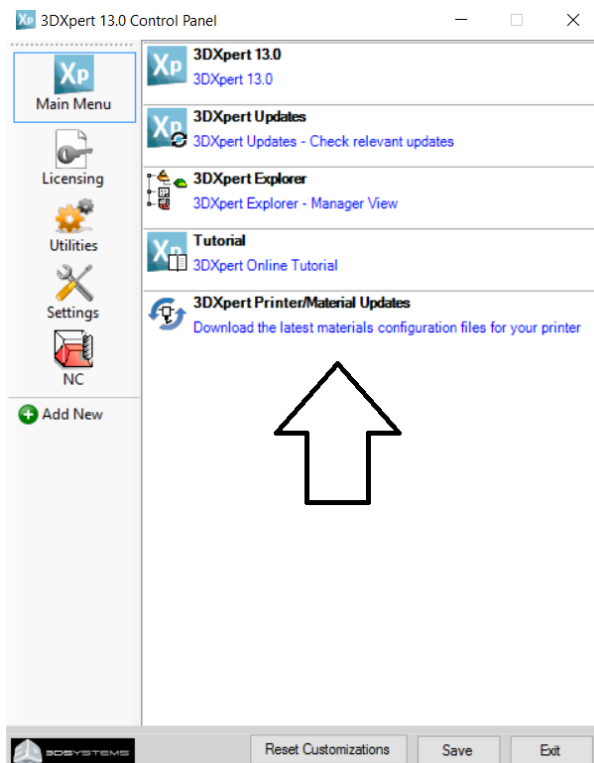
In this guide, we will use the printer PROX DMP 320B as an example.

The same method applies to any other printer or material that is available via the Download Server.

Through the Start menu, launch the 3DXpert Control Panel



From the Main Menu, launch the utility '3DXpert Printer/Material Updates'



From the list of available printers, select the printer Prox DMP 320A.

Notice that the table displays all the materials available on the web server and if exist, also materials which are already installed on your 3DXpert.

Each row represents a material and the following details:

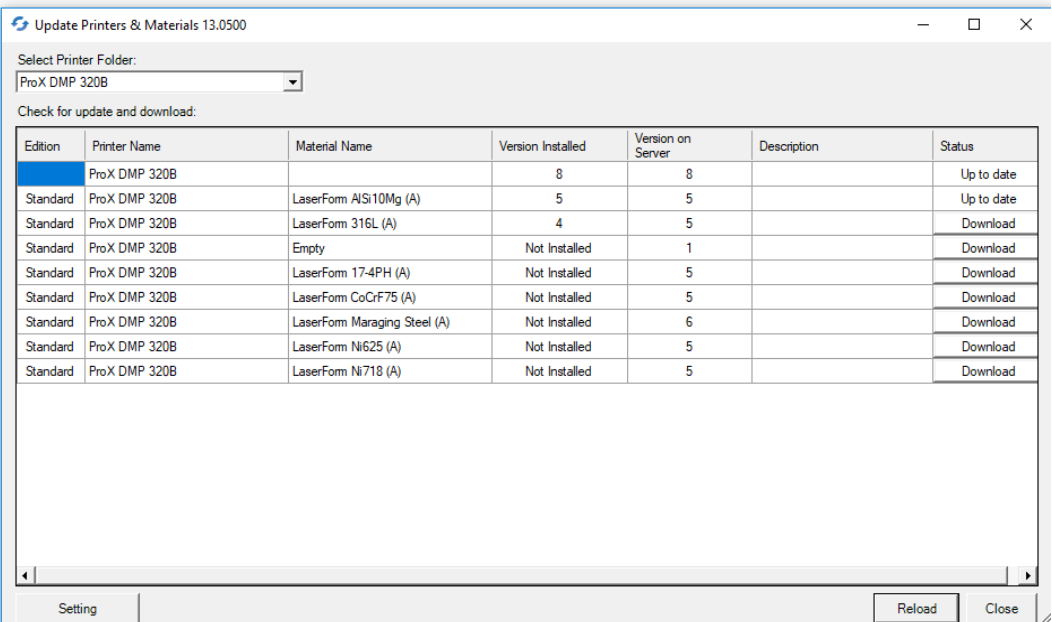
- Edition – Type of material (Empty/Standard).
- Printer Name - Name of the printer
- Material Name - Name of the material
- Version Installed - The version of the printer/material installed on your PC (if installed already)
- Version on Server - The latest version of the printer/material which is available for download
- Description - Comments on printer/material
- Status – Indicating if this material is available for download from the server

Remember that you can download all the certified materials for this printer, but you cannot use materials, unless you have the license to run them.

