



Sprayer-spreader

Synchronised application equipment for surface dressings



Simultaneous sprayer-spreader type equipment is the most efficient and economical solution for the creation of surface dressings. The FAYAT group has rationalised its range and presents the new harmonised product line manufactured by its Maintenance Division consisting of RINCHEVAL, BREINING and SECMAIR. This is the biggest range of products on the market, both in terms of the number of solutions and their performance, and supplements the traditional solutions (trailer-mounted sprayers and spreaders) described elsewhere.



An exhaustive range of surface treatment solutions

The quality and performance of surface dressings are largely dependent on the metering and synchronisation of emulsion spraying with the spreading of chippings. SECMAIR is the inventor of synchronised machines which significantly reduce the time between the two applications.

Over 25 years, this equipment has been developed to handle:

- full-width lanes and high-output applications
- localised repairs
- off-centre and lateral areas

We shall discuss the selection criteria for equipment, from both ergonomic and economic standpoints, and with regard to peripheral functions such as automation and loading methods.

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Selection criteria

There is a huge choice of sprayer-spreaders on the market. Choosing the right equipment therefore depends on the accurate definition of users' needs.

The choice of a sprayer-spreader depends on three main parameters that characterise its use:

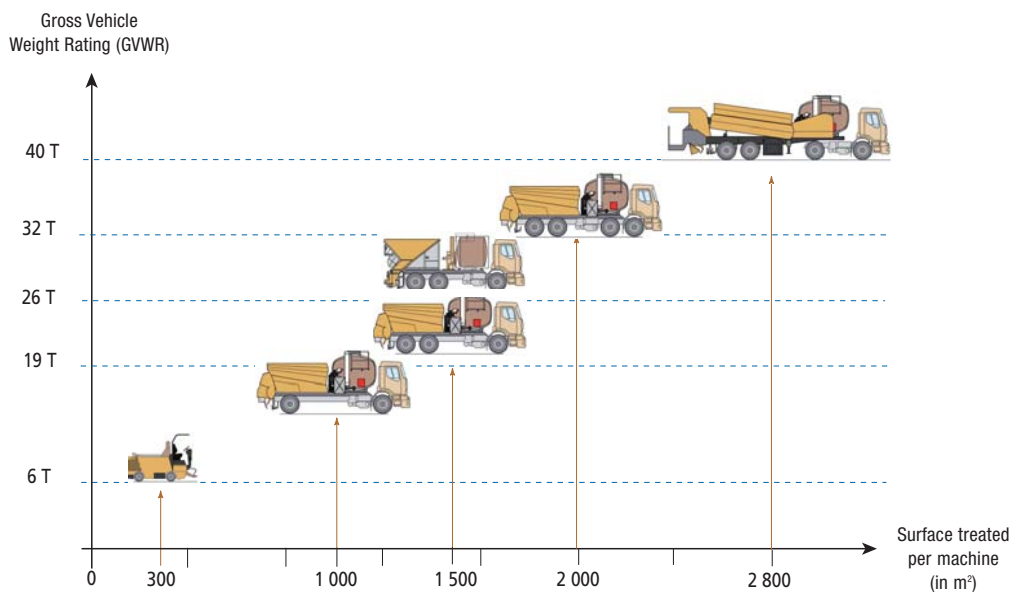
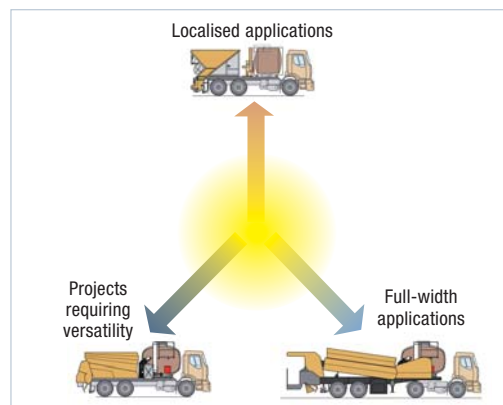
- application of "full-width" surface dressings,
- application of localised treatments (partial repairs to the wearing course: cracks),
- need for a versatile machine adapted to all types of projects (for tack coats prior to asphalt application, temporary surfacing, or as an addition to a traditional surface dressing team).

