

DYNAPAC SOIL COMPACTORS



Dynapac CA1300, CA1400, CA1500,
CA2500, CA3500



PRESENTING THE COMPLETE DYNAPAC SOIL COMPACTOR 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.



OPTIMIZED PARAMETERS

Provide superior compaction performance.



LOW NOISE AND LOW FUEL CONSUMPTION

Sustainability and working environment in focus.



ACTIVE BOUNCING CONTROL

Prevents misuse to the machine and over-compaction.



MISSION CONTROL

Puts you in full control of the entire compaction process.



CROSS-MOUNTED ENGINE

A revolution in serviceability.

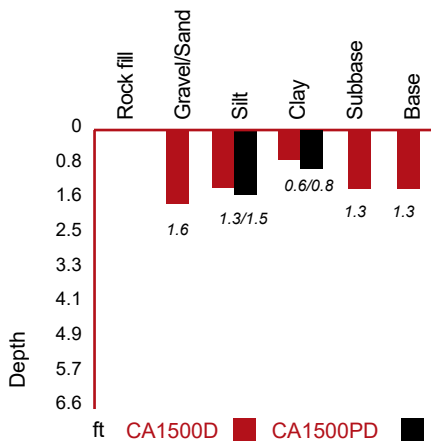




DYNAPAC CA1300, CA1400, CA1500

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 of 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.

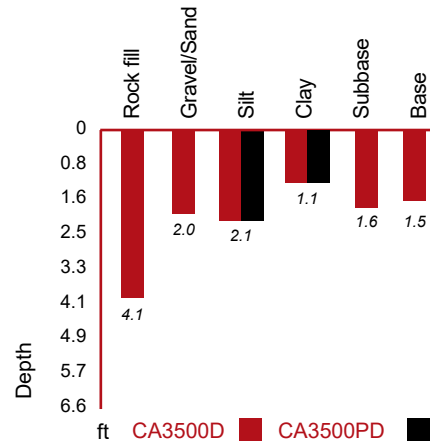
The PD version, equipped with pads and drum drive, is especially suitable for the compaction of silt and clay soils.



DYNAPAC CA2500; CA3500

The Dynapac CA2500 - CA3500 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 1.37 inch (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 sub-base courses can be compacted.



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

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)

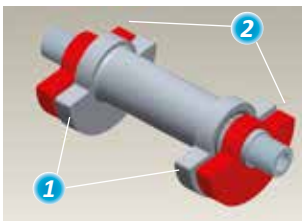
PREPARATION - COMBASE SOFTWARE

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)

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.

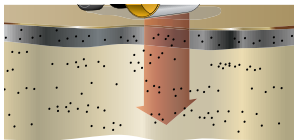
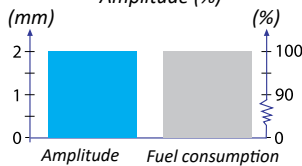
Soft ground



When the adjustable weight (2) is rotated so that it goes to the position shown in the picture above there is an amplitude of 100%.

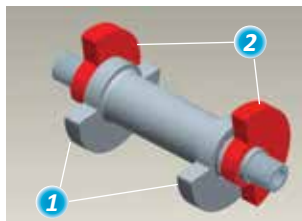


Amplitude (%)



All the dynamic energy from the drum can be absorbed by the ground.

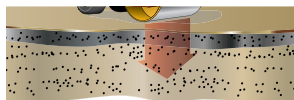
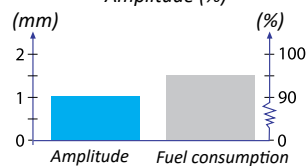
Hard ground



When the adjustable weight (2) is rotated so that it is in the position shown in the picture above there is an amplitude of 50%.

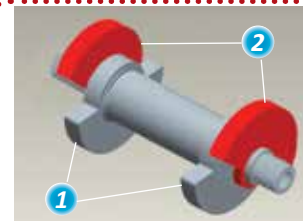


Amplitude (%)



The drum readjusts so that less dynamic energy is supplied to the ground from the drum.