If the version available on the server is higher, then a 'Download' button will show alongside the material (in the same row).

In the following image, two materials for Prox DMP 320B are already installed on the user's PC:

- LaserForm AlSi10Mg (A)
- LaserForm 316L (A)



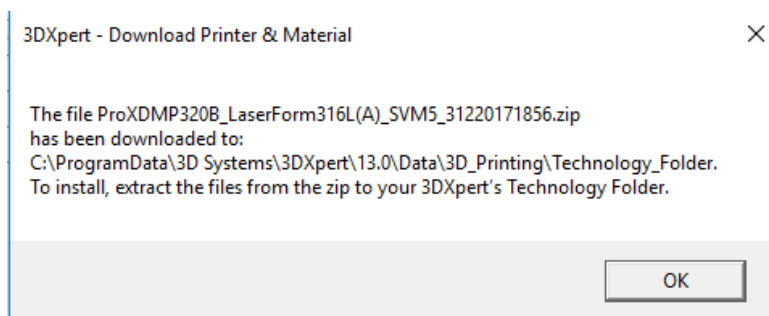
Edition	Printer Name	Material Name	Version Installed	Version on Server	Description	Status
	ProX DMP 320B		8	8		Up to date
Standard	ProX DMP 320B	LaserForm AlSi10Mg (A)	5	5		Up to date
Standard	ProX DMP 320B	LaserForm 316L (A)	4	5		Download
Standard	ProX DMP 320B	Empty	Not Installed	1		Download
Standard	ProX DMP 320B	LaserForm 17-4PH (A)	Not Installed	5		Download
Standard	ProX DMP 320B	LaserForm CoCrF75 (A)	Not Installed	5		Download
Standard	ProX DMP 320B	LaserForm Maraging Steel (A)	Not Installed	6		Download
Standard	ProX DMP 320B	LaserForm Ni625 (A)	Not Installed	5		Download
Standard	ProX DMP 320B	LaserForm Ni718 (A)	Not Installed	5		Download

Compare the printer version and the material version.

- See that the installed material database for LaserForm AlSi10Mg (A) is up to date (the version installed and the version available from the download server are the same - version 5).
- See that the installed material database for LaserForm 316L (A) is not up to date (the version installed is version 4 and the version available from the download server is version 5).

Since a new version is available for LaserForm 316L (A), press the Download button.

Once the download is over, the following message shows up:



The material file is now on your PC. However, the installation has not finished yet. The next step is manual:

Open up Windows Explorer and browse to the folder -

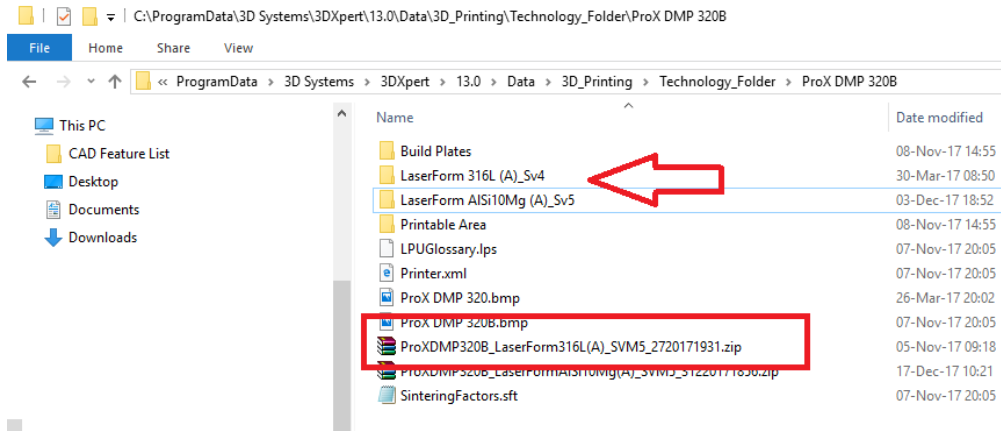
C:\ProgramData\3D Systems\3DXpert\13.0\Data\3D\_Printing\Technology\_Folder\

