



# THE MATRIX ORACLE

Version 1.0



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**Niche International Limited**  
Specialist Software Development

## **FASHION TYPE STOCK ITEMS**

Fashion type stock items are products that are usually referred to by their Style name and come in a variety of different colours and sizes. The stock items need not necessarily be fashion clothing. Footwear, Bikes, Jewellery, Computer Games, in fact any item that has a number of variations from within a style, model or type can be referred to as fashion stock.

For example, with clothing you may have an 'Addidas - Short Sleeved – V Neck – Sports Shirt' that has a style reference of say 'ADD100SSVN'. The style reference is unique to that *type* of sports shirt. The sports shirt however, comes in a variety of colours or designs and of course in different sizes. If this sports shirt came in sizes; **Small, Medium, Large** and **Extra Large**, and in colours; **Black, Blue, Red** and **Yellow**, there would be a possible 16 different versions of the same sports shirt as follows:

### **STYLE: ADD100SSVN - Addidas – Short Sleeved – V Neck – Sports Shirt.**

	<b><u>SIZES</u></b>			
	<b><u>Small</u></b>	<b><u>Medium</u></b>	<b><u>Large</u></b>	<b><u>Extra Large</u></b>
<b><u>COLOURS</u></b>				
<b>Black</b>	X	X	X	X
<b>Blue</b>	X	X	X	X
<b>Red</b>	X	X	X	X
<b>Yellow</b>	X	X	X	X

You can see that other types of products like Bikes and Jewelry etc. have similar structures.

It is possible that this simple **Two Level** structure does not subdivide a particular product sufficiently. For example our sports shirt above may additionally come in different materials, say for example, Nylon and Cotton In this case the *Colours* would each need to be divided into *Nylon* and *Cotton* options extending the number of possible variations to 32. You may wish to complicate the matter even further by having different *Fits* for each *Size*, say *Snug Fit*, *Standard* and *Loose Fit*. This would now give the structure a possible 96 variations of the same style of item!

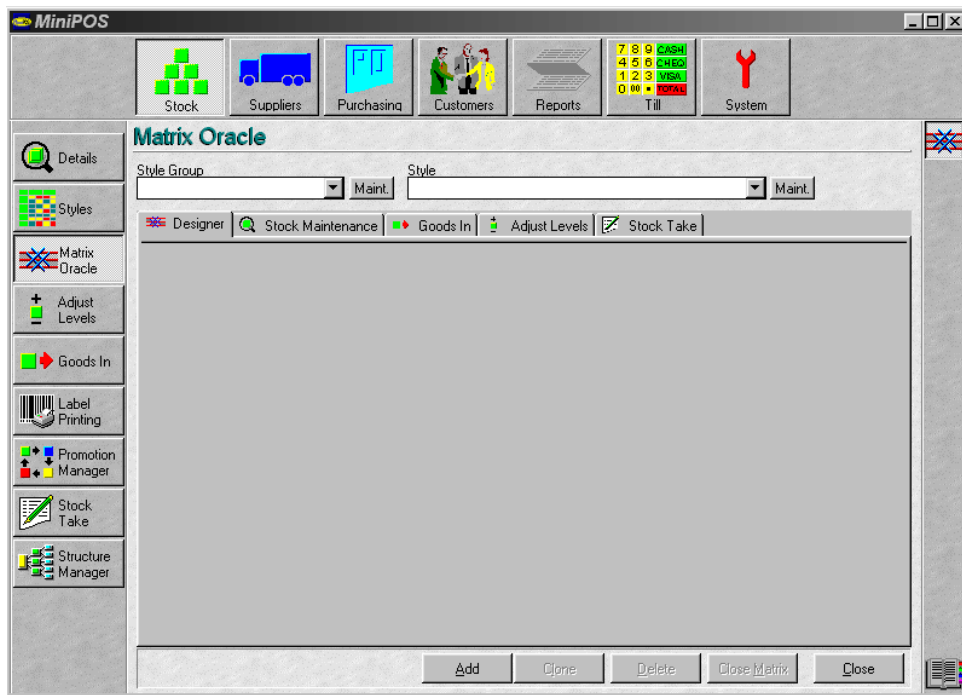
In a stock control and EPOS system, having to create each variation of a fashion type item individually would take a considerable amount of time. Most of the information to be entered is the same except for the different size and colour variations. To overcome this stock creation problem and to better manage fashion stock items, the MiniPOS™ Matrix module has been developed.

## **THE MINIPOS™ MATRIX ORACLE**

The Matrix facility is used for creating and managing fashion type stock items. It firstly allows you to define any number of variations for a particular style. Once the structure is created the Matrix displays a grid similar to a spreadsheet, in which each cell represents a unique combination of the variations defined for that style of item. The Matrix can then be used to create stock instantly for every variety of item, you can manage pricing, stock levels, goods in and much more in an fast and efficient manner with instant on-screen reference to all the possible variations of your items.

