

# FSR7



A new level of performance

 **FIMAP**<sup>®</sup>

# FSR7



TRANSPORTATION



CLEANING AND  
MULTI-SERVICE  
CONTRACTORS



PARKING LOTS



TRADE  
FAIRS



HEALTH

## Why choose an electric machine?

Unlike many models in its category, the FSR7 isn't powered by an endothermic engine, but by batteries. This is a much more efficient solution, due to the fact that there is no energy loss. Combustion engines, which generate heat through the combustion of fuel, inevitably lose much of the energy produced. The energy which remains – the kinetic energy, which makes the machine run and the engine components move – is much less.

In an electrical motor, meanwhile, which does not need to warm up to reach maximum revs, the energy generated can all be used immediately, without any dispersion.

The use of an electrical power supply offers unique benefits such as:

- no fuel costs
- zero exhaust emissions
- silent operation
- vibrations reduced to a minimum
- greater safety for the operator
- the versatility of being able to use the machine indoors

FSR7 is also available with lithium batteries, which ensure excellent power and long operating autonomy.

A NEW  
GENERATION  
MACHINE  
COMMITTED TO

ZERO   
EMISSIONS

# FSR7



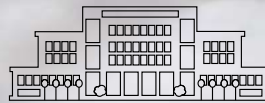
**FRONT SKIRT**  
in very dusty places, it prevents the  
dust from being raised and spread around



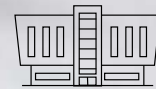
**INDUSTRY**



**LOGISTICS**



**LARGE-SCALE  
RETAILING**



**SHOPPING  
CENTRES**

## Designed to protect your investment

A painstaking development and design process gave shape to a machine body that encompasses and protects all the mechanical parts of the machine, covering and shielding them against damage from accidental impact

The frame and structure are made of steel with anti-rust protection

The entire outer structure and the debris hopper are made of high-density polyethylene – a solid, robust material with a long lifespan

Any minor knocks during use are absorbed completely by the integrated bumpers



## Some small but ingenious expedients can be of great help to the operator



### COMFORT

Space is optimised to make the driving position comfortable even when working for several hours

The footrest zone is designed to offer impressive space for the feet despite the compact dimensions of the machine

The lowered footboard facilitates access from both sides, allowing the operator to climb on and sit down without any effort



### DRIVER SEAT WITH ARMREST AND SAFETY BELT

For a comfortable, safe driving position



### SIDE ACCESSORY HOLDER

Useful for attaching a mop or other accessories needed to complete the work in corners where the machine can't reach



### YELLOW COLOUR CODE

Parts which must be cleaned regularly at the end of every shift are colour-coded in yellow for easy identification, saving time and making sure your sweeping machine remains in perfect condition at all times



### MAINTENANCE DUE WARNING

When the deadline for the periodic inspection established in the maintenance plan is approaching, a warning appears on the display, giving you plenty of time to arrange your appointment.





## BAG HOLDER AND DETERGENT HOLDER

For other small items that might  
come in handy when working



## SIDE PADDLES



The paddles integrated into the steering wheel help the operator keep his/her attention and eyes on the movement direction. By lightly pressing the left-hand paddle, the cleaning power is raised to the maximum level for 60 seconds. The right-hand paddle activates reverse movements.

The Eco Mode device reduces the noise level, to clean without disturbing



## NO TRAINING, THANKS TO INTUITIVE DRIVING



The displays of the Pro and Plus versions enable easy, intuitive driving. The Eco Mode button ensures immediate start-up: the operator can begin working straight away, without any need for training, because the maintenance cleaning configuration is already set



## ON-BOARD VACUUM CLEANER



With FSR7 you can have a powerful built-in vacuum cleaner too. The wand enables to remove the dirt that has built up in corners without even having to get off the machine



## SERVICE LIGHTS



The exclusive lights pack offers increased visibility of the parts which could require operator inspection, illuminating the relative zones with LED lights



# FSR7

## QUICK AND EASY MAINTENANCE, NO TOOLS NEEDED

When studying the design, one priority was how to guarantee easy, quick access to all those machine parts that require regular inspections and daily maintenance

