

DYNAPAC ASPHALT TANDEM ROLLERS



Dynapac CC4000 VI / CC4000C VI / CO4000 VI
CC4200 VI / CC4200C VI / CO4200 VI
CC5200 VI / CC5200C VI / CO5200 VI
CC6200 VI / CO6200 VI



APPLICATION

A NEW PERSPECTIVE ON COMPACTION

Sixth generation of Dynapac large asphalt rollers brings compaction quality to a new level!

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



The first generation of Dynapac large asphalt rollers, the CC40, was introduced in 1964. Dynapac is now introducing the sixth generation, the CC4000 - CC6200 VI and CO4000 - 6200 VI. The machines are extremely operator friendly, offering unmatched ease of operation, excellent maneuverability and highest quality compaction.



Performance

- Electronic Drive Control
- Active front drum steering
- EcoMode
- High vibration frequency
- High efficient eccentrics
- Oscillation drum variants
- Water System



Visibility

- 1x1 m view
- 255 degree turnable operator station
- Efficient lights for nightwork
- Drum edge, drum surface and sprinkler nozzle visibility



Operator's efficiency

- Good ergonomics
- Low noise
- Easy to understand instrument panel
- Easy to reach daily maintenance points



Serviceability

- Easy to reach daily maintenance points
- Reliable sprinkler system
- Lubrication free articulated joint
- Easy to reach hydraulic hoses
- Dyn@Link



Compaction Control

- Impactometer
- Asphalt temperature meter
- Evib Compaction Meter
- Dyn@Lyzer

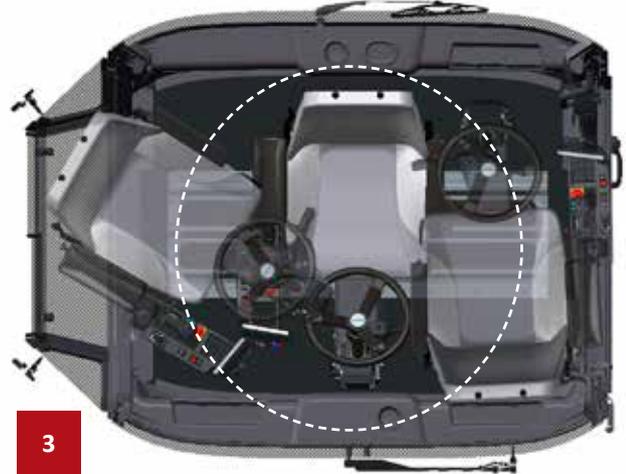
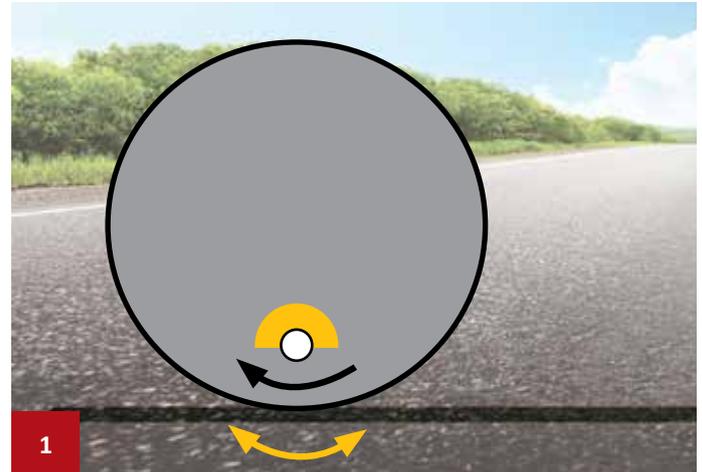
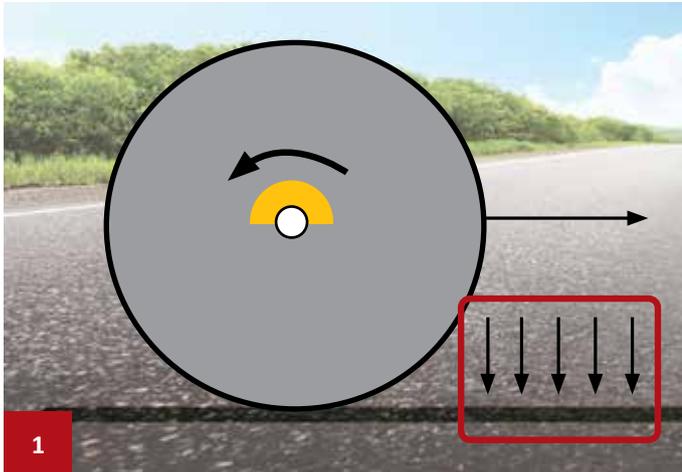