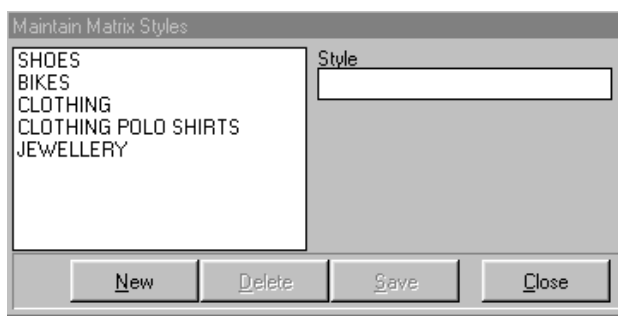
## CREATING A STYLE MATRIX

Select the **Stock** Module at the top of the MiniPOS™ display and then select the **Matrix** button from the facilities displayed on the left of the display. The screen should look similar to the following:



Different styles can be grouped together to simplify future selection. *For example, you may wish to group all your dress styles under the group **Dresses**.*

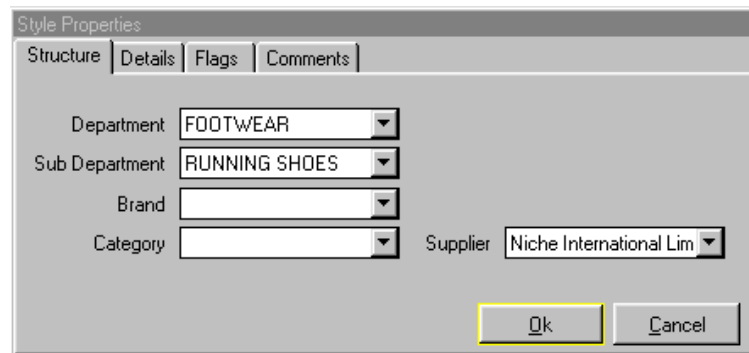
To create a new style group select the **Maint** button next to the **Style Group Combo Box**. The following pop-up will display:



Select the **New** button to create a new style group. The input cursor will move to the **Group Name** field. Type in a name for the style group you are creating and select the **Save** button. To close the pop-up select the **Close** button.

If you wish to delete an existing style group, highlight the group name in the list and select the **Delete** button. A pop-up will appear to confirm this deletion.

To create a new Style Matrix, first select a style group from the *Style Group List*, then click on the **Add button** at the bottom of the form. An input cursor will appear in the **Style Description Combo Box**. Type in the name of the new style you wish to create a Matrix for and then press the **TAB Key**. A **Matrix Properties** pop-up will display as follows:

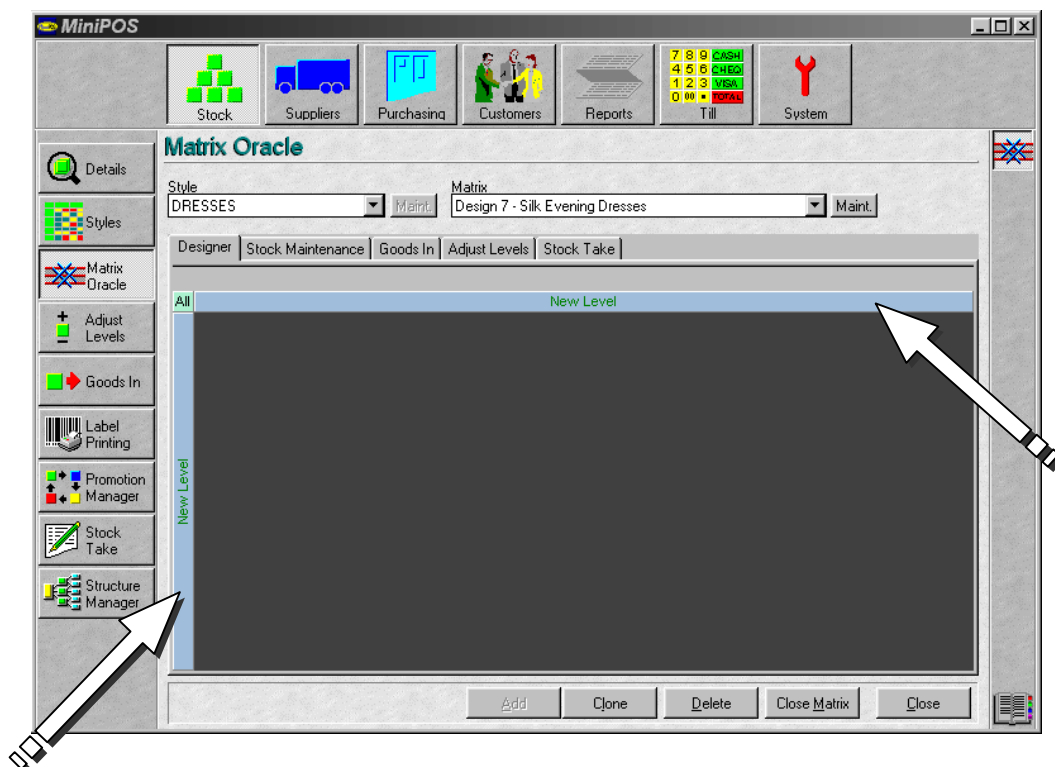


Next, select from the **Department Combo Box**, a department for the items that will be created using this style matrix. (New style descriptions must have at least a department selected before it can be saved.)

Continue by selecting the **Sub-Department, Brand, Category and Supplier Combo Boxes** as appropriate for the items being created.

Next select the **Details, Flags** and **Comments** tabs and enter any default information appropriate to the items that will be created using this style matrix. (The information in these fields will be used as default values when creating stock and can be amended at any time before and during stock creation.)

When you have finished entering the default values into the various fields select the **Ok** button. The **Matrix Properties** pop-up will close and two **Matrix Level Bars** will display, one along the top of the grid area, and one to the left as follows:

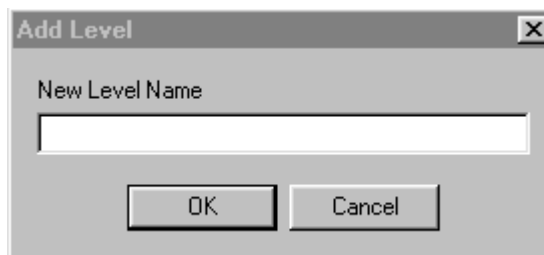


## **ADDING LEVELS**

Each style matrix is divided into a number of columns and rows which are created from the various **levels** and **sections** that you define. The columns and rows create a matrix and each cell within the matrix refers to a specific combination of the various sections defined, in other words, each cell refers to an individual product in a range of items belonging to a particular style.

