COLORJET
Digitalizing Textile Printing

VASTRAJET K2®
1.8 MTR DIRECT TO FABRIC PRINTER

USER MANUAL

EFFICIENT INDIAN ENGINEERING

This user manual is briefly describing the operational aspects of the **VastraJet K2** machine. In this document, the step-wise instructions for handling various aspects of the machine with visual screens are provided for easy and better understanding. It also describes the error messages encountered while working with the machine with appropriate remedial actions required to be taken by the user.

This manual serves as the reference tool which guides their customers how to use or operate the **VastraJet K2** machine without anyone else assistance. The information provided in this document ensures its uniqueness and language quality. For safe and proper use of the product, please read this manual carefully and follow all the instructions.

<u>**Disclaimer**</u>

The information and instructions provided in this user manual have been checked for accuracy, uniqueness, and reliability. ColorJet group reserves all the rights to modify and revise this manual as per the company requirements without any prior notice.

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The reference table is shown in the below table:

Doc Type	Doc Code	Version	Machine Name	Date of Issue
User Manual		1.0	**VastraJet K2**	May 2022

1. ABOUT DOCUMENT

PURPOSE

The purpose of this document is to guide and educate the targeted audience about the Printer and Printer Manager software so that they can easily handle and use it. Additionally, this document also provides step-wise instructions for handling various aspects of the printer and its related software with the help of graphical screens for easy and better understanding. Moreover, the document also describes commonly encountered problems with appropriate remedial actions.

INTENDED AUDIENCE

This document is meant for all the users who want to use the Printer for their printing business. Sometimes, the targeted audience has little knowledge about the printer but in most of the cases, targeted audience is much familiar with the terminologies of printer and printing business. Thus, this document is designed to facilitate both types of users.

2. MACHINE SPECIFICATION

VastraJet K2		
Printing Technology		Drop-on-demand, Piezo Electric Inkjet
Print Heads		Industrial Grade Jetting Assemblies
Print Head	**Type**	Industrial Grade Jetting Assemblies
	Resolution	Upto 1440 DPI
	Height Adjustment	Upto 30mm
	Cleaning Method	Pressure Purge and Wiping
	Wetting Control	Piezoelectric Actuations
Ink	**Type**	Reactive/Disperse/Pigment/Acid
	Colors	8 Colors
	Supply	10 Ltr, Bulk ink Supply System with inline degassing
Fabric	**Types**	Cotton, Viscose, Polyester, Polyamide, Silk, Wool
	Thickness	Upto 10mm
	Max. Width	1800 MM
	Roll Width	400 MM
Fabric Drying System		Infrared Heaters
Operating Interface		Touch screen
Printing Interface		USB 3.1
RIP Software Supported		ErgoSoft / NeoStampa (Colorjet Editions)
File Format		JPEG, TIFF, BMP/PDF (RGB, CMYK)
Power Supply		220 V, 105A Single/Three phase load distribution, 50Hz,
Operating Conditions		Temperature 18 to 28 C, Humidity: 35-80% RH (Non-Condensing)

3. MACHINE OVERVIEW

FRONT VIEW

The **Front View** of the machine is shown in the image below:
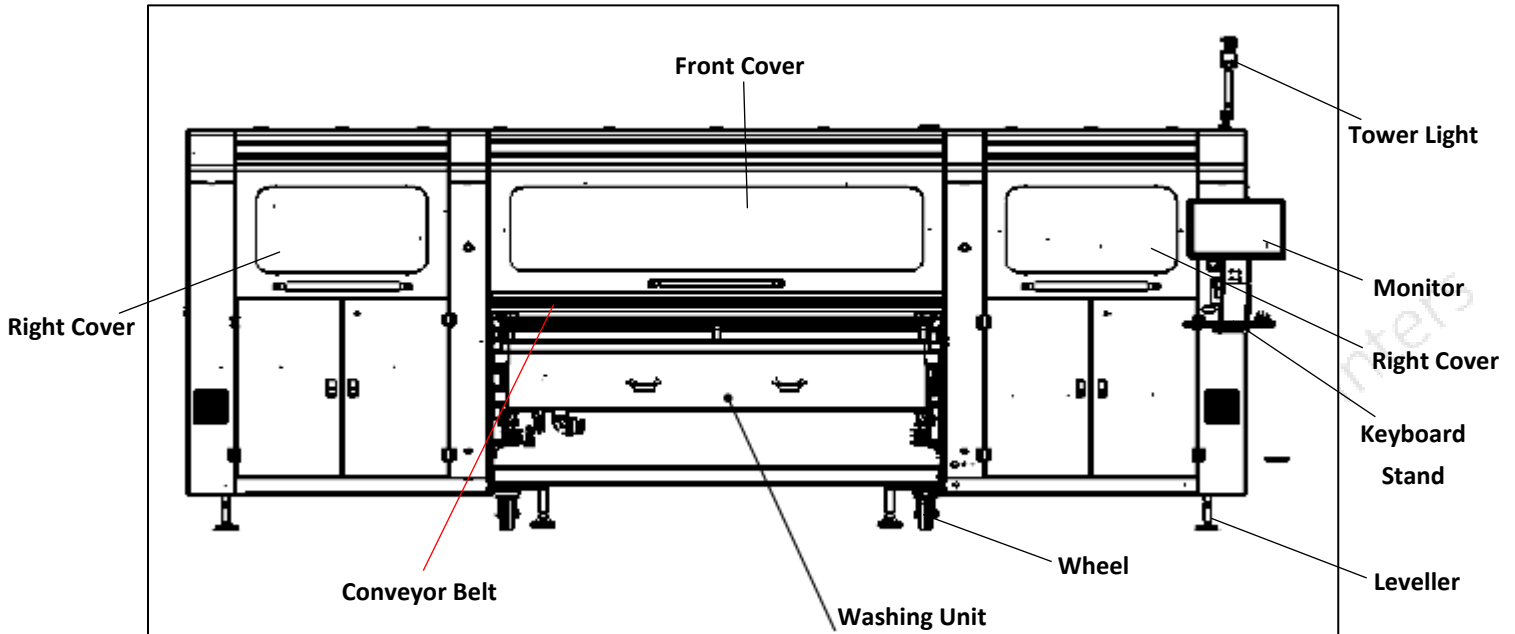

Fig 1: Displaying the Front View of the Machine

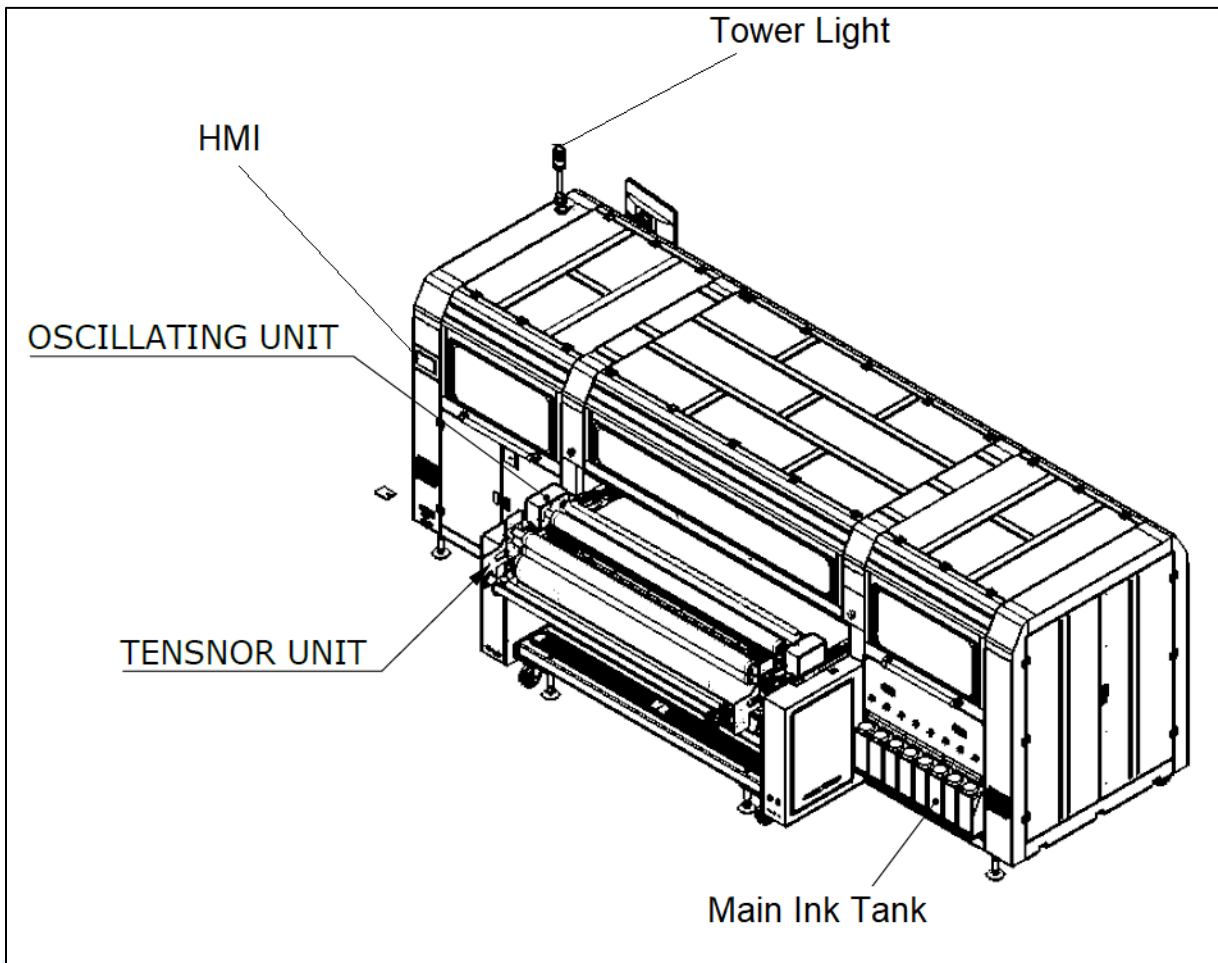The **Back View** of the machine is shown in the image below:

Fig 2: Displaying the Back View of the Machine

FEEDER OVERVIEW

The **<u>Feeder</u>** is shown in the image below:

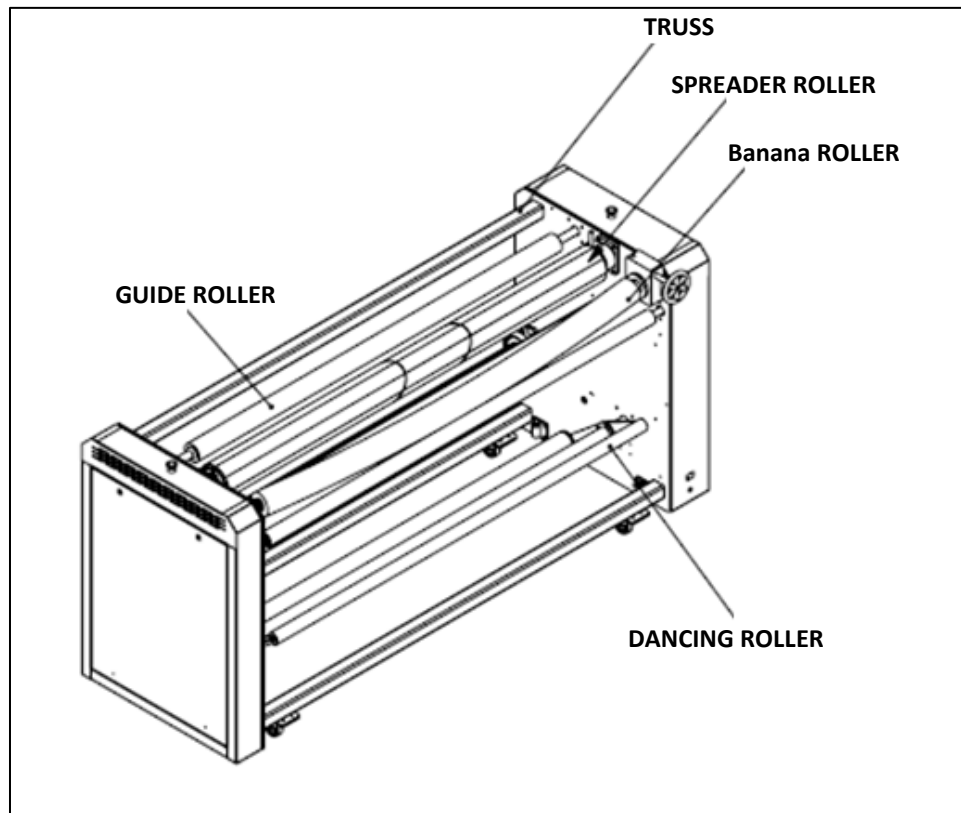**Fig 3: Displaying the Feeder Unit**

The Roller Adjustment Handle and Supply Shaft are shown in the image below:
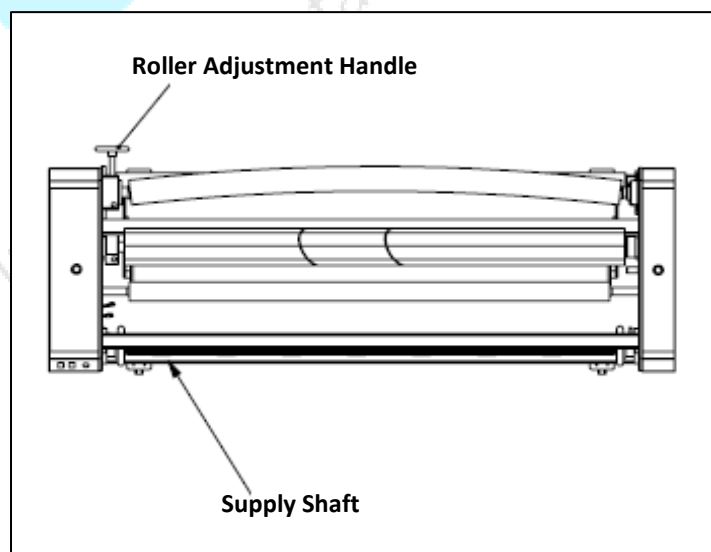

Fig 4: Displaying Different Parts of the Feeder

DRYER OVERVIEW
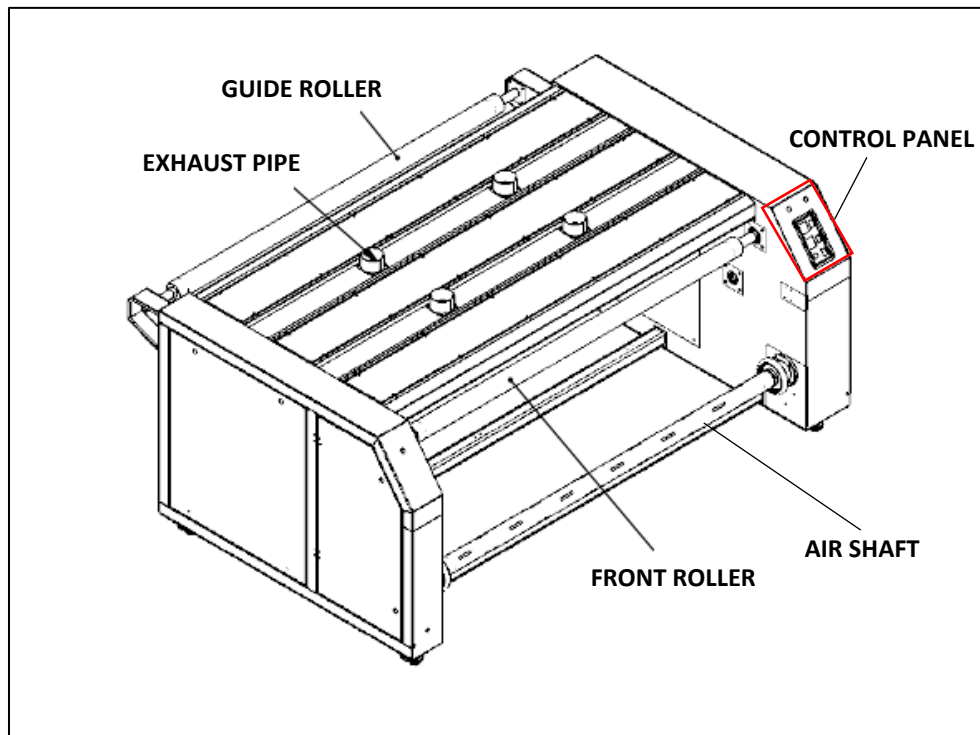
The **Dryer** is shown in the image below:

Fig 5: Displaying THE Different Parts of the Dryer

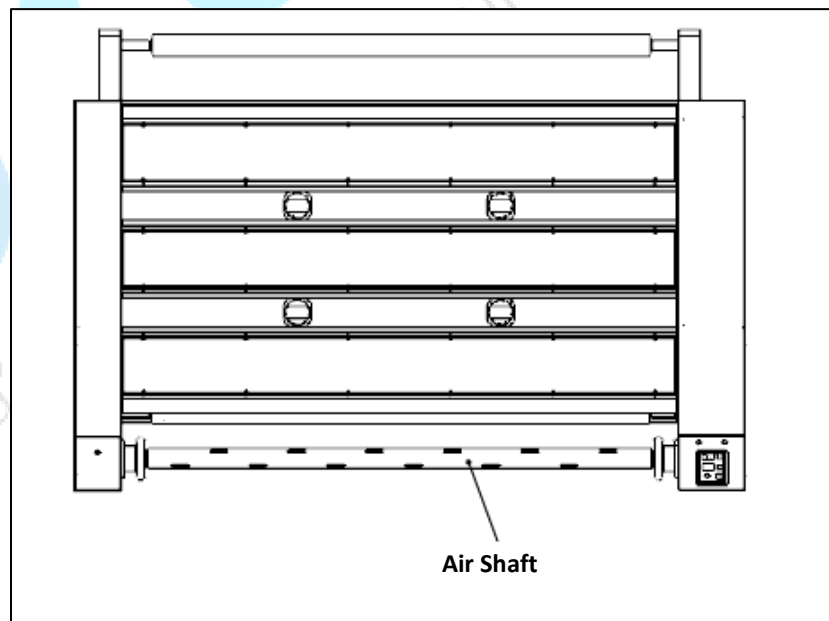The top view of the **Dryer** is shown in the image below:

Fig 6: Displaying the Back View of the Dryer

4. GETTING THE PRINTER READY

SWITCH ON PROCEDURE

Steps to switch ON the printer:

Step 1: *Open machine upper covers.*

Step 2: *Switch ON the compressor unit. The compressed air is required for the following parts to work:*

- **Washing tub**: *Help in moving the tub "Up or Down".*
- **Press roller:** *Help in changing the position "Up or Down".*
- **Soaking roller:** *Help in changing the position "Up or Down".*
- **Dancing roller:** *Help in dancing the roller.*

Note: Air pressure rate 0.6m³/min, 0.7MPA.

Step 3: *Check whether an **Emergency** button is pressed or not. If the **Emergency** button is pressed, then immediately release it.*

Step 4: *Turn on the machine power by pressing the **MC Power** button, as shown below:*

Fig 7: Turn ON the Machine Power Button

Step 5: Turn on the print engine from the front HMI by following the screens; **MAIN→ SERVICE**, as shown below:
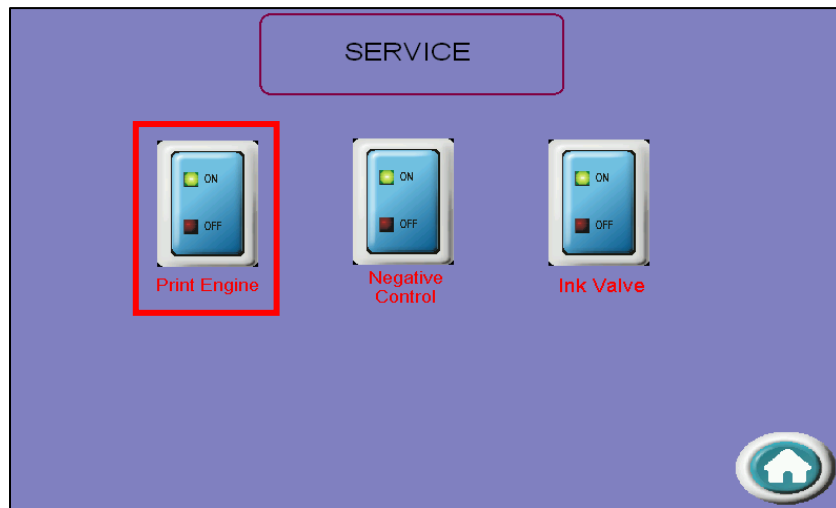

Fig 8: Turn ON the Print Engine

After turn on the print engine, the machine initialization process gets started. Firstly, the carriage moves in the upward direction to initialize the Z axis and then, it moves to the X axis origin to initialize it. After that, the carriage comes back to the Z print position. Finally, the Wiper unit gets activated and starts the initialization process.

Step 6: Check the negative pressure (range -4.2 to -4.6).

Step 7: Open the printer manager and RIP software.

Note: We recommend to use separate computer system for both, Print Manager software and RIP software.

Step 8: Check and change the fresh water in the head cleaning tray, if required.

