



The KMA 240(i) mobile cold recycling mixing plant from WIRTGEN has reached the finals of the Bauma Innovation Award 2022 in the category 'Mechanical Engineering'.

IMAGE SOURCE: WIRTGEN GROUP

Innovations for greater sustainability in recycling & soil stabilisation processes

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World premiere of the KMA 240(i) cold mixing plant and technology updates for the WR series

Cold recycling technologies from **Wirtgen** are in use around the globe for climate-friendly and cost-effective recycling of construction materials. The new mobile KMA 240(i) cold mixing plant now makes on-site production of high-quality mixes even more efficient. In addition to bituminous bound mixes, the plant is also a cost-effective solution for the production of cement-treated mixes. The recyclers of the WR series

are used in recycling and soil stabilisation projects. The new Resource Efficiency System increases the degree of automation in the overall process, which, in turn, further increases efficiency. Furthermore, the new VARIO injection bar for binding agents offers the ability to regulate the injection pressure of water and bitumen in order to achieve more homogeneous distribution in the mixing chamber.

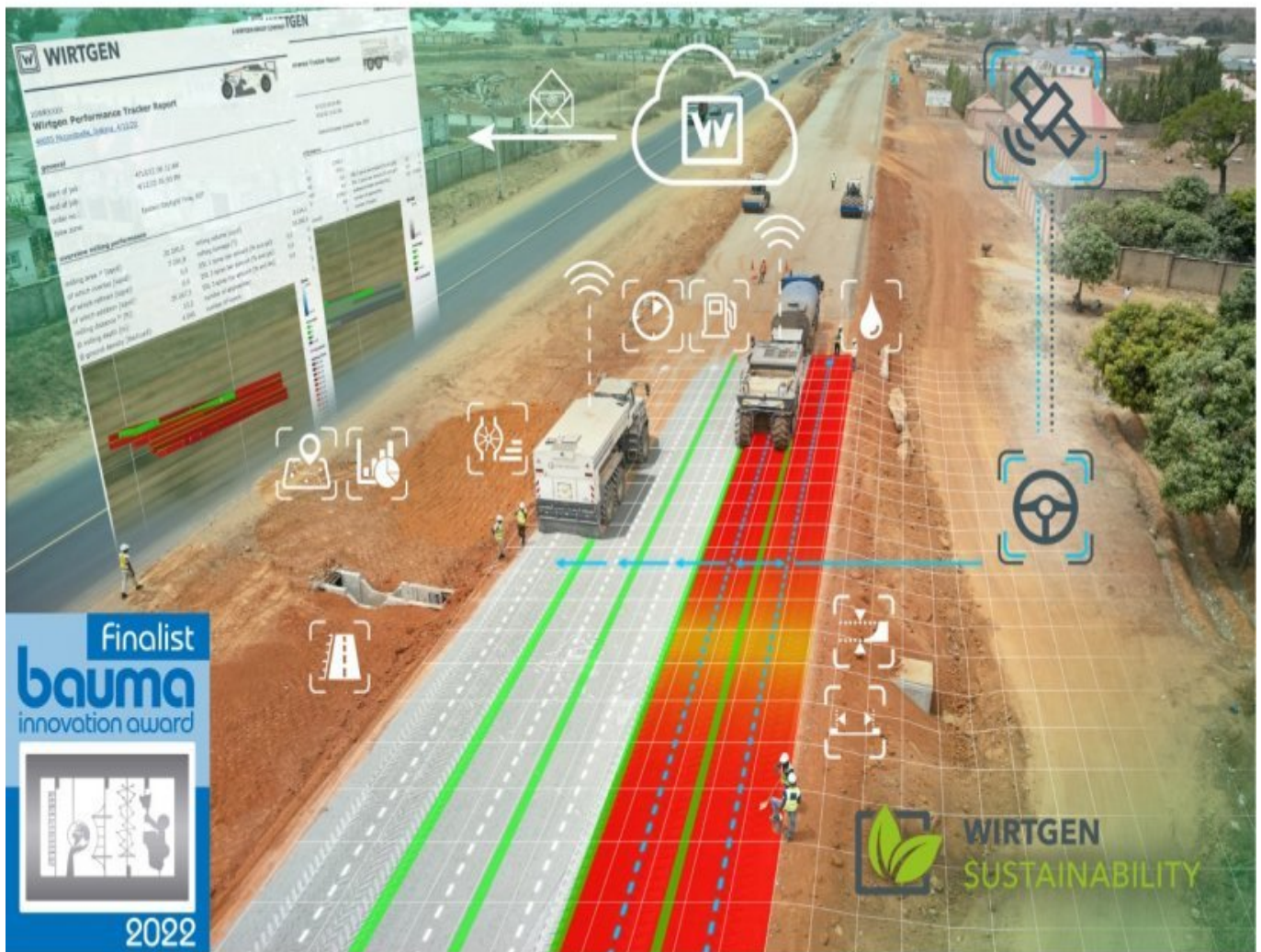
KMA 240(i) with double trough system

The new KMA 240(i) mobile cold recycling mixing plant from Wirtgen enables continuous and resource-efficient production of high-quality mixes. The innovative double trough technology makes it possible to double the speed of the production of mix from various different construction materials. The system enables precise, reliable and automatic addition of large amounts of hydraulic binding agents. As a result of this, the mix production process achieves the highest levels of efficiency and quality.

In addition to cold mixes for bituminous bound base layers, the plant can also produce mixes for cement-stabilised base layers (CTB) and roller compacted concrete (RCC) at rates of up to 240 t/h. These construction materials are integrated in the road construction cycle as high-quality mixes. They can be used for applications ranging from motorway, road and path construction to the construction of car parks or industrial areas

The KMA 240(i) can process an enormous variety of non-cohesive base materials. The newly developed double trough system with automatic self-calibration and precision weighing enables the constant addition of binding agents during the continuous mixing process. Depending on requirements, either small or large amounts of binding agents can be added in the process. Milled RAP or other granular material from old road surface layers and other materials from RC processing can be used as environmentally friendly construction materials.