A **Level** refers to a particular group of **Sections**. (For example, a **Size Level** would group all the sizes that a particular style of item comes in.) A level can have any number of sections. You can add another Level to an existing Level. There is no limit to the number Levels that can be created for each style matrix.

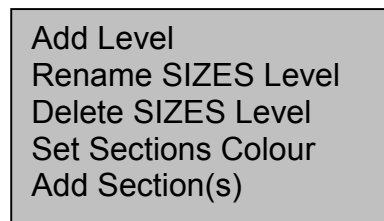
To create a new Level, (the principle is the same whether creating Levels as Columns or Rows), using the mouse pointer, right click on a **Level Bar**, an **Add Level** button will appear next to the mouse pointer. Move the mouse pointer over the **Add Level** button and left click. The following pop-up will appear:



Type a name for this level and select the **Ok** button. (For example if you are creating sizes, these are usually defined as column sections, type in the name **SIZE**.)

The level bar will now show the title '**SIZE**'. This level is now referred to as the **SIZE Level**.

Should you wish to **Rename** or **Delete** the **SIZE Level**, using the mouse pointer, right click over the **SIZE Level** and the following pop-up will appear:



The **Add Level** option allows you to add another level of sections to the existing **SIZES Level**. This will be explained further on in this manual.

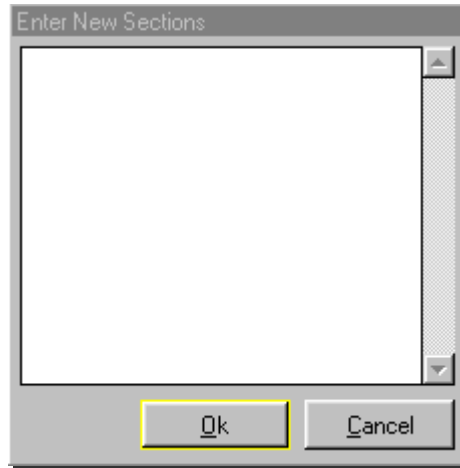
The **Set Sections Colour** option will enable you to define the colour of the **Section** header boxes.

The **Add Section(s)** option is explained in the following text:

## **ADDING SECTIONS TO LEVELS**

You can now define the **Sections** for this **SIZE Level**. Each Section will represent an individual size that the style of product comes in, e.g. 7, 7½, 8, 8½, 9, 9½, 10, 10½, 11.

To add sections to a level, right click on the level bar and the pop-up shown above will appear. Using the mouse pointer select the **Add Section(s)** option. The following pop-up will appear:

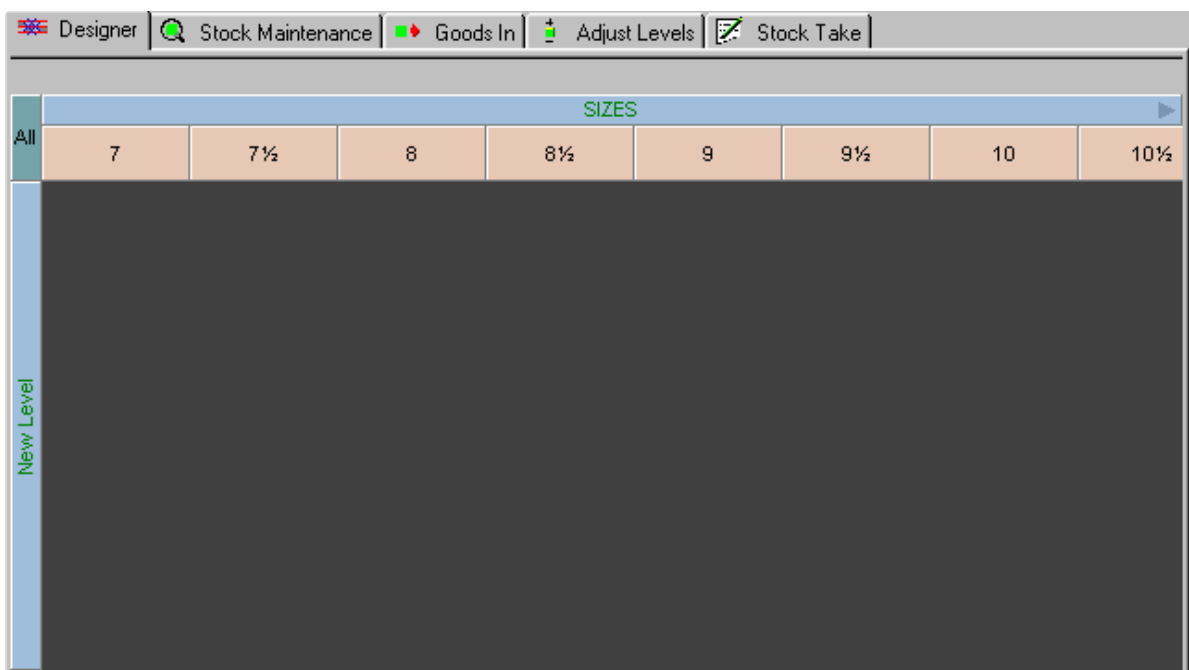


Type the name of the first **Section** for the **SIZE Level**, e.g. **7** and press the **Return Key** on the keyboard. The input cursor will move to the next line in the list.

*It is worth remembering that the style name will form the first line of description for our new items and the combination of **Section Names** will form the second line of description. You may wish to include the **Level Name** with each **Section Name** to give a better description, e.g. **Size 7, Size 7½ etc.***

Continue to enter the names for all the remaining **Sections** in the **SIZE Level** pressing the **Enter Key** after each name. When the **Sections List** is complete, use the mouse pointer and left click on the **Ok Button**.

