



SD-175 Vibratory Soil Compactor PRO-PAC™



The Ingersoll-Rand SD-175 PRO-PAC Series features a powerful Cummins turbocharged and aftercooled C8.3-C diesel engine. The 205 hp (153 kW) liquid-cooled engine and heavy-duty hydrostatic transmission provides power and torque to handle the demands of projects at elevations, in cohesive soils and climbing steep slopes. The lightweight, single-piece engine enclosure is hinged to allow unobstructed access to the engine, radiator, battery, filters and daily maintenance checkpoints.

The SD-175 PRO-PAC operator's station is designed for comfort and safety. A fully adjustable, suspension-mounted seat is standard. Four independent vibration dampeners isolate the operator's platform from machine vibration. Controls and gauges are ergonomically positioned.

A variable frequency control is provided to adjust vibration to the natural resonant frequency of the material being compacted, within a range of

1300 to 1825 VPM (21.7 to 30.4 Hz). Variable centrifugal force up to 80,900 lb. (360 kN) quickly densifies even the most difficult-to-compact materials.

The SD-175 PRO-PAC Series is available with a smooth drum for compaction of granular soils, aggregates or rock fill, designated SD-175D. A pad foot drum model, the SD-175F is ideal for compaction of fine-grained soils like clay and silt or cohesive soil mixtures. Lift thickness over two feet (600 mm) can be compacted to high density and material voids can be effectively eliminated using high drum amplitude. Low drum amplitude is suited for compaction of thinner layers of smaller aggregate gradations. Amplitude change is from the operator control console.



SD-175 PRO-PAC Specifications	SD-175D PRO-PAC		SD-175F PRO-PAC	
Machine Weights (w/ ROPS/FOPS)				
Operating Weight (CECE)	39,895 lb.	(18093 kg)	39,820 lb.	(18059 kg)
Static Weight at Drum	24,860 lb.	(11274 kg)	24,575 lb.	(11145 kg)
Static Weight at Tires	15,035 lb.	(6819 kg)	15,245 lb.	(11449 kg)
Shipping Weight	39,555 lb.	(17939 kg)	39,485 lb.	(17907 kg)
Machine Dimensions				
Overall Length	249 in.	(6325 mm)	249 in.	(6325 mm)
Overall Width	98 in.	(2480 mm)	98 in.	(2480 mm)
Overall Height (top of ROPS/FOPS)	122 in.	(3105 mm)	124 in.	(3150 mm)
Wheelbase	139 in.	(3525 mm)	139 in.	(3525 mm)
Curb Clearance	18 in.	(465 mm)	21 in.	(530 mm)
Outside Turning Radius (measured to drum edge)	303 in.	(7690 mm)	303 in.	(7690 mm)
Drum				
Drum Width	84 in.	(2135 mm)	84 in.	(2135 mm)
Drum Diameter	63 in.	(1600 mm)	62 in.	(1580 mm)
Drum Diameter Over Pad Feet	-	-	72 in.	(1835 mm)
Drum Shell Thickness	1.6 in.	(40 mm)	1.2 in.	(30 mm)
Number of Pad Feet	-	-	128	
Pad Height	-	-	5 in.	(125 mm)
Pad Tip Area	-	-	21 in. ²	(135 cm ²)
Vibration				
Frequency	1300-1825 VPM	(21.7-30.4 Hz)	1300-1800 VPM	(21.7-30 Hz)
Centrifugal Force	- high 80,900 lb.	(360 kN)	80,900 lb.	(360 kN)
	- low 40,500 lb.	(180 kN)	40,500 lb.	(180 kN)
Nominal Amplitude	- high 0.073 in.	(1.86 mm)	0.073 in.	(1.86 mm)
	- low 0.037 in.	(0.93 mm)	0.037 in.	(0.93 mm)
Propulsion				
Type System	Hydrostatic, two speed motor on planetary axle / No Spin® differential			
Tire Size	23.1 x 26 - 8PR R3		23.1 x 26 - 8PR R1	
Drum Drive	Low speed, high torque two speed motor			
Travel Speed	- high 0-8.2 mph	(0-13.2 km/hr)	0-8.6 mph	(0-13.8 km/hr)
	- low 0-4.1 mph	(0-6.6 km/hr)	0-4.3 mph	(0-6.9 km/hr)
Engine				
Make & Model	Cummins C8.3-C			
Engine Type	Turbocharged six cylinder			
Rated Power @ 2000 rpm	205 hp (153 kW)			
Electrical System	12-volt DC, negative ground; 63A alternator; 2 ea 800 CCA batteries			
Brakes				
Service	Dynamic hydrostatic through propulsion system			
Parking/Secondary	Spring-Applied, Hydraulically-Released on axle			
Miscellaneous				
Articulation Angle	±30°		±30°	
Oscillation Angle	±17°		±17°	
Fuel Capacity	100 gal.	(377 liters)	100 gal.	(377 liters)
Hydraulic Oil Capacity	35 gal.	(132 liters)	35 gal.	(132 liters)
Gradeability (theoretical)	46%		44%	

Standard Features

- Adjustable scraper
- Back-up alarm
- Dual-beam, halogen front light
- No-Spin® differential planetary axle
- Oil bath eccentric lubrication
- Patented, dual amplitude eccentric mechanism
- ROPS/FOPS with seat belt
- Variable vibration frequency
- Vibration isolated operator platform

Selected Options

- Air precleaner
- CE-conformity kit
- Compactometer
- Conversion drums (D to F or F to D)
- EROPS with heat or A/C and heat
- Rear work lights
- VPM Meter
- Contact factory for additional options

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