Step 9: Refill ink, if the low ink level alarm gets activated and starts sounding. The ink main tanks are shown below:
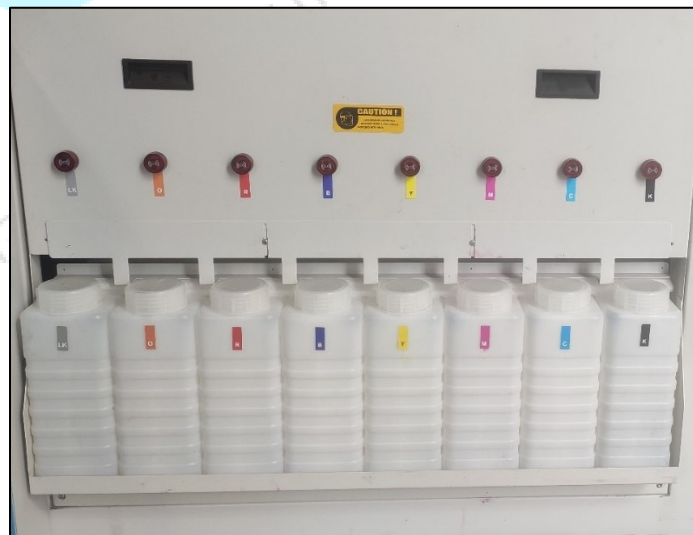

Fig 9: Displaying the Main Tanks

VastraJet K2

Step 10: Check the Waste Ink Bottle and empty it, if full.

Step 11: Perform purging using the front HMI and wiping process (Refer to the Head Wiping Section).

Step 12: Check print head nozzles status on the paper by issuing the Nozzle Test command. If nozzle test result is not OK or nozzles are blocked, perform the head wiping and purging.

Step 13: Go Online from the front HMI to enable the ONLINE mode.
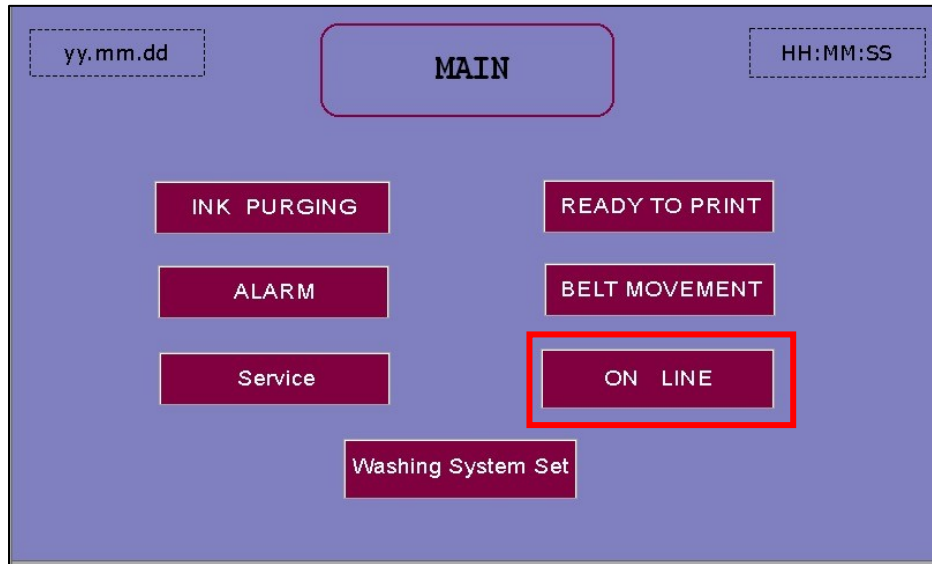

Fig 10: Enabling the Machine ONLINE Mode

Step 14: After enabling the ONLINE mode, turn on print heater and washing system to activate the glue using the **WASHING SYSTEM** screen as shown below:
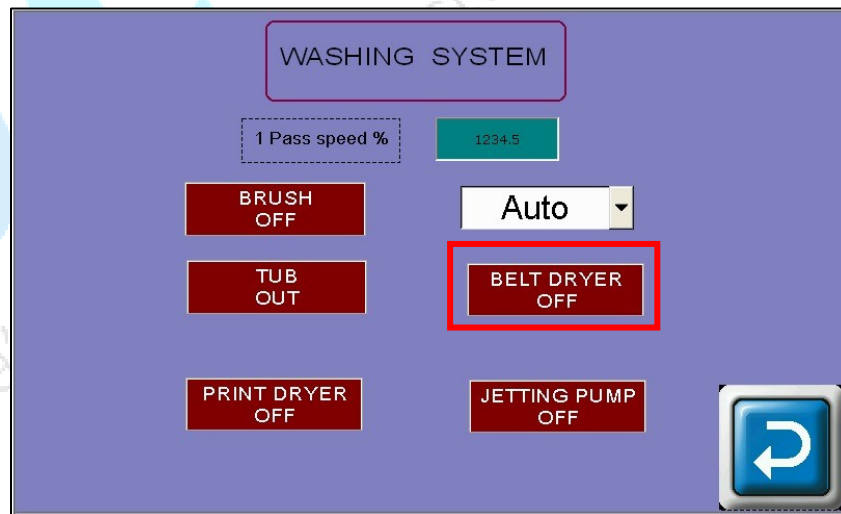

Fig 11: Enabling the Print Dryer

Step 15: Move the belt continuously in the forward direction using the arrow key from the keyboard (at least 10-15 mins) to check for obstacles and belt shifting.

Step 16: Check and verify the belt shifting.

Step 17: Check and fill fresh water in the water tank.

Step 18: Prepare print files and keep ready.

Step 19: Stop the belt movement by pressing the down arrow key.

Step 20: Switch ON the Feeder and Dryer units by pressing the Power ON switch, as shown below:
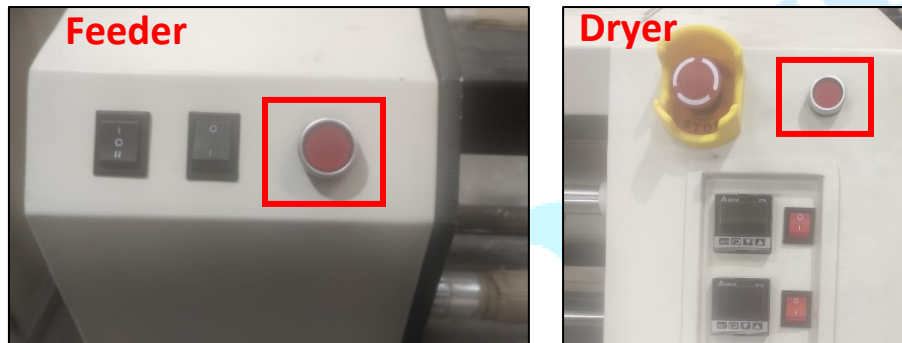

Fig 12: Switch ON Feeder and Dryer Units

Note: Kindly make sure that all the necessary dryer and feeder settings are done.

Step 21: Load the fabric and engage the press roller (Refer to the Loading Fabric section).

Note: Please be careful while loading the fabric as there are chances of serious injuries (like pinching finger or hand).

Step 22: Take care about the fabric handling from supply (in the feeder) and take up (in the dryer) sides.

Step 23: Set print origin to specify the printing starting position using the printer manager.

Step 24: If fabric thickness is changed, check head height and adjust it accordingly (min 3mm gap).

Step 25: After adjusting the head height, its recommended to check bi-direction and step calibration.

Step 26: Hold fabric till it reaches the take up (care it should not go into washing tub).

Step 27: Wind the fabric into take up and set take up power.

Step 28: Start printing.

Now, the printer is ready for printing.

SIGNAL LAMP DESCRIPTION

Signal Lamp description is given as below:

Color	Light of Steadily	Flashing Light		Remarks
Red	Emergency	System Error		Need to Restart
Orange	Printer is Working	Printer in working mode		
Green	Printer is ON			
Blue	Printer is ON			

The **Signal Lamp** is shown in the image below:
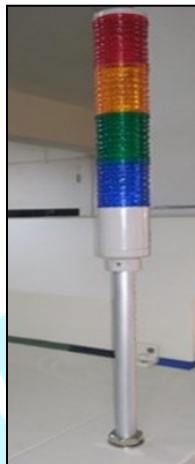
Fig 13: Displaying the Signal Lamp

LOADING THE FABRIC

Steps to load the fabric:

Step 1: Run the **Supply Motor** in the manual.

Step 2: Stop the **Supply Motor** when the unlock position of **Safety Chuk** and **Shaft** get matched, as shown below:

Fig 14: Displaying the Unlock Position

Step 3: Push the **Safety Chuk** to remove the shaft.

Step 4: Insert the shaft into the fabric roll.

Step 5: After inserting the fabric roll, fill air into the shaft to fix the roll with shaft, as shown below:
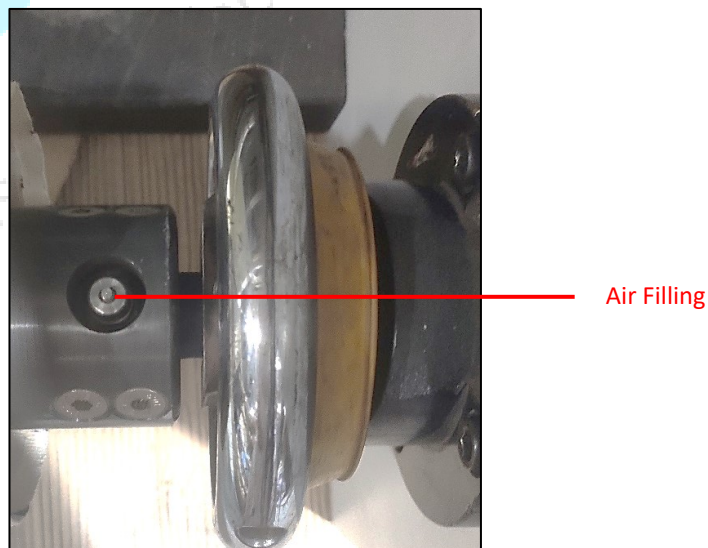
Fig 15: Filling Air

Step 6: *Adjust the pressure roller position (up and down) using the back-HMI screen, as shown below:*
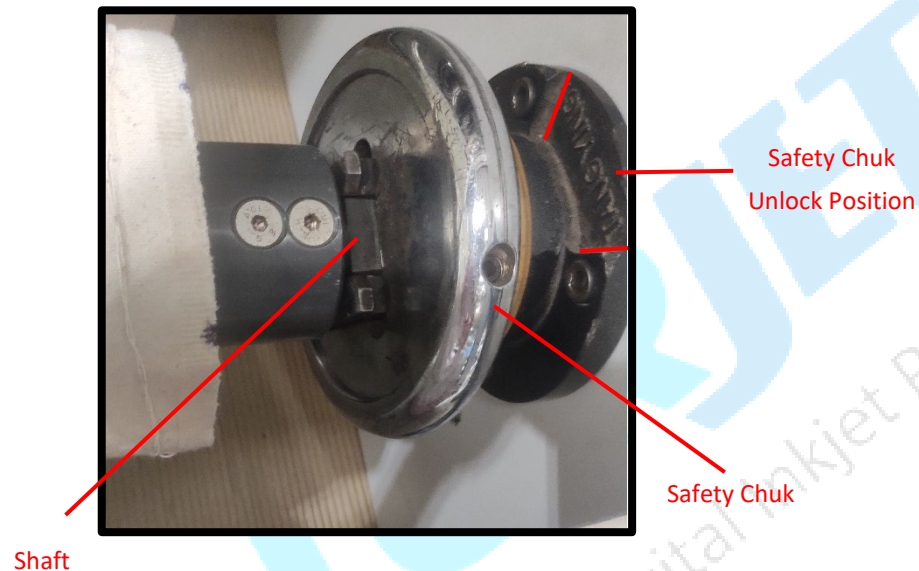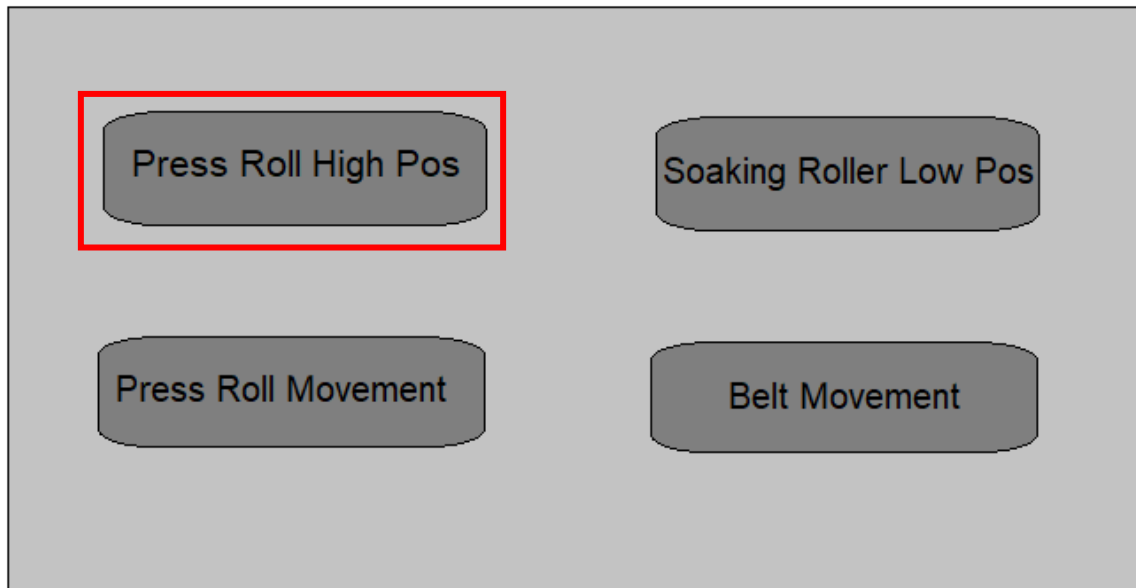

Fig 16: Adjusting the Pressure Roller

Step 7: *Load the fabric as per the path given below:*
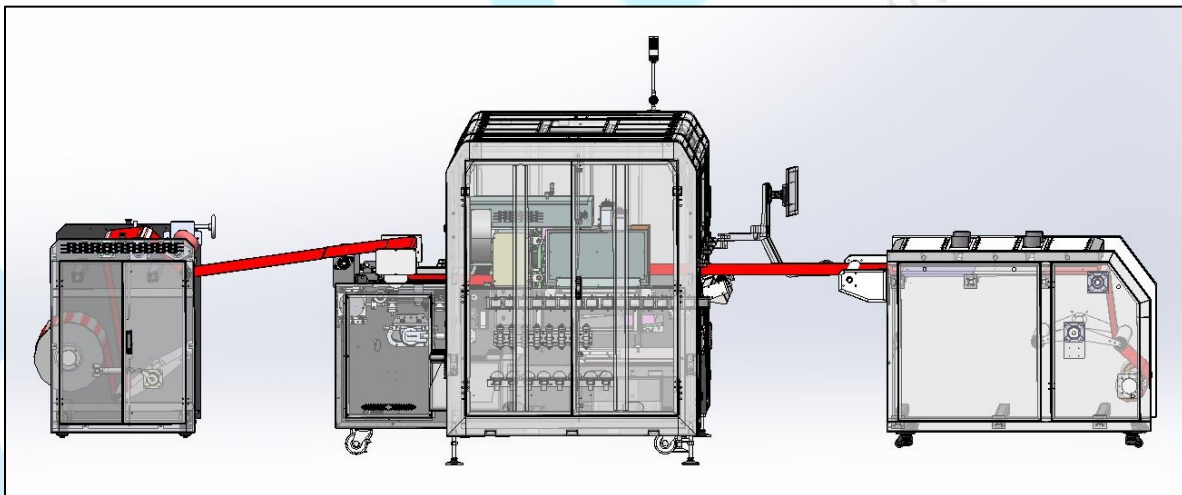
Fig 17: Displaying the Fabric Path

Note*: Please be careful while loading the fabric as there are chances of serious injuries (like pinching finger or hand).*

Step 8: Move the belt using the **Belt Movement** option available on the Back-HMI (Refer to Fig 16) until the fabric reached to the print origin.

Now, the fabric is loaded successfully.

REFILLING INK

To refill ink, remove the Main Ink Tank cap and refill ink as per the color sticker. The **Main Ink Tank** is shown in the image below:

Fig 18: Displaying the Main Ink Tank

Note: Don't shake ink bottles.

The **Ink Sub Tank** is shown in the image below:

Fig 19: Displaying the Ink Sub Tank

Note: Low ink level alarm gets activated when ink level goes down.

CONTROL PANEL OPERATIONAL FLOW DIAGRAM

The **Control Panel Operational** flow diagram of the front HMI is shown as below:
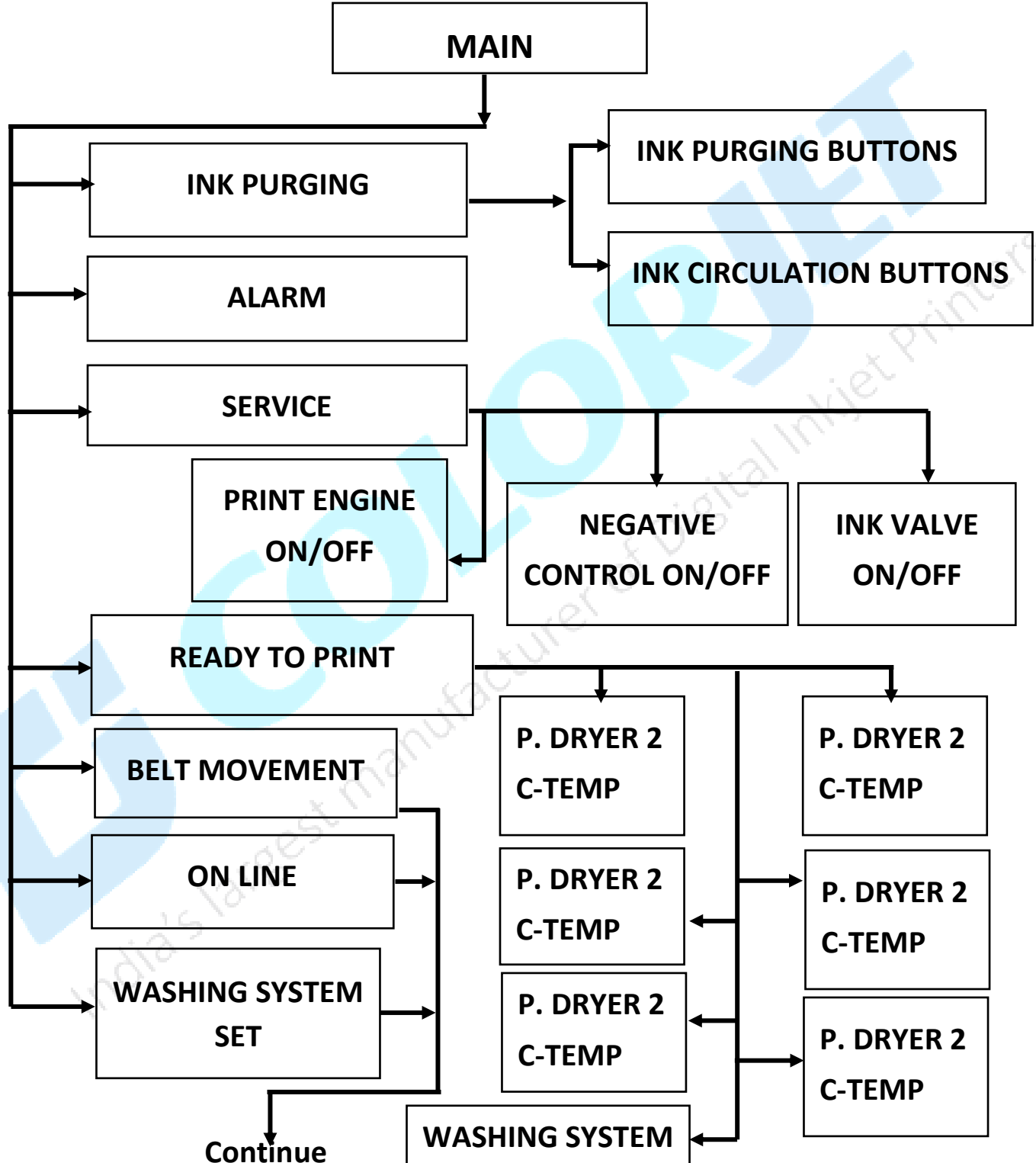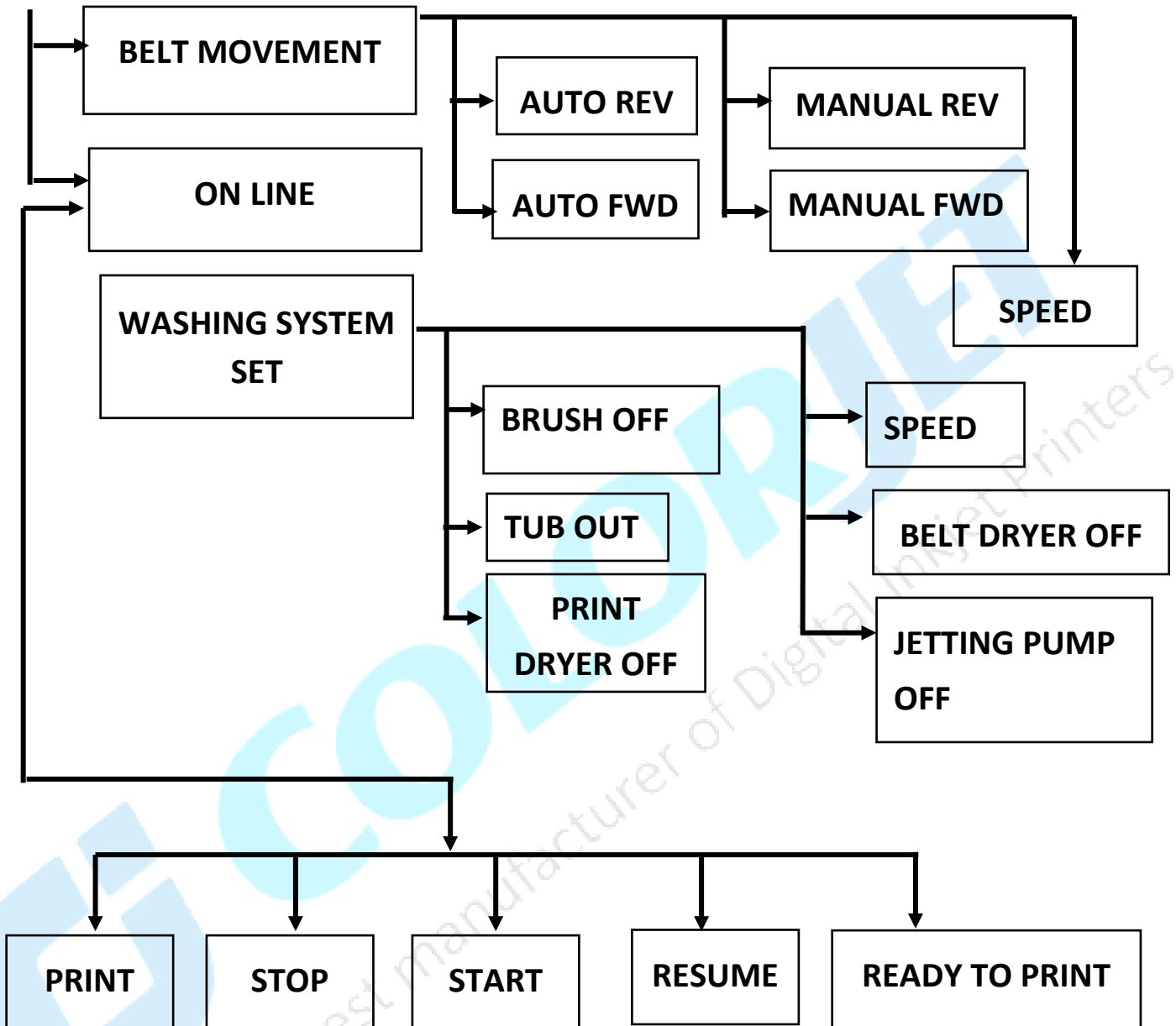
```
                    MAIN
                      │
                      ▼
  INK PURGING ──────────────▶ INK PURGING BUTTONS
                            ▶ INK CIRCULATION BUTTONS

  ALARM

  SERVICE ──────────────────▶ NEGATIVE          INK VALVE
    │                          CONTROL ON/OFF    ON/OFF
  PRINT ENGINE
  ON/OFF

  READY TO PRINT ──────────▶ P. DRYER 2        P. DRYER 2
                             C-TEMP            C-TEMP

  BELT MOVEMENT              P. DRYER 2        P. DRYER 2
                             C-TEMP            C-TEMP

  ON LINE ─────────────────▶ P. DRYER 2        P. DRYER 2
                             C-TEMP            C-TEMP

  WASHING SYSTEM
  SET ──────────────────────▶ WASHING SYSTEM

  Continue
```

```
BELT MOVEMENT ──────┬──────────────────┬──────────────┐
                    │                  │              │
                    ▼                  ▼              │
                 AUTO REV          MANUAL REV         │
ON LINE                                               │
                 AUTO FWD          MANUAL FWD          │
                                                      ▼
                                                   SPEED

WASHING SYSTEM ─────┬────────────────────────┐
SET                 │                         │
                    ▼                         ▼
                 BRUSH OFF                  SPEED
                    │                         │
                    ▼                         ▼
                 TUB OUT                  BELT DRYER OFF
                    │                         │
                    ▼                         ▼
                 PRINT                    JETTING PUMP
                 DRYER OFF                OFF
```

