Tutorial Manual

Seamly2D PATTERNMAKING SYSTEM – SeamlyME

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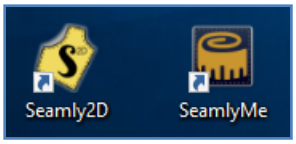
Seamly2D PATTERNMAKING SYSTEM – SeamlyME

ABOUT SeamlyME

SeamlyMe is a separate program that is installed on your system when you install **Seamly2D** Patternmaking Software which is used to store your measurements by means of a database (Qt) which is also installed during installation.

If you have chosen to create desktop shortcuts when you did the installation, you will have two icons on your desktop:



Once you have setup your measurement files, you will hardly use **SeamlyMe** except to create new or edit existing measurement files.

OVERVIEW

The results of a pattern system are determined by which measurements it uses, and the wearing ease, seam lines, and dart placement in its block patterns.

The differences between measurement sets help to explain the differences in fit between pattern systems.

The fewer the measurements, the more "average" proportions are used to fill in for the missing measurements, and the more "tweaking" is required to achieve a finished pattern with a good fit.

Interestingly enough, the more popular pattern systems use fewer measurement points because it is "easy to use" both during pattern drafting phase and the measuring stage. A system's book doesn't reveal the extra time required to create manual bust adjustments, redraw sleeve caps to fit the armscyes, etc, etc, etc!

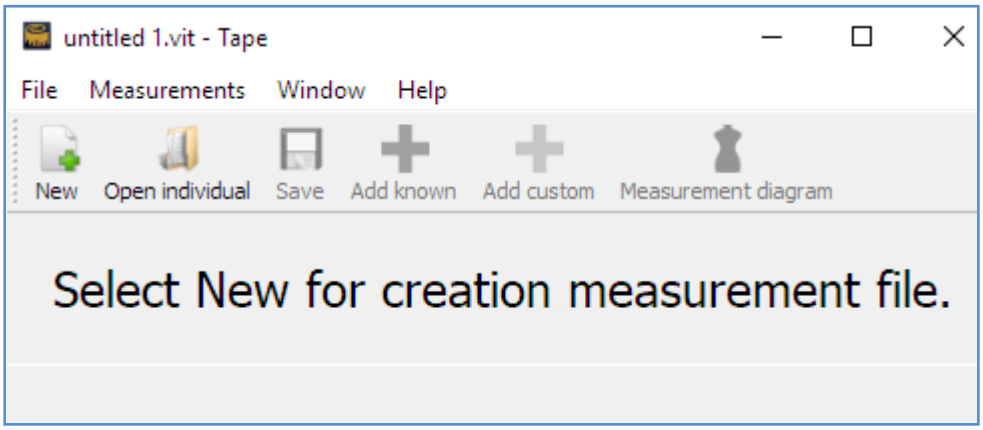
Measurement Templates for Pattern Systems

To make patterns from a pattern system, you will need the system's measurements in your measurement files.

SeamlyMe provides templates which pre-select the measurements used by a pattern system. To make the pattern quickly, straight from the book, you will need to be able to enter the pattern system measurement names into your formulas and variables.

SeamlyMe provides templates to enable using the specific pattern system measurement names which make it easier to pick up a book or magazine and try out a new pattern or technique

Seamly2D, along with **SeamlyMe** and the selected templates, assists students who are learning patternmaking as they can do their assignments, make mistakes, undo their mistakes, and experiment on a much faster learning curve than through manual drafting alone.



USER INTERFACE

The following image is of the screen you will see when you open **Seamly2D** for the first time:

Information Bar

At the very top is the Information Bar where you will see the name of the file you are working on, or in this case, I haven't loaded a file so it has the default of 'untitled 1.vit' listed here on the left.

On the right are the normal minimize, maximize and close icons.

Menu Bar

Below the Information Bar is the Menu Bar which will be covered in detail later.

Quick Icon Bar

Below the Menu Bar is the Quick Icon Bar which will also be covered later.

Work Area

Below the Quick Icon Bar is the main Work Area. Most of the work is done in this area. Since we haven't created nor opened a file, this gives the message 'Select New for creation measurement file.' All other options have been greyed out and the only options that you may use are to create a new file or to open an existing file (or to exit the program).

Creating a new file and opening and existing file are covered later.

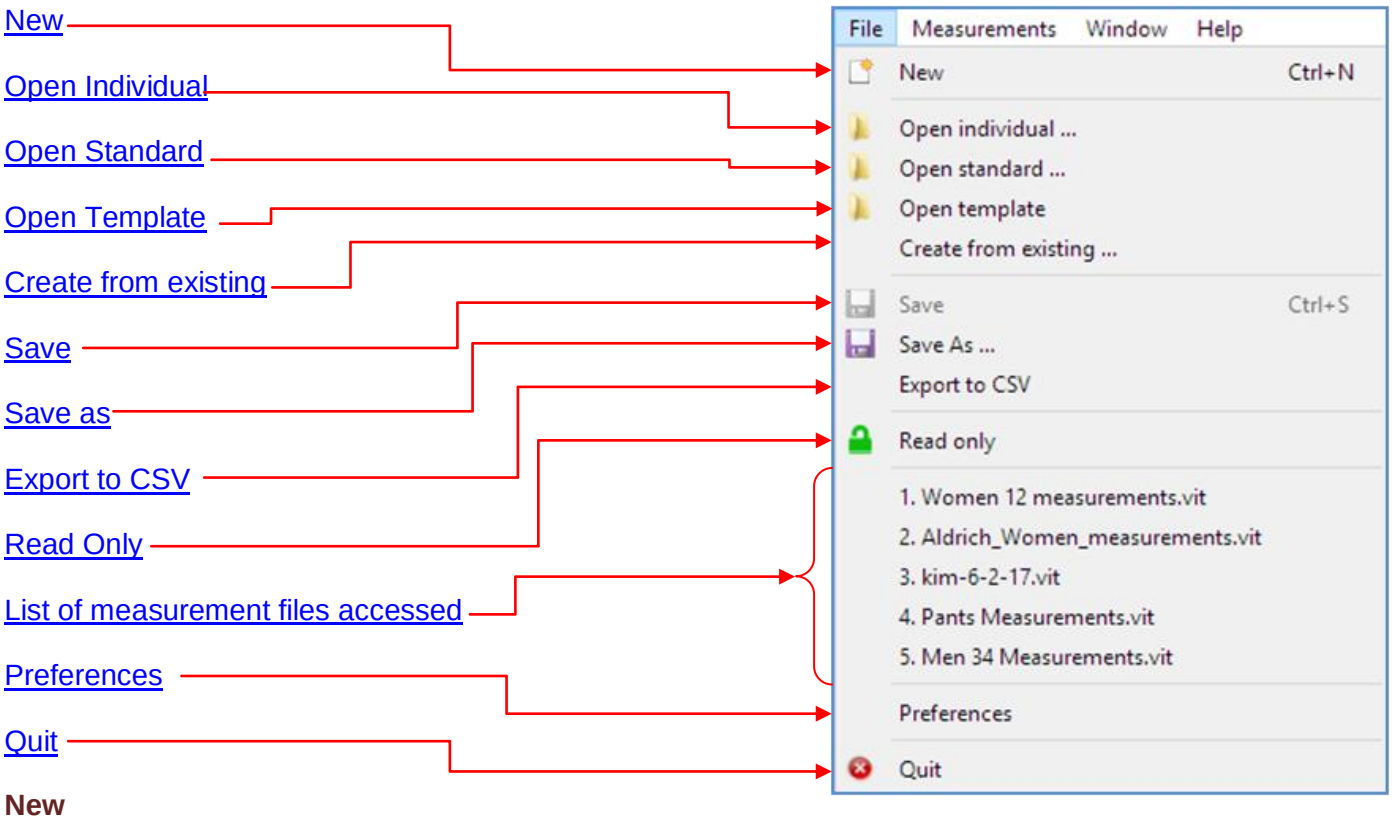
Selection Bar

Below the Work Area is the Selection Bar. Once you have created a new file or opened an existing one, there is an option to select things here depending on the type of file you have created/opened.

MENU

File

Click on File to get the dropdown list:



New

This creates a new measurement file. You may use Ctrl+N or the button on the front screen as well.

Open Individual

This will open an individual measurements file (.vit) or you can use the button on the front screen.

Open Standard

This will open a Multisize (Standard) measurements file (.vst).

Open Template

This will open a measurement Template file that you have previously created. Templates are still in development with some really exciting new features and have not yet been covered in the tutorial.

Once you have been over the tutorials, I'm sure you will be able to make your own measurement templates according to the items you wish to create and the measurements you prefer to work with, which will also include the basic information that you would like, thus saving you time in setting things up from scratch each time you wish to create a measurements file. At the moment, the only difference between a template file and other files is the location that the file is saved to. And by choosing '**Open Template**' will take you directly to the templates folder.

