iDeaX Africa
SmartFactory Report Tool
User Guide

Objective of this guide

This document is intended for anyone wishing to use the iDeaX Africa SmartFactory Report Tool. The purpose of this document is to teach you how to use this software in a fairly easy and quick guide.

This document contains a detailed view of this software with illustrations and examples in support to help you exploit all the options and opportunities that are offered in this program.
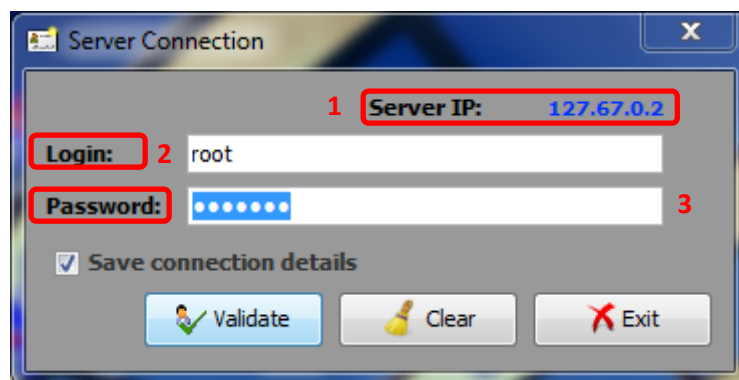
I   Start of Application

After successful installation, via the application shortcut either from the desktop or all programs in the start menu of the OS, launching this application is as below.
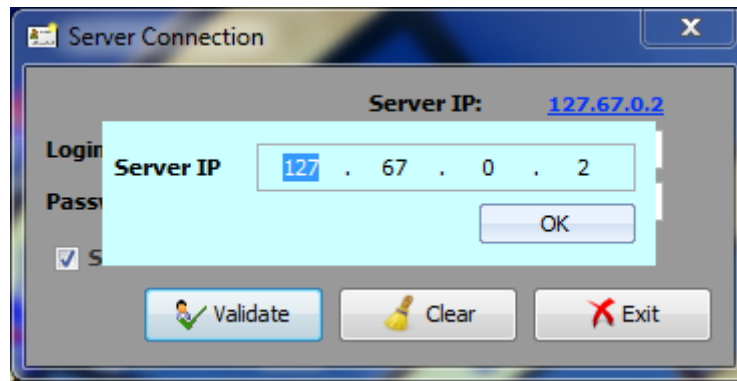

II   Server Connection

Being a client-server application, using the SmartFactory Report application requires authentication then a connection to the server, that is to say, it must be in the same local network as the server to run. To use this application, the server requires a login and a password.

This interface provides the following:

1- The Server IP Address

The Server IP loads with a default IP (127.0.0.1) meaning that the server is located on the same machine as the current application. Otherwise someone must provide the Server IP where the actual database is located as shown below
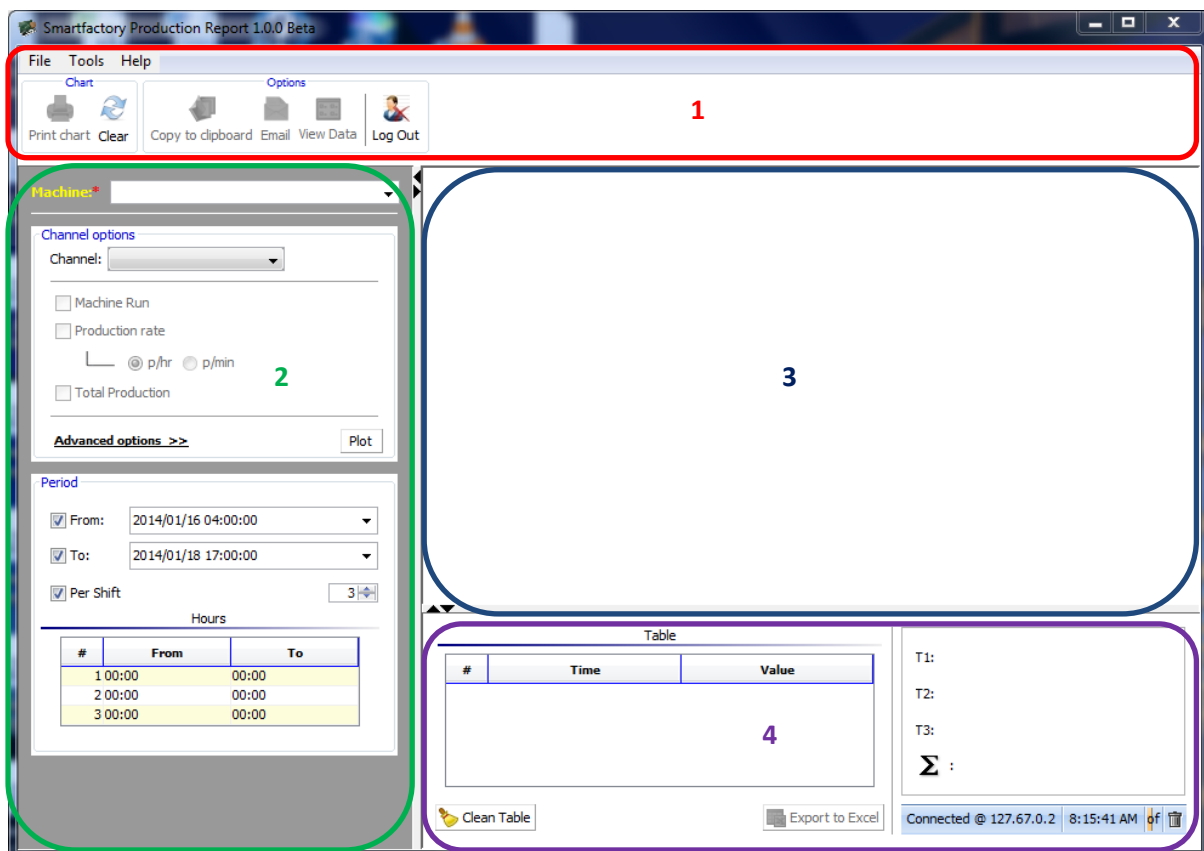
2- The Login: The default Login of the SmartFactory database is "root".

3- The password: "wnnr123"

The user has the choice to save the login details to log faster the next time by checking the "Save connection details". The "Clear" button clears and resets the interface. "Exit" button closes the application. If no errors, clicking on the "Validate" button loads the Main interface.

III- The Main Interface

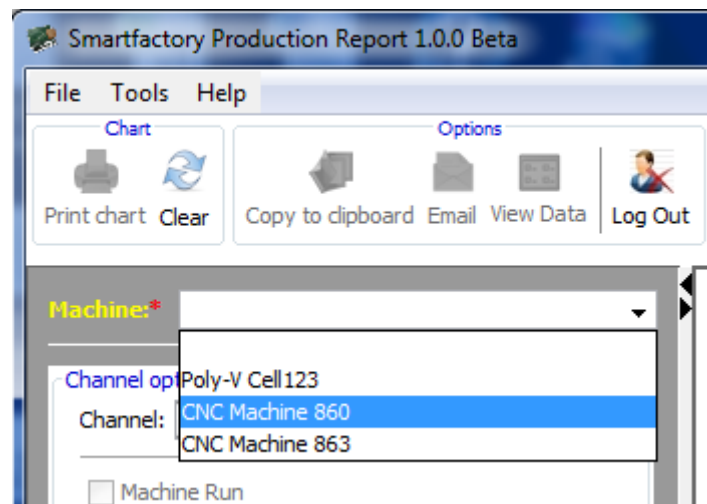1- **Menu** (not richly provided with menu items option) and **Toolbar**

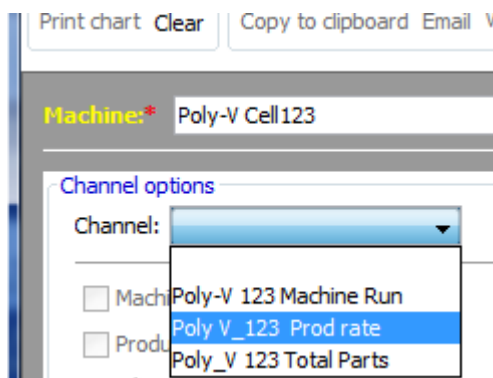Some toolbar buttons are only activated by the presence of a chart in (3).
- Print Chart: shows a Preview and Print interface of the plotted chart in (3)
- Clear: reset the interface to its original state
- Copy to clipboard: copy the available chart in (3) to be pasted in any document of choice as image
- Email: Not yet implemented
- View Data: View for a specific chart the values of data used in a table format in (4)
- Log Out: closes the application and saves its state for later login.

