



ENTERPRISE SOLUTIONS

160 – PATTERN DEVELOPMENT

161 - PATTERN DEVELOPMENT (CAD)

(Including links with Style technical pack)

Process manual

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INTRODUCTION

This document aims at describing the interconnections between four main functional areas: pattern making (**Pattern Developer 2D** and **3D** modules), Design / Technical Design (**Designer** module), marker making (**Marker Manager** and **Marker Maker** modules) and product development (**Product Developer** module).

It provides instructions on how to best utilize the corresponding modules in order to meet the styles and products development process.



Modifications made to the document since its last publication are highlighted in [blue](#).

1.1 Conventions

PLM	=	Product Lifecycle Management Solution
Product development module	=	Product Developer
Pattern development module	=	Pattern Developer
Pattern development 3D module	=	Pattern Developer 3D
Design / Technical Design module	=	Designer
Marker making modules	=	Marker Manager and Marker Maker
Plotting application	=	Justprint
Cutfile generation module	=	Cutfile generator

2. PROCESS

2.1 Definition

This process is part of the pattern development in relation to the product development. It not only leads to the creation of models with their gradings to meet the definition of a style but also to the completion of the technical folder of the Style product that includes CAD Specification elements such as pattern pieces, charts, 3D styles, markers ...

This information can be created, modified or accessed by different roles around the product development.

Below is an example of a possible organization of roles:

- The fashion designer creates the concepts, the sketches and takes style decisions.
- The designer carries out specific technical drawings (sometimes the fashion designer is also the designer).
- The pattern designer creates the patterns based on the definition of the design and Management teams and works out the 3D Style.
- The design Director directs the orientations of the different collections and is responsible for planning the design.

- The Marker Maker evaluates the material consumption of the product.

2.2 List of tasks

Here are some typical tasks of these developments:


- Create a new style based on existing specifications established by the fashion designer or the designer:
 - A Style product is created with its associated sketches, technical drawings, points of measure, embellishments, packaging labels
 - The pattern designer uses the specifications to create the CAD variants related to the corresponding style
 - The measures and details of this variant are aligned with those defined in the technical pack
 - Markers for prototypes cutting are generated (option)
 - Following the creation of successive prototypes, some modifications are made on the variant of the style
 - When a prototype is approved, the technical pack is finalized to send to production.
- Develop a style with few pre-established technical specifications and complete the associated product:
 - Define and associate the technical drawings and style boards to a Style product created by the fashion designer or the designer
 - In the patterns database, find the base block to be used as a basis for creation and create new CAD variants
 - Associate them to the Style product being developed
 - Compare the target measures with the measurements charts of the style
 - Markers for prototypes cutting are generated (option)
 - Create successive prototypes and finalize the technical pack
 - Send the variants to production.
- Adapt an existing Style on the basis of an already developed Style product:
 - Find an already developed Style product close to the new specifications for a starting point to changes to the new product.
 - Create sketches, communicate the wanted modifications and review the existing specifications.
 - Use the existing pattern as a basis for the creation of a new CAD variant.
 - Adapt existing prototype markers by variant analogy or create new ones (option)
 - Disclose the technical specifications to production make changes to the product and update the CAD variant.



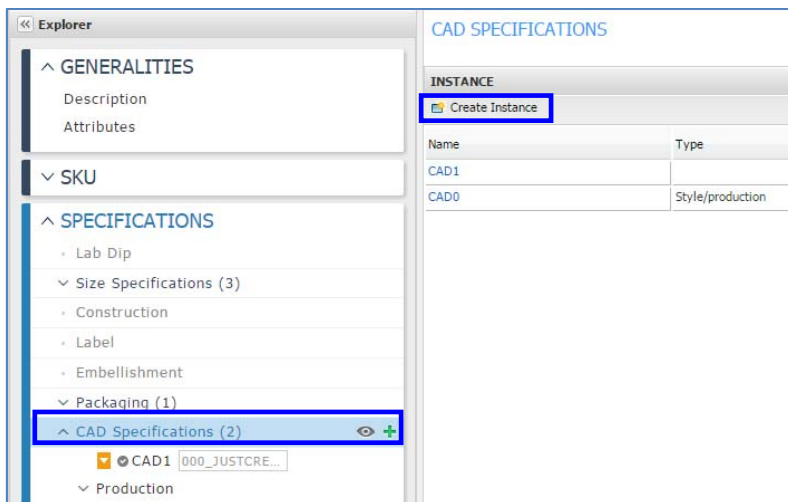
CAD (as well as BOM) specifications for a selected Style are summarized in information cards in the browser.
See the *Lectra_Enterprise_Solutions_VxRx_Style_Setup_Process-Manual_en.docx* for further information.

