



Advance Steel to Advance Design GTCX Process, Quick Start Guide.

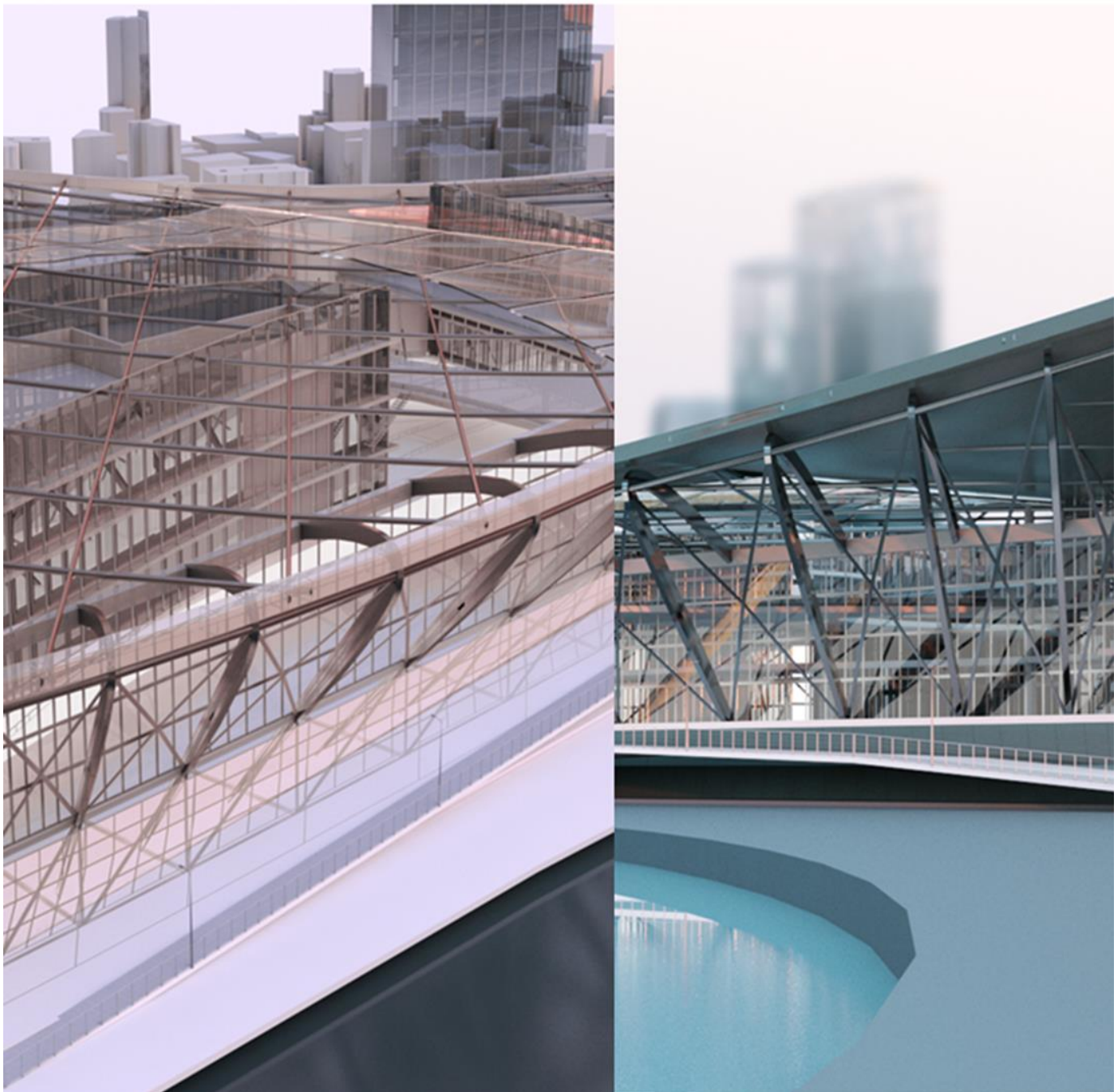


Table of Contents

Introduction	3
1. Where to find the GTCX tools.	3
Graitec Powerpack for Advance Steel.....	3
Advance Design GTCX tools.	3
2. How to use GTCX from Advance Steel to Advance Design	4
Bim Import method.....	5
BIM Ribbon tab> Graitec Bim commands.....	7
3. How to use GTCX from Advance Design to Advance Steel	9
GTCX Export	9
GTCX Import to Advance Steel.....	10
4. GTCX Synchronizing data	11
Advance Design Synchronisation tool.....	11
Advance Steel Synchronisation tool	11
Synchronization operation – an example	11
5. References/Resources	16



Introduction

Welcome to this Quick start guide for the GTCX tools within the Advance Design and Powerpack for Advance Steel, we aim to walk you through the process of creating GTCX exchange files that can be used to exchange and synchronise data between the platforms.

1. Where to find the GTCX tools.

Below are details of the where the user can find and install if required the GTCX tools within the PowerPack Advance steel and Advance Design platforms.

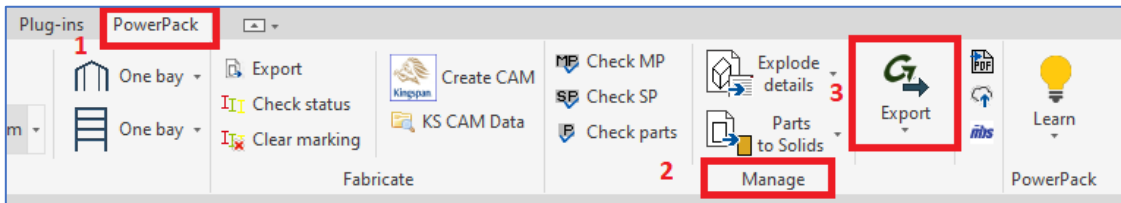
Graitec Powerpack for Advance Steel

For **Advance Steel users** the GTCX link comes as part of the '[Powerpack for Advance Steel](#)', the download for this use under the Graitec Advantages website, select version to suite you Advance Steel version.

Link to website: [Welcome to Graitec Advantage!](#) · [Graitec Advantage](#)

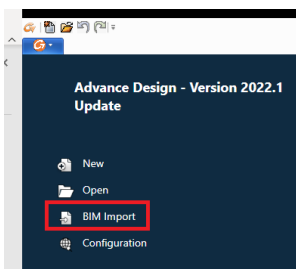
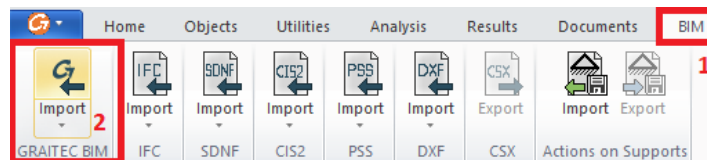
Filters	2022				
Select Product Advance BIM Designers Advance CAD Advance Design Advance Workshop Advance Workshop / Arma+ Autodesk Advance Concrete Autodesk Advance Steel IDEA StatiCa Opentree PowerPack for Autodesk Advance Steel PowerPack for Autodesk Inventor PowerPack for Autodesk Revit PowerPack for Autodesk Vault Select Version All	MD5 checksum for PowerPack for Advance Steel 2022	Date: 01-Jun-2021		Size: 1.00 MB	Download
	Advance PowerPack for Advance Steel 2022 (DVD ISO)	Date: 01-Jun-2021	What is new PowerPack for Advance Steel 2022	Size: 7080.00 MB	Download Alternative link Backup URL
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	Online Setup Advance 2022	Date: 01-Jun-2021	What is new PowerPack for Advance Steel 2022	Size: 8.40 MB	Download
	MD5 checksum for Advance 2022	Date: 01-Jun-2021		Size: 1.00 MB	Download
	Advance 2022 (DVD ISO)	Date: 01-Jun-2021	What is new PowerPack for Advance Steel 2022	Size: 12440.00 MB	Download Alternative link Backup URL

Once installed the user will see the **PowerPack Ribbon tab** and then look for the **Manage panel** and the **GTCX tools**.



Advance Design GTCX tools.

