



# Petrifilm™

## User Manual



- ① en Plate Reader Advanced and Plate Manager
- ② fr Lecteur automatique de tests Petrifilm et Gestionnaire de tests
- ③ de Plattenleser Advanced und Plattenmanager
- ④ es Lector avanzado de placas y administrador de placas
- ⑤ nl Telplaatlezer Advanced en Telplaatbeheerder
- ⑥ pt Leitora de Placas Avançada e Gerenciador de Placa
- ⑦ ja レードリーダー アドバンスド及びプレート管理
- ⑧ zh 高级判读仪和测试片管理器
- ⑨ th เครื่องอ่านแผ่นอาหารเลี้ยงเชื้อขั้นสูงและตัวจัดการแผ่นอาหารเลี้ยงเชื้อ
- ⑩ ko 드밴스드 결과 판독기와 Plate Manager



## User Manual

# Plate Reader Advanced and Plate Manager

### Intended Use

The 3M™ Petrifilm™ Plate Reader Advanced processes 3M™ Petrifilm™ Plates and is not intended to be used with any other manufactured products. The 3M Petrifilm Plate Reader Advanced utilizes specially designed algorithms to enumerate 3M Petrifilm Plates. The 3M™ Petrifilm™ Plate Manager is designed for the transfer, organization, data storage and data management for the results of the 3M Petrifilm Plates.

3M has not designed nor documented the 3M Petrifilm Plate Reader Advanced, and its power supply, or 3M Petrifilm Plate Manager for use with other manufacturers' products. Use with other manufacturers' designs or use in any other application that has not been evaluated or documented by 3M may lead to an unsafe condition. Although the 3M Petrifilm Plate Reader Advanced is accurate, all results should be reviewed and confirmed manually by the user. The 3M Petrifilm Plate Reader Advanced is not intended to be used in the diagnosis of conditions in humans or animals. The user is responsible to know and follow applicable workplace regulations.

3M anticipates that the 3M Petrifilm Plates, equipment and software will be utilized by technicians that have been properly trained on the 3M Petrifilm Plate test methods, the 3M Petrifilm Plate Reader Advanced and the 3M Petrifilm Plate Manager.

If this product is used in a manner that is not specified, the protection provided by the product may be impaired.

3M Food Safety is certified to ISO (International Organization for Standardization) 9001 for design and manufacturing.

### Safety Information

**Please read, understand, and follow all safety information contained in these instructions prior to use of this 3M Petrifilm Plate Reader Advanced. Retain these instructions for future reference.**

### User Responsibility

Users are responsible for familiarizing themselves with product instructions and information. Visit our website at [www.3M.com/foodsafety](http://www.3M.com/foodsafety), or contact your local 3M representatives or distributor for more information.









When selecting a test method, it is important to recognize that external factors such as sampling methods, testing protocols, sample preparation, handling, and laboratory technique may influence results.

It is the user's responsibility in selecting any test method or product to evaluate a sufficient number of samples with the appropriate matrices and microbial challenges to satisfy the user that the chosen test method meets the user's criteria.

It is also the user's responsibility to determine that any test methods and results meet its customers' and suppliers' requirements.

**As with any test method, results obtained from use of any 3M Food Safety product do not constitute a guarantee of the quality of the matrices or processes tested.**

Explanation of Safety Related Symbols	
	Warning: Hazardous Voltage
	Attention: Read Accompanying Documentation
	Caution: Consult the instructions for use
	Recyclable Packaging

	WEEE mark - This product contains electrical and electronic components and must not be disposed of using standard refuse collection. Please consult local directives for disposal of electrical and electronic equipment.
	Power Supply: Direct current DC source.
	UL NRTL mark (US and Canada electrical safety)
	CE mark (conforms to applicable requirements for European Economic Area).
	RCM mark (Australia and New Zealand electrical safety and EMC)
	Product Reference or Catalog Number
	Product Serial Number
	Date of manufacture YYYY-MM-DD

### Explanation of Signal Word Consequences

- ⚠ WARNING:** Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- ⚠ CAUTION:** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury and/or property damage.

## ⚠ WARNING

### To reduce the risk associated with hazardous voltage

- Use Indoors only.
- Only use device with power supply part number 26-1022-0552-8 supplied with the 3M Petrifilm Plate Reader Advanced.
- Do not spill liquids on device or immerse in liquids.
- Always unplug the 3M Petrifilm Plate Reader Advanced before cleaning the device.
- The Personal Computer (PC) that the 3M Petrifilm Plate Reader Advanced connects to must be an approved certified device (mark with UL, CSA, ETL, TUV, or other required regulatory safety agency in your region) and meet requirements specified in the user manual.
- The USB cable must only be connected to an approved Listed/certified device.
- The external power supply serves as the mains supply to disconnect the device. Do not position the equipment so that it is difficult to disconnect the device.
- The external power supply is a class I device. Only plug into an appropriate AC grounded outlet.

## ⚠ CAUTION

### To reduce the risk associated with EMC interference

- Modifications to this device or power supply shall not be made without the written consent of 3M Company. Unauthorized modifications may void the authority granted under Federal communication Rules permitting the operation of this device.

**To reduce the risk associated with misinterpretation of results**

- Users should be trained Microbiologists that are able to manually interpret 3M Petrifilm Plates and have been trained and understand fully how to operate the 3M Petrifilm Plate Reader Advanced and the 3M Petrifilm Plate Manager.
- Users should insert 3M Petrifilm Plates into the 3M Petrifilm Plate Reader Advanced in the correct orientation.
- Users should not feed 3M Petrifilm Plates through the device that have greater than 25% Liquefier colonies.
- Follow all instructions provided in the 3M Petrifilm Plate Reader Advanced User Manual.
- 3M has not documented 3M Petrifilm Plates for use in industries other than food or beverage. For example, 3M has not documented 3M Petrifilm Plates for testing water, pharmaceuticals, or cosmetics. 3M has not tested or documented 3M Petrifilm Plates for the use in all food matrices.
- Do not use any damaged or third-party parts including the user manual and important safety information with the 3M Petrifilm Plate Reader Advanced.
- All parts must be serviced by an authorized 3M Service Center.
- Do not use any software with the device that 3M has not supplied for the intended use.
- Users should maintain the device per the 3M Petrifilm Plate Reader Advanced User Manual. Devices that are dirty, damaged or out of calibration should not be used.
- Users should only operate the 3M Petrifilm Plate Reader Advanced in the proper environmental conditions that are outlined in the user manual.
- Do not use on a vibrating surface.
- Do not use the device outside the temperature range of 15-35 degrees Celsius.
- Do not use the device in environments greater than 85% relative humidity.
- Do not place the device close to any other device that emits a strong electro-magnetic field.
- Do not use the device with a PC that does not meet the minimum PC requirements specified in the user manual.
- Users should operate the 3M Petrifilm Plate Reader Advanced with the latest 3M Petrifilm Plate Manager Software.

**Reduce risk associated with bacterial infection and workplace contamination**

- Perform 3M Petrifilm Plate testing in a properly equipped laboratory under the control of a skilled microbiologist. The user must train its personnel in current proper testing techniques: for example, Good Laboratory Practices, ISO 7218, or ISO 17025.
- Always wear protective apparel such as eye protection, gloves and lab coats when operating the device.

**Reduce the risk of injury, instrument damage or damage to the 3M Petrifilm Plates**

- Perform 3M Petrifilm Plate testing in a properly equipped laboratory under the control of a skilled microbiologist. The user must train its personnel in current proper testing techniques: for example, Good Laboratory Practices, ISO 7218, or ISO 17025.
- Always wear protective apparel such as eye protection, gloves and lab coats when operating the device.
- Users should insert 3M Petrifilm Plates into the 3M Petrifilm Plate Reader Advanced in the correct orientation.
- Users should not feed 3M Petrifilm Plates through the device that have greater than 25% Liquefier colonies.
- Do not use any damaged or third-party parts including the user manual and important safety information with the 3M Petrifilm Plate Reader Advanced.
- All parts must be serviced by an authorized 3M Service Center.
- Follow the cleaning procedure listed in the 3M Petrifilm Plate Reader Advanced's user manual.
- This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

**Reduce the risks associated with exposure to biohazards and environmental contamination**

- Follow current industry standards and local regulations for the disposal of biohazardous waste and electronic waste.

## Regulatory Compliance

### Health and Safety Information

Device Safety Compliance: The 3M Petrifilm Plate Reader Advanced complies with the following standards as demonstrated by the CB Scheme Certificate and test report issued by UL, LLC (UL): • IEC/EN 61010-1:2010. Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements • 3M Petrifilm Plate Reader Advanced is UL Listed and carries the UL mark with adjacent indicators “C” and “US” based on compliance to the standards UL 61010-1, CAN/CSA 22.2 No. 61010-1. The 3M Petrifilm Plate Reader Advanced complies with the CE mark related to the Low Voltage Directive (LVD) 2014/35/EU as confirmed in the Declaration of Conformity. The 3M Petrifilm Plate Reader Advanced complies with the RoHS Directive, Directive 2015/863 of the European Parliament and of the Council of 31 March 2015 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 3M Petrifilm Plate Reader Advanced complies with China RoHS II requirements. 3M Petrifilm Plate Reader Advanced complies with the WEEE Directive, Directive 2012/19/EU of the European Parliament and of the Council of 04 July 2012 on waste electrical and electronic equipment (WEEE).

### EMC Compliance

The 3M Petrifilm Plate Reader Advanced complies with the following EMC standards as confirmed in the Certificate of Compliance generated by 3M: • IEC 61326-1:2012/EN 61326:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements • EMC requirements of the CE mark EMC Directive 2014/30/EU. This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments. The 3M Petrifilm Plate Reader Advanced complies with the Australian and New Zealand electrical safety and electromagnetic compatibility requirements as confirmed in the Supplier’s Declaration of Conformity that is linked to the Australian/New Zealand Regulatory Compliance Mark (RCM). Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (A)/NMB-3(A). This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

For information on documentation of product performance, visit our website at [www.3M.com/foodsafety](http://www.3M.com/foodsafety) or contact your local 3M representative or distributor.

### Environmental Operating Conditions

Environmental Condition	Operating Condition	Units
Indoor Use only	<i>only connect the data connections to a computer that conforms to IEC/EN/UL/CSA 60950-1 or 62368-1</i>	
Altitude	<i>5000 maximum</i>	<i>meters</i>
Operating Temperature Range	<i>15 to 35</i>	<i>°C</i>
Relative Humidity	<i>10 – 85 noncondensing</i>	<i>%</i>
Storage Temperature Range	<i>-20 to +60 (-4 to +140)</i>	<i>°C (°F)</i>
AC Voltage for power supply Mains Supply voltage fluctuations up to ± 10% of nominal voltage Temporary overvoltage’s occurring on the mains supply	<i>100-240</i>	<i>Volts</i>
Frequency	<i>50-60</i>	<i>Hertz</i>
AC Current for power supply	<i>1500/1.5</i>	<i>mA/Amps</i>
Power supply output voltage	<i>12</i>	<i>Volts DC</i>
Power supply output current	<i>9</i>	<i>Amps DC</i>
Input voltage	<i>12</i>	<i>Volts DC</i>
Input current	<i>9</i>	<i>Amps DC</i>

Overvoltage	Category II
Pollution Degree	2

### Instrument Specifications

	Specification	Units
Length	214	mm
Width	218	mm
Height	257	mm
Weight	4	Kg
External Connectors	USB 2.0 Type B and 4 Pin Lock DIN	

### Limited Warranty

3M Food Safety Hardware (“Hardware”) includes the 3M Petrifilm Plate Reader Advanced and any associated Software and other components supplied by 3M which are described in the applicable Installation and Use Guides (“User Documentation”).

### Limited Warranty and Disclaimer

3M warrants that for one year from the date of shipment that the Hardware will substantially perform in accordance with the User Documentation. THIS WARRANTY IS VOID IF: (A) THE HARDWARE HAS BEEN REPAIRED BY PERSONS NOT AUTHORIZED BY 3M; OR (B) THE HARDWARE HAS BEEN ALTERED, MODIFIED, OR MISUSED; OR (C) THE HARDWARE IS USED WITH PRODUCTS, SUPPLIES, COMPONENTS OR SOFTWARE NOT SUPPLIED BY 3M FOR USE WITH THE HARDWARE; OR (D) THE HARDWARE OR A COMPONENT IS USED FOR OTHER USES (FOR EXAMPLE USE WITH OTHER CIRCUIT BOARDS OR SOFTWARE) OR (E) THE HARDWARE HAS NOT BEEN MAINTAINED OR USED IN ACCORDANCE WITH THE USER DOCUMENTATION. UNLESS PROHIBITED BY LAW, THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THE IMPLIED WARRANTY OF MERCHANTABILITY, OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING OR OF PERFORMANCE, CUSTOM OR USAGE OF TRADE. 3M DOES NOT WARRANT THAT THE SOFTWARE WILL FUNCTION ERROR FREE.

If within one year after shipment, the Hardware does not conform to the express warranty set forth above, 3M’s sole obligation and User’s sole remedy shall be, at 3M’s option: 1) to repair or replace the non-conforming component; or, 2) refund the purchase price.

### Limitation of Liability

UNLESS PROHIBITED BY LAW, 3M WILL NOT BE LIABLE TO USER OR OTHERS FOR ANY OTHER DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES INCLUDING, FOR EXAMPLE, LOST PROFITS, BUSINESS, INVESTMENTS, OR OPPORTUNITIES EVEN IF 3M HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. The parties agree that 3M’s total cumulative liability to User for direct damages for all causes shall not exceed One Hundred Dollars, or the price paid for the Hardware, whichever is higher. Some states or countries may have laws which require liability rights different from those stated above. In such state or countries, the minimum required liability terms shall apply.

To request service, you must request a Returned Material Authorization (RMA) number from the service center. Please call 1-800-328-1671.

Disclaimer: 3M disclaims all express and implied warranties including warranties of merchantability or fitness for a particular use. If product is defective, the exclusive remedy is, at 3M’s option, replacement, repair or refund. Except where prohibited by law, 3M will not be liable for any further loss or damage arising from use of this product.

Users are responsible for familiarizing themselves with product instructions and information. Visit our website at [www.3M.com/foodsafety](http://www.3M.com/foodsafety), or contact your local 3M representative or distributor for more information.

### Using this Manual:

1. The 3M™ Petrifilm™ Plate Reader Advanced and the 3M™ Petrifilm™ Plate Manager User Manual is provided in electronic format only. The 3M Petrifilm Plate Reader Advanced and the 3M Petrifilm Plate Manager will include the updates to this User Manual, which will automatically be installed along with the software updates.
2. This User Manual describes the operation and behavior of the 3M Petrifilm Plate Reader Advanced and the 3M Petrifilm Plate Manager, and it is structured to provide step-by-step instructions for the operational tasks that users carry out.

3. In the step-by-step instructions for using the software, the following style guidelines were used:
  - a. *Italic text type* is the name of a window.
  - b. **Bold text type** is the exact text of something that appears on a window.
  - c. [**Bold text type with brackets**] is the name of a button that you can click on in a window.

## Setting up the 3M Petrifilm Plate Reader Advanced

### Package Contents

The packaged box will contain the following items:

- 3M Petrifilm Plate Reader Advanced
- Universal AC adapter
- Power cord (North American) only for the 6558 SKU
- Exit Tray
- Thumb Drive with installation package
- Important Safety Information Booklet
- Quick Start Guide

### Minimum Computer Requirements

- Microsoft .NET Framework 4.5 or above. (Installer)
- Device Drivers – For connectivity with the 3M Petrifilm Plate Reader Advanced. (LibUsb installer)
- Visual C++ Redistributable (64-bit) - vcredist\_x64.exe (version 10.0.30319.1). (Installer)
- Intel-Core-i3 @ 1.80GHz Processor, Windows 7, Windows 8, Windows 8.1 or Windows 10, 32/64 bit Intel based processors with minimum 4 GB of available RAM.

### Unpacking and setting up the Instrument

After unpacking the box, bring out the device, power cords, USB cable and exit tray. Assemble the components in the following sequence:

1. Attach the exit tray at the back of the 3M Petrifilm Plate Reader Advanced.
2. Connect the type B USB cord to the device and attach the opposite end to the computer.
3. Connect the power adaptor cable to the power charging port.
4. Ensure all the connections are in place and the power supply is plugged in, the device will then be powered on.

### Resolution Supported

Below mentioned resolution formats will be supported by the application:

1. 1600 \* 900
2. 1280 \* 720
3. 1920 \* 1080
4. 1366 \* 768

### Color Code explanation for Status LED

The status LED will indicate explanations from the below mentioned colors:

Color	Explanation
White	Operating System boot up
Blue	Algorithm models being loaded or USB is unplugged. Indicates that the device is not ready to be used.
Green	Device is ready to be used or is currently being used
Red	An error has occurred or the PAHF was removed

## Operating the 3M Petrifilm Plate Manager

### Software Installation

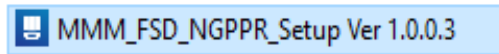
The 3M Petrifilm Plate Manager can be installed on Windows platforms: Win 7 (32 bit & 64 bit), Win 8/8.1 (32 bit & 64 bit) or Windows 10 (32 bit & 64 bit). The minimum configuration required for the software to operate on the computing platform shall be:

- Intel-Core-i3 @ 1.80GHz Processor
- 4 GB of available RAM
- At least 1 GB of available disk space. (Assuming users will save fewer than 1,000 3M Petrifilm Plate images)

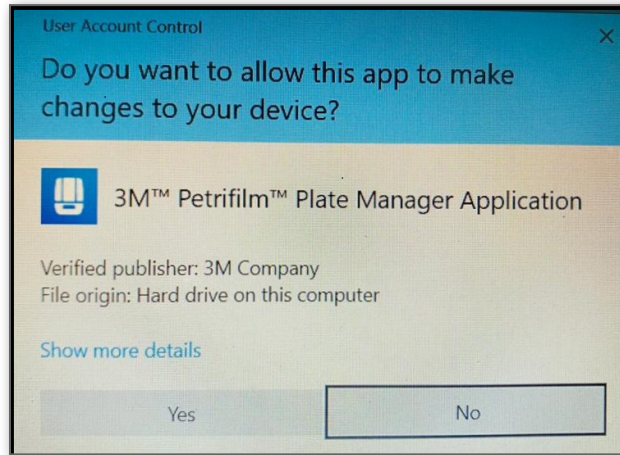
The installer is available as a self-extracting compressed package that includes and installs all required drivers and 3rd party libraries.

The below steps are to be followed for the installation of the 3M Petrifilm Plate Manager:

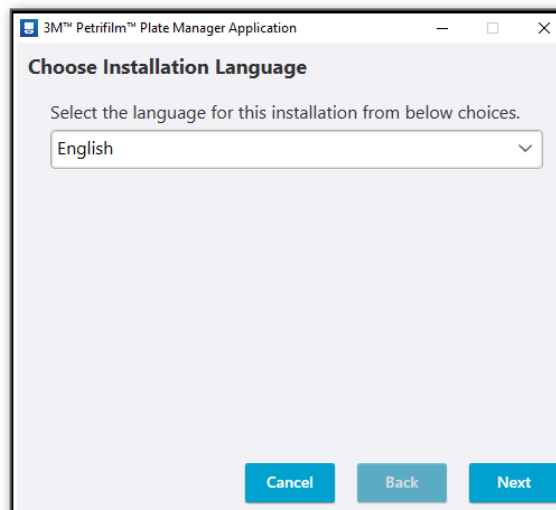
Plug the flash drive into the USB port of the PC. Navigate to the location where the “MMM.FSD.NGPPR\_Setup.exe” has been saved and double click on the file to launch the installation process or navigate to [www.3m.com/PetrifilmSoftware](http://www.3m.com/PetrifilmSoftware) and download the 3M Petrifilm Plate Manager.



1. On double clicking the .exe, a User Account Control prompt will appear Click on [Yes] to continue with the Installation process.

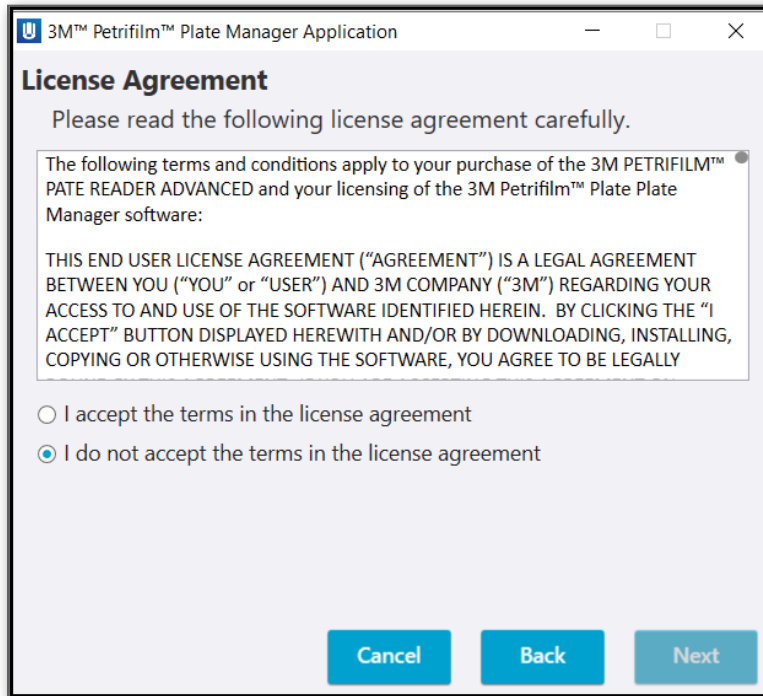


2. On clicking Yes, the window to *Choose Setup Language* opens. Select the language from dropdown (E.g.: **English**) and click on the [Next] button. (Buttons – [Cancel] and [Back] also appear. User has the privilege to cancel the installation by clicking the [Cancel] Button. [Back] Button is disabled, as this is the first step).



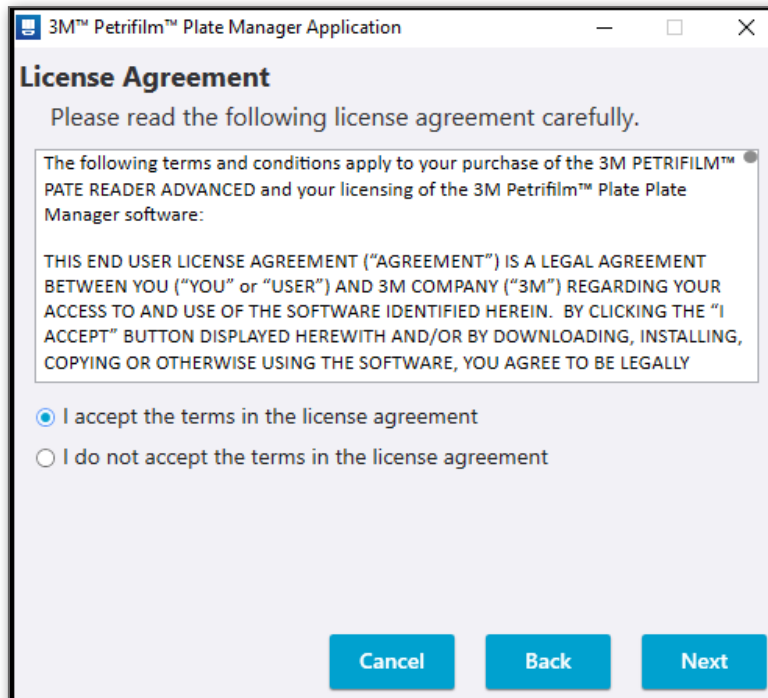


3. Upon clicking **[Next]**, a window to accept / do not accept *License Agreement* appears. By default, the option **I do not accept the terms in the license agreement** is selected. NOTE: The **[Next]** button is disabled as the installation can progress only when user accepts the license agreement. User can choose to go **[Back]** or **[Cancel]** the installation process as well.



4. Select the radio button **I accept the terms in the license agreement** to accept the *License Agreement* and click on **[Next]**.

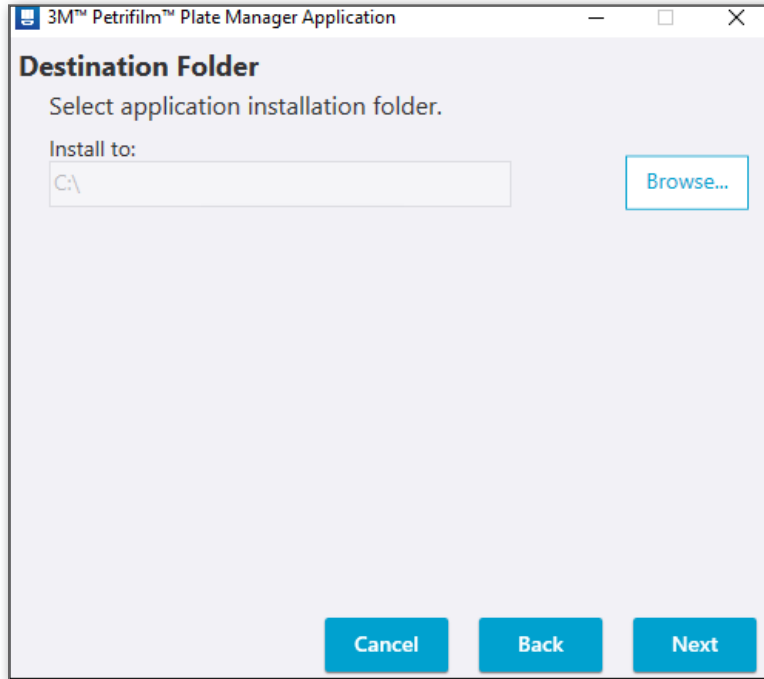
NOTE: The **[Next]** button will only get enabled when the license agreement is accepted.



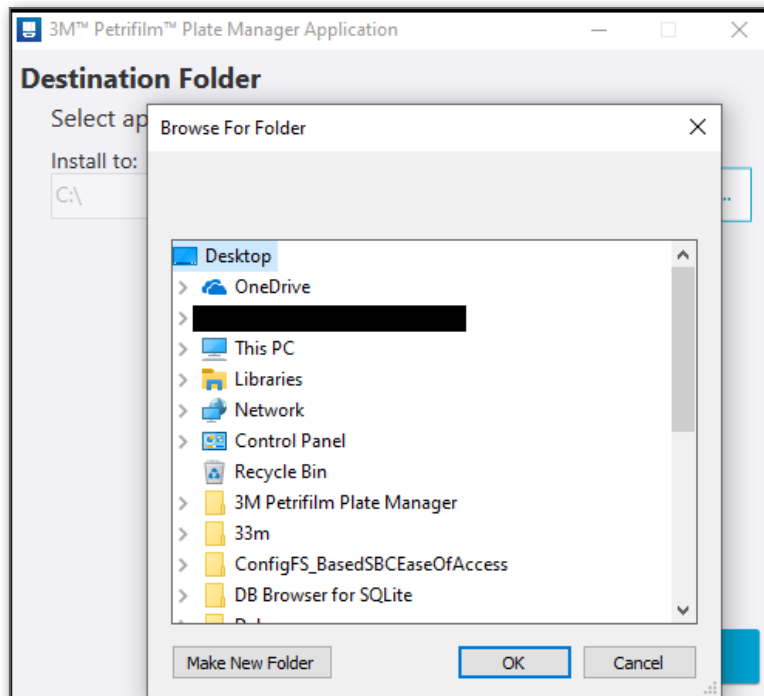


5. A dialog *Destination Folder* displaying the Default installation path will appear. Click on **[Next]** to install the application on the mentioned path.

NOTE: User has the provision to go **[Back]** or **[Cancel]** the installation process.



Click on the **[Browse]** button to select the application installation folder. By default, it will be installed in the following location: C:

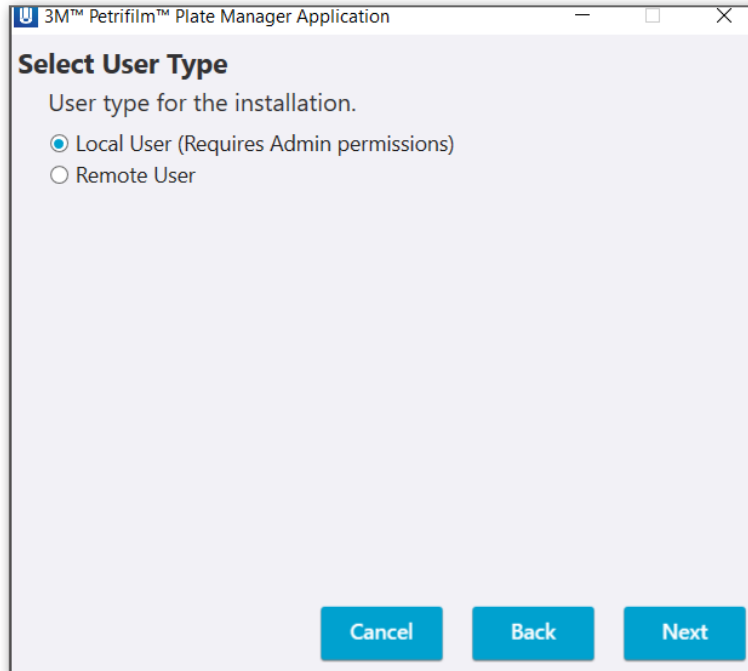


Select the path and click on OK.

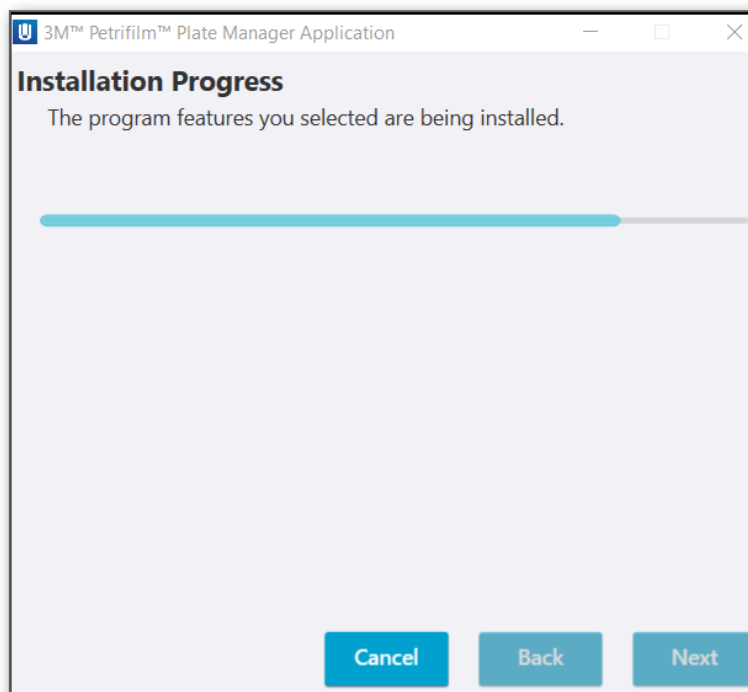
6. The window to *Select User Type* appears. By default, the **Local User** type for installation is selected. Click on **[Next]** to proceed with the installation.

User can select one of two user types that are listed below:

- a. **Local User:** User who is authenticated through the credentials (username and local password) on the system itself. The Local User Installation package should be used for all users who intend to use the 3M Petrifilm Plate Manager with the 3M Petrifilm Plate Reader Advanced.
- b. **Remote User:** User who can access the results in the application remotely through an authentication token and approver package file mapped to the MAC ID of the PC. Remote Users will only be able to use the 3M Petrifilm Plate Manager and NOT the 3M Petrifilm Plate Reader Advanced.

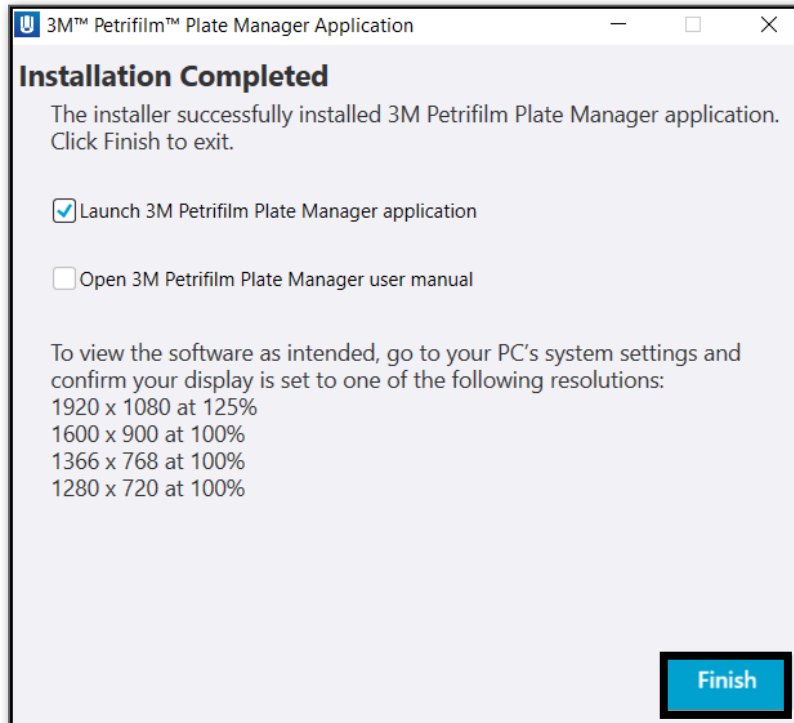


7. The *Installation Progress* can be seen on the **progress bar**. At this moment, the process of the installation can only be cancelled. The **[Next]** and **[Back]** buttons are disabled.



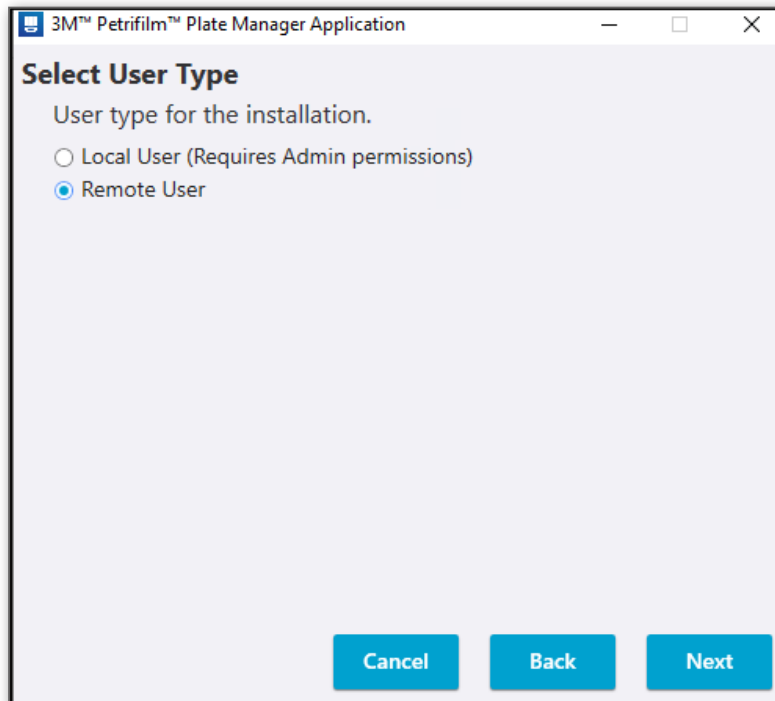
8. After the installation is completed, the window for the *Installation Completed* appears and the checkbox to **Launch 3M Petrifilm Plate Manager application** is checked. On clicking **[Finish]**, the application will be launched.

NOTE: By clicking the hyperlink for 3M Petrifilm Plate Manager user manual, the user will be redirected to the [www.3m.com/PetrifilmSoftware](http://www.3m.com/PetrifilmSoftware).

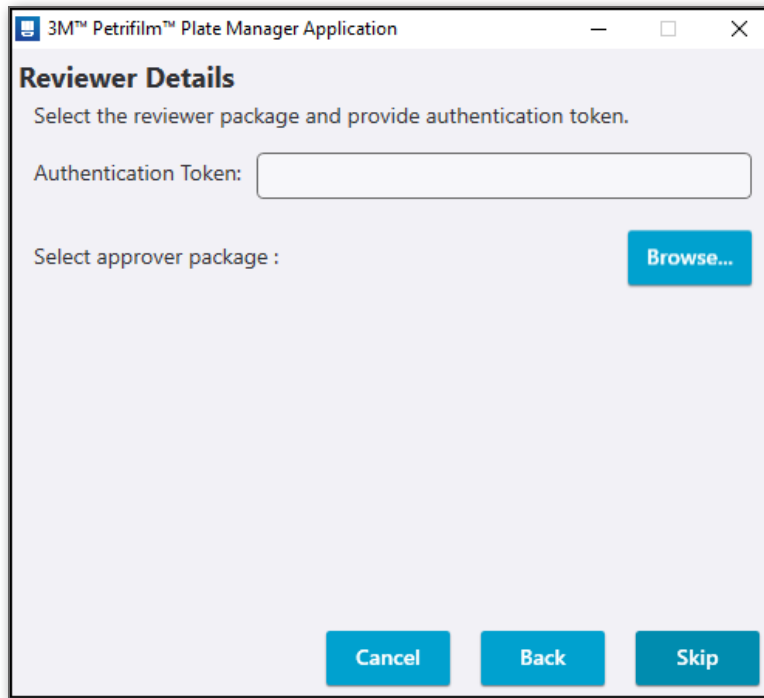


Click on Finish to exit and launch the **3M™ Petrifilm™ Plate Manager Application**

**Installation for a Remote User:**

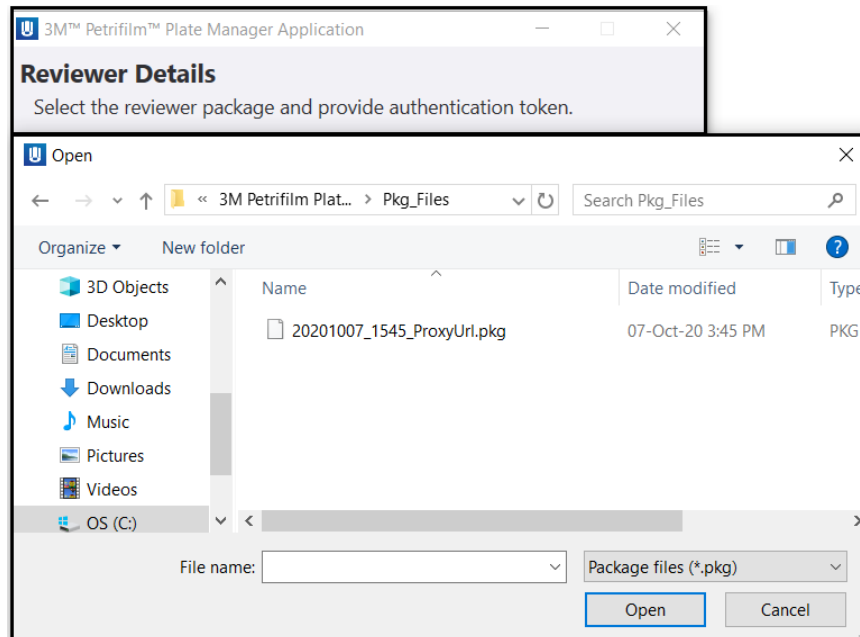


Click on **[Next]** to proceed with the Installation Process.

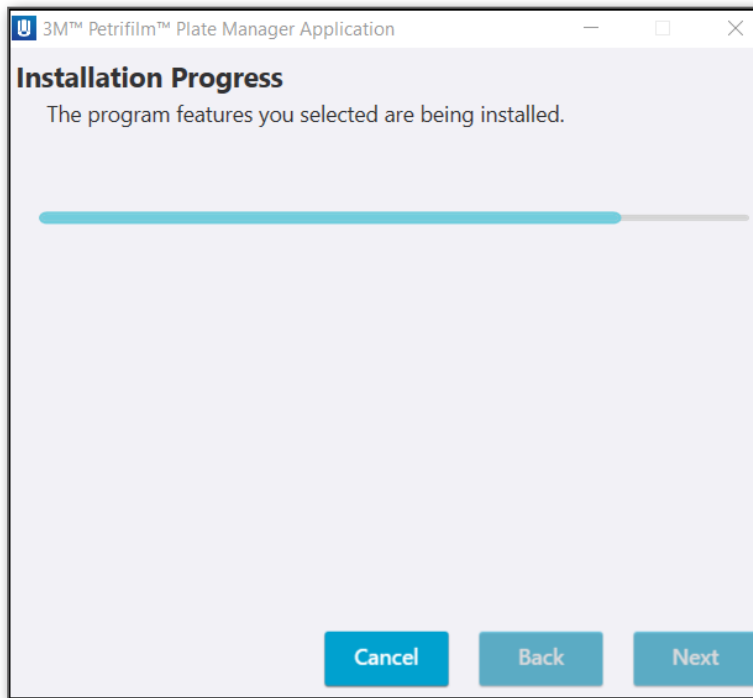


NOTE: Package file is mapped to the MAC ID of the machine and cannot be used over different machines. Host user needs to generate different packages for different machines.

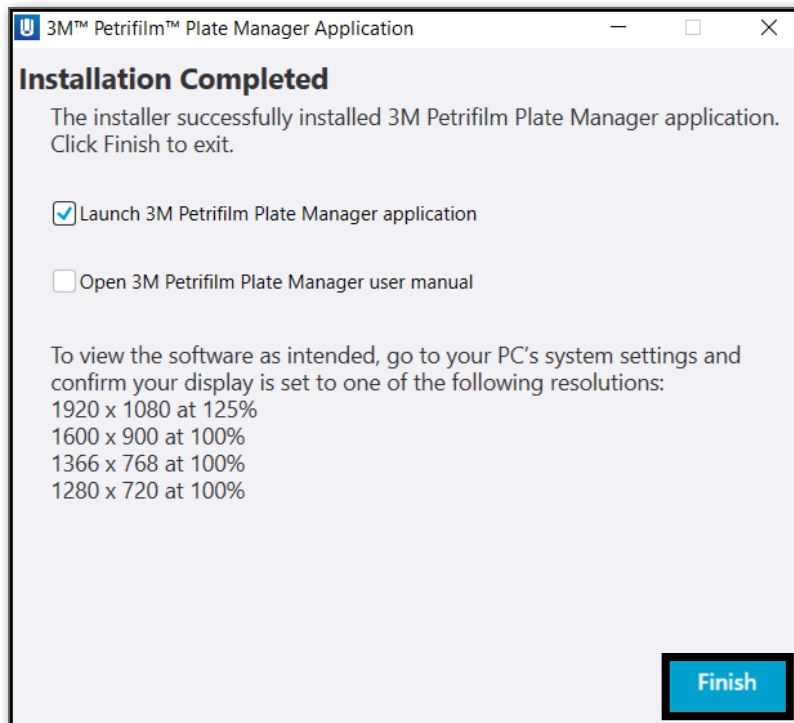
Users can browse to select the approver package file or proceed with the Installation without the approver package file. The approver package file/authentication token will be generated by the Host PC application or local user PC. To choose the approver package, browse for the desired path and select the package file. If the approver package is not selected, authentication can instead be provided during PC application login.



Click on **[Next]** to proceed with the Installation.



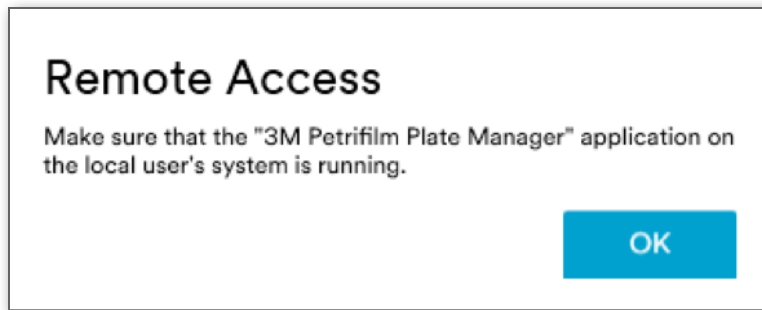
When the installation is complete and the user clicks on the **[Finish]** button, the application launches and the user will be navigated to the Enumerate screen after the boot up screen. The default username is “User”.



Click on Finish to exit and launch the **3M™ Petrifilm™ Plate Manager Application**

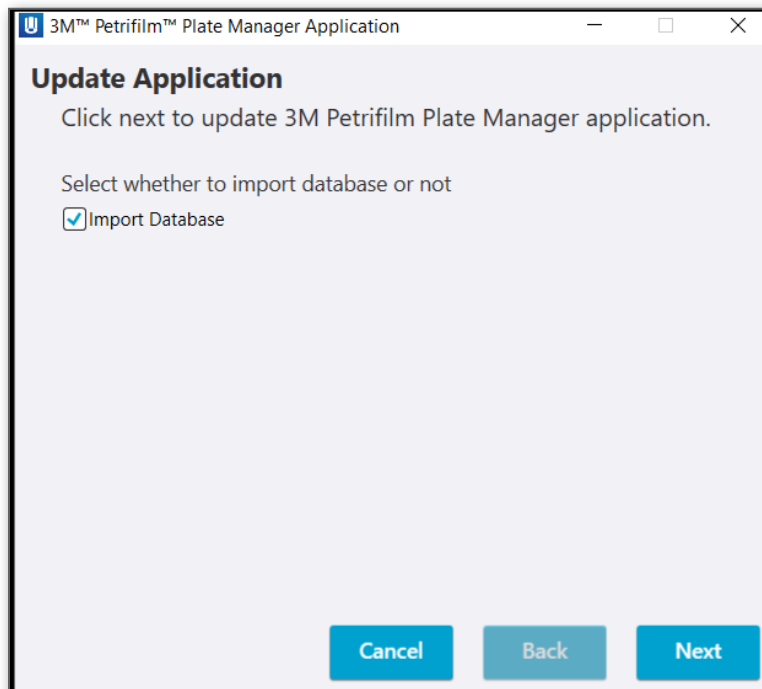
NOTE: While installing for a local user, a shortcut will be available at the machine level i.e. any user who logs into the machine will be able to find the shortcut.

When remote user tries to run the application, if it is not running on the host machine then a prompt shall appear as shown below:



#### Update Application version:

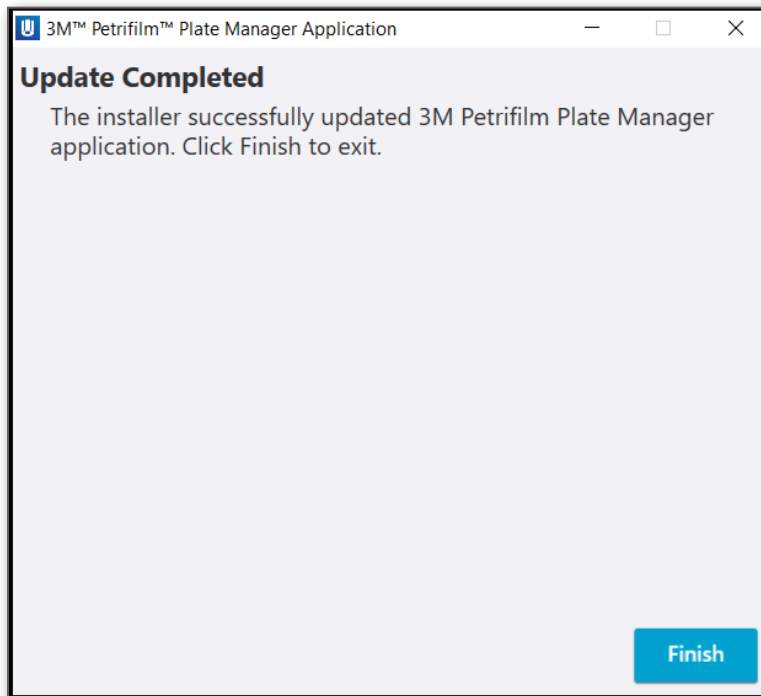
User shall double click on the exe to update the existing version of the application.



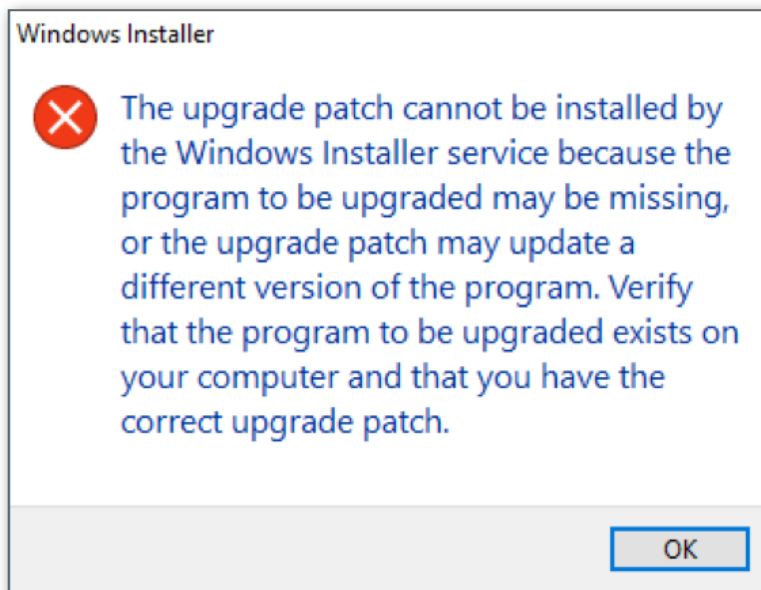
User shall be allowed to check/uncheck the **Import Database** checkbox as needed.