3. ADDING A CAD INSTANCE



To add a CAD Specifications instance:

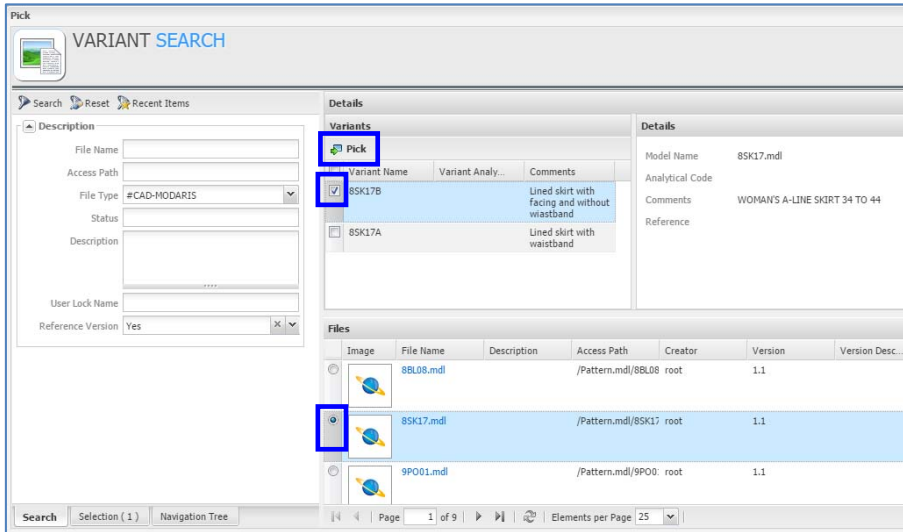
Click on the plus sign  beside the **CAD Specifications** branch.
OR

Click on the  sign beside the **CAD Specifications** branch and then click on the **Create Instance** link when the page refreshes.



3.1 Associating a CAD Variant

1. Fill in the information in the top section and click on .
2. Search for the CAD model you want in the **Variant Search** window that opens.
3. In the Files panel:
Click on the Model you want.
The variants associated to this model are displayed in the **Details** panel.
4. In the Details panel:
Check the box beside the variant you want to display and click .










5. The CAD variant is added to the **CAD Specification** instance.
Add any additional images or information and save the instance.





4. EDITING A CAD INSTANCE

Changes may be done only in edit mode.


4.1 Adding a different CAD variant to the instance


1. Click on  **Pick** and follow the steps for creating a new CAD instance.
2. The new CAD Variant is added below the existing ones.
3. The **Pieces** tab displays all the pieces contained in the variant.

Variants														
     														
File Name	Variant Name	Comments	Reference ...											
8DR13	8DR13A	Sleeveless v-neck dress with gathered waist	✓											
8SK17	8SK17B	Lined skirt with facing and without waistband	✓											

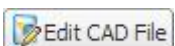
Pieces														
Im...	Piece ...	Piece ...	...	...	...	...	...	...	...	S	...	...	Fabric...	Fabric...
	1	8SK1719								1	0	0	1	1
	2	8SK1717								1	0	0	1	1
	3	8SK1716								1	0	0	1	1
	4	8SK179								1	0	0	1	1

4.2 Replacing a variant by another one

1. Select the variant to be replaced and click on .
2. Pick a new CAD variant.
3. Save.

 The list of 3D Styles that may have been selected for the previous variant remains the same. The display of dependency links between the 3D Styles in the list and the new variant are updated.


4.3 Editing the CAD File

Click on  to launch the application that was used to create the file (including 2D or 3D).

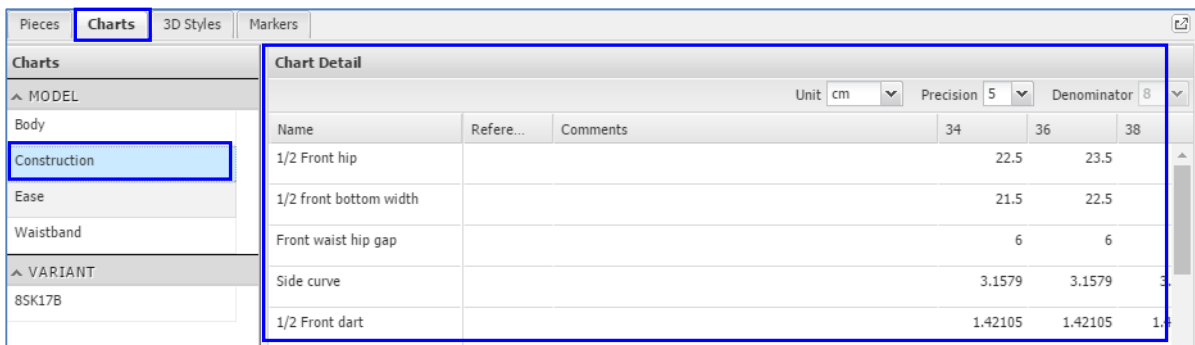
4.4 Displaying Measurement charts

4.4.1 Display the measurement chart(s) connected to a variant


1. In the **CAD Variants** window, check the variant to be detailed.
2. Open the **Charts** tab.

 If the variant has no associated measurement chart, the charts connected to the CAD model will be displayed.

3. In the **Charts** panel, select the chart to be displayed on the right side.



Name	Refere...	Comments	34	36	38
1/2 Front hip			22.5	23.5	
1/2 front bottom width			21.5	22.5	
Front waist hip gap			6	6	
Side curve			3.1579	3.1579	3.1579
1/2 Front dart			1.42105	1.42105	1.42105

 The first chart in the list will also be available to be printed on the ProductBrief_full.jrxml and ProductBrief_full_inch.jrxml reports.




