

Tandem Asphalt Rollers

CC224HF / CC234HF / CC324HF / CC334HF
CC384HF / CC424HF / CC524HF / CC624HF
CC224CHF / CC234CHF / CC324CHF / CC334CHF
CC424CHF / CC524CHF

DYNAPAC

Part of the Atlas Copco Group



Advantage Dynapac

Our tandem rollers are designed with efficiency in mind - application efficiency, operator efficiency, compaction control efficiency and service efficiency. Performance, visibility, operators comfort, compaction control and serviceability for the CC line will appeal to owners, operators and service crews. The environmental benefits appeal to everyone.

All models have high frequency vibration as standard.

► Top quality results

With the Dynapac rollers you achieve high quality surface finishes through operational features such as soft starting and stopping to prevent unevenness or cracking in the asphalt layers. This allows even an unskilled operator to start and stop without leaving marks. In a panic situation, the machine will drop out of the soft mode and brake immediately, signalling the need for an emergency stop.

► Highest availability

There is a number of features to the CC rollers to make servicing quick and easy, ensuring maximum uptime.

The use of a double pump vibration system eliminates the need for a vibration valve, making the system more efficient, aiding servicing and reducing fuel consumption. Both pumps – one for the front drum and one for the rear – can simply be shut off.

With a volume of 750 litres for the CC224HF - CC334HF, 900 liters for CC424HF and as much as 1400 liters as an option for for CC524 - 624HF, it gives ample water resources.

► The operator in control

One way of achieving high quality compaction is to optimise the ergonomics, ensuring that operators have continuous visibility of the operation and comfortable access to the controls. The corrosion-free water tank is mounted in the front frame. This helps the rollers feature 1 x 1 metre view and full visibility of all working functions.

You can tailor your roller to local conditions, including operator's platform with ROPS, ROPS cab, aircondition etc.



► Expertise in every aspect

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



► **Real-life performance**

No matter the application. Dynapac will always offer an optimized solution.

Unique Characteristics

- from the Experts in Road Construction

Compacts any type of asphalt mix

With high frequency/low amplitude for thin layers and high amplitude for thick layers the machines are versatile and will efficiently compact any type of asphalt mix.

Thin layers with high stone content cool off quickly and need to be compacted fast, but use of a high amplitude risks crushing the aggregate. Dynapac recommends a high frequency and lower amplitude.



▲ Powerful engine

The new models are powered by Cummins QSB 3.3 and QSB 4.5 water-cooled turbo-diesel engines with after cooler.

Dynapac's automatic engine idling system together with a highly efficient hydraulic system makes fuel consumption low and efficient.

Infinite adjustable maximum speed is standard.



▲ Control panel with valuable information

The clear LCD control panel gives operators the information they need. All the gauges are displayed and the operator can change between menus at the touch of a button.

Further information about compaction results and guidance can be provided through the optional DCA-A system.

▼ Steering system with flexibility

All machines can be equipped with the optional off-set drum (split drum and combi rollers have off-set as standard.) This in combination with the asymmetric cab make the machines very easy to operate.



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Outstanding operator comfort

We have equipped the machines with slideable and turnable seat and steering module for best ergonomics. The engine is placed on the rear module with less heat and noise for the operator. The very low vibration level on the operator's platform also adds to the comfort of the operator.

The noise level is very low, enabling long working days without fatigue.



Your vision is our mission

Visibility is one of the most important issues for making an asphalt roller efficient and safe to operate. Therefore the machines have full visibility of drum edges, drum surfaces and sprinkler nozzles. The 4-post ROPS and 1 x 1 meter visibility also give a minimum view obstruction both forward/backward and side-ways.

Environmental thinking all the way

Environmental benefits are achieved through reduced fuel consumption and quieter operation. Efficiency enhancements have saved some 8 kW in the operation of a typical model in the range, with consequent improvements in the running costs and noise.

Biodegradable hydraulic fluid is optional. The automatic idling system and alternative horse power rating keep exhaust emission on a low level. Emission controlled engines are standard.

Easy maintenance in every detail

Daily service points are few and easily accessible. The position of the engine on the rear module and the large, easy to-open engine hoods contribute to easy and fast service.

The service info displayed directly on the drivers LCD also facilitates service jobs.

