IMS 3.0
Ink Management System

USER MANUAL

SPECIALTY INKS

PRINTOP

Introduction

Ink Management Software (IMS) has been an essential component in textile ink rooms since the late 1980s when the first pigment concentrates (PC) systems were introduced. Using color systems offer a simple, efficient method to achieve Pantone® simulations and develop custom color. Every day, printers around the world count on the IMS 3.0 system to help them save time and money throughout the production process.

IMS 3.0 is a cloud-based solution for managing color and inventory in the textile screen printing market.* Offering tools for color creation and standardizing, IMS 3.0 manages daily maneuvers in a highly functional ink room by providing color management and communication agility. Color chip images appear with formulations to help with visual communication. Emailing of formulas and reporting will also feature the color display. The new platform and updated functionality will continue to add functional support and innovation to the concept of total ink room management.

From consistent, repeatable color matches in the ink room to smooth running inks on press, Avient color systems deliver the results that printers trust to grow their business. IMS 3.0 improves three critical areas of ink room functionality.

How Can IMS 3.0 Improve Your Ink Room Management?

Communication	• Provides expanded communication methods • Creates customized labeling • Offers visual color display • Accessible in the cloud, providing sharable formulas
Consistent Quality = Productivity and Repeatability	• Approve more colors • Filters advanced options • Applies user preferences • Automates ink room management

* Not all features are available for all brands.

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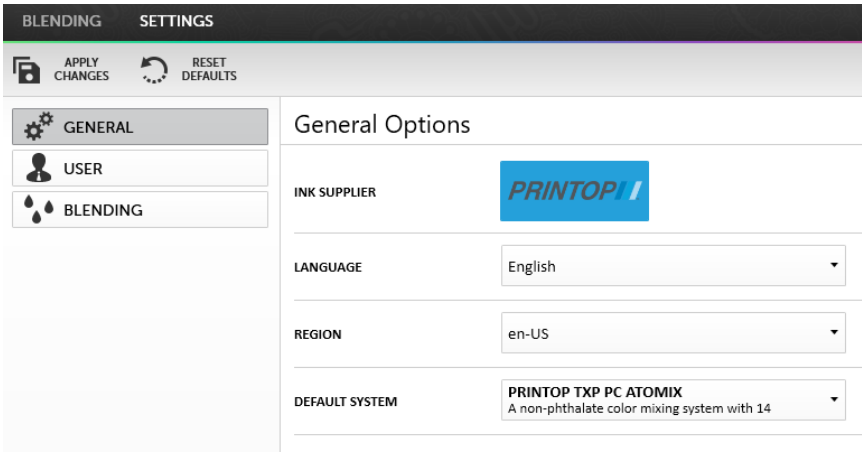
INSTALLATION

INSTALLING IMS 3.0

The IMS 3.0 download is available to Avient color system users by registering on the IMS 3.0 site. The following three steps will guide you through a successful installation.

1. To install IMS 3.0 on a Windows system, go to http://ims3.azurewebsites.net/Account/Login
2. Enter your login credentials
3. Download



4. Once the download is complete, open the software and log back in using the same credentials to access the system

HARDWARE ENVIRONMENT

REQUIREMENT	DESCRIPTION
Processor	x86 or x64 1 GHz Pentium processor or equivalent (minimum); 1 GHz Pentium processor or equivalent (recommended)
RAM	512 MB (minimum); 1 GB (recommended)
Hard Disk	Up to 1.5 GB of available space may be required
Display	800 x 600, 256 colors (minimum); 1024 x 768 high color, 32-bit (recommended)
Internet	Internet accessible

GETTING STARTED

Filters	Apply all filters and set up default values and printers
Pantone® Numbers	Enter number exactly as it appears in the Pantone Formula Guide (i.e. 032 C is Orange 032 C, entering a space between C or U)
Custom Color Search	Select User Formula button in upper left corner
Creating Custom Palette/ Modifying Standard Colors	Begin formula search in the User Formula area; if a custom color wis not found, select the Standard Formulas radio button to begin a new search
Printers, Labels and Scanners	• Choose any printer with a Windows driver • Use label stock best suited for selected printer • Scan using a single line hand-held laser device

INTERFACES

The IMS 3.0 has four main interfaces: blending, communication, inventory and settings.
This section will outline each of the four interfaces and their features.

