

**DYNAPAC**

# **LARGE ASPHALT TANDEM ROLLERS**

CC4000 VI - CC6200 VI AND CO





DOUBLE DRUM

# **VIBRATORY AND OSCILLATION ROLLERS**

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*Fast, effective compaction*

*Optimised driving position,  
excellent visibility*

*Simpler controls, more  
intelligent machine*

Dynapac's double drum asphalt roller range features everything from the most compact equipment for repair jobs to large machines for the biggest sites with selectable alternatives like high frequency vibration and oscillation.

Vibration dampened platforms, swivel seats plus optional full seat rotation for better visibility, logically sorted controls, and Roll Overprotective Structures (ROPS) all contribute to the manoeuvrability, operator's ergonomics and safety.

# A NEW PERSPECTIVE ON COMPACTION

## BRINGS COMPACTION QUALITY TO A NEW LEVEL

### SEVERAL COMPACTION ALTERNATIVES

#### Standard Vibration

The standard drums have the capability to alternate between high amplitude with low vibration frequency AND low amplitude with high frequency depending on project requirements.

#### Oscillation

Oscillation works well for compaction on thin asphalt layers and joints as well as being the recommended solution for compaction on bridges, joints and near to buildings.

#### Combi version

Rubber tyred wheels replace the rear drum to achieve a more sealed surface with a different texture to the material.

### SAVE FUEL WITH ECO MODE

With ECO Mode enabled, the engine rpm is adjusted to be as low as possible while still maintaining the necessary power required for the given compaction parameters, in order to sustain compaction efficiency. ECO-Mode will lower fuel consumption by up to 15% when fully utilized during operation. This fuel savings can be further amplified with the Automatic Idling feature which will cause the machine to go into idle after 10 seconds of standstill in either High or Mid / ECO rpm.

### ELIMINATE BOWS AND CRACKS IN THE ASPHALT

Dynapac's Electric Drive Control system assists for smooth starting and stopping in order to prevent bowing and cracking in the asphalt layers. It allows for the max speed to be set from the start to prevent over-speeding and reduce the risk of rippling while also avoiding losing efficiency due to under-speeding.



### CONTINUOUS JOBSITE MANAGEMENT

Dyn@Lyzer continuously measures the stiffness of the compacted area and records the number of passes. This data is constantly visible for the operator on the machine and can also be monitored from the office.

### MANAGE YOUR FLEET WITH DYN@LINK

Increase the profitability of your business by using Dyn@Link. Quickly identify underperforming equipment, maximize uptime with perfectly scheduled maintenance and in case of a breakdown get machines operating again as quickly as possible.



## WANT TO FIND OUT MORE?

Scan the QR code and experience the Dynapac Double Drum Vibratory and Oscillation Tandem Roller even further!



## ALL-AROUND VISIBLY

Dynapac provides excellent visibility to the operator with seat that rotates 180° and slides across the full width of the cabin, while the operator stays in control of all functions as the full operation module moves along with the seat. Visibility can be further enhanced with optional rear-view mirrors mounted either side of the front drum as well as a 255° full rotation seat.

## MAINTAIN COMFORT WHILE IN OPERATION

The operator will be in a good climate with our Comfort Cab, which has automatic climate control and floor heating to combat any outside conditions. The operator's surroundings in our Comfort Cab are further complemented by a luxury seat, a blue-tooth radio, and two charger sockets, one 24 V and one 12 V.

## INCREASE DRUM VISIBILITY

The asymmetric cabin allows for the operator to slide to the right beyond width of the drum.

## CONFIGURE YOUR DRUM TO YOUR NEEDS

To improve the stability of the outer edge of the asphalt mat and prevent water from penetrating into the mat, an edge presser can be added to edge of the drum. Additionally, edge pressers can be utilized to improve the joint between two layers by compacting before jointing. Additionally, a joint cutter can be mounted on the edge of the drum to improve the edge because often the furthest edges are poor quality due to segregation.

## INCREASE FRICTION FROM THE START

To increase the surface friction on freshly laid asphalt, a chip spreader can be used in tandem with the roller during the compaction process.

