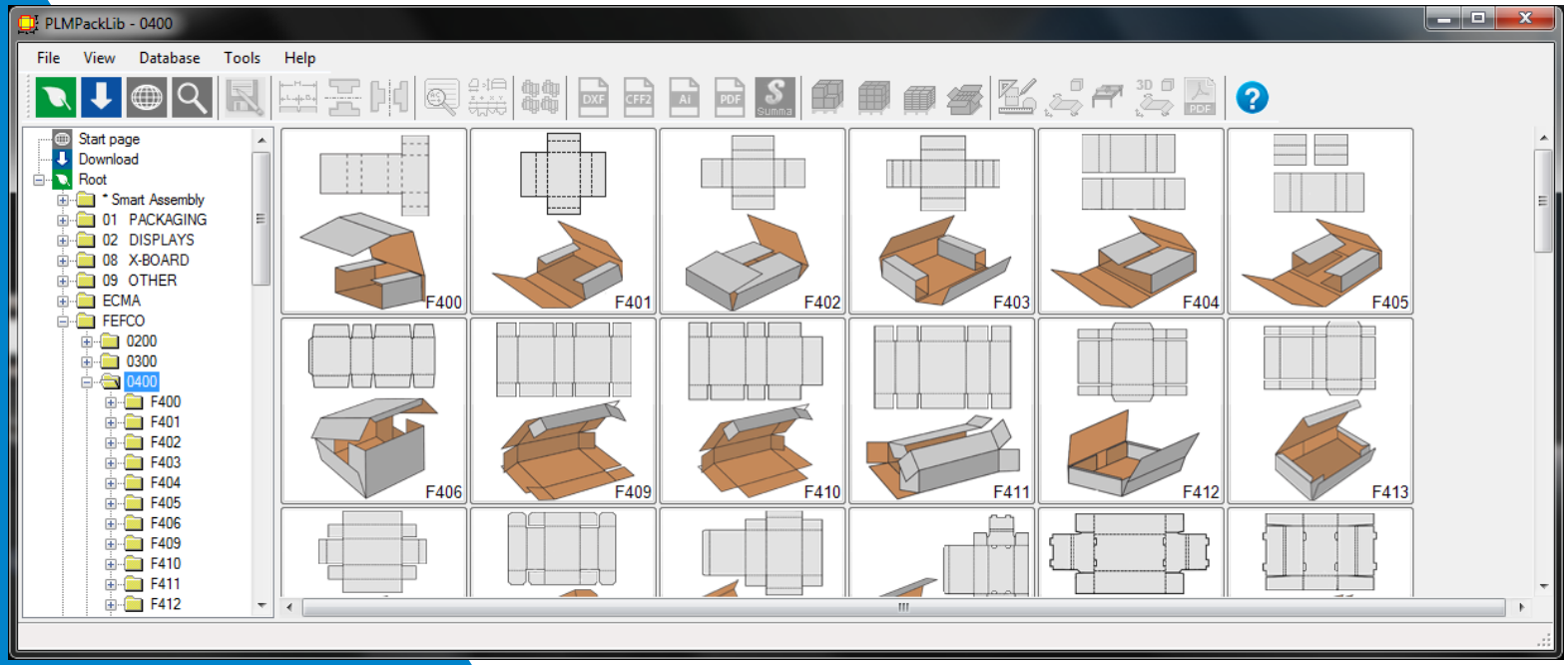
Packlib™ for Summa F Series™

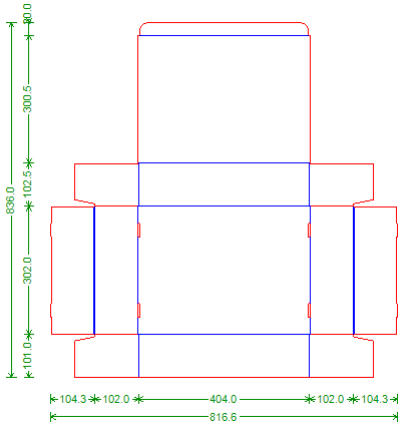
Packaging Library – Basic Info



Intro

- PLM Packlib – for Summa– is a library of resizable standard packaging models. The main packaging standards [**FEFCO** (corrugated cardboard) and **ECMA** (folding carton)] are included. Also a few **POS display** ***designs*** and **solid cardboard** (furniture) designs are available.

- Box / designs dimensions and material thickness are (most of the times) parametric. Within a few clicks the correct cutting and folding lines are generated for the selected material thickness. These lines can be exported to a layered Illustrator file, ready to put graphics on it. Or this *'Summa version'* has also the option to generate an OXF file, immediately ready to be used by SummaFlex.



License

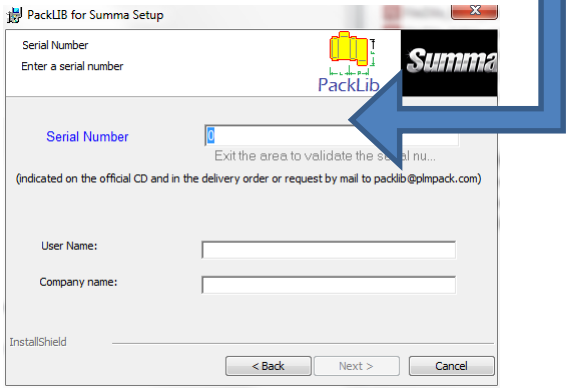
- The PLM Packlib is a program from treeDim, a French software house, mainly known by the CAD/packaging software ‘Picador’. The PLM Packlib – for Summa– software has a **Common Public License** Version. Meaning a **royalty free** license is applicable.

