

PRESS RELEASE

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A SEISMIC leap for asphalt compaction

Dynapac's SEISMIC innovation is a well-known, tested and proven technology that has massive advantages for compaction. Thanks to SEISMIC any guesswork is removed from the picture, allowing the operator to focus on their main task; meeting the compaction requirements. Following the success with SEISMIC for soil compactors, the engineers at Dynapac have developed additions and modifications to accommodate for the changing characteristics of a hot asphalt mix, and can now present SEISMIC ASPHALT.

Asphalt challenges

When an asphalt mix is hot, it is rather easy to compact, but as the mix cools off (which can happen quite quickly depending on the weather), the mix soon becomes very stiff and sticky, thus much more difficult to compact. The compaction effort (amplitude) must be increased to be able to further increase the density as the mix temperature drops. An intelligent tandem roller should be able to account for this "stiffening phenomena" due to cooling of the mix to be effective even at lower temperatures.

Let SEISMIC do the job

The intelligent SEISMIC system improves compaction performance significantly compared to conventional compaction carried out at fixed frequency. SEISMIC automatically detects the optimum compaction frequency and continuously adjusts according to the resonance frequency of the drum and soil system, as well as changes in the asphalt temperature. In fact, the system can adjust the machine settings as often as 5 times per second. A Dynapac SEISMIC machine adjusts both the rear and front drum simultaneously, making the machine even more effective compared to other machines on the market. SEISMIC ASPHALT uses smart technology and sensors so the operator can get in the machine, set it and forget it. With a fully automatic system like SEISMIC no additional training is required – the system will do the work for you.

Benefits of working smarter

Advantages of SEISMIC ASPHALT include high-quality compaction, improved operator comfort and up to 25% fuel consumption savings when working in combination with EcoMode. As a result, this helps in reducing the CO₂ emissions by up to 25%. Additionally, noise levels are lowered due to lower frequency and a potential overall reduction in the number of passes required to complete the job.

Less vibration goes hand in hand with reduced wear and tear and thus lower maintenance and repair costs as well as increased lifetime of the machine. SEISMIC ASPHALT is not only about the compaction results. The lower frequency, noise and vibrations make for a much more comfortable working environment, both for the operator and the wider surroundings.

Tick of approval

To make sure that the SEISMIC ASPHALT system performs as expected, the team at Dynapac have performed a series of in-house trials and a multitude of field tests. The in-house trials were performed on various asphalt mix types and layer thicknesses. From the paved and compacted lanes, no less than 360 core samples were drilled and analyzed with respect to degree of compaction. What's the verdict? The tests show that the machine fitted with SEISMIC operates at a much lower frequency, and thus much lower energy and fuel consumption, while maintaining the same compaction performance as a conventional machine operating at a higher fixed vibration frequency. The results speak for themselves. SEISMIC ASPHALT brings so many advantages for the environment, efficiency, operator well-being as well as excellent compaction results. SEISMIC ASPHALT is available for CC2200 VI – CC6200 VI, CO2200VI-CO6200VI & CX8 & CX9 rollers including combi variants.

Dynapac is a leading supplier of high-tech soil and asphalt rollers, light equipment, and pavers committed to strengthening customer performance by being a partner on the road ahead. Dynapac is represented worldwide via its regional sales- and service offices and cooperates with an extensive and professional distribution network. Headquartered in Wardenburg, Germany, Dynapac has production facilities in Europe, South America and Asia. Dynapac is part of the FAYAT Group.