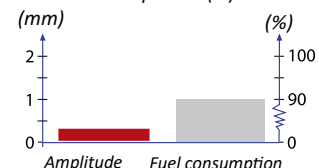
Final compaction



When the adjustable weight (2) is rotated so that it is in the position shown, there's a minimum amplitude so that the forces almost balance each other out.



Amplitude (%)



The drum is reset so that there is only a very small amount of dynamic energy supplied to the ground.

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.

PLANNING FOR EFFICIENCY AND ECONOMY

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
- OPTIMIZE YOUR PRODUCTIVITY

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 28 pli (5 kg/cm). This, combined with an optimum high amplitude, enables you to compact rockfill down to 5.2 ft (1,45 m) with a

Dynapac CA3500D. 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.

With ABC the machine never will work in bouncing and second-hand value will be secured.



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

STATIC LINEAR LOADS 196 lb/in (73 kg)

AMPLITUDE UP TO 0.079 in (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-to-use 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 CO₂ 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!

Dynapac 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.

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.



1

PERFORMANCE

Easy accessible scrapers divided to follow drum movement and replacement at low cost.

2

PERFORMANCE/DURABILITY

Thick drum shell ensures compaction performance and long running time before change.

3

STATIC LINEAR LOAD

in steps of 28 lb/in (5 kg/cm) means there's a machine for all needs.

4

COMPACTION PERFORMANCE

Several compaction data settings to choose among.

5

LIGHTS

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

6

OPERATOR'S STATION

Three main configurations to choose from, and numerous options.



5

7

10

11

9

8

7

PERFORMANCE

Clean inlet air (combustion and cooling) taken in as high as possible.

8

GRADEABILITY/PERFORMANCE

Heavy duty rear axle with failsafe brakes.

9

SERVICEABILITY

Cross-mounted engine gives unique service access

10

SAFETY

Sloping engine hood and 3.2 x 3.2 ft (1 x 1 m) view front & rear.

11

ENGINES FROM CUMMINS OR DEUTZ

4 or 6 cylinders, Stage T4f, T4i and T3, at your choice. Always following the latest emission steps.



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

PRODUCTIVITY OPTIMIZATION

QUALITY CONTROL

DATA FOR ACCEPTANCE INSPECTION

CROSS-MOUNTED ENGINE:

EXCELLENT SERVICEABILITY
VERY LOW NOISE LEVEL
CLEAN INLET AIR
OPTIMAL WEIGHT DISTRIBUTION
EASE OF TRANSPORTATION
3.2 ft x 3.2 ft (1 x 1 m VIEW)

SERVICE

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



A WORLD FIRST, WITH UNIQUE ADVANTAGES

ENGINES FROM CUMMINS, DEUTZ OR KUBOTA

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.

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 3.2 x 3.2 ft (1 x 1 m) 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.

SERVICE LEVEL ALERT

A service interval alert on 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-for-life 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.

WHEN YOU NEED US, WE'RE THERE

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

1. MACHINE TYPES ▶

Smooth drums (D)



Compaction Optimizers (DCO)



Pad foot drums (PD)



2. ENGINES ▶

IV/T4final



3. TRACTION SYSTEMS ▶

Antispin/ECO:

- NoSpin rear axle
- EcoMode & adjustable frequency
- Frequency meter
- Speed limiter
- Tilt Indicator

Separate choices:

- Gradeability Indicator
- Tires

Traction Control
or Traction Control/ECO
(Stage IV/T4f)

- No Spin rear axle or Limited slip rear axle
- Speed limiter
- Tilt Indicator
- (EcoMode & adjustable frequency)
- (Frequency meter)

Separate choices:

- Gradeability Indicator
- Tires

Dual Speed

- Dual speed
- Limited slip rear axle

Separate choices:

- Tires



4. OPERATOR'S PLATFORM

Cab

AC (some models)
Back-up alarm
CE: Yes
Charger socket: One 24V
Floor mat: Standard 0.2 in (5 mm)
Panels: Back cover
Heating: 6 nozzles
Hooks: One
Inner roof: Noise absorbing
Interior light: Door
Internal rear view mirror: CE-marked
Operator's seat, suspension
Operator's station, rotating
Rear view mirrors, traffic
Rotating beacon std.
Seat belt 3" with buzzer
Steering wheel: Adjustable
Storage: In back cover
Sun protection: Front screen print
Windows: Tinted
Wipers: Front/rear
Working lights, LED

ROPS / FOPS

Floor mat: Standard 0.2 in (5 mm)
Panels: Back cover
Charger socket: One 24V
Steering wheel: Adjustable
Storage: In back cover
CE: Yes
Operator's station, fixed or rotating (some models)
Operator's seat, suspension
Seat belt 3" with buzzer
Working lights LED
Rotating beacon std.
Rear view mirrors, traffic
Vandal cover
Back-up alarm

Comfort Cab

CAB FEATURES PLUS :

ACC
Charger socket: One 24V, One 12V
Entry light on footsteps/ladder/battery cabinet
Floor mat: Thick Noise absorbing 20 mm
FM/AM radio with MP3/USB and Bluetooth
Foot rest
Heating: 8 nozzles with floor heating
Hooks: Two
Interior light: Door w. timer, reading, night light
Ipod/MP3 holder
Operator's seat, comfort
Panels: Covering most steel plates
Rotating beacon dual LED
Service interval /daily check in display
Storage: Back cover, side panel, back upper shelf
Sun protection: Front screen print, sun visor front, sun curtain back
Wipers: Front/rear + Interval front
Working lights LED



6. OPTIONS

50 hours Service kit & tool box
Bolt-on padfoot shell (CA1500D-CA3500)
Compaction Meter with ABC
Cooling box
Dyn@Lyzer, preparation
Dyn@Lyzer, complete installation
Decal, risk location
Emergency stop, dual external
Engine block heater (120V or 240V)
Environmental Certificate (Swedish)
Fire extinguisher
First aid box
Fuel tank drainage
GNSS for Dyn@Lyzer
Gradeability indicator
Hearing protector
Heater, socket (240V) for Cabs
Hydraulic fluid, bio
Lights, licence plate
Lights, reversing, LED
Scrapers, fixed steel, smooth
Scrapers, flexible, smooth
Scrapers, fixed steel, pads
Scrapers, heavy duty, pads
Sign, Slow Moving Vehicle
Special Colour, one colour
Special Colour, two colours
Tachograph
Tachograph, preparation
Tool box
Tool set
Field kit, Bolt-on padfoot shell (CA1500D-CA3500D)



COST CONTROL THAT SAVES BIG

Being active in the Road Construction business requires considerable investment. Every square inch involves an operational cost composed of fixed costs such as interest on equipment acquired, labor costs, insurance and equipment depreciation, but also variable costs such as expenses for fuel, wear and maintenance.



Wear cost

Since Dynapac always uses high-quality wear parts, the time that is needed to change them can be kept to a minimum. Customers who use Dynapac spare parts will improve reliability and protect their investment.

Operator cost

The operator is always a very big part of the total cost. Operators using Dynapac equipment will enjoy good ergonomics and easy-to-operate equipment.

Maintenance cost

All road construction equipment need regular check-ups such as change of oils and filters. Dynapac always strives to use components that require as little maintenance as possible.

Investment cost

The purchase price is often only a relatively small part of the total cost. Dynapac rollers and pavers maintain a high value throughout their working life, which is good to know if you ever want to sell it.

Fuel cost

Fuel expenses can make up a large part of your total cost. Since Dynapac rollers and pavers are equipped with a very efficient hydraulic system, your fuel cost can be kept at a low level.

SERVICE COMMITTED TO YOUR FUTURE

WHAT?

GENUINE PARTS AND KITS

- Preventive maintenance kits
- Genuine Filters
- Fluids and lubricants
- Wear and repair kits
- Upgrade Kits

SERVICE

- Right competence
- Training program
- Inspection & service program
- Extended Warranty & Service Agreement

CONSUMABLES

- Road Milling
Tools (bits)

HOW?