The side brushes can be uncoupled easily without using tools



MAINTENANCE TOUCH POINT



MAINTENANCE TOUCH POINT



Access to the central brush is easy and user-friendly, as is its removal



Air output filter



HEPA filters



Vacuum cleaner filter





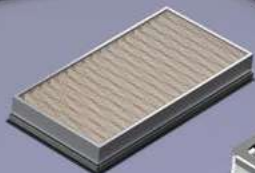
The bag filter of the vacuum cleaner is housed in a separate compartment so it's easier to replace



The battery compartment opens fully, enabling easy inspection and topping up of the liquid



Carpet floor pre-filter



Polyester or paper panel filter



Fabric pocket filter



Tetratex® pocket filter



The compartment that houses the filters is fully visible, speeding up cleaning and replacement tasks



The debris hopper can be easily taken out and put back in, thanks to a central wheel that guarantees stability and guides its movement

Helping the operator by simplifying his/her work also means reducing the costs and times for every work shift and ensuring the machine is always kept in good condition, thereby extending its working life and avoiding costly unforeseen interventions



To make it easier to empty the debris hopper, two internal containers can be requested as optionals. In this way, the load is divided between the two containers so the task requires less effort

# FSR7

Effective on the first pass,  
to get more out of every  
cleaning intervention



SIDE BRUSHES  
to channel dirt into the  
central area

FLAP LIFTING DEVICE  
To make it easier to move and pick up bulky residue

CONTAINER VOLUME

up to **105** litres



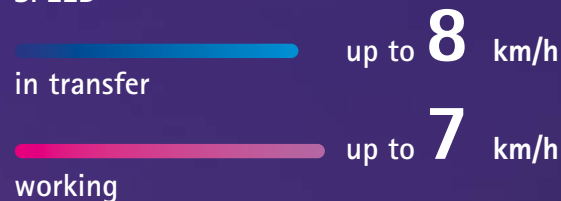
FORCE  
TECHNOLOGY



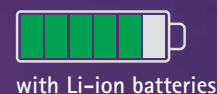
## ON-BOARD VACUUM CLEANER WITH 3-STAGE VACUUM MOTOR

The vacuum cleaner works independently, with a dedicated 3-stage vacuum motor and a high-efficiency HEPA filter. The wand picks up the dirt in corners, without the operator needing to get off the machine.

### SPEED



### WORKING AUTONOMY



\* In Eco Mode



### SWEEPING UNIT WITH FORCE TECHNOLOGY

Force technology, installed as standard, keeps the central brush in contact with the floor at all times. It intervenes automatically on the basis of the unevenness of the surface, ensuring that the pressure always remains the same, regardless of slopes or protrusions, to produce a uniform cleaning result on any floor

## Equipped to maximise productivity



### POWER MODE

When the dirt is particularly concentrated in a small area, it may be useful to briefly boost the cleaning power. By activating Power Mode, the pressure on the central brush is increased for 60 seconds, along with the vacuum, to thoroughly remove all the dirt in a specific point in one single movement



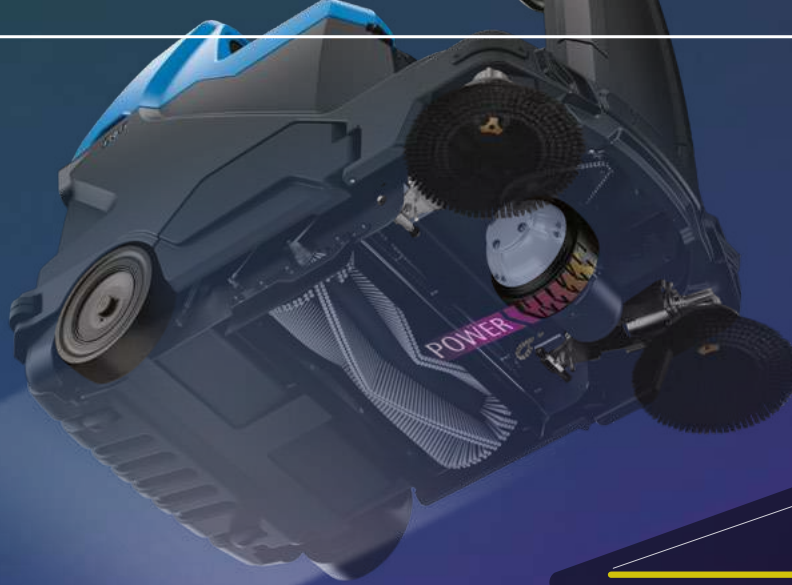
To ensure the desired cleaning results in all conditions and prevent the risk of tampering, the site supervisor can save a number of separate configurations with specific cleaning parameters for different work environments. The operator simply has to select the zone to be cleaned, and the machine is configured automatically with all the right settings