## MINIMIZE STOPS WITH EFFICIENT SPRINKLER SYSTEM

Dynapac's VI Generation Rollers are equipped with a large water tanks and a complete back-up of the sprinkler system to limit the amount of stops for refilling.



# JOB SITE CONFIDENCE

Keep your team confident and healthy when operating on the job site. Ensure good working safety, ergonomics and easy to use operating systems.

## OFFSET WITH ACTIVE FRONT DRUM STEERING

**FULL CONTROL OF THE FRONT DRUM**  
The operator has full control on the front drum which is the one that has most impact on his precision driving close to curbstones and other obstacles.

**OFF-SET STANDARD USAGE**  
Remove one drum edge when compacting close to curbstones minimizing the risk of pushing the stone when steering near the stone.

**DYNAPAC'S OFF-SET SYSTEM**  
The combination of articulated steering and steerable front drum giving a large off-set of 500 mm makes it possible too:

- Move the mass inwards the road when compacting on weak road edges
- Increase the surface capacity when doing the last passes to remove marks in the mat
- Minimize the turning radius by steering the offset drum and hitch in the same direction

## FULL SEAT ROTATION

**REMOVE THE LIMITATIONS**  
By being able to turn the seat and steering module all the way around the operator gains greater positional flexibility and thereby increases visibility. The ergonomics are automatically improved when the operator does not have to stretch and bend to see.

**DRIVEABILITY**  
Remove any doubts about which way to turn steering wheel as the drive lever system takes care of this in a logical way by alternating as the operator's station turns

**ELECTRONIC MINI STEERING WHEEL**  
The full seat rotation comes with electronic mini steering wheel that gives smooth and precise steering as it follows the operator's module for best visibility and ergonomics.

## ASYMMETRIC CAB

**VISIBILITY**  
Drum edge visibility is essential when driving a tandem roller on asphalt and with the asymmetric cab, it allows the operator to have excellent visibility by having the right side further out than the drum edge, preventing the need to lean out through the windows.

**ERGONOMICS**  
The asymmetric design makes it possible for the operator to stay within the cab in a good ergonomic position not putting unnecessary stress to back and neck.

**LOW NOISE CAB WITH GOOD CLIMATE**  
Dynapac's cabs are well known good climate and plenty of space. The asymmetric design makes it possible to stay in the cab protected from the weather conditions and be able to enjoy the good climate and low noise.











# HIGH PRODUCTIVITY

Increase the productivity of your job sites through efficient paving and compaction operation. Reduce non-productive times on the job site.

## HIGH VIBRATION FREQUENCY AND OSCILLATION

### HIGH FREQUENCY COMPACTION

In order to achieve compaction, the roller will operate with lower amplitude and a high vibration frequency. The rollers can also obtain a high level of compaction for thick layers with the high amplitude and "normal" frequency.

### OSCILLATION

Oscillation is for thin asphalt layer compaction, compaction on bridges and for joint compaction. It gives less transversal ground vibration, and a lower noise level than normal vibrations. Oscillation also limits the risk of damaging the mat with less qualitative aggregates.

### SIMPLICITY IN AMPLITUDE AND FREQUENCY SELECTION

The vibration system automatically sets the correct frequency once the operator selects which amplitude is required, with high or low for thick and thin layers.

## PAVECOMP

### WHICH MACHINE SIZE IS SUITABLE?

PaveComp will help you to select the optimal asphalt roller with regards to weight and drum width.

### HOW MANY MACHINES ARE NEEDED?

PaveComp will suggest how many rollers that are needed for your job. This suggestion can then also be compared with the fleet you have available.

### HOW MANY PASSES SHOULD I DO?

PaveComp gives best utilization of the machine and compaction capacity making it possible to plan how many passes needed on a certain asphalt mix and thereby the capacity.

## DYN@LYZER

### HOW MANY PASSES HAVE I DONE?

Dyn@Lyzer keeps track of how many passes done and where throughout the jobsite.