Total Economy

- Automatic idle function
- High efficient eccentrics
- EcoMode function
- Dual pump vibration system for higher efficiency



APPLICATION



FAST, EFFECTIVE COMPACTION FOR THIN LAYERS

High vibration frequency compaction has long been an important feature on Dynapac asphalt rollers. Modern thin layers need to be compacted fast because they cool off quickly. A higher amplitude will compact fast but might crush the aggregate material.

In the the sixth generation Dynapac continues its successful concept of using high vibration frequency with low amplitude in order to maintain high efficiency on modern thin asphalt layers. This gives very effective compaction for thin layers. The rollers can, of course, also be used for thick layers with high amplitude and a “normal” vibration frequency.

As an alternative for thin asphalt layer compaction, bridge compaction, compaction near foundations and concrete structures. Dynapac also offers variants with oscillation on the rear drum.

VERSATILE DRIVING POSITION, EXCELLENT VISIBILITY

When designing the new generation Dynapac had, as always, the operator first in mind. The seat and steering module can be swiveled and are slidable from the left side of the roller to the right. This makes it possible for the operator to slide over and see the drum edges in a more ergonomic way.

As an option you can swivel the seat so that the operator is facing fully to the rear, allowing him or her to work with the same good ergonomics on both sides of the roller when moving backwards. This eliminates the limitations of defined forward and reverse working directions.

Together with this option comes the electronic mini-steering wheel that makes it even easier to steer the roller smoothly and accurately, taking the ergonomics and maneuverability to an even higher level.

1. High Vibration Frequency as standard and variants with oscillation
2. Sliding and swiveling seat and steering module
3. 255 degrees turnable seat and steering module
4. Easy to use controls
5. Joint cutting and pressing



SIMPLER CONTROLS, MORE INTELLIGENT MACHINE

The new instrument panel and controls on the sixth generation were developed with “simplicity” as the key concept. The bigger touch screen ensures maximum visibility and, for those who prefer, there is a display control which can be used instead. The latest technology simplifies roller operation, ensures optimized handling and thus increases the quality of the compaction job.

The start-up procedure is another example of simplicity. Turn the ignition key, set the forward/reverse lever in neutral and push the start/stop button. The machine intelligence takes care of the rest, including pre-heating, and the engine starts when ready. Another feature is the possibility to turn the working lights on and off individually, directly on the display.

COMBINATION ROLLERS

Dynapac CC4000 VI, CC4200 VI and CC5200 VI can be ordered in combi version to further improve top layer texture. The Combi module is placed rear. Standard equipment includes emulsion sprinkler system, handles and footsteps for tank filling, quick-release of scrapers and cocoa mats for easy cleaning. Heat covers are available as option.

JOINT CUTTING AND PRESSING

The edge press strengthens the asphalt edge, and can also be equipped with the joint cutting disc for asphalt edge trimming prior to jointing. You can get the edge presser on the front drum, right or left side. It is also possible to get it on the rear drum, left side.

TECHNICAL FEATURES AND BENEFITS DURING COMPACTION



180 DEGREES STANDARD, 255 DEGREES OPTIONAL

The swiveling operator's module allows a 180° (+/- 90°) turn of seat, instruments and levers, keeping the operator in full control. It can also slide from side to side. As an option there is a 255° turning fully eliminating the limitations of defined forward and rewards working directions.

1

VISIBILITY

Full visibility of drum surfaces, sprinkler nozzles and drum edges. Optional active front drum steering/ off-set improves the drum edge visibility even more

2

COMPACTION DATA

Compaction data that make the machine versatile. A wide frequency and amplitude range provides optimization for any layer thickness. Eccenters designed for highest efficiency keeps power consumption low at the start-up of vibration. Variants with oscillation drum also available.

