

Colas Active Sealing with PenTack®



Preservation of asphalt pavements





Preservation and extension of the service life of asphalt pavements

Colas Active Sealing with PenTack is developed to preserve and give new life to old asphalt with ageing problems.

Colas Active Sealing with PenTack is a unique product that stops the degradation of asphalt pavements and extends the service life by up to 5 years. Our product regenerates the flexibility and adhesive properties of the existing binder and adds fresh binder and asphalt mortar to the asphalt layer. Follow-up treatments with our product will result in further extension of the asphalt pavement's service life.



Colas Active Sealing is today used all over Europe

Areas where Colas Active Sealing is used

- Civil Airports
- Military airports
- Race tracks
- Car testing areas
- Highways
- Primary roads
- Secondary roads
- Residential areas with soft asphalt types
- Car parks.

Problems prevented and solved with Colas Active Sealing

- FOD problems due to aggregate loss from the RWY and TWY asphalt surfaces
- Stone loss from surface dressing
- Aggregate loss from old base and binder courses - typically in industrial areas or new residential areas
- Micro surfacing and thin wearing course with aggregate loss and raveling
- HRA with stone loss
- Porous Asphalt with stone loss
- SMA with stone and mortar loss.



The benefits of Colas Active Sealing with PenTack®

- It is a cost-effective process that causes minimal inconveniences
- Our product mix is adjustable during application and is optimized continuously according to the condition of the asphalt
- It has a significant ability to penetrate deep into the asphalt
- It makes old bitumen flexible and strong again
- It strengthens the asphalt pavement and stops aggregate loss
- It rebuilds the asphalt mortar
- It makes the wearing course less susceptible to water penetration
- Retains the surface friction and thus can be used on sensitive areas.



Colas Active Sealing with PenTack® - a unique product for asphalt preservation

Colas Active Sealing with PenTack is a bitumen emulsion-based product that is applied cold. It consists of a regenerating emulsion and a modified bitumen emulsion mixed with water. These three components are adjustable during application thus ensuring a unique product mix that matches the varying conditions of the asphalt surface.

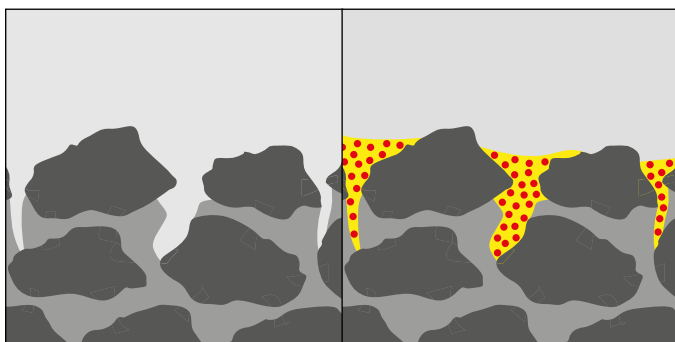
Finally, a fine aggregate is sprayed on the treated areas. The fine aggregate and the binder then forms new asphalt mortar and restores the microstructure of the surface. The size and type of the aggregate depends on the area and use of the asphalt.



Applying Colas Active Sealing with PenTack®

- We divert the traffic away from the working area
- If needed, works at airports and high traffic areas, can be done as night work
- Markings are shielded and preserved if required
- Spraying truck applies our product mix
- Areas that need extra will be hand sprayed
- The required number of hours for drying depends on the weather
- Sand spreading with suitable aggregate size
- Sweeping if necessary
- The area is ready for traffic.

Asphalt concrete with aggregate loss

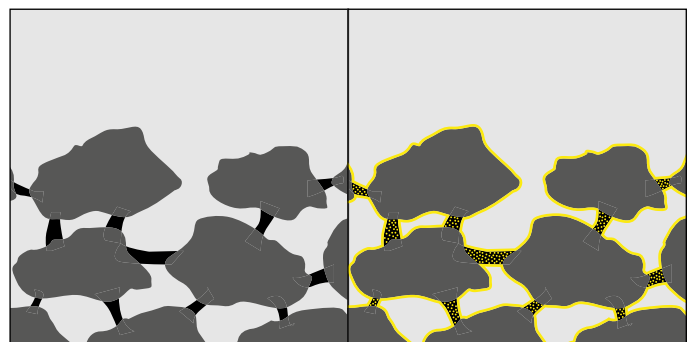


Before treatment

After treatment

The yellow parts in the illustration are the added binder.
The red dots represent the fine aggregate.
The combined result means added asphalt mortar and a restored microstructure on the surface.

Porous and noise-reducing asphalt types



Before treatment

After treatment

Colas Active Sealing with PenTack coats each aggregate without affecting the porous and noise reducing properties of the asphalt.
Hydro cleaning is required prior to treatment of this type of asphalt.



Colas Active Sealing offers

- A detailed presentation of our product and services, including case studies and test results
- Guidance on general asphalt pavement maintenance
- A no-obligation assessment of your asphalt pavements
- An indicative offer
- Reference lists from works all over Europe.



About us

Colas Active Sealing is a department within Colas Danmark A/S. Colas Danmark A/S is one of the asphalt industry's leading companies, with branches throughout Denmark and in Iceland. Since 1995, we have been part of the Colas Group. The Colas Group is a global market leader in the construction and maintenance of infrastructure.

We deliver solutions and advisory services for private and public sector customers. The industry is characterized by intense competition, and we expect that competitive parameters in the market will include energy efficiency and the ability to develop innovative and sustainable solutions that meet the needs of society for climate protection measures, CO2-reducing products, and new types of road surfacing.



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