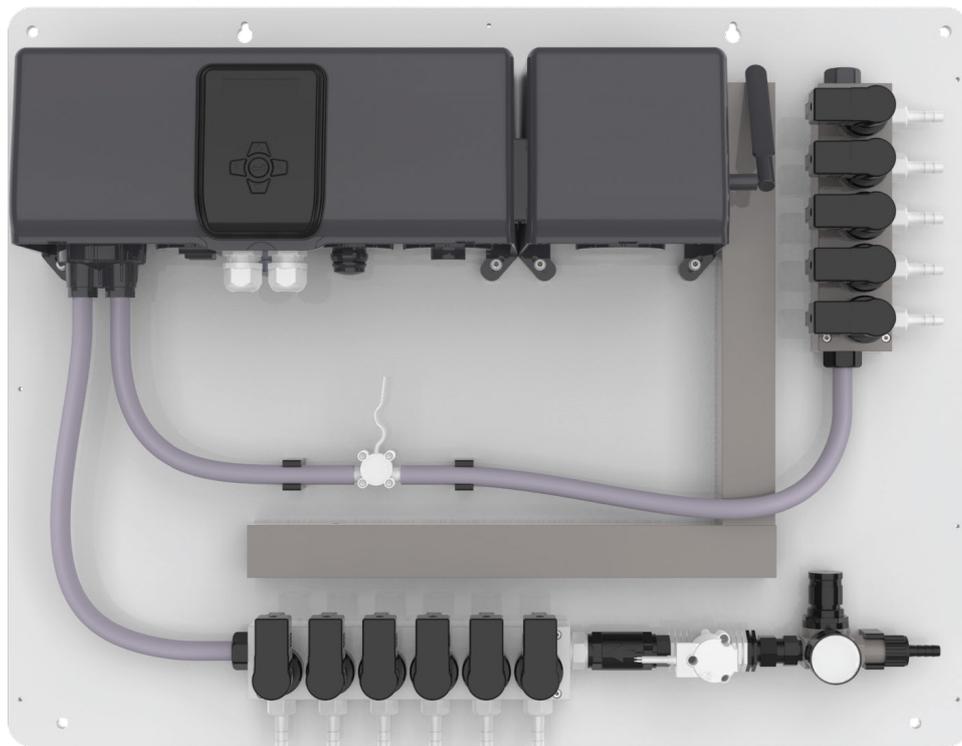


# BRIGHTWELL



## OPL MULTIPLEX M

LAUNDRY DOSING SYSTEM

(ELECTRIC)

INSTALLATION - SETUP - MAINTENANCE



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# GENERAL INFORMATION

## SAFETY INFORMATION



Wear protective clothing, gloves and safety glasses when installing our equipment or when handling chemicals. Follow the chemical manufacturer's guidelines for safety advice.



During maintenance work, depower the equipment whenever possible. Be aware of possible chemical residues that may remain on the various components of the equipment. Please flush the equipment with water before carrying out any work.

For information on the products used in this dispensing equipment, refer to the product label and the appropriate Material Safety Data Sheet (MSDS).



Caution! Risk of high voltage electric shock



Electrical installation should only be carried out by trained personnel and in accordance with local electrical wiring regulations. Disconnect power to the unit and isolate it from any electrical source before servicing.



Do not supply power outside the limits indicated on the rating plate.



Please earth the safety equipment as this increases the dispenser's resistance to electrical noise.



Do not use damaged or frayed cables and prevent this from happening by using, when necessary, protective elements (cable glands, conduits, etc...).



The installation of the metering unit must be carried out according to the instructions in this manual.



Do not fix the unit on an unstable, uneven or non-vertical surface. Make sure that the different elements are well anchored. Do not place heavy objects on them.



This equipment works in a vertical position, with the control cabinet at the top left and the chemical products underneath the equipment. Do not install it in other positions.



Do not disassemble or modify this equipment, at the risk of losing the possibility of warranty. Replacement of components (pumps, pipes, valves,...) or modification of the system must only be carried out by qualified personnel.



Avoid running the system dry as this may cause damage to the dosing pump(s).



Always ensure that chemicals are handled with care and that the dosing equipment area is adequately ventilated.



Do not reach into the mechanisms.

# GENERAL INFORMATION

## GUARANTEE

Your product comes as standard with a 2 year warranty from the date of manufacture, against manufacturing fault or defects and mechanical or electrical breakdown. Please visit our website for full terms and conditions.

[www.brightwell.co.uk](http://www.brightwell.co.uk)

[www.brightwell-inc.com](http://www.brightwell-inc.com)

## MÚLTIPLEX

Multiplex is part of the Brightwell proposal for the dosing of chemical products in industrial laundries and is designed to serve any laundry with a **maximum of 5 washing machines (depending on setup)**.

**For the equipment to operate with 5 washing machines, simply configure it with 5 washing machines and use the measuring cup valve as washing machine number five.**

Multiplex is a single-pump unit, with an electric diaphragm pump and is designed for a maximum of 6 products. It is possible to extend its capacities by adding additional panels with pump and suction to be able to dose more products and with simultaneous pumps.

The design of the equipment is based on the parameters that govern the entire Multiplex range:

**Technical:** Industrial design and conception, with the integration of mechanical, electrical and electronic components conceived for continuous tasks and routines.

**Flexible:** it can be configured and controlled, "in situ" or remotely, from any device, without the need for special applications or programmes.

**Secure:** Only company-authorised users have access to the equipment, defined by levels and with possible limitation of functions.

**Reliable:** Control elements and tools -software and hardware- to enable the precision required for dosing in industrial laundries.

**Accurate:** Recording of all data to obtain detailed statistics for a correct analysis of consumption, costs, alarms, performance, and production allowing the prognosis and anticipation of possible problems.

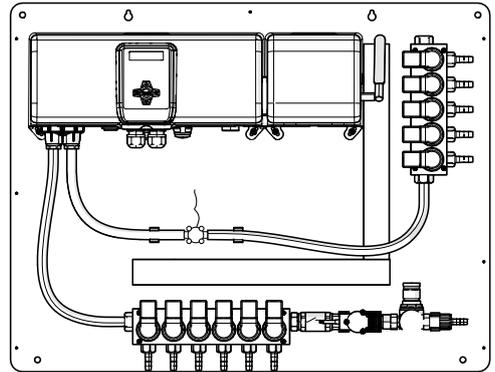
**Efficient:** With routines -software- and elements -hardware- that seek your best performance and effectiveness.

# TECHNICAL INFORMATION

## UNIT

---

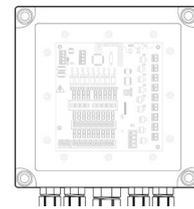
**MULTIPLEX OPL  
BUILT IN DISTRIBUTOR**  
(MAIN UNIT)



## ACCESSORIES

---

**MULTIPLEX**  
SIGNAL BOX

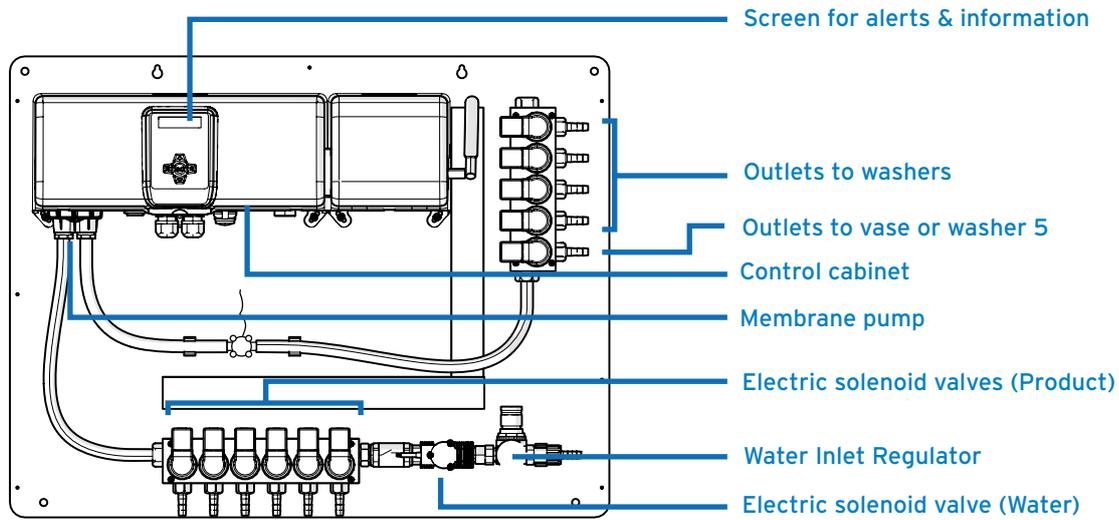


**MULTIPLEX**  
SUCTION ROD



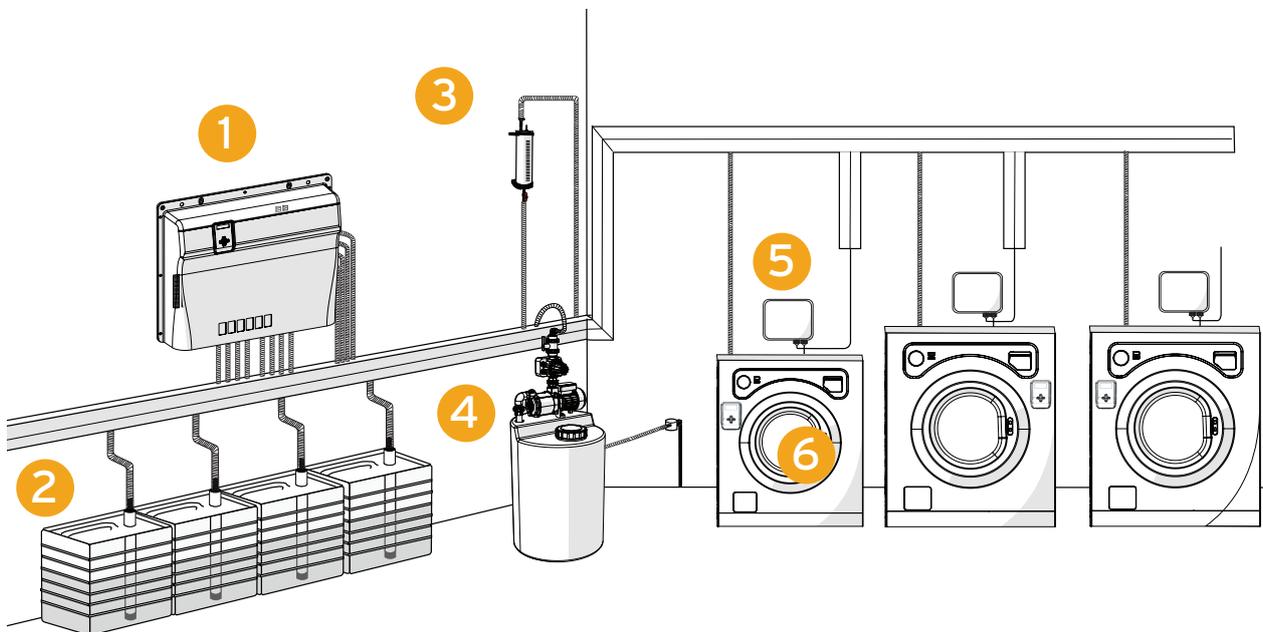
\*Brightwell recommends the use of accessories designed to work with Multiplex equipment. Please ask our sales department for more details on these products.

# MAIN UNIT DIAGRAM



# INSTALLATION AND CONNECTIONS

## INTRODUCTION



This image reproduces the 'Standard' setup of a Multiplex OPL unit (your setup will vary based on model), it contains

1. The main unit
2. Suction lances for the chemicals
3. A calibration vase for measuring output
4. A booster tank to regulate water pressure
5. Signal boxes for the washing machines
6. Formula Selectors to manage programs

# INSTALLATION AND CONNECTIONS

## BEFORE INSTALLATION

- Before beginning installation, ensure you have all necessary items and inspect them for any damage.
- Should you find any missing or defective components, refrain from installing them, as doing so could create a hazardous situation and void the warranty. Instead, return the equipment to the dealer in its original packaging. Installation of this system should only be carried out by qualified personnel in accordance with local regulations.
- Identify a smooth, flat surface near the washing machines for installation.
- It's crucial to note that suction points **should not exceed 5 meters**, thus requiring sufficient space near the chosen point and below where the equipment will be mounted.
- Avoid using elements from existing installations for new wiring. We recommend utilising the material kits provided by Brightwell; consult our sales department for assistance. Regardless, all materials used must meet the specifications outlined in this manual.
- Begin by securely fixing the equipment to the wall, ensuring it is positioned vertically and level. Then mount the communication boxes, placing one near each corresponding washing machine.
- Exercise caution when fixing channels for pipe transportation to prevent excessively sharp bends



Lay out the installation and fix all the elements - equipment, distributor, communication boxes and the necessary installation material - to the wall.



Install pipes and cables using cable ties to ensure that they are securely fastened to avoid pressure surges.



Check the product piping to avoid any possible chokes that could cause an inconvenient flow of the product.



Connect all electrical cables - using ferrules, if possible - and all pipes - using metal clamps.



Install electricity and water supplies (and air, if required).



Communication: Check all communication box connections, configure each box and selector to identify which washer they correspond to. Disconnect the communication connectors leaving only the first box connected.



Check, before raising the circuit breaker, with a multimeter that the incoming voltage is 110-240 VAC / 50-60Hz.



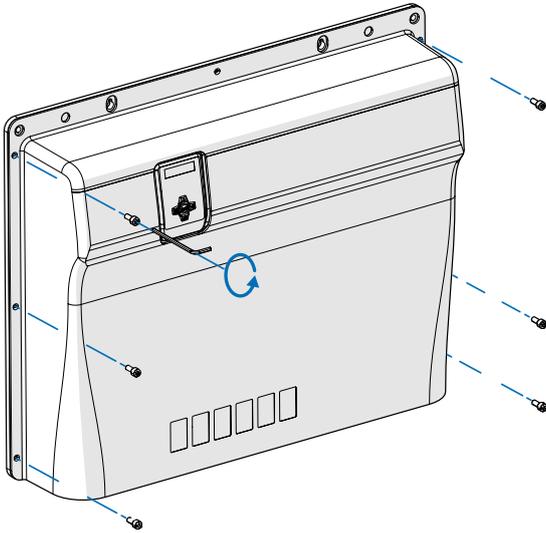
Supply power to the equipment and open the water supply (and air supply, if required).



Check that the supplies are adequate in terms of pressure and flow.

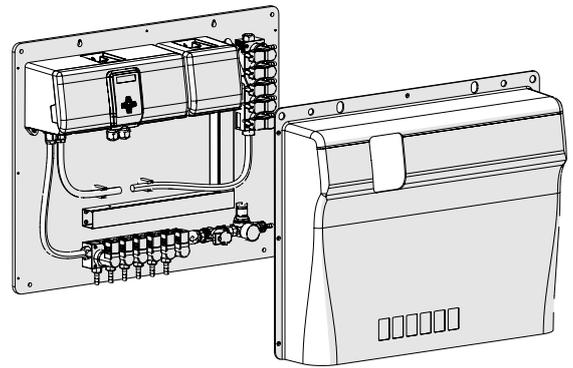
# MOUNTING YOUR MULTIPLEX UNIT

1.



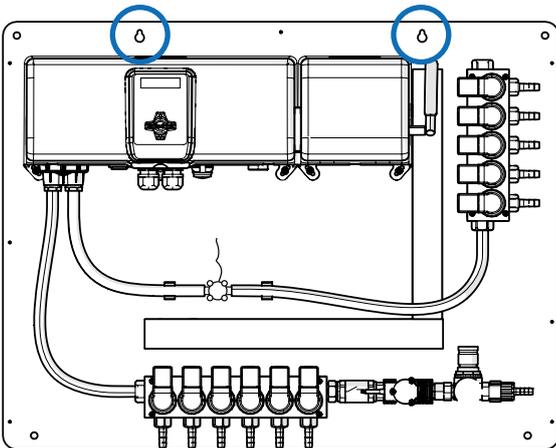
Remove the M6 screws attaching the cover to the OPL unit.

2.



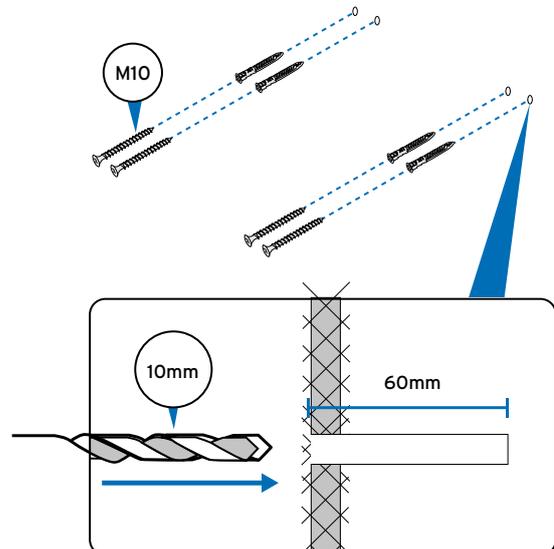
Once all screws are removed, remove the front cover and store safely.

3.



Once all screws are removed, remove the front cover and store safely.

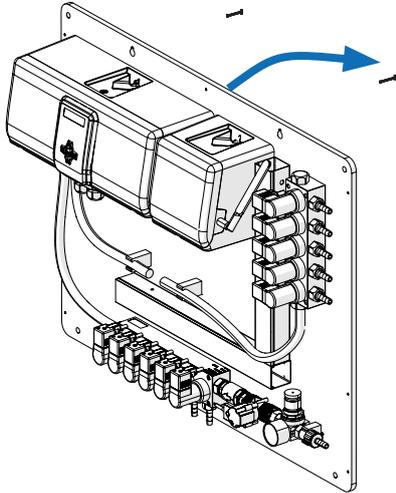
4.



Drill holes into the wall and insert the rawl plugs included. (3/8" / 2.4 in.)

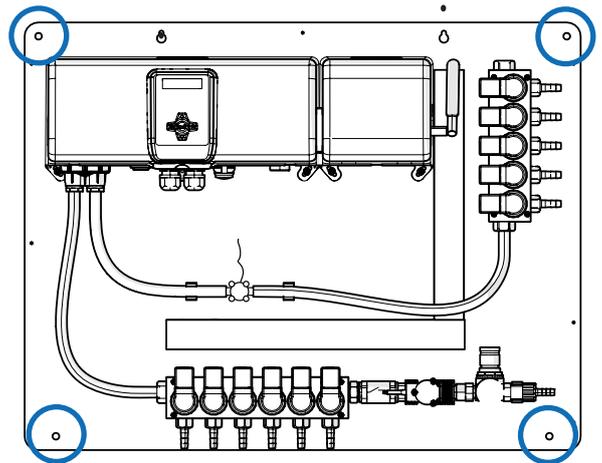
# MOUNTING YOUR MULTIPLEX UNIT

5.



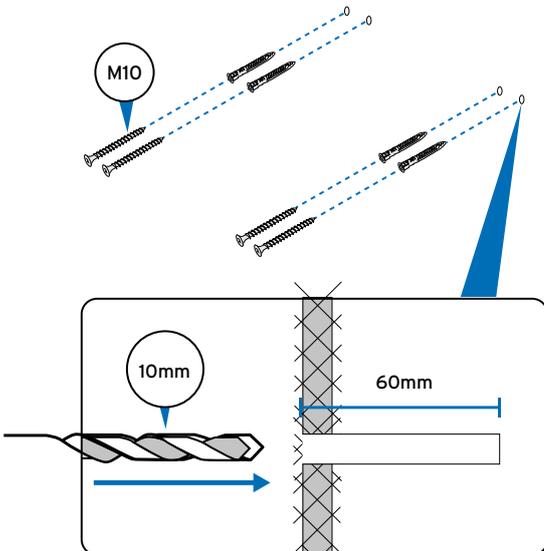
Hook the unit to the wall using the screws before.

6.



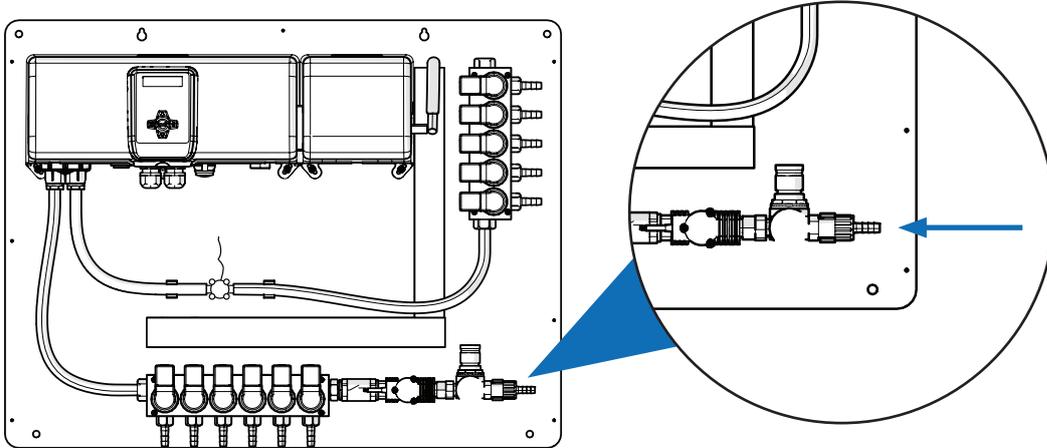
Mark the additional holes.

7.



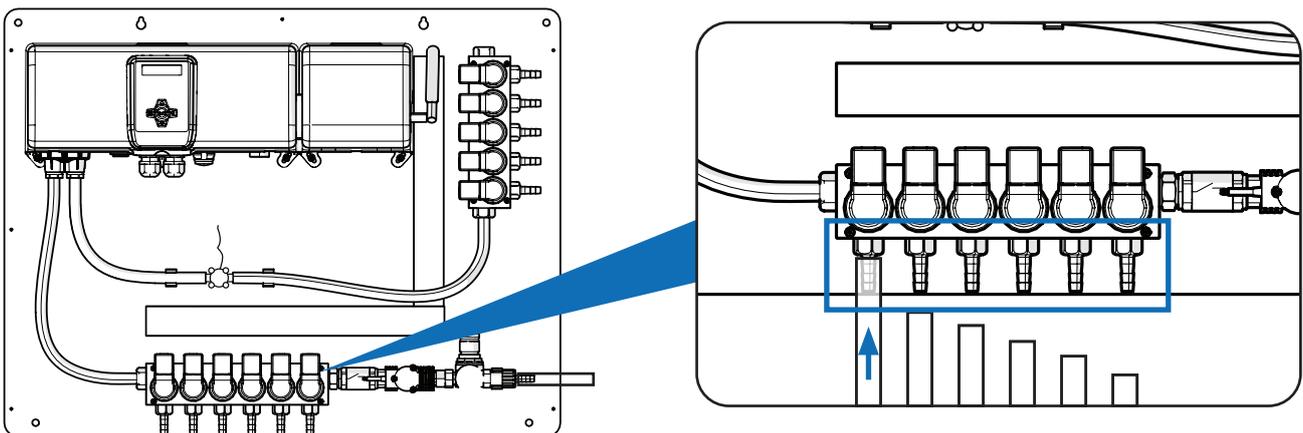
Remove the unit from the wall and insert the additional rawl plugs. (3/8" / 2.4 in.)

## CONNECTING WATER TO THE OPL UNIT



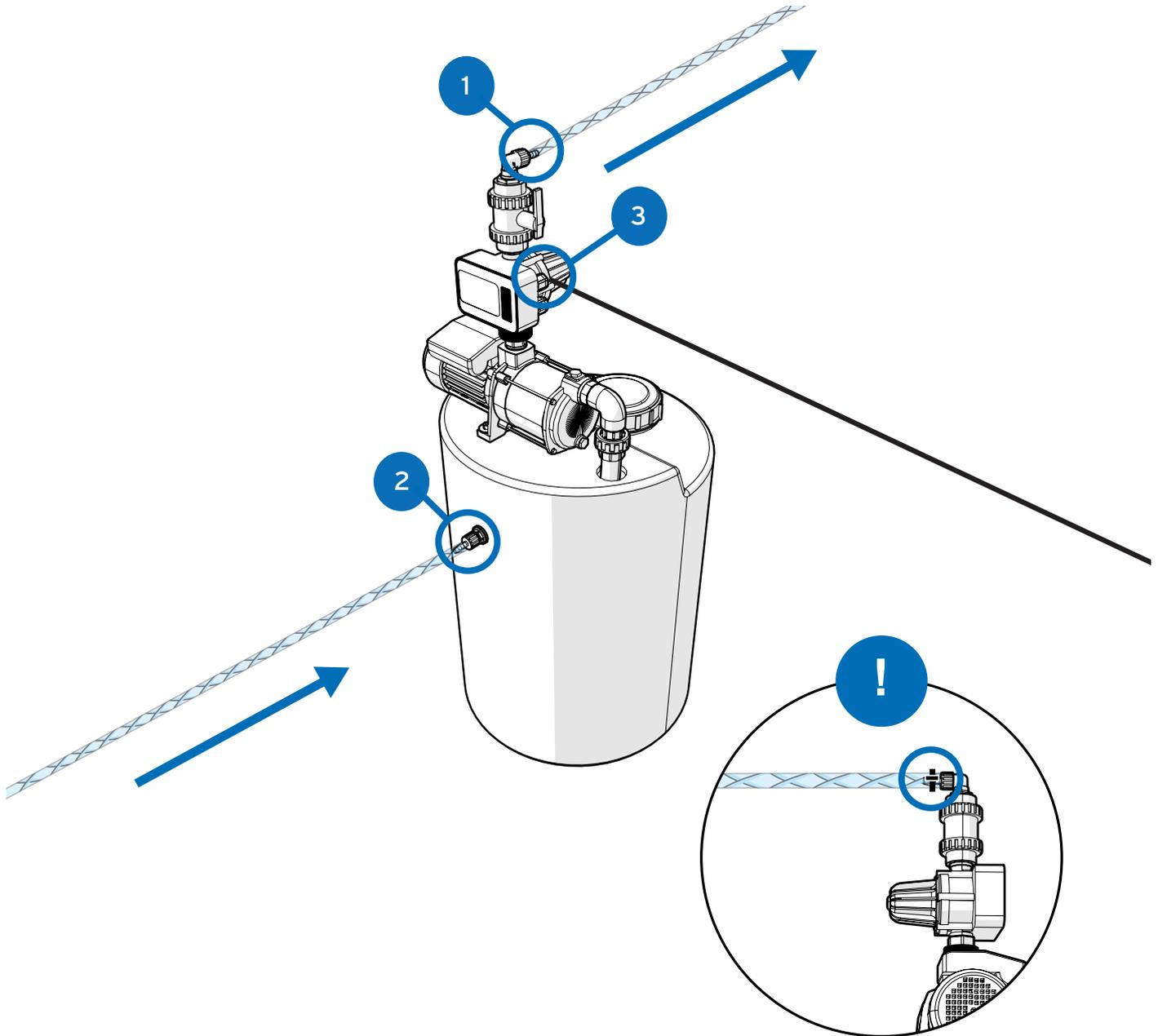
Attach the water to the inlet regulator seen here. It is recommended that you purchase a booster tank to maintain a **constant pressure rate of 1.8 bars (26 PSI)**. Use 10x16 braided (3/8" in) PVC pipe and stainless steel clamp.

## CONNECTING CHEMICAL TO THE OPL UNIT



Attach the chemicals inlets to the connectors seen here using 10x16 braided (3/8" in) PVC pipe.

# BOOSTER TANK CONNECTION (RECOMMENDED)



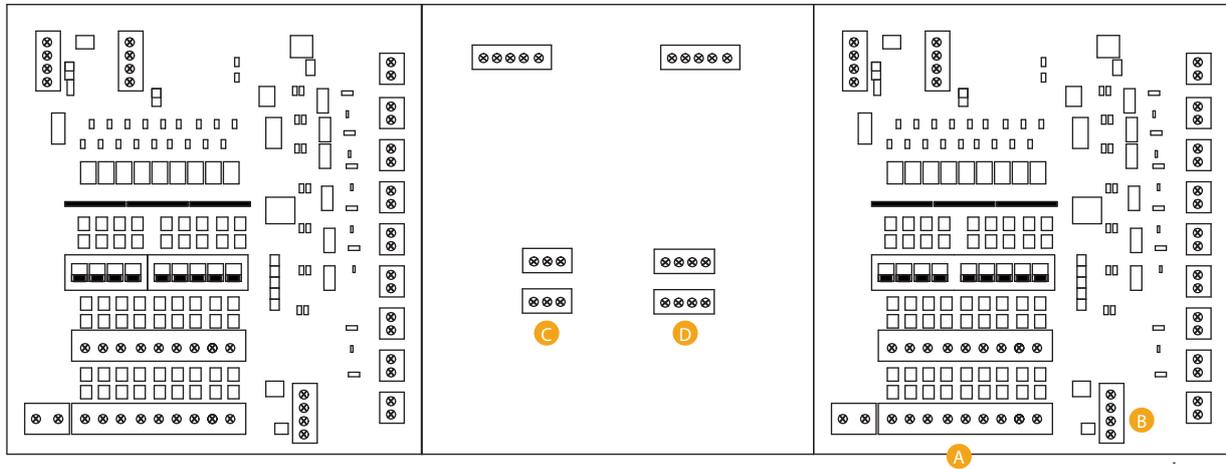
Please note that the unit requires a flow rate of minimum 2 L/min (0.53 GPM) to maximum 10 L/min (2.64 GPM), and a dynamic pressure range of 1.5 bar (21.8 psi) minimum to 3 bar (43.5 psi) maximum. A booster tank is recommended whenever a consistent supply is not available.

Use zip ties or hose clamps on all water connections to avoid leaks.

Please note - If you do not use a booster tank performance values can not be guaranteed by Brightwell.

No.	Description
1	Water Outlet 10mm (3 bar regulated) (3/8" in barbed connector)
2	Water Inlet 10mm (3/8" in barbed connector)
3	110 - 240 v Pump Input

# WIRING DIAGRAM



## A

- .....
- SUCTION LANCE 1
- .....
- SUCTION LANCE 2
- .....
- SUCTION LANCE 3
- .....
- SUCTION LANCE 4
- .....
- SUCTION LANCE 5
- .....
- SUCTION LANCE 6
- .....
- SUCTION LANCE 7
- .....
- SUCTION LANCE 8
- .....

## B

- .....
- SUCTION LANCE COMMON (TOP PIN ONLY)
- .....

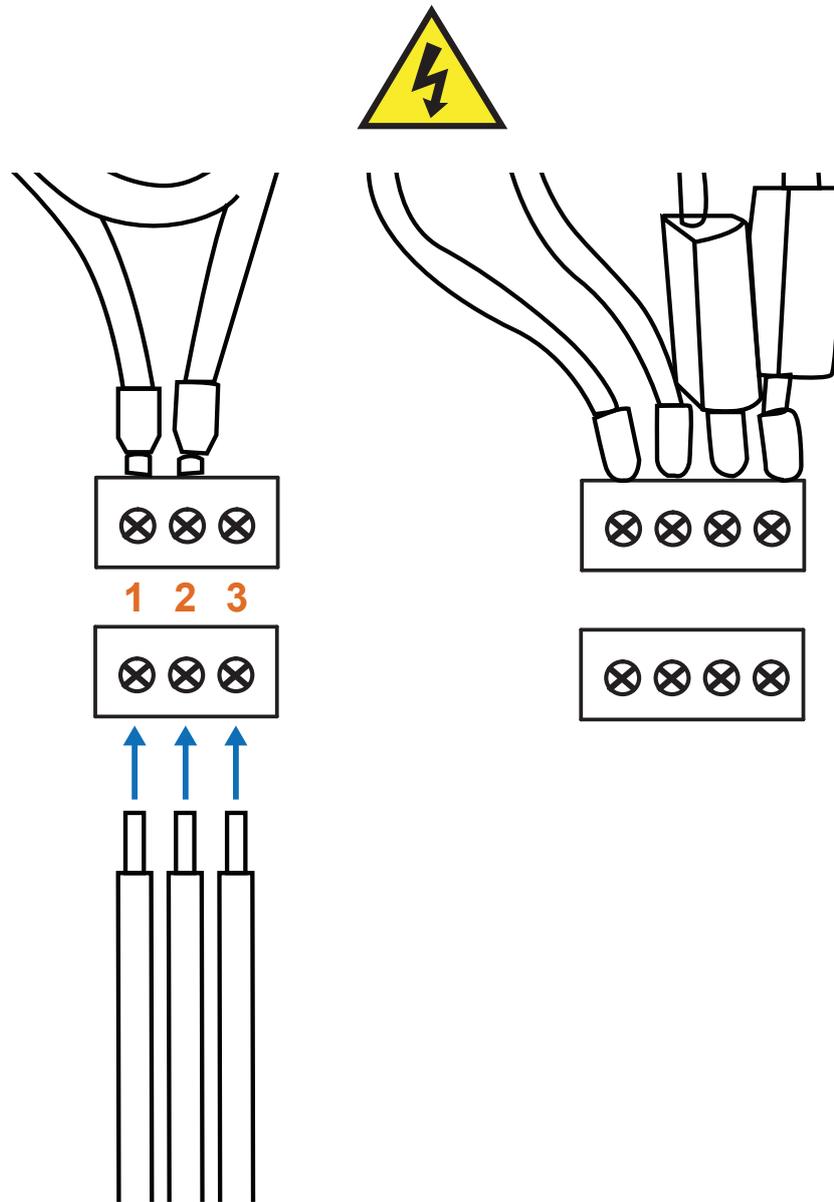
## C

- .....
- LIVE
- .....
- NEUTRAL
- .....
- EARTH/GROUND
- .....

## D

- .....
- POSITIVE
- .....
- NEGATIVE
- .....
- A
- .....
- B
- .....

# WIRING THE POWER

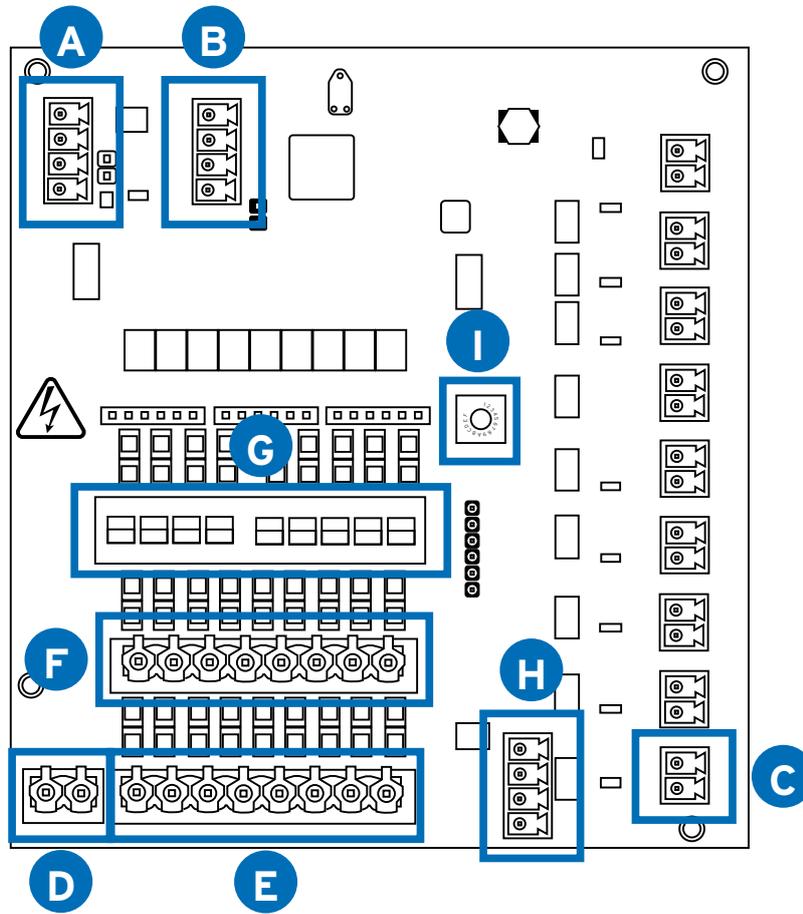


For the power supply of the equipment you must use **3x1'5mm<sup>2</sup> cable (3-conductor 16 AWG cable)**. Insert the cable through the channel located at the bottom left and use one of the cable glands to insert it safely inside the control cabinet. Connect to the terminals identified with X1 found on the lower left of the connections.

The power supply must be suitably protected. Use a specific line for the power supply of the equipment.

Connector	Description
1	LIVE
2	NEUTRAL
3	EARTH/GROUND

# PCB CONNECTIONS FOR YOUR SIGNAL BOX



Connector	Description
A	COMMS IN
B	COMMS OUT
C	MACHINE PAUSE
D	COMMON NEUTRAL*
E	SIGNAL/TRIGGER INPUTS*
F	ISOLATED NEUTRAL *
G	COMMON OR ISOLATED DIP SWITCH SELECTOR
H	FORMULA SELECT CONNECTOR
	MACHINE NUMBER ROTARY SELECTOR
	*Please turn the rotary dial to the machine number in the setup. IE
I	Number 1 = Machine 1
	Number 2 = Machine 2

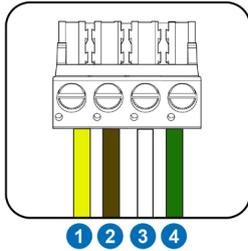
\* For the connection between the signal box and laundry machine, you'll need to provide a cable with the correct number of conductors for both signal and neutral transmission.

