

MC 210

FAYAT
ENVIRONMENTAL
SOLUTIONS



MC 210 • 05/2018 • Synapse Nancy

Discover our compact
sweeper MATHIEU MC 210
with our mobile app.



MATHIEU S.A.
85, rue Sébastien Choulette
B.P. 32 54202 Toul Cedex
France
T : +33 (0) 3 83 65 22 22
E : info@mathieu.fayat.com
www.mathieu.fayat.com



COMPACT

GOING THE



TRA MILE

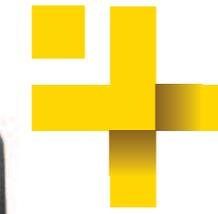


Our new MC 210 platform is the culmination of over 90 years' experience in the field of cleaning, comprising four different solutions: pure sweeping, versatile sweeping, brushing and washing.

In a world where comfort, reliability, performance and respect for the environment are the minimum requirement today, the new MC 210 sets new standards in urban cleanliness...

- A pure and functional design...
- A comfortable and spacious cab...
- Useful and intuitive technologies...
- Enhanced performance...
- Dedicated and tailor-made cleaning solutions...
- An environmentally-friendly approach...

Our new AZURA and AZURA FLEX sweeping solutions offer all this!



FUNCTIONAL DESIGN



The characteristic curves of the previous generation have gone; the new AZURA MC 210 sports a modern urban design which enhances the image of cleanliness. With its extra-compact dimensions, this sweeper blends into the urban environment.

- Streamlined style
- Relevant volumes
- A cab which combines design and practicality





360° view with rear view camera

Luxury driving

Space has been freed up, giving the driver and passenger an extra 20% of room. The passenger compartment has been de-cluttered for greater comfort. The driving position can be adjusted to all body shapes thanks to the enhanced cab, and a wide range of seat and steering column settings. These excellent ergonomics thus reduce joint and muscle tension. Combined with a calm environment, the overall feeling is one of well-being.



360° view

The passenger compartment of the new AZURA MC 210 makes its mark with its extra-high and extra-low windscreen, with its glass-panelled side doors, panoramic and wide-angle mirrors, rear-view quarter panels, floor window, suction nozzle and rear view cameras.

At the wheel, you are completely in control of your environment and enjoy a dominant position and an unsurpassed 360° view.

Designed for on-board comfort

You can now perform your sweeping tasks in a first-class environment thanks to the quality control equipment and a dashboard designed to optimise organisation at the driving position :

- Standard automatic air conditioning
- Foot-level heating

- Driver and passenger suspended seats with multiple settings and 3-point seatbelts
- Passenger foot-rest
- MP3-SD-USB Bluetooth radio with hands-free kit
- 12V plug with smartphone compartment
- Cup holder
- Rear view camera
- Suction nozzle camera

USEFUL TECHNOLOGY

A user-friendly, intuitive screen

Ergonomically built into the middle of the dashboard, the 7-inch multi-function colour screen with quality graphics can accompany you whilst operating the sweeper, and even afterwards.

The screen offers a number of services and promotes a dialogue between the machine and the operator, offers easier and quick maintenance for technicians and better monitoring of daily operation for managers.

- Real-time surveillance of active functions,
- Log book to access useful operational data (hours worked, distances travelled, average consumption, etc.),
- An integrated diagnostic help tool,
- A function to extract operational data and to update via USB stick,
- A PDF file reader.