Click on **[Next]** to proceed with the update process.

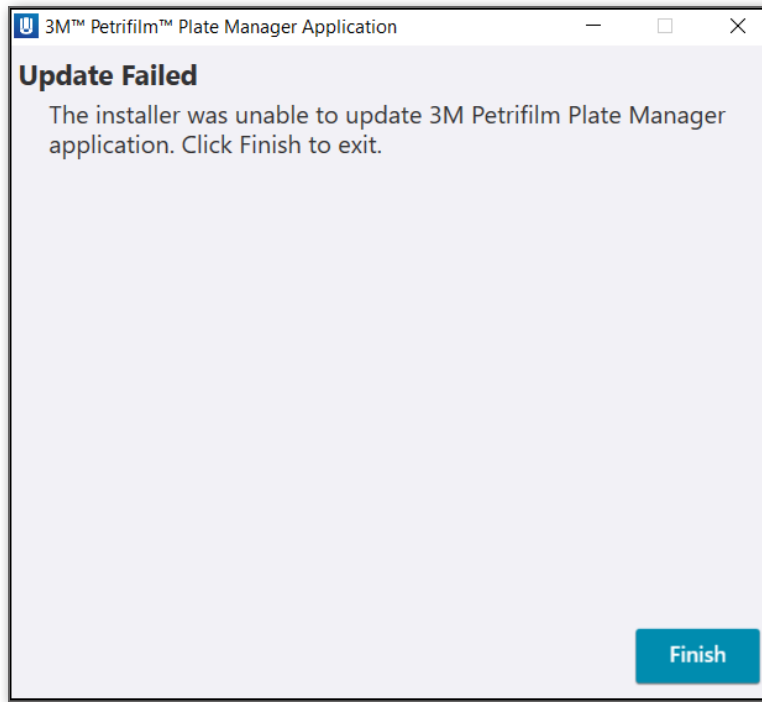
Once the update is complete below dialog shall appear.



If user tries to update the application without actually installing it first, then a prompt as below shall appear.







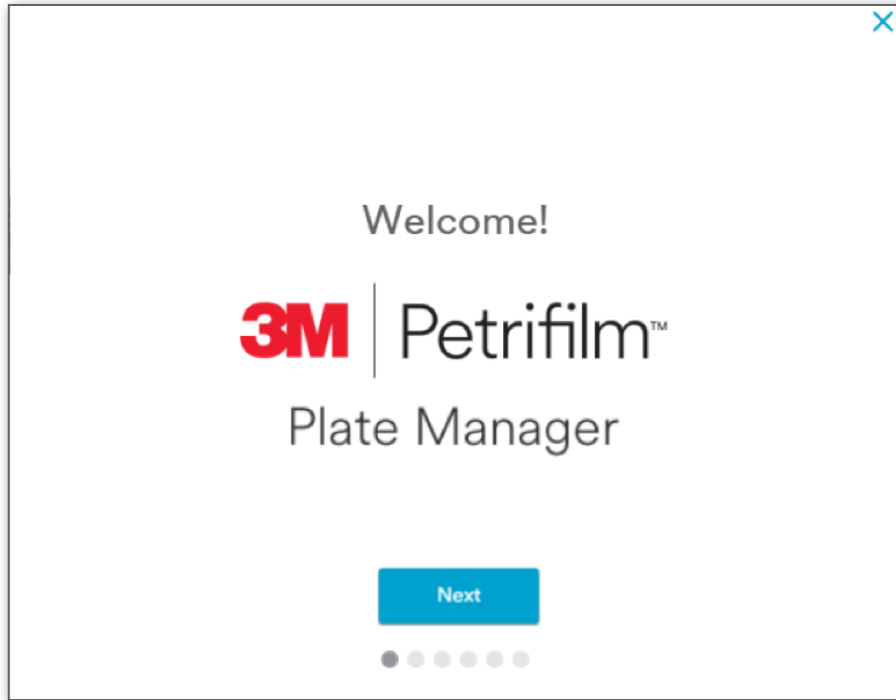
If user wants to downgrade the application version, then the user shall uninstall the existing version and install a previous intended version.

**Boot up screen:** When application is launched boot up screen shall open.

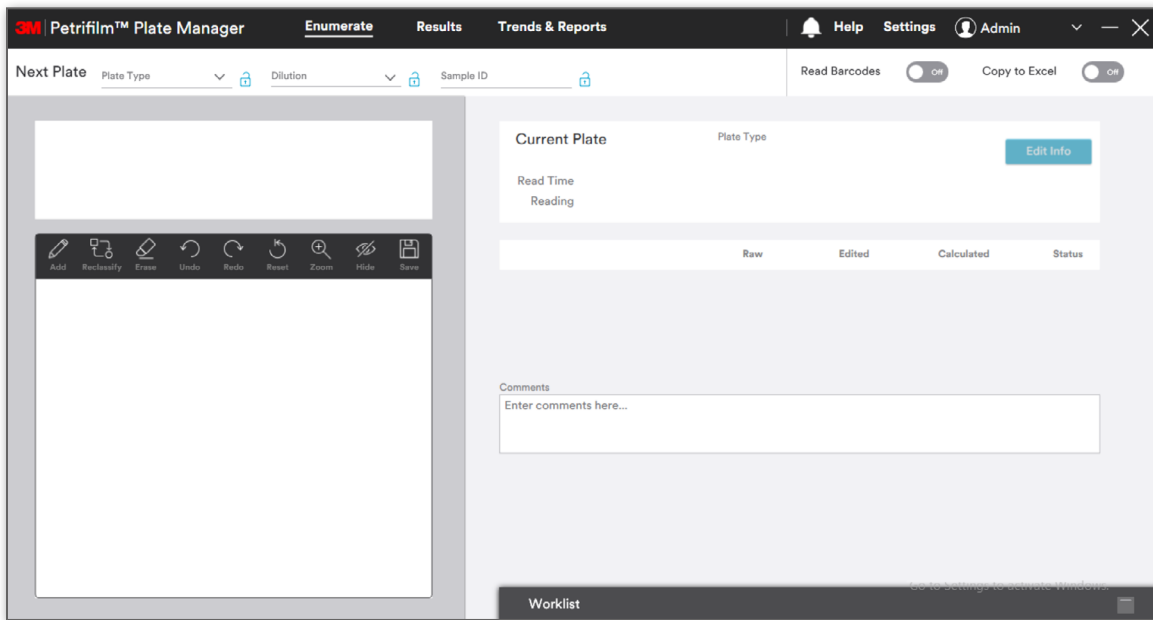
By default, the FTUE (First time User experience) tour dialog will appear for the first time any user visits the respective screen. This will give the user the information about what they can do and how they can do it on the screen. Clicking on **[Next]** will open other information dialogs while **[Dismiss Tips]** will dismiss all of them.



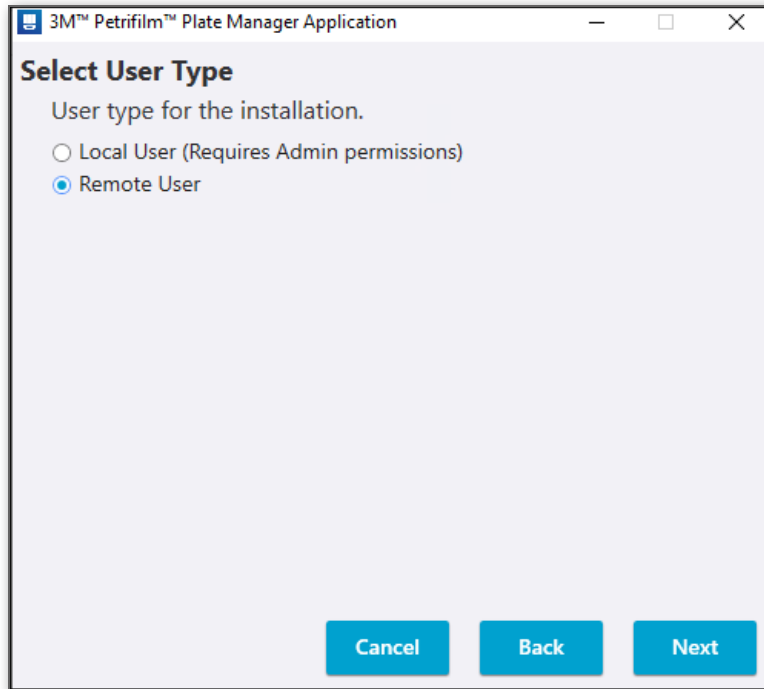
When application has just 1 user upon launch, user will see the feature tour after the boot up screen. *Enumerate* screen shall appear in the background. In case of multiple users, the Login screen shall appear after boot up screen.



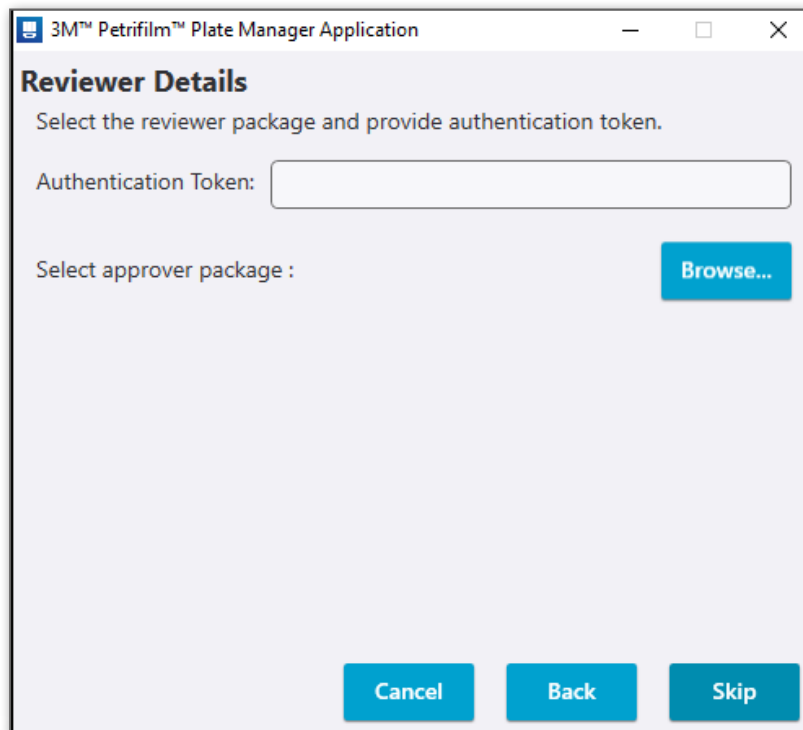
9. *Enumerate* screen appears.



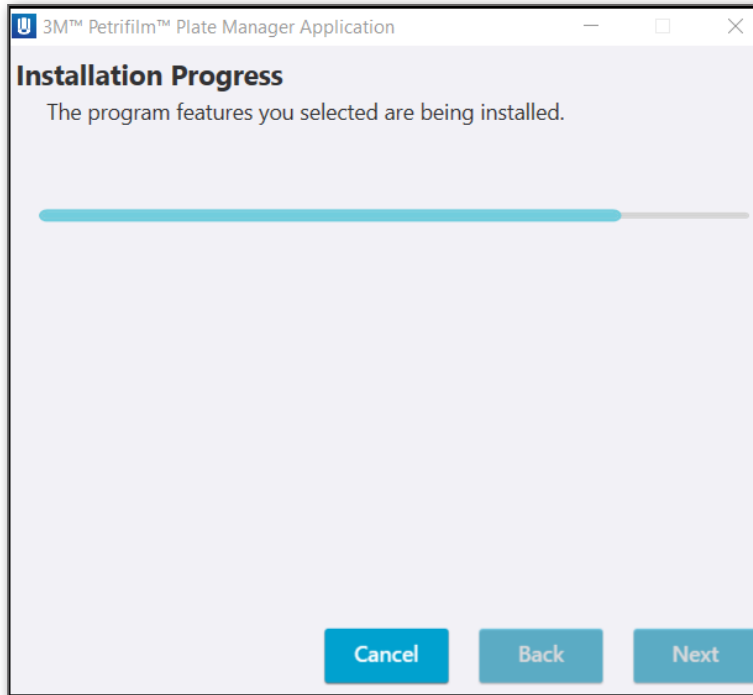
**Login Type: Remote user: Skipping the Authentication process / Authentication at the time of PC Application login**  
Select *User Type* as **Remote User** and click on **[Next]**.



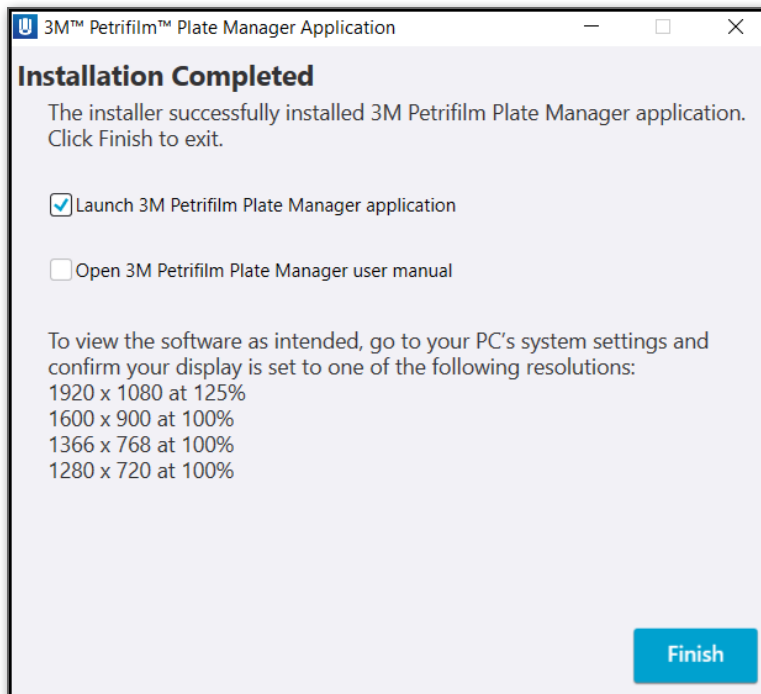
On the *Reviewer Details* screen, click on **[Skip]** to skip the Authentication Process.



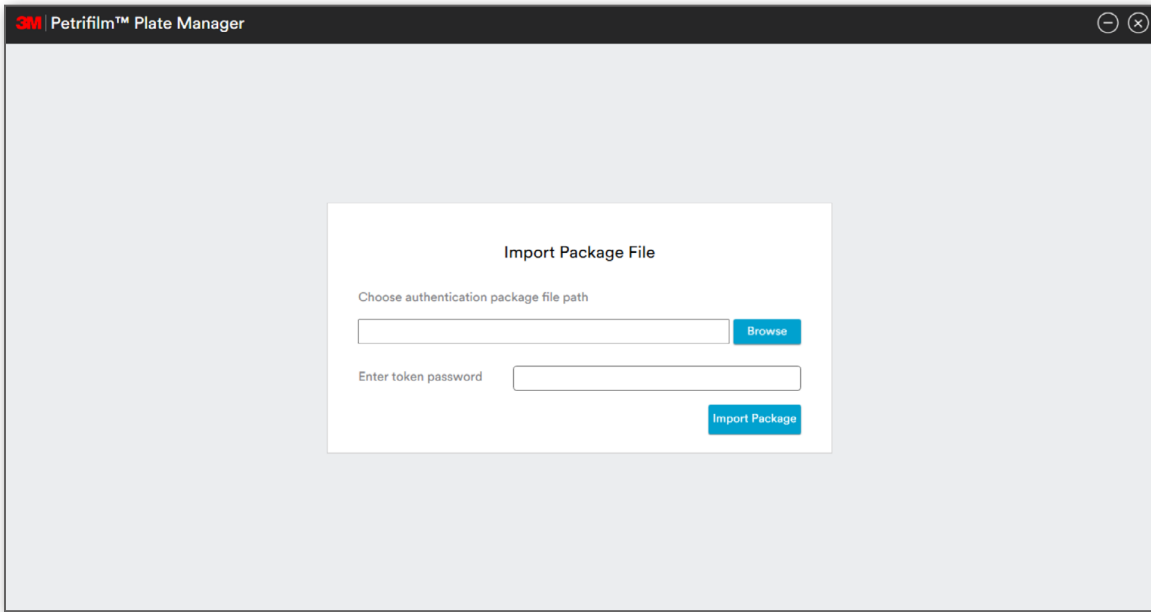
The Installation will progress. Clicking on the **[Cancel]** button will cancel the overall installation while **[Next]** and **[Back]** buttons are disabled.



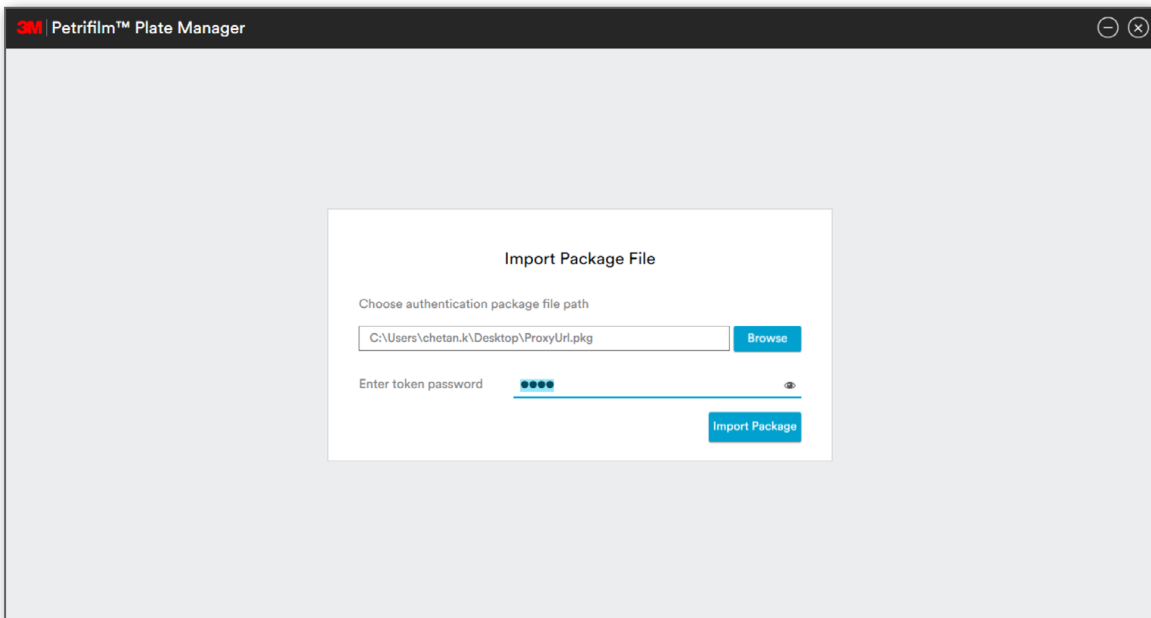
Application gets installed successfully. Click on **[Finish]** to exit.



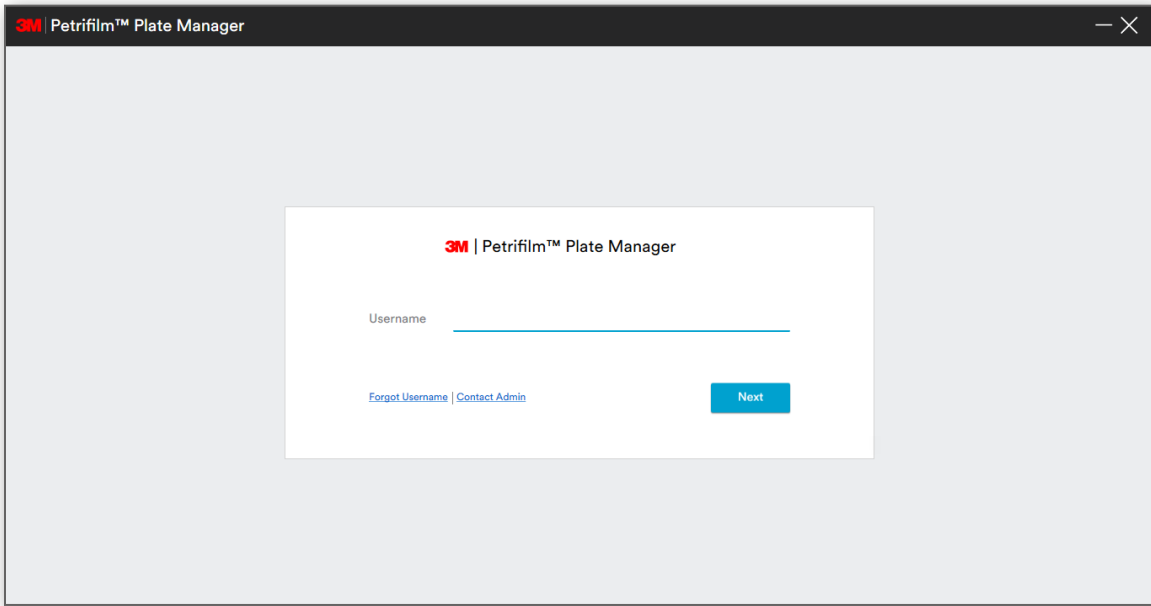
On successful completion of Application installation, the PC application will open asking the user to *Import Package File*.



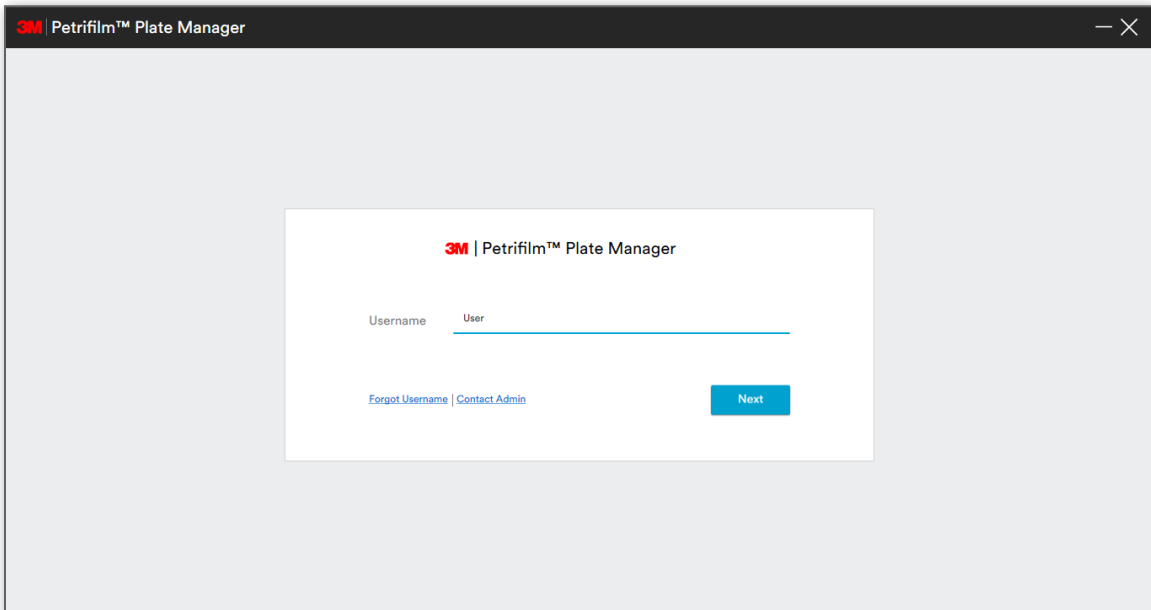
Click on **[Browse]** to choose Authentication file path and enter token password. Click on **[Import Package]** button to import the package.



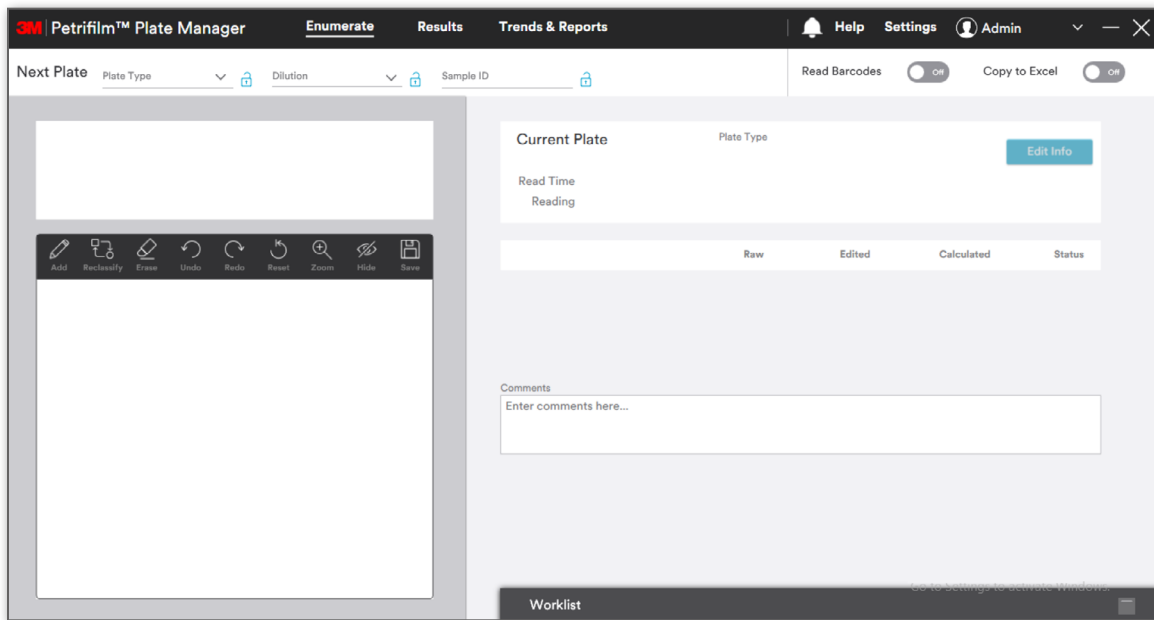
The login window prompts the User to enter their Username in the case authentication is required.



Enter Username and click on **[Next]**.



Enumerate screen appears.



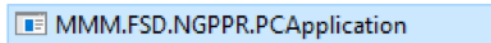
The installed application can be seen under Control Panel as:

 3M™ Petrifilm™ Plate Manager Application	3M	28-Sep-20	364 MB	1.0.0.4
----------------------------------------------------------------------------------------------------------------------------	----	-----------	--------	---------

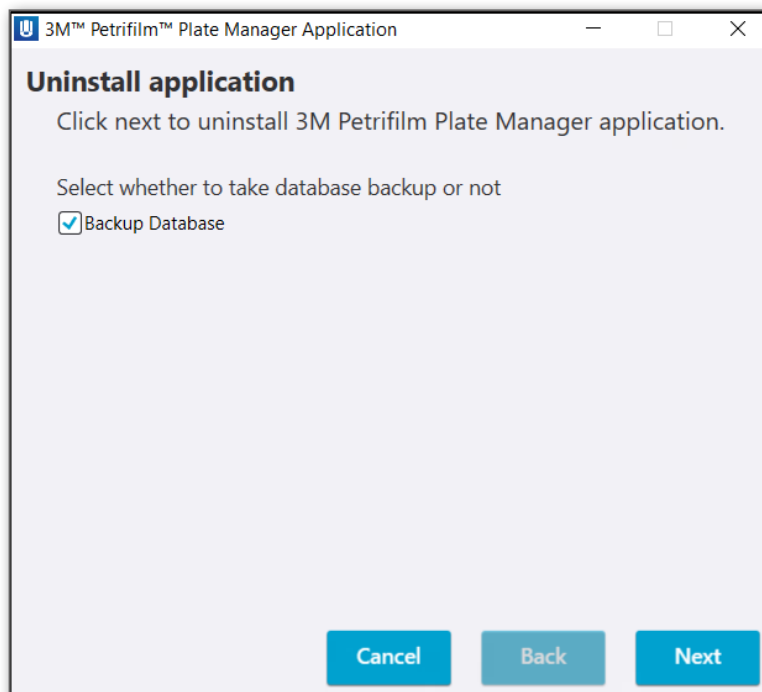
### Uninstalling the PC application

The 3M Petrifilm Plate Manager can be uninstalled either by double clicking on the .exe and proceeding with un-installation or from the control panel.

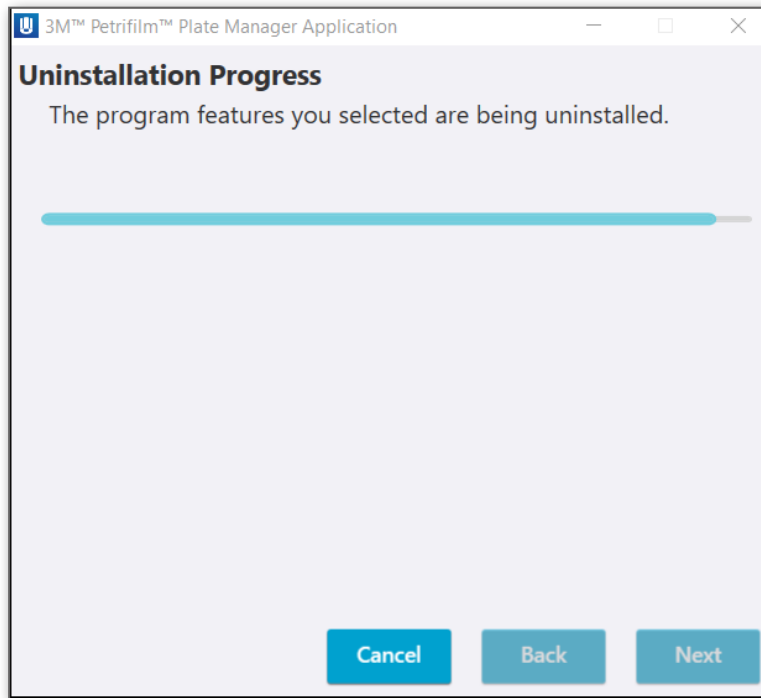
1. Double click on the .exe and proceed with un-installation.



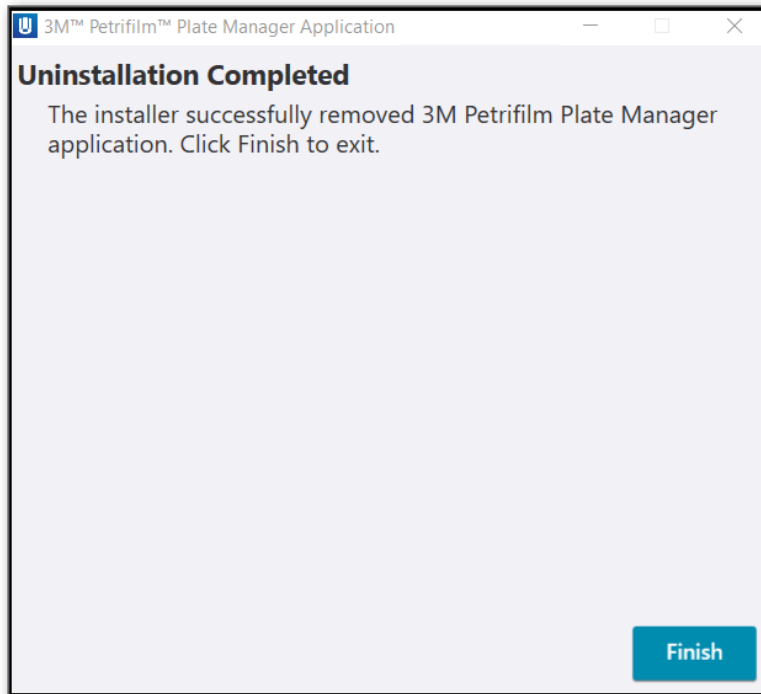
2. On the *Uninstall application* window prompt, click on **[Next]**. Users can also choose to take a backup of their data base.



3. Check for *Uninstallation Progress* status.



4. Once complete, the *Uninstallation Completed* window will appear. Clicking on **[Finish]** will exit the user from the uninstallation window.



The shortcut created at the time of software installation shall be removed and the instance from the control panel shall get deleted.

### 3M Petrifilm Plate Manager Notifications / Alerts

Users will receive notifications that can be in the form of the following:

1. Warnings
2. Information messages
3. Error messages



**User Authentication and Authorization-Login Page:**

Dialogs / modals	Messages
Forgot Password: User enters incorrect answer to the security question.	Incorrect answer.
Password does not match while setting new password.	Password does not match.
Forgot Username: User enters incorrect device serial number.	Incorrect device serial number.
Forgot Username: User enters incorrect first name and last name.	First name or Last name is invalid. To correct, contact your contact administrator.

**Settings:**

Dialogs / modals	Messages
Settings: All screens - User update a setting and clicks on "Apply Changes" button.	Changes applied successfully.
Product Specifications: Add product specification i. Lower limit = 1, Upper limit = 0 ii. Lower = 1, Upper limit = 2, Caution range = 3 to 4 iii. Lower = 1, Upper limit = 2, Caution range = 5 to 2	i. Upper limit should be greater than lower limit for <Plate Type>. ii. Enter caution range values that are between the lower limit and upper limit. iii. Lower limit of caution range should be less than upper limit of caution range.
Product Specifications: Delete a product specification.	Delete Product Specification?
Dilution Scheme: Name entered and clicked on Save button without adding details for any plate type.	Please enter all details for at least one plate type.
Dilution Scheme: Name entered, selected a plate type, clicked on Add dilution link and clicked on Save button without adding details.	Please enter all values for dilutions of <Plate type>.
Dilution Scheme: Delete a dilution scheme.	Delete Dilution Scheme?
Duplicate username.	User with same username already exists.
Delete logged in user.	Active user cannot be deleted.
Delete a user.	Are you sure you want to permanently delete the user profile for <Username>? This action cannot be reversed.
Reset password for user with authentication type "No authentication".	Password for user authentication type "No Authentication" can't be reset. Contact your system administrator.
Reset password for user with authentication type "Company Login".	Password for user authentication type "Company Login" can't be reset. Contact your system administrator.
Add user with authentication type as "Company Login" and username not matching with windows credentials.	The username you entered is not correct. Check to ensure that it matches your Company Login.
Mapping for Import: Add Custom field - User tries to add a custom field without providing field name for previously added field.	Enter a name for the column.
Mapping for Import: Add Custom field - User tries to enter duplicate name for a custom field.	This column name is already in use. Enter a unique name for your custom column.
Barcode: Delete data field.	Delete data field?
Barcode: Delete row in the translation table.	Delete translation table row?

**Enumerate:**

Dialogs / modals	Messages
Counts may not match. [Prompt: when user manually changes count] Sticky	“Count results and visual markers may not match because of a manual numerical edit.”
Estimated Counts. [Prompt: when user manually changes count] Sticky	“The enumerated result is estimated as it is outside of the recommended counting range.”
Forgot to add ‘Reason for Change’. [Prompt: User tries to setup a new plate or navigate away from Enumerate screen after making a change to results and didn’t select a reason.]	Select reason for change.
Barcode Errors. [Prompt: When barcode reading is on and a barcode can’t be detected or decoded.] Dismissible	“Barcode cannot be found. Check to ensure a barcode has been correctly mapped in Settings or turn off barcode reading.”
3M Petrifilm Plate Reader Advanced device is not connected and user tries to turn on “Read Barcode” toggle.	3M™ Petrifilm™ Plate Reader Advanced not found.
System does not have Excel and user tries to turn on “Copy to Excel” toggle.	Excel not installed on the system.
“Plate type” field is not selected and user tries to insert the plate.	Select a plate type before inserting plate into the 3M™ Petrifilm™ Plate Reader Advanced.

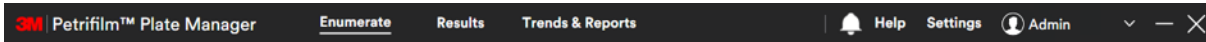
**Worklist:**

Dialogs / modals	Messages
Worklist: User tries to start a worklist while another is running.	<Worklist Name> is already running.
Worklist: Mapping for worklist not established.	Mapping for Worklist is missing or incorrect. Review the mapping template in Settings > Mapping for Import.
Worklist: Import from spreadsheet with missing columns.	Plate type or Dilution column is missing in file.
Worklist: Customize column - User tries to enter duplicate name for a custom column.	This column name is already in use. Enter a unique name for your custom column.
Worklist: User tries to schedule a worklist in the past.	A Worklist can’t be scheduled in the past. Choose a new date and/or time for your Worklist.
Worklist: Template name not entered while saving the worklist as a template.	Enter a name for your template.
Worklist: Customize column - Delete custom column.	Delete custom column?
Reminders for worklists. [Prompt: when time selected occurs]	“Worklist [insert name] is scheduled to be started in [insert number] minutes.”

**Results:**

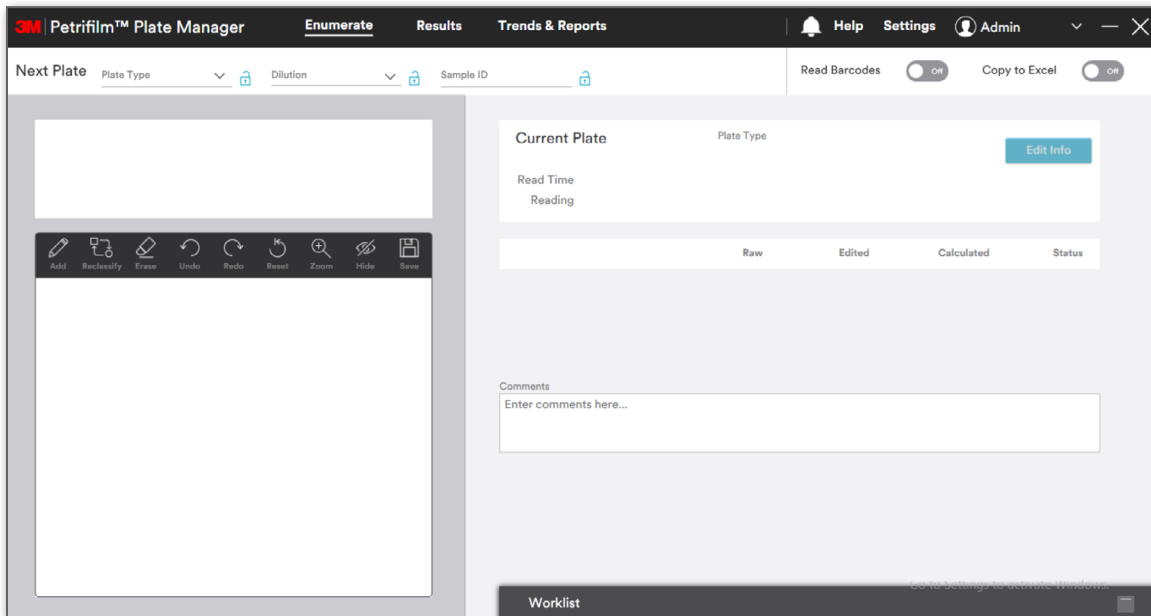
Dialogs / modals	Messages
Results: Mapping for results not established.	Mapping for results column is missing in Settings > Mapping for Import.
Results: Import from spreadsheet with missing columns.	Plate type or Dilution column is missing in file.
Results: Customize column - User tries to add a custom column without providing column name for previously added column.	Enter a name for the column.
Results: Customize column - User tries to enter duplicate name for a custom column.	This column name is already in use. Enter a unique name for your custom column.
Results: Customize column - Delete custom column.	Delete custom column?

## Navigation across the tabs:



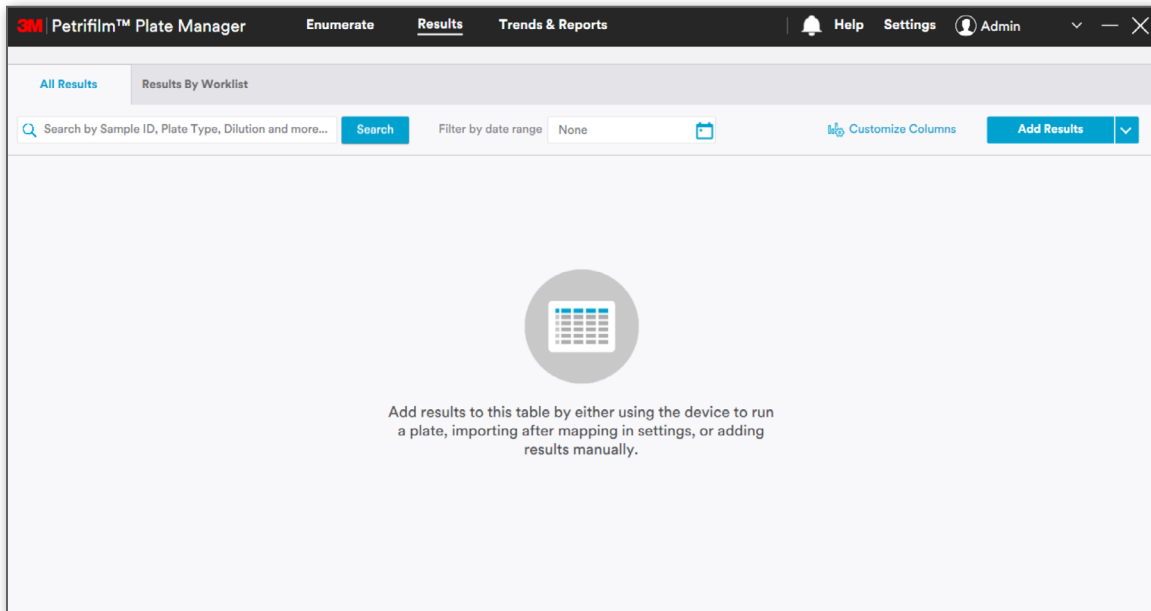
3M Petrifilm Plate Manager has the main menu bar with the below tab names:

1. **Enumerate** – Main landing page. Enumerate tab shows the below screen. Users can run 3M Petrifilm Plates and edit results on this screen.

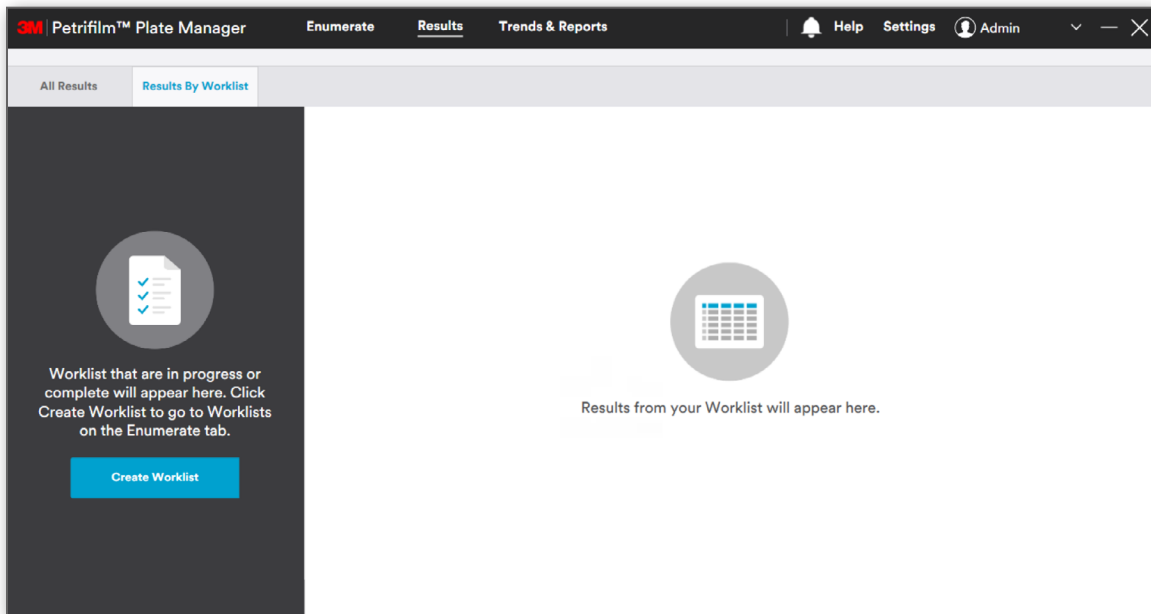


2. **Results** – Clicking on Results tab shows the below screen. Users can view results, add/import results, generate reports and export charts from this screen.

- a. All Results

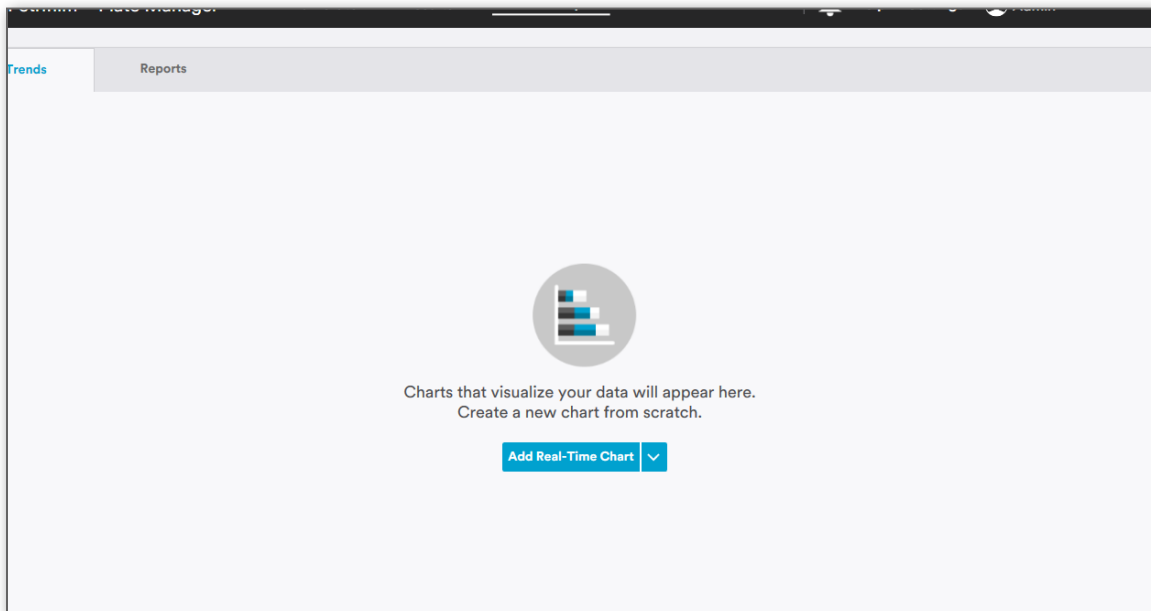


b. Results by Worklist

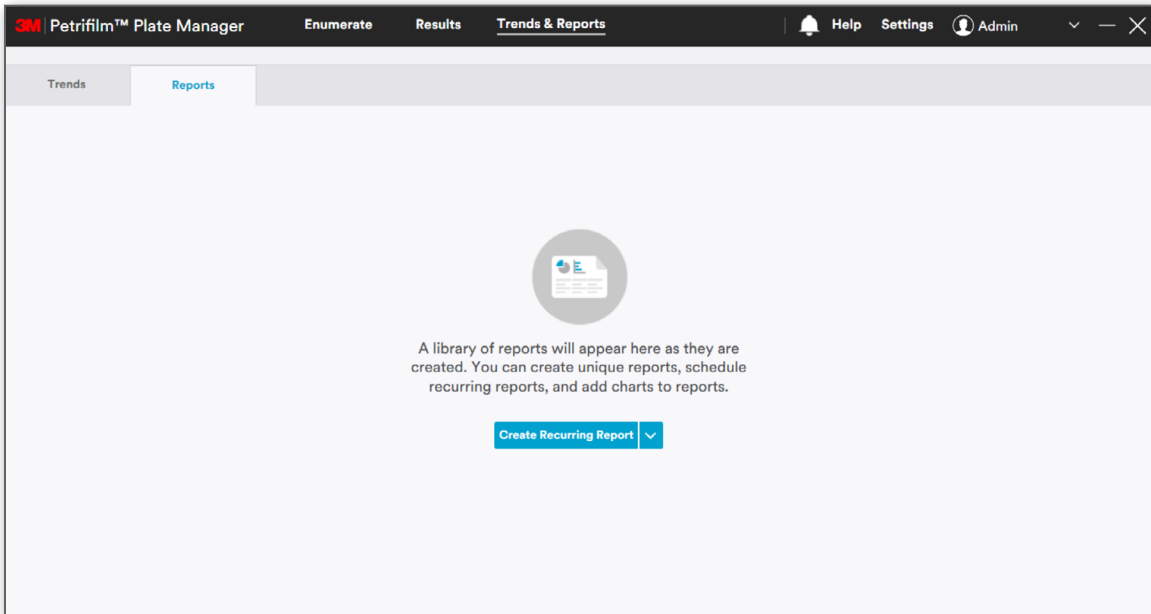


3. **Trends & Reports** – Clicking on the Trends & Reports tab shows the below screen. Users can create reports and add charts from this screen.

