



# Cat<sup>®</sup> CP76B

## Padfoot Drum Vibratory Soil Compactor

The Cat<sup>®</sup> CP76B features a padfoot drum and is ideally suited for cohesive and semi-cohesive soil applications.

### Comfortable and Ergonomic Operator Station

- Features pivoting seat with integrated multifunction LCD display and control console.
- Outstanding visibility to the front and rear of machine
- Low sound levels and vibration for greater operator comfort and productivity.

### Exceptional Propel System

- Built around the exclusive Cat dual pump propel system, two pumps provide separate dedicated flow to drum drive motor and rear axle motor for exceptional gradeability and traction in forward and reverse.
- Electronic propel control provides more precise machine control.

### Virtually Maintenance Free

- Maintenance-free hitch bearings.
- Extended maintenance intervals for vibratory system and hydraulic system, providing more uptime and lower maintenance costs.

### Enhanced Compaction Performance

- More weight at the drum and greater amplitude.
- Automated speed control and vibratory system functions make it easy to ensure consistent, high quality compaction.

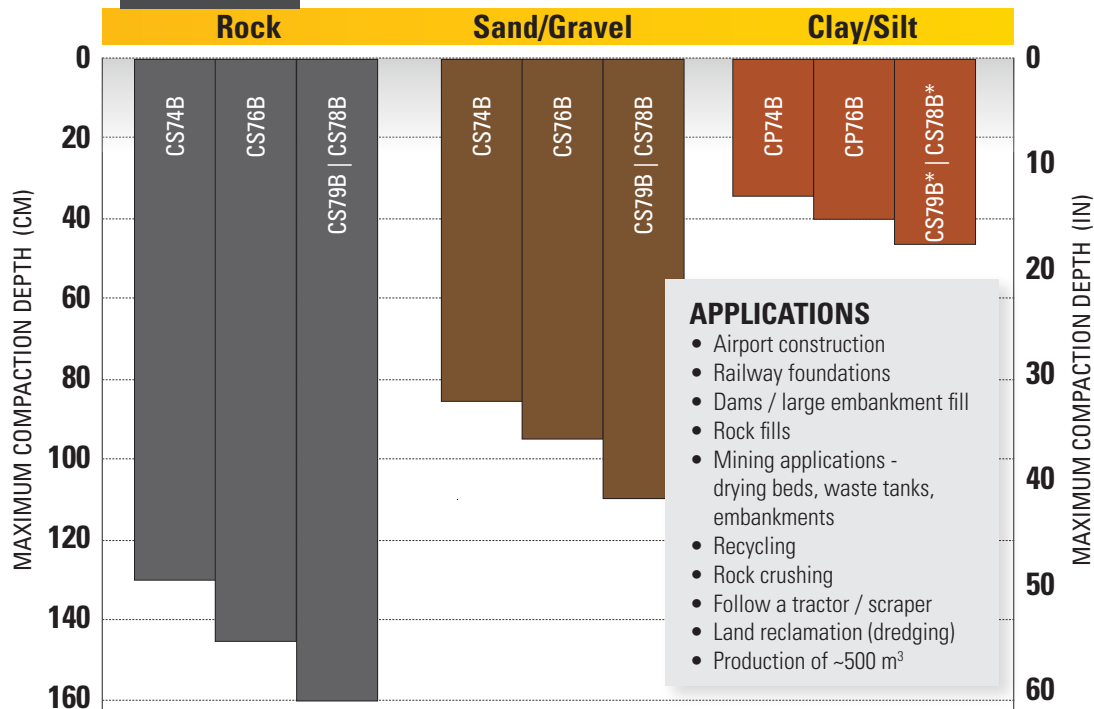
### Cat Compaction Control - Machine Drive Power (MDP)

- Helps operator determine when compaction has been completed to specification for greater productivity and uniform compaction quality.

## VIBRATORY SOIL COMPACTOR SELECTION GUIDE

**16 - 20 T**

Assumes density specification is 95% of Standard Proctor and can vary substantially due to different soil conditions.



### APPLICATIONS

- Airport construction
- Railway foundations
- Dams / large embankment fill
- Rock fills
- Mining applications - drying beds, waste tanks, embankments
- Recycling
- Rock crushing
- Follow a tractor / scraper
- Land reclamation (dredging)
- Production of ~500 m<sup>3</sup>

Rock  
Smooth drum, high amplitude (2.1 mm, 0.083 in) moving to low amplitude when approaching compaction, 4-8 passes  
Size: Less than 50 mm (2 in) diameter

