

SD-122D, SD-122DX, & SD-122F TF Series Soil Compactors



High Performance, Twelve-Ton Compactors

The Ingersoll-Rand SD-122 TF Series of vibratory soil compactors have 84 inch (2134 mm) vibratory drums and are designed with many innovative features that provide excellent drum performance, serviceability, reliability, and a safe, comfortable, and productive environment for the operator. The standard SD-122D smooth drum, the fully featured SD-122DX smooth drum, and the SD-122F padfoot drum models are engineered to efficiently and effectively compact all types of soils — granular, mixed, or cohesive.

Key Features

- Ultra-Grade® Traction Control System provides excellent climbing and traction when operating in difficult applications (optional on SD-122D)
- Variable frequency of 1,225 – 2,025 vpm (20.4 – 33.8 Hz) for better matching natural resonance of various soils (optional on SD-122D)
- Tilting operator platform for easy access to major components, reducing downtime and repair costs
- Vibration-isolated, anti-slip, polymer operator platform reduces fatigue, and its ergonomic design includes a seat, console, steering column, and controls all located within the operator's zone of comfort and reach
- "ONE METER BY ONE METER" visibility, increasing operator productivity and safety
- Universal front scraper, reducing time required to install or remove optional padfoot shell kit

Optional Padfoot Shell Kit Provides Versatility

A two-piece, clamp-on padfoot shell kit easily and quickly converts the SD-122D or the SD-122DX smooth drum to a padfoot drum without changing the hydraulic system. Drum conversion is completed by installing the two shells and replacing the smooth scraper bar with padfoot teeth.

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Specifications

STANDARD FEATURES

- Audible and visual warning lights for engine oil pressure, coolant temperature, hydraulic oil temperature, and air cleaner restriction
- Centrally located remote-mounted hydraulic oil filters and hydraulic test ports
- Control console provides storage and a cup holder
- Easily accessible batteries protected behind hinged steps
- Gauges for coolant temperature, fuel, hour meter, and tachometer
- Heavy-duty axle with No-Spin® differential
- Hydraulic and eccentric oil level sight gauges
- Inside drum scraper bar (optional on SD-122D)
- Lockable control panel, engine cover, and fill caps
- Premium 6-way adjustable suspension seat including swivel feature and arm rest (optional on SD-122D)
- Rear-mounted cooling system, easy access for cleaning
- ROPS / FOPS with seat belts
- Safety features include skid-resistant deck with foot rest, dual deck rails, hand rails, seat switch, back-up alarm, horn, and emergency stop
- Shock-mounted operator platform
- Single control for direction and speed with on / off vibration switch
- Tilt steering column with console (optional on SD-122D)
- Warning lights for battery discharge and parking brake

SELECTED OPTIONS

- Battery master switch
- Control console power outlet
- CE-conformity kit
- Engine cold start aid
- EROPS cab with heat (adds 450 lb / 204 kg)
- EROPS cab with heat and A/C (adds 550 lb / 249 kg)
- Gauges for engine oil pressure, hydraulic oil temperature, and volt meter
- Patented 2-piece, clamp-on padfoot shell kit
- Quick disconnect fittings for test ports
- Rotating beacon light
- Strike-off blade (padfoot drums only)
- VPM meter / speedometer
- Work lights (two front and two rear) mounted on ROPS / FOPS

