PRESSRELEASE FROM DYNAPAC CONSTRUCTION EQUIPMENT

For further information, please contact:
Name: Kim Hansen
Title: Product Manager Soil Rollers
Direct phone: +46705914131
E-mail: kim.hansen@dynapac.com

September 2019

CA1500 - CA6500 Seismic

Seismic is the innovation that lets the roller determine the optimum frequency for any compacted material, monitoring the variations and constantly adjusting to the changing conditions automatically. It will be available for CA1500-6500 rollers together with the Dynapac Compaction Meter including Active Bouncing Control. At the same time we are introducing Evib as complement to CMV in the compaction meter, the E module reflects the soil stiffness and can be showed as a loading value (Evib1) or unloading value (Evib2).

With the frequency automatically optimized at all times, Dynapac Seismic will reduce the fuel consumption, save the roller and can even reduce the number of passes required to reach the optimum compaction.

Let the machine sense the soil and cooperate with it!

Static linear load and amplitude connected to frequency and rolling speed are the most vital compaction parameters. Over many years Dynapac have been optimizing these parameters for the soil roller range in order to reach improved compaction efficiency and indicate the right number of passes. With a user-friendly interface we are guiding the operators - we have tools like the Dynapac Compaction Meter and Dyn@Lyzer to assist them. Manually adjustable frequency is available as well. Energy optimization comes with ECO mode and the efficient exciters that are now introduced on a part of the CA range.

The first step to let the machine make a decision regarding the compaction was the Active Bouncing Control, if the compaction energy goes back to the machine and possibly causing damage, we actively shut the vibration off. The machine in question cannot contribute to the compaction anymore. Avoiding bouncing is important to save the machine from downtime and to secure a high second hand value.

Static linear load is built into the machine together with well-defined amplitudes with the correct span between. Natural frequencies for the materials compacted with soil rollers has been known for many years along with the fact that hitting the material at the “right” time is more effective than doing it randomly. The parallel can be drawn to a person in a swing, putting in the energy in the right moment gives an obvious advantage in an increased amplitude. We detect this precise frequency in the compacted material and allow the roller to adjust the vibration frequency to continuously hit with the right timing. There are savings to be made in number of passes, fuel consumption, environmental impact as well as prolonging the lifetime of the roller.