2- Machine, Channel and Period

The application loads with the available machines as shown below. The machine names are retrieved from the database.
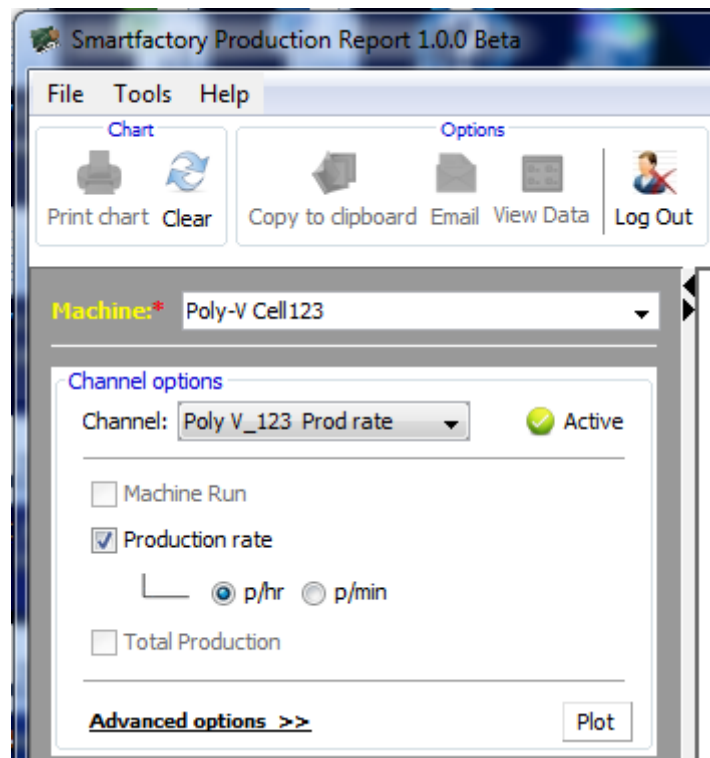

For a specific machine, channels are available. The case below shows the machine Poly-V Cell 123 selected and the current active channels connected to it.
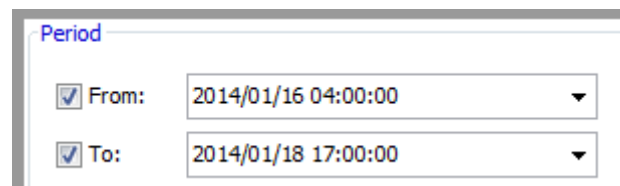
Production Rate example