# SIGNAL BOX CONNECTOR WIRING GUIDE

## A

### COMMS IN

(From the main dosing unit to the signal box)

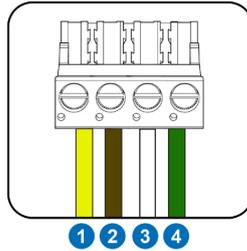


No.	Description
1	24 V +
2	24 V -
3	COMMS A
4	COMMS B

## B

### COMMS OUT

(To the next signal box in the chain)

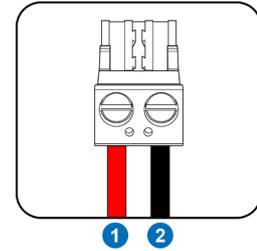


No.	Description
1	24 V +
2	24 V -
3	COMMS A
4	COMMS B

## C

### VALVE OUTPUTS

(24 VDC)

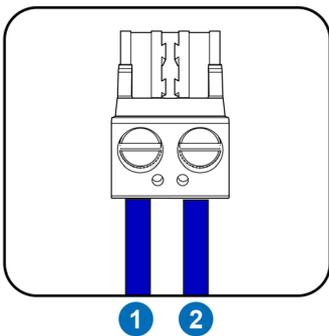


No.	Description
1	24 V +
2	24 V -

## D

### COMMON NEUTRAL \*

(Common neutral input)

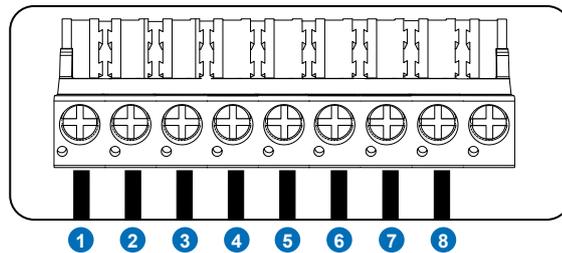


No.	Description
1	COMMON NEUTRAL
2	COMMON NEUTRAL

## E

### SIGNAL/TRIGGER INPUTS \*

(Signal inputs from machine)  
(24 - 240 VDC)

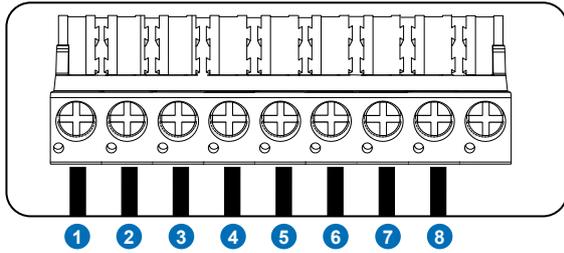


No.	Description
1	SIGNAL/TRIGGER INPUT 1
2	SIGNAL/TRIGGER INPUT 2
3	SIGNAL/TRIGGER INPUT 3
4	SIGNAL/TRIGGER INPUT 4
5	SIGNAL/TRIGGER INPUT 5
6	SIGNAL/TRIGGER INPUT 6
7	SIGNAL/TRIGGER INPUT 7
8	SIGNAL/TRIGGER INPUT 8

# SIGNAL BOX CONNECTOR WIRING GUIDE



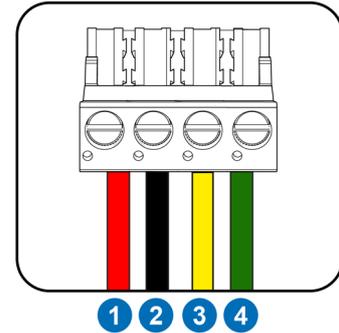
**ISOLATED NEUTRAL INPUTS \***  
 (Neutral inputs for isolated signals)  
 24 - 240 VDC)



No.	Description
1	ISOLATED NEUTRAL SIGNAL INPUT 1
2	ISOLATED NEUTRAL SIGNAL INPUT 2
3	ISOLATED NEUTRAL SIGNAL INPUT 3
4	ISOLATED NEUTRAL SIGNAL INPUT 4
5	ISOLATED NEUTRAL SIGNAL INPUT 5
6	ISOLATED NEUTRAL SIGNAL INPUT 6
7	ISOLATED NEUTRAL SIGNAL INPUT 7
8	ISOLATED NEUTRAL SIGNAL INPUT 8



**ENTRADA DE SELECCIÓN DE FÓRMULA**  
 (Formula Select Input)



No.	Description
1	24 V +
2	24 V -
3	COMMS A
4	COMMS B

# SIGNAL BOX CONNECTOR WIRING GUIDE

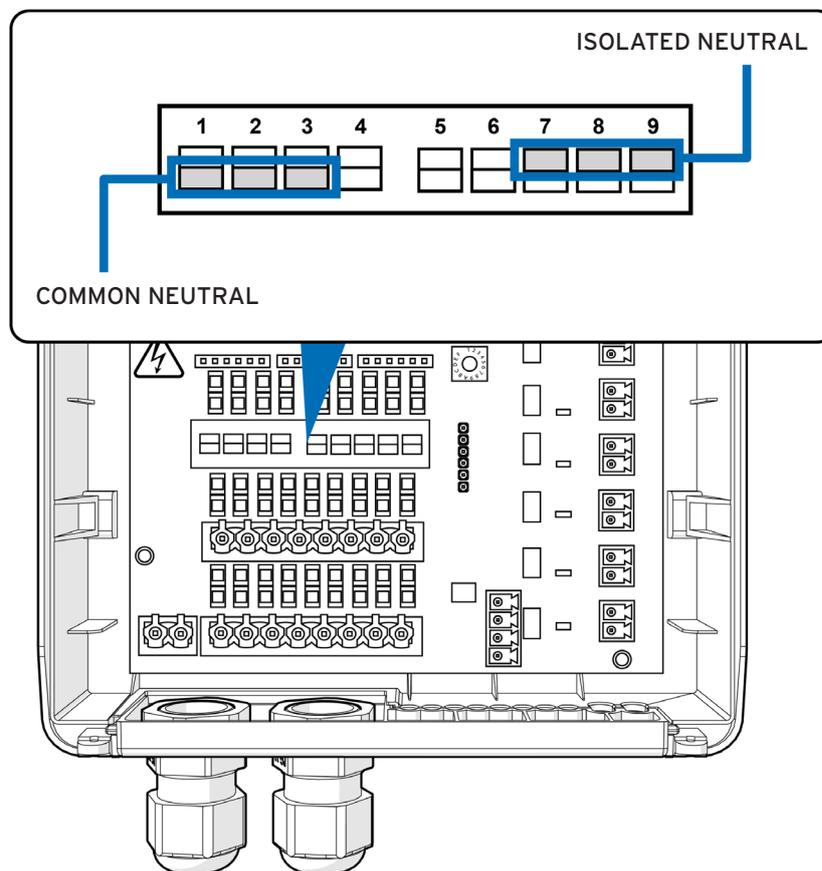
## DIP SWITCH CONFIGURATION AND SETUP

To configure the neutral connections, utilise the dip switches positioned above the signal inputs. Set the dip switch to either the **COMMON** or **ISOLATED** position as required. For isolating a trigger signal, move the dip switch to the **TOP** position. Conversely, if it shares a common neutral, move it to the **BOTTOM** position. Here's an example:

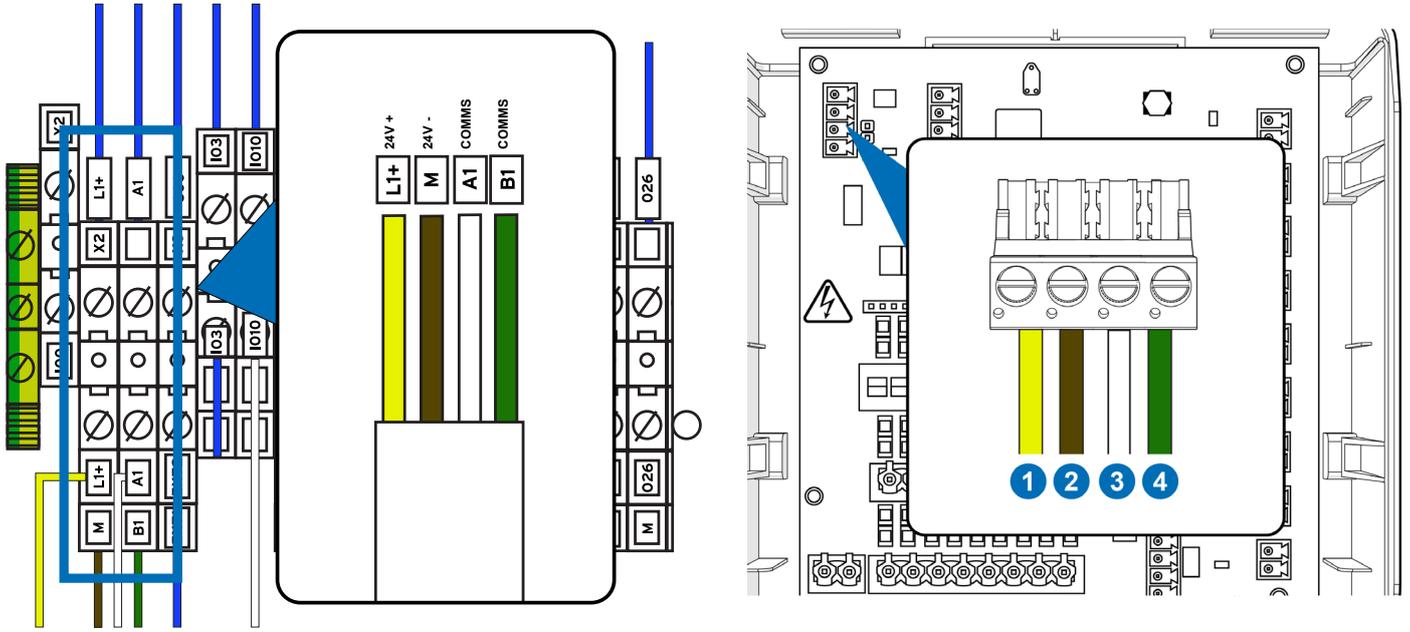
Trigger 1: Isolated - Dip switch 1 set to **TOP**

Trigger 2: Common - Dip switch 2 set to **BOTTOM**

## DIAGRAM



# COMMS WIRING SIGNAL BOX

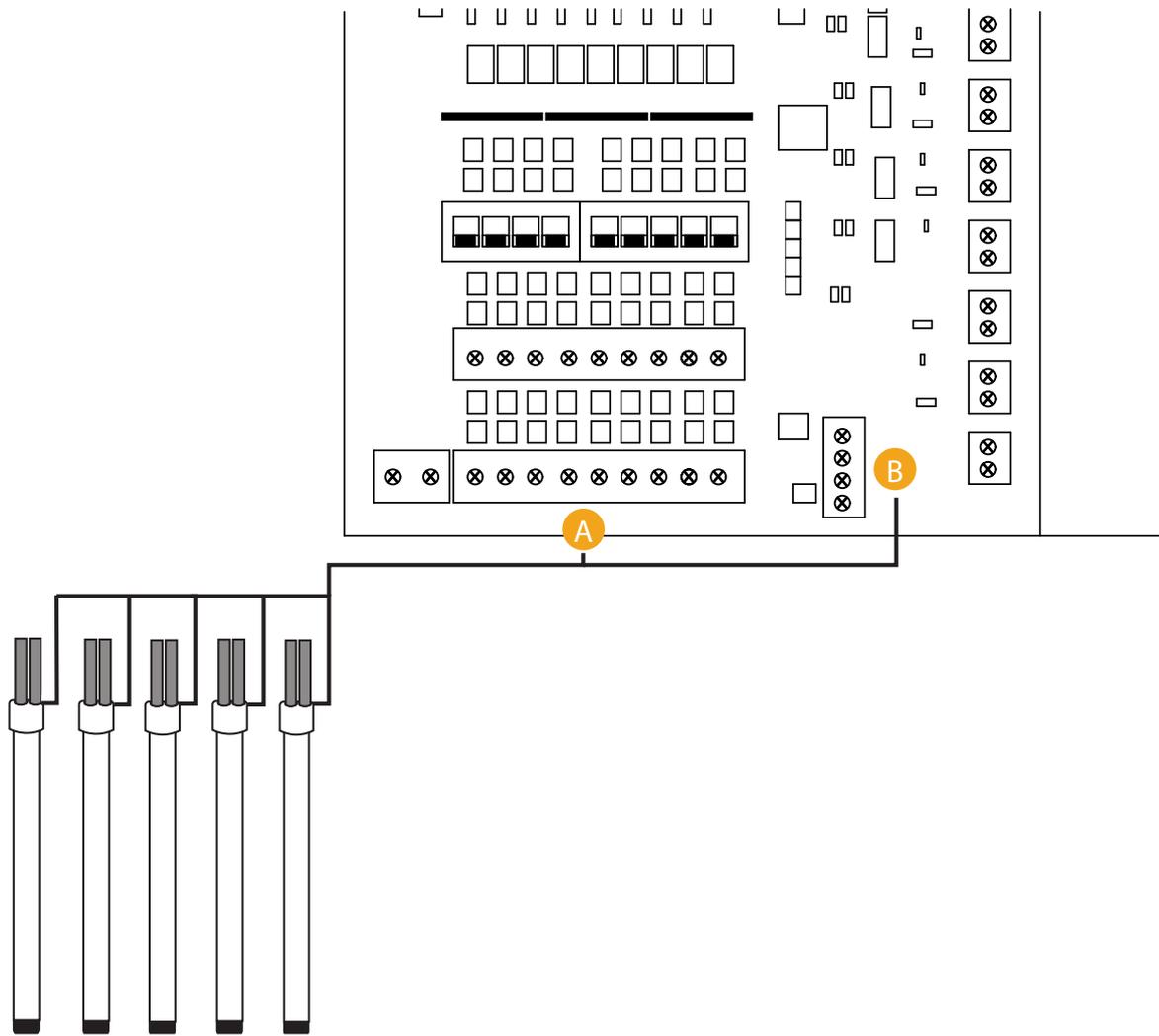


To connect the external communication box to the unit, connect terminal X2 on the main machine to terminal X1 on the communication box.

No.	Description
L1+	24 V +
M	24 V -
A1	COMMS A
B1	COMMS B

No.	Description
1	24 V +
2	24 V -
3	COMMS A
4	COMMS B

# ELECTRICAL WIRING SUCTION LANCES

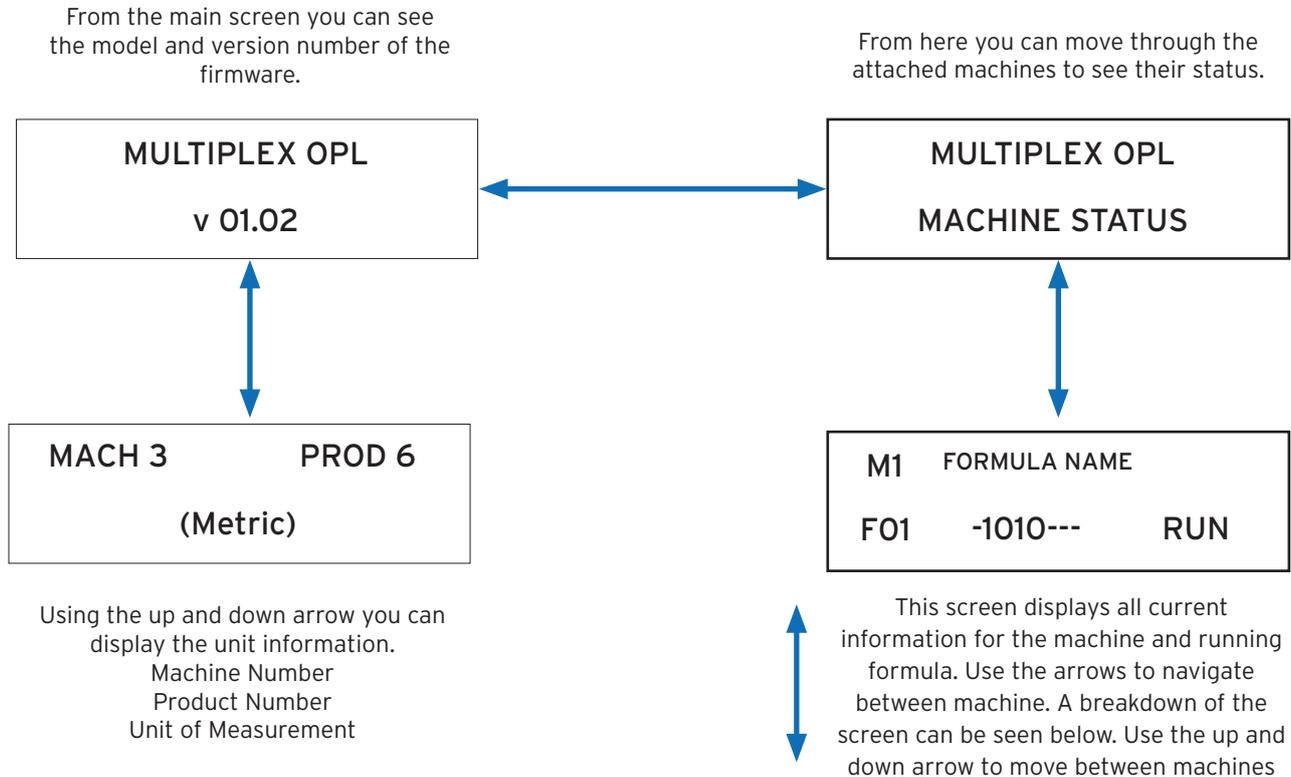


To connect the external suction lances to the machine, utilize inputs as indicated above.

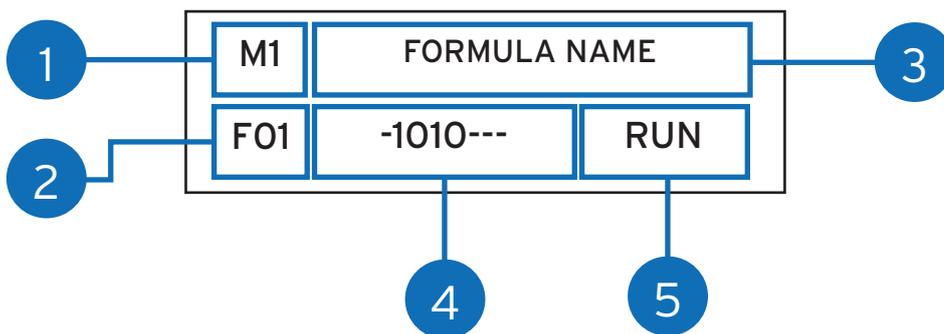
Connection	Rod number
A	SUCTION ROD 1 - 9
B	NEUTRAL (TOP PIN)

# MACHINE STATUS AND UNIT INFORMATION

The screen located on your Multiplex OPL unit will allow you to actively see the status of the washers in real time, also displaying any potential issues that may have occurred.



## SCREEN BREAKDOWN



1 Displays the machine number

2 Displays the machine number

3 Displays the name of the formula

4 Displays the programmed phases with the following symbols

(-) A dash represents a non programmed phase

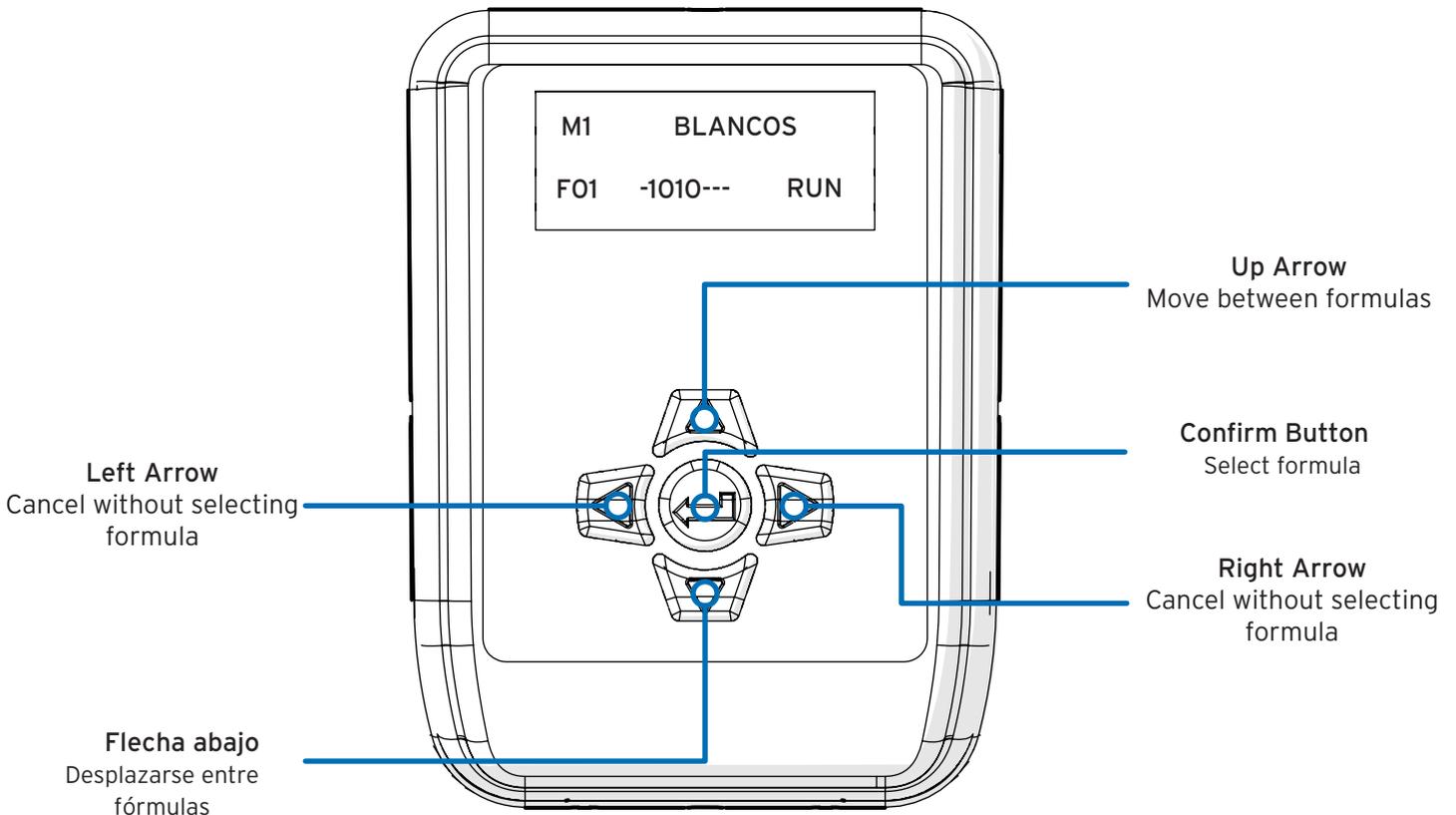
(1) Displays expected phases

(1) Displays received phases

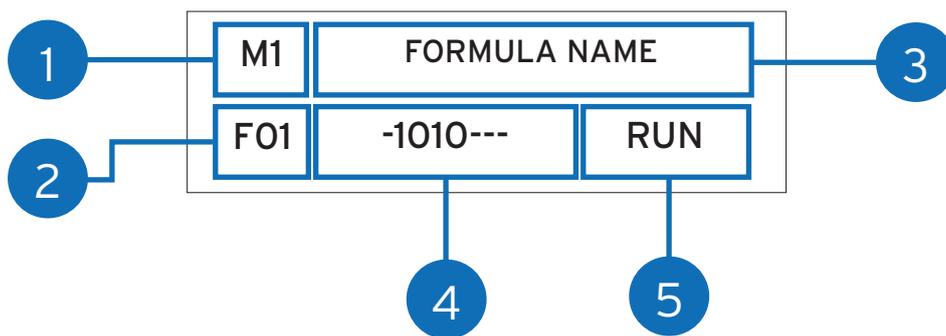
5 Shows the run status. **RUN** for running. **END** for completed. **HLD** for held.

# FORMULA SELECTOR

The screen located on your Formula Selector Module will allow you to actively see the status of the washers and wash programs.



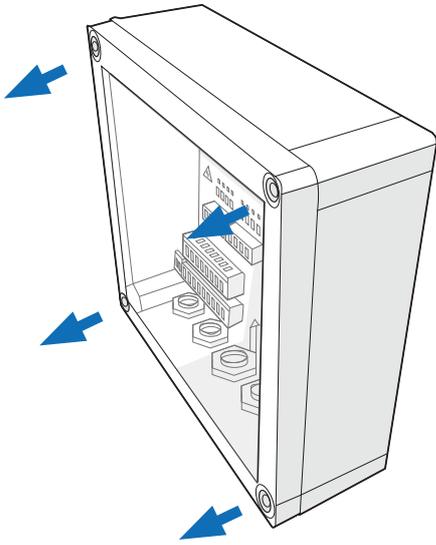
## SCREEN BREAKDOWN



- 1 Displays the machine number
- 2 Displays the formula number
- 3 Displays the name of the formula
- 4 Displays the programmed phases with the following symbols  
 (-) A dash represents a non programmed phase  
 (1) Displays expected phases  
 (1) Displays received phases
- 5 Shows the run status. **RUN** for running. **END** for completed. **HLD** for held.

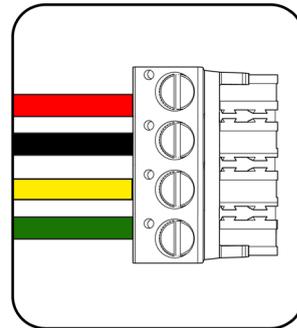
# FORMULA SELECTOR

1.



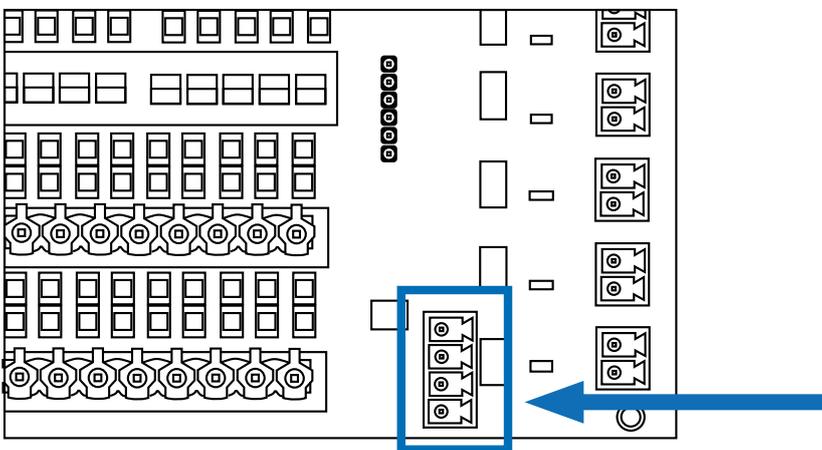
Remove the cover from your Signal Box.

2.



Wire your 4 way connector as shown.

3.

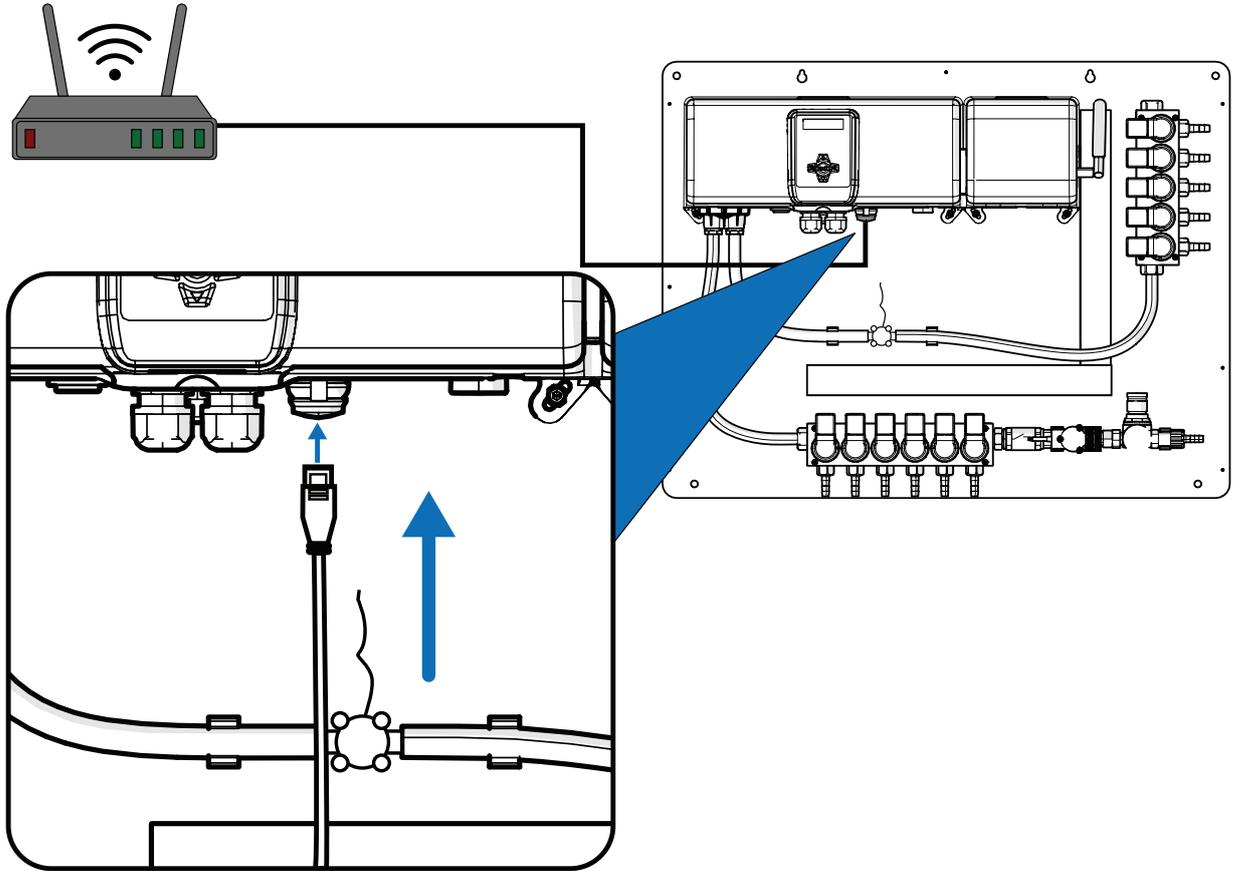


Wire your 4 way connector as shown.

# ALERT INFORMATION

Alert Screen	Description
EMERGENCY ALARM	Indicates a critical emergency that requires immediate attention. Examples include 'AIR PRESSURE FAILED!!' or 'EMERGENCY STOP LOCKED!!'
LEAK TEST ALARM	Indicates that the unit has failed the leak test and should be inspected.
WATER TEST ALARM	Indicates a problem during the water test, identifying the specific channel (e.g., 'WATER TEST CHANNEL 2')
WATER FLUSH ALARM	Alerts when there is a timeout during the water flush process, with the affected channel noted (e.g., 'FLUSH TIMEOUT CHANNEL 1').
PRODUCT DOSAGE ALARM	Notifies of a timeout in product dosing.
PRODUCT LOW-LEVEL ALARM	Warns that the product level is low, with the specific product name to be displayed.

# CONNECTING YOUR UNIT TO THE INTERNET

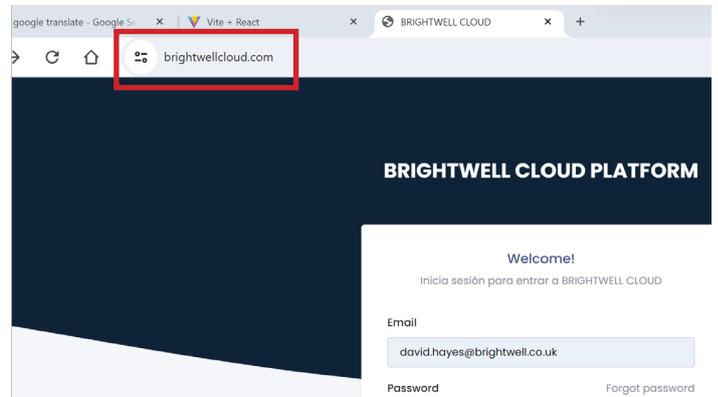


To connect your OPL unit to the internet please use an Ethernet cable and insert into the connector shown here.

# CONNECTING TO THE CLOUD

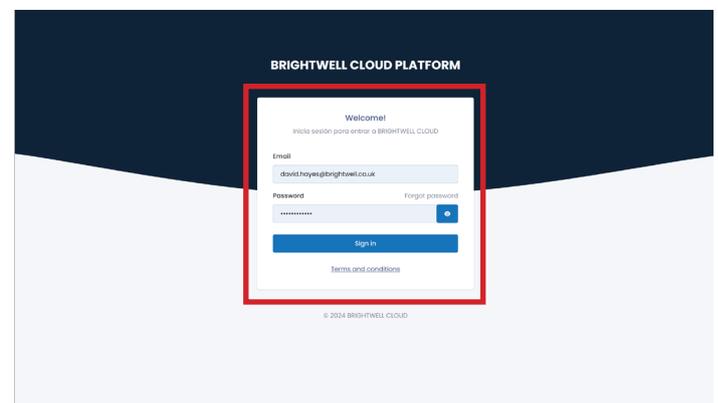
## STEP 1

Navigate to <http://brightwellcloud.com> using a suitable web browser.



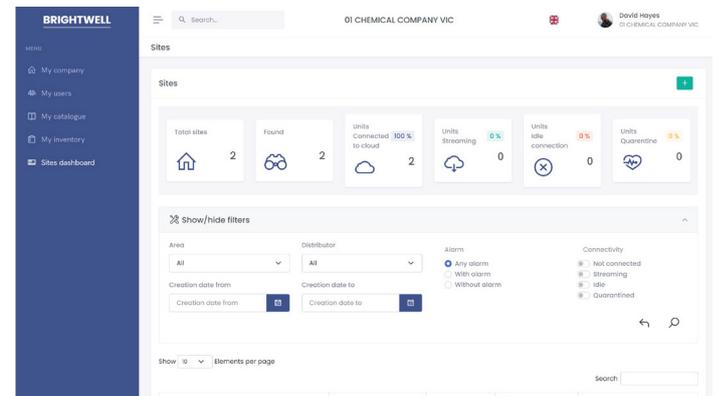
## STEP 2

Enter the log in details for your account. (These will be provided to you during the ordering process. Please contact your Brightwell representative if you do not have these).



## STEP 3

You will now see the main drop page for your Multiplex setup. We will break down the navigation options below.



# HOME PAGE OVERVIEW

The screenshot shows the Brightwell Home Page Overview. The interface includes a dark blue sidebar menu on the left, a top navigation bar with a search field and user profile, and a main content area with a 'Sites' dashboard. The dashboard features a summary of site statistics, a filter section, and a table of active units.

**1** Hamburger menu icon to expand/collapse the sidebar.

**2** Search bar for units, sites, or customers.

**3** Language selection icon (UK flag).

**4** User profile icon for David Hayes, 01 CHEMICAL COMPANY VIC.

**5** Sidebar menu items: My company, My users, My catalogue, My inventory, Sites dashboard.

**6** Green plus icon to add a new site.

**7** Summary dashboard showing: Total sites (2), Found (2), Units Connected to cloud (100%, 2), Units Streaming (0%, 0), Units Idle connection (0%, 0), Units Quarantine (0%, 0).

**8** Filter section with options for Area, Distributor, Alarm, and Connectivity.

**9** Search bar for filtering units.

**10** Table of units:

Name	Country	City	Alarm	Connectivity
Brightwell Briefcase	Spain	Gurb	Detected	Not connected
Spain wetlab	Spain	Gurb	Detected	Not connected

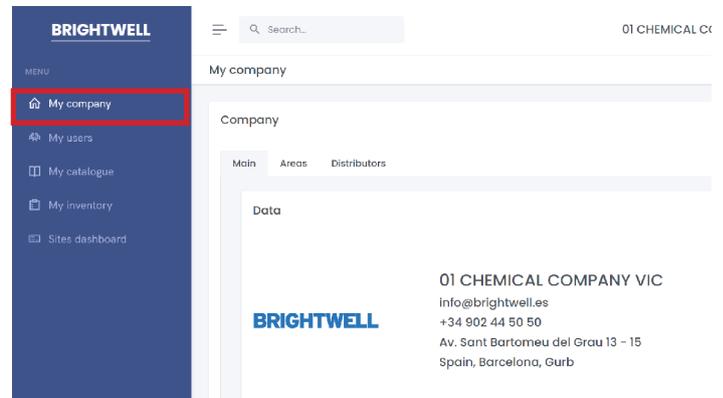
Showing 1 to 2 of 2 elements. Navigation: Previous 1 Next.

- 1** This will shrink or expand the side menu
- 2** Here you can quickly search for units, sites or customers
- 3** If you need to change the language use this icon
- 4** For profile settings or to logout press here
- 5** The side menu lets you move between the different sections of the portal
- 6** To add a new site to your system, press this green icon
- 7** Is a quick overview of your units and statistics
- 8** To filter the below list of sites use this box to set up your chosen parameters
- 9** Another search bar to quickly filter your units
- 10** This lists all current units attached to your Portal system

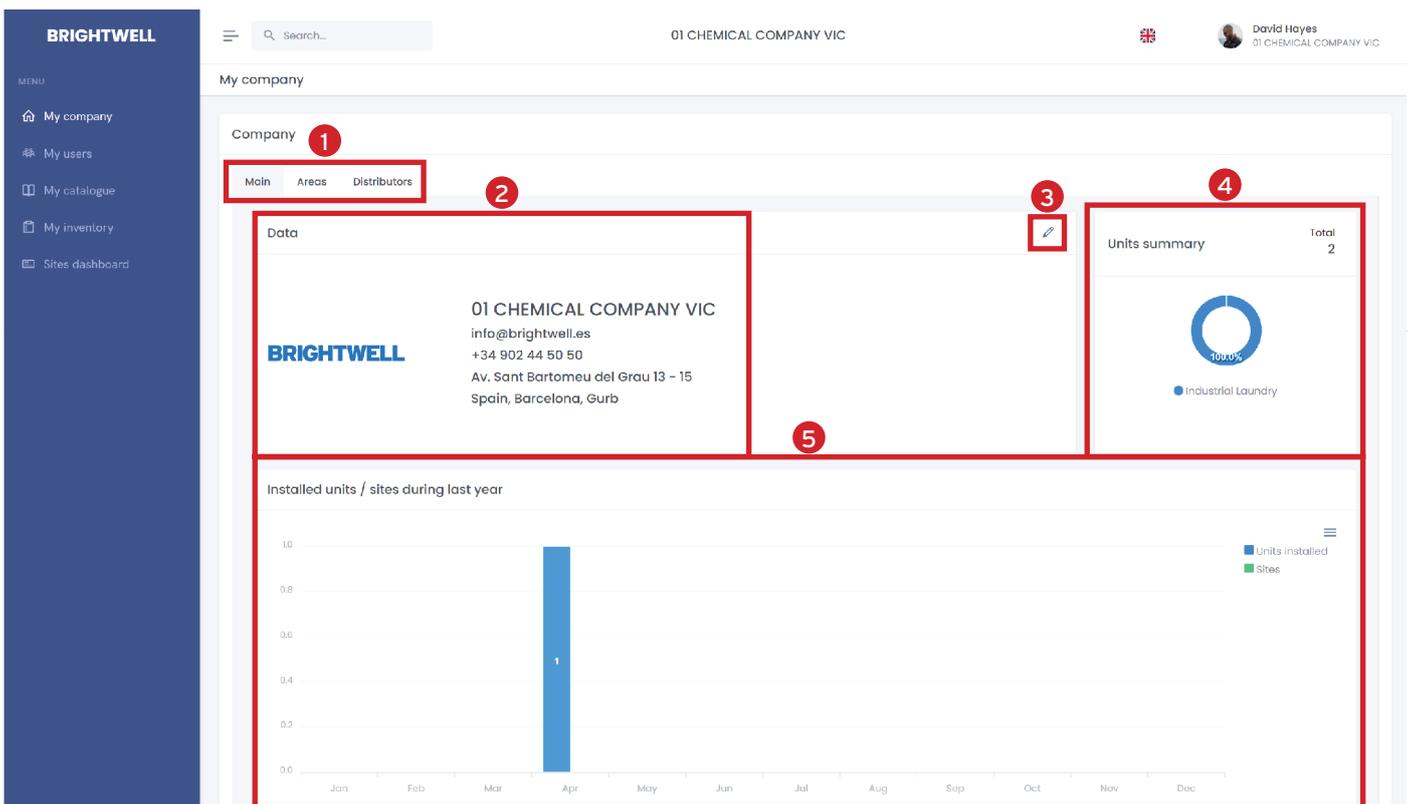
# ACCESSING YOUR COMPANY

## STEP 1

To access your company settings use the **My Company** icon in the side navigation bar.



# MY COMPANY OVERVIEW

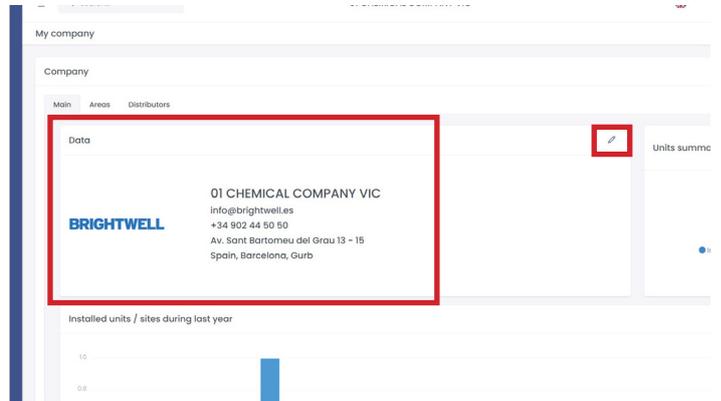


- 1** These tabs allow you to move between the Main page, Areas and Distributors linked to your company
- 2** Here you can see your current company details
- 3** Is the edit icon allowing you to change your company details
- 4** This is a quick overview of your units
- 5** Is a graph showing number of installations in the previous year

# EDITING YOUR COMPANY SETTINGS

## STEP 1

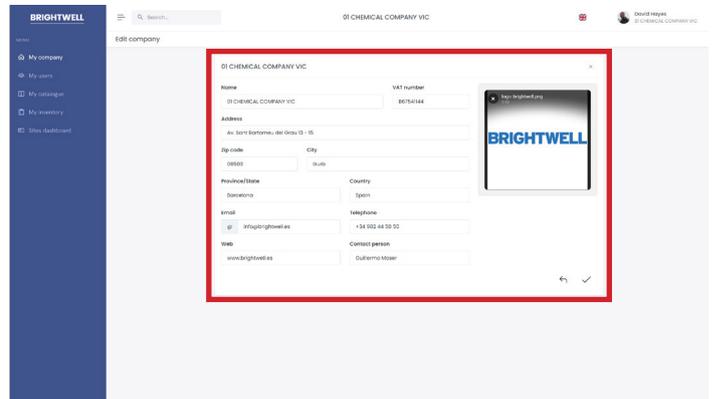
To edit the main company details seen here, press the **Edit icon** in the top right of the tile.



## STEP 2

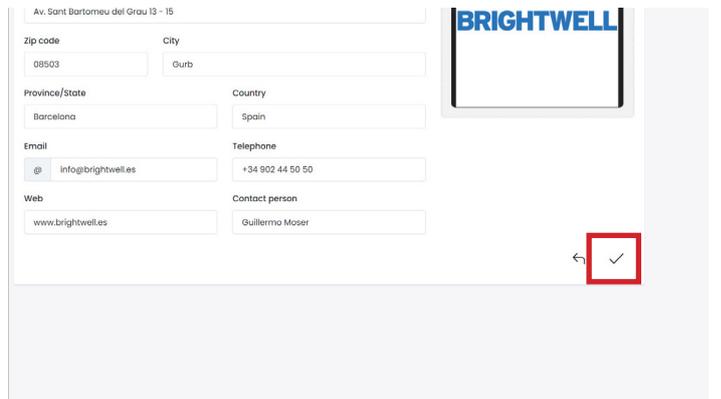
You can now edit the following fields;

- Name
- VAT number
- Address
- Email
- Telephone
- Website
- Contact
- Logo



## STEP 3

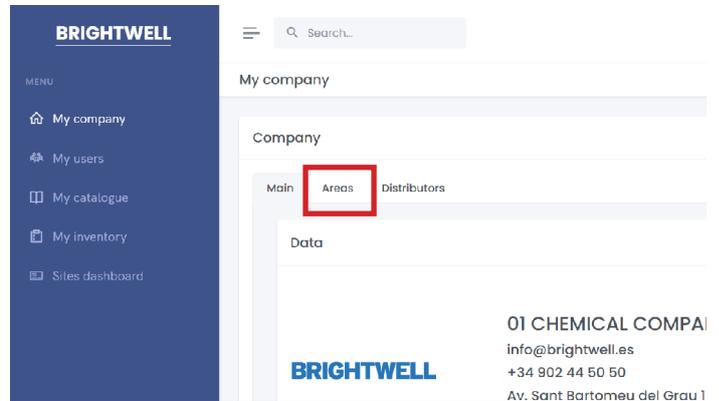
When you have finished the changes press the **Tick icon** to save.



# ADDING OR EDITING NEW AREA

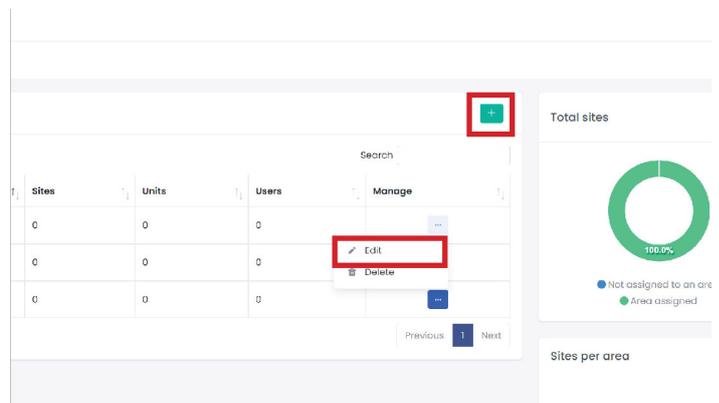
## STEP 1

To open the [Areas](#) screen for your company press the [Areas](#) tab at the top here.



## STEP 2

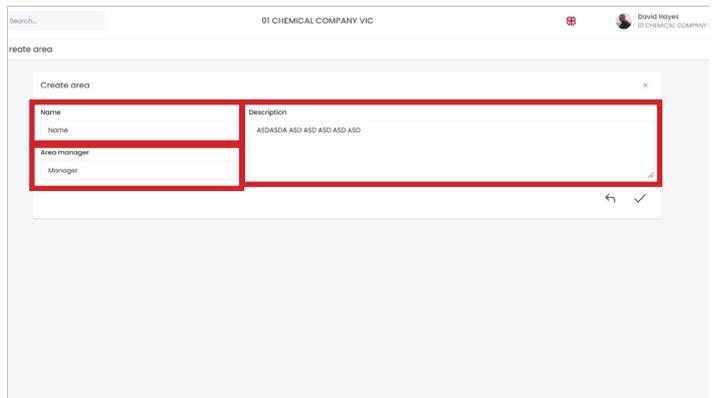
To add a new area press the + icon seen on the right hand side of the tile. To edit an existing area press the 3 dots next to the area you wish to change. A pop up menu will appear and you can select **Edit**.



