

Vibratory Roller

Choice of smooth or padfoot versions
Hydrostatic drum and axle drive for maximum gradeability
Field interchangeable smooth and padfoot drums

1402



1402

Model 1402 Specifications

Engine

Make and model **Deutz BF6L-913**,
air-cooled
Fuel Diesel
No. of cylinders 6
Bore and stroke 4.02" x 4.92"
(102 mm x 125 mm)
Displacement 373.95 in³ (6128 cm³)
Compression ratio 15.5 to 1
Fuel induction Turbocharged
Fuel supply Mechanical lift pump
and Bosch inline injection pump
Air cleaner Dry and safety cartridge
Oil filter Full flow spin-on cartridge,
Lubrication Pressurized with
piston oil cooling
Engine gradeability Forward 40°
Reverse 35°

Horsepower

(1) Gross 158 @ 2300 rpm
(118 kW @ 2300 r/min)
(2) SAE Net 150 @ 2300 rpm
(112 kW @ 2300 r/min)

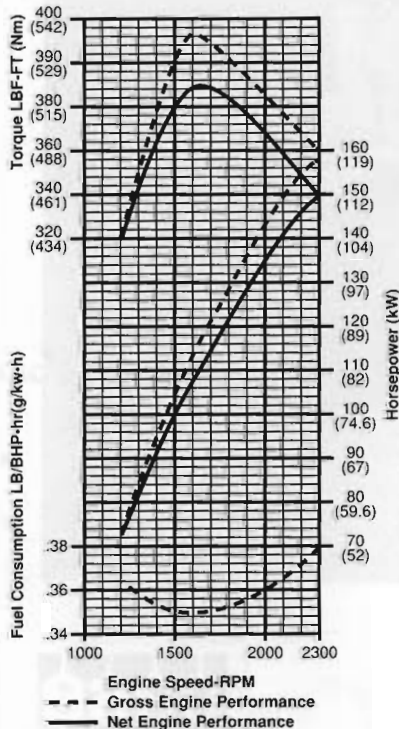
Max. torque ft-lb

(1) Gross 397 @ 1600 rpm
(538 Nm @ 1600 r/min)
(2) SAE Net 385 @ 1600 rpm
(522 Nm @ 1600 r/min)

(1) Gross engine horsepower or torque at flywheel per
SAE Standard J1349.
(2) Net engine horsepower or torque at flywheel per
SAE Standard J1349.

Electrical

System voltage 12
Battery (1) 540 cold cranking amps
Alternator 35 amp



Ground Drive System

Hydrostatic drive for infinitely variable work and travel speeds, plus 2-speed ground drive with push button selector for on-the-go shifting. Drive to drum and rear wheels.

Vibratory Drive

1402 Series — Piston-type pump with one displacement setting on 1402 PD, two displacement positions on 1402D.

Brakes

Hydrostatic braking in neutral position of ground drive pump with engine running. One multiple disc brake in the drum and two drum type brakes at the end of the planetaries of the axle, automatically operated or manually operated by push button.

Axle

Outboard planetary axle mounted to frame. Differential lock engaged with push-button control, locks both drive wheels for added traction. Lock engages in straight ahead position with lock indicator light on.

Tires

	Size	Ply Rating	Tread
1402D	23.1 x 26	8	Diamond
1402PD	23.1 x 26AS	10	Traction TSG

Steering

Articulated design with hydraulic power steering. Steering control can be adjusted to either side.

Hydraulic System

Ground drive:
Piston-type variable displacement pump with fixed displacement motor on drum and 2-speed motor on axle.

Filters

Engine oil spin-on cartridge
Fuel spin-on cartridge
Hydraulic replaceable cartridge
Air dual replaceable elements

Service Capacities

	U.S. Gal.	Liters
Fuel tank	72.4	274
Engine oil	17.2 qt	16.3
Hydraulic reservoir	18.5	70

Flow Divider

Standard. When engaged provides a 25/75 split of oil for maximum traction on steep conditions.

Travel Speeds

1402D and 1402PD	Forward/reverse	Working range	Transport range
		0-3.56 mph (0-5.7 km/h)	0-6.78 mph (0-10.9 km/h)

Indicator Lights and Gauges

Engine temperature gauge • Fuel gauge • Hourmeter • Pushbutton control for: horn, high-low range, differential lock, flow divider, vibratory high and low frequency and secondary brake • Warning lights and indicator lights for alternator charge, engine oil pressure, engine start lock, blower V-belt, hydraulic oil filter, air cleaner, secondary brake system, ground drive, high range, flow divider.