After the channel is selected, it shows its current state (active or inactive). For now, only active channels are shown in the dropdown list for a specific machine. Since it was presumed that a machine can have one or more channels doing the same job (i.e. Production rate) whereby different names provided, the user must also check the different options of a channel as shown on the next snapshot.
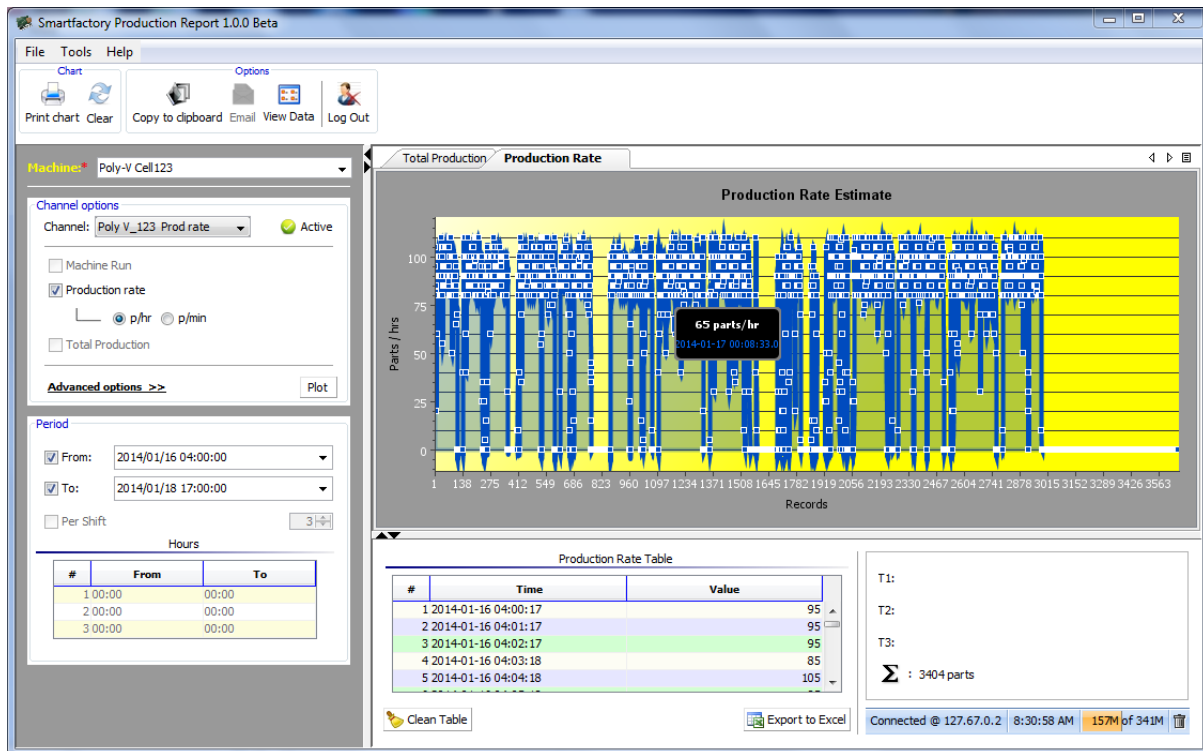

Before plotting, the period or time interval is necessary. The application loads with the current dates (*From and To* date chooser) but saves the dates for quick use next time. The date provided with Time in an hourly format (24h a day). NB: The "Per Shift" option is not yet implemented.
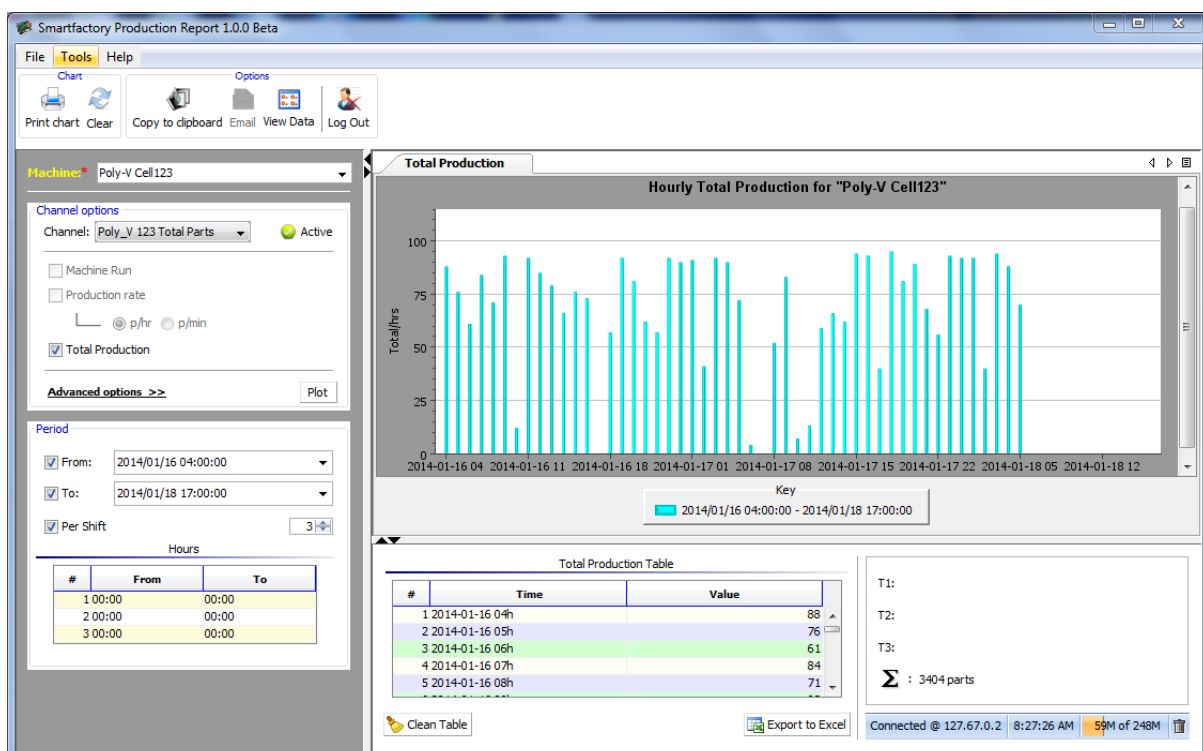