## STEP 3

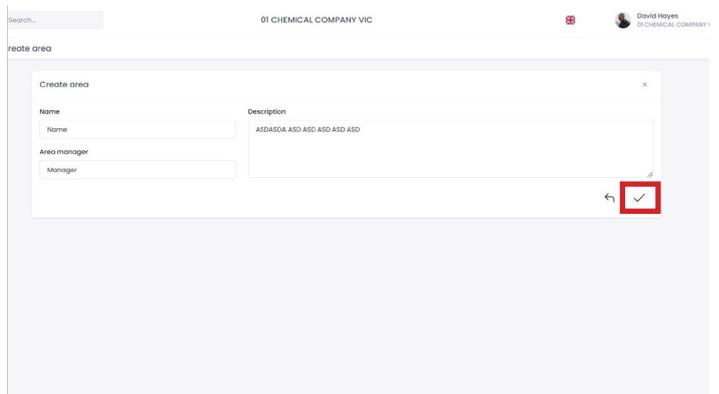
Use the fields provided to set the following details;

- Name
- Area percentage
- Description



## STEP 4

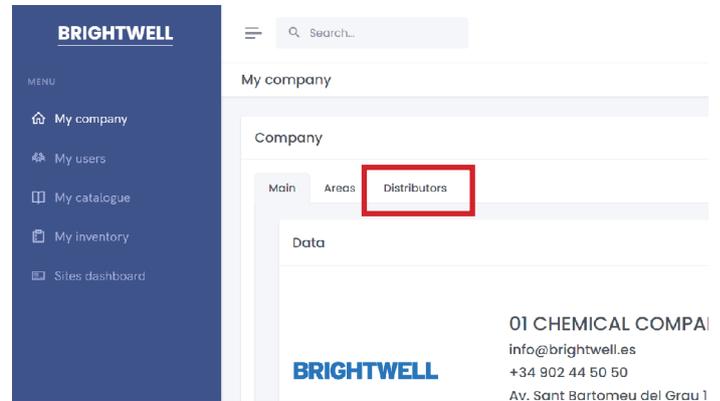
Once you are happy press the Tick icon to save these settings and create your site.



# ADDING OR EDITING AN EXISTING DISTRIBUTOR

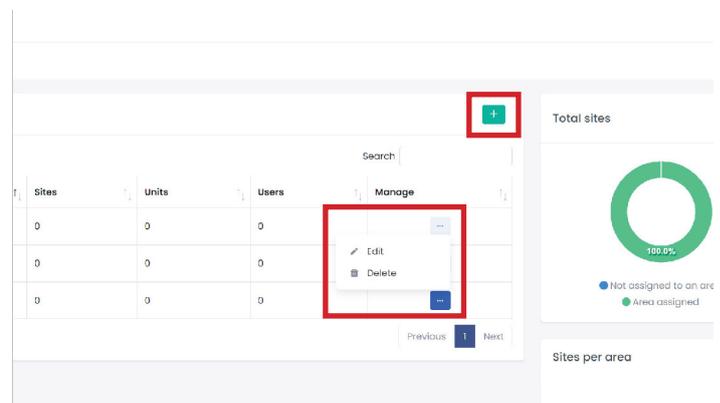
## STEP 1

To open the [Distributor](#) screen for your company press the [Distributor](#) tab at the top here.



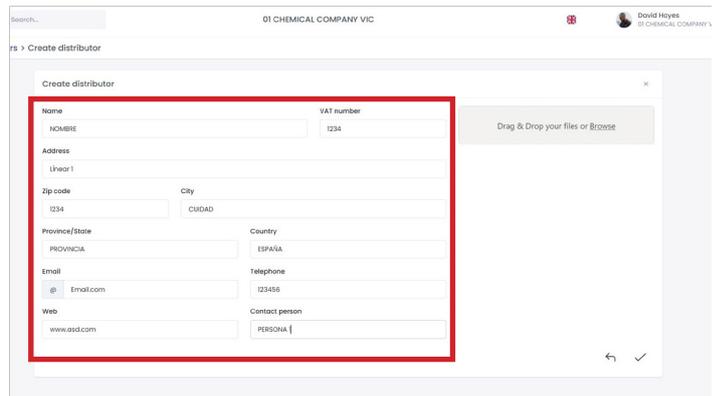
## STEP 2

To add a new distributor press the + icon seen in the left hand side of the tile seen here. To edit an existing distributor press the **3 dots** next to the area you wish to change. A pop up menu will appear and you can select **Edit**.



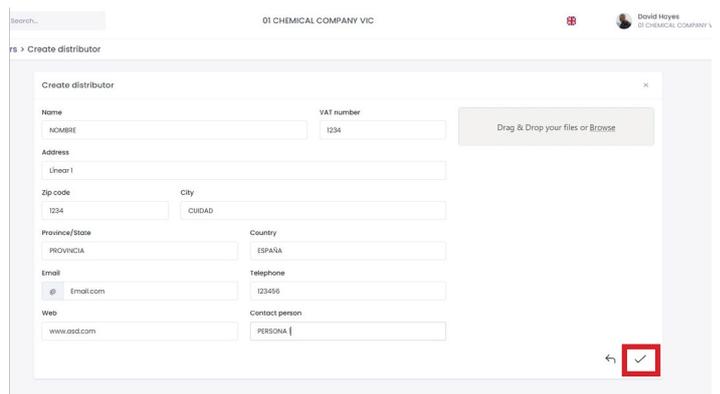
## STEP 3

Use the fields provided to add the details of your new Distributor, including an icon if required



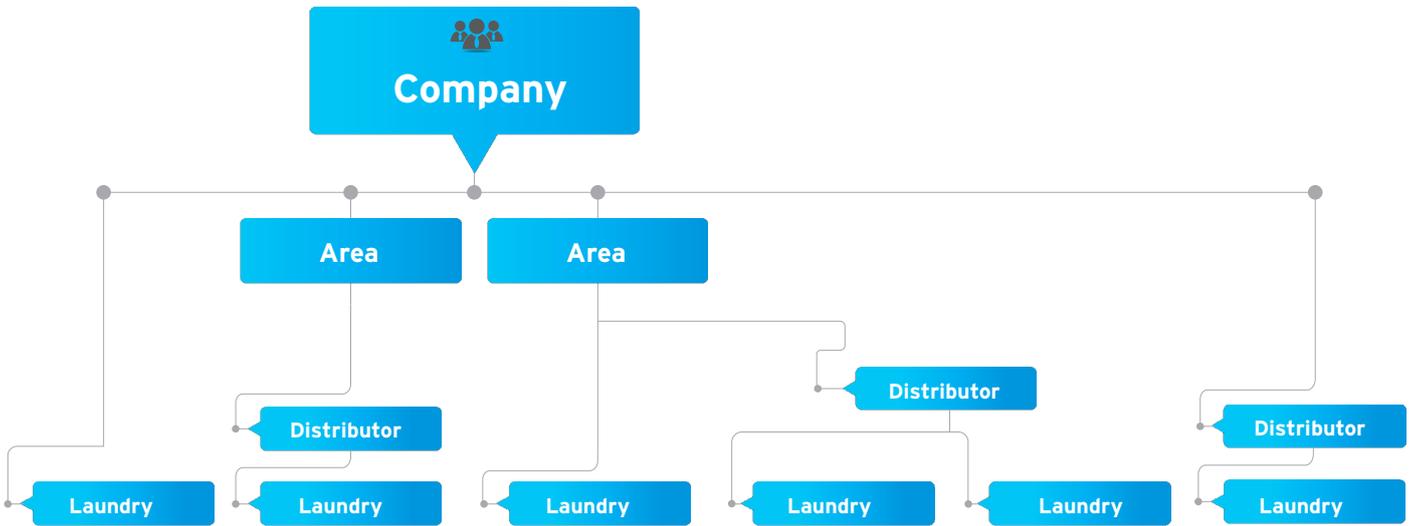
## STEP 4

Once you are happy press the Tick icon to save these settings and create your distributor



# ACCOUNT PERMISSIONS AND SECURITY

The Multiplex cloud system implements a tiered security system for your company and its users, ensuring that only relevant information and access are enabled for accounts further down the chain. This is explained further in the flowchart below.



**Area:** Refers to a geographic area or a specific customer that extends over a wide region and is served exclusively by someone without their own customer base.

**Laundry:** There can also be laundries serviced directly by your company, which will only be accessible via accounts directly linked to your company account.

**Distributor:** These are your customers who may be hosted within a larger Area account or directly connected to your company.

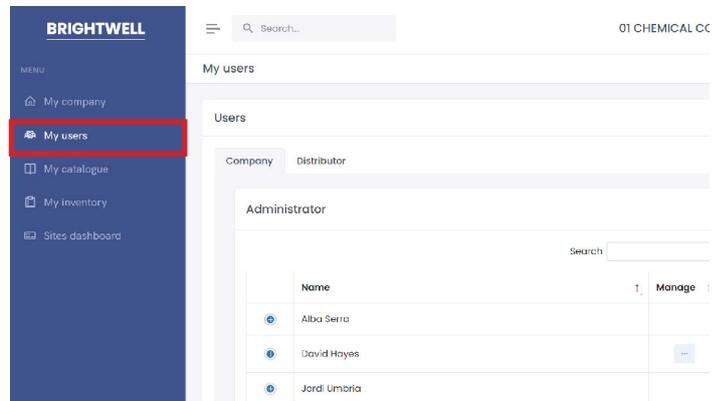
**User Accounts:** We offer two levels of user accounts for each of the four levels (Administrator and user), each with its own permissions. A user account can create accounts on the levels directly below it, allowing you to build a hierarchical structure that integrates with the existing system.

All of the above can be modified at any time using the Portal, allowing for complete customization of how you manage your cloud structure to perfectly fit your customer needs.

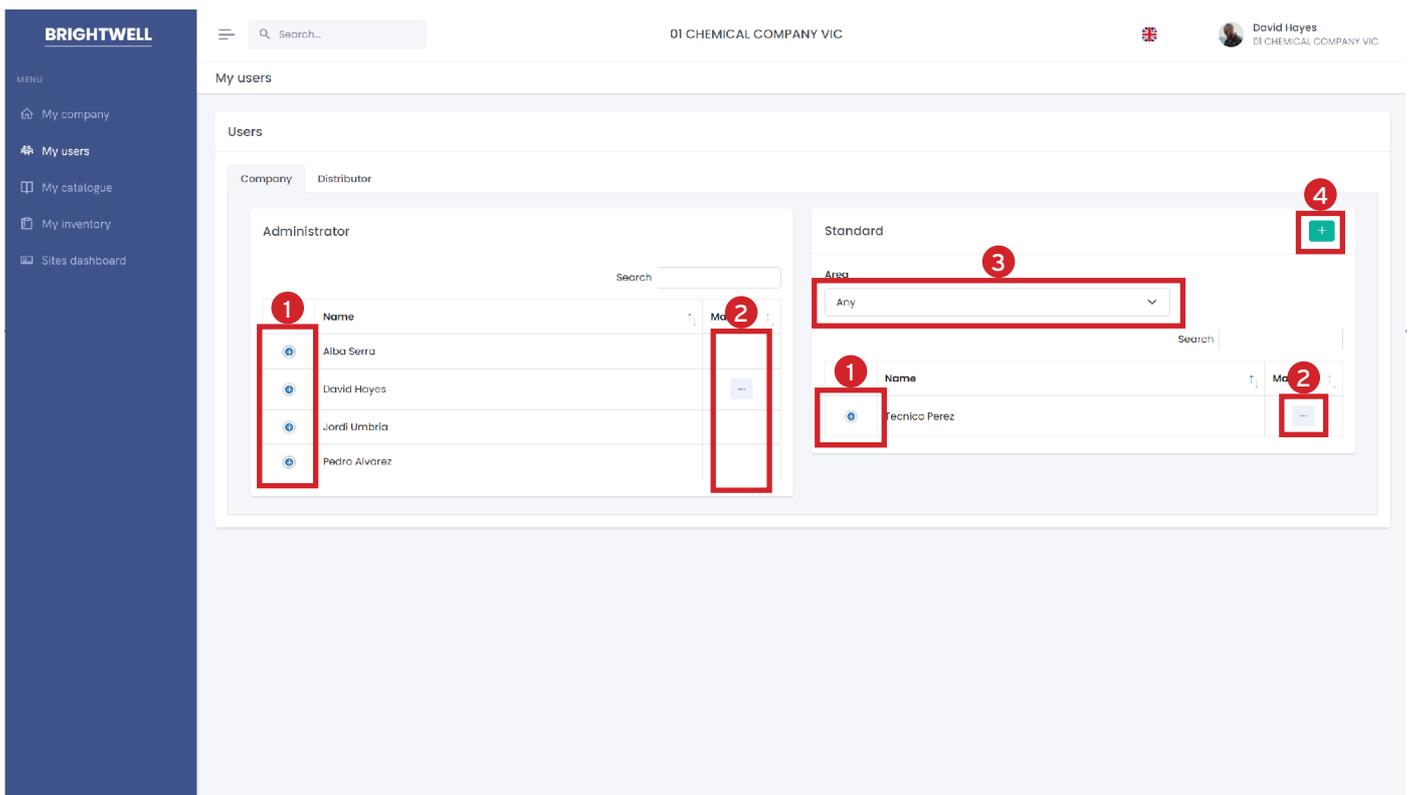
# ACCESSING YOUR USERS

## STEP 1

To access your user settings use the My Users icon in the side navigation.



# MY USERS OVERVIEW

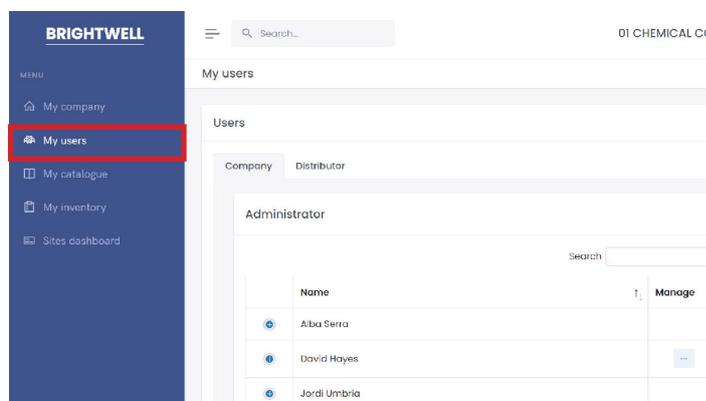


- 1 Expands to show the details for the user accounts
- 2 The three dots allow you to edit the specific user account
- 3 The drop down will allow you to filter the standard users by their account
- 4 Allows you to add a new user to the customer account

# EDITING YOUR USER ACCOUNT

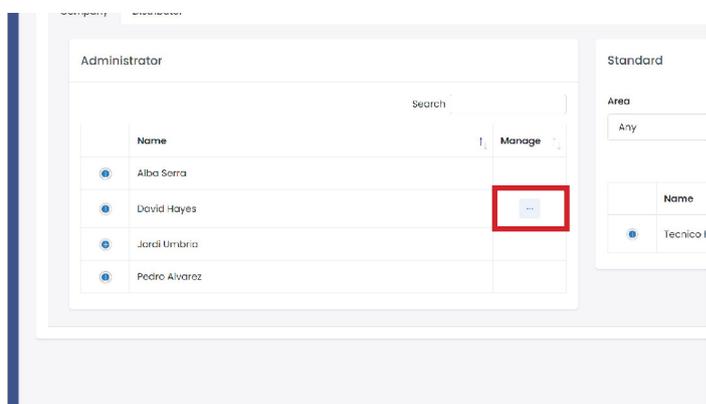
## STEP 1

To edit your user account open the My Users menu from the navigation bar here.



## STEP 2

Locate your account and press the 3 dots located next to it to open the edit menu.

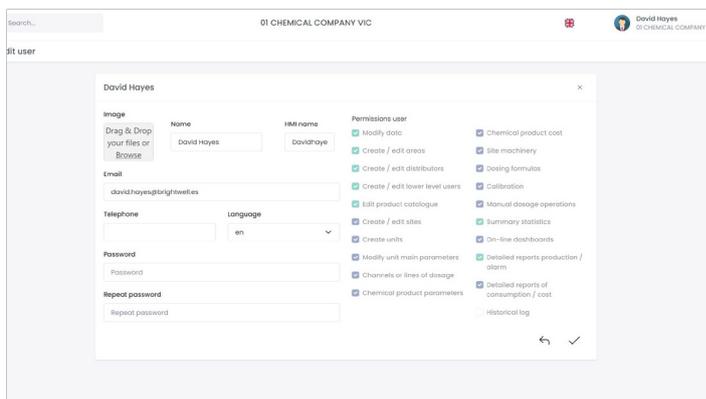


## STEP 3

You can now adjust the settings for your account including:

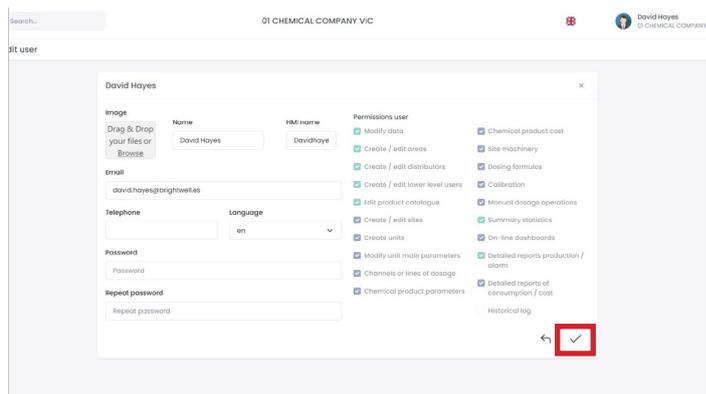
- Setting a photo
- Name and HMI name
- Email
- Telephone
- Language
- Password

You are also able to see your account permissions on the right.



## STEP 4

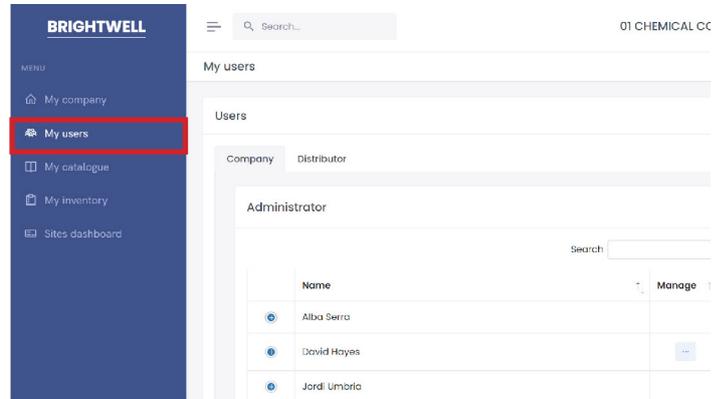
Once you are happy press the Tick icon to save these settings and edit your distributor.



# ADDING OR EDITING A STANDARD USER ACCOUNT

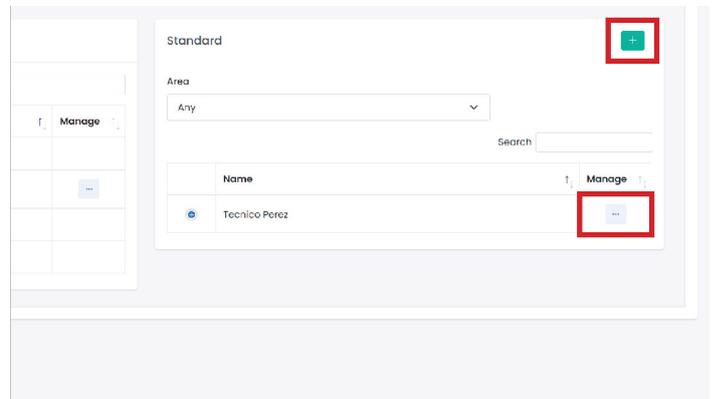
## STEP 1

To create a new or edit an existing user account open the **My Users** menu from the navigation bar.



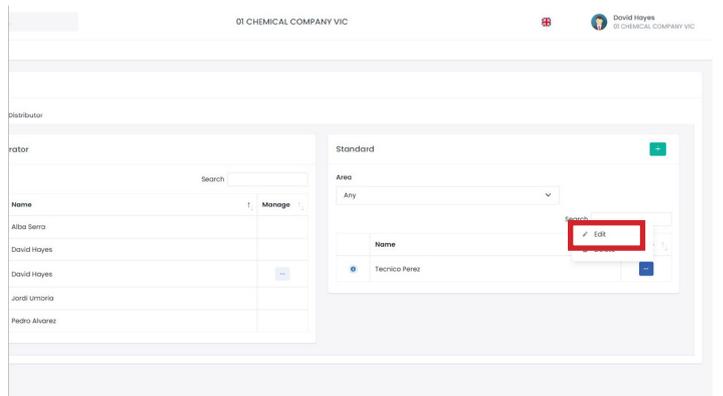
## STEP 2

Locate your account and press the **3 dots** located next to the account you want to edit.



## STEP 3

Once you have selected this a pop-up will appear. Select **Edit** to open the settings menu

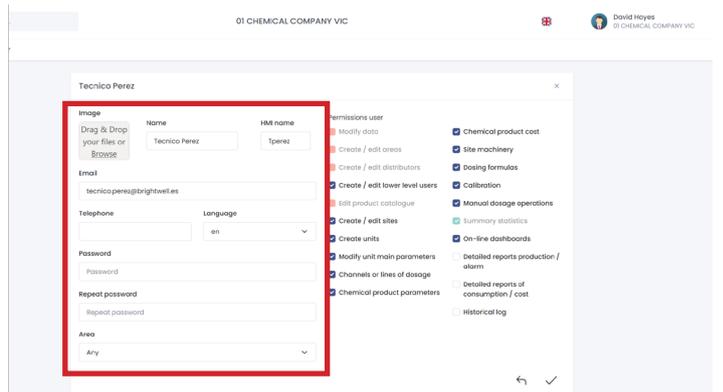


## STEP 4

In the left hand column you can adjust the following:

- Setting a photo
- Name and HMI name
- Email
- Telephone
- Language
- Password

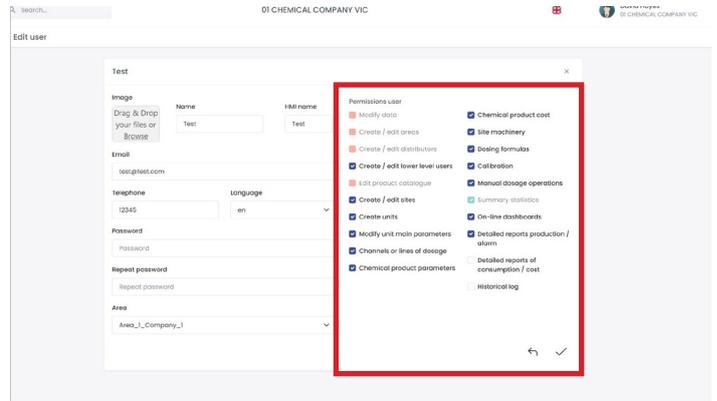
You are also able to set their account permissions on the right using the check boxes provided.



# ADDING OR EDITING A STANDARD USER ACCOUNT

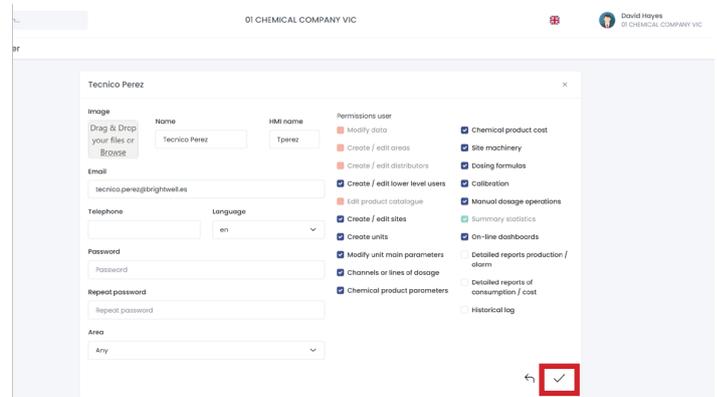
## STEP 5

After the user has been created, you can set the account permissions using the tick boxes on the right hand side.



## STEP 6

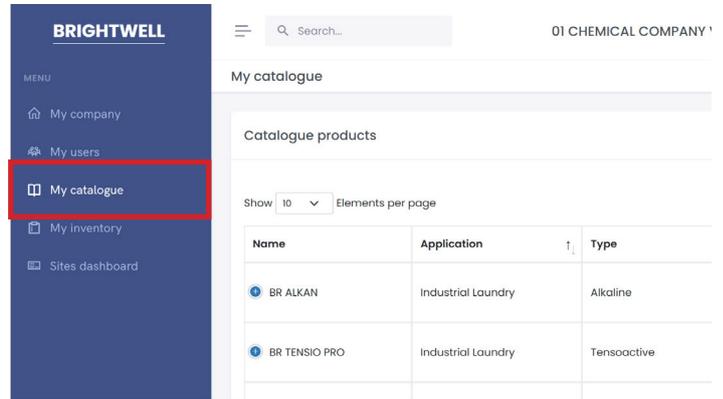
Once you have made the changes press the Tick icon to save the new settings.



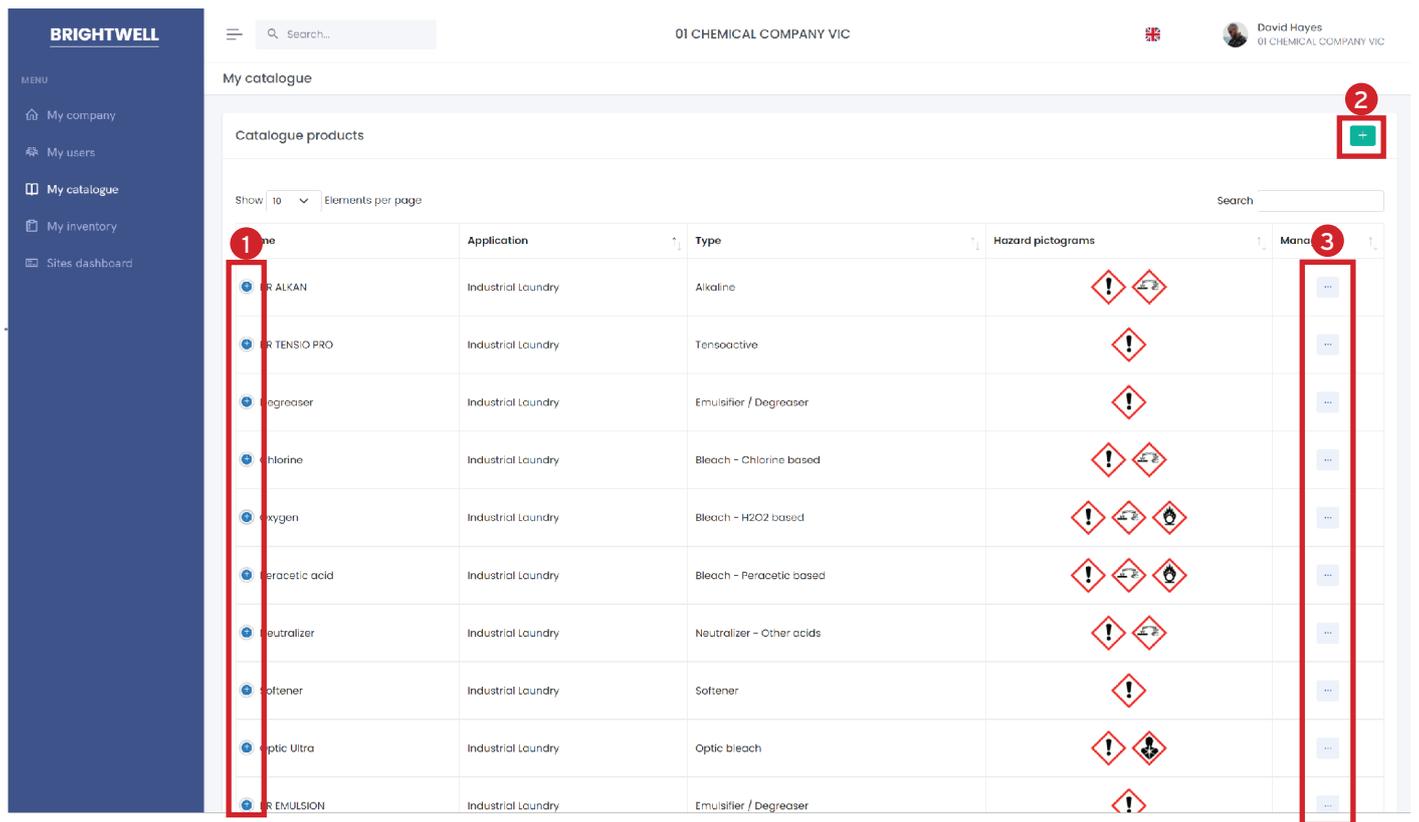
# ACCESSING YOUR PRODUCT CATALOGUE

## STEP 1

To access your Product Catalogue press the My Catalogue icon in the side menu.



# PRODUCT CATALOGUE OVERVIEW



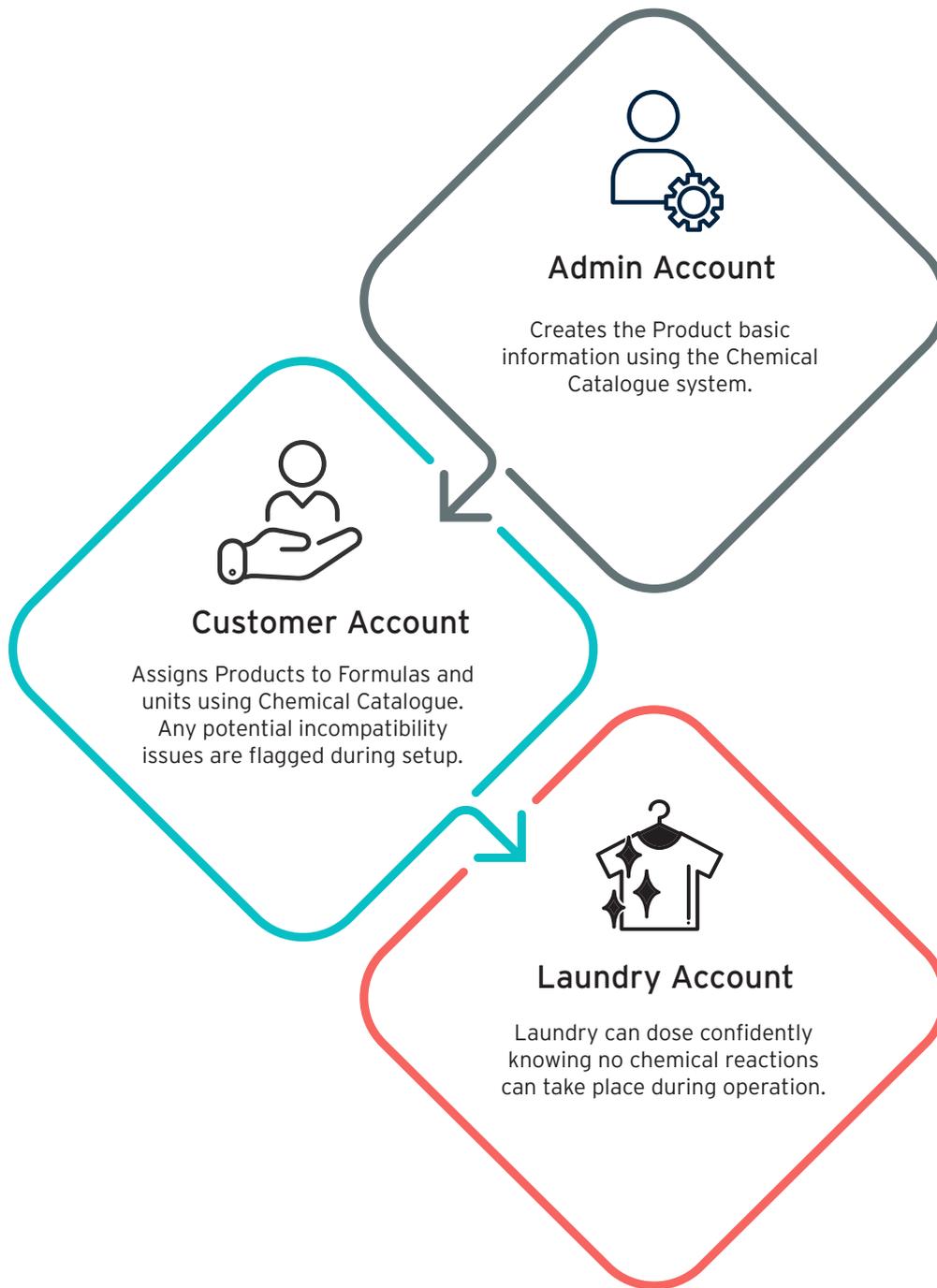
- 1 Shows the details of when the chemical was created.
- 2 Press this icon to create a new chemical for your catalogue
- 3 Use the three dots to edit an existing chemical

# PRODUCT CATALOGUE INFORMATION

To maximize the benefits you receive from your Multiplex system, it is best to use the complete setup options available through the cloud system. This allows you to access warnings for potential incompatibility issues from your products during the wash phase, preventing the hazard of mixing incompatible chemicals and generating unwanted reactions.

Once a chemical has been added to the catalogue, it is set up across all your systems, making it a quick and easy way to manage your entire catalogue for all units in the field.

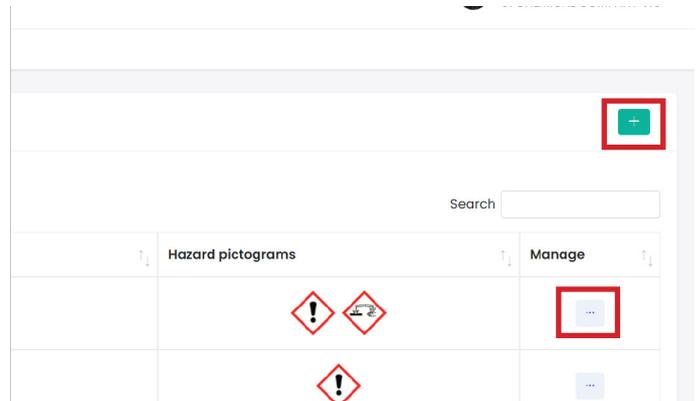
Additionally, you can store any relevant safety or information documentation so that they are available to users with the correct access on your cloud.



# EDITING OR ADDING A PRODUCT

## STEP 1

To edit an existing product within your catalogue press the three dots on the right of the tile. Alternatively, to create a new product for your catalogue press the + icon in the top right of the tile.



## STEP 2

Edit the product details including all relevant hazard information.

Please refer to the chemical manufacturers for this information.

Catalogue > Edit catalogue product

**BR ALKAN**

Application: Industrial Laundry | Type: Alkaline | Datasheet: Drag & Drop your files or Browse

Name: BR ALKAN

State: Liquid | Density: 1

Recommended dose:

**UNE-EN GHS**

Health hazard  
 Serious health hazard  
 Acute toxicity  
 Hazardous to environment  
 Corrosive

Oxidising  
 Flammable  
 Explosive  
 Gas under pressure

**NFPA**

Health hazard: hazardous

Fire hazard: Will not burn

Instability hazard: Violent chemical change

Specific hazard: None

Indications:

Remarks:

← ✓

## STEP 3

When you have completed the information use the Tick icon in the corner to save the details.

**NFPA**

Health hazard: hazardous

Fire hazard: Will not burn

Instability hazard: Violent chemical change

Specific hazard: None

Indications:

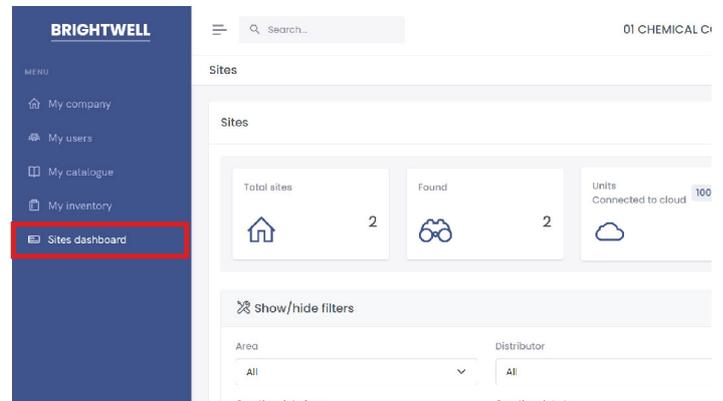
Remarks:

← ✓

# ACCESSING YOUR SITES DASHBOARD

## STEP 1

To access your user settings use the **Sites Dashboard** icon in the side navigation.



# SITES DASHBOARD OVERVIEW

The screenshot displays the 'Sites' dashboard in the Brightwell application. The interface includes a sidebar, a top navigation bar, and a main content area. Five red callouts with numbers 1 through 5 point to specific features:

- 1**: A green '+' button in the top right corner of the dashboard area.
- 2**: A red-bordered box encompassing the top row of statistics cards: 'Total sites' (2), 'Found' (2), 'Units Connected to cloud' (100%), 'Units Streaming' (0%), 'Units Idle connection' (0%), and 'Units Quarantine' (0%).
- 3**: A red-bordered box encompassing the 'Show/hide filters' section, which includes dropdown menus for 'Area' and 'Distributor', date range pickers, and radio buttons for 'Alarm' and 'Connectivity' settings.
- 4**: A search input field located at the bottom right of the dashboard.
- 5**: A red-bordered box around the first two rows of a table listing site details.

Name	Country	City	Alarm	Connectivity
Brightwell Briefcase	Spain	Gurb	Detected	Not connected
Spain wetlab	Spain	Gurb	Detected	Not connected

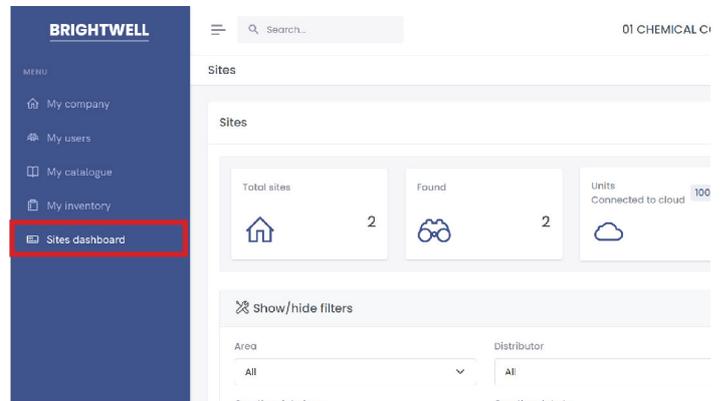
Showing 1 to 2 of 2 elements

- 1 Adds a new site to your account
- 2 Shows a quick overview of your units and site statistics
- 3 Allows you to set custom filters to display sites
- 4 A custom search bar for your sites
- 5 Displayed the site details

# CREATING A NEW OR EDITING AN EXISTING SITE

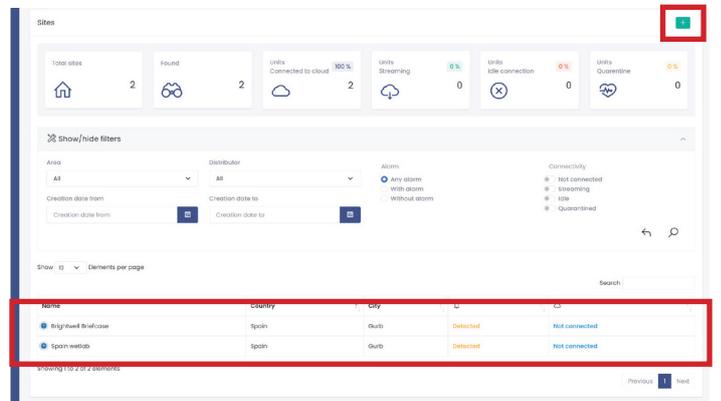
## STEP 1

To create a new site, or edit an existing one on your system go to the **Sites Dashboard** menu from the side navigation bar.



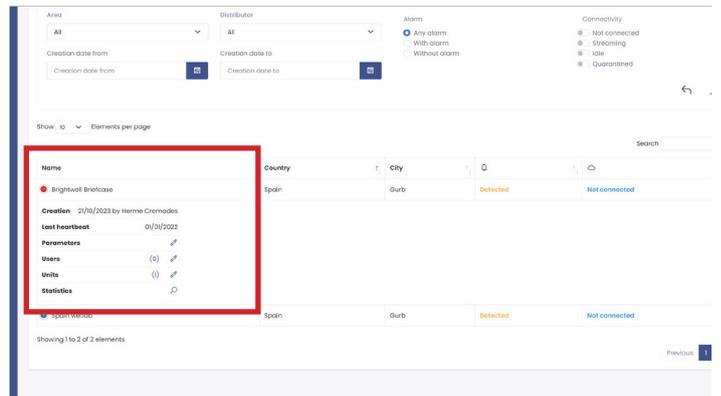
## STEP 2

From the sites list locate the site you want to edit and click on it to expand the options. Alternatively, create a new site, press the + icon in the top right of the screen.



## STEP 3

If you are editing an existing site the following menu will appear. Click on the **Edit icon** next to parameters to enter the configuration menu.

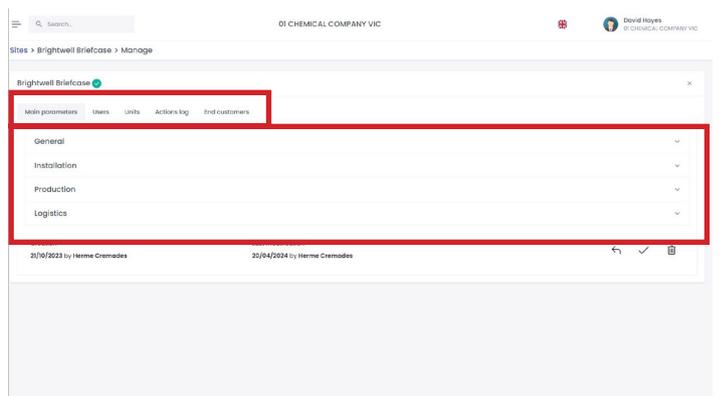


## STEP 4

On the site edit screen you can use the top bar to move between the:

- Main Parameters
- Users
- Units
- Actions log
- End customers

The second part are the expandable menus for editing the settings located on this tab.

