Dynapac Soil Compactors

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

Sustainable Productivity

Atlas Copco

DYNAPAC SOIL COMPACTOR RANGE

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 PERSPECTIV

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.

OPERATOR FOCUS ENGINE COMPACTION VIBRATIONS SERVICEABILITY

VE ON COMPACTION

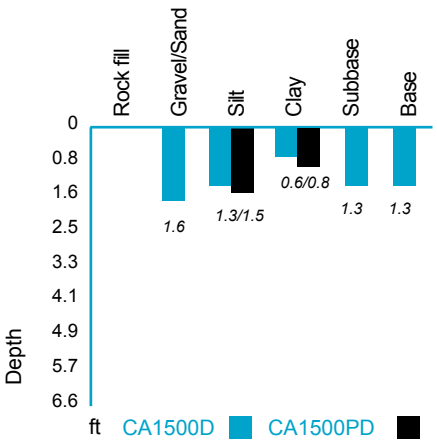
DYNAPAC SOIL COMPACTOR RANGE

Small, Medium, Large or XL

S Dynapac CA1300, CA1500

The small Dynapac soil compactors are vibratory rollers designed for compaction operations in pipe trenches, compacting roads, streets, parking lots and pipe trenches. 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.

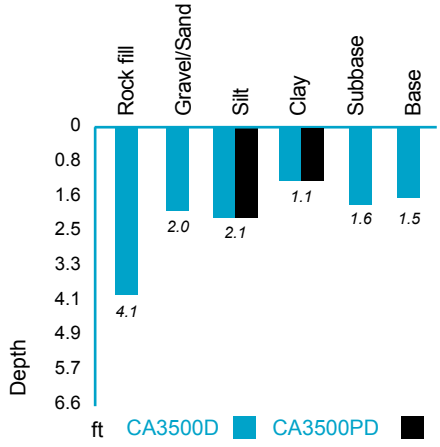


Operating mass	**11,000 - 15,500 lbs**
Static linear load	**73 - 112 pli**
Drum width	**54 - 66 in**

M Dynapac CA2500, CA3500, CA3600, CA4000, CA4600

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 1.37 inch 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.

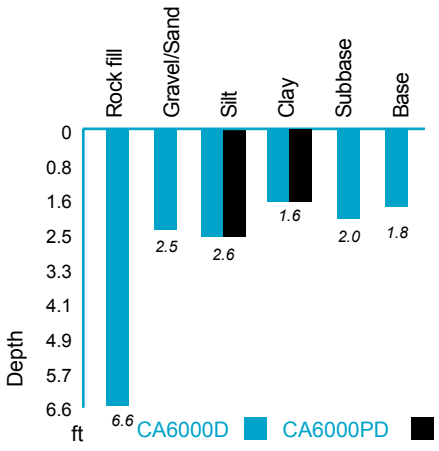


Operating mass	**22,000 - 33,000 lbs**
Static linear load	**140 - 225 pli**
Drum width	**84 in**

- Dynapac offers them all

L Dynapac CA5000, CA5500, CA6000, CA6500

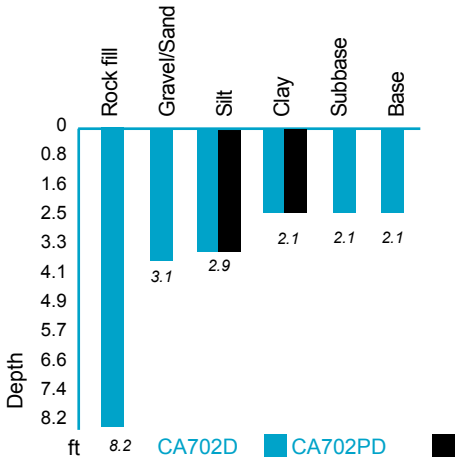
The CA5000, CA5500, CA6000 and CA6500 are heavy rollers designed for the toughest compaction applications. Rockfill can be compacted in 6.6-feet thick layers, in which the size of the rocks can be up to 3.3 ft in diameter. The smooth drum shell thickness is 1.7 (CA5000) and 1.9 in (CA 5500, 6000 and 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.