4.4.2 Change user preferences

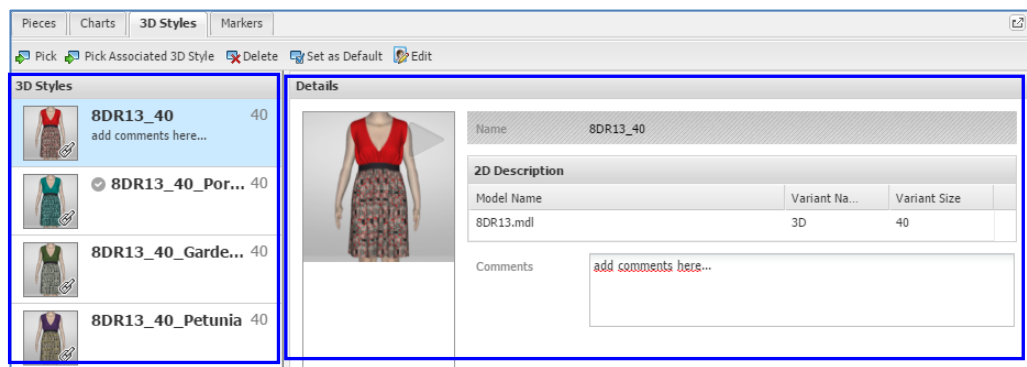
1. The **Unit** may be changed : **mm**, **cm** or **inch**.
2. You can set the **Precision** for **mm** or **cm** (number of digits after the decimal point) and **Denominator** (if **inch** has been chosen).

4.5 Associating 3D Styles to the instance

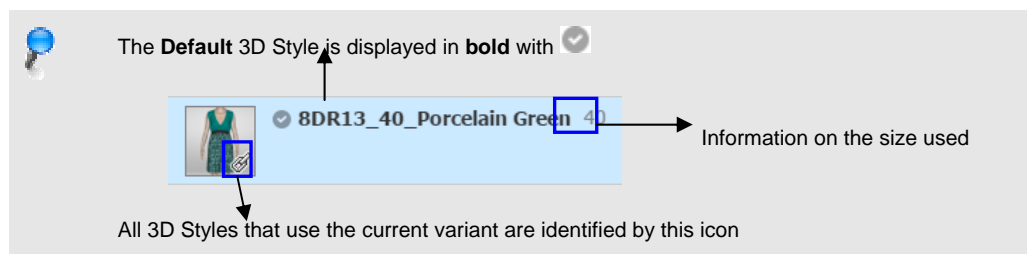
4.5.1 Associate 3D Styles

3D Styles may be associated to the current variant.


- In the **CAD Variants** window, check the variant you want to associate one or more 3D Styles to.
- Open the **3D Styles** tab.
- Click :
 -  **Pick** to search for any published 3D Style(s) to be associated to the variant.
Make your selection.
OR
 -  **Pick Associated 3D Style** to display all the 3D Styles that use the current variant.
Make your selection.
The thumbnail image of these 3D Styles will include a  icon as well as some information on the size used.
- The tab displays on the left the list of all 3D Styles chosen to illustrate the current variant and on the right the details of the selected 3D Style.
- Some **Comments** may be added in the **Details** part.



- Save.



4.5.2 Change default


The first 3D Style displayed in the list is the default one (displayed in **bold** ).

- To set another 3D Style as the default one, click on it and click .


2. Save.

4.5.3 Delete link

Any 3D Style associated to the current variant may be un-linked.


1. In the list, select the 3D Style to be deassociated.
2. Click on . The 3D Style is removed from the list.


4.5.4 Edit 3D Style

Click  to open the selected 3D Style for editing in the program which created it, if that program is available on the workstation.

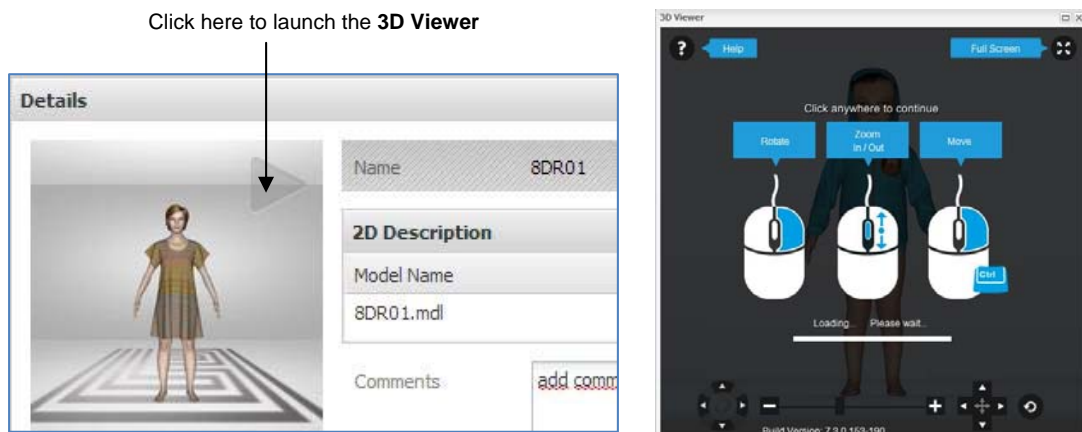
4.5.5 Launch 3D Viewer

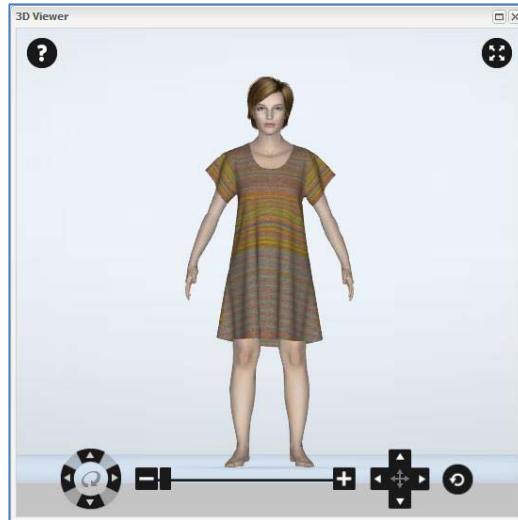
To view and manipulate the 3D Style (zoom, rotate, pan...), you may launch the **3D Viewer**.