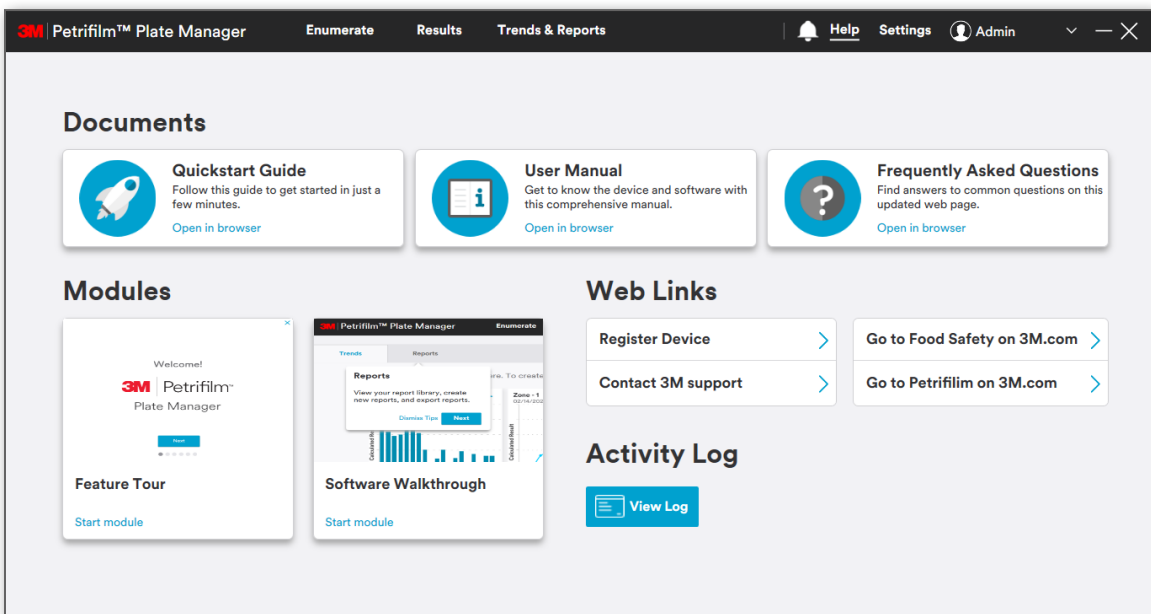
a. Trends



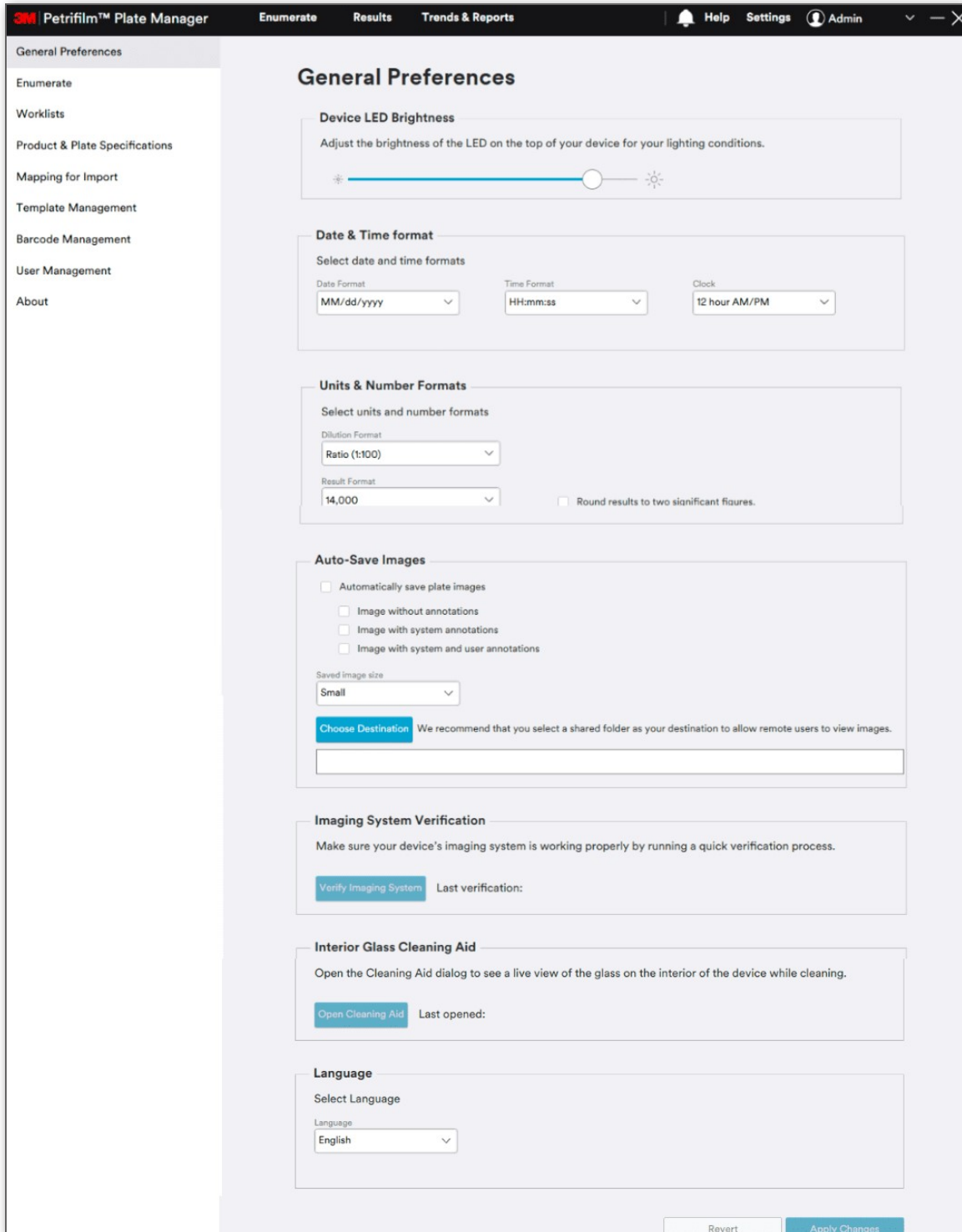
b. Reports



4. **Help** – Clicking on Help tab shows the below screen. User can view the documents, modules and web links by clicking on the hyperlinks and also view the audit logs.



5. **Settings** – Clicking on the Settings tab shows the below screen. Users with appropriate privileges can update the settings from this screen.



## How to insert a 3M Petrifilm Plate into the 3M Petrifilm Plate Reader Advanced:

In order to transport 3M Petrifilm Plates through the 3M Petrifilm Plate Reader Advanced, user shall have to insert the 3M Petrifilm Plates in the below mentioned form:



The 3M Petrifilm Plate should be placed in such a manner that the information zone or hinged portion of the plate is towards the device. The information zone will be captured first and then the inoculation zone.

Do not place the 3M Petrifilm Plate by flipping it so the inoculation zone is facing the benchtop or so the hinge portion is facing away from the device.

### Settings:

The 3M Petrifilm Plate Manager may be used without any initial configuration; however, an Administrator should consult this section to review the software's default settings and modify them if needed. From the landing page (*Enumerate* screen), navigate to the settings tab in the top right of the screen.

## Settings – General Preferences

General Preferences tab provides below settings options:

The screenshot shows the 'General Preferences' settings page in the 3M Petrifilm™ Plate Manager software. The page is organized into several sections:

- Device LED Brightness:** A slider control to adjust the brightness of the LED on the top of the device. The text says: "Adjust the brightness of the LED on the top of your device for your lighting conditions." The slider is currently set to approximately 50%.
- Date & Time format:** Three dropdown menus for selecting date and time formats.
  - Date Format: MM/dd/yyyy
  - Time Format: HH:mm:ss
  - Clock: 12 hour AM/PM
- Units & Number Formats:** Two dropdown menus for selecting units and number formats.
  - Dilution Format: Ratio (1:100)
  - Result Format: 14,000
 There is also a checkbox for "Round results to two significant figures." which is currently unchecked.
- Auto-Save Images:** A section with four checkboxes:
  - Automatically save plate images (unchecked)
  - Image without annotations (unchecked)
  - Image with system annotations (unchecked)
  - Image with system and user annotations (unchecked)
 Below these is a "Saved image size" dropdown set to "Small" and a "Choose Destination" button with a text field.
- Imaging System Verification:** A section with a "Verify Imaging System" button and a "Last verification:" label.
- Interior Glass Cleaning Aid:** A section with an "Open Cleaning Aid" button and a "Last opened:" label.
- Language:** A dropdown menu for selecting the language, currently set to "English".

### 1. Device LED Brightness:

User has the ability to adjust the brightness of the status LED that is located on the top of the device.

This is a close-up of the 'Device LED Brightness' control. It features a horizontal slider with a blue track and a white circular knob. The text above the slider reads: "Adjust the brightness of the LED on the top of your device for your lighting conditions." There are sun-like icons at both ends of the slider track.



**2. Date & Time Format:**

Below are the Date and Time formats. Selected formats shall be reflected across all the screens in the 3M Petrifilm Plate Manager.

Date formats in the system:

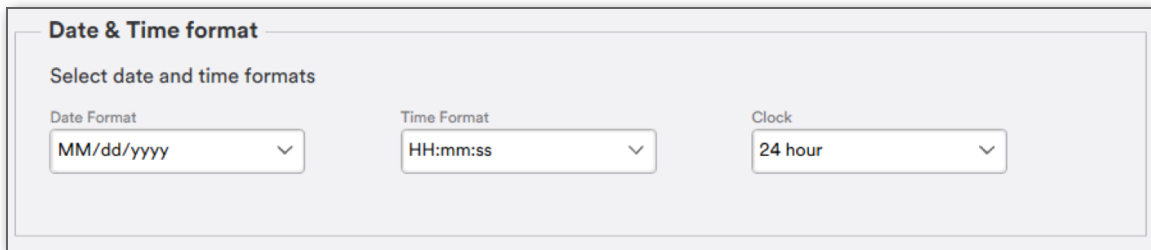
- i. dd/MM/yyyy
- ii. yyyy/MM/dd
- iii. MM/dd/yyyy
- iv. dd-MM-yyyy

Time formats in the system:

- i. HH:mm:ss
- ii. HH:mm

Clock:

- i. 12 hour AM/PM
- ii. 24 hour



**3. Units & Numerical Format:**

User can select the values for dilutions and results from a dropdown list and apply the changes by clicking the **[Apply Changes]** button in lower right corner of the screen. Users can also check the box **Round results to two significant figures.** if they would like all results to be rounded.



Dilution formats in the system:

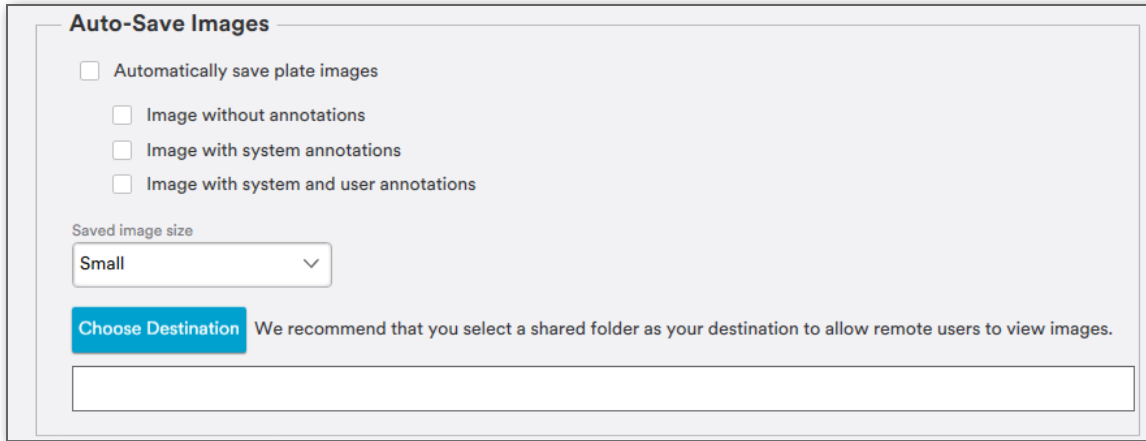
- i. 10<sup>2</sup>
- ii. 1:100
- iii. 100

CFU formats in the system:

- i. 14,000
- ii. 14 × 10<sup>3</sup>

4. **Auto-Save Images:**

The 3M Petrifilm Plate Manager allows you to save the plate images with the below options. It is not mandatory to select any checkbox. User can choose where the images will be saved by selecting the destination box and selecting the folder or location. If the user does not select a location to save the images, by default they will be saved in the 3M folder inside the Program Data folder for 72 hours.



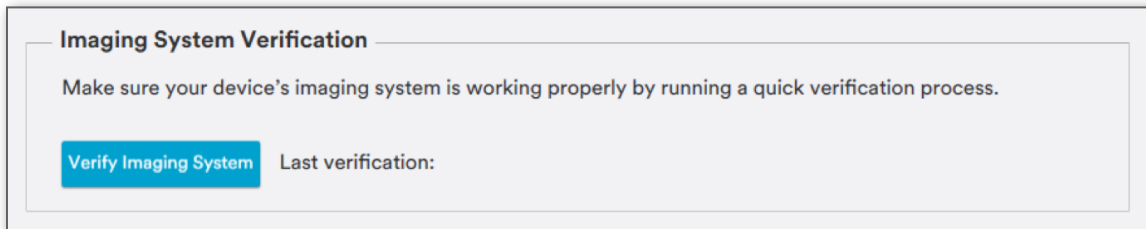
NOTE: The default location where the images would be AutoSaved “C:/ProgramData/3M/3M Petrifilm Plate Manager/PlateImage”.

- a. Image without annotation
- b. Image with system annotations
- c. Image with system and user annotations

NOTE: If user intends to access plate images remotely, the path at which the images are saved must be in a shared location. Images that are stored on the local user’s PC will not be accessible by the remote user.

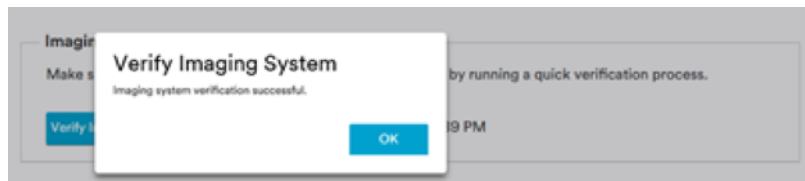
5. **Imaging System Verification:**

- a. The 3M Petrifilm Plate Manager allows you to have a quick verification process to check the device’s imaging system.



Clicking on the [Verify Imaging System] will start the verification process and shall provide the dynamic compensation status. A time stamp shall be displayed for the last successful verification cycle. On successful verification, **Imaging system verification successful** prompt shall appear.

NOTE: A log of all historical imaging verifications can be found by navigating to the help section and clicking on “view log”.

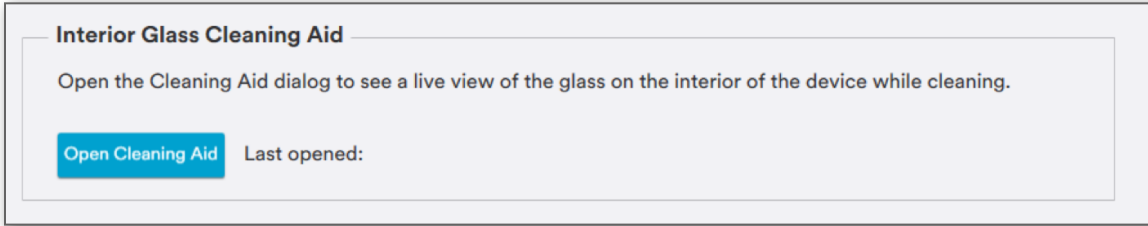


6. **System Health Check**

When the 3M Petrifilm Plate Reader Advanced is not actively being used, there is a system health check that is occurring in the device that will notify the user if there is a problem with the device. This health check is in place to ensure that the internal imaging system is operating as expected.

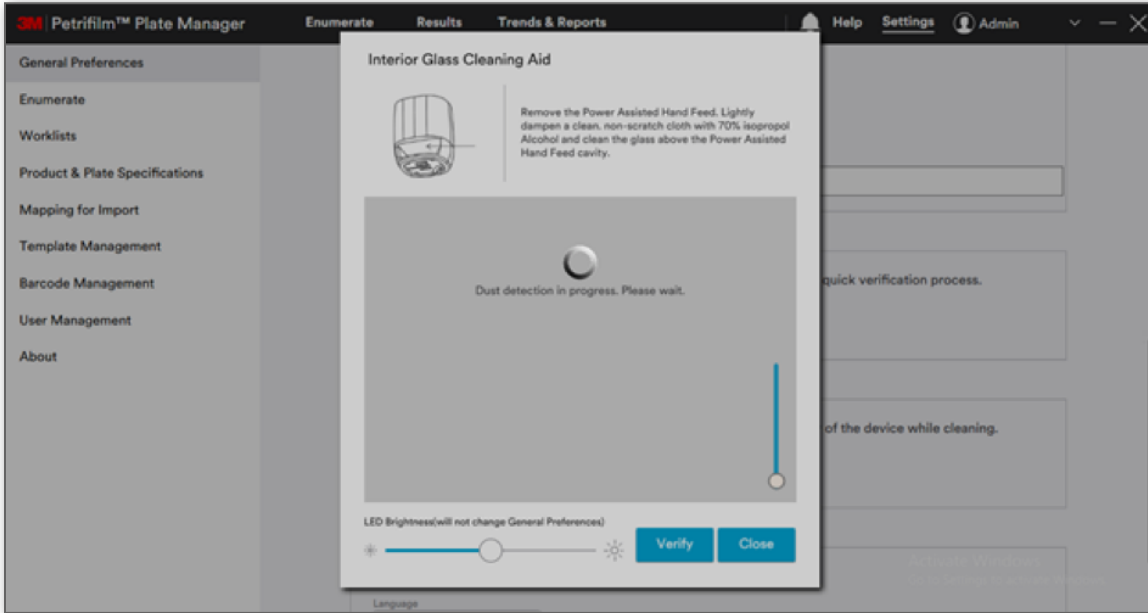
7. Interior Glass Cleaning Aid:

The 3M Petrifilm Plate Manager allows the user to view the interior glass of the device while cleaning by clicking on the **[Open Cleaning Aid]** button.

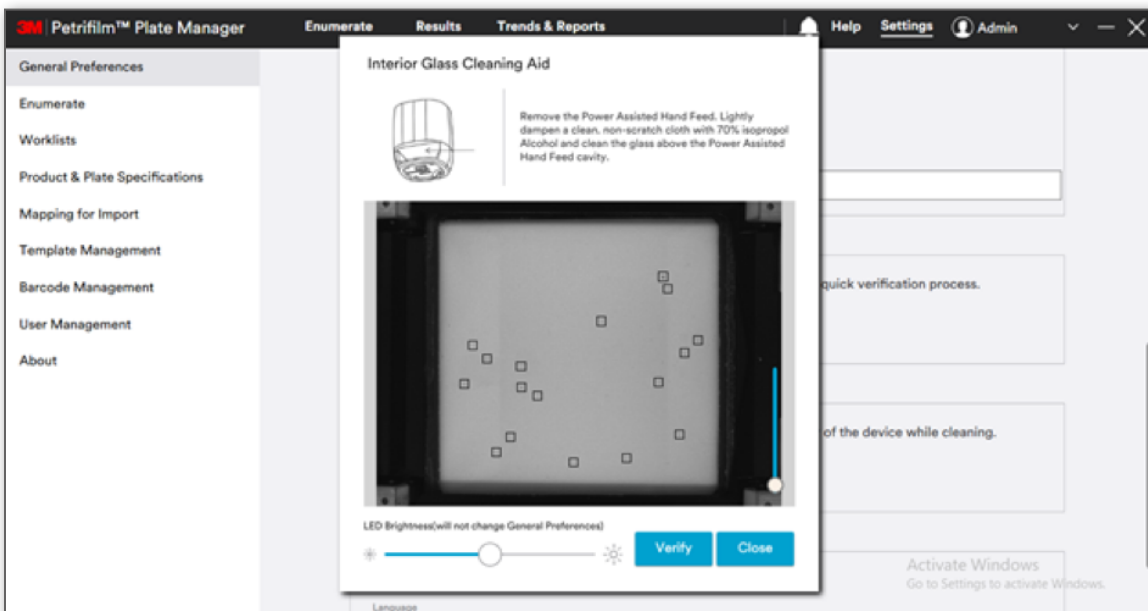


Clicking on **[Open Cleaning Aid]** button will start the cleaning aid process.

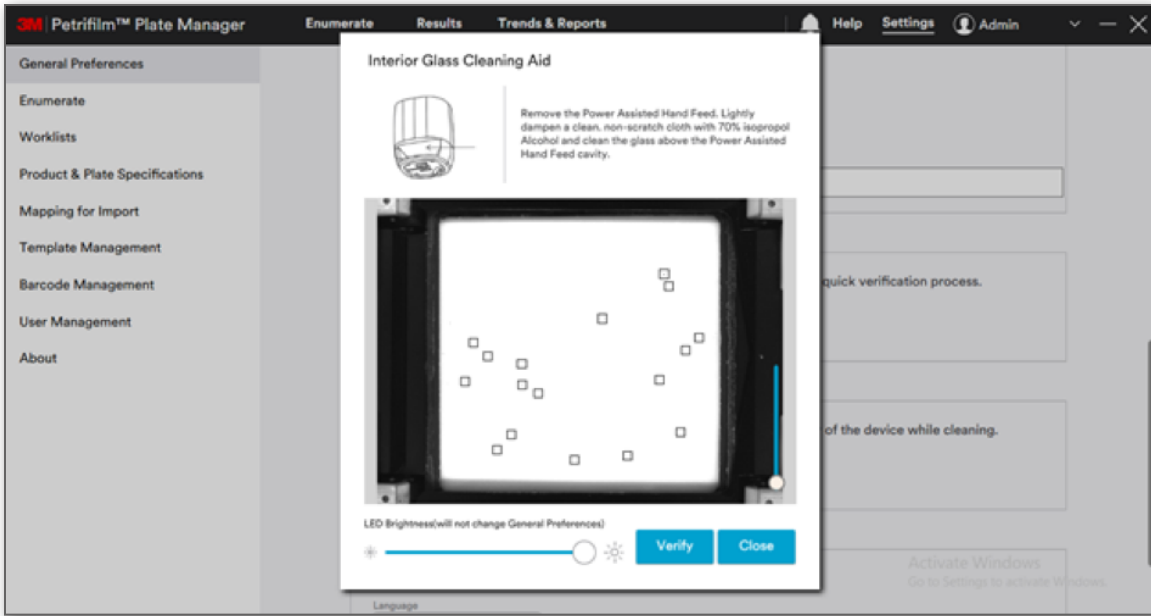
a. Screen while dust detection is in progress.



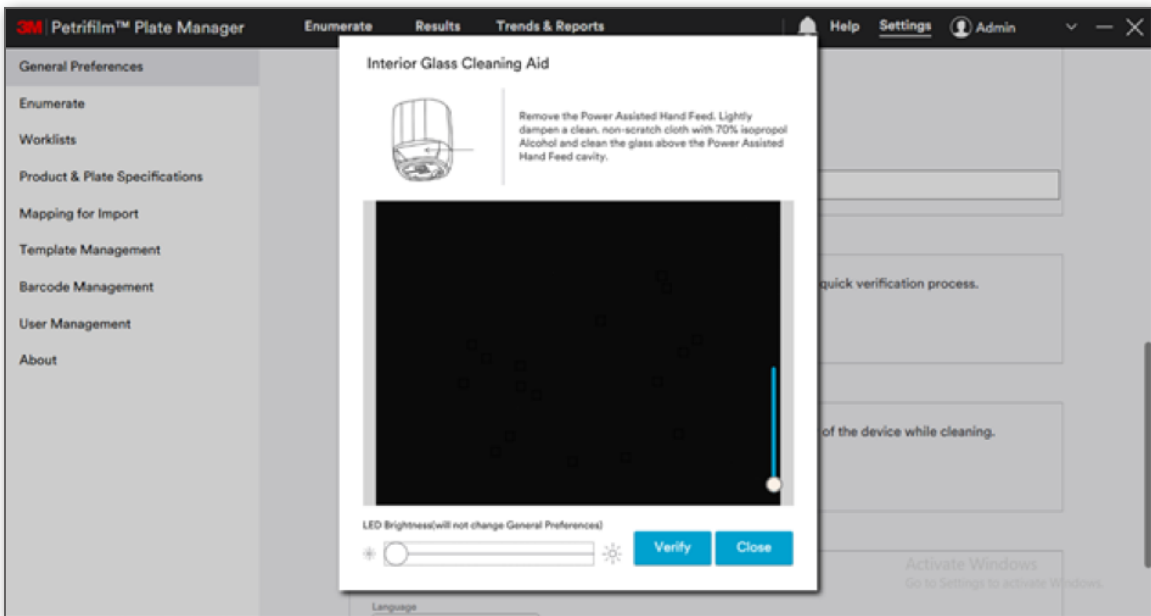
b. Image captured on performing dust detection. Any sizable dust that is present in the device will get detected by an algorithm which allows the user to specifically clean those section of the device.



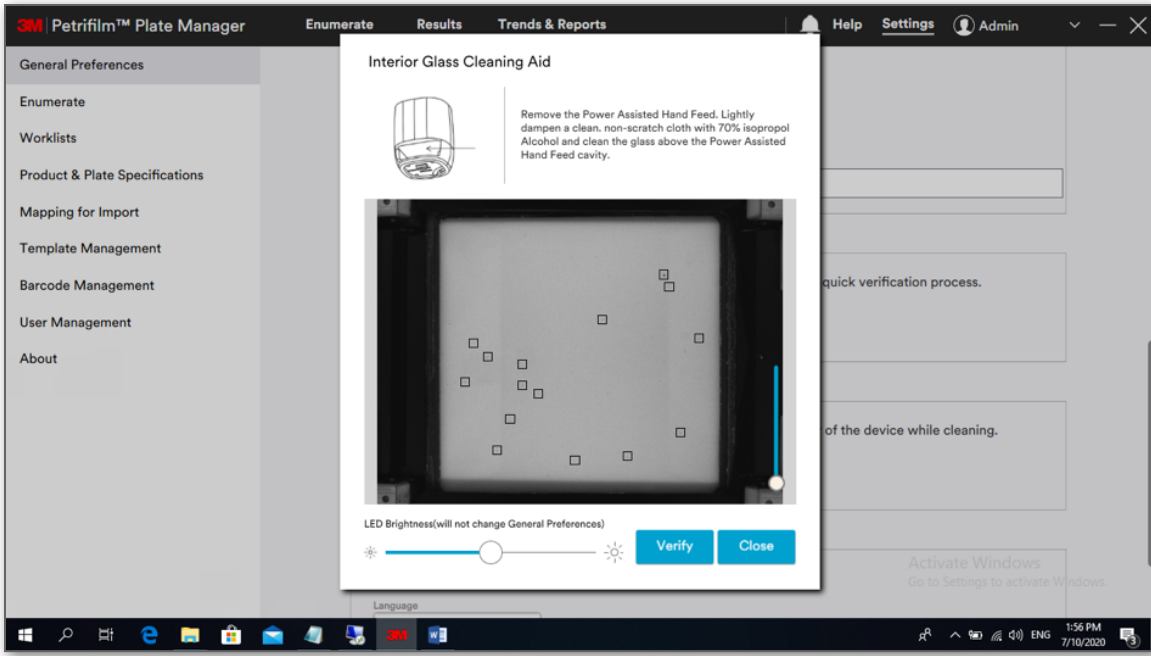
- c. LED brightness increased by using the draggable control at the bottom. This allows the user to see different contrast levels of dust that may be present.



- d. LED brightness reduced using the same draggable control.



e. When user clicks on **[Verify]** button again then the image is captured at the default brightness and the draggable control resets to the same default state.



**8. Language:**

User can select the user specific language from the **Language** dropdown for the application to be viewed in.

Current options are:

1. English
2. Chinese
3. French
4. German
5. Thai
6. Korean
7. Portuguese
8. Japanese
9. Spanish



**9. Revert & Apply Changes:**

**[Revert]** button will undo changes and take the settings back to the last saved state.

**[Apply Changes]** button will save the changes.



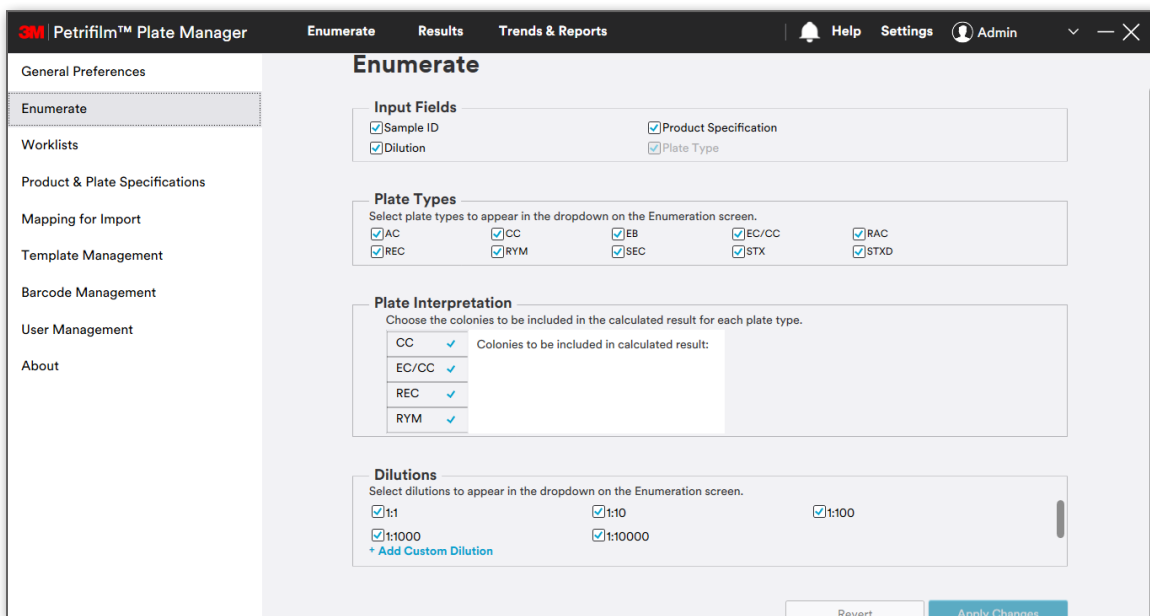
## 10. Default values in General Preferences

The below table indicates the default values for respective fields.

Section	Default value
Date	MM/dd/yyyy
Time	HH:mm:ss
Dilution format	00:000
Result format	14,000
Rounding	Off
Auto-save Images	All checkboxes un-ticked
Clock	12 hour AM/PM
Language	English

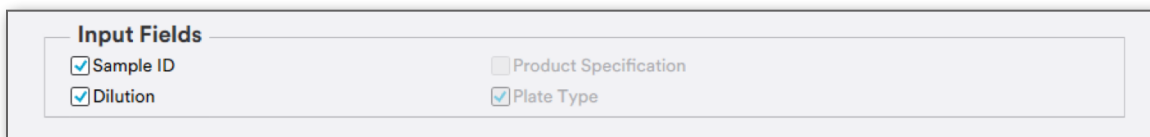
## Settings – Enumerate Settings

Enumerate tab provides the below settings options:



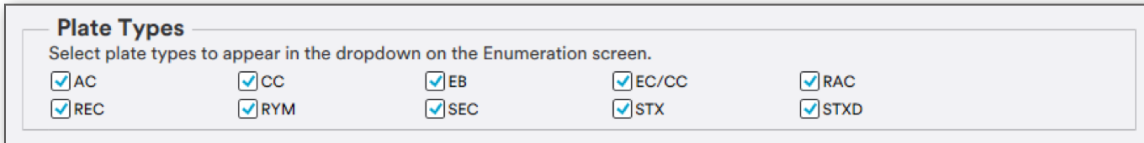
### 1. Input Fields:

There are 4 standard input fields: **Sample ID**, **Dilution**, **Product Specification** and **Plate Type**. A field that is selected will appear on the *Enumerate* screen. User cannot unselect the plate type field as that is required to run/feed a 3M Petrifilm Plate through the 3M Petrifilm Plate Reader Advanced. Product Specification will be enabled if user has added one in the system.



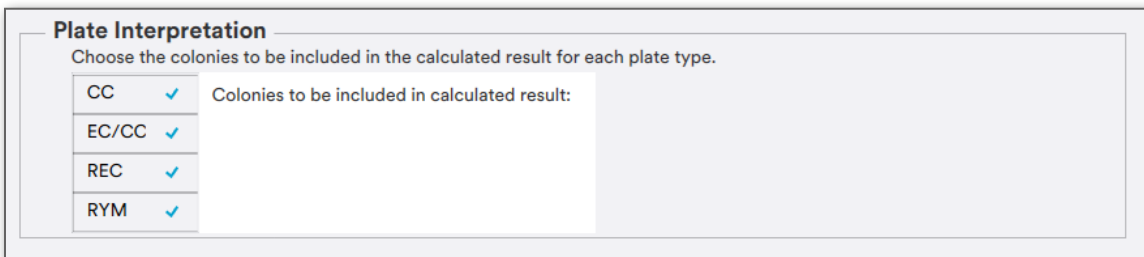
2. **Plate Types:**

The user may check  or uncheck  the boxes to match which plates they plan to use with the 3M Petrifilm Plate Reader Advanced. The 3M Petrifilm Plates they select will appear in the Plate type dropdown menu on the *Enumerate* screen. The 3M Petrifilm Plate Manager supports the following 3M Petrifilm Plate types: *E. coli*/Coliform Count Plate (EC/CC), Rapid *E. coli*/Coliform Count Plate (REC), Coliform Count Plate (CC), Select *E. coli* Count Plate (SEC), Staph Express Count Plate (STX), Staph Express Disk (STX disk), *Enterobacteriaceae* Count Plate (EB), Aerobic Count Plate (AC), Rapid Aerobic Count Plate (RAC), and Rapid Yeast and Mold Plate (RYM).



3. **Plate Interpretation:**

The user may check  or uncheck  the boxes to determine which colonies will be included into the calculated count. For example, a user who is using the 3M Petrifilm Coliform Count Plate, may include both “red with gas” and “red without gas” into their total coliform count or they may only include “red with gas” for their total coliform count depending on the method they are following.




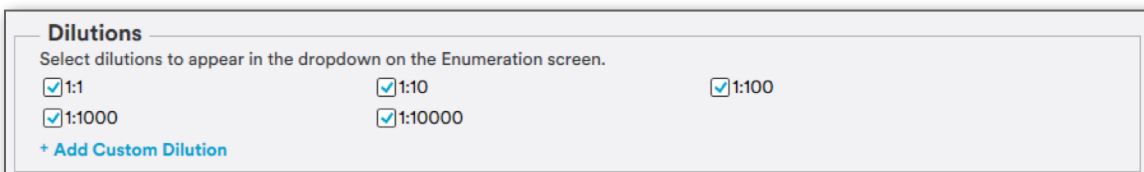
The below table represents the default colony types that will and will not be included into the calculated counts.

Plate Type	Default Colonies to be Included in Calculated Count (checked on)	Others That May be Included in Count (listed but checked off)
CC	Red with gas	Red without gas
EB	EB Colonies	N/A
EC/CC	Red with gas, Blue with gas	Red without gas, Blue without gas
REC	Red with gas, Blue colonies	Red without gas
AC	Colonies	N/A
RAC	Colonies	N/A
SEC	Blue-Green Colonies	N/A
STX	Red Violet	Black or Blue-Green Colonies
STXD	Pink Zones	N/A
RYM	Yeast, Mold	Yeast, Mold

NOTE: 3M Petrifilm Plates with single colony types are not part of the Plate Interpretation section.

4. **Dilution:**

The 3M Petrifilm Plate Manager allows users to either select an existing default dilution or create their own custom dilution by selecting **Add Custom Dilution**. The user cannot delete default dilutions in the system. It is possible to delete only the custom dilutions by hovering over the dilution and selecting the  icon provided the custom dilution is not being used.



5. **Revert and Apply Changes:**

[Revert] button will undo changes and take the settings back to the last saved state.

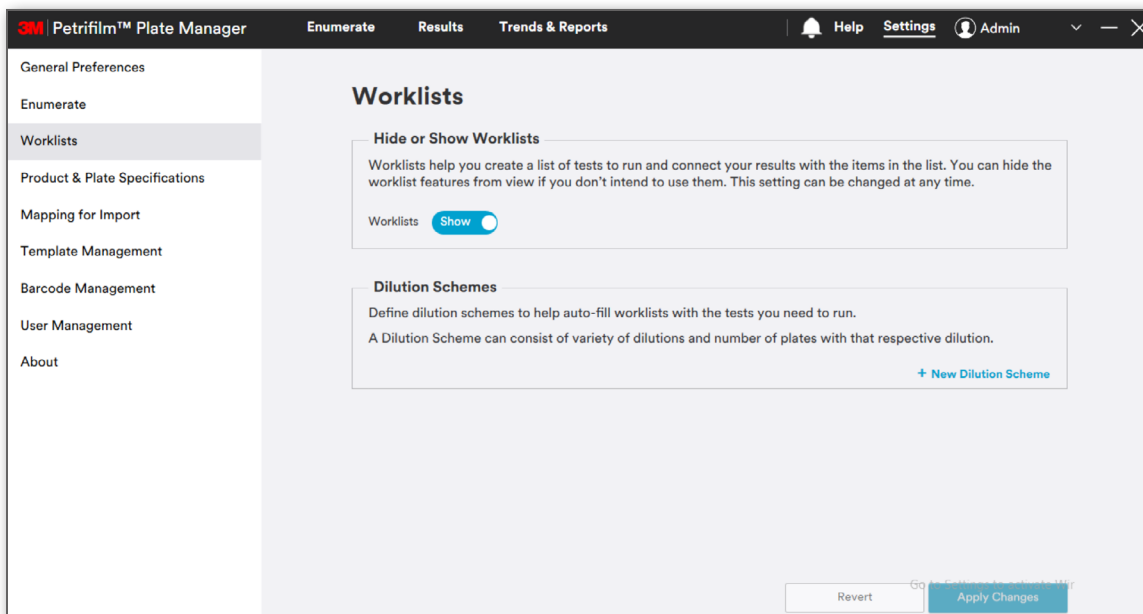
[Apply Changes] button will save the changes.



6. **Default values for the Enumerate section in Settings:**

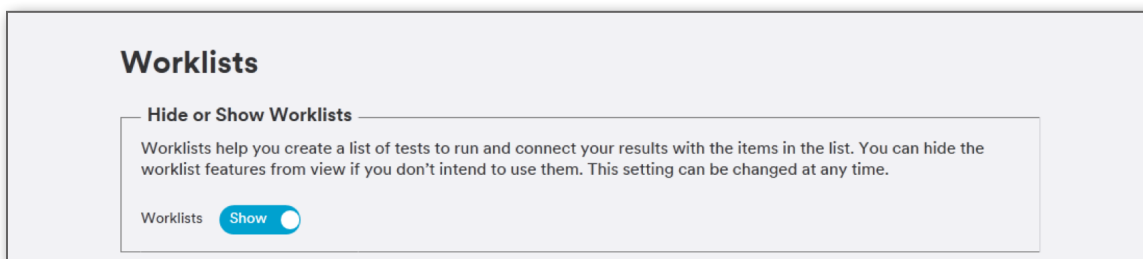
Section	Default value
Input Fields	Plate type checked and disabled. Sample ID, Dilution checked and Product Specification unchecked.
Plate Types	All selected
Dilutions	All selected

**Settings - Worklists**

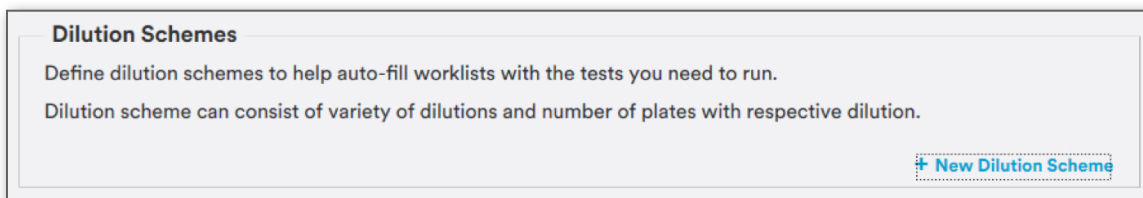


1. **Worklists:**

The user can choose to hide the worklist functionality on the Enumerate screen by toggling the button for Worklists-Show/Hide.



2. **Dilution Schemes:**





Users can add the new dilution scheme by clicking on **[New Dilution Scheme]**. In the dialog popup, the user can choose to name the scheme in the **Name** box. User can then select the 3M Petrifilm Plate that they want to set a dilution scheme for. Once user selects the 3M Petrifilm Plate, the user can enter a quantity by either using the up/down arrows or by clicking inside the box and typing the value. User can also select the dilution from the dropdown. Once complete, user can select the **[Save]** button.

### New Dilution Scheme

Name \*

AC	+ Add Dilution
CC	
EB	
EC/CC	
RAC	
REC	
RYM	
SEC	
STX	
STXD	

Cancel Save

Clicking on **[Add Dilution]** for the respective plate will show the default dilution and quantity for the 3M Petrifilm Plate. By default, it will be:

- a. Dilution: 1:1
- b. Quantity: 1

### New Dilution Scheme

Name \*

AC
CC
EB
EC/CC
RAC
REC
RYM
SEC
STX
STXD

Dilution

Quantity  ▲ ▼ -

+ Add Dilution

Add as per needed and click on **[Save]**.

#### Dilution Schemes

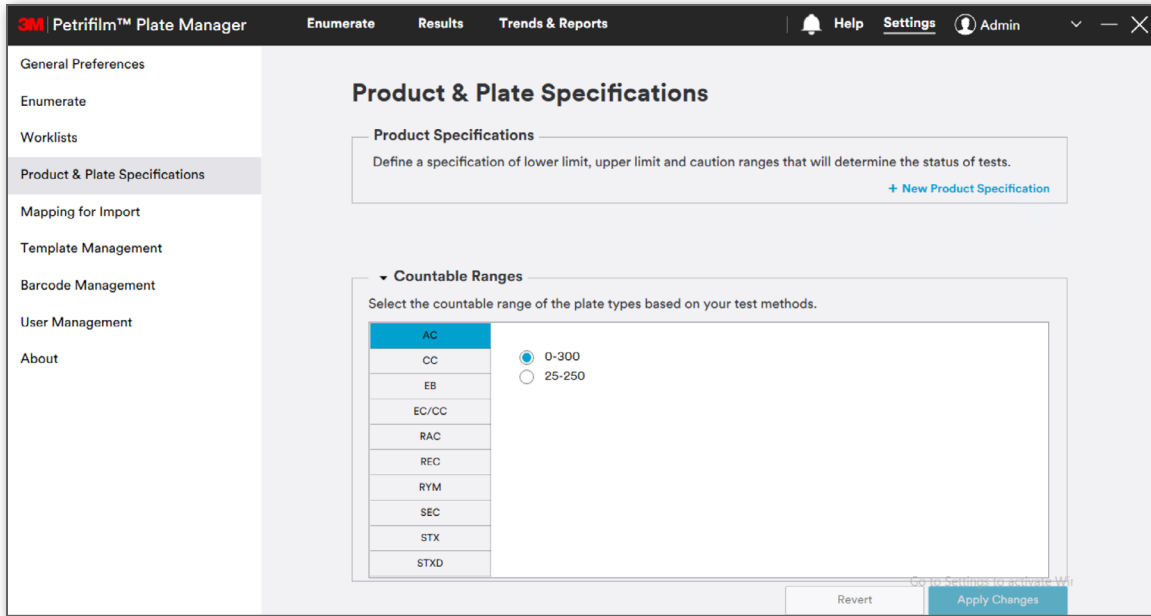
Define dilution schemes to help auto-fill worklists with the tests you need to run.

DS1	<a href="#">Delete</a>	<a href="#">Edit</a>
Plate Type	Dilution format	Quantity
CC	1:1	1
	1:10	2
EC/CC	1:100	1

*Dilution schemes* can be edited or deleted provided the dilution scheme is not being used.

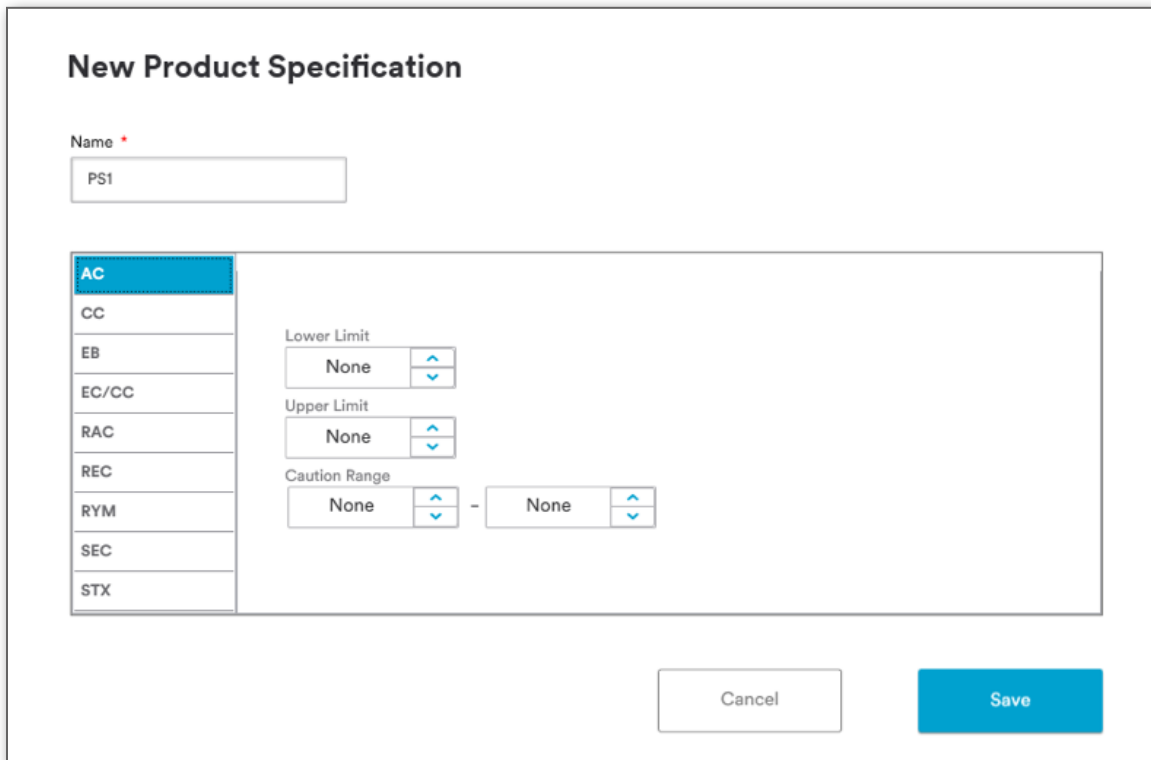
## Settings – Product and Plate Specifications

Product & Plate Specifications tab provides the below settings options:



### 1. Product Specifications:

User can add the new product specification by clicking on the **[New Product Specification]** link. User can enter the name in the dialog popup, select the 3M Petrifilm Plate type and specify the value for either the **Lower Limit**, **Upper Limit**, **Caution Range** or all three. Click on **[Save]** button for the dialog to close. Click on **[Apply Changes]** button to save the product specification. Added product specifications will appear in the respective dropdown menu on the enumerate screen.





**Product Specifications**  
Define a specification of lower limit, upper limit and caution ranges that will determine the status of tests.

PS1			<a href="#">Delete</a>	<a href="#">Edit</a>
Plate Type	Lower Limit	Upper Limit	Caution Range	
CC	100	1500	0-0	

Product Specifications can be edited or deleted provided the product specification is not being used.

**2. Countable Ranges:**

This section displays the countable ranges for all the 3M Petrifilm Plate types in the system. User can select the range as per the method they are using. IFU range and Global Validation range are the 2 methods available for the countable range selection.