3- **Chart**

Click on the "Plot" button shows on the image below for the machine Poly-V Cell 123, the channel Poly V_123 Prod rate (parts/hr), starting from 2014/01/16 at 04:00:00 to 2014/01/18 at 17:00:00, the Line chart of the Production rate estimate. With a lengthy time interval, more points are shown and it takes longer to display. For a specific point, corresponding information is displayed in a small black rounded rectangle.

By also clicking on the View Data for the current chart, its corresponding table is generated and populated with the values used to plot the chart as shown in part (4) of the main interface. The table name also changes dynamically for a current chart (to pay attention before printing). Double-clicking on the table views the table in a bigger display.

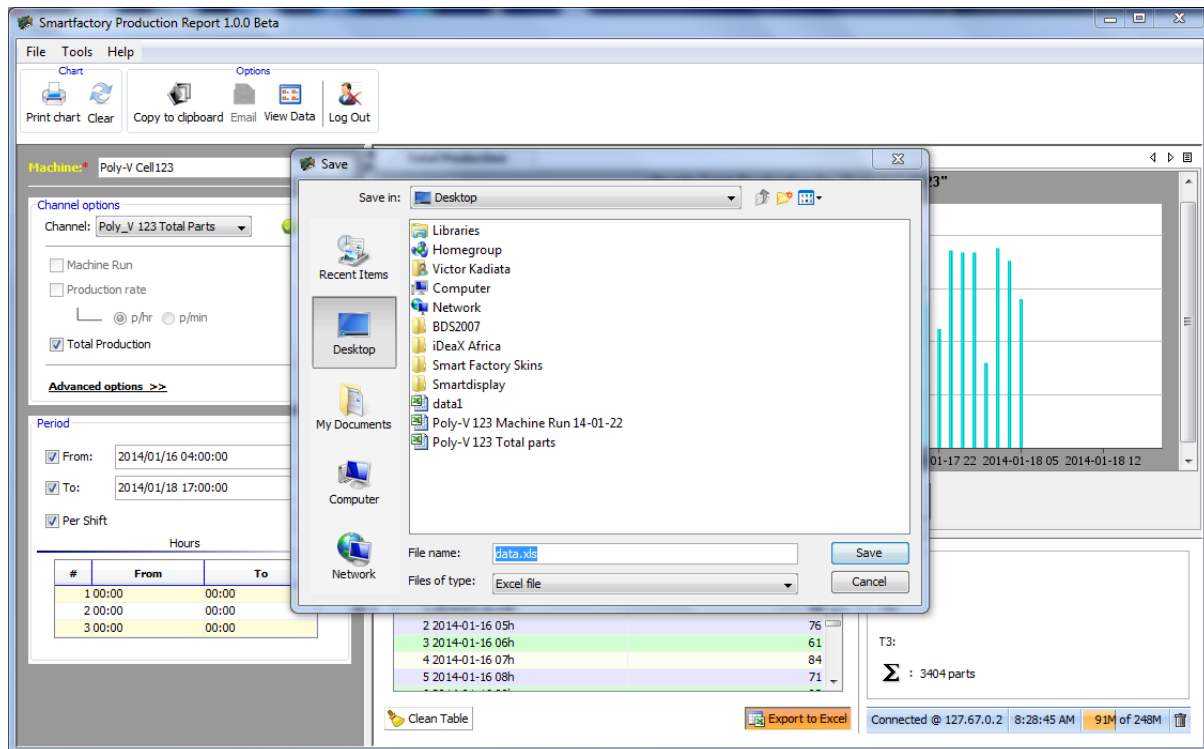**Total Production of the same machine with the same period time**

