The CP142 pneumatic roller - value for money

The highly cost-efficient CP142 is the smallest of Dynapac’s series of pneumatic tyred rollers. This machine shares many of the features that make Dynapac a strong and reliable partner for all kinds of jobs. For us at Dynapac, performance always comes first, and with our efforts in serviceability and ergonomics you can rest assured that efficiency and top quality results will last for the machine’s entire lifetime. The CP142 is used for chip-sealing and to compact asphalt for sealing purposes, and to compact base, sub-base and stabilized soil.

**Strong and smooth**
Dynapac CP142 has power reserves enough to ensure effortless and efficient finishing and sealing. Add to that the smooth start-stop procedure and you have a trusty working companion for long efficient passes. The power source is the reliable Cummins QSB 3.3 T3A with an output of 74 kW or 99 hp, and the muffler and exhaust pipes are hidden under the hood for best possible visibility backwards.

**Reliable performance**
The ergonomic designed F/R handle, located on the right side of the operator’s seat, makes operation smooth and easy. With full control of the engine power applied the surface quality and end result is maintained at top level. Perfect balance is provided by the unique modular ballast system. It gives you the advantage of direct visual control of the wheel loads.

**Safe and secure**
A clear view and undisturbed driver control are important properties both from a quality and a safety viewpoint. In the CP142 the operator seat is placed in the centre, and the ROPS is placed not to obstruct the view. The operator can keep an eye on the finest details – and stay aware of movements close to the machine.

**Business and pleasure**
In the Dynapac CP142, the operator’s unit feature a new and very user-friendly instrument panel. All indicators, switches and controls are clearly visible and easily reached. At Dynapac, we are convinced that efficient and profitable operation is directly connected to the quality of the driver’s environment.

**Environmental care**
Protection of our environment and careful use of resources are keywords in all Dynapac development. We strive for reduced fuel consumption and emissions, and engines complying with Stage 3A are fitted as standard. Our machines allow the use of bio-degradable hydraulic fluids, and by cautious design we have reduced the risk of spillage.

**Serviceability**
The Cummins diesel engine is easily accessed, thanks to the large hood. The few daily service points, as well as filters and filler caps, are positioned for trouble-free and fast maintenance and routine service.

▶ Service - easier than ever
Daily service points are few and within reach.
Scrapers combined with cocoa mats keep the tyres clean and reduce the risk of picking.

The ergonomic designed F/R handle, located on the right side of the operator’s seat makes operation smooth and easy.

Muffler and exhaust pipe are hidden under the hood for best possible visibility backwards.

Modern instrument panel were indicators and switcher are easy to reach.

Highly efficient cooling system keeps the engine and hydraulic system at the right temperature also when running at full speed.

Unique modular ballast system gives direct visual control of the wheel loads.

Ballast cartridges means less time and money spent on loading and unloading ballast in the form of sand and water. It will take only one third of the time.
Dynapac presents a series of pneumatic tyred rollers in the 21 - 27 ton weight class including a 21 ton wide base tyre version. The CP224, CP224W and CP274 incorporate several new features that will enhance efficiency, serviceability, operator comfort and the end result. The unique cab design offers an outstanding workplace for the operator, and the dual-circuit braking system is another Dynapac-only feature.

With genuine Dynapac performance you can add the final touch to any project. By the progressive design and striking Dynapac colour scheme makes it clear to everyone that you have chosen the right machine for the job.

Performance
A pneumatic tyred roller is a specialized machine – with a wide range of applications. Finishing and sealing are obvious ones but soil compaction can also be carried out with top quality. A significant feature is the smooth start-stop procedure when changing driving direction. The air-on-the-run option and back-up sprinkler further enhance the end result quality.

Safety
The braking system has two separate circuits which are able to maintain full braking capacity even if a damaged hose or other failure should disable one of the circuits.

Visibility and manoeuvrability are safety cornerstones. Dynapac’s cab design, as well as the 4-post ROPS, minimizes obstruction of the operator’s field of view. Also, precise steering and the powerful braking system keep the operator in control.

Ergonomics
In a Dynapac roller, the seat, steering wheel, dashboard and controls are built as an integrated unit, easily adjusted to personal preferences. The entire operator unit can slide and rotate in order to give the best visibility and working conditions possible. Add to that a wide range of options, including air condition or automatic climat control, as well as on-screen troubleshooting information. A Dynapac is built for long-term productivity.

Environmental care
Every Dynapac is designed and built with focus on reduced environmental impact. Optimized hydraulic systems and engines reduce fuel consumption and emissions, and engines complying with Stage 3A are fitted as standard. Biodegradable hydraulic fluid can be used, and it is easy to change engine liquids and hydraulic fluid without risk of spillage.

