

**PRIAMUS Machine Description Editor  
Quick Guide**



## **PRIAMUS SYSTEM TECHNOLOGIES AG**

Rheinweg 4

CH-8200 Schaffhausen / Schweiz

Telefon +41 (0)52 632 26 26

Fax +41 (0)52 632 26 27

[info@priamus.com](mailto:info@priamus.com)

[www.priamus.com](http://www.priamus.com)

Quick Guide: PRIAMUS Machine Description Editor

Edition: November 18, 2015

Document-No.: TI037d, Ed.11.15

Subject to change without notice

© 2014 PRIAMUS SYSTEM TECHNOLOGIES AG, Schaffhausen, Switzerland

## Document history

Document Version	Date	SW-Version	Modifications
1.0	October 21, 2014	1.0	New document
1.1	November 18, 2015	1.4	Layout

## Requirements

- Priamus BlueLine Core 8280
- Microsoft .NET 4.0 (and later)
- FillControl 1.10 (and later)

## Introduction

The PRIAMUS Machine Description Editor is an additional program to support PRIAMUS FillControl. It is free of charge and can be used to configure, establish and test the communication to the host computer interface of the molding machine or the hotrunner controller.

The program generates configuration files (machine descriptions) which can be used in FillControl systems to read and write values for injection speeds, barrel temperatures, holding pressures, mold temperatures, manifold- and hotrunner nozzle temperatures during production.

This quick guide gives an overview about the PRIAMUS Machine Description Editor, its main functionality, and its concept of operations.

## Starting the PRIAMUS Machine Description Editors

During installation of the program the following icon is placed onto the desktop. Double click the icon to start the PRIAMUS Machine Description Editor.



*Figure 1: PRIAMUS Machine Description Editor Icon*

## Creating a new machine description

A machine description is a configuration file which is created and edited using the PRIAMUS Machine Description Editor. The file is used by PRIAMUS FillControl to establish connections to the host computer interface of the molding machines and the hotrunner controllers. Once having such a connection FillControl is able to read and change values for injection speeds, barrel temperatures, holding pressures, mold temperatures, manifold- and hotrunner nozzle temperatures during production.

The graphical user interface of the program is based on the PRIAMUS FillControl and the same concepts of operations are used to ease the handling.