The Matrix display will look as follows:



If you have entered a number of **Sections**, they may not all fit into the Matrix display. When this occurs a small arrow appears in the **Level Bar** indicating that additional **Sections** exist. To scroll the Matrix display and bring into view the other **Sections**, position the mouse pointer over the small arrow in the **Level Bar** and click the left mouse button. The Matrix display will scroll one **Section** at a time. When you have scrolled to the end **Section**, the small arrow will appear on the left of the **Level Bar** to allow you to scroll back.

*It is worth noting that if you are creating a Matrix that has several more sections in one Level than another, create the Level with the most sections as Rows, i.e. on the left hand side of the Matrix instead of the top. For example, if you were creating a Matrix for a style that has several sizes but only a few colours, create the SIZES Level on the left and the COLOURS Level at the top. This would display many more visible size sections on the Matrix display as there are always more rows than columns displayed and this would reduce the need for scrolling. Of course, unfortunately style format conventions normally dictate that 'SIZES are along the top and COLOURS are down the side' but the choice is yours.*

To complete the Matrix for the example style you must now create the **COLOURS Level** on the left and enter the colour names for each **Section**. Repeat the process you used when creating the SIZE Level by right clicking on the left hand **Level Bar** in the Matrix display, adding the Level name '**COLOURS**' and then adding the sections as follows:



When complete the Matrix should look as follows:

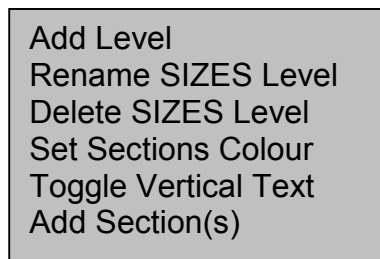
Designer   Stock Maintenance   Goods In   Adjust Levels   Stock Take								
		SIZES						
All		7	7½	8	8½	9	9½	10
COLOURS	Black							
	Brown							
	Brown/Black							
	Tan							
	Burgundy							
	Grey							

## **ADDING ANOTHER LEVEL TO AN EXISTING LEVEL**

One of the most powerful features of the Matrix is the ability to create an unlimited number of Levels in defining a style of product. A new Level can be added to an existing Level at any time and the Sections defined for this additional Level will automatically subdivide each Section of the first Level.

For example, If the shoes in the example style came in different **Widths** in each of the **Sizes**, a new **WIDTH Level** could be created attached to the **SIZES Level**. In this case, each **Section** of the **WIDTH Level** will divide each **Section of the SIZES Level**. The **Section** names of the **Width Level** in the example will be named **Narrow, Standard** and **Wide**.

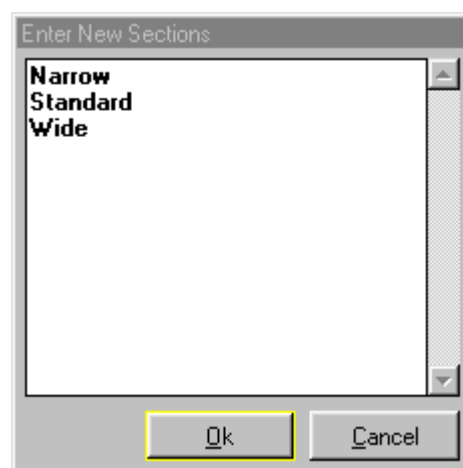
To add another level to the **SIZE Level**, position the mouse pointer over the **SIZE Level Bar** and click the right mouse button. The following pop-up will appear:



Position the mouse pointer over the **Add Level** option to highlight it and then press the left mouse button. The **Add Level Pop-up** will appear. Type in the name of the new level, e.g. **WIDTH** and select the **Ok Button**.

A new **WIDTH Level Bar** will appear below the **SIZE Level Sections**. You can now define the **Sections** for the **WIDTH Level** by right clicking on the **WIDTH Level Bar** and selecting the **Add Section(s)** option from the pop-up. The **Enter New Sections** pop-up will now display.

Type in the names of the new **WIDTH Sections** pressing the **Enter Key** after each entry as follows:



Select the **Ok Button** at the bottom of the pop-up and the Matrix should now display as follows:

Designer   Stock Maintenance   Goods In   Adjust Levels   Stock Take							
All	SIZES						
	7			7½			
	WIDTH						
	Narrow	Standard	Wide	Narrow	Standard	Wide	Narrow
COLOURS	Black						
	Brown						
	Brown/Black						
	Tan						
	Burgundy						
	Grey						

Notice that the **SIZE Sections** have expanded to include the **WIDTH Sections**. The Matrix could be further divided by adding a **MATERIAL Level** to the **COLOURS Level** and so on.

An alternative example of a 'Four Level Matrix' with created stock is shown below:

Designer   Stock Maintenance   Goods In   Adjust Levels   Stock Take											
All	COLLAR SIZE										
	13		13½		14		14½		15		
	FIT										
	Tailored	Straight	Tailored	Straight	Tailored	Straight	Tailored	Straight	Tailored	Straight	
COLOUR	White	SLEEVE	Long Sleeve								
		Short Sleeve									
	Sky	Long Sleeve									
		Short Sleeve									
	Pale Yellow	Long Sleeve									
		Short Sleeve									
	Burgundy	Long Sleeve									

You may notice that the cell sizes in the above example have been changed. You can resize cells to suit the data or descriptions that you are using. In this way you can display more of the Matrix by removing unwanted space. This resizing is explained in the next section.