3

BACK-UP SPRINKLER SYSTEM

Back-up sprinkler system means less breaks for cleaning of nozzles and includes a backup sprinkler pump. All nozzles placed on the outer scraper

4

ACTIVE FRONT DRUM STEERING WITH OFF-SET FUNCTION

Gives very good control on the front drum edges making it possible to follow curbstones and other obstacles with very good accuracy. More than 20.5 in (520 mm) offset for CC4000VI – CC5200VI.

5

WATER CAPACITY

Large water capacity increases the operating time between water refill breaks. Fill-up can be done from both sides.

6

EASY NIGHTWORK

Working lights of LED type is standard which means less maintenance and better visibility also on the drum surfaces. The optional drum edge lights makes nightwork even easier.

7



8

DYN@LYZER

Optional Dyn@Lyzer helps you do a perfect job. Full documentation of temperature, compaction Evib value and number of passes.

9

OPERATOR PLATFORM

ROPS and two different cab types are available, always with the sliding and swiveling operator's module plus the optional 255 degrees turning that fully eliminates the limitations of defined forward and rewards working directions. Big full color touch display for max visibility that also can be run with the display control if preferred.

10

LOW EMISSIONS

The fuel efficient Stage IIIA/T3, Stage V and T4f engines can be equipped with optional EcoMode achieving up to 15% reduction in fuel consumption. Automatic idling function is standard working.

11

SERVICE FRIENDLY

Service-friendly, engine compartment with all more frequent check points easy accessible when engine hoods are opened. The location on the rear module reduces noise and heat for the operator.

12

OPTIONAL EDGE PRESSER/ CUTTER

Edge presser tool for better joint binding. We have installed it with best operation visibility in mind.

13

CHIP SPREADER

Optional rear mounted chip spreader. To be used for creating friction on newly laid asphalt.

STEERING

ADVANCED STEERING GIVES UNMATCHED MANEUVERABILITY

Much appreciated by machine operators, Dynapac has for some time created offset on its Dynapac asphalt rollers by the unique method of combining articulated steering with a steerable rear drum. On the sixth generation Dynapac has taken it a step further for the CC4000 VI- CC5200 VI and CO4000 VI- CO5200 VI by increasing the offset to 20.5 in (520 mm) and using the front drum for offset for even better driving accuracy.

The increased offset to 20.5 in gives a very small turning radius when used in combination with the steering hitch. It makes it possible to move a larger portion of the machine mass inwards on the road when compacting weak road edges, thus making the roller more stable. It also increases the surface capacity when making the final static passes to get rid of marks in the mat.

Using the front drum for offset means that the roller operator will have very good control of the front drum edges and can follow a curb or other obstacles with a high degree of accuracy.

COMPACT POWER ENGINE

A choice between diesel engines fullfilling Stage IIIA/T3, Stage V and T4f offers impressive power reserves and significant operation benefits. Easy cold starting, low noise, rapid diagnostics and faster load acceptance are just some of them.

- EcoMode for up to 15% reduction in fuel consumption is available as option..



EXCELLENT VIEW

Great control over drum edges due to improved visibility



BEST COMPACTION

Better compaction along curbstones and obstacles



WEIGHT NEAR ROAD CENTER

Along weak road edges you can keep the machines weight near road center.

COST CONTROL THAT SAVES BIG

Being active in the Road Construction business requires considerable investment. Every square meter 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.



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.

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.

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.