**Countable Ranges**  
Select the countable range of the plate types based on your test methods.

AC	<input type="radio"/>	0-100
CC	<input type="radio"/>	10-150
<b>EB</b>	<input checked="" type="radio"/>	0-100
EC/CC		
RAC		
REC		
SEC		
STX		
STXD		

Plate	IFU Range	Global Validation range
AC	0-300	25-250
CC	0-150	15-150
RYM	0-150	0-150
STX	0-150	0-150
EC/CC	0-150	15-150
EB	0-100	10-150
RAC	0-300	25-250
REC	0-100	0-100
SEC	0-150	0-150
STDX	0-150	0-150

**3. Revert & Apply Changes:**

[Revert] button will undo changes and takes the settings back to the last saved state.

[Apply Changes] button will save the changes.

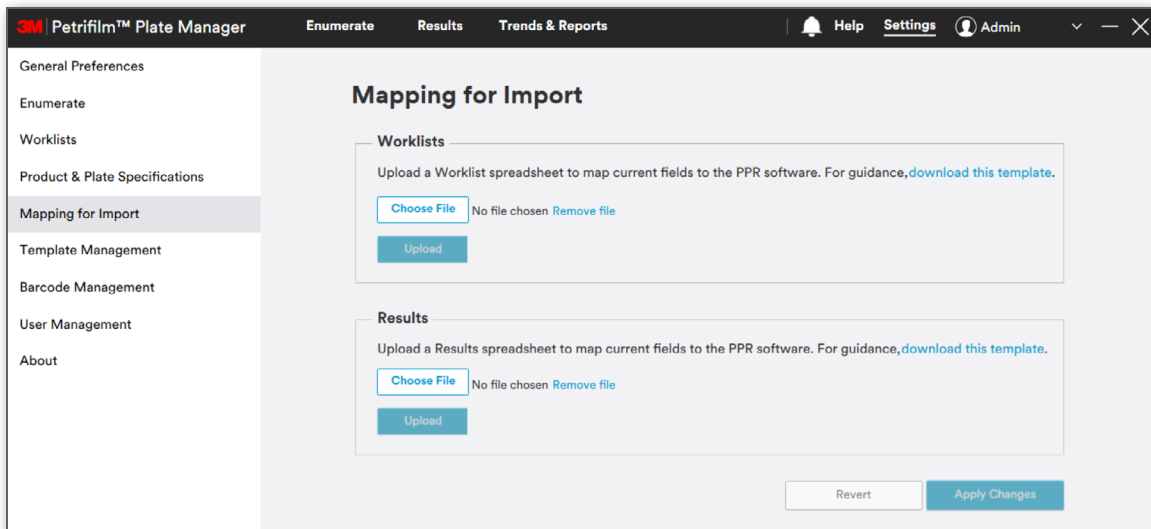
Revert	Apply Changes
--------	---------------

## Settings – Mapping for Import

Mapping for Import is used to upload a spreadsheet in order to map current fields to the 3M Petrifilm Plate Manager.

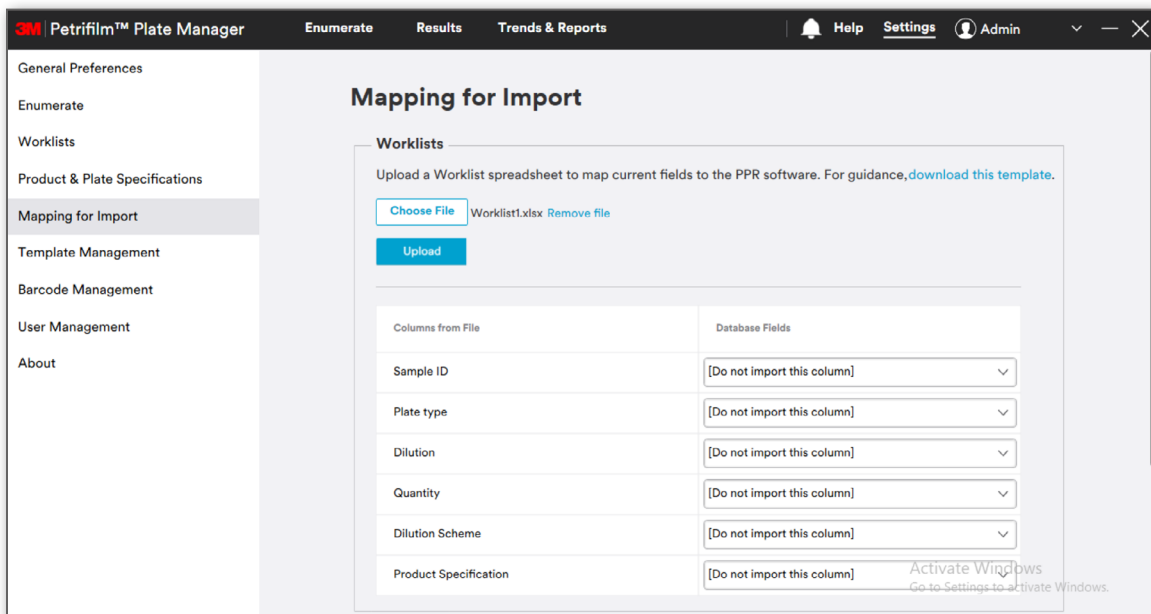
User can import spreadsheets for:

1. Worklists
2. Results



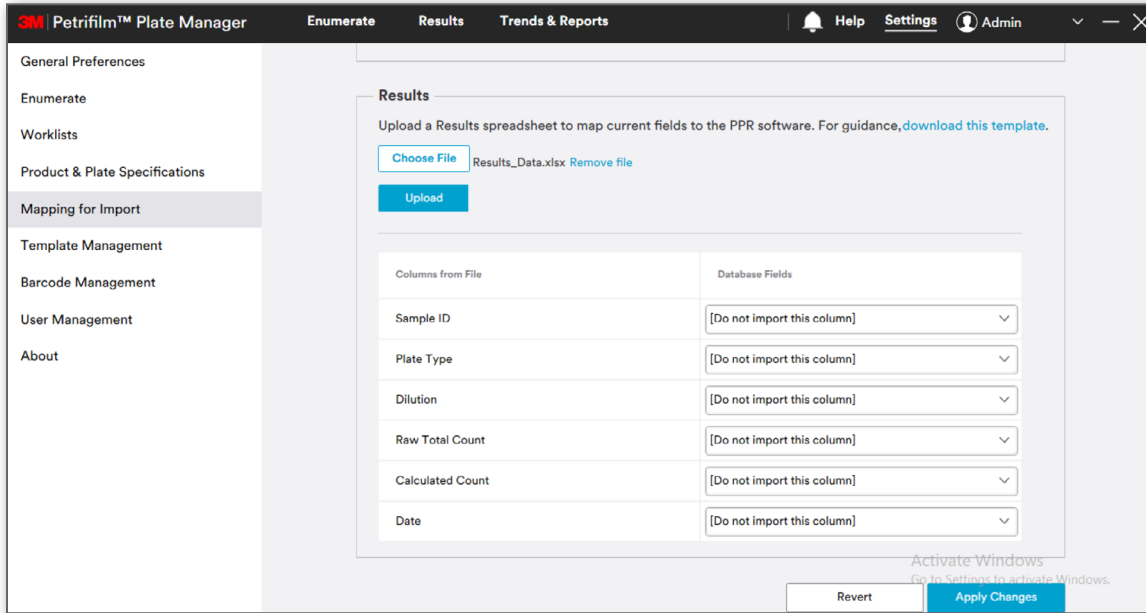
1. **Worklists:** User is given the provision to customize mapping of data fields for worklists. The following file types are supported: Excel, CSV or TSV. The mapped location will persist unless the user selects a different mapping file and overrides the previously mapped file.

Mapping for import columns shall be selected from the dropdown menu.



Default value in the dropdown shall be **Do not import this column**. For custom columns, when the user selects **Add new column to database** and clicks on **[Apply Changes]** button, then the respective column name shall appear in the database.

- Results:** User is given the provision to customize mapping of data fields for results. The following file types are supported: Excel, CSV or TSV. The mapped location will persist unless the user selects a different mapping file and overrides the previously mapped file.



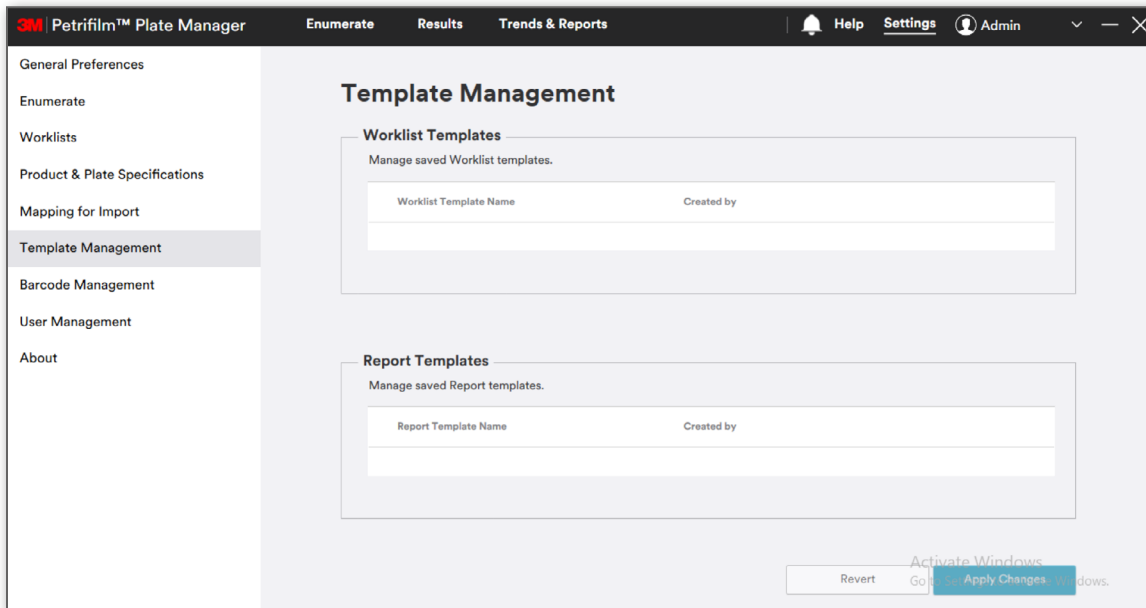
User shall be provided with a means to **[download this template]** hyperlink to export the template with customized mapping of fields for worklists as well as the results.

## Settings – Template Management

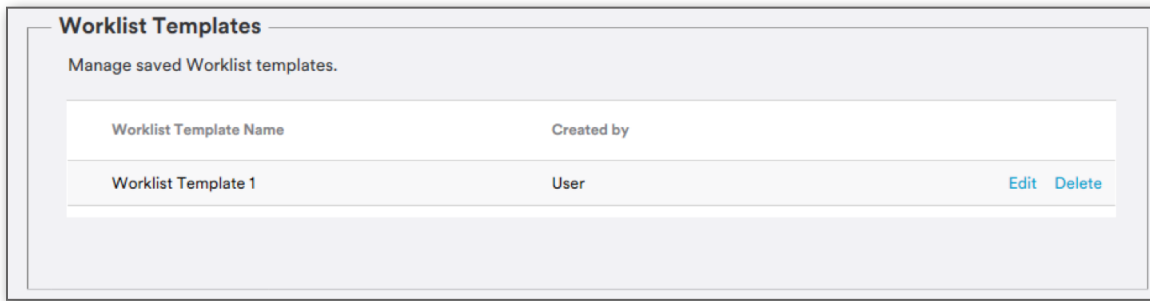
User can manage the saved templates for Worklist and Reports under **Template Management**.

Actions that can be performed on saved templates:

- Edit
- Delete

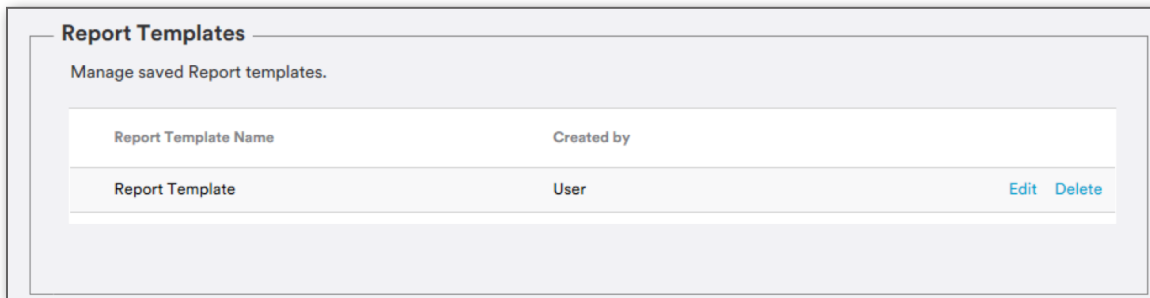


## 1. Worklist Templates



Editing a template will navigate the user to edit worklist screen and the user will remain on the worklist screen after saving the changes.

## 2. Report Templates



Editing a template will navigate the user to edit report screen and the user will remain on the reports screen after saving the changes.

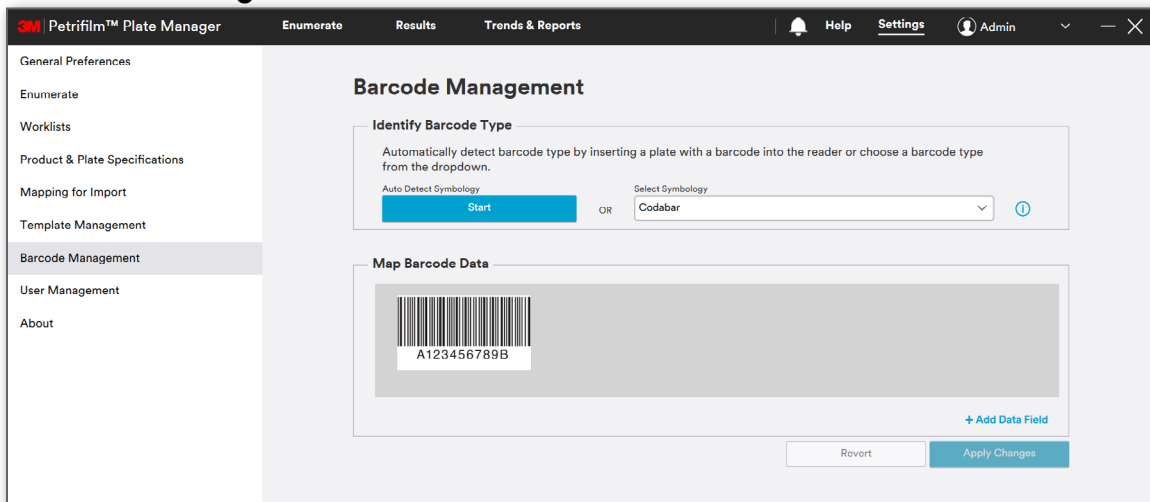
## 3. Revert and Apply Changes

**[Revert]** button will undo changes and takes the settings back to the last saved state.

**[Apply Changes]** button will save the changes.



## Settings – Barcode Management



### 1. Identify Barcode Type: The default value in the **Select Symbology** drop down menu is Codabar.

User can configure the barcode type in two different ways as shown below:

- i. Either by clicking on the **[Start]** button to auto detect the symbology or
- ii. **Select Symbology** dropdown manually. Upon clicking, the select symbology dropdown menu shows all supported symbologies such as UPC-A, UPC-E, EAN-8, EAN-13, Code 39, Code 128, Codabar, QR Code, Data Matrix, and PDF-417.

2. **Barcode Dimensions and Specifications:** The below table specifies the minimum requirements for setting up barcodes for individual symbologies.

Barcode Type	Symbology	Minimum characters	Minimum length for minimum characters (mm)	Maximum characters	Minimum length for maximum character (mm)
1-D	Codabar	3	9	17	52
	Code 128	1	11	30	50
	Code 39	1	11	11	52
	EAN-8	7	21	8	21
	EAN-13	12	30	13	30
	UPC-A	11	32	12	32
	UPC-E	6	21	7	21
2-D	QR	1	7	461	18 × 18
	PDF 417	3	21	838	51 × 18
	Data matrix	1	5	130	18 × 18

3. **Map Barcode Data:** User can map barcode data with the different fields shown below:

- i. Plate Type
- ii. Dilution
- iii. Sample ID
- iv. Product Specification Name
- v. Space (if any)


NOTE: The 3M™ Petrifilm™ Staph Express Disk cannot be used with the barcode functionality. For enumerating the 3M Petrifilm Staph Express Disk, please use either the worklist feature or 3M Petrifilm Plate type drop down menu on the *Enumerate* tab.

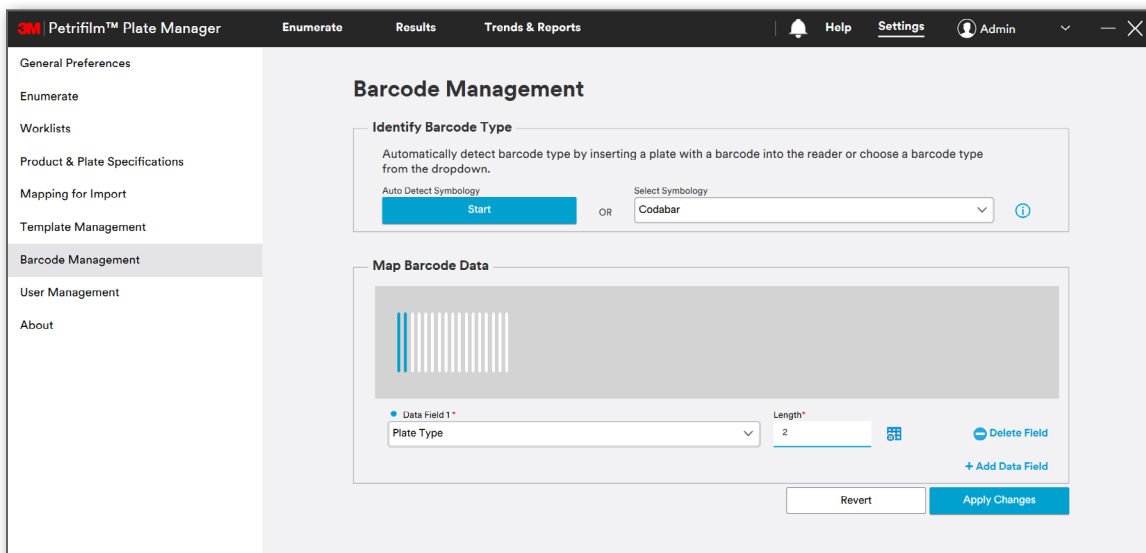
Click on **[Add Data Field]** link to add a field.

User can delete the data field by clicking on **[Delete Field]** button.

Click on **[Apply Changes]** button to save the added data field.

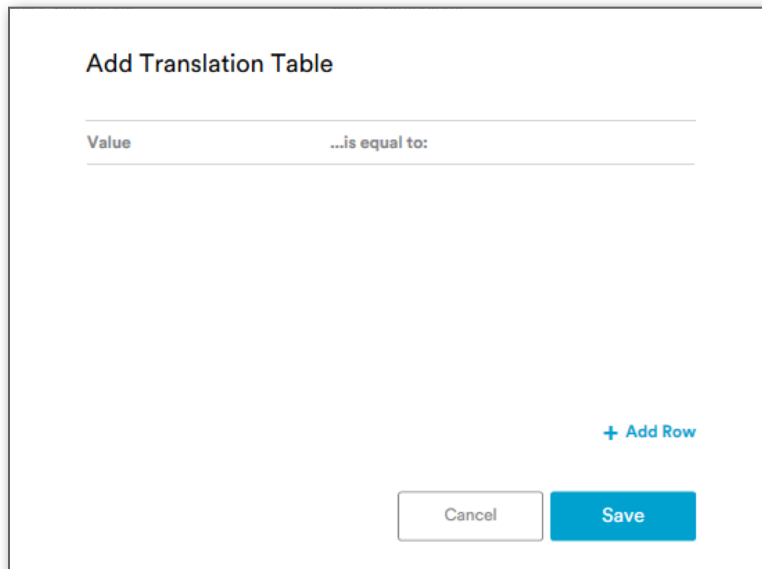


4. **Add Translation Table:** User can add a translation table by clicking on  icon.





A dialog as shown in the below image appears.



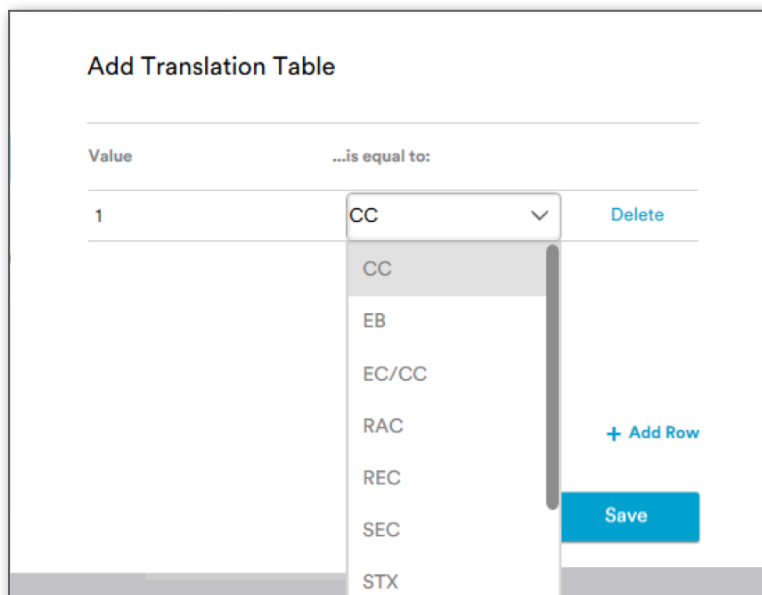
Add Translation Table

Value                      ...is equal to:

+ Add Row

Cancel      Save

Click on **[Add Row]** link to add rows to the translation table.



Add Translation Table

Value                      ...is equal to:

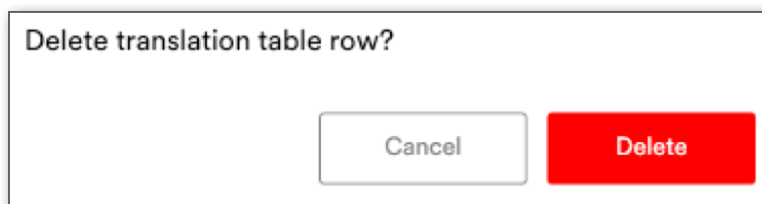
1	CC	Delete
---	----	--------

+ Add Row

Save

CC  
EB  
EC/CC  
RAC  
REC  
SEC  
STX

On clicking the **[Delete]** button, a confirmation dialog opens as shown below:



Delete translation table row?

Cancel      Delete

Clicking on **[Delete]** button will delete the respective row.

#### 5. Revert & Apply Changes:

**[Revert]** button will undo changes and takes the settings back to the last saved state.

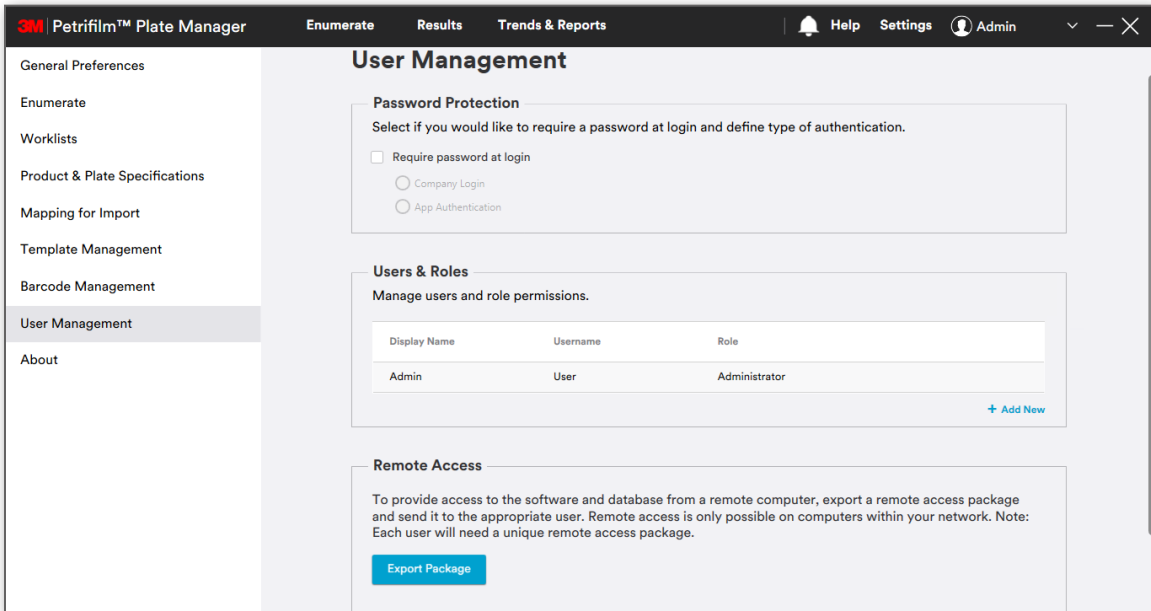
**[Apply Changes]** button will save the changes.



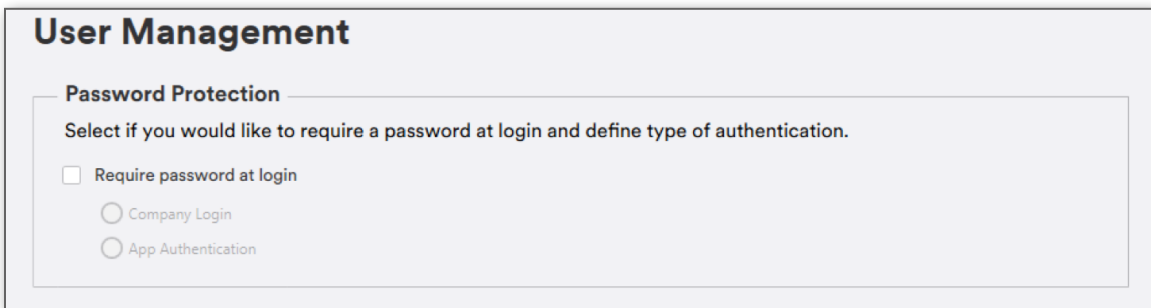
Revert      Apply Changes

## Settings – User Management

Under User Management, user is provided with a means for managing the list of application users including adding new users, deleting users, changing passwords, password protection by logging in either by Company Login or by App Authentication and accessing a remote package.



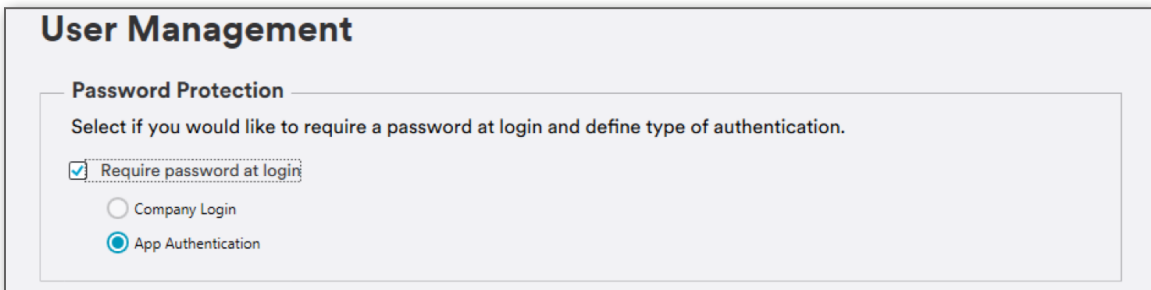
### 1. Password Protection:



Users in the system can be authenticated in the following 3 ways:

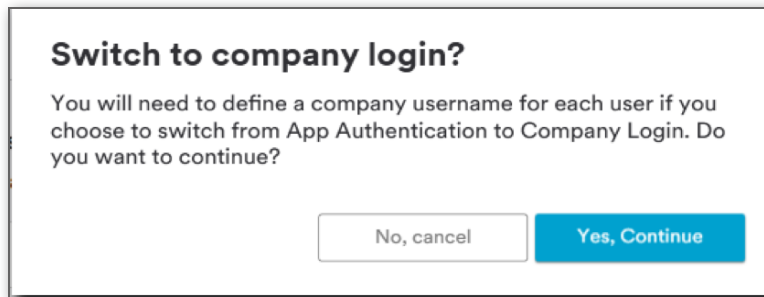
- a. **Company Login:** Username and password should match with windows credentials for successful login into the system.
- b. **App Authentication:** Authentication is performed at the application level.
- c. **No Authentication:** As the name suggests, there is no authentication in this case. It is the default state of login.

When user clicks on **Require password at login**, by default **App Authentication** would be auto selected. In case of multiple users, upon Logout / Switch User, the user would be required to set Password, set security questions and then login to the application.

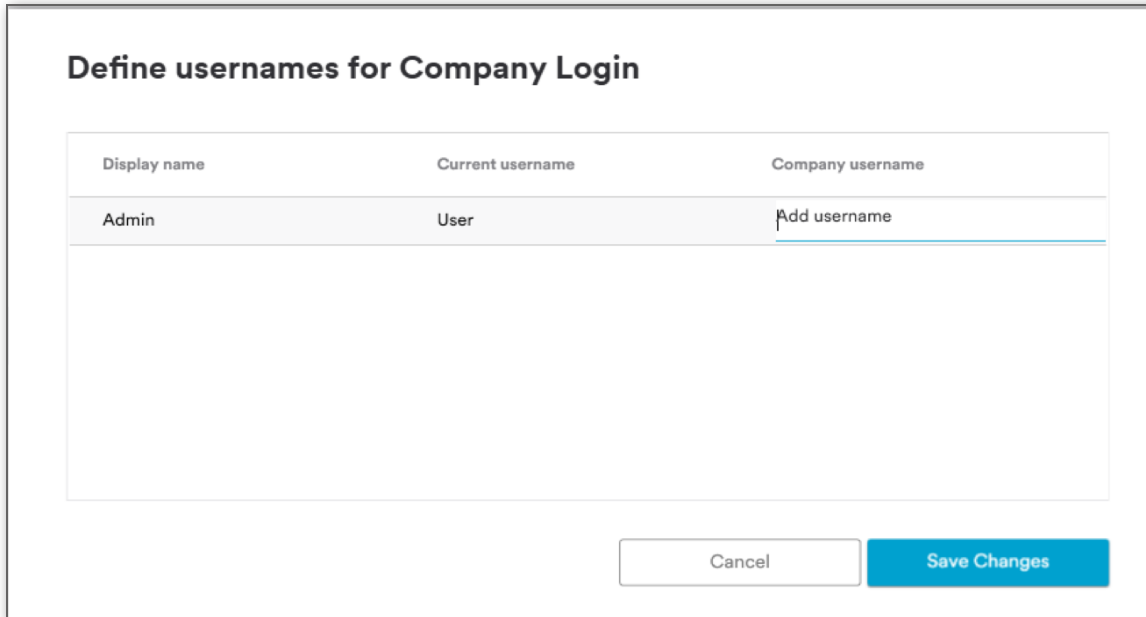




When user selects **Company Login**, a prompt will appear asking user to define company username if the user chooses to switch from **App Authentication** to **Company Login**.



Clicking on **[Yes, Continue]** will open a window for the user to *Define usernames for Company Login*.



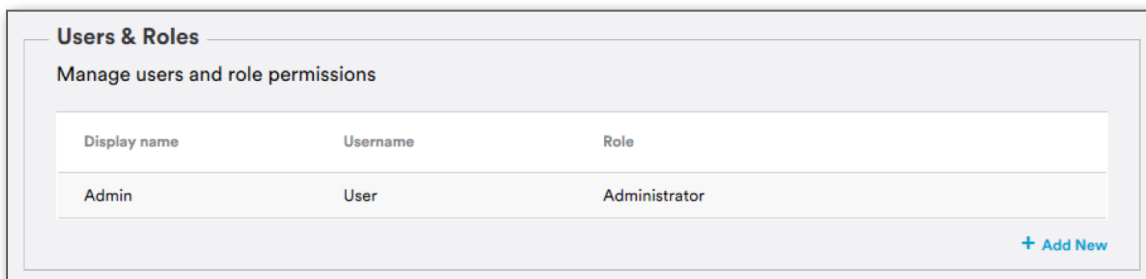
User needs to enter Company username, e.g. abcd.xyz and click on **[Save Changes]**.

Click on **[Apply Changes]** button to save the added user.

After saving the changes on User Management and upon re-logging in, the user would be required to enter the company username and password.

## 2. Users & Roles

User with **Administrator** role can add a new user by navigating to **Settings – User Management tab**.





## Add New User:

User can click on **[Add New]** to add a new user.

The screenshot shows the 'Add New User' form with the following fields:

- First Name \* (empty text input)
- Last Name \* (empty text input)
- Username \* (empty text input)
- Display Name (empty text input)
- Permission Level: (dropdown menu)
- Permissions (empty section)
- Buttons: Cancel and Save

Fill in the details and select the Permission level from **Permission Level** dropdown menu. Permissions for the respective user role shall appear after selecting the **Permission Level**.

The screenshot shows the 'Add New User' form with the following fields filled:

- First Name \* (abc)
- Last Name \* (xyz)
- Username \* (abc.xyz)
- Display Name (a.x)
- Permission Level: (Administrator)
- Permissions (expanded list):
  - Enumerate (View, Edit and Delete)
  - Results (View, Edit and Delete)
  - Trends & Reports (View, Edit and Delete)
  - Settings (View, Edit and Delete)
  - Users and Roles (View, Edit and Delete)
- Buttons: Cancel and Save

Mandatory fields: Enter details for below fields.

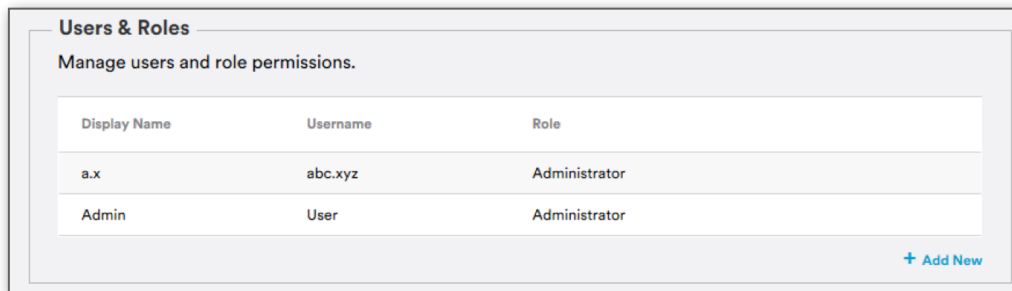
- i. First Name
- ii. Last Name
- iii. Username: Username will be a combination of First name and Last name and would be in enabled state at the time of Company Login.

**Display Name** (Optional): The display name is the name visible to other members on the forum. In case user does not provide display name then username shall appear on the display grid on the right side on the *Enumerate* screen.

Values in the permission level dropdown menu: There are 5 basic permission levels/roles in the system as shown below:

- i. Administrator
- ii. Supervisor
- iii. Technician
- iv. Custom
- v. Viewer

Upon clicking on **[Save]** button, user appears in the grid of the user management screen.



Click on **[Apply Changes]** button to save the added user.

**Roles with their permissions:**

Permissions		Administrator	Supervisor	Technician, Custom	Viewer
<b>User Management</b>	Edit	Yes	No	No	No
	View	Yes	Yes	No	No
	Delete	Yes	No	No	No
<b>Customize user interface</b>	Read Barcode	Yes (For all users)	Yes (For all users)	Yes (For self)	Yes (For self)
	Archive Images	Yes (For all users)	Yes (For all users)	Yes (For self)	Yes (For self)
	Auto copy to Excel	Yes (For all users)	Yes (For all users)	Yes (For self)	Yes (For self)
	Image Retention	Yes (For all users)	Yes (For all users)	Yes (For self)	Yes (For self)
	Table column	Yes (For all users)	Yes (For all users)	Yes (For self)	Yes (For self)
	Dashboard Widget	Yes (For all users)	Yes (For all users)	Yes (For self)	Yes (For self)
<b>Plate type management</b>	Edit	Yes	Yes	Yes	No
	View	Yes	Yes	Yes	Yes
	Delete	Yes	No	No	No
<b>Edit Result</b>	Edit	Yes	Yes	Yes	No
	View	Yes	Yes	Yes	Yes
	Delete	NA	No	NA	NA
<b>Logs Management</b>	Edit	NA	NA	NA	NA
	View	Yes	Yes	Yes	Yes
	Delete	NA	NA	NA	NA
<b>Database Management</b>	Edit	Yes	No	No	No
	View	Yes	No	Yes	No
<b>Role Management</b>		Yes	No	No	No
<b>Reset Passwords</b>	Self	Yes	Yes	Yes	Yes
	Others	Yes	No	No	No
<b>Remote Access</b>	Read	Yes	Yes	Yes	Yes
	Write	Yes	Yes	Yes	No

The 3M Petrifilm Plate Manager provides custom categories where the authorized user can change other user’s access levels. Here the user’s role name shall appear as **Custom**.

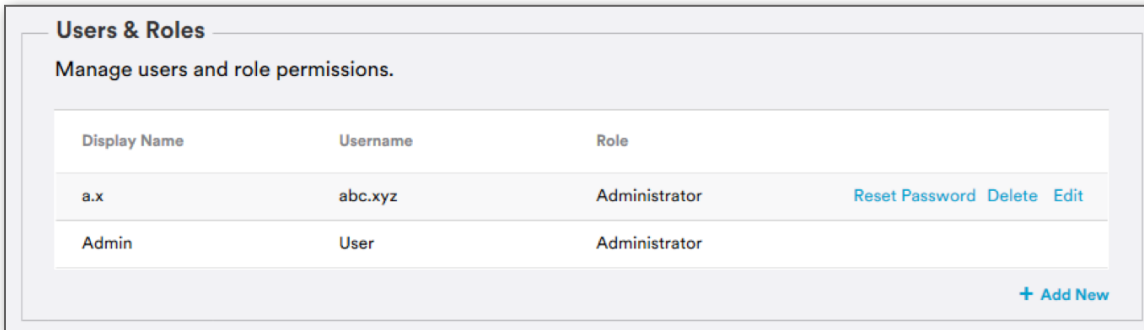
Any user can have the below permissions on the 5 tabs:

- i. View
- ii. View & Edit
- iii. View, Edit & Delete

NOTE: Enable remote access shall be enabled by default for **Administrator, Supervisor, Technician and Custom**. Viewer shall not be able to generate a remote access package.

**Edit User:**

User information or permission levels can be edited by clicking on the **[Edit]** link if the user doing the editing has the proper permission levels.



*Edit User* dialog appears on the screen.

**Edit User**

First Name \*  Last Name \*

Username \*  Display Name

Permission Level:

---

**Permissions**

Enumerate

Results

Trends & Reports

Settings

Users and Roles

User can do the necessary changes and click on **[Save]** button for the dialog to close.

Click on **[Apply Changes]** button to save the changes.

NOTE: User with role **Administrator** or **Supervisor** only can generate the token and package file.

- Remote Access:** In case the remote user tries to perform the installation process, the user shall be asked for a token/ password authentication. This can be done with the help of the **[Export Package]** button.

**Remote Access**

To provide access to the software and database from a remote computer, export a remote access package and send it to the appropriate user. Remote access is only possible on computers within your network. Note: Each user will need a unique remote access package.

[Export Package](#)

On the *Generate Authentication Token* dialog, enter the password and confirm. Click on **[Generate Token]** to generate the package file.

### Generate Authentication Token

Enter token password

Confirm token password

Package file link.

## User Management

Token generated successfully at path C:\ProgramData\3M\3M Petrifilm Plate Manager\Pkg\_Files\20200713\_0108\_ProxyUrl.pkg. Package is valid for 24 hours from when the package is generated.

[OK](#)

The package shall be valid for 24 hours from the time it is generated.

When the user tries to remotely log in to the application, the authentication token and access package file would be required at the login screen.

**Reset Password:**

Password can be reset from the settings screen by clicking on the **[Reset Password]** link.

User with admin privileges can reset a password for all users. Any user can reset their own password.

**Users & Roles**

Manage users and role permissions.

Display Name	Username	Role	
a.x	abc.xyz	Administrator	<a href="#">Reset Password</a> <a href="#">Delete</a> <a href="#">Edit</a>
Admin	User	Administrator	

[+ Add New](#)

A confirmation dialog as shown below appears on the click of the **[Reset Password]** link.

## User Management

Reset Password?

### Delete User:

User can be deleted by clicking on the **[Delete]** link.

#### Users & Roles

Manage users and role permissions.

Display Name	Username	Role	
a.x	abc.xyz	Administrator	<a href="#">Reset Password</a> <a href="#">Delete</a> <a href="#">Edit</a>
Admin	User	Administrator	

[+ Add New](#)

A confirmation dialog appears. Click on the **[Delete]** button on the dialog to delete the user.

Are you sure you want to permanently delete the user profile for abc.xyz? This action can't be reversed.

### Logout (Applicable in the case of more than 1 user)

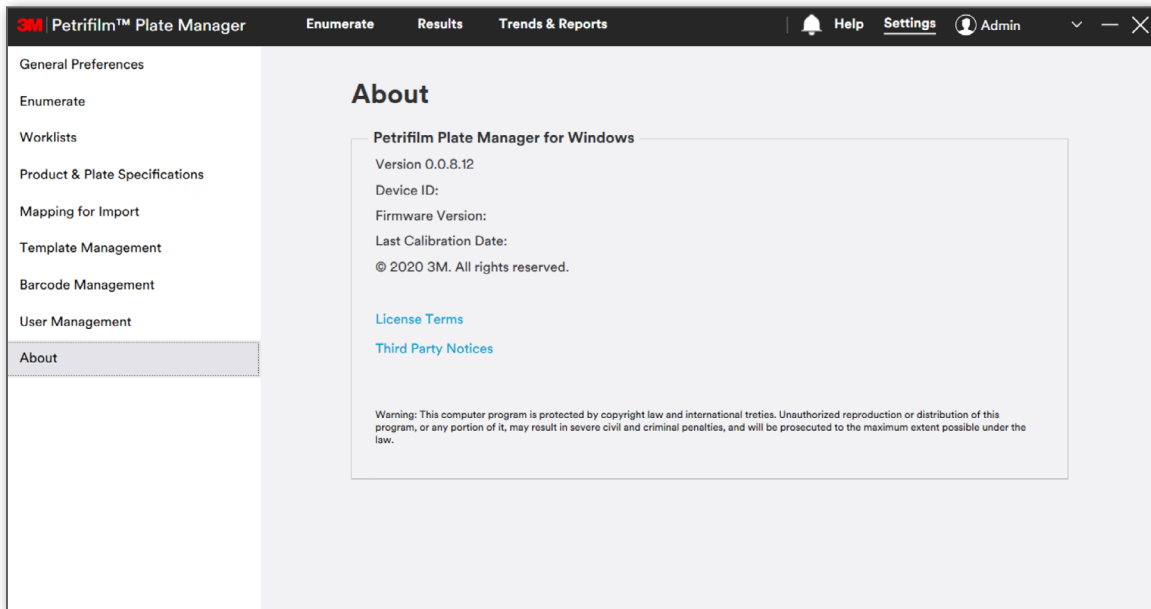
Users can logout by clicking on the  icon besides the display name and selecting **[Logout]**.



## Settings – About

About screen displays the below details:

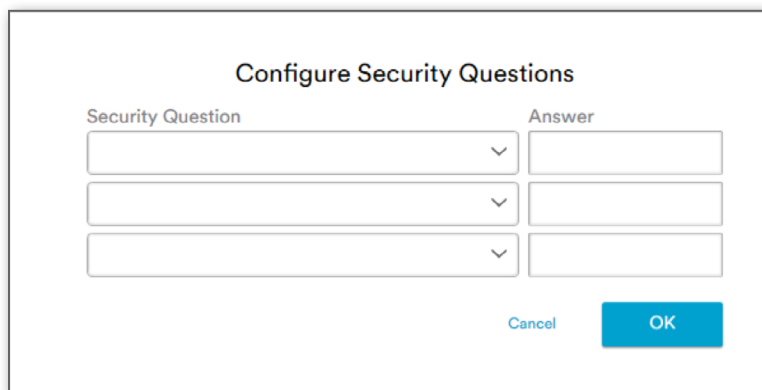
1. **Version**
2. **Device ID**
3. **Firmware version**
4. **Last Calibration Date**
5. Copyright Info
6. Hyperlink for [**License Terms**]
7. Hyperlink for [**Third Party Notices**]



## Security Questions:

**Pre-requisite:** New user (with authentication type as **Company Login** or **App authentication**) who has just set the password. Login with this newly created user by entering the username and password.

Select the security questions and set the answers for the same.



The screenshot shows a dialog box titled "Configure Security Questions". It contains two columns: "Security Question" and "Answer". There are three rows of input fields. Each row has a dropdown menu for the security question and a text input field for the answer. At the bottom right of the dialog, there are two buttons: "Cancel" and "OK".

### Forgot Username:

If user forgets the username, then click on [**Forgot Username**] hyperlink on the login screen.

3M | Petrifilm™ Plate Manager

Username

[Forgot Username](#) | [Contact Admin](#)

Enter details in the respective field and click on [**OK**] button. Clicking on [**Cancel**] shall show the login screen again.

Forgot Username

First Name

Last Name

Application provides the username as shown in the below figure. Click on [**OK**] button to redirect to the login screen.

Login

Your username is: Administrator.

If First Name and Last Name are not known or are invalid then user shall contact the admin by clicking on [**Contact Admin**] hyperlink.

3M | Petrifilm™ Plate Manager

Username

[Forgot Username](#) | [Contact Admin](#)

User shall get the admin details as shown in the below screenshot.

The screenshot shows a window titled "Admin Details" containing a table with the following data:

First Name	Last Name	Display Name
a	a	A
System	Admin	Admin

At the bottom right of the window is a blue button labeled "OK".

Click on **[OK]** button to redirect to the login screen.

**Forgot Password:**

If a user enters **Username** and forgets the password, then the user can click on **[Forgot Password]** hyperlink. Clicking on **[Back]** button shall show the screen to enter **Username**.

The screenshot shows the "3M | Petrifilm™ Plate Manager" login screen. It features a "Password" label and an empty text input field. Below the input field are two hyperlinks: "Forgot Password" and "Contact Admin". At the bottom right, there are two blue buttons: "Back" and "Login".

User can select and answer the security question. Click on **[OK]** button.

The screenshot shows a "Forgot Password" screen with the following fields:

- "Security Question" with a dropdown menu.
- "Answer" with a text input field.

At the bottom, there are three buttons: "Create Encrypted Key for Password Recovery", "Cancel", and "OK".

User can reset the password by entering a new password and confirming the password.

The dialog box is titled "Reset Password". It contains two text input fields. The first is labeled "Enter New Password" and the second is labeled "Confirm New Password". At the bottom right, there are two buttons: "Cancel" and "OK".

Enter new password and confirm the password by entering an identical string in **Confirm New Password** field.

The dialog box is titled "Reset Password". The two input fields are now masked with dots. The first is labeled "Enter New Password" and the second is labeled "Confirm New Password". At the bottom right, there are two buttons: "Cancel" and "OK".

Click on **[OK]** button. Application shows the below dialog suggesting that the password has been changed successfully.

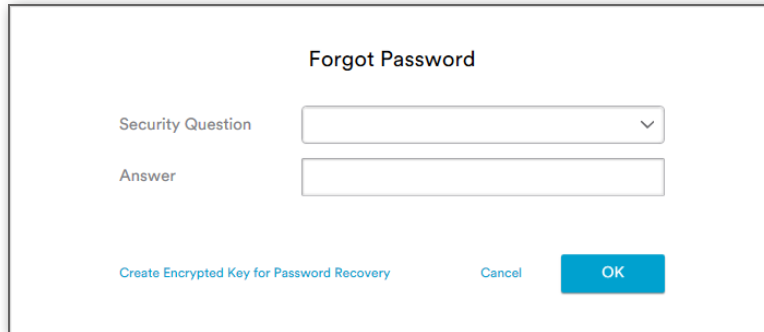
The dialog box is titled "Reset Password". It displays the message "Password changed successfully." At the bottom right, there is a single "OK" button.

If user is an administrator who has not set the answers to security questions and clicks on **[Forgot Password]** hyperlink then a prompt providing details to contact 3M at [PPRAdvanced.Support@mmm.com](mailto:PPRAdvanced.Support@mmm.com) is displayed as shown below.

The dialog box is titled "Contact 3M support". It contains the text: "To recover password, contact your local 3M Representative or [PPRAdvanced.Support@mmm.com](mailto:PPRAdvanced.Support@mmm.com)." At the bottom right, there is a single "OK" button.