### WHAT WAS THE TEMPERATURE ON THE ASPHALT MAT?

Too cold asphalt could make it difficult to reach proper compaction with the possibility of crushing the aggregate, while too warm asphalt could result in cracks. The asphalt temperature meter will warn the operator when out of the temperature range and the Dyn@Lyzer will records the temperatures through the worksite.

### WHICH LEVEL OF COMPACTION DID I REACH?

Dyn@Lyzer records and maps stiffness and stiffness progress. It takes the readings from the Evib compaction meter. It is important to relate to the asphalt temperature as stiffness and Evib values will increase when the asphalt cools.





# MAXIMUM UPTIME

A machine has to run to make money! Minimize non-productive times, avoid unscheduled break-downs.

## EFFICIENT WATER SYSTEM

### COMPLETE BACK-UP SPRINKLER SYSTEM

To avoid unnecessary interruptions, our rollers are equipped with a complete back-up system for the sprinkler including dual pumps and dual sprinkler bars on each drum as well as three step water filtration system to prevent clogged nozzles.

### FREEZE PROTECTION

Dynapac's sprinkler system have to ability to be equipped with anti-freeze fluid to protect all parts of the sprinkler systems waterflow in cold climates.

### BIG WATER TANKS

The water system has large volume tanks and efficient sprinkler system with sprinkler timer that assists in reaching lowest possible water consumption to reduce the need to stop for water filling as often.

## OPTIMIZED SERVICEABILITY

### LUBRICATION FREE STEERING HITCH

The only thing that needs treatment with lubrication is the bearing for the optional front drum steering which is situated at one easy to reach console that is accessible from ground level.

### HIGH PLACED SCRAPERS

The high placement of the scrapers on the drums provides additional aid in keeping them clean from any asphalt debris as compared with traditional lower placed scrapers, thus reducing the total amount of cleaning and adjustments.

### MODULARIZATION

To facilitate quick learning about Dynapac rollers, they are all designed around the concept of modularization. This gives notable similarities between different Dynapac machines within a class, meaning that if you know one Dynapac machine you will be able to easily understand others.

## DYN@LINK

### NEAR REAL-TIME LOCATION

All data are accessible for customers with password on the web and also through an app on your smart phone. With the positioning data it is easy to find your roller for service visit but it also makes it possible to geofence the roller warning you if the machine leaves the predefined jobsite area.

### ENGINE HOURS, VIBRATION HOURS AND SERVICE ALERTS

The engine hours are updated continuously while you can also see the distribution of idling and transportation/static passes. Service alerts pop up when regular service intervals should take place making it easier to plan for the maintenance.

### PREVENTIVE WARNINGS

Dyn@Link display critical warnings such as low oil pressure and overheating making it possible to prevent severe break downs preliminarily.









# HIGH QUALITY RESULTS

Avoid penalties and rework! Stabilize the quality of your paving and compaction jobs.

## PAVECOMP

**WHICH MACHINE SIZE IS SUITABLE?**  
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**HOW MANY MACHINES ARE NEEDED?**  
PaveComp will suggest of how many rollers that are needed. This suggestion can then also be compared with the fleet you have available.

**HOW MANY PASSES SHOULD I DO?**  
PaveComp gives best utilization of the machine and compaction capacity making it possible to plan how many passes are needed on a certain asphalt mix and thereby the capacity.

## DYN@LYZER

**HOW MANY PASSES HAVE I DONE?**  
Dyn@Lyzer keeps track of how many passes done and where throughout the jobsite.

**WHAT WAS THE TEMPERATURE ON THE ASPHALT MAT?**  
The asphalt temperature has an important impact on the compaction. Too cold asphalt could mean difficulties to reach proper compaction plus a risk of crushing the aggregate. Too warm asphalt could result in cracks. The asphalt temperature meter gives warnings when out of range and the Dyn@Lyzer records the temperatures.

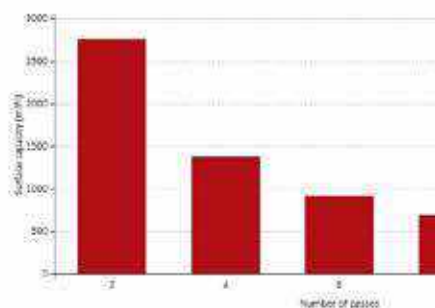
**WHICH LEVEL OF COMPACTION DID I REACH?**  
Dyn@Lyzer records and maps stiffness and stiffness progress through the day. It takes the readings from the Evib compaction meter. It is important to relate to the asphalt temperature as stiffness and Evib values increase when the asphalt cools.