### REAR VIEW CAMERA

Lets the operator monitor cleaning results in real time from the display, without taking his or her eyes off the direction of travel





### Astonishing performance in any situation

Thanks to electronic traction control, the FSR7 can adjust the power level to handle ramps easily and smoothly without stopping or slowing down, on gradients of up to 20%\*



RAMP UP



VACUUM  
ON/OFF

The possibility to exclude the vacuum function enables sweeping even on damp floors



Working width

up to **1300** mm with 2 side brushes

The considerable working width guaranteed by the side brushes boosts productivity and so lowers the work costs



\* Trailer ramp at net weight

With 3 filtering stages, even fine dust is effectively removed from the air returned into the environment



## SAFE AIR TECHNOLOGY: multi-stage filtering system

The air is cleaned by passing through a 3-level filtering system. Even the smallest particles are captured, thereby protecting the health of both the operator and the other people in the area



**3** HEPA filter  
High filtering capacity with the finest dust

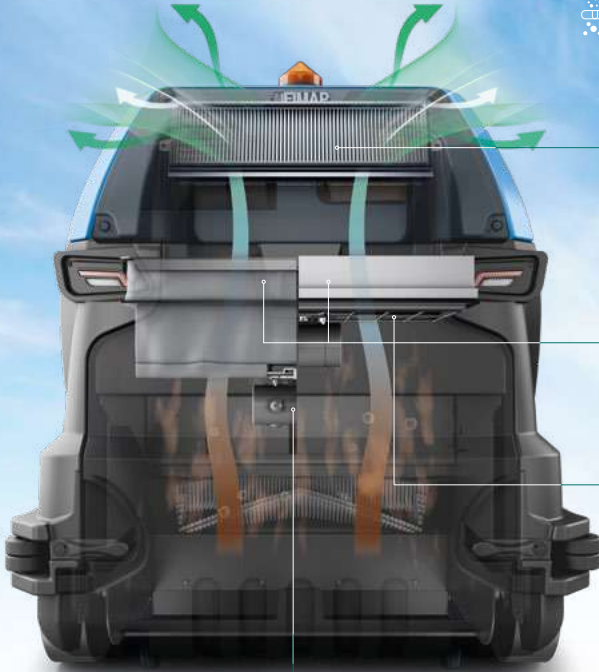


**2** Polyester or paper panel filter

Pocket filter in fabric or **Tetratex®**



**1** Pre-filter  
When cleaning carpet floors, the first filtering level blocks and captures fluff to protect the next filters



**AUTOMATIC FILTER SHAKER**  
Ensures filtering performance is maintained over time, shaking the filter regularly to prevent clogging and extend its lifespan

**FRONT ANTI-DUST SKIRT**  
The cover on the front brushes helps to hold down the dust, so it can be easily vacuumed straight away before it is dispersed into the air. Guarantees better cleaning results and protects the operator's health, especially in very dusty places



In the event of temporary stops, the brush motors, vacuum and traction switch off automatically, reducing consumption, costs and emissions. All the functions are reactivated automatically as soon as the operator touches the accelerator again.



PANEL FILTERS



FABRIC POCKET FILTER



POCKET FILTER IN **Tetratex**

LIGHT

MEDIUM

HEAVY

TYPE  
OF DIRT

FSR7 is available with a PANEL FILTER for standard applications, or a FABRIC POCKET FILTER can be requested for excellent filtering results even in places with high levels of fine dust.

