



Export CAE Material files to ANSA

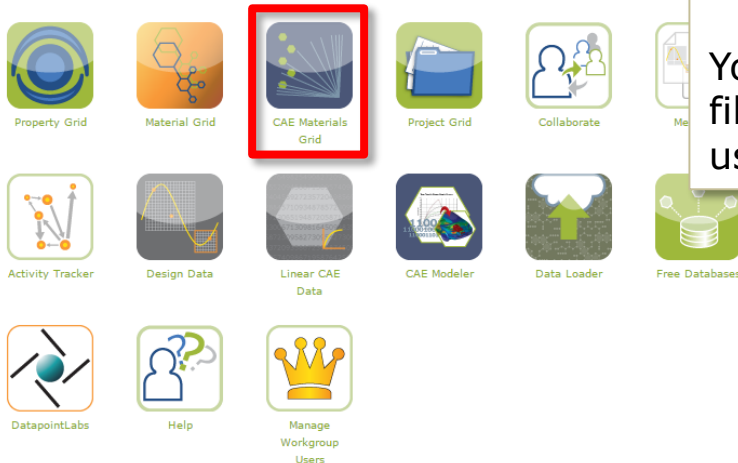
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Libraries



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

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: Subclass:

Material Name:

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

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				5	3
15-5PH					
17-7PH RH950					4

Key:
databases
select
tools

Data:
available

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	NX Nastran	ESI PAM-CRASH	Simpoee	Solidworks

Select Material

https://my.matereality.com/Legacy/MiroSearch/CaeSearch.aspx?OwnerSearch=0&CAE=Ls-Dyna

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Create Model for Ls-Dyna

Select Database | My Workgroup

Apply Material Constraints

Class	Sub Class	Supplier
Any	Any	Any

Get Plugins for your software.

Go

LC, (2002-2015)

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

Live Support

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Create

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



Create

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

Modeler

McMaster Carr ABS PN 8586K161 - LS-DYNA MAT_024 Calibration

Material Raw Data CAE Model

Ls-Dyna MAT_024 LCSR

mid	ro tonne/mm3	e MPa	pr	sigy MPa	etan MPa	fail	tdel
1		2066.699545		33.87235205		0.004492181	

c	p	lcsc	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**

Matereality x

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

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Confidential Demo Purposes

My Database > CAE Materials Grid

Author Mode

LS-DYNA
MAT_024

McMaster Carr ABS PN
8586K161

2

Upload Material File

Create Material File

Plugins

Export Selection

Export to HyperWorks

Export to ANSA

Key:
databases
select
tools

Data:
available

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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

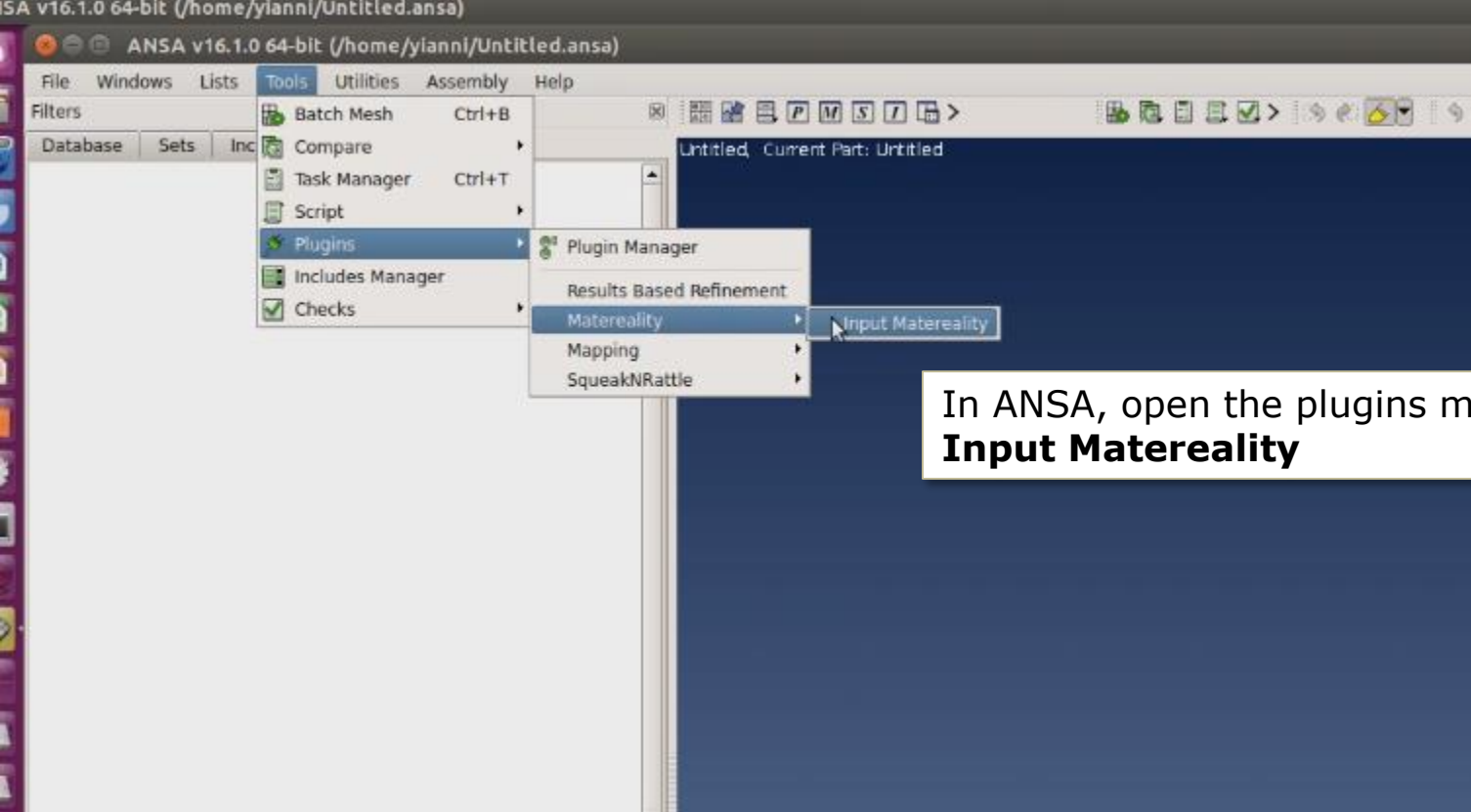
Click **Export to ANSA** to export all visible files to a .zip folder