Seamly2D PATTERNMAKING SYSTEM – SeamlyME

Seamly2D has very kindly offered a template that includes various formulas and all database measurement items, which you can find in the program files, tables, templates directory (**Seamly2D**\tables\templates).

Create from Existing

This option will create a new individual measurements (.vit) file from one you created before, which you will be able to edit and save under a different name.

Save

Saves a measurement file, or you can use Ctrl+S or the button on the front screen. I'm a firm believer in saving often, so I normally use the Crtl+S or the button, depending on whether I have the mouse in my hand or my hands on the keyboard.

Save as

Saves a new measurements file, or you can use Ctrl+S or the button on the front screen. Depending on the type of measurement file created, this option will automatically insert the extension of .vit or .vst. You may choose the location that the you want the file saved in if it's not the same location as chosen in the 'Preferences' and you may name the file as you wish, the name 'measurements' has automatically been generated.

Export to CSV

You can save your measurement file as a comma delimited file which can be opened in a word-processing document, spreadsheet or imported into a database of your choice.

Read Only

This is a very clever inclusion that locks the measurement file so that no changes can be made to it. Clicking this option will toggle the lock on and off.

List of Recent Measurement Files

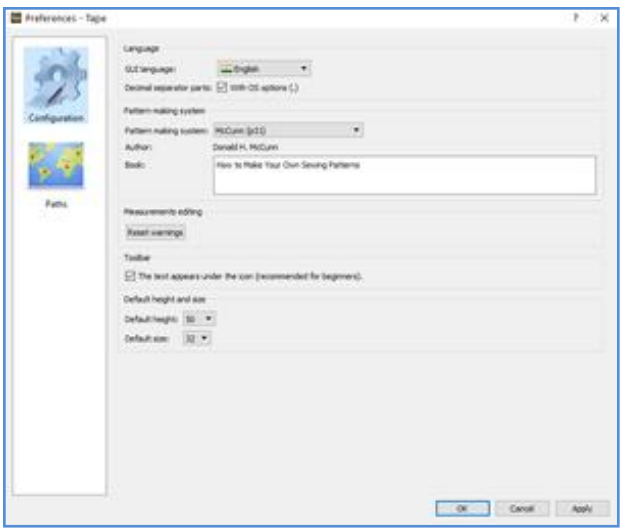
Next is a list of recent files opened to help you quickly find and open the one you are busy with. This list accommodates 5 files.

Preferences

And here we come to the all important one that is normally overlooked...

This is where we set up our personal preferences. These preferences will be the same every time we open **SeamlyMe** and can be changed at any time. Changes will be effective after they have been made, every time **SeamlyMe** is opened.

Click on **Preferences** and the following screen pops up:



On the left are 2 tabs – **Configuration** and **Paths**

Configuration

GUI Language – You can change this if you chose a language when installing **Seamly2D** and would prefer to use a different language.

Decimal Separator Parts with OS Options – I suggest you don't change this because it is automatically set to use whatever you have set your operating system to use.

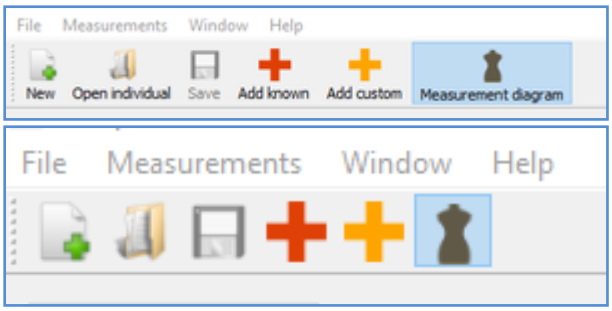
Patternmaking System – One often studies a lot of different patternmaking systems and incorporates different

items from each, however, if you have only 1 system that you use, you may wish to specify which system and perhaps the books name here. This is by no means compulsory, but it may assist you in creating a template of the measurement points used by the chosen system.

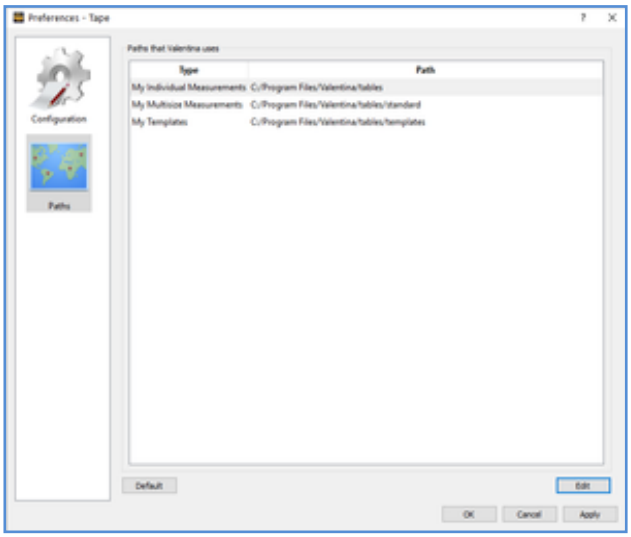
Please use the same patternmaking system in both **SeamlyMe** AND **Seamly2D** for the best results.

Measurement Editing – Reset Warnings – I'm not too sure what this does, so I'd leave it alone until some one advises me to use it.

Toolbar – ***Text appears under the icon (recommended for beginners)*** – By removing the tick in the box, the names of the icons will be removed as you can see below:



Default Height and Size – You may edit this to measurements in the range that you normally work with if you wish or to measurements for the specific multisize file that you are creating.



Paths

Click on the **Paths** tab to edit the following:

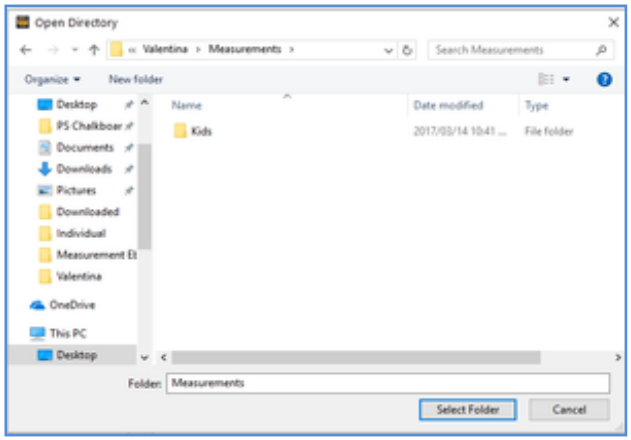
Select the line that you would wish to change, click Edit and navigate to where you'd like the default to be and click 'Select folder'.

My Individual Measurements – I have a folder on my desktop called **Seamly2D**. Inside this folder, I have a Measurements folder that I wish to store all my measurements in.

My Multisize Measurements – I leave this at the default, but you may change it.

My Templates – I also leave this at the default.

Once you have setup all your preferences, you may click on 'Apply' and 'Ok' to close it. These preferences will be the defaults for all your measurement files unless you specify differently.

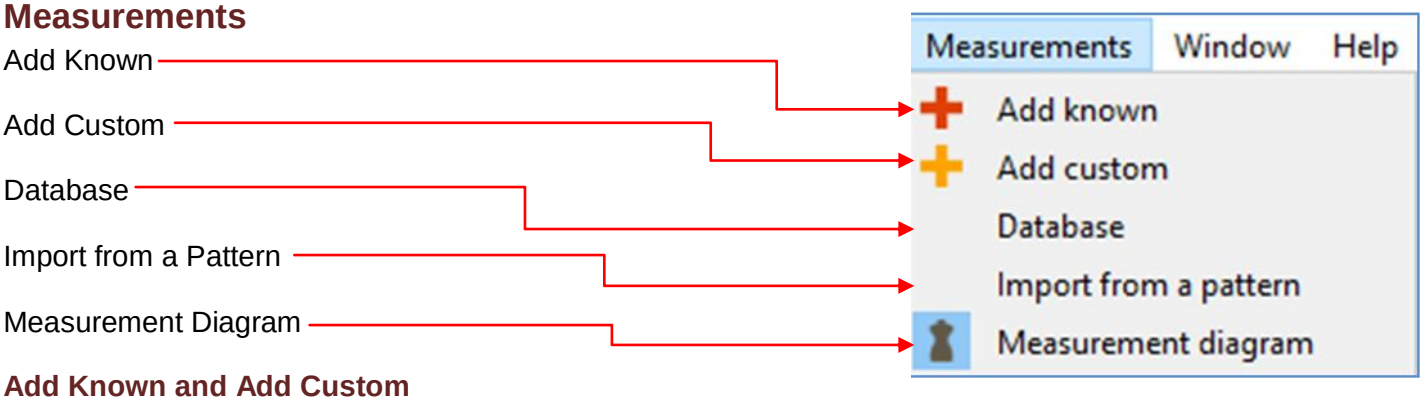


Quit

Closes the **SeamlyMe** program, you may also click on the X at the very top right.

