## DYNAPAC SOIL COMPACTORS

Dynapac CA1300, CA1400, CA1500, CA2500, CA2800, CA3500, CA3600, CA4000, CA4600, CA5000, CA5500, CA6000, CA6500, CA702



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Atlas Copco

PRESENTING THE COMPLETE DYNAPAC SOIL COMPATOR RANGE These machines and their variants, are the fifth generation of Dynapac CA single drum vibratory rollers. With their state-of-the-art designs and unique features, they represent yet another example of Dynapac's innovative thinking.

# A NEW PERSPECTIVE ON COMPACTION

#### THE COMPLETE PICTURE

There is much more to soil compaction than the roller. When we developed this generation, we applied our unmatched know-how in the field of soil compaction to the entire compaction mission. This ranges from planning the task, through the rolling phase, to analyzing the results once the job is complete.

#### FAST, SIMPLE, PROFITABLE

Our aim is to make your compaction mission as fast, simple and profitable as possible, from beginning to end. To achieve this, we focus on three clear steps: Preparation, Performance and Protocol – we call it Mission Compaction.

#### **OPTIMIZED PARAMETERS** Provide superior compaction performance.

**ACTIVE BOUNCING CONTROL** 

Prevents misuse to the machine and over-compaction.

CROSS-MOUNTED ENGINE

A revolution in serviceability.

LOW NOISE AND LOW FUEL CONSUMPTION Sustainability and working environment in focus.

> **MISSION CONTROL** Puts you in full control of the entire compaction process.

#### EXPERTISE IN EVERY ASPECT

Experience is the base of excellence. Dynapac will always help you to reach perfection.



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### DYNAPAC SOIL COMPACTOR RANGE

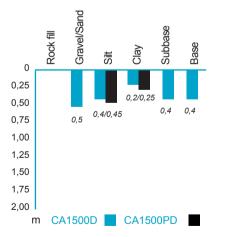


## SMALL, MEDIUM, LARGE OR XL



The small Dynapac soil compactors are vibratory rollers designed for compaction operations in pipe trenches, compacting roads, streets and parking lots. Due to the small size and exceptional maneuverability, these rollers are also well suited for compaction on large building foundations and industrial construction sites and in cramped spaces in connection with refilling work. The rollers are also suitable for repair work and gives good maneuverability even on very steep slopes. All types of supporting and reinforcement courses can be compacted.

The PD version, equipped with pads and drum drive, is especially suitable for the compaction of silt and clayey soils.

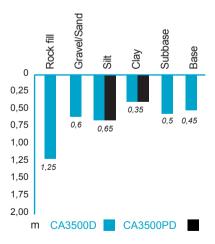


Operating mass Static linear load Drum width 5000 - 7000 Kg (11,000 - 15,500 lbs) 13 - 20 kg/cm (73 - 115 pli) 1370 - 1676 mm (54 - 66 in)



The Dynapac CA2500 - CA4600 are medium heavy vibratory soil compactors, typical utility machines, designed for long working days in tough applications. All types of base courses and reinforcement courses can be compacted to considerable depth. The 35 mm hitch drum ensures excellent resistance to wear - even in compaction operations on rockfill.

The padfoot version has it's major range of application on cohesive material and disintegrated rock. All types of base courses and subbase courses can be compacted.



 Operating mass
 10 000 - 15 000 Kg (22,000 - 33,000 lbs)

 Static linear load
 25 - 40 kg/cm (140 - 225 pli)

 Drum width
 2 130 mm (84 in)



## - DYNAPAC OFFERS THEM ALL

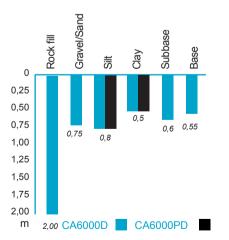


#### *DYNAPAC CA5000, CA5500, CA6000, CA6500*

The CA5000, CA5500, CA6000 and CA6500 are heavy rollers designed for the toughest compaction applications. Rockfill can be compacted in 2-meter thick layers, in which the size of the rocks can be up to 1 meter in diameter. The smooth drum shell thickness is 43 (CA5000) and 48 mm (CA 5500, 6000 and CA6500), which gives a long productive lifetime for compaction of rockfill, gravel and sand. Pad-foot drum is available for compaction of silt and clay materials. These rollers are a great investment for the bigger projects as compaction performance and capacity are outstanding.