## EASE OF OPERATION

**ELECTRONIC DRIVE CONTROL**  
The Electric Drive Control system assists for smooth starting and stopping in order to prevent bowing and cracking in the asphalt layers. It allows for the max speed to be set from the start to prevent over-speeding and reduce the risk of rippling while also avoiding losing efficiency due to under-speeding.

**FLEXIBLE OPERATOR'S STATION**  
Dynapac's standard rotatable and slidable seat & steering module facilitates an increased level of visibility by giving the operator a variety of options to get in the right position.

ASPHALT COMPACTION





# LOW COST OF OWNERSHIP

Improve the overall profitability of your investment by reducing the costs of operating the machine while maintaining a high equipment value.

## ECO MODE AND AUTOMATIC IDLING

### ECO FUNCTION FOR LOWER FUEL CONSUMPTION

Our large tandem rollers have a “best point regulation system” meaning that the engine rpm is kept as low as possible while providing the correct vibration frequency in order to maintain compaction efficiency. Noise emissions are alleviated by keeping the engine rpm as low as possible.

### AUTOMATIC IDLING

After 10 seconds in standstill at high or mid/ECO rpm, the automatic idling setting will activate causing the engine goes to idle. This helps to lessen fuel consumption as compared to setting the idle manually with the throttle control.

### DUAL PUMP VIBRATION SYSTEM

Two integrated basic on/ off valves in each pump create a more efficient system with less energy losses and lower fuel consumption compared with complicated vibration valves.

## OPTIMIZED SERVICEABILITY

### OPTIMAL ENGINE PLACEMENT

The engine is designed so that all routine maintenance points are accessible and easy to reach from the ground. Additionally, there is no need for a central lubrication system as the only greasing point is for the off-set drum bearing.

### DUAL PUMP VIBRATION SYSTEM

Two integrated basic on/ off valves in each pump create a more efficient system with less energy losses and lower fuel consumption compared with complicated vibration valves.

### DYN@LINK

The DYN@LINK system, that is standard on our large tandem rollers, is an excellent way to monitor your roller by being able to access the following:

- Position of your roller
- Engine hours
- Service alerts Eventual warnings

## HARDOX 450 DRUM SHELL

### HARDOX FOR OSCILLATION

For the oscillation drum we have used Hardox 450 which is the hardest weldable and bendable steel that can be manufactured into a drum today. This material increases the drum’s lifetime even when compacting tougher material.

### EASILY CHANGEABLE TIMING BELTS

The eccentric weights are driven by timing belts, and over the course of the machine’s life, these belts will eventually need to be replaced. On the oscillation drum, we have four bolted service covers for easy reach of the timing belts. Every oscillation machine comes with a special timing tool included, and this together with other solutions makes it possible to change the timing belt within only two hours.

### HIGHLY EFFICIENT ECCENTRICS

The eccentric system is designed with a patented design which contributes to power savings up to 12 kW at start-up of either vibration or oscillation.



Easy access to change to timing belt

CO4200 VI

NEW  
CO4200  
OSCILLATION  
DYNAPAC

**HARDDOX**<sup>®</sup>  
IN MY BODY  
© 2014 Dynapac. This product is made of exclusive Hardox wear plate.  
Inferiorment of SSAB. www.hardox.com







# ENVIRONMENT & SUSTAINABILITY

Protect the environment. Show your social responsibility and collect on tenders that require low CO<sub>2</sub> and noise emissions.

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### DUAL PUMP VIBRATION SYSTEM

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## LATEST ENGINE TECHNOLOGY WITH STAGE V

### STAGE V/ T4 AND IIIA/T3 ENGINE ALTERNATIVES

Dynapac offers a selection of engines that makes it possible to get as low emissions as possible while also considering which type of diesel fuel and sulphur content that is available around the globe.