For **Advance Design users** the GTCX is part of the [Advance Design](#) BIM Exchange is **included in the software** and found under the **BIM Ribbon Tab**, under the Panel **GRAITEC BIM**

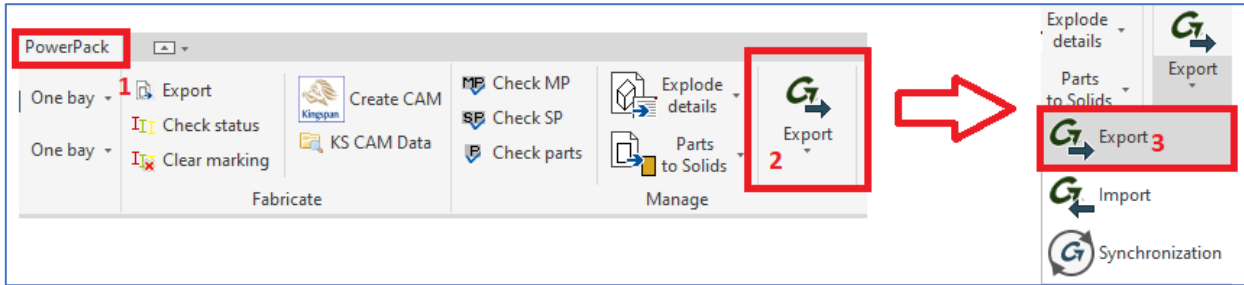


Alternately in the user is start their Advance design model from Advance steel they can use the BIM Import option, from the Start page of Advance design.

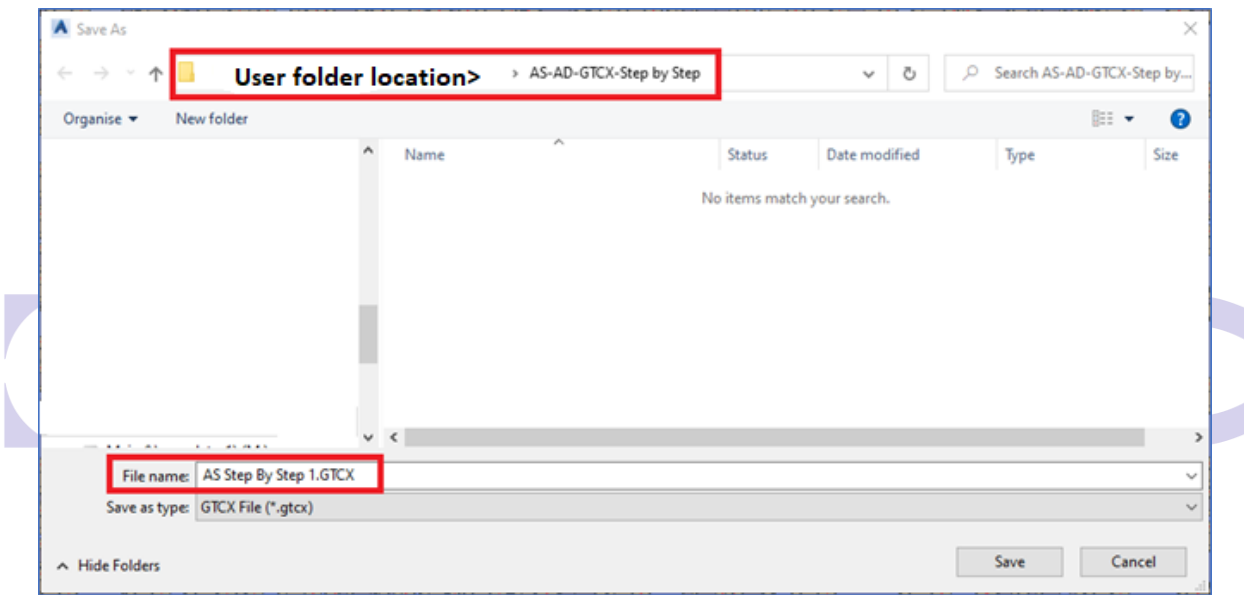
2. How to use GTCX from Advance Steel to Advance Design

Create and save your advance steel model, in the normal method.

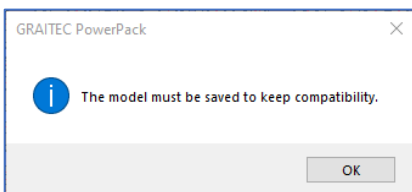
Change to the *PowerPack ribbon > Manage Panel > GTC Command Drop down list > Export*



With this activation the export process is started, and the user is promoted to save the Exchange file (*. GTCX)



Once saved the process is continued and the user is prompted to save the model file again to maintain consistency during this process, select ok to move forward, the GTCX is created, and the User has manually choice to save the model file.



GTCX File generated and stored automatically within the user system.
(Exchange file is small size, compared to model)

Name	Status	Date modified	Type	Size
AS Step By Step 1.dwg	🔄	24/02/2022 12:55	AutoCAD Drawing	316 KB
AS Step By Step 1.dwl	🔄	24/02/2022 12:55	DWL File	1 KB
AS Step By Step 1.dwl2	🔄	24/02/2022 12:55	DWL2 File	1 KB
AS Step By Step 1.GTCX	🔄	24/02/2022 13:07	Advance Design ...	28 KB

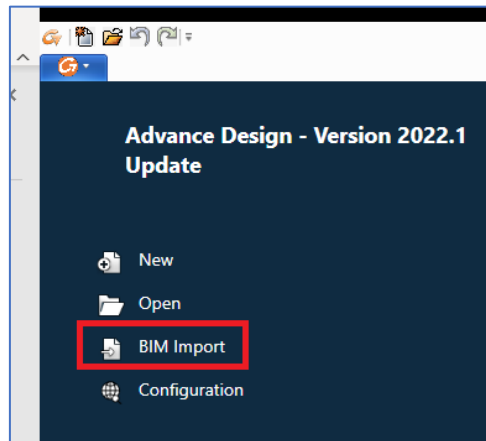
Tip: The user may wish to introduce and additional folder into their structure to store the GTCX file if they so wish, to keep GTCX files stored in one place within the project structure.

This completes the process within the Advance steel platform to generate the GTCX file for data exchange to Advance Design.

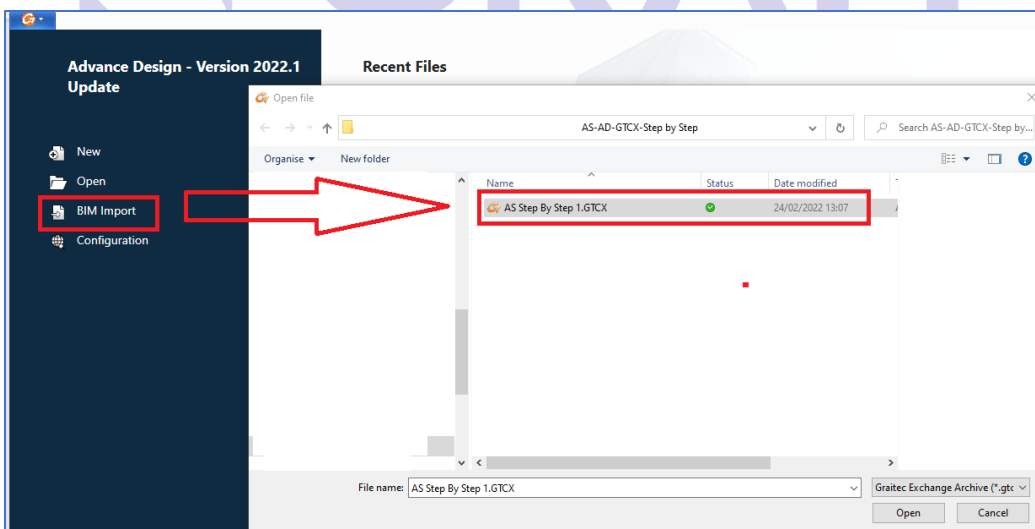
Within Advance Design, the user would see a couple of methods to bring in the Data exchange GTCX file, we will expand upon them below:

Bim Import method.

Used when starting new project with the model coming from an GTCX source file. This is found on the initial start page of the project.



Selecting this then allows the user to browse to the generated file from Advance steel and import that into a new workspace. The user will be prompted to select the GTCX file that was created within PowerPack Advance steel and with that the file is imported.



Selecting the file and then open will start the import process.

