

FSR8



Your solution to the toughest challenges



FSR8



REFERENCE INDUSTRIES



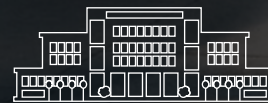
TRANSPORTATION



CLEANING AND
MULTI-SERVICE CONTRACTORS



PARKING LOTS



TRADE
FAIRS



HEALTH

Why choose an electric machine?

Unlike many models in its category, the FSR8 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

A NEW
GENERATION
MACHINE
COMMITTED TO

**ZERO
EMISSIONS**



FSR8



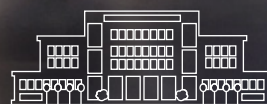
REFERENCE INDUSTRIES



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 is 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 CONTROL PANEL

Membrane control panel for manoeuvring the solid debris hopper

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



SERVICE LIGHTS

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



ON-BOARD VACUUM CLEANER

With FSR8 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



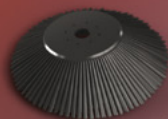
QUICK AND EASY MAINTENANCE, NO TOOLS NEEDED

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.

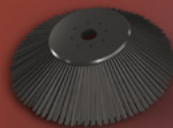
Helping the operator by simplifying his/her work also means reducing the costs and times for every work shift and ensuring the machine is always kept in good condition, thereby extending its working life and avoiding costly unforeseen interventions



The side brushes can be uncoupled easily without using tools



MAINTENANCE TOUCH POINT



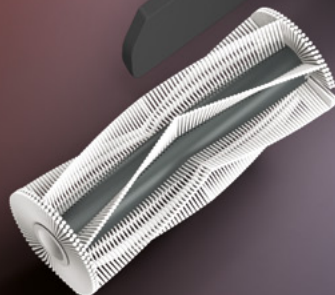
Vacuum cleaner filter



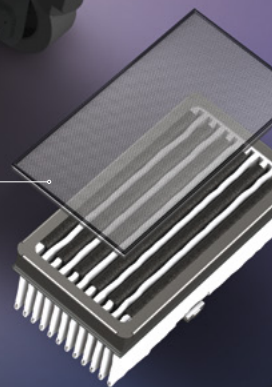
MAINTENANCE TOUCH POINT



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

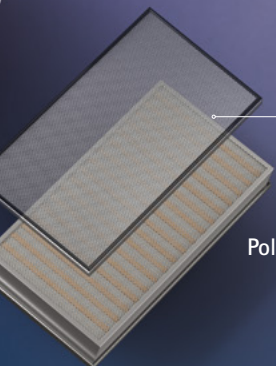


Tetratex® or fabric pocket filter





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



Polyester or paper panel filter



The debris hopper of the basic version is divided into two containers. The waste is thus distributed over the two bins, enabling the operator to empty one at a time and thus lift a lighter load, making the operation easier and less tiring



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



CONTAINER VOLUME

up to **45** litres each

FSR8

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
140 litres

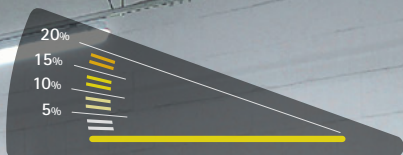


**SWEEPING UNIT
WITH FORCE TECHNOLOGY**

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





Astonishing performance in any situation

Thanks to electronic traction control, the FSR8 can adjust the power level to handle ramps easily and smoothly without stopping or slowing down, on gradients of up to 20%*.



VACUUM
ON/OFF

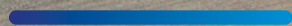
The possibility to exclude the vacuum function enables sweeping even on damp floors

WORKING AUTONOMY



up to **5** hours**

Transfer
and working
SPEED



up to **10** km/h

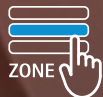
* Trailer ramp at net weight ** In Eco Mode

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



VERSIONS

PRO

PLUS



ELECTRICAL HOPPER EMPTYING AT HEIGHT

Hopper emptying takes place automatically without any effort for the operator, who can manoeuvre the waste hopper from the workstation via the instrument panel.

The operation is electric, which offers a host of advantages in terms of performance, time and costs over a hydraulic system. Indeed, hydraulic circuits are subject to much more mechanical stress, are also more prone to malfunctions and breakages.

They need to be inspected regularly, as do the oils that they contain, which need to be checked and replaced to prevent clogging. Any leaks can compromise the work and damage the environment.