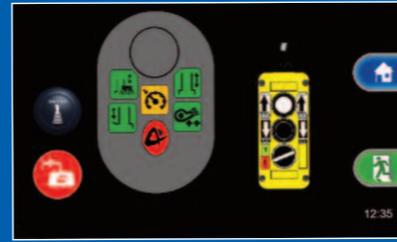
Travel mode



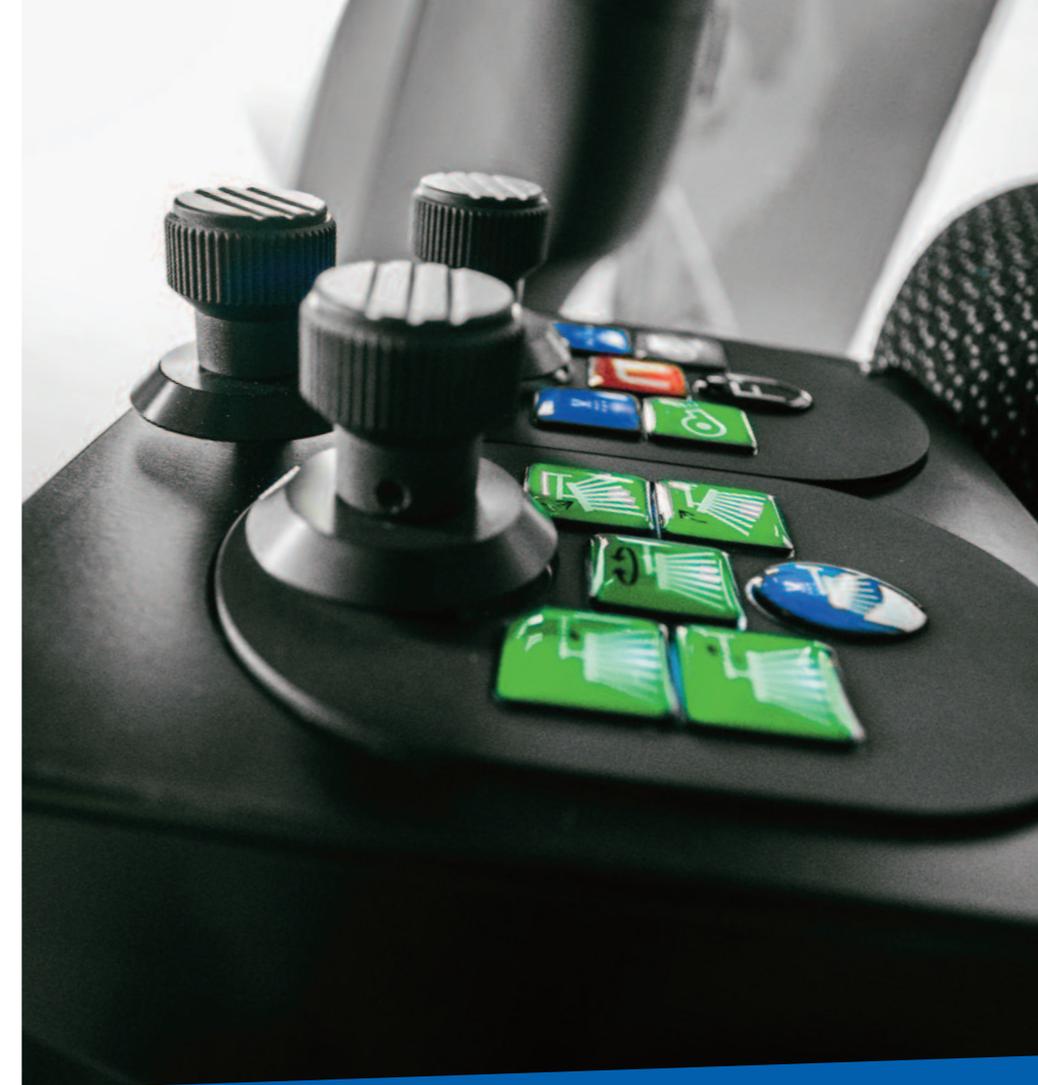
Work mode with indicator lights on



Data logbook



Diagnostic help tool



Intuitive work controls

The AZURA MC 210 features new and innovative work controls, managed by CANBus. This technology, used in our equipment for 10 years, has been redesigned to revolutionise your sweeping approach thanks to its ease of use.

The new **keypads** have short pressure buttons with backlit display, each one representing a function symbolised by an icon and a colour code. Utilising this technology, you can activate and deactivate the sweeping mode simply by pressing the **Start & Sweep** button.

The single multi-function joystick allows the driver to control movements more accurately. This technology is focused on the operator's needs.