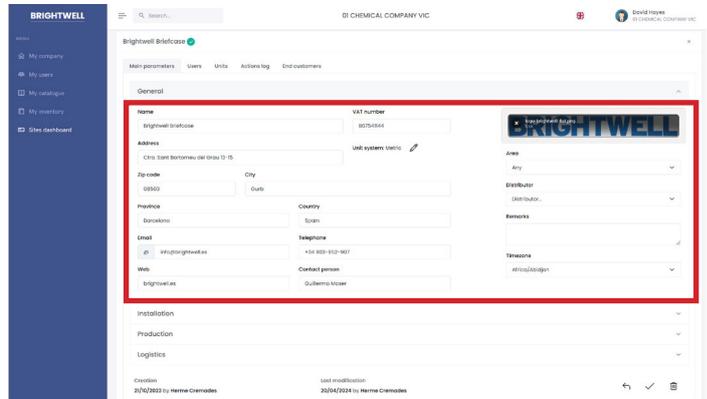


# EDITING A SITES MAIN PARAMETERS

## STEP 6

In the **Main Parameters** tab expand the **General** Tab to adjust the following settings:

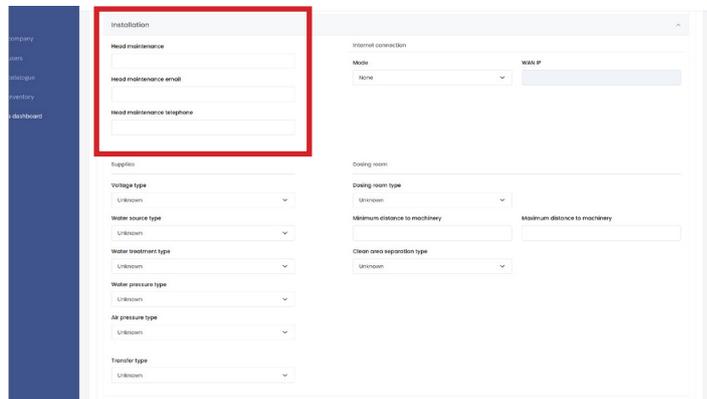
- Name
- VAT number
- Address
- Email
- Telephone
- Website
- Contact
- Logo
- Area
- Distributor
- Remarks
- Time zone



## STEP 7

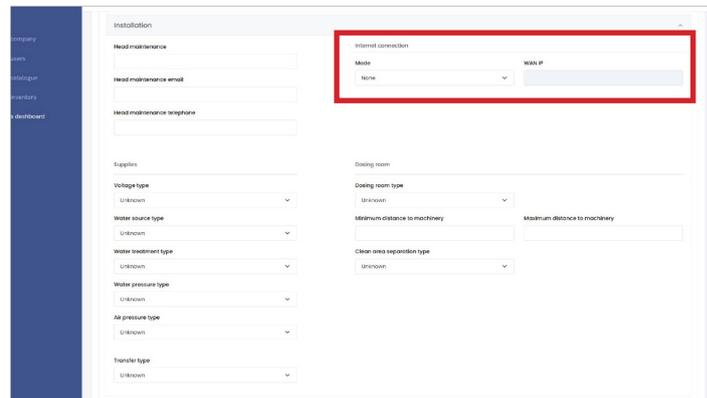
Initially you can set up your **Head Maintenance** contact information;

- Name
- Email
- Telephone



## STEP 8

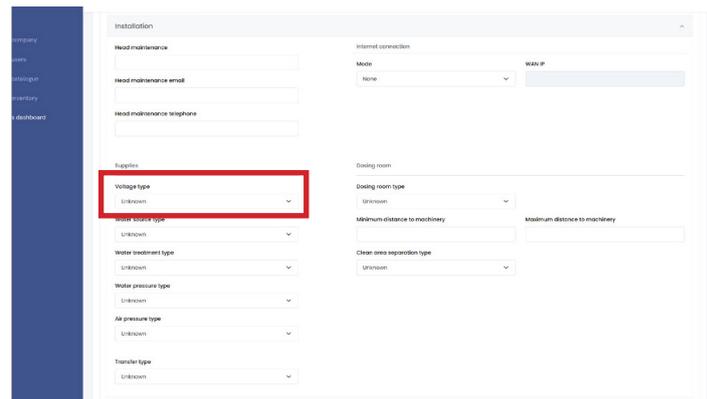
If the site has specific internet setup, you can add the **Mode** and **WAN IP** in the fields provided.



## STEP 9

In the initial **Supplies** section you can adjust the **Voltage type** on site. These are:

- 110V - Single Phase
- 230V - Single Phase
- 400V - 3 phases (transformer required)
- 400V - 3 phases + Neutral



# EDITING A SITES MAIN PARAMETERS

## STEP 10

Next you can adjust your **Water Source Type** between:

- Well / Reservoir
- External tank periodically filled
- Town network

The screenshot shows the 'Installation' configuration page. The 'Water source type' dropdown menu is highlighted with a red box. The dropdown menu is currently set to 'Unknown'.

## STEP 11

Next you can adjust your **Water Treatment Type** between:

- None
- Osmosis
- Water softener
- Other

The screenshot shows the 'Installation' configuration page. The 'Water treatment type' dropdown menu is highlighted with a red box. The dropdown menu is currently set to 'Unknown'.

## STEP 12

Next you can adjust your **Water Pressure Type** between:

- External Network Pressure
- Pressure booster supplied for the dosing unit
- Pressure booster of the laundry

The screenshot shows the 'Installation' configuration page. The 'Water pressure type' dropdown menu is highlighted with a red box. The dropdown menu is currently set to 'Unknown'.

## STEP 13

Next you can adjust your **Air Pressure Type** between:

- Not necessary
- Compressor supplied for the dosing unit
- Compressor of the laundry (>=8Bar)

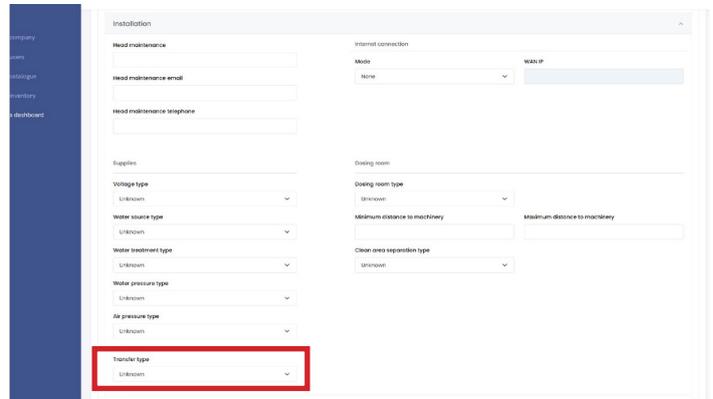
The screenshot shows the 'Installation' configuration page. The 'Air pressure type' dropdown menu is highlighted with a red box. The dropdown menu is currently set to 'Unknown'.

# EDITING A SITES MAIN PARAMETERS

## STEP 14

Next you can adjust your **Transfer Type** between:

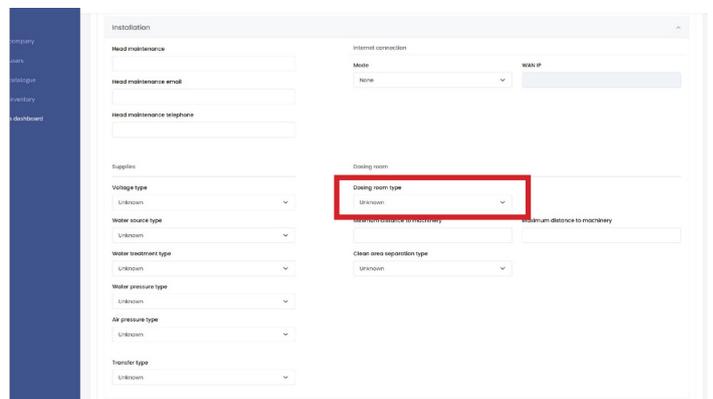
- None
- Storage Tank -> Dosage Tank
- Truck -> Dosing Tank
- Truck -> Storage Tank -> Dosing Tank
- Other



## STEP 15

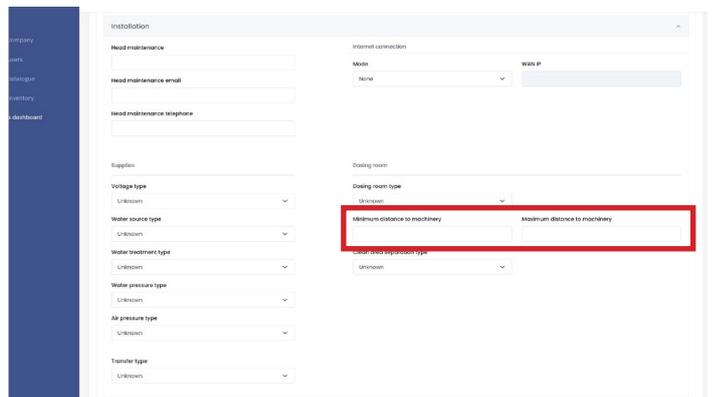
Next you can adjust your **Dosing Room Type** between:

- None - Products are in an external location
- None - Products are inside the laundry area
- Yes - Products are in a particular room



## STEP 16

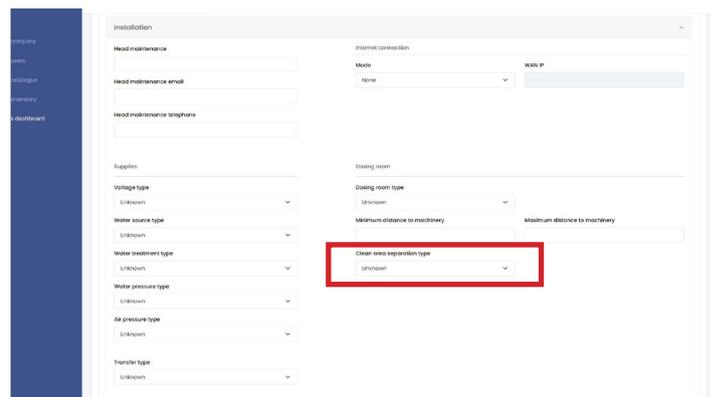
Next you can set your **Minimum and Maximum distance to machinery**.



## STEP 17

Next you can adjust your **Clean Area Separation Type** between:

- No separation between dirty and clean areas
- Normal separation between dirty and clean areas
- Sanitary barriers

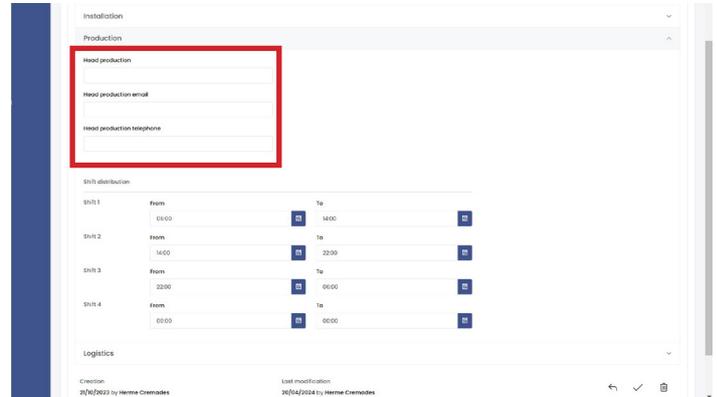


# EDITING A SITES MAIN PARAMETERS

## STEP 18

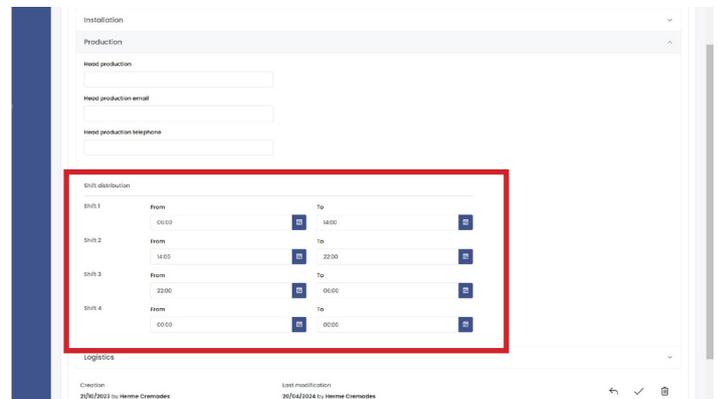
The third tab allows you to set the **Production** contact information.

- Production Head
- Production Email
- Production Telephone



## STEP 19

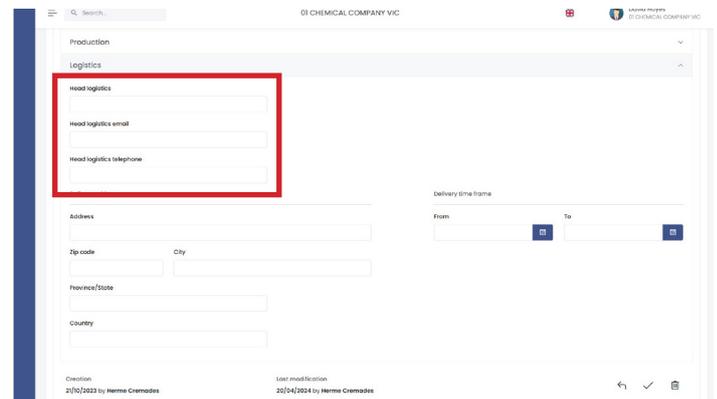
If your site has shifts, you can adjust the timings here to produce shift specific diagnostic data later.



## STEP 20

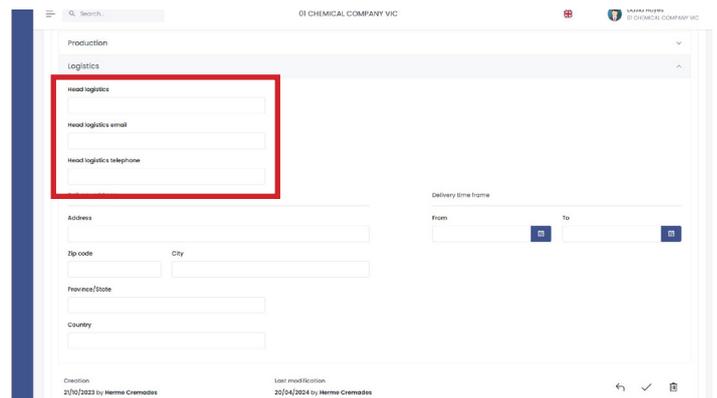
The last section allows you to adjust the **Logistics** contact information.

- Logistics Head
- Logistics Email
- Production Telephone



## STEP 21

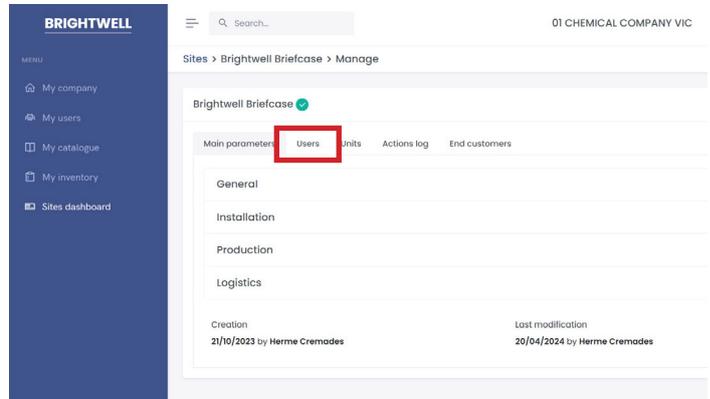
Finally, to save your settings press the **Tick Icon** in the bottom right. You can also delete the site from here using the **Trash Can Icon**.



# EDITING USERS FOR A SITE

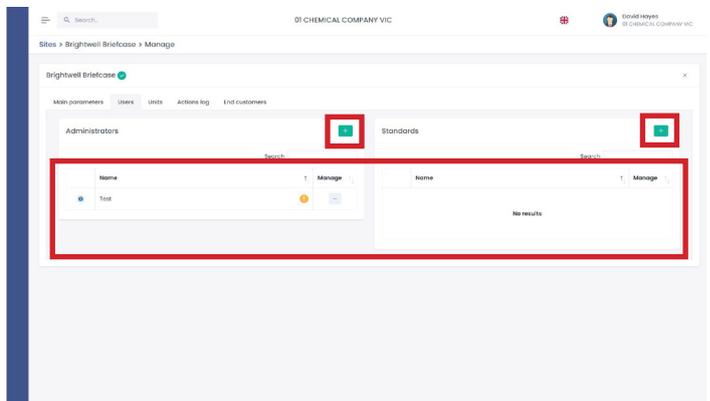
## STEP 1

To open the users list for the site press the **Users** tab at the top of the page.



## STEP 2

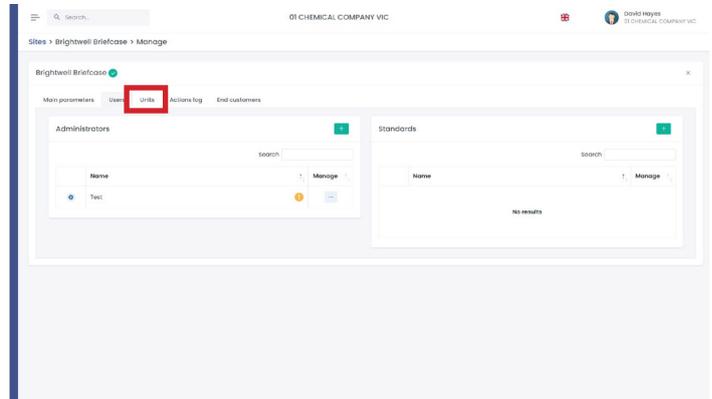
Here you can use the **+** icons to add either site administrators or standard users. Current users will be listed in the tables below.



# EDITING A UNIT

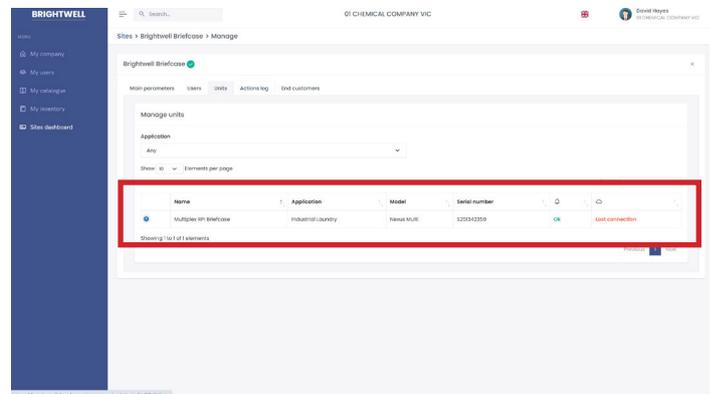
## STEP 1

To open the unit list for the site press the **Unit** tab at the top of the page.



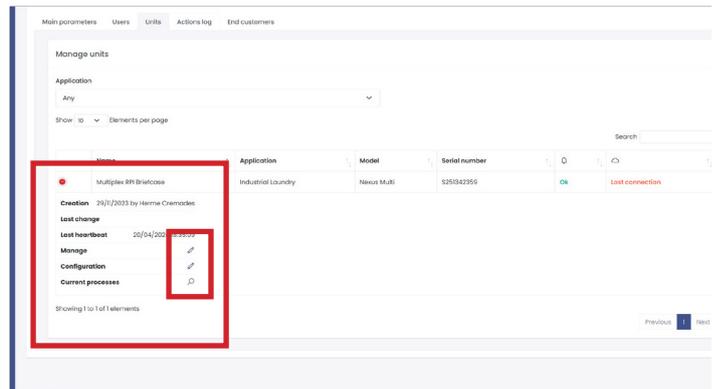
## STEP 2

All units that are linked to the site will be listed in the table at the bottom of the page. Click on the unit you want to modify.



## STEP 3

Click on the **+** icon or the unit name to expand the parameters menu. Click on the **Edit** icon to make the changes you desire.

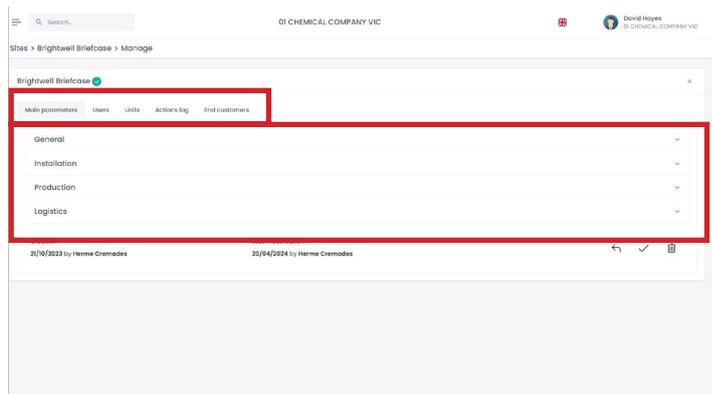


## STEP 4

On the site edit screen you can use the top bar to move between the:

- Main Parameters
- Users
- Units
- Actions log
- End customers

The second part are the expandable menus for editing the settings located on this tab.



# EDITING A UNIT

## STEP 5

Once the unit settings page has opened you can modify the following fields:

### General settings in section 1

- Unit Application
- Model
- Name
- Master number
- Protocol

### Configuration settings in section 2

This will allow you to edit the channel settings. (These will be covered in the next section)

### Remote warning settings in section 3

- Emergency stop
- External contacts
- Lost connection
- Wrong user login
- Washer communication
- Washer cycles
- Leak test
- Water test / flush
- Product dosage
- Product low level

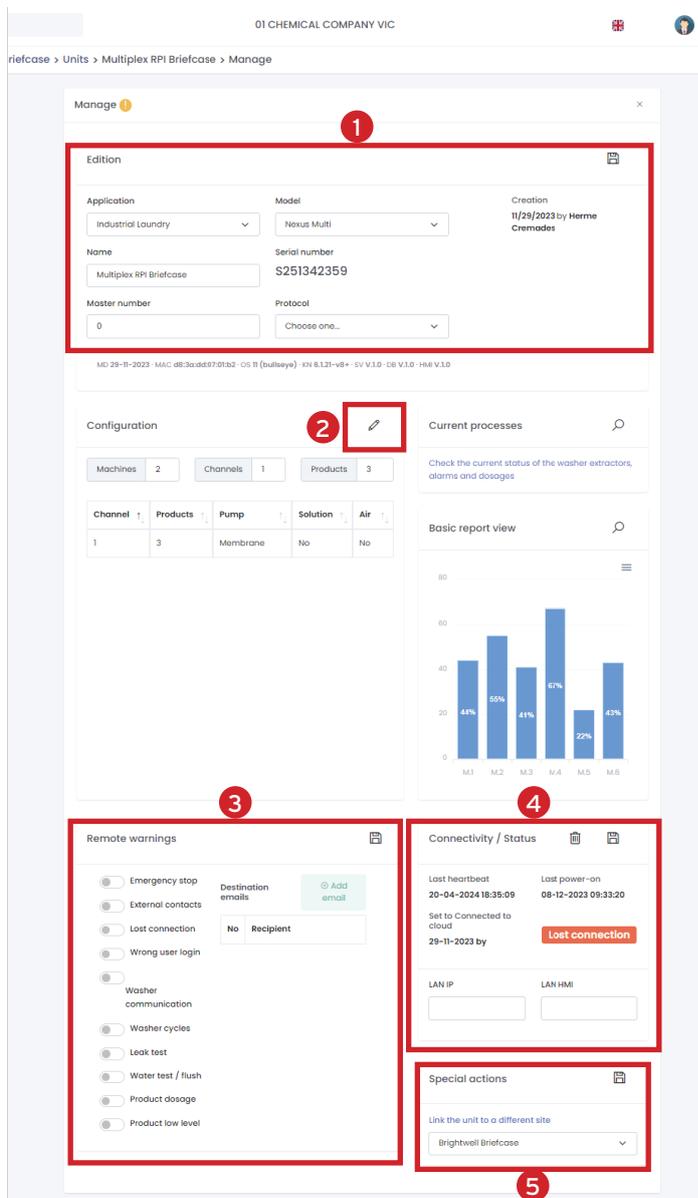
### Connectivity / Status settings in section 4

- Lan IP
- Lan HMI

### Special actions settings in section 5

- Change the site the unit is linked to

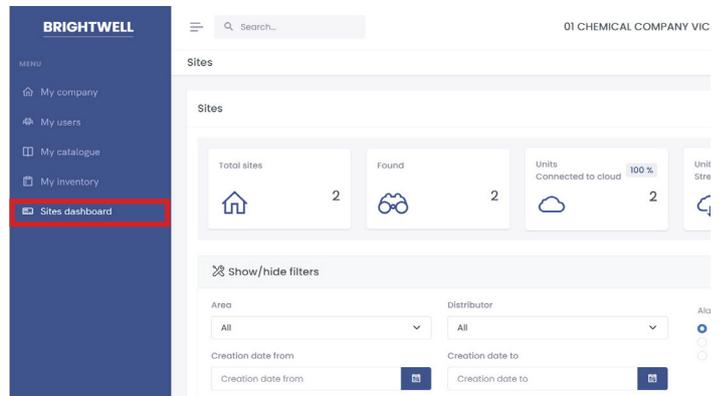
Please note - All sections are saved separately. If you make changes across multiple sections please make sure to press the Save icon for each section.



# ACCESSING CHANNELS, WASHER EXTRACTORS, FORMULAS AND DATA TRANSFER

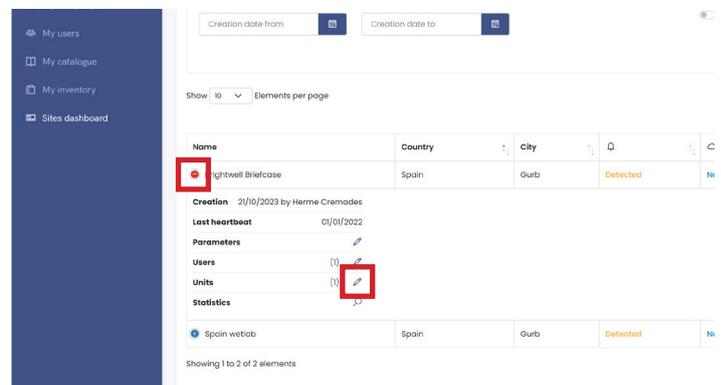
## STEP 1

To access the channels, Washer Extractors, Formulas and Data Transfer options for your Portal you will need to follow the below steps. First, click on the **Sites Dashboard** in the side navigation menu.



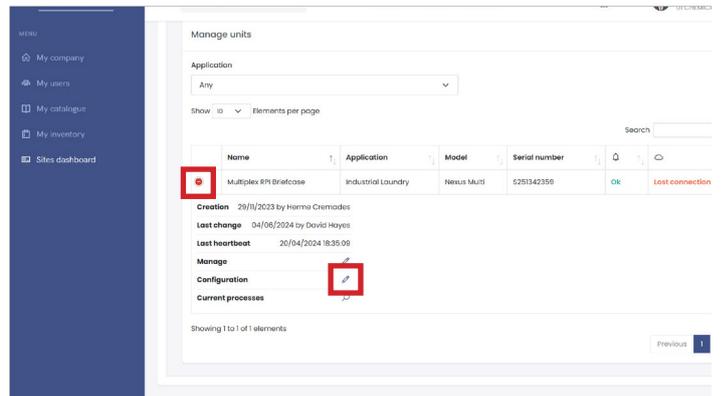
## STEP 2

Scroll down until you find the site you want to edit and click on the **+** to expand the options. Press the **Edit icon** next to **Units** option that appears.



## STEP 3

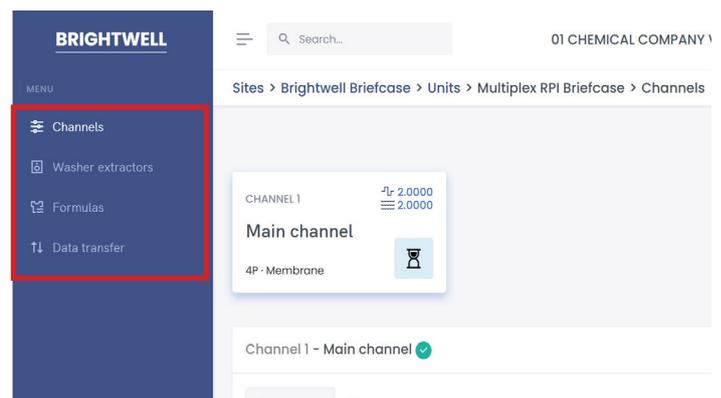
Click on the **+** icon or the unit name to expand the parameters menu. Click on the **Configuration icon** to open the next screen



## STEP 4

Once this opens the options for the following:

- Channels
- Washer Extractors
- Formulas
- Data Transfer



# UNIT CONFIGURATION OVERVIEW

Please note - To access the channel parameters menu. Please refer to this previous section - "[Accessing Channels, Washer Extractors, Formulas and Data Transfer](#)"

The screenshot displays the 'Main channel' configuration page in the Brightwell system. The interface is organized into several sections:

- 1:** Top right corner containing the user profile 'David Hayes' and an 'Add channel' button.
- 2:** A search bar and a list of channels, with 'Main channel' selected.
- 3:** A side navigation menu with options: Channels, Washer extractors, Formulas, and Data transfer.
- 4:** A tabbed interface for 'Parameters' and 'Products'.
- 5:** The 'Name' field, currently set to 'Main channel'.
- 6:** The 'Water control' section, including 'Control mode' (Time), 'Flow meter type' (Paddle Wheel), 'Cost/l' (1.00000), 'Kf (ml / pulse)' (2.0000), and 'Flow rate (l / min)' (2.0000).
- 7:** The 'Dosage' section, including 'Pump type' (Membrane), 'Flush type' (Water Only), and 'Water test (ml)' (1000).
- 8:** The 'Alarms' section, including 'Pulse detection range' (Low) and 'Attempts before warning' (1).
- 9:** A bottom right corner containing icons for back, delete, and save.

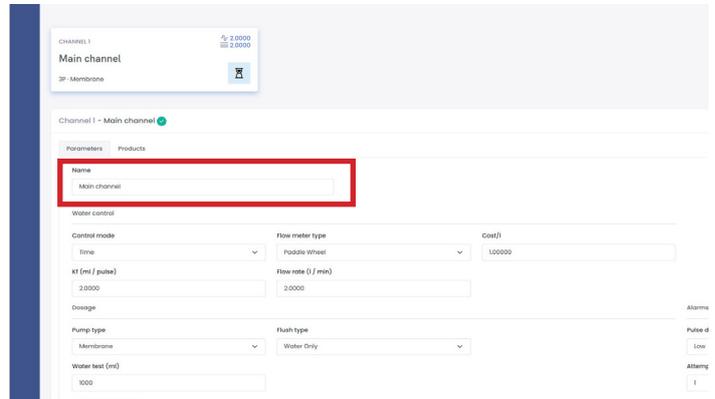
- 1 To add a new channel press the icon in the top right
- 2 Here you can see the list of current channels on your system
- 3 The side navigation bar has changed to allow you to move between;
  - Channels
  - Washer extractors
  - Formulas
  - Data transfer
- 4 Use these tabs to switch between Parameters and Product settings
- 5 Channel Name
- 6 Water control settings
- 7 Dosage settings
- 8 Alarm settings
- 9 Save, delete and return icons

# EDITING CHANNEL PARAMETER SETTINGS

## STEP 1

You can use the first field to adjust the Channel Name

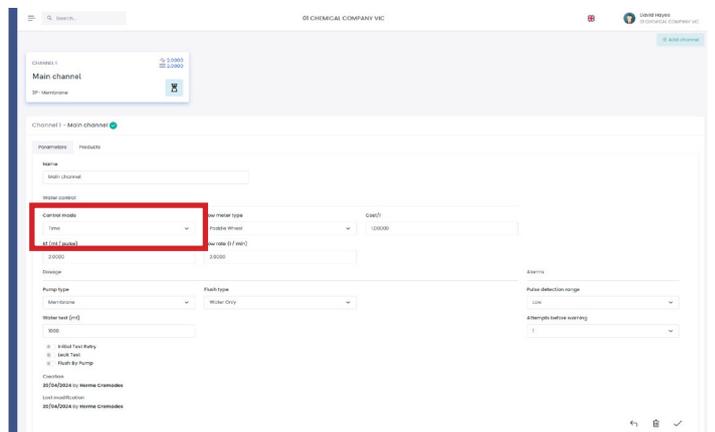
Please note - To access the unit Channels menu. Please refer to this previous section - ["Accessing Channels, Washer Extractors, Formulas and Data Transfer"](#)



## STEP 2

Next you find the [Control Mode](#). Where you can select between Time or Flow meter.

\*We recommend using a flow meter for your Multiplex as it guarantees accurate chemical delivery to your machines. This option is to allow for temporary use of the unit while you await repairs.

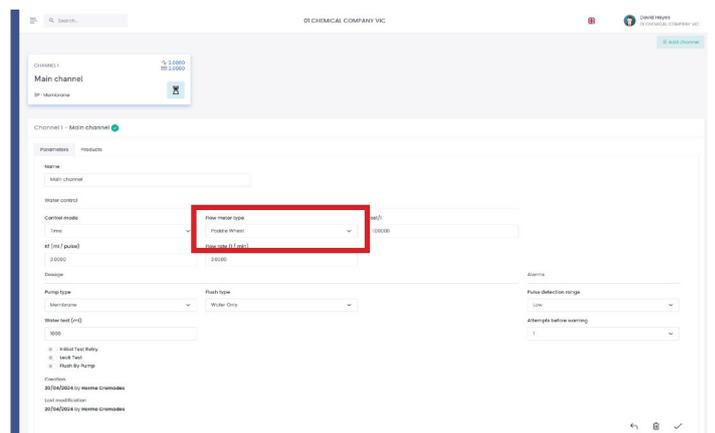


## STEP 3

Select the correct Flow Meter Type using the drop down:

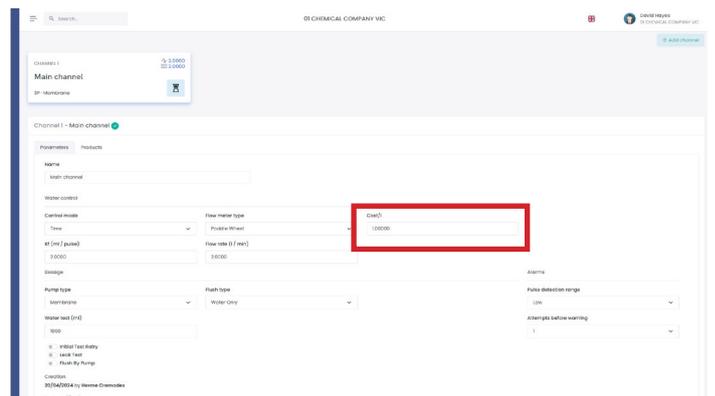
- Paddles
- Oval-Gear
- Thermal

Please note: Do not change this unless you have replaced the flow meter provided from your supplier.



## STEP 4

Next is the Cost value for the water of this channel, this is used for cost reporting.



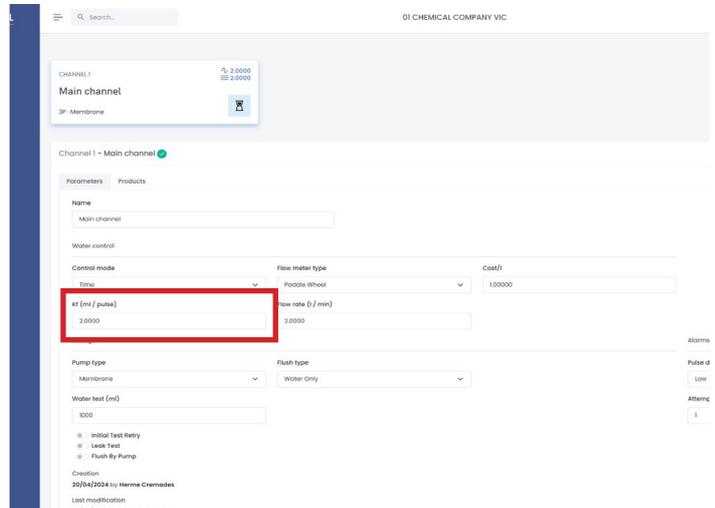
# EDITING CHANNEL PARAMETER SETTINGS

## STEP 5

To adjust the Kf value please use the highlighted box.

Please note - These values are generated automatically by running a calibration on the unit. Please refer to the Web Server Configuration Tool guide.

\*We **DO NOT** advise setting the values manually

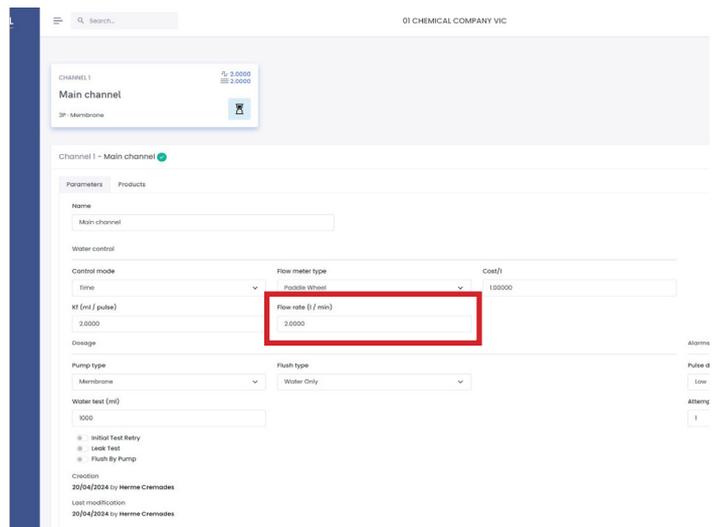


## STEP 6

You can now set up the Flow Rate value for the Chemical here.

Please note - These values are generated automatically by running a calibration on the unit. Please refer to the Web Server Configuration Tool guide.

\*We **DO NOT** advise setting the values manually

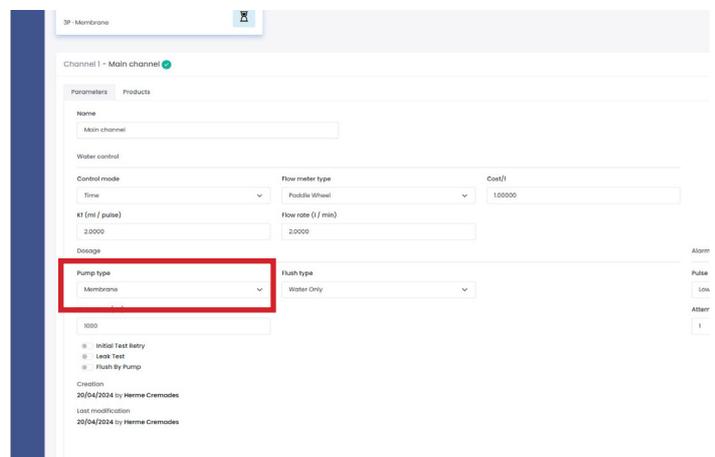


## STEP 7

If you need to adjust the pump type for the unit you can use the drop down menu to choose between:

- Peristaltic
- Motor
- Membrane
- Pneumatic
- Venturi

The recommended configuration for the Multiplex is water or air flush with a membrane or pneumatic pump. (Based on each site).



# EDITING CHANNEL PARAMETER SETTINGS

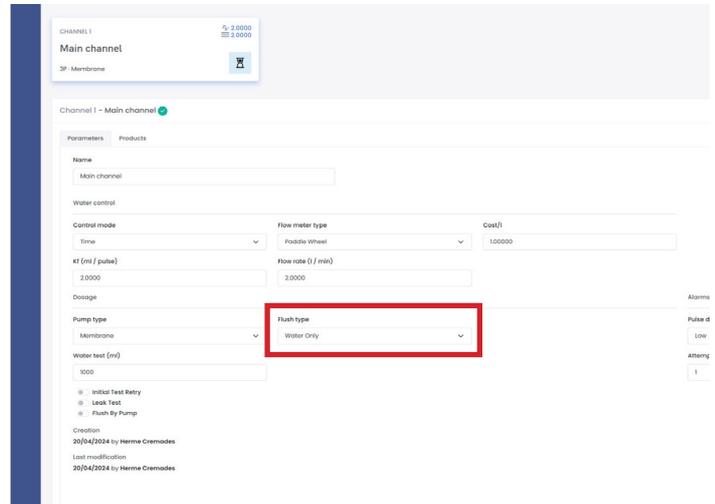
## STEP 8

If you need to adjust the **Flush Type** for the channel use this drop down to choose between:

- No Flush
- Only Water
- Air

*It is recommended to use water for set-ups where the distance between the distributor and unit is under 40 metres. Over 40 metres we advise using Air flush and a water test of over 1000ml to prevent product residue building up.*

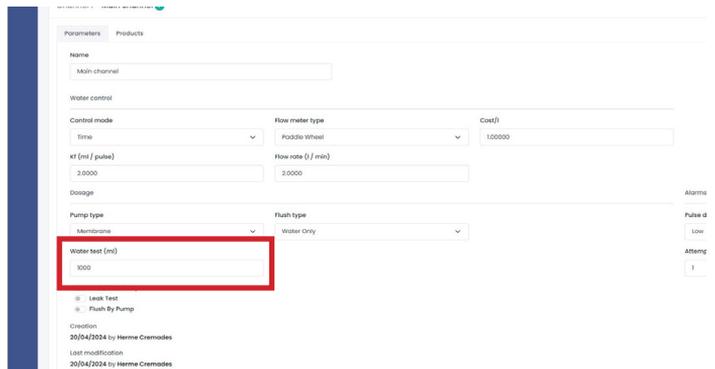
*It is only recommended to use no flush when you have chemicals that become more viscous with water or the product is going directly to the washer.*



## STEP 9

Next you can adjust the water test volume for your channel. **The minimum value for this is 700 ml to ensure a correct test and separation of chemicals.**

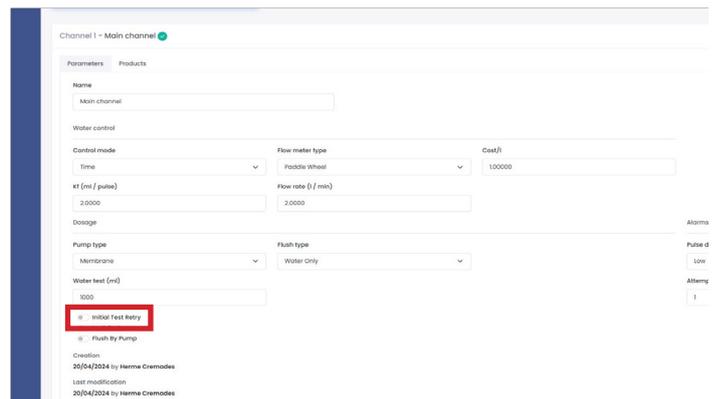
*A water test is used to verify that the minimum indispensable conditions and that the product will reach its destination. A water test is recommended when products with high viscosity or high surface tension pass through the channel*



## STEP 10

If you want to setup a **Retry the water test** on this channel press the drop down to toggle between Yes or No.

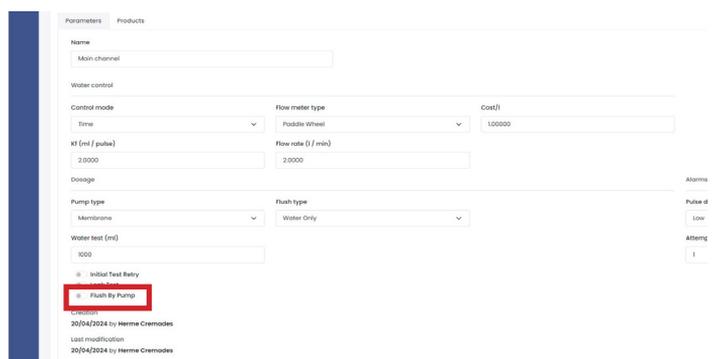
*Durante la operación puede haber un evento imprevisto donde el nivel correcto de agua no es entregado entre los productos. Si activa esta opción, podrá realizar una segunda prueba para solucionar este posible problema.*



## STEP 10

The final toggle switch enables the **Flush by Pump** function.