(The line will minimize the program to the taskbar and the squares will toggle the full screen mode on and off. Once you have exited full screen mode, the squares will become a single square which you may click to revert back to full screen mode.)

Measurements



Add Known and Add Custom

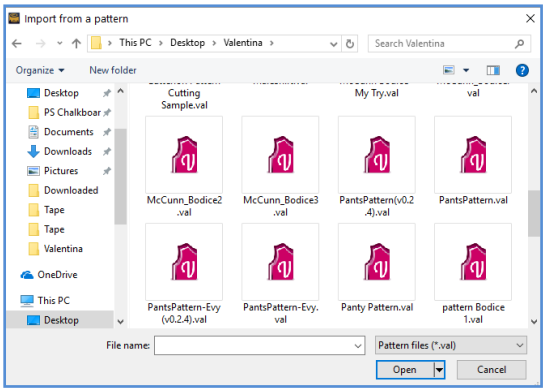
Have buttons on the screen that have been covered in the Multisize tutorials.

Database

This is a list of **Known** measurement areas.

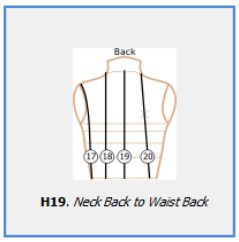
Import from a pattern

If you use this option, you will be able to choose which pattern you'd like to use to get the measurement items from. **SeamlyMe** will add all the measurement points to the list for you and you will only need to enter the actual measurements.

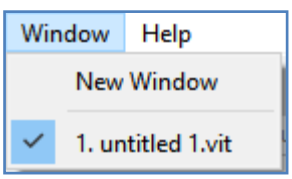


Measurement Diagram

This has a button on the screen and it toggles the diagram area, on the right side of the main screen, on and off. (I like to have the diagram showing to check that I can check the correct measurement is chosen.)



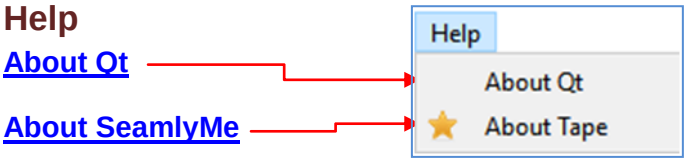
Window



New Window – will open a new instance of **SeamlyMe**.

Below **New Window** are the details of the current open file which are also in plain view at the top left of the screen.

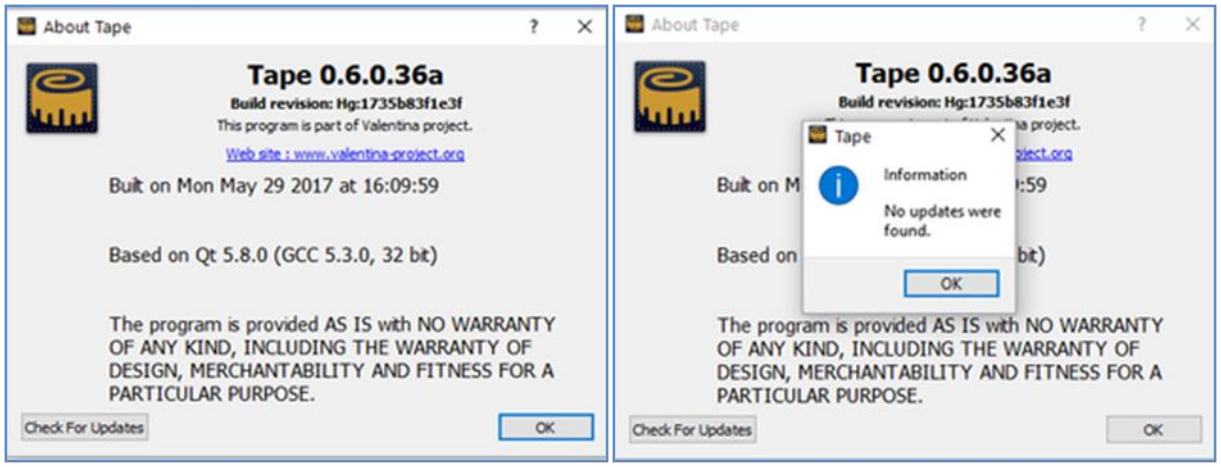
Help



About Qt

This gives information about Qt, click OK to close it:

About SeamlyMe

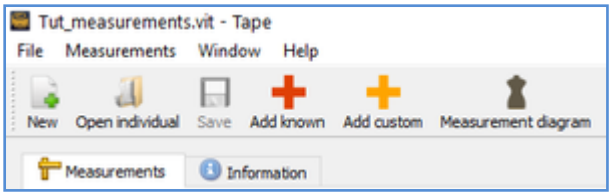


This gives information about **SeamlyMe**. You may click the box ‘Check for Update’ to upgrade to the latest version and click on **OK** to close it.

Currently, there are no help files attached to the program as it is still under development. This tutorial serves as the help file and you may join the active and friendly forum for any help not covered here.

Shortcut Buttons

Below the Menu on the top left are a few shortcut buttons. They have been covered in the File Menu section, however, here is a brief description of each.



New – Click to create a new measurement file.

Open Individual – Click to open an **Individual** measurement file (.vit) previously created.

Save – Click to save the file. If the file hasn't been changed since the last time you saved it, this button will be greyed out as you can see in the image above.

Add Known – Click to add a measurement from the **Database of Measurements**.

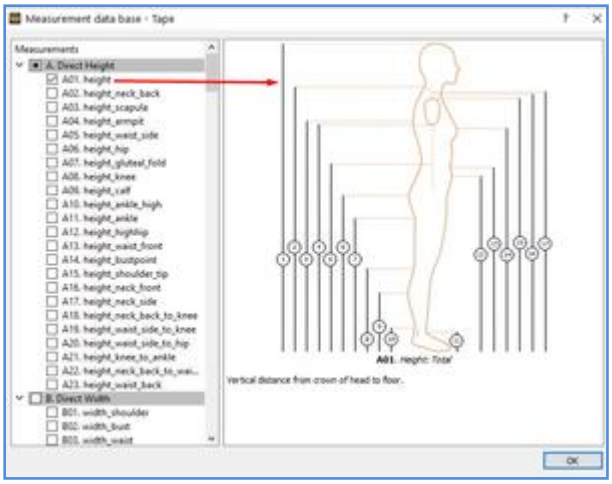
Add Custom – Click to add a **Custom** measurement that you can't find in the **Database of Measurements**.

Measurement Diagram – This button will toggle the right side diagram on and off.

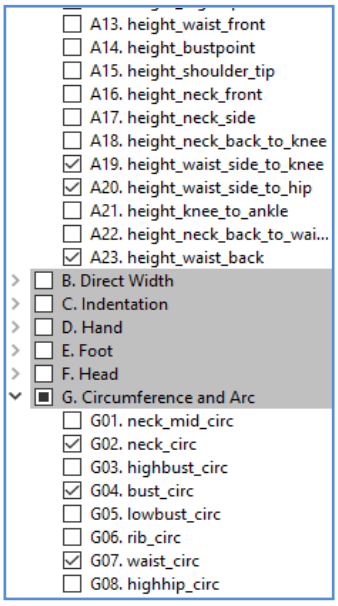
CREATING A LIST OF MEASUREMENT POINTS

Adding Known Measurement Points

Click on ‘Add Known’ and a long list of measurement points appears. (Most people seem to start with using the Aldrich Standard Measurements, so I will do the same. I’m using the table for Women of Medium Height on page 11 of her book.)



When you either click on an item or select an item, an image appears that shows you the area that should be measured when you use this measurement with a title and small explanation. As you can see, I have selected A1 in the list (it has a tick in the box before it) and in the diagram, I can follow the line that is intercepted with a ‘1’ in a circle for measurement purposes. While I’m in this screen, I go through and tick all the items that I will use for this MultiSize measurement file: Height, Bus, Waist, Back Width, Chest, Shoulder, Neck Size, Dart, Top Arm, Wrist, Ankle, High Ankle, Nape to Waist, Front Shoulder to Waist, Armscye Depth, Waist to Knee, Waist to Hip, Waist to Floor, Body Rise and Sleeve Length.

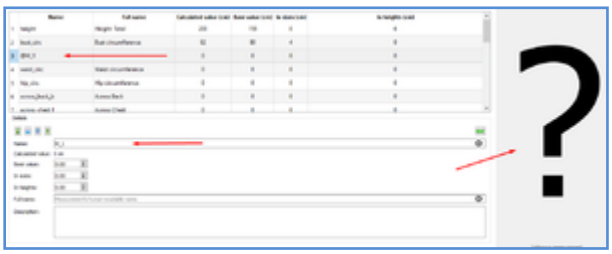


Once I have ticked the ones that I need, I click on ‘Ok’ and I have my list ready to be worked on.

You can always click on the Known icon to add more items to the list if you find you’ve missed one.