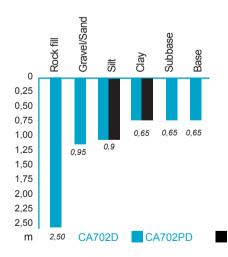
The CA702 is Dynapac's heaviest vibratory soil compaction roller. The machine has been specially developed for the heaviest large-scale compaction work on earth, rockfill and most types of soils and clays. Typical applications include dams, airfields, harbors and major railway and road projects.



 Operating mass
 16 000 - 21 000 Kg (35,000 - 46,500 lbs)

 Static linear load
 50 - 65 kg/cm (280 - 365 pli)

 Drum width
 2 130 mm (84 in)



Operating mass Static linear load Drum width 27 000 Kg (60,000 lbs) 80 kg/cm (450 pli) 2 130 mm (84 in)

## **MAKE USE OF SCIENCE IN COMPACTION**



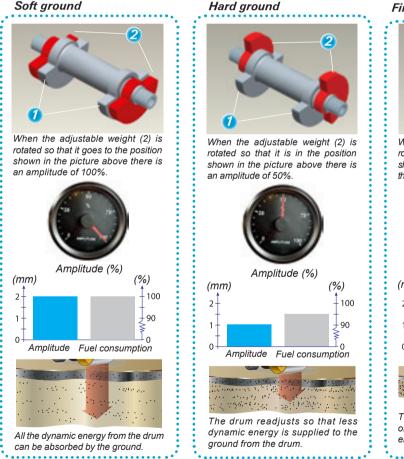
#### **PREPARATION - COMPBASE SOFTWARE**

CompBase is the only recommendation tool in the industry that can provide detailed compaction data and capacity information based on full-scale tests. The machine and method selection is based on the material to be compacted and provides information on the expected depth effect and degree of compaction after any given number of passes. In addition to this; CompBase recommends suitable amplitude and rolling speed for optimum performance.

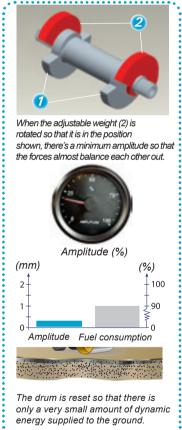


#### PERFORMANCE - DYNAPAC COMPACTION OPTIMIZER (CA3500/4000/5000/6000)

We all know that the whole idea with compaction is to reach the correct set of parameters for the type of work in question. There is no point in overdoing anything – it only costs time and fuel, without improving the final result. Dynapac Compaction Optimizer, DCO, is an innovative system based on the well-proven compaction meter. The stiffness of the ground constitutes the input value for the setting of amplitude of the vibratory drum. The operator gets full control and the project benefits from this in every respect.



#### Final compaction





#### PROTOCOL - DYN@LYZER FOR SOIL WITH GNSS

In all projects it is vital to do the right thing - and to do things right. Also in compaction, solid documentation is worth a lot more than spot checks and guesswork. Dyna@Lyzer, includes a field computer which is fed continuously with measurement data – not just random checks. The operator reads the results in real-time and can easily reach top performance from the beginning. The Dyna@Lyzer is a unique Dynapac feature that improves the result of every job. A real profit maker. The results of the compaction are shown directly on the screen of the portable Dyna@Lyzer unit. The measurement values can easily be transferred to a desktop computer.

#### MAP GROUND CONDITION

Map the ground condition and the material to be compacted. If your CA roller is equipped with a Compaction Meter with Dyna@Lyzer (with GNSS), you can run the machine over the area in advance. This will give you a chart showing ground condition and material to be compacted, at the same time revealing weak areas before you start rolling.

