

# THE ESSENCE OF SUSTAINABLE CLEANING







# CHEMICAL-FREE CLEANING SOLUTION

### **AQUÆ® TECHNOLOGY**

It is the Fimap technology that enables cleaning without the use of chemical detergents.

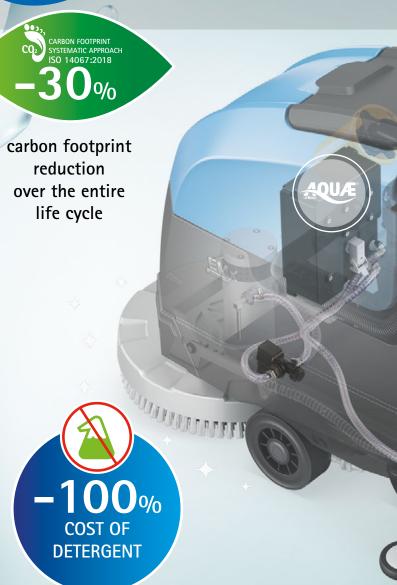
The exclusive AQUÆ® technology activates the chlorine molecules naturally present in normal softened tap water, to produce an effective cleaning and sanitizing solution.

### The HYPOCHLORUS ACID SOLUTION

obtained is suitable for daily and maintenance floor cleaning, which accounts for around 90% of applications in the industrial, logistics, trade and civil sectors.

It can even be used instead of detergents when cleaning other surfaces.

It can be taken up through the spray gun of the scrubber-dryer and can therefore be used to obtain a bottle of sanitizer.





In 5 years, the investment in the purchase of the machine can be recovered

# The exclusive technology to clean without detergents



Watch the video





### **PLUS**



### -100% ENVIRONMENTAL IMPACT

Prevents emissions caused by the production, transportation and disposal of detergent.

Avoids plastic detergent bottles



-100% RISKS FOR THE OPERATOR
No contact with chemical substances



## -100% OPERATOR TRAINING

Training on detergent use and dosage



## -97% MICROBIAL LOAD

Reduction of bacterial load on surfaces to which the solution is applied



Before being returned to the environment, the suctioned air is filtered through a HEPA filter, capable of retaining dust particles down to 0.3  $\mu m$ .

EMx therefore guarantees the return of clean air even from fine dust, making the environment that is being cleaned healthier.





To make your EMx more sustainable, you can choose to equip it with tanks made from recycled plastic, which are ReMade in Italy certified.

This enables you to reduce the impact of your scrubber-dryer on the environment,

by choosing a product manufactured with lower CO<sub>2</sub> emissions.

The distinctive black colour proves their authenticity, as this is the only shade that can provide uniformity regardless of the variety of the polymers involved. The recycled material used is exclusive to Fimap and guarantees the same durability and reliability as new plastics.





### Control and reduction of emissions







# Technologies for the reduction of water consumption...



### FSS - FIMAP SOLUTION SAVER

Used to separately adjust water and detergent flow. In this way, only the necessary quantity of water and the right percentage of detergent are used, according to the type of dirt, avoiding waste or excessive quantities of product that are then difficult to remove.



reduces the consumption of water and detergent

by up to 50%



by up to 66%

reduces the consumption of water and detergent

### FLR - FIMAP LONG RANGE

Upon request, the EMx can be fitted with the FLR water recycling system, which filters the detergent solution collected, making it available again. FLR increases the working autonomy and allows more sq.m. to be scrubbed whilst using fewer resources,

reducing detergent solution consumption by up to 66%\* per cleaning operation and increasing productivity by up to 70%.



### ...and resource wastage



Eco Mode is a quiet work configuration with low consumption. For frequent or maintenance cleaning, i.e. when enhanced scrubbing power isn't required, it guarantees sustainable operations by reducing the use of water, detergent and energy, to ensure good cleaning results with a limited quantity of resources, respecting the environment.

### **STARTESTOP**

When the machine stops temporarily, the brush motors, vacuum\*, traction and water flow turn off automatically, reducing consumption, costs and emissions. All the functions are reactivated automatically by pressing the dead man's lever.