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

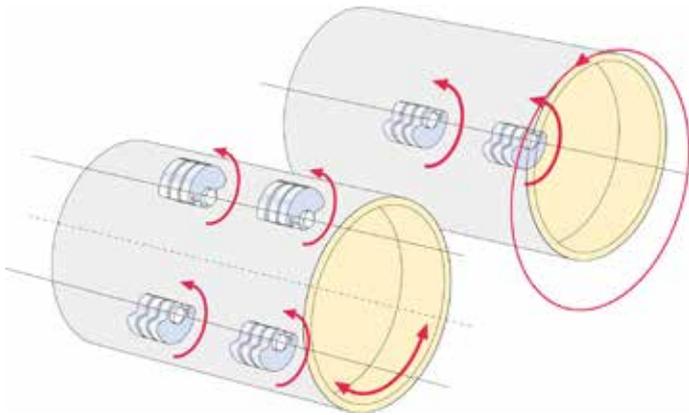
Increased equipment reliability
Full equipment uptime

Higher resale value

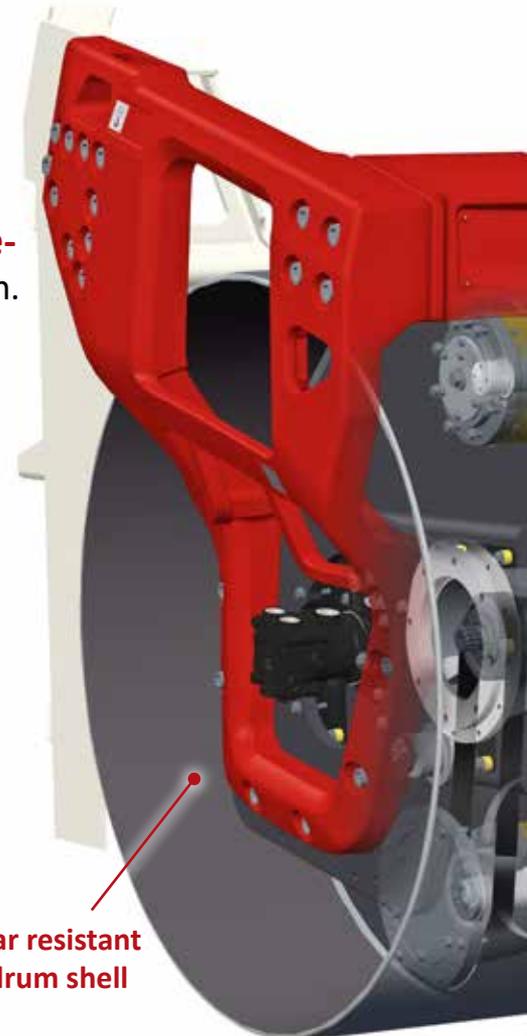
OSCILLATION

Together with the high vibration frequency concept on the large asphalt tandem rollers Dynapac also offers the oscillation concept. Meeting the special needs of the oscillation compaction concept, Dynapac has focused on **wear resistance and serviceability** in order to supply a long lasting and user friendly solution.

DESIGNED TO PERFORM, BUILT TO LAST



The Dynapac CO2200, CO4000 VI, CO4200 VI, CO5200 VI and CO6200 VI rollers have one vibrating drum with two vibration amplitudes and one oscillating drum. This allow the operator to select the system that is most suitable for the application on hand.