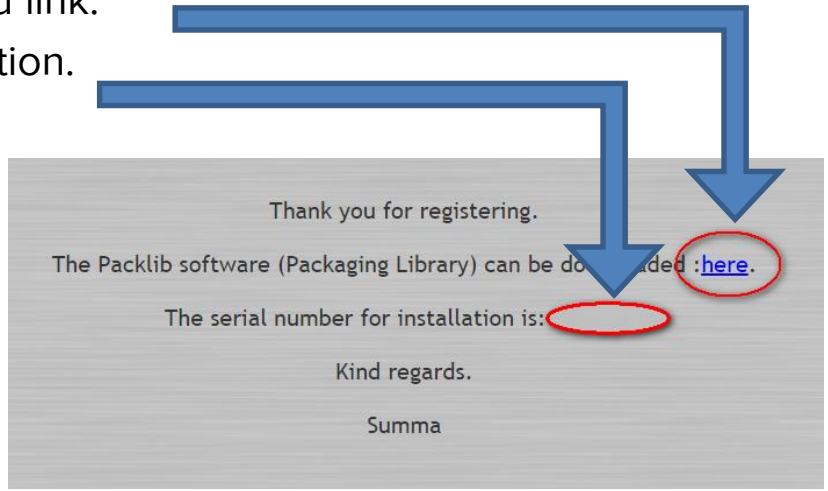
- Under this license, the software is also offered ‘**as is**’ meaning that **Summa nor TreeDim give any warranty on the product and also none of the parties can be hold liable for mistakes, bugs, problems**…. Full license text can be read when launching the installer.

- Although the license is royalty free, additional services can be charged (e.g: installation, training, support). During the Summa F Series training the library will be briefly shown and explained on request. However, for more in depth questions and requests partners and customers will be forwarded to treeDim, who may charge for support.

Installation

- Fill in the online form on http://www.summa.be/packlib.
- Download the installation file from the provided link.
- Use the provided Serial number during installation.





Opening screen

- When connected to the internet, the Summa packing page is displayed (currently the F Series page).

Basic Steps

STEP 1

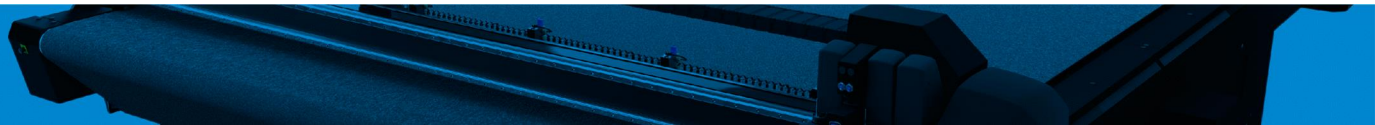
Browse the database for the design that best suits your needs

STEP 2

Adjust the design by changing the parametric values

STEP 3

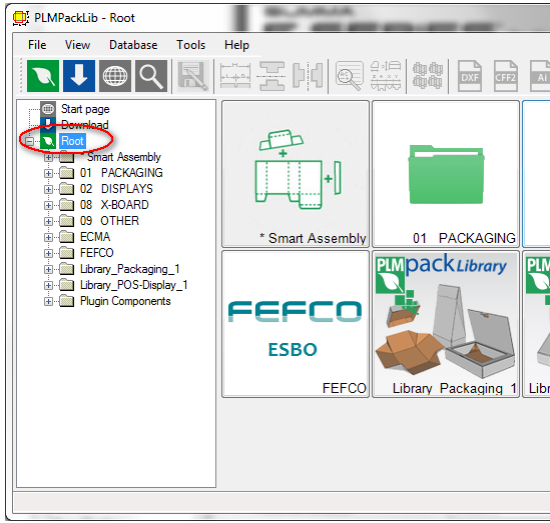
Export your design



STEP 1

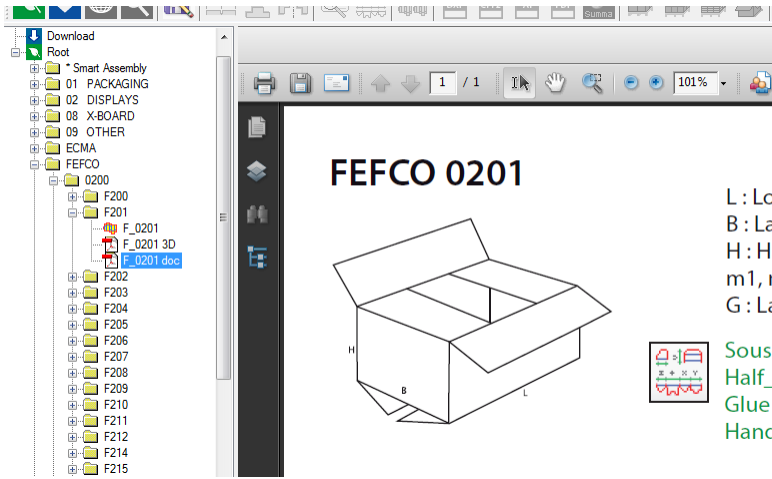
Browse the database

- Click on ‘Root’ and a folder-like structure appears.
- The database is split up in themed sections.
  - *Smart Assembly (see further)
- Most popular box standards are:
  - **ECMA** (folding carton)
  - **FEFCO** (corrugated cardboard)



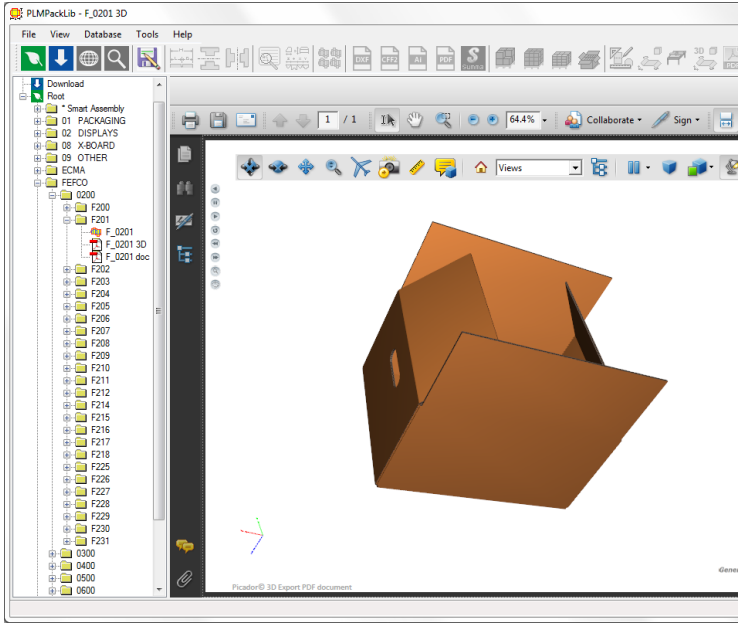
STEP 1
Browse the Files - 1

- In the folders several type of files can be found.
- Sometimes a **PDF info doc** is available (eg: in the FEFCO section), providing background information about the box design.