The file is imported, during that process, the user may be prompted with the Project titles dialog, for them to complete to skip as they required, if *this is not Check to be not displayed at start-up*

Project Titles

Name

Lot

Address

City

No Phase Variant

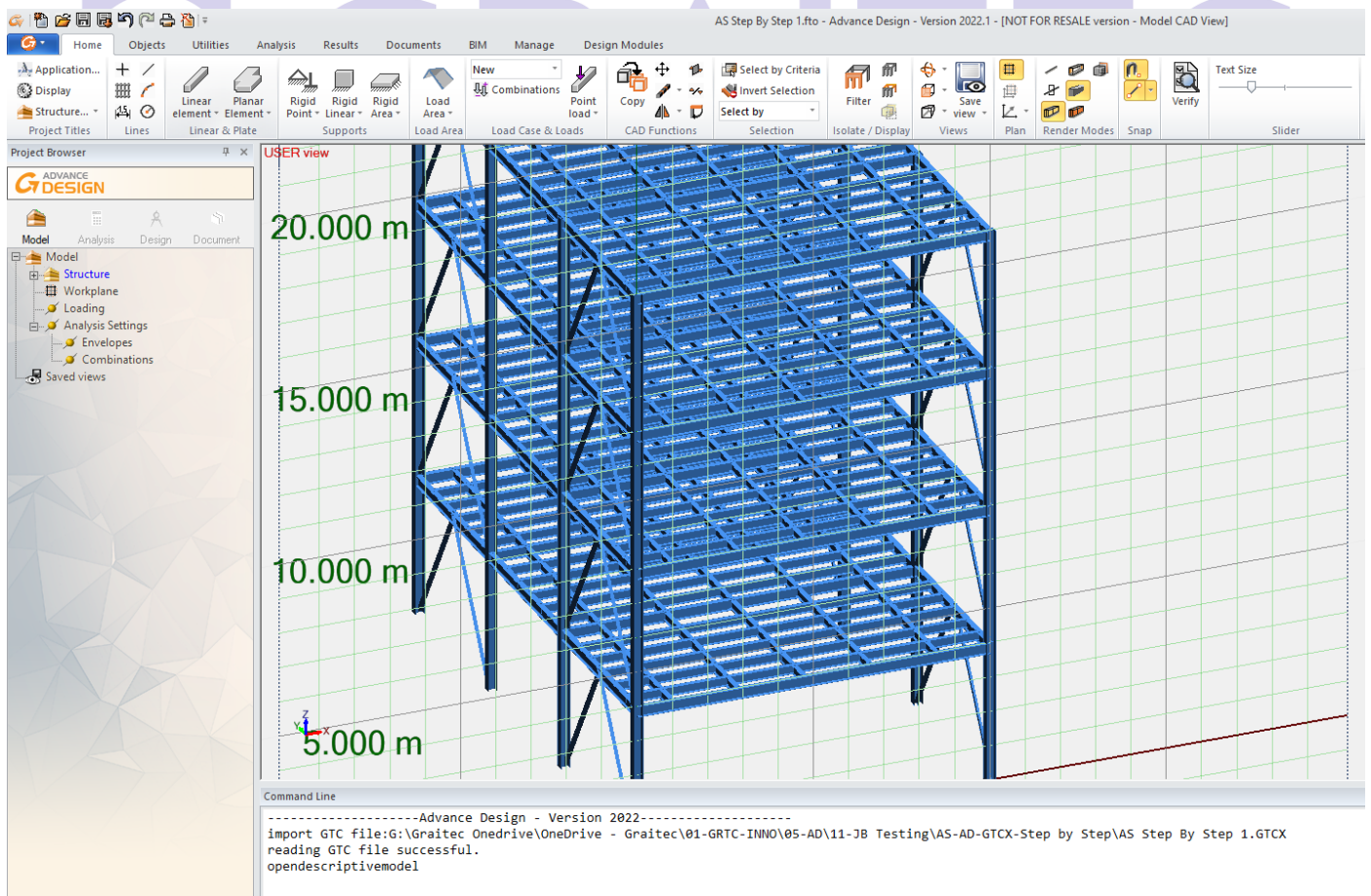
List of business stakeholders

All wizard parameters are accessible on the 'File \ Project titles' menu.

Do not display

< Back Next > Cancel

The GTCX is then turned into an Advance Design model, they are an automatic name to the file coming from the GTCX and a default save location. (The user may choose to save the model elsewhere.)

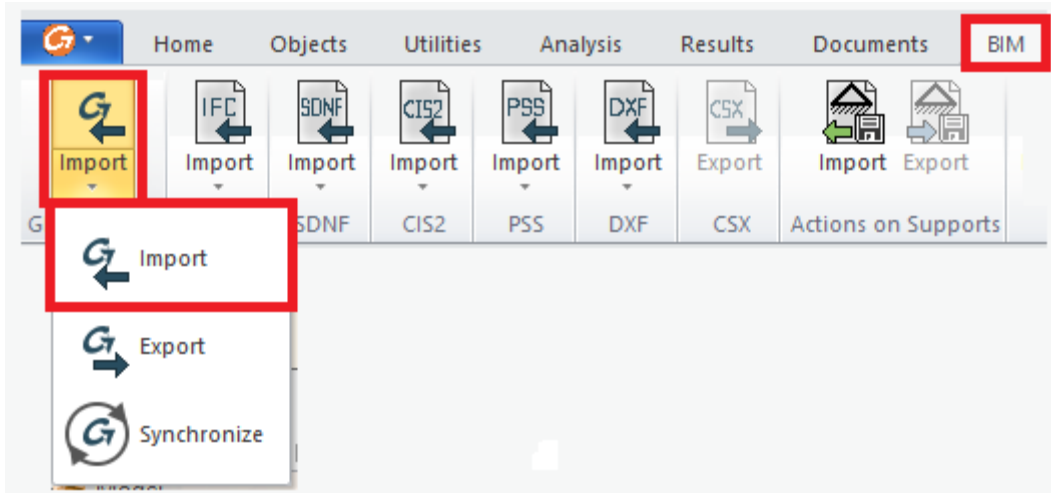


The user may start their analysis process from this imported file.

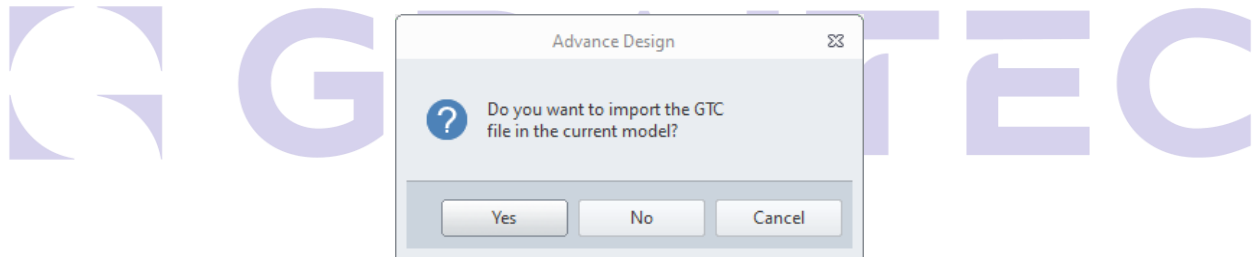
BIM Ribbon tab > Graitec Bim commands

Using the Graitec BIM tools from Bim ribbon is the other method to bring in a transfer file into a project model that is already started, maybe to bring in some additional structure from adjoined elements, this maybe the preferred method by the user to start a project.

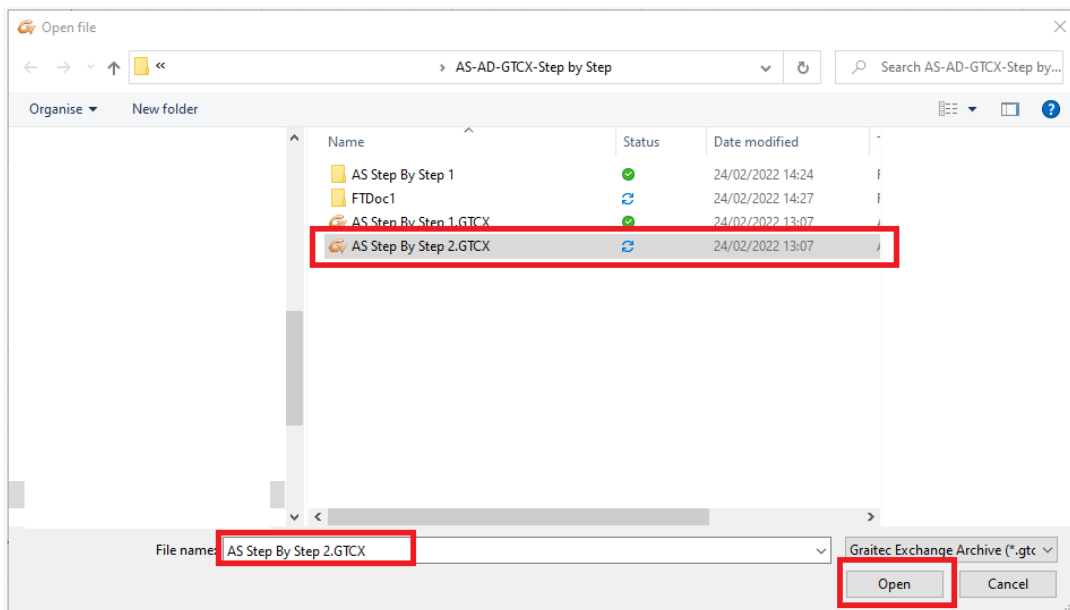
The user starts by selecting the Import command from the available dropdown listing under the Graitec Bim panel.