\*The vacuum does not stop automatically in the E versions. In the basic and Pro versions, it stops with the manual lifting of the squeegee.

Industrialization, new technologies, the use of the latest materials and the solutions developed thanks to advanced design methods, have enabled the number of components to be rationalised in number and the machine weight to be reduced, with improved performance and autonomy as a result, as well as a reduction in consumption of up to

35%.

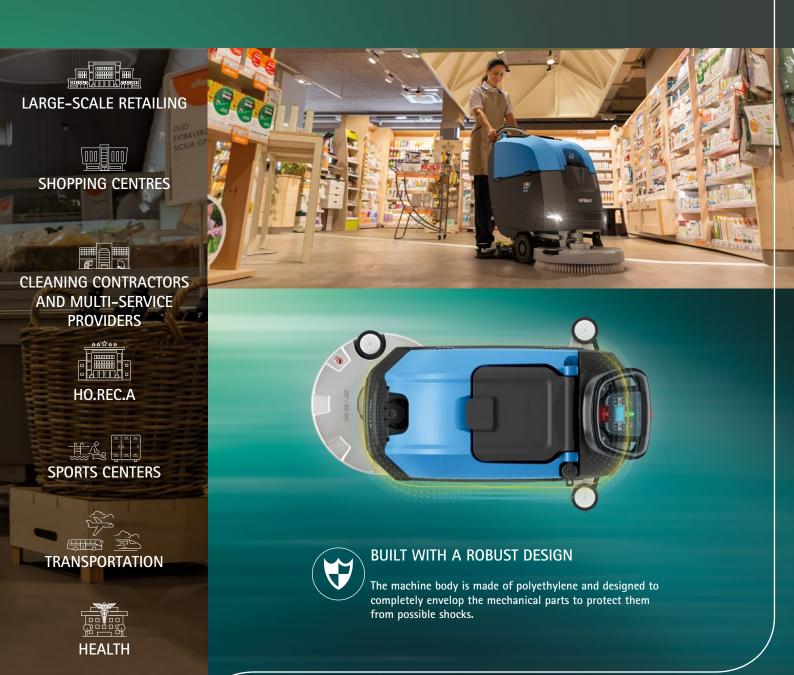




### Reference sectors



## Quality that enhances reliability





# It's simple, to help you gain time and reduce the costs of cleaning



#### YELLOW COLOUR CODE

Parts which must be cleaned regularly at the end of every shift are color coded in yellow for easy identification, saving time and making sure that your scrubbing machine remains efficient at all times.

Maintenance operations and battery inspections are just as easy, thanks to complete accessibility of the compartment in which they are housed.



Regular maintenance checks provide peace of mind, as you can be sure that your scrubbing machine is always working in the very best conditions.

EMx alerts you that it is time to perform maintenance, showing a warning on the display.



**SPRAY GUN** 

Facilitates maintenance at the end of the shift by providing clean water to rinse the tanks with.

Versions equipped with AQUÆ® technology enable the sanitizing solution to be taken up for use when cleaning other surfaces.

# Always get the clean you want!



### ZONE PROGRAMS

They help the operator to choose the correct cleaning settings. Depending on the characteristics of the rooms to be cleaned, up to 3 different configurations can be stored. In this way, when cleaning begins, the operator only needs to select the corresponding zone for the appropriate adjustments to be activated instantly.





### **POWER MODE**

At the touch of a button, all scrubbing functions are temporarily switched to maximum, to quickly remove localized dirt. When the time is up, the machine resumes working with the previous configuration. Thus, unexpected dirt situations can be solved without the risk of wasting unnecessary resources.





Devices to ensure safe operations for the operator, the working environment and the people present





Setting the speed for work or movements ensures correct machine operation, avoiding improper or dangerous use.

**FIMAP** 



### LED HEADLIGHTS

These make the machine more visible when moving, for greater safety in high-traffic environments such as hotels, gyms and supermarkets. They increase visibility when passing through rooms and corridors that may be poorly lit.