4- **Information**

This part shows the table data after clicking on the "View Data" button on the interface toolbar. The "Export to Excel" and "Clean Table" buttons. A panel for the sum of Total production for a given period and a status bar.
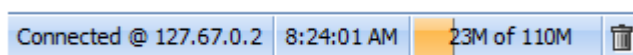
➢ **Export to Excel**

By default, the location is the desktop and "data.xls" is the given name of the file.
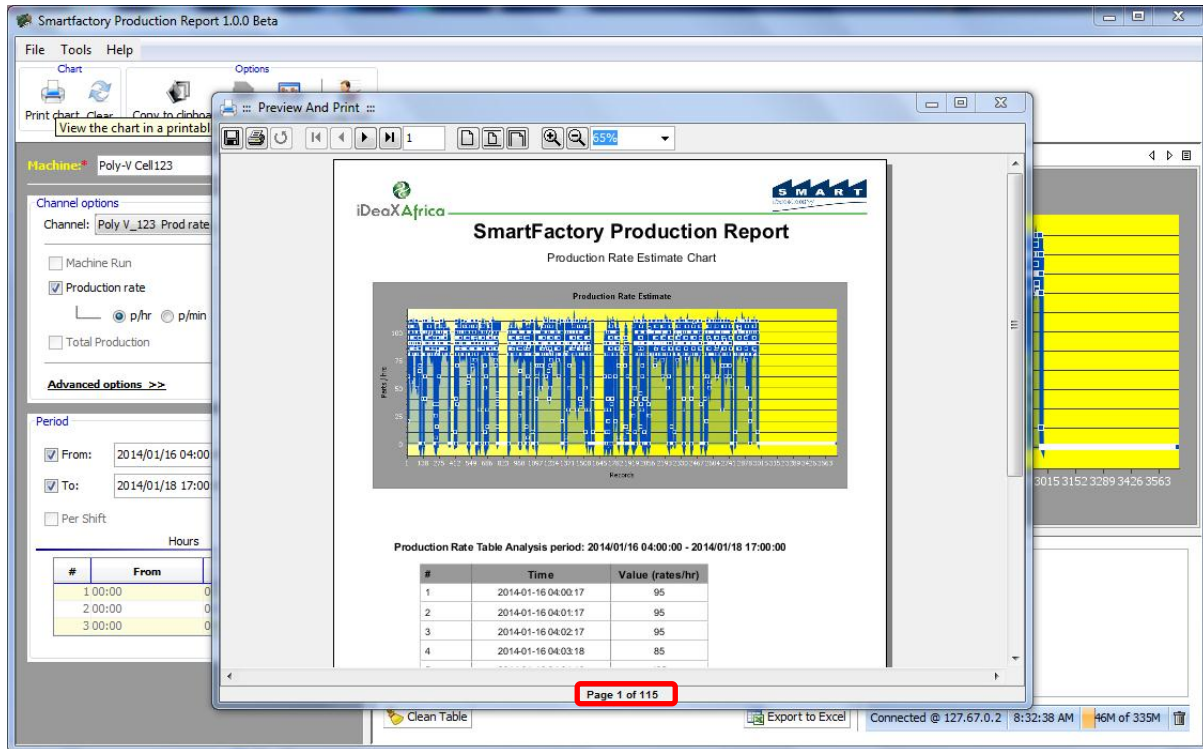

➢ **Status Bar**

The status bar shows the IP Address of the server (i.e. 127.67.0.2) to which the application is connected. The current time and the memory the OS has allocated to the application with its garbage collector to free some memory.

IV- Preview and Print

Clicking on the "Print chart" button of the toolbar generates a preview of the current chart and its table (in case generated) otherwise it only prints the chart. With a lot of information retrieved, the image below shows a document of 115 pages.

With the toolbar buttons of the Preview and Print interface, one has the option to Save in (pdf, docx, excel, etc.), print on the go the document, zoom….

More Options and Exception

➢ Menu Bar

Under File menu:
- New: close the application a generate a new interface
- Open: opens a specific created folder "SmartFactory Data" in the user's machine personal folder where some files or the current chart is saved as an image of the application.

➢ Exception

To view the table of the current chart, one must make sure to have also selected the specific channel.