Even higher filtering performance can be obtained with the **Tetratex**® POCKET FILTER.

This is made with a microporous expanded PTFE membrane, a highly efficient material that is ideal for particularly difficult applications, such as in areas where minerals, chemical products, pharmaceutical substances and fertilisers are processed, as well as in the food industry.

POCKET FILTER IN **Tetratex**

The **Tetratex**® membrane has an excellent release capacity, thanks to its surface filtration technology: even the most adherent dust, once it reaches the surface, falls down and leaves the filter free, preventing any risk of clogging.



With the microporous structure of the **Tetratex**® membrane, emission levels are close to zero. Particulate matter remains trapped on the filtering surface, thus reducing environmental emissions.



FES-FIMAP ENERGY SAVER

Careful design has made for the most efficient use of the energy that powers the FSR7 functions. The consequential optimisation of consumption benefits both working autonomy and the battery lifespan

up to **35%**  
It reduces energy consumption by

## Safety is paramount

### ACTIVE TECHNOLOGIES to prevent accidents

FSR7 adopts a series of safety systems that help keep everything under control, so the operator can work with complete peace of mind



Facilitates manoeuvres in reverse by detecting obstacles

REAR VIEW CAMERA



Automatically reduces speed when steering without the operator using the brake

ESC - ELECTRONIC STABILITY CONTROL



Enhances visibility in dim light

TOUCH SCREEN DISPLAY



Control device letting the operator set the required speed

CRUISE CONTROL



The steering wheel controls offer the operator even greater control when cleaning, and also improve safety by eliminating distractions and letting the operator keep his or her eyes on the zone ahead of the machine

STEERING WHEEL CONTROLS



Front and rear LED headlights maximize work safety in all conditions

LED HEADLIGHTS



Maintains a constant speed when driving downhill, and prevents sudden increases in speed caused by gravity

DESCENT CONTROL



Protect the operator holding him/herself in case of impact

SAFETY BELTS



The traction control system, which brakes and holds the machine when the accelerator pedal is released, provides assistance for both uphill and downhill gradients

STOP&GO



Ensure the best braking performance

MECHANICAL DRUM BRAKES



#### BLUE SAFETY SPOTLIGHT

Highlights the presence of FSR7 to avoid accidents when visibility is obstructed by shelves or other equipment



#### OVERHEAD GUARD

To protect operators working in warehouses and logistics centres



#### VIDEO TUTORIALS

Any questions? FSR7 has all the answers: the video tutorials help the operator in every phase of the job

## PASSIVE SYSTEMS to help the operator in the event of an emergency



#### EMERGENCY STOP

By pressing a single button the machine stops immediately



#### SOS DEVICE

Reduces time to service in case of emergency. The red button sends an SMS alert to receive prompt help, reducing downtime



Touch screen Display 



iD-intelligent Drive



TOUCH SCREEN  
DISPLAY



LOG-IN  
WITH PASSWORD



ZONE PROGRAMS



CRUISE  
CONTROL



SUSTAINABLE  
CLEANING



SWEEPING  
POWER



REAR VIEW  
CAMERA



VIDEO  
TUTORIALS

# Take professionalism to the next level, with the digital experience



With the iD - intelligent Drive system, the operator interacts with the machine in a completely new way.

The management through the display enables a more precise use of the functions, as the graphic provides the information in a clear and simple manner. This also improves the professionalism and quality of the cleaning operation.



**LOG-IN WITH PASSWORD**  
To protect your investment



**ZONE PROGRAMS**  
For all the performance you'll ever need



**ECO MODE**  
To protect the environment



**POWER MODE**  
For maximum power when you need it



**REAR VIEW CAMERA**  
To keep everything under control



**VIDEO TUTORIALS**  
For a more efficient, fast and easy operator training

# FSR7

Connect to your fleet  
and increase productivity with  
the My.Machine app



FIMAP FLEET MANAGEMENT

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.