## RESIZING LEVEL BARS, SECTION HEADERS AND CELLS

Level Bars, Section Headers and Cells can be resized either individually or as a group. If the name of a **Section** is longer than the default size of the **Section Header**, the beginning and end of the text will not be visible. The **Section Header** can be resized to display the entire name. You may wish to resize only one **Section**, or to keep the Matrix display uniform, you may choose to resize all **Sections**.

As it will usually be the **Sections** that require resizing, the following explains the procedure, which is also valid for **Levels** and **Cells**.

To resize the *width* of a **Section**, carefully position the mouse pointer over the right hand edge of the **Section Header** that you wish to resize. When the mouse pointer is over the right hand edge of the **Section Header** the mouse pointer will change to a double headed arrow. As you move off of the **Section Header** edge, the mouse pointer will reappear.

In the example below, the **Pale Yellow Section** of the **COLOURS Level** does not quite fit and the mouse pointer has been positioned over the right hand edge. The mouse pointer has changed to a double-headed arrow as follows:

The screenshot shows a software interface with a menu bar at the top containing 'Designer', 'Stock Maintenance', 'Goods In', 'Adjust Levels', and 'Stock Take'. Below the menu bar is a table with a grid of cells. The table has a header row with 'COLLAR SIZE' and sub-headers '13', '13½', '14', '14½', and '15'. Below this is a row with 'FIT' and sub-headers 'Tailored' and 'Straight' repeated for each collar size. The main body of the table is a grid of green cells. On the left side, there are section headers for 'COLOUR' and 'SLEEVE'. The 'COLOUR' section has 'White', 'Sky', 'Pale Yellow', and 'Rugundy'. The 'SLEEVE' section has 'Short Sleeve' and 'Long Sleeve'. A mouse cursor is positioned over the right edge of the 'Pale Yellow' section header, and a double-headed arrow is visible, indicating that the section is being resized.

To resize the width, click and hold down the left mouse button and drag the cursor to the right. The **Section** will expand as you move the mouse. When you have expanded the width of the **Section** sufficiently, release the left mouse button.

Notice that all of the **Sections** widths expand. This is because you are resizing the width of a **Row Section** and to keep the Matrix cells in line, all **Row Sections** must be the same width. Conversely, when resizing the height of a **Column Section**, all associated sections resize.

Individual **Column Section** widths and individual **Row Section** heights can be defined using the same procedure as above. For example, if you wanted to expand the width of the **'13' Section** only in the **SIZE Level**, you would position the mouse pointer on the right hand edge of the **13 Section** and drag the double-headed arrow to the right. Only the **13 Section** would expand as follows:

		COLLAR SIZE						
All		13	13½	14				
		Tailored	Straight	Tailored	Straight	Tailored	Straight	Tail
COLOUR	White	Long Sleeve						
		Short Sleeve						
	Sky	Long Sleeve						
		Short Sleeve						
	Pale Yellow	Long Sleeve						
		Short Sleeve						
	Burgundy	Long Sleeve						
		Short Sleeve						

Notice that the **WIDTH Sections** attached to the **13 Section** expand equally to fit the new size.

If you wish to change the width of all **Sections** for a particular **Column Level**, you first press and hold down the **CTRL Key** whilst using the mouse to expand the **Section**.

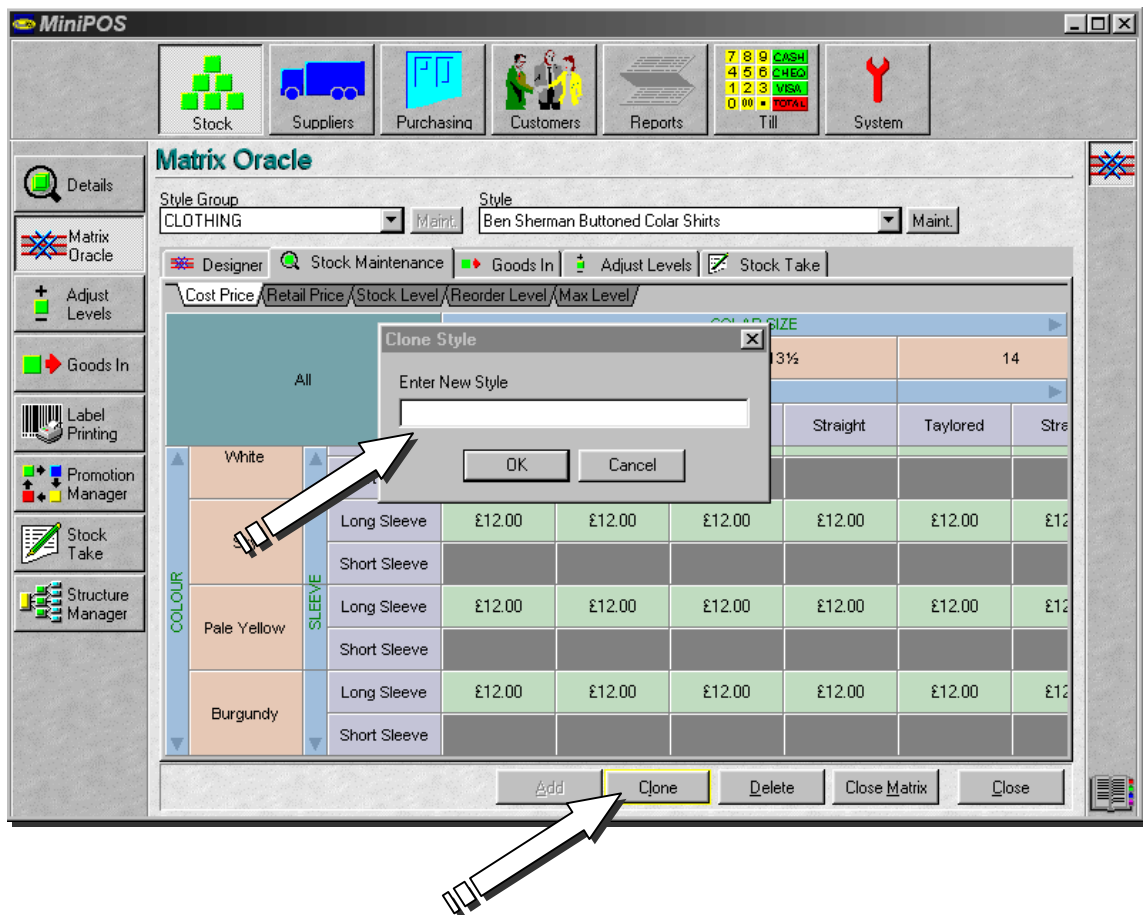
Where there are multiple levels, the sections of the additional levels are repeated as can be seen in the **WIDTH Sections** and **SLEEVE Sections** above. To expand all of the **Sections** that have the same name in a particular level, press and hold down the **ALT Key** whilst using the mouse to expand these sections.