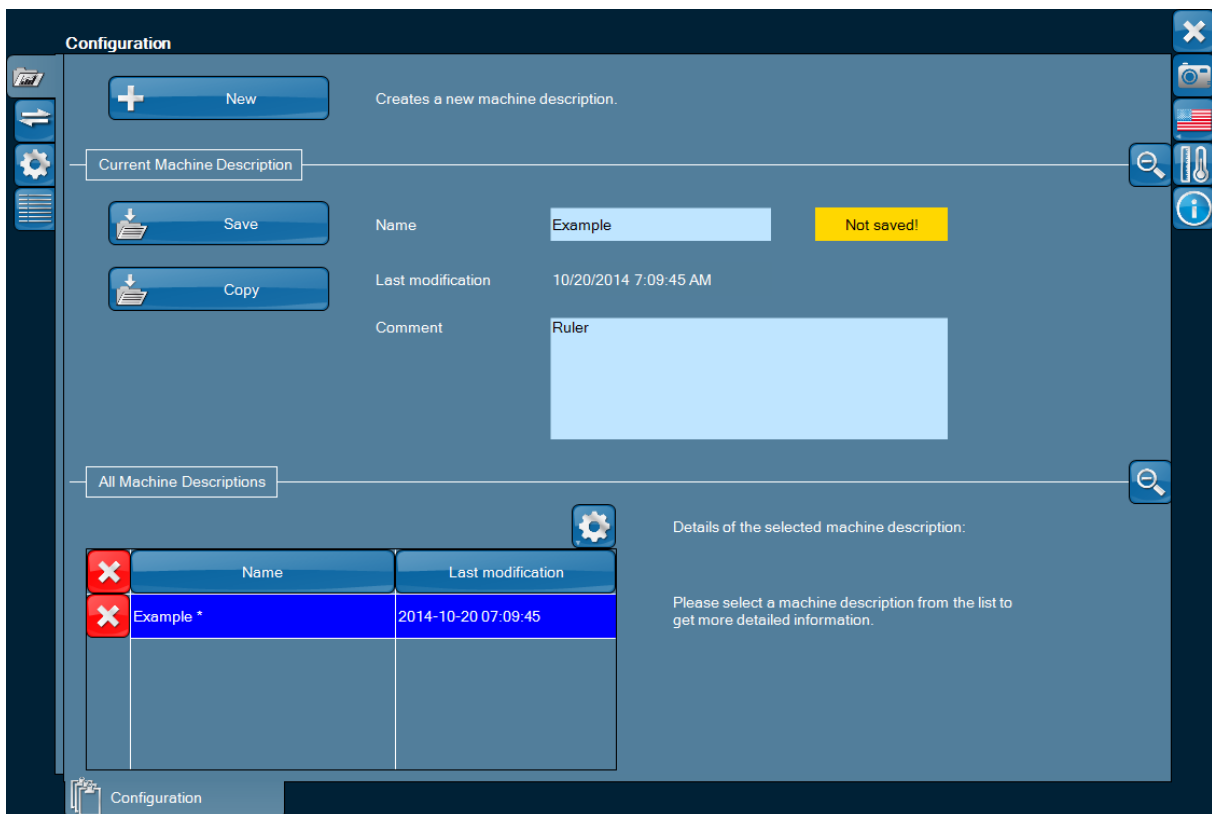


Figure 2: Configurations View

To create a new machine description use the "New"-button in the top-left corner of the page. Once clicked a new configuration will be added to the list in the bottom-left table. At any time you can change the name of the machine description. Additionally you can provide some useful information on the part to the comment field. Both name and comment fields are visible in FillControl later on. Providing reasonable names and comments is useful especially if you use different tools in one molding machine. It is recommended that you create a machine description for each tool you are using.

## Adding communication interfaces

To ensure that FillControl will be able to communicate with the host computer interface or the hotrunner controller during production, the right communication interface has to be chosen and configured first.

Therefore chose the second tab on the left hand side with the following symbol.



Figure 3: Connections

Once on this page, click either the button with the plus symbol in the center of the view or use the one in the top right corner. A list with the available interface will appear. Choose the fitting interface for your molding machine or your hotrunner controller device.



Figure 4: List of available interfaces

Remark: The list of available interfaces is extended constantly. If you need an interface which is not yet available in the list please contact [support@priamus.com](mailto:support@priamus.com).

After choosing the interface the connection details have to be entered. Depending on the communication interface and used protocol of the molding machine or hotrunner controller, the needed connection details can be different.