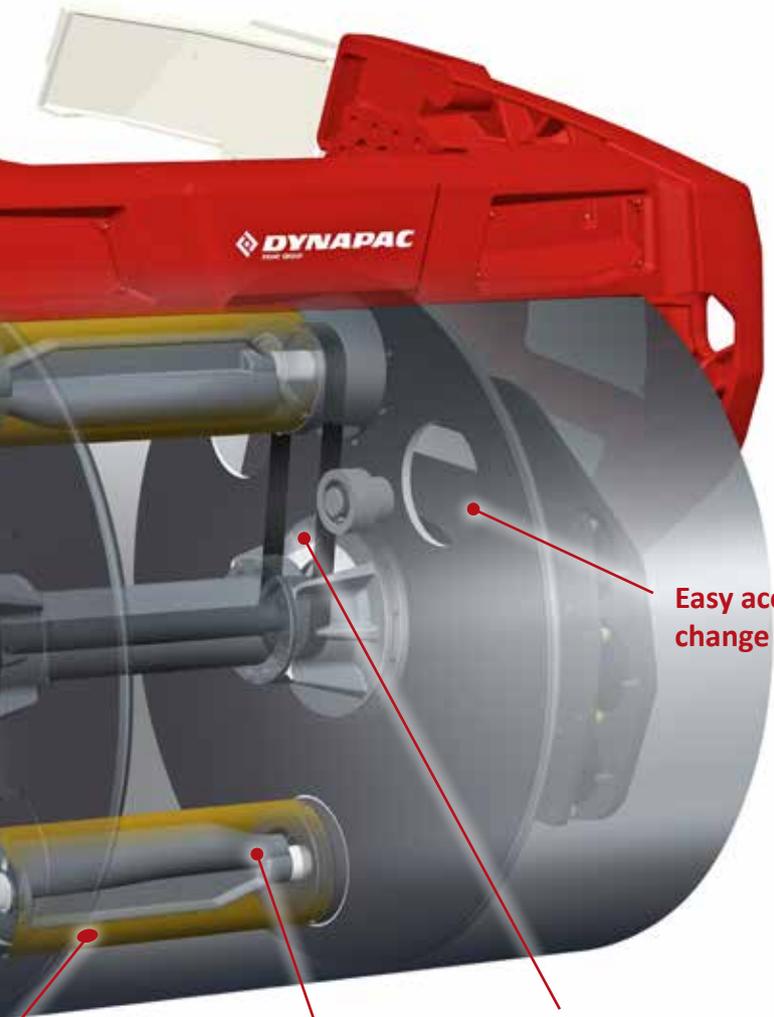
High wear resistant
Hardox drum shell

Eccentric housing
with oilbath

Oscillation has 100% ground contact.
No vertical vibration limits risk for damage
also on less qualitative aggregates.

Meeting state specification demands that oscillations should be used while compacting on bridge decks, near foundations or concrete structures.

Provides great performance on thin asphalt layers.



DYNAPAC

**Easy access to
change timing belt**

High efficient eccentrics

Timing belt



OSCILLATION

Two rotating eccentric weights placed away from the drum center will generate an oscillatory motion of the drum. This means that, as opposed to the vibration system, the drum does not move its axis of rotation, but rather oscillates around it.

The eccentric weights are driven by timing belts, these belts will eventually need to be replaced. The Dynapac CO2200, CO4000 VI-6200 VI have been designed to make this service operation fast and efficient. On the oscillation drum we have four bolted service covers for easy reach of the timing belts. With every oscillation machine comes a special timing tool that is included. This together with other clever solutions makes it possible to change the timing belt within only two hours.

In order to eliminate excessive wear on the drum shell, the oscillating drum on the CO2200, CO4000 VI-6200 VI has a drum shell made of super durable Hardox steel. The use of a Hardox drum shell will eliminate any wear problems encountered by other oscillating machines on the market.

Hardox in My Body

Hardox® 450

The oscillation drum shell is made of highly wear resistant Hardox steel.

Hardox® 450 is an abrasion-resistant steel with a nominal hardness of 450 HBW.

Hardox® 450, with an extra 50 Brinell hardness over 400 grade, provides better dent and abrasion resistance as well as longer drum life, ensuring many hours of trouble free running.

HARDOX®
IN MY BODY

COMPACTION CONTROL & DOCUMENTATION SYSTEM

Dynapac's experience in Continuous Compaction Control (CCC) or Intelligent Compaction (IC) dates back to the late 70s. Since then we have been able to offer our customers the opportunity to control the compaction work in real time and to document the completed work for improved quality control.

TWO LEVEL SYSTEM

The DYN@LYZER system is built up in two levels.

The first level is the Compaction Meter, now using EVIB readings for both soil and asphalt:

On asphalt rollers this is supplemented by the Asphalt Temperature Meter. It utilizes two temperature sensors, one at each end of the roller, to register the surface temperature of the asphalt. The temperature is measured by the sensor that is currently at the front depending on the driving direction. This minimizes the influence of surface water from the drum sprinklers.

The second level of the system is the Evib Compaction Meter plus the Dyn@lyzer with GNSS (Global Navigation Satellite System):

This registers all the Compaction Meter data and continuously displays the compaction results to the operator on the computer screen. The data is, at the same time, recorded and saved allowing full traceability and quality assurance. The GNSS receiver (such as GPS, GLONASS, Galileo, etc) gives the precise position of the roller on the job site at all times. The level of accuracy depends on site requirements.