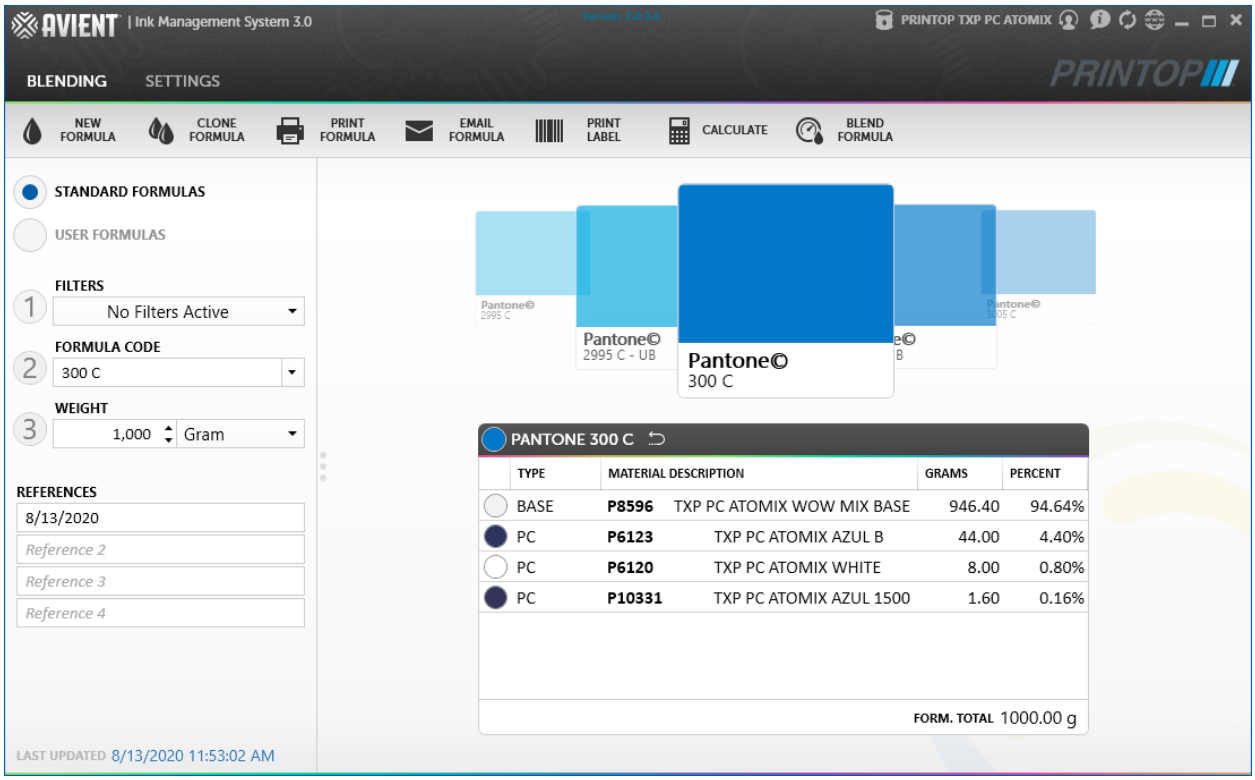
MAIN INTERFACE NAVIGATION

The navigation panel is the first element in the user interface. This navigation bar remains throughout the software.

1. Four tabs quickly switch between the Blending, Communication, Inventory and Settings interfaces
2. Color Systems Selection, Logout, About, Refresh, Minimize, Full Screen and Close buttons
3. Displays the current Color System in use

Blending Interface

The blending interface is the first user interface shown upon starting the software.



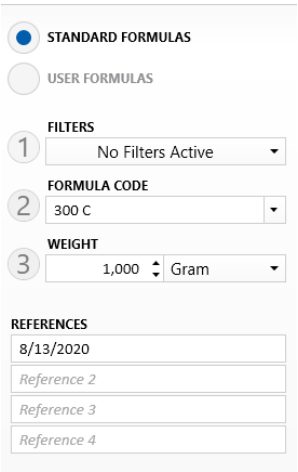
BLENDING INTERFACE NAVIGATION

Below is a labeled image of the Blending Screen Bar with function descriptions.

1. Create a new formula
2. Clone a formula
3. Print a formula
4. Email formula
5. Print a label
6. Calculate a formula cost
7. Blend a formula

BLENDING INTERFACE FORMULA OPTIONS

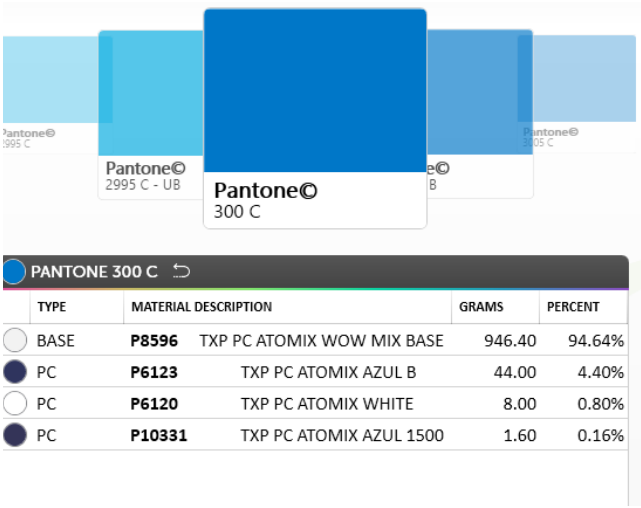
Below is a labeled image of the formula options with function descriptions.



1. Toggle between a list of standard formulas and a list of formulas you have created (User Formulas)
2. Create filters to manage your database and select your desired weight
3. Create user references to your formulas; references are useful for searching and organizing information (suggestions are customer, shirt style and job number)

FORMULA SELECTOR & INGREDIENT TABLE

Below is a labeled image of the Formula Selector and its associated ingredients and weights.



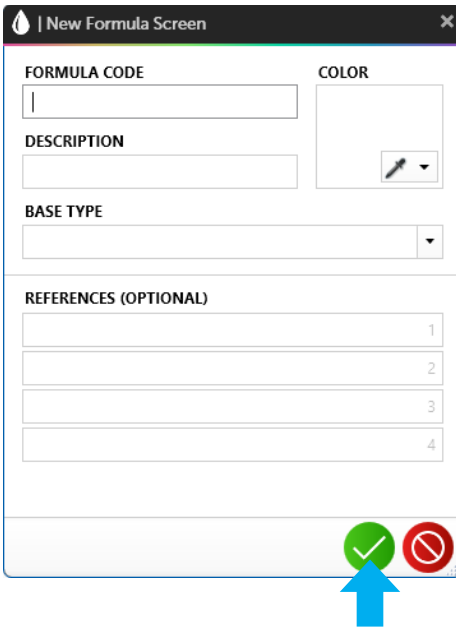
1. The Formula Selector uses a carousel to scroll through a selection of colors. Scroll using the left and right arrow keys while on the Formula Selector or by clicking one of the visual color chips.
2. Formula details are displayed in the table, including: Formula Type, Material Description, Material Code, Weight in grams (default), as well as the percentage of each ingredient found in the mix.

