

# Cat® PL61

## PIPELAYER



### FEATURES:

- **Structure** – Steel castings and heavy steel plates are welded to insure a rigid one-piece frame structure. Structures are designed to last throughout the extended service life.
- **Operator Station** – The operator station offers excellent visibility and superior comfort. Optional features include fully adjustable air suspended seat, air conditioning with enclosed cab, electro-hydraulic controls, advanced monitoring system and low sound levels for comfortable operation.
- **Engine** – The Cat C6.6 ACERT engine meets worldwide emission standards while providing outstanding engine performance, fuel efficiency and long-term durability.
- **Drive Train** – The hydrostatic drive with electronic control provides precise modulation for quick and smooth operation, superior maneuverability and comfortable operation to help increase your productivity.
- **Heavy Duty Undercarriage** – Heavy duty undercarriage is designed to give you extended wear life in abrasive conditions, on side slopes and in rocky, uneven terrain.

## Specifications

### Engine

Engine Model	Cat C6.6 ACERT	
Flywheel Power	93 kW	125 hp
Net Power – Caterpillar	93.2 kW	125 hp
Net Power – ISO 9249	93.2 kW	125 hp
Net Power – EEC 80/1269	93.2 kW	125 hp
Net Power – SAE J1349	92.1 kW	123.4 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	6.6 L	403 in <sup>3</sup>

- Engine ratings at 2,100 rpm.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 3000 m (9,842 ft) altitude, beyond 3000 m (9,842 ft) automatic derating occurs.

### Undercarriage

Number of Shoes – Each Side	40	
Track Rollers – Each Side	7	
Track Gauge – Narrow	1770 mm	70 in
Track Gauge – LGP	2000 mm	79 in
Track on Ground	2645 mm	104 in
Track Shoe Width – Narrow	560 mm	22 in
Track Shoe Width – LGP	760 mm	30 in
Ground Contact Area – Narrow	3 m <sup>2</sup>	4,650 in <sup>2</sup>
Ground Contact Area – LGP	4 m <sup>2</sup>	6,200 in <sup>2</sup>
Ground Pressure – Narrow	56.3 kPa	8.2 psi
Ground Pressure – LGP	43.4 kPa	6.3 psi

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## Weights

Operating Weight – Narrow Shoes	17 000 kg	37,480 lb
Shipping Weight – Narrow Shoes	16 070 kg	35,428 lb
Operating Weight – LGP	17 800 kg	39,242 lb
Shipping Weight – LGP	16 870 kg	37,192 lb

## Hydraulic Controls

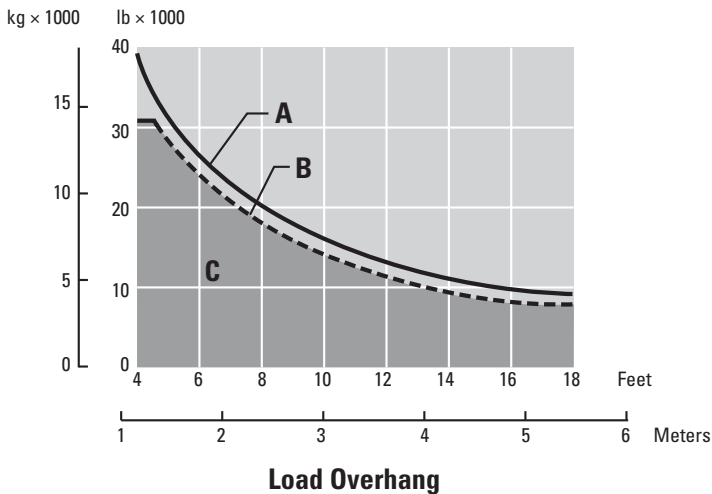
Type	piston type, variable, two section	
Output – Maximum	540 L/min	142 gal/min
Relief Valve Setting – Counterweight	17 237 kPa	2,500 psi

## Service Capacities

Fuel Tank	295 L	77.9 gal
Crankcase (with Filter)	16.5 L	4.35 gal
Final Drives (each)	23 L	6 gal
Cooling System	24.4 L	6.4 gal
Hydraulic Tank	58 L	15.3 gal