1. Click on the arrow  on the top right side of the image.

 The “unity” plugin has to be installed first. Follow the link to download the application and follow the installation wizard.

2. While loading the 3D Style, a Lectra window opens followed by a help screen that shows the basic moves to manipulate the 3D Style.








 The 3D Viewer may also be launched from the **LectraBoard**, the Explorer and any Document zone.
Click on  on the 3D Style image and select **3D Viewer** in the context menu

4.5.6 Attach a 3D Style to a Change tracking


A 3D Style may be selected as an attachment to a change tracking.

1. Create a new Change tracking.
2. Click on  in the **Attachment** zone and select **Pick** or **Pick Associated 3D Style**.
3. Pick the 3D Style you want.
4. Save.

 The 3D Style attached in the Change Tracking may be viewed in the **3D Viewer**. Click on  on the 3D Style image and select **3D Viewer**.

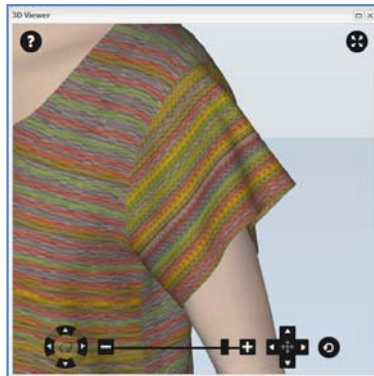
4.6 Annotating a 3D Style


The Markup tool may be used to make annotations in the 3D Viewer. The “marked-up” screen capture is saved in the **Change Tracking** section of the Product.

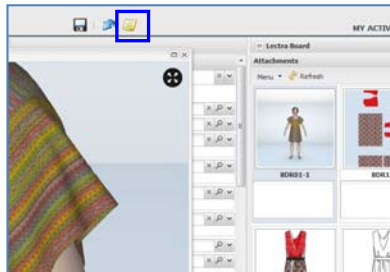
 The Markup tool has to be installed first. Follow the instructions in the **Lectra Fashion PLM – Installation checklist**.

1. [Launch 3D Viewer](#) (see above).


- Position 3D style in the desired view into 3D Viewer (zoom detail, rotation, pan, etc...).

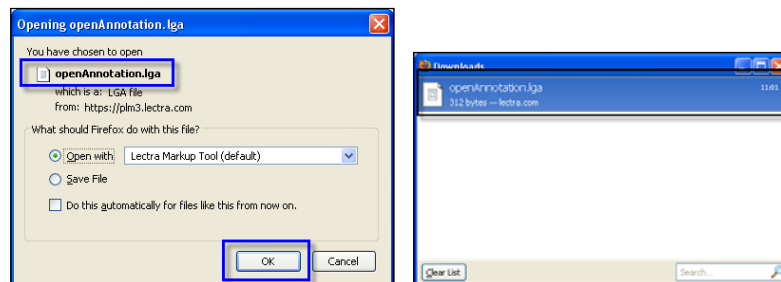



- Open the Markup tool by clicking .

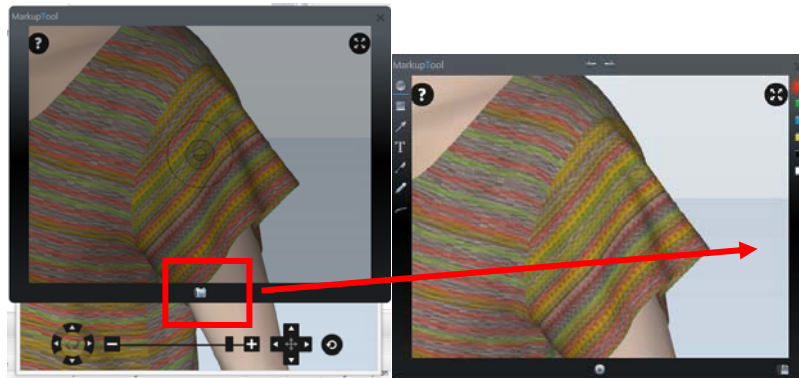


- The **Change Tracking** window opens automatically.
- If installed, the **Markup tool** is also launched

 The first time the **Markup tool** is launched, the user may be asked to open the Markup file. Browse to the location of the file and, once selected, click on the **Ok** button. If desired, set the browser settings to open the file automatically in the future.




- After opening the file, the **Markup Tool** window opens.
- Frame the image and capture it with the **Markup tool** by clicking .

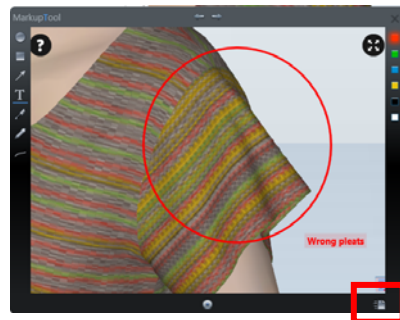


8. Use **Markup** tools in the side bars to annotate graphic and text.

Refer to the [Lectra_Enterprise_Solutions_V3R3_Platform-Common-features_user-guide](#) for more information on how to use the Markup tool.






9. After the desired Markup tools have been used, click on the **Publish Annotation** button  at the bottom right hand side of the window.