Adding Custom Measurement Points

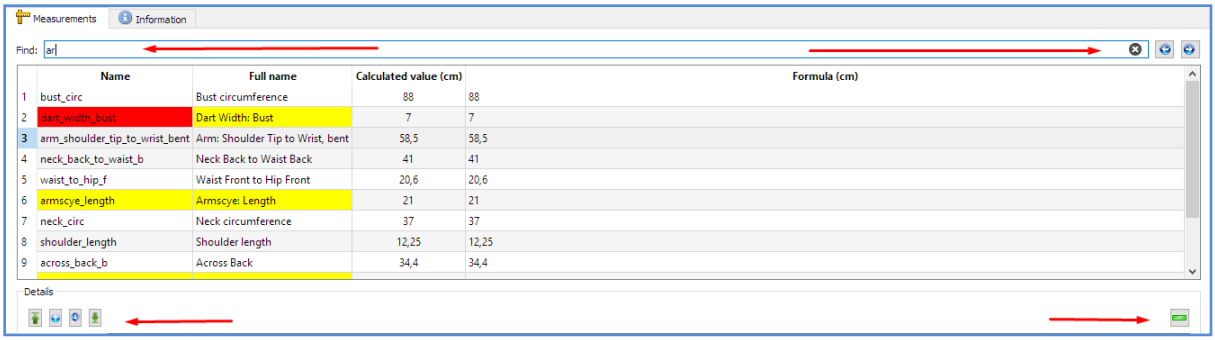
However, when you can’t find a Known Point, you may create your own points by clicking on ‘Add Custom’.



This will create a new item with a prefix of ‘@’. You will be able to name this item appropriately without using spaces or other special characters. Should you want a space, it is best to use an underline (_).

As this is a custom measurement, there is no picture reference

Searching, Adding, Moving and Deleting Lines



At the top, the 'Add Known' and 'Add Custom' are always available and will be every time you open this file in **SeamlyMe**, so you can add more items to it at any time you wish.

There is a ‘Find’ field above the list of measurement points. In the image above, I have started typing the word ‘Arm’ and have only reached the ‘Ar’ and the first item found with these 2 characters is already highlighted in red while the ones following it are highlighted in yellow. One may use the arrows on the right to scroll to the next item found or back to a previous one. The ‘X’ will delete the typed words to started a new search.

The 4 tiny icons in the centre of the screen to the left are what we use to move the lines. The 1st one will take the selected row to the top of the list, the 2nd one will move the row up a line, the 3rd one will move it down a line and the 4th one will take it to the end of the list.

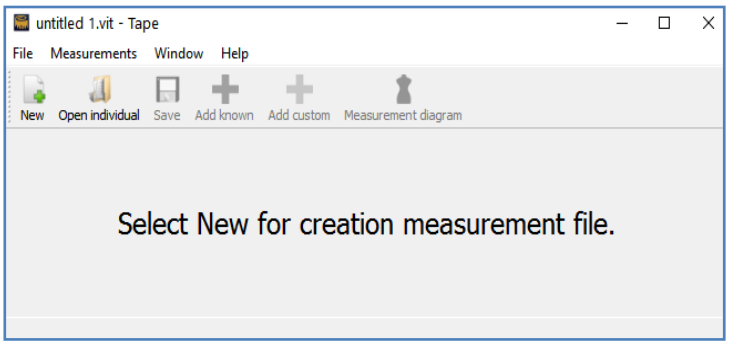
The single icon in the centre right will delete the line.

These can be used re-arrange your lines into the order of the list of measurements that you are working from, if you wish. I like doing this because it helps me not to make mistakes when entering base values and increments.

CREATING A NEW MEASUREMENT FILE

To open **SeamlyMe**, double click on the icon on your desktop, or open **Seamly2D** then click on **Measurements** in the top menu bar, then click **Open SeamlyMe** from the list.

SeamlyMe opens to a blank screen and the only options are **New** and **Open**:

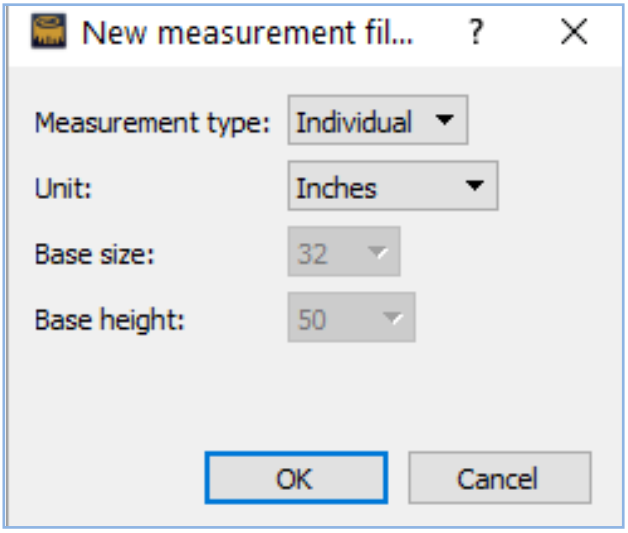


Above these 2 options is the menu - **File**; **Measurements**; **Window**; and **Help**. Several options under these headings are greyed out until you either create or open a measurement file.

After clicking on ‘**New**’, please proceed to the section that covers the type of measurement file you wish to create.

SEAMLYME - INDIVIDUAL MEASUREMENTS

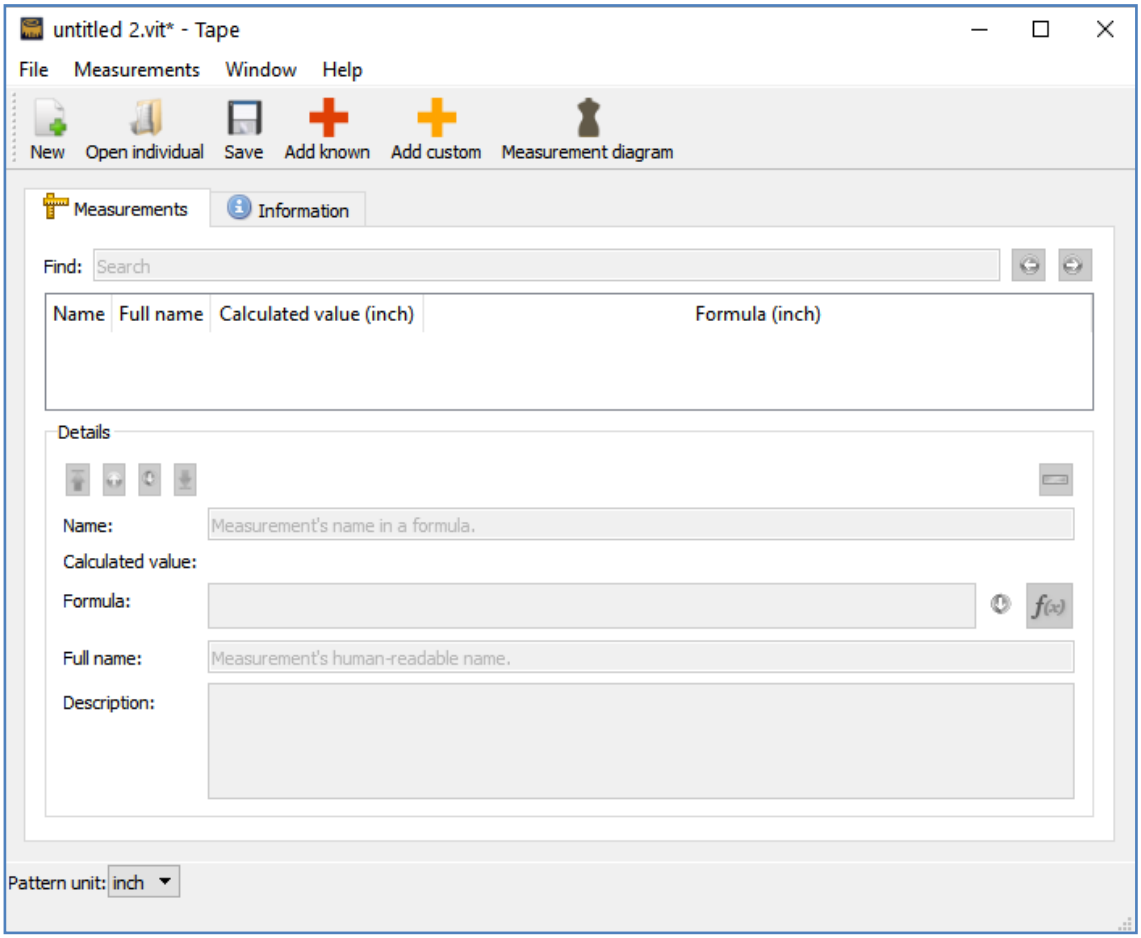
Files containing individual measurements end with suffix **.vit** (**Seamly2D** Individual Measurement).



Most people will design patterns and sew for specific people - either customers or family and friends. And, as one can read all over the internet, standard sizes do not fit everyone and always need adjustments. Therefore, **Seamly2D** has very cleverly provided the individual measurements system.

