

Surface repairing machine “chip sealer” **STRASSMAYR R** trailer type



Strassmayr R trailer surface dressing units are assembled on a single-axle trailer designed to perform large or partial road surface repairs using emulsion and aggregate technology. The unit is prepared for speeds up to 80 km/h, by 30% of stone bin filling. The whole process of reparation is controlled by a computer, ensuring even distribution of both materials depending on the speed of the carrier truck. The unit is additionally equipped in a Self-loading system of stones for bigger jobs.

Advantages of R line of surface reparation machines:

- Possibility of Integrating an emulsion tank (R 4000 model),
- basic working width of 2400mm, divided into 6 sections
- Vario system with stepless width regulation up to 4 meters (R 5500 Vario and R 7500 Vario models)
- large LCD controlling all of the functions of the unit
- ABS and ESP systems embedded in the trailer's brake system, ensuring full safety by transport speeds up to 80 km/h
- one man operation from a seat located above the rollers, covering all of the functions of the unit
- Computer operation system providing high quality and efficiency of the repair job

Models of R trailer line:

Model	R 4000	R 5500 Vario	R 7500 Vario
Capacity of emulsion	2200 l	-	-
Capacity of stones	4 m ³	6 m ³	7,5 m ³
Emulsion pump	420 l/min	800 l/min	800 l/min
Working width	2400 mm	2400 mm – 3950 mm	2400 mm – 3950 mm

Chassis single-axis trailer

- European homologation for the trailer allowing registration
- single axle trailer, with brake system empty weight of 7 500 - 8 000 kg (by different models)
- fixed tow bar with hook (allowing small regulation of height)
- installation of road lightning

Emulsion delivery system

- emulsion pump with hydraulic drive VARISCO V80 with 800 l/min capacity delivering emulsion from external tank of carrier (by R 5500 Vario and R 7500 Vario)
- emulsion installation secured with an emulsion filter circulation installation for emulsion to shorten the heating time
- two step cleaning system for emulsion installation: first step of cleaning executed by pre-compressed air insufflation second step of cleaning executed by rinsing with cleaning liquid

Main engine

- main engine HATZ 4H50TICD, fulfilling exhaust emission regulation EPA Tier 4 Final
vertical 4-cylinder liquid cooled Diesel engine power 55 kW
engine radiator with fan
- hydraulic pump driving all the functions
hydraulic oil tank with filter and temperature/oil level indicator
- Easy access to all components

Aggregate delivery system

- aggregate bin with capacity of 6,0 cbm
augers securing equal transverse discharge of aggregate in the bin
- self-loading system for aggregate
large aggregate intermediate hopper allowing loading from the tipper truck
wide transport conveyor for aggregate transportation
hydraulic system of positioning of the self-loading system
- aggregate dispensing drums
special drums with rough surface for even dosing of aggregate
standard width of drums (2 400 mm) divided into 6 sections
each section to be closed/opened with shutters moved with pneumatic cylinders

Spraying bar and aggregate feeding roller

- emulsion spraying ramp, fed from both sides with the emulsion, which ensures its accurate transverse distribution
- basic working width of about 2400 mm, divided into 6 sections
- additional hydraulic extensions (Vario models) 2 x 775 mm., for the total working width of 3 950 mm.
- pneumatic control of the opening of the emulsion spraying nozzles
- blow-off device of the emulsion circulation system, including the spraying ramp
- all drive systems powered by a hydraulic pump
- electronic pressure control system to ensure maintenance and alignment of constant pressure of emulsion quantity, regardless of the number of open spraying sections
- hydraulically driven aggregate feeding roller, automatic rotation adjustment, controlled by computer.
- aggregate feeding roller and emulsion spraying nozzles controlled by computer (in order to accurately determine the beginning and end of the administration of the aggregate and emulsion)

SPS computer dosing process control system

- fully automatic, depending on the driving speed adjustment of pressure, ensuring a permanent and unchanging dosage of emulsion regardless of the working speed of the unit
- control of all of the functions of the machine by SPS Siemens controller.
- operation through touch screen
- ability to record and provide the following information:
 - spraying efficiency in l/m²
 - driving speed
 - number of total repairs made in m²
- optional printer for printing main job information

Emulsion bin (only in R 4000)

- emulsion bin capacity of 2000 liter
insulated with rockwool
mechanical indicator of filling the emulsion bin
emulsion bin integrated in the body of the unit
- automatic heating installation
thermostat adjusting the temperature of emulsion
- RIELLO diesel burner

Self-loading system

- conveyor belt with a loading tray for loading the aggregate into the container
special construction allowing hydraulic movement of loading system into two positions:
 - transport position
 - working position
- movements of loading system secured by hydraulic cylinders
conveyor belt with hydraulic drive
hydraulic engine running the conveyor belt
conveyor belts width 1600 mm., allowing quick loading of material
- large aggregate hopper allowing loading of each truck - tipper

Additional equipment

Additional coat heating

coat heating system for emulsion pump and emulsion filter
preheating the body of the pump before starting operation
avoiding cooling down of the emulsion when entering cold body of the pump
system of heat exchange delivering the warm liquid to the coat heating system

Additional coat heating for spray bar

coat heating system for the spray bar, using special heat exchanger with pump to preheat the spray bar for quicker every day start up

Printer, mounted in the drivers cabin

allowing printing of main job's information
protocol in format A4

Additional emulsion tank, capacity 6 000 liters

ready for mounting on a truck pulling the R Vario models
with complete automatic heating system