



SD 100 C Series Vibratory Compactor



The Ingersoll-Rand SD-100 is powered by a 95 hp (71 kW) Cummins turbocharged diesel engine. The SD-100, with axle drive only, is suited for the majority of applications. For more demanding projects or where superior gradeability is required, the SD-100D and SD-100F, with drum drive as well as axle drive, are powered by a turbocharged and after cooled 125 hp (93 kW) Cummins engine.

A dual amplitude eccentric design is standard equipment for all SD-100 C Series models. Vibration frequency is infinitely variable in either amplitude setting to 1800 VPM (30 Hz). This permits the operator to match frequency of the compactor to soil type, moisture content and job site conditions.

The easily accessible ergonomically designed operator station provides comfort, convenience, ease of control, excellent 360 degree visibility and a safe environment for the operator.

An optional, patented, two-piece clamp-on pad foot shell kit is available for the SD-100D. This kit is easily installed by a service technician and includes a pad foot drum scraper bar. The shell kit permits a smooth drum unit to be modified for cohesive soil compaction applications for added versatility.

Standard Features

- Back-up alarm
- Hydrostatic drive of axle and drum (except SD-100) with two speed transmission
- Oil splash eccentric bearing lubrication
- Dual amplitude eccentric mechanism
- Planetary axle with No-Spin® differential
- ROPS/FOPS w/seat belt
- Torque-balanced hydraulic components
- Variable vibration frequency
- High ambient capability
- 84 inch (2134 mm) compaction width

Specifications for C Series	SD-100 C Series		SD-100D C Series		SD-100F C Series	
Machine Weights						
Operating weight with cab only (no ROPS)	22,675 lbs.	(10283 kg)	22,765 lbs.	(10324 kg)	24,025 lbs.	(10895 kg)
Operating weight (CECE) w/ROPS/FOPS	22,765 lbs.	(10324 kg)	22,855 lbs.	(10365 kg)	24,115 lbs.	(10936 kg)
Static weight at drum	13,225 lbs.	(5998 kg)	13,585 lbs.	(6161 kg)	14,965 lbs.	(6787 kg)
Static weight at tires	9,540 lbs.	(4326 kg)	9,270 lbs.	(4204 kg)	9,150 lbs.	(4150 kg)
Shipping weight	22,474 lbs.	(10192 kg)	22,564 lbs.	(10233 kg)	23,824 lbs.	(10804 kg)
Dimensions						
Overall length	17 ft 9 in.	(5410 mm)	17 ft 9 in.	(5410 mm)	17 ft 9 in.	(5410 mm)
Overall width	7 ft 8 in.	(2335 mm)	7 ft 8 in.	(2335 mm)	7 ft 8 in.	(2335 mm)
Overall height (top of steering wheel)	7 ft 8 in.	(2335 mm)	7 ft 8 in.	(2335 mm)	7 ft 10 in.	(2388 mm)
Wheelbase	10 ft 9 in.	(3275 mm)	10 ft 9 in.	(3275 mm)	10 ft 9 in.	(3275 mm)
Curb clearance	20 in.	(514 mm)	20 in.	(514 mm)	22 in.	(556 mm)
Outside turning radius (measured to drum edge)	223 in.	(5665 mm)	223 in.	(5665 mm)	223 in.	(5665 mm)
Drum diameter (F measure over pads)	59 in.	(1500 mm)	59 in.	(1500 mm)	67 in.	(1700 mm)
Drum width	84 in.	(2134 mm)	84 in.	(2134 mm)	84 in.	(2134 mm)
Drum shell thickness	1 in.	(25 mm)	1 in.	(25 mm)	1 in.	(25 mm)
Pad tip area		-		-	21 sq in.	(135 sq cm)
Number of pads/Pad height		-		-	120/4 in. 120/(100 mm)	
Vibration						
Frequency		0-1800 VPM (0-30 Hz)	0-1800 VPM (0-30 Hz)	0-1800 VPM (0-30 Hz)	0-1800 VPM (0-30 Hz)	0-1800 VPM (0-30 Hz)
Centrifugal force	high	55,000 lbs. (245 kN)	55,000 lbs. (245 kN)	55,000 lbs. (245 kN)	55,000 lbs. (245 kN)	55,000 lbs. (245 kN)
	low	37,000 lbs. (165 kN)	37,000 lbs. (165 kN)	37,000 lbs. (165 kN)	37,000 lbs. (165 kN)	37,000 lbs. (165 kN)
Nominal amplitude	high	.076 in. (1.92 mm)	.076 in. (1.92 mm)	.076 in. (1.92 mm)	.063 in. (1.59 mm)	.063 in. (1.59 mm)
	low	.051 in. (1.29 mm)	.051 in. (1.29 mm)	.051 in. (1.29 mm)	.042 in. (1.06 mm)	.042 in. (1.06 mm)
Engine						
Make and model	Cummins B3.9-C Turbo			Cummins B3.9-C Turbo, aftercooled		
Rated power	95 hp (70.8 kW) @2400 rpm			125 hp (93.2 kW) @2400 rpm		
Electrical system	12 volt DC, negative ground, 900cca battery					
Propulsion						
Type system	Hydrostatic, two speed motor on planetary axle/No Spin® differential					
Tire size	23.1 x 26, 8 PR		23.1 x 26, 8 PR		23.1 x 26, 8 PR	
Drum drive	-		Low speed, high torque motor		Low speed, high torque motor	
Speed	low gear	0-3.8 mph (0-6.1 km/hr)	0-4.1 mph (0-6.6 km/hr)	0-4.3 mph (0-6.9 km/hr)	0-4.3 mph (0-6.9 km/hr)	0-6.9 mph (0-11.1 km/hr)
	high gear	0-7.7 mph (0-12.4 km/hr)	0-6.6 mph (0-10.6 km/hr)	0-6.9 mph (0-11.1 km/hr)	0-6.9 mph (0-11.1 km/hr)	0-11.1 mph (0-17.7 km/hr)
Brakes						
Service brake	Dynamic hydrostatic through propulsion system					
Parking/secondary brake	Spring-Applied, Hydraulically-Released SAHR					
Miscellaneous						
Articulation angle	± 40°		± 40°		± 40°	
Oscillation angle	± 17°		± 17°		± 17°	
Fuel capacity	72 gal.	(273 l)	72 gal.	(273 l)	72 gal.	(273 l)
Hydraulic oil capacity	54 gal.	(204 l)	54 gal.	(204 l)	54 gal.	(204 l)
Gradeability (theoretical)	33%		52%		49%	

Selected Options

- Air pre-cleaner for engine
- Cab, cab with heat or cab with AC and heat
- Clamp-on pad foot drum shell kit (except SD-100 C)
- Cold weather starting aid
- EPA certified engine installation (SD-100 D and SD-100F)
- Lights with turning signals
- Optional 18.4 x 26, 10 PR tires
- Special paint
- Vandal cover for instrument panel
- Work lights
- Contact factory for additional options



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Ingersoll-Rand Company

Road Machinery
312 Ingersoll Drive
Shippensburg, PA 17257
www.road-development.irco.com
www.lightcompaction.com