I cover centimeters in **Multisizes**, so we will use inches in **Individual** measurements. When you open **SeamlyMe**, you are presented with a blank screen, click on **New** and choose the options in the popup screen image to the right.

And click on **OK**.

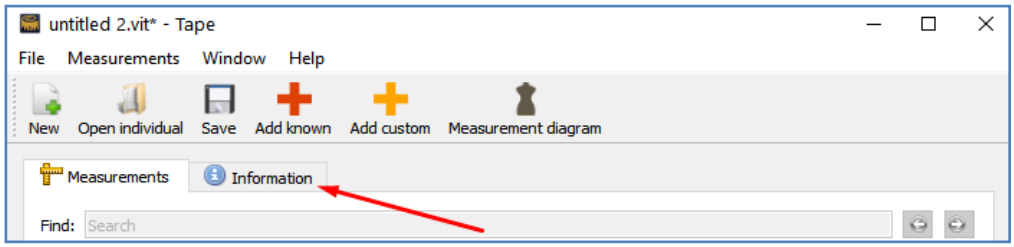


You now have the basic measurement file ready to enter values into it. It's wise to save the file. You may include the person's name or any other info in the name of the file so that you can find the set of measurements when you start creating the pattern.

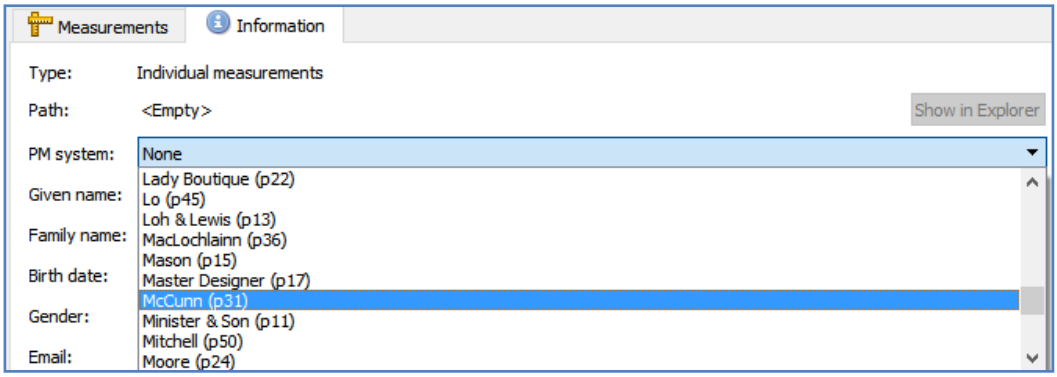
Information

Before we enter the measurements, I like to add a few details that I may need once I have completed the pattern:

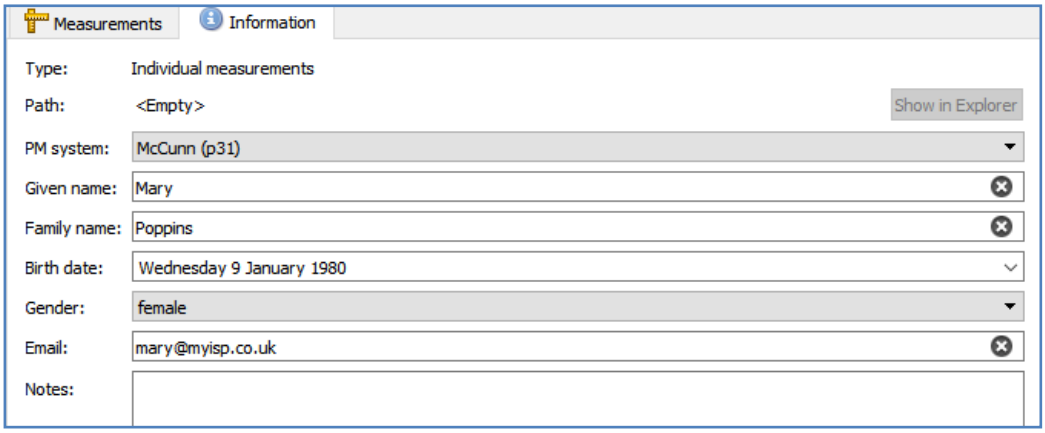
Click on the Information tab:



It really isn't necessary to enter any information, but I am going to cover it just to let everyone know that the facility is available. The first option is which patternmaking system you are going to use:



For the sake of this tutorial, I am going to choose the **McCunn** system, as this **SeamlyMe** file is being created especially for the tutorial on making-patterns using the McCunn system.



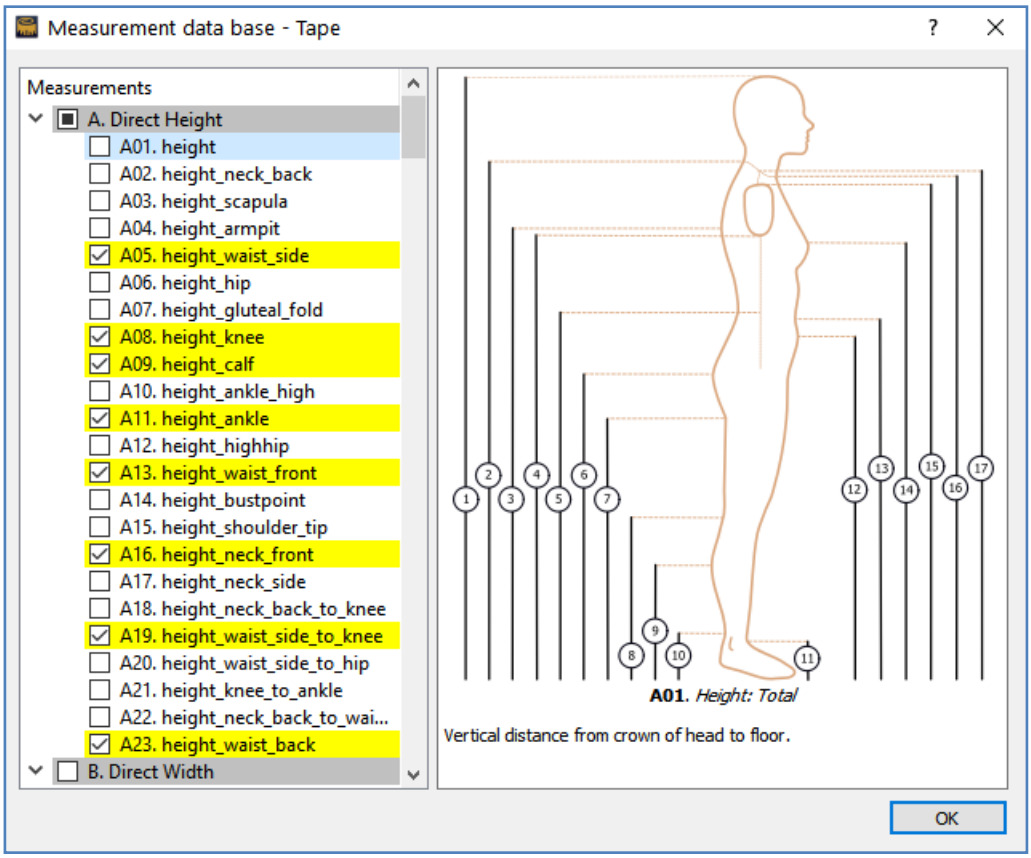
I have added fictitious information. You may add mobile numbers or any other information that you deem necessary to identify and contact the person once the pattern blocks have been prepared and this information will be attached to this measurement file until you delete the file or change the information.

Individual Measurements

Individual measurement files have the extension **.vit**. All .vit files will open in **SeamlyMe** if clicked from a folder.

It is always an idea to create a list of points that you wish to measure on a person, so armed with our list of measurements that we have taken of our client, we are ready to proceed.

First we add all the **Known** items to the list, so click on **Known**, and the **Measurement Database** window opens where we tick all the items that we will as described earlier:



Next, we open all the **Custom** measurement items that we will need with detailed descriptions so that we will be able to find them once we start creating our pattern.

A moment may be taken to **sort** the items into the order of our measurement sheet, if you wish.

Entering Measurements

When entering **Individual Measurements**, we only take **ONE** person's height and width into consideration so we only have **ONE** box to enter measurements into.

However, this box not only takes *actual measurements* but also ***formulas***.

For instance:

If you consider the image below, you will notice that I have entered the measurement at height_waist_front as 39 inches and the height_neck_front as 57 inches. These are the measurements from the floor to the waist and neck fronts.

To determine the measurement from the neck front to the waist front, I don't need to actually measure the person. All I need to do is to enter the formula: **height_neck_front –** (minus) **height_waist_front** and that will give me the measurement of 18 inches.