**\*This is not a recommended setup option and is only used when you do not have pressure regulated water for your setup. If this is the case, we advise the purchase of a booster tank to stabilise water pressure and ensure unit performance and reliability.**



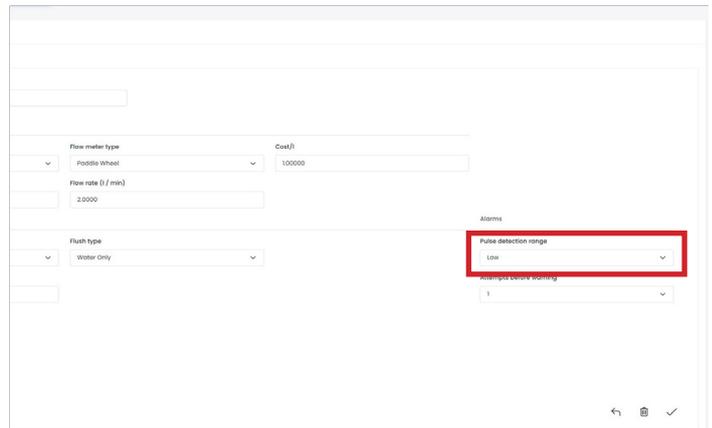
# EDITING CHANNEL PARAMETER SETTINGS

## STEP 11

At the bottom of the screen you can see the **Alarms settings**. The first box allows you to setup the **Pulse Detection Range**. You can select between:

- Low (30%)
- Medium (50%)
- High (70%)
- Maximum (100%)

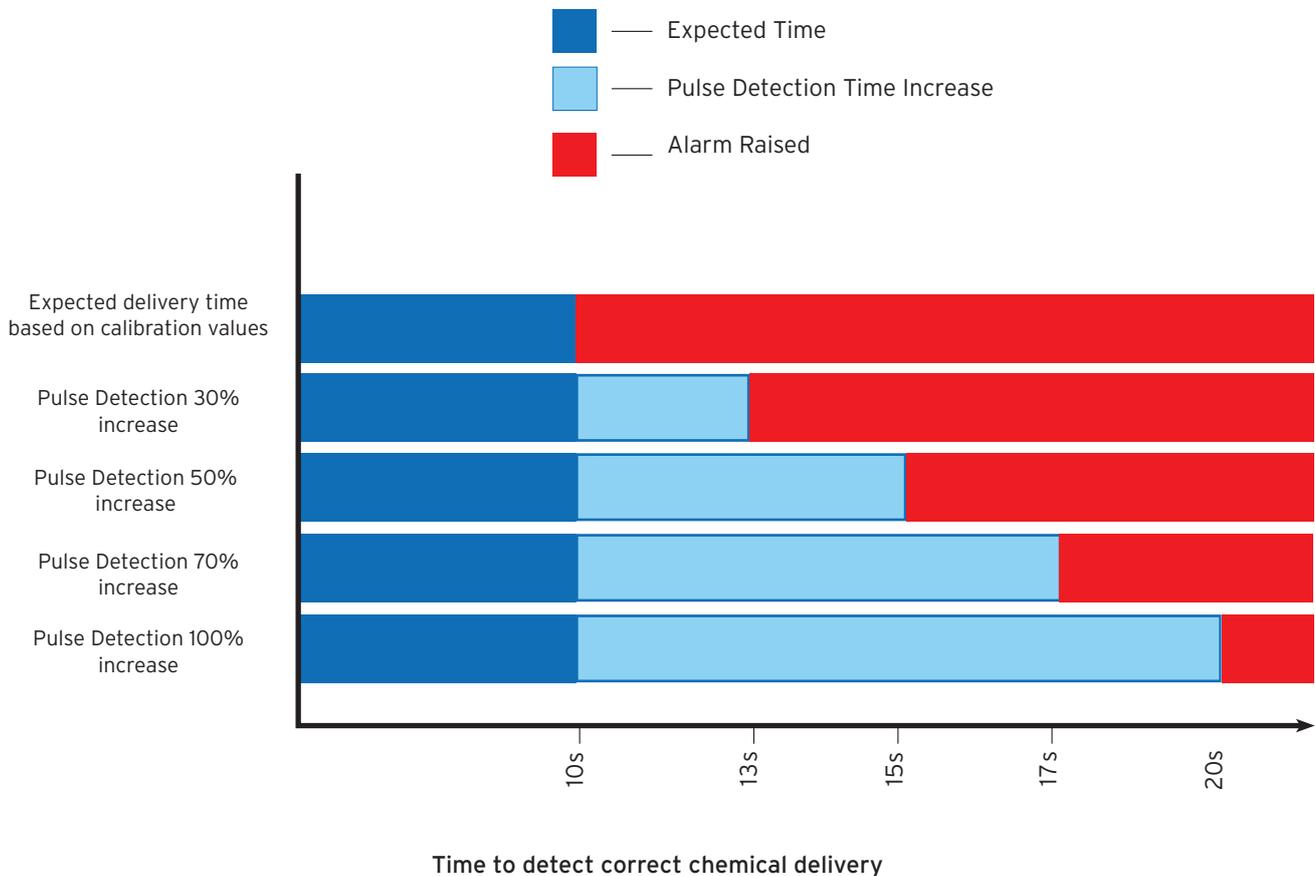
This is the additional time that can be added for the flow meter to detect the correct volume of chemical. A more detailed explanation is on the next page.



## PULSE DETECTION RANGE

When dosing chemical it may be required to increase the detection range to allow for fluctuations in flow for the product. This may be needed when there is potentially gassing products causing gas to expand in the pipe, or very viscous products that can become more difficult to pump if left sedentary.

Below is a graph explaining the functionality.



Please note - we advise setting this to as close to the expected delivery time as possible for accurate results and early warning of any potential hardware failures that may arise. Setting this to the maximum level by default will potentially hide maintenance issues that could be resolved before failure of the part.

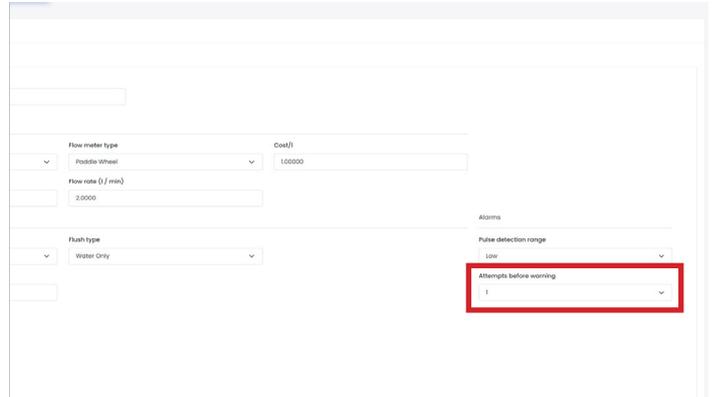
# EDITING CHANNEL PARAMETER SETTINGS

## STEP 12

Below this you can set the number of retries before an alarm is raised.

*The feature is only available with a flow meter installed. This stops consecutive audio alarms from sounding on the unit to reduce noise pollution in the laundry.*

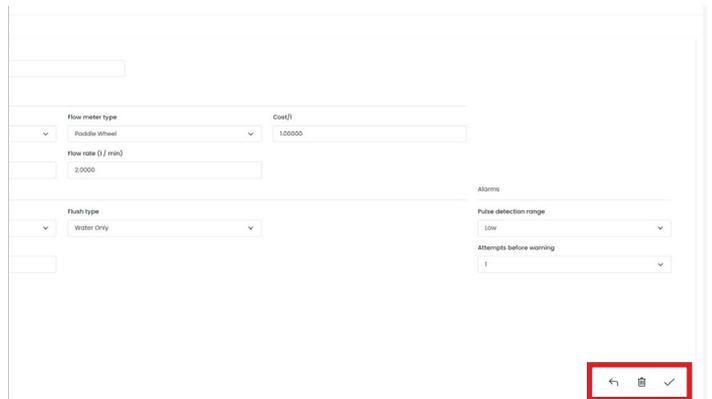
*This is ONLY for the product dosage and water flush test. Not initial leak test.*



## STEP 13

Once you are happy with the settings you can use the Tick icon in the bottom right to save your settings.

The Trash icon will clear all changes made.

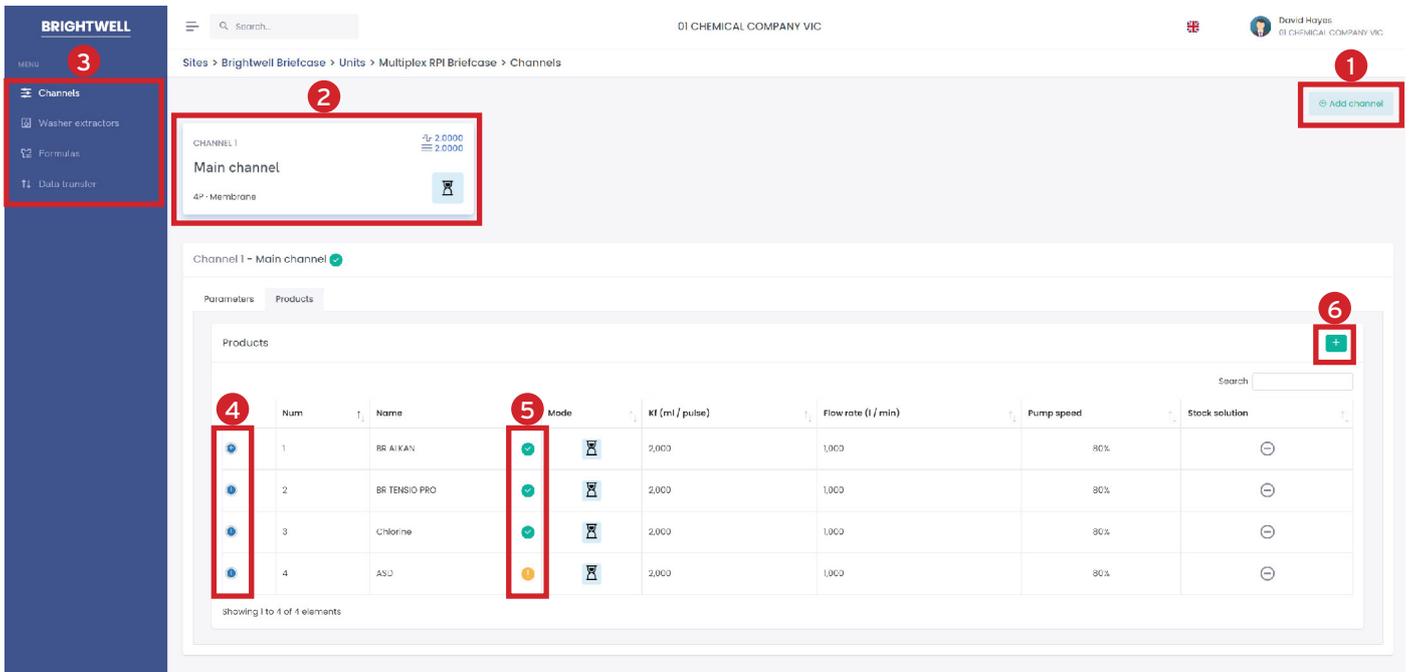
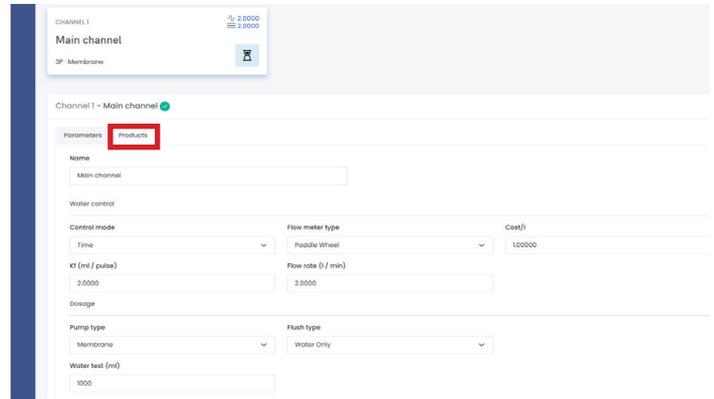


# PRODUCT PAGE OVERVIEW

Please note - To access the products menu. Please refer to this previous section - "[Accessing Channels, Washer Extractors, Formulas and Data Transfer](#)"

## STEP 1

To open the Product settings menu press the **Product tab** located at the top of the page.

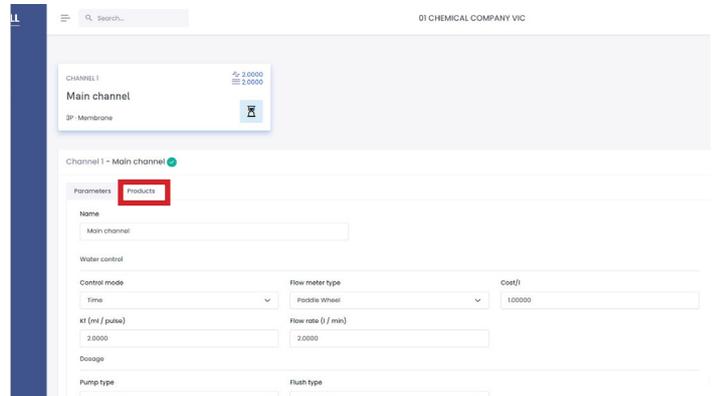


- 1 To add a new channel press the icon in the top right
- 2 Here you can see the list of current channels
- 3 The side navigation bar has changed to allow you to move between:
  - Channels
  - Washer extractors
  - Formulas
  - Data transfer
- 4 Press this + icon to expand the selected chemical and view details
- 5 Is a visual indicator for the chemical. Green confirms it has been setup and saved correctly into the catalogue. Orange implies the chemical is incomplete and requires attention
- 6 The + icon here allows you to add a new chemical to your channel

# ADDING OR EDITING YOUR PRODUCT SETTINGS

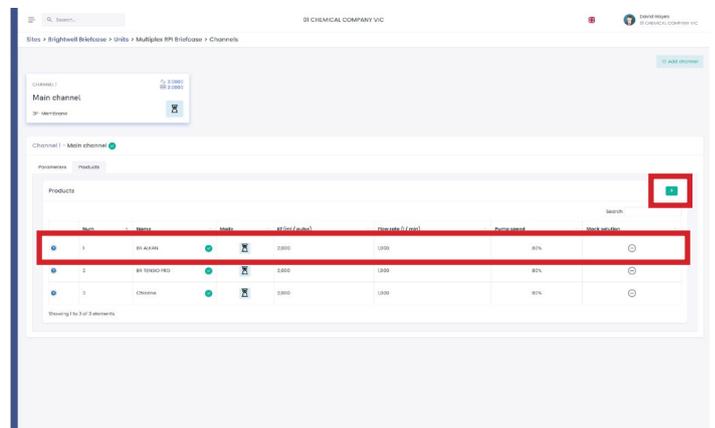
## STEP 1

To open the Product settings menu press the **Product** tab located at the top of the page.



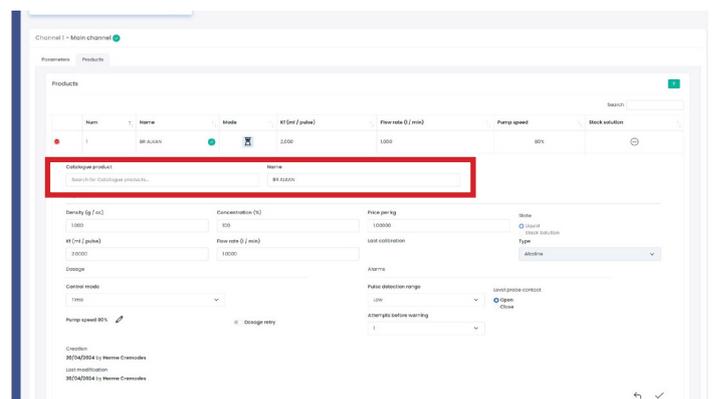
## STEP 2

Locate the chemical you want to edit and click on the **Blue + icon** to expand the settings. Alternatively, to create a new Product press the **+ icon** located in the top right of the web page.



## STEP 3

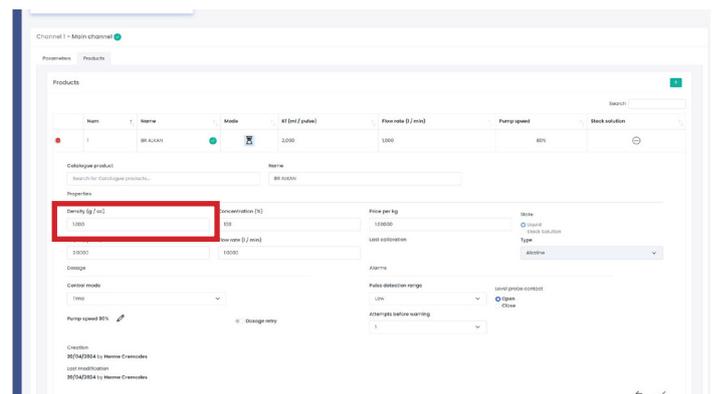
Once expanded you can edit the **Catalogue Product name** and the **Product name** using the text fields provided.



## STEP 4

The next box allows you to set the **Density** of the product. Please refer to the chemical manufacturers values for this

We recommend that this value is precise and based on the chemical datasheet. As this directly effects the dosage of the chemical.  
**X value density / 1kg of laundry**

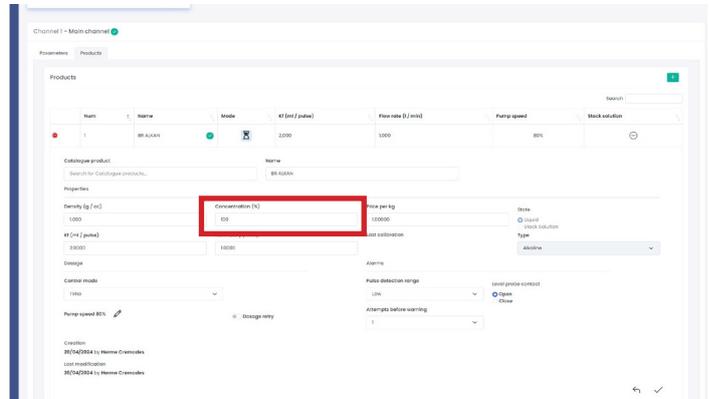


# ADDING OR EDITING YOUR PRODUCT SETTINGS

## STEP 5

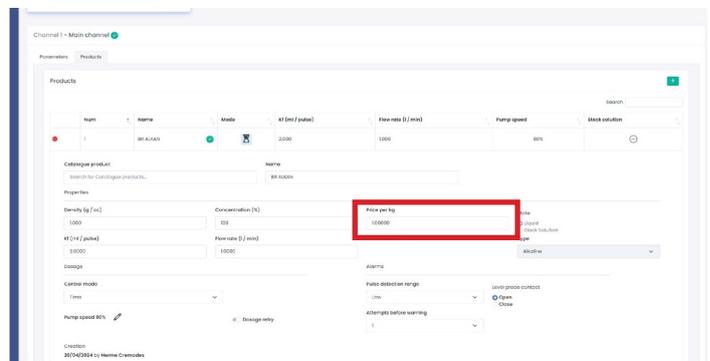
Next set your **Product Concentration** percentage if this is diluted.

If you are using products in pre-dilution and want the 'grams of pure product' you should set this field percentage to the direct dilution of the product. For example:  
 1000 litres you use 100kg of product your % =  $1000/100 = 10\%$



## STEP 6

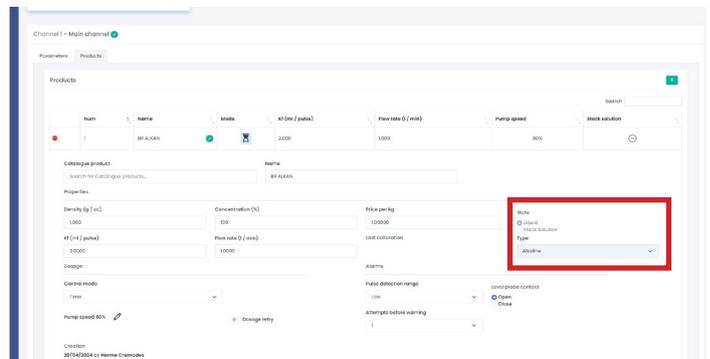
Below you can set the **Price per KG** of the product for cost reporting.



## STEP 7

You can see the **State** and **type** of the product on the right hand side.

Please note - These are uneditable and set by the chemical catalogue.

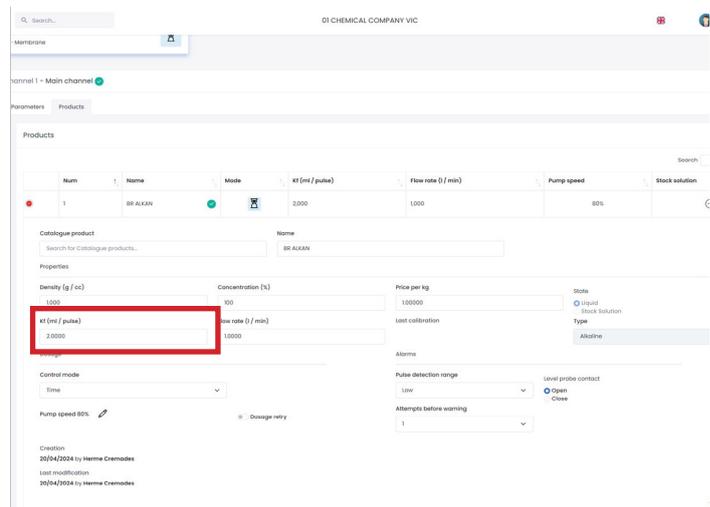


## STEP 8

To set the **Kf** value please use the highlighted box.

Please note - These values are generated automatically by running a calibration on the unit. Please refer to the Web Server Configuration Tool guide.

\*We **DO NOT** advise setting the values manually



# ADDING OR EDITING YOUR PRODUCT SETTINGS

## STEP 9

You can now set up the **Flow Rate** value for the chemical here.

Please note - These values are generated automatically by running a calibration on the unit. Please refer to the **Web Server Configuration Tool** guide.

\*We **DO NOT** advise setting the values manually

Channel 1 - Main channel

Parameters Products

Products

Num	Name	Mode	K1 (ml / pulse)	Flow rate (l / min)	Pump speed	Stock solution
1	BR ALKAL		2.000	1.000	80%	

Catalogue product: BR ALKAL

Properties

Density (g / cc): 1.000  
 Concentration (%): 100  
 Price per kg: 100000  
 State: Liquid  
 Type: Alkaline

Flow rate (l / min): 1.0000

Control mode: Time  
 Pulse detection range: Low  
 Level probe contact: Open

Pump speed 80%  
 Attempts before warning: 1

Creation: 20/04/2024 by Heeme Cremades  
 Last modification: 20/04/2024 by Heeme Cremades

## STEP 10

Below you can now adjust the **Pump Speed** for this chemical using the pencil icon.

We recommend a speed of:

- 80% - 100% for high volume delivery
- 30% - 80% for low volume delivery
- **DO NOT** use below 30% speed for delivery

Channel 1 - Main channel

Parameters Products

Products

Num	Name	Mode	K1 (ml / pulse)	Flow rate (l / min)	Pump speed	Stock solution
1	BR ALKAL		2.000	1.000	80%	

Catalogue product: BR ALKAL

Properties

Density (g / cc): 1.000  
 Concentration (%): 100  
 Price per kg: 100000  
 State: Liquid  
 Type: Alkaline

Flow rate (l / min): 1.0000

Control mode: Time  
 Pulse detection range: Low  
 Level probe contact: Open

Pump speed 80%  
 Attempts before warning: 1

Creation: 20/04/2024 by Heeme Cremades  
 Last modification: 20/04/2024 by Heeme Cremades

## STEP 11

To the right of pump speed you can locate the **Dosage Retry** button.

This will enable the system to retry dosing the product if the correct number of pulses are not met in the expected delivery time.

Channel 1 - Main channel

Parameters Products

Products

Num	Name	Mode	K1 (ml / pulse)	Flow rate (l / min)	Pump speed	Stock solution
1	BR ALKAL		2.000	1.000	80%	

Catalogue product: BR ALKAL

Properties

Density (g / cc): 1.000  
 Concentration (%): 100  
 Price per kg: 100000  
 State: Liquid  
 Type: Alkaline

Flow rate (l / min): 1.0000

Control mode: Time  
 Pulse detection range: Low  
 Level probe contact: Open

Pump speed 80%  
 Attempts before warning: 1

Dosage retry

Creation: 20/04/2024 by Heeme Cremades  
 Last modification: 20/04/2024 by Heeme Cremades

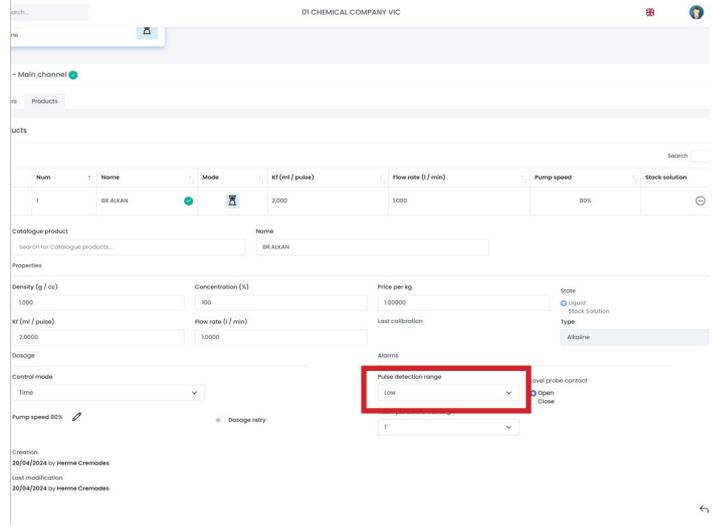
# ADDING OR EDITING YOUR PRODUCT SETTINGS

## STEP 12

At the bottom of the screen you can see the **Alarms settings**. The first box allows you to setup the **Pulse Detection Range**. You can select between:

- Low (30%)
- Medium (50%)
- High (70%)
- Maximum (100%)

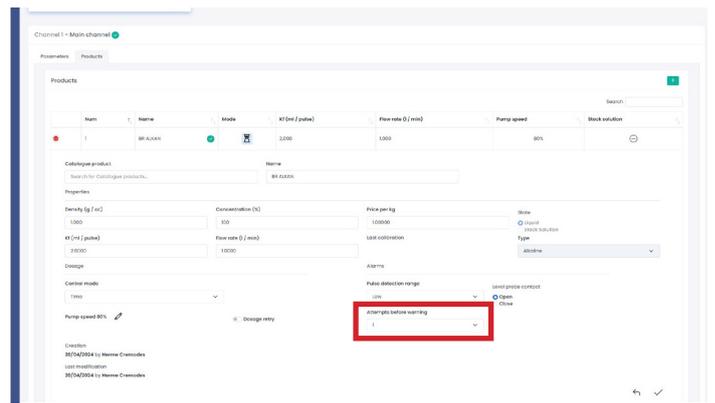
This is the additional time that can be added for the flow meter to detect the correct volume of chemical. A more detailed explanation is found here: [Pulse Detection Range](#)



## STEP 13

Below this you can set the number of **Attempts Before Warning**

The feature is only available with a flow meter installed. This stops consecutive audio alarms from sounding on the unit to reduce noise pollution in the laundry.

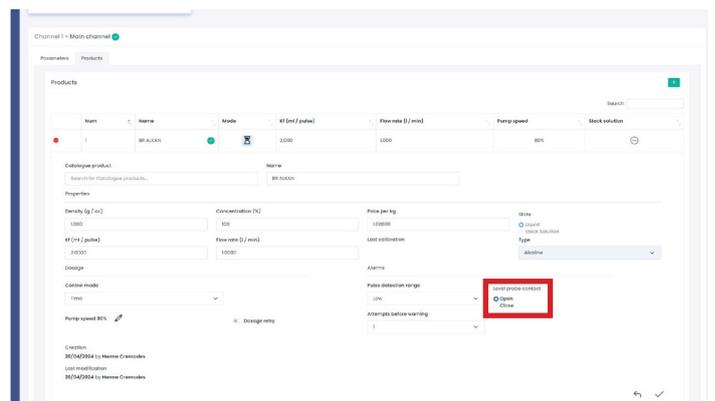


## STEP 14

Finally, you can adjust the Level Probe Contact to:

- Normally Open
- Normally Closed

*Please note - The standard Brightwell products are Normally Closed*

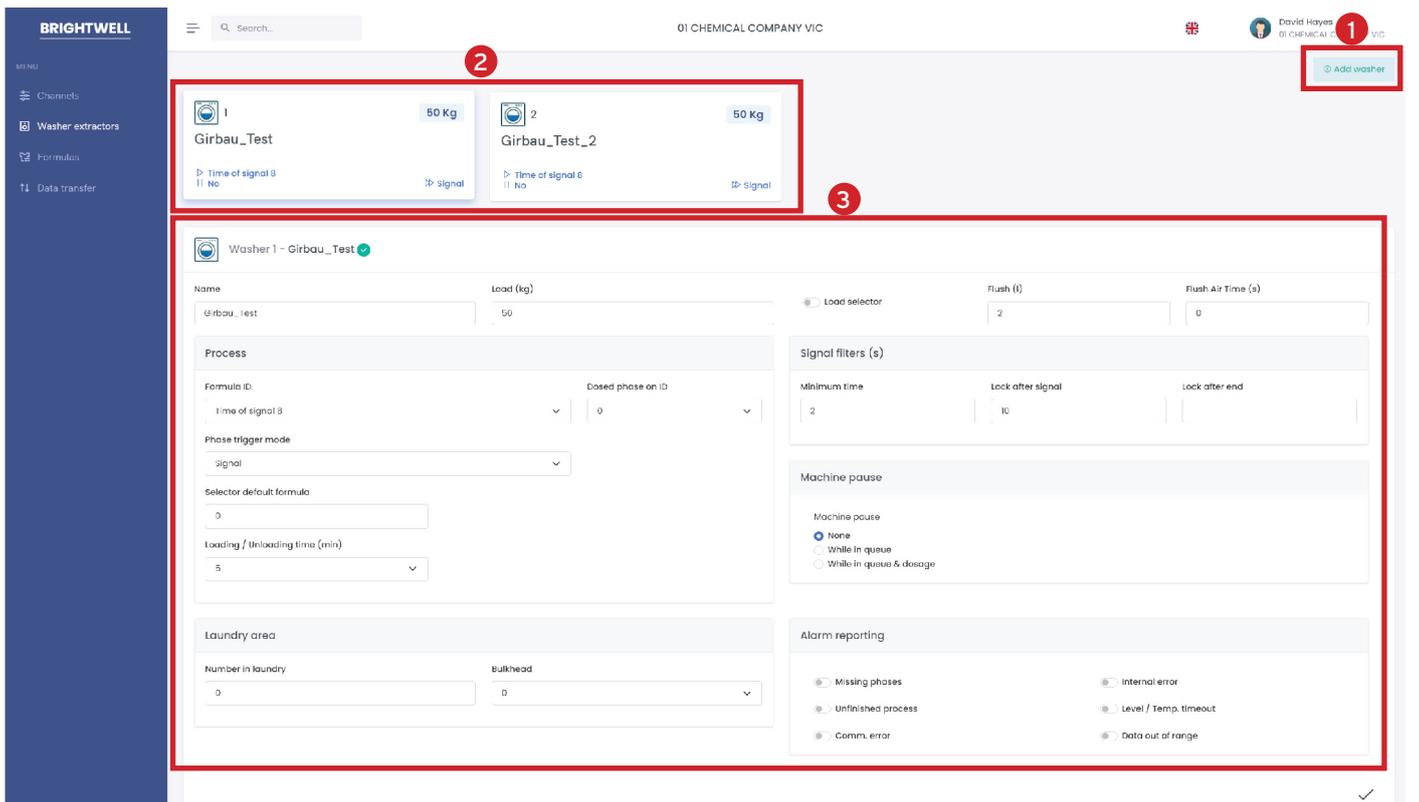
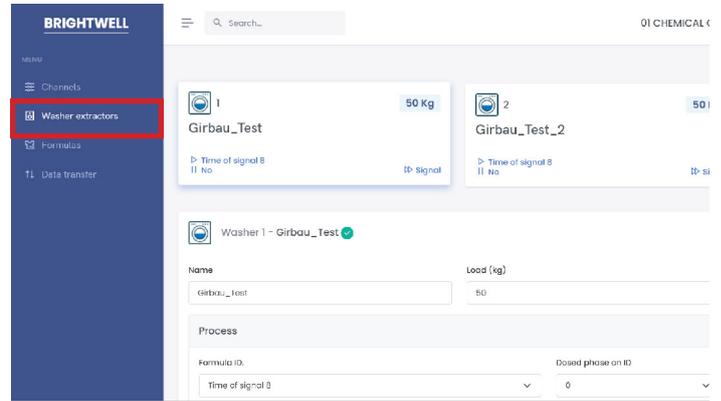


# WASHER EXTRACTORS OVERVIEW

Please note - To access the washer extractors menu. Please refer to this previous section - [“Accessing Channels, Washer Extractors, Formulas and Data Transfer”](#)

## STEP 1

To access the Washer Extractors overview select the icon in the side navigation bar.

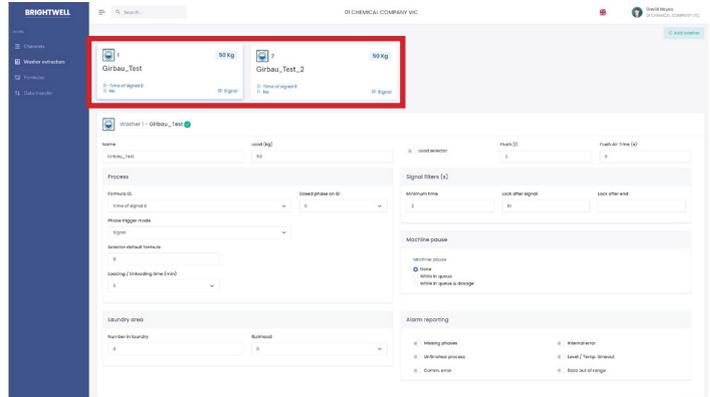


- 1 To add a new channel press the icon in the top right
- 2 Here you can see the list of current washer extractors linked to your channel, this is also how you select the extractor you wish to edit
- 3 The washer extractor settings are listed here

# EDITING OR ADDING A WASHER EXTRACTOR SETUP

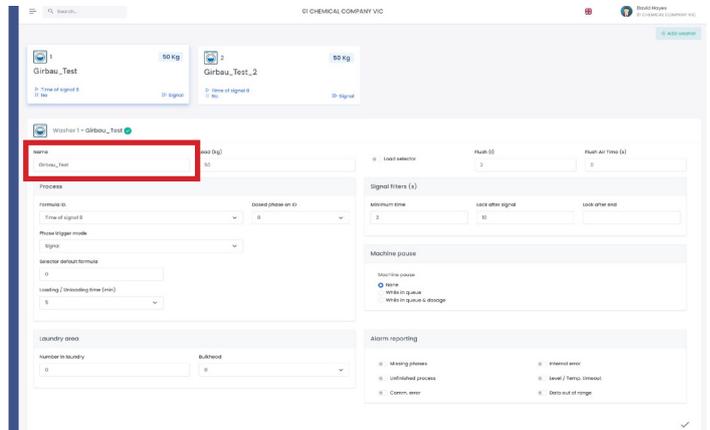
## STEP 1

To change the settings on a washer extractor navigate to the **Washer Extractor** menu via the side menu. Once here, select the washer from the available at the top of the page



## STEP 2

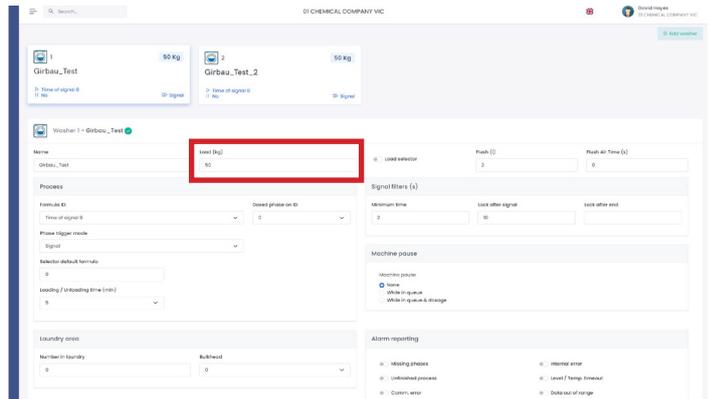
The first section allows you to set the custom name for the washer.



## STEP 3

Next you are able to set the **Total Load in Kg** for the **Washer Extractor**.

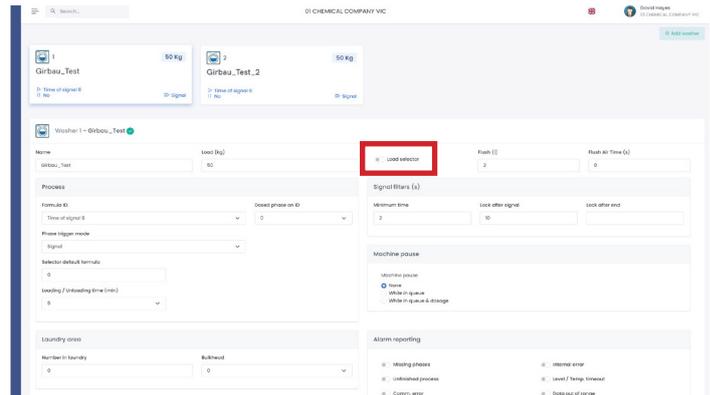
*This field is essential in calculating the total volume to be dosed to the load.*



## STEP 4

You can now enable or disable the **Load Selection** for this washer.

*This setting requires a formula select, so please contact Brightwell to discuss this setting and equipment if required.*



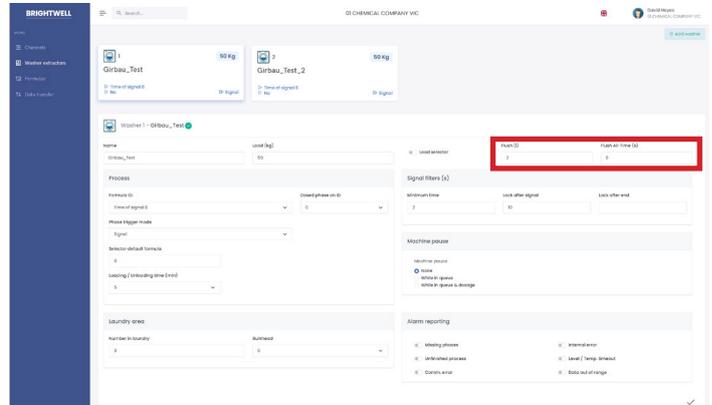
# EDITING OR ADDING A WASHER EXTRACTOR SETUP

## STEP 5

The next box allows you to set the **Water Flush (Fl. oz)** quantity required

Alternatively, if you are using air flush you can use the **Air Time (S)** box below this instead

*This value needs to be precise for correct delivery of chemical. Please run a visual check of the water required to completely inject the chemical into the machine, as this varies based on distance from the distributor*

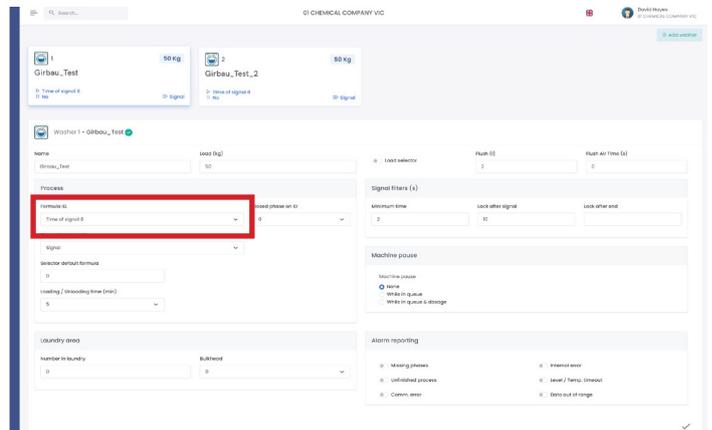


## STEP 6

In the Dosing Process column you can first set the Formula ID section. This can be:

- Selector
- Time of signal 8
- Time of signal 1+8
- Binary
- Free

Please refer to the next section for a more detailed explanation.



## SIGNAL TIME 8

This selects the program based on 5 second intervals of the Signal 8 going high. This settings is advised for units with a lower number of formulas (1-20). Please refer to the table below for timings.

Formula	Signal 8 Time on						
1	5 s	5	25 s	9	45 s	13	65 s
2	10 s	6	30 s	10	50 s	14	70 s
3	15 s	7	35 s	11	55 s	15	75 s
4	20 s	8	40 s	12	60 s	16...	80 s...

# EDITING OR ADDING A WASHER EXTRACTOR SETUP

## SIGNAL TIME 1+8

This selects the program based on the duration of signals 1 and 8 going high simultaneously. This setting is advised for units that have a larger volume of formulas to select (20+) The below table explains the timing and selection details.

Formula	Signal 1 Time on	Signal 8 Time on	Formula	Signal 1 Time on	Signal 8 Time on	Formula	Signal 1 Time on	Signal 8 Time on	Formula	Signal 1 Time on	Signal 8 Time on
1	5 s	5 s	11	10 s	5 s	21	15 s	5 s	31	20 s	5 s
2	5 s	10 s	12	10 s	10 s	22	15 s	10 s	32	20 s	10 s
3	5 s	15 s	13	10 s	15 s	23	15 s	15 s	33	20 s	15 s
4	5 s	20 s	14	10 s	20 s	24	15 s	20 s	34	20 s	20 s
5	5 s	25 s	15	10 s	25 s	25	15 s	25 s	35	20 s	25 s
6	5 s	30 s	16	10 s	30 s	26	15 s	30 s	36	20 s	30 s
7	5 s	35 s	17	10 s	35 s	27	15 s	35 s	37	20 s	35 s
8	5 s	40 s	18	10 s	40 s	28	15 s	40 s	38	20 s	40 s
9	5 s	45 s	19	10 s	45 s	29	15 s	45 s	39	20 s	45 s
10	5 s	50 s	20	10 s	50 s	30	15 s	50 s	40	20 s	50 s

## BINARY

For this mode the unit will select a program based on the below signal combinations.

Formula	8	7	6	5	4	3	2	1
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Formula	8	7	6	5	4	3	2	1
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

Formula	8	7	6	5	4	3	2	1
33								
34								
35								
36								
37								
38								
39								
40								
42								
43								
44								
45								
46								
47								
48								
49								

## FREE MODE

Free mode allows the users to build a custom list of formula selection based on incoming signals. These are **ONLY** defined via the web portal or web server, they cannot be defined on the built in screen

# EDITING OR ADDING A WASHER EXTRACTOR SETUP

## STEP 7

After this you can select the **Dosed Phase ID** number using the drop down here.

*This allows you to customise what state the machine will enter on receiving the first signal.*

*If you set this to Phase 0, the unit will not begin dosing until a signal is received from the washer.*

*If you set this to Phase 1 the unit will immediately begin to dose after the auto formula select signal is confirmed*

The screenshot shows the 'Washer 1 - Girbau\_Test' configuration page. The 'Dosed phase on ID' dropdown menu is highlighted with a red box, showing the value '0' selected. Other visible fields include 'Name', 'Load (kg)', 'Load selector', 'Flush (l)', 'Flush air time (s)', 'Formula ID', 'Phase trigger mode', 'Signal', 'Signal filters (s)', 'Machine pause', and 'Alarm reporting'.