The **Markup** window will disappear and be saved into the **Change Tracking** record.

10. Fill the **Change Tracking** window (Specify recipients, add comments...).

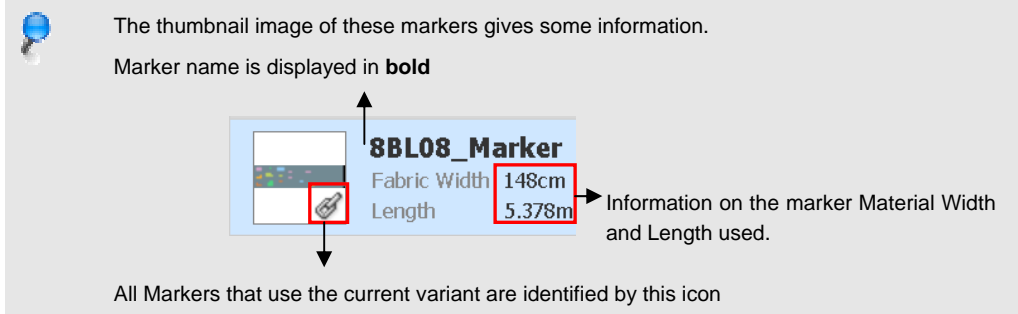
3. Click :  to modify the current CAD.
- Click :  **Pick Associated Marker** to display all the markers that use the current variant.
- Make your selection and click on  **Pick** button.
- The **Markers** tab displays on the left the list of all markers chosen to illustrate the current variant and on the right the details of the selected marker (Characteristics and Composition).



The thumbnail image of these markers gives some information.

The thumbnail image of these markers gives some information.

Marker name is displayed in **bold**



Information on the marker Material Width and Length used.

All Markers that use the current variant are identified by this icon


4. Some **Comments** may be added in the **Details** part.
5. Save.


4.7.2 Delete link

Any Marker associated to the current variant may be un-linked.

1. In the list, select the Marker to be deassociated.
 2. Click on  **Delete**.
- The Marker is removed from the list.


4.7.3 Edit Marker

Click  **Edit** to open the selected Marker for editing in Marker Manager program, if that program is available on the workstation.

 "Marker Manager" determines the composition of markers, a description of any motif and all the associated constraints. "Marker Maker" is the module used to place the pieces onto a representation of the material, interactively or automatically.

4.7.4 Attach a Marker to a Change tracking

A Marker may be selected as an attachment to a change tracking.

1. Create a new Change tracking.
2. Click on  in the **Attachment** zone and select **Pick Associated Marker**.
3. Pick the marker you want.
4. Save.

5. CREATING A NEW STYLE PRODUCT FROM PATTERN DEVELOPER

Pattern Developer is used to create a new pattern and to create a new Style product on the basis of this pattern.

The new pattern is either created from scratch or based on an existing one.

5.1 Creating a new model

1. On the desktop of the **Pattern Developer** module, click **File > New**.
2. Name the model and start creating.

5.2 Creating from an existing model

5.2.1 From the Platform

It is possible to open an existing pattern already saved on the Platform. To be opened in **Pattern Developer**, the .mdl file does not need to be shared. Sharing is however necessary to access the variants from **Product Developer**.

1. On the Desktop of the **Pattern Developer** module, click **File > Open Model....**
The **Open Model** window opens.
2. If needed, define various search criteria and then click **Search** to search for all the **Models** that correspond to the request.

5.2.2 From a local model

Use this feature to open a file not present on the Platform but saved locally on the User's workstation or on a server.

1. On the desktop of the **Pattern Developer** module, click **File > Import mdl file**.
2. Select the .mdl file you want.

5.3 Measurement Charts

5.3.1 Specifications measurement charts

Specifications of measures can be found in the **Product Developer** module in the **Size Specifications** branch.

5.3.2 Dynamic measurement charts

The measurement chart(s) connected to a CAD variant are visible in the **CAD Specification** branch of the **Product Developer** module.



See [Display Measurement charts](#) for more details.



The first chart in the list will also be available for printout on the ProductBrief_full.jrxlm and ProductBrief_full_inch.jrxml reports.

To view the charts connected to a Variant:

1. Go to the Desktop of the **Pattern Developer** module and click on the **Chart Manager** with **F8 | Charts manager**.
2. Navigate to the correct variant and the associated charts will be visible.

5.3.2.1 Naming Measurement Charts

Charts can be named according to user preference. It is recommended to name them in a logical way to describe the type of chart and relevance to the Variant.



In the Product Developer, charts are displayed in an alphabetical order (whatever the order in the CAD module). Naming is therefore important since it is the first chart in the alphabetical list that will print out in briefs.

5.3.2.2 Reordering Measurement Charts

The charts can be 'reordered' by right-clicking on the concerned chart (**Move** or **Copy chart...** function) and pasting it below. Repeat this process until the desired measurement chart is the first one in the list. A chart that has been moved is placed by default at the end of the list in the variant.

5.4 Making a variant available in development environment (Publishing)

A variant gathers all the pieces necessary to manufacture the garment.

A CAD variant (being part of a model), as well as its measurement charts, may be shared with the **Product Developer** module.

When CAD Variants are published and saved, they are stored on the Lectra Fashion Platform. This is a shared database library that allows users to access files from the modules of pattern development, technical design, and product development.

5.4.1 Save a pattern in the Platform

5.4.1.1 Save

Allows the user to save the CAD Model file and related Variants onto the Platform common data versus the users desktop or shared drive.

