

# Moderately Warm Asphalt Mixes (WMA)

At STRABAG, we are taking action against climate change. We mitigate our negative impact by reducing total emissions from construction materials, processes and machinery. To this end, we are driven by the intention to make our projects and activities climate neutral by 2040.

To achieve this goal, we apply in most of our asphalt mixing plants the Warm Mix Asphalt (WMA) technology – including its lowest carbon footprint process, the bitumen foaming process – which allows a reduction in production temperature of up to 40°C compared to conventional asphalt production technology (HMA).

## The result?

The same high quality asphalt mixes as conventional asphalt mixes, but with up to 80% lower emissions.



## Why is the WMA process preferable to the traditional asphalt production process?

- The lower production temperature with lower energy consumption results in lower emissions.
- The binder in the asphalt mix produced at lower temperatures is less oxidised, resulting in better performance over its lifetime.
- A moderately hot asphalt mix has the same characteristics after installation as conventionally produced asphalt mixes.
- The specification for the production and installation of asphalt mixes treats them as equivalent products, but gives preference to WMA because of its environmentally friendly production technology.
- The workability of WMA asphalt mixes is more favourable or can be time-stretched against the extent of temperature reduction.
- It results in a lower temperature paving environment for paving line personnel compared to asphalt mixes produced by conventional methods.
- No other equipment is required, the same paving machine line can be used to pave WMA asphalt mixes.
- The production of one truckload (approx. 26 tonnes) of WMA asphalt mix can save the equivalent CO<sub>2</sub> emissions of planting more than two trees compared to the conventional process.