Can lift up to **210** kg

Emptying at a height of **1630** mm



Working width

up to **1500** mm with 2 side brushes

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



The different types of filters available ensure performance to meet any requirement



SAFE AIR TECHNOLOGY:

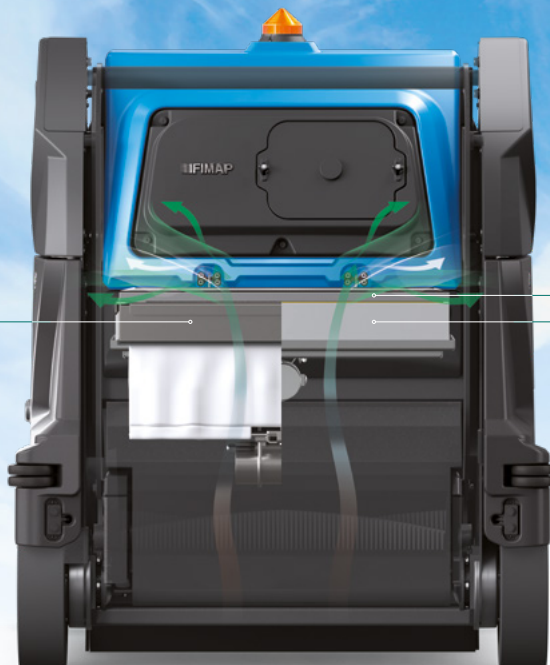
multi-stage filtering system

Even the smallest particles are captured, thereby protecting the health of both the operator and the other people in the area

Pocket filter
in fabric or **Tetratex®**

HEPA output air filter

Polyester or paper
panel filter



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.

START&STOP



FSR8 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 FSR8 functions. The consequential optimisation of consumption benefits both working autonomy and the battery lifespan

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

Safety is paramount

ACTIVE TECHNOLOGIES to prevent accidents

FSR8 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/her 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



Self-adjusting, guaranteeing the best braking performance

HYDRAULIC DRUM BRAKES

On the road to accident-free cleaning



BLUE SAFETY
SPOTLIGHT

Highlights the presence of FSR8 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? FSR8 has all the answers: the video tutorials help the operator in every phase of the job



ANTI-COLLISION
SYSTEM

The anti-collision system detects obstacles when reversing

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

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.



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 CO₂ produced by the machine since the beginning of its working life



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



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.



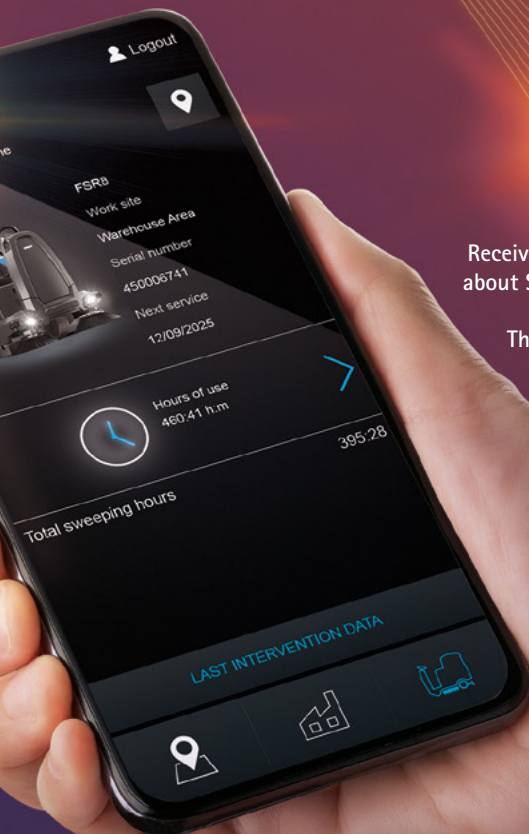
ALARMS

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.



NOTIFICATIONS

Receive real-time notifications about SOS alerts and anomalies on your devices. The service is available for all iOS and Android systems.