BLENDING INTERFACE FEATURES

This section will cover each function available within the Blending Interface, beginning with new formula creation.

Create a New Formula

1. Click the “New Formula” button on the Blending Screen bar.



2. Selecting the “New Formula” button will prompt a dialog box to input details about the formula you are creating, including formula code, description, base type, references (optional) and color.

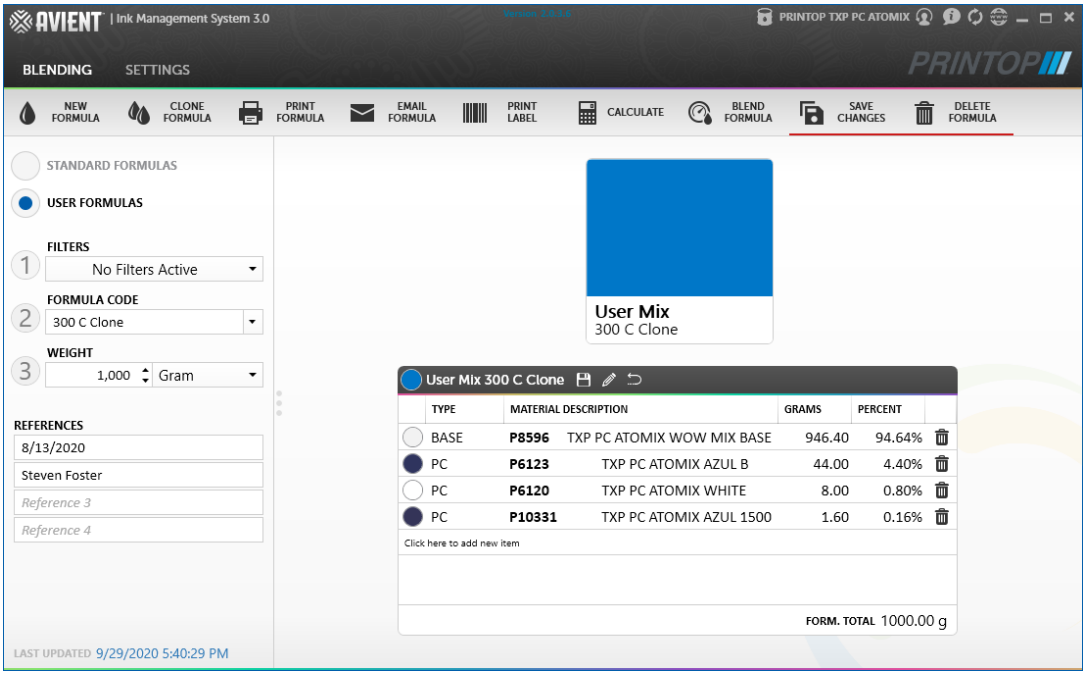
3. Once you have entered the required fields, click the button at the bottom of the panel. You will be redirected to “User Formulas”, which will display the newly created formula. From this screen, you can add or remove ingredients, edit or delete your formula.

CLONE A FORMULA

1. To clone a formula, first select the target formula from the carousel.

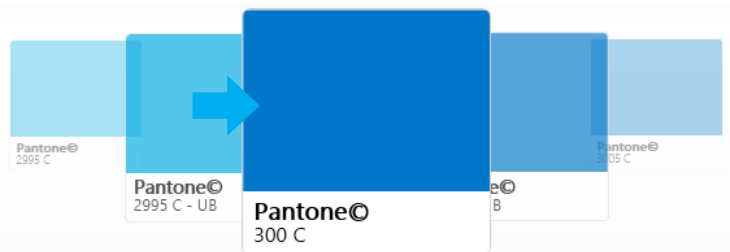
2. Click the “Clone Formula” button on the Blending Screen navigation bar.

3. A dialog box will appear with pre-populated values. Eid the Formula Code and Description inputs and add references to the newly cloned formula.
4. Click the “Finish” button at the bottom of the dialog box.
5. The User Formulas will appear with the newly cloned mix.
6. Add, remove, edit or delete clone if needed.



