DYNAPAC
COMPACTION EQUIPMENT

Compaction Analyzer
A Dynapac vibratory roller with Compaction Meter and DCA

A reliable system for measuring compaction and ensuring top quality on your next project: A Dynapac vibratory roller with Compaction Meter and DCA Field Computer. The operator can continuously read off the compaction result on his instrument panel. In contrast to conventional control methods, the Compaction Meter gives continuous measurements, not just spot-checks.

The Dynapac Compaction Analyzer (DCA) registers all Compaction Meter Value (CMV) data while displaying the compaction results on the operator’s computer screen.

Dynapac have developed this unique combination, which will help you to compact correctly from the beginning.

A real profit maker!

The roller

Careful compaction of each layer of soil greatly improves the load-bearing capacity of the soil masses. Homogeneous capacity in every layer will help to prevent uncontrolled settling in the future.

When properly used, a vibratory roller is the perfect machine for good compaction. If you can also use the roller with an instrument for measuring compaction, it becomes an even more effective tool in the compaction process. It helps you locate areas where further compacting is necessary for homogeneity and satisfactory compaction characteristics.
The Compaction Meter gives a measure of the bearing capacity of the ground expressed as a Compaction Meter Value (CMV), which normally increases with the number of passes. An accelerometer, mounted on the vibrating drum of the roller, continuously records the impact forces that arise when the vibrating drum works on the surface. Signals from the accelerometer change as the ground becomes harder and more stable. The processor uses a patented principle to convert the signals to values that the roller operator can read on the instrument panel.

Since the CMV has to be translated into a degree of compaction, a test surface is rolled at the start of each new compaction job. This allows correlation of the CMV to the degree of compaction.

Application advantages of the Dynapac Compaction Analyzer:
• Compaction energy can be concentrated on surfaces that need it most
• No unnecessary compaction need be done on finished surfaces
• The risk of ‘undercompacting’ and ‘overcompacting’ is eliminated
• Each step of the work is documented and quality can be determined immediately

In other words, it increases your ability to obtain:
• Good compaction results, with maximum homogeneity in the bearing capacity of each layer
• A simple assurance of quality
• More efficient compaction
• The best possible economy for both contractor and customer

DCA stands for Dynapac Compaction Analyzer. It registers all CMV data while displaying the compaction results on the operator’s computer screen. Based on either experience or on-site calibration, the CMV limit values can be adapted to each individual compaction job, so you can see exactly which sectors need more compaction. It’s a retrospect of the compaction process.

The DCA is portable, and measurement result can easily be studied back at the office. A memory card allows easy transfer of measurements to a standard computer for permanent storage.
Advantages of the DCA

- Several machines can be prepared, and the system is easy to move between machines
- User-friendly, modern interface in a PC-based Windows environment
- Off-site training with the built-in simulator
- 12.1” full-colour touch screen
- 3-button remote for better operator comfort
- Electronic keyboard for entry direct in the machine
- Mobile memory for permanent storage
- Dynapac CompBase software included

About the DCA unit

Usually installed in a special attachment in the operator’s cabin next to the instrument panel.

- Stores 4 million square metres
- Collects and compiles CMV data
- Several languages to choose from
- Help function on screen
- Roller data
- Shows remaining memory
- Time and date
- Runs on the roller’s 12 V battery
- Computer weight: 5.0 kg
- 220 V adapter
- Industrial computer, resistant to dust, moisture and vibrations

The DCA unit can be factory-installed in the following machines

- CA 152–602