| PRINT | STOP | START | RESUME | READY TO PRINT |
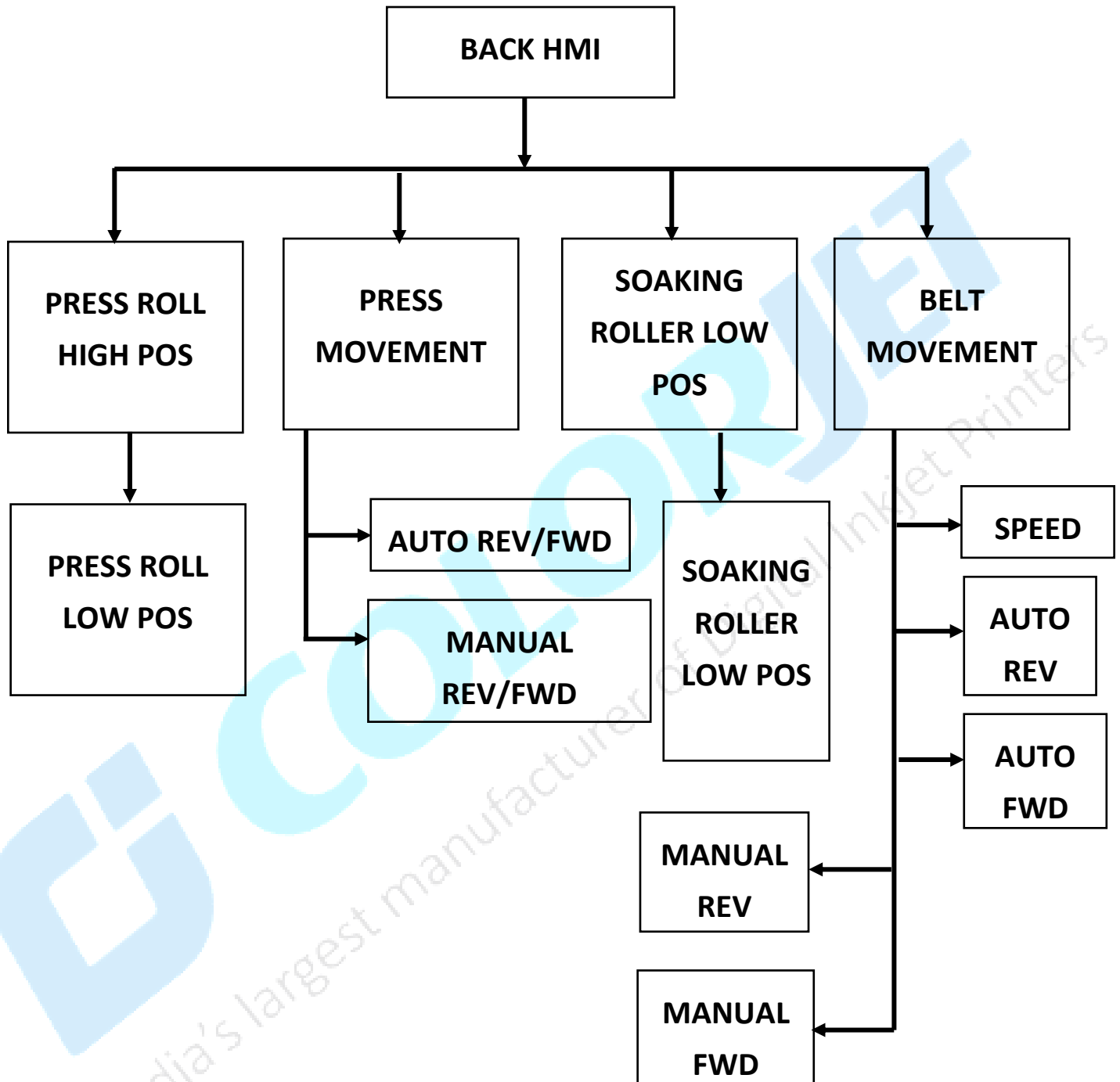
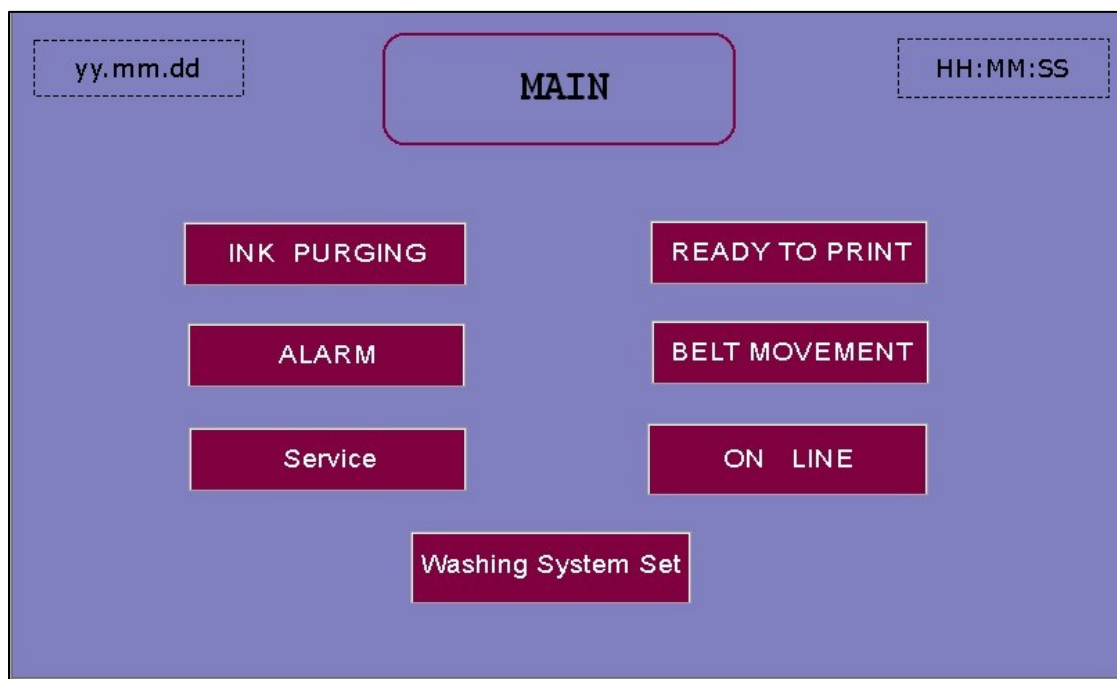After the Start Up screen, the **MAIN MENU** screen appears with a list of options, as shown below:

Fig 20: Displaying the Main Menu Screen

The description of different options in the **MAIN MENU** screen is given as follow:

- **INK PURGING:** Purge ink from print heads.
- **READY TO PRINT:** Enable to update the dryer settings and turn on the washing system.
- **ALARM:** Turn ON or OFF the alarm unit.
- **BELT MOVEMENT:** Move the belt in reverse or forward direction with different modes viz. Auto and Manual.
- **Service:** Turn ON or OFF the print engine, negative control, and ink valve.
- **ON LINE:** Enable the ON-LINE mode and directly issue the print command, stop the print, resume the print, and start the print from beginning.
- **Washing System Set:** Turn ON or OFF washing system units and their settings like brush movement, tub out, print dryer off, belt dryer off and jetting pump off.

PURGING INK

Head purging refers to the method in which print heads are cleaned by forcing pressurized ink through the nozzles. To purge ink from print head, touch the **MAIN MENU→INK PURGING** screens. The INK PURGING screen is shown in the image below:
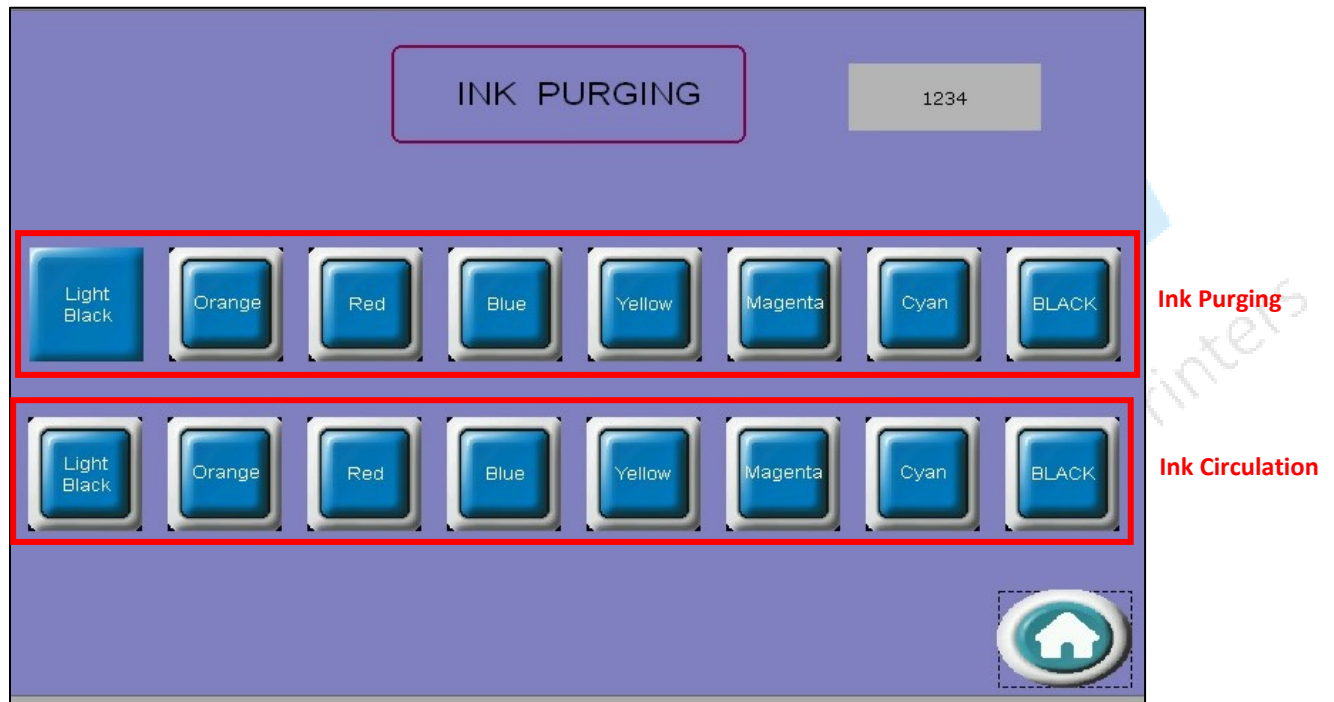

INK PURGING

1234

Light Black | Orange | Red | Blue | Yellow | Magenta | Cyan | BLACK → **Ink Purging**

Light Black | Orange | Red | Blue | Yellow | Magenta | Cyan | BLACK → **Ink Circulation**

Fig 21: Displaying the INK PURGING Screen

In the above screen, user can view the ink circulation button for each color. The Ink circulation enables to remove air from print head ink pipes.

SERVICE SCREEN

User can enable or disable Print Engine, Negative Control, and Ink Valve using the **SERVICE** screen. To open the **SERVICE** scree, touch the **MAIN MENU→ SERVICE** screens. The **SERVICE** screen is shown in the image below:
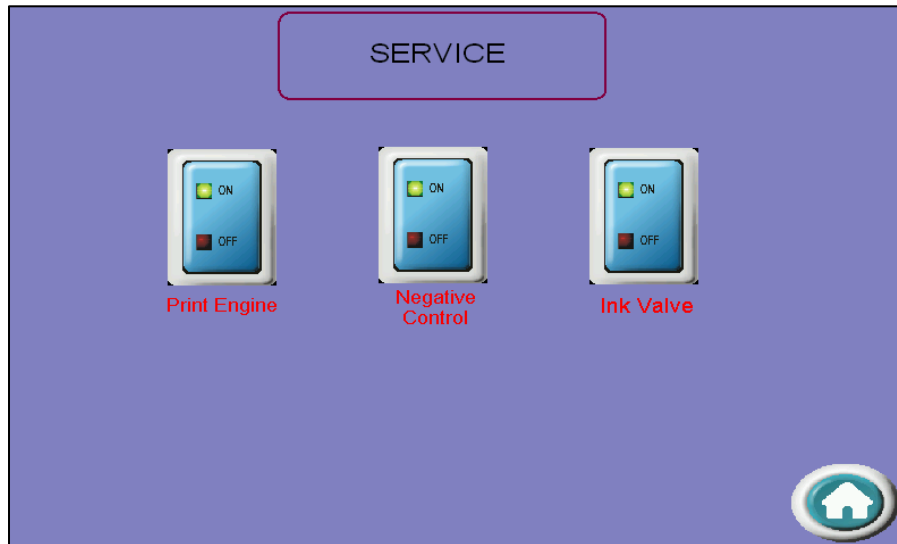
Fig 22: Displaying the SERVICE Screen

Note: Please don't disturb the above shown settings (refer to Fig 22) as this part is mainly used by the service engineer.

CONTROLLING BELT MOVEMENT

To control the belt movement, touch the **BELT MOVEMENT** icon on the **MAIN MENU** screen (Refer to Fig 20). The **BELT MOVEMENT** screen appears as shown below:
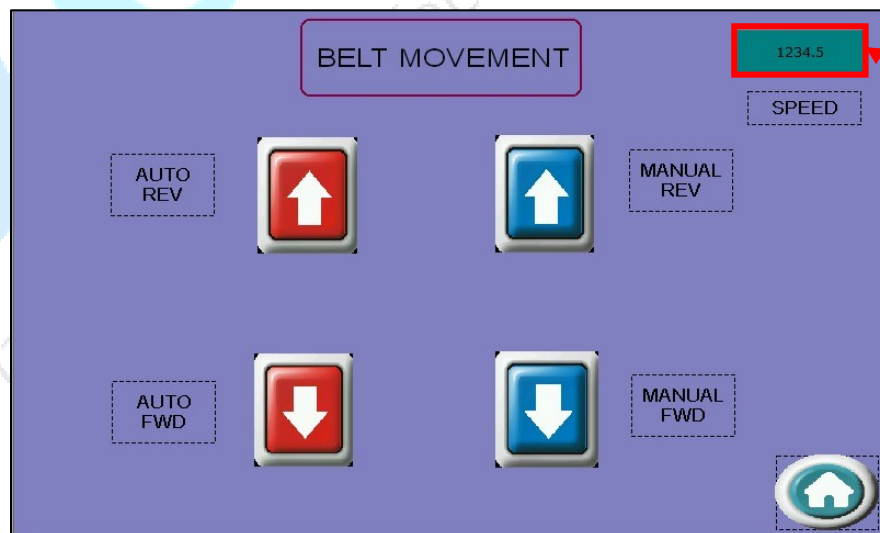
Display the belt speed

Fig 23: Displaying the BELT MOVEMENT Screen

The description of different options in the **BELT MOVEMENT** screen is given as follow:

- **SPEED**: Set the speed of the Conveyor Belt.
- **AUTO REV**: Auto move the belt in the reverse direction.
- **AUTO FWD**: Auto move the belt in the forward direction.
- **MANUAL REV**: Manually move the belt in the reverse direction.
- **MANUAL FWD**: Manually move the belt in the forward direction.