#### SELECT MACHINE AND COMPACTION STRATEGY

Dynapac CompBase software bases the selection of machine and method on the material to be compacted. The software provides information on the expected depth effect and degree of compaction after any given number of passes. CompBase also recommends suitable amplitude settings and rolling speed for optimum performance. This saves fuel and reduces environmental impact.



TOOL: DYNAPAC COMPBASE SOFTWARE

MAP GROUND CONDITION, MATERIAL & COMPACTION SPECIFICATIONS SELECT MACHINE & COMPACTION STRATEGY CALCULATE COMPACTION ACHIEVEMENT



#### FEEDBACK ON PROGRESS AND POSITION

Your fifth generation Dynapac CA soil compactor is warmed up and ready to roll. Start compacting and the Dynapac CA roller, with Compaction Meter and Dyna@Lyzer, gives you continuous information on the increase in compaction and reveals weak areas. Compaction results are displayed on the computer screen, allowing you to focus the compaction energy on the ground surfaces that need additional compaction. The screen also displays the position of the roller in relation to a selected reference line for the section, so you always know precisely where you are.

#### SUPERIOR COMPACTION PERFORMANCE

The new CA rollers have static linear loads in steps of 5 kg/cm. This, combined with an optimum high amplitude, enables you to

compact rockfill down to 1.65 meter with a Dynapac CA4000D. The better depth effect means higher volume capacity and less passes to reach compaction specifications, thus saving fuel and reducing cost. Environmental impact is also lower. If the roller is equipped with the Dynapac "Silent Weights" eccentric concept, this enhances compaction performance even further.

#### ACTIVE BOUNCING CONTROL (ABC)

This feature on the new CA generation prevents damage and prolongs the lifetime of the roller by eliminating drum double jump, or over-compaction – an action that can destroy components in the machine. ABC is standard in Dynapac Compaction Meters.



*Tools: A fifth generation Dynapac CA soil compactor, equipped with Compaction Optimizer, incorporating Compaction Meter and Dyna@Lyzer with GNSS (optional).* 

STATIC LINEAR LOADS 13 - 80 KG/CM AMPLITUDE UP TO 2,1 MM ERGONOMICALLY DESIGNED CAB CONTINUOUS OPERATOR FEEDBACK ADVANCED SAFETY FUNCTIONS LOW FUEL CONSUMPTION AND ENVIRONMENTAL IMPACT



#### THE MACHINE TAKES THE STRAIN

The ergonomically designed, air-conditioned cabs on the new generation offer a high level of operator comfort and good visibility over the work area and surroundings. The noise level from the engine is very low. A feature unique to Dynapac CA rollers is a spin-around seat, steering module and display cluster, which allows movement of up to 180 degrees without stress to the neck or body.

#### **SAFETY FIRST**

Safety functions include Electronic Drive Control with a "quick brake" function, which shortens braking distances if the lever is moved very fast, and a tilt indicator. Loss of traction, even in the toughest conditions, is swiftly counteracted by an easy-touse toggling gear shifting system, or with an anti-spin system.

#### LOWER FUEL CONSUMPTION AND ENVIRONMENTAL IMPACT

The engines can have the Dynapac EcoMode fuel saving system that minimizes fuel consumption and CO<sub>2</sub> emissions by ensuring that the roller does not consume more power than needed at any time. This, together with higher compaction parameters and other improvements, has resulted in a drastic reduction in fuel consumption compared to the previous generation.

#### BEST POSSIBLE OVERALL ECONOMY

With Dynapac performance, you can achieve first-rate compaction results with maximum uniformity in terms of the bearing strength of each layer, with the best possible overall economy, i.e., lower cost per compacted cubic meter. Mission target reached!



### **BIG FUEL SAVINGS WITH ECO!**

The Atlas Copco Road Construction Equipment division is proud to announce that we have fulfilled our promise to offer customers soil and asphalt rollers with very low fuel consumption. The secret is our EcoMode.

We closely monitored the fuel consumption of the new Dynapac soil compactor range. As a result, we can now confirm that in EcoMode, all the rollers consume 15–20% less diesel fuel than our previous range without EcoMode.