PERFORMANCE

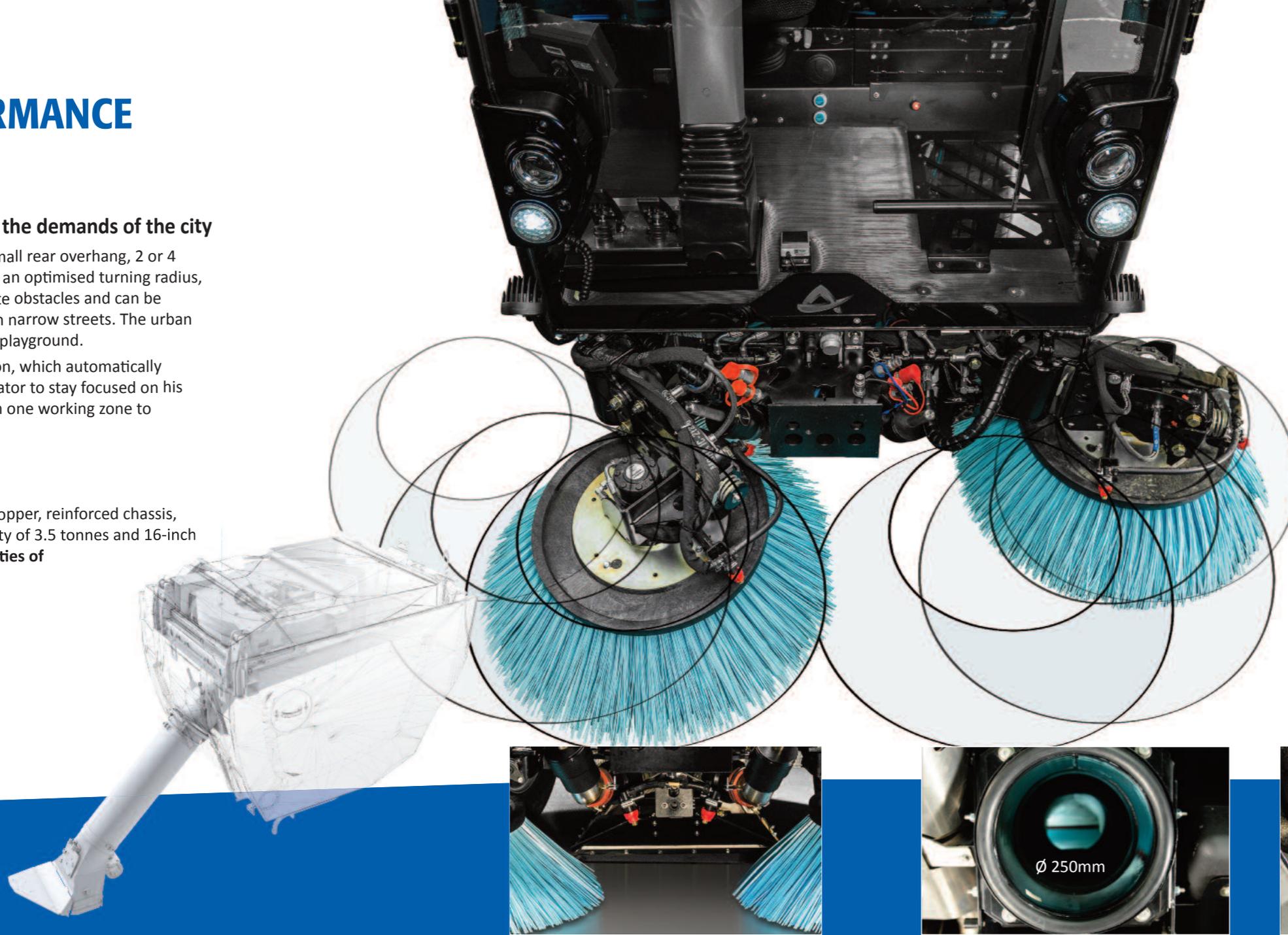
A manoeuvrability in line with the demands of the city

With its extra-compact dimensions, small rear overhang, 2 or 4 wheel steering in sweeping mode and an optimised turning radius, the AZURA MC 210 can easily negotiate obstacles and can be manoeuvred with great agility through narrow streets. The urban environment is definitely its favourite playground.