- Choosing the best equipment must also take account of:

- gross vehicle weight rating of the truck or trailer,
- surface area to be treated.

- In response to the different types of projects undertaken by our customers, we have also developed three types of aggregate supply systems for chip spreaders:

- tipping hoppers,
- gravity-fed bins,
- horizontal, conveyor-fed hoppers.

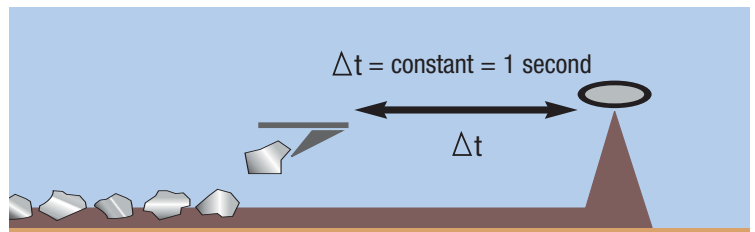


The synchronous method

A synchronised application consists of spraying a coat of bitumen binder while spreading a layer of chippings at the same time. The sprayer-spreader combines both components on the same machine and applies the materials.

Qualitative advantages

- Simultaneous spreading, guaranteeing the perfect cohesion of binder and chippings.
- The period of time between the spraying of the binder and spreading of the chippings remains constant.



Economic benefits

- The sprayer-spreader is a two-in-one machine that halves the number of vehicles required.
- Having fewer trucks on the site halves the energy consumption and thus reduces greenhouse gas emissions.



Ergonomic and safety benefits

- The equipment is designed to be compact and capable of adapting to all projects.

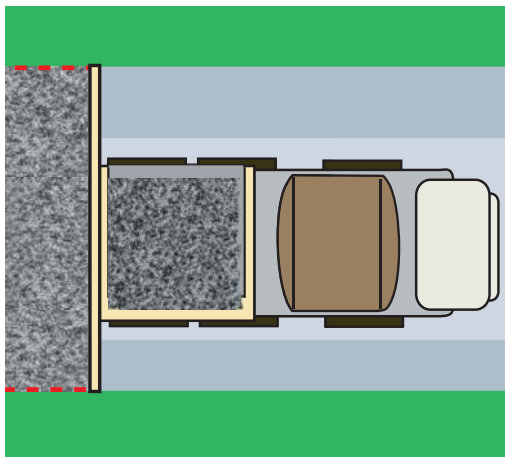


Full-width applications

The Chipsealer range, featuring the VINGEVA sprayer unit, is designed for large-width surface-dressing projects.

With their large binder and chipping capacities, these machines are an alternative to traditional road surfacing trains.

This range of sprayer-spreaders offers the lowest application cost per m².



Full and variable widths

The VINGEVA sprayer unit is equipped with a spraybar and a telescopic chip spreader.

Thanks to this function, it is possible to treat full lanes by adjusting the spraying width.

Full-width, joint-free application

Thanks to the telescopic sprayer unit, it is possible to cover full widths of 4.50 m without joints.

The synchronised application also eliminates surplus aggregates around the joints.



High-capacity equipment

Our range of high-output equipment is designed to optimise the onboard load. It also satisfies the requirements relating to the environment in which the machines operate.

Large payload

The sprayer-spreader range for the application of full-width surface dressings has been designed with the aforementioned principles in mind and includes the following models:

- 3-axle truck-mounted,
- 4-axle truck-mounted,
- 40 T trailer-mounted.

The trailer-mounted models are self-contained with an independent unit providing all of the required power.

Compliance with the working environment

Sprayer-spreaders are designed to operate on worksites that remain open to traffic. It is therefore essential for the trucks to operate with the traffic flow, i.e. in forward gear. In addition, it is essential for the machines to remain within the dimensions of the truck. Consequently, the range features stationary chipping storage units (bins or hoppers with conveyors), thus preventing any risk of contact with cables, bridges, etc.