### EFFICIENT ECCENTRICS

Dynapac’s patented highly efficient eccentrics saves up to 12 kW of power at the vibrations start up. The start-up of the vibration can often cause high levels of energy consumption so, the eccentrics allow for us to go down in engine size, thus saving fuel but still having a powerful machine.

### THERMOSTAT CONTROLLED COOLING FANS

Dynapac offers hydraulic and thermostat-controlled cooling fans which aid in lower fuel consumption and lower noise as standard.

## LATEST COMPACTION TECHNOLOGY AND COMPACTION CONTROL

### PAVECOMP

Answers your question about:

- Which machine size is suitable?
- How many machines are needed?
- How many passes should I do?

### IMPACTOMETER, ASPHALT TEMPERATURE METER AND EVIB COMPACTION METER

The Impactometer helps you to keep the optimum speed while the temperature meter and the Evib compaction meter gives support for compaction at the most efficient temperature without over-compacting and wasting passes.

### DYN@LYZER

Dyn@Lyzer keeps track of how many passes done and where throughout the jobsite. Dyn@Lyzer records and maps stiffness and progress through the day. It takes the readings from the Evib compaction meter. It is important to relate these value to the asphalt temperature as stiffness and Evib values will increase when the asphalt cools.



# COMPACTION ESSENTIALS

Your satisfaction is key. We offer various options and best-in-class features. We are your partner on the road ahead.

## MACHINE TYPES



### STANDARD DRUMS

The standard drums have the capability to alternate between high amplitude with low vibration frequency AND low amplitude with high frequency depending on project requirements.



### OSCILLATION DRUMS

Oscillation works well for compaction on thin asphalt layers and joints as well as being the recommended solution for compaction on bridges, joints and near to buildings.



### COMBI

Rubber tyred wheels replace the rear drum to achieve a more sealed surface with a different texture to the material.

## ENGINES



### ENGINE COMPARTMENT - LEFT SIDE

A mixture of dynamic controlled pumps and an optimized hydraulic routing ensures to use as little energy as possible within the drive train.



### ENGINE COMPARTMENT - RIGHT SIDE

Highest traction even at the largest widths.

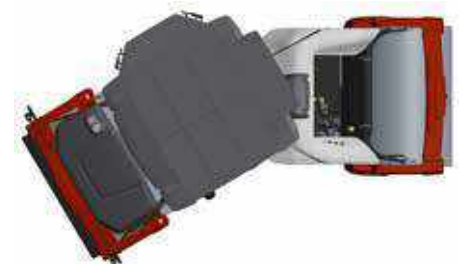
## STEERING



### ACTIVE FRONT DRUM STEERING WITH OFFSET

CC4000 VI - CC5200 VI  
CO4000 VI - CO5200 VI

The operator has full control of the front steerable drum with precision driving that when used in combination with the articulated steering hitch can create more than 500 mm offset.



### STANDARD STEERING

## EDGE PRESSER / JOINT CUTTER



### PREPARING THE JOINTS

To improve the stability of the outer edge of the asphalt mat and prevent water from penetrating into the mat, an edge presser can be added to edge of the drum. Also, edge pressers can be utilized to improve the joint between two layers by compacting before jointing.

Additionally, a joint cutter can be mounted on the edge of the drum to improve the edge because often the furthest edges are of poorer quality due to segregation.

## ALL AROUND VISIBILITY



### GET INTO RIGHT POSITION

Dynapac provides excellent visibility to the operator with seat that rotates 180° and slides across the full width of the cabin, while the operator stays in control of all functions as full operation module moves along with the seat. Visibility can be further enhanced with optional rear-view mirrors mounted either side of the front drum as well as a 255° full rotation seat.

## ELECTRIC DRIVE CONTROL

### AVOID MARKS IN THE MAT

Dynapac's Electric Drive Control system assists for smooth starting and stopping in order to prevent bowing and cracking in the asphalt layers. It allows for the max speed to be set from the start to prevent over-speeding and reduce the risk of rippling while also avoiding losing efficiency due to under-speeding.