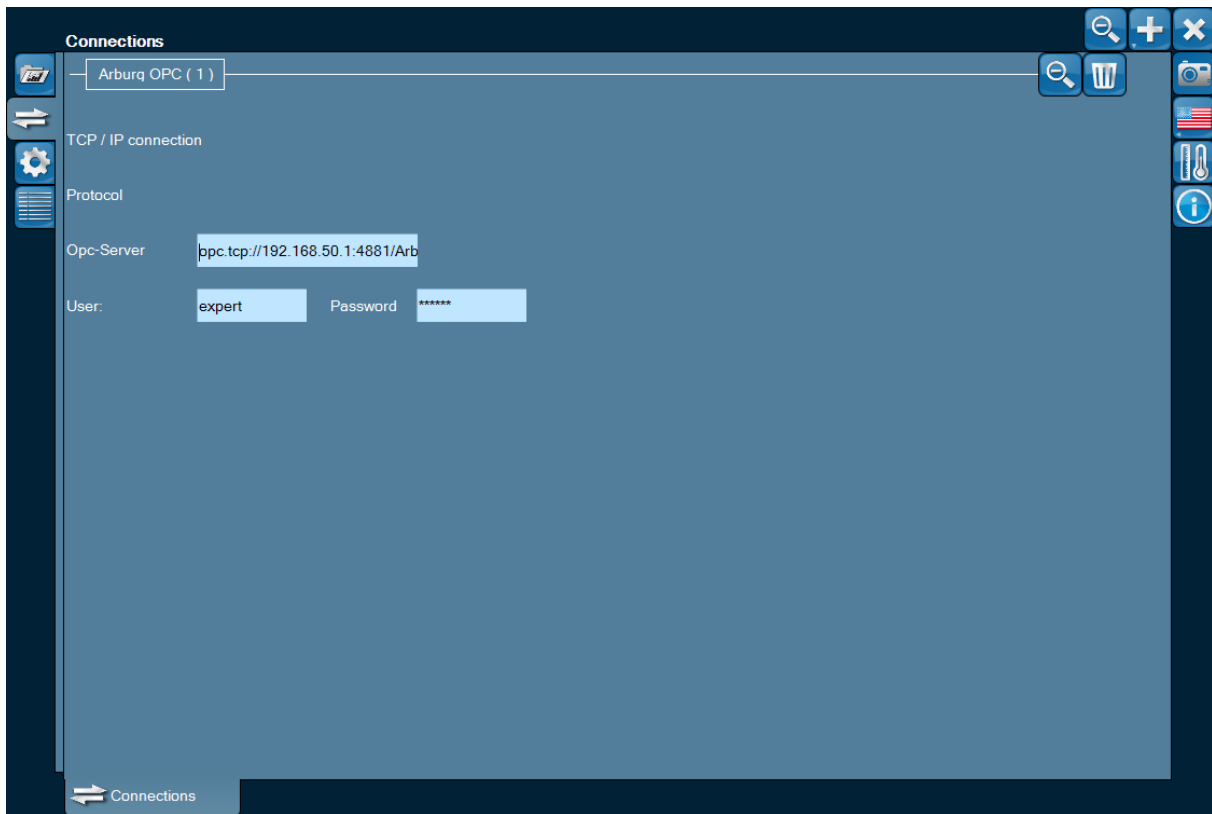


Figure 5: Connection details

## Creation and configuration of profiles

A (controller-)profile is a group of parameters (injection speed, barrel temperature, nozzle temperature, etc.) within the molding machine or the hotrunner controller which can be read and controlled by the FillControl software.

To create such a profile select the tab with the cog wheel on the left hand side of the view.



Figure 6: Profile Views

Afterwards choose a tab at the bottom of the page. Each tab contains the profiles of an individual type of profile. The first tab contains all created profiles of injection speed, the second one the profiles for the barrel temperatures and so on. Using the "+"-button on the views starts the configuration of a new profile within a so called wizard (configuration layer).

