

Road repairing equipment ARES 2



Operation principle for the road repairing equipment ARES 2:

The radiant panel is composed of ten MFB 4 burners and they have the role of heating through radiations the defected area. The used fuel (propane) comes from a group of 4 tanks, each weighing 33 kg. The combustion gases from these burners bathe the thermocontainer and they are evacuated in the superior part. The thermocontainer is heated and has the role of preheating the filler material that is going to be used. Above the thermocontainer there is another radiant panel, with two MFB 2 burners, which have the role of preheating the thermocontainer when the main radiant panel is not used. Both the thermocontainer and the radiant panel above these are modules which can function individually and constitutes actually the ARES 3 and ARES 4 versions. The equipment is easy to transport and it's set in position with the help of an adapted pallet like system. This allows the height adjustment of the radiant panel.

Application range for the road repairing equipment ARES 2

Having a radiant panel with a medium surface and a thermocontainer with discontinuous heating of the filler material, ARES 2 is destined for medium scale remedial works, especially for pits, tilters, crases and holes.

Advantages of using the road repair equipment ARES 2

- Permits the depositing and transport of fresh asphalt, in briquettes/chopped in cold conditions, without having the need to supply from asphalt stations during the cold season when these, in general, don't work.

- The possibility of warm recycling of the uncovered and grated asphalt or milled in a drum, lead to the reduction of costs with positive effects upon the ambient environment.
- The heating of the filler asphalt mixture only in the necessary quantity for a defect needs a reduced gas consumption compared with the one necessary maintaining the temperature in the thermocontainers with the aproximate 2-4 tones capacity, freshly aquired form stations, necessary for a days work.
- High energetic efficiency, and, implicitly reduced fuel costs through:
 - = Using combustion gases colected from the radiant panel for the heating and maintaining the temperature of the filler material from the thermocontainer/drum;
 - = Judicious heating only in the perimeter area of the defecte by individually switching each necessary burner;
 - = Thermostatic
 - = Thermal isolation
 - Safety in exploitation through keeping under control the burning (prevention, electronic ignition, ionization sensor for lack of flame, postventilation);
 - Possibility of setting the radiation intensity depending on the exterior temperature, the heating depth and the aging degree of the bitumen in the asphalt
 - Hygienic combustion (reduced NOX emissions)
 - Flexibility depending of the span and types of defects through the modular construction and multifunctional construction.

Main technical characteristics

Main radiant panel dimensions	1290 x 2169 mm
Secondary radiant panel dimensions	660 x 460 mm
Radiation surface for the main radiant panel	2,8 m ²
Radiation surface for the secondary radiant panel	0,3 m ²
Storage capacity for LPG	4 x 33 = 132 kg; 262 liters
Preaheating capacity for milled asphalt mixture	150 kg/cicle (10-15 minutes)
Instaled power for the main radiant panel	200 kW
Estimated consumption of fuel for the main radiant panel	14,4 kg/h
Instaled power for the secondary radiant panel	20 kW
Estimated consumption of fuel for the secondary radiant panel	1,44 kg/h