Safety and ergonomics

Thanks to sprayer-spreaders, the working conditions on surface dressing projects have become much safer. Another of our daily aims is to improve comfort for users of our machines.



Operator safety

Operations are performed from the cabin, which satisfies the primary health and safety requirements. On the one hand, the in-cabin control station protects operators from the inhalation of vapours and dust from the materials being applied and on the other, the user is not exposed to danger at the outside of the vehicle in the event of an accident.

Ergonomic control station

The control console is now situated inside the cabin. The ergonomic controls incorporate a joystick and touch screen.



Traceability

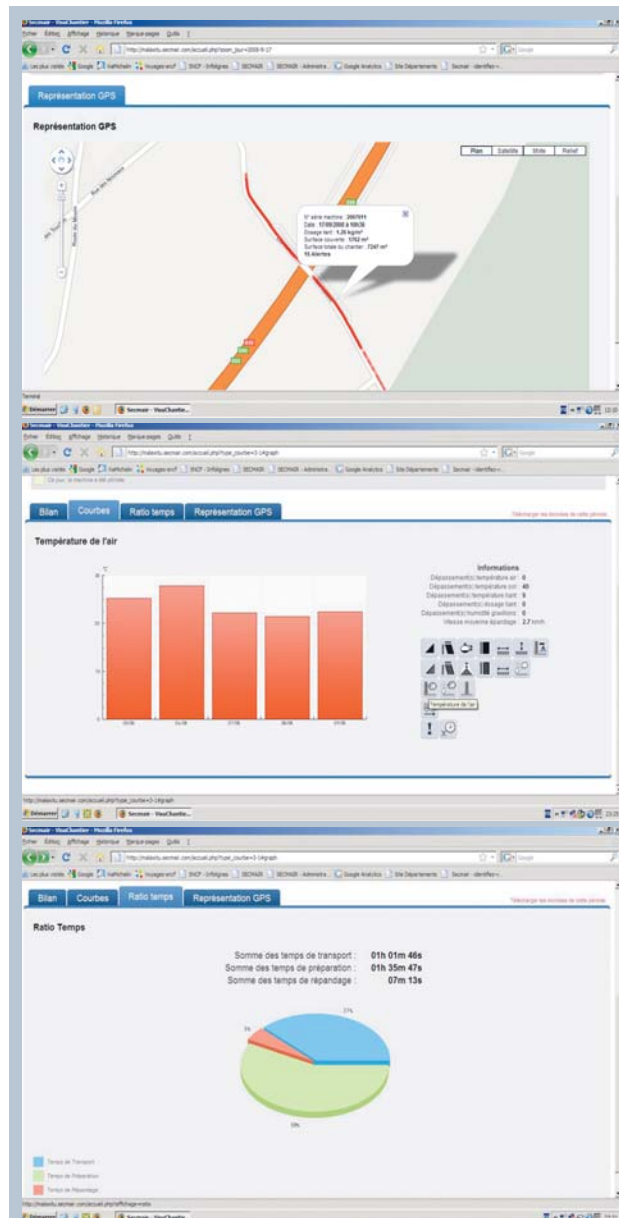
The new EC standard for the creation of surface dressings requires accurate traceability on work sites. The MALAXITU database allows you to record all of the application conditions for your work sites, while also providing information on productivity and outputs.

Our seven requirements

- Improve the reliability of your production management system
- Improve your communications
- Help you to stand out from your competitors
- Extend the use of your existing management tools (GIS-type)
- Prove to your customer that it has made a profitable investment
- Optimise your journeys, thus reducing your pollution emissions
- Offer you the benefits of a special relationship

