Warm mixes TEMPERA®

A MAJOR STEP TOWARDS SUSTAINABLE DEVELOPMENT, REDUCING THE ROAD INDUSTRY'S CARBON FOOTPRINT.

In an increasingly demanding ecological and energy context, lowering asphalt mix temperatures has become one of the major concerns of the various players in the road industry.

With a pioneering process launched in 2003, Vinci Construction has become a leader in the field with several million tonnes already applied. Today, all of Vinci Construction's so-called warm processes are grouped together in a range called Tempera®.

Key

figures

A reduction of the production temperature by

up to 50 °C

A reduction in greenhouse gas emissions

of 18 to 40%

Energy savings of

between 20 and 40%

Tempera® is made up of a set of technologies, both in terms of products and methods (anhydrous additives or foaming effect), which significantly reduce asphalt mix production and laying temperatures.

In this range, the mixes retain the same characteristics as conventional hot-mix solutions with the possibility, depending on the type of asphalt plant, the petrographic nature of the aggregates or the type of asphalt mix, of reducing the manufacturing temperature. This reduction, which can be as much as 50 °C compared with conventional asphalt mixes, is equivalent to reducing by at least 20% the amount of fuel oil required by the asphalt plant to heat the aggregates. The Tempera® range of asphalt mixes also offers very substantial reductions in carbon monoxide and dioxide, nitrogen and sulphur oxides emissions from fossil fuel combustion.

The very convincing results observed in the laboratory and confirmed on site validate the performance of the products and processes of the Tempera® range. Indeed, the possibility of working with a wide choice of new asphalt mixes or by integrating recycled asphalt mixes is validated. To date, the various types of aggregate tested have proved to be compatible with the Tempera® processes of the Vinci Construction range.

Adapted to all types of pavements and with high performance, the technologies in the Tempera® range provide a wide range of solutions to design environmentally friendly roads.



LOCATIONS

Drawing on its experience and recognized expertise both in France and internationally, Vinci Construction's technical network supports the company's agencies and industries in their many day-to-day activities. It perfectly reflects the company's decentralized organization, ensuring that technicians are always close to their clients.

The technical network carries out research, assistance and expertise missions for companies in the Vinci group, partner companies or external clients

Quality and respect for the environment are at the heart of Vinci Construction's business lines and are fully in line with the company's approach to sustainable development.

Through its work to develop and actively promote new solutions that are increasingly respectful of the environment, Vinci Construction is asserting its role as a responsible player aiming to preserve natural resources, the climate and people.

Located as close as possible to their business managers, the laboratories study all road engineering needs and provide optimal solutions.





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