## STEP 8

You can now choose between a **Signal or Sequential Phase Trigger Mode**.

*Signal mode defines that the machine itself will send a signal to identify what phase it is entering.*

*Sequential mode sets it so that it will move sequentially through the phases one by one in a logical order.*

The screenshot shows the 'Washer 1 - Girbau\_Test' configuration page. The 'Phase trigger mode' dropdown menu is highlighted with a red box, showing the value 'Signal' selected. Other visible fields include 'Name', 'Load (kg)', 'Load selector', 'Flush (l)', 'Flush air time (s)', 'Formula ID', 'Dosed phase on ID', 'Signal filters (s)', 'Machine pause', and 'Alarm reporting'.

## STEP 9

If you have **Selector** chosen you will also have the option to set the **Selector Default Formula**. Which will default back to after a successful cycle.

The screenshot shows the 'Washer 1 - Girbau\_Test' configuration page. The 'Selector default formula' dropdown menu is highlighted with a red box, showing the value '0' selected. Other visible fields include 'Name', 'Load (kg)', 'Load selector', 'Flush (l)', 'Flush air time (s)', 'Formula ID', 'Dosed phase on ID', 'Phase trigger mode', 'Signal filters (s)', 'Machine pause', and 'Alarm reporting'.

## STEP 10

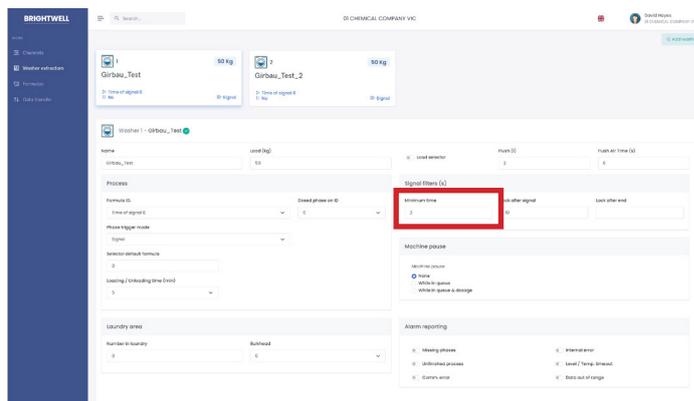
Finally you can adjust the time required to load or unload the machine.

The screenshot shows the 'Washer 1 - Girbau\_Test' configuration page. The 'Loading / Unloading time (min)' dropdown menu is highlighted with a red box, showing the value '5' selected. Other visible fields include 'Name', 'Load (kg)', 'Load selector', 'Flush (l)', 'Flush air time (s)', 'Formula ID', 'Dosed phase on ID', 'Phase trigger mode', 'Signal filters (s)', 'Machine pause', and 'Alarm reporting'.

# EDITING OR ADDING A WASHER EXTRACTOR SETUP

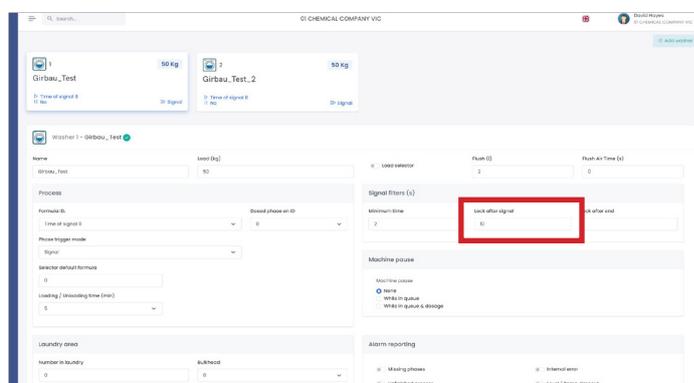
## STEP 11

In the **Signal Filters** column the first box allows you to adjust the **Minimum Time** for an accepted signal. This stops ghost signals from triggering the washer.



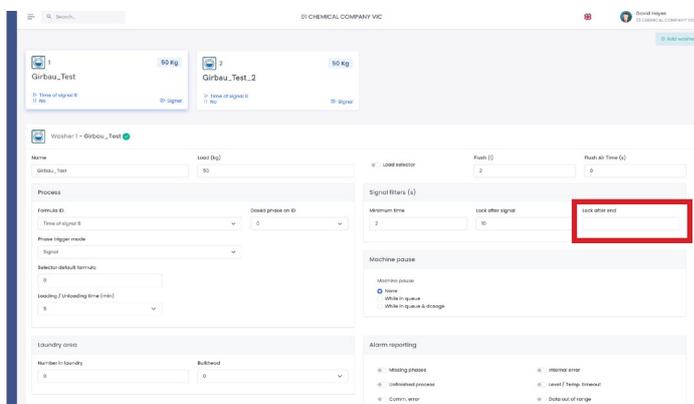
## STEP 12

Next you can adjust the time it takes for the washer-extractor to **Lock after a Successful Signal** has been sent.



## STEP 13

The final box in the **Signal Filters** column allows you to adjust the **Lock time** for the equipment to allow new signals, once the **RESET** has been completed.



## STEP 14

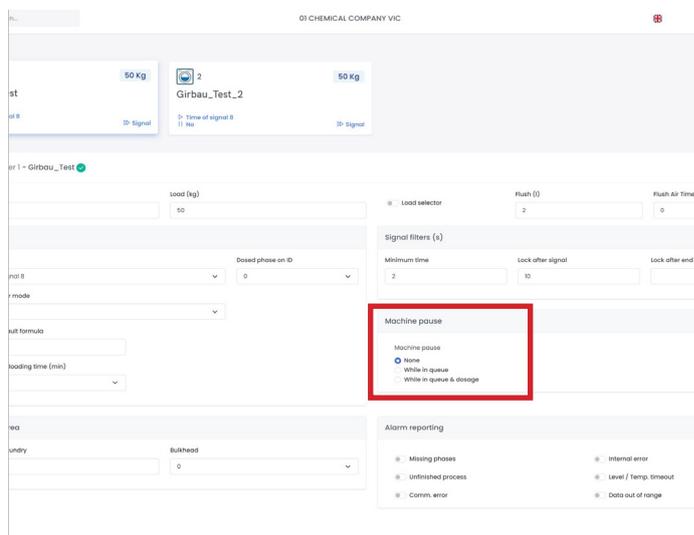
The last column is the **W.E Pause (Washer Extractor Pause)** section.

The first box allows you to adjust the Activation between:

- No (Deactivated)
- While in queue
- While in queue and dosage

The washer pause functionality allows for 'queuing' of machines when they request chemical delivery while the unit is busy.

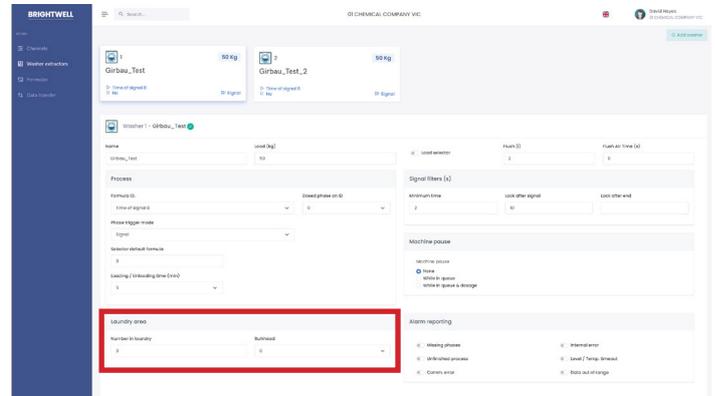
When a machine is 'waiting' its timer is paused so that the wash can complete a full cycle correctly. The above options allow you to adjust when the 'pause timer' begins again.



# EDITING OR ADDING A WASHER EXTRACTOR SETUP

## STEP 15

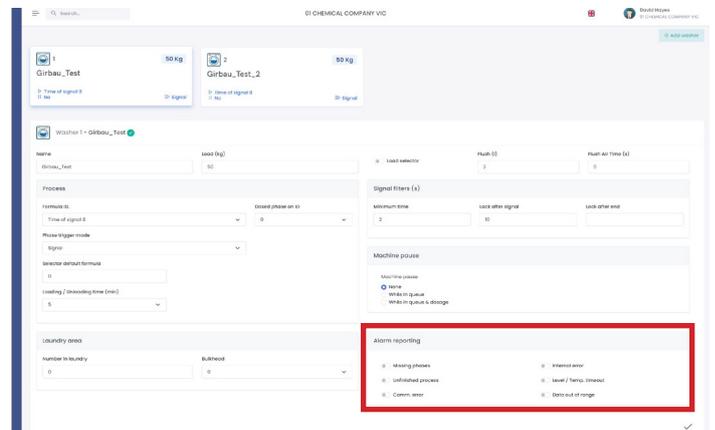
The last setting on the left hand column allows you to set the Number in Laundry and the Bulkhead number



## STEP 16

The final section allows you to toggle what alarms are enabled on your washer:

- Missing Phases
- Internal Error
- Unfinished Process
- Level / Temp. Timeout
- Communication Errors
- Data Out Of Range

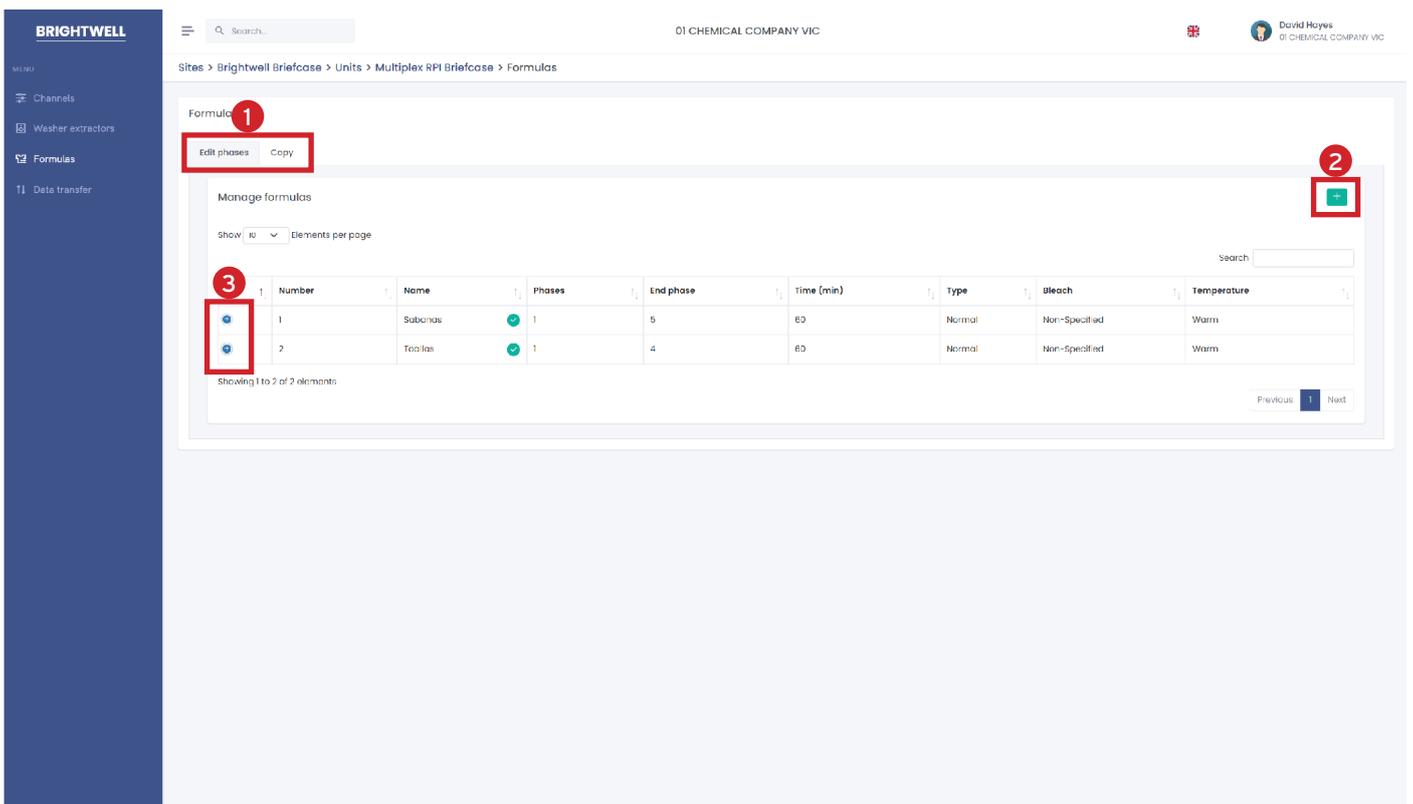
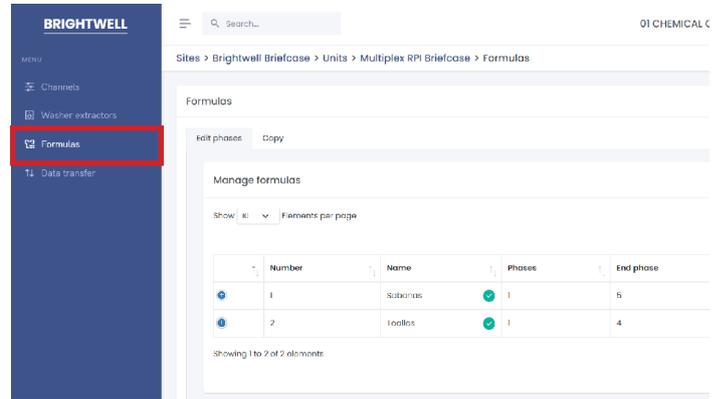


# FORMULAS OVERVIEW

Please note - To access the formula menu. Please refer to this previous section - [“Accessing Channels, Washer Extractors, Formulas and Data Transfer \(P28\)”](#)

## STEP 1

To access the **Formulas overview** select the icon in the side navigation bar.

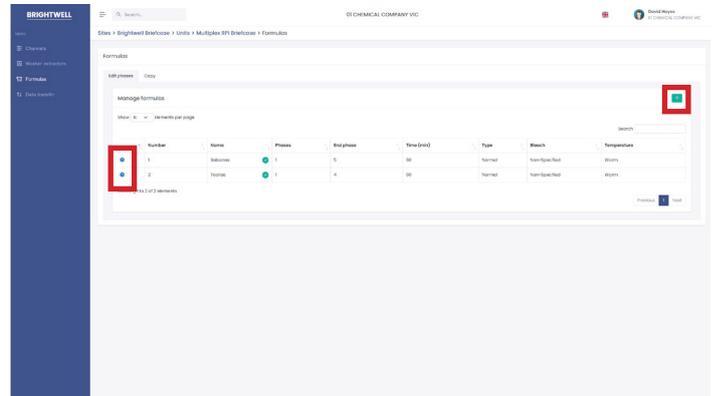


- 1 Allows you to move between the Edit Phases and Copy tabs
- 2 Press this to create a new formula
- 3 Expand the formula using the icon here

# EDITING OR CREATING A NEW FORMULA

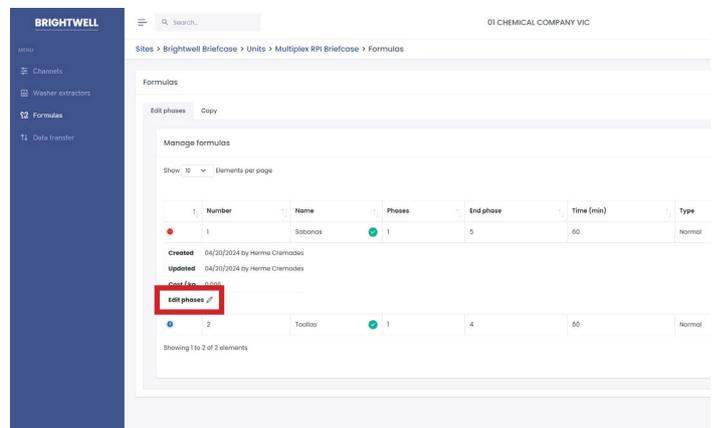
## STEP 1

To adjust the settings of your formula press the **Blue + icon** on the formula to expand the options. Alternatively, press the **+ icon** in the top right to create a new one.



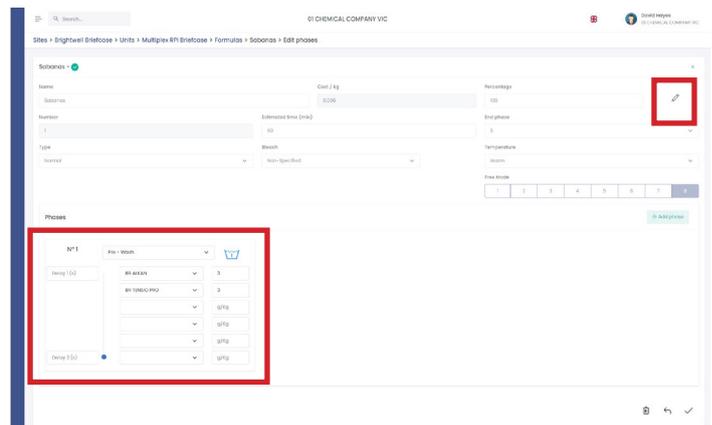
## STEP 2

Once the options have been expanded, press the edit icon located next to the **Edit Phases** text.



## STEP 3

Once the formula has opened you will be able to edit the phases settings located at the bottom of the page. However, you will be unable to make other changes until you have pressed the Edit icon located on the right hand side of the screen.

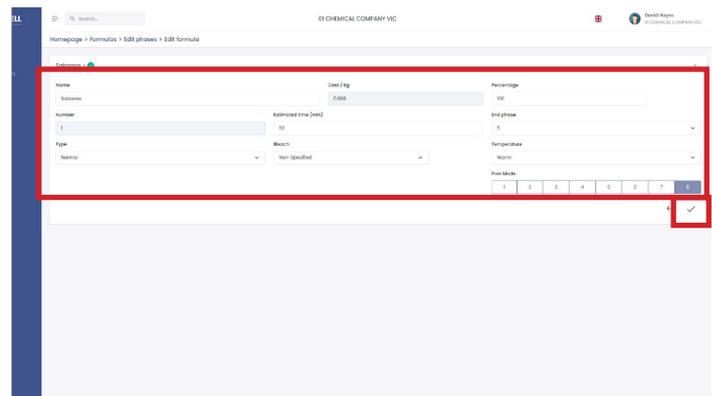


## STEP 4

You can now edit:

- Name
- Percentage
- Estimated Time
- End Phase
- Type
- Bleach
- Temperature
- Free mode

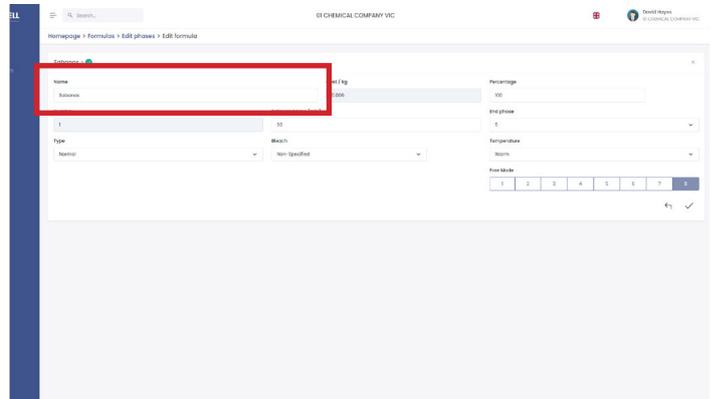
Once you are happy with the changes press the Tick icon to save.



# EDITING OR CREATING A NEW FORMULA

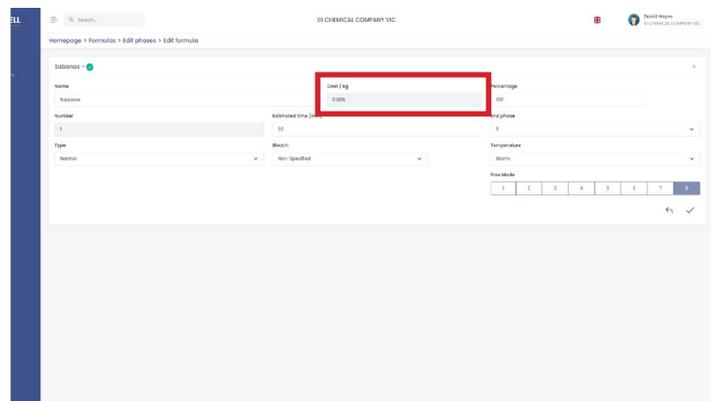
## STEP 5

The next box allows you to set a custom Formula Name.



## STEP 6

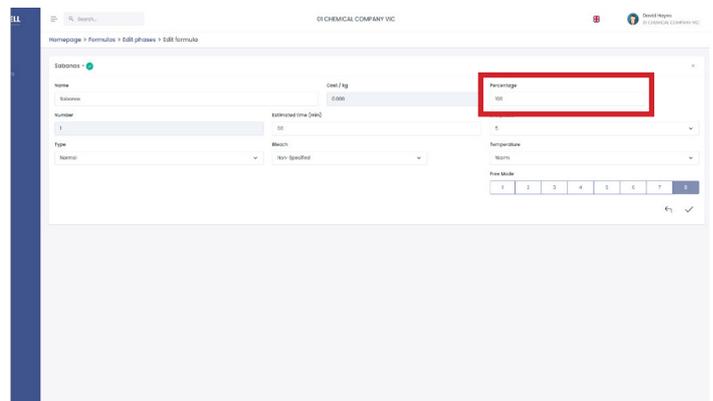
You are able to view the Cost per KG here. (this setting is adjusted in the Product settings)



## STEP 7

Next you can adjust the Percentage value for this formula

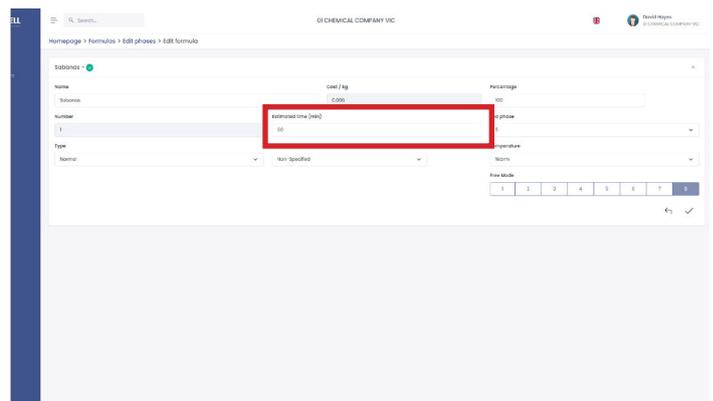
*This can be adjusted to reduce the percentage of product delivered for this formula. It can be used if dosing to a different sized machine etc.*



## STEP 8

After this you can adjust the Estimated Time (min) value for this formula.

*This data is informative. It will be useful to obtain more complete statistics.*



# EDITING OR CREATING A NEW FORMULA

## STEP 9

Using the drop down located here you are able to set the End Phase for this formula.

*The End Phase denotes what the final phase the washing machine needs to enter to trigger a complete cycle for this Formula.*

The screenshot shows the 'Edit formula' page for 'Sabonics'. The 'End phase' dropdown is highlighted with a red box, indicating it is the focus of this step. Other fields like 'Name', 'Code / Ag', 'Percentage', 'Number', 'Estimated time (Sec)', 'Type', and 'Bleach' are also visible.

## STEP 10

You can now select the type of formula you are creating:

- Delicate
- Normal
- Heavy Soil
- Re-Process
- Desize
- Rinse/Spinning
- Recovery
- Other

*This data is informative. It will be useful to obtain more complete statistics.*

The screenshot shows the 'Edit formula' page for 'Sabonics'. The 'Type' dropdown is highlighted with a red box, showing 'Normal' as the selected option. Other fields like 'Name', 'Code / Ag', 'Percentage', 'Number', 'Estimated time (Sec)', 'End phase', 'Temperature', and 'Flow Mode' are also visible.

## STEP 11

If you have bleach for this formula, you can use the drop down here to select:

- Non Specified
- No bleach
- Yes (No chlorine)
- Yes (With chlorine)

*This information is informative. It will be useful to get more detailed information about possible problems via the integrated "Help" function.*

The screenshot shows the 'Edit formula' page for 'Sabonics'. The 'Bleach' dropdown is highlighted with a red box, showing 'Non-Specified' as the selected option. Other fields like 'Name', 'Code / Ag', 'Percentage', 'Number', 'Estimated time (Sec)', 'End phase', 'Temperature', and 'Flow Mode' are also visible.

## STEP 12

Here you can adjust the Water Temperature for this formula

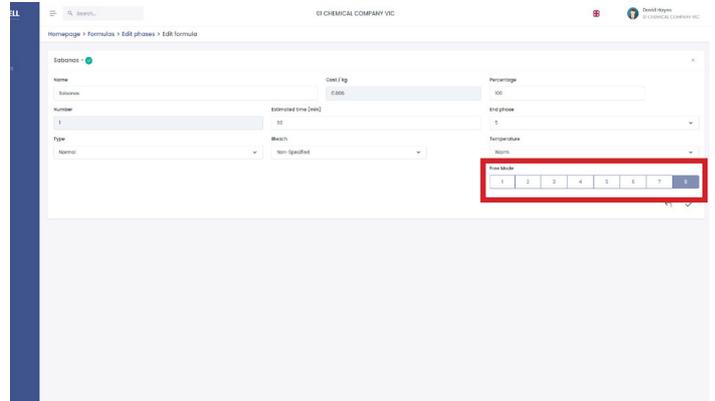
The screenshot shows the 'Edit formula' page for 'Sabonics'. The 'Temperature' dropdown is highlighted with a red box, showing 'Normal' as the selected option. Other fields like 'Name', 'Code / Ag', 'Percentage', 'Number', 'Estimated time (Sec)', 'End phase', and 'Flow Mode' are also visible.

# EDITING OR CREATING A NEW FORMULA

## STEP 13

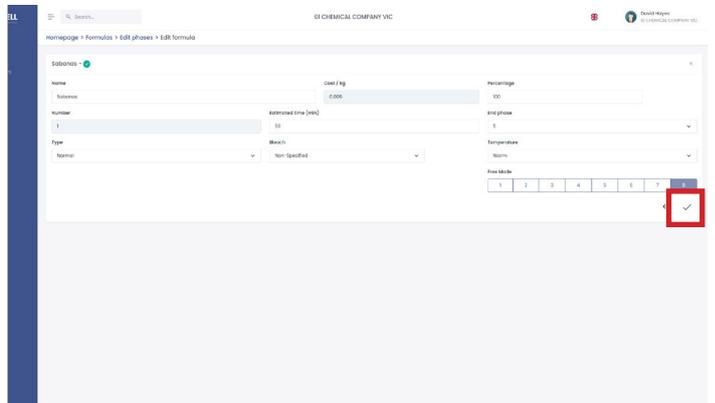
If you have bleach for this formula, you can use the drop down here to select:

- Non Specified
- No bleach
- Yes (No chlorine)
- Yes (With chlorine)



## STEP 14

To save the changes press the Tick icon in the bottom right.

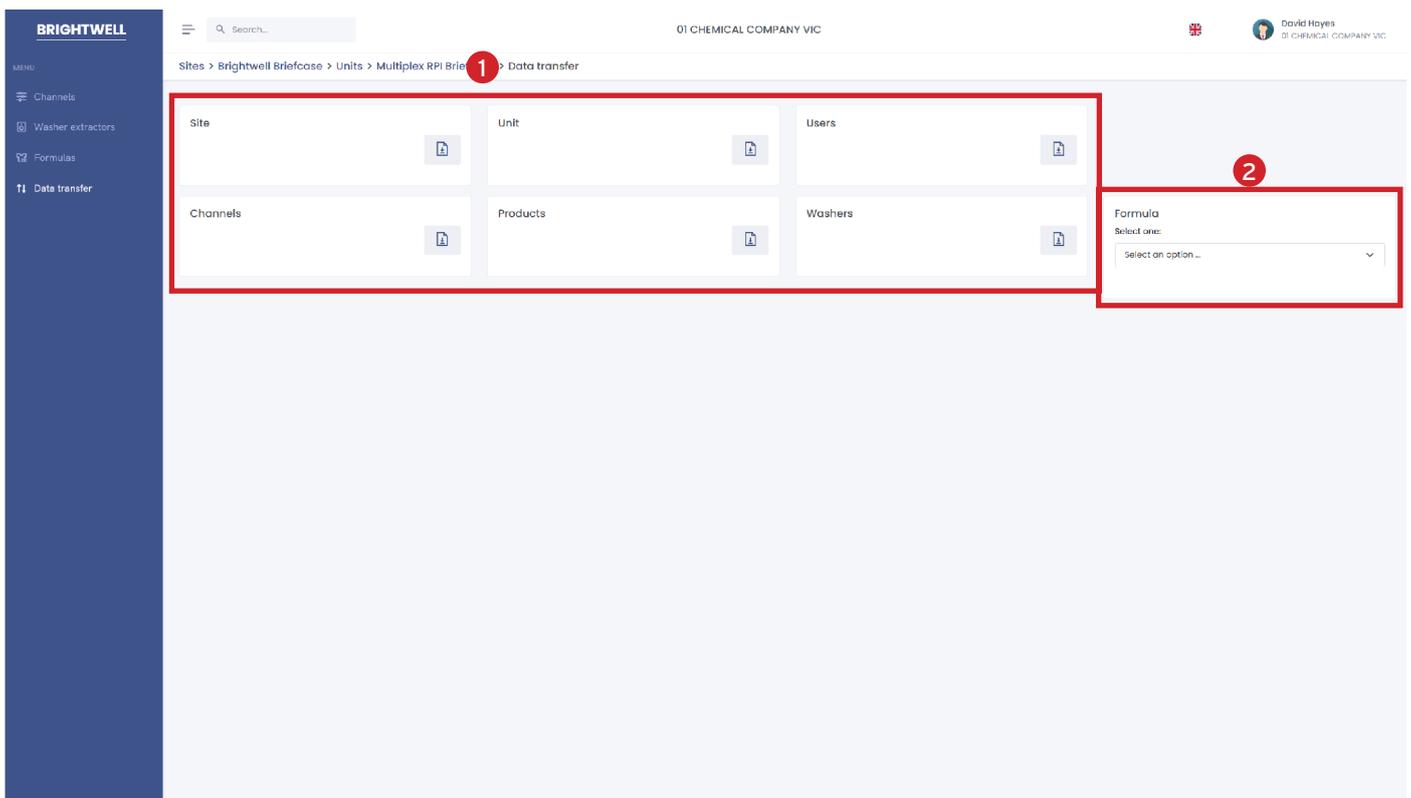
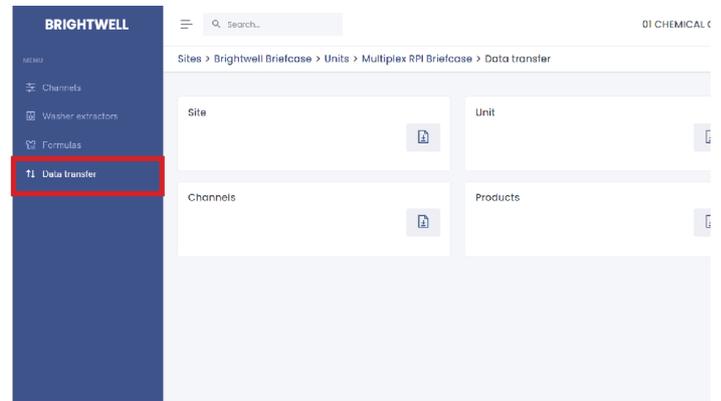


# DATA TRANSFER OVERVIEW

Please note - To access the Data Transfer menu. Please refer to this previous section - [Accessing Channels, Washer Extractors, Formulas and Data Transfer](#)

## STEP 1

To access the **Data Transfer** overview select the icon in the side navigation bar



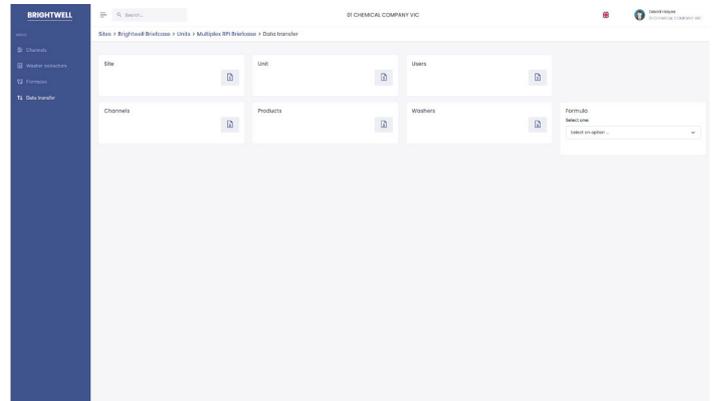
- 1 Allows you to download the individual settings from a unit to transfer. These include:
- Site
  - Unit
  - Users
  - Channels
  - Products
  - Washers

- 2 Use the drop down menu to select a specific formula to transfer

# DATA TRANSFER SAVING A JSON FILE

## STEP 1

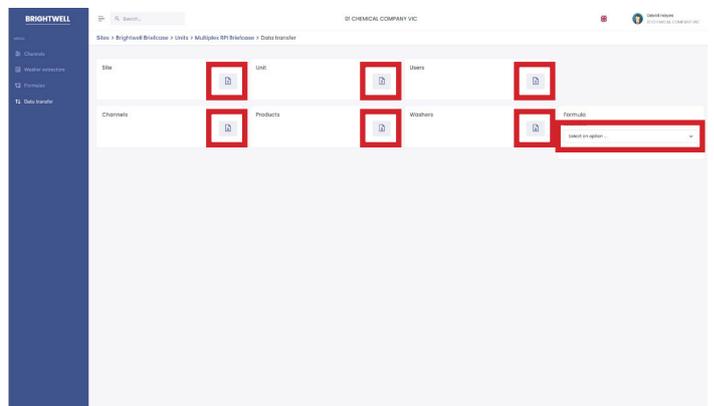
If you want to download JSON setup data for you Multiplex system and transfer it to an offline unit via the Web Server.



## STEP 2

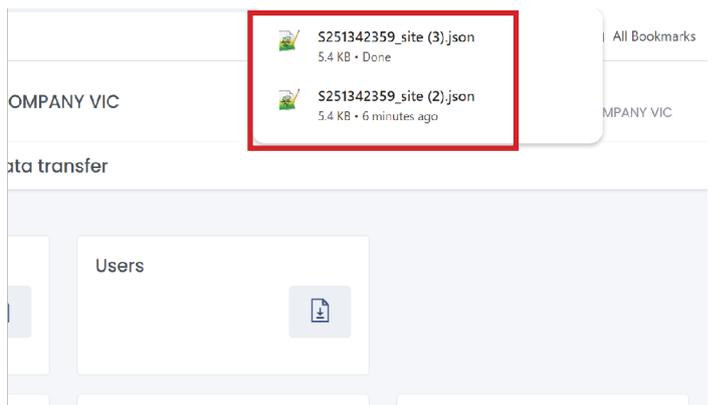
Using any of the Download icons seen on here, or the drop down for specific Formula data to download a file.

Please note - For the initial setup you will need to download ALL files. After this has been done, any changes to the Washers, Formulas or Channels can be downloaded and replaced individually. Please refer to the Configuration Tool user guide for information on how to upload to the unit.



## STEP 3

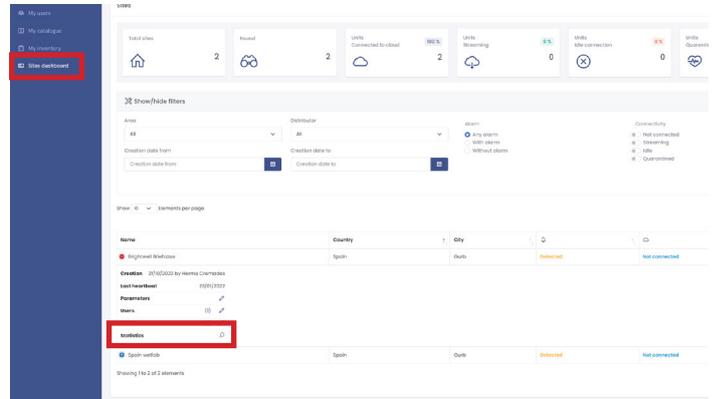
Once the JSON file has downloaded, it is ready to be used via the Configuration Tool.



# STATISTICS

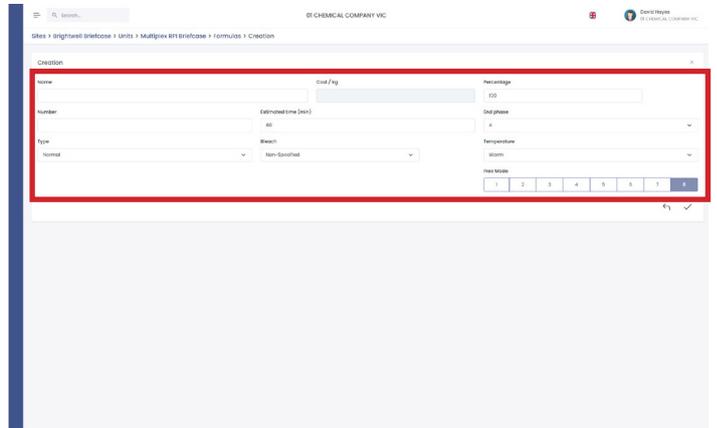
## STEP 1

To access the **Statistics** you will need to be on the Sites Dashboard page. Click the + icon to expand the company and press on the Search icon that appears.



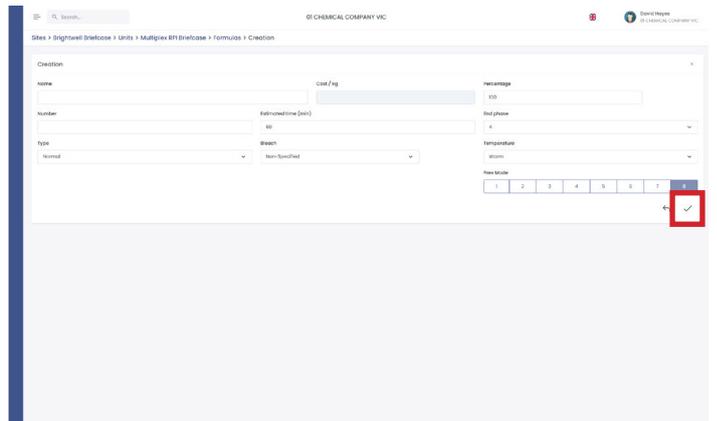
## STEP 2

Use the options available here to set the parameters for your report including the machine and dates you want to run it between.



## STEP 3

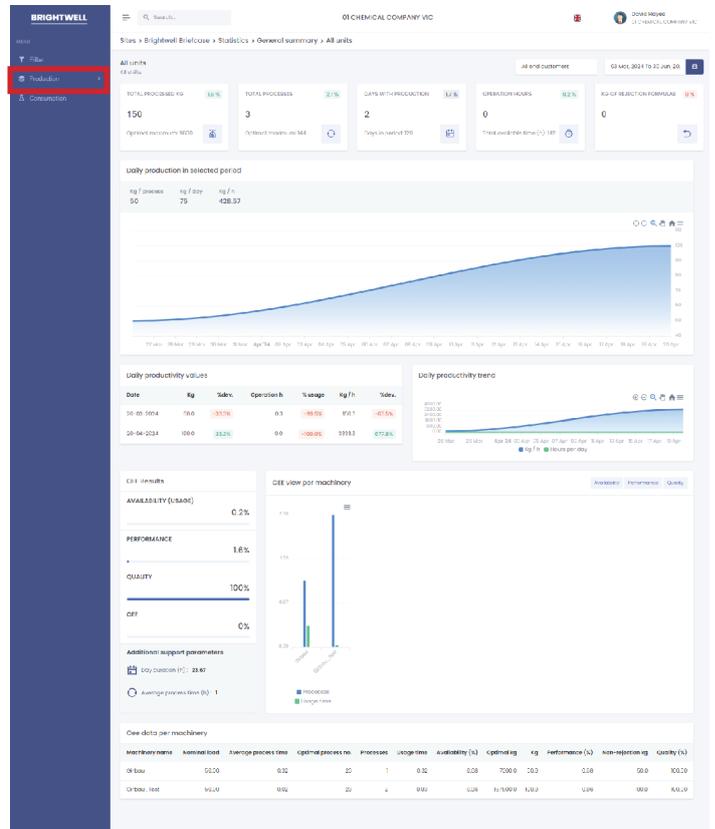
Use the **Tick icon** on the right hand side to start the report generation.



# STATISTICS

## STEP 4

Your statistics production stats will now display on the screen.



## STEP 5

If you want to see the Consumption statistics for your unit press the Consumption icon in the side navigation bar



# MAINTENANCE

## ON EACH MAINTENANCE VISIT

**Visual Check:** Inspect all connections for leaks or product residues.

**Alarms:** Access the list of alarms via the webserver. If any particular alarm is noted on one or more days, prioritize addressing it.

## EVERY 6 MONTHS

**Visual check:** look for leaks or product residues at any of the connections.

**Alarms:** By connecting to the webserver, look at the list of alarms of the equipment. If you notice a particular alarm on one or more days, focus on it.

**Calibration:** calibrate the products again. Thermal changes affect the viscosity of the product and it is possible that the calibration is not adjusted.

## EVERY YEAR

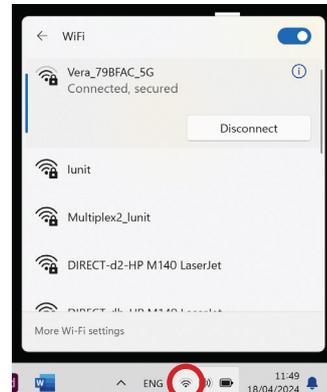
If the equipment operates regularly without seasonal shutdowns, ensure that the suction lines are in good condition. It is recommended to replace the suction line for alkaline products to prevent excessive hardening of the tubes and the risk of breakage

If the equipment is only used during the summer season, it is important to fill all lines with water at the end of the season, including the suction lines. This helps minimize the effects caused by contact with chemicals and prevents future problems.

# CONNECTING TO THE UNIT WEB SERVER

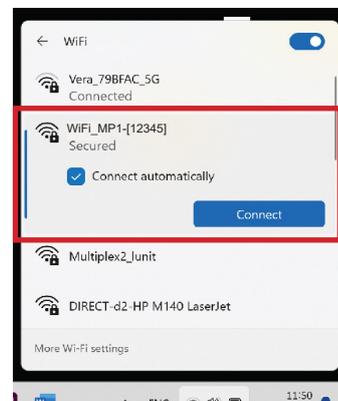
## STEP 1

Each Multiplex unit enables direct connection through its web server. This connection is established via your computer's **Wifi network**. After powering on the unit, please allow 3 minutes for it to boot up and generate the server. To view available networks, simply click on the Wifi icon located in your toolbar.