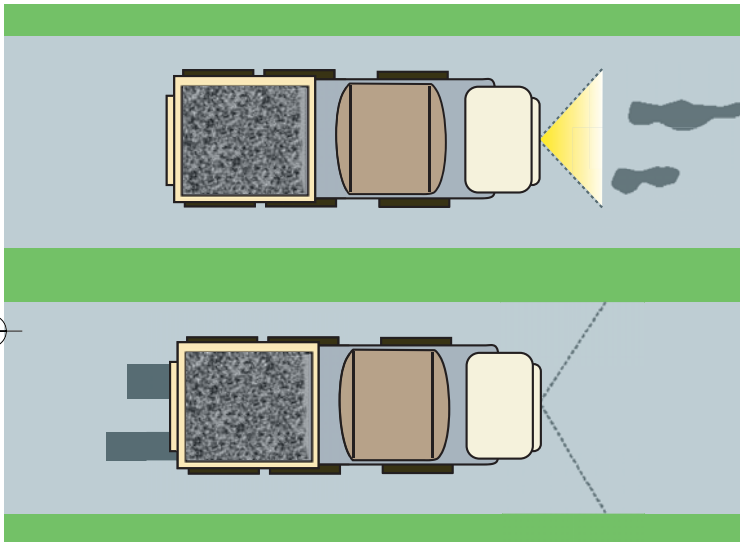
Examples of data provided

- Mapping of work sites
- GPS position, date and time
- Transportation, waiting and spraying-spreading times
- Instantaneous metering
- Surface areas and quantities
- Temperatures



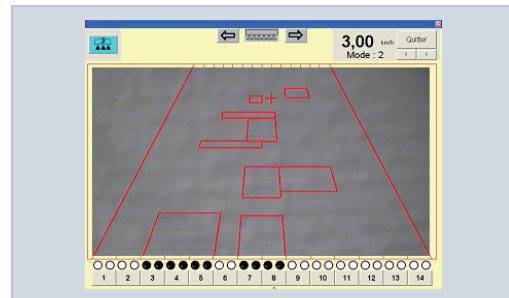
Localised applications

The sprayer-spreader remains the ideal machine for the performance of partial repairs. Indeed, it allows for the application of localised treatments with the metering quality of a surface dressing.



The VIASEALER has been especially designed to satisfy two major criteria for localised treatments:

- Accuracy of treatment controlled from the cabin,
- Homogeneous, 100% distribution of the binder, including over narrow widths.



SPRAYER-SPREADER

**Accuracy of localised treatment**

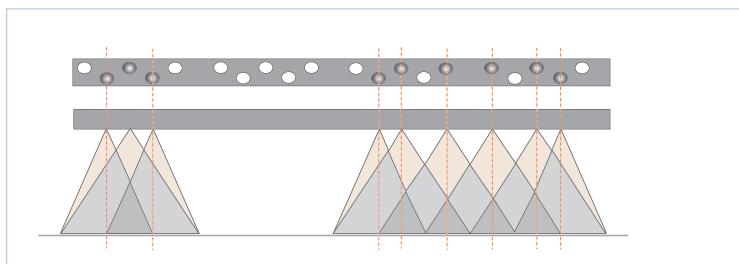
Thanks to a camera positioned at the front of the vehicle, the operator can select the treatment application area with great accuracy.

Another alternative in reverse gear allows the operator to steer the machine directly from the walkway.

Homogeneous, 100% distribution of the binder, including over narrow widths

The VIASEALER is equipped with an automated spraying system including DUOSPRAY: a spraybar with a double row of nozzles over a width of 2.5 m.

Thanks to its three overlaps, this system allows for the uniform distribution of the binder for optimal quality (coefficient of transversal variation < 3%).



Versatility

The huge variety of different types of work sites demands increasingly versatile equipment. Therefore, all of our machines can be configured to satisfy particular requirements. Each machine is designed according to the needs defined by the user.



The perfect addition to a traditional team

Thanks to its compact size, it is ideally suited to all peripheral works: road junctions, crossroads, roundabouts, etc.

Specific work sites

- The CHIPSEALER is ideally suited to small work sites: housing estates, platforms, trench sealing, urban works, etc.
- The CHIPSEALER can also be equipped with a telescopic spraybar for the application of tack coats.



SPRAYER-SPREADER



Sprayer-spreaders can be adapted to suit the needs of each customer.