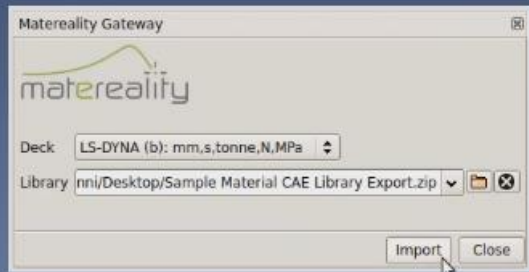
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Live Support



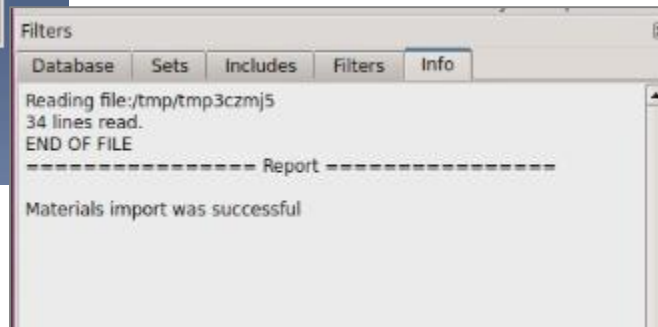
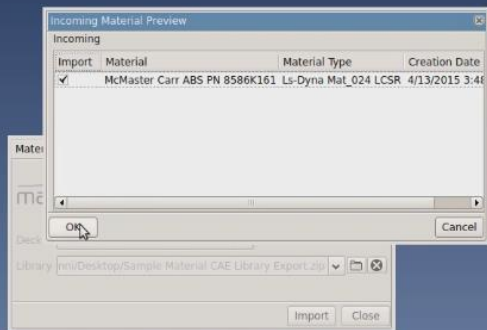