To set the belt speed, touch the **SPEED** icon on the **BELT MOVEMENT** screen. The **Numeric Keypad** appears on the **BELT MOVEMENT** screen, as shown below:
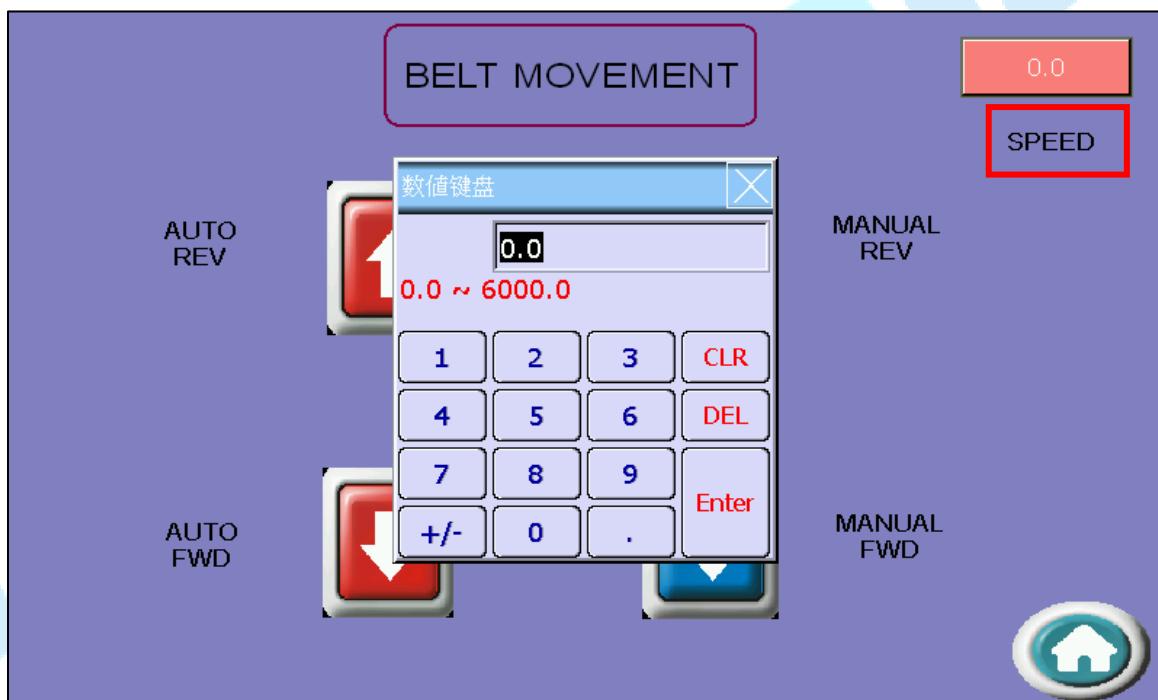

Fig 24: Setting the Belt Speed

*Enter the belt speed using the **Numeric Keypad** and touch the **Enter** button to set the belt speed.*

SETTING WASHING UNIT

Open the **WASHING SYSTEM** screen by touching the **Washing System Set** button on the **Main Menu.** The **WASHING SYSTEM** screen appears from where user can turn ON or OFF the BRUSH, BELT DRYER, PRINT DRYER, JETTING PUMP and TUB OUT, as shown below:
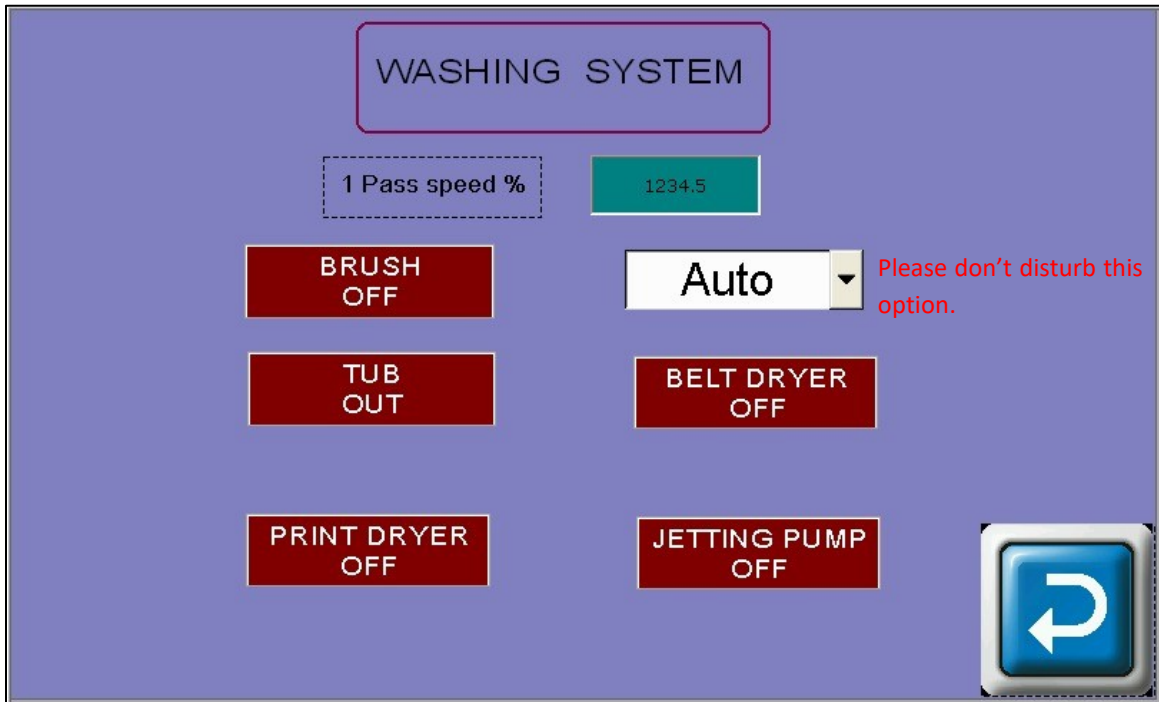

Fig 25: Displaying the WASHING UNIT Screen

The description of different options in the **WASHING SYSTEM** screen is given as follow:

- **BRUSH OFF**: Turn ON or OFF the brush unit.
- **BELT DRYER**: Turn ON or OFF the belt dryer.
- **TUB OUT**: Move out the washing tub.
- **JETTING PUMP**: Turn ON or OFF the jetting pump.
- **PRINT DRYER**: Turn ON or OFF the print dryer.

The above screen is used to run the wash cycle by enabling all the options and run the belt in auto mode (using the BELT MOVEMENT screen Fig 23).

CONTROLLING DRYER SETTINGS

To update the dryer settings, touch the **READY TO PRINT** button on the **MAIN MENU** screen (Refer to Fig 20). The **READY TO PRINT** screen appears as shown below:
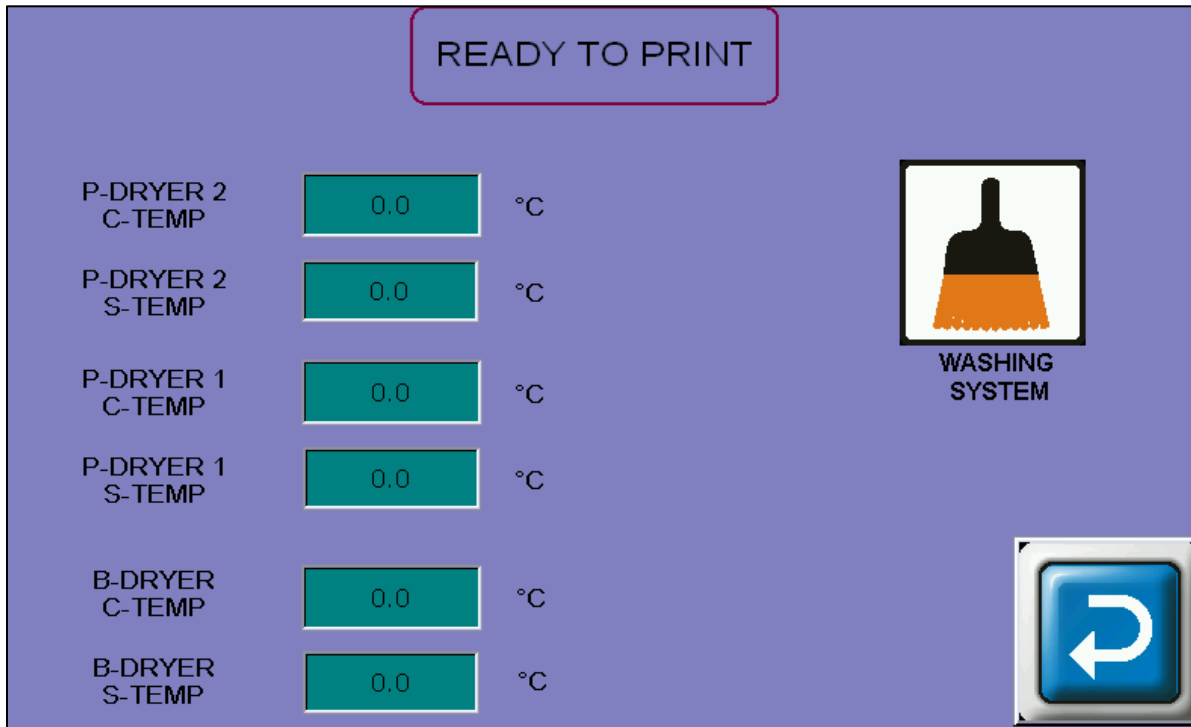

Fig 26: Displaying the HEATERS SETTINGS Screen

Note: Default dryer settings are fed. User can update the dryer temperature setting as per the type of fabric and design.

Using the above screen, user can also update the washing system settings (refer to the WASHING SYSTEM screen).

ONLINE MODE

Using the ONLINE mode, user can directly issue the print command, pause the print, stop the print, resume the print, and start the print from the beginning. On touching the **ONLINE** icon on the **Main Menu** screen, the following screen appears:
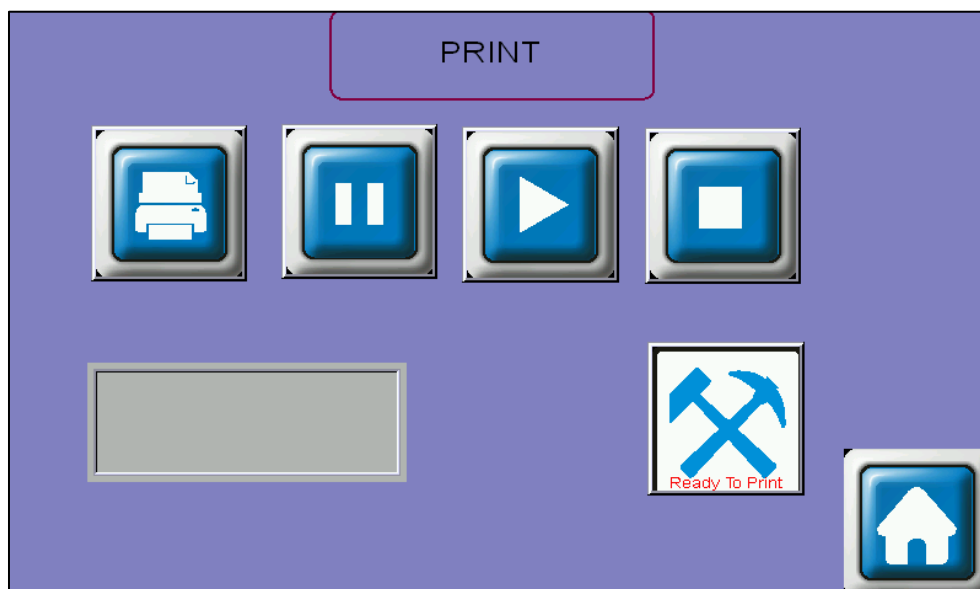

Fig 27: Displaying the ONLINE Mode Screen

Using the above screen, user can also open the READY TO PRINT screen simply by touching the **Ready To Print** icon (Refer to the **CONTROLLING DRYER SETTING** section).

BACK HMI SCREEN
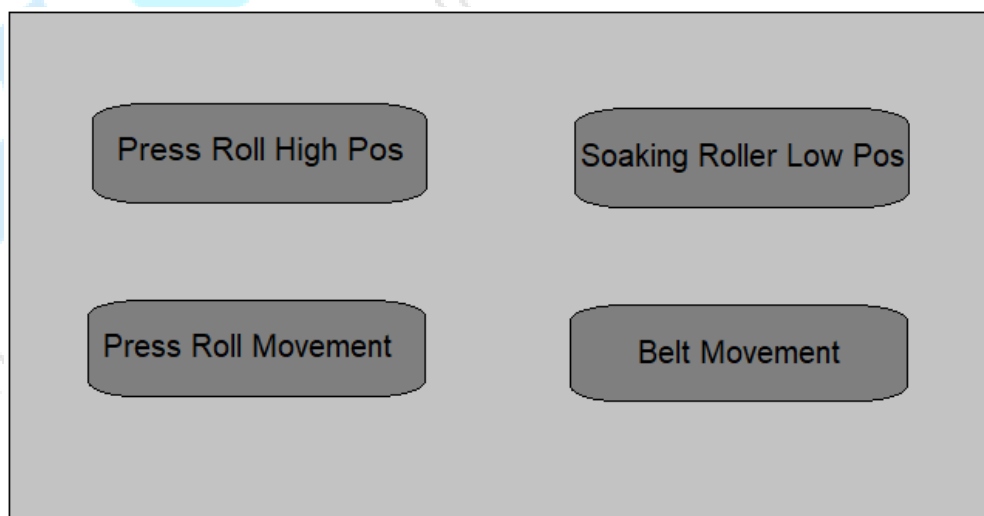
The **Back HMI Start Up Screen** is shown as below:

Fig 28: Displaying the Start Up Screen from the Back

The description of different options in the **BACK-HMI** screen is given as follow:

- **Press Roll High Pos**: Set the pressure roller position (Up or Down).
- **Press Roll Movement**: Set the press roller movement (auto/manual and rev/fwd).
- **Soaking Roller Low Pos:** Set the soaking roller position (Low or High).
- **Belt Movement:** Set the belt movement (auto/manual and rev/fwd) (refer to Fig 23)

Case 1: On click the **Press Roll Low Pos** and **Soaking Roller Low Pos** icons (one by one) in Screen 1. The Screen 2 appears, as shown below:
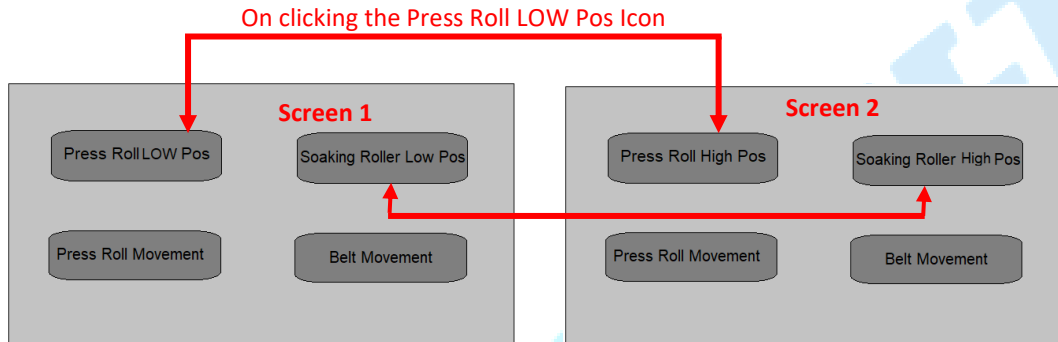
Case 2: On click the **Press Roll Movement** icon in Screen 1. The Screen 2 appears, as shown below:
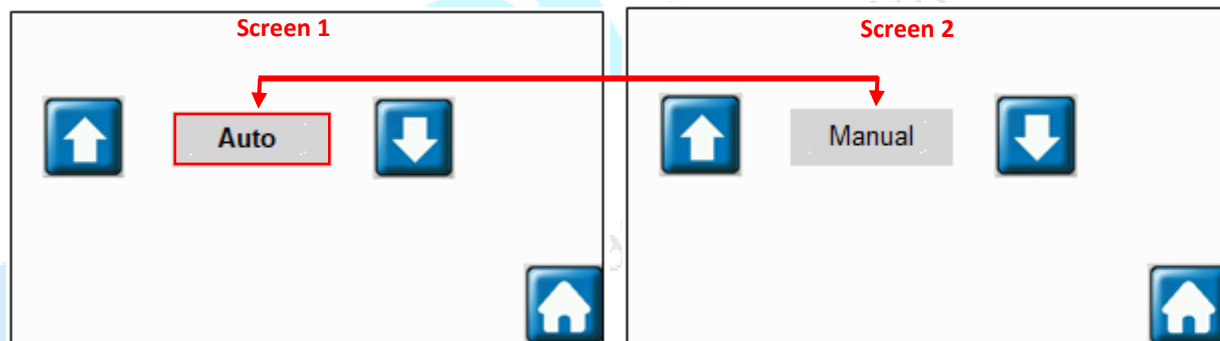
The User Interface of the Printer Manager software is shown as below:

The description of the Printer Manager window is given as below:

Main Menu	Consists of several sub menu options viz. Settings, Tools, and also provide variety of functions in well organize manner.
Quick Access Toolbar	Displays commands that are used more frequently like Add Job, Delete Job, Print Job, Pause or resume, Abort job, Check nozzle, Move left, Move right, Move forward, Move backward, Z Move Down, Z Move Up, Move carriage to origin, and more.
Job Information	Displays the properties of the selected job like File Name and Path, Status, Print Size, Print Area, DPI, Pass, and more.
Job Preview	Shows the preview of the selected job as well as printing status progress in this area.
Job List	Displays the thumbnail preview of added jobs.
Error message	Displays the system generated error messages.

SETTING MENU

The **Setting** window with the **Printer** tab is shown in the below image:

Fig 30: Displaying the Setting Window

The **Move** tab is shown in the image below:
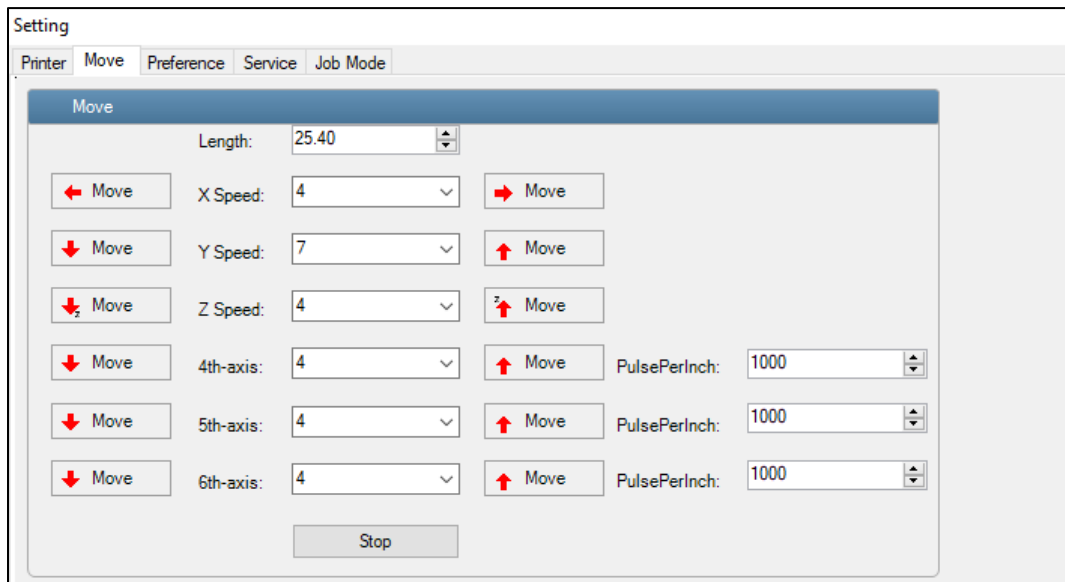
Fig 31: Displaying the Move Tab

The **Preference** Tab is shown in the image below:
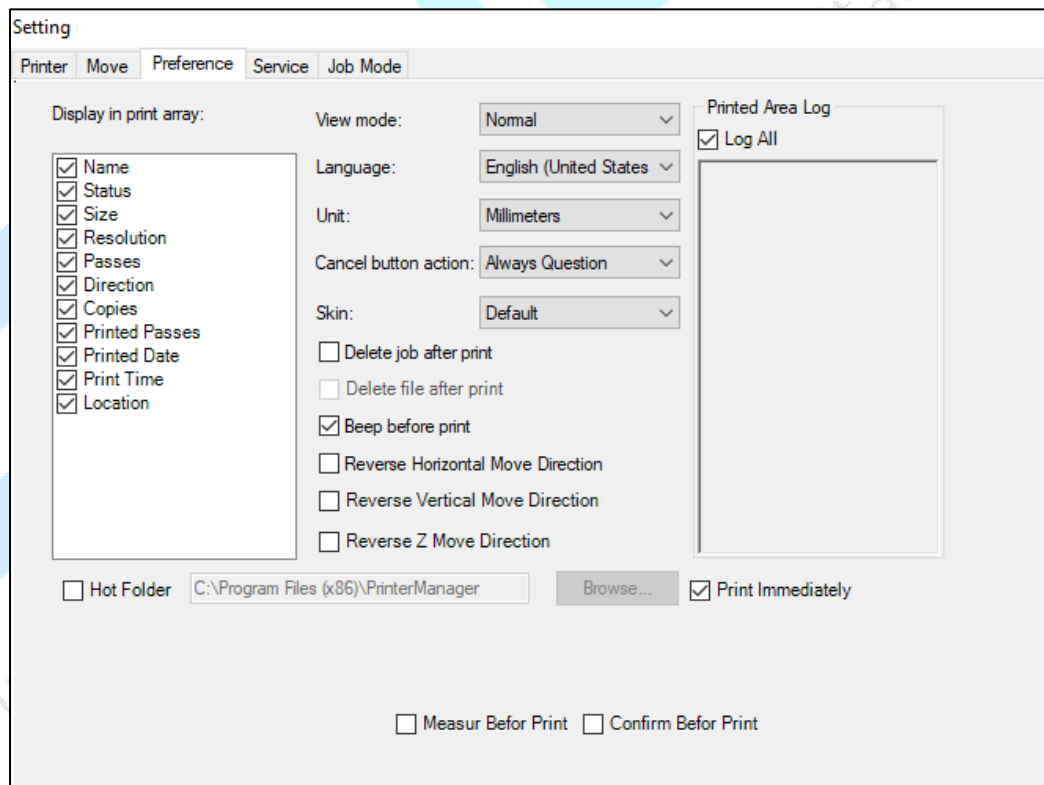
Fig 32: Displaying the Preference Tab

Note: Unit value can be changed using the **Unit** drop down list.

FEEDING PASSWORD

The Password option enables operator to feed the time password of the printer. On clicking **Password** option under the **Tools** menu, the **Password** window appears with two options viz. Time Password and Language Password.

Follow these steps to feed the time password:

Step 1: *Click* on the **Main Menu→ Tools→ Password** options, as shown below:
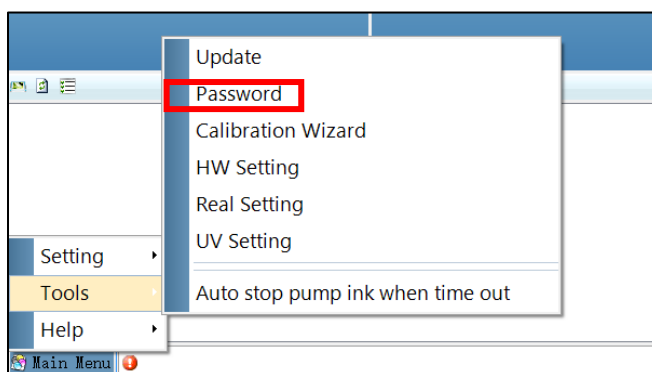
Fig 33: Selecting the Password Option

The **Password** window appears on the screen as shown below:
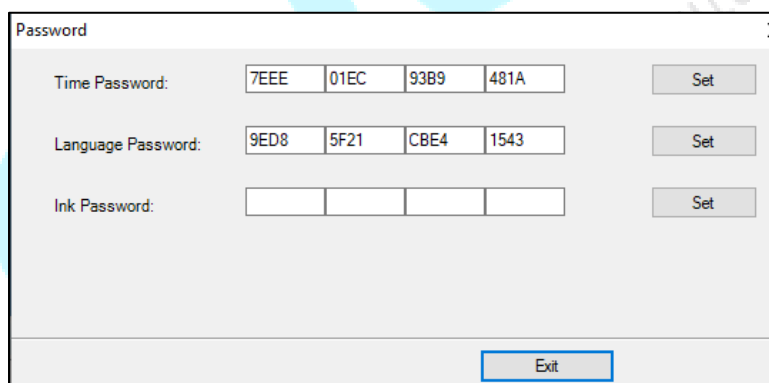
Fig 34: Displaying the Password Window

Step 2: *Set* the time password (Refer to Fig 34).