In travel mode, the **Auto-Steer** function, which automatically realigns the rear axle, allows the operator to stay focused on his task and to quickly and safely get from one working zone to another.

Proven chassis

A large capacity stainless steel 4016 hopper, reinforced chassis, resized rear axle with safe load capacity of 3.5 tonnes and 16-inch premium wheels offer **payload capacities of + 400 kg.**



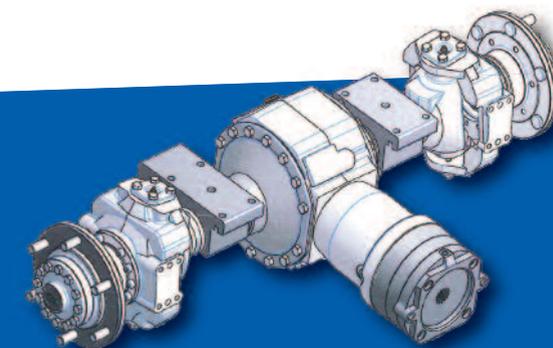
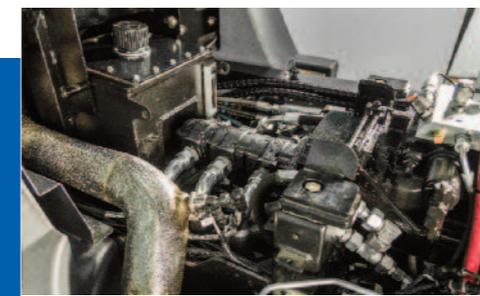
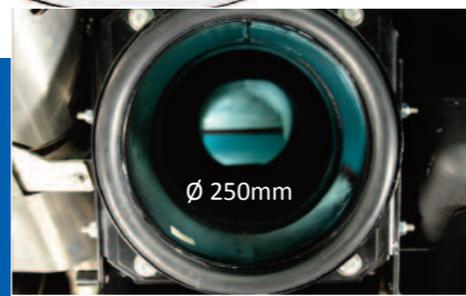
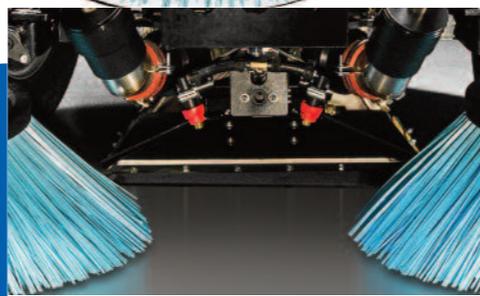
A manoeuvrability in line with the demands of the city

With its extra-compact dimensions, small rear overhang, 2 or 4 wheel steering in sweeping mode and an optimised turning radius, the AZURA MC 210 can easily negotiate obstacles and can be manoeuvred with great agility through narrow streets. The urban environment is definitely its favourite playground.

In travel mode, the **Auto-Steer** function, which automatically realigns the rear axle, allows the operator to stay focused on his task and to quickly and safely get from one working zone to another.

Proven chassis

A large capacity stainless steel 4016 hopper, reinforced chassis, resized rear axle with safe load capacity of 3.5 tonnes and 16-inch premium wheels offer **payload capacities of + 400 kg.**





In the city, no task is too challenging

The AZURA FLEX is the essence of flexibility; being the 5-in-1 tool-sweeper version of the AZURA.

Designed to be in action all year round thanks to its remarkable performance and flexibility, it will meet all your needs in terms of urban viability in all seasons, more than any other solution.

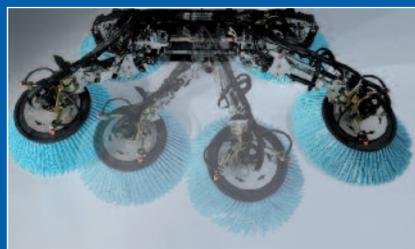
With the standard front arrangement, it becomes a three-brush sweeping solution, a mechanical weeding solution, a brushing/scouring, washing or snow removal solution.

It takes less than 5 minutes to install the different tools. It is therefore easy for the operator and doesn't require specific machines for the various tasks.