The best way to understand all this flexibility is to experiment with resizing both the height and widths of different level bars and sections on both simple and complex Matrix. Future versions of the Matrix will permit images and multiple entries per cell to be defined, resizing will come into it's own then.

## CREATING A NEW STYLE MATRIX BY COPYING AN EXISTING MATRIX

It is necessary that each style of product that you wish to create has its own Matrix. Therefore if in your particular operation you require 100 different styles, you would need to create 100 different style Matrix. To simplify the creation of additional Matrix you can copy or clone an existing Matrix. The cloned Matrix is given a new style name and all of the style properties from the original Matrix are copied to the new one. The Matrix design will be identical to the original but none of the data from the original Matrix will copy to the new one.

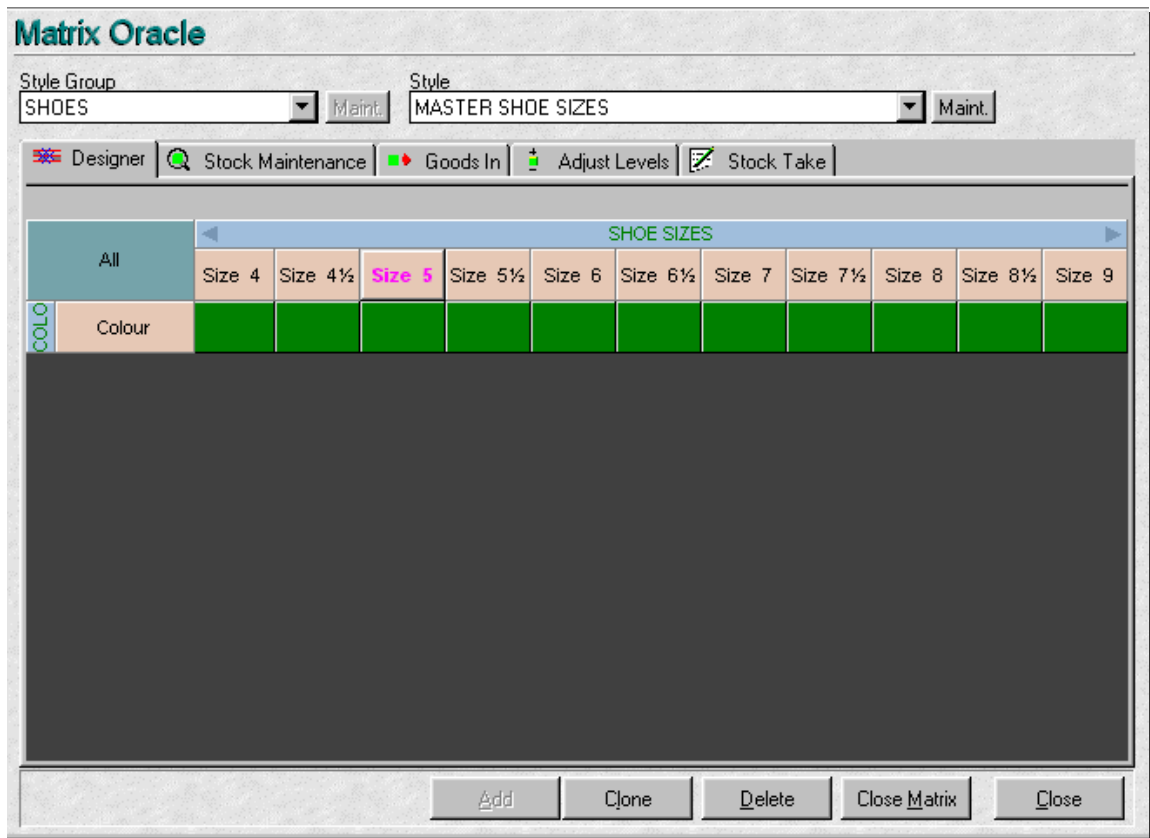
To clone an existing Matrix you must first display the Matrix that you wish to clone. Close any open Matrix by clicking on the **Close Matrix Button** at the bottom of the form and then select the **Style Group** and the **Style** to display the required Matrix. At the bottom of the **Matrix Oracle Form** click on the **Clone Button**, a **Clone Style Pop-up** will appear as follows:



Type in the name of the new style that you wish to clone this Matrix to and click on the **Ok Button**. The **Clone Style Pop-up** will close and the original style Matrix will remain displayed.

To select, view and edit your new cloned style Matrix, you close the existing Matrix and select the **Style Group** and **Style** for the new Matrix.