5.4.1.2 Save as...

Allows the user to save a copy of the CAD Model file with a new name and/or in a new location on the Platform.

5.4.2 Publishing a variant

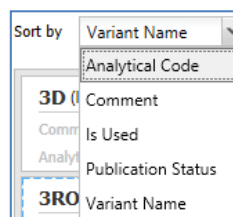
Publishing a variant means making it available in a development environment.

In the **Pattern Developer** module, the files are all saved onto the Lectra Platform, but unless the variant has been published, it will not be available for a Style record association in the **Product Developer** module.

Once a Variant has been published to the Platform, it can be associated to the **CAD Specification** branch of a Style record.


1. On the Desktop of the **Pattern Developer** module, click **File > Publish....**
2. Variants can be dealt with individually or massively. Publication can also be done automatically when saving the variant.
Variants can be sorted to ease the display.


- **Sort the variants:**




Choose the sort order in the list:


- **Publish/unpublish variants individually:**

Switch the cursor to  : the selected variant is published.

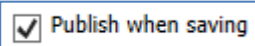
Switch the cursor to  : the selected variant is private (not published).

- **Publish/unpublish all variants at once:**

Switch the cursor to  : all the displayed variants are published at the same time.

Switch the cursor to  : all the displayed variants are unpublished at the same time.

- **Publish when saving:**

Check this box  if you want the variant to be automatically published when you save the model.

5.5 Creating a new Style Product that uses the variant

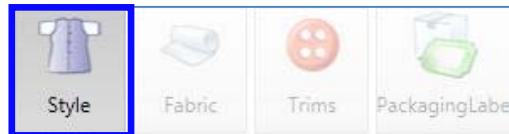
The pattern designer creates a Style Product and associate the current variant to it.

1. On the desktop of the **Pattern Developer** module, click **File > Save....**
The **File Manager Browser** window opens.
2. In the bottom left panel, select the shared Variant to be associated to the **CAD Specification** branch of a Style record.

3. Click the **Create Product** button.

The **Create Product** window opens.

- If the variant is already associated to a **Style Product**, this will be shown in the **Where Used** part with a hyperlink to the associated product(s).
- In the bottom part, the **Style** product category you want to associate the variant to is selected.



4. Click on the **Create** button.

The CAD Variant is then linked to a newly created Style Product whose name is automatically generated in the **Product Developer** module.



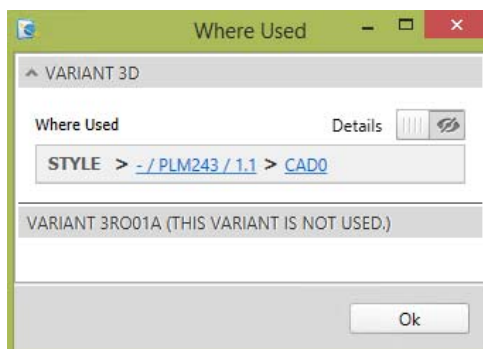
The **Where Used** part of the **File Manager Browser** displays this new Style Product name below the linked variant.

5. You may click on the link to open **Product Developer**, in which you can see the new instance.
Depending on which part of the link you clicked on, you are positioned either on the **General Objectives** tab or on the **CAD Specifications** branch.

5.6 Where Used...

Click **Where Used** to show the Style Products, the 3D Styles and the Marker(s) in which each CAD variant is used.

1. On the desktop of **Pattern Developer**, click **File > Where Used...**
2. A list of all Style Products, 3D Styles and Markers associated with the CAD variant is displayed.
3. Click on the 3D Style name to display it in the **3D module**.
OR
Click on the Marker name to display it in the **Marker Manager module**.
OR
Click on the name of the Style Product to display it in the **Product Developer** module.
Depending on which part of the link you clicked on, you are positioned either on the **General Objectives** tab or on the associated **CAD Specifications** branch.



E.g.

6. CREATING A NEW STYLE PRODUCT FROM PATTERN DEVELOPER 3D

Pattern Developer 3D is used to create a new 3D Style and to create a new Style product on the basis of this 3D Style.

The new 3D Style is either created from scratch or based on an existing one.

All the elements composing a 3D Style (visual effects / mannequins / mechanical properties) may be retrieved from the base. The 3D style will not be automatically updated if those elements are modified.

6.1 Creating a new 3D Style

1. On the desktop of the **Pattern Developer 3D** module, click **File > New**.
2. Start creating.

6.2 Creating from an existing 3D Style

6.2.1 From the Platform

It is possible to open an existing 3D Style already saved on the Platform. To be opened in **Pattern Developer 3D**, the 3D Style file does not need to be published. Publishing is however necessary to access the 3D Style from the **Product Developer**.

1. On the Desktop of the **Pattern Developer 3D** module, click **File > Open...: LectraBrowser** opens.
2. If needed, define various search criteria and then click **Search** to search for all the **3D Styles** that correspond to the request.

6.2.2 From a local file

Use this feature to open a file not present on the Platform but saved locally on the User's workstation or on a server.

1. On the desktop of the **Pattern Developer 3D** module, click **File > Import mtg file....**
2. Select the **.mtg** file you want.

6.3 Saving a 3D Style in the Platform

6.3.1 Save 3D Style

Allows the user to save the 3D Style file onto the Platform.

6.3.2 Save 3D Style as...

Allows the user to save a copy of the 3D Style file with a new name.