3 SOLUTIONS FOR WINTER VIABILITY

- A 200-litre salt spreader with direct spreading or circular gritter disc - the dosage is set in the cab (optional) via a control unit.
- Rotating snow removal brush installed at the front of the AZURA FLEX. This acts in addition to the spreader at the rear to carry out efficient and complete snow removal from the road and sidewalks.
- A robust snow removal blade for easy snow removal thanks to hydraulic adjustment of the blade left and right.



- A third robust and efficient brush for an even better performance. For mechanical weeding operations, treatment of cluttered or inaccessible zones, this solution will appeal to you due to its extended efficiency and speed.



- An innovative brushing and scouring unit comprising 3 brushes, combined with a system for collecting waste water will allow you to renovate any type of porous or smooth floor (paving stones, marble, natural stone, etc.). Thanks to its integrated detergent tank fitted with a precise dosing system, all you will leave behind is a genuine impression of cleanliness.

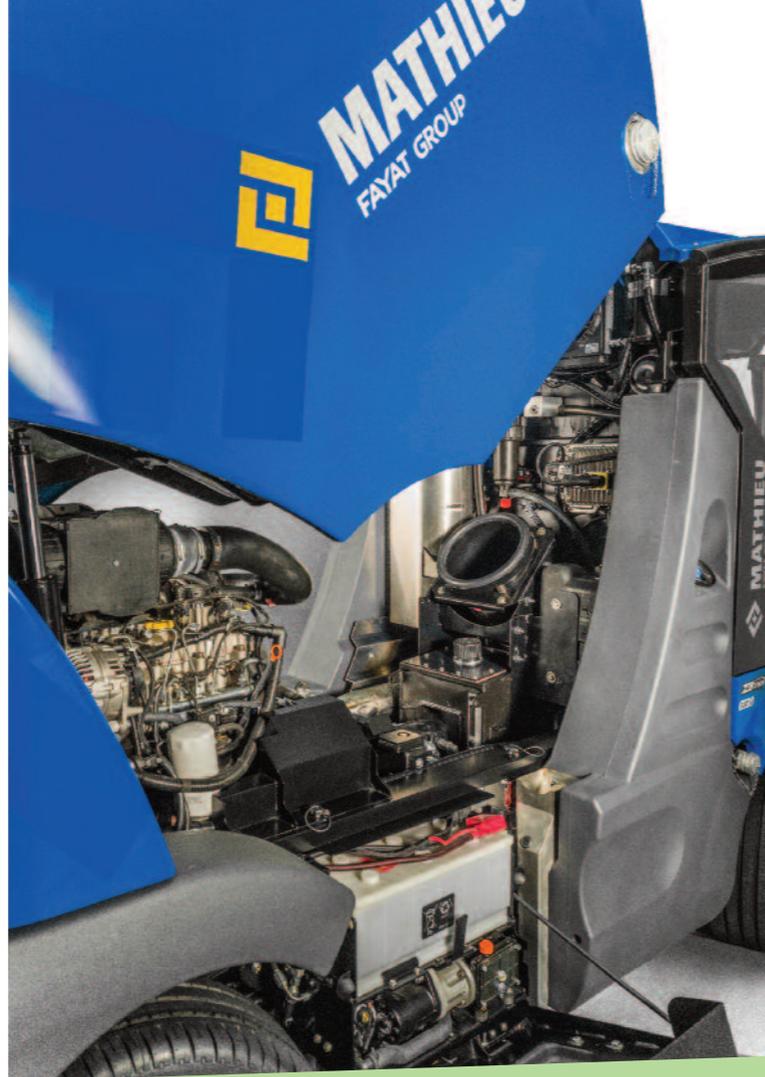


- A washing kit, fitted with high-pressure pump, front-installed removable cleaning spray-bar with two side jets and a nozzle coupled with an automatic hose reel, will be essential for your washing operations.

