



SD-77DX & SD-77F

TF Series Soil Compactors



*Moving the
World Forward*

High performance seven ton compactor

The Ingersoll Rand SD-77 TF Series vibratory soil compactors with 66 inch vibratory drums offer many innovative features that provide excellent drum performance, serviceability, reliability, and a comfortable and safe environment for the operator. The SD-77DX smooth drum and SD-77F padfoot drum are engineered to efficiently and effectively compact all types of soils ranging from granular to cohesive.

MODEL	SD-77DX	SD-77F
MACHINE WEIGHTS (W/ ROPS / FOPS)		
Operating Weight (CECE) – lb (kg)	16,350 (7415)	17,780 (8063)
Static Weight @ Drum – lb (kg)	8,500 (3855)	9,930 (4503)
Static Weight @ Tires – lb (kg)	7,850 (3560)	7,850 (3560)
Shipping Weight – lb (kg)	16,103 (7303)	17,533 (7951)
MACHINE DIMENSIONS		
Length – in (mm)	199 (5044)	199 (5044)
Width – in (mm)	74 (1880)	74 (1880)
Height (top of ROPS / FOPS) – in (mm)	115 (2922)	116 (2955)
Wheelbase – in (mm)	105 (2677)	105 (2677)
Curb Clearance – in (mm)	15 (385)	17 (445)
Inside Turning Radius (to drum edge) – in (mm)	128 (3249)	128 (3249)
DRUM		
Width – in (mm)	66 (1676)	66 (1676)
Diameter – in (mm)	48 (1219)	48 (1219)
Shell Thickness – in (mm)	0.88 (22)	0.88 (22)
Diameter Over Pad Feet – in (mm)	N/A	54 (1372)
Number Of Pad Feet	N/A	84
Pad Height – in (mm)	N/A	3 (76)
Pad Tip Area – sq in (cm ²)	N/A	21 (125)
VIBRATION		
Frequency – vpm (Hz)	1,850 – 2,025 (30.8 – 33.8)	1,870 – 2,025 (31.2 – 33.8)
Centrifugal Force – lb (kN)	High	32,100 (143)
	Low	23,300 (104)
Nominal Amplitude – in (mm)	High	0.078 (1.98)
	Low	0.047 (1.2)
0.052 (1.33)		
PROPULSION		
Type System	Hydrostatic, 2-speed motor on planetary axle w/ No-Spin® differential and single-speed drum drive motor	
Drum Drive	Planetary gear reduction	
Tire Size	14.9 x 24 -6PR R3	14.9 x 24 -6PR R1
Travel Speed – mph (km/h)	High	0 – 9 (0 – 14.5)
	Low	0 – 4.1 (0 – 6.6)
0 – 4.3 (0 – 6.9)		
ENGINE		
Make & Model	Cummins B4.5T Tier 2	
Engine Type	Turbocharged 4-cylinder	
Rated Power @ 2,200 rpm – hp (kW)	99 (73.8)	99 (73.8)
Electrical System	12 volts DC, negative ground; 105 A alternator; 750 CCA battery	
BRAKES		
Service	Dynamic hydrostatic through propulsion system	
Parking / Secondary	Spring-applied, hydraulically released on axle and drum drive motors	
MISCELLANEOUS		
Articulation Angle	+ / - 38°	+ / - 38°
Oscillation Angle	+ / - 15°	+ / - 15°
Fuel Capacity – gal (L)	47 (178)	47 (178)
Hydraulic Oil Capacity – gal (L)	22 (84)	22 (84)
Gradeability (theoretical)	55%	77%

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

AVAILABLE OPTIONS

- Air precleaner
- Battery master switch
- 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
- Power outlet
- Quick disconnect fittings
- Rotating beacon light
- Strike-off blade (padfoot drums only)
- Vpm meter and speedometer
- Work lights (two front and two rear) mounted on ROPS / FOPS



PERFORMANCE FEATURES

- Audible and visual warning light for engine oil pressure, coolant temperature, hydraulic oil temperature, and air cleaner restriction
- Centrally located remote-mounted hydraulic oil filters and hydraulic test ports
- Easily accessible battery 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
- Lockable control panel, engine cover, and fill caps
- ONE METER BY ONE METER visibility
- Powerful eccentric system with dual amplitude
- Premium 6-way adjustable suspension seat, including swivel feature and arm rest
- Premium shock mounts for operator platform
- 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
- Single control for direction and speed with on / off vibration switch
- Tilt steering column with console
- Tilting operator platform for easy access to major components, reducing downtime and repair costs
- Ultra-Grade® Traction Control System provides excellent climbing and traction when operating in difficult applications
- Universal front scraper, reducing time required to install or remove optional padfoot shell kit
- Variable frequencies provide better matching of natural resonance of various soils
- Vibration-isolated, anti-slip, roto-molded plastic operator platform reduces fatigue



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