Operating mass	**35,000 - 46,500 lbs**
Static linear load	**280 - 365 pli**
Drum width	**84 in**

XL Dynapac CA702

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	**60,000 lbs**
Static linear load	**450 pli**
Drum width	**84 in**

MAKE USE OF SCIENCE IN COMPATION

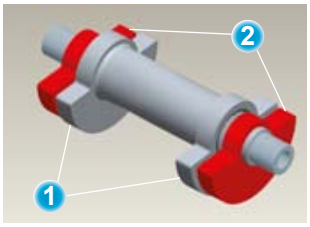
Preparation - CompBase software

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)

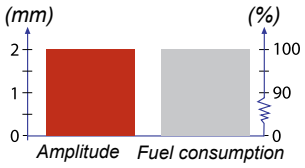
We all know that the whole idea with compaction is to reach the correct set of parameters for the type of work in question. There is no point in overdoing anything – it only costs time and fuel, without improving the final result. Dynapac Compaction Optimizer, DCO, is an innovative system based on the 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.

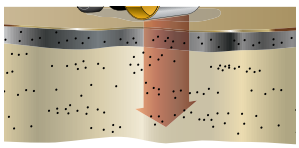
Soft ground



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%.

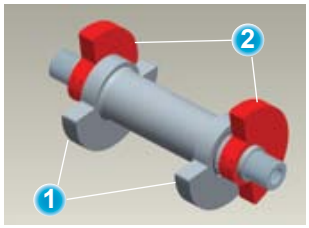
Amplitude (%)





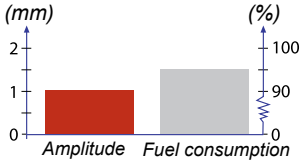
All the dynamic energy from the drum can be absorbed by the ground.

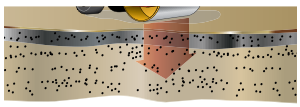
Hard ground



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%.

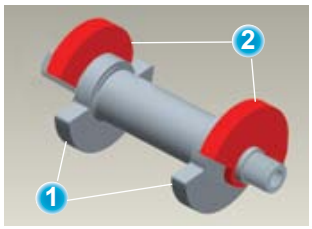
Amplitude (%)





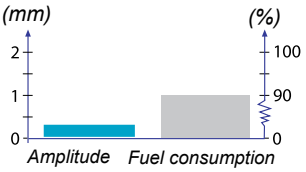
The drum readjusts so that less dynamic energy is supplied to the ground from the drum.

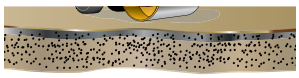
Ready compacted ground



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 - Dynapac Compaction Analyzer for soil with GPS

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. Dynapac Compaction Analyzer, DCA, 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. DCA 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 DCA unit. The measurement values can easily be transferred to a desktop computer.

MISSION PLANNING FOR EFFICIENCY AND ECONOMY

Map ground condition

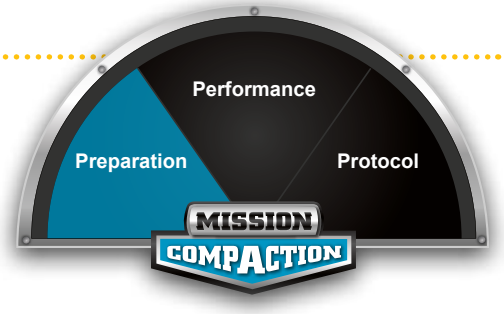
Map the ground condition and the material to be compacted. If your CA roller is equipped with a Compaction Meter with DCA-S (with GPS), you can run the machine over the area in advance. This will give you a chart showing ground condition and material to be compacted, at the same time revealing weak areas 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



LOWER COST PER COMPACTED CUBIC YARD

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 Compaction Analyzer, 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

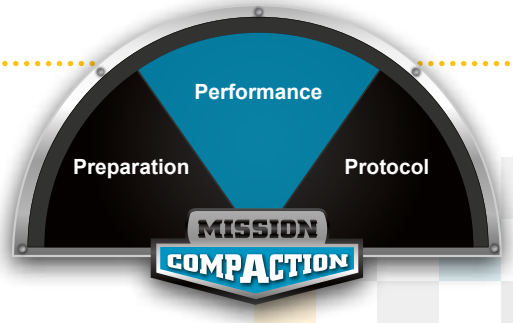
The new CA rollers have static linear loads in steps of 28 lb/in. This, combined with an optimum high amplitude, enables you to compact rockfill down to 5.4 ft with a CA4000D. The better depth effect means higher volume capacity and less passes to reach compaction specifications, thus saving fuel and 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.

