

# PIQUANT

## Packing Management



### Installation

Unzip the file PIQUANT-demo.zip and execute the file PIQUANT.MSI. Once the application has been installed you may execute it by clicking on the desktop icon that is created by the installation process. Alternatively run the file PIQUANT.EXE from the BIN directory of your installation folder.

### Restrictions

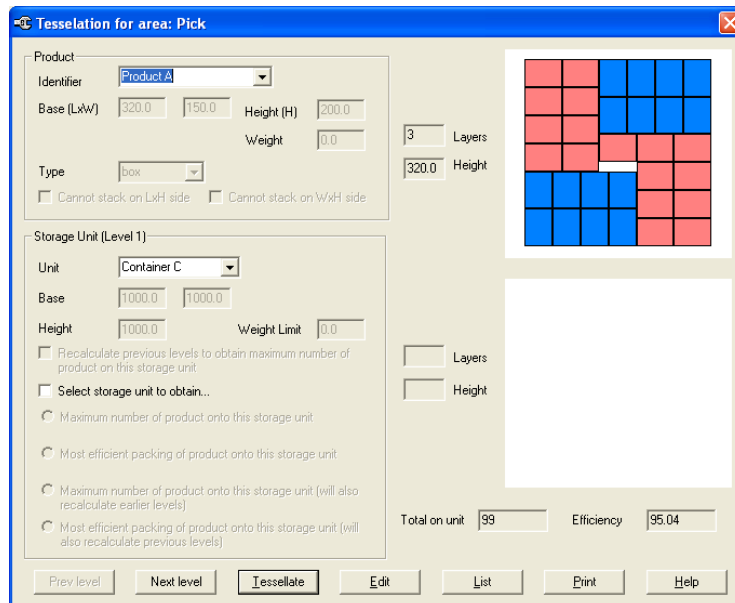
This installation is a fully functional system and is licenced free of charge and under no obligation for a period of 30 days.

PSL currently have a limited number of focus group licences available for the PIQUANT product. If you would like to participate in a short email/telephone discussion on how PIQUANT could be improved for use by your business in exchange for a free focus group licence please contact PSL at [registrations@pslopt.co.uk](mailto:registrations@pslopt.co.uk).

### Using the system

#### Packing your products

Open the demo scenario by selecting the *Scenarios/View Scenario* menu option. Next open the tessellation dialog by selecting *Tessellate/Single*.



# PIQUANT

## Packing Management



This dialog allows you to calculate a packing layout for any of the products and storage containers. Both the calculated packing plan and the associated quantity and efficiency information appear on the right hand side of the screen when a product and storage unit are selected from the drop down lists. Each plan is made up of packing layouts with no more than two different layer patterns. The number of times each layer pattern is repeated is shown to the left of the pattern.

You may ask the system to calculate the best container for the selected product. Check the box “*Select storage unit to obtain*” and then using the activated radio buttons to select your packing criteria. You can ask for the container that accommodates the greatest number of product units or the container that can be used most efficiently (i.e. with minimum wasted volume). Press *Tessellate* to see the resulting layout.

Press the *List* button to display a table of the packing efficiencies of a selected product when combined with each of the storage units. Simply double click on a line in the table to display the corresponding tessellation diagram.

Piquant also supports multiple level packing where your choice of container depends not only on the efficiency of packing a product into a container but also on the efficiency of packing that container on to a pallet.

Press the *Next Level* button to see the packing plan for your selected container on to a pallet. The container you have previously selected will appear in the top dropdown box. Select *Pallet* from the *Unit* dropdown box and its packing layout will be displayed.

You may again use the “*Select storage unit to obtain*” checkbox and radio buttons to request the system to choose the best level 2 storage unit (best pallet) for the selected container.

In addition you can request the system to search for the combination of container and pallet that together pack the greatest quantity of the selected product on to the pallet or that result in the most efficient packing of the selected product on to the pallet.

The packing diagrams may be changed manually at any time using a pattern editor, press the *Edit* button to access this screen. The diagrams can also be printed using the *Print* button.

The Piquant system offers the following facilities:

- ***Packing of cuboid and cylindrical shaped products***
- ***Weight limits for storage units***
- ***Permitted overhang of the base of the storage unit***
- ***Restrictions on the orientation of a product or container***
- ***Planning across multiple storage levels (e.g. product/container/pallet/van etc.)***

# PIQUANT

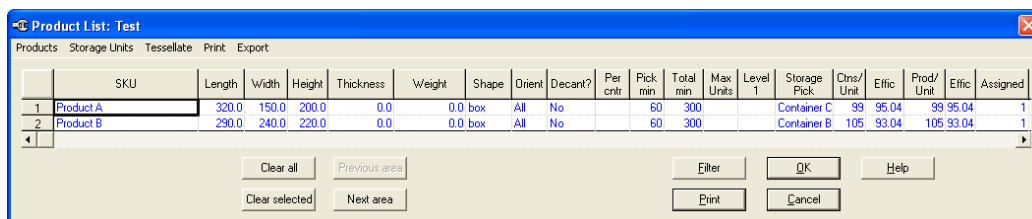
## Packing Management



### Packing a list of products

Piquant is designed to manage a catalogue of products and a wide variety of possible storage units. It may be cumbersome to handle each of a long list of products separately through the *Single Tessellate* dialog and so Piquant provides facilities to work with a list of products simultaneously.

On exiting the *Single Tessellate* dialog the *Product List* will reappear.



The screenshot shows a window titled "Product List: Test" with a menu bar containing "Products", "Storage Units", "Tessellate", "Print", and "Export". Below the menu bar is a table with the following columns: SKU, Length, Width, Height, Thickness, Weight, Shape, Orient, Decant?, Per cent, Pick min, Total min, Max Units, Level 1, Storage Pick, Dims/Unit, Effic, Prod/Unit, Effic, and Assigned. The table contains two rows of data:

	SKU	Length	Width	Height	Thickness	Weight	Shape	Orient	Decant?	Per cent	Pick min	Total min	Max Units	Level 1	Storage Pick	Dims/Unit	Effic	Prod/Unit	Effic	Assigned
1	Product A	320.0	150.0	200.0	0.0	0.0	box	All	No		60	300			Container C	99	95.04	99	95.04	1
2	Product B	290.0	240.0	220.0	0.0	0.0	box	All	No		60	300			Container B	105	93.04	105	93.04	1

Below the table are several buttons: "Clear all", "Previous area", "Filter", "OK", "Help", "Clear selected", "Next area", "Print", and "Cancel".

You may use the *Tessellate* menu options to assign containers and pallets to any products in the list that do not currently have storage units assigned.

To recalculate all assignments click the Clear all button. All current assignments of storage units will be removed. Next choose a *Tessellate* menu option. Select the option *Tessellate/All/For maximum efficiency* to assign a container and pallet combination that makes the best use of the pallets capacity. Select the option *Tessellate/All/For maximum number* to assign a container and pallet combination that accommodates the greatest number of product units on one pallet.

The Piquant system offers the following facilities.

- **Limited availability of containers.**
- **Import/Exporting between the product list and spreadsheet software.**
- **Planning for more than one storage area (e.g. picking area and background storage)**

### Further information

For further information on PIQUANT please contact PSL either via email at: [info@pslopt.co.uk](mailto:info@pslopt.co.uk) or by phone on +44 (0) 161 905 1665.