

Compaction Redefined

SEISMIC SOIL by Dynapac



Your Greatest Work

Increase productivity, quality and operator well-being.
Reduce costs, fuel consumption and CO₂ emissions.



A New Take on Compaction

With a SEISMIC SOIL machine you benefit from high-quality results, increased productivity, energy and cost efficiency as well as operator comfort and simplicity.

The SEISMIC innovation by Dynapac is unique and is the only system on the market that is completely automatic with no need for additional operator training.

As opposed to conventional compaction SEISMIC reads the natural frequency of the material to maximize energy efficiency and compaction force. Operation is seamless with the system adjusting five times per second.

Results are proven with studies by KTH Royal Institute of Technology and VTI (Swedish National Road and Transport Research Institute) confirming SEISMIC technology improves compaction efficiency, reduces fuel consumption, and decreases environmental impact.

SEISMIC SOIL technology represents a leap forward in sustainable, efficient, and high-quality compaction.



Available on all single drum vibratory rollers from CA1500-CA6500.

SEISMIC SOIL

Perfect Results

SEISMIC automatically adjusts the drum vibration frequency in real-time for optimal, energy-efficient compaction – without operator intervention.



Innovation

The system provides real-time monitoring and continuously adjusts the frequency automatically based on the material. The fully automatic operation requires no additional training, eliminating the risk of incorrect compaction settings.

Precision

By working in harmony with the material being compacted, it prevents issues like bouncing and aggregate crushing. This fully automatic compaction process eliminates operator guesswork, ensuring optimal performance for any material or layer type.

Efficiency

SEISMIC is on by default and will take care of the compaction settings for you with adjustments happening in real-time and 5 times per second. The smart system ensures you are working at the optimal frequency at all times.

Productivity

By utilizing SEISMIC technology, the number of compaction passes can be reduced by up to 30%, which not only saves time but also reduces fuel consumption and equipment wear.

30%
Fewer passes

Fuel

When vibrating at the natural frequency, the drum's amplitude is optimized, as energy is efficiently supplied at the perfect time. This ensures effective compaction with minimal energy as well as cost and fuel savings of up to 55%.

55%
Less fuel required

CO₂

By optimizing energy consumption, SEISMIC SOIL minimizes fuel usage, which not only lowers operational costs but also translates into significant CO₂ reductions and less environmental impact.

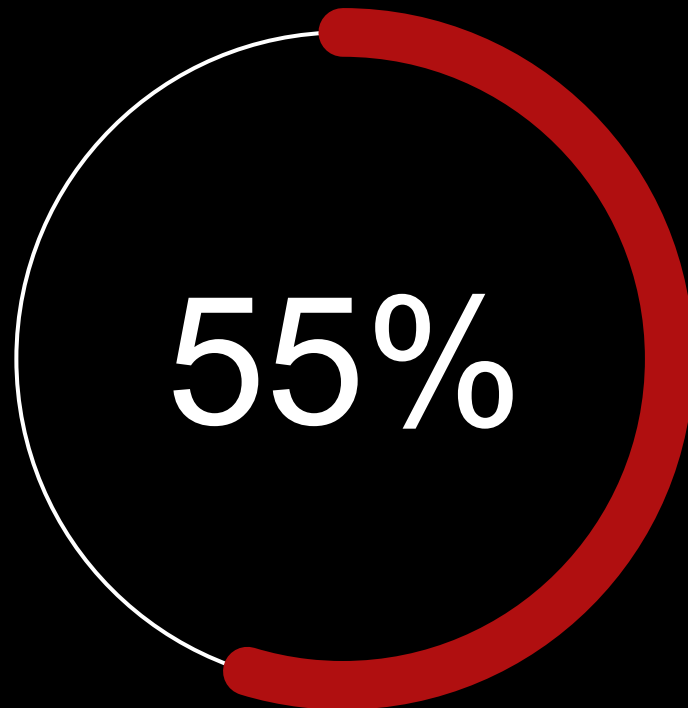
55%
Less carbon emitted

Noise

The machine operates at a lower noise level and transmits fewer vibrations to the cab, thanks to reduced frequency levels. Moreover, the roller works in harmony with the soil, ensuring a smooth operation without any bouncing.

2 dB
Less noise

SEISMIC SOIL cuts CO₂ emissions by up to 55%*, offering a more sustainable, fuel-efficient solution.



The fuel savings achieved through the energy-efficient SEISMIC SOIL technology directly translate into significant CO₂ reductions. By optimizing energy consumption, SEISMIC SOIL minimizes fuel usage, which not only lowers operational costs but also reduces the environmental

impact. Substantial CO₂ savings do not only contribute to a more sustainable operation: The savings also align with global efforts to combat climate change by reducing the carbon footprint associated with construction activities.

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Eliminate guesswork
and perfect your
compaction results



SEISMIC SOIL

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Questions? We're Happy to Help

Find your closest dealer at dynapac.com