PRINT A FORMULA

1. Select the formula from the Formula Selector.

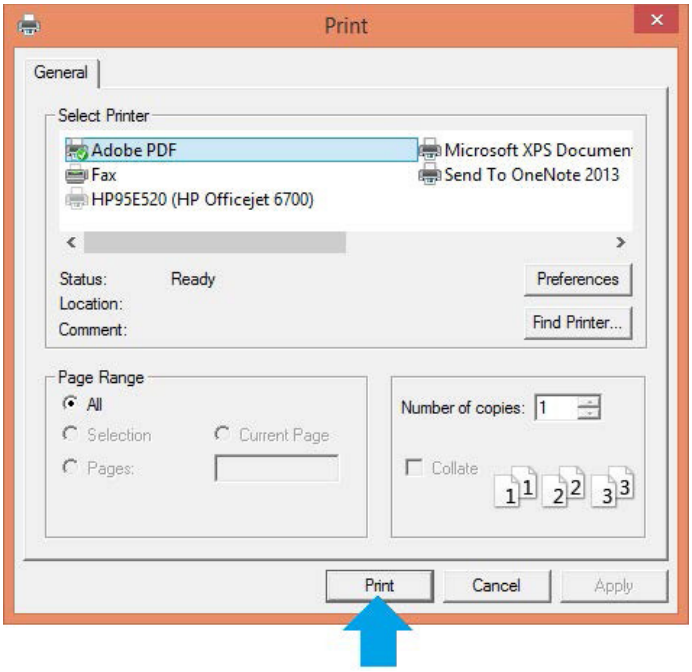


PANTONE 300 C

	TYPE	MATERIAL DESCRIPTION		GRAMS	PERCENT
○	BASE	**P8596**	TXP PC ATOMIX WOW MIX BASE	946.40	94.64%
●	PC	**P6123**	TXP PC ATOMIX AZUL B	44.00	4.40%
○	PC	**P6120**	TXP PC ATOMIX WHITE	8.00	0.80%
●	PC	**P10331**	TXP PC ATOMIX AZUL 1500	1.60	0.16%

2. Click the Print Formula button on the Blending Screen navigation bar.

3. A dialog box will appear with a prompt to confirm choice. Click OK.
4. Select printer and click the Print button.

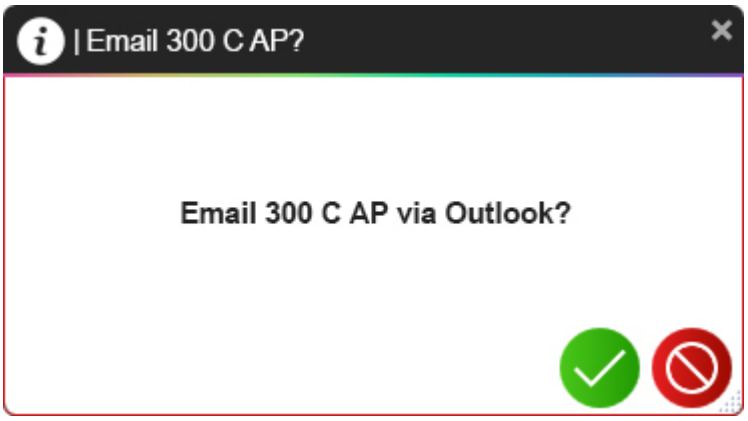


EMAIL A FORMULA

1. Click the “Email Formula” button on the Blending Screen navigation bar.

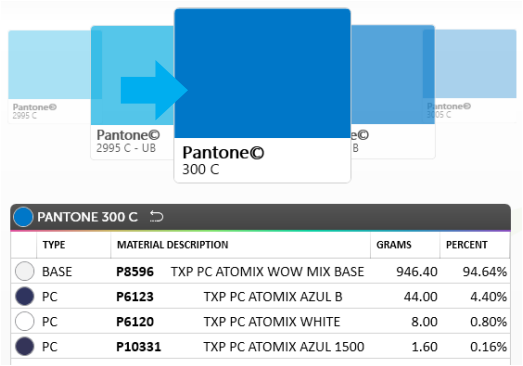
2. Your email client will open a new window with the formula added as an attachment

3. Enter all relevant information and click ✓



PRINT A LABEL

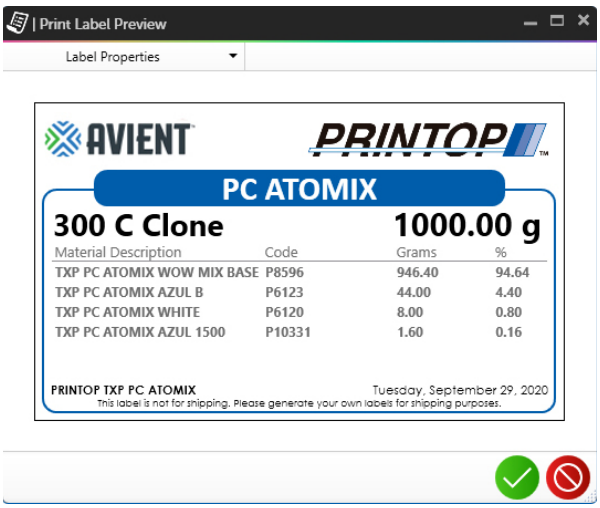
1. Select the target color from the Formula Selector.



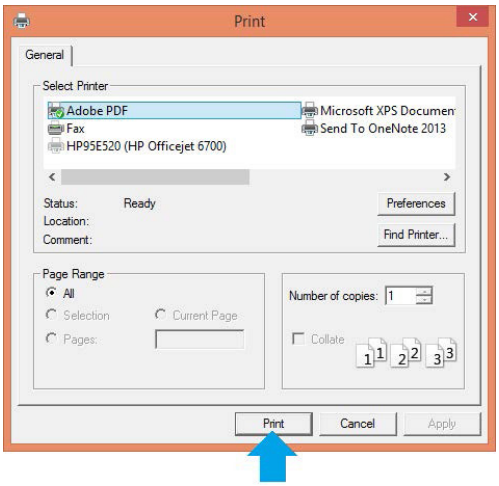
TYPE	MATERIAL DESCRIPTION		GRAMS	PERCENT
BASE	P8596	TXP PC ATOMIX WOW MIX BASE	946.40	94.64%
PC	P6123	TXP PC ATOMIX AZUL B	44.00	4.40%
PC	P6120	TXP PC ATOMIX WHITE	8.00	0.80%
PC	P10331	TXP PC ATOMIX AZUL 1500	1.60	0.16%

