



# Export CAE Material files to ANSA

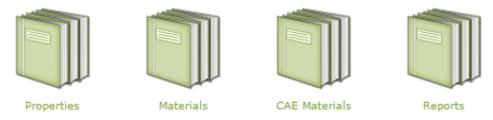
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Quick Links

- Global Data Center
- My Workgroup
- My Database
- Shared Data
- Free Databases

### Libraries



### Apps



To populate your database with CAE Material files, navigate to the **CAE Materials Grid**

You can either upload existing CAE Material files from your computer, or create new files using the built in **Modeler** module

# Upload

My Database > CAE Materials Grid

Author Mode

LS-DYNA MAT\_024 Moldflow ANSYS MISO SolidWorks ANSYS Elastic

0.026" Thick Sheet Metal

0.026in Thick Sheet Metal

15-5PH

17-7PH RH950

2014

LS-DYNA MAT\_024 Moldflow ANSYS M

0.026" Thick Sheet Metal

0.026in Thick Sheet Metal

15-5PH

Key: databases select tools Data: available

To upload existing CAE Material files from your computer:

Click the **Upload Material File** button

OR

Turn on Author Mode and select a material and model type by clicking the appropriate hexagon



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# Upload

## Upload CAE Material File

### Select Material

Class: -- Filter By Class - ▾ Subclass: -- Filter By Subcla ▾

Material Name: -- Select Material ▾

### File Information

File Format:  Model Type:

Project Id:

Notes:

File:  No file chosen

Upload

Select an existing material from your database and fill out the file information for your CAE Material file

Choose the file and click **Upload**

# Create

Matereality

https://my.matereality.com/MyDatabase/CaeGrid

Apps Gmail Matereality Log On DatapointLabs Admin Knowmats Admin picsci

matereality

My Database > CAE Materials Grid

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Key: databases select tools

Data: available

Upload Material File

Create Material File

Plugins

Export Selection

Export to HyperWorks

Export to ANSA

The screenshot shows a web browser window with the Matereality logo and navigation menu. The main content area displays a grid of materials under the heading 'My Database > CAE Materials Grid'. A sidebar on the left contains several buttons, with 'Create Material File' highlighted by a red box. Below the grid, there is a 'Key' section for databases and tools, and a 'Data' section indicating availability.

To create a new CAE Material file from existing property data in your database, select **Create Material File** and select your CAE Software from the list

Create Models for your CAE

SIMULIA (Abaqus/CAE)

Autodesk Simulation Mechanical (Algor)

ANSYS

LS-DYNA

Moldex3D

Autodesk Simulation Moldflow

SIEMENS NX Nastran

ESI PAM-CRASH

Simpoe

SOLIDWORKS

The screenshot shows a dialog box titled 'Create Models for your CAE'. It contains a horizontal list of software options, each with a logo and a brief description. The options are: Simulia (Abaqus/CAE), Autodesk Simulation Mechanical (Algor), ANSYS, LS-DYNA, Moldex3D, Autodesk Simulation Moldflow, SIEMENS NX Nastran, ESI PAM-CRASH, Simpoe, and SOLIDWORKS.

# Create

Get Plugins for your software.

Go

	Match 0	Match 1
8619K441 HDPE	●	○
8742K133 PP	●	○
AL 2024 T3	●	○
Makrolon 7435	●	○
<b>McMaster Carr ABS PN 8586K161</b>	●	○
Sheet Metal Sample	●	●

Live Support

Search for materials with applicable property data, then select your material from the list by clicking the appropriate hexagon



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McMaster Carr ABS PN 8586K161 - LS-DYNA MAT\_024 Calibration - Google Chrome

[https://my.matereality.com/Export/SelectExportFormat.aspx?rid=24\\_635863783558800983&orid=15\\_635863783521301208&STemplate=LS-](https://my.matereality.com/Export/SelectExportFormat.aspx?rid=24_635863783558800983&orid=15_635863783521301208&STemplate=LS-)

Modeler

McMaster Carr ABS PN 8586K161 - LS-DYNA MAT\_024 Calibration

Material Raw Data CAE Model

Select the output format

LS-DYNA (b): mm,s,tonne,N,MPa

Start Conversion Cancel

Select your output format from the dropdown list

# Create

# Create

Modeler

Material Raw Data CAE Model

Ls-Dyna MAT\_024 LCSR

mid	$\rho_0$ tonne/mm <sup>3</sup>	e MPa	pr	sigy MPa	etan MPa	fail	tdel
1		2066.699545		33.87235205		0.004492181	

c	p	lcss	lcsr	vp

**Stress Ratios**

Strain Rate (/s)	Stress Ratio
0.010002	1
0.10002	1.127371273712737
1.0002	1.222222222222223
10.002	1.2953929539295392
100.02	1.3848238482384825