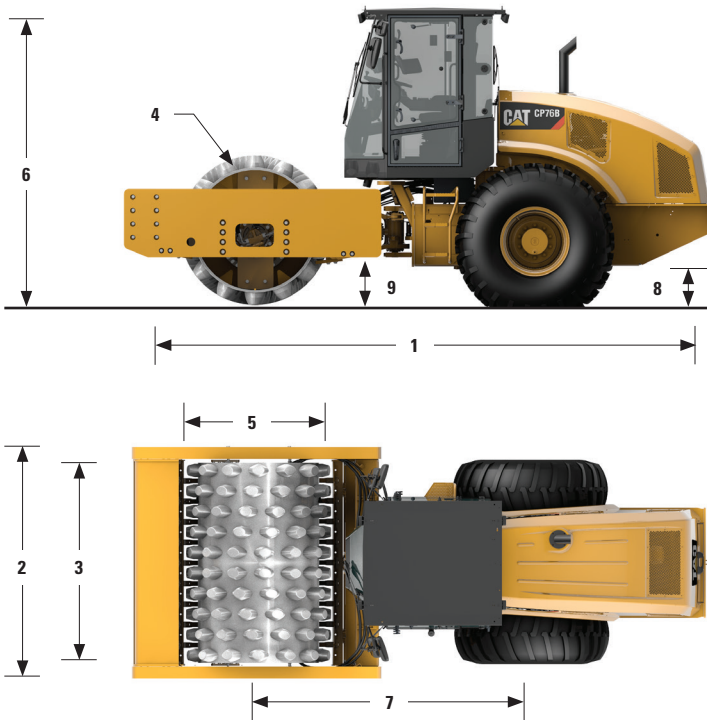
Sand/Gravel  
Smooth drum, high amplitude (2.1 mm, 0.083 in) moving to low amplitude when approaching compaction, 4-6 passes

Clay/Silt  
Padfoot and smooth drum application (for smoothing), 4-10 passes. Compaction in cohesive soils strongly depends on moisture content.

\* Smooth drum model equipped with padfoot shell kit



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## Dimensions

|   |                           |         |          |
|---|---------------------------|---------|----------|
| 1 | Overall Length            | 6.13 m  | 20.1 ft  |
| 2 | Overall Width             | 2.37 m  | 7.78 ft  |
| 3 | Drum Width                | 2134 mm | 84 in    |
| 4 | Drum Shell Thickness      | 40 mm   | 1.6 in   |
| 5 | Drum Diameter (over pads) | 1549 mm | 60.9 in  |
| 6 | Maximum Overall Height    | 3.11 m  | 10.2 ft  |
| 7 | Wheelbase                 | 2.9 m   | 9.5 ft   |
| 8 | Ground Clearance          | 448 mm  | 17.6 in  |
| 9 | Curb Clearance            | 534 mm  | 21.0 in  |
|   | Inside Turning Radius     | 3.68 m  | 12.07 ft |
|   | Hitch Articulation Angle  | 34°     |          |
|   | Hitch Oscillation Angle   | 15°     |          |

## Padfoot Specifications

|                                     |                                           |
|-------------------------------------|-------------------------------------------|
| Number of Pads                      | 140                                       |
| Pad Height, oval pads               | 127 mm 5 in                               |
| Pad Face Area, oval pads            | 74.4 cm <sup>2</sup> 11.5 in <sup>2</sup> |
| Pad Height, optional square pads    | 100 mm 3.9 in                             |
| Pad Face Area, optional square pads | 123 cm <sup>2</sup> 19.1 in <sup>2</sup>  |
| Number of Chevrons                  | 14                                        |

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## Technical Specifications

### Engine - Power Train

|                                        |                                |                       |
|----------------------------------------|--------------------------------|-----------------------|
| Engine Model                           | Cat C7.1                       |                       |
| Global Emissions                       | US EPA Tier 3<br>EU Stage IIIA |                       |
| Gross Power ISO 14396                  | 129.5 kW                       | 173.7 hp              |
| Gross Power SAE J1995                  | 130.2 kW                       | 174.6 hp              |
| Net Power 9249                         | 108.5 kW                       | 145.5 hp              |
| SAE J1349                              | 107.2 kW                       | 143.8 hp              |
| Displacement                           | 6.6 L                          | 402.8 in <sup>3</sup> |
| Stroke                                 | 135 mm                         | 5.3 in                |
| Bore                                   | 105 mm                         | 4.1 in                |
| Max. Travel Speed (Forward or Reverse) | 11.4 km/h                      | 7 mph                 |

### Vibratory System Specifications

|                                        |            |               |
|----------------------------------------|------------|---------------|
| Frequency                              |            |               |
| Standard                               | 28 Hz      | 1680 vpm      |
| During Eco-mode Operation              | 25.5 Hz    | 1527 vpm      |
| Optional Variable Frequency            | 23.3-28 Hz | 1400-1680 vpm |
| Nominal Amplitude @ 30.5 Hz (1830 vpm) |            |               |
| High                                   | 2.1 mm     | 0.083 in      |
| Low                                    | 0.98 mm    | 0.039 in      |
| Centrifugal Force @ 30.5 Hz (1830 vpm) |            |               |
| Maximum                                | 332 kN     | 74,600 lb     |
| Minimum                                | 166 kN     | 37,300 lb     |