2. Click the Print Label button on the Blending Screen navigation bar.

3. A dialog box will appear with a prompt to confirm choice. Click



4. Select printer and click the Print button.

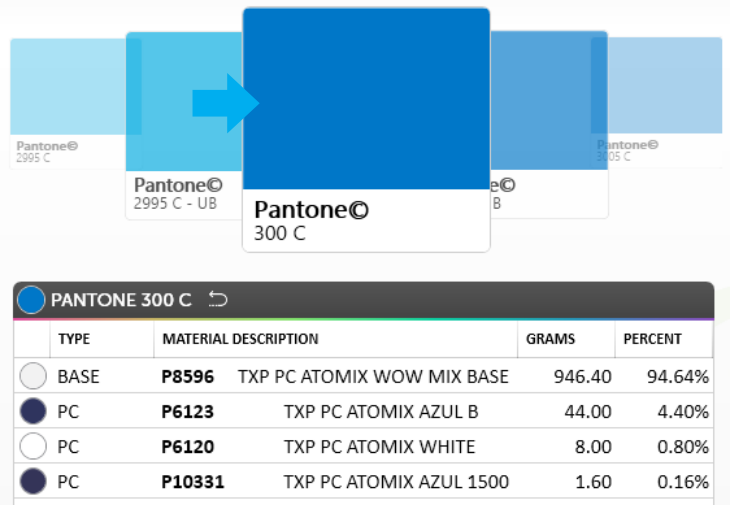


CALCULATE INK COST

There are three modes to calculate ink costs within the Blending Interface.

A. Actual: calculates the cost based upon actual ink deposit
B. Theoretical: calculates the cost based upon theoretical ink deposit of screen mesh and image size
C. Specify Amount: calculates the cost based upon a specified amount of ink

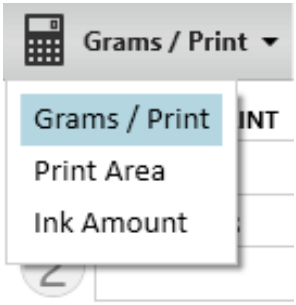
1. Select the target formula from the Formula Selector.



TYPE	MATERIAL DESCRIPTION		GRAMS	PERCENT
BASE	**P8596**	TXP PC ATOMIX WOW MIX BASE	946.40	94.64%
PC	**P6123**	TXP PC ATOMIX AZUL B	44.00	4.40%
PC	**P6120**	TXP PC ATOMIX WHITE	8.00	0.80%
PC	**P10331**	TXP PC ATOMIX AZUL 1500	1.60	0.16%

2. Click the Deduct Inventory button on the Blending Screen navigation.

3. Choose a mode from the navigation drop down menu:
   a. Grams/Print: calculates actual ink deposit
   b. Print Area: calculates theoretical ink deposit of screen mesh and image size
   c. Specify Amount: calculates specified amount of ink

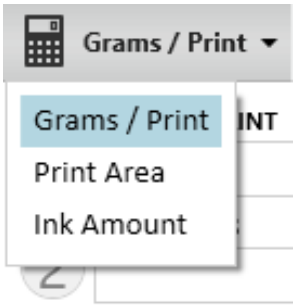


Calculating Ink Cost: Grams Per Print

Grams per w estimation is referenced by the actual cost estimation. This calculation is based upon the weight of the ink on the garment multiplied by the number of units/prints.

1. Determine the weight of a print
   a. Cut two pieces of cloth of equal size
   b. Weigh and record the unprinted pieces
   c. Print the image on the second piece of cloth and weigh before curing ink
   d. The difference between the two pieces of cloth represents the actual ink on the garment*
   *Note: this does not include ink for the ink well or flood stroke

2. Select the Grams/Print mode from the drop-down menu

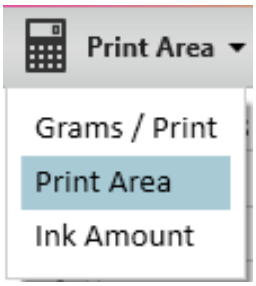


3. Complete details on the left panel, including the weight in grams per print, as well as the number of prints.
4. The ingredient table displays the amount of each ingredient needed to fill the batch requirement.
5. Click the Finish button to redirect back to the Blending Screen with new formula, updated base total and material weights.

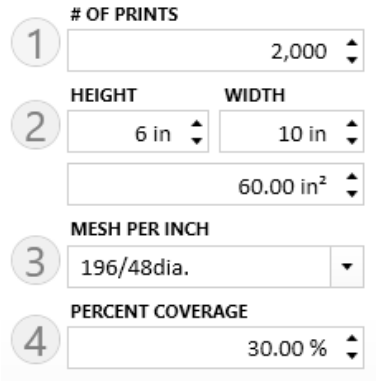
Calculating Ink Cost: Print Area

Print area estimation is referenced by the theoretical ink deposit of screen mesh and image size.

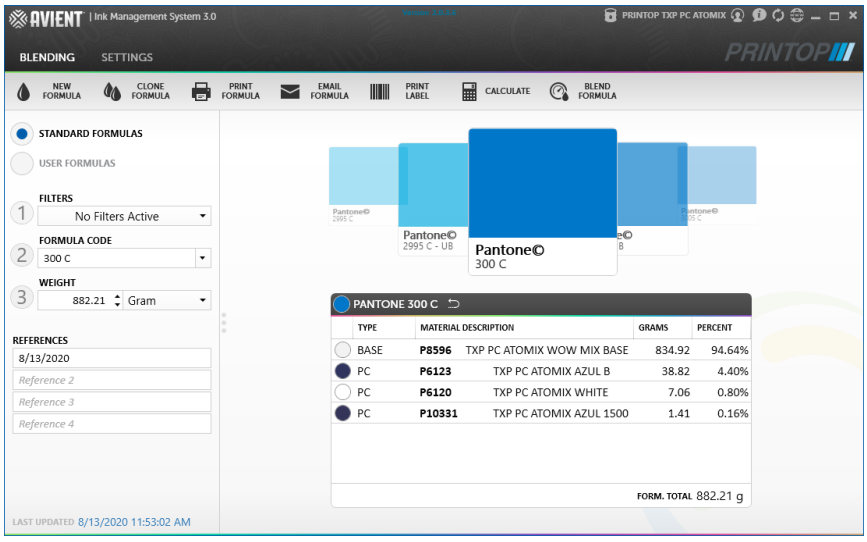
1. Select the Print Area mode from the drop-down menu