**Stress Strain Data**

X Linear X Log Y Linear Y Log Unzoom Zoom Select Update

80  
70  
60

Use the Modeler module to adjust your CAE Material file and click **Update** to apply changes

Download the material file to your computer by clicking **Download**

Save the file to your database by clicking **Save**

- Upload Material File
- Create Material File
- Plugins
- Export Selection
  - Export to HyperWorks
  - Export to ANSA**

My Database > CAE Materials Grid

Author Mode



Once you have populated your database with CAE Material files:

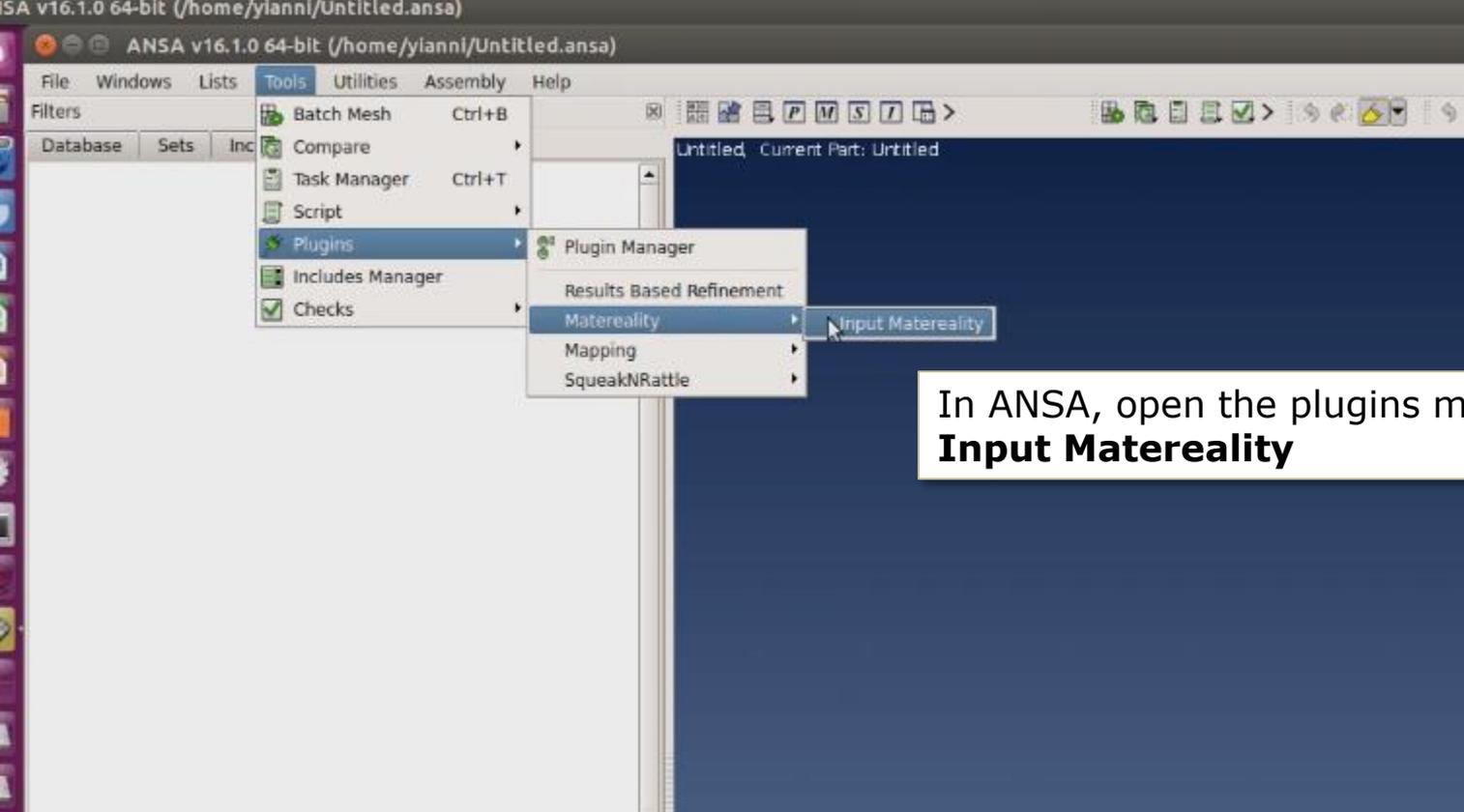
Use the **Select** tab to filter your view to include only the models you would like to export