### Weights

|                                      |           |           |
|--------------------------------------|-----------|-----------|
| Operating Weight w/ open platform    | 17 087 kg | 37,670 lb |
| Operating Weight w/ steel sun canopy | 17 182 kg | 37,879 lb |
| Operating Weight w/ ROPS/FOPS canopy | 17 357 kg | 38,266 lb |
| Operating Weight w/ ROPS/FOPS cab    | 17 677 kg | 38,971 lb |
| Weight at Drum w/ open platform      | 11 694 kg | 25,781 lb |
| Weight at Drum w/ steel sun canopy   | 11 734 kg | 25,869 lb |
| Weight at Drum w/ ROPS/FOPS canopy   | 11 789 kg | 26,010 lb |
| Weight at Drum w/ ROPS/FOPS cab      | 11 924 kg | 26,288 lb |

### Service Refill Capacities

|                                      |        |          |
|--------------------------------------|--------|----------|
| Fuel Tank, total capacity            | 332 L  | 88 gal   |
| Cooling System                       | 28.2 L | 7.5 gal  |
| Engine Oil w/ Filter                 | 17.4 L | 4.6 gal  |
| Eccentric Weight Housings (Combined) | 26 L   | 6.9 gal  |
| Axle and Final Drives                | 24 L   | 6.3 gal  |
| Hydraulic Tank (service refill)      | 50 L   | 13.2 gal |

\* Actual gradeability may vary based on site conditions and machine configuration. Refer to the Operation and Maintenance Manual for more information.

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## Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

|                                                                        | Standard | Optional |                                                                            | Standard | Optional |
|------------------------------------------------------------------------|----------|----------|----------------------------------------------------------------------------|----------|----------|
| <b>OPERATOR ENVIRONMENT</b>                                            |          |          | <b>POWER TRAIN</b>                                                         |          |          |
| Open Platform with Handrails/Guardrails, Floor Mat                     | ✓        |          | Cat C7.1 Diesel Engine                                                     | ✓        |          |
| Vinyl Adjustable Pivoting Seat with Integrated Console and LCD Display | ✓        |          | Air Cleaner, Dual Element                                                  | ✓        |          |
| Adjustable Tilting Steering Column with Integrated Cup Holders         | ✓        |          | Three-Speed Throttle Switch, Eco-mode and Automatic Speed Control          | ✓        |          |
| Seat Belt                                                              | ✓        |          | Dual Propel Pumps; One for Drum Drive, One for Rear Axle                   | ✓        |          |
| 12-volt Power Outlet                                                   | ✓        |          | Fuel Filter, Water Separator, Priming Pump, Water Indicator                | ✓        |          |
| Horn, Backup Alarm                                                     | ✓        |          | Tilting Radiator/Hydraulic Oil Cooler                                      | ✓        |          |
| Steel Sun Canopy                                                       |          | ✓        | Dual Braking System                                                        | ✓        |          |
| ROPS/FOPS Canopy                                                       |          | ✓        | Two-speed Hydrostatic Transmission                                         | ✓        |          |
| ROPS/FOPS Cab with Climate Control                                     |          | ✓        | Transmission Guard                                                         |          | ✓        |
| Internal Rear View Mirror                                              |          | ✓        | <b>CAT COMPACTION CONTROL TECHNOLOGY</b>                                   |          |          |
| External Rear View Mirrors                                             |          | ✓        | Measure - Machine Drive Power                                              |          | ✓        |
| Sun Visor                                                              |          | ✓        | Map - SBAS GNSS Mapping                                                    |          | ✓        |
| Cab Internal Roll-down Sun Screen                                      |          | ✓        | Connect - Machine to Machine Communication                                 |          | ✓        |
| <b>VIBRATORY SYSTEM</b>                                                |          |          | <b>ELECTRICAL</b>                                                          |          |          |
| Padfoot Drum                                                           | ✓        |          | 24 volt Electrical System                                                  | ✓        |          |
| Dual Amplitude, Single Frequency                                       | ✓        |          | 100 ampere Alternator                                                      | ✓        |          |
| Dual Pod-Style Eccentric Weight Housings                               | ✓        |          | 750 Cold-cranking Amps Battery Capacity                                    | ✓        |          |
| Auto-vibe Function                                                     | ✓        |          | <b>OTHER</b>                                                               |          |          |
| Dual Adjustable Steel Scrapers                                         | ✓        |          | Product Link™                                                              | ✓        |          |
| Variable Frequency                                                     |          | ✓        | Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level            | ✓        |          |
|                                                                        |          |          | S-O-S <sup>SM</sup> Sampling Valves: Engine Oil, Hydraulic Oil and Coolant | ✓        |          |
|                                                                        |          |          | Upgraded Halogen Light Package                                             |          | ✓        |
|                                                                        |          |          | Rotating Beacon                                                            |          | ✓        |
|                                                                        |          |          | Fuel Fill Access Door                                                      |          | ✓        |

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