# DYNAPAC ASPHALT TANDEM ROLLERS



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Dynapac CC4000 VI / CC4000C VI / CC4200 VI CC4200C VI CC5200 VI / CC5200C VI / CC6200 VI



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dynapac.us

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

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# A NEW PERSPECTIVE ON COMPACTION

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

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. 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

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 eccenters 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.

### 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
- 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 CC4200VI and CC5200VI can be ordered in Combi versions 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

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180 DEGREES STANDARD	. 255 DEGREES OPTIONAL
100 DEGNEES STANDAND	, 200 DEGNELS OF HONAL

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.

#### VISIBILITY

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

#### 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 BACK-UP SPRINKLER SYSTEM

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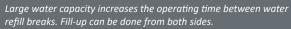
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**4** Back-up sprinkler system means less breaks for cleaning of nozzles and includes a backup sprinkler pump. All nozzles placed on the outer scraper

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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.

### WATER CAPACITY



### 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.

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### DYN@LYZER

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

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### 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.

### LOW EMISSIONS

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

### SERVICE FRIENDLY

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

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### OPTIONAL EDGE PRESSER/ CUTTER

Edge presser tool for better joint binding. We have installed it 12 with best operation visibility in mind.

### CHIP SPREADER

Optional rear mounted chip spreader. To be used for 13

creating friction on newly laid asphalt.

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### 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 CC4000VI- CC5200VI 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 (520 mm) 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.

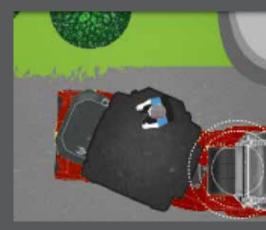


EXCELLENT VIEW Great control over drum edges due to improved visibility





BEST COMPACTION Better compaction along curbstones and obstacles



WEIGHT NEAR ROAD CENTER Along weak road edges you can keep the machines weigh road center.

# COMPACT POWER ENGINE

A choice between diesel engines fullfilling Stage IIIA/T3 and Stage IV/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.

OVNADA

CCS200

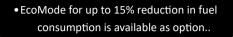
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# 5 in (520 mm)









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# 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 IV/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**

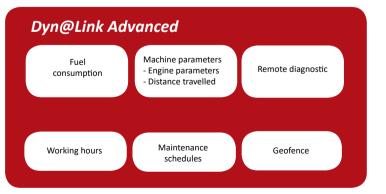
With the introduction of Dyn@Link Advanced as standard, Dynapac provides customers with a tool to monitor and manage their machine fleet efficiently and conveniently. The intelligent telematics system offers many possibilities to optimize fleet usage, to reduce maintenance costs and to save time and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



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



## Combi



## 2. STEERING

Active front drum steering with offset CC4000VI – CC5200VI



Standard steering



# 3. ENGINES 🕨

# IIIA/T3 or IV/T4f



Engine compartment - left side



Engine compartment - right side

### 4. OPERATOR'S PLATFORM

180<sup>0</sup> swiveling operator's platform

or

255 <sup>O</sup> swiveling operator's platform including electric mini steering wheel





Assymetric cab

## 5. OPERATOR'S PLATFORMS FEATURES

Asymmetric comfort cab

Asphalt temp meter with dual sensors Operator's seat. luxurv 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



# 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.



### 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 maintenence 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.COM
- 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

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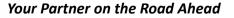
S Higher resale value





# DYNAPAC ASPHALT TANDEM ROLLERS

	CC4000 VI	CC4000C VI	CC4200 VI	CC4200C VI	CC5200 VI	CC5200C VI	CC6200 VI
Drum width, in/mm	66/ 1680	66 / 1680	66 / 1680	66 / 1680	77 / 1950	77 / 1950	84 / 2130
MASSES							
Operating mass, lbs/ kg (incl. ROPS)	21 388 9 700	20 300 9 200	22 050 10 000	20 700 9 400	26 020 11 800	22 700 10 300	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 - 7/0 - 12	0-7.5/0-12	0-7.5/0-12
Vertical oscillation	±7°	±7°	±7°	±7°	±7	±7°	±7°
Theor. gradeability	45 %	46 %	40 %	41 %	34 %	35 %	32 %
COMPACTION							
Centrifugal force , lb kN high/low amplitude	25 425/16 650 113/74	25 425/16 650 113/74	28 800/18 900 128/84	28 800/18 900 128/84	32 400/20 925 144/93	32 400/20 925 144/93	35 325/ 23 175 157/ 103
Nominal amplitude, in, mm high/low	0,031/0,012 0.8/0.3						
Static linear load, pli kg/cm (front/rear)	162/162 28.9/28.9	162 28.9	167/167 29.8/29.8	167 29.8	170/170 30.3/30.3	170 30.3	163/163 29.1/29.1
Vibration frequency, vpm Hz high/low amplitude	3060/4020 51/67						
Water tank, gal liters	185/238 700/900	185 + 53 700+200	185/238 700/900	185 + 53 700+200	224/277 850/1050	224+53 850+200	224/277 850/1050



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