## STEP 2

Locate the network named according to Wifi, this appears as the make of the Multiplex and the unit serial, for example: "Wifi\_OPL-[123456]", click 'Connect' and you will be prompted to enter the network password for your unit. (This password would have been set up during the ordering process)



## STEP 3

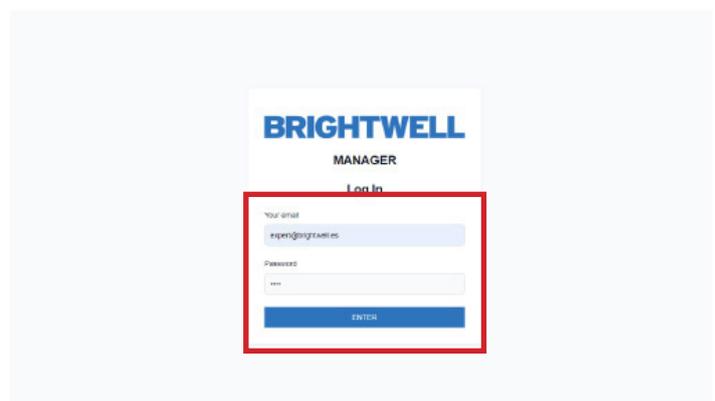
Open your chosen web browser and enter the following address: [www.mp1pro.com](http://www.mp1pro.com)

\*Please note - It can take up to two minutes to connect



## STEP 4

Once the login page for the unit has displayed enter the information into the boxes provided. Once complete press the 'Enter' button to log into the unit. (This information was setup during the ordering process)



# OVERVIEW

**BRIGHTWELL**

Manager **3**

**Channels** Add New

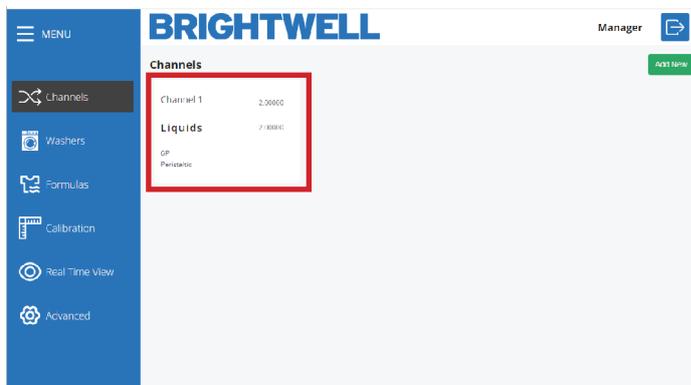
Channel 1	2.00000
<b>Liquids</b>	2.00000
6P Peristaltic	

- 1** Number 1 highlights the expandable menu containing general settings for the configuration tool including;
  - Channels
  - Washers
  - Formulas
  - Calibration
  - Real time view
  - Advanced
  - Upload File
- 2** Number 2 is the side navigation bar displaying all menus allowing you to customise your Multiplex unit
- 3** Number 3 is how you disconnect from the unit.

# CHANNELS TAB SETTINGS AND OPTIONS

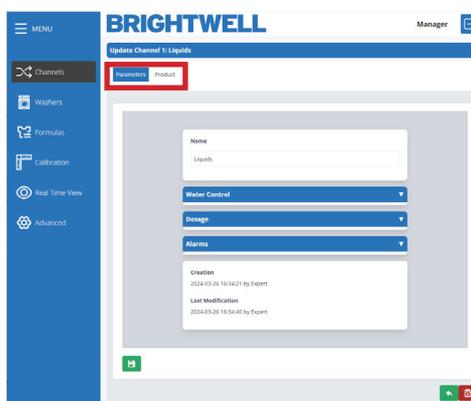
## STEP 1

The first menu is 'Channels' which allows you to edit an existing channel or create a completely new one. If you select a channel you will be presented with the current configuration settings.



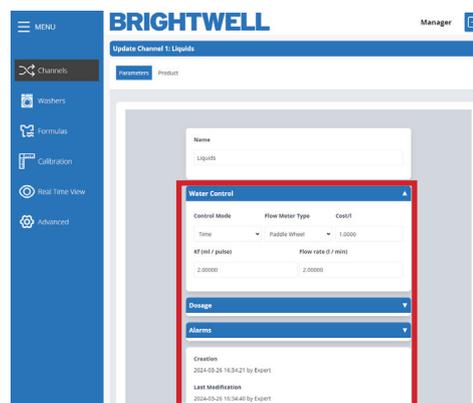
## STEP 2

These settings are divided into the two tabs [Parameters](#) and [Product](#) at the top.



## STEP 3

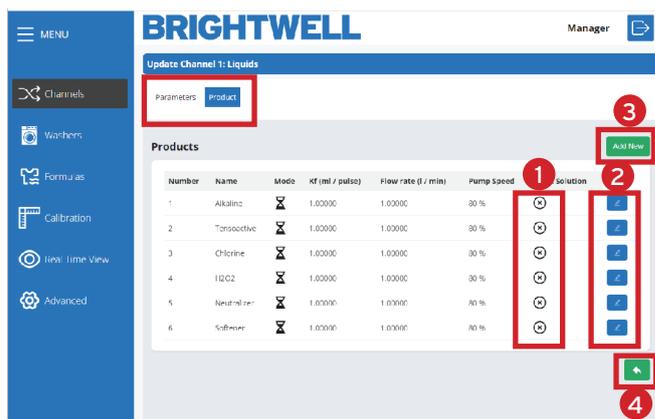
Use the expandable sections in the **Parameters** section to navigate through the editable settings and configure as required. These are expanded in the later section  
 - Editing or Creating a New Channel (P11)



## STEP 4

If you open the **Product** tab to move across to this section. From here you can access the following menus:

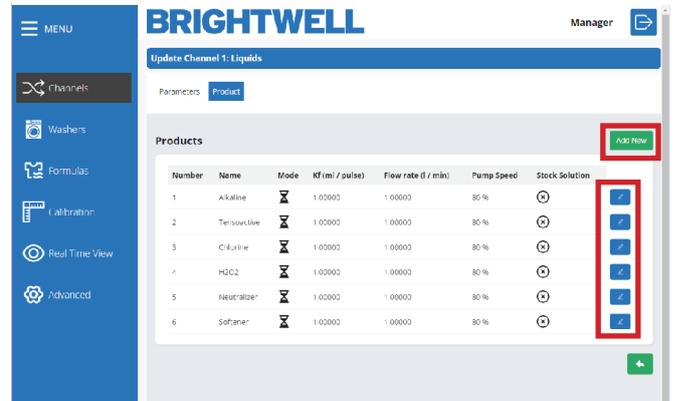
- 1 Delete the chemical
- 2 Edit the chemical details
- 3 Add a new chemical
- 4 Exit the Product menu



# EDITING OR CREATING A NEW PRODUCT

## STEP 1

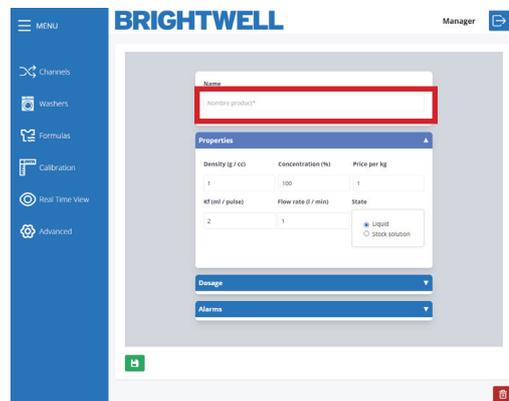
To edit an existing product press the **Edit** icon on the right hand side of the list. Alternatively, to add a new product to your system press the **Add New** button.



## STEP 2

Use the first box to set the **Custom Product Name** for the chemical so you can identify it clearly.

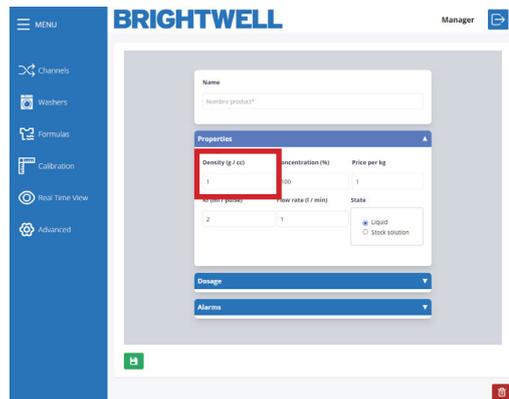
*It is advisable to be very precise with the name so no errors are made in selection.*



## STEP 3

The next box allows you to set the **Density** of the product. Please refer to the chemical manufacturers values for this.

We recommend that this value is precise and based on the chemical data sheet. As this directly effects the dosage of the chemical  
**X value density / 1kg of laundry**

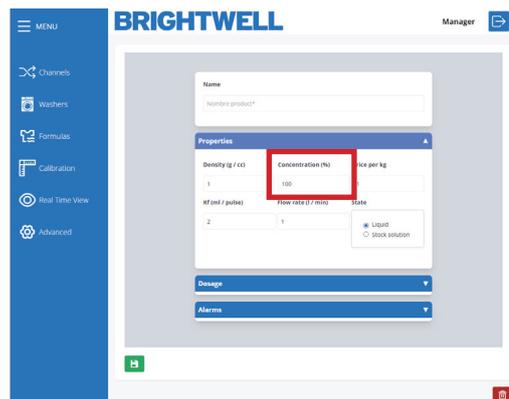


## STEP 4

Next set your **Product Concentration** percentage if this is diluted.

If you are using products in pre-dilution and want the 'grams of pure product' you should set this field percentage to the direct dilution of the product. For example:

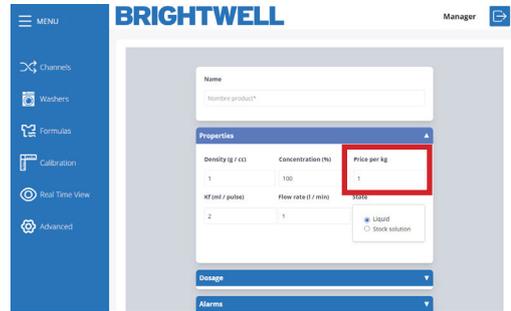
**1000 litres you use 100kg of product your % = 1000/100 = 10%**



# EDITING OR CREATING A NEW PRODUCT

## STEP 5

Below you can set the Price per KG of the product for cost reporting.

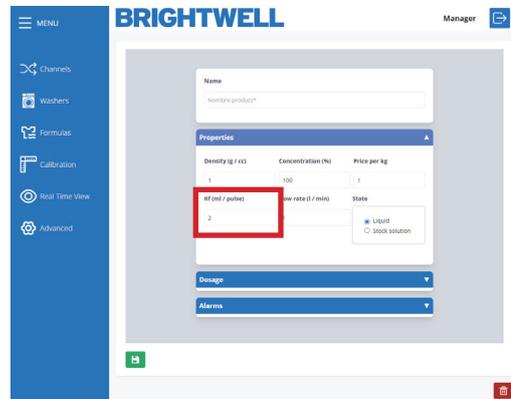


## STEP 6

Here you can adjust the Kf value as required.

(Please note - These values are generated automatically by running a calibration on the unit seen later in this guide: - Running a Calibration.)

\*We DO NOT advise setting the values manually

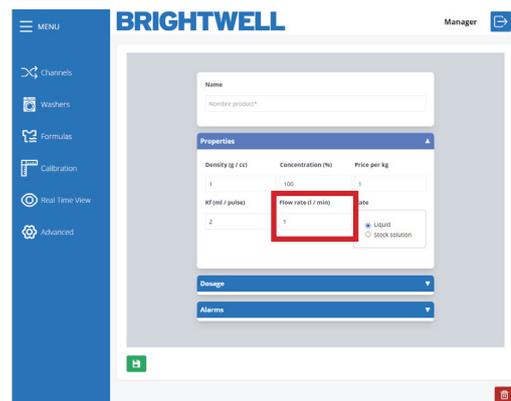


## STEP 7

You can now set up the Flow Rate value for the chemical here.

(Please note - These values are generated automatically by running a calibration on the unit seen later in this guide: - Running a Calibration.)

\*We DO NOT advise setting the values manually

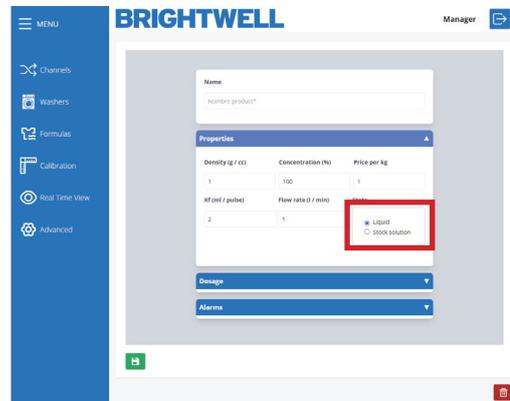


# EDITING OR CREATING A NEW PRODUCT

## STEP 8

You can now adjust the **State** of the product using the drop down. You can select between:

- Liquid
- Solid Solution

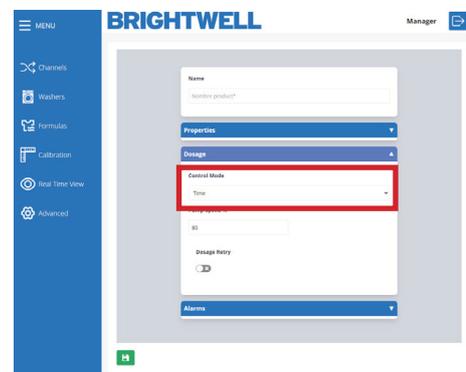


## STEP 9

Under the Dosage menu you can choose between:

- Modo de control
- Tiempo
- Caudalímetro

*Recomendamos utilizar un caudalímetro en todas las configuraciones para maximizar toda la funcionalidad de su Equipo Multiplex.*

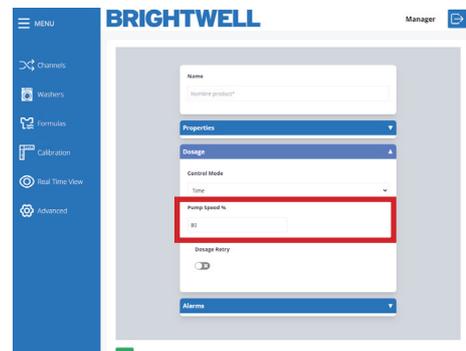


## STEP 10

Below you can now adjust the Pump Speed for this chemical.

*We recommend a speed of:*

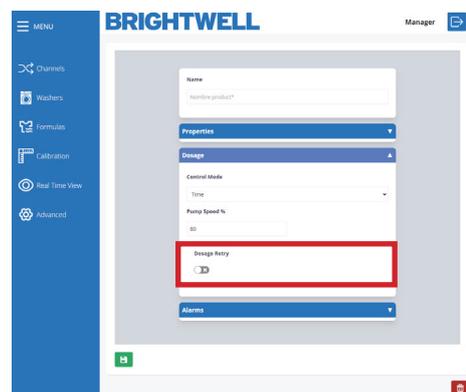
- 80% - 100% for high volume delivery
- 30% - 80% for low volume delivery
- DO NOT use below 30% speed for delivery



## STEP 11

The final setting in the dosage column allows you to enable or disable the **Dosage Retry**.

*This will enable the system to retry dosing the chemical if the correct number of pulses are not met in the expected delivery time.*



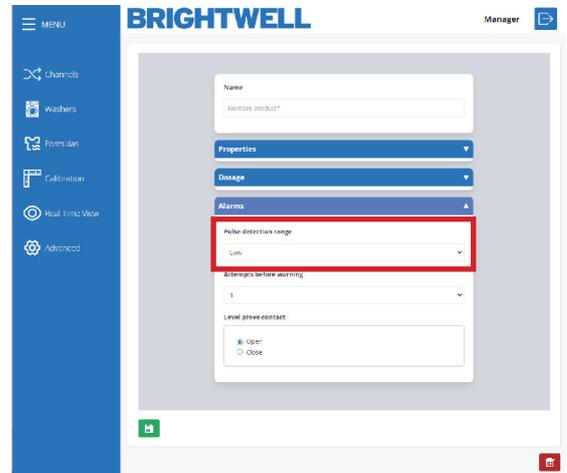
# EDITING OR CREATING A NEW PRODUCT

## STEP 12

At the bottom of the screen you can see the **Alarms settings**. The first box allows you to setup the **Pulse Detection Range**. You can select between:

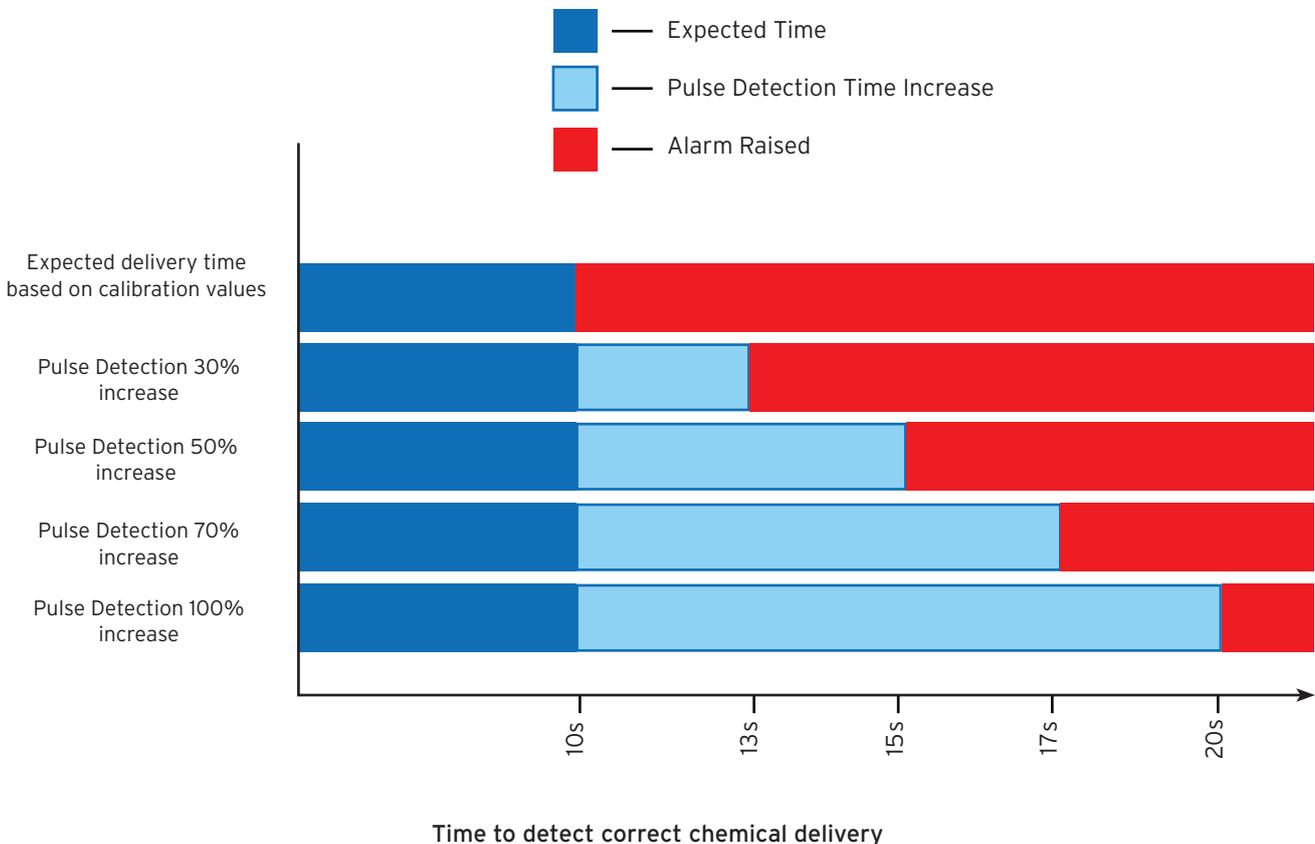
- Low (30%)
- Medium (50%)
- High (70%)
- Maximum (100%)

This is the additional time that can be added for the flow meter to detect the correct volume of chemical. A more detailed explanation is found below:



## PULSE DETECTION RANGE

When dosing chemical it may be required to increase the detection range to allow for fluctuations in flow for the product. This may be needed when there is potentially gassing products causing gas to expand in the pipe, or very viscous products that can become more difficult to pump if left sedentary. Below is a graph explaining the functionality.



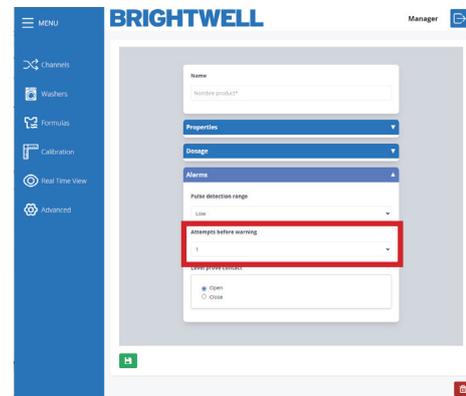
Please note - we advise setting this to as close to the expected delivery time as possible for accurate results and early warning of any potential hardware failures that may arise. Setting this to the maximum level by default will potentially hide maintenance issues that could be resolved before failure of the part.

# EDITING OR CREATING A NEW PRODUCT

## STEP 13

Below this you can set the number of retries before an alarm is raised.

*The feature is only available with a flow meter installed. This stops consecutive audio alarms from sounding on the unit to reduce noise pollution in the laundry.*

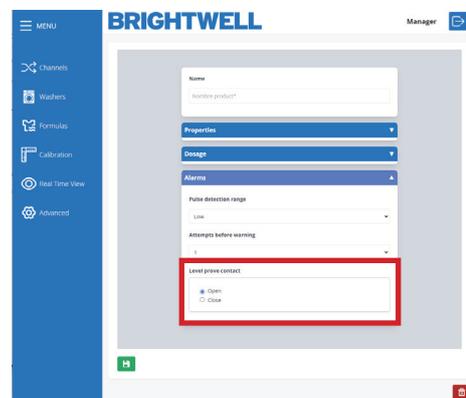


## STEP 14

Finally, you can adjust the Level Probe Contact to:

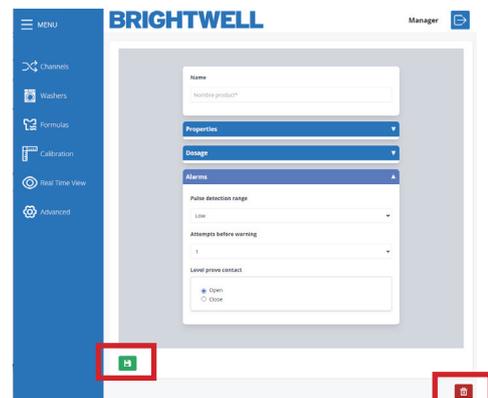
- Normally Open
- Normally Closed

*Please note - The standard Brightwell products are Normally Closed*



## STEP 15

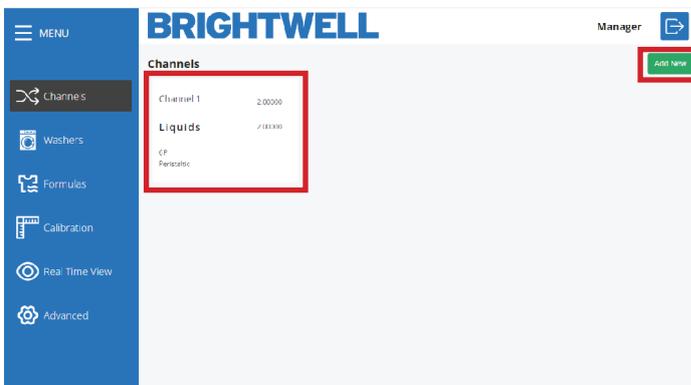
Pressing the **Save** icon located in the bottom left will save the details and complete the setup. Alternatively, the **Delete** icon will remove the chemical.



# EDITING OR ADDING A NEW CHANNEL

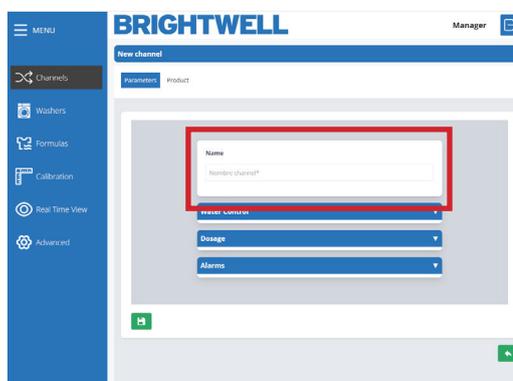
## STEP 1

To edit an existing channel press the **icon** in the channels list. Alternatively, to add an additional channel to your Multiplex setup press the **Add New** button in the top right of the screen.



## STEP 2

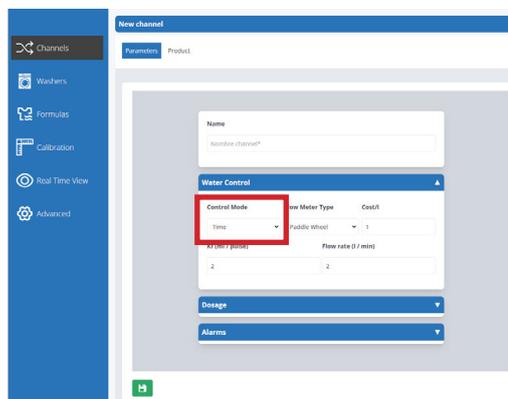
Initially you can set the name for your new channel.



## STEP 3

The final setting in this menu is the **Control Mode**. Where you can select between Time or Flow meter.

\*We recommend using a flow meter for your Multiplex as it guarantees accurate chemical delivery to your machines. This option is to allow for temporary use of the unit while you await repairs.

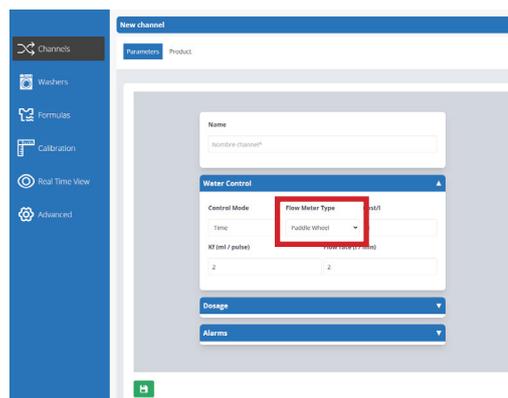


## STEP 4

Select the correct **Flow Meter Type** using the drop down:

- Paddles
- Oval-Gear
- Thermal

Please note: Do not change this unless you have replaced the flow meter provided from your supplier.



# EDITING OR ADDING A NEW CHANNEL

## STEP 5

Next is the **Cost** value for the water of this channel, this is used for cost reporting.

The screenshot shows the 'New channel' configuration interface. On the left is a navigation menu with options: Channels, Washers, Formulas, Calibration, Real Time View, and Advanced. The main content area is titled 'New channel' and has tabs for 'Parameters' and 'Product'. Under 'Parameters', there is a 'Name' field with the placeholder 'Nombrre channel?'. Below this is the 'Water Control' section, which is expanded to show a table with columns: Control Mode, Flow Meter Type, and Cost. The 'Cost' column has a value of '1' and is highlighted with a red box. Below the table are sections for 'Dosage' and 'Alarms', both currently collapsed.

## STEP 6

Here you can adjust the **Kf** value as required.

(Please note - These values are generated automatically by running a calibration on the unit seen later in this guide: - Running a Calibration

\*We **DO NOT** advise setting the values manually

This screenshot is similar to the previous one, but the 'Kf (ml / pulses)' field in the 'Water Control' table is highlighted with a red box. The 'Cost' field now contains the value '1'.

## STEP 7

You can now set up the **Flow Rate** value for the chemical here.

(Please note - These values are generated automatically by running a calibration on the unit seen later in this guide: - Running a Calibration

\*We **DO NOT** advise setting the values manually

This screenshot shows the 'New channel' configuration page with the 'Flow rate (l / min)' field in the 'Water Control' table highlighted with a red box. The 'Kf' value is now '2' and the 'Cost' value is '1'.

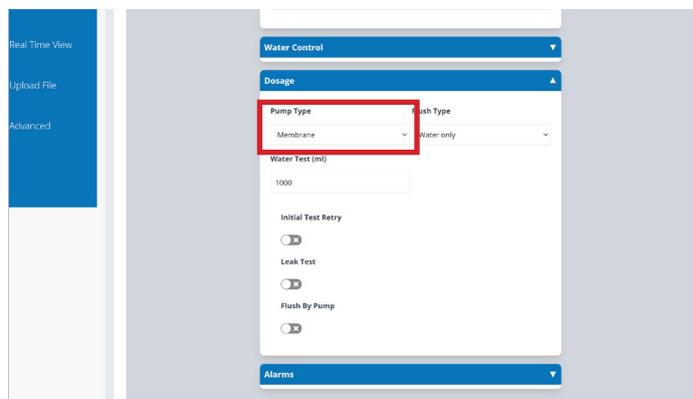
# EDITING OR ADDING A NEW CHANNEL

## STEP 8

If you need to adjust the [Pump Type](#) for the unit you can use the drop down menu to choose between:

- Peristaltic
- Motor
- Membrane
- Pneumatic
- Venturi

*The recommended configuration for the Multiplex is water or air flush with a membrane or pneumatic pump. (Based on each site)*



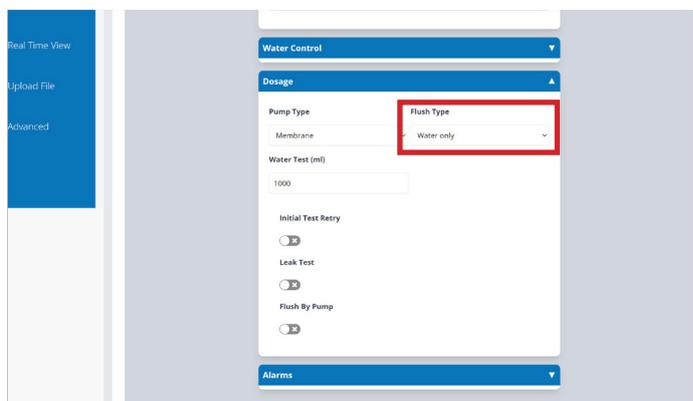
## STEP 9

If you need to adjust the [Flush Type](#) for the channel use this drop down to choose between;

- No Flush
- Only Water
- Air

*It is recommended to use water for set-ups where the distance between the distributor and unit is under 40 metres. Over 40 metres we advise using Air flush and a water test of over 1000ml to prevent product residue building up.*

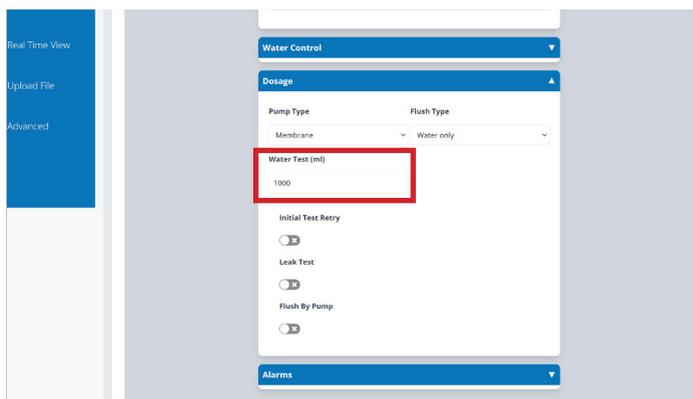
*It is only recommended to use no flush when you have chemicals that become more viscous with water or the product is going directly to the washer.*



## STEP 10

Next you can adjust the Water Test volume for your channel. The minimum value for this is 700 ml to ensure a correct test and separation of chemicals.

*A water test is used to verify that the minimum indispensable conditions and that the product will reach its destination. A water test is recommended when products with high viscosity or high surface tension pass through the channel.*

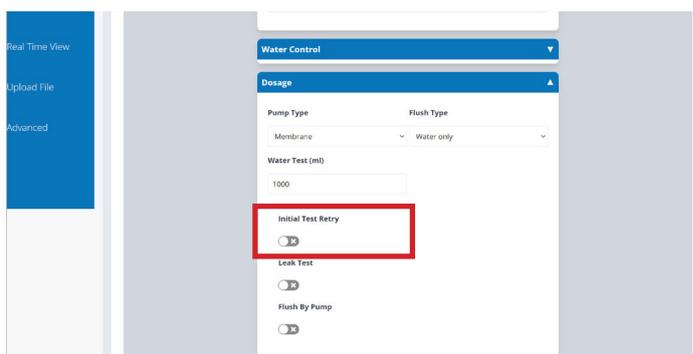


## STEP 11

Below this you can set the number of retries before an alarm is raised.

*The feature is only available with a flow meter installed. This stops consecutive audio alarms from sounding on the unit to reduce noise pollution in the laundry.*

*This is **ONLY** for the product dosage and water flush test. Not initial leak test.*



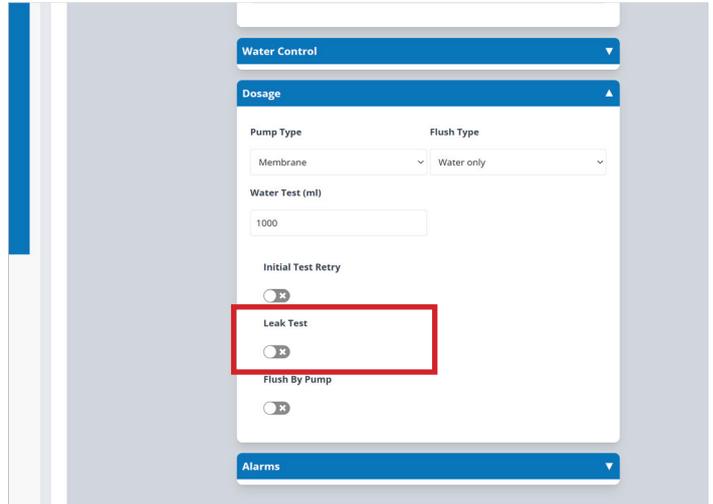
# EDITING OR ADDING A NEW CHANNEL

## STEP 12

Next enable or disable the [Leak Test](#) for the channel.

A leak test ensures that none of the valves on the unit are damaged by closing the valves and driving water to them, looking at the flow meter to see if any Pulses are detected. It is highly recommended that this option is enabled, however it may be needed to be deactivated for some examples:

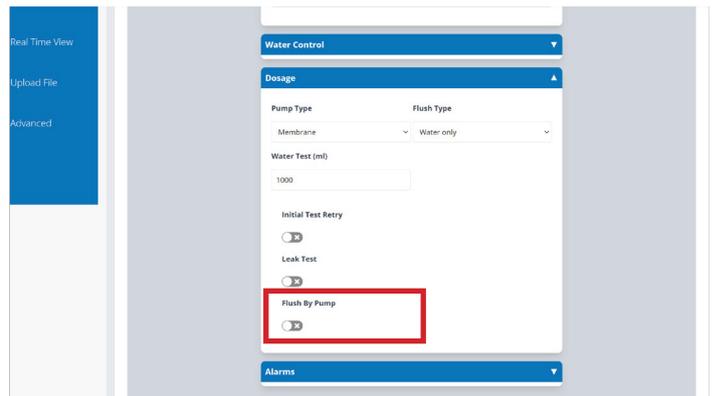
- The pipe is soft and allows for expansion or compression
- There is a longer distance of pipe to the distributor
- The channel product is dosed directly to the distributor



## STEP 13

Another [flush](#) setting can be adjusted next, selecting if you are flushing with only a pump or not.

\*This is not a recommended setup option and is only used when you do not have pressure regulated water for your setup. If this is the case, we advise the purchase of a booster tank to stabilise water pressure and ensure unit performance and reliability.



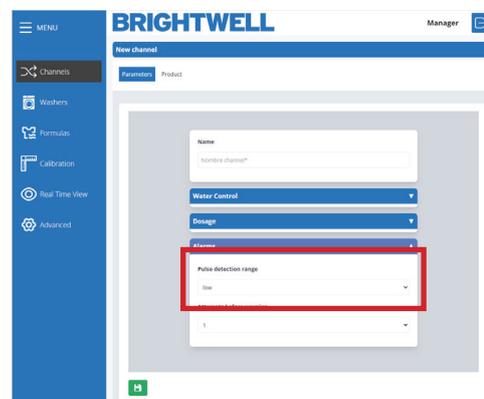
## STEP 14

At the bottom of the screen you can see the Alarms settings. The first box allows you to setup the Pulse Detection Range. You can select between:

- Low (30%)
- Medium (50%)
- High (70%)
- Maximum (100%)

This is the additional time that can be added for the flow meter to detect the correct volume of chemical. A more detailed explanation is found earlier here:

### Pulse Detection Range



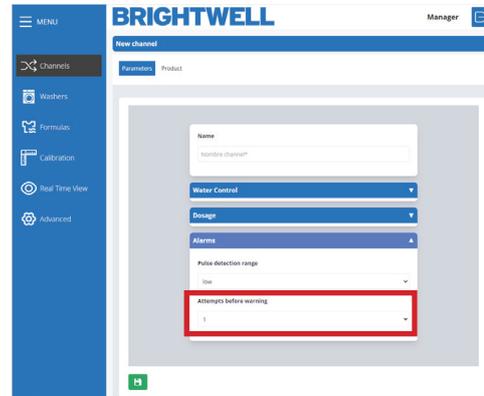
# EDITING OR ADDING A NEW CHANNEL

## STEP 15

Below this you can set the number of retries before an alarm is raised.

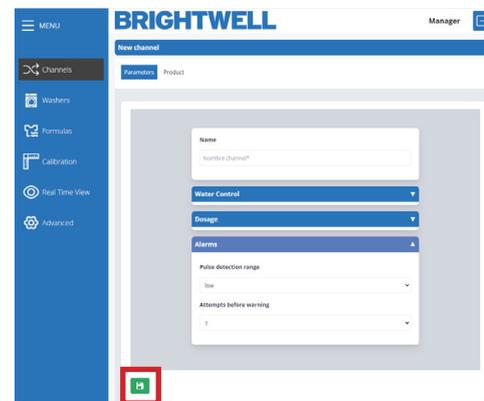
*The feature is only available with a flow meter installed. This stops consecutive audio alarms from sounding on the unit to reduce noise pollution in the laundry.*

*This is ONLY for the product dosage and water flush test. Not initial leak test*



## STEP 16

To save your new channel and its settings press the **Save** icon located at the bottom left of the screen



# WASHERS

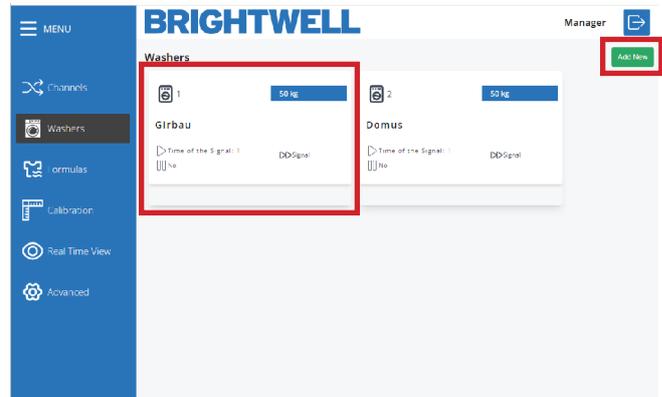
The screenshot shows the BRIGHTWELL Manager interface. On the left is a blue sidebar menu with the following items: MENU, Channels, Washers (highlighted), Formulas, Calibration, Real Time View, and Advanced. The main content area is titled 'Washers' and contains two configuration cards. The first card is for a 'Girbau' washer with a 50 kg capacity and a 'Time of the Signal: 1' setting. The second card is for a 'Domus' washer with a 50 kg capacity and a 'Time of the Signal: 1' setting. A red box highlights the 'Washers' section, and a green box highlights the 'Add New' button in the top right corner.

- 1 Number 1 are the current washers setup on the system giving you basic information on the machine details. You can click on any of these to open up the configuration and setup.
- 2 Number 2 is the side navigation bar displaying all menus allowing you to customise your Multiplex unit.

# EDITING OR ADDING A NEW WASHER

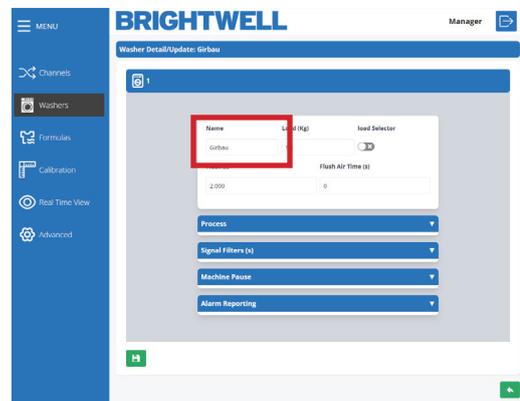
## STEP 1

To edit an existing washer click on the icon on the main Washers tab. Alternatively, to create a new press the Add New button located in the top right.



## STEP 2

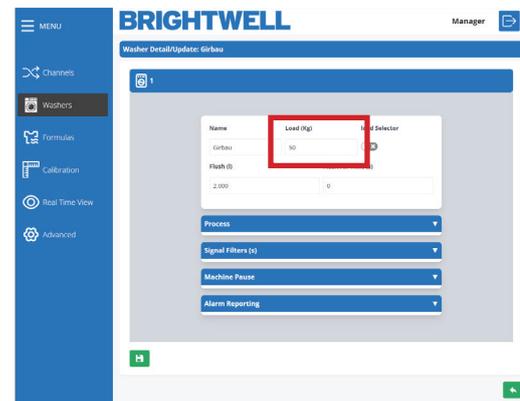
The first section allows you to set the Custom Name for the washer.



## STEP 3

Next, you can set the Total Load in Kg for the Washer.

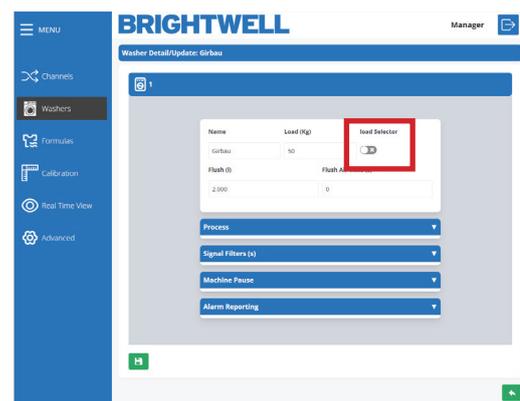
*This field is essential in calculating the total volume to be dosed to the load.*



## STEP 4

You can now enable or disable the Load Selection for this washer.