Creating **Formulas** is covered in a bit more detail in the **Seamly2D Manual**, but for a brief recap, the following may be used in formulas:

Constants (integers or decimal numbers)

Variables (any of the ones listed in the Tables of variables)

Operators

+ for addition
- for subtraction
* for multiplication
/ for division
^ for raising a number to an integer power (e.g. 3^2 = 9)
< for less than
> for larger than

Algebraic or trigonometric functions

sin
cos
min
max
avg
fmod
pi

How or why one would use these is way beyond this tutorial, however, they are available for those who wish to use them. For most, the simple operators should be sufficient.

Another example of using them would be to find the diameter of the waist girth measurement:

waist_circ / _pi

If the waist_circ = 31.5", this formula will return 10.0268" which corelates to 31.5" * 7 / 22.

To enter the actual measurement value, just type the value into the box provided.

SeamlyME - MULTISIZE MEASUREMENTS

Files containing standard measurements end with suffix **.vst** (**Seamly2D** standard table). These files must reside in a specific folder for **Seamly2D** to find them. **Seamly2D** will look for the files in the following order:

For Unix(Linux):
[path to **Seamly2D** binary]/tables/standard
/home/[user name]/.**Seamly2D**/tables/standard
/usr/share/**Seamly2D**/tables/standard
OS X:
[path to **Seamly2D** bundle]/Resources/tables/standard
[path to **Seamly2D** bundle]/tables/standard
/home/[user name]/.**Seamly2D**/tables/standard
/usr/share/**Seamly2D**/tables/standard
Windows:
[folder where **Seamly2D**.exe resides]/tables/standard

The paths mentioned above can be rewritten by changing the settings in **Preferences**. See page User Manual: Configuring **Seamly2D**

If a pattern is connected to standard measurements, to determine which standard figure is currently associated with your pattern, look at the values of size and height displayed at the bottom left of the main window. You may modify these values independently using the corresponding drop-down lists.

Standard Measurements are measurements that increase by a set value over a number of sizes and are determined by Height and Width or Vertical and Horizonal (for actual length/distance, regardless of direction, I advise that you use the Height option). For example, a person could wear a size 10 blouse, but, because they are short, the blouse could be worn as a dress unless they take the hem up. So by choosing both their height (vertical) and width (horizontal), a pattern for the blouse could be created that will automatically adjust the armhole, length to waist and many other dimensions to have as close a fitting garment, as possible very easily, which could be used to create a pattern for someone who is very tall and relatively slim, as well.

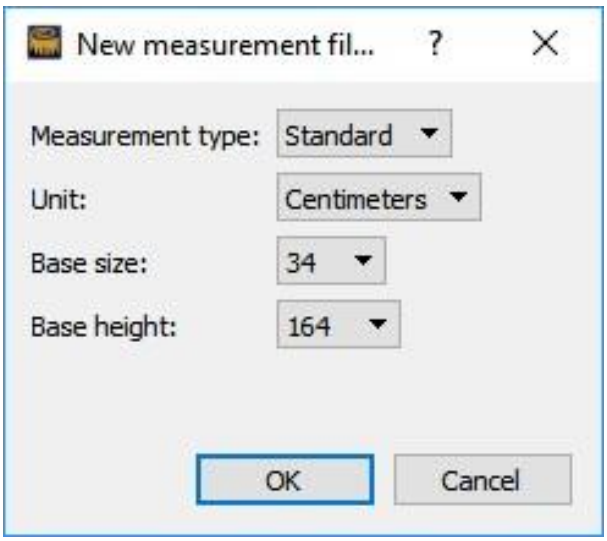
Creating a Multisize Measurements File

In this section, I will be creating a new Multisize Measurement file so I will click on the 'New" Button.

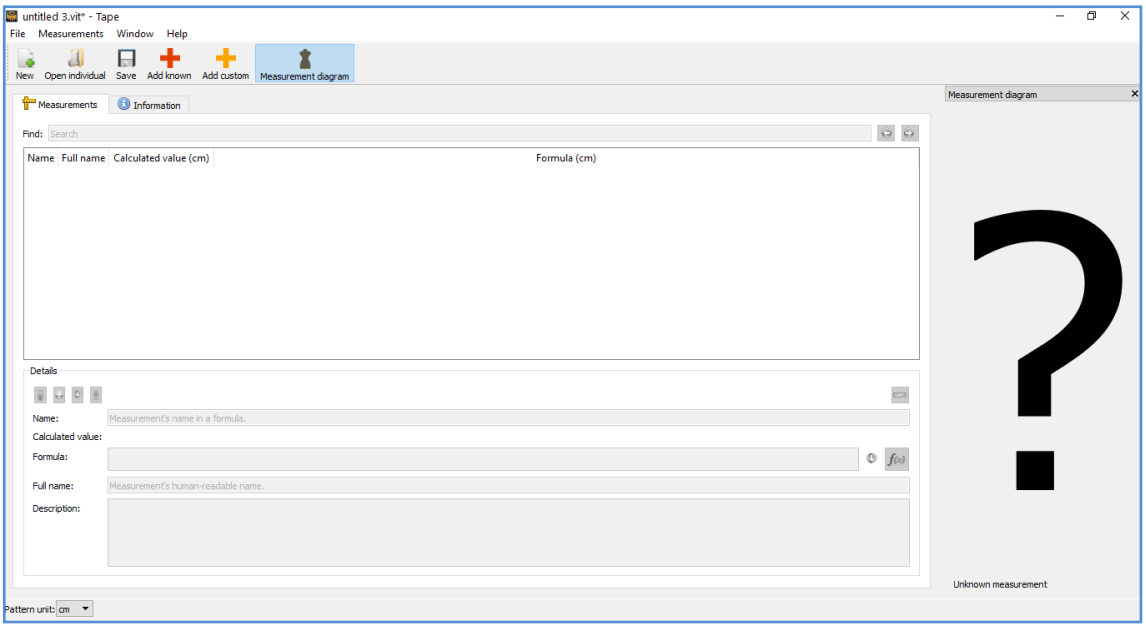
A box will pop up where you may select the details of the new measurement file that you are creating:

In this case, I am using the standard measurements from 'Metric Pattern Cutting for Women's Wear' by Winifred Aldrich to base my patterns on. You will find this book on Amazon - https://www.amazon.com/Metric-Pattern-Cutting-Womens-Wear/dp/1405175672

I have chosen to create a standard measurements file for a women's size 10 which is size 34 and the standard height falls into the 160cm to 172cm range so I chose the height to be 164.



Once you have done that, click on 'Ok' and you presented with a blank measurement file as shown below:



Understanding Multisize Measurements Tables

Multisize measurements tables contain sizing information which **Seamly2D** uses to calculate body measurements for standard-sized figures. It is important to bear in mind that, for the calculations to work, the body measurements must grow proportionately from size to size. However, people of different genders and ages (e.g. babies and toddlers, children, women, men, etc.) grow in different proportions. Therefore, you must provide a separate table for different genders and age groups as the standard measurement tables are divided up into sections of sizes.

Some multisize tables provide a lot statistical data that are hard to describe and require more than just the one column in the individual measurement file. Instead, you provide measurements for a default standard figure and allow **Seamly2D** to calculate the rest. To designate the default standard figure, specify a **base size** and a **base height** for your standard measurements table. Two values, **size** and **height**, uniquely identify standard-sized figures.

By size we usually understand value of chest measurement. According to our internal system of names, it is measurement ***G04 - Bust circumference (bustcirc)***. See page Measurements.

Height values grow in 6 cm increments and are limited to the values listed below:

> Height (cm): 50, 56, 62, 68, 74, 80, 86, 92, 98, 104, 110, 116, 122, 128, 134, 140, 146, 152, 158, 164, 170, 176, 182, 188, 194, 200.

Size values grow in 2 cm and increments are limited to the values listed below:

> Size (cm): 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72.

The format supports values described in two units: centimeters and millimeters (inches aren't supported in multisizes). Convert values described above to millimeters to get appropriate values if you use millimeters in your table.

Usually, the process creating a file with multisize tables requires specifying a base size, a base height and units of increment, then specifying a base value for each measurement. In other words, a column for this size and height you selected when creating the file as a base. To enable **Seamly2D** to generate measurements for other size/height combinations, you must provide a **size_increase** and a **height_increase** for each measurement. The size_increase is the amount **Seamly2D** will add/subtract to the measurement's base value for every step up/down in size. Likewise, the height_increase is the amount **Seamly2D** will add/subtract to the measurement's base value for every step up/down in height.

Let's take a look at some examples to understand how it will work...