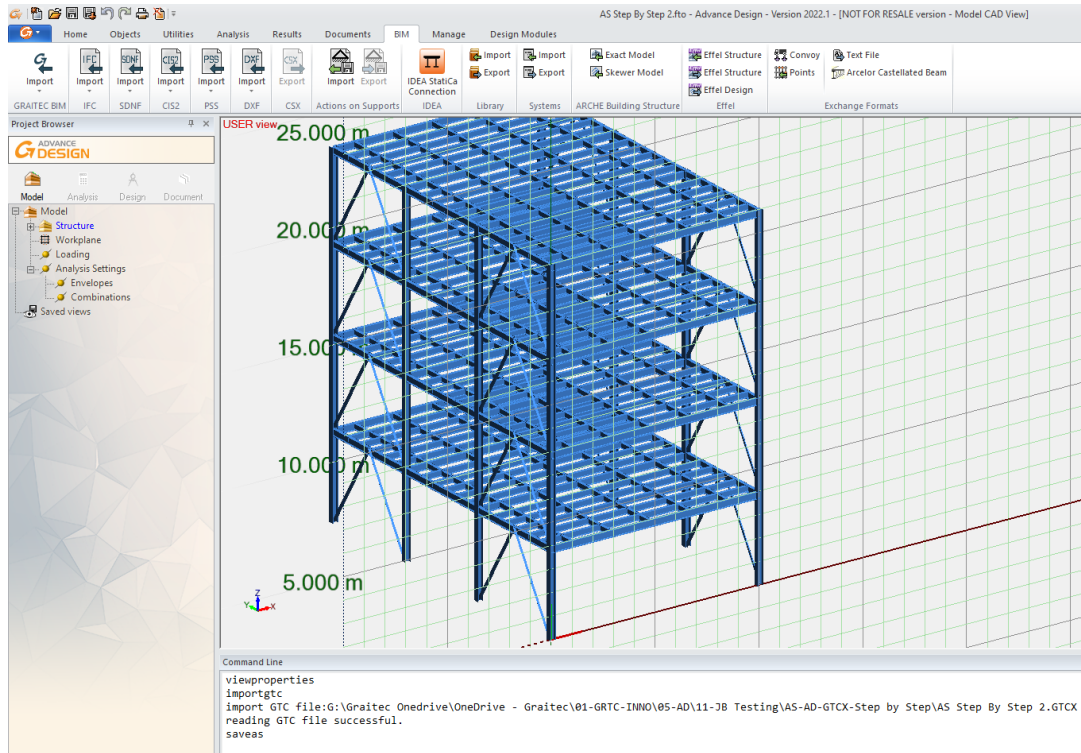
This process will then start, and the user will be prompted to confirm the import process into the current model, selecting yes will continue the process.



Next the user will see a dialog to browser and select the required GTCX file, selecting this file and then the open button to import the data into the current model.



The model is now imported into the current workspace of Advance design for the Analysis process to start.



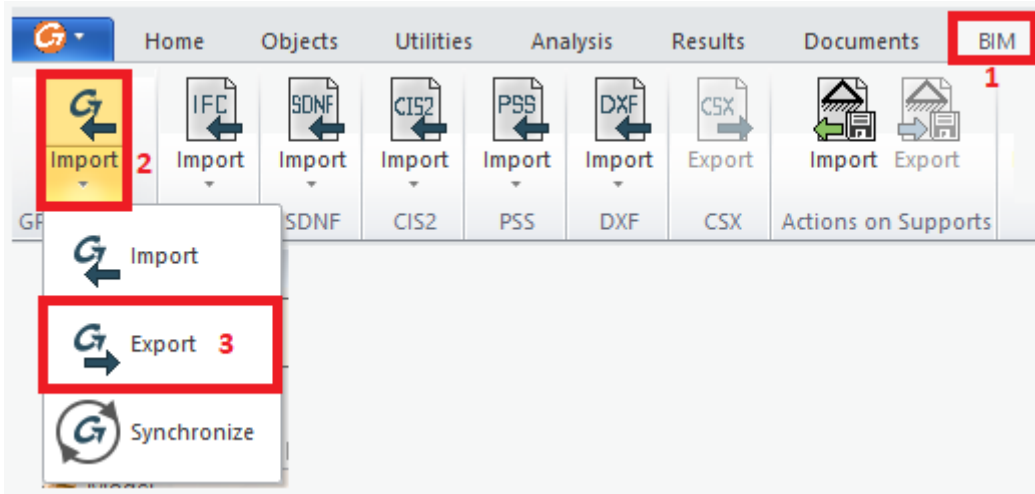
The user may start their analysis process from this imported file.



3. How to use GTCX from Advance Design to Advance Steel

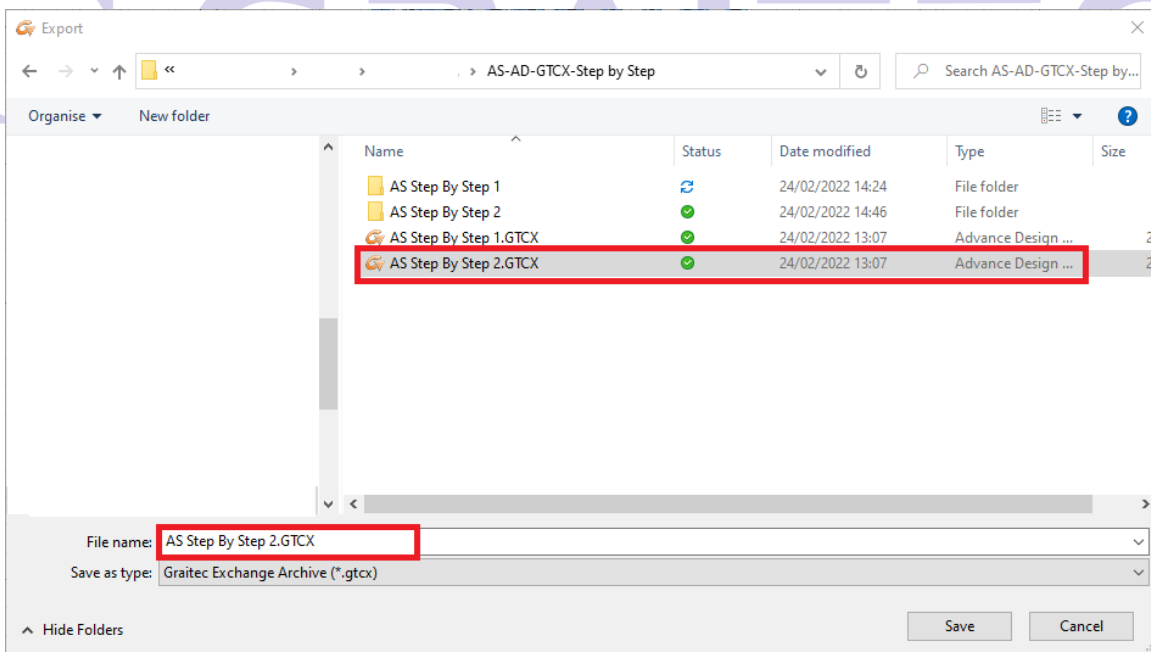
In this section we focus upon the export from Advance design via GTCX.

In Advance Design the GTCX tools are input into the BIM Ribbon and found under the GRAITEC BIM Panel. The user will see the options to import, export and Synchronise under the drop-down menu available.



GTCX Export

Selecting from the drop down the 'Export' option the user will then be prompted to save the GTCX file to be exported from Advance Design via a browser window, allowing the user to save the file to their required location.



Once saved the process is continued and the user is prompted to save the model file again to maintain consistency during this process, select ok to move forward, the GTCX is created, and the User has manually choice to save the model file.

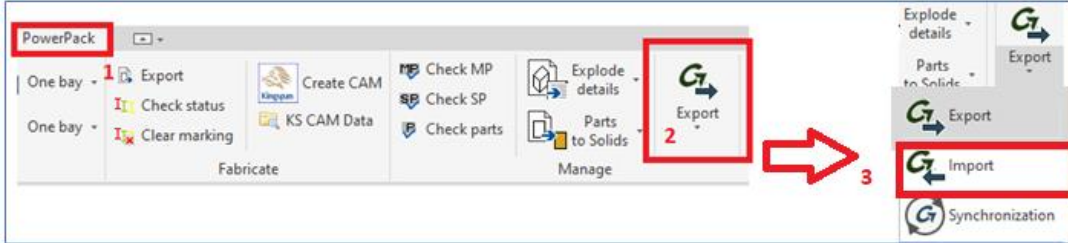
GTCX File generated and stored automatically within the user system. (Exchange file is small size, compared to model)

With the GTCX file saved the file maybe shared with the other software, in this example Advance Steel.