DYN@LYZER FOR ASPHALT

Compaction Documentation

Records and maps in real time:

- Evib Compaction Meter values
- Progress of Compaction Meter values, relative
- Temperature Meter values
- Number of passes
- Supports the roller operator to optimize compaction effort

Analysis of the compaction

- Compaction Meter values (stiffness)
- Progress of Compaction Meter values (progress of stiffness)
- Temperature
- Number of passes
- Statistics and distribution
- Export PDF report and data text file



Facts about the DYN@LYZER

- Multiple machines can be factory prepared. This ensures a cost effective way to prepare a fleet of machines with the DYN@LYZER as they can share DYN@LYZER computer and GNSS equipment for use as required.
- User-friendly, modern user interface
- 11.6" full color touch screen
- Electronic keyboard for entry of data
- Mobile memory for permanent storage
- Several languages to choose from
- Runs on the roller's 24V battery or internal battery
- Tablet weight: 3.1 lbs / 1.4 kg
- 220V adapter for office use
- Rugged tablet, resistant to dust, moisture and vibrations
- In Multi version, office software is included as well as machine-to-machine communication



EcoMode

We are 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 large CC asphalt rollers. As a result, we can now confirm that with optional EcoMode, all the rollers consume up to 15 % less diesel fuel than our previous range without EcoMode.



The entire range of Dynapac 10-13 t tandem rollers have Stage V and T4f engine alternatives with very low emissions. For less regulated markets we also offer a IIIA engine as an alternative.

When using the ECO-system the percentile saving is higher during compaction than during idling and transportation. Combine the fuel savings with biodegradable hydraulic oil and very low noise levels and the result is “green” rollers.

WHAT MORE DID WE DO TO REDUCE THE FUEL CONSUMPTION?

The answer is hard work both with major components and with small details. Here are some examples:

- Double pump vibration system
- Reduced number of hydraulic hose fittings
- Proportional control of cooler fan speed with regards to engine coolant and hydraulic oil temperatures
- Automatic idling of the diesel engine after 10 seconds in neutral

CONNECTING TO THE FUTURE

With the introduction of Dyn@Link Advanced as standard, Dynapac provides customers with a tool to monitor and manage their machine fleet efficiently and conveniently. The intelligent telematics system offers many possibilities to optimize fleet usage, to reduce maintenance costs and to save time and money.

ALL MACHINE INFORMATION AT A GLANCE

All machines, together with important information such as position, fuel and Ad-blue levels, service status and map view, are listed on the dashboard. Thanks to the online portal and the Dyn@Link app, users can access this information from anywhere and at any time.

CUSTOMIZE THE TOOL

The user-friendly webpage is easy to learn and the various filters and personal setting options for graphs and tables allow you to adapt the webpage to your individual requirements.

Dyn@Link Advanced

Fuel consumption	Machine parameters - Engine parameters - Distance travelled	Remote diagnostic
Working hours	Maintenance schedules	Geofence

The systems include the hardware with sim-card, webpage access and a 36-month data connection package, which can be extended after 3 year.

1. MACHINE TYPES ▶

Standard drums



Oscillation drum



Combi



2. STEERING ▶

Active front drum steering with offset
CC4000VI – CC5200VI
CO4000VI- CO5200VI



Standard steering



3. ENGINES ▶

Stage IIIA/T3, Stage V or T4f



Engine compartment - left side



Engine compartment - right side



4. OPERATOR'S PLATFORM

180° swiveling operator's platform

or

255° swiveling operator's platform including electric mini steering wheel



Asymmetric cab

5. OPERATOR'S PLATFORMS FEATURES

Asymmetric comfort cab

ACC
Asphalt temp meter with dual sensors
Operator's seat, luxury
Radio with bluetooth
Integrated ROPS
Operators station, sliding and rotating
Seat belt 3"
Heating system
Frequency meter/ impactometer
3 speed fan system with filter
Floor mat
Lights working, LED
Panel covers, interior
Inner roof: Noise absorbing
Internal rear view mirror
Hooks: Two
Charger socket: One 24V & one 12V
Interior light
Steering wheel: Adjustable
Storage: Panels and netbag
Cup and can holder
Tinted safety glass
Openable side windows
Wipers and washers:
Front/rear also on the asymmetric part
Rotating beacon
Rear view mirrors, process view