You may find it useful to create a **Master Matrix** from which you can clone new styles of products that use, for example, a common size range. If you have a large range of shoes, you could create a **Master Shoe Size Matrix** that you could clone for each style of shoe and then simply add the colours or materials relevant to each new style Matrix that you create. Remember, you must have at least one **Row Section** to create a Matrix. In the example below the **Row Section** is called **Colour** as a reminder and looks as follows:



You can now call up this *Master Shoe Size Matrix* and clone it whenever you wish to create new shoe styles. All that is then required is for you to either **Rename** the **Colour Section** or delete it and enter new ones. Of course this *Master Matrix* could also show a standard range of colours for you to delete or modify for each new style.

## CREATING STOCK RECORDS

So far we have only covered the design and creation of a Style Matrix. As previously explained, each style of product requires it's own Matrix, but this in itself does not create any individual stock records, we must use the Matrix for each style and create the individual stock items that we require in our system.

Each **Cell** in a Matrix represents a specific individual stock item. A **Cell** refers to a unique combination of the various **Sections** within a particular style Matrix, for example the **Cell** pointed to in the diagram below represents the specific stock item:

<b><u>Style:</u></b>	<b><u>Waist:</u></b>	<b><u>Leg:</u></b>	<b><u>Colour:</u></b>
Hugo Boss Mens Casual Turn Ups	W30	L31	Charcoal

Example:

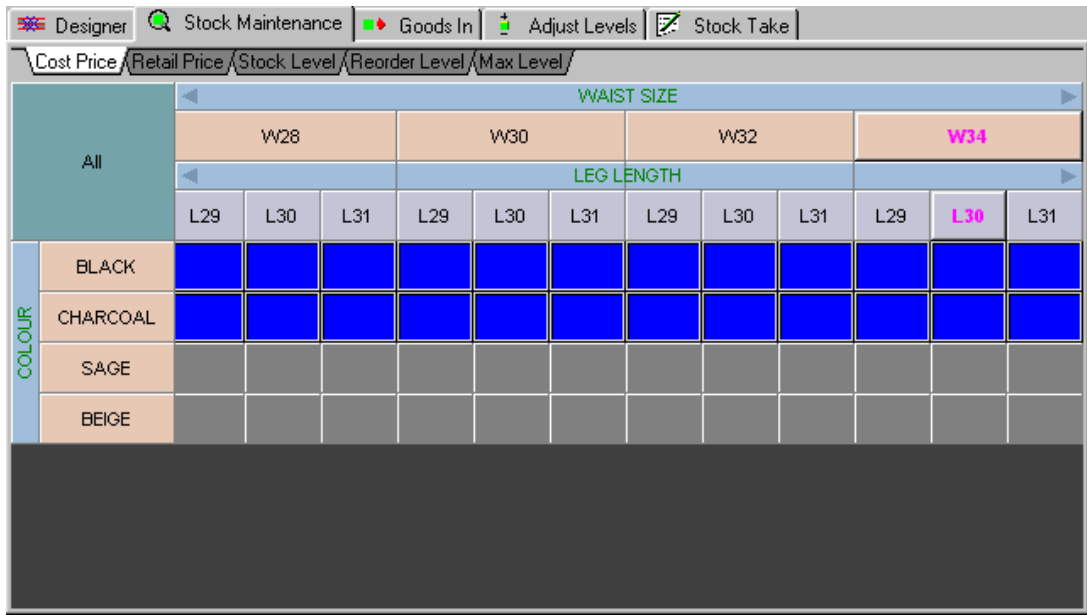
		WAIST SIZE											
All		W28			W30			W32			W34		
		LEG LENGTH											
		L29	L30	L31	L29	L30	L31	L29	L30	L31	L29	L30	L31
COLOUR	BLACK												
	CHARCOAL												
	SAGE												
	BEIGE												

In the Matrix above there are a possible 48 individual products that can be created. The reason I say "a possible 48" is that some operators may wish to only create those products that they actually stock, whereas others may wish to create the entire range showing which items are available even if not in stock.