The 100 percent recycling rate enables substantial CO₂ reductions and energy savings, while simultaneously minimising project costs and timeframes. The cold recycling mixing plant is mounted on a low-loader semi-trailer and has its own high-performance engine unit. This mobile concept enables fast and flexible redeployment of the plant to an enormous variety of different working locations.



The Resource Efficiency System from WIRTGEN has reached the finals of the Bauma Innovation Award 2022 in the category 'Digitisation'.

IMAGE SOURCE: WIRTGEN GROUP

Resource Efficiency System for the WR series

The Resource Efficiency System combines an automatic steering system and digital project site documentation in a single app that makes a significant contribution to the cost-effectiveness and resource-efficiency of soil stabilisation and recycling operations. The satellite-based guidance system enables precise and efficient completion of the successive project tasks. It steers the machine with a precision measured in centimetres on the basis of a previously calculated reference cut and a predefined overlap of adjacent cuts. At the same time, all relevant location-specific parameters are registered to provide a comprehensive database for site analysis and documentation purposes. In the case of soil stabilisers, these are, for instance, working width and depth, distance and area worked, fuel consumption and many other parameters. The

forward-looking system is also scalable, which means that other machines such as motor graders, rollers and compactors involved in the process can also benefit from the data.

VARIO injection bar for the WR series

In order to achieve consistently high quality of the mixing results, the addition of water and binding agents is regulated according to various parameters such as the working width and depth, the material density and the machine advance rate. Each injection bar has a maximum of 16 nozzles, each of which can be activated or deactivated at any time to vary the spraying width. The premiere of another innovation in the WR series – the VARIO injection bar for water, bitumen emulsion and foamed bitumen. The adjustable nozzle cross-section enables the regulation of the injection pressure and, in turn, the depth the spray jet penetrates into the milled granulate. The result is an even more even distribution of water, bitumen emulsion, or foamed bitumen throughout the entire mixing chamber.

Source: WIRTGEN GROUP