

Working procedure:

-If it is not allowed to raise the laying roadway, with the cutter you cut an amount of old flooring equal to the amount of new material to be added and take it away.

-In the milled recess, spread the new material, dosing it with a grit spreader.

-The cutter, passing over the virgin materials, cuts to the predetermined depth and leaves in the form of a curb in the center of the milled table, the old and new materials mixed together.

The self-propelled A.R.T. plant loads the materials into a buffer hopper, from where they come out dosed and are subsequently introduced into the dryer-mixer.

- In the interior of this the old bitumen is not damaged because the materials are heated without direct contact with the flame of the burner. The new bitumen, at the point where it flows, suitably dosed, finds the materials in the best conditions both to rejuvenate the old bitumen, and to obtain completely homogeneous coatings, even for long mixing.

-The adhesion of the anchoring hand is ensured by the perfect dedusting of the new laying surface, carried out by the cleaning equipment incorporated in the A.R.T. system.

At the exit of the dryer-mixer the product is conveyed to the paver through an anti-segregation hopper.

-The paver with hydraulically expandable iron lays out and compacts the new carpet to the desired width.

-A compactor roller completes the job leaving the road finished.

SELF-PROPELLED GROUP Main functions:

- Semi-trailer group towing
- Cleaning of the surface to be repaved
- Lifting of milled material
- Storage and heating of bitumen

It consists of:

- Chassis with 4 axles, 2 rear engines and 2 front steering.
- Diesel engine for the advancement and control of the loading and cleaning equipment.

Hydrostatic transmission for advancement with 2-speed gearbox. Pneumatic braking system with double circuit. Power steering.

Driver's seat with protective roof. Commands and control tools.

Connection by means of an audible warning device with the operator of the semi-trailer group.

- Cleaning and dedusting unit of the milled table for width up to 5.20 m. including on each side:

- 1 brush of synthetic material for cleaning the high edges near the cut.
- 2 metal brushes for the removal, from the edges of the milled surface, of the elements escaped in the formation of the cord pile.

- 1 metal brush to remove material in front of the steering wheels.

All brushes can be carefully positioned individually.

Behind the loader group, 4 suction ports, two central and two lateral adjustable to the width of the milled surface, perfectly dust the new laying surface.

The sucked powders are separated through a sedimentation chamber coupled to a battery of multi-cyclones and conveyed, by means of two augers, on the loader belt.

- Loading group of milled materials, placed in cord, consisting of:

- 2 conveyor blades that can be opened according to the width of the milled box.
- Conveyor-loader auger, for placing materials on the belt.
- Rubber elevator conveyor belt with studs, with zipper for hydraulically controlled positioning during transfers.

Bitumen tank heated by 2 automatic oil burners. Inside the tank are inserted the coils for the oleo-thermal heating of the pipes and the bitumen dosing pump and for the heating of the bituminous emulsion for the anchoring coat.

Pump for self-loading of the tank and internal circulation of bitumen.

SEMITRAILER GROUP Main functions:

- Dosing of milled material
- Bitum dosageand
- Heating, drying and mixing of the material
- Feeding the paver

It consists of:

- Semi-trailer chassis with 3 axles, gooseneck for coupling to the self-propelled group or, for fast transfers, to a suitable road tractor.

The semi-trailer is approved for free road circulation in Italy.

- Generator set driven by diesel engine:

It feeds the electric drives and the automatism of the assembly, as well as the electric motors of the material conveyer belt, the vacuum cleaner and the bitumen thermal group located on the self-propelled unit.

- Feeding and dosing group.

•Buffer hopper of the loaded material with level indicators connected to the automatism, 2 adjustable vibrators with intermittent operation to facilitate the outflow of materials.

•At the base of the hopper an extractor belt with variable speed electric drive doses the materials volumetrically and unloads them on the belt that feeds the dryer-mixer cylinder.

- Dryer-mixer cylinder.

Rotation by toothed pinion and crown. Internal palletizing for drying, heating and mixing materials.

Silent high pressure burner, operating on diesel, equipped with automatic regulation according to the temperature of the product at the exhaust, measured by optical pyrometer.

The burner acts in a protected combustion chamber, made of special steel, so that the material to be recycled does not come into contact with the flame, but only with hot gases.

Flue gas extractor with automatic intake adjustment.

Device for the automatic maintenance of the slope of the cylinder when the longitudinal slope of the road surface varies.

Variation range +/- 4%.

- Dosing pump of the new bitumen with variable speed electric drive, connected to the dosing of the material to be recycled.

Flow meter for flow control.

- Bar conveyor for the transport of the finished product, from the cylinder unload, to the anti-segregation hopper that feeds the paver.

Device for intermediate evacuation of the product, with conveyor for lateral unloading.

- Diesel tank built into the frame. Electric pump for filling the generator set tank, quick socket for manual cleaning lance

with diesel jet.

- Pneumatic system, powered by an electric compressor, for the operation of the servo controls; air vents for additional use.

- Command and control post, with seat and protective canopy; The operator may call the driver of the installation and the paver driver by means of audible warning devices, and vice versa.

- Alarm for the paver driver: A red flashing light lamp and horn indicate if the paver exerts pressure on the semi-trailer chassis.