Rops platform

Asphalt temp meter with dual sensors
Roll over protection structure
Floor mat and anti-slip
Panels: Back cover
Lights working, LED
Charger socket: One 24V & one 12V
Steering wheel: Adjustable
Frequency meter/ impactometer
Storage: Integrated in panel
Operators station, sliding and rotating
Operator's seat, suspension
Seat belt 3"
Hooks: Two
Vandal cover
Rotating beacon
Lunch box holder

Selectable options:

Rear view mirrors, traffic

6. OPTIONS

Biodegradeable hydraulic fluid
Chipspreader (Only for CC4000 VI- CC5200 VI)
Edge press,
- single, right front
- dual, front right and front left
- dual, right front and left rear
Evib Compaction Meter
First Aid Kit
Joint cutter disc, 80/150mm
Lights drum edge
Special color
Tool set
One extra watertank (*standard on off-set/active front drum steering rollers*)
Water tank cover, lockable
Service kit 50/500/1000 h
Decal risk location (GOST)
Lights, direction, side mounted
Lights, driving (left or right hand)
Lights, licence plate
Steering, emergency
Slow moving vehicle sign
Rotating beacon, ignition controlled
Heat cover wheel (for Combi only)
Dyn@Lyzer
Tachograph
Tachograph prep.
Fire extinguisher



DYNAPAC ASPHALT TANDEM ROLLERS

	CC4000 VI	CC4000C VI	CO4000 VI	CC4200 VI	CC4200C VI	CO4200 VI	CC5200 VI	CC5200C VI	CO5200 VI	CC6200 VI	CO6200 VI
Drum width, in, mm	66 1 680	77 1 950	77 1 950	77 1 950	84 2 130	84 2 130					
MASSES											
Operating mass ,lbs kg (incl. ROPS)	21,390 9 700	20,290 9 200	21,610 9 800	22,050 10 000	20,730 9 400	21,830 9 900	26,020 11 800	22,710 10 300	25,800 11 700	27,340 12 400	27,340 12 400
TRACTION											
Speed range, mph/km/h	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12	0-7.5/0 -12
Vertical oscillation	±7°	±7°	±7°	±7°	±7°	±7°	±7°	±7°	±7°	±7°	±7°
Theor. gradeability	45 %	46 %	45%	40 %	41 %	40%	34 %	35 %	34%	32 %	32%
COMPACTION											
Centrifugal force , lb, kN high/low amplitude	25 425/16 650 113/74	25 425/16 650 113/74	25 425/16 650 113/74	28 800/18 900 128/84	28 800/18 900 128/84	28 800/18 900 128/84	32400/20 925 144/93	32400/20 925 144/93	32 400/20 925 144/93	35 325/23 175 157/ 103	35 325/23 175 157/ 103
Oscillation force, lb kN			27,450 122			27,450 122			27,450 122		34,425 153
Nominal amplitude, in mm, high/low	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3	0,031/0,012 0.8/0.3
Oscillation tangential amplitude, in			0.057 1.45			0.055 1.4			0.051 1.3		0.055 1.4
Static linear load, pli kg/cm (front/rear)	162/162 28.9/28.9	162 28.9	162/165 28.9/29.5	167/167 29.8/29.8	167 29.8	167/164 29.8/29.2	170/170 30.3/30.3	170 30.3	170/166 30.3/29.7	163/163 29.1/29.1	163/163 29.1/29.1
Vibration frequency, vpm Hz, high/low amplitude	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/67	3060/4020 51/ 67	3060/4020 51/ 67
Oscillation frequency, vpm Hz			2,400 40			2,400 40			2,400 40		2,400 40
Water tank, gal liters	185/238 700/900	185+53 700+200	185/238 700/900	185/238 700/900	185+53 700+200	185/1050 700/900	224/277 850/1050	224+53 850+200	224/277 850/1050	224/277 850/1050	224/277 850/1050

Your Partner on the Road Ahead



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