ENVIRONMENTALLY RESPONSIBLE

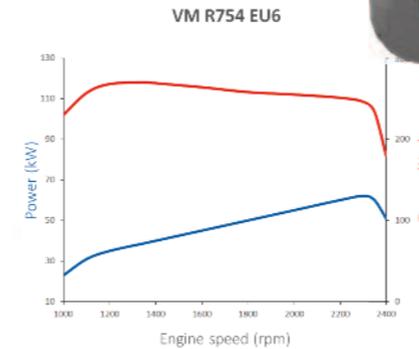
The AZURA MC 210 thinks of tomorrow, now
Offering a clean environment every day is the basis of our activity. Our eco-responsible approach ensures well-being and comfort for operators and residents.

An eco-efficient working mode
The new AZURA MC 210 has three pre-defined working speeds to handle the different sweeping tasks which the operator encounters daily: an **EcoMode**, a standard mode and a **BoostMode** limited to 10 minutes of use.



- EcoMode**
80% of common sweeping tasks are handled with EcoMode.
- Activation of this working mode leads to:
- Up to 50% fuel savings compared to an intensive working mode,
 - Less noise pollution,
 - Preserving the lifetime of your sweeper.

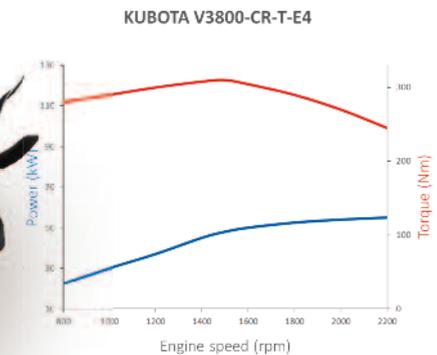
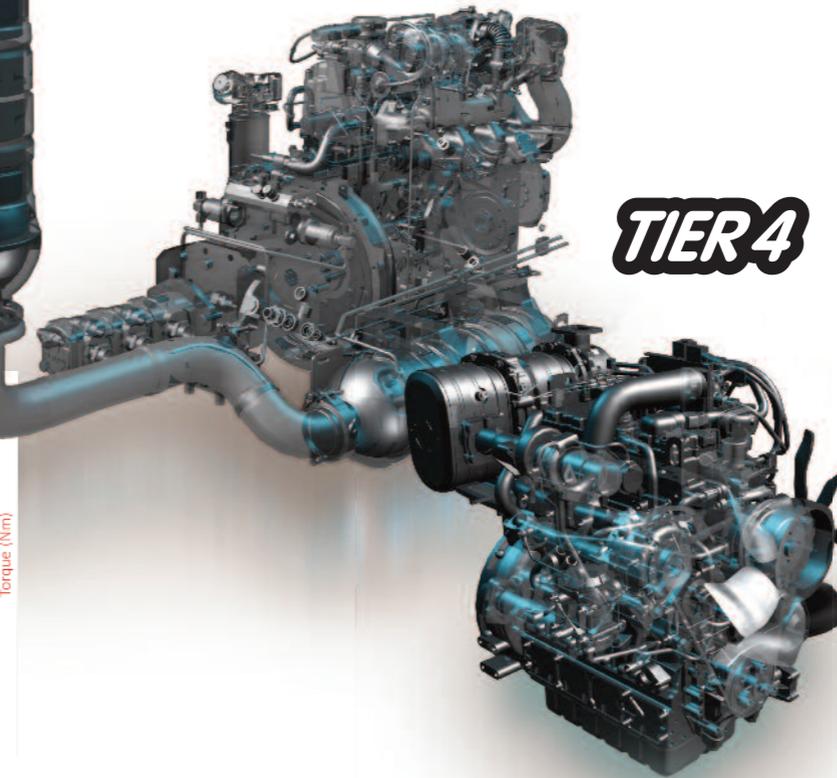
EURO 6



Latest-generation clean engine, diesel or petrol

MATHIEU offers two engines in compliance with EURO 6 and TIER IV road standards, which largely reduce particle and nitrogen oxide emissions thanks to new aftertreatment equipment.

TIER 4



Reducing clean water consumption
Thanks to the option of recycling waste water re-injected into the suction nozzle, added to a precise and proportional dose of clean water sprayed onto the brushes and in the nozzle, you can significantly reduce your clean water requirements.