## ECO MODE



### SAVE FUEL

With ECO Mode enabled, the engine rpm is adjusted to be as low as possible while still maintaining the necessary power required for the given compaction parameters, in order to sustain compaction efficiency. ECO-Mode will lower fuel consumption by up to 15% when fully utilized during operation. This fuel savings can be further amplified with the Automatic Idling feature which will cause the machine to go into idle after 10 seconds of standstill in either High or Mid / ECO rpm.

## CHIP SPREADER



### CREATE INITIAL FRICTION ON THE NEW ASPHALT

To increase the surface friction on freshly laid asphalt, a chip spreader can be mounted on the rear drum to be used in tandem with the roller during the compaction process. Additionally, chips can be used in repairing asphalt bleedings.

## MONITORING TOOLS



### FOR DOCUMENTATION

Dyn@Lyzer continuously measures the stiffness of the compacted area and records the number of passes. This data is constantly visible for the operator on the machine and can also be monitored from the office.

Increase the profitability of your business by using Dyn@Link. Quickly identify underperforming equipment, maximize uptime with perfectly scheduled maintenance and in case of a breakdown get machines operating again as quickly as possible. Don't leave important business decisions to educated guesses, use the data from the telematics within Dyn@Link to make fully informed decisions.

## COMPACTION DOCUMENTATION

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

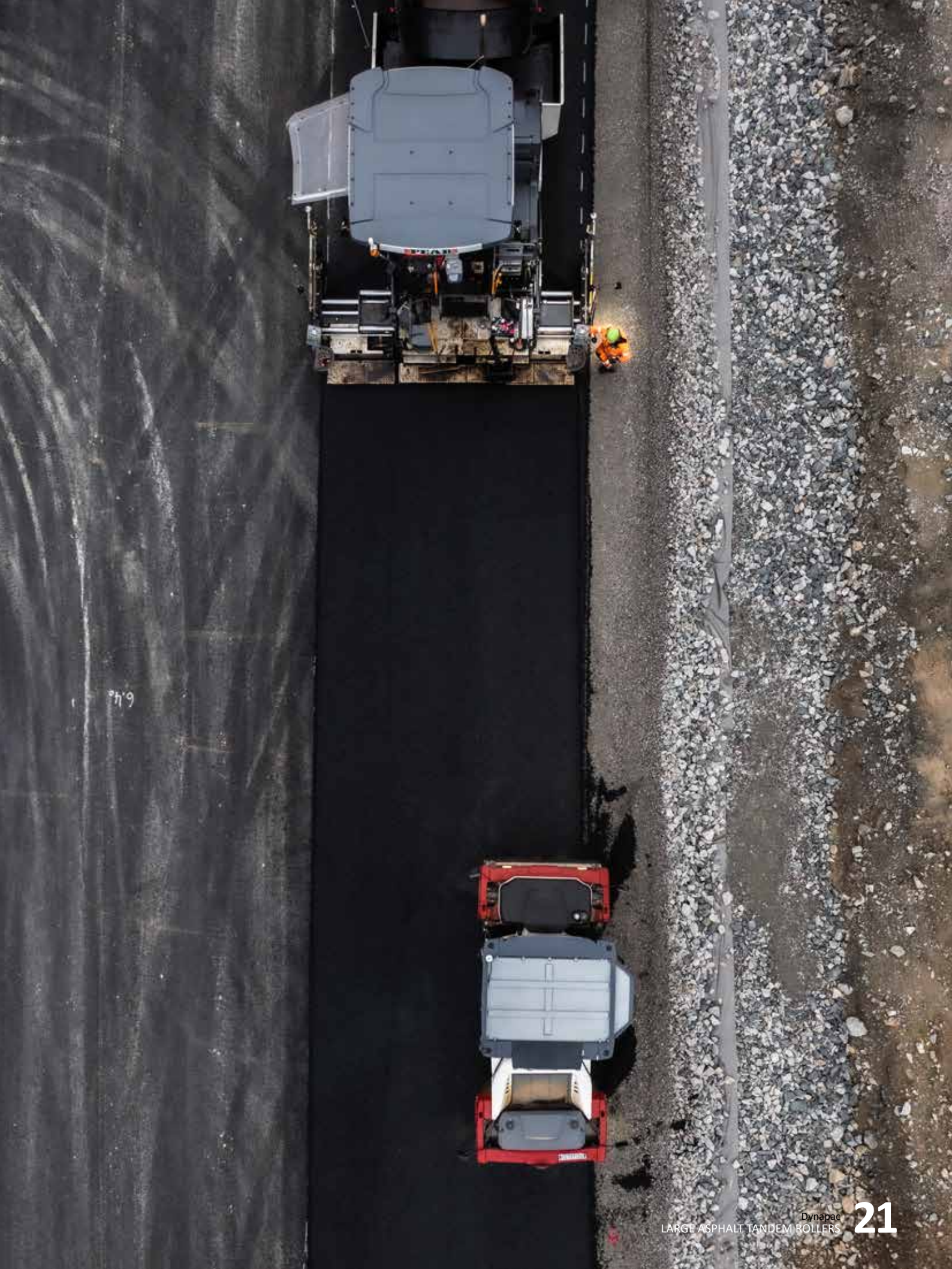
## ANALYSIS OF THE COMPACTION

- 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

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.



# DYN@LYZER COMPACTION CONTROL



6.4



# 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.

## SERVICE COMMITTED TO YOUR FUTURE

### GENUINE PARTS AND KITS

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

### SERVICE

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