Click on **[OK]** button to navigate to login screen.

If user does not remember their answers to security questions then the user can generate an encrypted key/token to recover the password by clicking on **[Create Encrypted Key for Password Recovery]**.



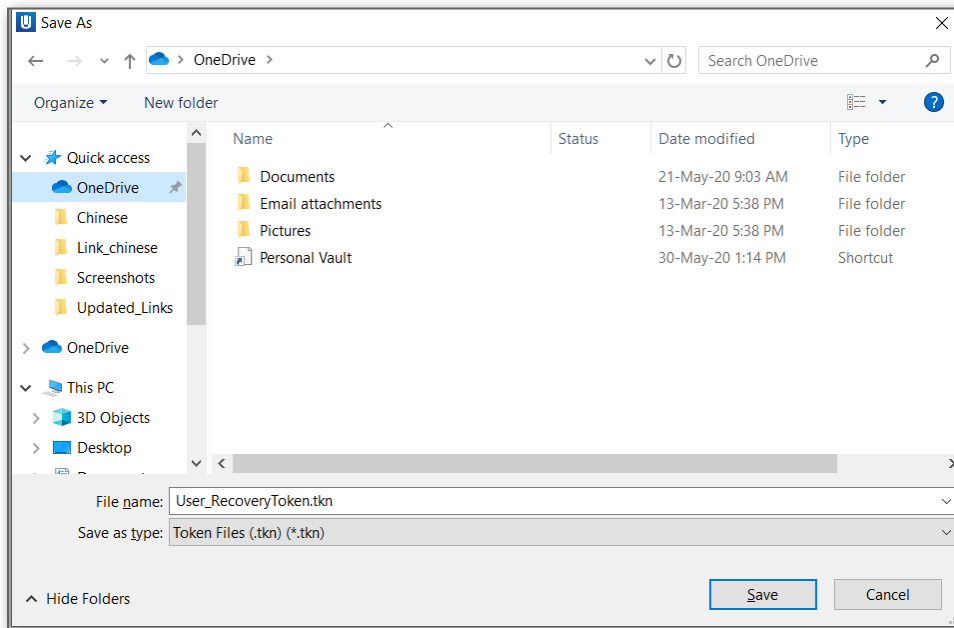
**Forgot Password**

Security Question

Answer

Create Encrypted Key for Password Recovery
Cancel
OK

User shall be displayed a Windows dialog to save the file. Default file name is “<Username>\_RecoveryToken.tkn”

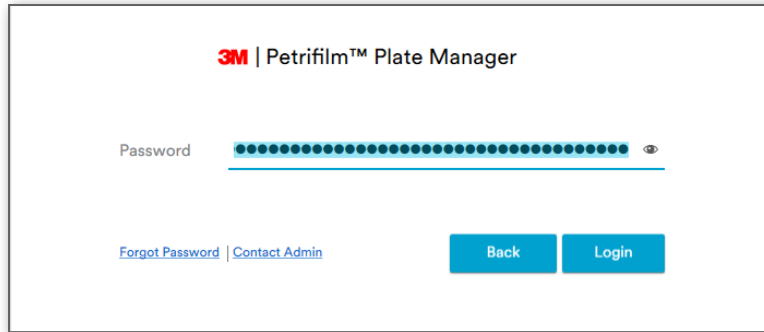


Saving the file shall display the path where the file has been saved.



User shall provide the encrypted token to the 3M support team at the following email: PPRAdvanced.Support@mmm.com. After providing 3M with the encrypted key, a 3M representative will respond with a temporary password.

Upon receiving the temporary password from a 3M representative, the user shall enter the username and temporary password provided.



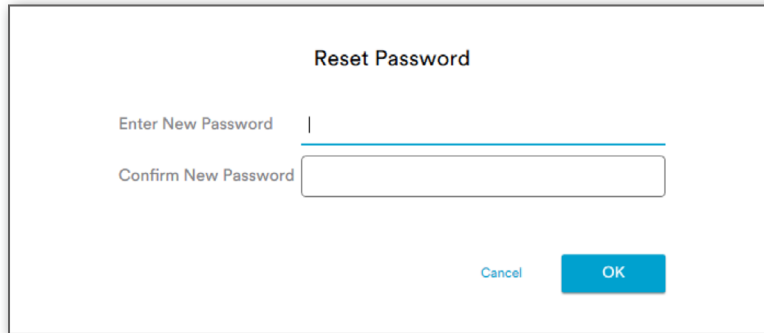
3M | Petrifilm™ Plate Manager

Password

[Forgot Password](#) | [Contact Admin](#)

[Back](#) [Login](#)

Clicking on **[Login]** button shall display the screen to reset the password.



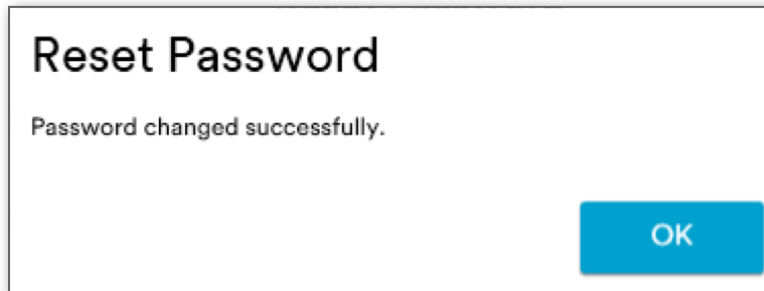
Reset Password

Enter New Password

Confirm New Password

[Cancel](#) [OK](#)

Once user enters new password and clicks on **[OK]** button, the below prompt shall display.



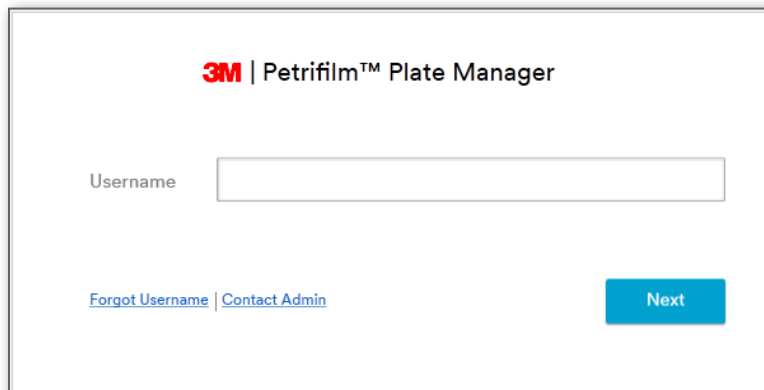
Reset Password

Password changed successfully.

[OK](#)

**Contact Administrator:**

If user wants to contact the Administrator, then the user can click on **[Contact Admin]** hyperlink.



3M | Petrifilm™ Plate Manager

Username

[Forgot Username](#) | [Contact Admin](#)

[Next](#)

Clicking on [**Contact Admin**] hyperlink displays *Admin Details*.

### Admin Details

First Name	Last Name	Display Name
System	Admin	Admin

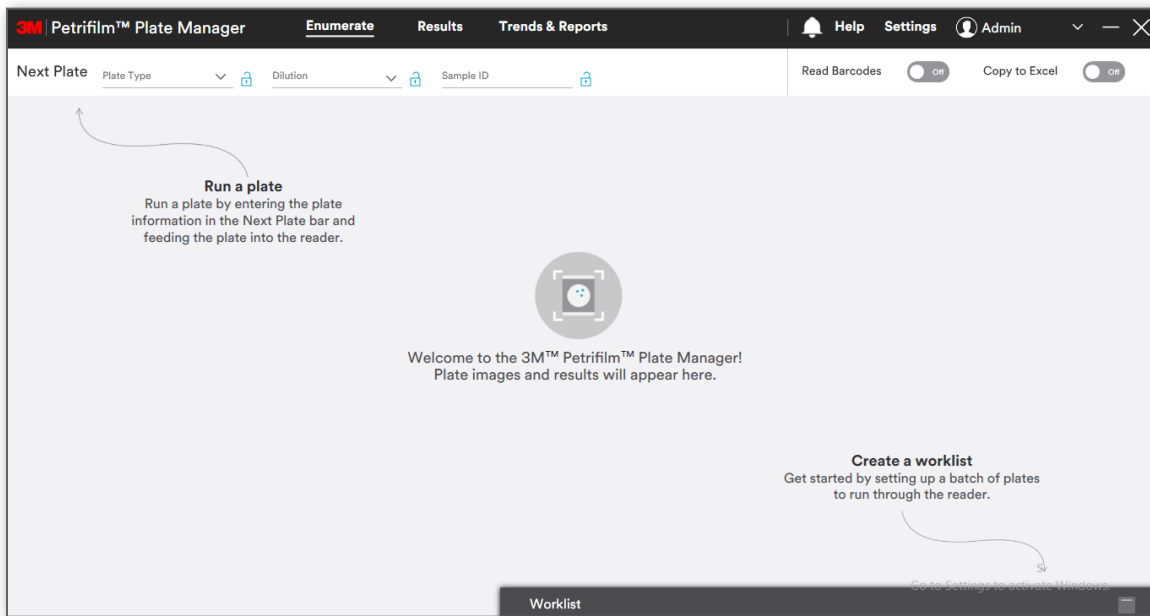
User can contact the Administrator to recover username if:

- i. First name and Last name is not known
- ii. First name or Last name is invalid

User can contact the Administrator to recover password if:

- i. Answers to security questions are not known and the administrator is available

### Enumerate Screen:



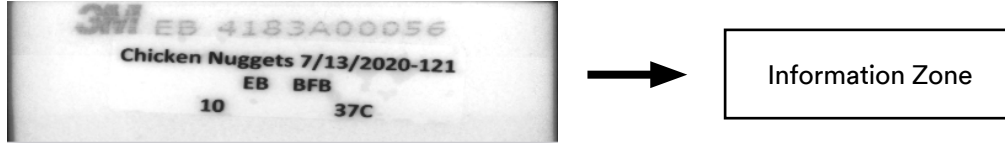
### Input fields:

- **Plate Type:** User can select a 3M Petrifilm Plate from the **Plate Type** dropdown. Plate types selected in the *Enumerate* section in **Settings** shall be available for the user.
- **Dilution:** User can select a dilution from the dropdown menu. It is also possible for a user to add a dilution by typing the dilution into the respective field.
- **Sample ID:** User can type in the **Sample ID**. The application will show the input history upon clicking the respective dropdown menu.
- **Product Specification:** User can select any added **Product specification** from the respective dropdown menu.
- **Read Barcode:** This is a toggle button that the user can toggle ON or OFF. When the **Read Barcodes**  **Off** toggle is OFF and user selects a 3M Petrifilm Plate type from the Plate Type dropdown menu, then the user can insert the 3M Petrifilm Plate into the 3M Petrifilm Plate Reader Advanced. The image of the respective 3M Petrifilm Plate is displayed. Details are displayed in **Edit Info** section on the right side. Barcodes on the 3M Petrifilm Plates can be read when the toggle is **ON**.

- Copy to Excel:** This is a toggle button that the user can toggle **ON** or **OFF**. When the **Copy to Excel** toggle is **ON** and 3M Petrifilm Plate is inserted in the device, an excel sheet is generated and the data gets copied to it. Any edits made to the 3M Petrifilm Plate on the enumerate screen while the Excel file is still open will also be reflected in the Excel file.

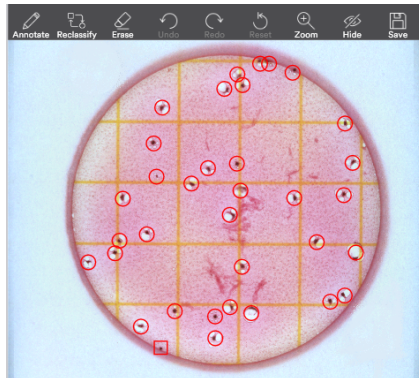
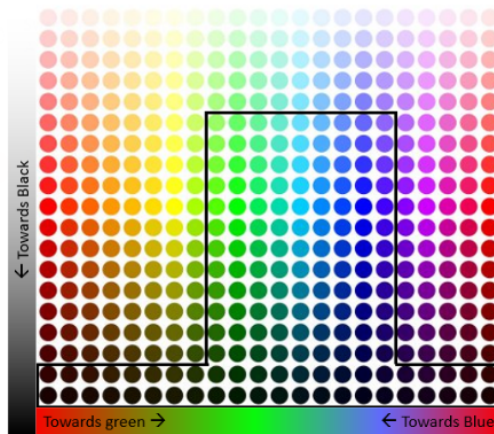
**NOTE:** System shall have MS Office/Excel installed for above operation. Otherwise user shall get a prompt informing that **Excel is not installed on the system**.

Image section on the left side shows information zone above the inoculation zone.



The below screen shows the color palette that can be used to identify what color pens/sharpeners can be used for writing in the information zone. The colors inside the black box will be visible in the information zone. Users **cannot** use pens that are red, yellow, orange, pink or light purple.





**Colour Palette for Marker Pens**







**Result:** Grid on the right displays the count of colonies for the respective 3M Petrifilm Plate.

	Raw	Edited	Calculated	Status
▼ Total CC	34	34		
Red With Gas	34	34  		
▼ Other Colonies	1	1		
Red Without Gas	1	1  		

**Raw:** The 3M Petrifilm Plate colony count as detected by the algorithm. The counting algorithm will give the count of colonies that it has detected. It could be a zero, specific count or Too Numerous To Count (TNTC).

**Edited:** This is the adjusted colony count that may be updated by the user either by manually annotating the image or by updating the count in the results grid.

**Calculated:** The Raw or Edited count including the dilution factor. Representation depends on the result format selected in settings. If the user has selected a dilution factor for a given plate, then the application will use that and the edited count to provide the calculated count.

**Reason for Change:** The dropdown menu appears as soon as the user edits the count and it is a mandatory field. Requires the user to select why they have made any manual changes to the count. If user attempts to navigate away from an edited plate before selecting a reason for change, a dialog appears saying: **Select Reason for Change**. If user selects cancel, the application will return to the *Enumerate* screen. If user selects **[Save]** the application will save the reason for change and navigate to the screen that the user was navigating to.

**Comments:** If needed, user can enter additional comments regarding the result.

User may edit fields such as **Sample ID**, **Dilution** and **Product Specification** by selecting the **[Edit Info]** button. Users cannot update the plate type field after running a 3M Petrifilm Plate.

### Edit Plate Information

Edits to plate type will void the previous result and require you to rerun the plate. All other edits will effect the calculated result.

Sample ID <input style="width: 90%;" type="text"/>	Dilution <input style="width: 90%;" type="text" value="1:10"/>
Plate Type <input style="width: 90%;" type="text" value="EC/CC"/>	Product Specification <input style="width: 90%;" type="text" value="PS1"/>




Upon updating the plate type, the previous results are marked as void and the user needs to re-run the 3M Petrifilm Plate. [Save] button changes to [Save and re-Run Plate].

### Edit Plate Information

Edits to plate type will void the previous result and require you to rerun the plate. All other edits will effect the calculated result.

Sample ID <input style="width: 90%;" type="text"/>	Dilution <input style="width: 90%;" type="text" value="1:10"/>
Plate Type <input style="width: 90%;" type="text" value="CC"/>	Product Specification <input style="width: 90%;" type="text" value="PS1"/>

User can perform the following operations on the 3M Petrifilm Plate image:


- i. **Add**  – Opens movable submenu . Defaults to top colony type ON. Click to add colony markers. If plate has only one colony type, no sub menu appears.
- ii. **Reclassify**  – Reclassify mode. Opens movable submenu (same as Annotate mode). Defaults to top colony type ON. Click existing annotation to reclassify. If the 3M Petrifilm Plate has only one colony type the tool appears disabled.
- iii. **Erase**  – Open the submenu  to erase the colony markers one after the other OR remove all at once. (Ghosting refers to deleting the annotation and removing the colony from the count. It allows for traceability of what is being deleted.)
- iv. **Undo**  – Undo last action (can be done back to the point the screen was opened/refreshed). If no action has been taken, tool appears disabled.
- v. **Redo**  – Redo last action (can be done up to the point of the last action). If no action has been taken and undone, tool appears disabled.
- vi. **Reset**  – Revert to original (system) annotations. If no changes have been made, tool appears disabled.
- vii. **Zoom**  – Shows +/- slider . Responds to scroll wheel and track pad pinch. (Zoom/pan by scroll and track pad available in all modes).
- viii. **Hide**  – Opens movable submenu . User can hide system or user annotations (or both at the same time). When user selects another tool, all annotations are shown (only can hide in this mode).

- ix. **Save**  – Save opens dialog to save the 3M Petrifilm Plate images. User can choose to save images, or the user can choose to **Save test for support**. **Save test for support** allows the user to fill out a short questionnaire regarding their sample and it creates a zip file of the results and the questionnaire that they can send to a 3M representative for support.

**Worklist:**

Worklist drawer appears in minimized mode by default with worklist progress appearing on the right. Worklists allow users to set up a predefined series of plates that allows them to run them through the 3M Petrifilm Plate Reader Advanced in the specified order. All information that is associated with the particular result will be imported into the database in the same order that was established in the worklist.



Worklist can be expanded by clicking on  button to display the list of worklists present in the system in the **Not Started** and **In Progress** state.

Worklists
Demo 2 | 0 of 44 (0%) complete

Create New Worklist ▼

OR

Time Frame  
All Time ▼

**In Progress**

Name	Progress	Created On	Scheduled For
DEMO - 7-15-20	<div style="width: 49%; background-color: #007bff; height: 8px;"></div> 49%	15-07-2020 08:15:21	No Date
<span style="color: green;">●</span> Demo 2	<div style="width: 0%; background-color: #007bff; height: 8px;"></div> 0%	06-10-2020 12:39:35	No Date

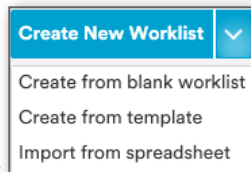
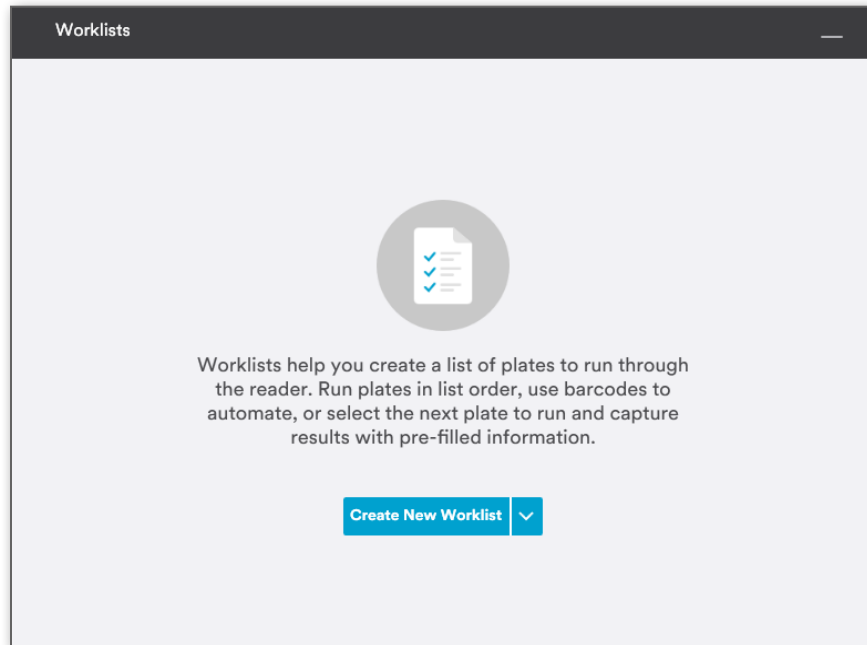
**Not Started**

Name	Created On	Scheduled For
PM Shift Monday	06-10-2020 12:15:35	No Date
AM shift Tuesday	06-10-2020 12:15:58	No Date
RAC-Milk 2020-12-16	06-10-2020 12:16:31	No Date

Users can search for worklists by entering the worklist name in the field.

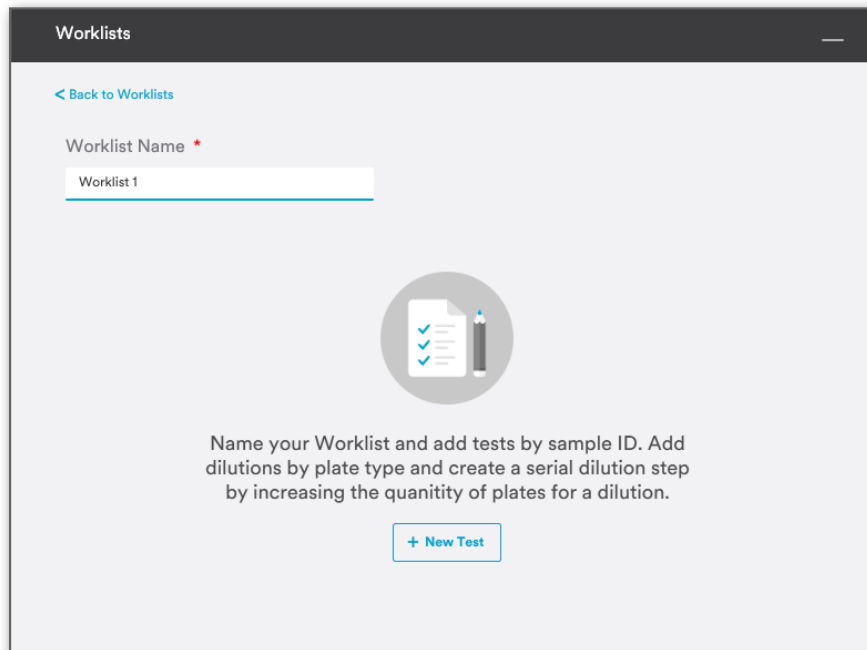
Worklists can also be searched by providing a date range or by selecting a value from the time frame dropdown menu.

When user opens the worklist drawer, below screen appears. User can add a new worklist from the **[Create New Worklist]** dropdown.



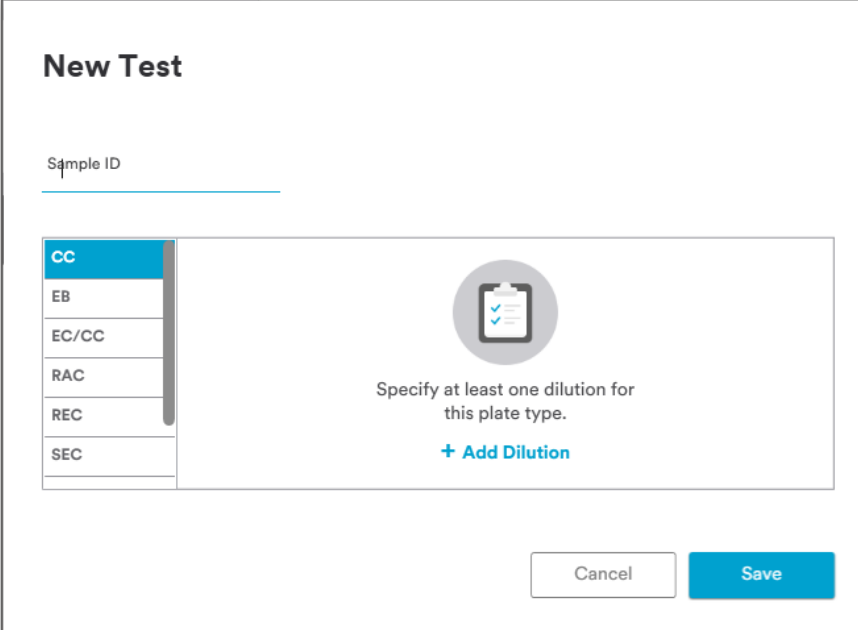
User can add a worklist in 2 ways -

- **Create From Blank Worklist:** Adding from a blank worklist: It is mandatory to provide the worklist name.



User can add a test to the worklist.

While adding a test, the user may or may not select the product specification, dilution scheme and sample ID. User must select a plate type, quantity and dilution.



**New Test**

Sample ID

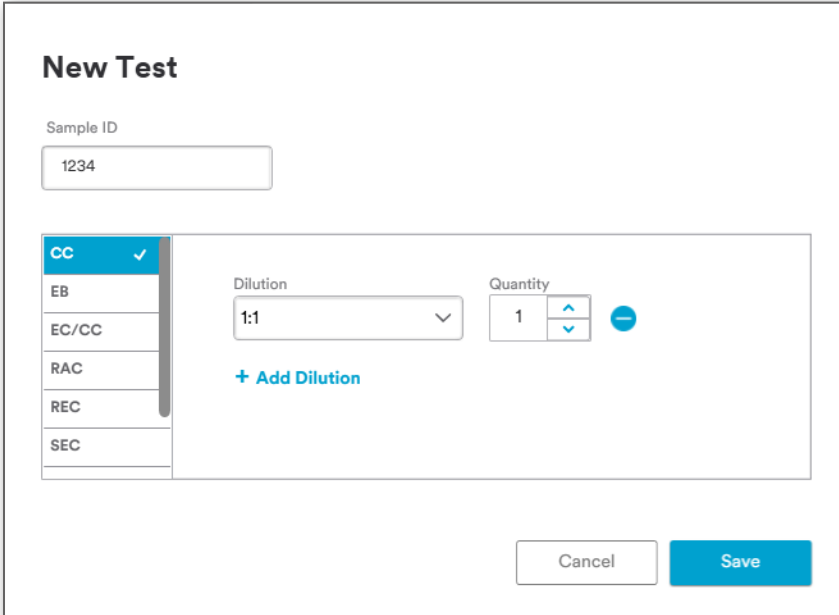
CC
EB
EC/CC
RAC
REC
SEC

Specify at least one dilution for this plate type.

[+ Add Dilution](#)

Cancel Save

Click on **[Add Dilution]** to add Quantity and Dilution. By default, the lowest dilution and quantity is set to 1.



**New Test**

Sample ID

1234

CC ✓
EB
EC/CC
RAC
REC
SEC

Dilution: 1:1

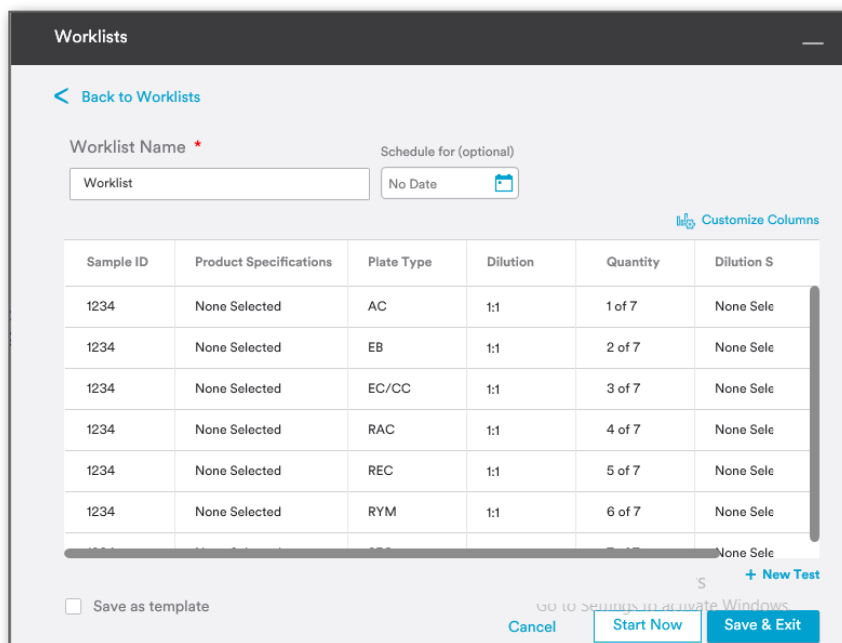
Quantity: 1

[+ Add Dilution](#)

Cancel Save

An added dilution can be deleted by clicking on  icon for the respective entry.


Clicking on **[Save]** will save the data.



Worklists

[Back to Worklists](#)

Worklist Name \*

Schedule for (optional)  

[Customize Columns](#)

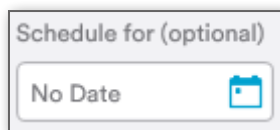
Sample ID	Product Specifications	Plate Type	Dilution	Quantity	Dilution S
1234	None Selected	AC	1:1	1 of 7	None Sele
1234	None Selected	EB	1:1	2 of 7	None Sele
1234	None Selected	EC/CC	1:1	3 of 7	None Sele
1234	None Selected	RAC	1:1	4 of 7	None Sele
1234	None Selected	REC	1:1	5 of 7	None Sele
1234	None Selected	RYM	1:1	6 of 7	None Sele

Save as template


[Cancel](#) [Start Now](#) [Save & Exit](#)

[+ New Test](#)

User can schedule the worklist to be run by selecting a specific date (optional).



Schedule for (optional)



In case user has scheduled the worklist to be run by selecting a specific date and time, the user can then **Set Reminder**.

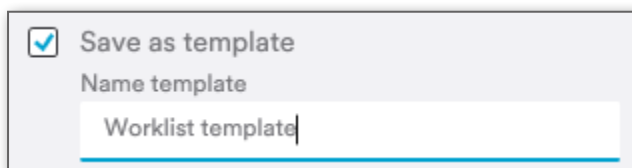


Schedule for (optional)   AT HH:MM  AM

User can also set a reminder for a given time that they would like to be notified to run the list. By default, it will be **30 minutes before**. Worklists can be saved using the **[Save & Exit]** button.

While creating a worklist, it is possible to start the worklist by clicking on the **[Start Now]** button.

Worklists can be saved as a template by checking the **Save as template** checkbox and entering the Template name.



Save as template

Name template

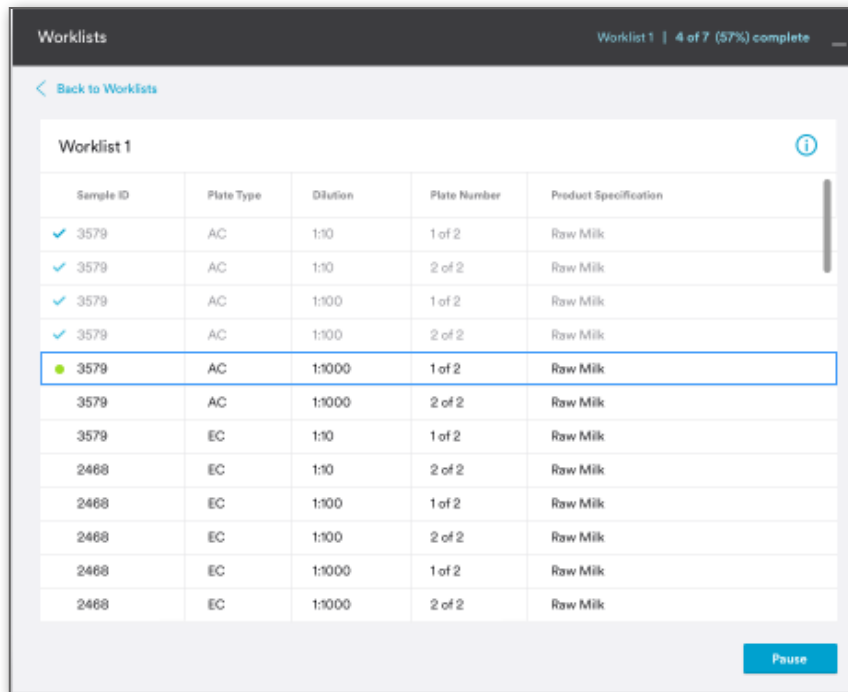
Users can also navigate back to the worklist grid by clicking on the **[Back to Worklists]** link.

**Not Started** or **In Progress** worklist can be edited when user hovers over a worklist and clicks on **[Edit]** link.

User can create a copy of the **Not Started** or **In Progress** worklist by clicking on **[Copy]** link and delete a worklist by clicking on **[Delete]** link.

User can resume a paused worklist by clicking on **[Resume]** link; pause a running worklist by clicking on **[Pause]** link.

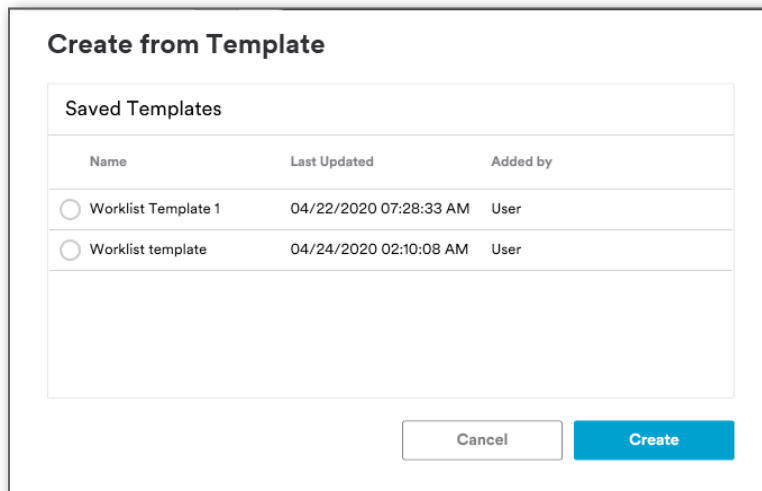
User can navigate to worklist running screen by double clicking a worklist from the grid. The worklist running screen displays the tests present in the respective worklist.



Next plate to be scanned is indicated by the ● (green dot) while completed tests are indicated by a ✓ (check icon). User can navigate to the worklist screen by clicking on **[Back to Worklists]** link.

**i** Hovering over this icon shall display the tooltip with **If barcode reading is turned ON, the 3M Petrifilm Plate Reader Advanced will automatically assign results to the appropriate 3M Petrifilm Plates. If barcode reading is turned OFF, the 3M Petrifilm Plate Reader Advanced will assign results to plates in the order of the worklist unless the user selects a plate from the worklist prior to feeding.**

**Create from Template:** User can also create a worklist from a template by selecting a template from the existing list.



Selecting the **[Create]** button opens the worklist edit screen. User must enter the worklist name and click on **[Save & Exit]** button to save the same.

**Import from Spreadsheet:** User can add a worklist by importing from an “.xls”, “.csv” or “.tsv” file.



To Import the Petrifilm Plate type, users must use the below acronyms:

Acronym	3M Petrifilm Plate Type
AC	Aerobic Count Plate
CC	Coliform Count Plate
RYM	Rapid Yeast and Mold Plate
STX	Staph Express Count Plate
EC/CC	<i>E. coli</i> /Coliform Count Plate
EB	<i>Enterobacteriaceae</i> Count Plate
RAC	Rapid Aerobic Count Plate
REC	Rapid <i>E. coli</i> /Coliform Count Plate
SEC	Select <i>E. coli</i> Count Plate
STXD	Staph Express Disk

### Import Worklist

Choose File Worklist1.xlsx

Upload

Sample ID	Product Specification	Plate Type	Dilution	Plate Number
1234	None Selected	RAC	1:1	1
2345	None Selected	EB	1:10	2
3456	None Selected	EC/CC	1:100	5
4567	None Selected	EB	1:1000	4
5678	None Selected	REC	1:10	8

Cancel Import

To import a worklist, user needs to map the current fields from **Settings > Mapping for Import**. If mapping is not in place, then the user gets the below prompt.

## Enumerate

Mapping for Worklist is missing or incorrect. Review the mapping template in Settings>Mapping for Import.

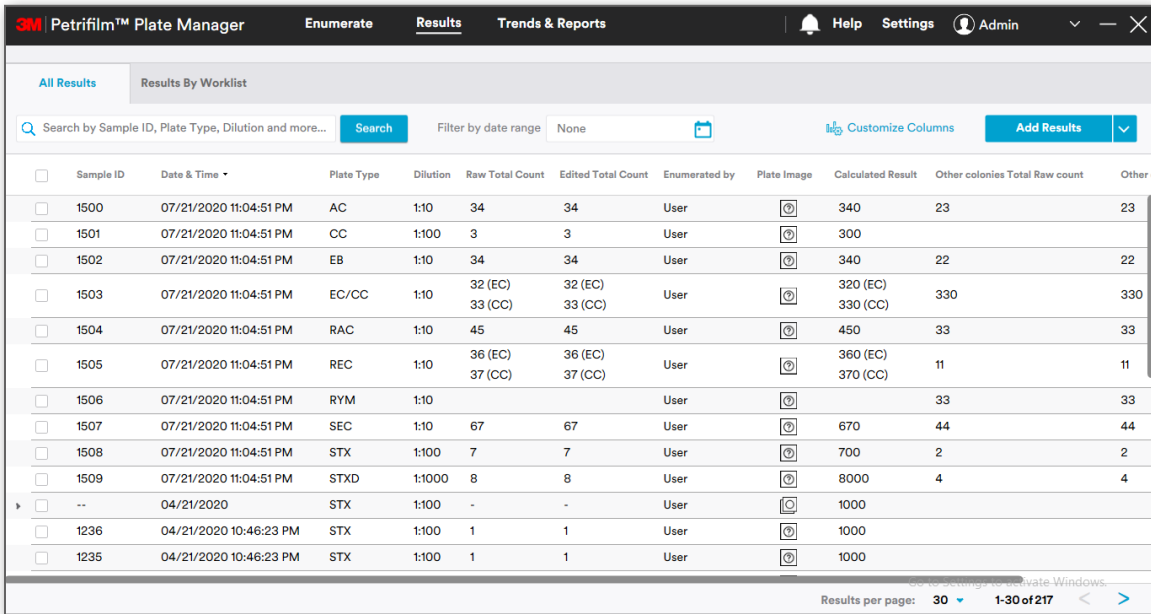
OK
















## Results:

### All Results:

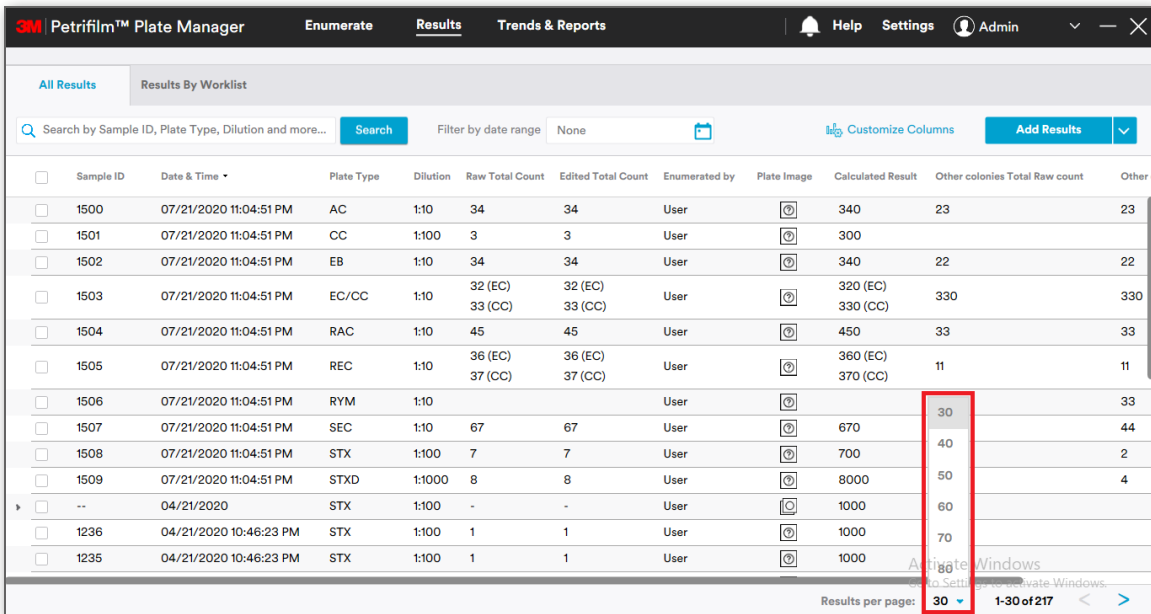
3M Petrifilm Plate images can be viewed in the **Results** tab. The Application will display all test results, but the user has the ability to filter results based on the column headers. The images shall be deleted after 72 hours without any notification to the user when the Auto-save preferences is OFF.
















Sample ID	Date & Time	Plate Type	Dilution	Raw Total Count	Edited Total Count	Enumerated by	Plate Image	Calculated Result	Other colonies Total Raw count	Other c
1500	07/21/2020 11:04:51 PM	AC	1:10	34	34	User		340	23	23
1501	07/21/2020 11:04:51 PM	CC	1:100	3	3	User		300		
1502	07/21/2020 11:04:51 PM	EB	1:10	34	34	User		340	22	22
1503	07/21/2020 11:04:51 PM	EC/CC	1:10	32 (EC) 33 (CC)	32 (EC) 33 (CC)	User		320 (EC) 330 (CC)	330	330
1504	07/21/2020 11:04:51 PM	RAC	1:10	45	45	User		450	33	33
1505	07/21/2020 11:04:51 PM	REC	1:10	36 (EC) 37 (CC)	36 (EC) 37 (CC)	User		360 (EC) 370 (CC)	11	11
1506	07/21/2020 11:04:51 PM	RYM	1:10			User			33	33
1507	07/21/2020 11:04:51 PM	SEC	1:10	67	67	User		670	44	44
1508	07/21/2020 11:04:51 PM	STX	1:100	7	7	User		700	2	2
1509	07/21/2020 11:04:51 PM	STXD	1:1000	8	8	User		8000	4	4
--	04/21/2020	STX	1:100	-	-	User		1000		
1236	04/21/2020 10:46:23 PM	STX	1:100	1	1	User		1000		
1235	04/21/2020 10:46:23 PM	STX	1:100	1	1	User		1000		

Results per page: 30 1-30 of 217

Rows per page shall start from 30 with an increment of 10.



Sample ID	Date & Time	Plate Type	Dilution	Raw Total Count	Edited Total Count	Enumerated by	Plate Image	Calculated Result	Other colonies Total Raw count	Other c
1500	07/21/2020 11:04:51 PM	AC	1:10	34	34	User		340	23	23
1501	07/21/2020 11:04:51 PM	CC	1:100	3	3	User		300		
1502	07/21/2020 11:04:51 PM	EB	1:10	34	34	User		340	22	22
1503	07/21/2020 11:04:51 PM	EC/CC	1:10	32 (EC) 33 (CC)	32 (EC) 33 (CC)	User		320 (EC) 330 (CC)	330	330
1504	07/21/2020 11:04:51 PM	RAC	1:10	45	45	User		450	33	33
1505	07/21/2020 11:04:51 PM	REC	1:10	36 (EC) 37 (CC)	36 (EC) 37 (CC)	User		360 (EC) 370 (CC)	11	11
1506	07/21/2020 11:04:51 PM	RYM	1:10			User			30	33
1507	07/21/2020 11:04:51 PM	SEC	1:10	67	67	User		670	40	44
1508	07/21/2020 11:04:51 PM	STX	1:100	7	7	User		700	50	2
1509	07/21/2020 11:04:51 PM	STXD	1:1000	8	8	User		8000	60	4
--	04/21/2020	STX	1:100	-	-	User		1000	70	
1236	04/21/2020 10:46:23 PM	STX	1:100	1	1	User		1000		
1235	04/21/2020 10:46:23 PM	STX	1:100	1	1	User		1000		


Results per page: 30 1-30 of 217


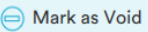
User can perform the following operations in the results grid:

- Search:** User can enter a string in the  field and tab/enter out. Advanced search is performed on all the columns and relevant results are fetched.


NOTE: Multi column search can be performed by using “,” separator (i.e. 1238, RAC).




Filter by date range: User can filter results based on the date range. This can be done in conjunction with Advanced / Multicolumn search.

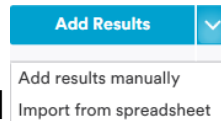
- Calculate Total:** User can perform calculate total for 3M Petrifilm Plates with the same Sample ID and same 3M Petrifilm Plate type. Select respective 3M Petrifilm Plates and click on  Calculate Total icon. The same functionality is available in **Results by Worklist** as well.

- Group as Same Plate:** User can perform group as same plate when Sample ID, 3M Petrifilm Plate type and Dilution for selected plates are same. Select respective 3M Petrifilm Plates and click on  Group as Same Plate icon. The same functionality is available in **Results by Worklist** as well. This function is reserved for when users are checking the results for the 3M Petrifilm *E. Coli*/Coliform Count Plate at both 24 and 48 hours.
- Mark as Void:** User can mark the results as void by clicking the  Mark as Void button. Voided results will appear with a strikethrough.



It is possible for the user to undo mark as void by selecting a void result and clicking on  Undo Mark as Void icon. This applies to the results grid in **Results by Worklist** tab as well.

- Export Results:** User can export results by selecting results from the results grid and clicking on  Export Results icon. Results can be exported in excel, .csv, .tsv and custom delimited formats. This is applicable for **Results By Worklist** tab as well.
- Generate Report:** Static reports can be generated from **All Results** by selecting results from the results grid and clicking on  Generate Report icon. Charts and Logos can be added to static reports and generated reports can be seen on the Report Dashboard.
- Export Chart:** User can export charts from **All Results** by selecting results from the results grid and clicking on  Export Chart icon. Charts can be exported PDF, Excel or Word formats.



User can add results in 2 ways by clicking on **[Add Results]** :

- Add results manually:** Details entered into the fields appear in the grid.

### Add results manually

Sample ID <input type="text"/>	Plate Type <input type="text" value="↓"/>	Dilution <input type="text" value="↓"/>
Raw Total Count <input type="text"/>	Calculated Result <input type="text"/>	Other colonies Total Raw count <input type="text"/>

+Add Another

- Import from spreadsheet:** User can also import results from a spreadsheet. The PC application supports “.xls” or “.csv” formats for importing the results. Support format for Dilutions are simple numbers 10, 100, 1000 which represent 1:10, 1:100 and 1:1000 respectively in the PC application.

To Import the Petrifilm Plate type, users must use the below acronyms:

Acronym	3M Petrifilm Plate Type
<b>AC</b>	Aerobic Count Plate
<b>CC</b>	Coliform Count Plate
<b>RYM</b>	Rapid Yeast and Mold Plate
<b>STX</b>	Staph Express Count Plate
<b>EC/CC</b>	<i>E. coli</i> /Coliform Count Plate
<b>EB</b>	<i>Enterobacteriaceae</i> Count Plate
<b>RAC</b>	Rapid Aerobic Count Plate
<b>REC</b>	Rapid <i>E. coli</i> /Coliform Count Plate
<b>SEC</b>	Select <i>E. coli</i> Count Plate
<b>STXD</b>	Staph Express Disk

### Import Results

Results.xlsx

Sample ID	Date & Time	Plate Type	Dilution	Colony Count	Calculated Result	Enumerated by
		EB				
		CC		45		
		AC		0		
		EC/CC		25		
				5		
		EC/CC		0		
				0		

Mapping of the current fields to the 3M Petrifilm Plate Manager needs to be in place. Mapping can be done from **Settings > Mapping for Import**.

If there are any validation errors, then a prompt as shown below is displayed:


Following errors were encountered while importing.

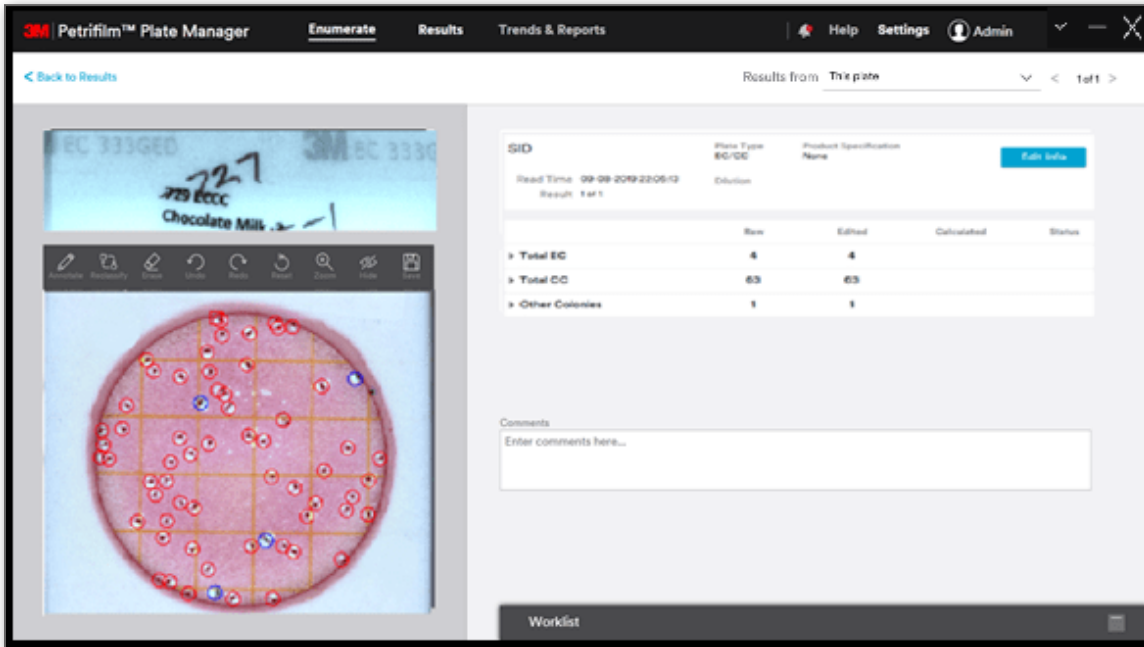
Row Id	Column Id	Value in the Incorrect field	Validation Message
14	2	RCC	Plate Type is invalid.
15	2	RCC	Plate Type is invalid.
16	2	RCC	Plate Type is invalid.
17	2	RCC	Plate Type is invalid.
18	2	RCC	Plate Type is invalid.
19	2	RCC	Plate Type is invalid.
32	2	LAB	Plate Type is invalid.
33	2	LAB	Plate Type is invalid.
34	2	LAB	Plate Type is invalid.
35	2	LAB	Plate Type is invalid.