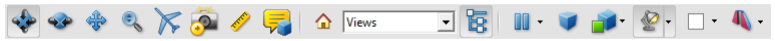


STEP 1

Browse the Files – 2a

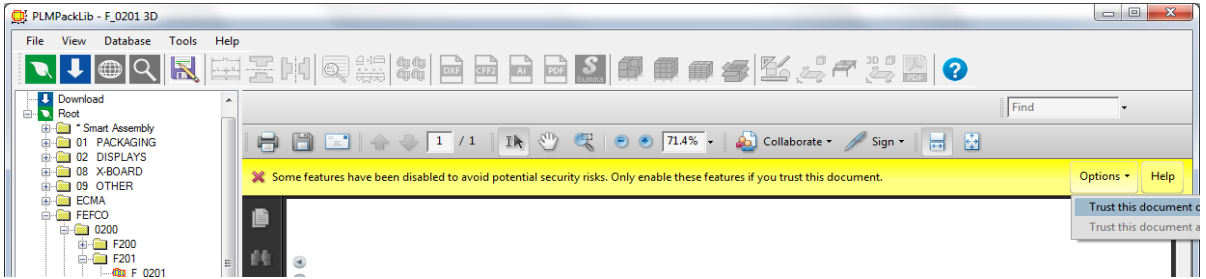


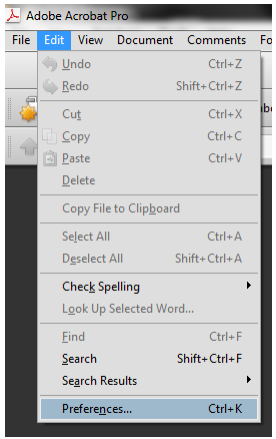
- Sometimes a **PDF 3D sample** is available. From time to time with jpg artwork.
- Use the play buttons to browse through the folding process.
- Use the mouse to move around the object.
- Use the top toolbar to change view settings.

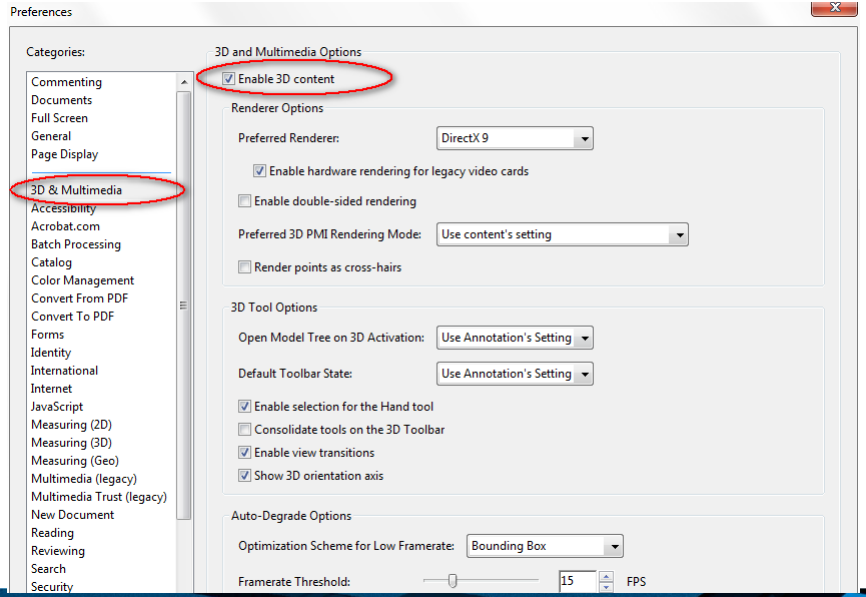


STEP 1
Browse the Files – 2b

- When opening 3D, PDF security warnings may appear in the Adobe viewer.
- To avoid these messages open the Adobe program separately and change the settings as displayed.