### CONSUMABLES

- Road Milling Tools (bits)

## 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

### REGULAR MAINTENANCE PREVENTS COSTLY STANDSTILLS.

Equipment breakdowns have a direct impact on your productivity. Preventative maintenance is the only way to ensure that your machine sustains its productivity throughout the working season. To optimize this productivity, your preventative maintenance needs to be planned either ahead of the working season or as your machine approaches specific intervals for servicing. To assist with maintaining your machines, Dynapac offers preventative maintenance kits so that you can have all that is needed for each service interval in one place.





# TECHNICAL DATA

## LARGE ASPHALT TANDEM ROLLERS

TECHNICAL DATA	CC4000 VI (CO)	CC4000C VI	CC4200 VI (CO)	CC4200C VI	CC5200 VI (CO)	CC5200C VI	CC6200 VI (CO)
Drum width, mm	1680	1680	1680	1680	1950	1950	2130
<b>MASSES</b>							
Operating mass, kg (incl. ROPS)	9700 (9800)	9200	10000 (9900)	9400	11800 (11700)	10300	12400 (12400)
<b>TRACTION</b>							
Speed range, km/h	0-12	0-12	0-12	0-12	0-12	0-12	0-12
Vertical oscillation	± 7°	± 7°	± 7°	± 7°	± 7°	± 7°	± 7°
Theor. gradeability	45%	46%	40%	41%	34%	35%	32%
<b>COMPACTION</b>							
Centrifugal force , kN high/low amplitude	113/74 (122)	113/74	128/84 (122)	128/84	144/93 (122)	144/93	157/103 (153)
Nominal amplitude, mm, high/low	0.8/0.3 (1.45)	0.8/0.3	0.8/0.3 (1.40)	0.8/0.3	0.8/0.3 (1.30)	0.8/0.3	0.8/0.3 (1.40)
Static linear load kg/cm (front/rear)	28.9/28.9 (28.9/29.5)	28.9	29.8/29.8 (29.8/29.2)	29.8	30.3/30.3 (30.3/29.7)	30.3	29.1/29.1 (40)
Vibration frequency, Hz high/low amplitude	51/67 (40)	51/67	51/67 (40)	51/67	51/67 (40)	51/67	51/67 (40)
Water tank, l	680/880	680+200	680/880	680+200	850/1050	850+200	850/1050
<b>ENGINE</b>							
Engine manufacturer & types	Cummins F3.8/QSF3.8	Cummins F3.8/QSF3.8	Cummins F3.8/QSF3.8	Cummins F3.8/QSF3.8	Cummins F3.8/QSF3.8	CCummins F3.8/QSF3.8	Cummins F3.8/QSF3.8