OK

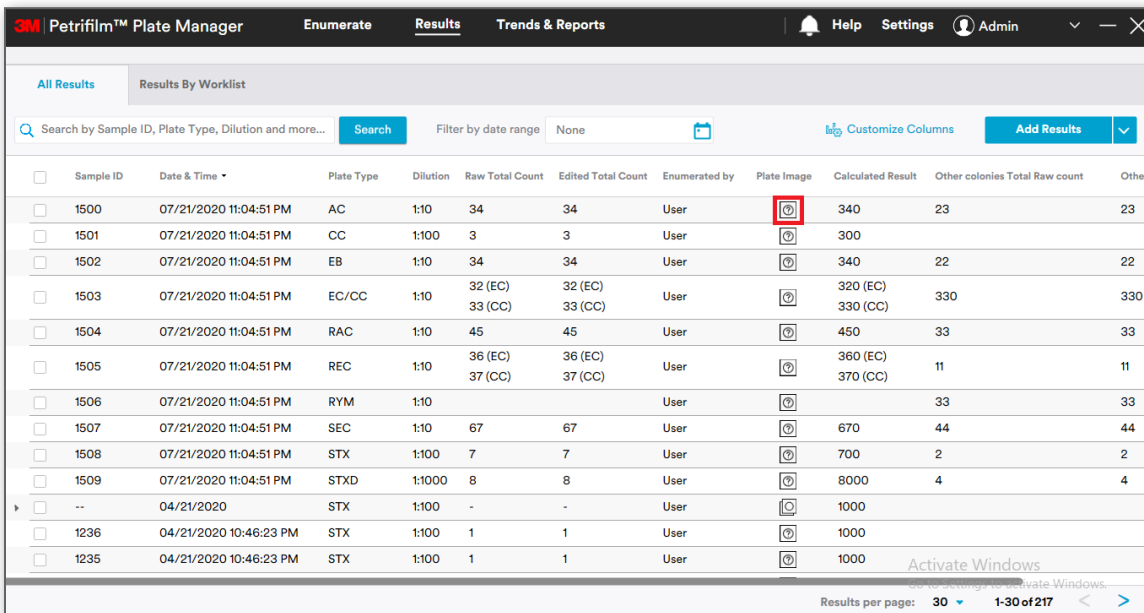
Results cannot be imported unless the errors are rectified.

**Results – continued**

User is redirected to *Enumerate* screen upon double clicking the  “image icon” for a result wherein user gets to view the result for the respective entry.



If the user clicks on  image icon of a manually added result then a placeholder is displayed for the image.





3M Petrifilm™ Plate Manager    Enumerate    Results    Trends & Reports    Help    Settings    Admin

Results from: This plate    1 of 1

**Warning:** The enumerated result is estimated as it is outside of the recommended counting range.

**Current Plate**    Edit Info

Read Time: 07/22/2020 12:40:09    Readings: -    Plate Type: EC/CC    Sample ID: S454    Dilution: 1:1    Product Specification: PS1

	Raw	Edited	Calculated	Status
<b>Total EC</b>	-0	-0	-0	⊗
Blue With Gas	0	0		
<b>Total CC</b>	-0	-0	-0	⊗
Red With Gas	0	0		
Blue With Gas	0	0		
<b>Other Colonies</b>	-0	-0		

Comments: Enter comments here...

Relink Image

Worklist

**Re-link image:** User can re-link an image of resolution 2592×1944 by clicking on **[Relink Image]** button. User can change the colony count in the grid. Clicking on 3 dots shall provide user an option to reset the colony count.

3M Petrifilm™ Plate Manager    Enumerate    Results    Trends & Reports    Help    Settings    Admin

Results from: This plate    1 of 1

**Current Plate**    Edit Info

Read Time: 07/22/2020 12:40:09    Readings: -    Plate Type: EC/CC    Sample ID: S454    Dilution: 1:1    Product Specification: PS1

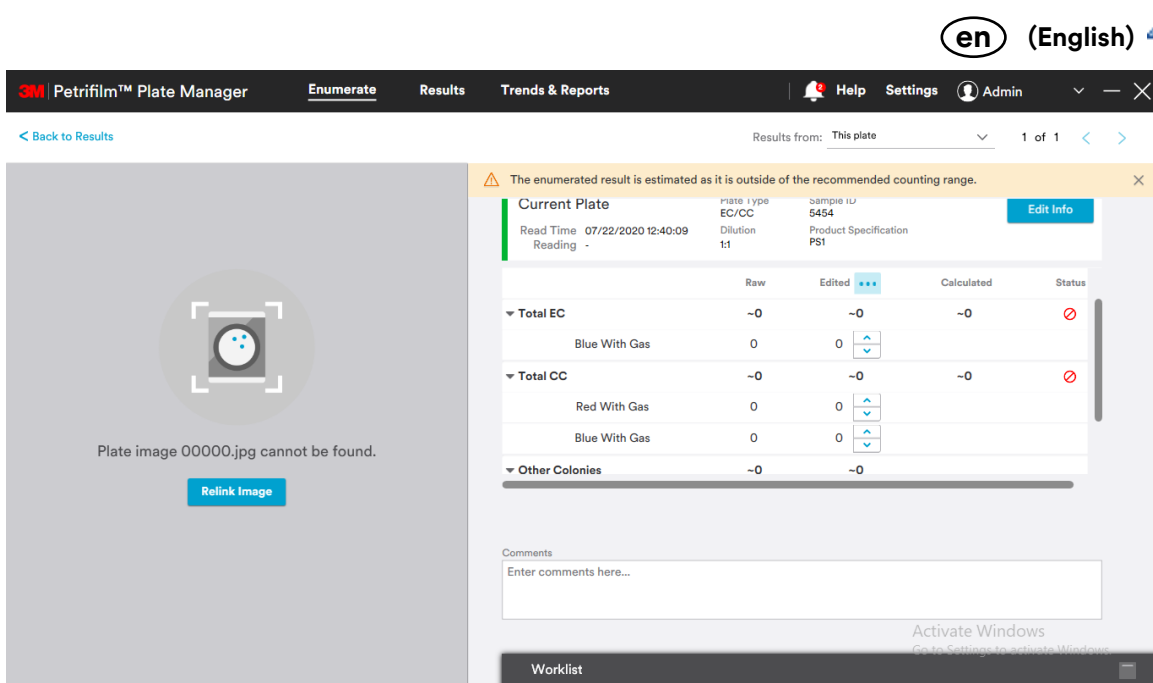
	Raw	Edited	Calculated	Status
<b>Total EC</b>	-0	Reset	-6	⊗
Blue With Gas	0	6		
<b>Total CC</b>	-0	-6	-6	⊗
Red With Gas	0	0		
Blue With Gas	0	6		
<b>Other Colonies</b>	-0	-0		

Reason for change (required):

Comments: Enter comments here...

Relink Image

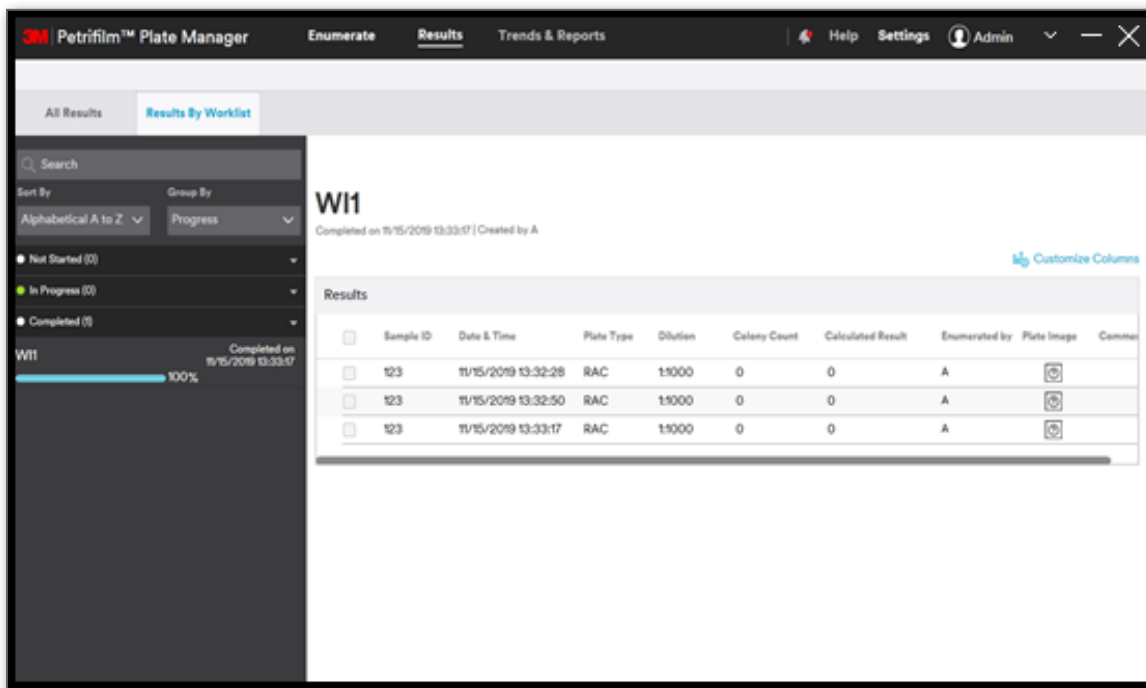
Worklist



Clicking on the **[Back to Results]** link takes user back to **All Results** screen.

User can select the number of results to be displayed on the screen by clicking on the **Results per page: 30** dropdown and selecting a value from the same. User can navigate through pages to view the results present in the system by clicking on the arrows accordingly. **1-16 of 71** < >

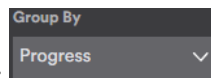
**Results by Worklist:** User can view worklist wise results under the tab, **Results By Worklist**.



User can search worklist by name.

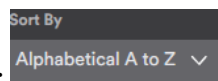
It is also possible to group the searched worklists by:

- a. **Progress**
- b. **Date**
- c. **Created By**



User can also sort the worklists by:

- a. **Alphabetical order A to Z**
- b. **Alphabetical order Z to A**

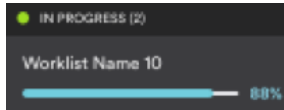


- c. Progress low to high
- d. Progress high to low
- e. Oldest
- f. Most Recent

User can also group the worklist in the below categories:

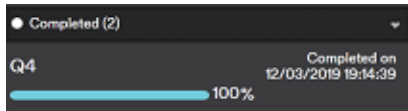
a. **IN PROGRESS**

Progress of a worklist is displayed by the progress bar and xx% completion.



b. **Completed**

Completed worklist can be seen as: with completion percentage as 100%.

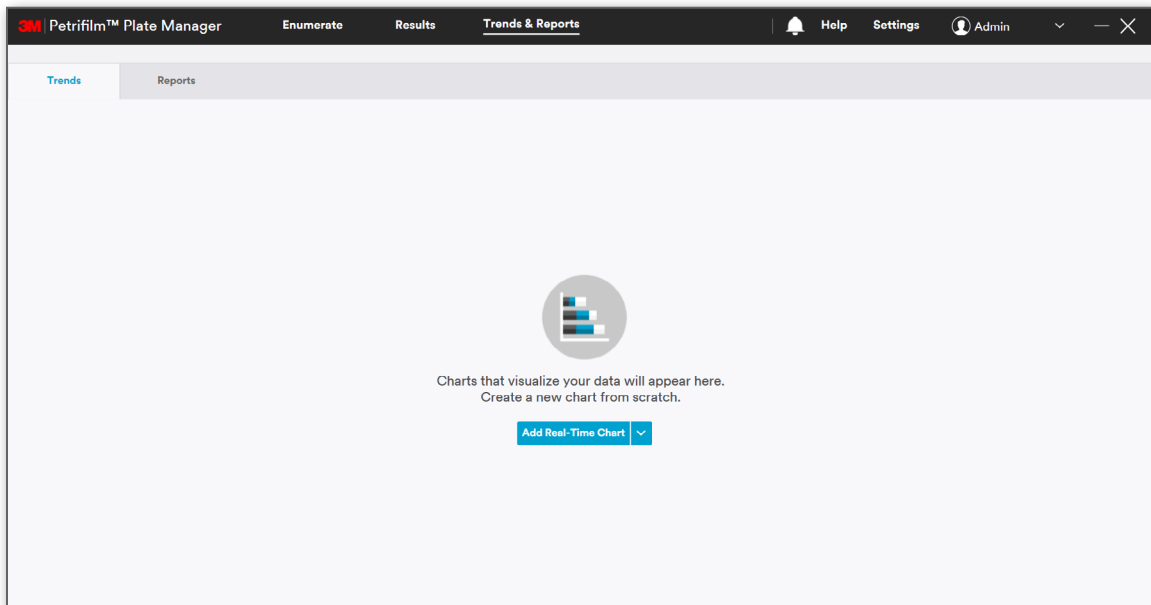


### Trends and Reports:

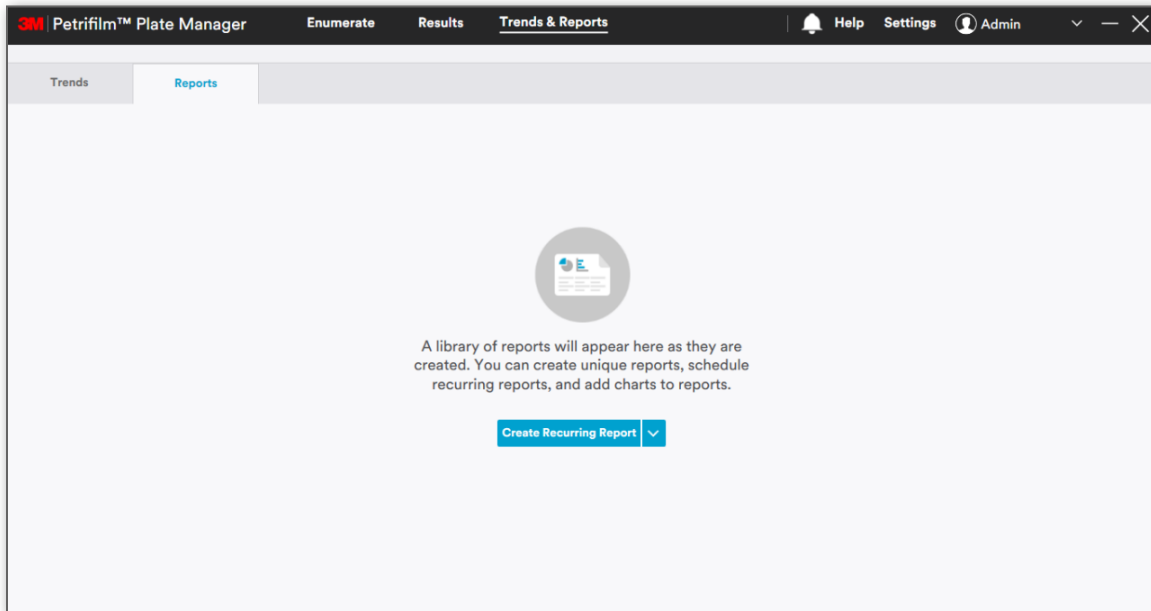
PC application has 2 tabs under Trends and Reports:

- 1. Trends
- 2. Reports

Trends tab is set as default for Trends and Reports screen.



## Reports:

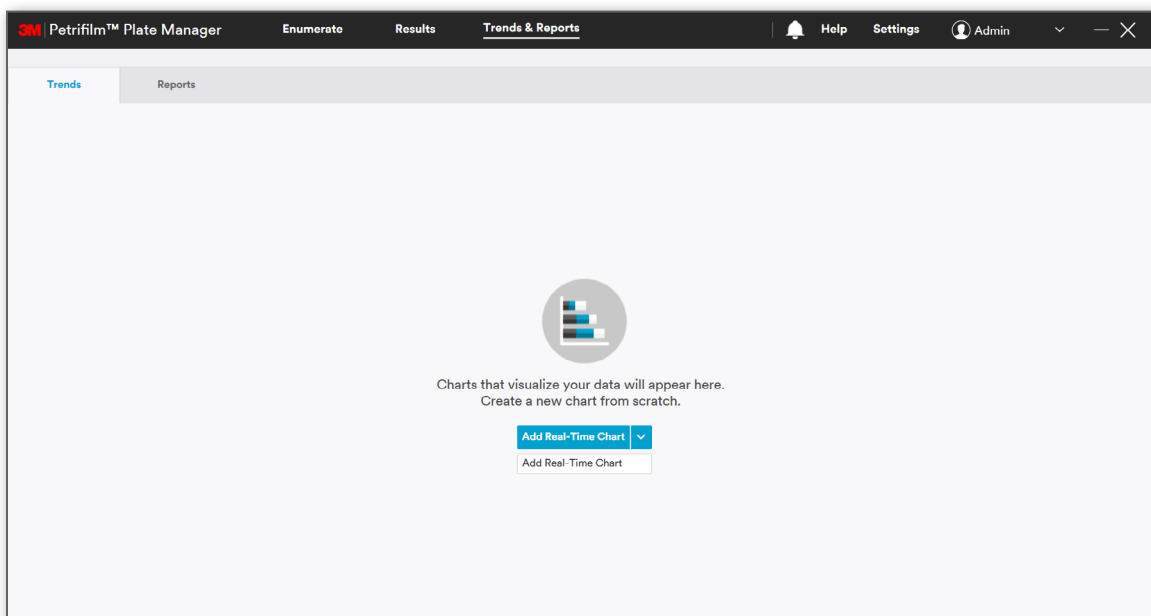


**Trends and Reports** tab will allow user to:

- i. Add real time chart
- ii. Edit a chart
- iii. Delete a chart
- iv. Export a chart
- v. Search report
- vi. View/Preview report
- vii. Create recurring report
- viii. Save report
- ix. Print report

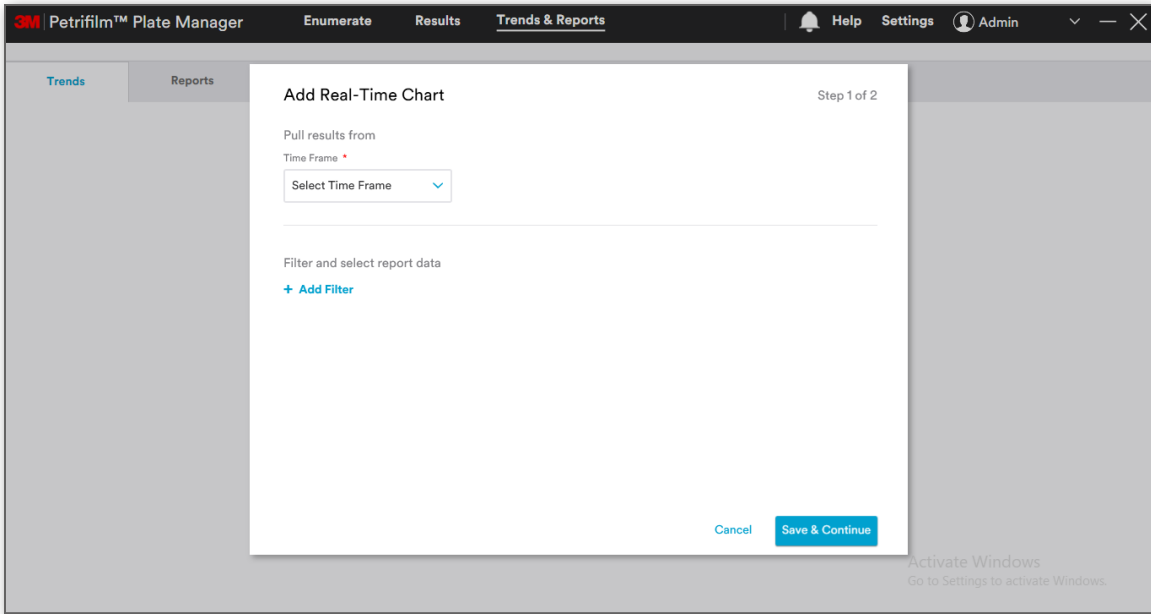
### Add Real-Time Chart

User can create new chart by selecting **Add Real-Time Chart** from [**Add Real-Time Chart**] dropdown. User can generate a trending chart based on custom criteria (e.g., 3M Petrifilm Plate types, dilutions, sample ID, etc.) that consists of historical results.



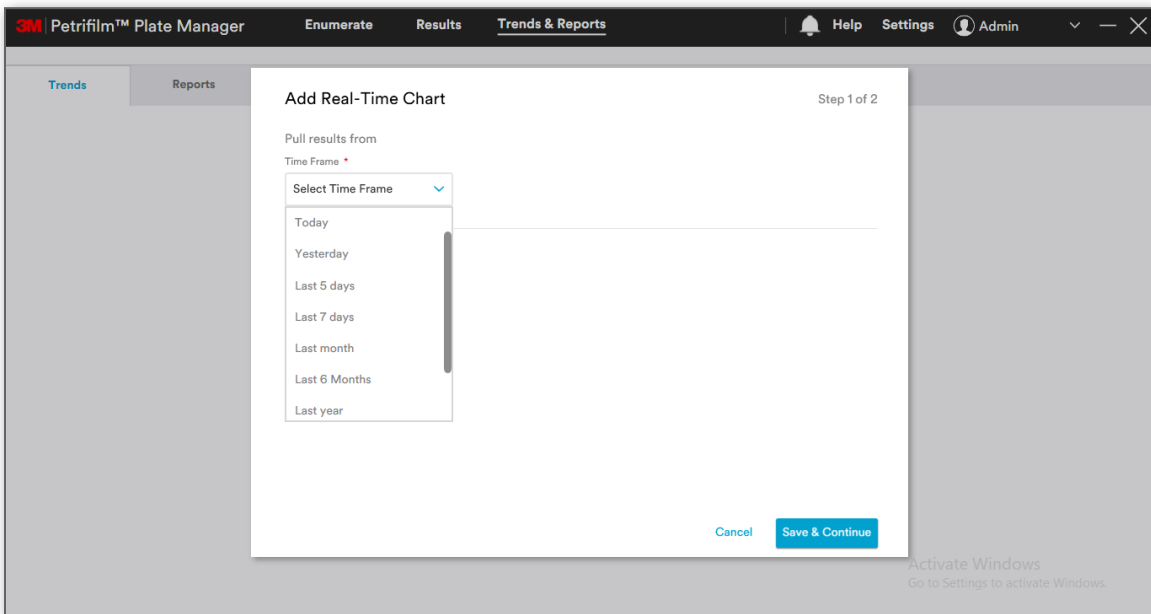


On selecting **Add Real-Time Chart**, the window for *Add Real-Time Chart* would appear. User can create chart by **Select Time Frame** and by **Adding Filter** for Report data.

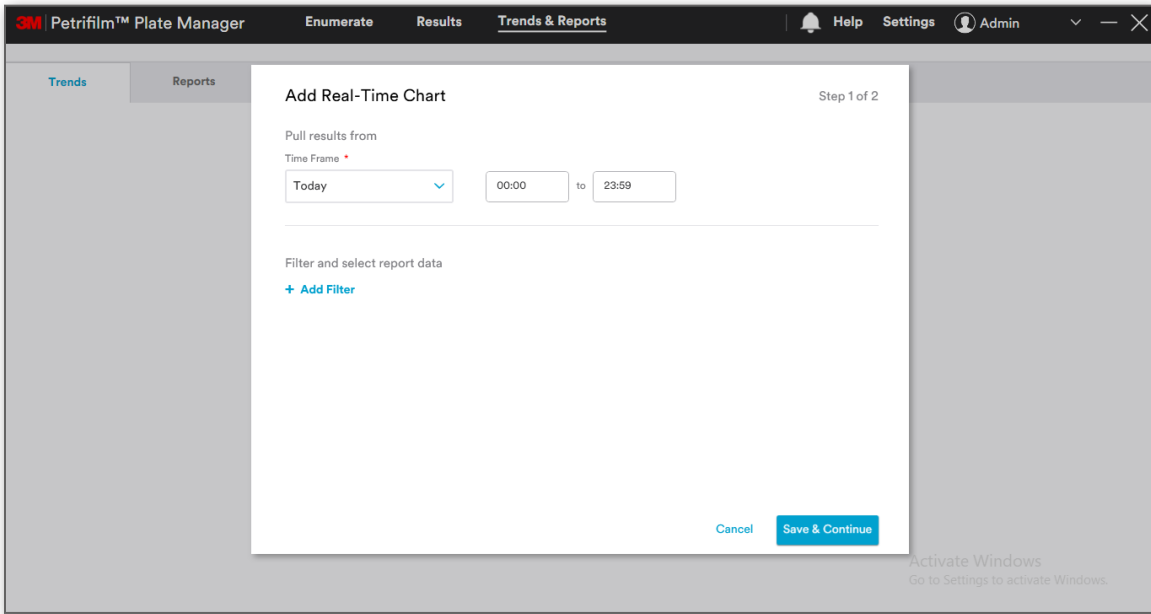


**Time frame:** Select **Time Frame** dropdown has the values of:

- i. **Today** [ 00:00 - 23:59 Default]
- ii. **Yesterday** [00:00 - 23:59 Default]
- iii. **Last 5 days**
- iv. **Last 7 days**
- v. **Last month**
- vi. **Last 6 months**
- vii. **Last year**
- viii. **Custom Range** » 00/00/00 to 00/00/00

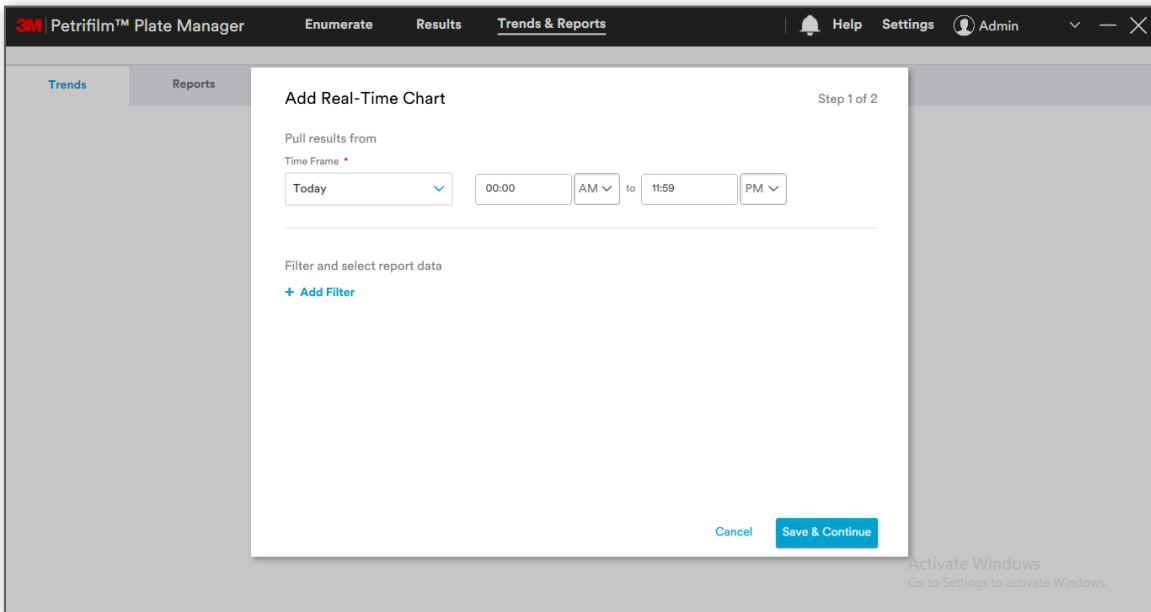


When user selects **Today** or **Yesterday**, a dialog will appear as shown below along with the time values:

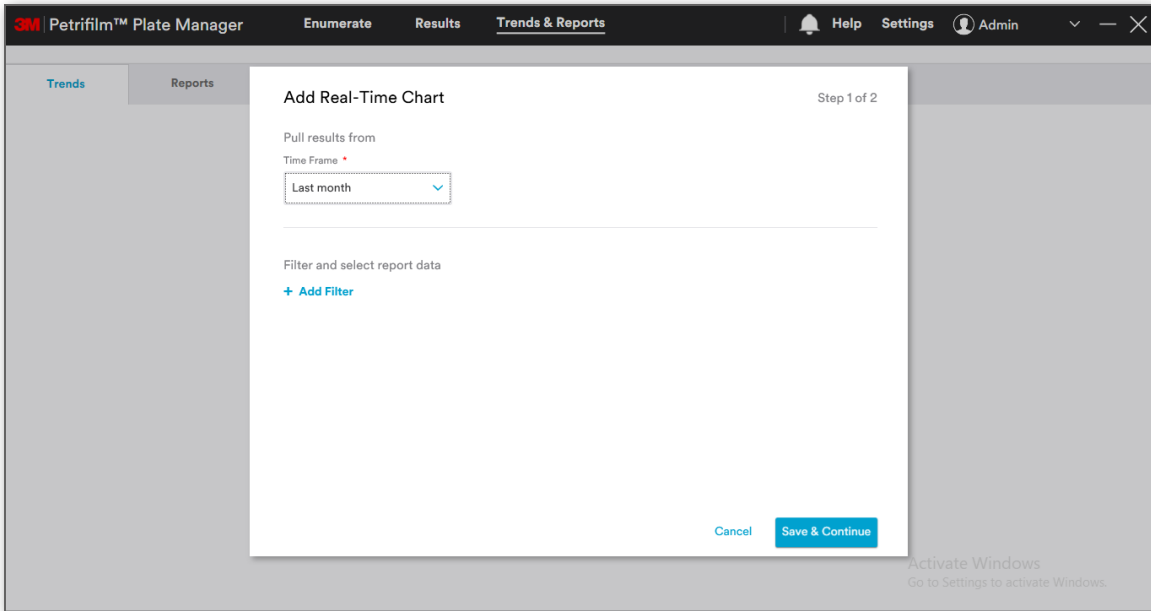


The above image is for a 24 hour clock.

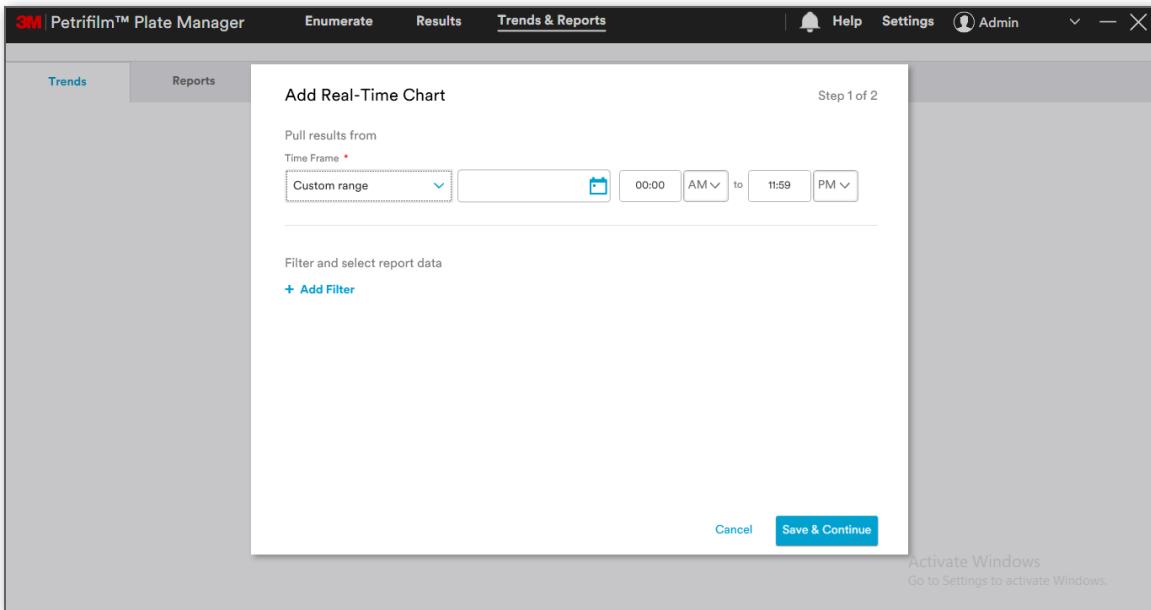
In case a 12 hour AM/PM clock is selected in the **Date & Time Format**, it will appear as below:



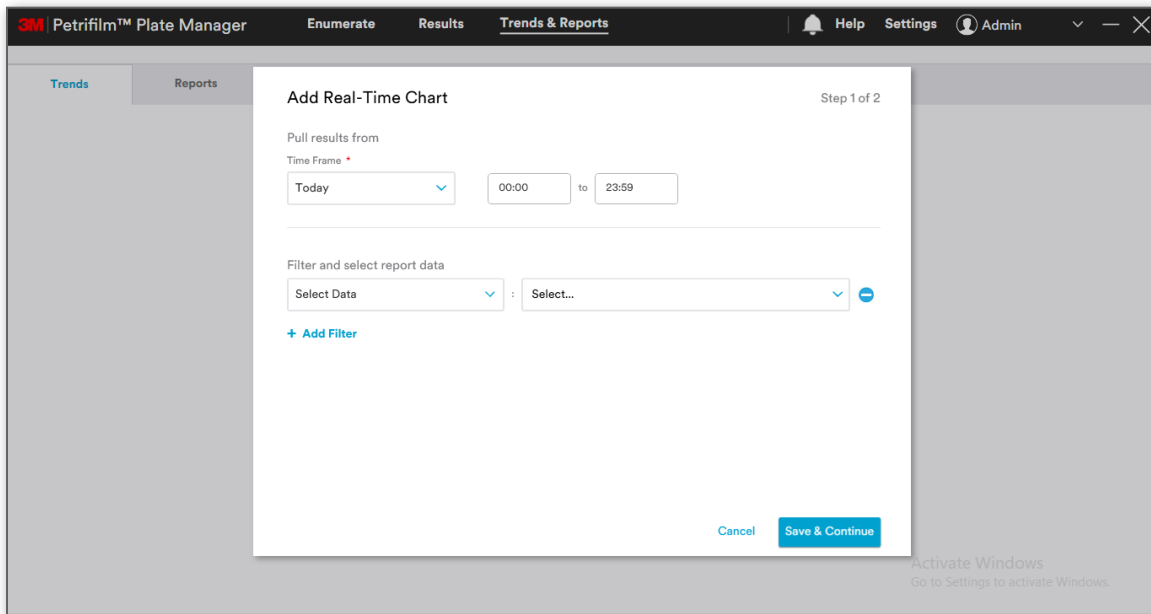
When **Last 5 days/Last 7 days/Last month/Last 6 months/Last year** are selected from the dropdown, a dialog will appear as below:



When user selects **Custom Range**, user has the provision to select the date and time.

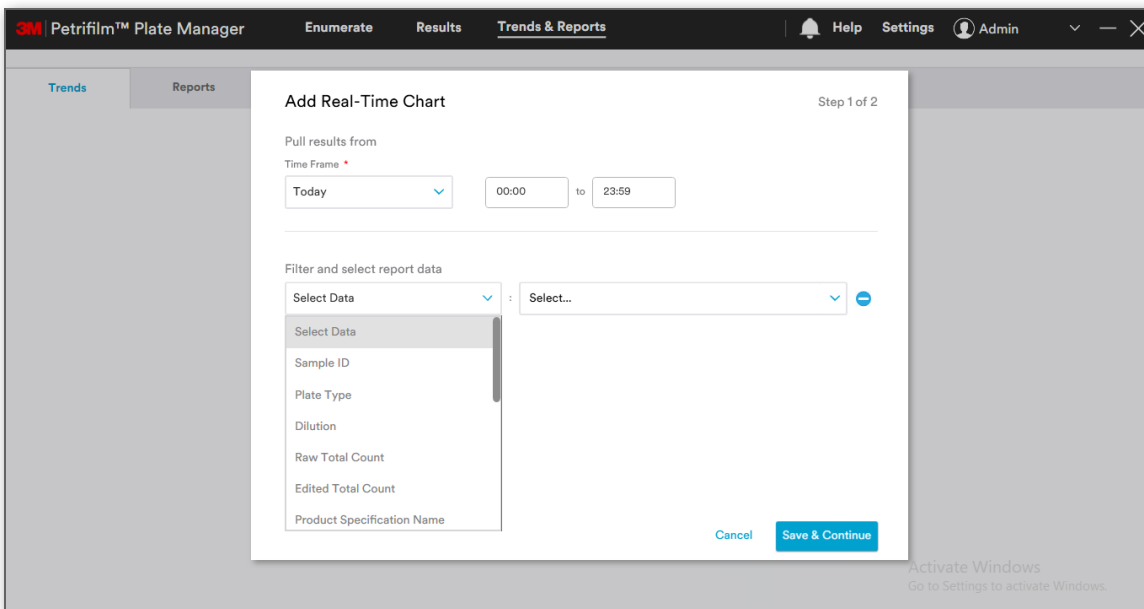


Click on **[Add Filter]** to filter and select reported data.

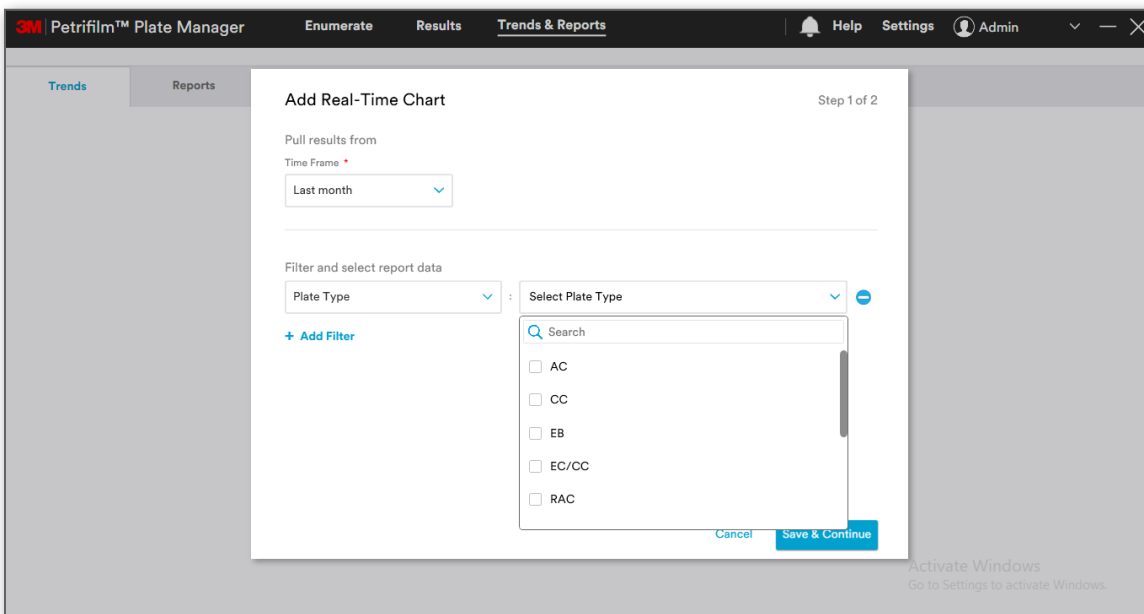


Under **Select Data**, the below options are present:

- i. **Sample ID**
- ii. **Plate Type**
- iii. **Dilution**
- iv. **Raw Total Count**
- v. **Edited Total Count**
- vi. **Product Specification Name**
- vii. **Dilution Scheme Name**
- viii. **Worklist**
- ix. **Enumerated By**
- x. **Calculated Result**
- xi. **Other Colonies Raw Total count**
- xii. **Other Colonies Total Edited count**
- xiii. **Edited By**
- xiv. **Result Range**

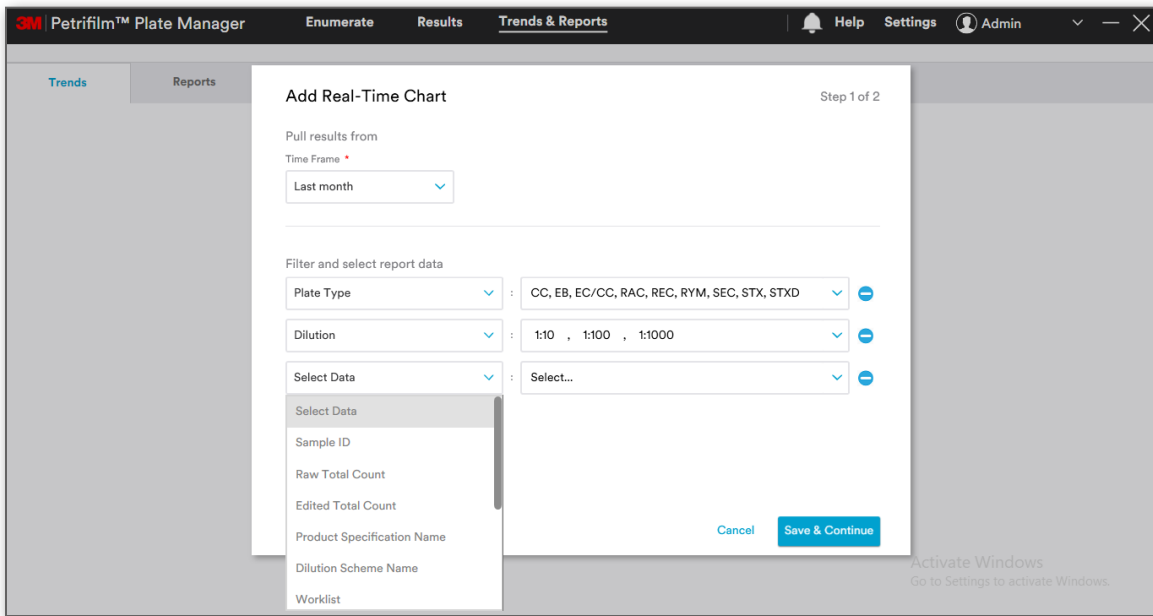


For instance, if user selects **Last month** from **Time Frame** and **Plate Type** from **Select Data**, corresponding Plate Types will be populated based on the **Time Frame** selected.

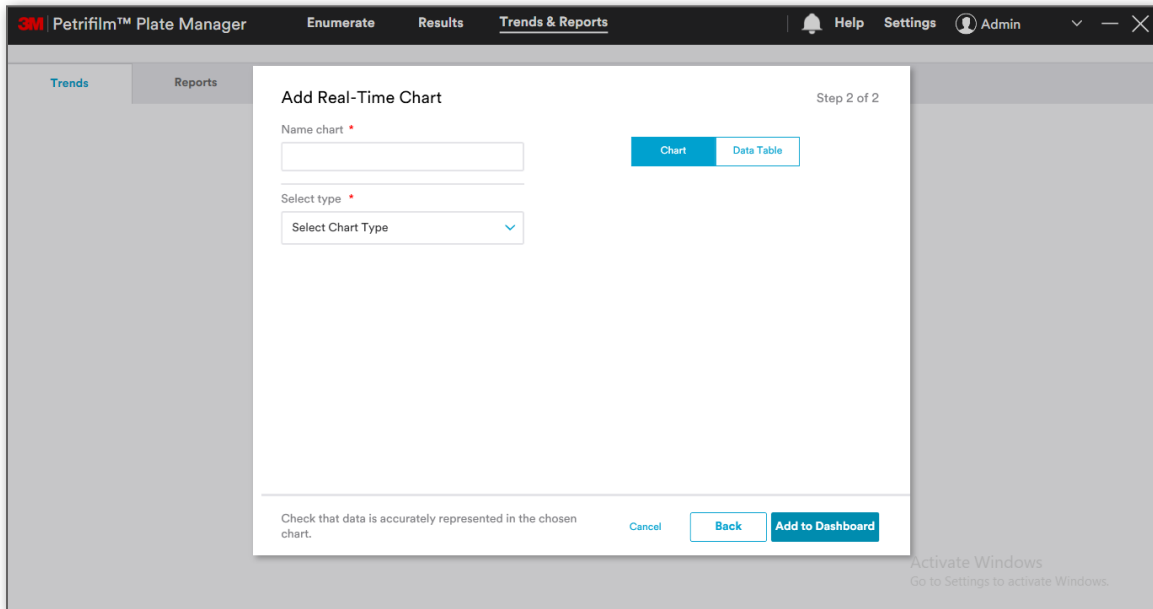




User can add other filters from the dropdown as per requirement.

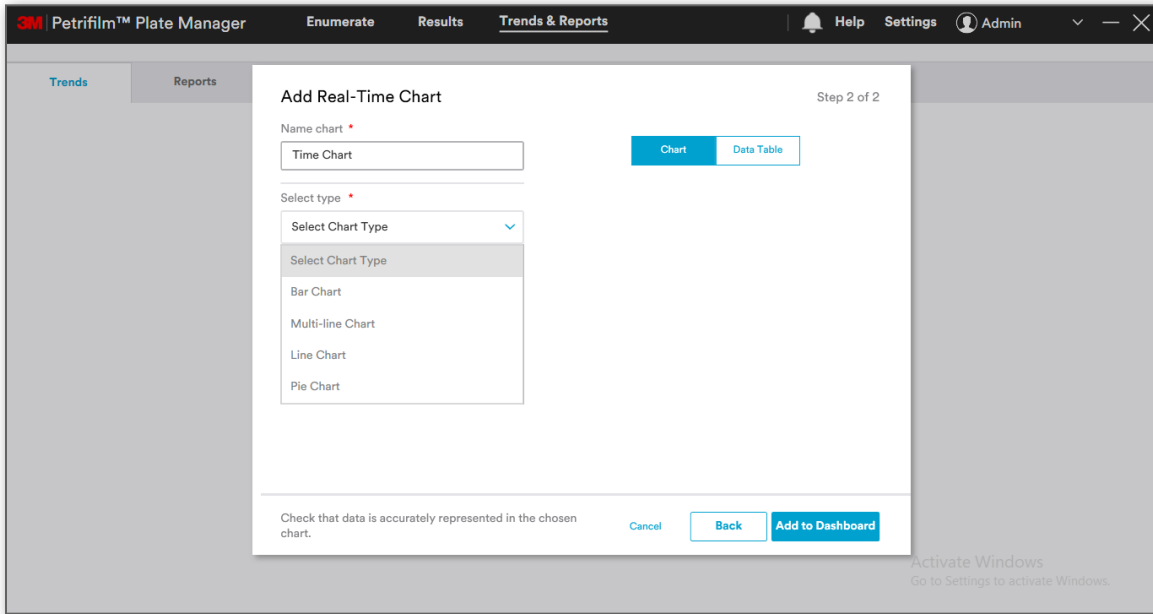


Click on [Save & Continue] to save the selected data and move to next window.

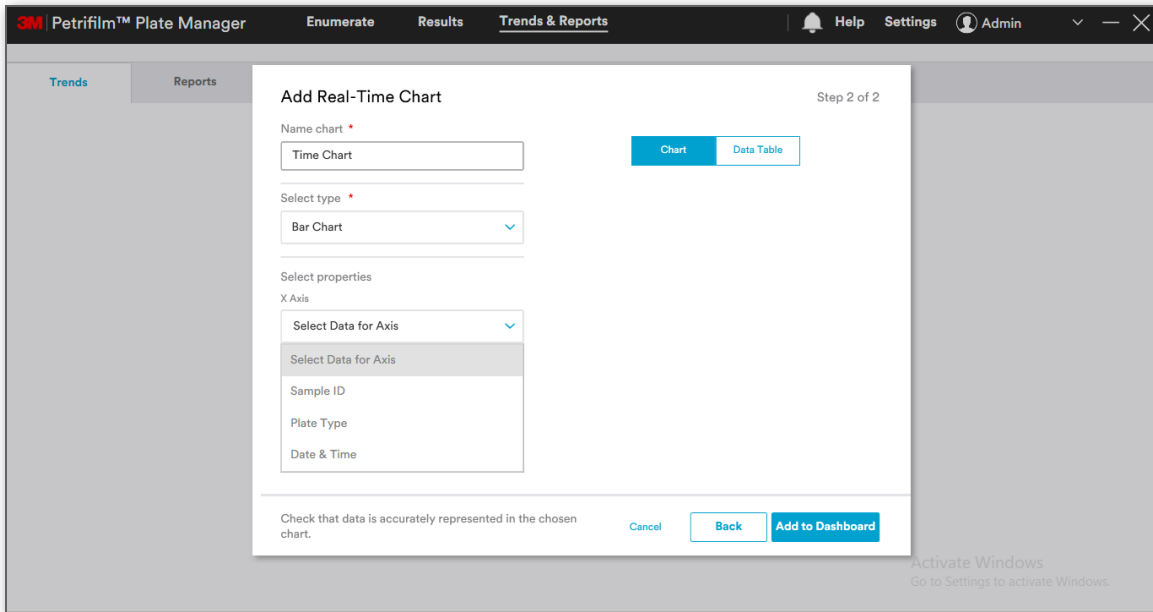


On Step 2 of 2, user will be able to select the **Chart Type** from **Select type** dropdown. Below are the different types of charts:

- i. **Bar Chart**
- ii. **Multi-line Chart**
- iii. **Line Chart**
- iv. **Pie Chart**



Select **Bar Chart** as the Chart type and map data for the X and Y axis.