Automatic 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 Compaction Analyzer, with GPS (optional).

STATIC LINEAR LOADS 73 - 448 lb/in
AMPLITUDE UP TO 0.083 in
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 or ROPS/FOPS structure 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 optional anti-spin system.

Lower fuel consumption and environmental impact

The engines can have the Dynapac ECO mode fuel saving system that minimizes fuel consumption and CO_2 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 yard. 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 ECO Mode.

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

RCE is one of the first manufacturers to equip its rollers with Stage IIIB/T4i engines with very low emissions. The entire range 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 is “green” rollers.

Customers who choose the traction/performance packages “Anti-spin & ECO” or „Traction Control & ECO“ will have ECO Mode included. ECO Mode always comes with adjustable vibration frequency and a frequency meter.

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.

Compaction Performance
Several compaction data to choose among.

Static linear load
in steps of 28 lb/in means there's a machine for all

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 3.2 x 3.2 feet view front & rear.

Safety/Performance
Heavy duty rear axle with failsafe brakes.

Engines from Cummins or Deutz
4 or 6 cylinders on selected models. Stage IIIB (Tier4i), your choice.

After compaction - Protocol

DOCUMENTING THE MISSION TO ASSURE QUALITY

Dynapac's documentation system

Using the built-in Compaction Meter with Compaction Analyzer DCA-S with GPS (if fitted), 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 DCA 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 Stage IIIB engines (Tier 4i) from Cummins (4 cylinders) or Deutz (6 cylinders).

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 feet 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.

CONSTRUCTION TECHNIQUE 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 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

All 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

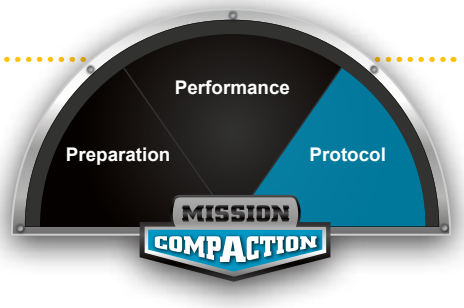
Dynapac's CostCtrl software on the web and service contracts, including extended warranty, enable you to gain full control over life-cycle costs and maximize machine availability.

When you need us, we're there

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

Service

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



A WIDE SELECTION, DYNAPAC CA1500 - CA6500

Drums
Smooth (D)
DCO (CA3500/4000/5000/6000)
Padfoot (PD)

**PD is not available for CA1800/2800*

Engine
IIIB/T4i

NoSpin rear axle
ECO mode & adjust. frequency
Frequency meter
Speed limiter
Tilt Indicator
Separate choices:
Gradeability Indicator
Tyres

Tractions Systems:
Antispin /ECO
Traction Control
Dual Speed

No Spin rear axle (Deutz)
Limited slip rear axle (Cummins)
Speed limiter
Tilt Indicator
Separate choices:
Gradeability Indicator
Tyres

Dual speed
Limited slip rear axle
Separate choices:
Tyres

Operator Platforms

Cab

Included
Heating: 6 nozzles
Floor mat: Standard 5 mm
Panels: Back cover
Inner roof: Noise absorbing
Internal rear view mirror: CE-marked
Hooks: One
Charger socket: One 24V
Interior light: Door
Steering wheel: Adjustable
Storage: In back cover
Sun protection: Front screen print
Windows: Tinted
Wipers: Front/rear
CE: Yes
Operator's station, rotating
Operator's seat, suspension
Seat belt 3" with buzzer
Working lights H3
Rotating beacon std.
Rear view mirrors, traffic
Back-up alarm