Note: The length of the password field must be of 16 digits.

Step 3: After feeding the time password, click on the **Set** button to set the password (Refer to Fig 34).

Step 4: Now the time password gets set, c*lick* on the **Exit** button to close the window (Refer to Fig 34).

Note: When **"First Warning"** appears, kindly contact Head Office with the following screen:

- Password Screen (Refer to Fig 34)
- About Screen
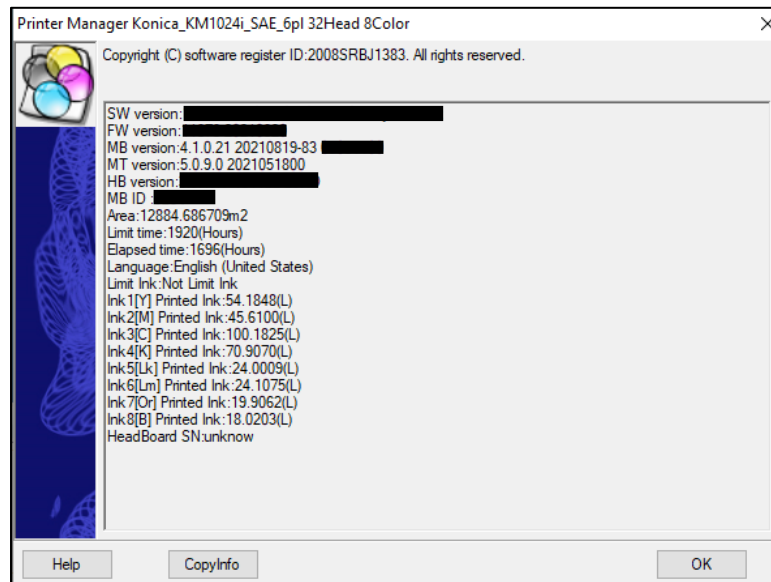
Fig 35: Displaying the About Screen

7. PRINTER MANAGER OPERATIONS

SETTING THE PRINT ORIGIN

Print origin sets the print starting point from the Carriage Home Position (right side from the front of the machine). It can be set by two ways; moving & positioning the carriage and typing the offset value directly in the given field.

Follow these steps to change the print origin:

*Step 1: Move the carriage at the position from where you want to start the printing by clicking on the left and right buttons on the **Quick Access Toolbar**, as shown below:*

Fig 36: Adjusting the Carriage Position

*Step 2: After positioning the carriage, click on the **Set print origin** icon on the **Quick Access Toolbar**, as shown below:*

Fig 37: Selecting the Set Print Origin Option

*On clicking the **Set print origin** icon, the current position of the carriage gets updated in the **Origin X** text box, as shown below:*

Fig 38: Displaying the Origin Value

Now, the printing origin gets set. Additionally, you can also directly enter the print origin value in the Origin X field under the Print Parameter section.
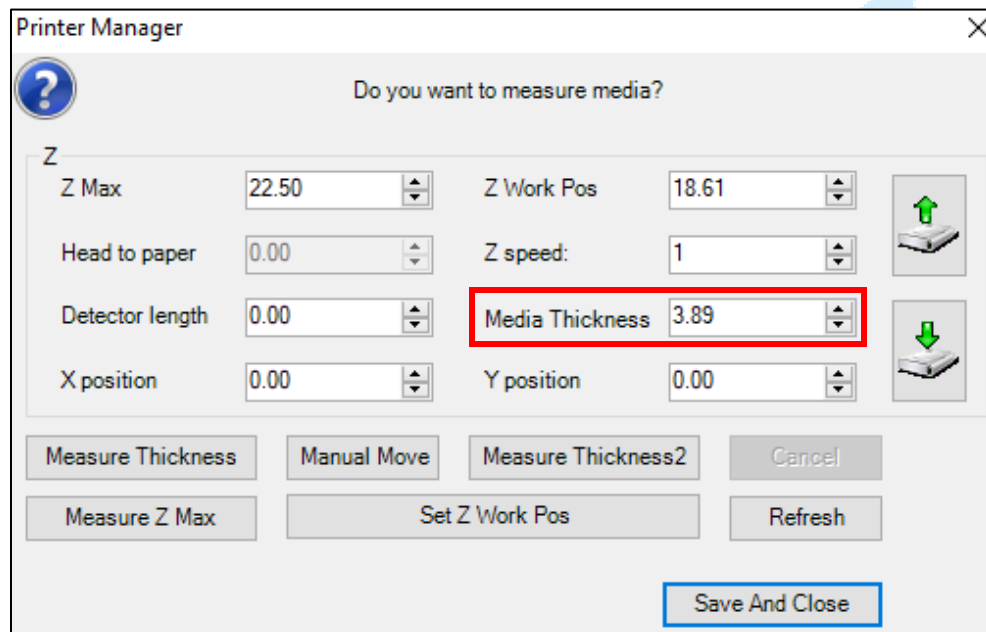
SETTING MEDIA THICKNESS

To change the media thickness, open the Z parameter window by clicking on the **Measure Paper Height** icon on the **Quick Access Toolbar** as shown below:

Fig 39: Setting Media Thickness

The **Z Parameter** screen appears as shown below:

Fig 40: Setting the Print Head Height

A default value of media (fabric) thickness is 3.89 for 0.1 – 1.0 mm fabric. In case, the fabric thickness gets changed, then user needs to update the default value by adding or subtracting in it. After updating the value, please perform the bi-direction calibration and correct it, if required.

Note: Please don't disturb other settings on the above window (Fig 40).

PRINT HEAD CALIBRATION

The Print Head calibration is categorized into the following types:

- **Mechanical Check**: Includes Vertical Check and Angle Check
- **Software Calibration**: Includes Horizontal Calibration and Step Calibration

Let's explain the above-mentioned checks and calibration one by one in details.

Note: Mechanical checks are performed by service engineer, thus these checks and their description are not included in the user manual.

NOZZLE CHECK

To perform the nozzle check, click on the **Nozzle Check** icon on the **Quick Access Toolbar** as shown below:

Fig 41: Performing the Nozzle Check

Th print of nozzle check gets started. The Nozzle Test print is shown in the image below:

Fig 42: Displaying the Nozzle Check Result

THE CALIBRATION WIZARD

Print heads should be calibrated to ensure good printing quality. *To open the* **Calibration Wizard**, *click on the* **Main Menu→ Tools → Calibration Wizard** *options, as shown below:*
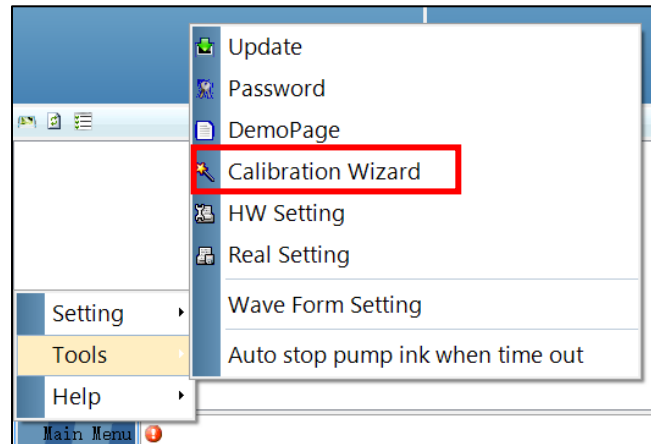
Fig 43: Selecting the Calibration Wizard Option

The **Calibration Home Page** screen appears. *Click the* **Next** *button and user redirects to the* **Mechanical Inspection** *screen as shown below:*
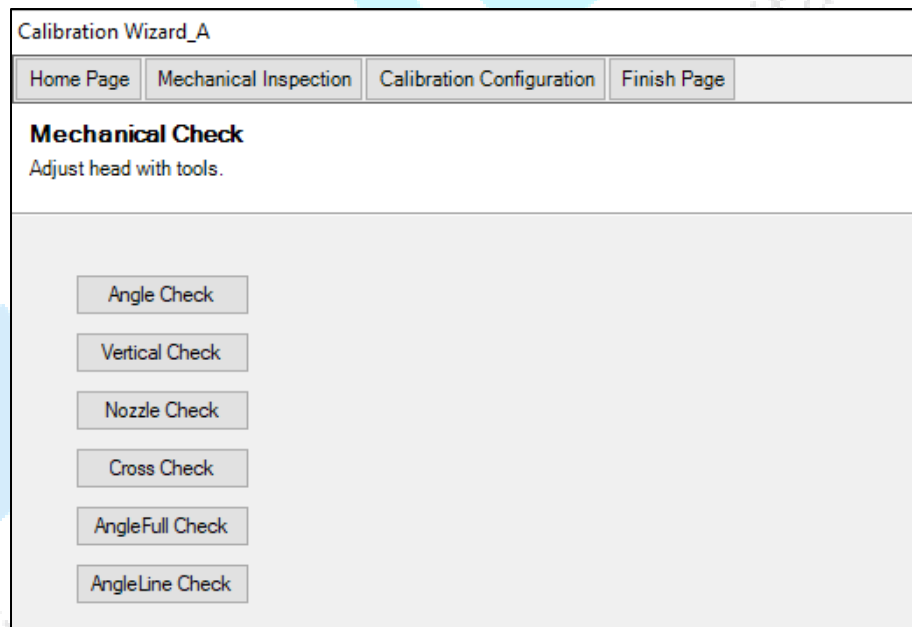
Fig 44: Displaying the Calibration Wizard

Note: The Mechanical Inspection section is only done by the service engineer.

When the **Next** button is pressed, you are redirected to the software calibration screen, as shown in the below images:

Fig 45: Displaying the Printer Calibration Options

HORIZONTAL CALIBRATION

Horizontal calibration checks the bi-directional, left, and right alignment and corrects it by adding or subtracting the correction value from the default set value. It has to be performed for each print mode, whichever is required. Let's explain each type of horizontal test one by one.

Bi-direction Calibration

Bi-directional calibration is performed to achieve dot placement accuracy between the "Left to Right" and "Right to Left" print sweeps. If the bi-direction offset value is correct, the Left to Right test print would align accurately with the Right to Left test print at **"0"** position. In case of error in the Bi-Direction offset, the Left to Right and Right to Left print would align at some other point on the scale.

The Bi-direction Calibration result is shown in the image below:
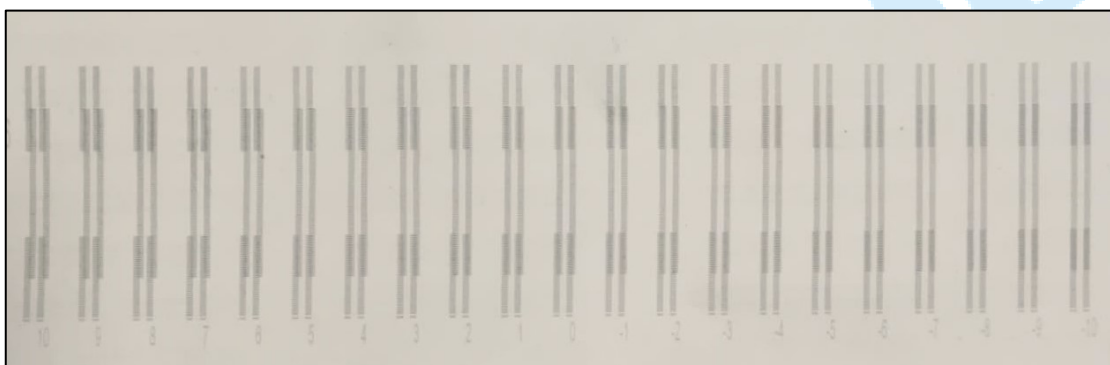
Fig 46: The Bi-Direction Calibration Output

Based on the above figure, you can notice that the Bi-direction calibration is good at **"-10"** position. The correction value is **"-10"** which means you need subtract 10 to correct the bi-direction value. Sometimes, the correction value can either positive or negative. If the correction value is positive, then you need to add it in the current bi-direction adjust value or subtract the same if negative.

Left to Right and Right to Left Calibrations

Left to Right calibration is performed to achieve dot placement accuracy of all colors with respect to reference color (Black) during the carriage's left to right print sweep. Similarly, Right to Left calibration is used to achieve dot placement accuracy during the carriage's right to left sweep.

When the position of the test head is correct, then it would align perfectly with the reference color at **"0"** position, indicating that the error position is **"0"**. If the test print head's position saved in the system is inaccurate then it would not align at **"0"** position, but at some other point on the calibration scale. The position at which the test head aligns perfectly with the reference head, indicates the error in position.

The **Left and Right Calibration** checks are shown in the image below:

Fig 47: Displaying the Horizontal Left and Right Checks

STEP CALIBRATION

The printer step calibration is performed to verify and correct fabric feeding. The printer prints a complete image pass by pass. A pass is the horizontal carriage sweep perpendicular to the fabric movement. After each pass the printer moves the fabric forward for the next pass. This movement of fabric is called a step. The distance by which the fabric is moved is called the step size and it has to be accurate. Step size errors cause horizontal white or dark bands to appear in the print output. Step size needs to be adjusted for multiple factors like thickness and roughness of the print fabric etc. Step calibration should be used to fine adjust the step size and has to be done for each desired pass.

The Step Calibration result image is shown as below:
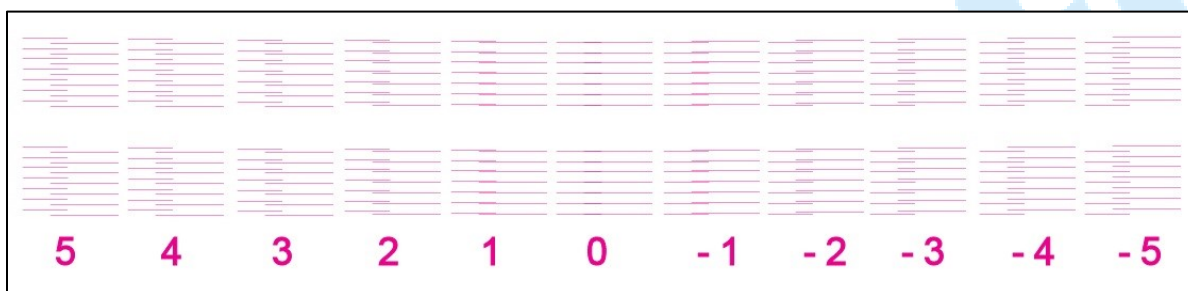
Fig 48: Displaying the Output of the Step Calibration

From the above figure, you get the accurate step adjust correction value. The correction value is either positive or negative. If the value is positive, then add it in the current step adjust value for the Print Head calibration. On the other hand, if the value is negative, then subtract the value from the current step adjust value. From the above, you can conclude that the pattern is corrected at **"0"** position.

The **Step Calibration** and its parameters are shown in the image below:
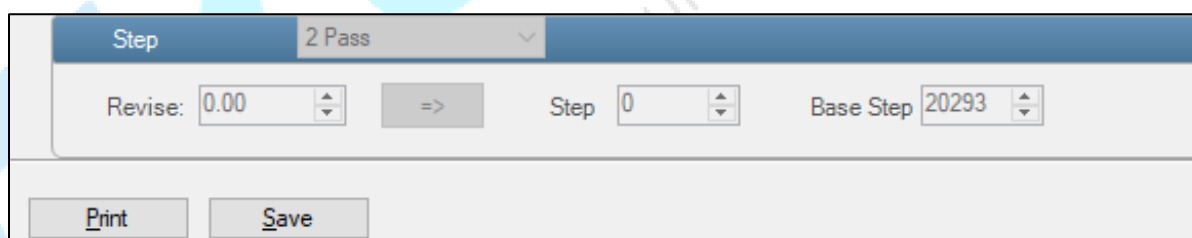
Fig 49: Displaying the Step Calibration Parameters

Follow these steps to perform step calibration:

Step 1: Select the desired pass from the list and click on the **Print** button (Refer to Fig 49).

Step 2: Feed the correction value in the **Revise** field (the correction value up to two decimal places) (Refer to Fig 49).

Note: If lines are not matching exactly in one line in any of the numbers in the printed pattern. Then, we have to select decimal values between two nearest matching numbers. For example, nearest matching values are 0 and 1 then we can select in between 0.1 and 0.9.

Step 3: Click on the **=>** icon (Refer to Fig 49) on the Step Calibration window. The correction value result will be reflected in the **Step** field (Refer to Fig 49). The same step value will also be displayed in the **Steps** field on the **Quick Access Toolbar**.

SETTING PRINT PARAMETERS

Using the printer manager, you can manually change print preferences as per the printing requirements such as print origin, printing speed, no of steps, and more as shown below:

Fig 50: Setting Printing Parameters

The description of printing parameters is given as follows:

- **Origin X**: Directly enter the print origin value.
- **Steps**: Remove step size errors in the current print job by specifying number of steps.
- **Pass**: Choose the number of passes with which the print job should be printed. Increasing the number of passes improves the print quality but at the cost of printing time.
- **Speed**: Choose the printing speed like High Speed, Medium, and Low.
- **Medium Speed**: Set the Y printing speed viz. Standard Speed and Low.

ADDING JOBS

There are two ways to add jobs in the Job List area viz. the Add Job button and right click on the Job List area. Let's explain both the ways one by one.

Follow these steps to add jobs in the Job List area:

Step 1: *Click* on the **Add Job** button on the **Quick Access Toolbar**, as shown below:

Fig 51: Clicking on the Add Job Button

The **Open** window appears on the screen.

Step 2: *Navigate* to the location where the image file with extension "**.prt**" and "**.prn**" is stored (Refer to Fig 52).

Step 3: *Click* on the **Open** button to add the file into the **Job List** area, as shown below:
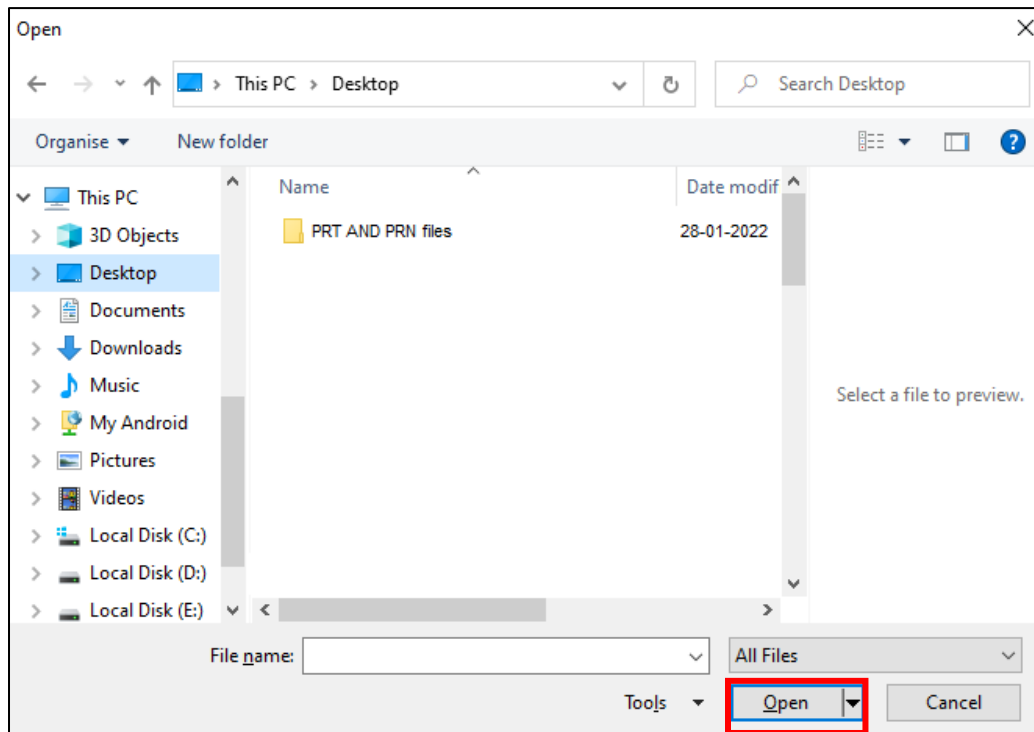
Fig 52: Adding the Job

Now, the selected image appears in the Job List area, as shown below:
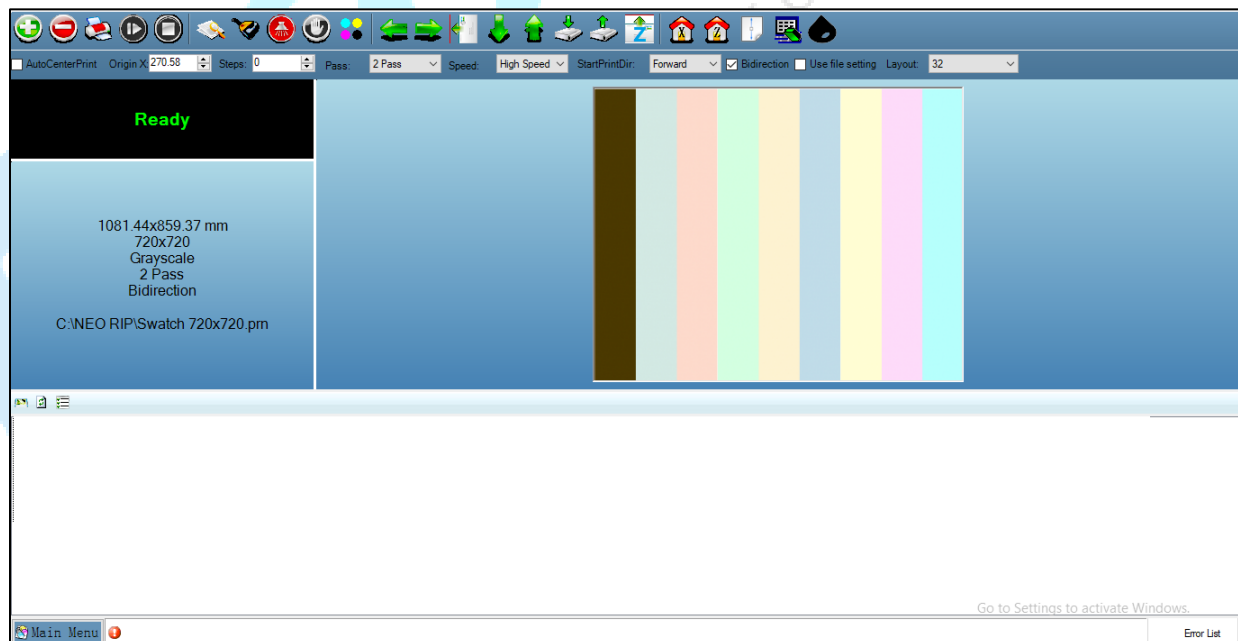
Fig 53: Displaying the Added Job and Their Details

Once a file has been added its information such as file path, size, resolution, and number of passes can be viewed in the Job Information area. User can also add a job simply by right clicking on the Job List area and selecting the **Add Job** option from the context menu, as shown below:
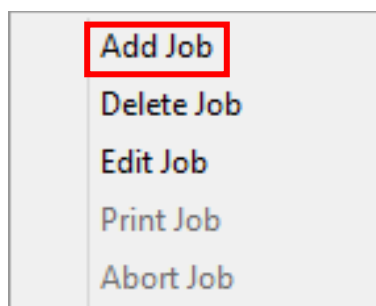
Fig 54: Displaying the Context Menu

On selecting the **Add Job** option, the **Open** window appears and follow the above-mentioned steps to add more jobs.