6.4 Publishing/Unpublishing

6.4.1 Publishing

Publishing a 3D Style means making it available in a development environment.

1. Open the 3D Style to be published.
2. Click **File > Publish**.
3. Click:
 - **Publish Only 3D Style**: only the 3D Style is published.
 - **Publish Full Model**: the 3D Style is published along with its variants



Once a **3D Style** has been published to the Platform, Product Developer users may access the 3D Styles.

6.4.2 Unpublishing

1. Open the 3D Style to be unpublished.
2. Click **File > Unpublish**.
3. Click:
 - **Unpublish Only 3D Style**: only the 3D Style is unpublished.
 - **Unpublish Full Model**: the 3D Style is unpublished along with its variants



Unpublishing is not possible if the 3D Style is used in a Style Product.

6.5 Creating a new Style Product that uses the 3D Style

The 3D pattern designer may create a Style Product and attach the current 3D Style to it.

The **Create Product...** command does not only create a Style product, it also publishes the 3D Style and its variants at the same time, and it creates a CAD Specification instance with the 3D Style attached in the **3D Style** tab. The 3D Style is also made available in the **Lectra Board** of the **General Objectives**.

1. Select **File > Create Product...**
 - The **Create Product** window opens.
 - The **Style** category is selected.
2. Click on **Create**.
3. The 3D Style is then linked to the newly created PDM Product whose name is automatically generated in the Product Developer module.



In the **Where Used** area, you can see in which Style products the 3D style is used.

Example: **Style > - / PLM921 / 1.1 > CAD0**

- / PLM921 is the STYLE name
/ 1.1 is the version
CAD0 is the CAD Specification instance to which the 3D Style has been attached

6.6 Where Used...

Shows the Style Products in which the 3D Style is used.

1. On the desktop of the **Pattern Developer 3D** module, click **File > Where Used...**
2. A list of all Style Products associated with the current 3D Style is displayed. The CAD specification instances in which the 3D Style is used are also displayed.
3. Click on the on the name of the Style Product (or on the CAD specification instance) to display it in the **Product Developer** module.

7. CREATING A NEW STYLE PRODUCT FROM DESIGNER / WHERE USED

Designer may also be used to create illustrations for your PLM products, as well as to create PLM products that will have objects coming from Designer as illustrations.

7.1 Creating a new Style product that uses the technical drawing

The designer creates a Style Product and attaches the current technical drawing to it.



Refer to the **Technical Design – Creative Design Process Manual** for explanations on how to create illustrations and how to create a Style Product from Designer.

7.2 Where Used...



The **Where Used...** option enables to view the Style Products that are linked to the selected sketch, as well as the Boards or Style in which it is used.

1. In **Designer**, identify the technical drawing that corresponds to the needs of the pattern maker.
2. Right-click on the sketch and choose the **Where Used...** option.
3. A window opens showing the linked **Style Product** records in the **Product Development** module.
4. Click on the hyperlink in the **Design Code** or **Technical Code** column to open the **Style Product** record.
5. You may check if a CAD instance has been created and if it contains a 2D or 3D style that may be reused.



8. CREATING A MARKER AVAILABLE IN DEVELOPMENT ENVIRONMENT

8.1 Creating and saving new Marker(s) in the Platform

8.1.1 Create and save markers one by one


1. In **Marker Manager**, click on the **Marker** tab to get into the "Marker" workshop.
This workshop allows you to create markers one by one.
2. In the command bar, click on the **Create new marker** button .
The fields take the default value.
3. Complete the **Characteristics** section as indicated in the online help.
This section allows you to enter the marker **Generalities**, the **Material** characteristics, as well as the **Tolerances** for positioning the pieces.
4. Complete the **Composition** chart as indicated in the online help.
The composition is the list of variants to be nested in a given size and in a given quantity.
5. In the command bar, click on the **Save marker** button .



8.1.2 Create and save markers in mass

1. In **Marker Manager**, click on the **Sheet** tab to get into the "Sheet" workshop.
This workshop allows for mass marker creation.
2. In the command bar, click on the **Create new sheet** button .
This function deletes the contents of the sheet being edited.
3. Complete the **Sheet** as indicated in the online help.
The marker sheet is a list of markers. It contains the exact description of each of them (Marker characteristics, Composition, Efficiency achieved, Status ...).
4. Select or check the markers to save.
5. In the command bar, click on the **Save Markers** button .
Check if you want to save all markers, selected markers or checked markers.
Click on the button **OK**.




8.2 Publishing/Unpublishing Marker(s)

8.2.1 Publish or unpublish markers one by one

1. In **Marker Manager**, click on the **Marker** tab to get into the "Marker" workshop.
This workshop allows you to create markers one by one.
2. In the command bar, click on the **Open Marker** button .
Select a Marker, and click on **Open** button.



3. If the marker is saved and unpublished, you can click on the **Publish Marker** button  .
If the marker is published, you can click on the **Unpublish Marker** button  .

8.2.2 Publish or unpublish markers in mass


1. In **Marker Manager**, click on the **Sheet** tab to get into the "Sheet" workshop.
This workshop allows for mass marker creation.
2. In the command bar, click on the **Open Sheet** button  .
Select a Sheet, and click on **Open** button.
3. Select or check the markers to Publish or Unpublish.
4. If at least one marker is saved and unpublished, you can click on the **Publish Markers** button  .
If at least one marker is published, you can click on the **Unpublish Markers** button  .

8.3 Where Used...

The **Where Used...** option enables to view the Style Products that are linked to a Marker.