3 stars in the EUnited PM10 test
The MC 210 reached the maximum score in the standardised EUnited PM 10 test. This is the guarantee of choosing a sweeper with the lowest release of airborne particulates!



Recyclable sweepers
Constructed from 90% steel, cast iron, aluminium, copper and glass, the mechanical and hydraulic components of the MC 210 platform are entirely recyclable. The plastic parts are also able to be recycled by specialists.



-20% fuel consumption
The new pre-defined working speeds coupled with the new engines allow for fuel savings of up to 20%.



-20% CO2 emissions
Thanks to the reduced fuel requirement, the CO2 rate is significantly reduced.



Low noise pollution
Thanks to the effi-silence technology, reduced-noise engines and the selection of quality sound-proofing materials, the sweepers' level of acoustic power and pressure has been reduced.



EQUIPMENT AND OPTIONS

	AZURA	AZURA Flex
COMFORT		
Removable central fleece armrest	●	●
Climate control	●	●
Adjustable foot-level heating	●	●
Document holder	●	●
Coat hook	●	●
Cup holder	●	●
Passenger-side footrest	●	●
Wide-angle rear-view brush mirrors	●	●
Class II panoramic wing mirrors	●	●
Class II panoramic heated wing mirrors, electrically adjustable from the cabin	○	○
Driver seat suspended mechanically with multiple settings and headrest with 3-point seatbelt	●	●
Driver seat suspended electro-pneumatically with multiple settings and headrest with 3-point seatbelt	○	○
Passenger seat suspended mechanically with multiple settings with 3-point seatbelt	●	●
Roller sun blind (driver and passenger)	●	●
AUDIO		
Smartphone compartment	●	●
Hands-free kit (integrated into the radio)	●	●
12V plug	●	●
MP3 - USB - SD - Bluetooth radio	●	●
7" DISPLAY		
Speedometer	●	●
Logbook	●	●
Diagnostic help tool	●	●
Datas extraction and update via USB	●	●
WORK FUNCTIONS		
Two-brush sweeping with integrated PPS system	●	●
Camera on nozzle	●	●
Main working controls integrated into the door console	●	●
Brush lighting with LED	●	●
Blocking of nozzle trap in the up position	●	●
Potentiometer to adjust the pressure and relief of the side brushes	●	●
Potentiometer to adjust the rotating speed of the side brushes	●	●
Potentiometer to adjust the speed of the front tool	X	●
Recycling of waste water in the suction nozzle	○	○
Adjustment of the tilt of the brushes from the cabin (right + left)	○	○
Rapid lift of the nozzle / brush unit	●	●
Activation and deactivation of the sweeping mode with Start & Sweep	●	●
Independent proportional water valve for dampening the nozzle and the brushes	●	●
DRIVING		
Right stalk	●	●
Intermittent windscreen wipers	●	●
Self-cancelling turning indicators	●	●
2 or 4 steer wheels in working mode	●	●
2 front steer wheels in travel mode	●	●
STEERING		
Automatic alignment of rear wheels, Auto Steer	●	●
16" wheels and 225/65 tyres	●	●