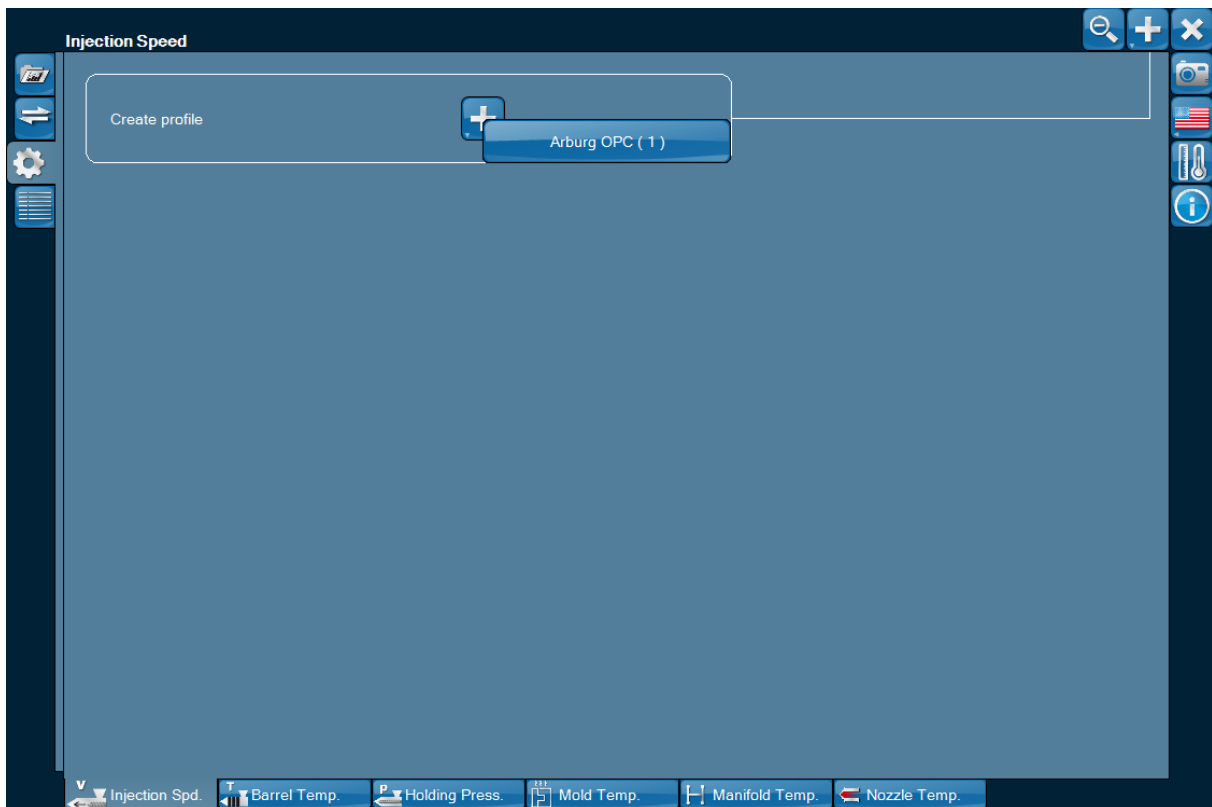


Figure 7: Create an injection speed profile



The following is an example on an injection speed profile with three injection speed steps. You start by giving the profile a meaningful name which can be used by FillControl. Giving a reasonable name to the profile is very helpful if you have a multi components application and you have to a multiple injection speed profiles (one profile per component).

The next step is to configure the individual parameters of the profile. First you have to enter from how many steps or positions the profile consists. In this example the profile is made of three injection steps.

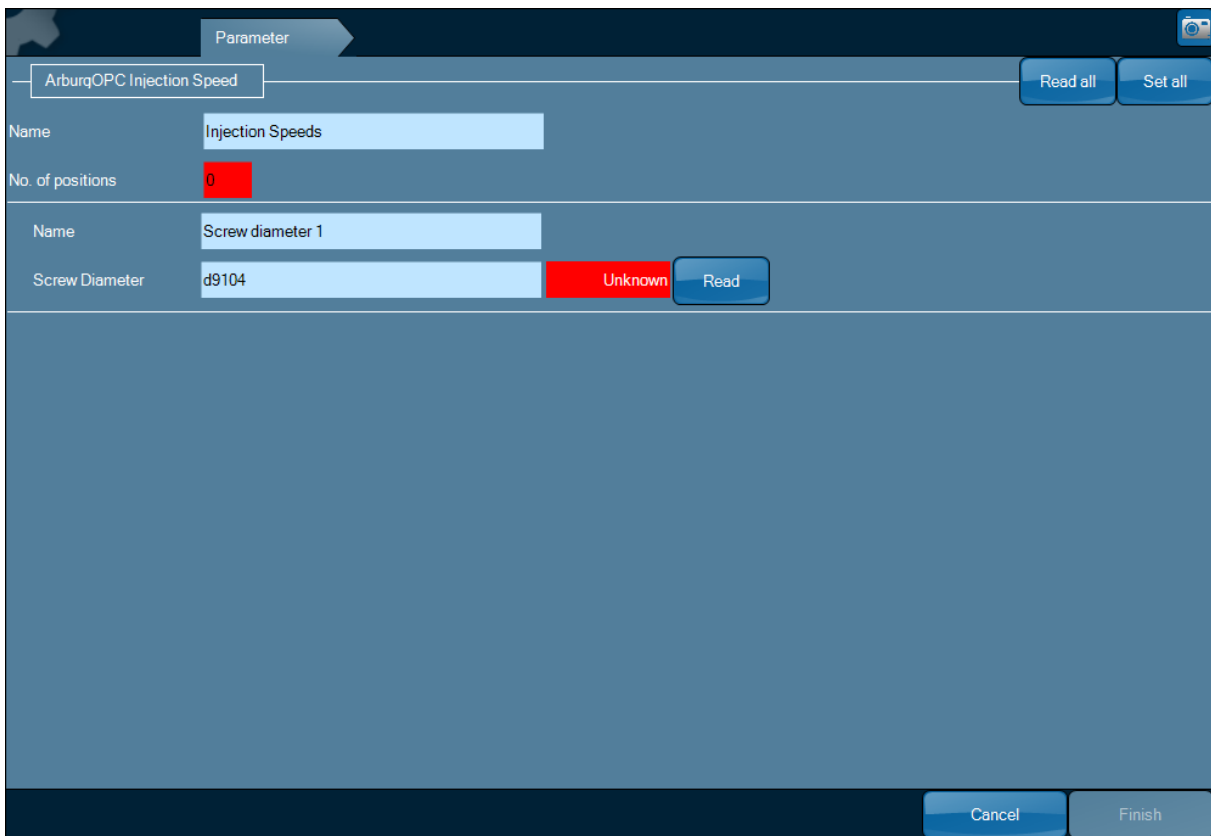


Figure 8: Profile wizard

After entering the number of profile steps for each position one of the following line appears. It consists of a name field a (screw-)position and a corresponding injection speed.