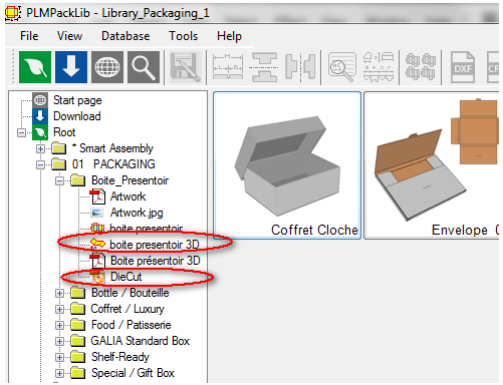




STEP 1
Browse the Files - 3

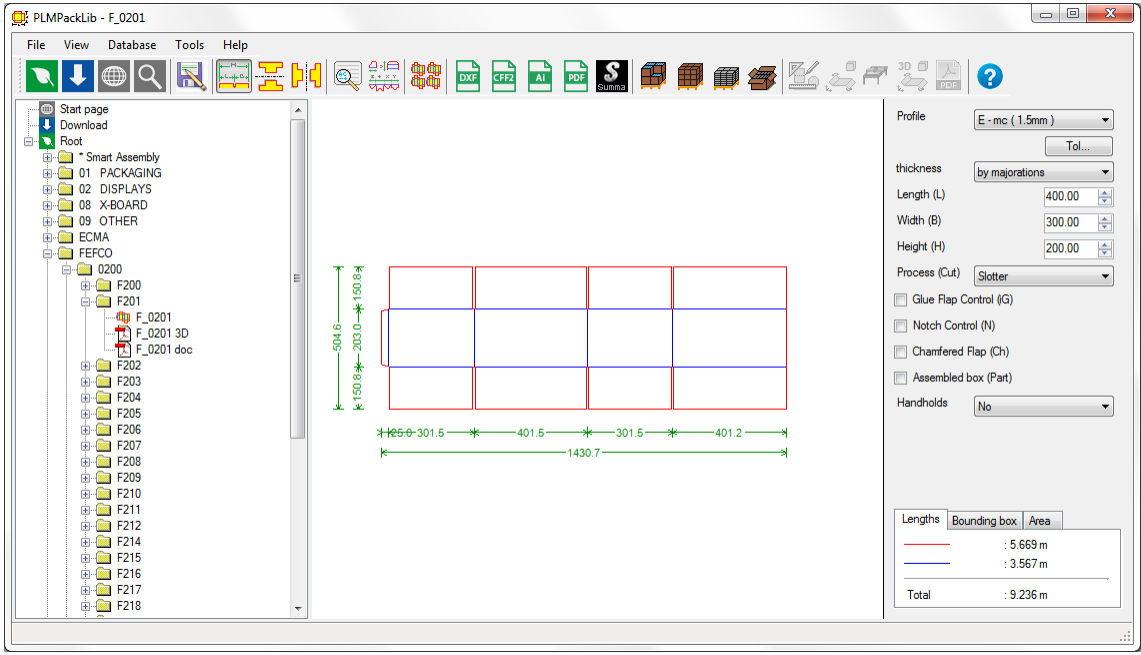
- Sometimes a picador 3D File is available.
  - These files require extra software and will not open in PackLib.

- Sometimes an Illustrator file is available.
  - These files will open in the linked program to the AI-extension, if any (eg. Adobe Illustrator).

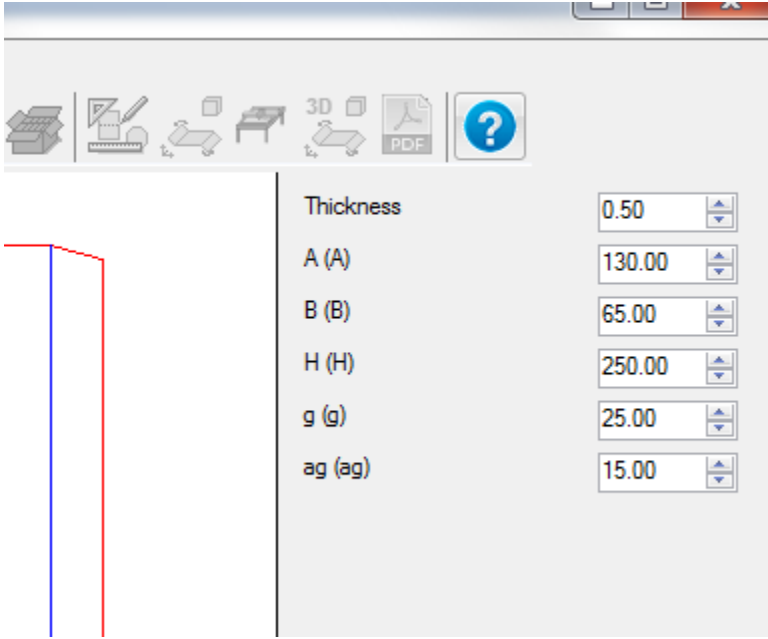


STEP 1
Browse the Files - 4

- A box design file
  - Parametric
  - Non parametric



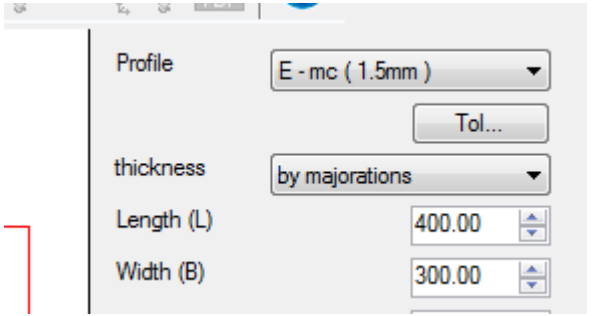
STEP 2
Adjust the Design

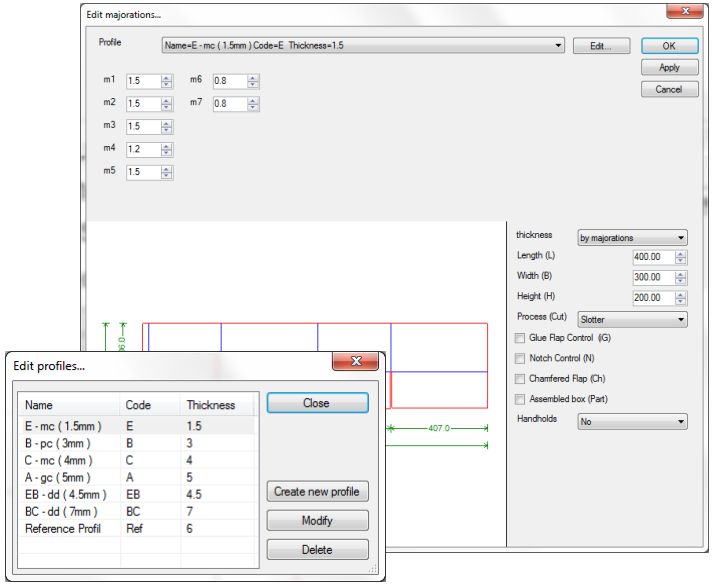


- Most designs are parametric. The most common ones are:
  - **Thickness** (of the material) to adjust the design, depending on the used material.
  - **A or L**, **B** and **H** are the **inner** dimensions of the box.
- Other parameters depend on the design and don't lay within the scope of this document.
- When hovering a parameter, the impact of the parameter is visualised.

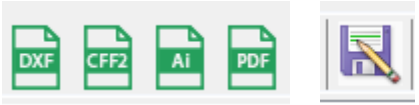
STEP 2
Profiles & Majorations

- Corrugated board focussed designs (eg. FEFCO) often have the possibility to use predefined material (= **Profile).**
- In this case the compensations for folding lines (=**Majorations**) can be controlled in detail (by pressing the Tol… button).
- The profile list can be edited.

