

Installing Pretreat Equipment

OVERVIEW

In this phase the technician should have started loading ink into the printer if we are installing a pretreat device during equipment setup. To complete the process of calibrating the printer the technician will need a pretreated garment. While the printer is loading ink, it is the perfect time to setup and go over the pretreatment device. It is important that distilled water is present and onsite for the setup of this equipment. At least 5 one-gallon containers of distilled water will be needed for the mixing of pretreatment and for the humidifier that goes under the printer. Please ensure that this is in place and present before the installing technician arrives.

We will go over how to get the Schulze pretreatment device prepped for use. Then, how to mix pretreat and load that into the device. Lastly, we will cover how to upkeep the machine. We will touch on garment absorbency and how to use the highlight check pattern to help determine adequate pretreat coverage.

KEY LEARNING OBJECTIVES:

- ☑ Prepping the unit for loading pretreatment
- ☑ How to mix pretreatment
- ☑ How to load the pretreat and distilled water
- ☑ Profiling the pretreat volume
- ☑ Using Presets
- ☑ Basic Maintenance processes
- ☑ Cleaning the nozzles

ADDITIONAL DOCUMENTATION:

[Schulze III Instruction Manual](#)

[Schulze IV Instruction Manual](#)

[Schulze Basic Instruction Manual](#)

[Nozzle Cleaning Fluid - PRETREATcleaner](#)

PREPPING THE UNIT:

In this section, we will go over how to prepare the pretreatment unit for use. This means removing items such as tape and installing the handles of the device. We will also need to locate all the accessories and set them to the side for installation.

- Removing tape and binding materials.
- Locating accessories.
- Removing and unpacking the sonic cleaner.
- Storing accessories.
- Installing the handles.
- Installing the platen and trays.

INSTALLING THE ACCESSORIES:

Once the accessories have been removed from the pretreatment device, we will want to get them hooked to the device to prepare to power it on for the first time. We will cover what will be needed to load the device for the first time including where all the tanks need to be hooked up.

- Loading water into the water only tank.
- Hooking up the waste tank.
- Connecting the tanks.
- Installing the nozzles and black rings into the quick exchange caps.
- Installing the power cord.

CONTROL PANEL OVERVIEW:

Once all accessories have been attached to the Schulze we can proceed to power the unit on. Once powered on, there are several key items you will want to take note of. The LCD panel reviews all the steps that should be performed up to this point. It also displays the firmware version. After we cycle the panel by hitting the arrow the panel displays setting information. There are other areas we also need to be aware of on this panel that will be accessed regularly. We will go over the outline of what each of these main button features consist of and where they are located.

- How to power on the display.
- How to check the Firmware Version.
- How to locate/use the Water Button.
- How to locate/use the Precoating Button.
- How to use the Spray/Nozzle Area Display.
- How to adjust the Begin Settings.
- How to adjust the Length Settings.
- How to adjust the Speed/Volume Settings.
- How to adjust the Pressure Settings.
- How to use the Maintenance Functions.
- How to change the Inch/mm setting.
- How to use the Rotate Garment Setting.
- How to use the Auto-Start Button.

MIXING PRETREATMENT:

To mix pretreatment, we will need the Brother GTX4 Pretreatment on-hand along with enough distilled water to cover our initial setup and mixing of the pretreatment. Consider having more distilled water onsite if we need to run production directly after install. In this section we will cover mixture ratios, when to use them, and how to mix the pretreat by volume. Please note pretreat can also be mixed by mass however that requires weighing both the water and then the pretreat by scale and mixing accordingly.

- Why mix pretreat?
- Which ratio should I use?
- When will the other ratio apply?
- How to mix at the 1:1 ratio
- How to mix at the 2:1 ratio
- Is there a mixture ratio for DTG Pretreatment?

LOADING LIQUIDS FOR THE FIRST TIME:

In this step we will take the mixed pretreatment solution and load it into the pretreatment tank. We will also load the water into the water tank. Afterwards, we need to attach the lines to the tanks and load the liquids for the first time to remove air. Lastly, we will attach the nozzles.

- Loading the pretreatment solution.
- Loading the distilled water.
- Attaching the lines.
- Loading liquid through the lines the first time.
- Removing air from the lines.
- Attaching the nozzles and quick exchange caps.

UNDERSTANDING PRETREAT VOLUME:

Once pretreatment has been loaded into our pretreatment device we can move on to spraying our garments. The key to knowing what settings to use for the garments are by understanding how to determine the pretreat volume we are putting on a garment and the absorbency of the garment. This topic goes together with the Highlight Mask Check Pattern. Understanding the use of how much pretreat we are putting down on a garment and how ink is passing into the garment are the key items you need to get the perfect settings for your garments. Be sure you have a gram scale present that can detect gram differences within 2 grams; on location.

- How do we define pretreat volume?
- Setting up the device to calibrate for the proper volume.
- Utilizing the proper type of gram scale.
- Taring; out a dry garment.
- Spraying the garment and getting the difference.
- Determining good baseline amounts.
- Utilizing the Highlight Mask Check Pattern to verify the proper amount.

HOW TO SETUP ANY PRESETS:

If you purchased a Schulze III or IV; both come with the ability to save preset settings. These are located on the bottom of the control panel once you bypass the start screen. They are labeled F1 through F5. Please note changing a setting within these presets overwrites the previous setting. We will go over how to create presets using the five optional presets buttons available.

- What are presets?
- How to create to preset
- What you need to understand about presets to avoid overwriting them.

BASIC MAINTENANCE PROCESSES:

There are several basic maintenance items to be aware of when cleaning the Schulze line of units. Here we will go over the daily and periodic items that will needed to be performed to keep the unit in good working order.

- What are the daily maintenance processes?
- What are the periodic maintenance items?

- What items should be performed as needed?
- What supplies are needed for cleaning?
- What items are considered consumable?

HOW TO CLEAN NOZZLES:

When the nozzles are not performing as expected or an even fan is not being emitted with the machine is firing pretreat you may need to clean the nozzles. To clean the nozzles, you will need to utilize an ultrasonic cleaner and Schulze cleaning solution. In this section we will go over the process to use and when you may need to perform this action.

- Key indicators that you need to clean the nozzles
 - What supplies will be needed
 - Process to use the sonic cleaner
 - How to minimize needing to clean the nozzles
 - Cleaning methods that can damage the nozzles
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FOR ADDITIONAL TECHNICAL SUPPORT INFORMATION:

[GTX Support Videos](#)

[GTX Drivers/Firmware](#)