The machines can be configured with a wide range of optional equipment that is both functional and ergonomic.

- Sweeper
- Interchangeable options
- Loading crane
- Towing hook
- Compaction wheels



Self-propelled sprayer-spreader version:

“Wagonnette” mini-supply wagon for projects on narrow lanes (driveways, cycle paths, etc.).



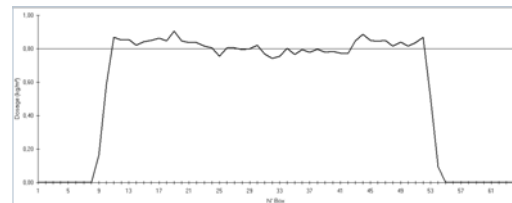
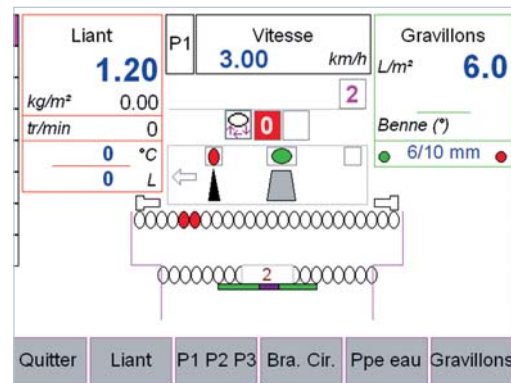
Quality and controls

The automated systems are especially designed by our Engineering & Design departments. The accuracy of binder and aggregate metering allows for compliance with the requirements of the standard for surface dressings while reducing the consumption of materials. The repeatability of binder and aggregate metering guarantees quality control throughout the duration of your projects.

Controls

The transversal distribution performance of the equipment is tested in our accredited testing stations:

- binder testing bench,
- chippings testing bench.



Product range

The solutions developed by SECMAIR answer to the needs of the surface dressing works.

Truck-mounted Sprayer-spreader	Spraying width	Binder capacity	Aggregate capacity	Aggregate supply
WAGONNETTE	1.20 m	400 L	1.5 m ³	Hopper
CHIPSEALER 20	3.20 m	3,500 L	4.5 m ³	Tipper bucket
VIASEALER	2.50 m	5,000 L	6 m ³	Hopper
CHIPSEALER 60	3.20 m	5,000 L	7 m ³	Tipper bucket
CHIPSEALER 61	3.20 m or 4.50 m	5,000 L	7 m ³	Conveyor belt tipper
CHIPSEALER 80	3.20 m	6,000 L	9 m ³	Tipper bucket
CHIPSEALER 81	3.20 m or 4.50 m	6,000 L	9 m ³	Conveyor belt tipper

Trailer-mounted Sprayer-spreader	Spraying width	Binder capacity	Aggregate capacity	Aggregate supply
CHIPSEALER 40	3.80 m	6,000 L	12 m ³	Tipper bucket
CHIPSEALER 41	3.80 m	6,000 L	12 m ³	Conveyor belt tipper
CHIPSEALER 42	4.50 m	9,000 L	12 m ³	Conveyor belt tipper

Sprayer	Spraying width	Type of spraybar	Binder capacity	Heating
ROADSPRAYER	4.50 m	Mechanical or pneumatic with knuckle joint	7,000 to 16,000 L	Direct heating
EUROSPRAYER	2.50 m to 5.00 m	Pneumatic with knuckle joint or telescopic	3,000 to 16,000 L	Direct heating
EDENSPRAYER V6	5.00 m or 6.20 m	Telescopic pneumatic	7,000 to 16,000 L	Direct or thermofluid heating

Chip spreaders	Spraying width	Type of distribution	Opening of gates	Chipping box
WK	2.50 m or 3.10 m	Gravity-fed	Manual or pneumatic	Yes
GPB 1 400	3.10 m	Distribution roller	Pneumatic	No
VEYMONT	3.10 m	Distribution roller	Pneumatic	Yes
GPB 14 000	3.10 m	Extracting roller	Pneumatic	No



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