2. Complete details on the left panel, including number of prints, height, width, mesh per inch and coverage.



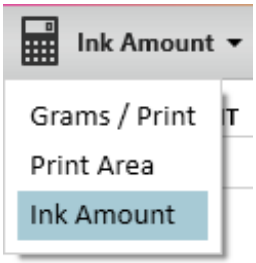
3. The ingredient table displays the amount of each ingredient needed to fill the batch requirement.
4. Click the Finish button to redirect back to the Blending Screen with new formula, updated base total and material weights.



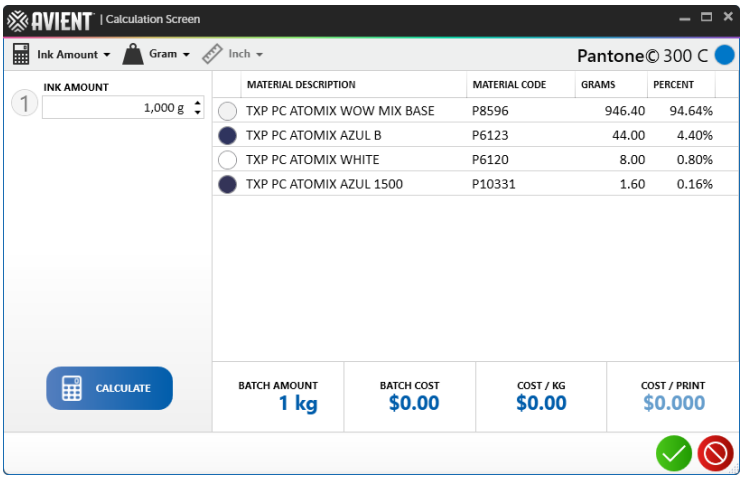
Calculating Ink Cost: Ink Amount

Ink amount estimation is referenced by the calculated cost based upon a specified amount of ink.

1. Select the Ink Amount mode from the drop-down menu



2. Enter the target amount of ink in Ink Amount field on the left panel.
3. The Batch Amount, Batch Cost, Cost per KG and Cost per Print will update based upon the Ink Amount target.

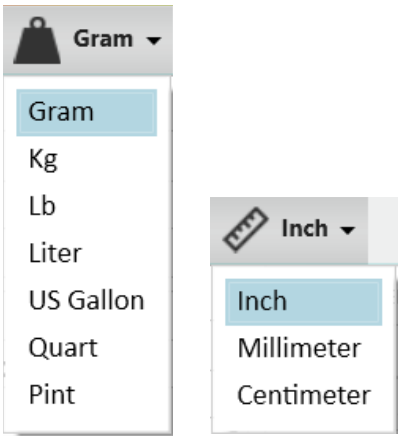


4. Click the ✓ button to redirect back to the Blending Screen with new formula, updated base total and material weights.

Change Units of Measurement

Several units of measurement are available to calculate cost.

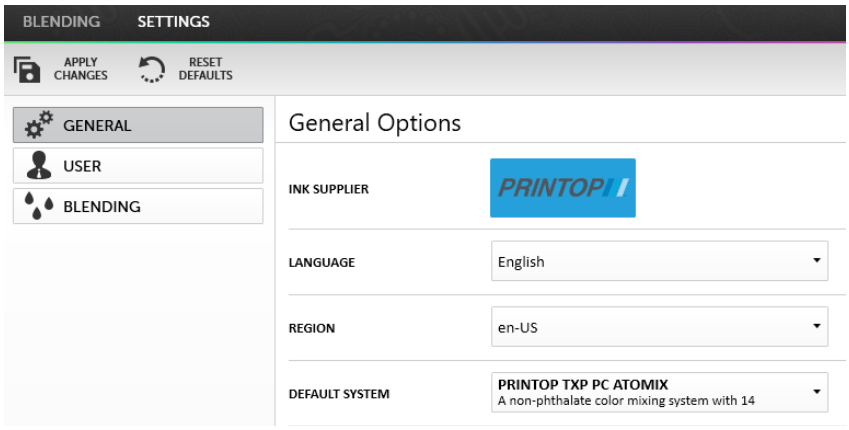
1. Click either the weight or measuring tape icon to change the unit of measurement.



2. Select desired unit to update all cost estimates.

SETTINGS INTERFACE

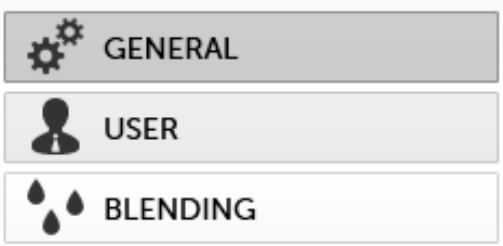
IMS 3.0 has several different settings, each designed to enhance user experience.