Here is an example of how **Seamly2D** would calculate a measurement after a new size and height combination has been selected:

```
distance_between_consecutive_sizes = 20 mm
distance_between_consecutive_heights = 60 mm
// Base values for a table:
base_size = 500 mm
base_height = 1760 mm
// waist girth:
base_value = 780 mm
size_increase = 40 mm
```

height_increase = 0 mm
// Change size and height:
new_size = 560 mm
new_height = 1880 mm
// Calculate the number of steps to go from the base size to the new size.
size_coefficient = (new_size - base_size) / distance_between_consecutive_sizes
= (560 - 500) / 20 = 3
// Calculate the number of steps to go from the base height to the new height.
height_coefficient = (new_height - base_height) / distance_between_consecutive_heights
= (1880 - 1760) / 60 = 2
new_measurement_value = base_value + size_coefficient * size_increase + height_coefficient * height_increase
// Calculate new measurement value for waist girth:
new_waist_girth = 780 + 3 * 40 + 2 * 0 = 900 mm

Let's look at a simpler example:

Height (cm)		56	64	72	80	86	92
Approximate weight (kg)		4–5	6–7	8	9–10	11–12	–
Approximate age		birth	3m	6m	12m	18m	2yrs
B	chest	41	44	47	50	52	54
C	waist	41	43	45	47	49	51
D	hip/seat	41	44	47	50	52	54
E	across back	16.8	18	19.2	20.4	21.2	22
F	neck size	22	23	24	25	25.5	26
G–H	shoulder	4.4	5	5.6	6.2	6.6	7
I	upper arm	14.4	15.2	16	16.8	17.4	18
J	wrist	9.8	10.4	11	11.6	12	12.4
K–L	scye depth	9	9.8	10.6	11.4	12	12.6
K–M	back neck-waist	15.8	17.4	19	20.6	21.8	23
M–N	waist-hip	7	8	9	10	10.75	11.5
K–O	cervical height	42.2	49.4	56.6	63.8	69.2	74.6
M–P	waist-knee	20.2	22.8	25.4	28	30	32
Q–R	body rise	10.2	11.5	12.8	14.1	14.9	15.7
S–O	inside leg	16	21	26	31	34.5	38
H–T	arm length	19.2	22	24.8	27.6	29.8	32
U	head circumference	42.5	44.5	46.5	48.5	49.5	50.5
V	vertical trunk	66	73	80	87	92	97
W	ankle girth	11	12	13	14	14.5	15
X–Y	foot length	8.4	9.6	10.8	12	13	14
Extra measurements (garments)							
cuff size, two-piece sleeve		–	–	–	9.4	9.7	10
cuff size, shirts		–	–	–	14.5	14.8	15.1
trouser bottom width		–	–	–	14.5	15	15.5
jeans bottom width		–	–	–	2.5	13	13.5

Here we see a table that has a correlation between measurements at different heights. The next thing, that we need to do to continue to work with it, is to designate the base size and base height. In this example, we will take size (chest measurement) 50 and height 80. All measurements in the column height 80 are now our base values. Then we calculate the values **size_increase** and **height_increase** for each measurement separately. In this example, the table only provides changes for heights. So, **size_increase** will be always equal to 0. The last thing to do is to find the **height_increase** values. Here are several examples for better understanding:

chest = 50, 52, 54 = 2cm (increment per size)
50 + 2 = 52. 52 + 2 = 54cm
waist = 47, 49, 51 = 2cm
shoulder = 6.2, 6.6, 7 = 0.4cm
body rise = 14.1, 14.9, 15.7 = 0.8cm

Using measurements

To use the measurements, it should be linked to a pattern file. By default, each new pattern file isn't connected to any measurement file. To understand the current state, take a look at the title bar at the top. It

will have the measurement file inside '[' ']' if one was connected to pattern, like this: **pattern.val [measurements.vit]**. Alternatively, you can use the menu **Pattern piece -> Pattern properties**.

To create a measurement file, use the **SeamlyMe** app.

To link new measurements to the pattern file, use menu Measurements -> Load Individual ... or Measurements -> Load Multisize...

If a pattern is connected to standard measurements, to determine which standard figure is currently associated with your pattern, look at the values of size and height displayed at the bottom left of the main window. You may modify these values independently using the corresponding drop-down lists according to the size of pattern you wish to produce.

Setting Up a Measurement List

Multisizes in **SeamlyMe** are an amazing feature of the **Seamly2D** Pattern Making software. A Multisize (or 'Standard') measurement file can help you grade patterns easily.

Seamly2D multisize files are stored with a **.vst** extension and typically stored under the **Seamly2D / measurements / standard** data folder:

Seamly2D
|__measurements
|__standard
|__individual
|__patterns
|__templates

Sizes are grouped into tables where increments between sizes are (more or less) constant.

USA Standard Measurements (from ASTM) are a good place to start looking for standard sizes, but they are pricey. *Hint: There are some very kind people who have shared their standard sizes on the internet or y*ou may have created your own set. (Many designers tweak the measurements to reflect a certain body type or shape.)

Although this is not necessary, I organize my Multisize measurements in a spreadsheet before entering them into **Seamly2D**'s **SeamlyMe** application – here is a PDF of my spreadsheet which you may download here: MultiSize_with_Increments_-_14W_to_32W.pdf, or print Annexure_A, or you may create your own multisize measurements in a spreadsheet before you enter them in **Seamly2D**'s **SeamlyMe** application.

For this exercise, I am using my spreadsheet, so please take note the column and row labels.

The top row states the base size is **14W**. The remaining sizes are calculated from this size. The columns are: **Code**, **Measurement Area**, **Base Value**, and **Increment.**

Down the left-hand side, the table is split into groups: **Girth** (*for circumference*), **Vertical**, and **Width/Length**.

Note: the **Width/Length** category could be simplified to **Width** to avoid confusion, because a length could be vertical or horizontal and could be incorporated into the Girth section.

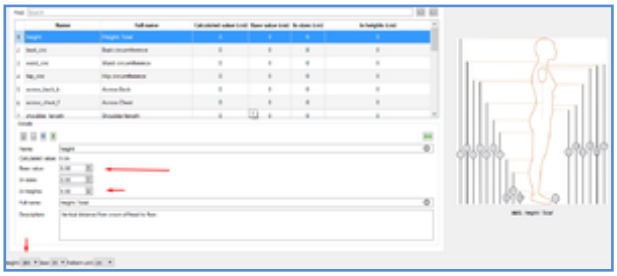
Multisize measurements can be graded based on **Height** or **Girth/Width** measurements, so it is necessary to enter the increment values into the correct column.

Increments for measurements related to the Width or Girth of the person (like **Bust circumference** or **Bustpoint to Bustpoint**) are entered into the **Sizes** column.

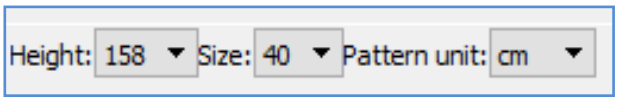
Only increments for measurements related to the **Height** of the person are entered into the **Vertical** column.

This is explained in more detail later.

Understanding the Measurements and Increments



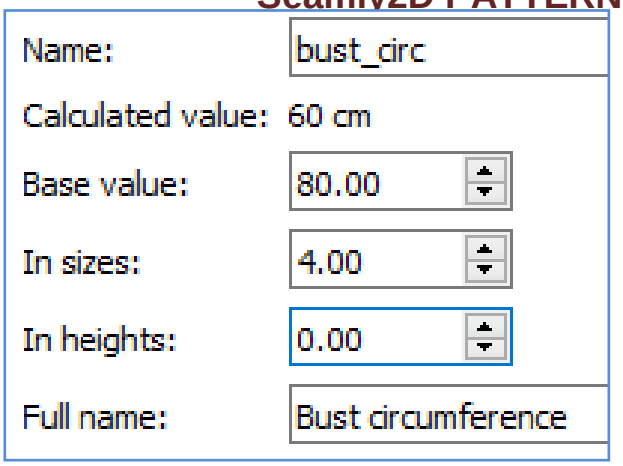
Since this table is for women of 'Medium Height' from 160cm to 172cm, I should have made my base height 160, but **SeamlyMe** only allows 6cm increments from height 50cm to 200cm, and the system I'm using starts at 160cm, it would be better to use 158cm. I have now created my new MultiSize table using the correct base sizes of Height - 158cm and Size – 40 (**which is half of the smallest bust measurement in the table**).



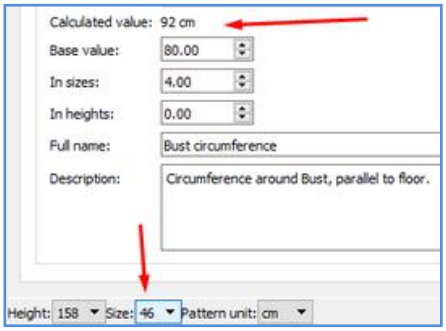
After highlighting the Height line by clicking on it, I can now enter the base value of 158cm and the height value of 6cm or I can use the arrow on the side and select 158cm: The Aldrich sizes don't really work with heights, as such, but I'm doing this 'just in case' it makes a difference. Her measurements are all according to size, so from here on, we will be using only the size increments. In the table, she gives the following for the bust size:

Women of medium height 160 cm–172 cm (5 ft 3 in–5 ft 7½ in)										
Size code	8	10	12	14	16	18	20	22	24	26
BUST	80	84	88	92	96	100	104	110	116	122

The smallest size is 80cm and the next size is 80cm + 4cm = 84cm So we enter 80cm into the base and 4cm into the size. Height remains 0



As you can see, the 'Calculated Value' is 60cm. If you change the size value in the bottom left, the calculated value will automatically change accordingly.