PASSIVE SYSTEMS help the operator in the event of an emergency



SOS DEVICE

Located above the display, where it's clearly visible, the SOS button can be used to call for immediate assistance. If the machine isn't working properly, just press this button to send a request SMS. This reduces waiting times and machine downtime, because the message goes directly to the person responsible for taking prompt action.



If something unexpected occurs, it may be necessary to immediate stop the cleaning activity. On pressing the emergency button, all machine functions and movement are stopped immediately, allowing any unforeseen issues to be resolved safely.



# Connect to EMx, stay in control of cleaning operations

Track the performance of your fleet easily from your smartphone, with the My.Machine app. Enter the profile of each machine to see where it is, whether the planned cleaning schedule is being followed, and whether anything unexpected has occurred.

You can check the list of maintenance tasks carried out, the recharges made and any issues that have arisen, to always be in full control of the situation and keep productivity high.



### Choose your connection!

You can choose from 3 types of FFM, depending on the type of network you intend to use for data transmission:



# FFM WI-FI

This is the easiest and most cost-effective version, that uses the Wi-Fi network already available in the building that is being cleaned.



### FFM GSM

This is useful when there is no Wi-Fi network available in the facility to be cleaned.

Data transfer is ensured by the SIM network installed on the machine.





### FFM WI-FI & GSM

This is the solution that offers the most continuity as it uses both types of network.

Data transmission is more stable because it constantly uses both the Wi-Fi network and the GSM network of the SIM installed on the machine, ensuring reliable communication at all times.

With this solution, data gathering is more detailed: Being able to associate the activity of individual machines

in the fleet with the key in use means specific data can be obtained on each model.

In addition, it provides access to the INDOOR TRACKING function, for tracking cleaning inside buildings.

Manage your fleet remotely with the FFM – Fimap Fleet Management system, using the My.Machine app to access the data at any time and don't miss out on a single detail on the status of your machines



Watch the video



### INDOOR TRACKING

Tracking of the cleaning activity inside buildings, to detect which areas have already been cleaned and which are still to be done.



# MISSION CONTROL PART PROGRAM

The supervisor can set a weekly cleaning schedule and send it remotely to the machine.

This enables the operator to follow the set schedule, ensuring the desired cleaning standards are maintained, and keeping costs low.



### **USE INFORMATION**

It's possible to know in what working mode the machine is operating and for how long.

Moreover, it provides information about the duration of each intervention and the sq.m cleaned.



### **HEALTH STATUS**

It is possible to monitor the condition of both machines and batteries at any time, to have a clear view of the fleet availability and optimize its coordination.



### **ALARMS**

The anomalies occurred are summarised in a list which includes a description of the type of issue, and the date and time of the event. It helps you to have an overview of the improper uses that need to be corrected.



### **MAINTENANCE**

An overview of the list of the maintenance services performed allows to identify discrepancies with the condition of the machine in case an anomaly is detected, and to monitor the inspections of the whole fleet.





Choose the scrubbing technology best suited to your cleaning goals





Disc brushes are the most versatile type of brush head, that can adapt to any type of environment and surface. The scrubbing machine with disc brushes can be used on any hard floor, easily removing even stubborn dirt.

In models with one disc brush, the detergent solution emerges from the center of the brush, ensuring even cleaning with reduced water consumption.





SINGLE DISC with 1 disc brush of 430 mm or 500 mm



The cylindrical brush head consists of two counter-rotating cylindrical brushes that not only scrub but also make a light sweeping action.

The sweeping action removes small, solid, non-adherent residue and collects it in a drawer installed at the rear of the brush head, which is removable for emptying. This type of brush head is recommended for hard floors (even structured, uneven or non-slip). The bristles clean deep down, quaranteeing optimum results even where there are wide gaps.



The brush head consists of a rectangular pad that oscillates crosswise in relation to the direction of machine movement.

The orbital movement ensures excellent, uniform results across the entire surface as every point of the pad is in constant contact with the floor. This type of brush head is ideal when working on structured floors or those with wide gaps. The efficacy of the mechanical action, combined with the use of abrasive pads, minimizes the use of detergents, in particular the most aggressive ones rich in VOC (volatile components).



