

Blow Patcher **STRASSMAYR STP 1010 FOB** front operating boom with manual operation with electronic control of the mixing process “Easy Patch”



BESTSELLER

The **STRASSMAYR STP 1010** Blow Patcher allows reparation of holes and damages in the road surface without using the milling machine and paver, on behalf of emulsion and aggregates. This type of machine requires only two man to operate and fulfill the technology of road surface repairs (the operator and the driver of a truck). Machine is equipped with the most modern material delivery systems, including electronic control over the mixing process.

Advantages of Blow Patching Pothole reparation technology:

- Two main materials used for operation (aggregates and emulsion) stay separated till the last moment before application
- No loss of material in case of necessity of stopping the reparation process, materials stay separated in two different bins
- No need to purchase each day small quantities of asphalt mixture easy storage of aggregates and emulsion close to the jobsite
- Thanks to the electronic “EasyPatch” system we remove the risk of incorrect amount of emulsion in the mixture

Models of STP 1010 FOB line:

Model	STP 1010/4000 FOB	STP 1010/6000 FOB
Capacity of emulsion	2000 l	2000 l
Capacity of stones	4 m ³	6 m ³

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
- Kaeser OMEGA blower, delivering flow of air necessary for aggregate transportation driven by hydraulic motor
- Easy access to all components from the side of the unit

Emulsion delivery system

- 2 emulsion pumps with hydraulic drive
larger pump for circulation and loading/unloading of emulsion
smaller pump for spraying operation
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
- “Easy Patch” - automatic electronic system regulating the amount of emulsion to be delivered
regulation of emulsion’s delivery accordingly to the amount of delivered aggregates

Aggregate bin

- aggregate bin with capacity of 4 or 6 m³ divided into two sections allowing operation on behalf of two sizes of stone
- two screw conveyors with hydraulic drive
- use of two sizes of aggregate allows quality reparation with long-lasting effect

Emulsion bin

- 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

Working arm

- Front Operating Boom enables the reparation in the radius of 3,5 – 4,0 m
- working arm assembled in the front of a truck, for higher safety of the operator and highest efficiency of reparation work
- ring of nozzles creating the mixture of aggregate and emulsion allowing homogenous coverage of aggregates with emulsion
- by-pass system allows reduction of the speed of aggregates leaving the nozzle and material lost around repaired place
- pneumatic suspension of working arm - pneumatic cylinder supporting the working arm
- easy adjustment of height of working arm accordingly requirements of operation
- operator panel assembled on the working arm allowing regulation of main functions of unit

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

Set of legs

set of 6 legs with manual height regulation
additional intermediate frame integrated in the unit construction for legs fitting
allowing quick and trouble-free dismantling of the unit from the truck without use of crane

Water spraying installation

water bin with capacity of 200 liters
water pump with electric drive
additional nozzle assembled by the working arm
additional spraying bars with nozzles in two aggregate bins
possibility to wash the aggregate mixing chamber
possibility to fill in a bucket of water or wash hands

Rain cover

rain cover for aggregate bin
to be opened manually

Security rear installation “lightning arrow”

assembled in the rear part of the unit connected with electric installation of the unit
panel allowing switching on and off
access platform allowing easy access to the engine compartment including ladder

Electronic system Patch Portal

electronic system based on GPS and GSM connection, allowing:

- tracing of the unit when operating
- calculation of material used during operation
- location of single potholes repaired
- check of weather conditions during operation by single potholes

system allows check of technical condition of main components of the unit
when problem, a message in the form of mail or sms will be automatically sent to predefined address or phone number of supervisor
system allows creation of database of several different units
system working based on SIM Card of a customer
system allows export, storage and data processing on external computer

The Blow Patcher technology of road repairing process

1. The examples of a damage of the road

The pictures show the holes in the road and a net of rifts all around the holes.



2. The right machine for reparation of the damage in the road is the STRASSMAYR STP 1010 Patcher

All the stages of the reparation will be done using the nozzle of the working arm, while the operator is secured from the following traffic by the body of the truck.



3. Drying and cleaning of the damage

The most important stage in the whole process of reparation. With the use of a special construction of a nozzle, with the pressed air coming out of the blast machine, the right cleaning and drying of a hole is ensured.



4. Spraying of the damage with emulsion

After switching on the emulsion pump, the emulsion will be sprayed from the same nozzle, covering the cleaned bottom of the damage and filling the rifts around the hole. The emulsion in filled rifts create the net of roots which will be an additional hold for the hole filling.



5. Filling the damage with the homogeneous mixture of emulsion and stones

After switching on the hydraulic drive of stone feeding screws, the stones will be transported to the nozzle, where the stone will be covered with the flowing emulsion, making the homogeneous mixture. This mixture blasted with the pressure to the hole will fill the damage.



6. Covering the repaired damage with clean and dry stones

After filling the hole with the homogeneous mixture, the emulsion pump will be switched off, and clean stones will be blasted with pressed air on the repaired damage, covering it with the protective surface. Thanks to this the following cars will be protected from emulsion rests.



7. Picture of the repaired damage

Just after the reparation the traffic can use the repaired road. The additional compaction will be done by the following traffic.



8. The cut of the road damage repaired with the technology of Blow Patching.