Note: To delete the selected job, *click* on the **Delete job** icon on the **Quick Access Toolbar**.

EDITING JOB

Follow these steps to edit the selected job:

Step 1: *Select* the job for which details you want to edit from the **Job List** area.

Step 2: *Right-click* on the selected job. The context menu appears on the screen.

Step 3: *Select* on the **Edit** option from the context menu, as shown below:
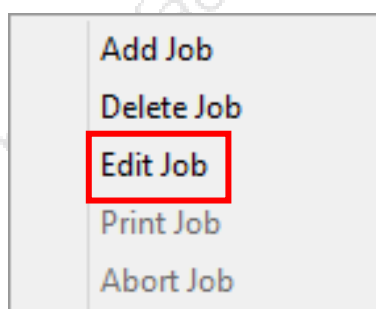
Fig 55: Selecting the Edit Job Option

The **Edit Job Form** appears with the list of options viz. Clip, Reverse Print, and Tile.

Step 4: *Select* the desired checkbox in front of the Clip, Reverse Print, and Tile options. On clicking to any option, its related parameters get appeared on the right pane and you can edit them as per the requirements. In our case, we have selected the **Clip** checkbox.

Step 5: After making the desired changes, *click* on the **OK** button to apply the settings, as shown below:
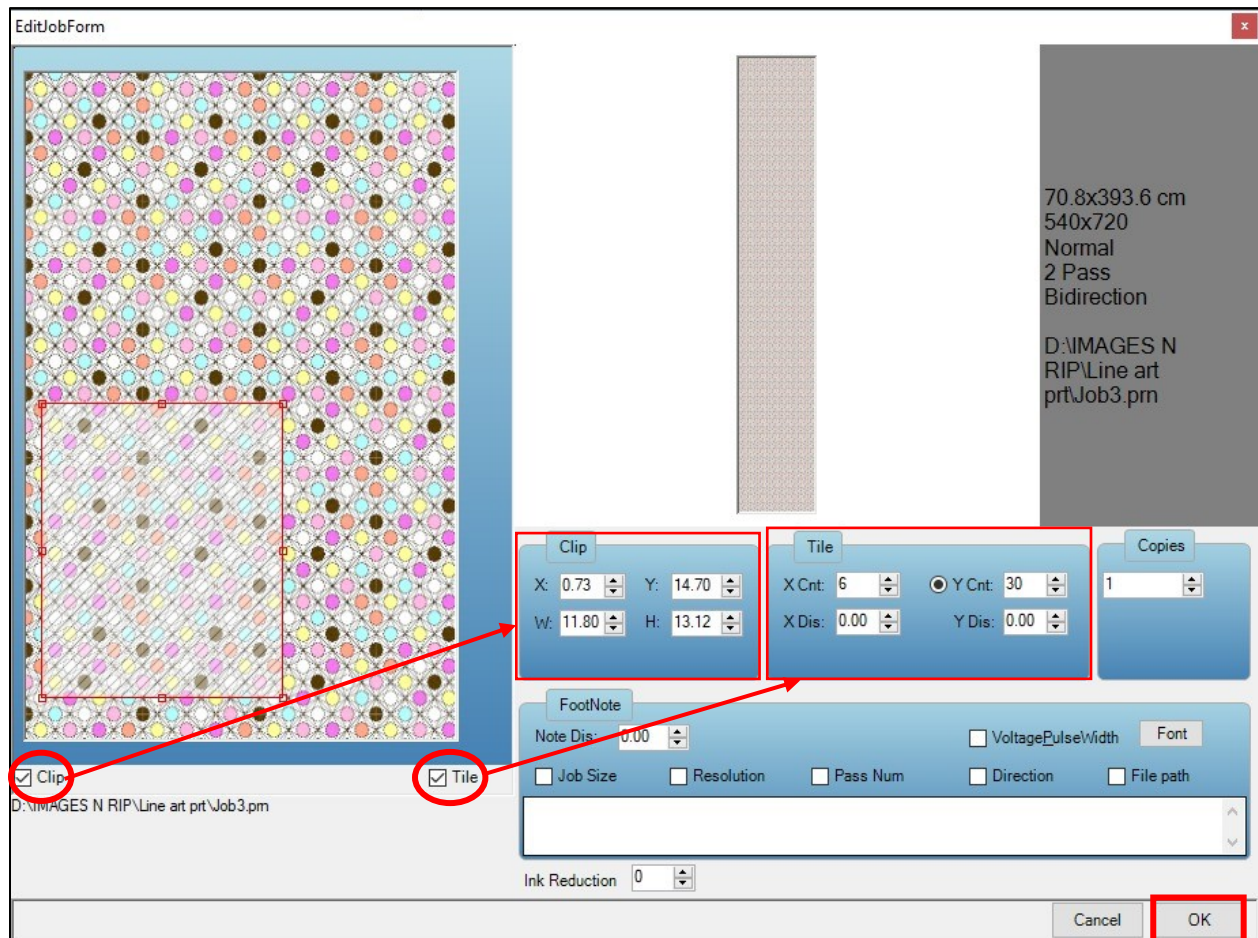
The description of different options in the **EditJobForm** window is given as below:

- **Clip**: By enabling this, a portion of the image can be selected by dragging the image preview. User can also adjust height and width using the above window.
- **Tile:** By enabling this, desired number of counts in x and y directions can be printed. User can also adjust the distance between each count.
- **Copies:** Feeding any number of copies will repeat the prints in the Y direction. Careful, the Print will stop and restart after each copy.
- **Foot note:** You can add footnote printing with each printed image.
- **Ink Reduction:** Reduce the usage of ink.

RIPPING AND PRINTING

Ripping is an independent process which converts a raw image file into the machine-readable format and get the file ready for printing. The Rip software supports the tiff, jpeg, eps, psd, bmp file formats. After ripping the image file, the output file will be in **".prt"** or **".prn"** file format. Thus, you should first rip the image file before printing and then issue the Print command. While ripping, the color profiles are used to automatically perform the color corrections in the image.

You can print an image on the selected fabric simply by clicking on the **Print Job** button available on the **Quick Access Toolbar,** as shown below:

Fig 57: Issuing the Print Job Command

After issuing the Print command, the printing gets started and its progress details displays in the Job Information area, as shown below:

Printing

1081.44x859.37 mm
720x720
Grayscale
2 Pass
Bidirection

C:\NEO RIP\Swatch 720x720.prn
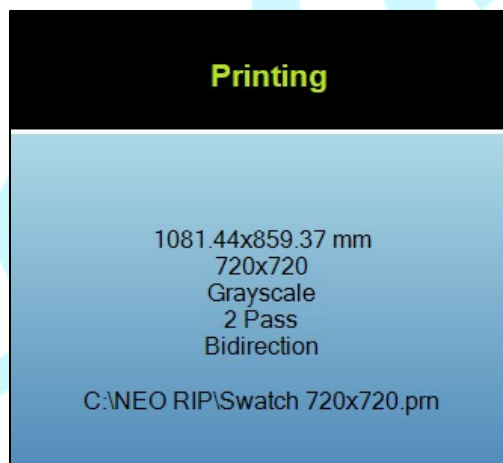
Fig 58: Displaying the Printing Details

DPI AND MODE

There are different combination of print modes and resources, as shown through the table:

Print DPI	Print Passes
540x720	2
540x1080	3
540x1440	4

PAUSING AND CANCELING PRINTING

If you find any defect during the printing process, you can immediately pause or cancel the current printing job using the Pause or resume and Abort Job buttons available on the **Quick Access Toolbar** as shown below:

Fig 59: Issuing the Pause or resume Command

Similarly, you can abort the process by right clicking on the selected Job in the Job List area and select the **Abort Job** option from the context menu.

Note: Keyboard shortcut for pausing and resuming is **Ctrl+TAB.**

8. HEAD CLEANING

Print Head is a delicate part which needs to be cleaned as per the recommended methods to have long life and to ensure consistent print quality. Below sections give recommended steps to clean the Print Heads.

HEAD WIPING
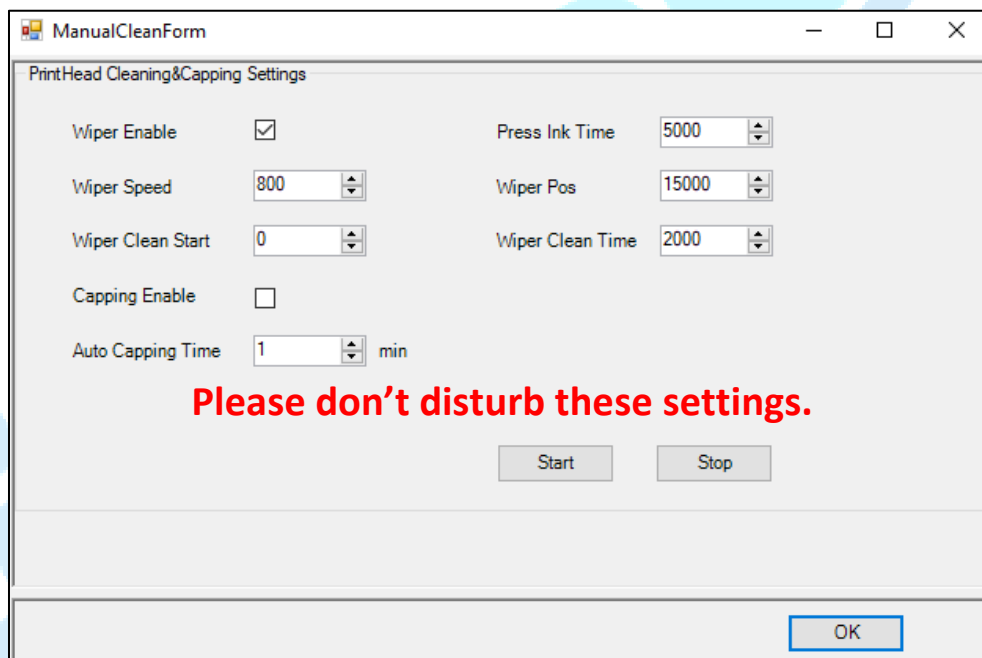
Head wiping refers to the process in which the head surface area is cleaned for better printing result and quality. In **VastraJet K2**, the Auto Wiping option is available to clean the head surface area.

The Auto Wiping option is shown in the image below:

Fig 60: Displaying the Auto Wiping Option

On clicking the **Auto Wiping** icon, the **Manual Clean Form** window appears on the screen, as shown below:

Fig 61: Displaying Auto Wiping and Auto Capping Settings
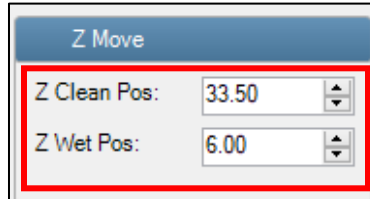
The list of Auto Wiping and Auto Capping options is defined as follow:

- **Wiper Enable:** Enable the auto wiper functionality.
- **Wiper Speed:** Help in defining the wiper speed.
- **Wiper Clean Start:** Denote the wiper home position.
- **Wiper Pos:** Help in defining the distance travel by the wiper.
- **Capping Enable:** Enable the auto capping functionality.
  Note: Enable or disable as per their requirements.

- **Auto Capping Time:** Define the auto capping time. When the printer is ideal for the define time then auto capping process gets started and capped the capping station with the head plate.

SETTING WIPING AND CAPPING HEIGHT

Using the Settings window, user can set the wipping and capping height by updating values in the Z Clean Pos and Z Wet Pos list boxes, as shown below:

Fig 62: Setting Wiping and Capping Height

HEAD PURGING

Head purging refers to the method in which heads are cleaned by forcing pressurized ink through the nozzles. In VastraJet K2, user can perform the head purging using the front HMI. To purge, touch the Ink Purging icon on the Main Menu screen. The Ink Purging screen appears as shown below:
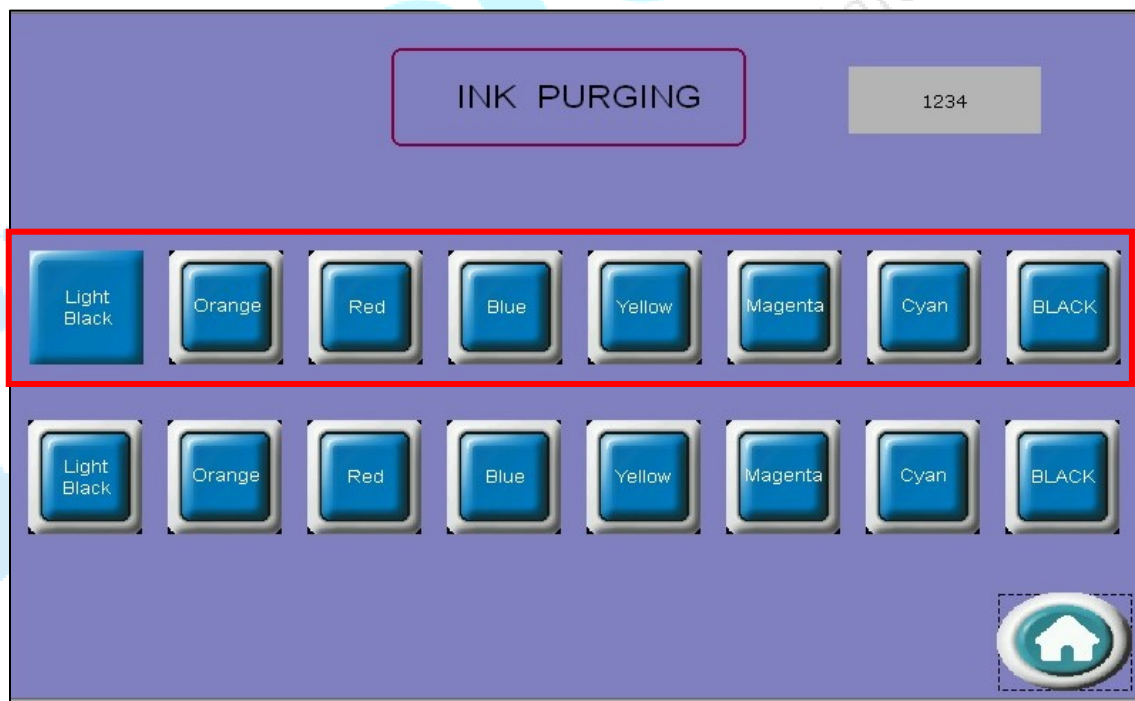
Fig 63: Displaying the Purging Buttons

Note: Please note that purging button should be pressed only for a second (until few drops of ink come out).

HEAD SPRAYING

Head spraying is used to avoid mixing of colors during the head purging and wiping process. This method can help to open head nozzles, if few nozzles are blocked. To perform head spraying, *click* on the **Spray** button available under the **Quick Access Toolbar**, as shown below:

Fig 64: Displaying the Spray Button

9. SWITCH OFF PROCEDURE

Note: The machine main power must be **"ON"**.

Follow these steps to learn the switch off procedure:

Step 1: Perform the Nozzle Test to check print head nozzles status.

Step 2: Up the press roller (using the back HMI) and remove the fabric.

Step 3: Clean the Capping Station area and check the water level in the Capping tray.

Step 4: Click the **Auto Capping** *icon to engage capping station with the head plate using the Printer Manager, as shown below:*

Fig 65: Displaying the Auto Capping Option

Note: *Never move the carriage manually over elevated capping station.*

Step 5: Close the printer manager software.

Step 6: Turn OFF the Print Engine from the front HMI using the SERVICE screen.

Step 7: Turn OFF the printer using the Machine Power button or Emergency button.

Step 8: Insert the bracket to hold the press roller in the UP position, as shown below:
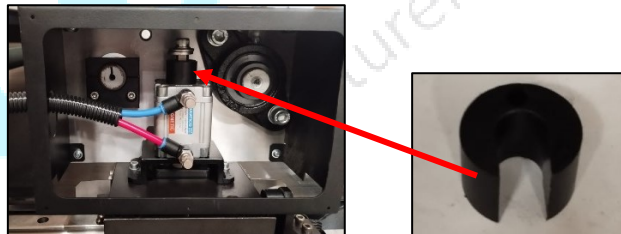
Fig 66: Holding the Press Roller in the Up Position

Step 9: Cover the printer to avoid dust particles on the machine parts.

Now, the printer is switch off.

10. GLUE COATING

GLUE IMPLEMENTATION

Glue is composed of three different chemicals and two solvents.

Chemicals:

1. Prima: It is used as a primitive coat, for smoothening the belt surface. This is to be done only when the previous glue layers have been washed completely.	**2. Therma**: It is used for an intermediate coat, for activating and deactivating the glue according to the temperature variation.	**3. Perma**: It is the final glue coat, to make the belt sticky for the fabric.

Solvent:

| **Cleantek**: This liquid solution is used for the renewing/refreshing the tackiness of the Perma adhesive. In digital printing, the adhesive film must be even, thin and hard (to maintain accurate distance in between print head and fabric). The Cleantek removes foreign elements, like dust and micro fibers, from the top layer, hence enhancing the adhesion property of the Perma. If there is no improvement using the Cleantek, it means it's time for a coat of the Perma.	Solvtek: This is used either to dilute the adhesives, or to complete removal of the all adhesive layers. The following are the two main reasons for removing all the glue layers: • When the thickness of the adhesive layer goes on increasing due to multiple coat of the Perma. • When the glue layer feels smudgy or groovy (in terms of evenness).

Stages of Glue (Adhesive) Process

Stage 1: Prima coat   **Stage 2:** Therma coat   **Stage 3:** Perma coat

An interval of 4hrs is required for the glue to set and dry. After each glue coat, run the glue cycle for 50 minutes with glue heater ON. After final coat of Perma, printing can be started. The third stage is generally a repetitive process, repetition depending on the frequency of printing hours. And when the glue coats get uneven or once in 2-3 months, whole process has to be repeated after removing existing Glue layers.

Note: Average consumption for the Cleantek solvent is 500ml for one time.

Approximate consumption of chemicals for a year:

- **Prima:** Approx. 2 Ltrs
- **Therma:** Approx. 2 Ltrs
- **Perma:** Approx. 5 Ltrs
- **Cleantek:** Approx. 4 Ltrs
- **Solvtek :** Approx. 10 Ltrs

Note: Actual consumption depends on the work load, fabric type, and the maintenance. Generally, shelf life for these chemicals is approx. 4 years.

Shelf life for this chemical are approx. 4 years. Some of the Glue are having these chemicals as base and it harms the belt or adversely affects the life of the Printing Blanket (Conveyor Belt):

RECOMMENDED	NOT RECOMMENDED	NOT RECOMMENDED
Alcohol	Aromatic	Methyl ethyl ketone (MEK
Methyl alcohol	Benzene	Chlorinated hydrocarbon
Ethyl alcohol	Toluene	Methyl chloride
Isopropyl alcohol	Xylene	(Mono) chlorbenzene
Ester	Aliphatic	Chloroform
Butyl acetate	Hexane	Trichloroethane
Ethyl acetate	Cyclohexane	Trichloroethylene
	Ketone	Ether
	Acetone	Ethyl ether
		Tetrahydrofurane (THF)

GLUE PROCESS PREPARATION

Follow these steps for glue process preparation:

Step 1: Keep the **ventilators** and **exhaust** fans ready.

Step 2: Remove the fabric, if any.

Step 3: Run the **Wash Cycle** from HMI, simultaneously belt can be cleaned by wiping with cloth.

Fig 67: Running the Wash Cycle

Note: The wash cycle is a process of cleaning the conveyor belt, for which some options such as Brush, Print Dryer, Belt Dryer, Jetting Pump and Tub Out in the WASHING SYSTEM screen need to be enabled, and then move the belt in auto mode using the BELT MOVEMENT screen.

