Slurry seal and microsurfacing unit
STRASSMAYR STR S
installed on a 3 axle truck or 3 axle semi-trailer

Strassmayr STR S is assembled on a frame or a 3 axle trailer and is designed to perform large road surface repairs using slurry seal and micro-surfacing technology.

Models of STR S line:

Model	STR S 8000	STR S 12000
Capacity of emulsion	2000 l	5000 l
Capacity of water	1600 l	4000 l
Capacity of dope	300 l	300 l
Capacity of stones	8 m^3	12 m^3
Capacity of filler	500 l	500 l

Main engine
- main engine DEUTZ,
  vertical 4-cylinder liquid cooled Diesel
  engine power 74 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

Dope system
- Dope tank with capacity of 300 l
- Stainless steel tank
  Dosing pipes
  Transparent level indicator
- Volumetric rotary lobe pump
  Output regulated by potentiometer between 3-25 l/min

Aggregate hopper
- Steel construction, capacity of 8 or 12 m3
- Electrical vibrator inside of the hopper
- Aggregate outlet using a conveyor belt below the aggregate hopper

Emulsion system
- Emulsion tank with capacity of 2000 l or 5000 l
  Level indication
  Air and overflow pipes
  Thermometer 0 – 120 °C
- Gear type emulsion pump
  Output regulated by potentiometer between 50-200 l/min
  Volumetric metering system

Water system
- Water tank with capacity of 1400 l or 4000 l
  Level indication
  Air and overflow pipes
- Volumetric rotary lobe pump
  Output regulated by potentiometer between 20-150 l/min

Control and remote box
- Control of the unit is done by electric switches and potentiometers located at the rear platform
- The dosing components are controlled by electrical proportional valves ensuring full precision during operation

Aggregate conveyor belt
- Infinitely variable belt speed with supporting rollers (200 - 2000 kg/min)
- Maximum flow: 120 t/h
- Volumetric metering system, adjustment by potentiometer
- Plastic covered drive roller powered by a hydraulic motor
- Smooth tail roller with tightening screws
- A conveyor belt system in cassette design allows quick and easy dismounting and mounting

A wiper roller prevents dirt sticking at the conveyor belt

Filler system
- Filler bin with capacity of 500 L
- Special part with grid and opening cutter for filler bags
- Feeding auger made of stainless steel
- Output regulated between 4-40 kg/min
- Integrated agitator addicted to the speed of the feeding auger

Mixer
- 2 horizontal shafts each with 30 adjustable screwed-on mixer paddles
- Regulation by potentiometer between 600 - 2000 kg/min
- Mixer inclining by means of a hydraulic cylinder
- Each mixer shaft is driven by a synchronized hydraulic motor
- Reversible rotating directions
- The mixer consists of an upper and bottom half-liners: the upper contains the mixer shafts while the bottom one can be quickly opened by means of two quick-action locks
- The mixer shafts are secured against blocking
- For easy maintenance the mixer greasing nipples are located at the front of the mixer.
- Manually operated swinging chute at the mixer outlet for directing the mix into the spreader box

Surface distributor type M2500/4000
- Integrated augers, for levelling out carriageway depressions
- using bituminous final coats, DSK, micro surfacing
- The surface distributor is provided with a rectangular outer frame made from sheet steel,
- with exchangeable lateral and central skids
- A transverse plate with rubber strip holder is provided at the front, and adjustable screeding rail
- with rubber clamping strip at the rear
- The clamping strips are with fix couplings adapted for easy and quick removal if you extend the spreader box.
- The box is equipped with a central joint to permit it to be adjusted to the road profile.
- The box comprises two hydraulically driven, oppositely turning, reversible, two-part auger shafts with mixing paddles.
- The oil motors are driven by the hydraulic system of the slurry machine.
- Infinitely variable width by two spindles which are guided in tubular sections, permit the overall width of the outer frame, together with the two screening frames supported therein, to be varied infinitely. The auger shafts can be adapted to the changed width by slip-on shaft elements.

Additional equipment

Fibre cutting and dosing device

- Fibre Dosing Device is designed for cutting 16 mm fibre particles before being fed into the mixer. The lengths can be varied by the exchange of the cutter block (lengths 12 or 8 mm).
  At the rear of the Micro-Surfacing Machine there is a compartment of 800 x 600 x 350 mm in which 4 coils with glass fibre - diameter up to 300 mm, height up to 250 mm - can be stored. From two of them the fibre thread will be pulled by the cutting device.
  By means of hydraulically driven rotating cutters the fibre thread will be cut into particles having the length determined by the rotating cutter blades.
  With the aid of a chute the fibre particles will be directed without formation of fibre clots onto the conveyor belt and from this into the mixer.
  By regulation of the number of revolutions of the hydraulic motor the dosage of the fibres is affected which should be between 1 - 2 ‰ of that of aggregate.
  At the operating station the regulation of the number of revolutions as well as the speed 1.000 - 5.000 rpm is adjustable/readable.

Computer dosage system

- Control and regulation system with a microprocessor fulfilling the EMC standards. It is composed of an industrial automation as well as a 12'' touch screen (PC type, with Windows Operating System). System specially designed for an operation on mobile job site, ensuring a reliability of each component in the most extreme working condition. The automatism calculates and corrects continuously each dosing parameters for liquid and materials depending on the preset formula. Programming is done with standard CoDeSys language.
  The touch screen gives a simplified access to parameters for a fast intervention during application, thanks to icon representation. The 12'' high resolution control screen is robust and ergonomic. The system has a Protecting level IP 67, and is not sensible to heat or humidity. Can Bus technology is providing modularity of the whole system.
  All components are individually programmed on the control station. The measuring organs are directly auto regulated and the ordering input for each quantity is respected.
  The whole system is developed through AES company, well known in the asphalt plant industry.
- All of the rotating speeds of various elements, as for example the sand belt speed, the dope pump speed and many more are measured to ensure high accuracy regulation of dosages.
  Control and regulation of aggregates and liquids is fully computerized
  The materials weighing machine placed below the aggregate conveyor output is used as a reference for the regulation. – nie do regulacji, regulacja odbywa się objętościowo
  A tolerance range, for an accepted dosage error, with an integrated possibility to stop the production.
  Humidity rate correction in % by the humidity input
  A general potentiometer allows to vary the global output during the production about +/- 30%. Components programmed in the formula vary all in the same proportion.
- In the same control station included is the starting switch of the drive assembly, with a speed engine display. Lights show the oil pressure and there is an analogical display for the fuel level.
- Possibility to display the state of components (valve positions, speed, etc.) for each function (water, emulsion, aggregates, dope, filler, fibre)
- Included sensors and controls
  Air, ground temperature sensors (continuous measure)
  Air humidity (continuous measure)
  A GPRS/EDGE modem allows to the manufacturer to do the trouble shooting diagnostic and/or a remote maintenance (Data card to be supplied by the customer)
  remote control for the spreader box (includes tilting function)
- Rear platform with low access
  Control station, easily accessible from the ground to realize supplying operations (water,emulsion,dope)
  Easy access to the mixer for maintenance operation
- Weight regulation of the output obtained by a belt weight and a speed coder
  FMS weight sensor under the aggregate belt, with associated display
  It measures the weight in 4 directions in the same time, on both side of the aggregate belt
  It sends the measure to a digital display and the 12'' touch screen, displaying output in kg/min
  Recording of aggregate consumption
  Dedicated switch for auto calibration of the sensor