

INGERSOLL-RAND®

DD-12 DURA-PAC™ Vibratory Asphalt Compactor



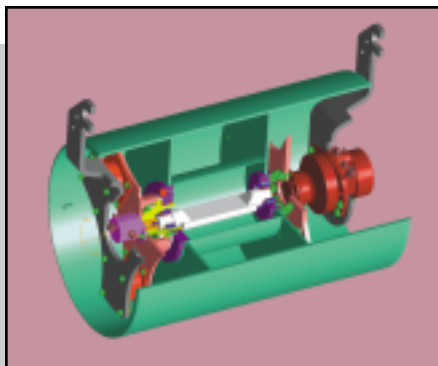
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DURA-PAC™ Series

Ingersoll-Rand has developed a new technologically advanced line of vibratory asphalt compactors. The new DD-12 double drum vibratory compactor offers high performance in an ergonomically styled compact package. This compactor provides unsurpassed overall value through industry leading drum performance, unmatched operating intervals, and more standard safety features than any machine in its class. No matter how complex the conditions or how demanding the schedule, the DD-12 provides a distinct competitive advantage.

Smooth Drum Performance

As a leader in the compaction industry, Ingersoll-Rand understands the needs of the Hot Mix Asphalt contractor. Our **optimum drum performance** results from the ideal combination of amplitude, centrifugal force, and frequency for the most effective and efficient compaction of the widest range of materials. The DURA-PAC's amplitude provides application versatility, the centrifugal force provides the energy necessary to achieve proper density, and the frequency provides closer impact spacing at a **faster rolling speed**. Every drum is manufactured with robotic precision and receives a chamfered edge to produce a smooth, professional quality finish on every job.



Rugged and Reliable

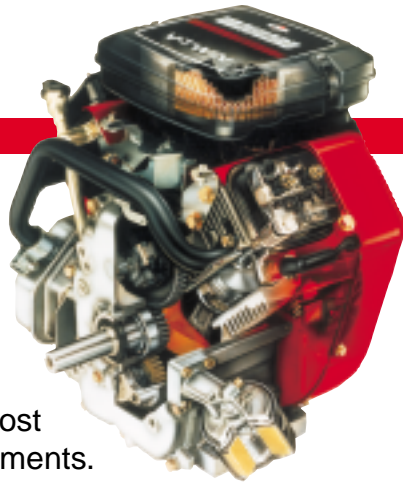
The DURA-PAC Series of compactors has been designed with extra emphasis on durability and reliability. Powered by a rugged 16.5 hp Briggs & Stratton Vanguard gasoline engine, the DD-12 is equipped to handle the most demanding work conditions. The DD-12's functional design and durable components will keep it operational for many years and is backed by a **one-year/1000 hour parts and labor warranty**.

Redefining Comfort and Safety

The DURA-PAC Series has been engineered to optimize operator comfort and safety. The entire machine has been ergonomically designed to enhance visibility, to minimize operator fatigue, and to **maximize operator comfort**. The operator's platform is isolated to minimize vibration feedback, and has all controls positioned to ensure maximum comfort and ease of use. Ingersoll-Rand provides the highest level of standard safety features available today.

Feature: Engine

The DD-12 features an engine designed for the most demanding requirements. The compactor is equipped with the fuel-efficient, Briggs & Stratton **16.5 HP at 3000 rpm Vanguard gasoline engine**. This reliable Vanguard engine provides excellent cold weather starting characteristics and gives the DD-12 a high horsepower to weight ratio for superior operation in all conditions.



Feature: Drum Summary

Drums are constructed of durable carbon steel with thick shells to provide a long life. Every DURA-PAC drum is machined to achieve maximum symmetry with edges chamfered for optimum performance on Hot Mix Asphalt. **Each compactor offers the ideal combination** of eccentric weight, drum width, centrifugal force, frequency and amplitude to provide the most efficient compaction of materials. This combination allows for the highest versatility and the best overall performance, making the DD-12 the contractor's first choice.



Feature: Amplitude

The DD-12 has an amplitude that was designed primarily for Hot Mix Asphalt compaction. However, the entire DURA-PAC Series is equally effective for soil sub-base and aggregate base applications.

Feature: Centrifugal Force

With a **centrifugal force of 3300 lbs. (14.7 kN)**, the DD-12 provides the compaction necessary to achieve maximum density and smoothness in fewer passes. The force is designed proportionally to match drum width with overall output to ensure maximum productivity. The operator can choose front drum vibration only or static mode.

Feature: Frequency

Each DURA-PAC model has the **highest frequency in its class—4000 vpm**. This frequency allows for optimum impact spacing at higher rolling speeds providing a smooth, dense, quality pavement. The DD-12's frequency makes it the most productive and efficient compactor in its class.