Click **Export to ANSA** to export all visible files to a .zip folder

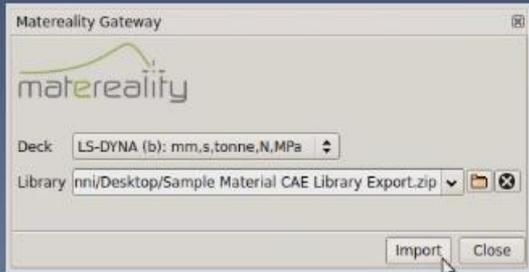
Key:  
databases  
select  
tools

Data:  
available  
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Live Support

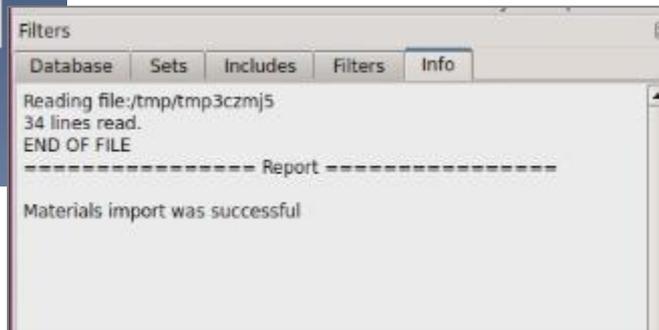
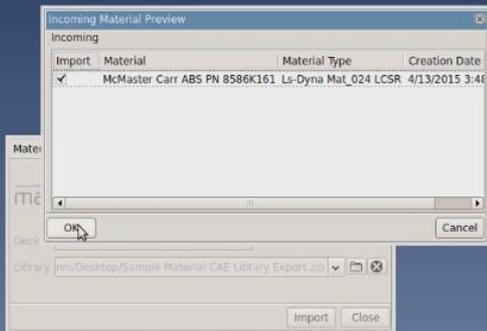


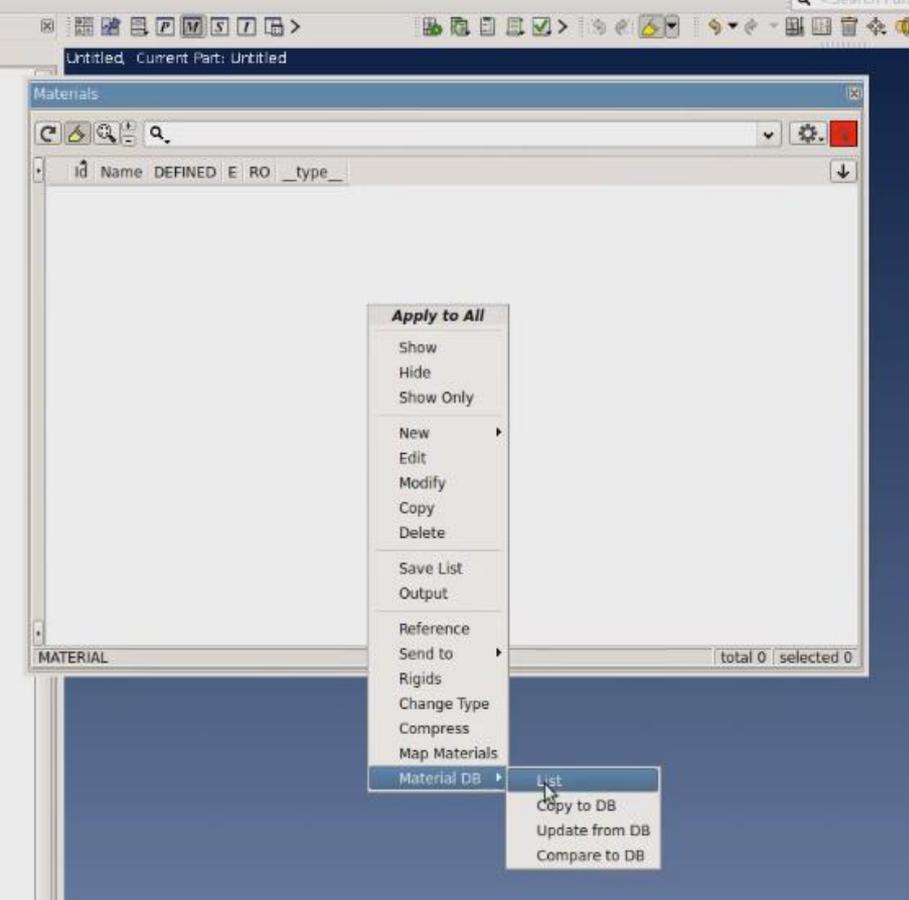
In ANSA, open the plugins menu and select **Input Matereality**



Select your exported .zip file and the model type of your material files

Check the files you would like to import and click **OK**





Open your **Materials** window, right click, and select **Material DB > List**