RCE is one of the first manufacturers to equip its rollers with Stage IIIB/T4i engines with very low emissions. The entire ran-

ge of the new CA soil compactors have engines of this type. When using the Eco-system the percentile saving is higher during compaction than during idling and transportation. Combine the 15-20% fuel savings with biodegradable hydraulic oil and very low noise levels and the result are "green" rollers.

Customers who choose the traction/performance package "Anti-spin & ECO" will have EcoMode included. EcoMode always comes with adjustable vibration frequency and a frequency meter. For Stage IV/T4f engines also Traction Control is with EcoMode.

## During compaction FEATURES AND BENEFITS

**PERFORMANCE/DURABILITY** Thick drum shell ensures compaction performance and long running time before change.

**PERFORMANCE** Easy accessable scrapers divided to follow drum movement and replacement at low cost.

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**COMPACTION PERFORMANCE** Several compaction data to choose among.

> **STATIC LINEAR LOAD** in steps of 5 kg/cm means there's a machine for all needs.

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#### **LIGHTS**

Night or day? Choose working/driving lights according to your needs.

**OPERATOR'S STATION** Three main configurations to choose from, and numerous options. **PERFORMANCE** Clean inlet air (combination and cooling) taken in as high as possible.

> SERVICEABILITY Cross-mounted engine gives unique service access

> > **SAFETY** Sloping engine hood and 1x1 meter view front & rear.

> > > **SAFETY/PERFORMANCE** Heavy duty rear axle with failsafe brakes.

*ENGINES FROM CUMMINS OR DEUTZ* 4 or 6 cylinders, Stage IIIA (Tier3)and up, your choice.

## AFTER COMPACTION - PROTOCOL DOCUMENTING THE MISSION TO ASSURE QUALITY

#### DYNAPAC'S DOCUMENTATION SYSTEM

Using the built-in Compaction Meter with Dyna@Lyzer with GNSS, each stage of the compaction work is documented and all measured values can be stored. The analysis function enables the compaction work to be replayed.

#### **MACHINE USE - LEVEL OF EFFICIENCY**

It enables the complete project to be studied in the office after the task is completed to see how many runs have been allocated over the surface and the level of compaction achieved. It thus provides the opportunity to assess if the roller has been used efficiently.

#### **ELIMINATING WEAK SPOTS**

Studying the results reveals any areas that may not have reached compaction due to "hidden" weak spots and measures can be taken to remedy this before construction work is carried out on top.

#### **QUALITY ASSURANCE /** ACCEPTANCE INSPECTION

High quality documentation is generated for quality assurance and as an indication for acceptance inspection. The results from the acceptance inspection can be entered in the Dyna@Lyzer so that the results from quality control can be collected together in one protocol.



*Tools: PC and data from fifth generation Dynapac CA soil compactors equipped with Dynapac Documentation System.* 

HAS THE SOIL COMPACTOR BEEN USED EFFICIENTLY? LOCATING POSSIBLE WEAK SPOTS QUALITY CONTROL DATA FOR ACCEPTANCE INSPECTION



## A WORLD FIRST, WITH UNIQUE ADVANTAGES

#### **ENGINES FROM CUMMINS OR DEUTZ**

The new soil vibratory rollers are the first of their type with cross-mounted engines at the rear – and this provides excellent serviceability. They can be equipped with the latest engine emission stages from Cummins or Deutz.

#### **VERY LOW NOISE LEVEL**

The noise level is very low, since the cooling air intake is placed at the top of the hood with the outlet down the sides, combined with the ejector exhaust outlet.

#### **CLEAN INLET AIR**

The position of the combustion air intake also has the advantage of keeping the inlet air as clean as possible, an important factor in the dusty environments in which these rollers operate.

#### OPTIMAL WEIGHT DISTRIBUTION AND EASE OF TRANSPORTATION

The cross-mounted engine also gives both optimal weight distribution and ease of transportation as it keeps down machine length. The low profile of the hood gives a 1 x 1 meter view to the rear.

#### THICK DRUM SHELL

Ensures a long running time before a drum change is required.

#### **DIVIDED SCRAPER BLADE**

Keeps drum free of material during operation and can be replaced quickly and at low cost.