Step 4: Put masking PVC tape on both edges of the Conveyor Belt, by simultaneously moving the belt through HMI in slow speed.
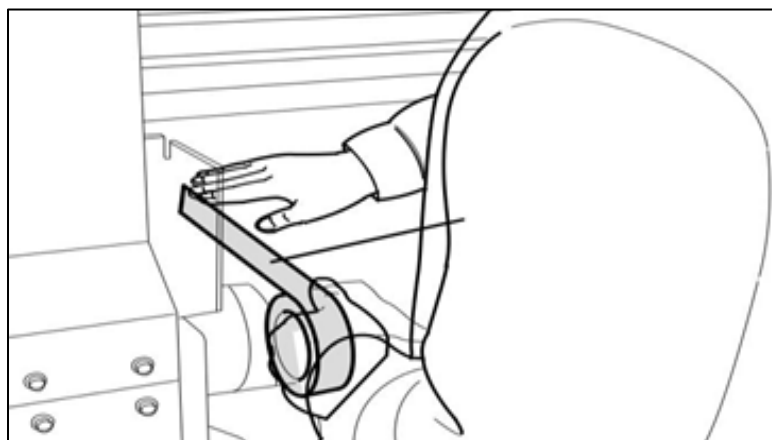
Fig 68: Using Masking Tape

Step 5: Put on gloves, goggles, and face mask for safety:
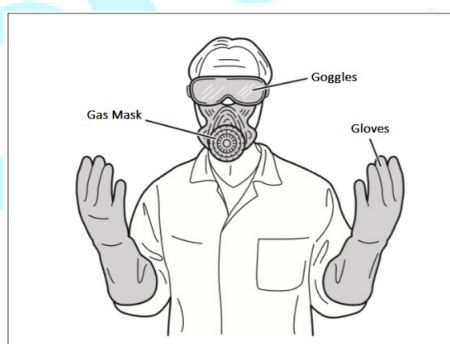
Fig 69: Using Safety Precautions

Step 6: Keep ready the following items:

- Glue container(500-600ml), whichever required
- Home cleaner liquid spray
- Pouring container
- Waste bin
- Woven cotton bud sticks (for spreading the glue)

Glue Coating Procedure

Note: Extreme care to be taken during the glue process, any negligence may render the coat unsuitable for use, and complete process may be required to be repeated. At least 3 persons will be required for this process.

Follow these steps to start the glue coating process:

Step 1: Before starting the glue coating, make sure that tub is out. In case tub is not out, touch the TUB IN icon on the WASHING SYSTEM screen to tub out, as shown below:

Click TUB IN

On clicking TUB IN, the WASHING SYSTEM screen with TUB OUT option appears
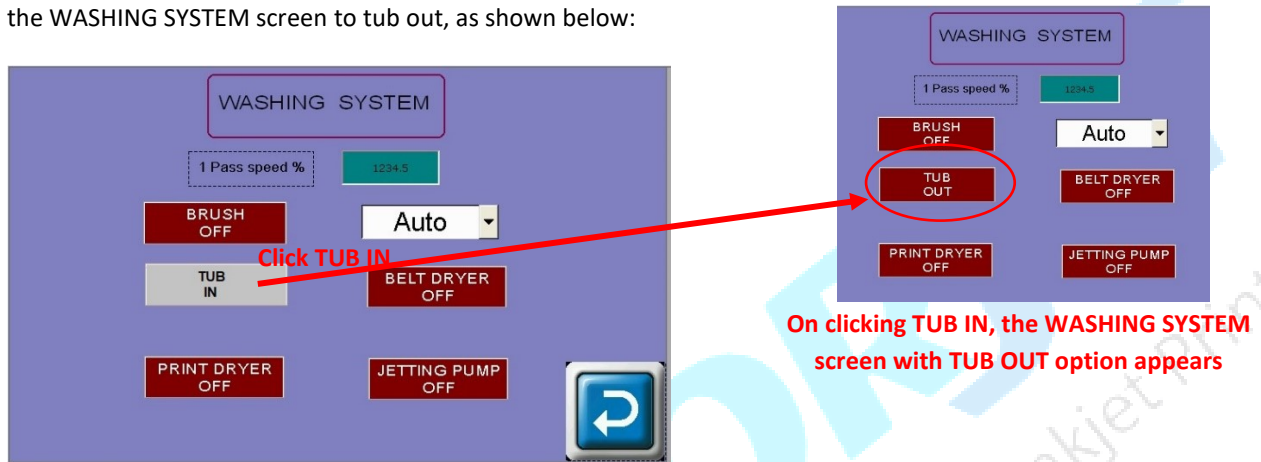
Step 2: Place the Glue Applicator unit on the given studs in the front of the machine, as shown below:
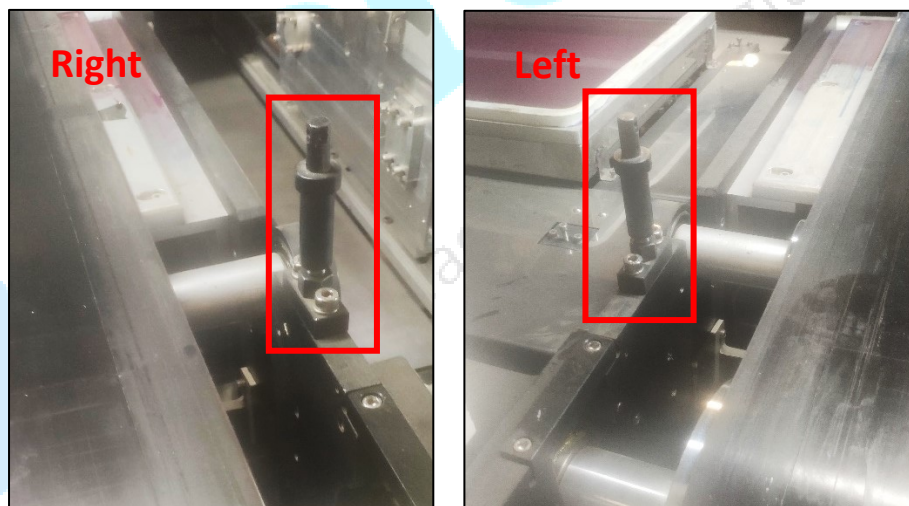
Fig 70: Placing the Glue Applicator Unit

The Glue Applicator unit is shown in the image below:

Fig 71: Displaying the Glue Applicator Unit

Step 3: Move the belt in the reverse direction with slow speed using the **BELT MOVEMENT** screen, as shown below:

Fig 72: Setting the Belt Speed

Note: Belt speed should be 8.

Step 4: Pour 70% glue equally in front of the Glue Applicator unit and leave the 10cm from both edges.

Step 5: Let the two persons firmly hold the handle of the Glue Applicator unit, so that it doesn't move.

Step 6: Once the glue has crossed the Glue Applicator unit, speed can be increased to 20. Using the cotton bud stick, keep spreading the glue from the area where glue is in excess, to the area wherever the glue is less in quantity.
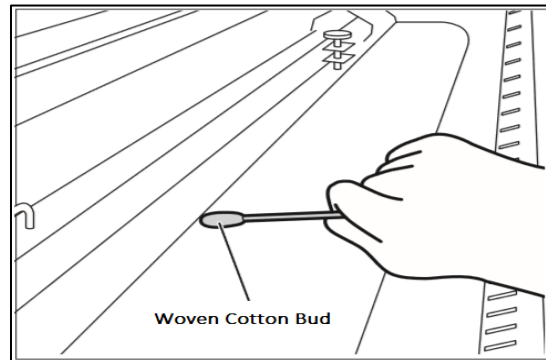
Fig 73: Spreading the Glue

Step 7: Wherever the glue under the Glue Applicator is diminishing, pour the remaining glue over such areas.

Step 8: When glue below the Glue Applicator seems to be diminishing at some areas, and becoming of higher viscosity and uneven, person standing in front, should start spraying the cleaner liquid continuously till the end.
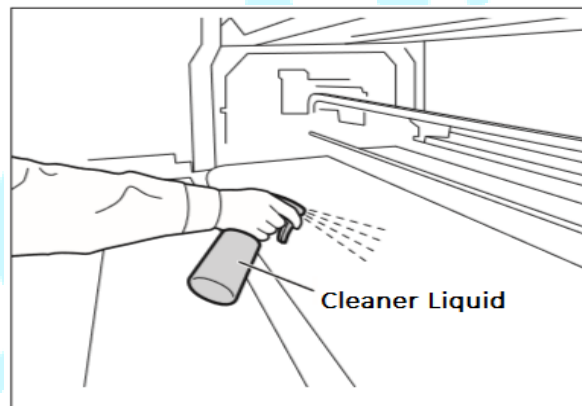
Fig 74: Spraying the Cleaner Liquid

Step 9: Later the cleaner liquid spraying should be done throughout the belt, until the remaining glue appears to be deactivated, due to mixing of cleaner liquid.

Step 10: Remove the excess deactivated glue and throw in the waste bin. Wipe up only the area where liquid is present, touching dry belt will damage the coating.
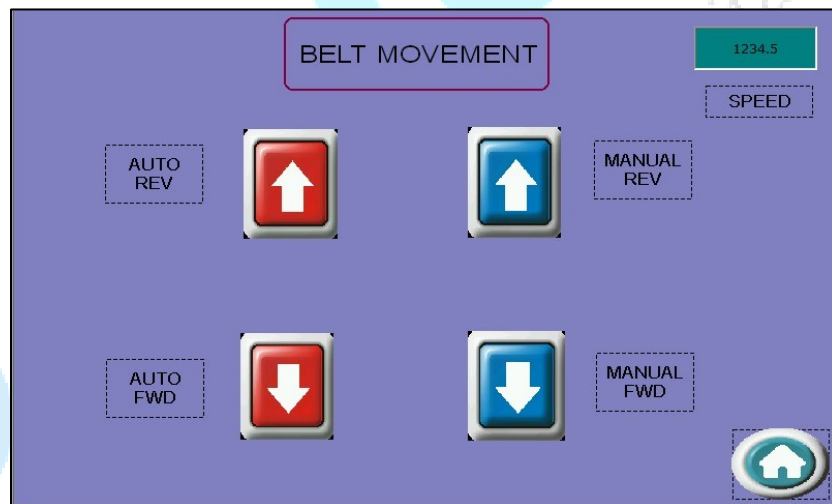
Step 11: Take out the Glue Applicator unit.

Step 12: Once excess glue is removed, run the glue cycle for 30-50 min (turn on print dryer and move belt using the washing System screen).

Step 13: Leave machine idle for 4 hours to let glue dry and set. (Next glue coat has to be done only after resting period of 4 hours) Above process has to be repeated for every glue coat process.

Glue Removing Preparation

Prepare and ready the following below mention things before removing glue:

- Prepare proper ventilators.
- Wear proper safety armament to prevent from touching glue and cleaner.
- Put cover sheets on under belt, printer front and rear to protect them from dropped glue and cleaner.

Note: Do not use the Belt Washing Unit during the glue coating or glue removing process. Additionally, glue or the cleaner may damage the brush-roller or sponge roller, thus put a cover on the washing unit.

GLUE REMOVING PROCEDURE

Glue coat gets damaged due to several reasons like during unpacking or unloading. Thus, service engineer needs to remove the damaged glue coating and recoat the glue on the belt.

Follow these steps to remove glue:

Step 1: Prepare cleaner which is dedicated to using glue.

Step 2: Wipe cloth or paper towel with purified water. Place wipe clothes on belt to cover belt.

Fig 75: Wiping the Belt

Step 3: Pour cleaner liquid (Solvtek) onto wipe clothes.
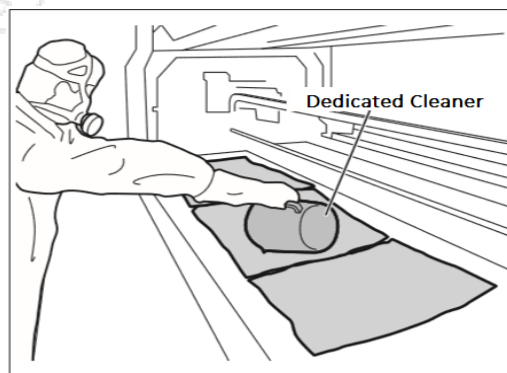
Fig 76: Pouring Cleaner Liquid

Step 4: Wait 5 minutes to dissolve glue.

Step 5: Wipe dissolved glue and cleaner by wipe clothes.

Step 6: After wiping out the part, turn the belt and repeat wiping until wipe out over all.
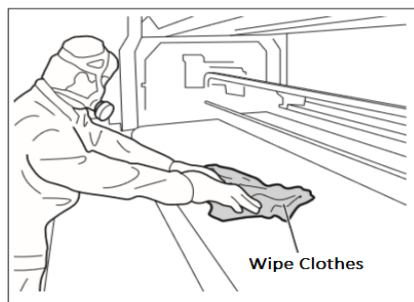
Fig 77: Wiping the Glue

Step 7: Spray or pour purified water onto the belt.

Step 8: Wipe out cleaner on the belt by paper towel.
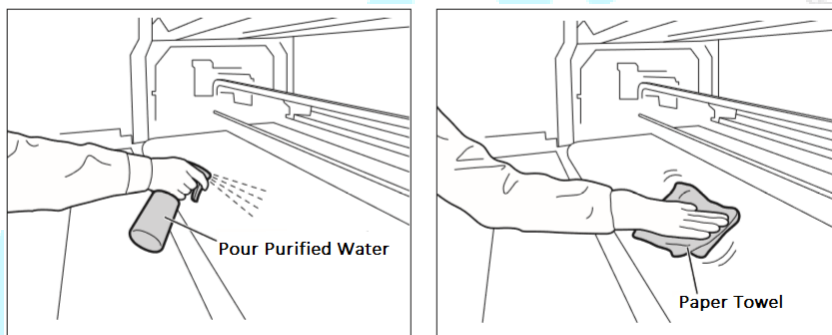
Fig 78: Wiping Out Cleaner from the Belt

Step 9: After clean up the part, turn belt and repeat cleaning until clean up over all. Remove cover sheet which covers washing unit.

Step 10: Finally, remove remained cover sheets, and keep the belt dry.

Fig 79: Removing the Cover Sheet

11. DO'S AND DON'T

Note: The machine main power must be ON.

Do's

1. Keep the room dust free and maintain the temperature 24°C $\pm$ 4.
2. Pull up the press roller when machine is OFF.
3. Capping station should be clean.
4. Perform the nozzle test daily to monitor the print head nozzles status.
5. Avoid head damage due to fabric and print head confliction.
6. Colorbar should be ON.
7. Maintain the water level in the capping station to avoid print head dryness.
8. Ink Maintenance station should be clean.
9. Check and verify that the wiper and wiper sponge should be clean.
10. Degassing pressure has to be monitored regularly (between -85 to -95 KPa).
11. Don't use expiry ink and store the ink at recommended environment.
12. If thickness of fabric is changed, check the head height and adjust it accordingly using the software (fabric thickness option). Also, check the bi-direction calibration.
13. Always care about the wrinkles on fabric, it may damage the print heads.
14. Conveyor belt shifting has to be monitored regularly.
15. Always use the clean and fresh water for the washing system.
16. Always check the waste bottle and empty it, if required.
17. It's time for tub maintenance, if:
    a. Jetting pipe have choked nozzles.
    b. When brush roller is filled with lint and glue.
    c. When sponge roller is not moving and has become slippery.
18. When belt has shifted out of the roller
    a. Don't give next print command.
    b. Remove fabric from the belt.
    c. Follow all the steps mentioned in the *Belt Shifting Control* section.

Don'ts

1. Don't off the machine air pressure.
2. Don't continue printing in case of belt shifting.
3. Don't leave the print heads without capped.
4. Don't manually move the carriage over the capping station when printer is OFF.
5. Don't print when glue layer is not smooth/peeled OFF.
6. Don't leave the tub in while switching off the machine (always switch off the print engine).

12. MAINTENANCE

PRINT HEAD MAINTENANCE

Print head is an important and delicate part of the printer. Thus, it must be handled with care to ensure the long life of the print heads. For print head maintenance, the following instructions should be taken care:

- Perform the nozzle test daily to monitor the print head nozzles status.
- Capping station should be clean.
- Maintain the water level in the capping station to avoid print head dryness.
- Colorbar should be ON.
- Ink Maintenance Station should be clean.
- Degassing pressure has to be monitored regularly and it should be in between -85 to -95 KPa. In case, degassing pressure is not maintained, then it may cause the nozzle blockage.
- If thickness of fabric is changed, check the head height and adjust it accordingly using the software (fabric thickness option). Additionally, check the bi-direction and step checks.

Precautions:

- Idle spray should always be enabled with 10000 value.
- Uneven or partly peeled off glue coating on belt may damage the head nozzle.
- Don't use wrinkled or non-ironed fabric roll, as wrinkle on fabric can cause accidents like entangling of fabric with head base.
- Don't use expiry ink and store the ink at recommended environment.

BELT MAINTENANCE

Conveyor belt is an important part of the printer, thus belt and it's position should be monitored time to time and always be running well inside the rollers.

UNDERSTANDING THE BELT SHIFTING CONTROL

This section explains how to control the movement of the conveyor belt as it must run in the center.

Follow the below given instructions:

- Wait for the completion of the current printing process. If the print command repeats, then immediately stop giving the next print command for printing.
- Takeout the fabric and lower down the tub.

Controlling the belt shifting in the following ways:

a. **Belt is shifting more frequently (for example, more than 5mm in 1 hour)**
   i. Run the belt in the reverse direction using the **Belt Movement** icon from HMI until it comes in the center.
   ii. Adjust the Belt Adjustment screws (refer to the upcoming section for more details).
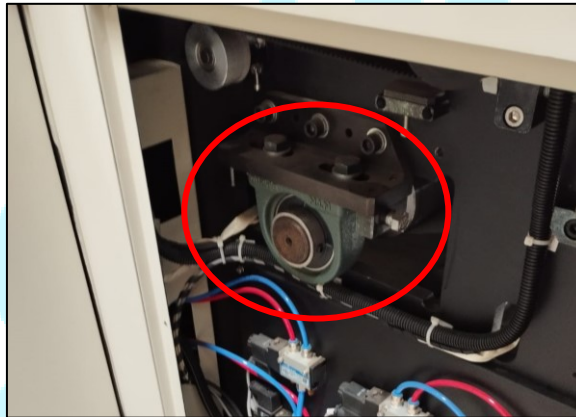
   iii. After adjustment, run the belt in the forward direction for some time and carefully observe it.
   iv. If belt shifting is controlled, then OK. Otherwise, follow the upcoming section "**Belt is shifting slightly**".

b. **Belt is shifting slightly**
   i. **Belt is shifting in same direction:** Again, rotate the belt adjustment screws slightly in the same direction as done above.
   ii. **Belt shifting is controlled:** No need to adjust.
   iii. **Belt has started shifting in opposite direction:** In this case, rotate the adjustment screw slightly in reverse direction (half of last rotated degree performed in step ii of **point a**).

Note: While performing the above process patience is required and need to repeat the process, until the belt shifting is controlled.

BELT SHIFTING PROCEDURE

Follow these steps to control belt shifting:

Step 1: Remove all the selected knobs to open the side cover available on the left side from the back of the machine, as shown below:

Fig 80: Removing the Side Cover

Step 2: Loose both the screws available on the top of the belt adjustment handle.

Note: While performing the belt shifting control process, user needs patience and carefully observe the shifting.

Step 3: Tight or loose the belt adjustment side screws to adjust the belt shifting as per requirements, as shown below:
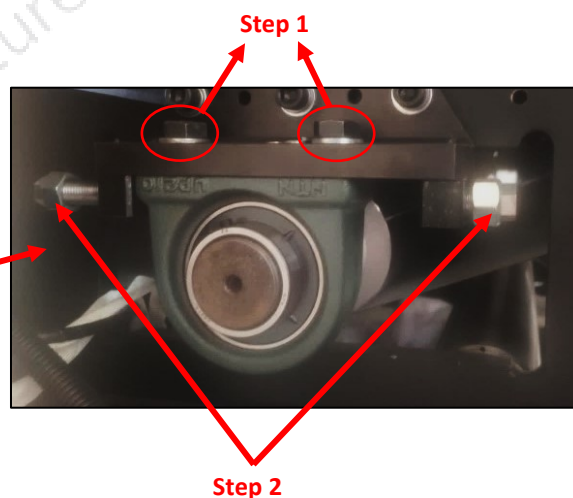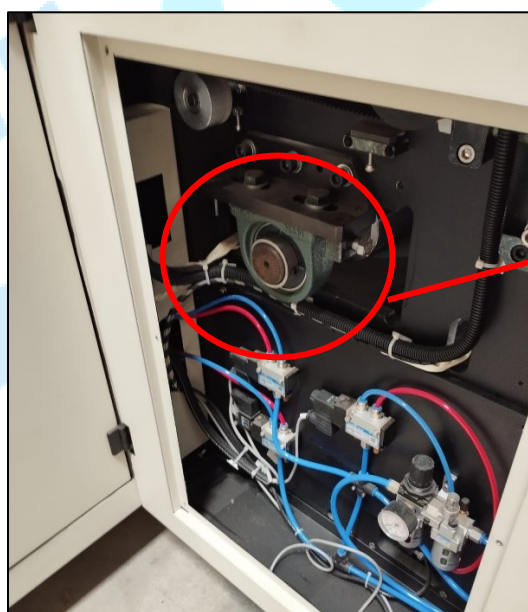

Fig 81: Displaying the Belt Shifting Control Screw

Note: In VastraJet K2, two belt adjustment handles are available on both sides (left and right) from the back of the machine. This is advisable that user needs to use only one side belt adjustment handle for controlling the belt shifting.