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



Watch the video



### MISSION CONTROL PART PROGRAM

The supervisor can set a weekly cleaning schedule and send it to the machine.  
This enables the operator to follow the set schedule, ensuring the desired cleaning standards are maintained, and keeping costs low.



#### INDOOR TRACKING

Tracking of cleaning activities inside buildings, to see which areas have already been cleaned and which are still to be completed.



#### 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

You can see the amount of CO<sub>2</sub> produced by the machine since the beginning of its working life



#### 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.



#### BATTERY RECHARGE

It sums up all the complete and opportune recharges performed, the residual charge and the charge settings. This is an essential set of information to extend the battery lifespan and reduce the related costs.



#### 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.

FSR7



## AVAILABLE IN 3 VERSIONS



Membrane control panel

Touch-screen display



## Customise your machine with the most suitable accessories for your sector

### OPTIONALS



Left side sweeping brush



Front anti-dust skirt



Dual inner container



Set of cleaning accessories



On-board vacuum cleaner



On-board battery charger



Seat with armrests and seat belt



Super elastic rear wheels



LED service lights



LED headlights and tail-lights



Blinking light



FFM-FIMAP FLEET MANAGEMENT



Bull bar



Overhead guard



Blue safety spotlight



The fabric pocket filter increases filtering performance in dusty environments



With the **Tetratex**® pocket filter, high filtering efficiency is obtained in even the most demanding contexts of specific sectors



Polyester panel filter



Carpet floor pre-filter for capturing fluff



HEPA output air filter

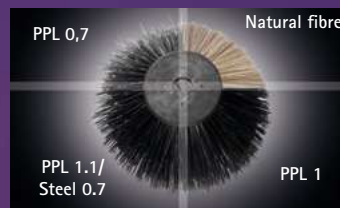
## ACCESSORIES



CENTRAL CYLINDRICAL BRUSHES

Various types of brush are available, to deal with any type of dirt on any floor.

The natural fibre brush is recommended for sweeping up fine dust on smooth floors, both indoors and outdoors



SIDE BRUSHES

Natural fibre

PPL 0,7

PPL 1.1/  
Steel 0.7

PPL 1

# OPTIONAL AND STANDARD EQUIPMENT

USER EXPERIENCE	FSR7	FSR7 Pro	FSR7 Plus
iD-Intelligent Drive:	-	-	•
- 5 inch high resolution colour touch screen	-	-	•
- Log-in with password	-	-	•
- Zone programs	-	•	•
- Cruise control	-	•	•
- Eco Mode	-	•	•
- Power Mode	-	-	•
- Rear view camera	-	-	•
- Operator training video tutorials	-	-	•
- Maintenance due warning	•	•	•
Membrane control panel	-	•	-
<b>COMFORT</b>			
Hour meter	•	•	•
Vacuum ON/OFF (to protect the filter when cleaning damp surfaces)	•	•	•
Basic seat	•	•	-
Driver seat with armrest and safety belt	○	○	•
On-board battery charger	○	○	○
Dual inner container	○	○	○
Set of cleaning accessories (side plate with clips, tub, bag-holder)	○	○	○
Automatic brush lifting system	-	•	•
Manual brush lifting system	•	-	-
<b>PRODUCTIVITY</b>			
Triple pressure selector	-	-	•
Extra pressure	-	•	•
Vacuum speed selector	-	-	•
On-board vacuum cleaner with 3-stage vacuum motor and HEPA bag filter	○	○	○
Automatic filter shaker with timer	-	•	•
Manual filter shaker	•	•	•
Front flap lifting device to facilitate the collection of bulky dirt	•	•	•
FFM (Fimap Fleet Management)	○	○	○
Front anti-dust skirt	○	○	○
Right side brush	•	•	•
Left side brush	○	○	○
Force technology (guarantees uniform cleaning on uneven surfaces too)	•	•	•
<b>SAFETY</b>			
Blinking light	○	○	•
Driving LED lights (front-rear)	○	○	•
LED service lights	○	○	•
Ramp up	•	•	•
Stop&Go	•	•	•
Descent control	•	•	•
ESC (Electronic Stability Control)	•	•	•
Emergency Stop	•	•	•
Super elastic rear wheels	○	○	○
Overhead guard*	○	○	○
Blue safety spotlight	○	○	○
Bull bar	○	○	○
Mechanical drum brakes	•	•	•
Electrobrake	•	•	•
Side brushes that retract in the event of impact	•	•	•
<b>ENVIRONMENT</b>			
Paper panel filter	•	○	○
Polyester panel filter	○	•	•
Fabric pocket filter**	○	○	○
<b>Tetratex</b> ® pocket filter**	○	○	○
Carpet floor pre-filter***	○	○	○
HEPA output air filter	○	○	○
FES (Fimap Energy Saver)	•	•	•
Start&Stop	•	•	•