	AZURA	AZURA Flex
SECURITY		
Activation of brake lights when decelerating	●	●
Reflective strip (white and red), Cat. II	○	○
Emergency stop button	●	●
ON/OFF button for the rotating warning light	●	●
Rear view camera	●	●
2 kg powder extinguisher	●	●
LED daytime running lights	●	●
LED working lights mounted on top of the cab	○	○
LED low and high beam head-lights	○	○
LED rotating beacon on the cab roof	●	●
2 nd LED rotating beacon on the rear of the hopper	○	○
Rear step	●	●
MAINTENANCE		
Spare wheel (separate)	○	○
12-tonne jack	○	○
Automatic centralised greasing	○	○
Manual centralised greasing	○	○
Tool kit	○	○
WORK TOOLS		
Manual cleaning dome (2 rotating jets) with coupling trolley at the rear	○	○
15 m automatic hose reel fitted to the front of the machine (not compatible with a 3rd brush)	○	X
15 m automatic hose reel fitted to the rear on an articulated frame	○	○
360° washing attachment fitted on the roof of the container with 15 m automatic hose reel and nozzle	○	○
Additional 240 litre clean water tank (total water capacity of 540 litre)	○	○
High-pressure system (20L/min at 150 bar), 5m of hose and nozzle	○	○
Leaf suction hose (150 mm diameter) with support frame at the rear of the machine (Not compatible with the additional water tank)	○	○
3 rd brush mounted on a geared rail with quick fastening system	X	○
3 rd weeding brush: specific weeding brush and anti-projection bib	X	○
1,50 m-wide snow brush, 420 mm diameter brush with left/right hydraulic adjustment	X	○
Brushing kit with 3 brushes with waste water suction system and 20 litre detergent tank	X	○
Washing kit including an automatic hose reel with 15 m hose, a high-pressure nozzle, a cleaning spray-bar that can be manually adjusted up and down, left and right, and two side jets to wash under cars and benches	X	○
Snow blade, 1.40 m wide, left and right hydraulic adjustment, rubber scraper, signalling flag	X	○
Salt-spreader 200-litre volume, adjustable spreading range from 1 to 6 m via a circular gritter disc, signalling light ramp with fog and reversing lights	X	○
Salt-spreader 200-litre volume, spreading range set at 1.40 m, signalling light ramp with fog and reversing lights	X	○
Hydraulic lifting system for brushing, blade and snow blade unit.	X	○

Key : standard = ● optional = ○ unavailable = X

DIMENSIONS & CHARACTERISTICS

Chassis	
Travel speed (kph)	25 to 50 (depending on local regulations)
Working speed (kph)	0 - 15
Steering	2 or 4 steer wheels in working mode
Front and rear suspensions	leaf springs
Front brakes	Disc brakes with dual braking system
Rear brakes	Hydraulic brakes + drum brakes (optional)

Engines	EURO 6	TIER IV /STAGE IIIB	TIER II / CARB TIER III
Make / Type	VM R754 EU6 Common rail direct injection turbocharged diesel engine	KUBOTA V3800-CR-TE4B direct injection turbocharged diesel engine	KUBOTA WG3800-G Petrol engine
After treatment	Exhaust line with catalyst (DOC) and particle filter (DPF) + Selective Catalytic Reduction system (SCR) with AdBlue injection (14 liter tank)	Exhaust system with catalyst (DOC) and particle filter (DPF)	Exhaust system with catalyst and silencer
Cubic capacity	2 970 cm ³	3 800 cm ³	3 800 cm ³
Number of cylinders	4	4	4
Maximum power	62 kW @ 2 300 rpm (83 BHP)	55,4 kW @ 2 200 rpm (74 BHP)	58,1 kW @ 2 200 rpm (78 BHP)
Maximum couple	270 Nm @ 1 350 rpm	310 Nm @ 1 500 rpm	256 Nm @ 1 400 rpm

Dimensions, weight, capacities	
Length (mm)	3 852 (Azura) / 3 948 (Azura Flex)
Width (mm) (without mirrors)	1 293
Height (mm) (without rotating beacon)	2 089
Seat height (mm) (from seat to ceiling)	970 - 1 030
GVW (kg)	5 000 (5 200 depending on local certification)
Wheelbase (mm)	2 150
Maximum weight on front axle (kg)	2 500
Maximum weight on rear axle (kg)	2 500
Fuel tank capacity (liters)	70
Clean water tank capacity (liters)	300 (540 option)
Recycled water tank capacity (liters)	250 (option)
Turning radius curb to curb (mm)	3 150
Turning radius wall to wall (mm)	3 700
Gradeability [%]	Up to 28

Waste Hopper	
Voided volume (m ³)	2
Payload (kg)	1 500 (depending on the options)
Material	4016 stainless steel
Dumping height (mm)	1 400

Sweeping system	
Sweeping width (mm)	1 650 - 2 450 (2 700 with 3 rd brush)
Number of brushes	2 or 3 (option)
Brush diameter (mm)	900

Suction system	
Blower capacity (m ³ /h)	13 000
Suction nozzle dimensions (mm)	540 x 200
Suction tube diameter (mm)	250