Note: You can always see where the technology installation folder is by clicking the Settings button on the Printer and Materials Update dialog:

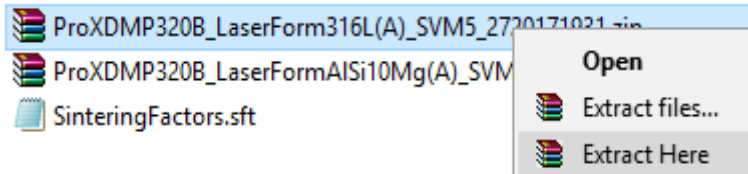


As you browse to the technology folder, you will find the downloaded zipped file (in this example, ProXDMP320B\_LaserForm316L(A)\_SVM5\_2720171931.zip) as it is placed along the printer folders.

Move the zip file into the relevant printer folder. The following image show the current material database folder (V4) and the new database (V5, zipped):



Extract the contents of the file to this folder.



A new folder has been created.

The material folders (as saved inside the ZIP files) retain the version numbers. This is done on purpose so that an additional material folder will be created, and thus not overwrite existing materials files.

The updated material database is now ready to use. Running the Material Update tool again (or pressing the Reload button), it show that the material database is up to date.

Update Printers & Materials 13.0500

Select Printer Folder: ProX DMP 320B

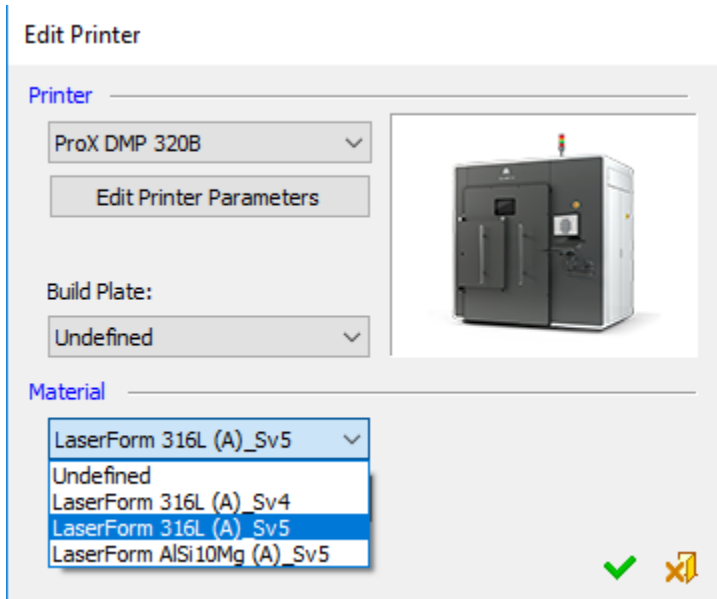
Check for update and download:

Edition	Printer Name	Material Name	Version Installed	Version on Server	Description	Status
Standard	ProX DMP 320B	LaserForm AISi10Mg (A)	5	5		Up to date
Standard	ProX DMP 320B	LaserForm 316L (A)	5	5		Up to date
Standard	ProX DMP 320B	Empty	Not installed	1		Download
Standard	ProX DMP 320B	LaserForm 17-4PH (A)	Not installed	5		Download

## Using the new material database

If you create a new project or edit an existing one, note that both the previous version (V4) and the new version (V5) of the material database are available.

These are independent material databases.



To remove a material database, browse to the printer folder and delete the relevant folder.