While if you change the Height value, the Calculated Value will remain the same. You may now go down the list entering the base values and increments as explained above. The names of the different measurement points will differ for different tables and between **SeamlyMe** and these tables. Every effort has been made to include as many measurement points as possible and to show them on diagrams so that you may make sure that you are using the correct measuring points.

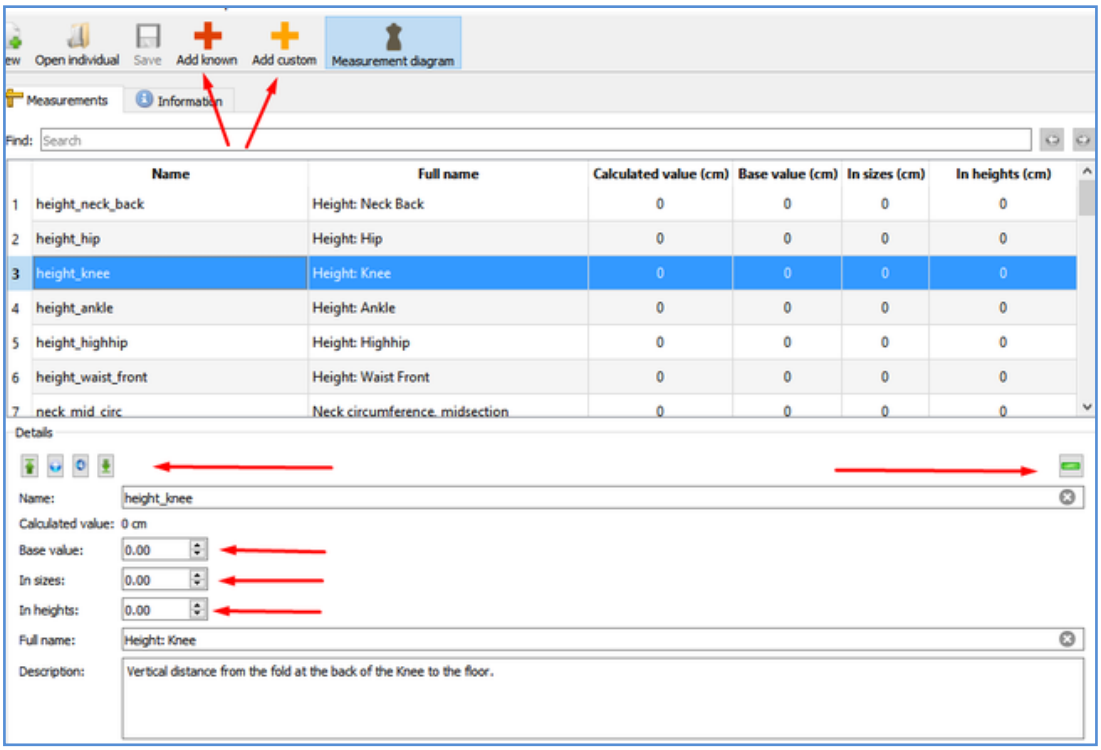
Other Measurement Tables

Some measurement tables give increments by both size and height. These are pure magic and are catered for by having the two increment options which may have values entered into both, which adjust the pattern in both directions when changing the size.

Adding Base Values and Increments

Starting at the top of the list, we can start entering our values. I suggest that you double check that all the descriptions are the same and the diagram corresponds to the list item before entering values. I can't stress this enough because the success of your pattern drafting depends on it and this is why we have created a list, added all the lines and sorted them into order... **To minimize making errors**.

At this point, I advise that all items in the 'Vertical' section of our list have the increments entered into the Height column. The rest can be entered into the 'Size' column.



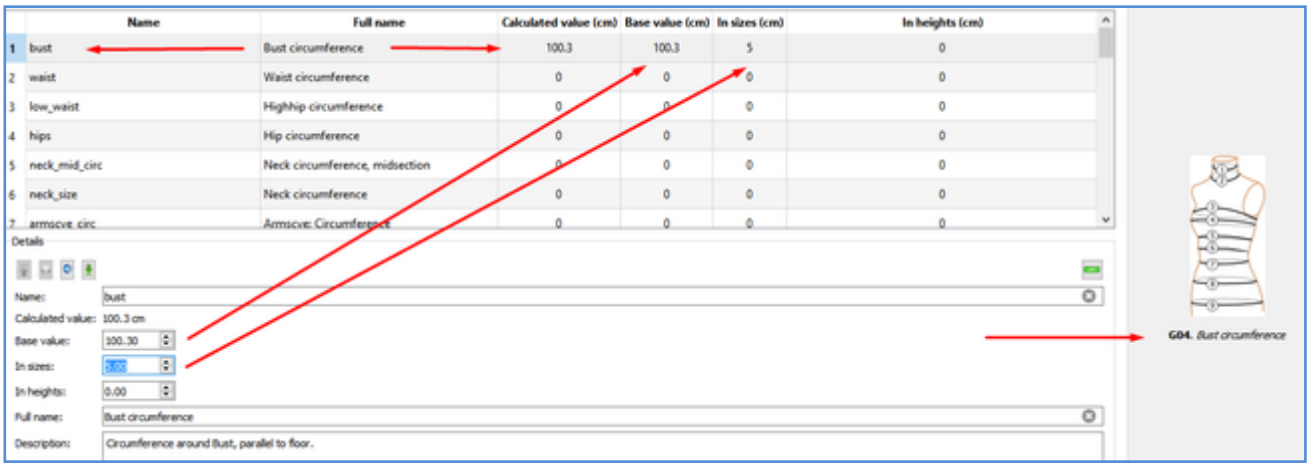
As you can see, I have checked that I have the correct line and it corresponds to the diagram and description. I've entered the base value into the box provided and **SeamlyMe** has added it to the line in the column 'Base Value'. I've entered the increment value into the 'In sizes' box and it has been added to the line in the column 'In Sizes'.

To easily move from the Base Value box to the In Sizes box, you may use the TAB key or the mouse.

Continue in this fashion until you have all the values entered, remembering to enter the increment of the Vertical section into the 'In Height' box so that they can go into the 'In Height' column for those lines.

Also, remember to save your work often. I don't like doing everything twice, so I do.

Here is an image of a part of my completed table:



Once you have entered all your base values and increments, you may save your file one last time and close **SeamlyMe**. It will be available to you when you need it to create a pattern in **Seamly2D**.

WHAT NEXT?

Once you have set up the measurement file that you need, you now have the basis to start creating glorious patterns.

Open Seamly2D and get creative!

Should you have any questions, our lively and friendly forum is there to help you.

Credits

A very special thank you to the whole **Seamly2D** team for making this wonderful program available. Without your input, this tutorial would never have been possible. **Thank you**.

Cover Picture

The elements were designed by **Seamly2D**.

This manual is a combined effort taken from the wiki tutorials and forum.

ANNEXURE A

MULTISIZE MEASUREMENTS - WOMEN'S PLUS - 14W TO 32W				
		Size	14W	
	Code	Measurement Area	Base Value	Increment
GIRTH	G01	Mid-neck	38.70	1.00
	G02	Neck base	40.00	1.25
	G04	Bust	100.30	5.00
	G07	Waist	80.00	5.00
	G08	High hip	101.60	5.00
	G09	Full hip	105.40	5.00
	L11	Upper arm	31.80	1.50
	L13	Elbow	26.70	1.00
	L15	Wrist	16.50	0.25
	L19	Armscye	43.80	1.50
	M03	Thigh, max	64.10	3.25
	M04	Thigh, mid	55.20	3.25
	M05	Knee	40.60	1.25
	M07	Calf	41.30	1.25
	M09	Ankle	25.40	0.75
	N01	Total crotch	72.40	2.00
		Vertical trunk (Neck side, around crotch, to neck side)	160.00	3.75
VERTICAL	A01	Total Height	158.00	6.00
	A02	Cervical height	144.80	1.00
	A06	Hip height	81.60	0.25
	A08	Knee height	46.40	0.00
	A11	Ankle height	7.60	0.00
	A12	High hip height	92.40	0.25
	A13	Waist height	103.50	0.25
	H01	Waist length (front)	41.30	0.75
	H19	Waist length (back - on curve)	38.70	0.75
	M01	Crotch height	76.20	0.00
WIDTH/LENGTH	H36	Shoulder slope (degrees)	24.00	0.00
	I01	Shoulder length	12.40	0.25
	I03	Cross-chest width	34.90	1.25
	I07	Across shoulder back	38.70	1.25
	I08	Cross-back width	37.50	1.25
	J01	Bust point to bust point	20.30	0.75
	J02	Neck to bust point	27.90	1.00
	L01	Arm length - shoulder to wrist	58.40	0.50
	L02	Arm length - shoulder to elbow	34.30	0.25
	L20	Scye depth	20.30	0.25