GLOBAL DISTRIBUTION NETWORK

Always close to you

DYNAPAC.US

- Kit selector
- Fluid selector
- Shop Online

DYN@LINK

- Manage your fleet
- Timely interventions planned with service alerts

PREVENT THE COST OF A BREAKDOWN

REGULAR MAINTENANCE PREVENTS COSTLY STANDSTILLS.

Equipment breakdowns have a direct impact on your productivity. No production means no revenue, but the fixed costs stay the same, resulting in lower profitability. By avoiding breakdowns and increasing the reliability of your machine, you will be able to produce more per year, which will immediately improve your profitability.

PREVENTIVE MAINTENANCE KITS

PREVENTIVE MAINTENANCE KITS

All in one box and tailored to match your equipment. Easy to obtain and attractively priced, our preventive maintenance kits contain all the parts required for the equipment's scheduled maintenance program. When installed by one of our certified technicians, you keep equipment downtime to a minimum and its uptime to a maximum throughout its working life.

PREVENTIVE MAINTENANCE PAYS BACK

Equipment needs preventive maintenance that demands

- Timely intervention to avoid expensive breakdowns
- High quality maintenance also means higher resale value (residual value)



Lower Cost of Ownership
Maintenance prevents more costly repairs



Increased equipment reliability
Full equipment uptime



Higher resale value

DYNAPAC SOIL COMPACTOR RANGE

IMPERIAL

	Operating mass, incl. Rops, lb	Static linear load, lb/in	Drum width, in	Frequency, high/low VPM / Amplitude, high/low, in	Diesel Engine Power, hp
CA1300D	10 600	73	54	2,100 / 0,067	75 (IIIB/T4)
CA1300PD	10 500	-	54	2,100 / 0,059	75 (IIIB/T4)
CA1400D	6 500	112	66	1,920 Hz / 0.068 / 0.031	75 (IIIB/T4)
CA1400PD	6 500	-	66	1,920 Hz / 0.063 / 0.031	75 (IIIB/T4)
CA1500D	15 500	112	66	1,920/2,400 / 0.071/0.031	75 (IIIB/T4)
CA1500PD	15 500	-	66	1,920/2,400 / 0.071/0.031	75 (IIIB/T4)
CA2500D	22 300	146	84	1,980/2,040 / 0.071/0.035	120 (IV/T4)
CA2500PD	24 300	-	84	1,800/1,800 / 0.079/0.04	120 (IV/T4)
CA3500D	26 200	196	84	1,860/2,040 / 0.075/0.035	130 (IV/T4)
CA3500PD	26 200	-	84	1,800/1,800 / 0.071/0.039	130 (IV/T4)

DYNAPAC COMPACTION OPTIMIZER

CA3500DCO	26 900	196	84	1.680 / 0 - 0.079	130 (IV/T4)
-----------	--------	-----	----	-------------------	-------------

METRIC

	Operating mass, incl. Cab (kg)	Static linear load (kg/cm)	Drum width (mm)	Frequency / Amplitude	Diesel Engine Power, kW (stage/Tier)
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)
CA1500PD	7 300	-	1676	32/36 Hz / 1.8/0.8 mm	55 (IIIB/T4)
CA2500D	10 300	26	2130	33/34 Hz / 1.8/0.9 mm	89 (IV/T4)
CA2500PD	11 200	-	2130	30/30 Hz / 2.0/1.1 mm	89 (IV/T4)
CA3500D	12 100	36	2130	31/34 Hz / 1.9/0.9 mm	97 (IV/T4)
CA3500PD	12 100	-	2130	30/30 Hz / 1.8/1.0 mm	97 (IV/T4)

DYNAPAC COMPACTION OPTIMIZER

CA3500DCO	12 200	36	2130	28 Hz / 0-2 mm	97 (IV/T4) / 97 (IIIA/T3)
-----------	--------	----	------	----------------	---------------------------

Your Partner on the Road Ahead



Dynapac North America LLC
 342 Patricia Lane Suite 104, Fort Mill, SC 29708
 Phone: 800-651-0033
www.dynapac.us