User will be able to see the Chart data generated on the basis of Type and properties selected.

**Add Real-Time Chart** Step 2 of 2

Name chart \*  
Time Chart

Select type \*  
Bar Chart

Select properties  
X Axis  
Sample ID  
Y Axis  
Select Data for Axis

Select Data for Axis  
Calculated Result

Check that data is accurately represented in the chosen chart.

Cancel Back Add to Dashboard

**Add Real-Time Chart** Step 2 of 2

Name chart \*  
Time Chart

Select type \*  
Bar Chart

Select properties  
X Axis  
Sample ID  
Y Axis  
Calculated Result

Calculated Result

Sample ID

Sample ID	Calculated Result
1501	~500
1503(EC)	~500
1504	~500
1505(CC)	~500
1507	~1000
1509	~8000

Check that data is accurately represented in the chosen chart.

Cancel Back Add to Dashboard





Sample ID	Date & Time	Plate Type	Dil.
1501	07/21/2020 23:04	CC	1:1C
1502	07/21/2020 23:04	EB	1:1C
1503	07/21/2020 23:04	EC/CC	1:1C
1504	07/21/2020 23:04	RAC	1:1C
1505	07/21/2020 23:04	REC	1:1C
1506	07/21/2020 23:04	RYM	1:1C
1507	07/21/2020 23:04	SEC	1:1C
1508	07/21/2020 23:04	STX	1:1C
1509	07/21/2020 23:04	STXD	1:1C

Clicking on **[Add to Dashboard]** will add the created Chart to the Dashboard.

Software shall allow user to plot graphs with the below combinations:

i. Bar chart

X-axis	Y-axis
Date & Time	Number of plates
Plate Type	Calculated Result
Date & Time	Calculated Result
Sample ID	Calculated Result

ii. Line chart

X-axis	Y-axis
Date & Time	Number of plates
Plate Type	Calculated Result
Date & Time	Calculated Result
Sample ID	Calculated Result

iii. Multi-line chart

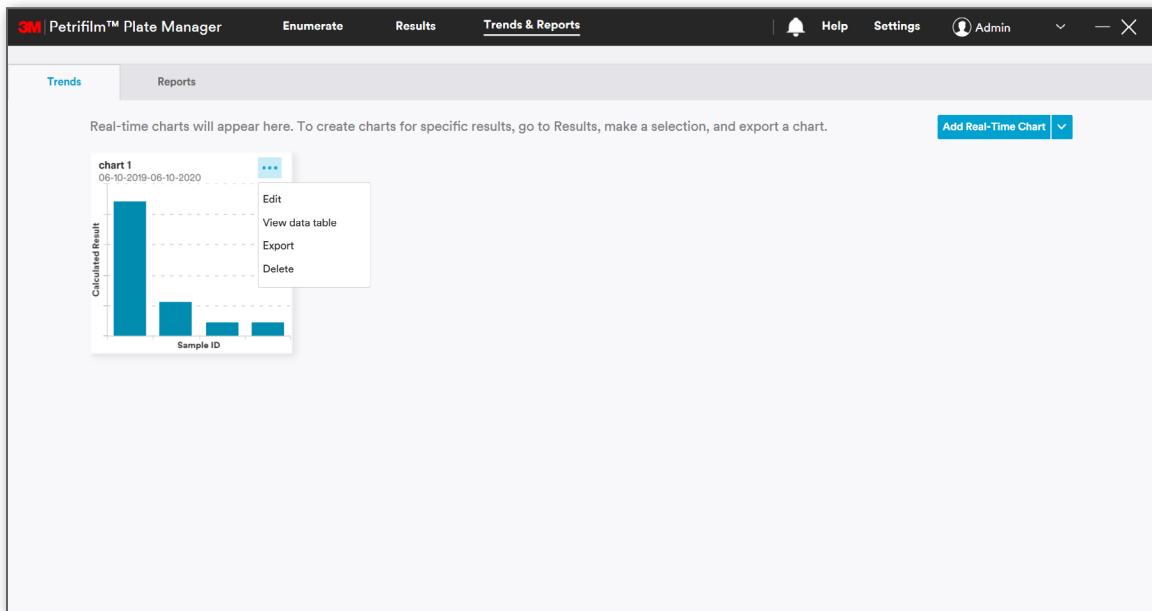
X-axis	Y-axis
Date & Time	Calculated Result
Sample ID	Calculated Result

iv. Pie chart

X-axis
Plate type
Enumerated By
Status

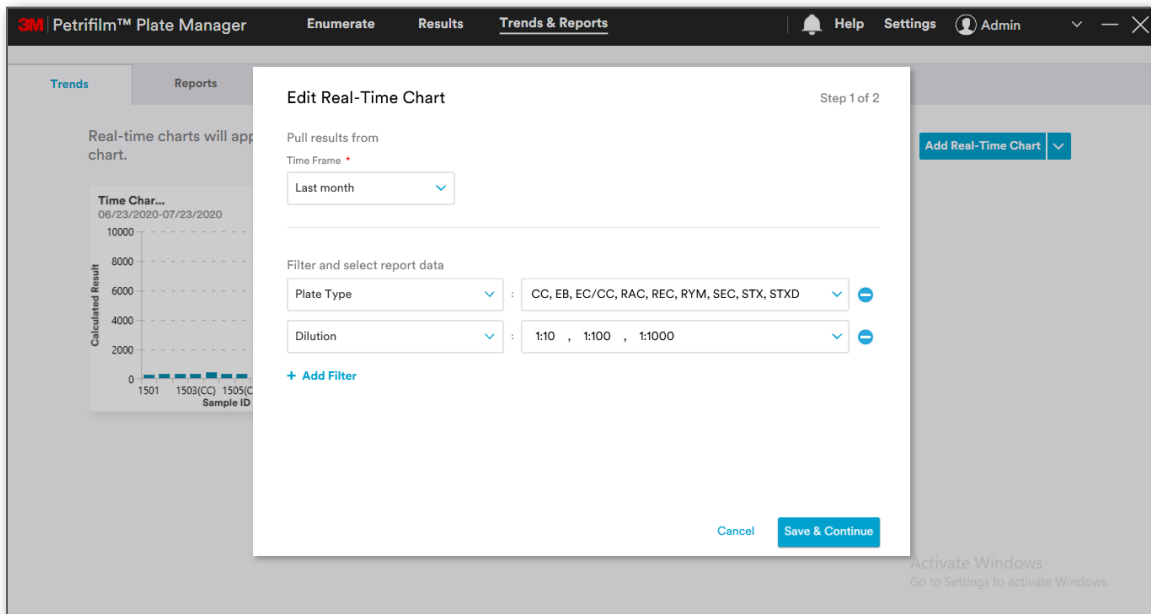
User can perform the following actions on the chart added:

1. **Edit**
2. **View data table**
3. **Export**
4. **Delete**

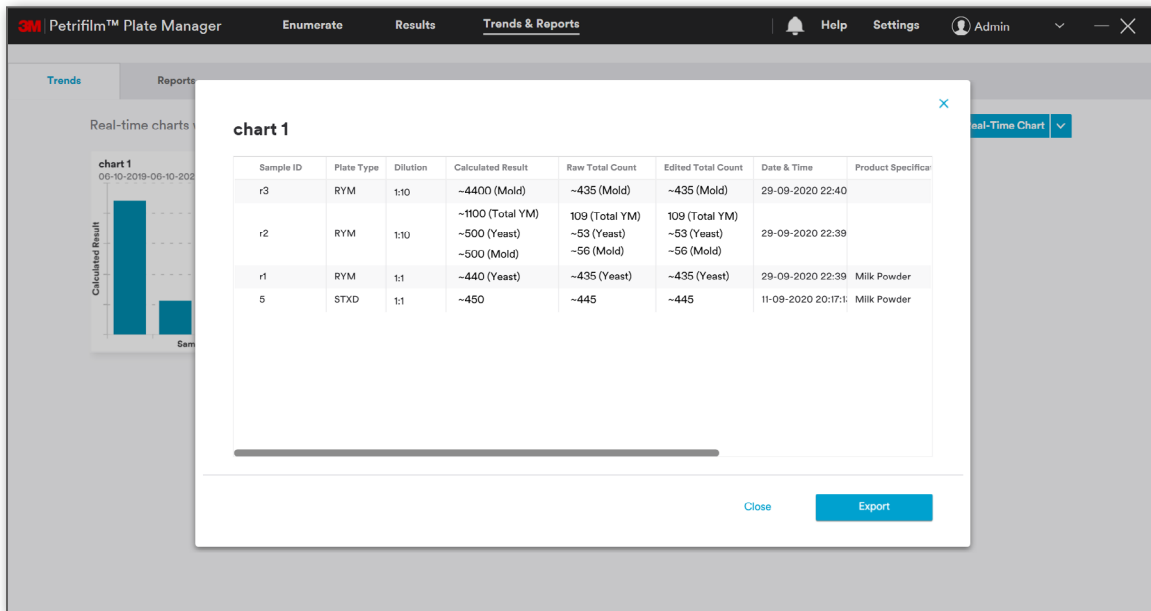




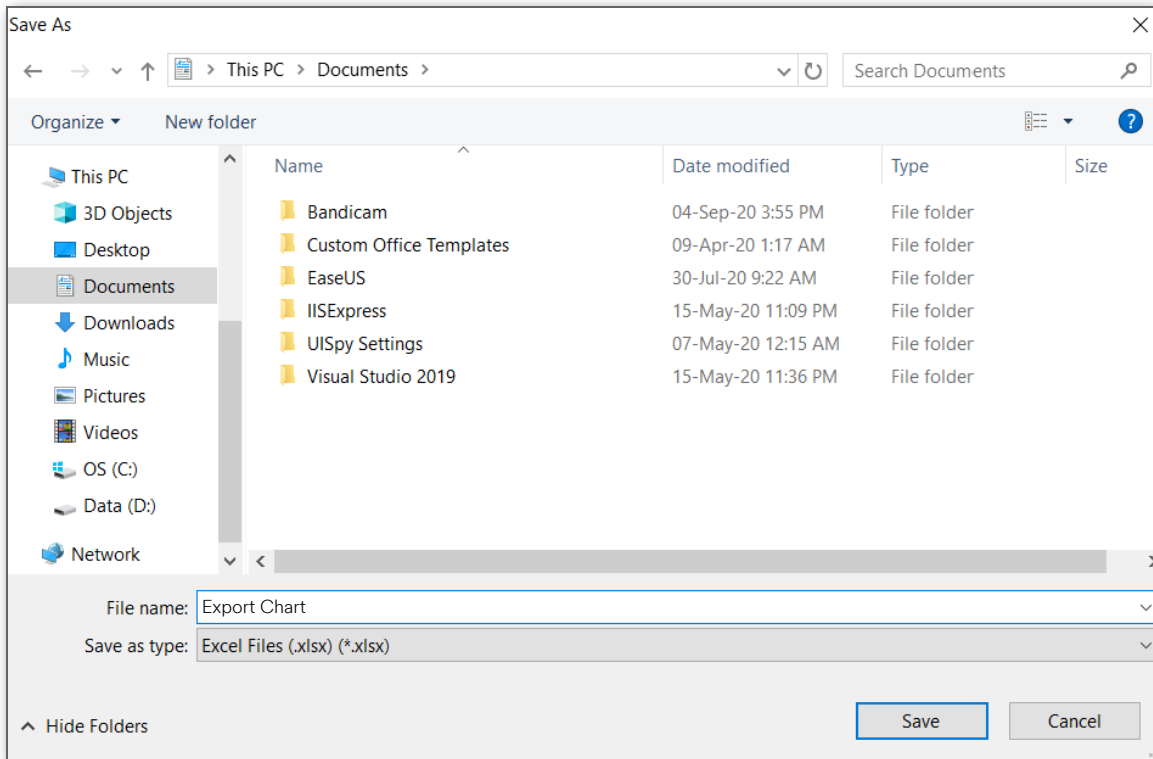
On clicking **[Edit]**, the Chart opens in Edit mode.



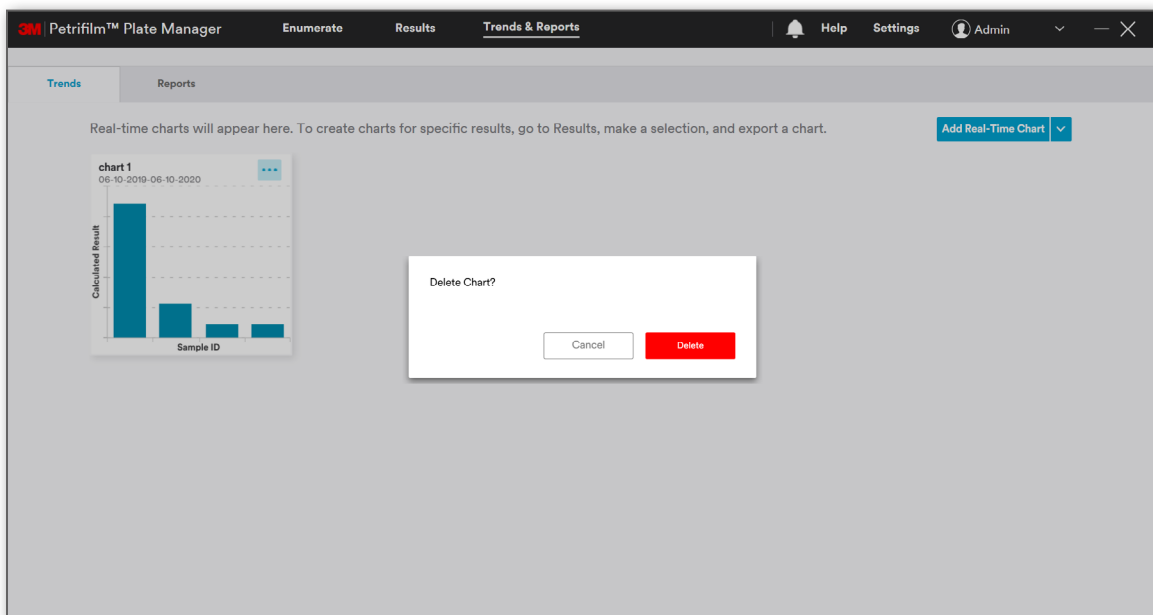
Clicking on **View data table** opens the data table. User can choose to close the data table or Export.



User can export the chart using **[Export]** option.

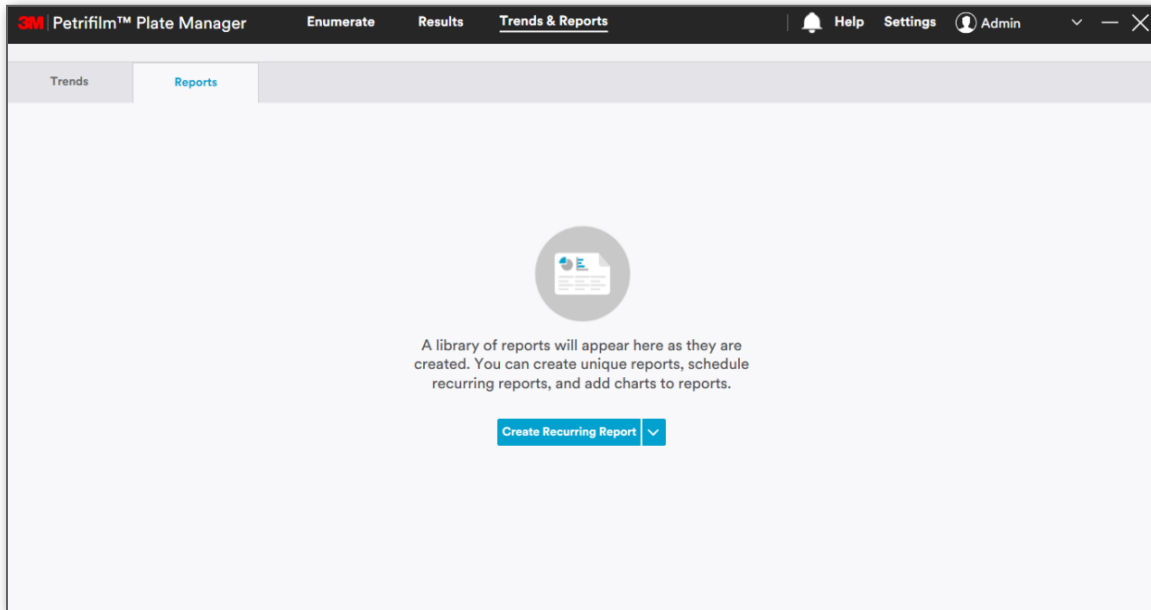


User can delete the chart using the **[Delete]** option.



## Reports:

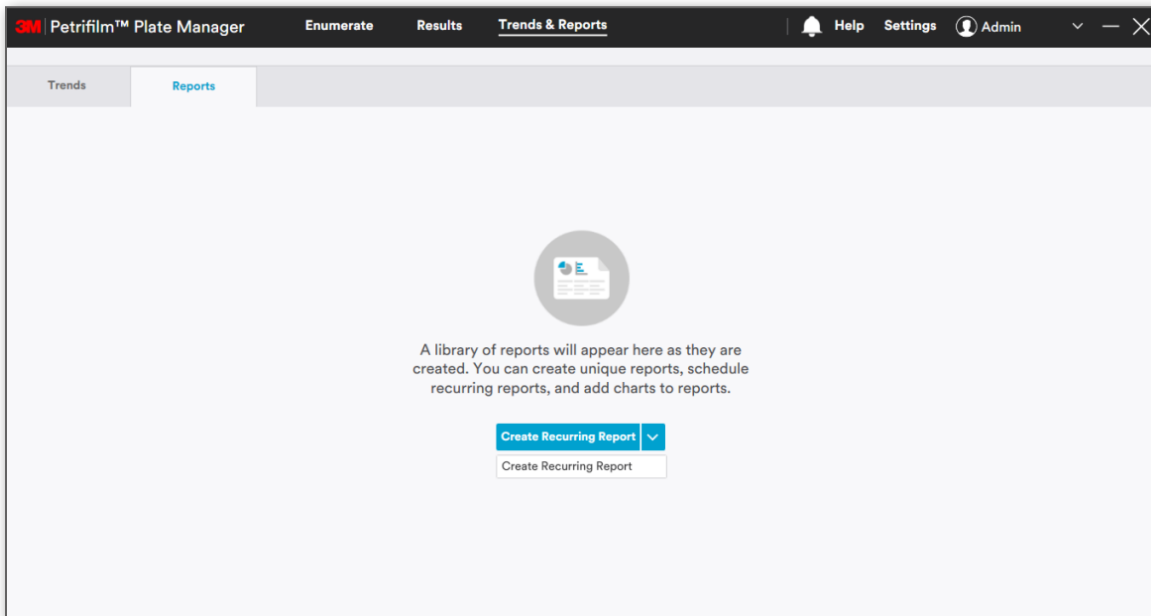
**Reports** tab provides a consolidated glimpse of graphs and charts for better data visualization.



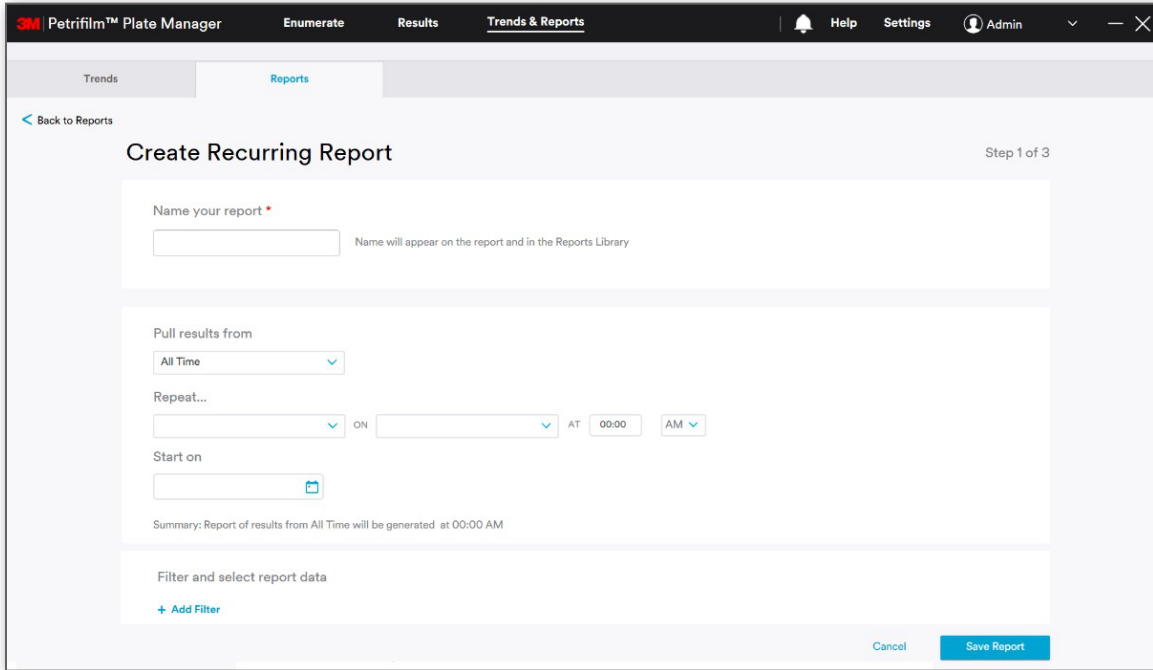
User can create reports using:

1. **[Create Recurring Report]**
2. **[Create report from Template]**

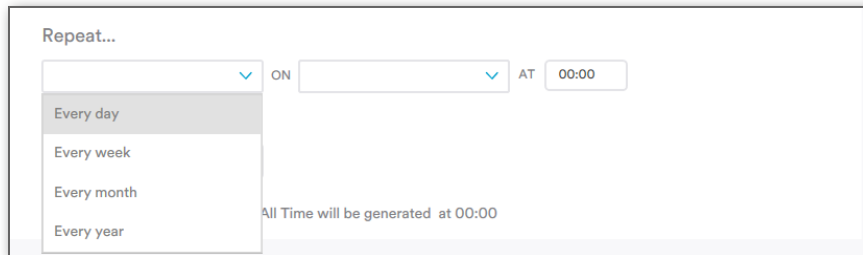
NOTE: Create from Report template will appear in dropdown only when a report is saved as a template.



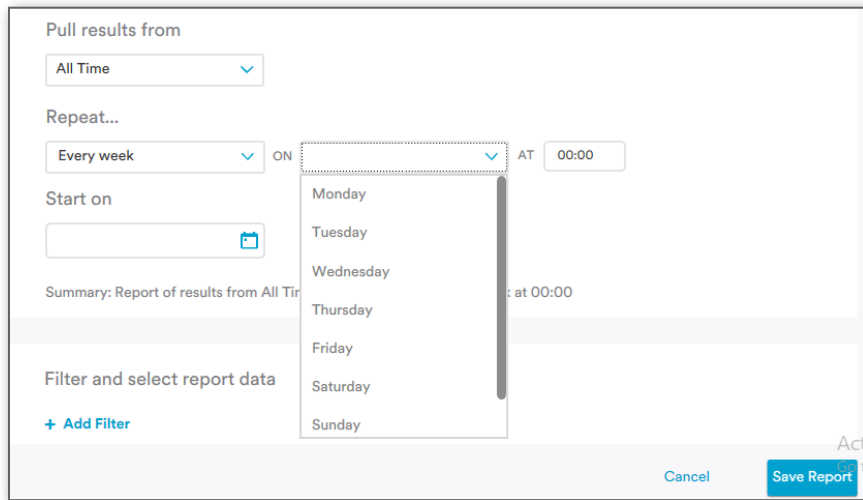
**Create Recurring Report:** Clicking on **Create Recurring Report** will open the *Create Recurring Report* screen. User must enter the Report name, **Pull Results from** and click on **[Save Report]**. By default, All Time is the selected choice in **Pull Results from**. The report of results from **All Time** will be generated. **Name your report** field is mandatory along with **Repeat...** section. User can add filters and select reported data.



Under **Repeat...** dropdown, user gets 4 options to generate recurrence report.



Based on the selection and time entered, the Start and End date can be selected. On the set time, a notification would occur under the notification icon that a report is generated.



Pull results from

All Time

Repeat...

Every week  ON Wednesday  AT 13:00

Start on

End on

Summary: Report of results from All Time will be generated Every week on Wednesday at 13:00 starting 07/09/2020

When user clicks on **[Save Report]**, the screen for Step 2 opens. In Step 2, user can:

- a. **[Customize Columns]**
- b. **[Add Charts]** (Optional)
- c. **[Add Logo]** (Optional)

3M Petrifilm™ Plate Manager Enumerate Results Trends & Reports Help Settings Admin

Trends Reports

Back to Reports

## Create Recurring Report Step 2 of 3

Report Data [Customize Columns](#)

Sample ID	Date & Time	Plate Type	Dilution	Raw Total Count	Edited Total Count	E
1500	07/08/2020 12:23:47	CC	1:10	0	TNTC	U
1501	07/08/2020 12:23:47	EB	1:100	25	25	U
1502	07/08/2020 12:23:47	EC/CC	1:10	27 (EC) 28 (CC)	27 (EC) 28 (CC)	U
1503	07/08/2020 12:23:47	RAC	1:10	24	24	U
1504	07/08/2020 12:23:47	REC	1:100	21 (EC) 22 (CC)	21 (EC) 22 (CC)	U
1506	07/08/2020 12:23:47	SEC	1:100	17	17	U
1507	07/08/2020 12:23:47	STX	1:100	0	TNTC	U
1508	07/08/2020 12:23:47	STXD	1:10	56	56	U
1234	05/27/2020 16:00:00	AC	1:10	50	50	U
1234	05/27/2020 04:00:00	SEG	1:10	51	51	U
4567	05/27/2020 04:00:00	AC	1:10	53	53	U
1234	05/26/2020 16:35:00	EB	1:10	45	45	U
1234	05/26/2020 16:31:00	CC	1:10	45	45	U

▼ Add Charts (optional)

+ Add Chart

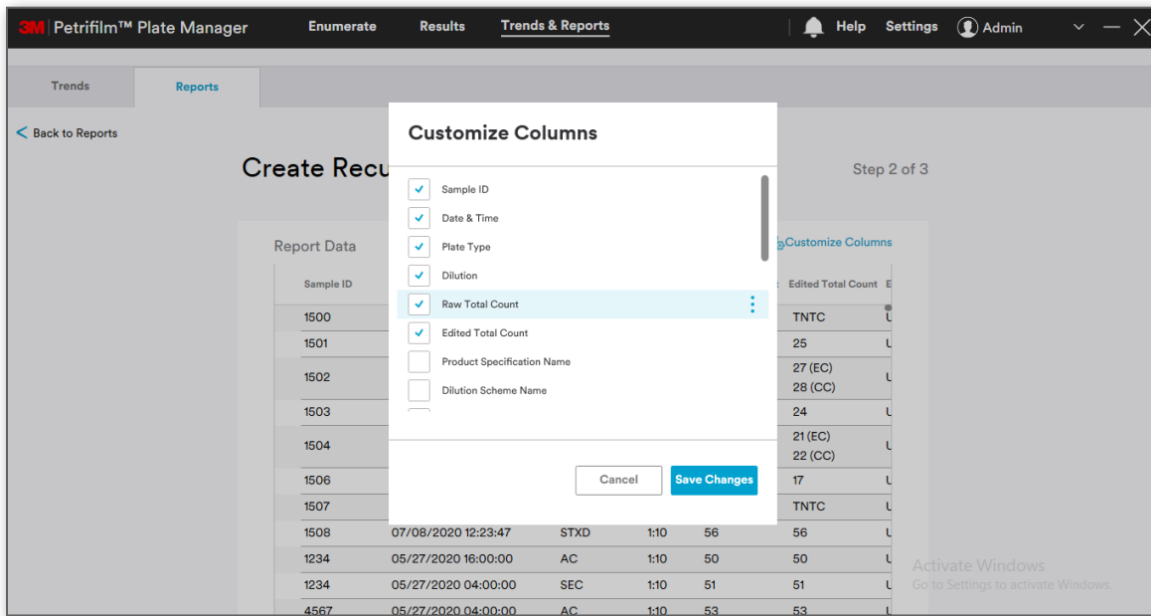
▼ Add Logo (optional)

+ Add Logo

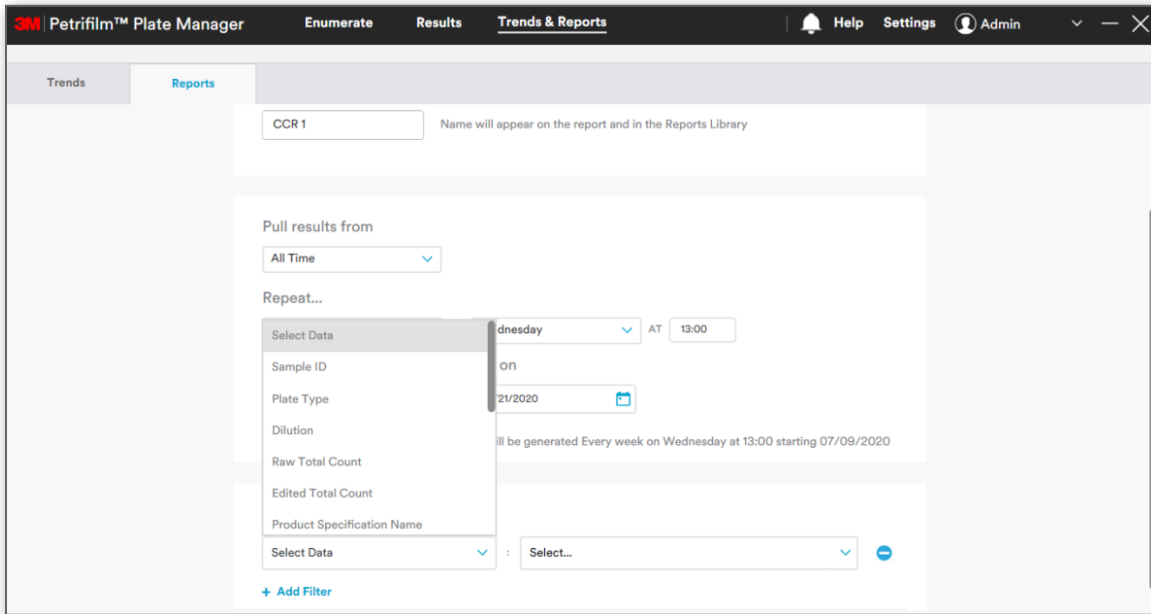
Recommended size less than 1MB.

Back Preview Report

Clicking on **[Customize Columns]** will open *Customize Columns* dialog.

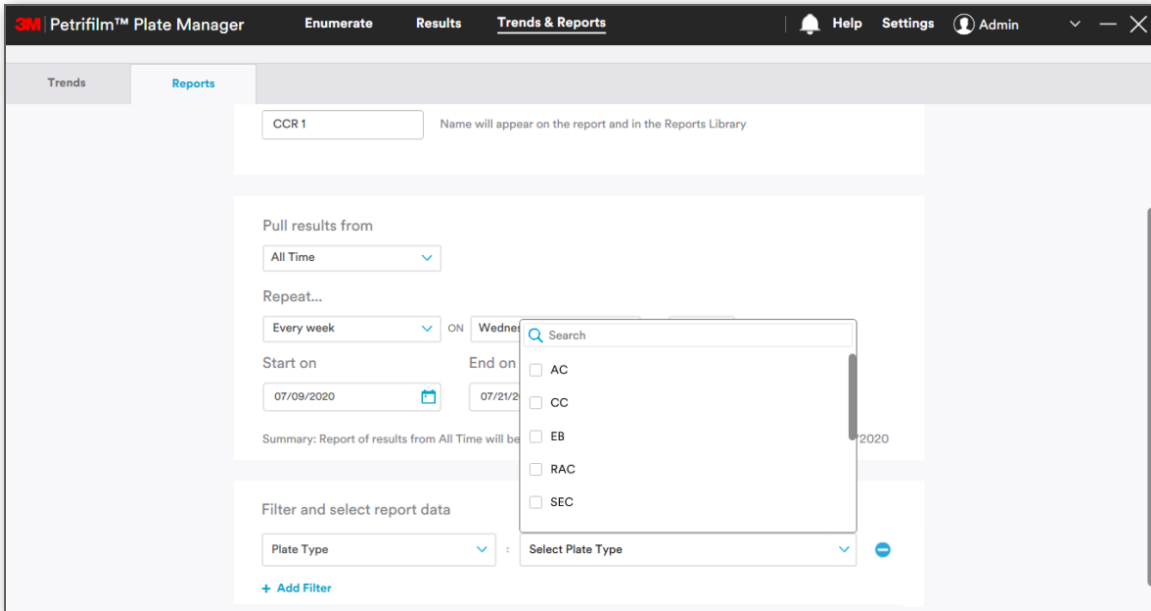


a. **[Add Filter]** and report data has the following options:

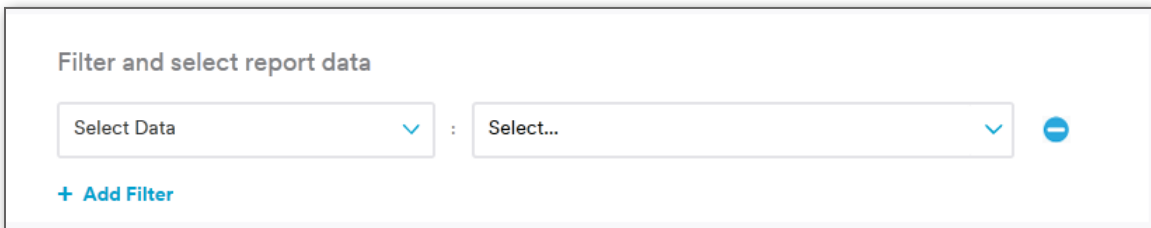




For e.g. If user selects **Plate Type** as the field to apply a filter, then all the plate types for which the results are present in the system shall appear in the combo box.

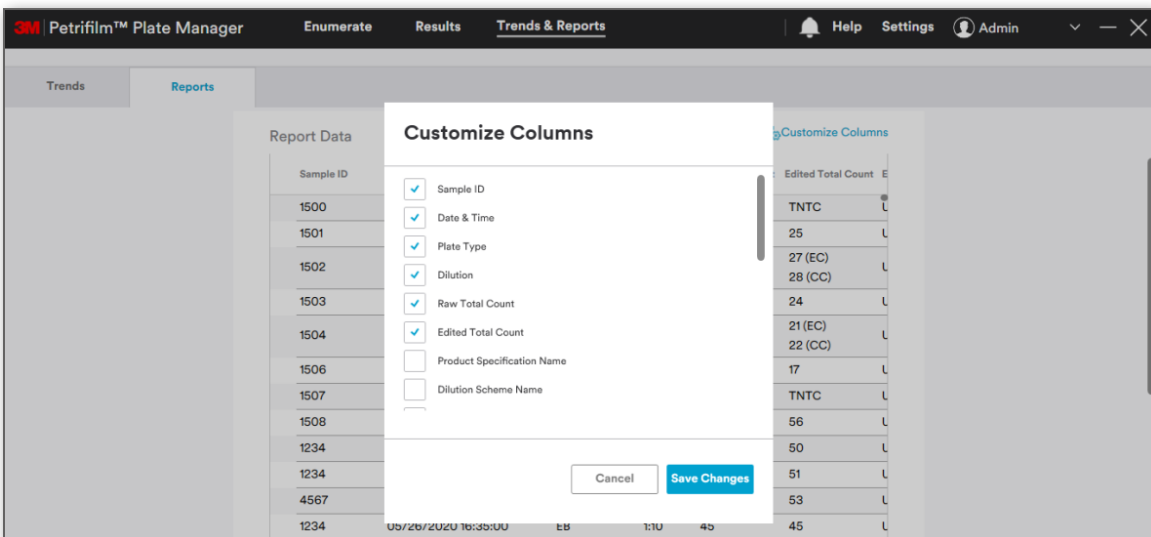


User has been given the provision to add as well as delete the fields/columns on which the filter can be applied. Clicking on **[Add Filter]** would allow user to add new fields/columns.



**b. Customize Columns:**

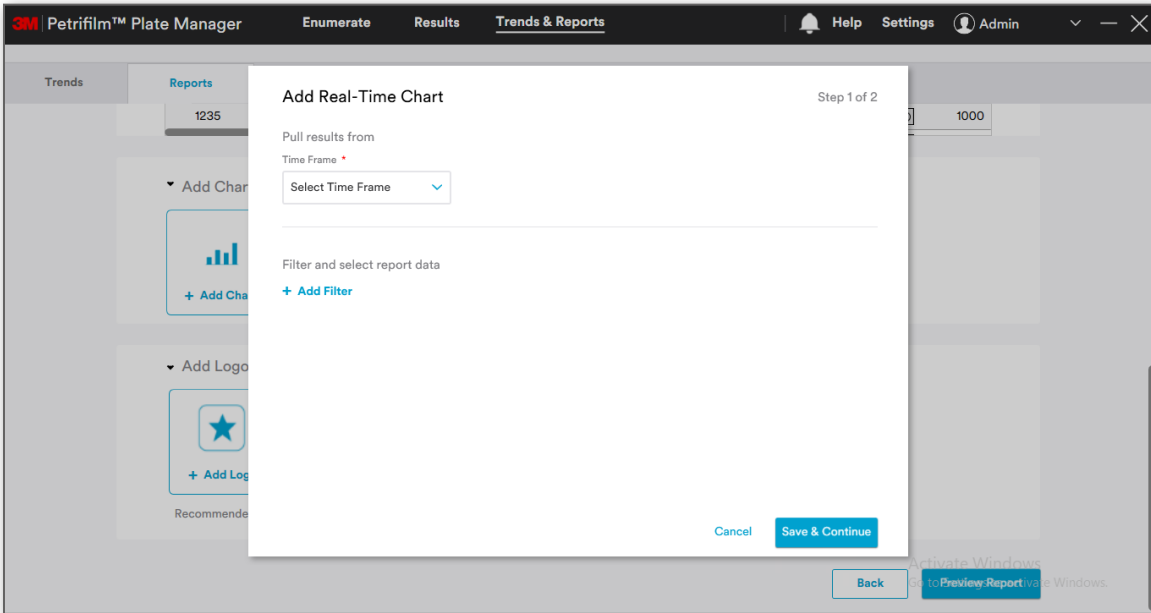
User can customize columns while creating report by checking/un-checking the checkbox to show/hide a column.



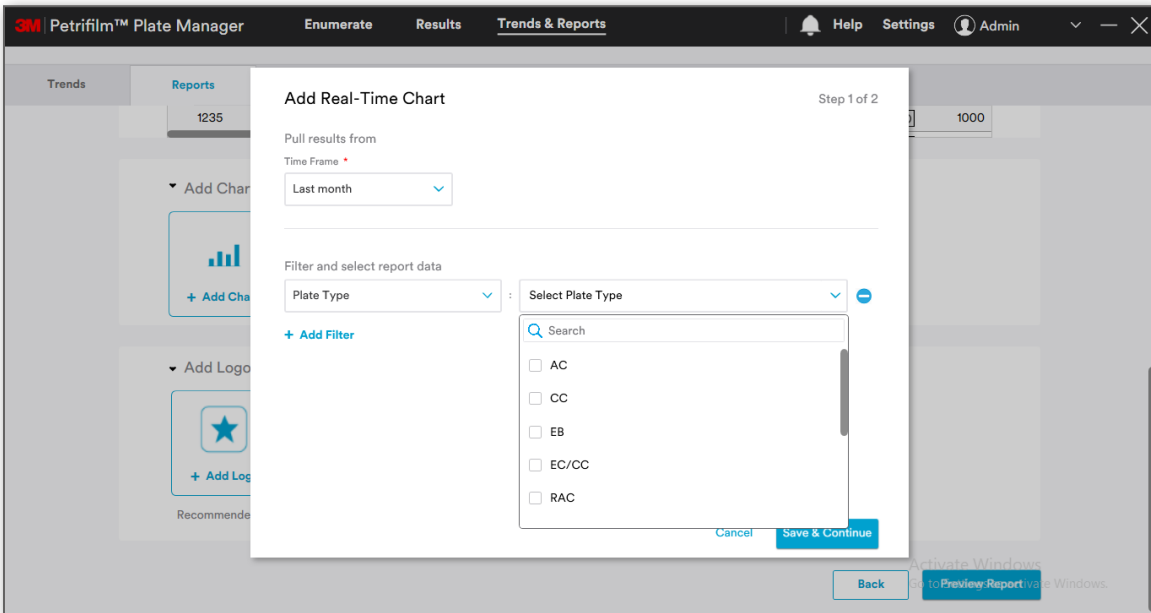
c. **Add Charts:** User has the provision to **[Add Charts]** while creating the report. It is optional.



Clicking on **[Add Chart]** will open the *Add Real-Time Chart* dialog.



User can pull results from a certain time frame while creating a Chart.



Click on **[Save & Continue]** to save the selected data.



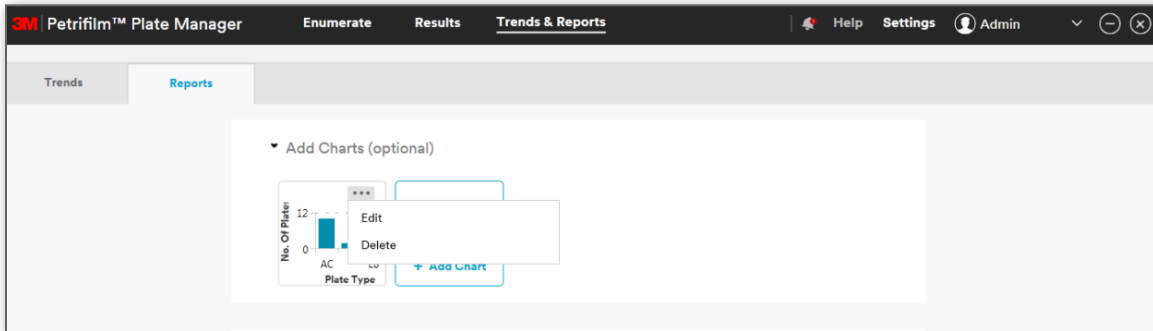
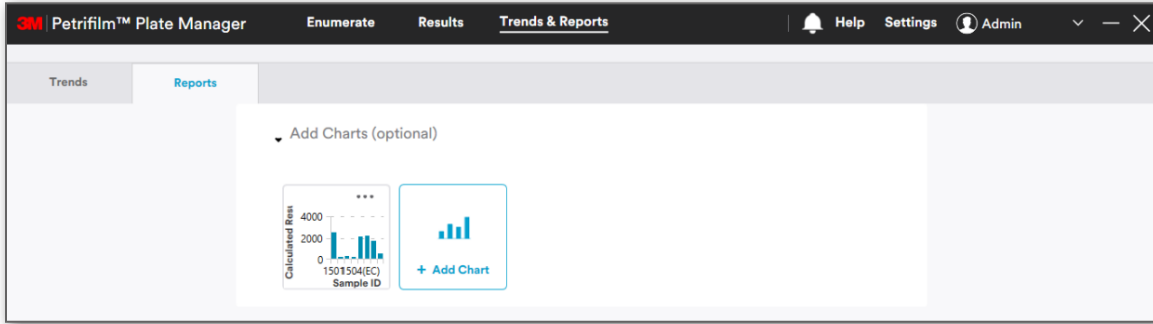
In Step 2: Enter chart name, select chart type and properties. Chart/Data Table will be populated.

Data-table can be seen as:

Sample ID	Date & Time	Plate Type	Dil.
1500	07/21/2020 23:04	AC	1:1C
1501	07/21/2020 23:04	CC	1:1C
1502	07/21/2020 23:04	EB	1:1C
1503	07/21/2020 23:04	EC/CC	1:1C
1504	07/21/2020 23:04	RAC	1:1C
1505	07/21/2020 23:04	REC	1:1C
1506	07/21/2020 23:04	RYM	1:1C
1507	07/21/2020 23:04	SEC	1:1C
1508	07/21/2020 23:04	STX	1:1C
1509	07/21/2020 23:04	STXD	1:1C

Clicking on **[Cancel]** button on step 1 or step 2 of Add Chart shall cancel the chart creation process. While, clicking on **[Back]** button on step 2 of Add Chart process shall take the user to step 1 with all the details populated/retained.

Clicking on **[Add to Report]** will add the chart to the report.



User can **Edit/Delete** the chart created in Step 2.

- d. **Add Logo:** User can select an image to be used as a logo. Supported image formats are .jpg and .png. User can add maximum of 3 logos.





Clicking on [Preview Report] will take user to Step 3 wherein user will be able to see the list of customized columns and the charts that were added. Based on the selection of the columns report, the preview will be displayed. User will have an option to save the report as a Template.