#### ROAD CONSTRUCTION EQUIPMENT SERVICE

Servicing your machines regularly is very important to ensure reliable operation and a long service-life. With pro-active service and preventive maintenance you minimize the risk of high production costs and breakdowns. You can select a service contract that meets your requirement for professional service in order to get the most out of your machine investment.

#### ALL-IN-ONE BOX KITS

An all-in-one box, tailored to match your equipment. The parts you need, when you need them! An all-in-one box contains all the parts required as part of the equipment's scheduled maintenance program. When installed by an Atlas Copco certified technician, you keep your downtime to a minimum and your equipment in top condition its entire life.

Easy to obtain and attractively priced, the most effective solution to keep your maintenance budget low.

#### Find a suitable kit at dynapac.com / kitselector

#### **FLUIDS**

- · The right fluid optimizes machine performance
- Simplified selection process, less time spent on finding the right oil
- Delivery in a handy container, no need for transfer from an oil drum
- All-in-one delivery, less time spent on waiting and dealing with different suppliers
- One invoice, less administration

Find a suitable fluid at dynapac.com / fluidselector

Please contact your sales rep for more information.

### A NEW LEVEL OF SERVICEABILITY



#### SERVICE LEVEL ALERT

A service interval alert in the instrumentation display for comfort cabs indicates when service is required and what action to take.

#### **EXCELLENT ACCESS TO ENGINE**

The cross-mounted engine at the rear offers excellent access for all service and maintenance needs. The engine hood is easy to open for quick maintenance and the hydraulic pumps are in line with the engine and fully accessible for service.

#### SUSTAINABILITY PACKAGE

The CA rollers can be equipped with a Sustainability Package featuring an rpm management system, biodegradable fill-forlife hydraulic fluid, 50 hours service kit, electrical engine block heater and working lights with LED lamps.

#### **CONTROLLING LIFE-CYCLE COSTS**

Dynapac's CostCtrl software on the web and service contracts, including extended warranty, enable you to gain full control over life-cycle costs and maximize machine availability.

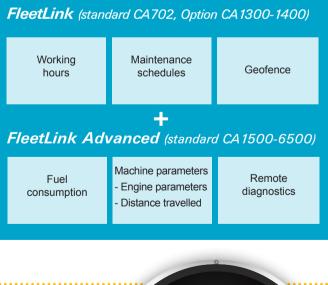
#### Service

SERVICE LEVEL INDICATOR EXCELLENT ACCESS TO ENGINE/COMPONENTS SUSTAINABILITY PACKAGE CONTROL OVER LIFE-CYCLE COSTS INTERNATIONAL SERVICE NETWORK FLEETLINK

#### WHEN YOU NEED US, WE'RE THERE

Dynapac's international service network offers full support and assistance with all parts and service needs.

#### FLEETLINK





### A WIDE SELECTION, DYNAPAC CA1500 - CA6500



Dyn@Lyzer, preparation Dyn@Lyzer, complete installation Decal, risk location Emergency stop, dual external Engine block heater (120 v or 240V) Environmental Certificate (Swedish) Fire extinguisher

#### Hearing protector Heater, socket (240V) for Cabs Hydraulic fluid, bio Lights, licence plate Lights, reversing, LED Scrapers, fixed steel, smooth

Scrapers, flexible, smooth

Tachograph Tachograph, preparation Tool box Tool set Field kit, Bolt-on padfoot shell (CA1500D-CA5000D) Field kit, Drum conversion, D to PD (CA5500-CA6500)