With maintenance free steering hitch and steering cylinder, very few grease nipples are found on these machines. At the same time, the periods between servicing have been extended.

Corrosion-free water tank and sprinkler tubes, in combination with easily accessible filters, ensure reliability and easy maintenance.

Hydraulic hoses can be replaced in individual segments, avoiding the need to fit a full length. Drum shock absorbers also benefit from easy replacement – there is no need to remove the forks or the drums.



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Attention to detail - the base of perfection

All Dynapac rollers benefit from solid experience, proven concepts – and advanced technology research. And when we introduce a line-up of new features, our first concern is real-life improvements for our users. Easy handling and servicing, and a clear focus on lasting performance.

Night work is easy. Experience the difference with Night Working Kit with drum edge light, drum surface light and snake light for the operator.

Compaction data that make the machine versatile. A wide frequency and amplitude range provides optimization for any layer thickness.

The unique offset drum and articulated steering give supreme maneuverability.

Service-friendly, roomy engine compartment. The location on the rear module reduces noise and heat for the operator.

► Combination rollers

All rollers from CC224HF up to CC524HF can be ordered in Combi versions (with exception for CC384HF) to further improve top layer texture. The Combi module is placed rear and is combined with offset steering. 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. Rubber coated drum is available as an option for CC224CHF.

The swiveling operator's platform allow a 180° turn of seat, instruments and levers in order to keep the operator in full control.

Open platform, ROPS and two different cab types are available as option, always with the sliding and swiveling operator's module.

Optional DCA-A helps you do a perfect job.

The unique design ensures full visibility of drum surfaces, sprinkler nozzles and drum edges.

Back-up sprinkler system means less breaks for cleaning of nozzles and includes a backup sprinkler pump.

Heavy-duty maintenance-free steering hitch high mounted to allow trouble-free access to engine and water tank maintenance.

Large water capacity increases operating time between water refill breaks.

Dynapac offers rollers with split drums. This makes operating easier in confined spaces and reduces the risk of cracks in the asphalt.



► **Compact power engine**

A choice between diesel engines fulfilling Stage IIIA/T3 and Stage IIIB/T4i offers impressive power reserves and significant operation benefits. Easy cold starting, low noise, rapid diagnostics and faster load acceptance are just some of them.



► **Joint cutting disc**

The edge press strengthens the asphalt edge, and can also be equipped with the joint cutting disc for asphalt edge trimming prior to jointing.

Take the guesswork out of compaction

► Dynapac Compaction Analyzer

Compaction is precision work. In order to reach the right density and obtain the right surface texture, a series of parameters must be monitored. By using the Dynapac DCA-A compaction analyzer this delicate task becomes a lot easier. Graphic, real-time display of temperature and number of passes, plus the support of GPS positioning, help you in making every job world class.

Furthermore, DCA-A provides full statistics, documentation and thorough data for quality analysis. The rolling pattern can be played back and all results printed on paper or to a PDF file. It is easy to understand how these benefits improve quality and clients' trust in your capabilities. The DCA-A analysis tool takes the guesswork out of compaction.

► A system that helps you do a perfect job

Compaction analysis

- Temperature- first and last pass
- Number of passes at each position inside and outside the temperature range
- Playback of the rolling pattern
- Full statistics
- Print to paper or export to PDF

Compaction Documentation

- Number of passes
- Surface temperature (core temperature)
- Graphic display of the temperature and the number of passes
- Background material for the quality analysis
- Support for continuous improvements of the paving process, rolling patterns and overall compaction results



The pass-count and asphalt temperature are presented in real-time on the operator screen - providing vital information for a successful compaction job.

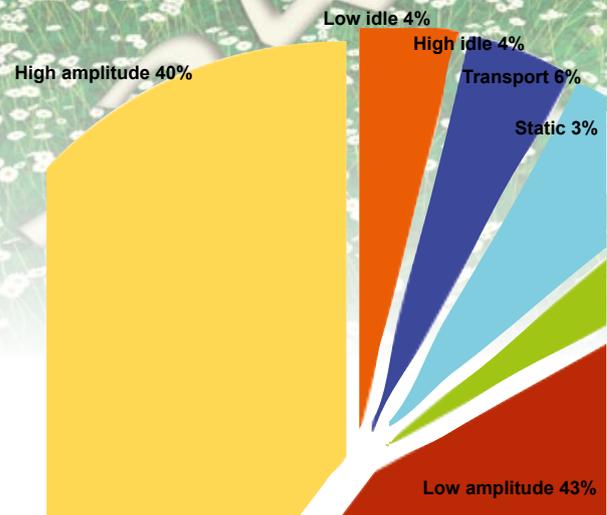
24% less CO2 emissions with CC224HF/CC234HF



