

عنوان مقاله:

Overview of warm mix asphalt and it's performance

محل انتشار:

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خلاصه مقاله:

Increased environmental awareness and stricter emissions regulations have led to a development of warm mix asphalt (WMA) to reduce the high mixing temperatures of regular hot mix asphalt (HMA). Its benefits are reduction in energy consumption during production and reduced emissions during production and placement. The temperature reduction achieved by WMA comes from the use of various technologies that have been developed in recent years, and which can be classified in the following three groups: asphalt foaming technologies, organic additives, and chemical additives. All three methods reduce the viscosity of the binder at a certain temperature range, allowing the aggregate to be fully coated at lower temperatures than in HMA production. The objective of this paper is to clarify WMA as a new paving technology in the asphalt industry, describing warm mix technologies, evaluating WMA performance compared to traditional HMA and discuss about the benefits of this technology as well as its possible drawbacks and declare the need for further research in this area.

کلمات کلیدی:

Warm mix asphalt, Emissions, Warm mix asphalt performance, Hot mix asphalt

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