FSR8



AVAILABLE IN 3 VERSIONS

Basic

PRO

PLUS

Membrane control panel

Touch-screen display



2 debris hoppers with manual emptying



Debris hopper with automatic emptying



Customise your machine with the most suitable accessories for your sector

OPTIONALS



Left side sweeping brush



Front anti-dust skirt



Set of cleaning accessories



On-board vacuum cleaner



On-board battery charger



Super elastic front traction wheel



Super elastic wheels



LED service lights



LED headlights and tail-lights



Seat with armrests and seat belt



FFM-FIMAP FLEET MANAGEMENT



Bull bar



Overhead guard



Blue Safety Spotlight



Paper or polyester panel filter



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



HEPA output air filter

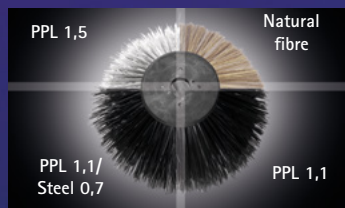


Rear anti-collision system

ACCESSORIES



CENTRAL CYLINDRICAL BRUSHES



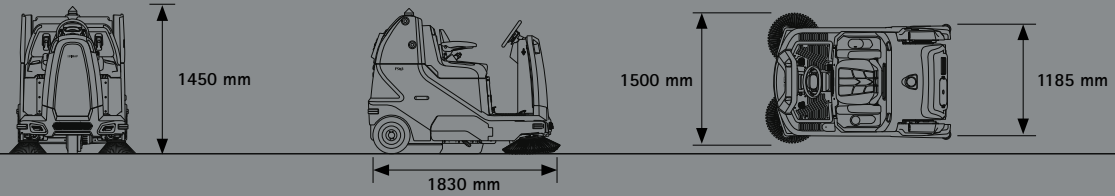
SIDE BRUSHES

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

OPTIONAL AND STANDARD EQUIPMENT

USER EXPERIENCE	FSR8	FSR8 Pro	FSR8 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	-	-	•
- Rear anti-collision system	-	○	•
- Maintenance due warning	-	•	•
Membrane control panel	-	•	-
COMFORT			
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	○	○	○
Set of cleaning accessories (side plate with clips, tub, bag-holder)	○	○	○
Automatic brush lifting system	-	•	•
Manual brush lifting system	•	-	-
2 debris hoppers with manual emptying	•	-	-
Debris hopper with automatic emptying	-	•	•
PRODUCTIVITY			
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)	•	•	•
SAFETY			
Blinking light	•	•	•
Driving LED lights (front-rear)	○	○	•
LED service lights	-	○	•
Ramp up	•	•	•
Stop&Go	•	•	•
Descent control	•	•	•
ESC (Electronic Stability Control)	•	•	•
Emergency Stop	•	•	•
Super elastic front traction wheel	○	○	○
Super elastic wheels	○	○	○
Overhead guard	○	○	○
Blue safety spotlight	○	○	○
Bull bar	○	○	○
Hydraulic drum brakes	•	•	•
Electrobrake	•	•	•
Side brushes that retract in the event of impact	•	•	•
ENVIRONMENT			
Paper panel filter	•	○	○
Polyester panel filter	○	•	•
Fabric pocket filter	-	○	○
Tetratex® pocket filter	-	○	○
HEPA output air filter	○	○	○
FES (Fimap Energy Saver)	•	•	•
Start&Stop	•	•	•

DIMENSIONS AND TECHNICAL DATA



TECHNICAL DATA – FSR8		FSR8	FSR8 Pro	FSR8 Plus
Productivity theoretical		up to sqm/h	15000	
Estimated coverage		up to sqm/h	12750	
SWEEPING UNIT				
Working width with central cylindrical brush	mm	850		
Working width with side brushes	(no.) mm	(1) 1175 - (2) 1500		
Brush motors (central/side)	(no.) V/W	(1) 36/1000 - (1/2) 36/290		
Brush rpm (central / side)	rpm	550/75		
DIRT COLLECTION SYSTEM				
Maximum volume of the 2 debris hoppers with manual emptying	(no.) l/each	(2) 45	-	
Maximum volume of the debris hopper with automatic emptying	l	-	140	
Debris hopper at height	mm	-	1630	
FILTERING SYSTEM				
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				
BATTERIES				
Supply/traction	V	36/aut.		
Batteries	(no.) V/Ah	(6) 6/425 WET		
Battery run time*	up to h	5 (WET)*		
PROPELLING SYSTEM				
Forward working speed	km/h	10		
Transport speed	km/h	10		
Gradeability (Working / Transport at gross weight / Trailer ramp at net weight)	%	12,5 / 14 / 20		
Traction motor	(no.) V/W	(1) 36/2350		
SPECIFICATIONS				
Machine dimensions (L x h x w)	mm	1830		
		1450		
		1185		
Machine weight empty without batteries	kg	570,4		
Machine weight empty with batteries	kg	902,4		
GVW (Gross Vehicle Weight)	kg	1199		
Sound pressure level (ISO 11201) – L _{PA} – Eco Mode	dB (A)	<70		
Minimum aisle turn	mm	2360		

*Run times are based on continuous sweeping 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.

CERTIFICATIONS



AWARDS



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.

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



FIMAP spa - Via Invalidi del Lavoro, 1 - 37059 S. Maria di Zevio - Verona - Italy - Tel. +39 045 6060411 - E-mail: contact@fimap.com