To reduce noise, the cooling fans are thermostatically controlled, and the entire machine produces a surprisingly low level of ambient noise.

► Comfort in mind
The operator unit is designed with operator comfort and safety in mind. The whole unit can slide and rotate to give the best visibility and working conditions possible.
**Value you can count on**

- A modular steel ballast system takes one-third the time to load and unload than ballast in the form of sand and water, which saves money.

- Dynapac Compaction Analyzer: The optional DCA-A analyzer takes the guesswork out of compaction by monitoring asphalt temperature and the number of passes. Achieving the optimum density and surface texture in six passes instead of eight can save 25% in the cost of operating a roller and reduce the number of mandatory test spots by 50%. This means better results in less time, which increases profitability.

- Modularization allows for faster service response and keeps maintenance costs low, and the common parts and systems between different product lines simplify technician training and inventory. In the short term, this means maximum uptime, productivity and profitability on the job. In the long term, a well-maintained roller has up to a 15% higher resale value.

- The operator has a direct impact on compaction efficiency and cost. With one of the most modern operator platforms on the market and a dual-circuit braking system that maintains full braking operations even if one circuit is disabled, the operator works in comfort and safety – increasing productivity on the job.

- Paving and compaction often take place at night, when working speed can drop by 20% due to poor visibility. Optional Xenon lights create a safer job site for nighttime operations and help maintain productivity.

- An optimized hydraulic system and thermostat regulated cooling fans can reduce fuel consumption by 3-4% compared to a traditional system.

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**Serviceability**

Daily service points are few and the large hood and location of filters and filler caps make routine service tasks smooth and fast. And in order to assist the operator, service information is displayed on the dashboard LCD.

Several Dynapac models share many common components and sub-systems. This modularization simplifies stock keeping of spare parts and enable quicker service to end-users.
Optional air-on-the-run for adjusting tyre pressures.

Asymmetrical cab and ROPS with a wide range of optional equipment.

Modular design enhances serviceability.

Redundant dual-circuit braking system for increased reliability and safety.

Choice of two travel speeds

The Dynapac DCA-A compaction analysis tool provides superior control.

CP224W: Wide-base tyres
Wide-base tyres cause less lateral movement of the particles than standard tyres.

Dual-circuit braking system
The braking system has two separate circuits. This means that full braking capacity is maintained even if a damaged hose or other failure should disable one of the circuits.

Optional back-up sprinkler pump.
24 volts electrical system increases cranking capacity and general durability.

Engine type Stage 3A standard for all markets.

Sliding and rotating operator’s module increases visibility and comfort.

Fully hydraulic propulsion reduces maintenance costs.

Optional steel ballast can be mounted in separate boxes under the frame.

Easy and fast drain of water ballast increases productivity.

The new CP224/274 rollers are under three metres in height with Cab or ROPS. This can be a key factor when transporting the roller between worksites.

Outstanding operator comfort

In a Dynapac, the operator has the advantage of a highly ergonomic and user-friendly driver’s environment.

The spacious asymmetrical cab can be equipped with air conditioning or ACC.

Balanced all the way

To achieve the same ground pressure on front and rear tyres, the ballast is distributed evenly, whether water, sand or steel is used.

In a Dynapac, the operator has the advantage of a highly ergonomic and user-friendly driver’s environment.

The spacious asymmetrical cab can be equipped with air conditioning or ACC.

To achieve the same ground pressure on front and rear tyres, the ballast is distributed evenly, whether water, sand or steel is used.
Standard Equipment CP142
- Backup alarm
- Ballast boxes, 6
- Cover, instrument panel
- Dual scrapers with cocoa mats
- Fuel gauge
- Horn
- Hour meter
- Hydraulic check points
- Hydraulic oil lever indicator
- Interloc system
- Key master and start
- Lifting and tiedown eyes
- Main battery switch
- Neutral start arrangement
- Pressurized sprinkler system
- ROPS (incl. seat belt) *
- Pressurized sprinkler system
- Neutral start arrangement
- Main battery switch
- Neutral start arrangement
- Pressurized sprinkler system
- ROPS (incl. seat belt) *

Optional Equipment CP142
- Ballast boxes, 2 extra for full ballast
- Biologically degradable hydraulic oil
- Canopy (not for ROPS)
- Driving lights
- Rotating beacon
- Tool box
- Towing eyelets
- Tyres, 14 ply
- Vandal resistant instrument cover
- Warning lights for air cleaner, brake, engine temp, engine oil pressure, hydraulic filter, hydraulic oil temp and low fuel level