1. In **Marker Manager**, click on the **Marker** tab to get into the "Marker" workshop.
2. In the command bar, click on the **Open Marker** button  .
Select a Marker, and click on **Open** button.
3. If the marker is published, you can click on the **Where used...** button  .
A window opens showing the linked **Style Product** records in the **Product Development** module.

OR

1. In **Marker Manager**, click on the **Sheet** tab to get into the "Sheet" workshop.
2. In the command bar, click on the **Open Sheet** button  .
Select a Sheet, and click on **Open** button.
3. Select a marker.
4. Open the contextual menu (right-click).
If the selected marker is published, you can click on **Where used...**
A window opens showing the linked **Style Product** records in the **Product Development** module.


9. CREATING A NEW STYLE PRODUCT FROM PRODUCT DEVELOPER

9.1 From an existing style

Some existing model may be used to help create a new Style product. You may create a duplicate of a style or create a new version of it.


9.1.1 Create a duplicate

1. Search for the style or template that best meets your needs.

2. Click the **Save as** icon .
3. Select the **Quick Save As** or the **Complete Save As** option and select the **Items to save**.
4. Enter a new **Technical Code**, **Save** the Style product and make all the changes you want.

9.1.2 Create a version

1. Search for the style that best meets your needs.

2. Click on **Create version** .
3. Make the changes you want.
If instances are changed, the previous versions instances are not modified.

9.2 From scratch

A new empty Style product may be created directly from Product Developer.

The necessary **Attributes** have first to be detailed in order to develop the technical specifications that are required.

In the concerned branches, create new instances and select the items that you want. Finalize the specification packages by adding technical sketches, model, 3D Style, points of measure, embellishments, packaging etc.



To get information on:

- how to associate a 3D Style to a CAD instance, see previous chapter [Associating 3D Styles to the instance](#)
- how to illustrate the **LectraBoard**, refer to the *Platform Common Features User Guide – chapter Picture Management*.

10. DELETION RULES

A 2D or 3D Style associated to a Style product cannot be deleted.

11. REPORTS

Several reports are specific to the CAD applications.

The specific reports are as follows:

1. ProductBrief_full
 - a. Style Summary Sheet **Style Product**
 - b. Construction, Label, Packaging, and Embellishments Sheets
 - c. Measurement Sheet
 - d. CAD Measurement Sheet
 - e. CAD Association with piece images
 - f. CAD Association with 3D Styles (information + images)
 - g. CAD Association with Markers (information + images)
 - h. POM how to measure guide sheet
2. ProductBrief_Full_inch (same as product brief full, but in inches versus cm)
3. ProductBrief_Summary
 - a. A short summary sheet
4. ProductBrief_Summary_inch
 - a. A short summary sheet and additional sheet containing measurements in inches.
5. ProductBrief_Tracking
 - a. A short summary sheet of the changes made to the Style product, visible in the Change History of the **Module of product development**.

12. USING MODEL AND MARKER FILES WITH MARKER MAKING AND PLOTTING APPLICATIONS

For pre-production or production use, Pattern piece and Marker information can be accessed directly by the marker making and plotting applications.

The 2D Models (file managed) can be retrieved via the Webdav.

The Marker Making applications reach the model information via embedded data browsers and direct data accessors (no need of Webdav drives).

Pieces can be directly plotted from Pattern Developer.

When using JustPrint from the Desktop menu, a WebDAV connection will be necessary to reach the 2D models in the PLM File Manager.

The Markers (stored on the Platform) need to be exported.

MarkerMaking opens and saves markers using embedded data browsers (no Webdav connection used).

Plotting can be operated directly from Marker Making applications.

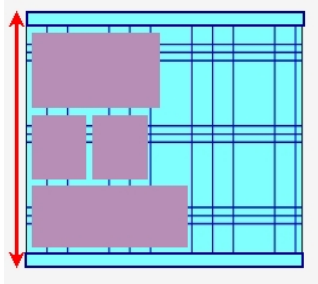
When plotting out of the marker making solution, it will be necessary to extract the marker related data, with Marker Manager, to produce a ZIP file containing all the required data (PLX, MDL, constraints, background image). After uncompressing the data, they will be available for applications, out of any PLM connection

13. GLOSSARY

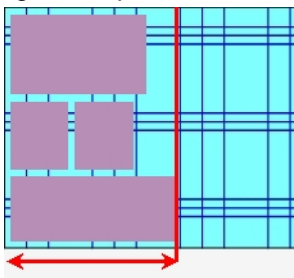
3D Style: 3D simulation of a model, its material and its mechanical, visual and decorative characteristics... It refers to a (CAD) model

Material width: Width of material on which the pieces are to be nested.

Total width of a material, including selvages.



Length (marker): Length of material occupied by the marker. This is determined by the position of the rightmost piece.



Marker : A marker describes the position of the pieces to be nested on a material.

The pieces to be placed are pieces of the same fabric type from variants to be produced in one or more sizes.

Marker Composition: List of variants, articles or XCH-models to be nested in a given size (if there are different sizes) and in a given quantity.

Marker characteristics: The marker characteristics consist of:

- The general information (Name, Code, required efficiency, etc.)
- Information about the material (Width, Selvage, material name, fabric type, etc.)
- The piece positioning tolerances.

Tolerances (marker): Marker characteristics indicating the positioning constraints of the pieces belonging to that marker.

- Pieces spacing
- Marker edges spacing
- Moving
- Tilt