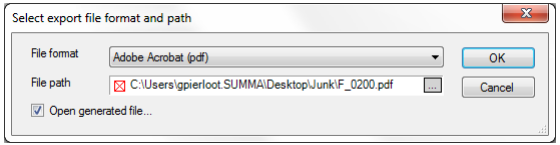




STEP 3
Export Design - 1



- PackLib can export or save the design to several formats including:
  - treeDim Picador (Native format): des
  - Autocad: dxf
  - Adobe Acrobat: pdf
  - Adobe Illustrator: ai
  - Common file format 2: cf2

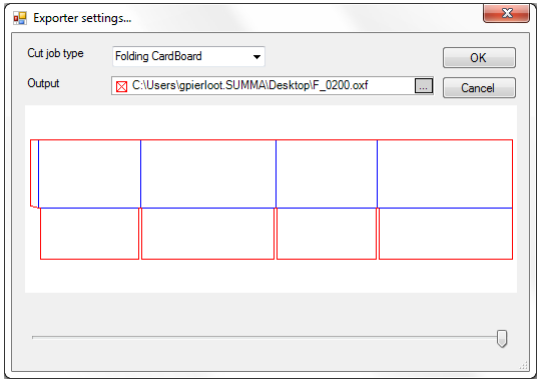


- If the design needs further editing (eg. placing graphics, registration marks,...) the AI format is recommended. In this format the different line types (cutting, creasing,...) are put in different spot colours and on separate layers.

STEP 3
Export Design - 2

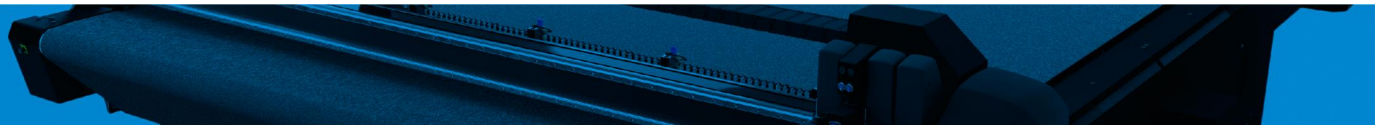
- PackLib – Summa Version – to OXF the native format for SummaFlex (Pro)

- The cut job type can be controlled and will determine what tools will be used.
  - Folding Cardboard
    - Cut Out knife & Creasing Wheel
  - Corrugated Board
    - EOT & Creasing Wheel
  - Xboard
    - POT & V-Cut



Extra Functionality

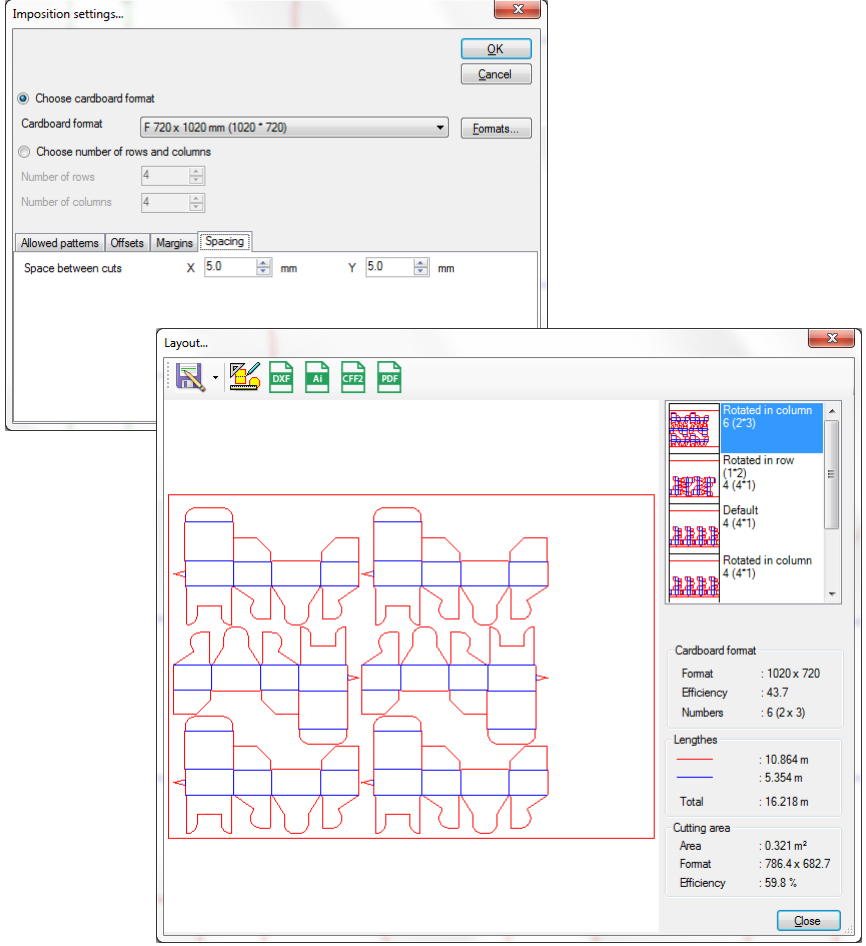
- Although PackLib – Summa Version – is mainly intended to be used as described before in the three steps, it also has extra functionalities.
  - Imposition (Multi copy Nesting)
  - Case analysis
  - Pallet analysis
  - Bundle Pallet analysis (Flat – unfolded)
  - Bundle Case analysis (Flat – unfolded)
  - Library Download
  - Component Parameters
  - Component code
  - Cotations Mirroring
  - Smart Assembly



Extra Functionality
Imposition

- Imposition will place as much copies as possible of the design on a sheet/board (=multi-copy nesting).