Let's understand the belt shifting process with the help of case 1 and case 2 one by one.

Case 1: Belt is Shifting Left Side from the Back
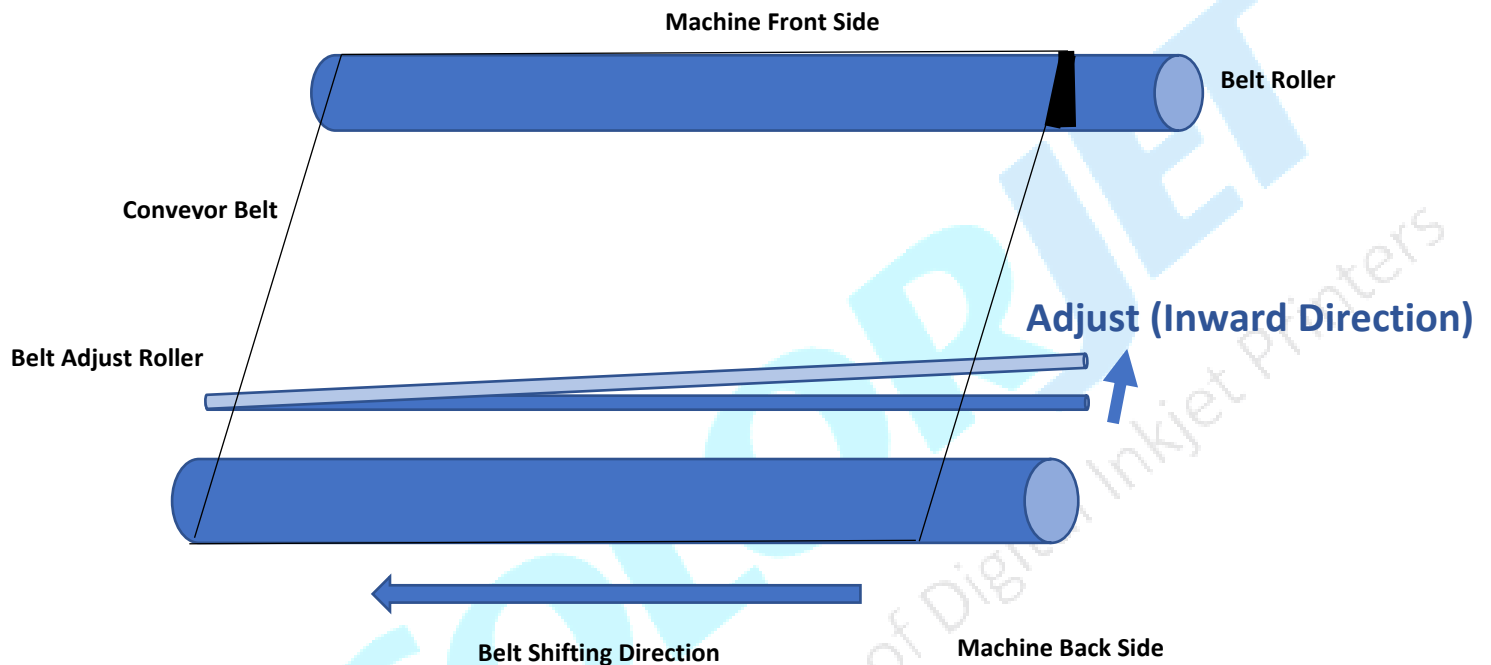
As per the above figure, belt is shifting toward the left side from back of the machine. In this case, user needs to loose screw 2 and then tight screw 1 as per the requirement. After adjusting the belt shifting, move the belt and carefully observe the belt movement.

Fig 82: Controlling Belt Shifting from Right

Case 2: Belt is Shifting Right Side from the Back

Machine Front Side

Belt Roller

Conveyor Belt

Belt Adjust Roller

Adjust (Outward Direction)

Belt Shifting Direction   **Machine Back Side**

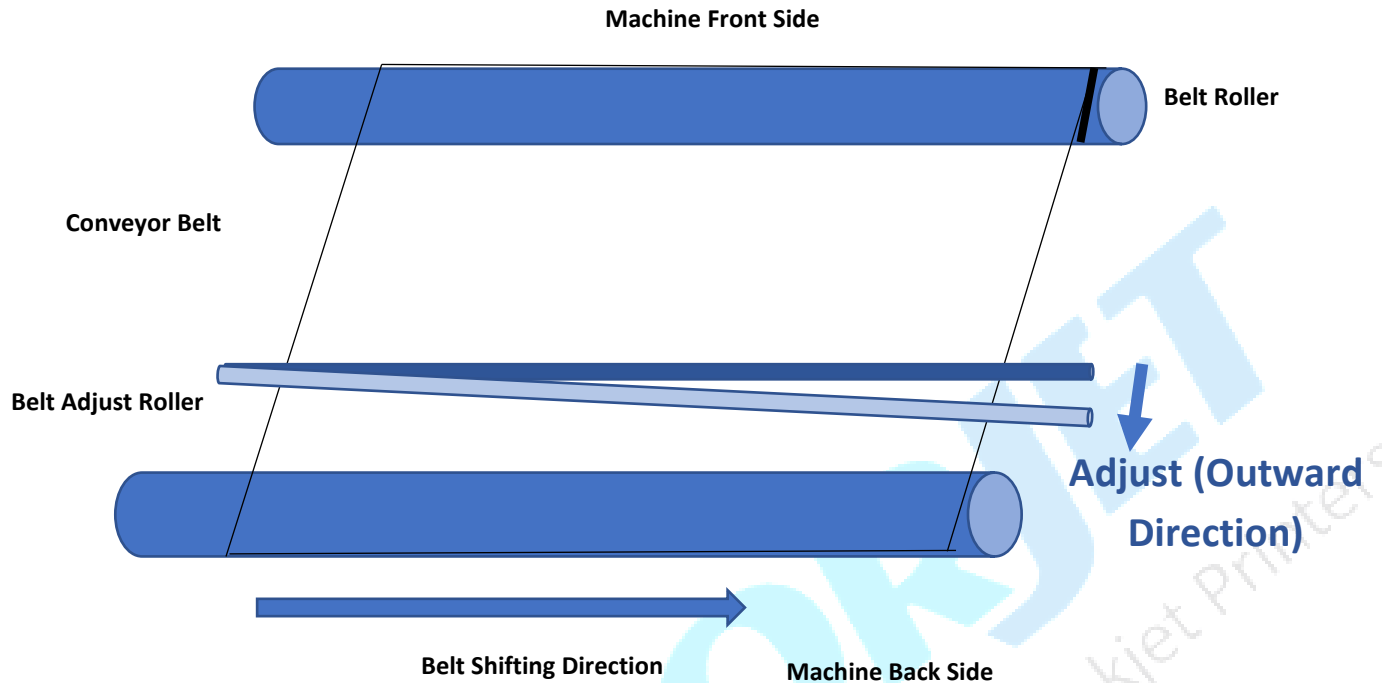As per the above figure, belt is shifting toward the right side from back of the machine. In this case, user needs to loose screw 1 and then tight screw 2 as per the requirement. After adjusting the belt shifting, move the belt and carefully observe the belt movement.

Screw 1   **Screw 2**

Fig 83: Controlling Belt Shifting from Right

GLUE COATING LAYER

- It is strictly recommended that the company suggested glue has to be used, otherwise it may cause damage to the sponge rollers, conveyor belt, brush motor assembly, and belt motor coupling.
- Glue coating has to be checked from time to time for its adhesive strength. Whenever required, fresh coating is to be done.

Precautions:

- If the glue layers are peeling off partly, it may harm the print head and also results in the printing wastage.
- If glue adhesion goes less, it can damage the print head as the fabric gets entangled with the Print Head during printing.

ENVIRONMENTAL MAINTENANCE

- Room temperature should be maintained in 24 ^{o} C $\pm$ 4 with humidity 65%RH $\pm$ 10%
- Closed dirt-free room exclusive for Printer
- Proper cool with white lightings

DAILY MAINTENANCE

- Renewal of water is done every 4 hours in the water tank, as per the use.
- Keep the capping area clean, particularly before capping.
- Run the wash cycle after finishing each fabric roll and also remove the fabric thread, if any.
- Clean the purging tray daily.
- Maintain the recommended air pressure.
- Belt shifting should regularly be monitored and adjusted, if required.
- Press roller and fabric guiding rollers should be wiped daily to remove the ink stains.

WEEKLY MAINTENANCE

Washing Tub Maintenance

Washing tub is an integral part of the printer. Its maintenance is equally important as the production job work. The timely maintenance increases overall productivity by minimizing the downtime of machine and increases the life of the tub related parts.

- Whole tub unit should be cleaned thoroughly.
- Water tank, jetting pipes, brush roller and refreshing tank water should be cleaned frequently to prevent from fabric threads, mold or algae choking the water flow in the tub, and its related parts.

Precautions:

- Don't run the wash cycle while jetting pump is OFF.
- Don't run the wash cycle until the glue gets dry (after glue coating, wait for 3 or 4 hours).
- Always use the clean water (50-150 rpm) for the washing system.
- Don't forget to clamp the water pipes before starting the wash cycle.

Tub Removal Steps for Maintenance:

Step 1: Lower down the tub by following the screens; **Main Menu→Washing System Set→ Tub IN**, as shown below:
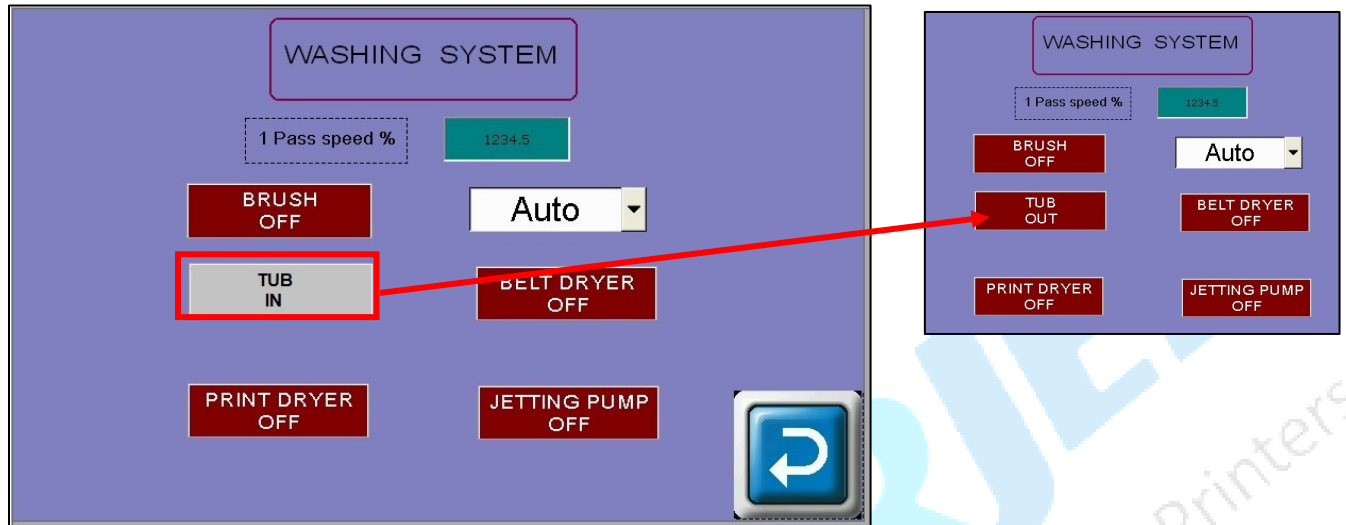

Fig 84: Displaying the Washing System Screen

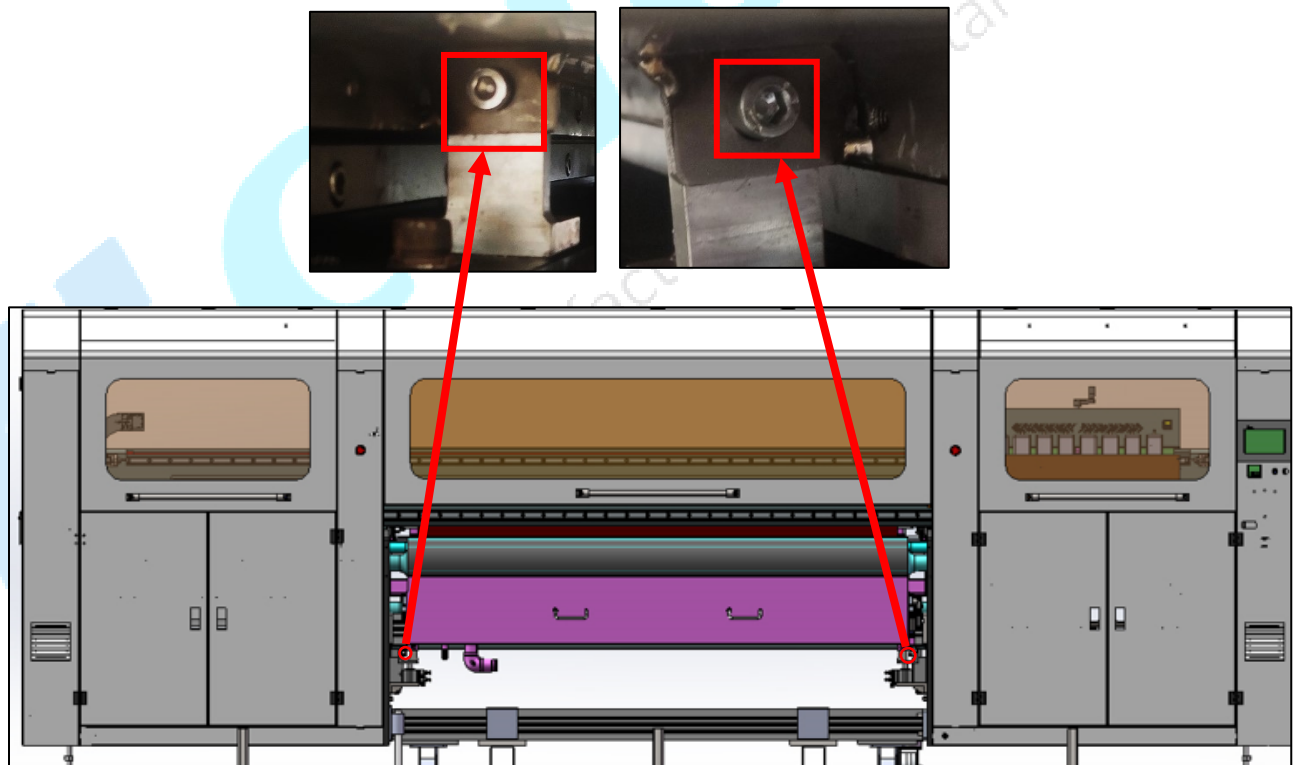**Step 2:** Remove Allen screws from both sides to remove the tub.

Fig 85: Removing Screws

Pull the washing tub and start the tub maintenance process, as shown below:
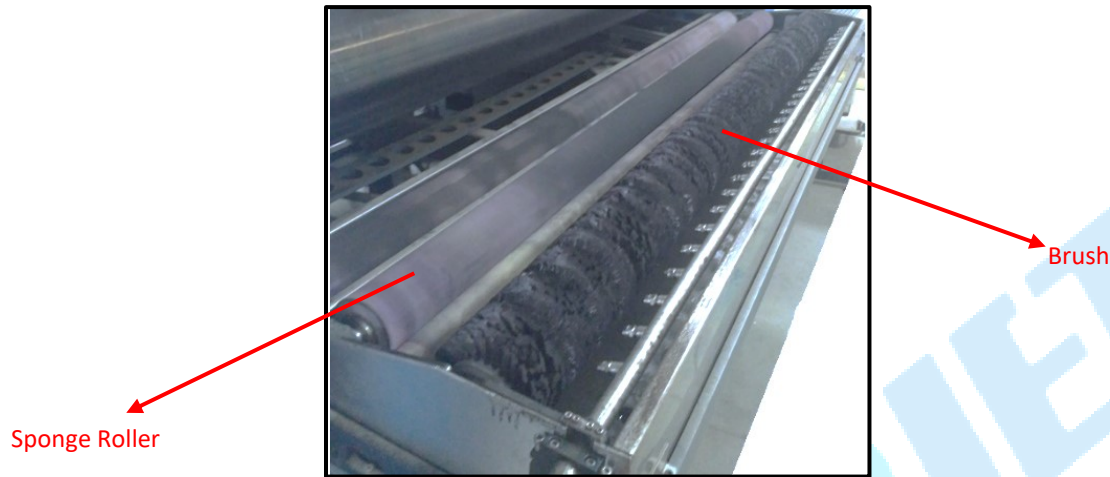
Fig 86: Cleaning the Washing Tub

Cleaning points:

Note: Use water to clean the washing tub, don't use any chemical or detergent.

- Comb the Brush to remove fabric threads, and thoroughly wash with water to remove Glue residue layer on it.
- Sponge rollers should be rinsed with water and squeezed simultaneously.
- Check the jetting pump for any choked pieces in its inlet.
- Clean the jetting pipe nozzles thoroughly to get rid from fabric threads.

Step 3: After completing the cleaning process, fix the washing tub by tightening both the Allen screws (refer to step 87).

Cleaning Jetting Nozzle

Jetting Nozzles are shown as below:
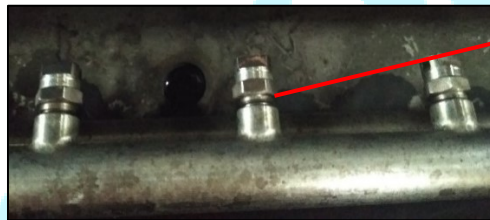
Jetting Nozzles

Fig 87: Displaying the Jetting Nozzles

Computer Storage Management:

- Remove unwanted files from your computer to maintain a free space.
- Remove unwanted programs and old ripped files from the computer to improve the speed of printing.

MONTHLY MAINTENANCE

- LM guide should be wiped monthly.
- Cleaning the floor particularly the area near the water tank and washing tub.
- Encoder strip should be cleaned gently with wet tissue paper, on weekly basis.

13. TROUBLESHOOTING

PRINTER NOT INITIALIZING

- Emergency button is pressed.
- Print engine is OFF.
- Main Board is faulty.
- Encoder sensor is not connected to HB.
- Limit switch is disconnected from MB.

JETTING PUMP NOT WORKING

- Water is less in the water tank.
- Not enabled from HMI.
- Make sure belt is in motion and pump stops when belt is idle.
- Jetting pump is having air lock /clog by foreign materials.
- Pump is failure.
- Pump fuse is blown.

WATER SEEPAGE IN BELT

- Tub is moved in and out during pause (in between print).
- Sponge roller is turn OFF/ shape is distorted.
- Glue dryer is OFF.

BELT SHIFTED

- Shifting is not monitored and arrested properly using the belt adjustment handle.
- Belt Shifting Adjustment screw is tighten/loosen incorrectly or excessive.

NEGATIVE PRESSURE DROP/NOT WORKING

- Adjust negative pressure using Negative Pressure switch meter.
- Meniscus vacuum switch is OFF.
- Negative Pressure switch program is disturbed.
- Ink overflowed from sub tank and filled in the reservoir.
- Vacuum is not generated by pump (pump failure).
- Any ink/air tube is having leakage/cut/loose on fitting joints.
- Vacuum pump connector is loose/open from relay.

FABRIC NOT STICKING TO BELT

- Glue heater is not ON or not working.
- Glue coating layer needs the new glue coating.
- Belt layer is full of dust/threads need manual cleaning/wiping.

PRINT NOT DRYING/INK MARKS ON BACK OF THE FABRIC

- Print dryer is not ON or not working.
- Dryer temperature is not sufficient.
- Coating of fabric is not correct.
- Fabric supporting bar and take up roller is stained with ink.

INK NOT FILLING

- Main tank is empty.
- Ink pipe is having cut/bend.
- Ink pump is not working/connector loose/open.
- Sub tank float connector is loosely connected to the headboard.
- Sub tank float is not working.

FABRIC NOT PEELING OFF

- Takeup Motor power is not ON.
- Dancing bar weight is less.
- Core is slipping and not intact with air shaft.
- Fabric is not stick to the core.

IMPRESSION OF INK ON PLAIN FABRIC

- Belt is not washed properly.
- Water in the tank is dirty and have fabric lints.
- Fabric threads are stick over the belt.
- Brush is congested with fabric threads and not uprooting the threads from the belt.
- Press roller is having ink stains.

PRINTER MANAGER NOT SHOWING "READY"

- USB is disconnected from computer or loosely connected.
- Print engine is OFF.
- Main board is faulty.
- USB cable is faulty.

PRINT STOPS IN BETWEEN PRINTING

- USB cable is loose / faulty.
- Image files are heavy in size.
- Ground wire is disconnected.
- Encoder strip is having ink stains/scratches.
- Ripped file is having error.

PRINT IS SHIFTING WRT FABRIC/ JUNK PRINTING

- Encoder strip is having ink stains (print shows vertical color bands).
- Encoder sensor is not clean.
- Fiber optical cable is faulty.
- LVDS is faulty.

PRINT IS BLUR

- No proper calibration viz. bi-direction and step.
- Head height is disturbed and not calibrated.
- Incorrect resolution is selected.
- X div is selected "High Speed" instead of "High Precision".

LINES IN PRINTS

- Nozzle blocked in heads (check nozzle test).
- Incorrect feed step (calibration required).
- Belt motor coupling loose.

India's largest manufacturer of Digital Inkjet Printers

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