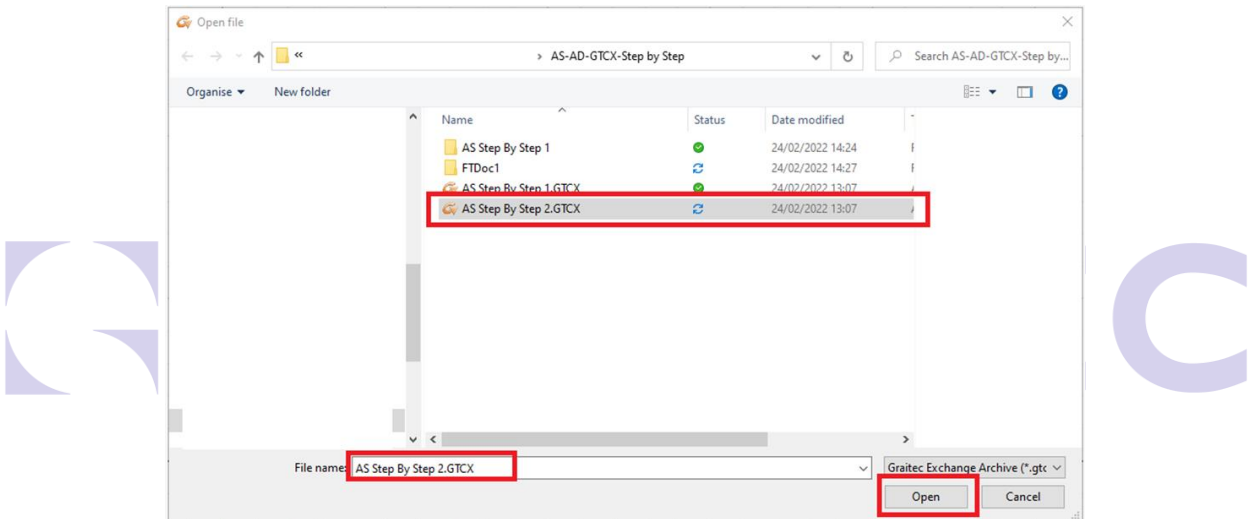
GTCX Import to Advance Steel.

Using the Generated GTCX file from Advance design the Advance Steel user can start a new model file from a template, recommend saving that model file ready for the import.

The GTCX import tool is found under the Powerpack ribbon Tab, go to the Manage panel and then select from the drop down list the 'Import' command.



This command will then open a dialog for the user to browser to the required file. (For this example, we give the file a new name to differentiate from the source file we created within AS)

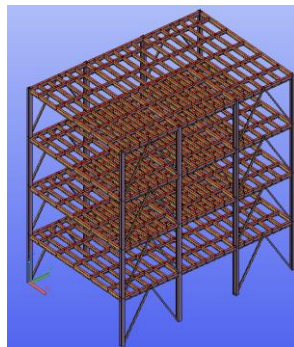


The model is then populated with the elements contained with the GTCX file created from the Advance design platform.

During the process you may encounter a mapping dialog, asking you map entries into the mapping database.

The model is generated within the Advance steel workspace, the user should save the file after the import process.

The user may now start to work on the file.

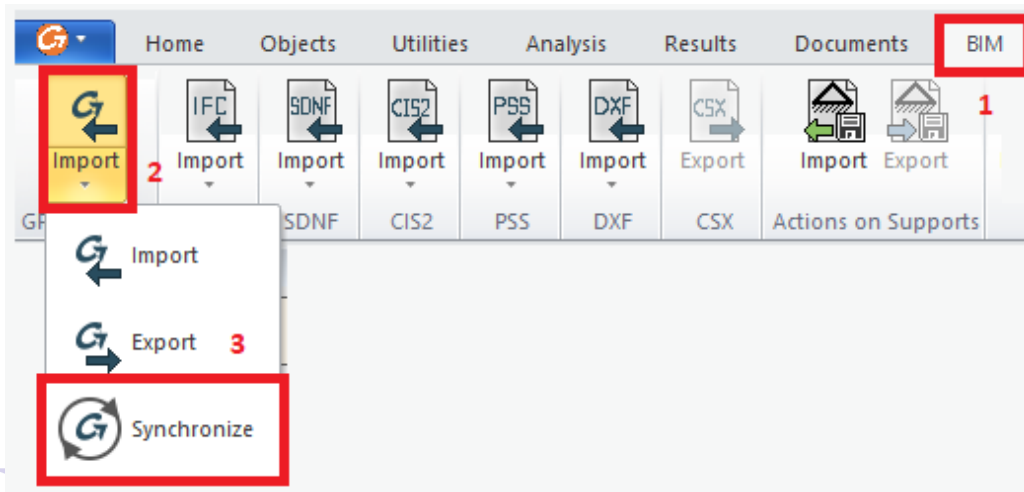


4. GTCX Synchronizing data

As part of the GTCX Toolset there is a Synchronization option to allow the users of both Advance Steel and Advanced design to exchange Changes within their models, without having to change out the whole model, the dialog and options allow for the user to select elements within the dialog and keep them, as either group selection or single item. Within this section we will explore that function.

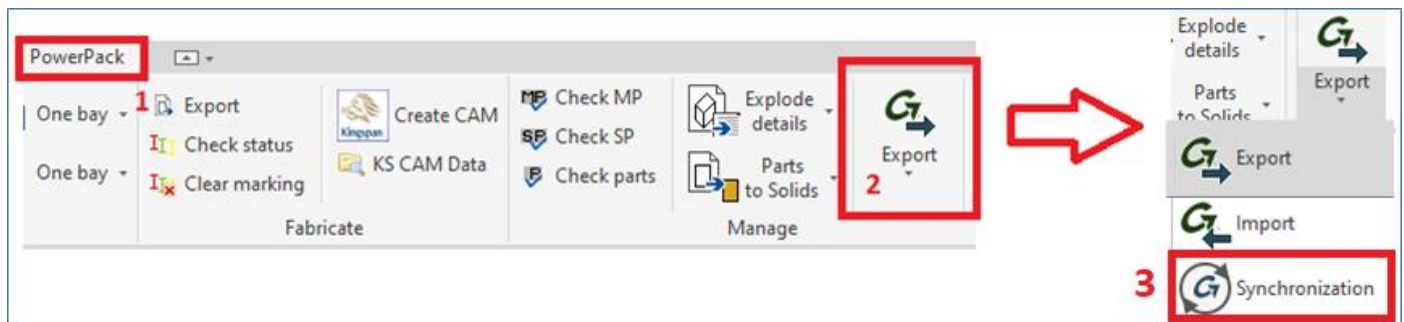
Advance Design Synchronisation tool

The synchronisation command is located under the BIM Ribbon tab within the Graitec BIM panel and under the drop-down list, the bottom item shown.



Advance Steel Synchronisation tool

The synchronisation command is located under the 'Powerpack' Ribbon tab within the 'Manage' panel and under the drop-down list, the bottom item shown.