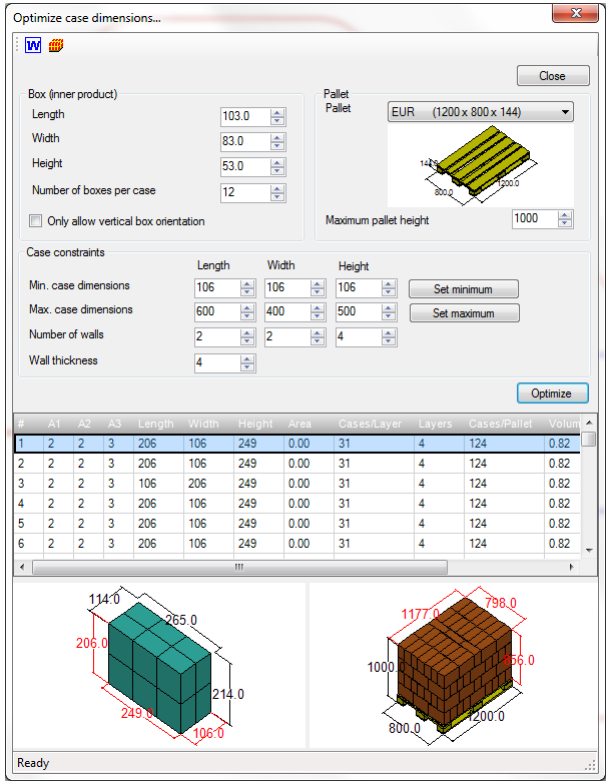
- If nothing appears, check whether your design is not too big for the selected board.



Extra Functionality
Case Dimension

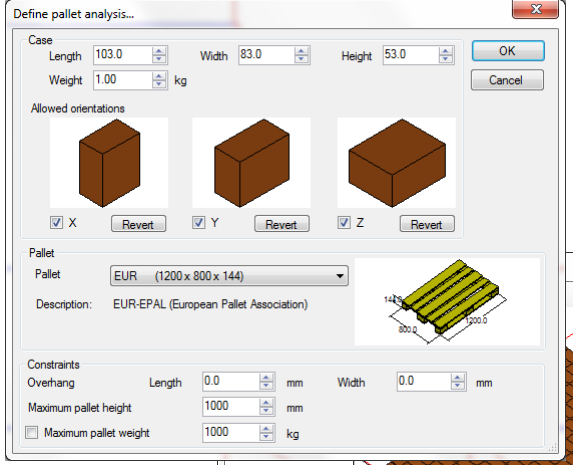
- Multiple boxes can be put in a bigger box (=**Case**). Taking into account the box dimensions, the pallet dimensions and the optimized case dimensions are calculated.

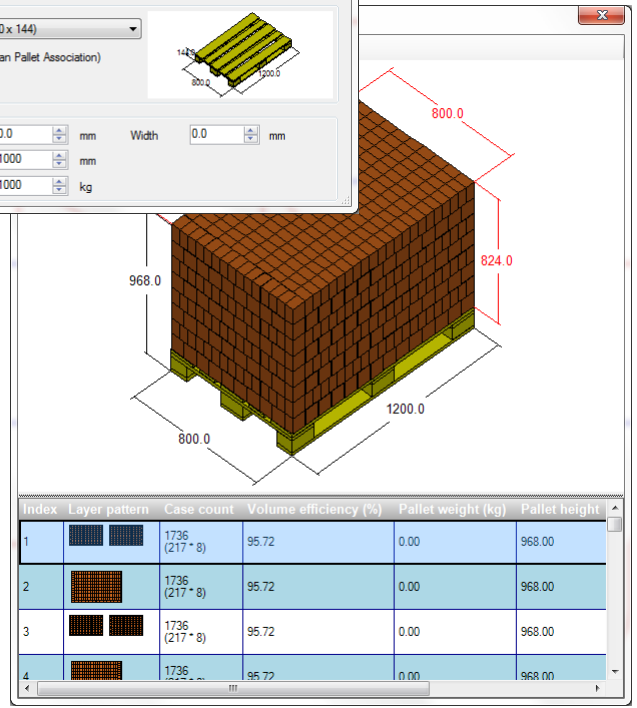
- Make sure that your box design is smaller than half of the pallet size, otherwise no case can be calculated.



Extra Functionality
Pallet Analysis

- Calculates how many boxes fit on a pallet and proposes loading options.
- If no proposal appears, see to it your box is smaller than your pallet.

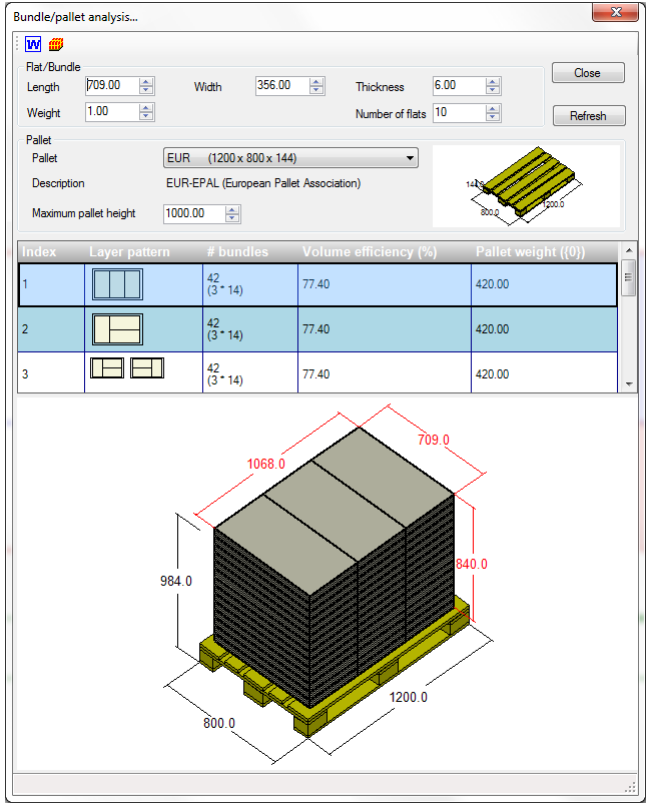




Extra Functionality
Bundle /Pallet Analysis

- Calculates how many unfolded (flat) boxes fit on a pallet and proposes loading options.