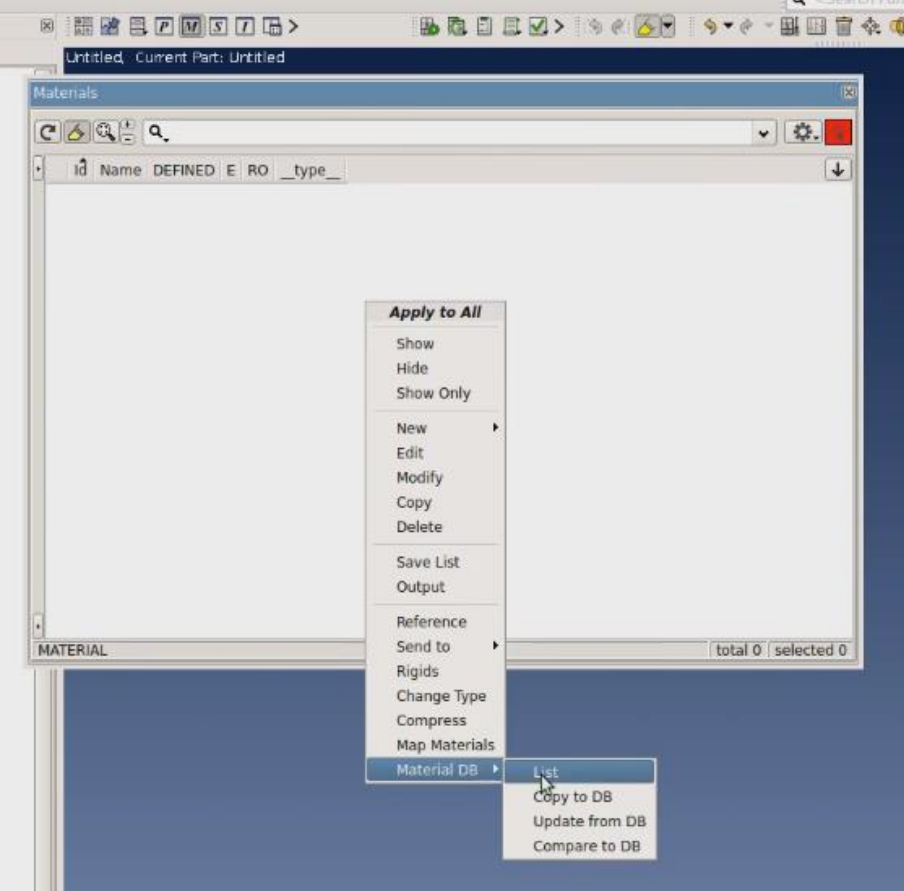
In ANSA, open the plugins menu and select **Input Matereality**



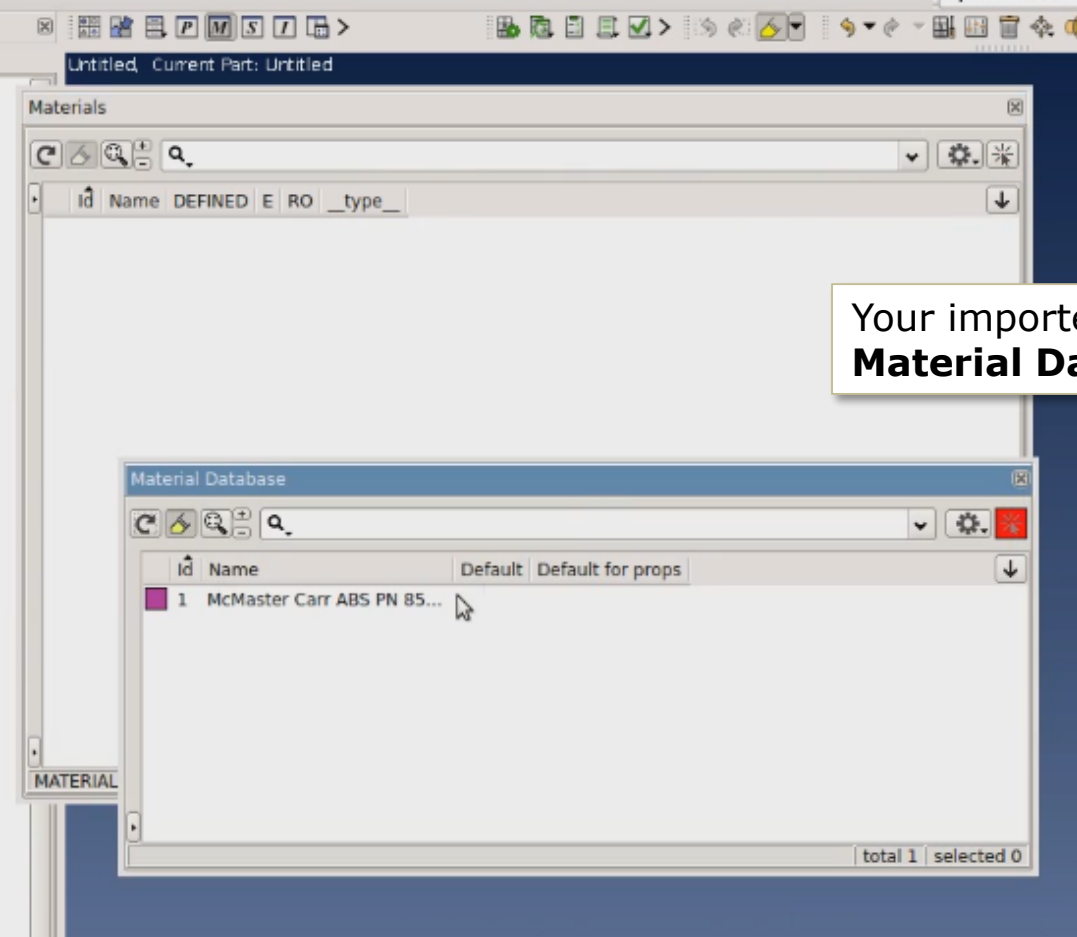
Select your exported .zip file and the model type of your material files

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





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



Your imported material files appear in the **Material Database** window