### TECHNICAL DATA DYNAPAC SOIL COMPACTOR RANGE

	Operating mass, incl. Cab (kg)	Static linear load, kg/cm	Drum width, mm	Frequency / Amplitude	Diesel Engine Power, kW
CA1300D	5000 (ROPS)	13/15	1370	35 Hz / 1.7 mm	55 (IIIB/T4)
CA1300PD	5000 (ROPS)		1370	35 Hz / 1.5 mm	55 (IIIB/T4)
CA1400D	6 500 (ROPS)	20	1676	32/32 Hz / 1.7/0.8 mm	55 (IIIB/T4)
CA1400PD	6 500 (ROPS)		1676	32/32 Hz / 1.6/0.8 mm	55 (IIIB/T4)
CA1500D	7 200	21	1676	32/36 Hz / 1.8/0.8 mm	55 (IIIB/T4) / 74 (IIIA/T3)
CA1500PD	7 300		1676	32/36 Hz / 1.8/0.8 mm	55 (IIIB/T4) / 74 (IIIA/T3)
CA2500D (3.3)	10 200	26	2130	30/30 Hz / 1.8/0.9 mm	82 (IIIA/T3)
CA2500D	10 300	26	2130	33/34 Hz / 1.8/0.9 mm	89 (IV/T4) / 97 (IIIA/T3)
CA2500PD	11 200		2130	30/30 Hz / 2.0/1.1 mm	89 (IV/T4) / 97 (IIIA/T3)
CA2800D	12 200	36	2130	33/34 Hz / 1.8/0.9 mm	97 (IIIA/T3)
CA3500D	12 100	36	2130	31/34 Hz / 1.9/0.9 mm	97 (IV/T4) / 97 (IIIA/T3)
CA3500PD	12 100		2130	30/30 Hz / 1.8/1.0 mm	97 (IV/T4) / 97 (IIIA/T3)
CA3600D	12 500	36	2130	31/34 Hz / 1.9/0.9 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA3600PD	12 500		2130	30/30 Hz / 1.8/1.0 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA4000D	13 300	41	2130	30/30 Hz / 2.0/0.8 mm	119 (IIIA/T3 & IIIB/T4i)
CA4000PD	13 300		2130	30/30 Hz / 2.0/1.0 mm	119 (IIIA/T3 & IIIB/T4i)
CA4600D	13 700	41	2130	30/30 Hz / 2.0/0.8 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA4600PD	13 600		2130	30/30 Hz / 2.0/1.0 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA5000D	16 200	50	2130	29/30 Hz / 2.1/0.8 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA5000PD	16 500		2130	29/30 Hz / 1.9/1.0 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA5500D	18 400	55	2130	29/30 Hz / 2.1/0.8 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA5500PD	18 200		2130	29/30 Hz / 2.1/0.8 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA6000D	19 500	60	2130	29/30 Hz / 2.1/0.8 mm	150 (IIIA/T3 & IIIB/T4i)
CA6000PD	19 300		2130	29/30 Hz / 2.1/0.8 mm	150 (IIIA/T3 & IIIB/T4i)
CA6500D	20 900	65	2130	29/30 Hz / 2.1/0.8 mm	150 (IIIA/T3 & IIIB/T4i)
CA6500PD	20 800		2130	29/30 Hz / 2.1/0.8 mm	150 (IIIA/T3 & IIIB/T4i)
CA702D	26 900	81	2130	28/30 Hz / 2.0/1.3 mm	164 (IIIA/T3)
CA702PD	26 900		2130	28/30 Hz / 2.0/1.3 mm	164 (IIIA/T3)
DYNAPAC (	COMPACTION (	OPTIMIZER			
CA3500DCO	12 200	36	2130	28 Hz / 0-2 mm	97 (IV/T4) / 97 (IIIA/T3)
	13 400	41	2130	28 Hz / 0-2 mm	110 (IIIA/T3 & IIIB/T4i)

CA3500DCO	12 200	36	2130	28 Hz / 0-2 mm	97 (IV/T4) / 97 (IIIA/T3)
CA4000DCO	13 400	41	2130	28 Hz / 0-2 mm	119 (IIIA/T3 & IIIB/T4i)
CA5000DCO	16 300	50	2130	28 Hz / 0-2 mm	128 (IIIA/T3) / 129 (IIIB/T4i)
CA6000DCO	19 600	60	2130	28 Hz / 0-2 mm	150 (IIIA/T3 & IIIB/T4i)

## **COMMITTED TO SUSTAINABLE PRODUCTIVITY**

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time.

This is what we call - Sustainable Productivity.

