INNOVATIVE BREAKTHROUGH IN ASPHALT RECYCLING TECHNOLOGY

RA Tech
Triangle

100% HOT ASPHALT RECYCLING PLANT
Adding scraped distressed old asphalt to the economy by transforming it into quality asphalt is a daily growing demand throughout the world. There is a continuous technological change involved. RATech (Recycling Asphalt Technology) is a new technological breakthrough in this field.
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Why RATech?

- RATech can produce bitumen base mixture by adding aggregate, bitumen and anti-aging additive to RAP material without the need for asphalt plant. In this way the overall production capacity of facility increases 100%.

- RAC is added to the mixture via weighing unit.

- RATech provides 45sec. bitumen base mixing in its own special mixer. Mixer is equipped with bitumen weighing unit and ant-aging additive dosing unit.

RAP exposure to flame RAP is indirectly exposed to 200-400°C, while it is directly exposed to low temperatures of 120-200°C. Therefore bitumen is protected against negative effects caused by high temperatures.
Sticking of materials to surfaces is prevented as RAP material is dragged along fixed ground by driving plates.

In binder and wearing course production RATech provides further 45sec. mixing time to RAP material with anti aging additives. In this way 70sec. mixing time is achieved during the 45 sec. batch time.

Flow of hot material is from top to bottom in the system. Heat loss of RAP material is prevented as it is stored in bin with a heating system.

RAP material will not stick as it is conveyed cold in the vertical elevator.

Equipped with discharge lid against blockage.
100% production with RATech

RATech production independent of asphalt plant;

- RAP + additional aggregate + additional bitumen + ant-aging additive are mixed within its own mixer producing 100% bitumen base asphalt.

Together with asphalt plant;

- Up to 70% RAP material used for binder course
- Up to 50% RAP material used for wearing course

Bitumen Base Production

Up to 100% RAP can be used for bitumen base production. RAP material heated in RATech is fed to RATech mixer via weighing unit. Required bitumen, aggregate and anti-aging additive is added to the mixture in conjunction with the values pre-determined in the laboratory. After specific mixing duration, bitumen base produced in mixer is discharged and directed to RATech ready asphalt bunker.

Binder and Wearing Course Production

For binder and wearing course production, weighed RAP material is mixed with anti-aging additive in RATech mixer for certain duration, then discharged and directed to asphalt plant mixer. Required bitumen, aggregate and other additives are added to the asphalt plant mixer in conjunction with the values pre-determined in the laboratory. After specific mixing duration the production in mixer is discharged and directed to asphalt plant's ready asphalt bunker.
RATech
CAPACITY CHART
- ACCORDING TO
MOISTURE CONTENT

Chart has been prepared at 15°C

Ton/h

Moisture%  0.5%  1.0%  1.5%  2.0%  2.5%  3.0%  3.5%  4.0%  4.5%  5.0%  5.5%  6.0%

E-MAK
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