(\*) Can only be installed if the bull bar is fitted

(\*\*) The two filters cannot be installed together

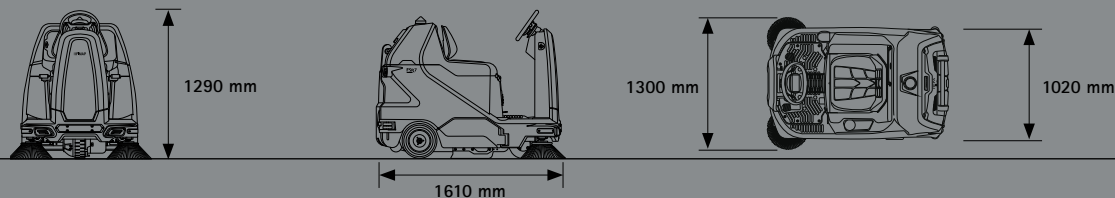
(\*\*\*) Cannot be installed with fabric/**Tetratex**® pocket filters

• STANDARD

○ UPON REQUEST

- NOT AVAILABLE

# DIMENSIONS AND TECHNICAL DATA



TECHNICAL DATA – FSR7		FSR7	FSR7 Pro	FSR7 Plus
Productivity theoretical	up to sqm/h		9100	
Estimated coverage	up to sqm/h			
<b>SWEEPING UNIT</b>				
Working width with central cylindrical brush	mm		700	
Working width with side brushes	(no.) mm		(1) 1000 – (2) 1300	
Brush motors (central/side)	(no.) V/W		(1) 24/460 – (1/2) 24/115	
Brush rpm (central / side)	rpm		640/70	
<b>DIRT COLLECTION SYSTEM</b>				
Maximum debris hopper volume	l		105	
<b>FILTERING SYSTEM</b>				
Paper panel filter filtration degree	µm		14	
Polyester panel filter filtration degree	µm		15	
Fabric pocket filter filtration degree	µm		5	
Tetratex® pocket filter filtration degree	µm		0,3	
HEPA output air filter filtration degree	µm		99,9% efficiency	
Vacuum cleaner HEPA filter filtration degree	µm			
<b>BATTERIES</b>				
Supply/traction	V		24/aut.	
Batteries	(no.) V/Ah		(4) 6/270 WET – (2) 24/200 Li-ion	
Battery run time*	up to h		5.30 (WET) – 7 (Li-ion) *	
<b>PROPELLING SYSTEM</b>				
Forward working speed	km/h		7	
Transport speed	km/h		8	
Gradeability (Working / Transport at gross weight / Trailer ramp at net weight)	%		12,5 / 14 / 20	
Traction motor	(no.) V/W		(1) 24/750	
<b>SPECIFICATIONS</b>				
Machine dimensions (L x h x a)	mm		1610	
			1290	
			1020	
Machine weight empty without batteries	kg		285	
Machine weight empty with batteries	kg		420	
GVW (Gross Vehicle Weight)	kg		685	
Sound pressure level (ISO 11201) – L <sub>PA</sub> – Eco Mode	dB (A)		< 70	
Minimum aisle turn	mm		2010	

\*Run times are based on continuous sweeping run times

The weights are calculated on the basis of a standard reference model

# 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

  
www.fimap.com

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