4,000 VPM

**12 impacts per foot x 88 fpm
= 3.8 mph (6.1 km/hr)**

Feature: Comfort & Safety

The DURA-PAC Series has been designed to optimize operator comfort and safety. Isolation of the front vibratory drum, positioning of the operator platform on the rear frame, plus 4-point isolation of the operator platform from the frame eliminates nearly all vibration feedback from reaching the operator. The operator's platform is skid resistant with safety kick plates. Convenient grab handles are integrated into the **standard Roll Over Protective Structure (ROPS)**. Operators have access to the unit from both sides. The manually-applied parking brake with test switch, emergency stop switch, seat safety switch, and propulsion control with neutral start are all designed to provide a safe work environment.

Feature: Water System

The DD-12 has a large capacity **52-gallon (197 liters)**, rotationally molded, polyethylene water tank which provides extended intervals between refills. The variable water flow control and spring-loaded, self-adjusting, neoprene wipers distribute water evenly across each drum.



Feature: Clearance & Visibility

High curb and low side clearances allow for efficient maneuvering around curbing and other job site obstacles. The hose-tube-hose configuration in the drum area is utilized to provide superior wall and curb clearance. The DURA-PAC Series' small size, low sloping hood, and **tight turning radius** allows the compactors to operate in confined areas.



Feature: Controls

The DURA-PAC Series has been designed with an extra emphasis on comfort, simplicity and ease of use. Propulsion and vibration controls are conveniently located to the right of the operator's seat. Drum vibration is controlled manually by a button on the propulsion lever.



Feature: Serviceability

The four daily checkpoints are unobstructed and have been positioned to make preventative maintenance easy and effortless. The engine enclosure lifts easily, giving ground-level access to the engine, radiator, battery, and filters. Color-coded service charts show detailed checkpoint locations, service intervals and proper lubricants.



DD-12 Specifications

Machine Weights

Operating Weight	2,954 lb.	(1340 kg)
Static Weight		
at Front Drum	1,254 lb.	(569 kg)
at Rear Drum	1,521 lb.	(690 kg)
Shipping Weight	2,389 lb.	(1084 kg)

Machine Dimensions

Overall Length w/ROPS	80.1 in.	(2034 mm)
Overall Length w/o ROPS	80.1 in.	(2034 mm)
Overall Width	38.94 in.	(989 mm)
Overall Height		
top of steering wheel	60.35 in.	(1533 mm)
top of ROPS	88.15 in.	(2235mm)
Drum Base	55.1 in.	(1400 mm)
Curb Clearance	13.27 in.	(337 mm)
Side Clearance		
right	1.67 in.	(42.5 mm)
left	1.83 in.	(46.5 mm)
Outside Turning Radius (measured to drum edge)	108 in.	(2740 mm)

Drums

Rolling Width	35.4 in.	(900 mm)
Overall Diameter	21.9 in.	(556 mm)
Shell Thickness (nominal)	0.39 in.	(10 mm)
Finish	Machined/chamfered edge	

Vibration

Frequency	4000 vpm	(47.5 Hz)
Centrifugal Force	3,300 lb.	(14.67 kN)
Nominal Amplitude	0.014 in.	(0.35 mm)
Lubrication	Grease	
Type System	Open Loop	
Vibrating Drums	Front or Static	
Vibration Isolation	6 shear block isolators	

Propulsion

Type System	Closed-loop hydrostatic, series circuit	
Drum Drive	Pump: axial-piston, Motor: radial-piston, low-speed high-torque	
Speed-forward & reverse	0-5 mph	(0-8 km/hr)
Gradeability (theoretical)	31.7%	

Engine

Make & Model	Briggs & Stratton Vanguard	
Rated Power @ 3000 rpm	16.5 hp	(12.3kW)
Type	2-cylinder Gasoline	
Displacement	34.8 cu. in.	(570 cc)

Brakes

Service	Dynamic hydrostatic through propulsion system	
Parking/Secondary	Mechanical, cable controlled	

Steering

Design	Centerpoint articulation	
Type System	Double-acting, hydraulic, single cylinder	
Articulation Angle	±34°	

Water System

Type	Gravity	
Filters	none	
Tank Capacity	52 gal.	(197 liters)

Drum Wipers

Type	Spring-loaded, self-adjusting neoprene wipers	
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Electrical

Battery	12 volt, negative ground, 450 CCA	
Alternator	15 amp	

Miscellaneous Specifications

Fuel Capacity	7 gal.	(26.5 liters)
Hydraulic Oil Capacity	9 gal.	(34 liters)
Oscillation Angle	±10°	

Options

- Back-up alarm
- Custom painting
- Inside wipers

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