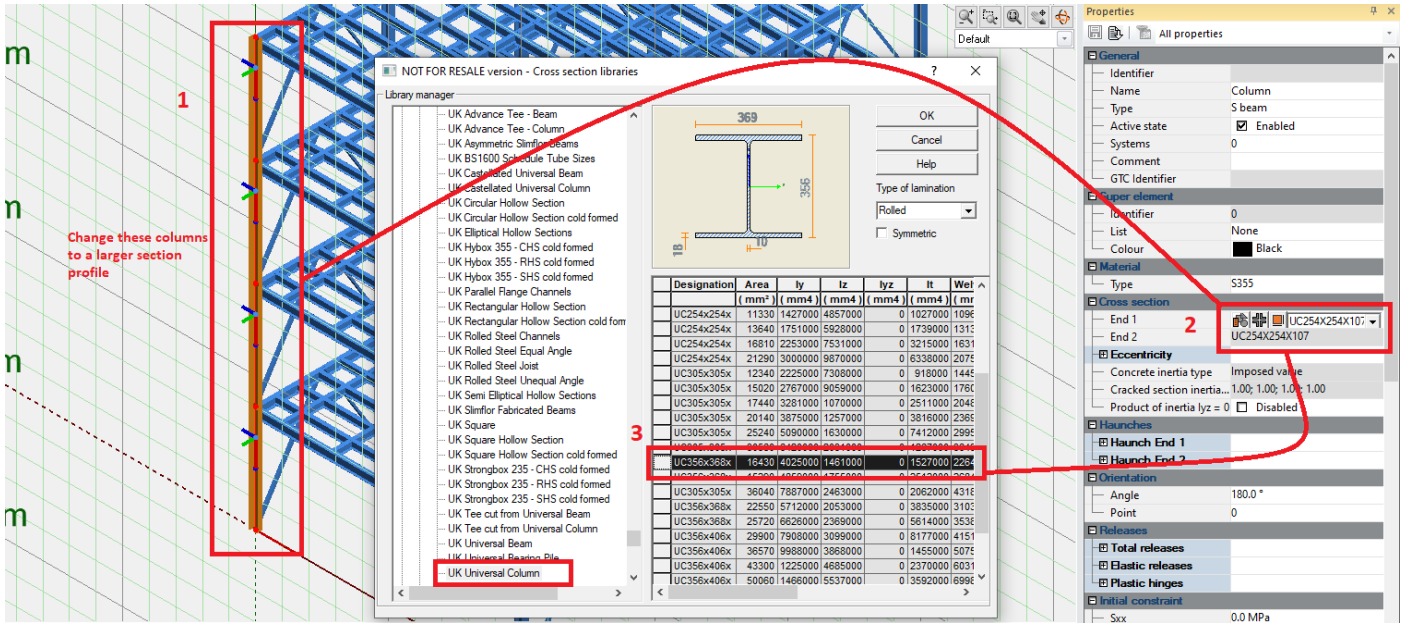


Synchronization operation – an example

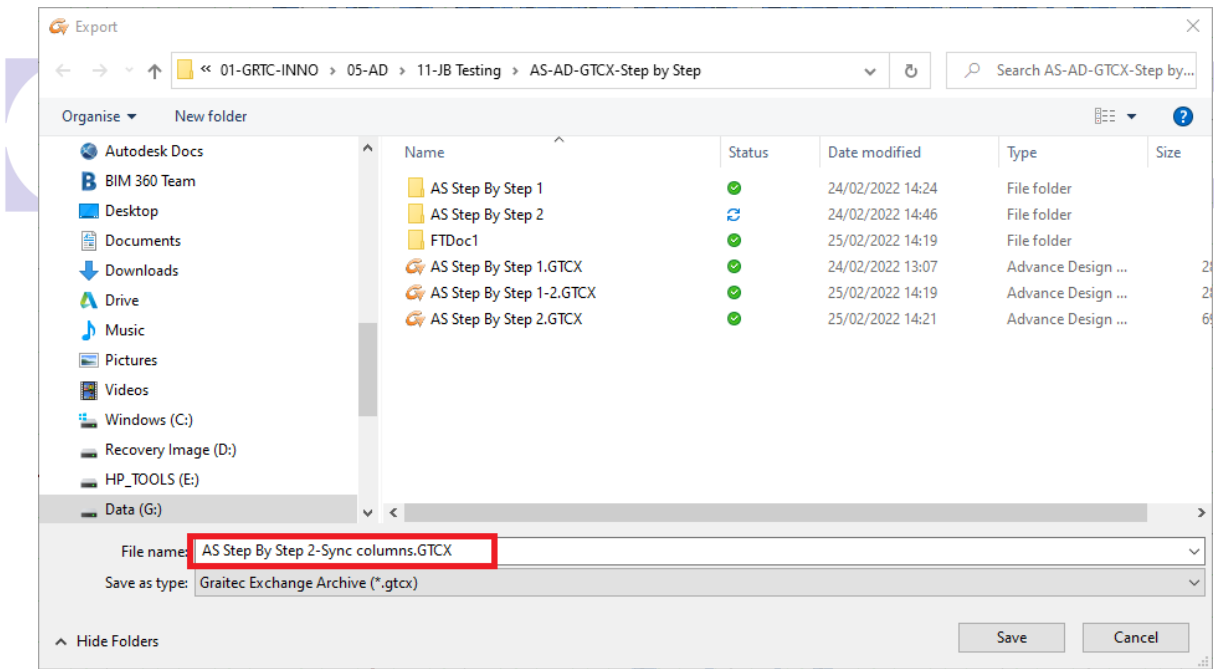
To demonstrate the Synchronization operation, we can take an Advance design model, that may have previously come from Advance Steel (it could be the reverse of this) within that Advance Design model we can make a simple change to a section profile size, this can then be exported via the Same Export options we showed earlier.

For this example, we change the column size to a **UC 356x368x129**

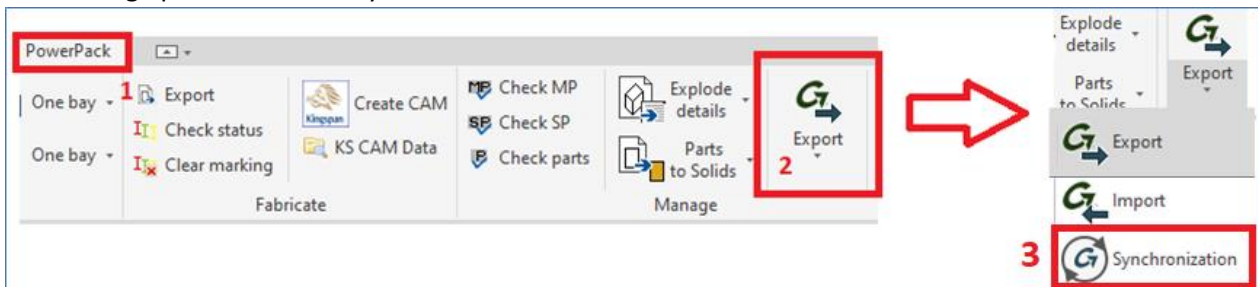
See example image on next page:



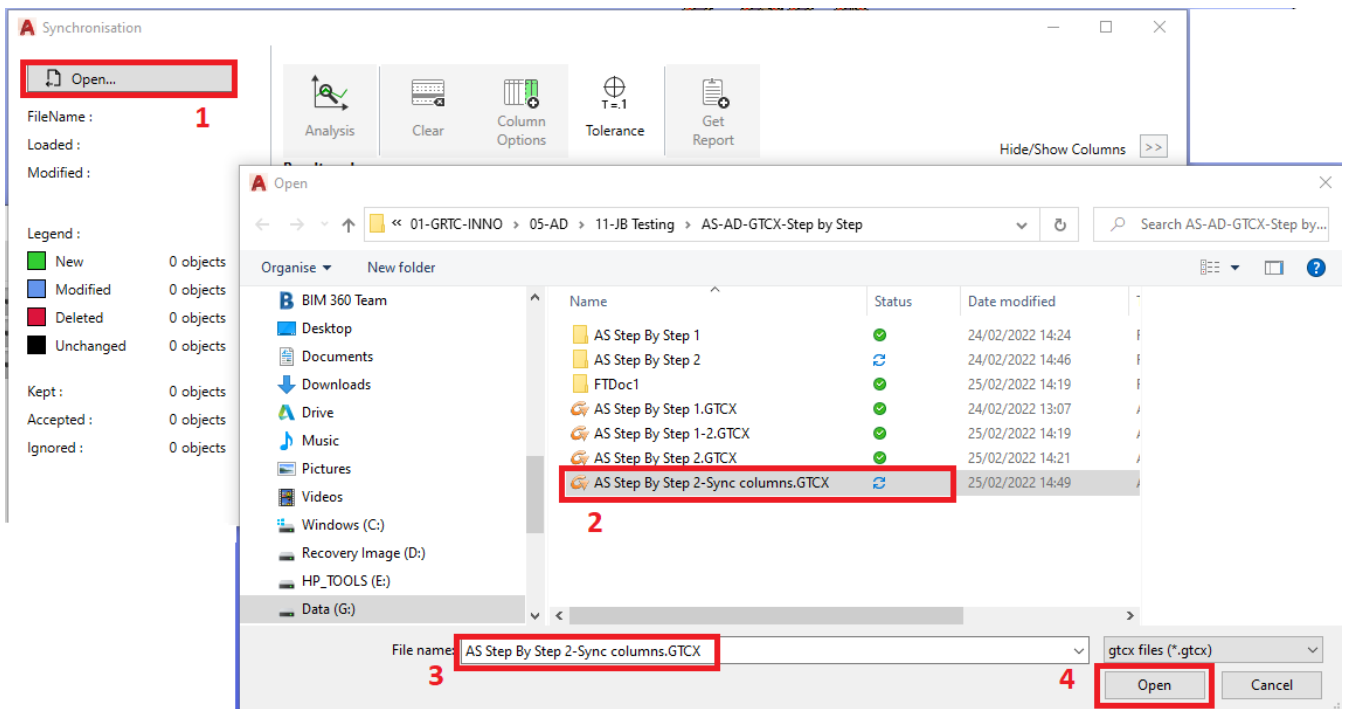
After the change then go to the **BIM Ribbon> Graitec BIM** and the **Export** command and create a New GTCX file with these changes in place.



Then returning to the Advance Steel Platform, within the same model space, then going to the Powerpack Ribbon and Manage panel select the synchronization command.