Optional Equipment CP224/274
- Air on the run
- Asphalt temperature meter
- AWC (Automatic Water Control)
- Back up alarm
- Biodegradable hydraulic fluid
- Cab, asymmetric, ROPS
- Canopy
- Cocoa mats
- Compaction Analyzer – Dynapac DCA-A
- Edge cutter
- Fire extinguisher
- First aid box
- Heat covers for wheels
- Lights, driving, right-hand traffic
- Lights, driving, left-hand traffic
- Lights, working, front/rear for cab/ROPS/canopy (Helium or Xenon)
- Lights licence plate
- Lunch box holder (not for cab)
- Michelin tyres
- Process mirrors
- Rear view mirrors, external
- ROPS, 4 posts, with roof and seat belt
- Rotating beacon
- Seat, luxury for platform and cab
- Slow moving vehicle sign
- Sprinkler and scraper system
- Sprinkler back up pump
- Sprinkler timer
- Steel ballast
- Tool set
- Towing eyelets front & rear
- Vandal cover for instrument panel (not cab)
- Water level gauge
- Water tank covers, lockable
- 3 inch seat belt

Standard Equipment CP224/274
- Battery switch
- Choice of 2 travel speeds
- Documentation (Manuals), one set
- Drainage for water ballast
- Emergency stop
- Engine temperature display
- Fuel level display
- Horn
- Hour meter
- Hydraulic fluid temperature display
- Hydraulic checkpoints
- Hydrostatic drive with 2 hydraulic motors
- Interloc system
- Key master and start
- Lifting points
- Parking brake
- Redundant brake system
- Sliding and swiveling operator unit
- Speedometer
- Tachometer display
- Tilt steering wheel
- Tie down points
- Voltage meter display
- Warning – Air cleaner
- Warning – Brake
- Warning – Clogged hydraulic oil filter
- Warning – Engine temperature
- Warning – Engine oil pressure
- Warning – Hydraulic fluid temperature
- Warning – Low charge
- Warning – Low fuel level
- 2 multi-disc brakes for parking and dynamic service brake

Std Equipment for Cab CP224/274
- Air filtering system
- Fan, fresh air (3-speed)
- Interior light
- Rear view mirror, internal
- Safety glass, tinted
- Side windows, openable
- Heater
- Wiper with washer, front/rear

Technical data

<table>
<thead>
<tr>
<th></th>
<th>CP142</th>
<th>CP224</th>
<th>CP224W</th>
<th>CP274</th>
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<tbody>
<tr>
<td>Operating mass, kg(incl. ROPS)</td>
<td>6000/12000</td>
<td>9 450</td>
<td>9 450</td>
<td>10 800</td>
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<tr>
<td>Max. operating mass, kg</td>
<td>14 000</td>
<td>21 000</td>
<td>21 000</td>
<td>27 000</td>
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<tr>
<td>Wheel load, std/max, kg/wheel</td>
<td>670/1560**</td>
<td>1350/3000*</td>
<td>1350/3000*</td>
<td>1200/3000**</td>
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<tr>
<td>Speed, km/h</td>
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<td>Propulsion, rear</td>
<td>1760</td>
<td>2 032</td>
<td>2 332</td>
<td>2 300</td>
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<tr>
<td>Water tanks, liters</td>
<td>500</td>
<td>415</td>
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<tr>
<td>Number of tires</td>
<td>5 front/4 rear</td>
<td>3 front/4 rear</td>
<td>3 front/4 rear</td>
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<td>Tyre pressure, kPa</td>
<td>450-630</td>
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Dimensions

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<tr>
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<tbody>
<tr>
<td>Compaction width, mm</td>
<td>1 760</td>
<td>1 800</td>
<td>2 280</td>
<td>2 300</td>
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<tr>
<td>Length, mm</td>
<td>3 580</td>
<td>5 180</td>
<td>5 180</td>
<td>5 480</td>
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<tr>
<td>Width, mm</td>
<td>1 760</td>
<td>2 032</td>
<td>2 665</td>
<td>2 332</td>
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<tr>
<td>Height, w/l/w/o ROPS, mm</td>
<td>2990/2295</td>
<td>2990/2280</td>
<td>2990/2280</td>
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Engine

<table>
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<tr>
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<th>CP224</th>
<th>CP224W</th>
<th>CP274</th>
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</thead>
<tbody>
<tr>
<td>Rated power, SAE J1995, at 2200 rpm, kW (hp)</td>
<td>74 (99)</td>
<td>74 (99)</td>
<td>74 (99)</td>
<td>85 (110)</td>
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</table>

For further information and contacts please visit www.dynapac.com

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We reserve the right to change specifications without notice. Photos and illustrations do not always show standard versions of machines.

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