MODEL	SD-122D	SD-122DX	SD-122F	
MACHINE WEIGHTS (W/ ROPS / FOPS)				
Operating Weight (CECE) – lb (kg)	26,460 (12000)	26,465 (12002)	28,235 (12805)	
Static Weight @ Drum – lb (kg)	15,630 (7088)	16,230 (7361)	18,000 (8163)	
Static Weight @ Tires – lb (kg)	10,830 (4912)	10,235 (4642)	10,235 (4642)	
Shipping Weight – lb (kg)	26,176 (11871)	26,181 (11873)	27,951 (12676)	
MACHINE DIMENSIONS				
Overall Length – in (mm)	232 (5895)	232 (5895)	232 (5895)	
Overall Width – in (mm)	90 (2286)	90 (2286)	90 (2286)	
Overall Height (top of ROPS / FOPS) – in (mm)	121.7 (3091)	121.7 (3091)	123.9 (3146)	
Wheelbase – in (mm)	122 (3100)	122 (3100)	122 (3100)	
Curb Clearance – in (mm)	19 (483)	19 (483)	19 (483)	
Inside Turning Radius – in (mm) (measured to drum edge)	136 (3463)	136 (3463)	136 (3463)	
DRUM				
Drum Width – in (mm)	84 (2134)	84 (2134)	84 (2134)	
Drum Diameter – in (mm)	59 (1499)	59 (1499)	59 (1499)	
Drum Shell Thickness – in (mm)	1.19 (30)	1.19 (30)	1.19 (30)	
Drum Diameter Over Pad Feet – in (mm)	—	—	69 (1753)	
Number Of Pad Feet	—	—	120	
Pad Height – in (mm)	—	—	5 (127)	
Pad Tip Area – sq in (cm ²)	—	—	21 (125)	
VIBRATION				
Frequency – vpm (Hz)	High Amp	1,250 / 1,850 (20.9 / 30.9)	1,250 – 1,850 (20.9 – 30.9)	1,250 – 1,650 (20.9 – 27.6)
	Low Amp	1,225 / 2,025 (20.4 / 33.8)	1,225 – 2,025 (20.4 – 33.8)	1,225 – 2,025 (20.4 – 33.8)
Centrifugal Force – lb (kN)	High Amp	28,853 / 63,200 (128 / 281)	28,853 – 63,200 (128 – 281)	37,821 – 65,900 (168 – 293)
	Low Amp	17,064 / 46,400 (76 / 206)	17,064 – 46,400 (76 – 206)	23,537 – 64,000 (105 – 285)
Nominal Amplitude – in (mm)	High Amp	0.075 (1.90)	0.075 (1.90)	0.080 (2.03)
	Low Amp	0.046 (1.17)	0.046 (1.17)	0.052 (1.31)
PROPULSION				
Type System	Hydrostatic, 2-speed motor on planetary axle w/ No-Spin® differential and 2-speed drum drive motor			
Tire Size	23.1 x 26 -8PR R3	23.1 x 26 -8PR R3	23.1 x 26 -8PR R1	
Drum Drive	Planetary gear reduction			
Travel Speed – mph (km/h)	High	0 – 7.5 (0 – 12.1)	0 – 8.2 (0 – 13.1)	0 – 7.9 (0 – 12.7)
	Low	0 – 2.7 (0 – 4.3)	0 – 3.1 (0 – 5.1)	0 – 2.8 (0 – 4.5)
ENGINE				
Make & Model	STD: Cummins QSB5.9-30T; Optional: Cummins B5.9-TAA			
Engine Type	STD: Turbocharged 6-cylinder; Optional: Turbocharged and charge air-cooled			
Rated Power @ 2,200 rpm – hp (kW)	STD: 156 (115.6); Optional: 173 (129)			
Electrical System	12 volts DC, negative ground; 95 A alternator; (2) 750 CCA batteries			
BRAKES				
Service	Dynamic hydrostatic through propulsion system			
Parking / Secondary	Spring-applied, hydraulically released on axle and drum drive motors			
MISCELLANEOUS				
Articulation Angle	+ / - 38°	+ / - 38°	+ / - 38°	
Oscillation Angle	+ / - 17°	+ / - 17°	+ / - 17°	
Fuel Capacity – gal (L)	68 (257)	68 (257)	68 (257)	
Hydraulic Oil Capacity – gal (L)	22 (84)	22 (84)	22 (84)	
Gradeability (theoretical)	68%	75%	71%	

Product improvement is a continuing goal at Ingersoll-Rand.
Designs and specifications are subject to change without notice or obligation.