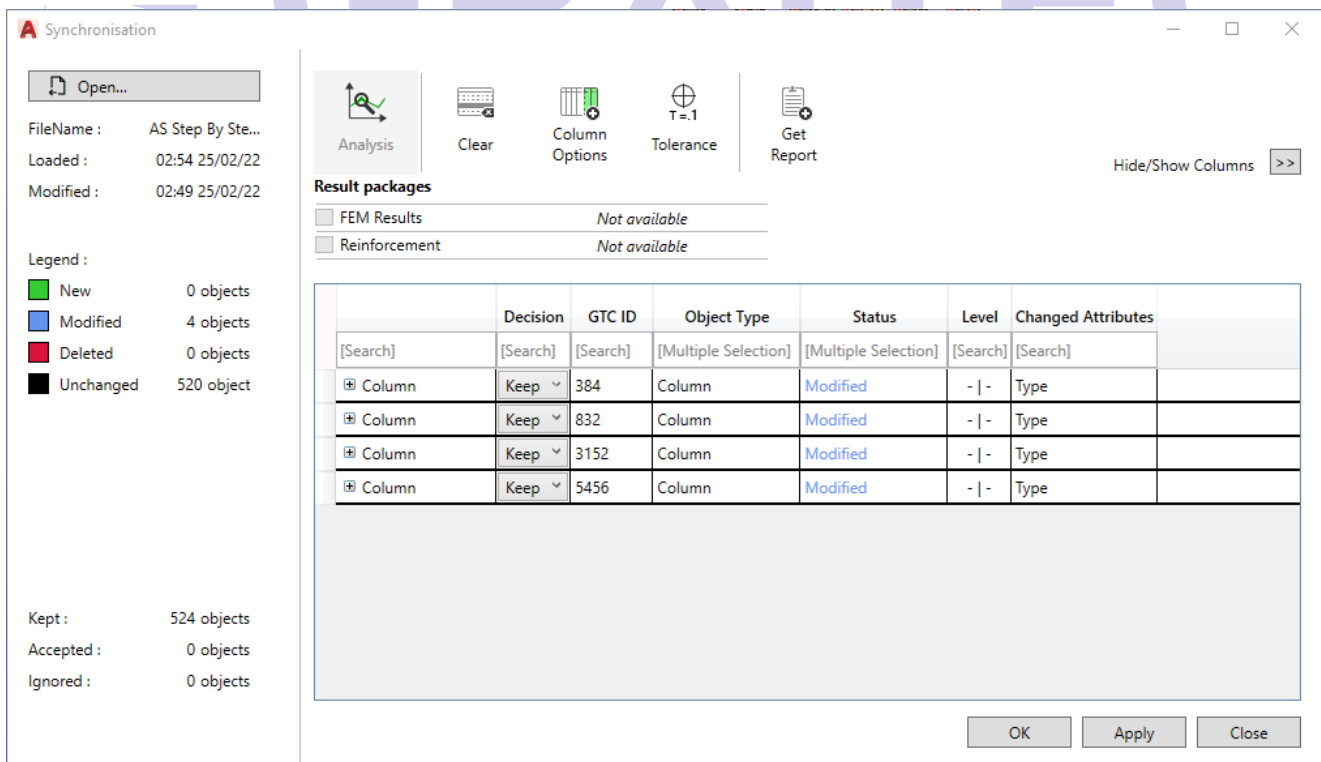


When selecting this command a new dialog will appear, showing the synchronisation tools. Select the GTCX file just created from within the advance design export process.



The dialog is then populated with the Changes found within the Sync dialog.

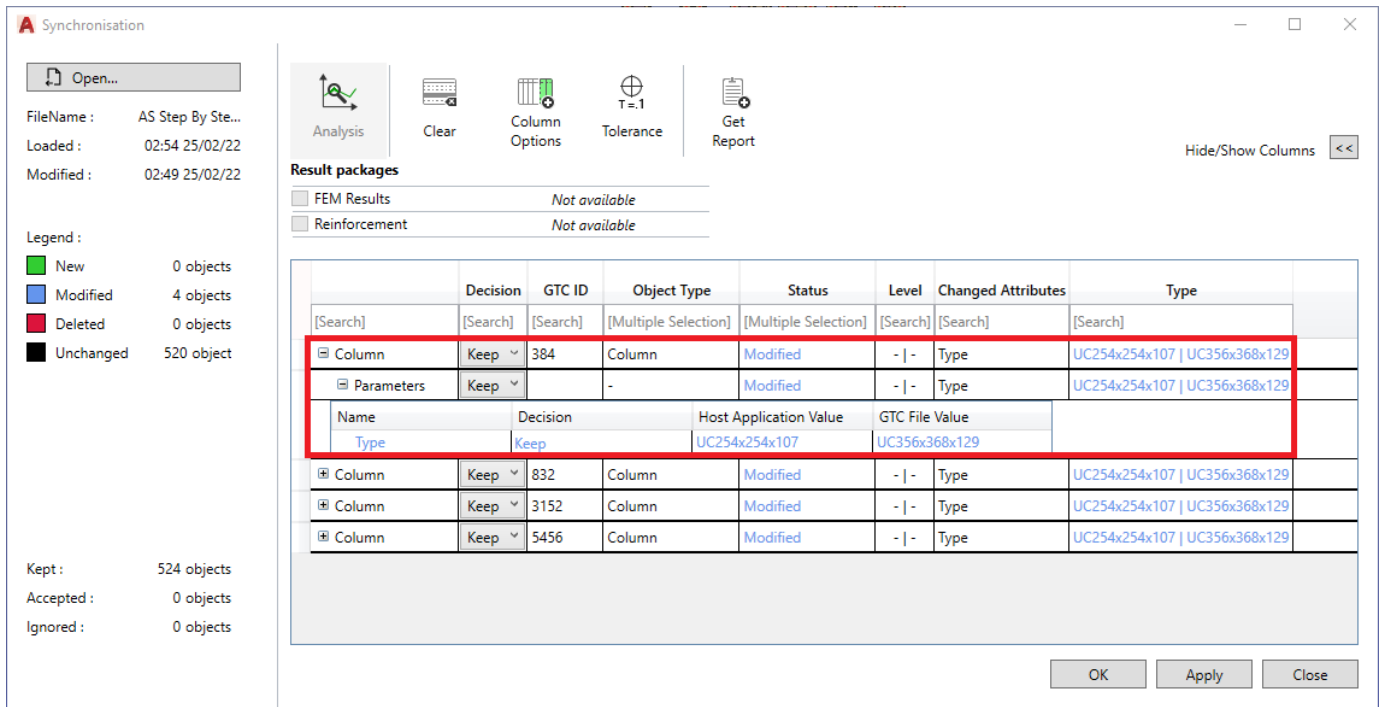
Note the dialog is resizable to accommodate more details



The items within the dialog are expandable and there are tools to allow filtering when encountering multiple object types and changes etc.

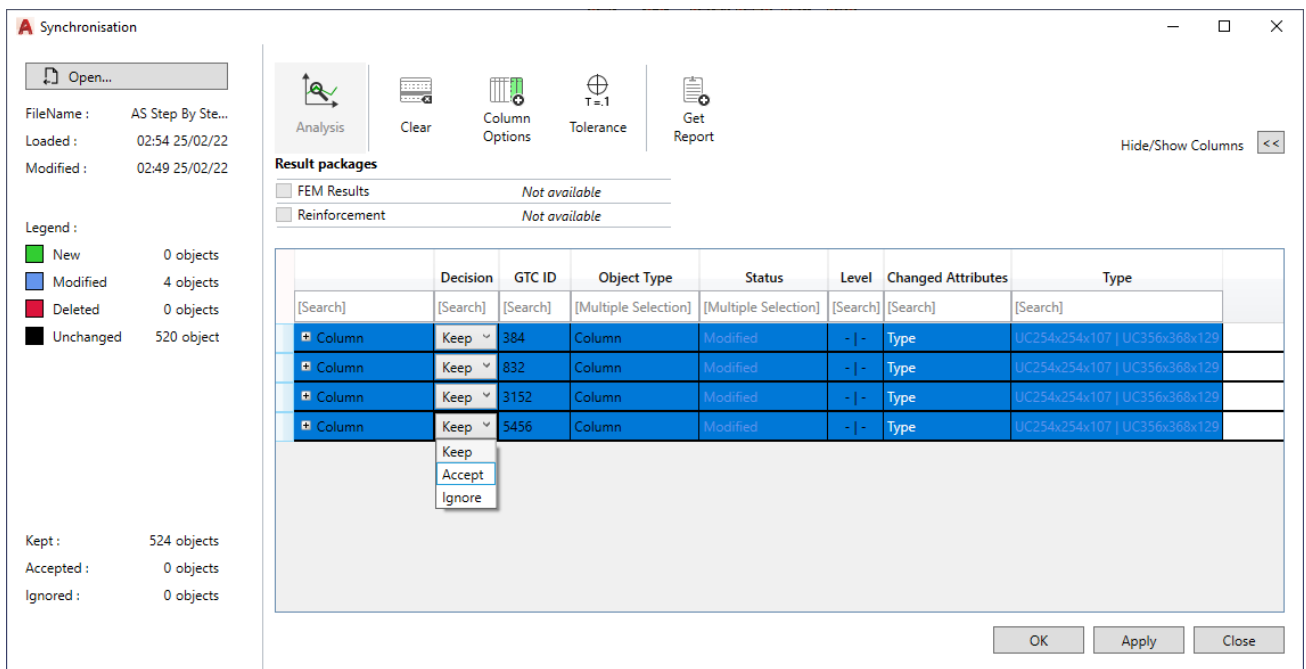
Also, the user may select multiple lines and change at once all the items that are the same, using the 'Shift key'

For this example, we can see that the change in column sizes has been introduced into the dialog, showing the change as a modification, with then options to 'Keep', 'ignore', 'accept'. For this example, we are going to select 'Accept'.