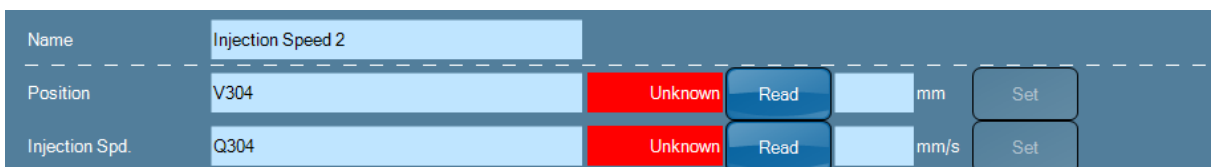


Figure 9: Injection speed profile step

For the position and the injection speed the correct command (Figure 9: Injection speed profile step V304 and Q304) from the host computer interface (or hotrunner controller) now has to be entered. The PRIAMUS Machine Description Editor offers for most of the interfaces suitable initial values. Unfortunately these commands can differ among molding machines and hotrunner controllers.

Remark: It is essential that the correct commands are entered. If the correct commands are not entered, it is impossible to get the reading and writing values to and from the host computer.

After entering a command, reading the corresponding value from the host computer (or hotrunner controller) can be tested. Therefore you can press the "Read"-button. If the connection to the host computer can be established and the command is correct the value can be read. In this case the value is shown in a green box. Otherwise "Unknown" is printed out in a read box.

If the read access was successful, a write access can be tested. Therefore use the input field and the "Set"-button.



Figure 10: Test of communication

If the reading and writing for all profile steps works properly, then the configuration of the profile has been successfully finished. The wizard can be left using the "Finish"-button in the bottom right corner. Your new profile is listed in the overview page.



Figure 11: Overview page

If you want change something in a profile, you can enter the profile wizard using button with the cog wheel in the headline of the profile in the overview page. For removing the profile from the machine description use the button with the dust bin.



Figure 12: Remove profile

To complete your machine description you can continue with the other profiles (barrel temperature, holding pressure, etc.).

## Using a machine description in PRIAMUS FillControl

To use the machine description in FillControl, create a new configuration and choose the "Interface"-Tab in the configuration wizard.

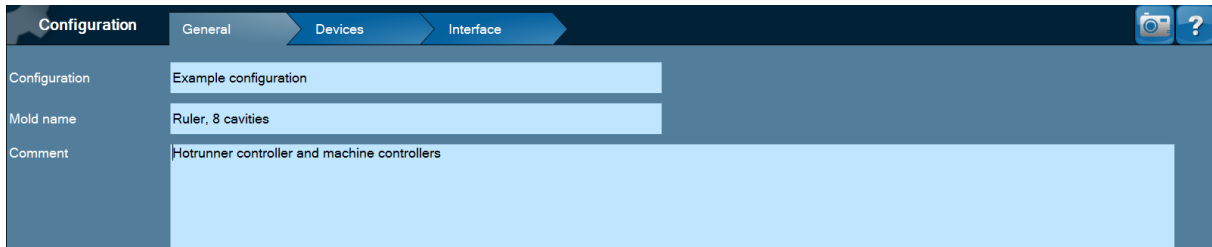


Figure 13: FillControl configuration wizard

Here you can use the "Configuration"-Button to open a list of available machine descriptions. Choose the one you need from the list and click "OK". From now on all the profiles defined in the machine description are ready for use in FillControl and the values of the profile steps are measured each cycle automatically. This feature is also available in FillControl Monitor.



Figure 14: Selection of a machine description

FillControl Control-H (hotrunner controlling) and Control-M (molding machine controlling) offer the possibility to adapt the entered profiles automatically to balance your process and keep it stable.

## **Further Sources of Information**

For more information on the PRIAMUS BlueLine platform as well as other PRIAMUS products refer to the relevant PRIAMUS documentation or see [www.priamus.com](http://www.priamus.com).

## **Contacts for more information**

For all other information, please do not hesitate to contact your closest PRIAMUS office or agent.

### **Switzerland (Headquarters):**

PRIAMUS SYSTEM TECHNOLOGIES AG  
Rheinweg 4  
CH-8200 Schaffhausen  
Phone +41 (0)52 632 26 26  
Fax +41 (0)52 632 26 27  
[info@priamus.com](mailto:info@priamus.com)

For addresses of all PRIAMUS Branch Offices and Agents, see [www.priamus.com](http://www.priamus.com).