CYLINDRICAL
with 2 cylindrical brushes and a debris hopper
for small sized solid debris



ORBITAL with pad



# Build your own machine: find the perfect combination of accessories to meet your needs

## Choose the instrument panel

### Basic





Membrane control panel









UISE SUSTAINAE



### **OPTIONALS**









AQUÆ\* + DS (Detergent dosing system)

AQUÆ\* + DS + Spray gun

AQUÆ® + Spray gun

### **OPTIONALS AND ACCESSORIES**

### **OPTIONALS**



**HEPA** filter



Recycled plastic tanks



**FSS-FIMAP SOLUTION SAVER** 



FLR-FIMAP LONG RANGE



FFM-FIMAP FLEET MANAGEMENT



Spray gui

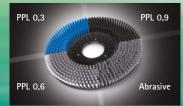


On-board battery charger



Front driving LED headlights

### **ACCESSORIES**

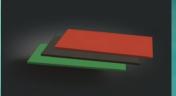




A wide choice of disc or cylindrical brushes in PPL is offered, available in thicknesses from 0.3 to 0.9 cm. These offer the perfect solution for dealing with any type of dirt on any floor.



Ideal for heavy duty cleaning on industrial surfaces.



Pads
BLACK COLOUR – Superior abrasiveness for rapid and thorough heavy duty cleaning.
GREEN COLOUR – Ideal for removing dirt from more delicate floors (rubber or linoleum).
RED COLOUR – Ideal for scrubbing delicate or treated floors. For instant shine.



Rear squeegee rubber blades
33 SHORE (PARA)
For maintenance cleaning of smooth floors.
40 SHORE (PARA)
For stubborn dirt on floors with joints.
POLYURETHANE
For heavy duty cleaning on industrial
floors, even with wide gaps.



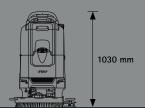
Splash guards

## OPTIONAL AND STANDARD EQUIPMENT

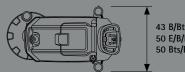
| USER EXPERIENCE                       | SINGLE DISC |           |      |         |           | CYLINDRICAL | ORBITAL    |
|---------------------------------------|-------------|-----------|------|---------|-----------|-------------|------------|
|                                       | 43 B/Bt     | 43 Bt Pro | 50 E | 50 B/Bt | 50 Bt Pro | 50 Bts Pro  | 50 Bto Pro |
| - Membrane control panel              | -           | •         | -    | -       | •         | •           | •          |
| - Zone programs                       | -           | •         | -    | -       | •         | •           | •          |
| - Cruise control                      | -           | •         | -    | -       | •         | •           | •          |
| - Eco Mode                            | -           | •         | -    | -       | •         | •           | •          |
| - Power Mode                          | -           | •         | -    | -       | •         | •           | •          |
| - Maintenance warning                 | -           | •         | -    | -       | •         | •           | •          |
| COMFORT                               |             |           |      |         |           |             |            |
| Hour meter                            | •           |           | •    | •       | •         | •           | •          |
| Cleaning solution level indicator     | •           | •         | •    | •       | •         | •           | •          |
| On-board battery charger              | 0           | 0         | -    | 0       | 0         | 0           | 0          |
| Automatic brush coupling/uncoupling   | •           | •         | -    | •       | •         | -           | -          |
| Spray gun*                            | -           | 0         | -    | -       | 0         | -           | -          |
| Noiseless suction                     | -           | •         | -    | -       | •         | •           | •          |
| PRODUCTIVITY                          |             |           |      |         | l         |             |            |
| Water flow selector                   | _           | •         | _    | _       | •         | •           | •          |
| FFM (Fimap Fleet Management)          | 0           | 0         | _    | 0       | 0         | 0           | 0          |
| Squeegee support in aluminum          | •           | •         | •    | •       | •         | •           | •          |
| Splash guard rubber blade             | 0           | 0         | 0    | 0       | 0         | -           | -          |
|                                       |             |           |      |         |           |             |            |
| SAFETY                                |             |           |      |         |           |             |            |
| Driving LED headlights (front)        | 0           | •         | -    | 0       | •         | •           | •          |
| Emergency Stop                        | •           | •         | •    | •       | •         | •           | •          |
| ENVIRONMENT                           |             |           |      |         |           |             |            |
| AQUÆ**                                | -           | 0         | -    | -       | 0         | -           | -          |
| AQUÆ® + DS (DETERGENT DOSING SYSTEM)* | -           | 0         | -    | -       | 0         | -           | -          |
| AQUÆ® + SPRAY GUN*                    | -           | 0         | -    | -       | 0         | -           | -          |
| AQUÆ® + DS + SPRAY GUN*               | -           | 0         | -    | -       | 0         | -           | -          |
| FSS (Fimap Solution Saver)*           | -           | 0         | -    | -       | 0         | 0           | 0          |
| FLR (Fimap Long Range)*               | -           | 0         | -    | -       | 0         | 0           | 0          |
| Recycled plastic tanks                | 0           | 0         | 0    | 0       | 0         | 0           | 0          |
| HEPA filter                           | 0           | 0         | 0    | 0       | 0         | 0           | 0          |
| FNC (Fimap Noise Canceling)           | •           | •         | •    | •       | •         | •           | •          |
| FES (Fimap Energy Saver)              | •           | •         | •    | •       | •         | •           | •          |
| Start&Stop                            | •           | •         | •    | •       | •         | •           | •          |