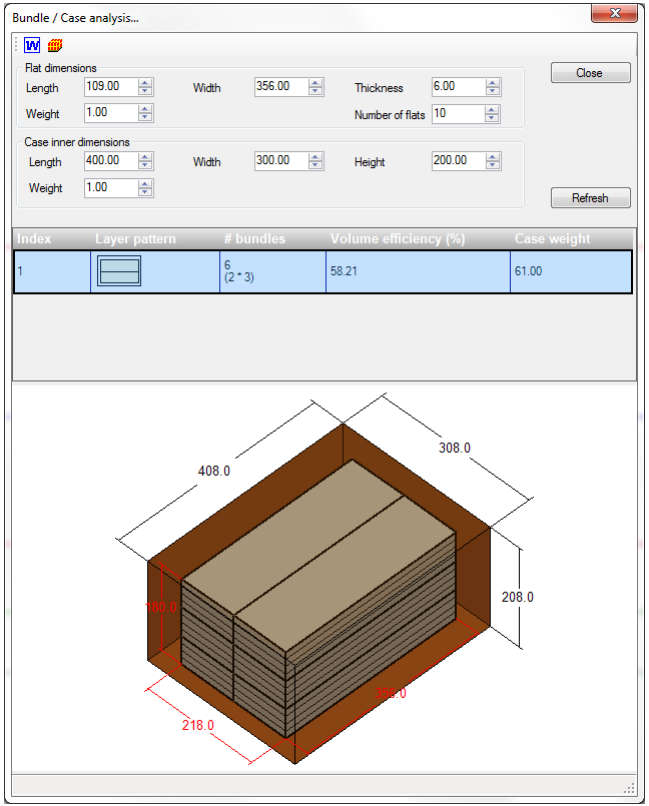
- If no proposal appears, see to it your box is smaller than your pallet.



Extra Functionality
Bundle /Case Analysis

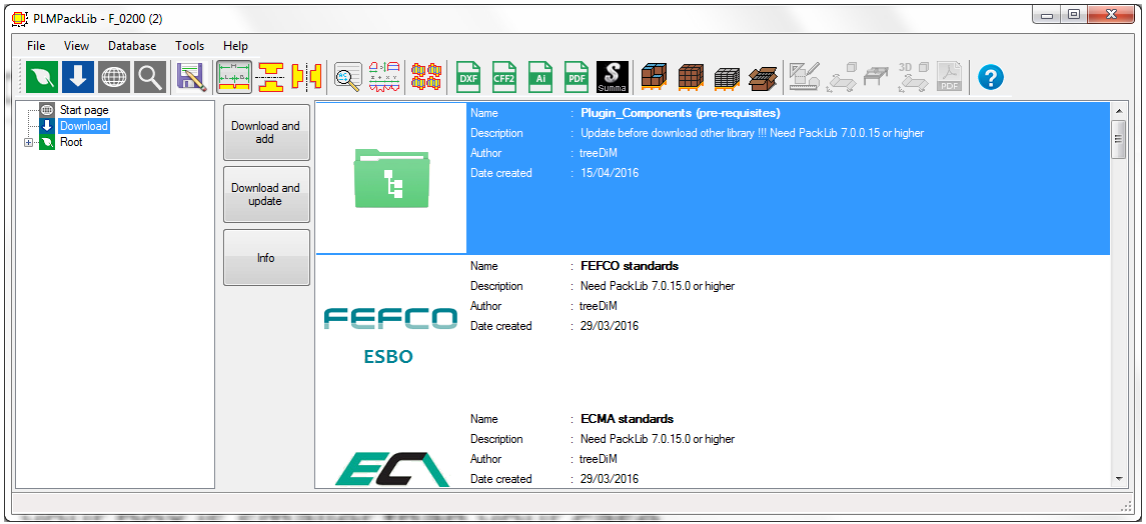
- Calculates how many unfolded (flat) boxes fit in a case and proposes loading options.

- If no proposal appears, see to it your box is smaller than your case.



Extra Functionality
Download / Library

- In the download section you can find online available libraries. This way you can expand/update your database.

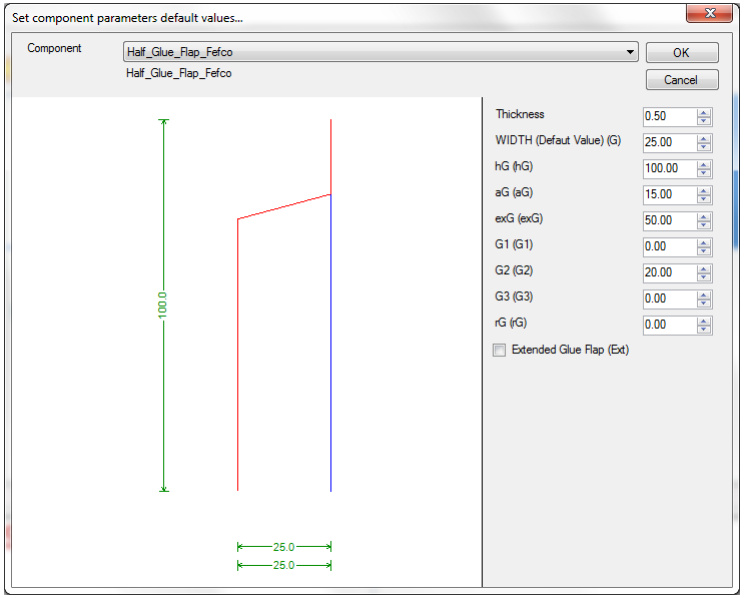


Note: Some libraries are made by third parties. The liability of the libraries can't be guaranteed.