Petrifilm™ Plate Manager
Enumerate Results Trends & Reports
Help Settings Admin

Trends
Reports

[Back to Reports](#)

## Create Recurring Report

Step 3 of 3

Review Report

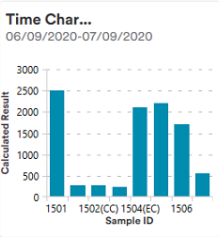
**CCR1**

03/06/2020-07/08/2020

Created on 07/09/2020

**Time Char...**

06/09/2020-07/09/2020



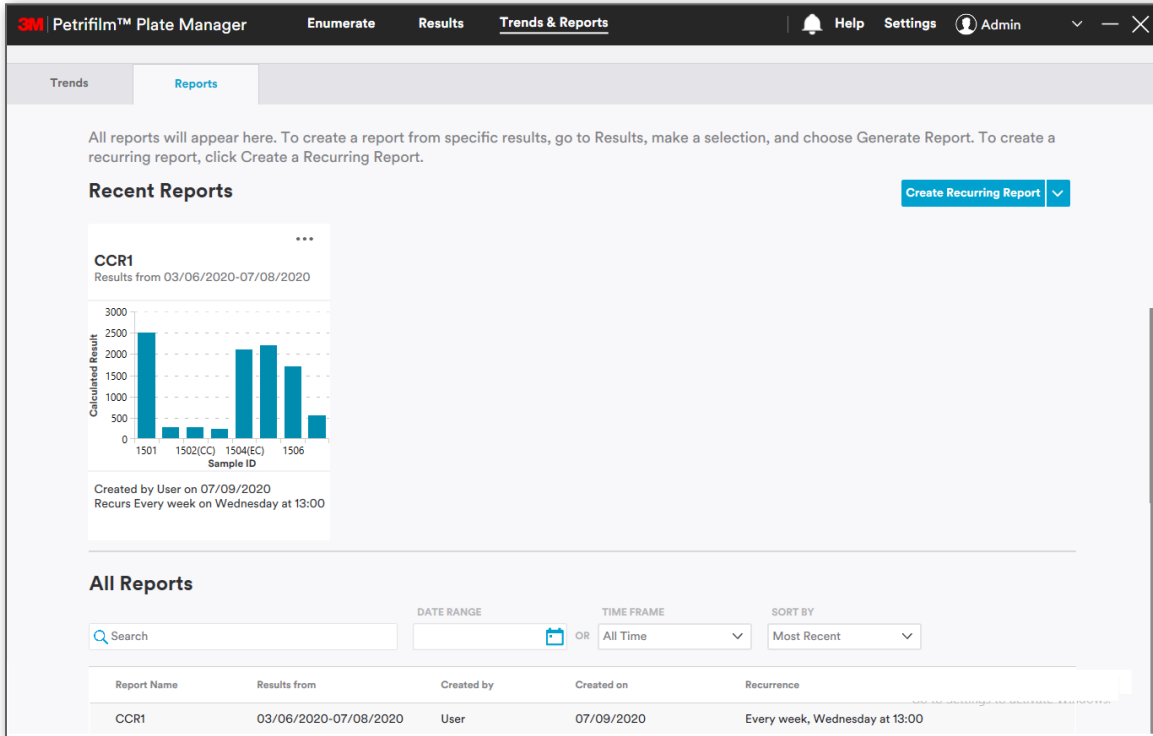
Sample ID	Date & Time	Plate Type	Dilution	Raw Total Count	Edited Total Count	Enumerated by
1501	07/08/2020 12:23:47	EB	1:100	25	25	User
1502	07/08/2020 12:23:47	EC/CC	1:10	27 (EC) 28 (CC)	27 (EC) 28 (CC)	User
1503	07/08/2020 12:23:47	RAC	1:10	24	24	User
1504	07/08/2020 12:23:47	REC	1:100	21 (EC) 22 (CC)	21 (EC) 22 (CC)	User
1506	07/08/2020 12:23:47	SEC	1:100	17	17	User
1508	07/08/2020 12:23:47	STXD	1:10	56	56	User
1234	05/27/2020 16:00:00	AC	1:10	50	50	User
1234	05/27/2020 04:00:00	SEC	1:10	51	51	User
4567	05/27/2020 04:00:00	AC	1:10	53	53	User
1234	05/26/2020 16:35:00	EB	1:10	45	45	User
1234	05/26/2020 16:31:00	CC	1:10	45	45	User
4567	05/26/2020 10:58:22	STX	1:10	87	87	User
4567	05/26/2020 06:49:00	AC	1:10	23	23	User

Save Report as Template

Save as template

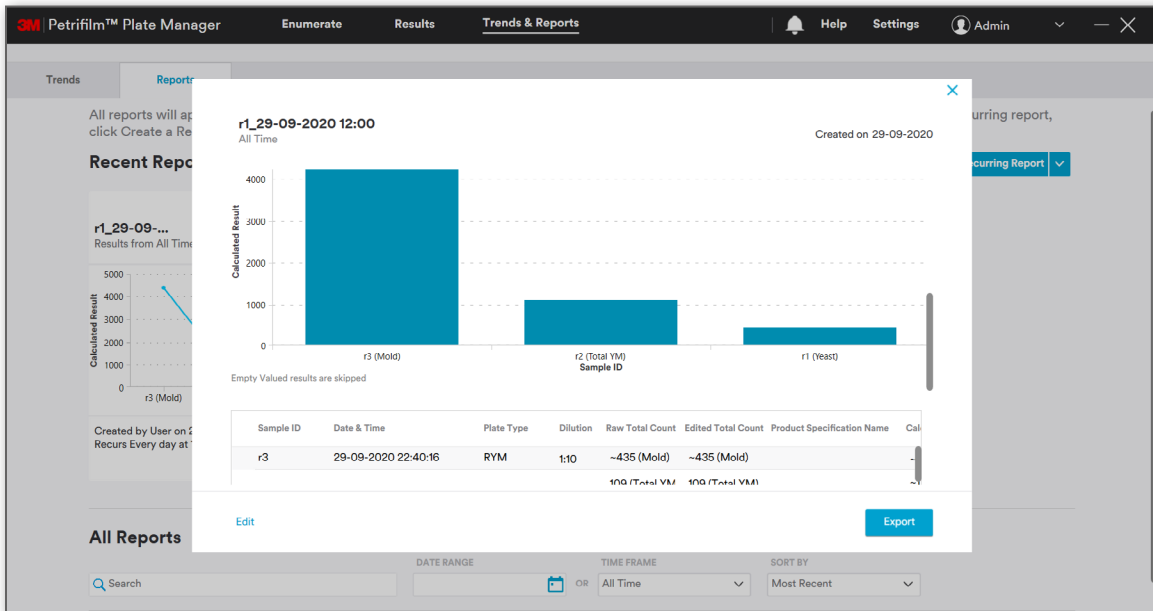
Cancel
Back
Create Report

Clicking on **[Create Report]** will create the report and take the user to the **Reports** dashboard. User will be able to see the **Recent Reports** on the left most corner (i.e. First position). All the reports can be found in the lower grid under **All Reports**.



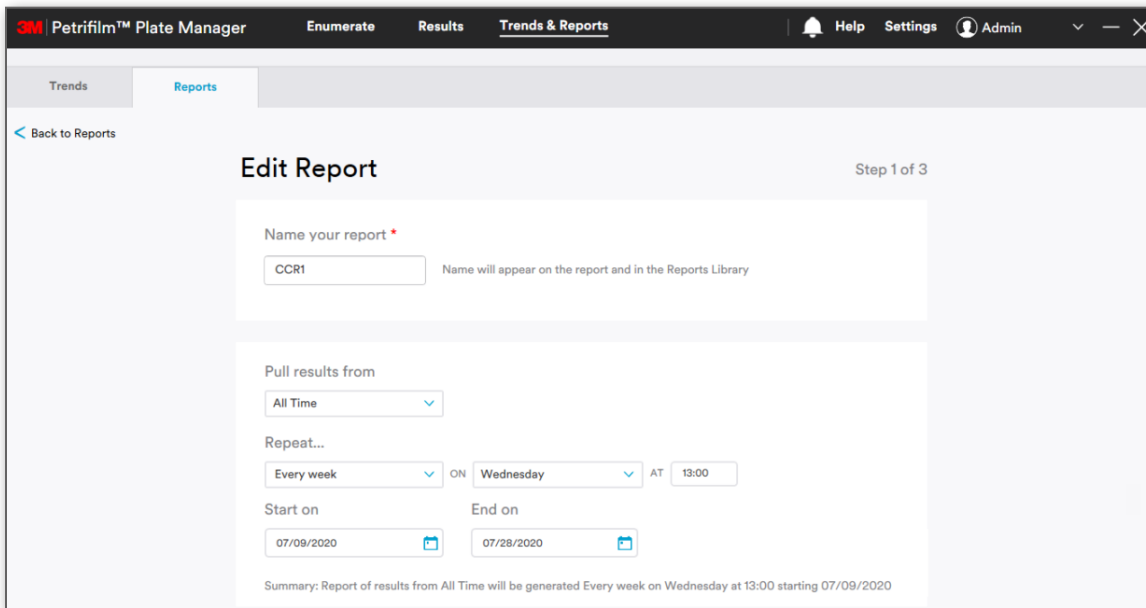
User can double click on a report (tile) for the reports to be viewed. Similarly, a user can double click on the row under **All Reports** to view the report.

If a report has multiple charts, then only the first chart added in the report will be seen on the main report screen.



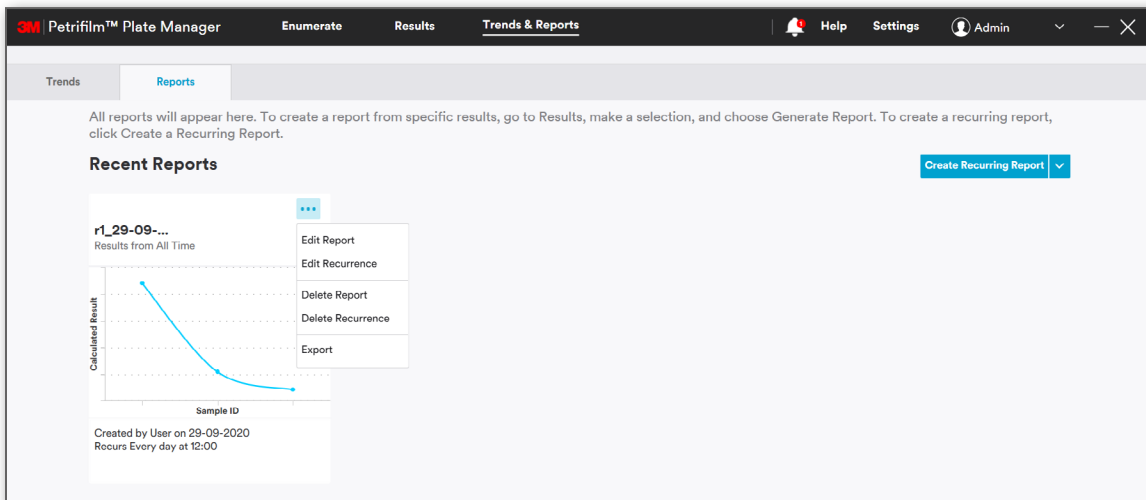


Clicking on **[Edit]** while in Preview mode will then open the report in Edit Mode.



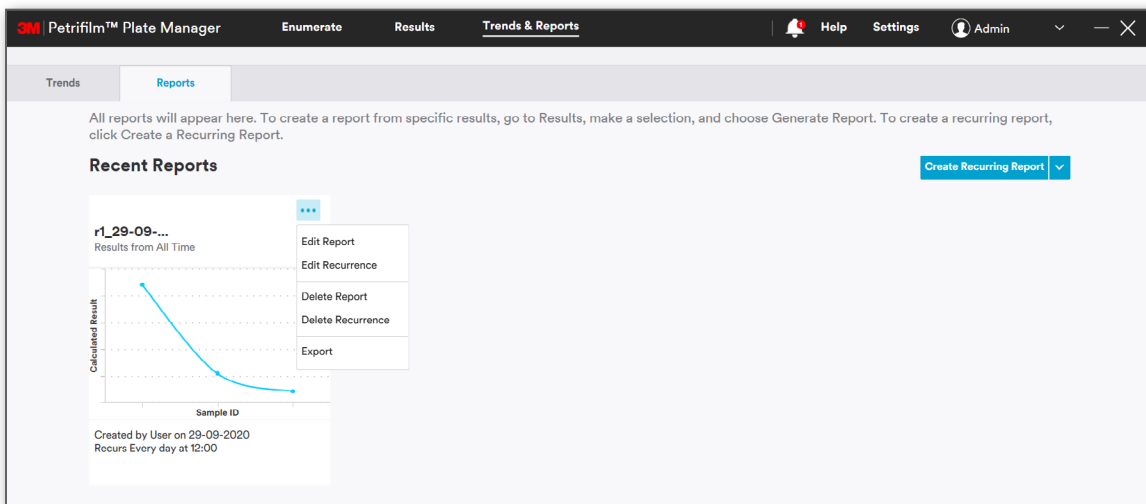
User can perform the below given actions on the recurring report. Click on the 3 dots (...) to view the options under **All Reports**.

1. **Edit Report**
2. **Edit Recurrence**
3. **Delete Report**
4. **Delete Recurrence**
5. **Export**

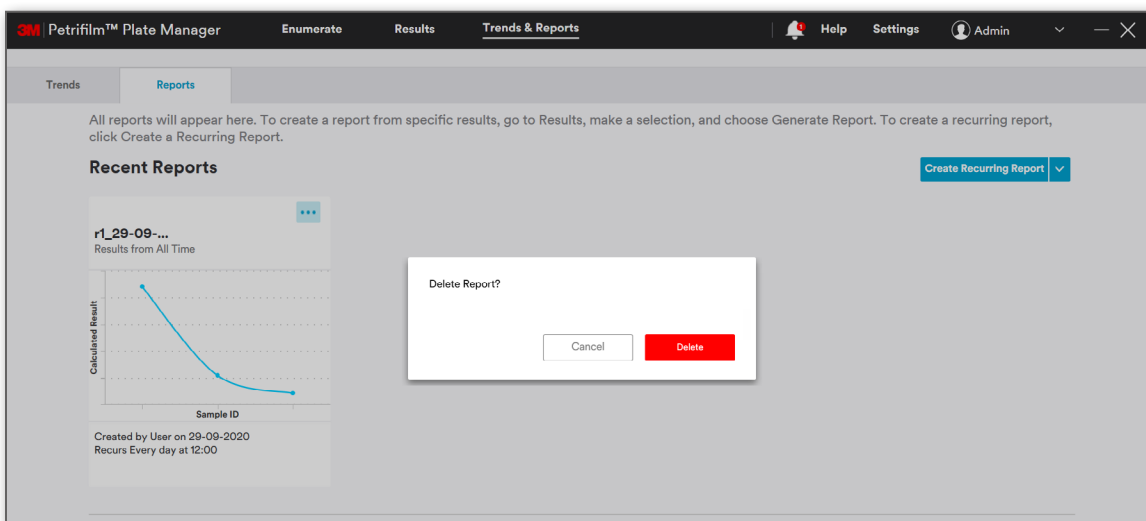




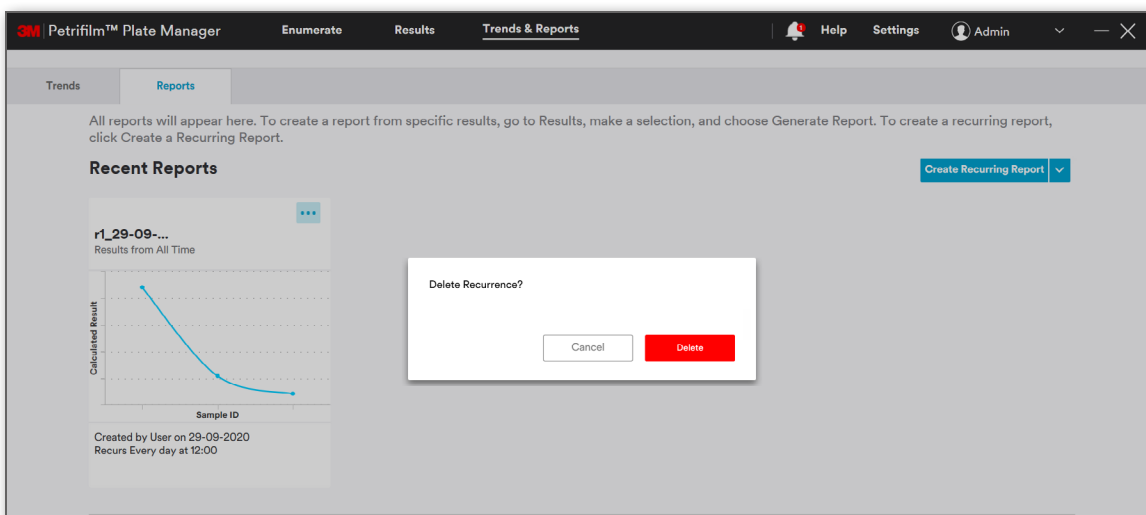
**Edit Report / Edit Recurrence:** Clicking on **Edit Report / Edit Recurrence** will open the report in Edit mode.



**Delete Report:** Clicking on **Delete Report** will open a confirmation dialog to delete report. Clicking on **[Delete]** will delete the report. **[Cancel]** will cancel the action and close the dialog.



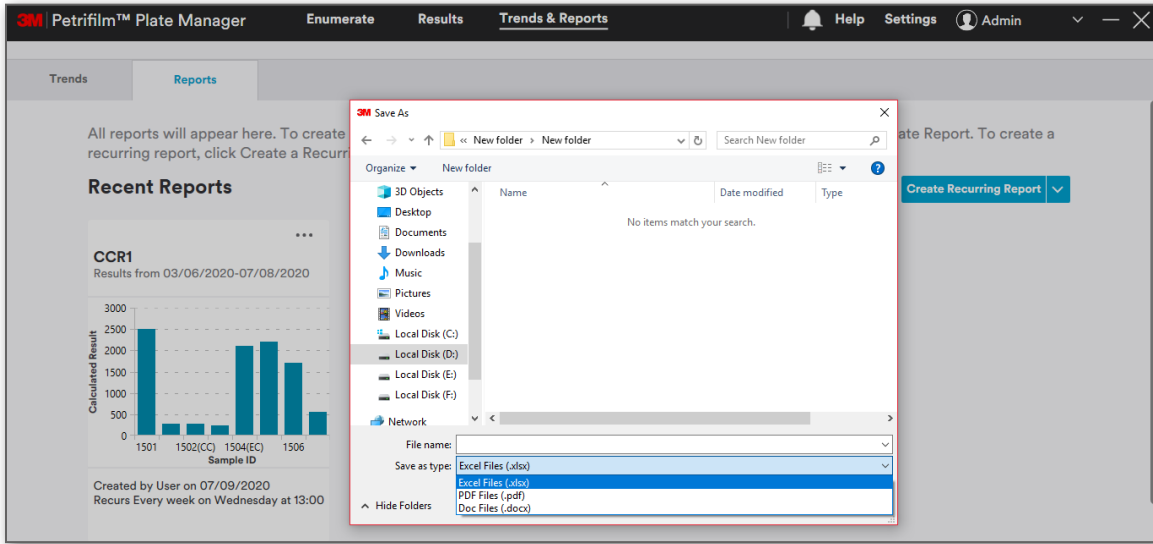
**Delete Recurrence:** Clicking on **Delete Recurrence** will open a confirmation dialog to delete recurrence. Clicking on **[Delete]** will delete the recurrence in the report. **[Cancel]** will cancel the action and close the dialog.



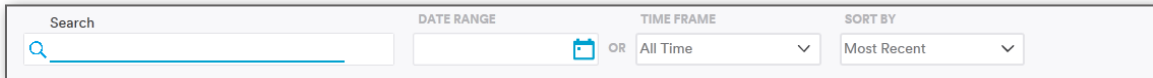


**Export:** User can export reports using **Export** option. Reports can be exported in the following formats:

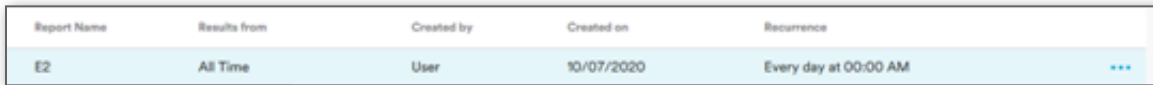
- a. Excel (.xlsx)
- b. PDF (.pdf)
- c. Doc (.docx)



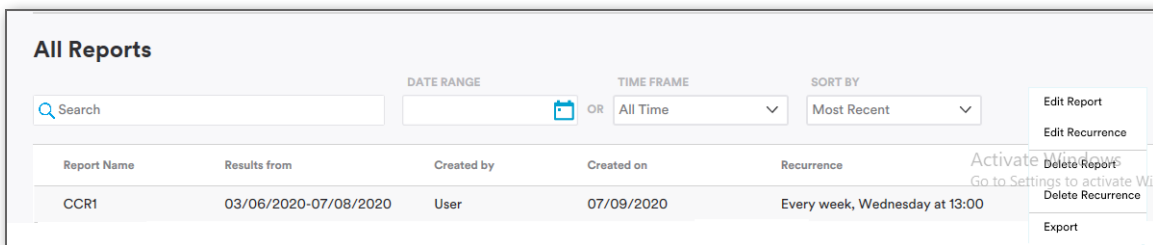
User can search the reports based on all the columns in the grid.



User can perform similar action on reports under **All Reports** grid. User needs to hover over the Report grid and click on the 3 dots (...).

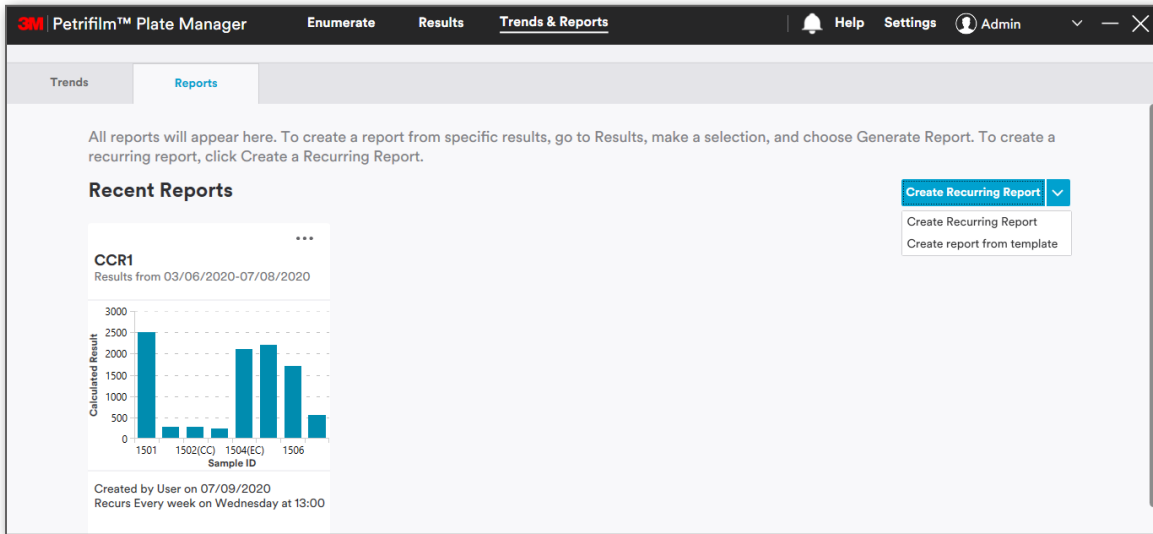


Clicking on the dots will open the same set of actions that can be performed on Reports as on the tiles under **Most Recent** reports.

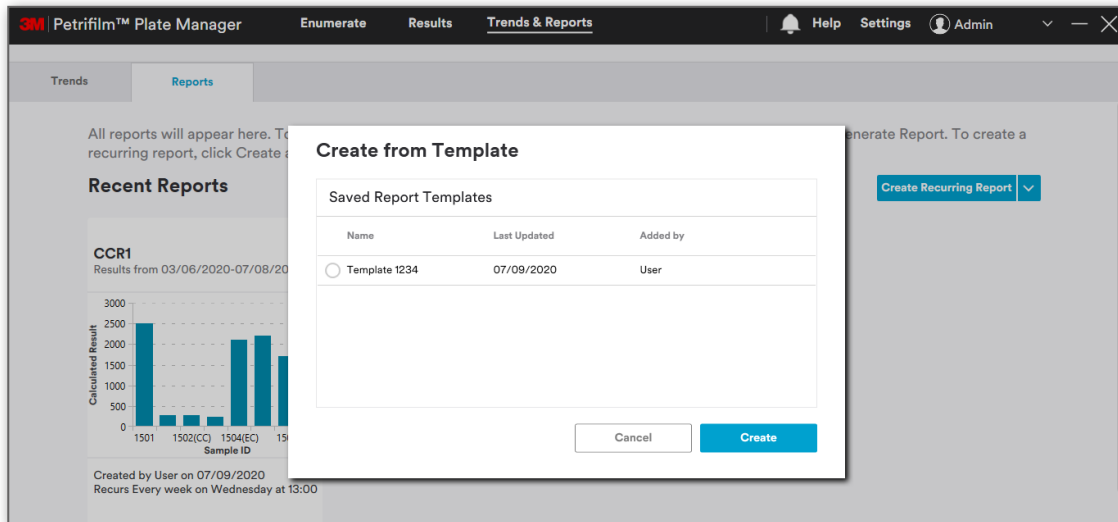


## Create Report from Template

[Create report from template] will only be available in the dropdown when the user has saved a report as a template.



Clicking on [Create report from template] will open *Create from Template* dialog where user will get the option to select from saved templates.





Select the template and click on **[Create]** button. This will open the **Create Recurring Report** screen.

Enter report name, set recurrence and filter data.



Click on [Save Report]. On step 2 of 3, user will be able to see the following:

3M Petrifilm™ Plate Manager    Enumerate    Results    Trends & Reports    Help    Settings    Admin

Trends    Reports

< Back to Reports

### Create Recurring Report Step 2 of 3

Report Data [Customize Columns](#)

Sample ID	Date & Time	Plate Type	Dilution	Raw Total Count	Edited Total Count	
1501	07/08/2020 12:23:47	EB	1:100	25	25	
1502	07/08/2020 12:23:47	EC/CC	1:10	27 (EC) 28 (CC)	27 (EC) 28 (CC)	
1503	07/08/2020 12:23:47	RAC	1:10	24	24	
1504	07/08/2020 12:23:47	REC	1:100	21 (EC) 22 (CC)	21 (EC) 22 (CC)	
1506	07/08/2020 12:23:47	SEC	1:100	17	17	
1508	07/08/2020 12:23:47	STXD	1:10	56	56	
1234	05/27/2020 16:00:00	AC	1:10	50	50	
1234	05/27/2020 04:00:00	SEC	1:10	51	51	
4567	05/27/2020 04:00:00	AC	1:10	53	53	
1234	05/26/2020 16:35:00	EB	1:10	45	45	
1234	05/26/2020 16:31:00	CC	1:10	45	45	
1234	05/26/2020 16:31:00	CC	1:10	45	45	
4567	05/26/2020 10:58:22	STX	1:10	87	87	
4567	05/26/2020 06:49:00	AC	1:10	23	23	

▼ Add Charts (optional)

No data can be displayed.

+ Add Chart

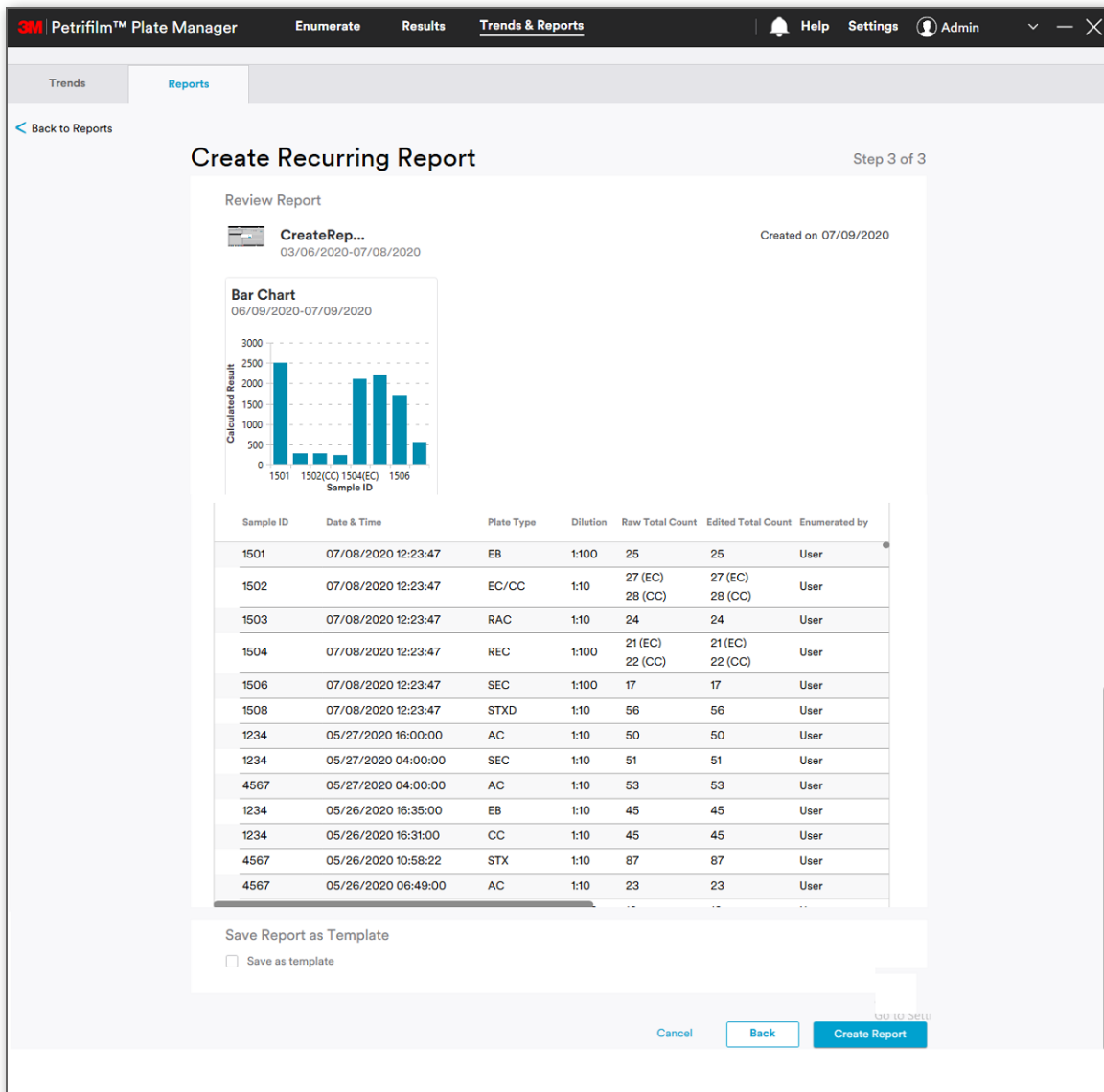
▼ Add Logo (optional)

+ Add Logo

Recommended size less than 1MB.

Back    Preview Report

User can add a Chart and or a logo. Clicking on **[Preview Report]** will show the report's preview and user can create the report after that.



**Create Recurring Report** Step 3 of 3

Review Report

**CreateRep...**  
03/06/2020-07/08/2020 Created on 07/09/2020

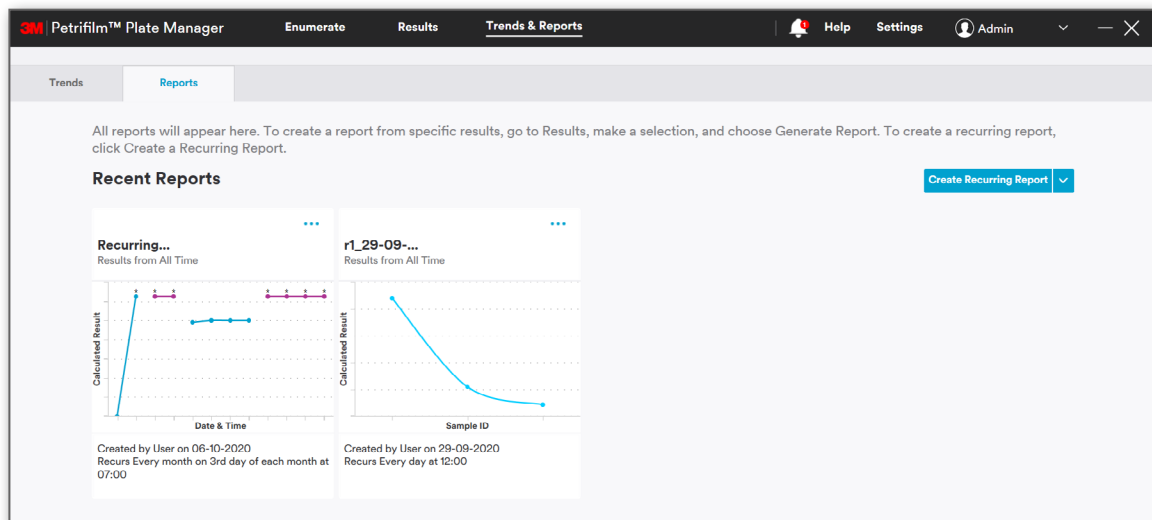
**Bar Chart**  
06/09/2020-07/09/2020

Sample ID	Date & Time	Plate Type	Dilution	Raw Total Count	Edited Total Count	Enumerated by
1501	07/08/2020 12:23:47	EB	1:100	25	25	User
1502	07/08/2020 12:23:47	EC/CC	1:10	27 (EC) 28 (CC)	27 (EC) 28 (CC)	User
1503	07/08/2020 12:23:47	RAC	1:10	24	24	User
1504	07/08/2020 12:23:47	REC	1:100	21 (EC) 22 (CC)	21 (EC) 22 (CC)	User
1506	07/08/2020 12:23:47	SEC	1:100	17	17	User
1508	07/08/2020 12:23:47	STXD	1:10	56	56	User
1234	05/27/2020 16:00:00	AC	1:10	50	50	User
1234	05/27/2020 04:00:00	SEC	1:10	51	51	User
4567	05/27/2020 04:00:00	AC	1:10	53	53	User
1234	05/26/2020 16:35:00	EB	1:10	45	45	User
1234	05/26/2020 16:31:00	CC	1:10	45	45	User
4567	05/26/2020 10:58:22	STX	1:10	87	87	User
4567	05/26/2020 06:49:00	AC	1:10	23	23	User

Save Report as Template  
 Save as template

Cancel Back Create Report

Clicking on **[Create Report]** will create the report and it will be saved to the database. It shall be visible under **Recent Reports** and **All Reports**.



All reports will appear here. To create a report from specific results, go to Results, make a selection, and choose Generate Report. To create a recurring report, click Create a Recurring Report.

**Recent Reports** Create Recurring Report

**Recurring...** Results from All Time

**r1\_29-09-...** Results from All Time

Created by User on 06-10-2020  
Recurs Every month on 3rd day of each month at 07:00

Created by User on 29-09-2020  
Recurs Every day at 12:00

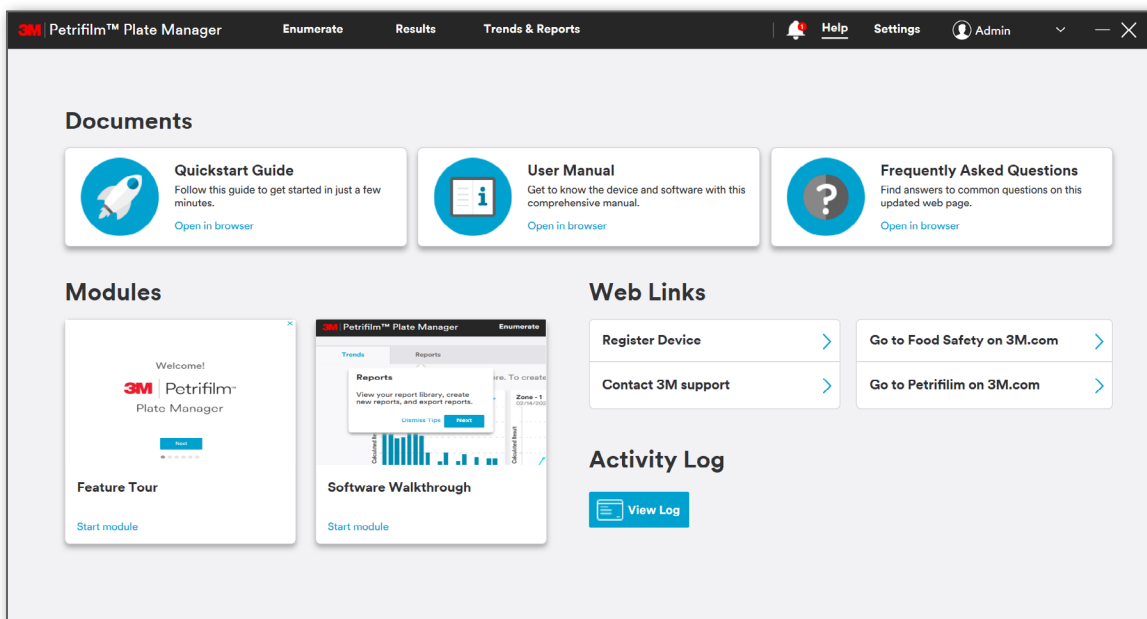


All Reports				
Search	DATE RANGE	OR	TIME FRAME	SORT BY
			All Time	Most Recent
Report Name	Results from	Created by	Created on	Recurrence
CreateReportfromTempl	03/06/2020-07/08/2020	User	07/09/2020	Every week, Tuesday at 00:00
CCR1	03/06/2020-07/08/2020	User	07/09/2020	Every week, Wednesday at 13:00

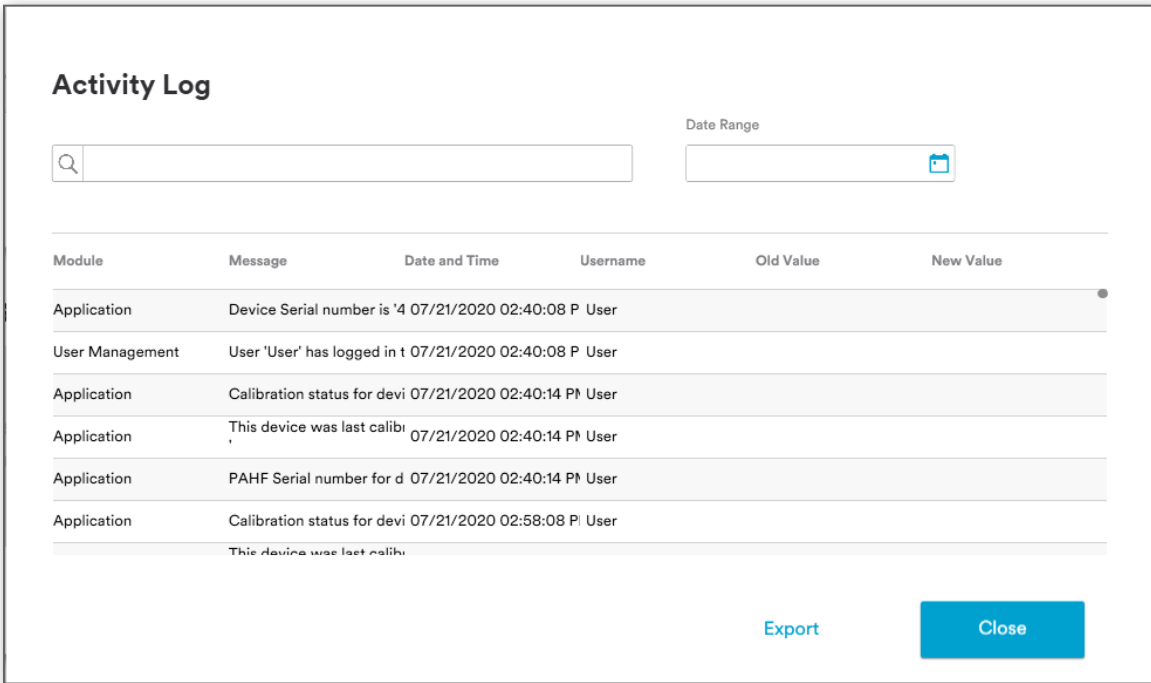
**Help:**

[Help] screen shall display the below details:

- i. **Documents**
  - a. Quick Start Guide
  - b. User manual
  - c. Frequently asked questions
- ii. **Modules**
  - a. First Launch Feature Tour
  - b. Software Tutorial
- iii. **Web Links**
  - a. Register Device
  - b. Contact 3M
  - c. 3m.com/3M/en\_US/food-safety-us/
  - d. 3M Petrifilm Product Page
- iv. **Activity Log:** Activity Log shall keep track of system activities.
  - a. View Log

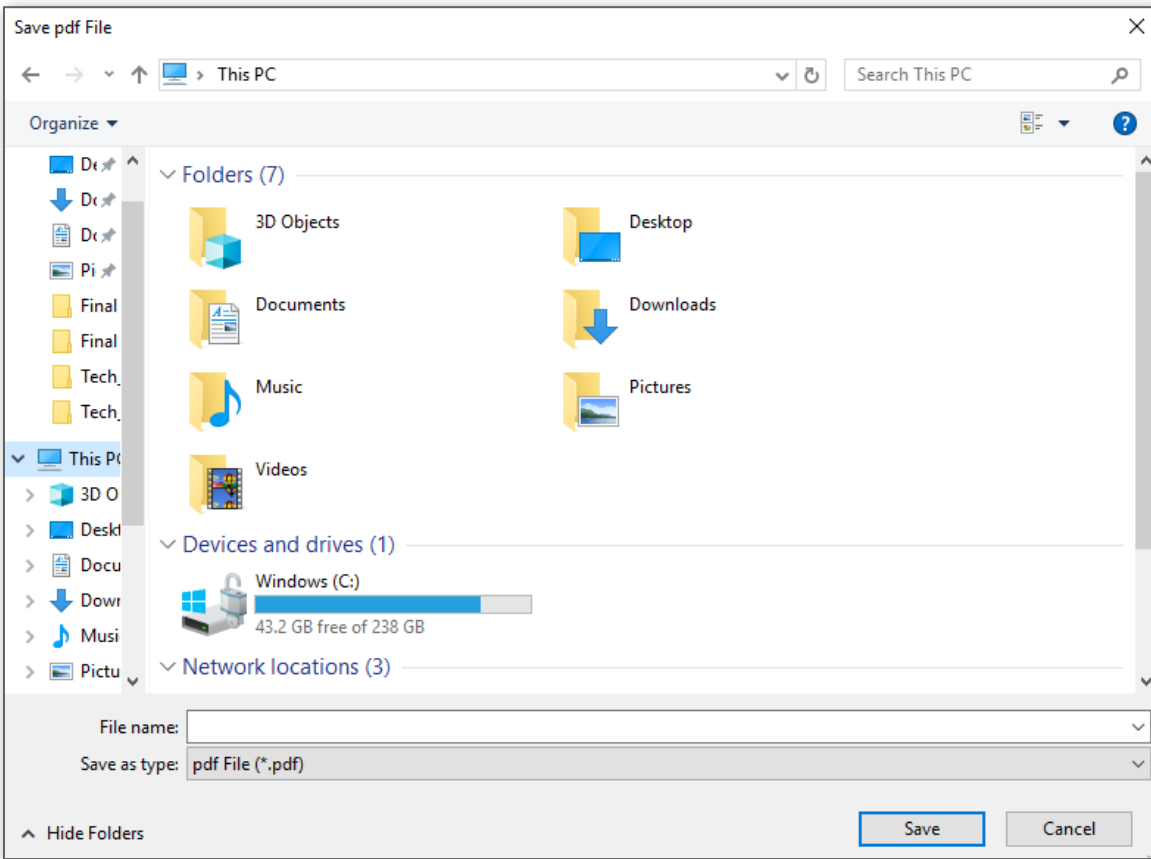


Clicking on **[View Log]** button shall open a dialog where user can view the audit logs.



User can also search the logs by date range or a keyword.

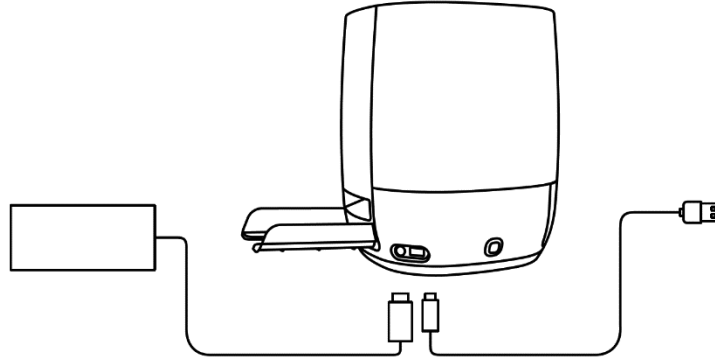
Clicking on **[Export]** button shall allow user to export the logs in a PDF format.



User shall provide the filename to save the logs.

## Cleaning and Decontaminating the 3M Petrifilm Plate Reader Advanced

1. Disconnect the power cable (1) and the USB cable (2) from the left-hand side of the base.



**Figure 1: Location of the Power Cord Connection and USB Connection**

2. Lightly spray a disposable towel with 70% Isopropyl alcohol (IPA) or a mild solution of soap and water and gently wipe the outer surfaces of the instrument. The disposable towel should be modestly moist and not dripping. Avoid the power and USB cable connection while cleaning the exterior surfaces.



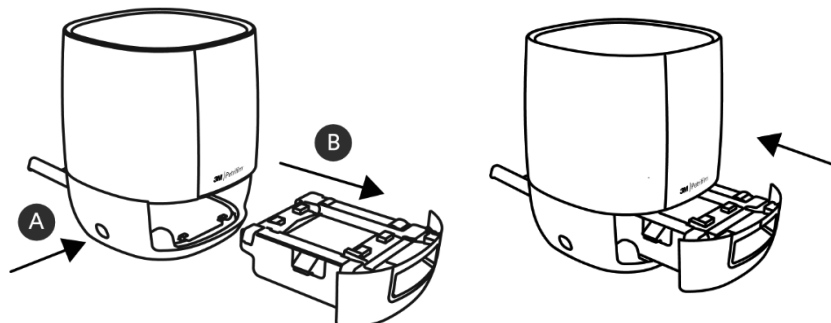
**Figure 2: External Surface to be cleaned on the 3M Petrifilm Plate Reader Advanced**

3. Use another disposable towel to repeat the procedure with DI water (distilled water or deionized water).



**Figure 3: Decontaminating the Power Assisted Hand Feed (PAHF)**

4. Remove PAHF from the 3M Petrifilm Plate Reader Advanced by pressing the push button which is on left side of the base. Pull the ejected PAHF out of the device.



**Figure 4: Removal and Ejection of the PAHF Assembly from the 3M Petrifilm Plate Reader Advanced**



5. Clean the fixed plate and the moving plate of PAHF by following the below procedure:
  - a. Use 70% Isopropyl alcohol (IPA) or a mild solution of soap and water.
  - b. Use a disposable towel and lightly spray the towel with the solution.
  - c. Use another disposable towel to repeat the procedure with DI water (distilled water or deionized water).

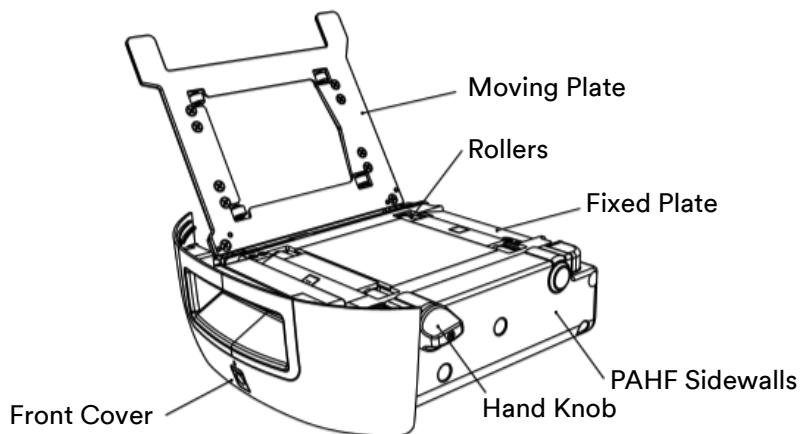


Figure 5: PAHF Assembly

6. To clean the rollers, use the following procedure:
  - a. Use hand knob to rotate the rollers against the disposable towel.
7. If dust particles are saturated on the side walls of PAHF, it can be cleaned by the following procedure:
  - a. Lightly spray a disposable towel with 70% Isopropyl alcohol (IPA) or a mild solution of soap and water and gently wipe the outer surfaces of the instrument. The disposable towel should be modestly moist and not dripping. Avoid the power and USB cable connection while cleaning the exterior surfaces. Use another disposable towel to repeat the procedure with DI water (distilled or deionized water).
  - b. Use a dry disposable towel to wipe the surfaces of the PAHF.
8. 70% Isopropyl alcohol (IPA) should only be used when cleaning the inside of the 3M Petrifilm Plate Reader Advanced. Do not use mild soap and water when cleaning the internal Isolation glass.
9. Insert the PAHF into 3M Petrifilm Plate Reader Advanced and connect the USB cable and power cable.

### Troubleshooting the 3M™ Petrifilm™ Plate Reader Advanced

Problem	Possible cause	Solution
Instrument remains in power down state	Power connection not established or not secure	Turn power switch to off, check connections, and turn switch to on
Instrument motor is generating noise	Gum from the 3M Petrifilm Plates or dust accumulated in PAHF assembly	Remove PAHF, clean as per instructions
Solenoid generating noise (User may not be able to identify the noise source)	Solenoid generating noise (User may not be able to identify the noise source)	Contact 3M Technical Service
LED lights from the Status LED on the top of the device are not ON	No power applied to unit	Check DC adaptor switch and GREEN light indication on the adaptor Contact 3M Technical Service
PAHF insertion not detected by software	Unit sensor's malfunction	Contact 3M Technical Service
Status LED indication giving un-defined sequence	Issue with computing module/ interface	Contact 3M Technical Service

### 3M Food Safety - Product and Service Information

3M Product Information: [www.3M.com/foodsafety](http://www.3M.com/foodsafety)

To request service, you must request a Returned Material Authorization (RMA) number from the service center.

(US) 1-800-328-1671



Outside the US +1 651-575-5589

To obtain warranty service, contact an official 3M Food Safety Representative.

If you have questions about ordering additional 3M Petrifilm Plates, please visit our website at [www.3M.com/foodsafety](http://www.3M.com/foodsafety) or contact your local 3M representative or distributor.

**Supplier's Declaration of Conformity for the following 3M Company manufactured product(s):**

Trade Name: 3M™ Petrifilm™ Plate Reader Advanced

Model(s): 6557/6558

We hereby declare that this product(s) complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Responsible Party – US Contact information:

3M Company

2510 Conway Ave.

Saint Paul, MN 55144-1000 USA

(US) 1-800-328-1671

Outside the US +1 651-575-5589

[www.3M.com/foodsafety](http://www.3M.com/foodsafety)

## 3M Food Safety

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Bldg. 275-5W-05  
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1-800-328-6553

### 3M Canada

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### 3M Japan

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81-570-011-321

### 3M Australia

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61 1300 363 878



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[www.3M.com/foodsafety](http://www.3M.com/foodsafety)

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34-8725-5485-1