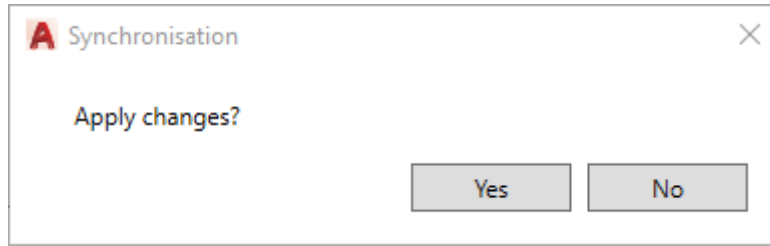


Note: The basic of the decision column, is that if you choose to 'Ignore' then the change will be removed from the listing under the sync, 'Keep' will maintain it within the process and 'Accept' will commit it to the exchange process and change it in the physical model.

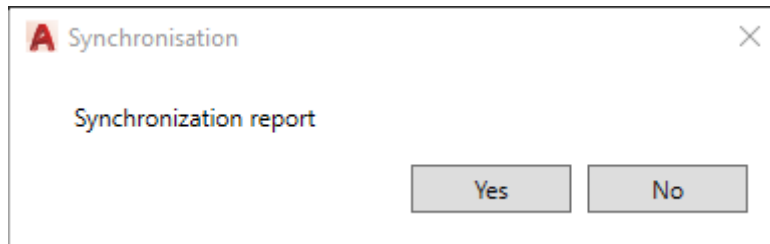
With the decision set to ACCEPT the columns are then changed to accept and the user selects apply.



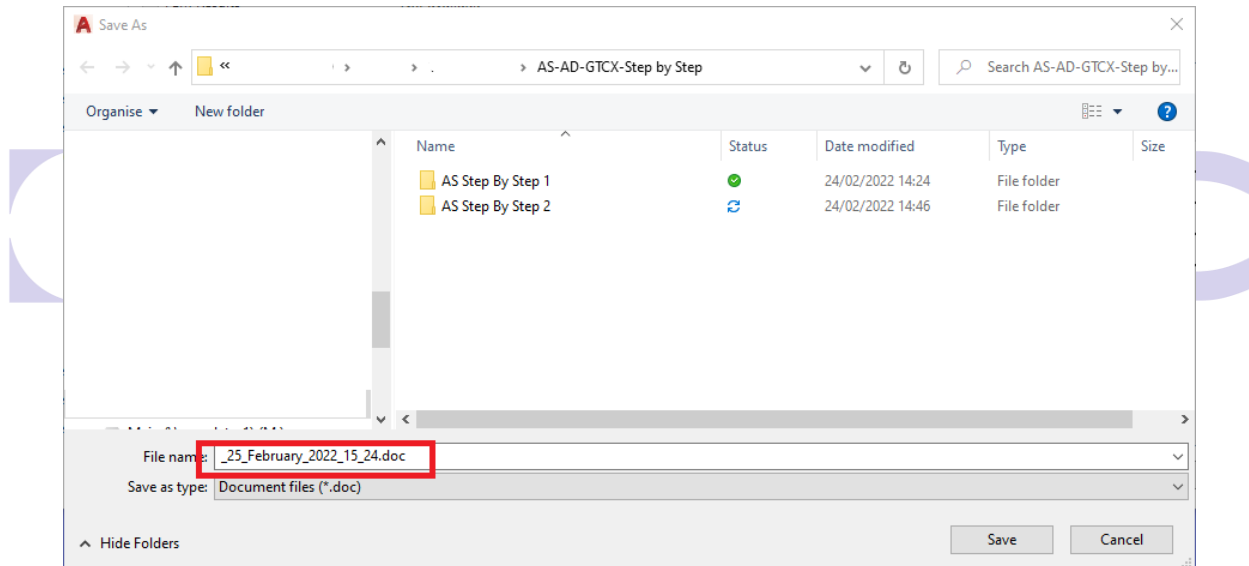
With the apply the user is prompted again as a double check to confirm these changes.



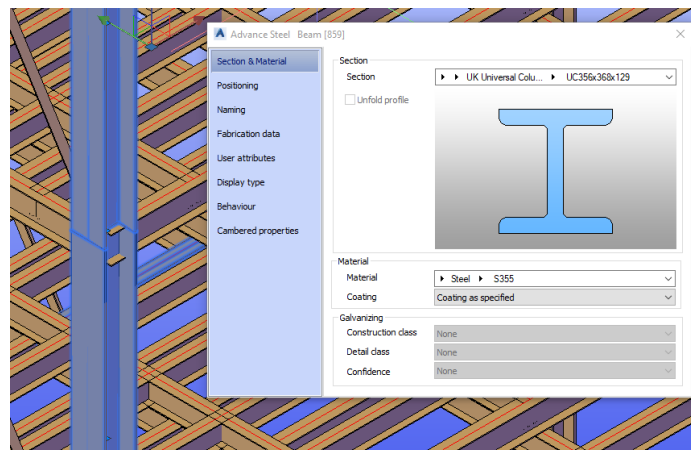
This is then followed by a synchronisation report pop up for the user to decide if required or not.



Selecting yes will bring up the Save dialog, for user to select location and file name.



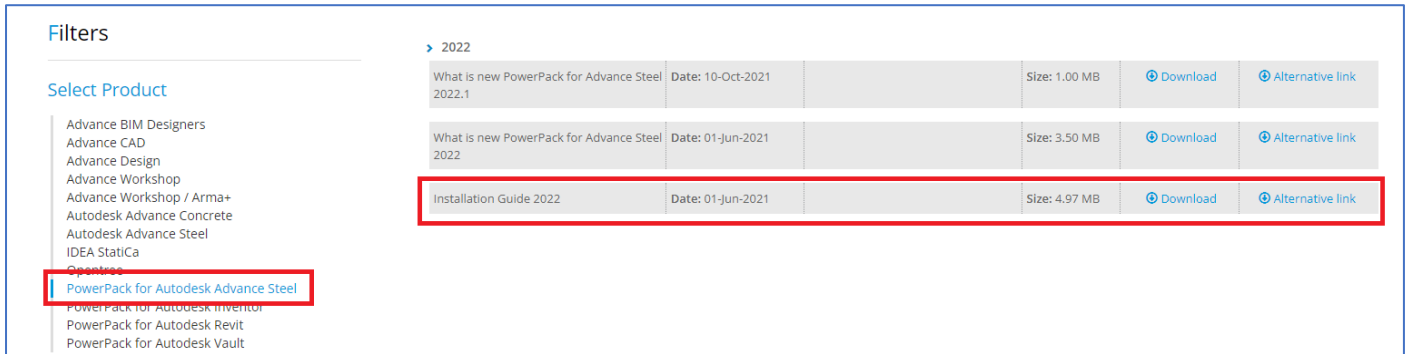
After this the user can close the dialog, the model is changed to reflect the synchronisation changes accepted from the process.



5. References/Resources

How to install the Powerpack, see the installation guide on the Graitec Advantages website, (*user registration required -free access*) under documentation download:

Link to website: [Download Documentation · Graitec Advantage](#)



The screenshot shows a web interface with a 'Filters' section on the left and a list of documents on the right. The 'Filters' section includes a 'Select Product' dropdown menu with the following options: Advance BIM Designers, Advance CAD, Advance Design, Advance Workshop, Advance Workshop / Arma+, Autodesk Advance Concrete, Autodesk Advance Steel, IDEA StatiCa, OpenSpace, PowerPack for Autodesk Advance Steel (highlighted with a red box), PowerPack for Autodesk Inventor, PowerPack for Autodesk Revit, and PowerPack for Autodesk Vault. The document list on the right is filtered for the year 2022 and contains three entries:

Document Title	Date	Size	Download	Alternative link
What is new PowerPack for Advance Steel 2022.1	10-Oct-2021	1.00 MB	Download	Alternative link
What is new PowerPack for Advance Steel 2022	01-Jun-2021	3.50 MB	Download	Alternative link
Installation Guide 2022	01-Jun-2021	4.97 MB	Download	Alternative link

For full information over the synchronisation features check the Graitec Advantage site for documentation and Help links.