Dynapac's new rollers CC224HF and CC234HF set new standards in low fuel consumption. Compared with already fuel efficient predecessors, CC222HF and CC232HF, the new rollers use up to 24% less fuel. This is Dynapac's contribution to customers who care about operating costs and the environment.

When developing the new CC rollers we had a number of important objectives in mind. Designing high performance rollers that are easy to drive and easy to service was important. Equally important was the goal to reach ambitious targets in terms of low fuel consumption and minimized environmental impact.

Emission controlled engines stage IIIA/T3 or IIIB/T4i can be chosen for CC224HF/CC234HF. On top of that we have managed to make a large reduction in fuel consumption. When we did the comparison we used a realistic mix of different working modes.



How did we reduce the fuel consumption so much?

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 revolutions after 10 seconds in neutral

The CC224HF and CC234HF are also amongst the most productive rollers on the market. When using our optimising software tool PaveComp and/or our documentation system DCA-A, your results will be even better with regards to compaction, economy and lower environmental impact.

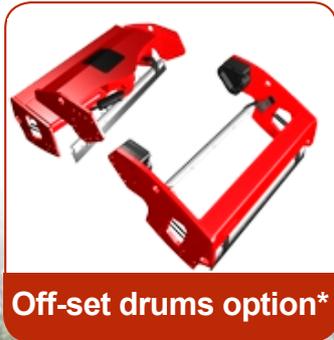
Choose between

3 different machine types Off-set drums or not

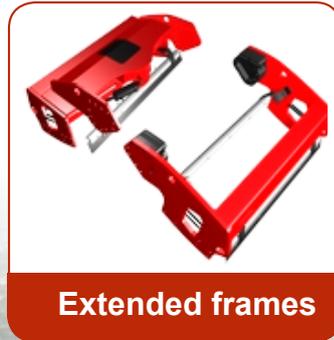
Short or extended frames 2 different engines



Standard drums



Off-set drums option*



Extended frames



III A/T3 or III B/T4i

Standard drum **Standard on combi and split drum*

**Only for CC524HF and CC624HF*



Combi



Split drums

CC224HF - CC384HF :
Cummins QSB 3.3 stage IIIA
74 kW/100 hp
or
Deutz TCD 3.6 stage IIIB
75kW/102 hp

CC424 and CC524:
Cummins QSB 4.5 stage IIIA
93 kW/132 hp
or
Cummins QSB 4.5 stage IIIB/T4i
97 kW/125 hp

CC624:
Cummins QSB 4.5 stage IIIA
113 kW/152 hp
or
Cummins QSB 4.5 stage IIIB/T4i
119 kW/161 hp



3 different operator's platforms



Asymmetric Cab

Assymmetric Comfort cab: & Assymmetric cab, including

Integrated ROPS
 Operators station, sliding and rotating
 Seat belt 2"
 Heating system
 Frequency meter/ impactometer
 3 speed fan system with filter
 Floor mat
 Lights working, H3 (Halogen)
 Panel covers, interior
 Inner roof: Noise absorbing
 Internal rear view mirror
 Hooks: Two
 Charger socket: One 24V
 Interior light
 Steering wheel: Adjustable
 Storage: Rear cover and side panel netbag
 Cup and can holder
 Tinted safety glass
 Openable side windows
 Wipers and washers:
 Front/rear also on the asymmetric part
ACC (comfort cab only)
Operator's seat, luxury (comfort cab only)
 Rotating beacon
 Rear view mirrors, traffic
Radio with CD-player (comfort cab only)
 Back-up alarm
 Sprinkler system additional