Comfort Cab

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

ROPS/FOPS

Included
Floor mat: Standard 5 mm
Panels: Back cover
Charger socket: One 24V
Steering wheel: Adjustable
Storage: In back cover
CE: Yes
Operator's station, fixed
Operator's seat, suspension
Seat belt 3" with buzzer
Working lights H3
Rotating beacon std.
Rear view mirrors, traffic
Vandal cover
Back-up alarm

Options

50 hours Service kit & tool box
Bolt-on padfoot shell (CA1500D-CA5000D)
Certificate, SBF 127 (Swedish)
Compaction Meter with ABC
DCA-S preparation
DCA-S, complete installation
Decal, risk location
Emergency stop, dual external
Engine block heater (240V)
Environmental Certificate (Swedish)
Fire extinguisher

First aid box
Fuel tank drainage
GPS for DCA-S
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-CA5000D)
Field kit, Drum conversion, D to PD (CA5500-CA6500)

Technical Data Dynapac Soil compactor range

	Operating Mass incl.Rops (lb)	Static Linear Load (lb/in)	Drum Width (in)	Vibration Frequency High/Low (VPM)	Vibration Amplitude High/Low (in)	Diesel Engine Model	Engine Power (hp)
CA1300D	10 600	73	54	2,100	0,067	Kubota V 3307 CR-TE4 (T4f)	75
CA1300PD	10 500	-	54	2,100	0,059	Kubota V 3307 CR-TE4 (T4f)	75
CA1500D	15 500	112	66	1,920/2,400	0.071/0.031	Cummins QSB3.3 (T4i)	100
CA1500PD	15 500	-	66	1,920/2,400	0.071/0.031	Cummins QSB3.3 (T4i)	100
CA2500D	22 300	146	84	1,980/2,040	0.071/0.035	Cummins QSB 4.5 (T4i)	130
CA2500PD	24 300	-	84	1,800/1,800	0.079/0.041	Cummins QSB 4.5 (T4i)	130
CA3500D	26 200	196	84	1,860/2,040	0.075/0.035	Cummins QSB 4.5 (T4i)	160
CA3500PD	26 200	-	84	1,800/1,800	0.071/0.039	Cummins QSB 4.5 (T4i)	160
CA3600D	27 100	196	84	1,860/2,040	0.075/0.035	Deutz TCD6,1L06 (T4i)	173
CA3600PD	27 100	-	84	1,800/1,800	0.071/0.039	Deutz TCD6,1L06 (T4i)	173
CA4000D	28 900	224	84	1,800/1,800	0.079/0.031	Cummins QSB4.5 (T4i)	160
CA4000PD	28 900	-	84	1,800/1,800	0.079/0.039	Cummins QSB4.5 (T4i)	160
CA4600D	29 800	224	84	1,800/1,800	0.079/0.031	Deutz TCD6,1L06 (T4i)	173
CA4600PD	29 800	-	84	1,800/1,800	0.079/0.031	Deutz TCD6,1L06 (T4i)	173
CA5000D	35 700	280	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	173
CA5000PD	36 300	-	84	1,740/1,800	0.075/0.039	Deutz TCD6,1L06 (T4i)	173
CA5500D	40 400	308	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	173
CA5500PD	40 000	-	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	173
CA6000D	43 000	336	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	200
CA6000PD	42 600	-	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	200
CA6500D	46 000	364	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	200
CA6500PD	45 700	-	84	1,740/1,800	0.083/0.031	Deutz TCD6,1L06 (T4i)	200
CA702D	59 305	452	84	1,680/1,800	0.079/0.051	Cummins QSB6.7 (T3)	220
CA702PD	59 415	-	84	1,680/1,800	0.079/0.051	Cummins QSB6.7 (T3)	220

Customer Finance

Atlas Copco is offering you customised equipment financing. A wide range of financing solutions for all types of Atlas Copco equipment and related products is available with possibilities to customize payments to suit your specific requirements. Various formulas are available, making Atlas Copco a full line supplier for equipment, aftermarket services and all inclusive financing.

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