SETTINGS INTERFACE NAVIGATION

1. Click Apply Changes to save any changes made within the Settings Interface
2. Reset setting to default configuration

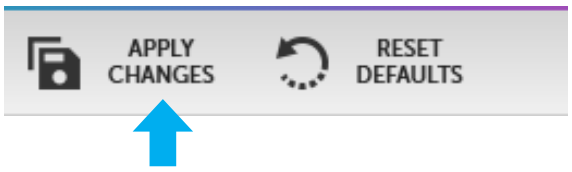
SETTINGS TABS



1. Open General Settings
2. Open User Settings
3. Open Blender Settings
4. Open Inventory Settings

SETTINGS INTERFACE FEATURES

This section outlines configurable settings within IMS 3.0. To save and apply any changes made in this tab, click the Apply Changes button on the Settings Interface Navigation.



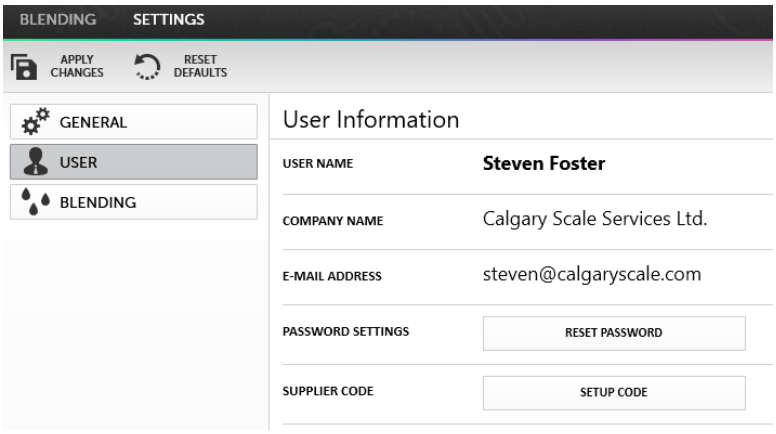
GENERAL SETTINGS

Customize color scheme, set up a supplier code, import formulas and access new formulas using General Settings. An introductory video opens upon loading the software.

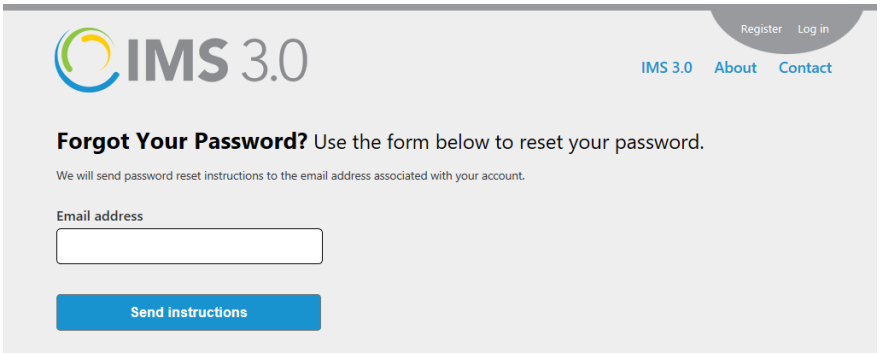
Reset Password

To reset a password, follow the steps below.

1. Click the Reset Password button inside the User Settings Tab



2. Enter email address when the IMS 3.0 website appears

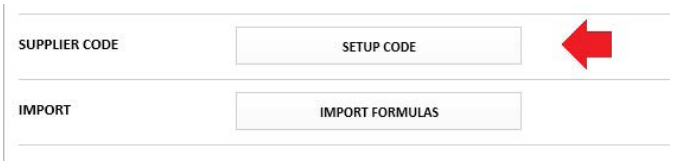


3. Follow instructions to reset password from email

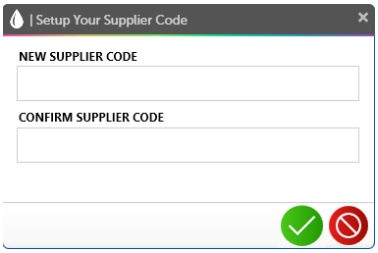
Set Up Supplier Code

A supplier code is useful to share a database with another login, ideally across multiple print locations under one company or brand.

1. Click the Setup Code button within the User Settings tab



2. Enter supplier code into the New Supplier Code field in the prompt box

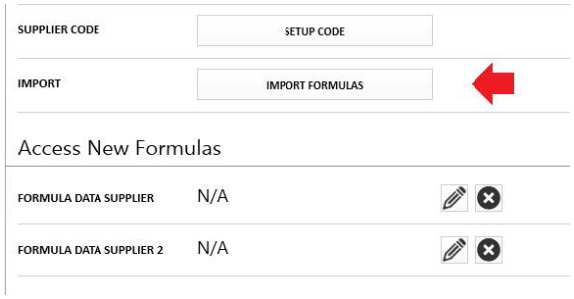


3. Click

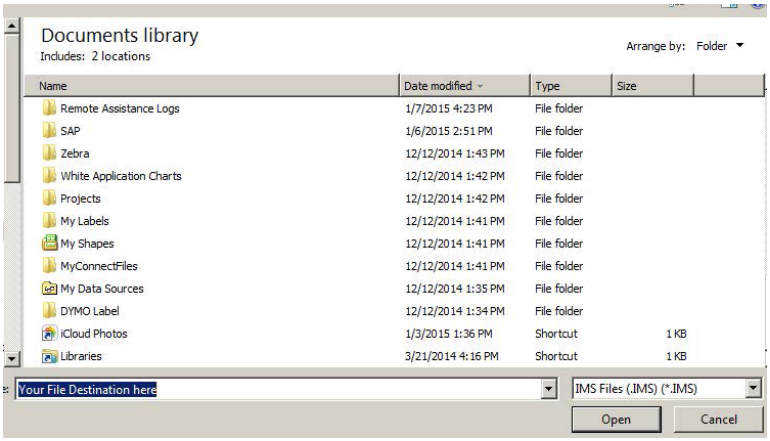
Import Formulas

This function applies to formulas exported from IMS version 7.54 using the default file extension.ims.