| • STANDARD | o UPON REQUEST | - NOT AVAILABLE |
|------------|----------------|-----------------|
|------------|----------------|-----------------|

## **DIMENSIONS AND TECHNICAL DATA**







43 B/Bt: 705 mm 50 E/B/Bt: 705 mm 50 Bts/Bto: 805 mm

43 B/Bt: 1155 mm 50 E/B/Bt: 1225 mm 50 Bts: 1163 mm 50 Bto: 1107 mm

|  |                | SINGLE DISC  |           |                          |  |           | CYLINDRICAL ORBITAL |                     |
|--|----------------|--|-----------|--------------------------|--|-----------|---------------------|---------------------|
| TECHNICAL DATA - EMX                   |                | 43 B/Bt  | 43 Bt Pro | 50 E                     | 50 B/Bt  | 50 Bt Pro | 50 Bts Pro          | 50 Bto Pro          |
| Productivity theoretical               | up to sqm/h    | 1505/1720  | 1720      | -                        | 1785/2040  | 2040      | 1920                | 2040                |
| Estimated coverage                     | up to sqm/h    | 15   | 05        | -                        | 1785   |           | 1680                | 1785                |
|  |                |  |           |                          |  |           |                     |                     |
| SCRUBBING SYSTEM                       |                |  |           |                          |  |           |                     |                     |
| Working width                          | mm             | 430  |           | 510                      |  |           | 480                 | 510                 |
| Brush motors                           | (no.) V/W      | (1) 24   | 4/500     | (1) 230 / 375 (1) 24/500 |  |           | (2) 24/350          | (1) 24/680          |
| Brush rpm                              | rpm            | 140  |           |                          |  | 600       | -                   |                     |
| Pressure on the brushes                | kg             | 23   |           |                          |  | 17,5      | 45                  |                     |
| Oscillations                           | n/min          | - 2  |           |                          |  |           | 2000                |                     |
| TANK AND RECOVERY SYSTEM               |                |  |           |                          |  |           |                     |                     |
| Solution tank                          | _              | 40   |           |                          |  |           |                     |                     |
| Recovery tank                          | _              |  |           |                          | 40   |           |                     |                     |
| Suction motor                          | V/W            | 24/422   |           | 230/450                  |  | 24,       | 422                 |                     |
| Vacuum water lift                      | mbar           | 180 140 11   |           |                          | 180  |           |                     |                     |
| Solution tank capacity (FSS)           | 1              | -  | 3         |                          | -  |           | 3                   |                     |
| Solution tank capacity (DS)            | 1              | -  | 1         | -                        |  |           | 1                   |                     |
| Maximum debris hopper volume           | I              | -  |           |                          | 3,6  | -         |                     |                     |
|  |                |  |           |                          | ı  |           |                     |                     |
| BATTERIES                              | 6.44.2         |  |           |                          |  |           |                     |                     |
| Supply/traction                        | (V/Hz)         | 24/semi/aut.                                       | 24/aut.   | 230/50                   | 24/semi/aut. 24/aut.                               |           |                     |                     |
| Batteries                              | (no.) V/Ah C20 | (2) 12/75 AGM<br>(2) 12/120 ACID<br>(2) 12/ Li-ion |           | -                        | (2) 12/75 AGM<br>(2) 12/120 ACID<br>(2) 24/ Li-ion |           |                     |                     |
| Battery run time*                      | up to h        | 2.30 - 4 (Li-ion) * -                              |           |                          | 2.30 - 4 (Li-ion) *                                |           |                     |                     |
| PROPELLING SYSTEM                      |                |  |           |                          |  |           |                     |                     |
| Forward working speed                  | km/h           | 3,5 / 4  | 4         | 3.5                      |  | 3.5       | 5 / 4               |                     |
| Traction motor                         | V/W            | - / 24/150   | 24/150    | / 24/150                 |  | 24/150    |                     |                     |
|  | -              | , ,  |           |                          |  |           |                     |                     |
| SPECIFICATIONS                         |                |  |           |                          |  |           |                     |                     |
| Machine dimensions (L x h x a)         | mm             | 1155<br>1030<br>591                                |           | 1225<br>1030<br>597      |  |           | 1163<br>1030<br>565 | 1107<br>1030<br>509 |
| Squeegee width                         | mm             |  |           | 705                      |  |           | 805                 |                     |
| Machine weight empty without batteries | kg             | 88   |           | 80                       | 92   |           | 90                  | 118                 |
| Machine weight empty with batteries    | kg             | 140  |           | -                        | 144  |           | 150                 | 178                 |
| GVW (Gross Vehicle Weight)             | kg             | 180  |           | 114,5                    | 184  |           | 185                 | 213                 |
| Sound level (ISO 11201)                | dB (A)         | 66,2   |           | < 70                     | 66   |           | 66,2                |                     |
| Sound level (ISO 11201) - Eco Mode     | dB (A)         | -  | 64,2      |                          | -  |           | 64,2                |                     |

<sup>\*</sup> Run times are based on continuous scrubbing run times

#### CONSULTING AND PLANNING



We put our experience at your service, to help you realize the cleaning project perfect you. We suggest you the best solutions to make costs decrease and service quality

#### SET-UP



We can help you set up your machines in order to make them meet specifically the requirements of the sites of your project, allowing you to always have control over costs and results.

#### **AUTHORIZED WORKSHOP NETWORK**



The Fimap Authorised Workshop network spans the globe, so you can enjoy the peace of mind of finding a professional support wherever your business is.

#### **CONFIGURATION**



Your business is unique, only a customized fleet can lead you to better results. We will help you find the configurations that best fit the specific requirements of your cleaning sites, in order to optimize processes and lower costs.

#### TRAINING COURSES



Fimap Academy offers courses for all levels, from the correct use of machines and technologies, up to the management of sites and tenders, helping you to make your service really competitive.

#### MAINTENANCE AND REPAIR



With our service packs, we help you to ensure your business is always operational. Our technicians take care of monitoring the machines health status and know how to intervene quickly and effectively when needed.

#### FINANCIAL SOLUTIONS



You can choose to use the fleet in different ways. We can advise you on the best financial solution for your business, so that you can get the quality of the Fimap world at the most convenient conditions for you.

#### DIGITAL FLEET MANAGEMENT SYSTEM



With Fimap Fleet Management everything is under your control. You can have a complete overview of the service provided and find out the improvements that can be made, basing your considerations on real data, always available via the My.Machine app or FFM website.

#### **GENUINE SPARE PARTS**



Get the most out of your machines, choose the reliability of Fimap original spare parts. They are designed together with the machines, so they perfectly fit them thus guaranteeing the highest quality of performance.

#### CERTIFICATIONS









ISO 14064-1:2018







**AWARDS** 

For any additional information or for a demo please contact your usual Fimap dealer