Extra Functionality
Component Parameters

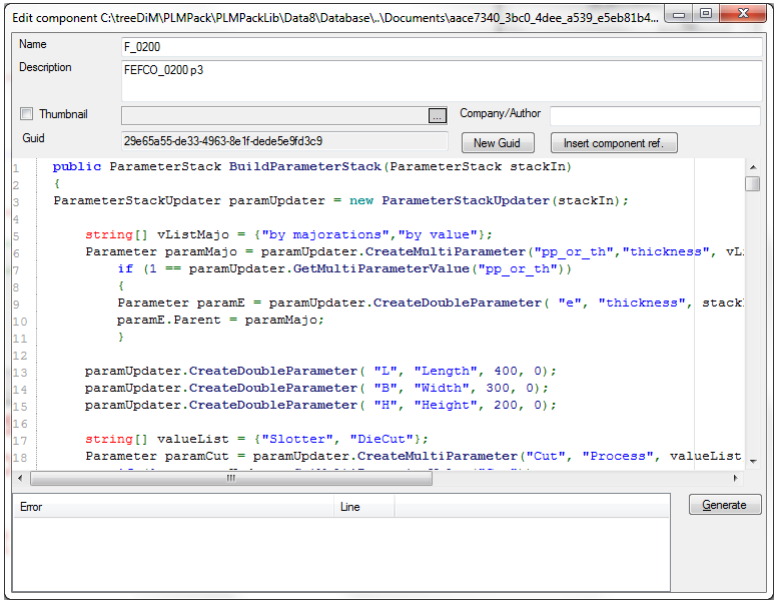
- If the design is built up out of (general) components, the parameters of the components can be changed.
- Often this gives access to some more parameters.
- This changes the default setting of the component. This means it influences all designs, based on this component.

  Don’t touch if you don’t know what you are doing.



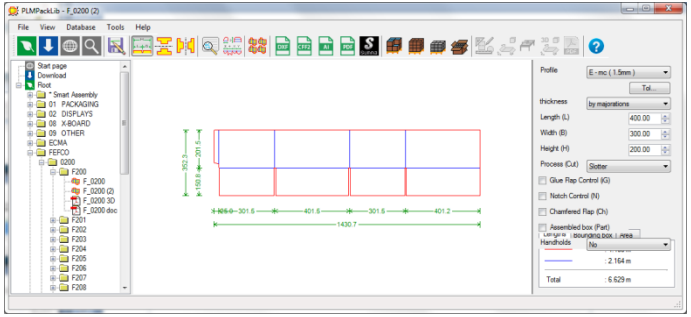
Extra Functionality
Component Code

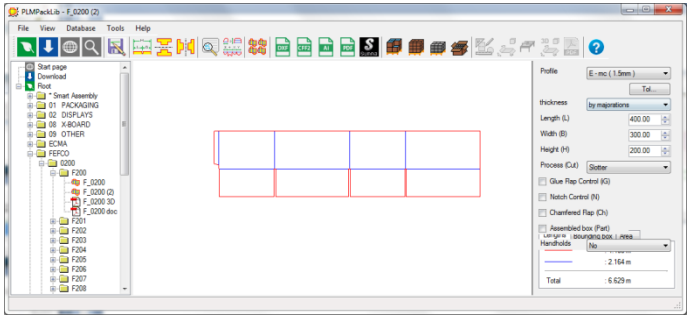
- If the design is built up out of (general) components, the code behind the behaviour of the component can be viewed/altered.
- When generating the component a copy of the original is created.
- Don't touch if you don't know what you are doing.



Extra Functionality
Cotations & Mirroring

- Horizontal and vertical mirroring.
- Hiding/showing the Cotations (=dimensions).

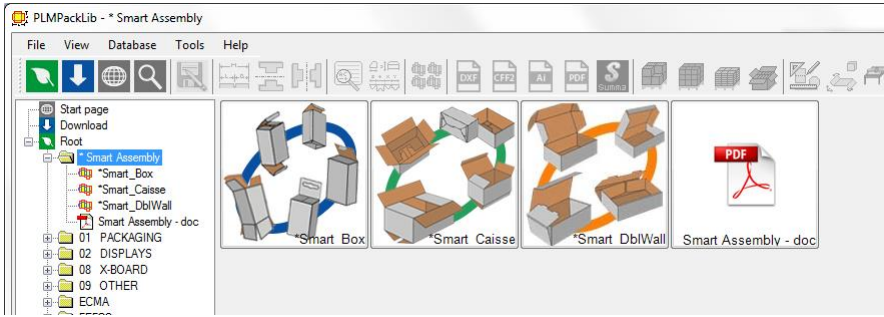




Extra Functionality
Smart Assembly

- A box is composed of 3 parts: a Base, a Top part and a Bottom part.

- For each of these parts Smart Assembly offers several standard designs. Different Bases, Top and Bottom parts can be combined, which offers more than a thousand combination possibilities. Moreover, the sizes are parametric.



OXF Job Types

- The OXF job types can be edited (other tools/layers…) by changing the related xml- file:
  C:\treeDiM\PLMPack\PLMPackLIB\ExporterSettings.xml

- Don’t touch if you don’t know what you are doing.

ExporterSettings.xml

```
<?xml version="1.0" encoding="utf-8" standalone="no"?>
<ExporterSettings xsi:schemaLocation="http://www.treedim.com/PLMPack K:\GitHub\PLMPackLib\treeDiM.Processor\ExporterSettings.x
  <GeneralSettings Scale="100" LimitFormat="1000.0 1200.0" />
  <TypeCutJobs>
    <TypeCutJob Name="Folding CardBoard">
      <Material Thickness="0.5"/>
      <Tools>
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        <Tool LineType="LT_CUT" ToolNumber="12"  ToolType="Cut Out Knife" ToolName="Cut Out Knife" Color="255 0 0"/>
      </Tools>
    </TypeCutJob>
    <TypeCutJob Name="Corrugated Cardboard">
      <Material Thickness="3" FluteDirection="Y"/>
      <Tools>
        <Tool LineType="LT_CREASING" ToolNumber="10" ToolType="Creasing Wheel" ToolName="Creasing Wheel" Color="191 191 64"/>
        <Tool LineType="LT_CUT" ToolNumber="14" ToolType="Oscillating Knife" ToolName="Oscillating Knife" Color="39 126 54"/>
      </Tools>
    </TypeCutJob>
    <TypeCutJob Name="Xboard">
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      <Tools>
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        <Tool LineType="LT_CUT" ToolNumber="16" ToolType="POT" ToolName="POT" Color="153 153 102"/>
      </Tools>
    </TypeCutJob>
  </TypeCutJobs>
</ExporterSettings>
```

Beyond Packlib

- treeDim is offering more packaging solutions, such as full CAD design, 3D rendering, Folding animations …
- In case you would need more professional support on your packaging project, you can contact treeDim:

Alain Nobre

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