1. Click the Import Formulas button within the User Settings Tab



2. Enter the file path of the target import database
3. Click Open and formulas will load into the software

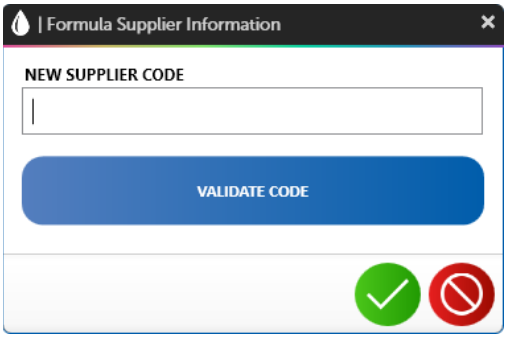


Access New Formulas

Follow the steps below to access formulas from different suppliers.

1. Click the pencil icon underneath Access New Formulas within the User Settings Tab

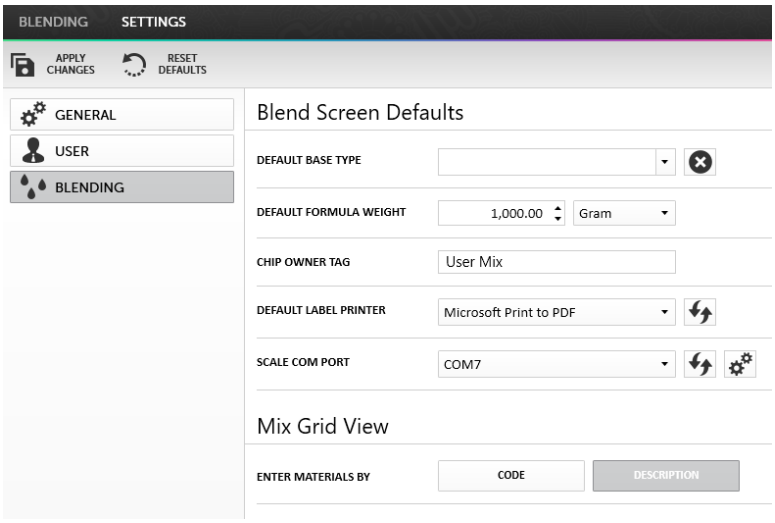
2. Validate the supplier code by re-entering the unique code in the prompt box



3. Click to access the supplier's formulas

Blending Settings

Set default configurations for Default Color System, Default Base Type, Default Formula Weight, Chip Owner Tag, Default Label Printer, Scale COM Ports and DM4 COM ports within the Blending Settings tab.

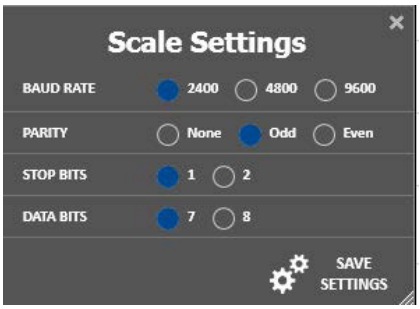


Setting Blending Defaults

Before implementing IMS3.0, set blending defaults to save time. The following defaults provide guidance for use.

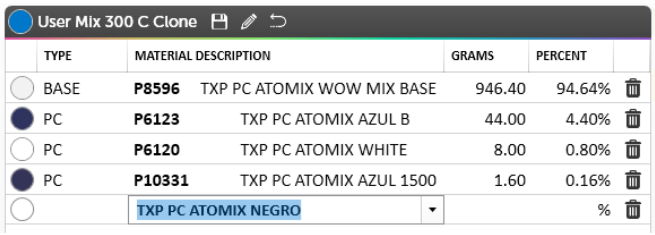
1. Default Base Type: used for systems that require base and colorant
2. Default Formula Weight: used with a standard mix quantity at all times
3. Chip Owner Tag: the name that appears on a user formula color chip to identify the chip if sharing formulas (the identifier will differ from one user to another when browsing the color chip carousel)

4. Default Label Printer: preferred printer (any Microsoft® Windows printer may be used and configured to print labels or reports)
5. Scale Com Port: used when communicating IMS 3.0 to the Sartorius® PMA 7500 family of scales (default settings shown below)

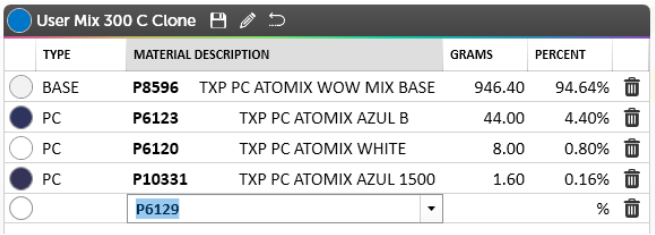


6. Mix Grid View: used when creating a new user formula (when entering formula components within the blending screen, the Mix Grid View accepts materials by Material Code or Material Description)

Mix Grid Set by Material Code



Mix Grid Set by Material Description



7. Click Apply Changes button on the Settings Interface Navigation to save and apply changes

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