Asymmetric Comfort Cab

ROPS platform including

Roll over protection structure
 Floor mat and anti-slip
 Panels: Back cover
 Lights working, H3 (Halogen)
 Charger socket: One 24V
 Steering wheel: Adjustable
 Frequency meter/ impactometer
 Storage: In back cover
 Operators station, sliding and rotating
 Operator's seat, suspension
 Seat belt 2"
 Hooks: Two
 Vandal cover
 Rotating beacon
 Lunch box holder
 Back-up alarm
 Sprinkler system additional



ROPS platform

Selectable options:

Rear view mirrors, traffic

Options CC224 - CC624

Asphalt temperature meter
 Biodegradeable hydraulic fluid
 Chipsreader (only for CC224HF - CC334HF)
 Edge press, front mounted
 First Aid Kit
 Joint cutter disc, 80/150mm
 Lights drum edge
 Rear view mirrors, process view
 Special color (one of two colors)
 Tool set
 Two watertanks for ext. frames*
 Water tank cover, lockable
 CE package compaction parameters and noise supression
 Service kit 50/500/1000 h
 Hearing protectors
 Decal risk location (GOST)
 Lights, direction, side mounted
 Lights, driving
 Lights, licence plate
 Steering, emergency
 Slow moving vehicle sign
 Foot rest
 Rotating beacon, ignition controlled
 Heat cover wheel (for Combi only)
 Dynapac Compaction Analyzer
 Tachograph
 Tachograph prep.
 Fire extinguisher
 Seat belt 3"

** only for CC524HF and CC624HF*

Technical data



	CC224HF	CC234HF	CC324HF	CC334HF	CC384HF	CC424HF	CC524HF	CC624HF
Drum width, mm	1500	1500	1730	1730	1730	1730	1950	2130
Masses								
Operating mass , kg (incl. ROPS)	7 700	8,100	8,100	9,000	9,400	10,200	11,300	12,000
Module mass, kg (front/rear)	3,850/3,850	4,050/4,050	4,075/4,075	4,500/4,500	4,700/4,700	5,100/ 5,100	5,650/5,650	60000/6,000
Traction								
Speed range	0 -12	0 -12	0-12	0-12	0 -12	0-12	0-12	0-12
Vertical oscillation	±7°	±7°	±7°	±7°	±7	±7°	±7°	±7°
Theor. gradeability	42 %	39 %	37 %	35 %	37 %	45 %	40 %	36 %
Compaction								
Centrifugal force , kN (high/low amplitude)	78/67	72/59	90/75	79/64	90/75	139/ 92	154/101	166/ 106
Nominal amplitude, mm (high/low)	0.7/0.3	0.5/0.2	0.7/0.3 mm	0.5/0.2	0.7/0.3	0.8/ 0.3	0.8/0.3 mm	0.8/ 0.3
Static linear load kg/cm (front/rear)	25.7/25.7	27.0/27.0	23.6/23.6	26.0/26.0	27.2/27.2	29.5/ 29.5	29.0/29.0	28.2/28.2
Vibration frequency, Hz (high/low amplitude)	48/67	48/67	48/67	48/67	48/67	51/ 67	51/67	51/ 67
Water tank, l	750	750	750	750	750	900	900/1150/1400	
Engine								
Manufacturer/Model	Cummins QSB 3.3 IIIA/T3				Cummins QSB 4.5 IIIA/T3			
Type	Water cooled turbo Diesel with After Cooler				Water cooled turbo Diesel with After Cooler			
Rated power, SAE J1995	74 kW (99 hp) @ 2,200 rpm				93 kW (125 hp) @ 2,200 rpm 113 kW (152 hp) @ 2,200 rpm*			
Fuel tank capacity, l	130				240			
Manufacturer/Model	Deutz TCD 3.6 IIIBT4i				Cummins QSB 4.5 IIIBT4i			
Type	Water cooled turbo Diesel with After Cooler				Water cooled turbo Diesel with After Cooler			
Rated power, SAE J1995	75 kW (100 hp) @ 2,200 rpm				97 kW (130 hp) @ 2,200 rpm 113 kW (152 hp) @ 2,200 rpm*			
Fuel tank capacity, l	130				240			
								*CC624 only
	CC224HF	CC234HF	CC324HF	CC334HF	CC384HF	CC424HF	CC524HF	CC624HF

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Dynapac Compaction Equipment AB, Box 504, SE-371 23 Karlskrona, Sweden. Tel: +46 455 30 60 00, Fax: +46 455 30 60 30

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