*This setting requires a formula select, so please contact Brightwell to discuss this setting and equipment if required.*

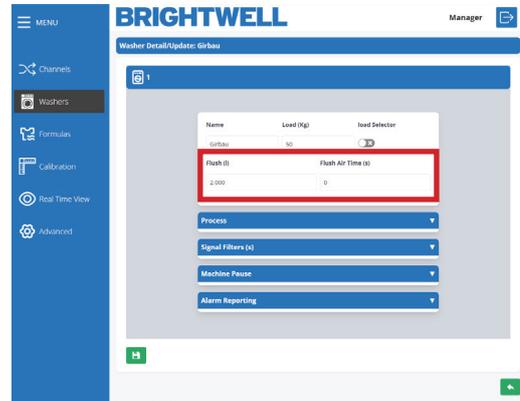


# EDITING OR ADDING A NEW WASHER

## STEP 5

The next box allows you to set the **Water Flush (I)** quantity required.  
Alternatively, if you are using air flush you can use the **Air Time (S)** box below this instead.

*This value needs to be precise for correct delivery of chemical. Please run a visual check of the water required to completely inject the chemical into the machine, as this varies based on distance from the distributor.*

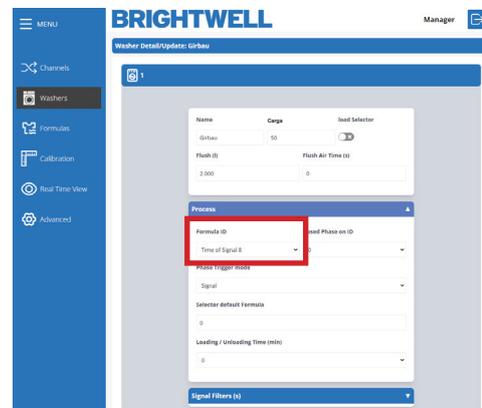


## STEP 6

In the Dosing Process column you can first set the Formula ID section. This can be:

- Selector
- Time of signal 8
- Time of signal 1+8
- Binary
- Free

Please refer to the next section for a more detailed explanation.



## SIGNAL TIME 8

Esto selecciona el programa basado en intervalos de 5 segundos de la Señal 8 que va alta. Esta configuración se aconseja para Equipos con un número inferior de fórmulas (1-20). Consulte la tabla siguiente para conocer los tiempos.

Formula	Signal 8 Time on						
1	5 s	5	25 s	9	45 s	13	65 s
2	10 s	6	30 s	10	50 s	14	70 s
3	15 s	7	35 s	11	55 s	15	75 s
4	20 s	8	40 s	12	60 s	16...	80 s...

# EDITING OR ADDING A NEW WASHER

## SIGNAL TIME 1+8

This selects the program based on the duration of signals 1 and 8 going high simultaneously. This setting is advised for units that have a larger volume of formulas to select (20+) The below table explains the timing and selection details.

Formula	Signal 1 Time on	Signal 8 Time on	Formula	Signal 1 Time on	Signal 8 Time on	Formula	Signal 1 Time on	Signal 8 Time on	Formula	Signal 1 Time on	Signal 8 Time on
1	5 s	5 s	11	10 s	5 s	21	15 s	5 s	31	20 s	5 s
2	5 s	10 s	12	10 s	10 s	22	15 s	10 s	32	20 s	10 s
3	5 s	15 s	13	10 s	15 s	23	15 s	15 s	33	20 s	15 s
4	5 s	20 s	14	10 s	20 s	24	15 s	20 s	34	20 s	20 s
5	5 s	25 s	15	10 s	25 s	25	15 s	25 s	35	20 s	25 s
6	5 s	30 s	16	10 s	30 s	26	15 s	30 s	36	20 s	30 s
7	5 s	35 s	17	10 s	35 s	27	15 s	35 s	37	20 s	35 s
8	5 s	40 s	18	10 s	40 s	28	15 s	40 s	38	20 s	40 s
9	5 s	45 s	19	10 s	45 s	29	15 s	45 s	39	20 s	45 s
10	5 s	50 s	20	10 s	50 s	30	15 s	50 s	40	20 s	50 s

## BINARY

For this mode the unit will select a program based on the below signal combinations.

Formula	8	7	6	5	4	3	2	1
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
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27								
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29								
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31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								

## FREE MODE

Free mode allows the users to build a custom list of formula selection based on incoming signals. These are **ONLY** defined via the web portal or web server, they cannot be defined on the On Screen setup.

# EDITING OR ADDING A NEW WASHER

## STEP 7

After this you can select the **Dosed Phase ID** number using the drop down here.

*This allows you to customise what state the machine will enter on receiving the first signal.  
If you set this to Phase 0, the unit will not begin dosing until a signal is received from the washer.  
If you set this to Phase 1 the unit will immediately begin to dose after the auto formula select signal is confirmed.*

The screenshot shows the 'Washer Detail/Update: Gibeau' configuration page. The 'Process' section is expanded, and the 'Dosed Phase on ID' dropdown menu is highlighted with a red box. The 'Formula ID' is set to 0, and the 'Time of Signal B' is set to 0. The 'Phase Trigger mode' is set to 'Signal'.

## STEP 8

You can now choose between how the phase of dosification is activated, **Signal** or **Sequential**.

*Signal mode defines that the machine itself will send a signal to identify what phase it is entering.*

*Sequential mode sets it so that it will move sequentially through the phases one by one in a logical order.*

The screenshot shows the 'Washer Detail/Update: Gibeau' configuration page. The 'Process' section is expanded, and the 'Phase Trigger mode' dropdown menu is highlighted with a red box. The 'Formula ID' is set to 0, and the 'Time of Signal B' is set to 0. The 'Dosed Phase on ID' is set to 0.

## STEP 9

If you have Selector chosen you will also have the option to set the **Selector Default Formula**. Which will default back to after a successful cycle.

The screenshot shows the 'Washer Detail/Update: Gibeau' configuration page. The 'Process' section is expanded, and the 'Selector default Formula' dropdown menu is highlighted with a red box. The 'Formula ID' is set to 0, and the 'Time of Signal B' is set to 0. The 'Phase Trigger mode' is set to 'Signal'.

## STEP 10

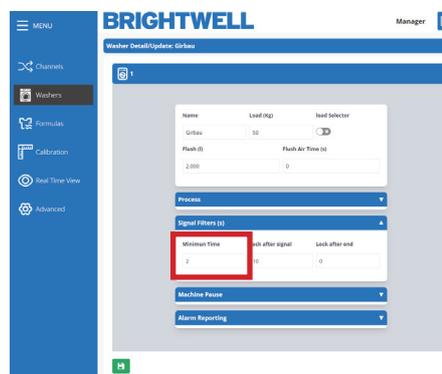
Finally you can adjust the time required to load or unload the machine.

The screenshot shows the 'Washer Detail/Update: Gibeau' configuration page. The 'Process' section is expanded, and the 'Loading / Unloading Time (min)' dropdown menu is highlighted with a red box. The 'Formula ID' is set to 0, and the 'Time of Signal B' is set to 0. The 'Phase Trigger mode' is set to 'Signal'.

# EDITING OR ADDING A NEW WASHER

## STEP 11

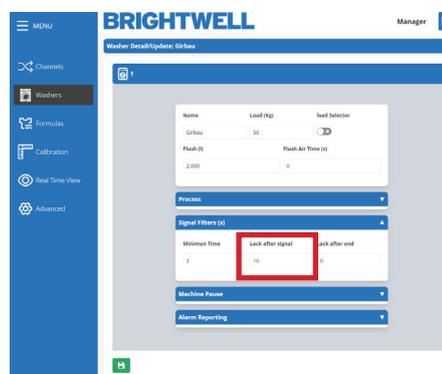
The final box in the **Signal Filters** column allows you to adjust the **Lock** time for the equipment to allow new signals, once the **RESET** has been completed.



## STEP 12

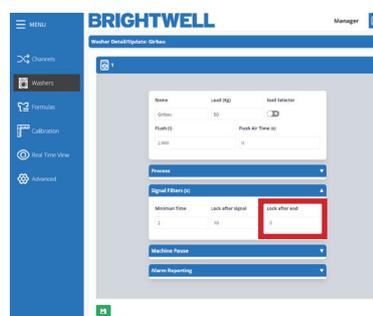
You can then adjust the time that the device would block reception of signals, after having received a valid signal.

With this option, we prevent possible “bounces” of a signal from being mistaken for input signals



## STEP 13

In the **Signal Filters** column the first box allows you to adjust the **Minimum Time** for an accepted signal. This stops ghost signals from triggering the machine.



## STEP 14

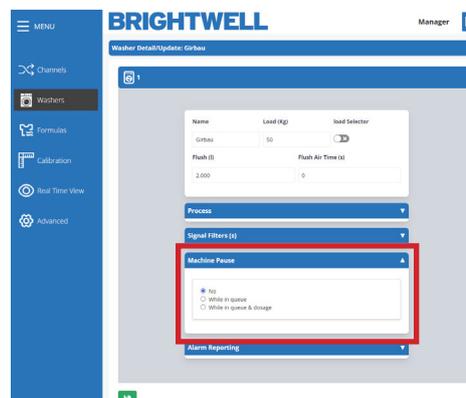
The last column is the **W.E Pause (Washer Extractor Pause)** section.

The first box allows you to adjust the Activation between:

- No (Deactivated)
- While in queue
- While in queue and dosage

*The washer pause functionality allows for ‘queuing’ of machines when they request chemical delivery while the unit is busy.*

*When a machine is ‘waiting’ its timer is paused so that the wash can complete a full cycle correctly. The above options allow you to adjust when the ‘pause timer’ begins again.*

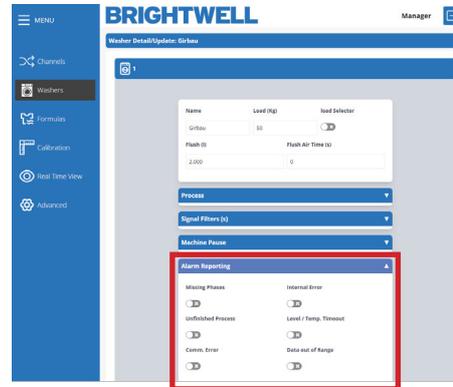


# EDITING OR ADDING A NEW WASHER

## STEP 15

The final section allows you to toggle what alarms are enabled on your washe:

- Missing Phases
- Internal Error
- Unfinished Process
- Level / Temp. Time-out
- Communication Errors
- Data Out Of Range



# FORMULAS

**BRIGHTWELL** Manager

**Formulas**

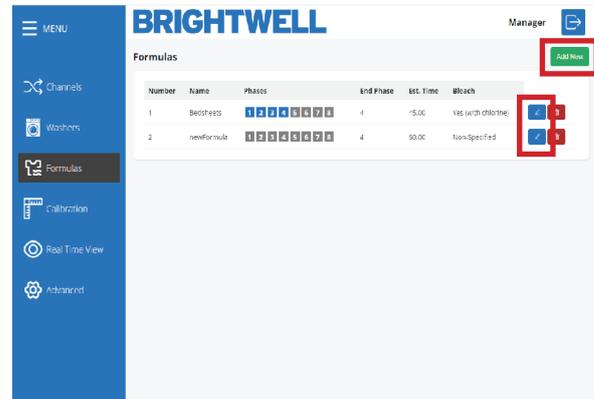
Number	Name	Phases	End Phase	Est. Time	Bleach
1	Bedsheets	1 2 3 4 5 6 7 8	4	45.00	Yes (with chlorine)
2	newFormula	1 2 3 4 5 6 7 8	4	60.00	Non-Specified

- 1 Number 1 is the **Add New** button to create a new formula
- 2 Number 2 displays the phases that have configuration data setup within the formula.
- 3 Number 3 is the **Edit** button, allowing you to edit the configuration of an existing formula.
- 4 Number 4 is the **Delete** button, allowing you to remove a formula.

# EDITING OR ADDING A NEW FORMULA

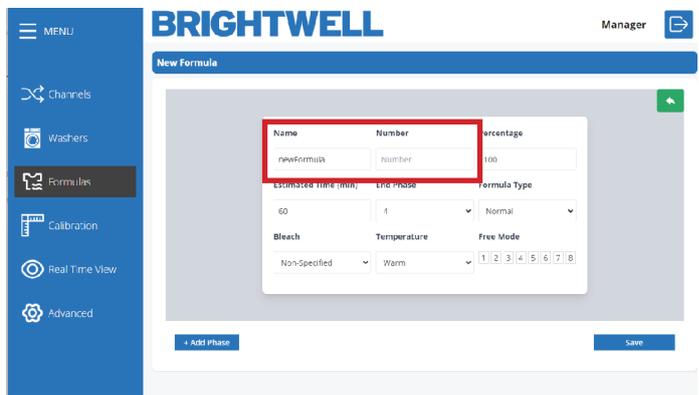
## STEP 1

To edit an existing formula on your system press the **Edit** button located on the right hand side. Alternatively, press the **Add New** icon in the top right to create a new formula.



## STEP 2

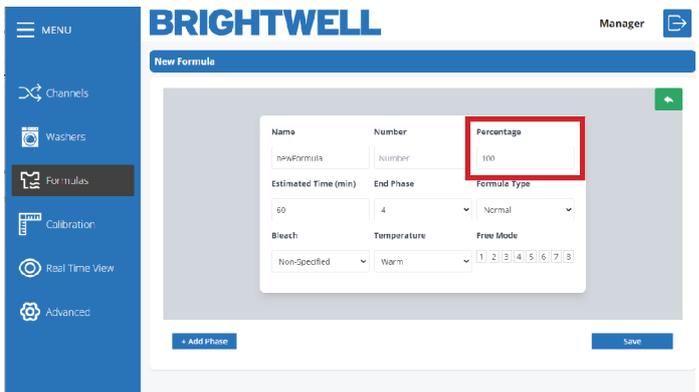
The first two boxes allow you to edit the **Name** of the formula and the assigned **Program Number**.



## STEP 3

Next you can adjust the **Percentage** value for this formula.

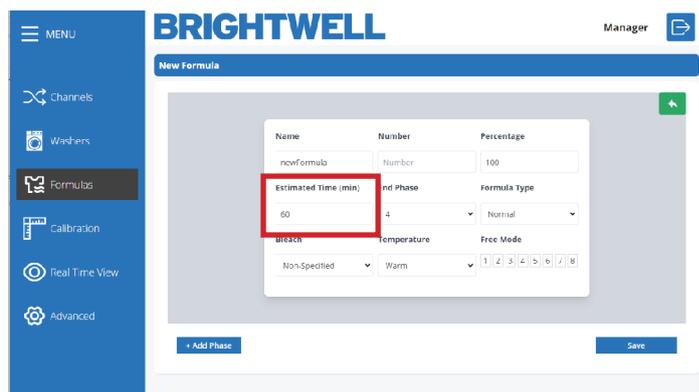
*This can be adjusted to reduce the percentage of product delivered for this formula. It can be used if dosing to a different sized machine etc.*



## STEP 4

After this you can adjust the **Estimated Time (min)** value for this formula.

*This is a rough time that the formula will take to complete.*

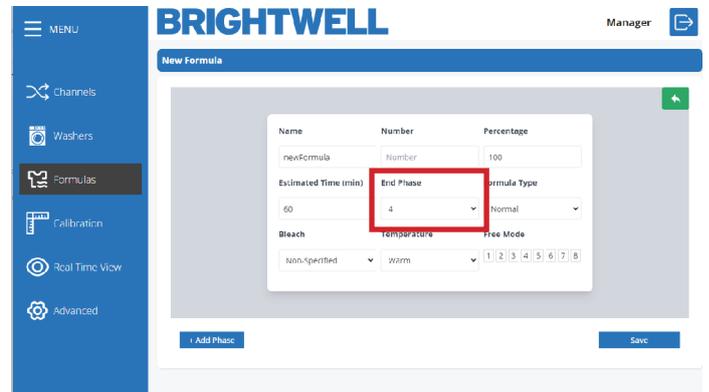


# EDITING OR ADDING A NEW FORMULA

## STEP 5

Using the drop down located here you are able to set the **End Phase** for this formula.

*The End Phase denotes what the final phase the washing machine needs to enter to trigger a complete cycle for this Formula.*

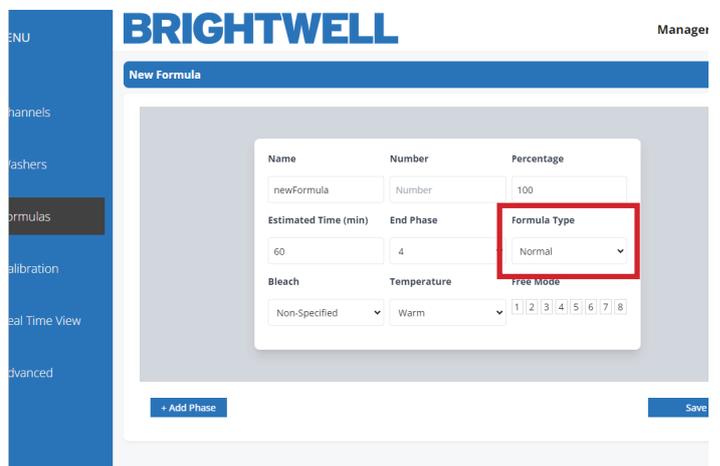


## STEP 6

You can now select the Formula Type you are creating:

- Delicate
- Normal
- Heavy Soil
- Re-Process
- Desize
- Rinse/Spinning
- Recovery
- Other

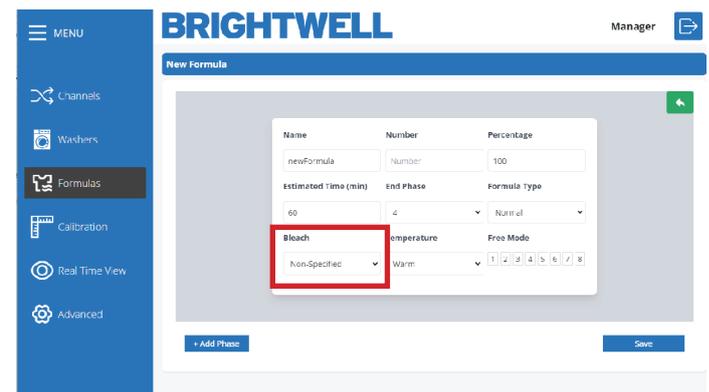
*This data is informative. It will be useful to obtain more complete statistics.*



## STEP 7

If you have bleach for this formula, you can use the drop down here to select:

- Non Specified
- No bleach
- Yes (No chlorine)
- Yes (With chlorine)

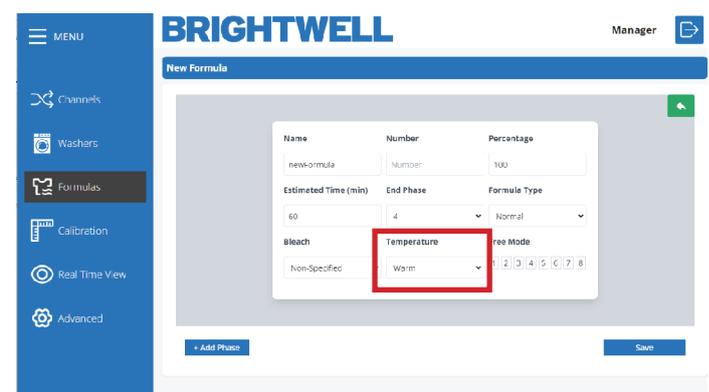


## STEP 8

You can now set the desired temperature for the formula:

- Cold
- Warm
- Hot
- High Temperature

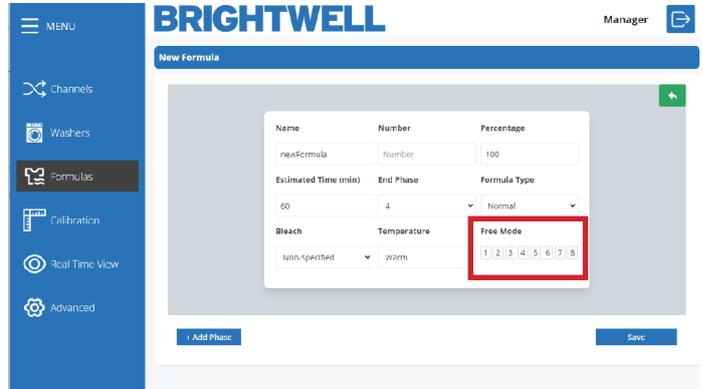
*This data is informative. It will be useful to obtain more complete statistics.*



# EDITING OR ADDING A NEW FORMULA

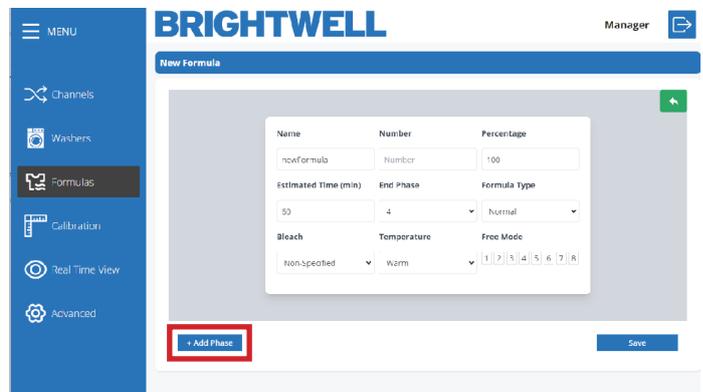
## STEP 9

If you are using **Free Mode** for your unit you can set the **Formula Input Signals** here.



## STEP 10

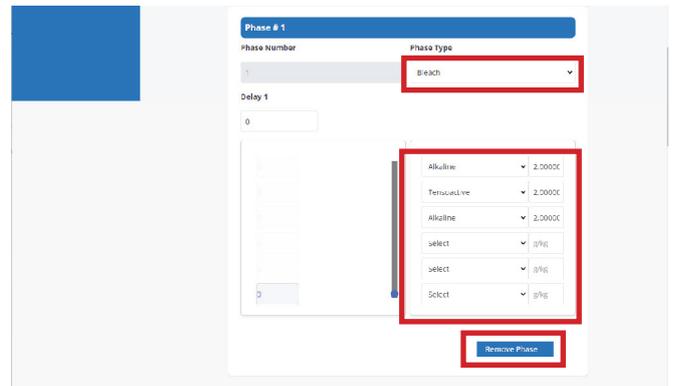
Now that you have completed the basic details for the formula you will need to set up the phases. Press the **Add Phase** at the bottom left.



## STEP 11

Within the **Add Phase** screen you can adjust the **Product Delivery** levels for each phase. Using the drop down menu you can select the dosing phase, your chosen products will be listed below. You can add, remove or adjust the values as required

Also, you can **Remove Phase** to delete completely.

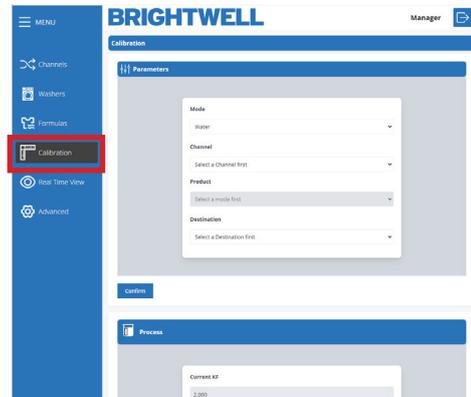


# RUNNING A CALIBRATION WITH THE CONFIGURATION TOOL

## STEP 1

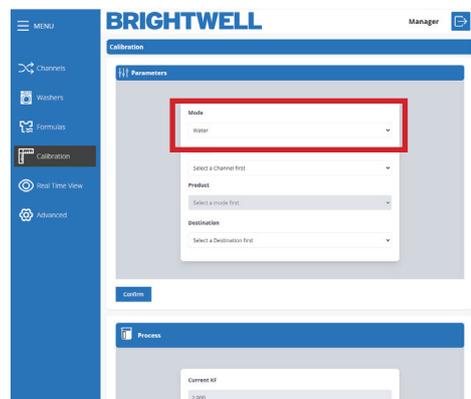
To run a calibration on your Multiplex unit press the **Calibration** icon in the side menu, located here.

Please note - You can **ONLY** run a calibration via the web server.



## STEP 2

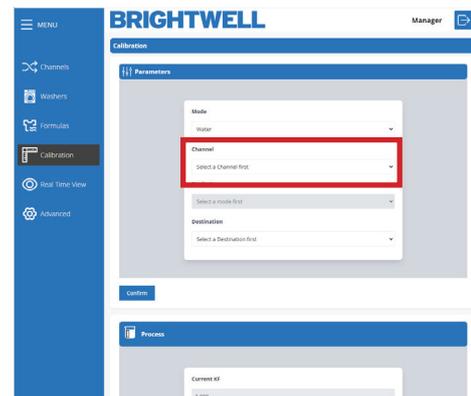
Before you run a calibration on your unit you will need to confirm the details on that channel. Initially you need to select the mode. This can be **Water** or **Product**.



## STEP 3

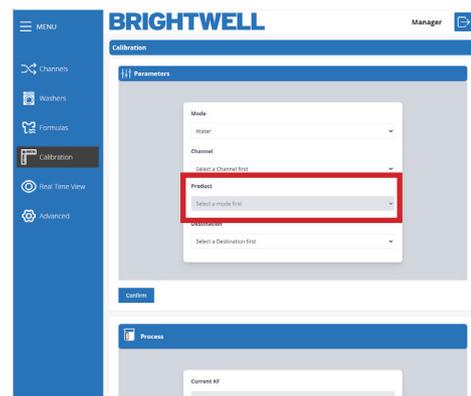
Now you need to select the channel you would like to calibrate to. If you have a measuring vase attached use that. If not, you can either use an empty output or remove the pipe of the current product output and catch using a measuring device.

Please follow all chemical safety if removing piping.



## STEP 4

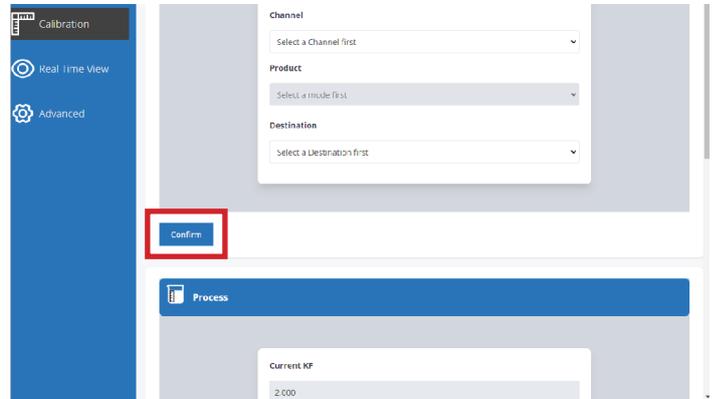
If you have selected Product, you can select that using the drop down.



# RUNNING A CALIBRATION WITH THE CONFIGURATION TOOL

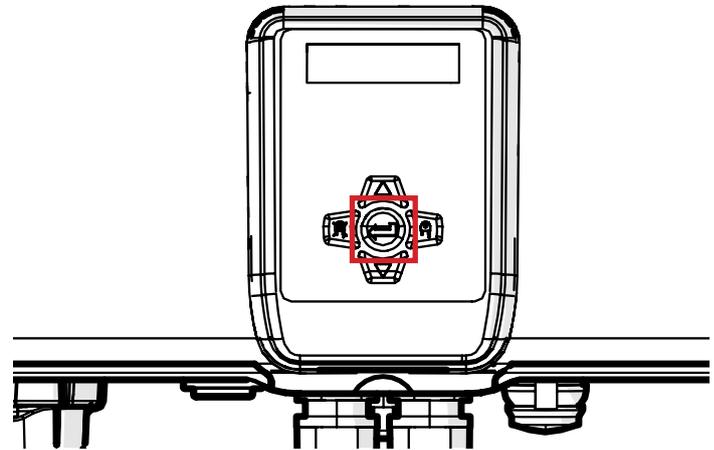
## STEP 5

Once you have confirmed the settings press the **Confirm** button to begin the calibration. Please confirm you have a measuring vase or suitable vessel ready to capture the outflow for calibration.



## STEP 6

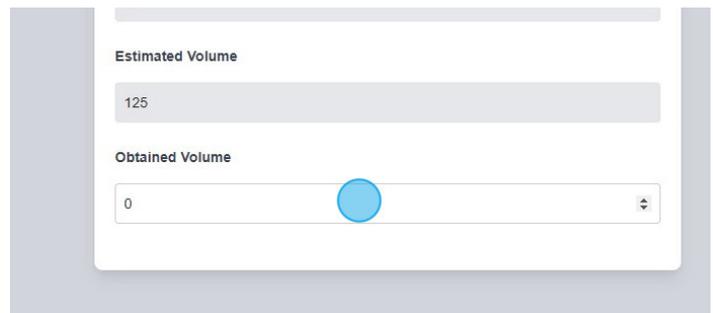
Now that the unit is ready for calibration go to your unit and **press and hold** the [Calibration](#) button on the unit and it will begin to [flush](#).



## STEP 7

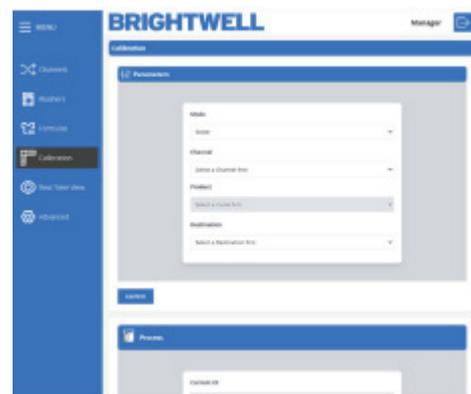
Once the calibration has run confirm the volume of liquid dispensed and enter the values in the **Obtained Volume** tab. Press the **Confirm** button to save these settings.

The unit will now automatically generate the new **Flow rate** and **Kf** for the unit. Setting these values in the relevant sections



## STEP 8

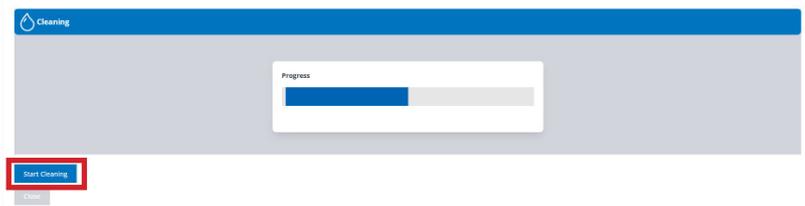
Once calibration is complete, confirm the volume of liquid dispensed and enter the values in the Volume Obtained tab. Press the **Confirm** button to save these settings.



# RUNNING A CLEANING FLUSH

## STEP 1

After completing a calibration with product, **YOU MUST** run a cleaning cycle to clear all chemical from the channel. This will automatically show once you have entered the **Obtained Value** into the box. Press the button to begin



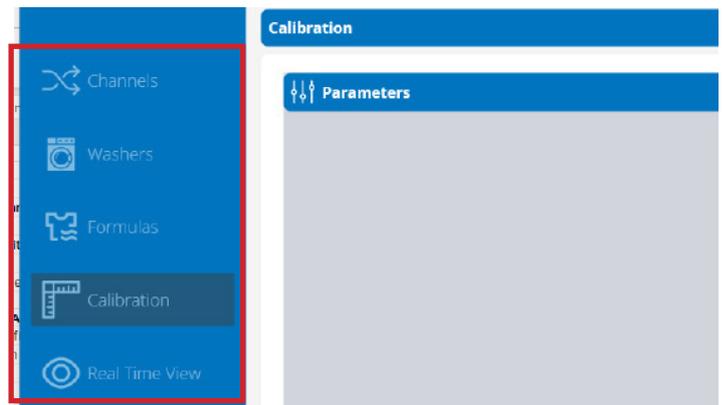
## STEP 2

Once a cleaning cycle has completed the progress bar will turn green.



## STEP 3

Please note - While you are running a cleaning cycle, you are unable to leave the screen and all navigation options will be disabled.



# REAL TIME VIEW

**BRIGHTWELL** Manager

Real Time View

Number	KG	Formula Num.	Formula Name	Washer Customer	Phase Status	Finish	Pause
1	50.00	1	Bedsheets	0	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
2	0.00	0		0	<input type="checkbox"/>	<input type="checkbox"/>	

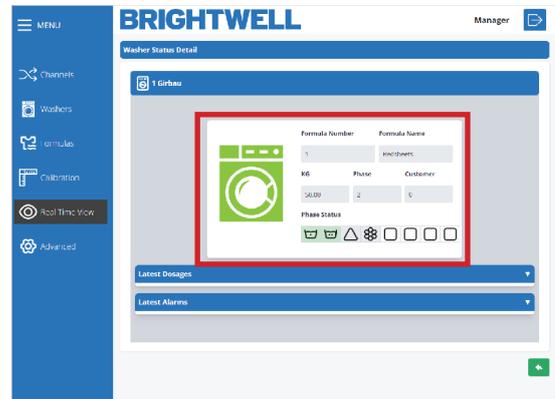
- 1 Number 1 is the machine real-time dashboard
- 2 Number 2 opens the more in depth machine information screen

# REAL TIME VIEW

## STEP 1

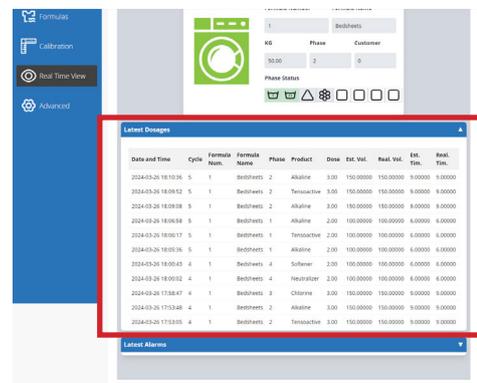
If you expand the view on a single machine you can view more in depth details about the status. The main screen will show:

- Formula Number
- Formula Name
- KG
- Phase
- Customer



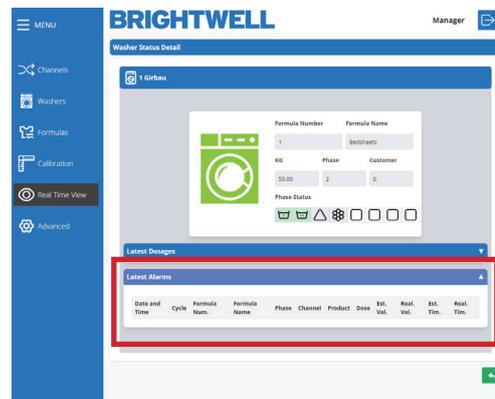
## STEP 2

If you choose to expand the Latest Dosages tab it will display more detailed information along with time stamps.



## STEP 3

You also have the ability to expand all the alarm information on the Brightwell page. Displaying any issues that the machine has encountered in the latest session.



# ADVANCED SETTINGS

**BRIGHTWELL** Manager

Advanced

**Connections**

Network ID Password

MiRedWiFi Password

**Parameters**

Metric Units Language

Metric Not used

Save

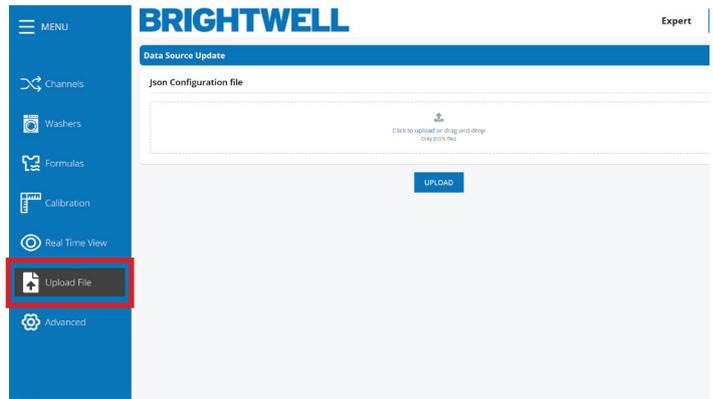
- 1** Number 1 allows you to edit the current Wifi settings. Using the drop down menu to change the Network ID and the textbox to adjust the password.
- 2** Number 2 are the Units and language settings for the unit. Allowing you to adjust based on your needs.
- 3** Number 3 is the Save icon. Use this to save any settings you have adjusted from the menu above.

# UPLOADING JSON FILES FOR THE FIRST TIME

## STEP 1

To upload JSON files to your unit via the configuration tool for the first time you need to download ALL JSON files from the Portal. Please refer to the **Data Transfer Saving a JSON file**.

To access the data transfer menu press the **Upload File** button.



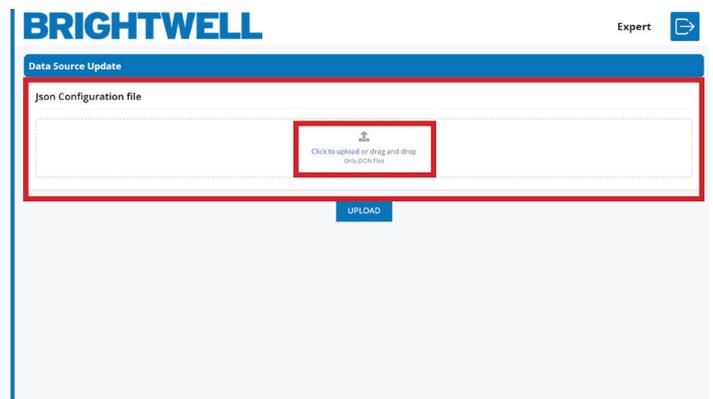
## STEP 2

You will need to upload the files in the following order:

- User
- Site
- Channel
- Products
- Washers
- Formulas

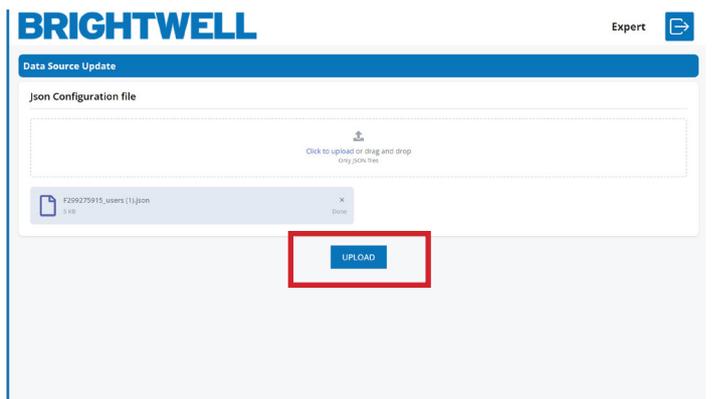
Take your JSON file \* and drop it onto the upload box, or alternatively press the **Click to Upload** and select it from your machine.

\* (These files are generated via the Portal. Please see the section - **Data Transfer Saving a JSON file** in the Portal manual)



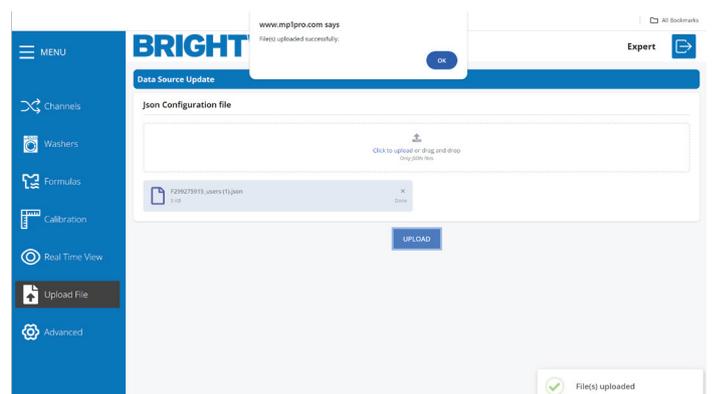
## STEP 3

Press the Upload button to upload this to your unit.



## STEP 4

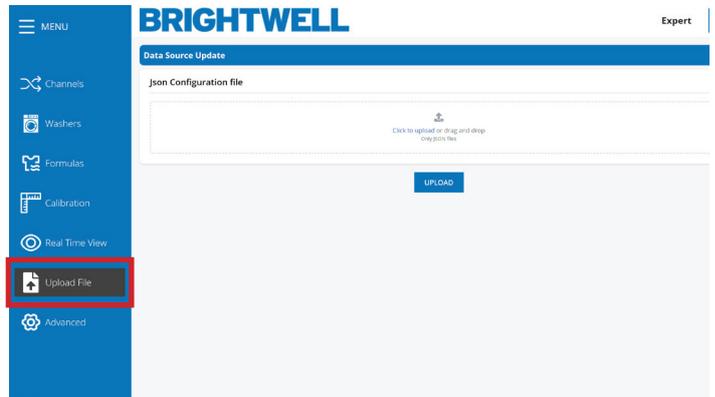
If this has been successful you will receive the following confirmation message.



# MAKING CHANGES WITH A SINGLE JSON FILE

## STEP 1

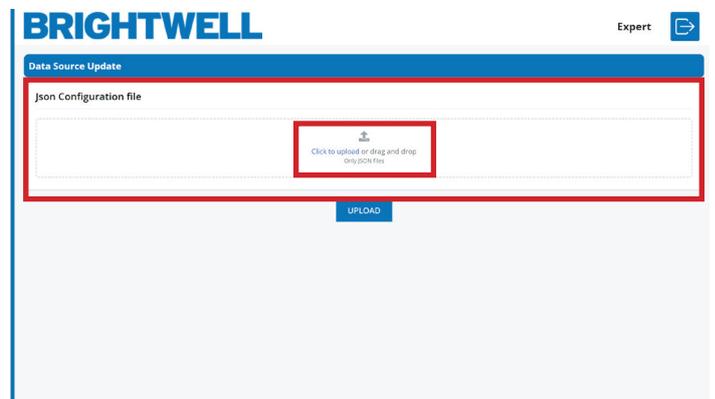
To access the data transfer menu press the **Upload File** button.



## STEP 2

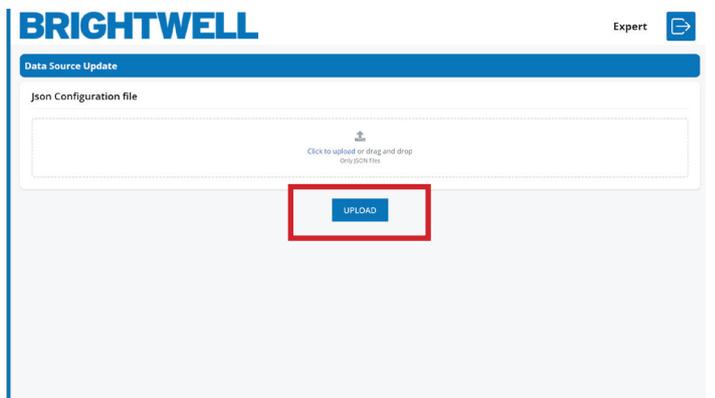
Take your individual JSON file \* and drop it onto the upload box, or alternatively press the Click to Upload and select it from your machine

\* (This is generated via the Portal. Please see the section - Data Transfer Saving a JSON file in the Portal manual)



## STEP 3

Press the Upload button to upload this to your unit.



## STEP 4

If this has been successful you will receive the following confirmation message.