Standard Equipment

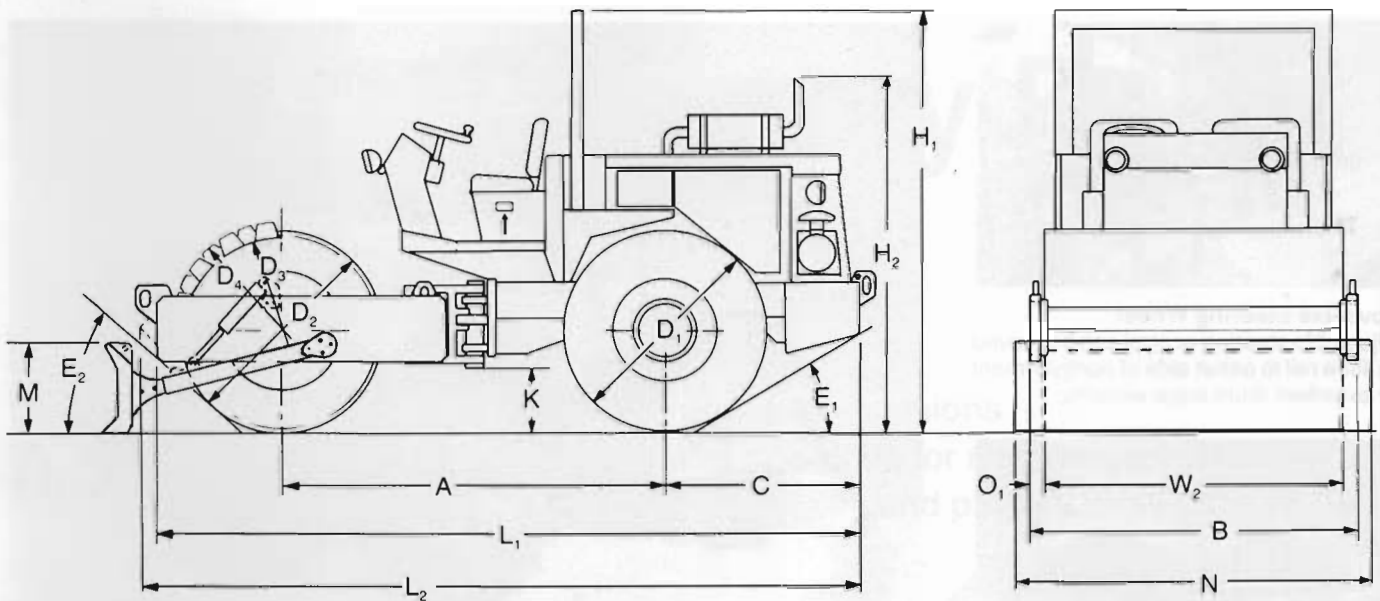
Adjustable, replaceable scrapers on padfoot unit • Articulation joint service lock • Engine covers • Fuel tank, hydraulic tank and ignition equipped with locks • Hand rails for mounting and dismounting unit • Horn • Lockable cover for instrument panel • Maintenance-free articulation joint • Oil bath vibration lubrication • ROPS.

Optional Equipment

All-weather cab • Back-up alarm • Front and rear lights • Interchangeable smooth and padfoot drum • Leveling blade • Sunshade.

1402D/1402PD Dimensional Data

1402D/1402PD



Dimensions:

	A	B	C	D ₁	D ₂	D ₃	D ₄	H ₁	H ₂	K	L ₁	L ₂	O ₁	W ₂	E ₁	E ₂	M	N
in	112	90.6	56.1	59.8	59	55	63	118.7	94.5	21	206.7	215.4	2.95	84.6	30°	40°	25	103
mm	2845	2300	1425	1520	1500	1400	1600	3015	2400	530	5250	5470	75	2150			635	2616

Operating Data

	1402D		1402PD
Operating weight	30,313 lb (13 750 kg)		30,313 lb (13 750 kg)
Weight distribution — front	16,424 lb (7450 kg)		16,424 lb (7450 kg)
rear	13,889 lb (6300 kg)		13,889 lb (6300 kg)
Static applied linear drum load (P.L.I.)	194 lb/in (34.65 kg/cm)		—
Drum weight (unsprung)	9259 lb (4200 kg)		9259 lb (4200 kg)
Articulation	37°		37°
Oscillation	15°		15°
Turning radius — inside	12'1.7" (3.7 m)		12'1.7" (3.7 m)
Drum shell thickness	1.4" (35 mm)		—
Number of feet	—		144
Height of foot	—		3.94" (100 mm)
Contact area of foot	—		64 in ² (413 cm ²)
Max. depth of compaction	47.2" (1.2 m)		47.2" (1.2 m)
	1st Stage	2nd Stage	1st Stage
Frequency	1680 vpm (28 Hz)	2160 vpm (36 Hz)	1680 vpm (28 Hz)
Amplitude	0.075" (1.9 mm)	0.023" (0.6 mm)	0.075" (1.9 mm)
Centrifugal force	56,200 lbf (250 kN)	31,472 lbf (140 kN)	56,200 lbf (250 kN)
Centrifugal force/ rolling width (P.L.I.)	664 lbf/in (162 N/cm)	372 lbf/in (65.1 N/cm)	664 lbf/in (162 N/cm)
Total applied force	72,624 lbf (323 kN)	47,896 lbf (213 kN)	72,624 lbf (323 kN)
Total applied linear force	858 lbf/in (1503 N/cm)	566 lbf/in (991 N/cm)	—

Model 1402D/1402PD



Moveable Steering Wheel

Adjustable steering control can be moved on slide rail to either side of compartment for excellent drum edge visibility.



Good Side-wall Clearance

Vibrator and ground drivemotors are recessed into drum for working close to graded areas, curbs or sidewalks.



Sold and serviced by:

Note: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.