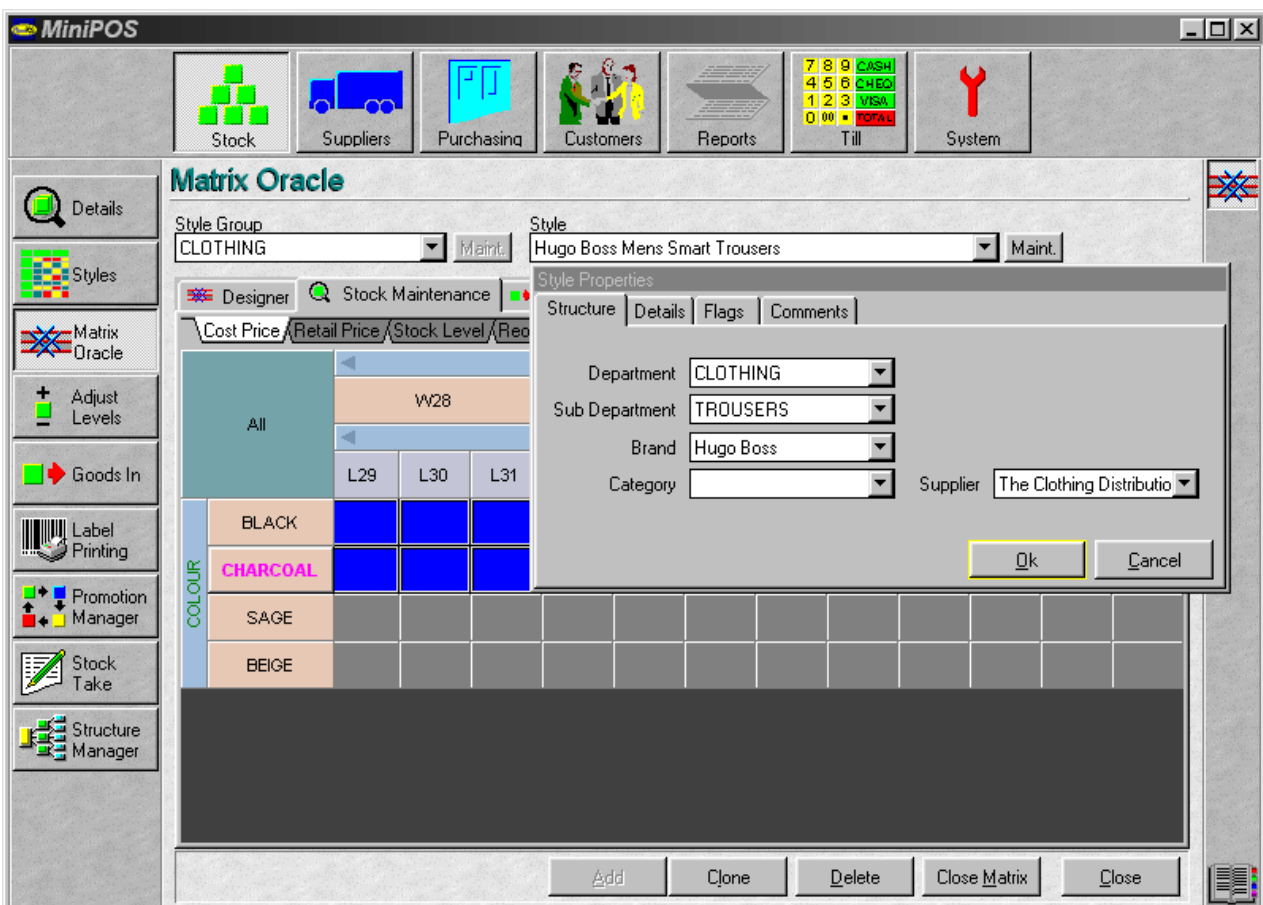
To create individual stock records from a style Matrix, you must first select the **Stock Maintenance Tab** by positioning the mouse pointer over the TAB and clicking the left mouse button.

The Matrix display will remain as shown above. Note that the **Cells** are coloured Grey. If a **Cell** is coloured in Grey it signifies that no stock item has been created for that cell. In the example above, whilst the Matrix displays all the possible stock items for the selected style, no stock records have been created.

To create individual stock records from a style Matrix you must highlight the **Cells** that you wish to create stock records for. Position the mouse pointer over the first **Cell** in the range and whilst holding down the left mouse button, drag across the other **Cells** in the range and release the left mouse button. The selected **Cells** should be highlighted as follows:



Move the mouse pointer over any highlighted **Cell** and click the right mouse button. A **Create Stock Button** will appear next to the mouse pointer. Move the mouse pointer over the **Create Stock Button** and click the left mouse button. The **Style Properties pop-up** will appear and the screen should appear as follows:





When you have entered your new data for the **Cell** you can either press the **Enter Key** and the **Cell** immediately to the right will change to *Edit Mode*, or you can use the **Arrow Keys** to move in any direction, changing the **Cell** that you move to into *Edit Mode*. Using the **Arrow Keys** in this way provides for fast data entry without the need to keep pressing the **Enter Key** to confirm inputs.

## GOODS IN USING THE STYLE MATRIX

You can enter deliveries of stock items using a style Matrix by selecting the **Goods In Tab**. You enter the quantities and cost price of each stock item received. When processed the received items are added to the stock level and if the **Print Labels On Receipt Of Goods Flag** is set, the number of labels required will automatically be added to the *Bar Code Label Print List* for subsequent printing.

To enter deliveries, first select the style Matrix for the items that you are receiving and click on the **Goods In Tab**. Click on the first item **Cell** to enter *Edit Mode*. Type in the quantity of this item received and either press the **Enter Key** or the **Arrow Keys**. A **Purchase Price Pop-up** will appear under the selected **Cell**. The figure displayed in the **Purchase Price Pop-up** is either the default cost price as defined in the **Style Properties Pop-up** if there is no *Last Cost Price* for the item, or is the *Last Cost Price* if the item has previously been received.

The display should appear as follows:

		COLAR SIZE								
		13	13 1/2	14	1 1/2					
COLOUR	All	Taylor'd	Straight	Taylor'd	Straight	Taylor'd	Straight	Taylor'd	Straight	
	White	Long Sleeve	4							
		Short Sleeve	Purchase Price							
			12.00							
	Sky	Long Sleeve								
		Short Sleeve								
	Pale Yellow	Long Sleeve								
		Short Sleeve								
Burgundy	Long Sleeve									

You can accept or modify the **Purchase Price** for the item you are receiving and again press the **Enter Key** or **Arrow Keys** to move to the next item.

When you have finished entering the received items you must click on the **Apply Button** at the top right of the Matrix as indicated above. A pop-up will ask you to confirm that you wish to process these items into stock. If you wish to proceed click on the **Ok Button**. Next a **User Reference Pop-up** will appear as follows:

User Reference

Enter User Reference

BOSS119990904093149

OK Cancel

There is a system generated reference number for this Goods In transaction, you can either accept this reference or if you prefer enter your initials and date or perhaps the delivery note number for the goods being received.

To proceed click on the **Ok Button**. The **Goods In Processing Pop-up** will now display and you may enter any additional discounts or charges for this delivery. When you are satisfied with this information click on the **Ok Button** and the received stock items will be processed.

As previously mentioned, if you have the **Print Labels On Receipt Of Goods Flag** set either in the **Style Properties Pop-up** or in the stock item **Flags Tab** of the **Details Form**, the number of items received will be added to the **Bar Code Print List** in the **Label Printing Form** as follows:

