

# EMX



A NEW  
GENERATION  
MACHINE  
COMMITTED TO

ZERO  
EMISSIONS



CHEMICAL-FREE  
CLEANING SOLUTION



HEPA  
Filter



TANKS MADE  
FROM RECYCLED PLASTIC



FIMAP  
FLEET MANAGEMENT



BATTERIES  
LI-ION

## THE ESSENCE OF SUSTAINABLE CLEANING





## CHEMICAL-FREE CLEANING SOLUTION

### AQUAE® TECHNOLOGY

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

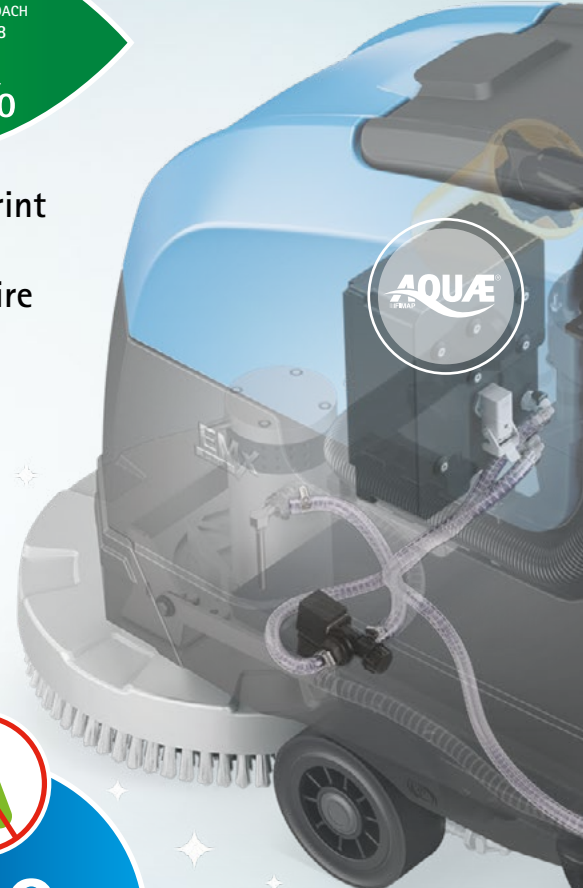
The exclusive AQUAE® technology activates the chlorine molecules naturally present in normal softened tap water, to produce an effective cleaning and sanitizing solution.

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.



carbon footprint  
reduction  
over the entire  
life cycle



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

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# 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**

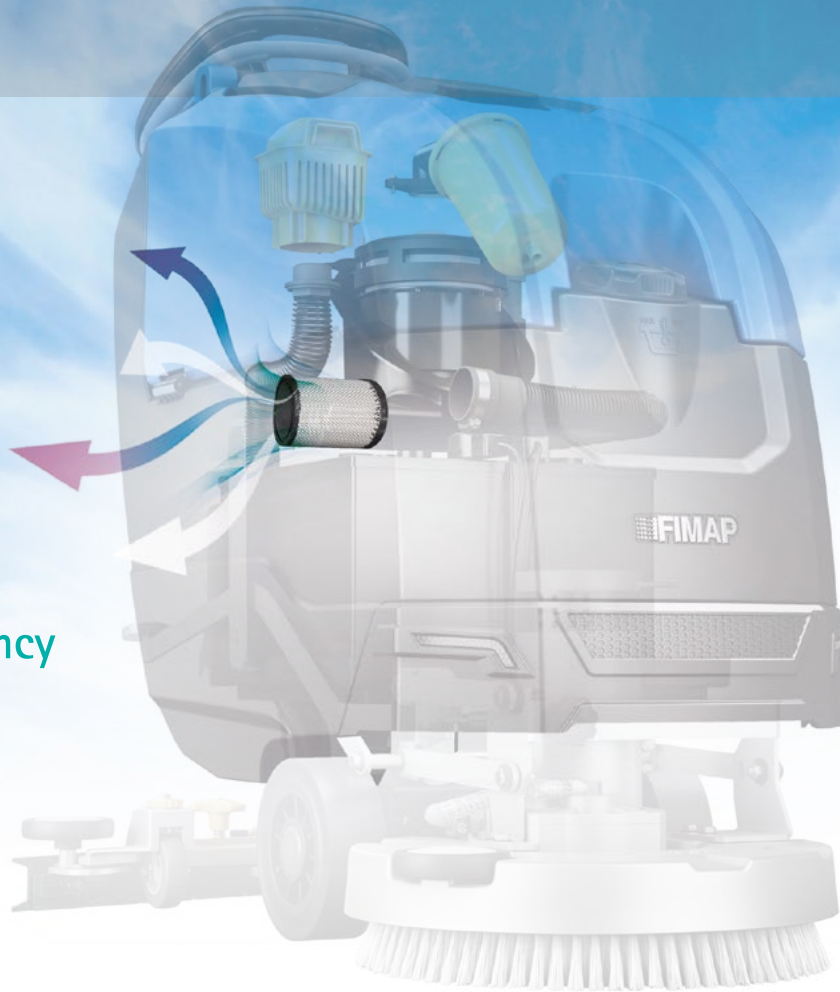
Reduction of bacterial load on surfaces to which the solution is applied



## Air filtration



0,3  $\mu\text{m}$   
99,9% efficiency



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

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

## Recycled plastic tanks



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.

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# Control and reduction of emissions

## FFM – FIMAP FLEET MANAGEMENT

### Monitoring of environmental impact

The FFM system also records the data relating to the production of CO<sub>2</sub> for each individual machine from the start of its life cycle and enables these to be viewed on the My.Machine app.

Having an awareness of the actual amount of emissions produced helps to identify targets and actions to be taken in order to reduce these emissions.



Partial hour of use

Number of interventions

Total area

Battery status

CO<sub>2</sub> saved





Efficient energy  
management



## LITHIUM BATTERIES

As they can be partially charged at any time, they increase the availability of the machine, which can be used for several jobs on the same day.

In addition, they are more efficient than traditional batteries, in that they require less energy to charge, and have a much longer life cycle.

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## Technologies for the reduction of water consumption...

saving  
**WATER**  
and  
**DETERGENT**



reduces the consumption of water and detergent

by up to **50%**



reduces the consumption of water and detergent

by up to **66%**

### 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.

### 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%.

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\*Saving calculated on a triple recycling cycle



...and resource wastage



START&STOP



up to **35%**

It reduces energy consumption by

**FES-FIMAP ENERGY SAVER**

## ECO MODE

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.

## START&STOP

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%.

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## Reference sectors

EMx is a highly versatile scrubbing machine, thanks to its compact dimensions and extensive choice of equipment.

Among these is a wide selection designed to ensure that the EMx is equipped in a totally sustainable manner – that is, with all Fimap solutions and technologies designed to save resources and reduce the environmental impact of cleaning operations and of the product itself.





# Quality that enhances reliability



LARGE-SCALE RETAILING



SHOPPING CENTRES



CLEANING CONTRACTORS  
AND MULTI-SERVICE  
PROVIDERS



HO.REC.A



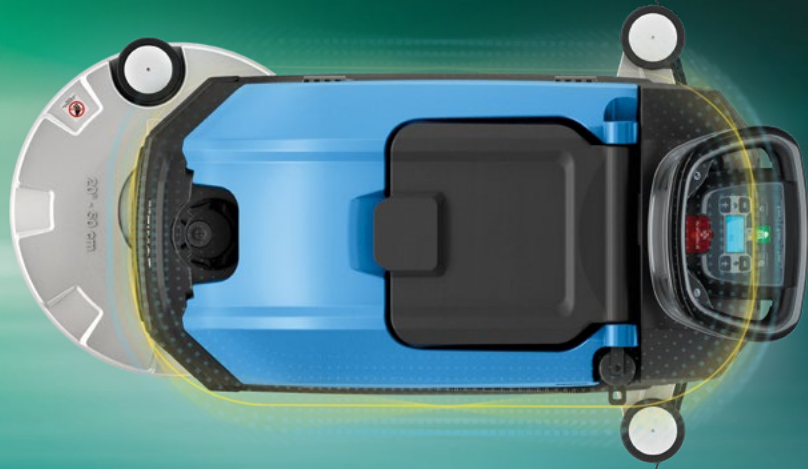
SPORTS CENTERS



TRANSPORTATION



HEALTH



## BUILT WITH A ROBUST DESIGN

The machine body is made of polyethylene and designed to completely envelop the mechanical parts to protect them from possible shocks.



# EMX

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



### MAINTENANCE TOUCH POINT

#### 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.



### MAINTENANCE DUE WARNING

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.

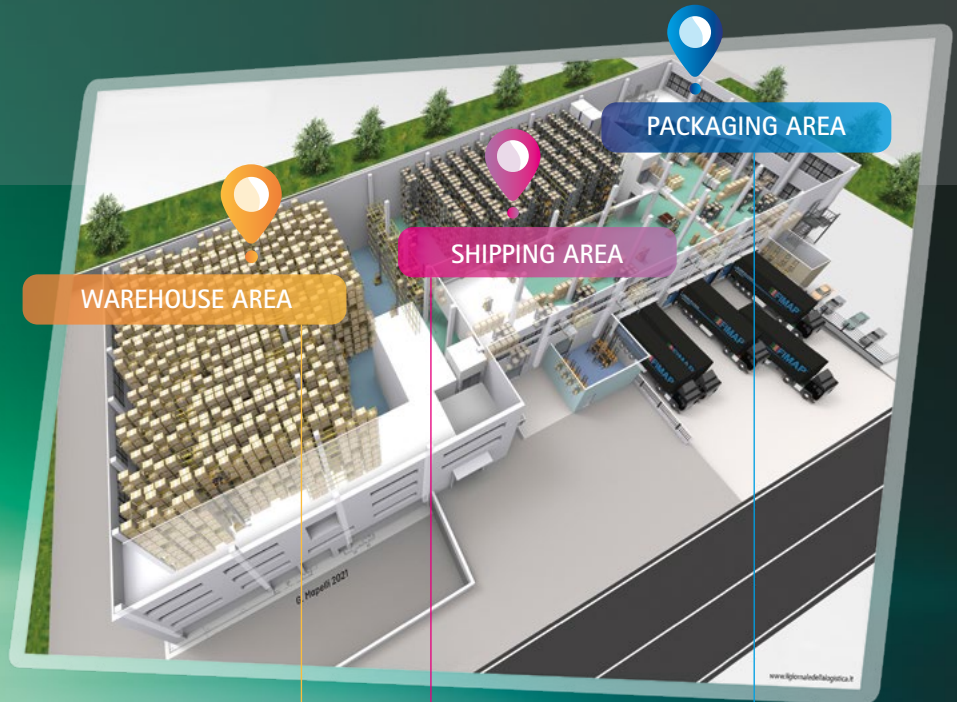


# Always get the clean you want!



## 3 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.



# EMX

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



ACTIVE TECHNOLOGIES to prevent accidents



CRUISE CONTROL

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



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.







SOS EMx

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 immediately 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.



EMERGENCY  
STOP



## 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.



FIMAP FLEET MANAGEMENT

### 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.



### GEOLOCALISATION

It shows on a map the machine.



### 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.



### ENVIRONMENTAL IMPACT

It is possible to see the quantity of CO<sub>2</sub> produced by the machine from the start of its life cycle.



### 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.



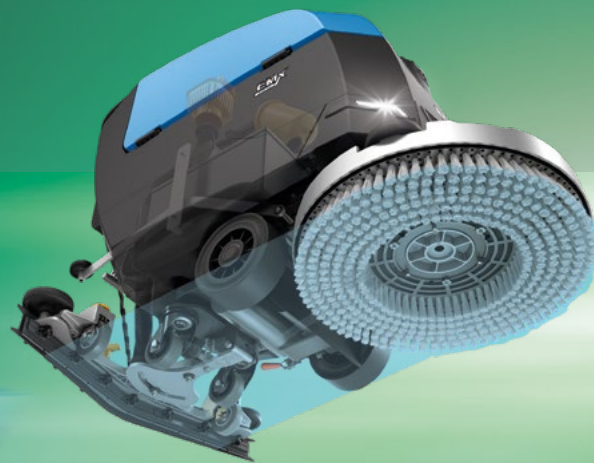
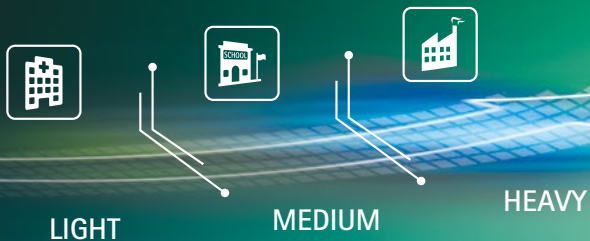
### MAINTENANCE

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.



# EMX

Choose the scrubbing technology best suited to your cleaning goals

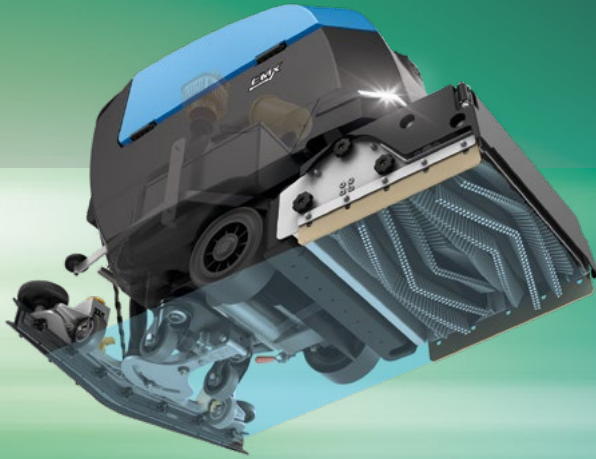


Disc brushes are the most versatile type of brush head, that can adapt to any type of environment and surface. The scrubbing machine with disc brushes can be used on any hard floor, easily removing even stubborn dirt.

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

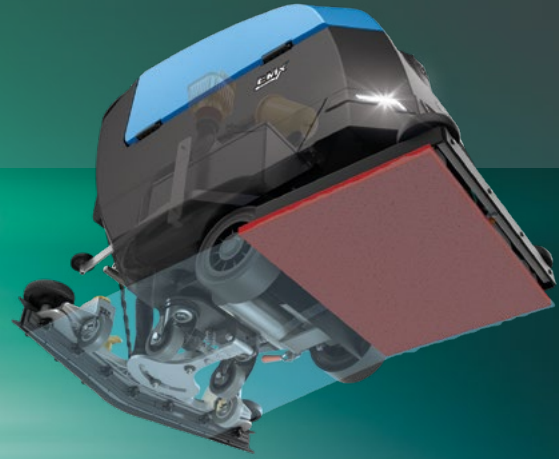


SINGLE DISC  
with 1 disc brush  
of 430 mm or 500 mm



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, guaranteeing 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



PRO

Membrane control panel



ZONE PROGRAMS



MAINTENANCE DUE WARNING



CRUISE CONTROL



SUSTAINABLE CLEANING



SEVERE CLEANING

## OPTIONALS



AQUA+



AQUA+ + DS (Detergent dosing system)



AQUA+ + DS + Spray gun



AQUA+ + Spray gun



# OPTIONALS AND ACCESSORIES

## OPTIONALS



HEPA filter



Recycled plastic tanks



FSS-FIMAP SOLUTION SAVER



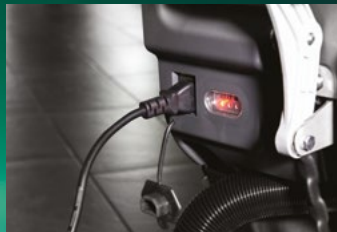
FLR-FIMAP LONG RANGE



FFM-FIMAP FLEET MANAGEMENT



Spray gun

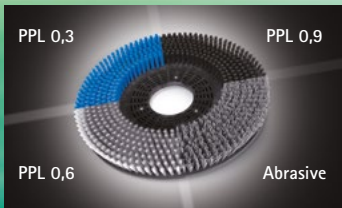


On-board battery charger



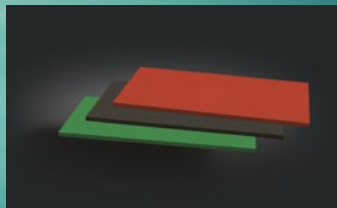
Front driving LED headlights

## 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.

Abrasive brushes:  
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

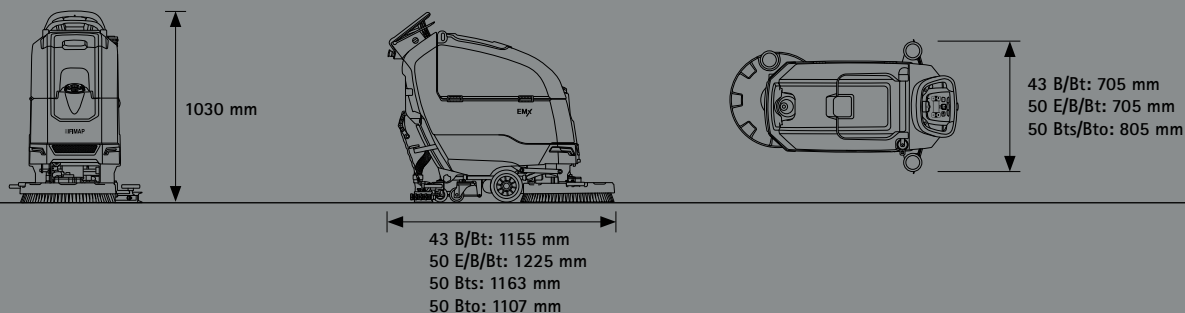
# OPTIONAL AND STANDARD EQUIPMENT

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	-	•	-	-	•	•	•
<b>COMFORT</b>							
Hour meter	•	•	•	•	•	•	•
Cleaning solution level indicator	•	•	•	•	•	•	•
On-board battery charger	○	○	-	○	○	○	○
Automatic brush coupling/uncoupling	•	•	-	•	•	-	-
Spray gun*	-	○	-	-	○	-	-
Noiseless suction	-	•	-	-	•	•	•
<b>PRODUCTIVITY</b>							
Water flow selector	-	•	-	-	•	•	•
FFM (Fimap Fleet Management)	○	○	-	○	○	○	○
Squeegee support in aluminum	•	•	•	•	•	•	•
Splash guard rubber blade	○	○	○	○	○	-	-
<b>SAFETY</b>							
Driving LED headlights (front)	○	•	-	○	•	•	•
Emergency Stop	•	•	•	•	•	•	•
<b>ENVIRONMENT</b>							
AQUÆ*	-	○	-	-	○	-	-
AQUÆ® + DS (DETERGENT DOSING SYSTEM)*	-	○	-	-	○	-	-
AQUÆ® + SPRAY GUN*	-	○	-	-	○	-	-
AQUÆ® + DS + SPRAY GUN*	-	○	-	-	○	-	-
FSS (Fimap Solution Saver)*	-	○	-	-	○	○	○
FLR (Fimap Long Range)*	-	○	-	-	○	○	○
Recycled plastic tanks	○	○	○	○	○	○	○
HEPA filter	○	○	○	○	○	○	○
FNC (Fimap Noise Canceling)	•	•	•	•	•	•	•
FES (Fimap Energy Saver)	•	•	•	•	•	•	•
Start&Stop	•	•	•	•	•	•	•

\* These items cannot be combined with each other

• STANDARD	○ UPON REQUEST	- NOT AVAILABLE
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# DIMENSIONS AND TECHNICAL DATA



TECHNICAL DATA - EMx	SINGLE DISC					CYLINDRICAL	ORBITAL	
	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	1505		-	1785		1680	1785
<b>SCRUBBING SYSTEM</b>								
Working width	mm	430		510		480	510	
Brush motors	(no.) V/W	(1) 24/500		(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			-			-	2000
<b>TANK AND RECOVERY SYSTEM</b>								
Solution tank	l	40						
Recovery tank	l	40						
Suction motor	V/W	24/422		230/450	24/422			
Vacuum water lift	mbar	180		140	180			
Solution tank capacity (FSS)	l	-	3	-			3	
Solution tank capacity (DS)	l	-	1	-			1	
Maximum debris hopper volume	l						3,6	-
<b>BATTERIES</b>								
Supply/traction	(V/Hz)	24/semi/aut.	24/aut.	230/50	24/semi/aut.	24/aut.		
Batteries	(no.) V/Ah C5	(2) 12/75 GEL (2) 12/120 ACID (2) 12/ Li-ion		-	(2) 12/75 GEL (2) 12/120 ACID (2) 24/ Li-ion			
Battery run time*	up to h	2.30 - 4 (Li-ion) *		-	2.30 - 4 (Li-ion) *			
<b>PROPELLING SYSTEM</b>								
Forward working speed	km/h	3,5 / 4	4	3.5	3,5 / 4			
Traction motor	V/W	- / 24/150	24/150	-	- / 24/150	24/150		
<b>SPECIFICATIONS</b>								
Machine dimensions (L x h x a)	mm	1155 1030 591		1225 1030 597		1163 1030 565	1107 1030 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	66,2			
Sound level (ISO 11201) - Eco Mode	dB (A)	-	64,2	-	64,2			

\* Run times are based on continuous scrubbing run times



# SERVICES

## 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 increase.

## 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 MyMachine 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



## AWARDS

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

**FIMAP**  
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