## Pipelaying Equipment

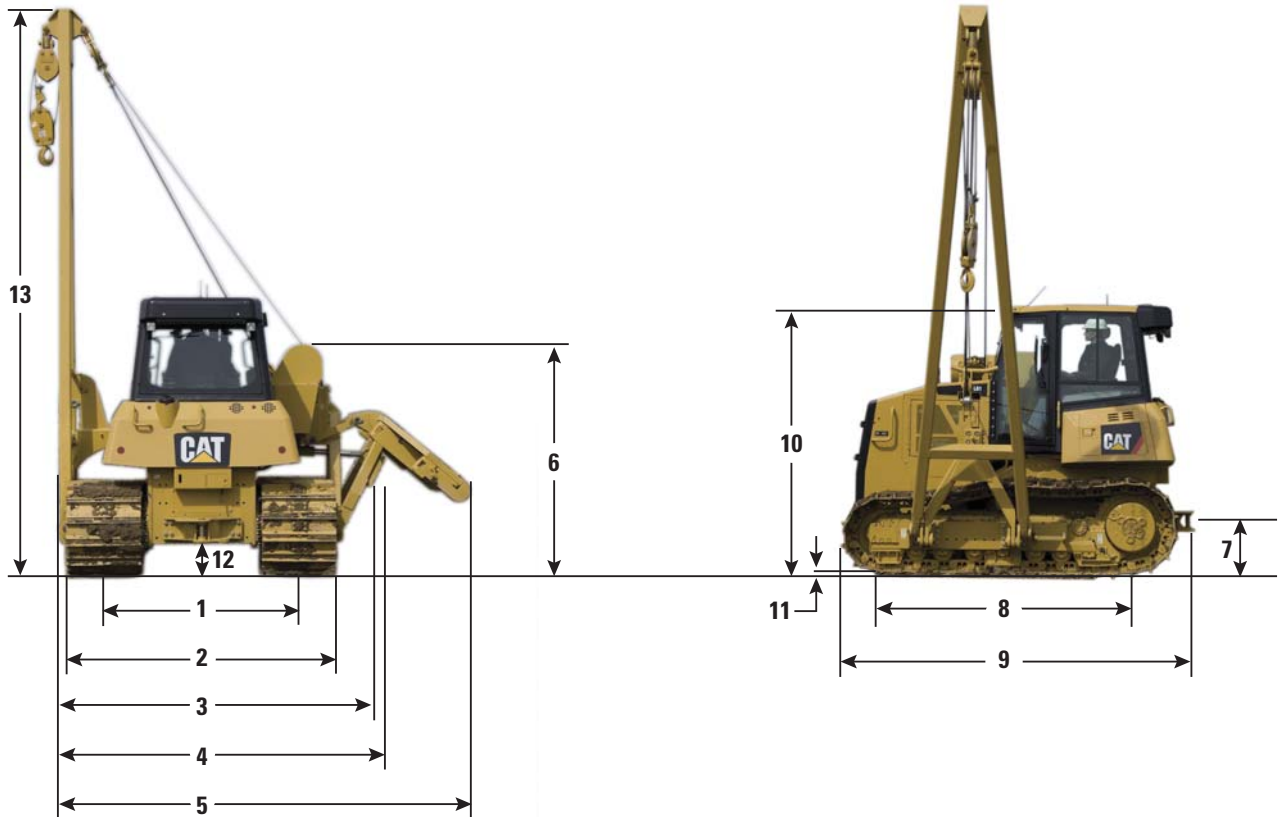
Lift Capacity	18 145 kg	40,000 lb
Boom Length	5.49 m	18 ft
Hook Winch Drum Diameter	216 mm	8.5 in
Boom Winch Drum Diameter	245 mm	9.63 in
Hook Winch Flange Diameter	398 mm	15.5 in
Boom Winch Flange Diameter	372 mm	14.63 in
Hook Winch Drum Length	254 mm	10 in
Boom Winch Drum Length	254 mm	10 in
Hook Winch Capacity – 16 mm (5/8 in) Diameter	72.85 m	239 ft
Boom Winch Capacity – 16 mm (5/8 in) Diameter	49.38 m	162 ft
Hook with Wire Rope Installed – 16 mm (5/8 in) Diameter	39.62 m	130 ft
Boom with Wire Rope Installed – 16 mm (5/8 in) Diameter	39.62 m	130 ft
Boom Line Speed	46 m/min	151 ft/min
Bare Drum Hook Speed (Lo)	33 m/min	108 ft/min
Bare Drum Hook Speed (Hi)	69.5 m/min	228 ft/min
2 Part Line Hook Speed (Lo)	16.5 m/min	54 ft/min
2 Part Line Hook Speed (Hi)	34.8 m/min	114 ft/min
3 Part Line Hook Speed (Lo)	11 m/min	36 ft/min
3 Part Line Hook Speed (Hi)	23.2 m/min	76 ft/min
Counterweight Extendible	2980 kg	6,570 lb



## Specified Equipment

Diameter Wire Rope	16 mm	5/8 in
Rope Minimum Breaking Strength	183.3 kN	41,200 lb
3 Part Load Line		
3 Part Boom Line		
Counterweight Extended	1231 kg	2,714 lb
Standard Boom	5.49 m	18 ft
Total Operating Weight		
Narrow	17 000 kg	37,480 lb
LGP	17 800 kg	39,242 lb

- A – Lift capacity at tipping point – ISO 8813
- B – Rated load capacity – ANSI/ASME B30.14
- C – Working range – ANSI/ASME B30.14



## Dimensions

Tractor Dimensions	Narrow		LGP	
<b>1</b> Track gauge	2000 mm	79 in	2000 mm	79 in
<b>2</b> Width of tractor (standard shoes)	2560 mm	101 in	2760 mm	109 in
<b>3</b> Width of tractor counterweight/boom removed	2917 mm	115 in	3117 mm	123 in
<b>4</b> Width of tractor (counterweight retracted)	3000 mm	118 in	3200 mm	126 in
<b>5</b> Width of counterweight extended	4426 mm	175 in	4414 mm	174 in
<b>6</b> Machine height (tip of winch)	2454 mm	97 in	2454 mm	97 in
<b>7</b> Drawbar height	483 mm	19 in	483 mm	19 in
<b>8</b> Length of track on ground	2645 mm	104 in	2645 mm	104 in
<b>9</b> Operating length	3784 mm	149 in	3784 mm	149 in
<b>10</b> Height of machine				
Height of top of stack	2914 mm	115 in	2914 mm	115 in
Height to the top of the ROPS canopy/cab	2958 mm	116.5 in	2958 mm	116.5 in
<b>11</b> Grouser height	48 mm	1.9 in	48 mm	1.9 in
<b>12</b> Ground clearance (per SAE J1234)	360.4 mm	14.2 in	360.4 mm	14.2 in
<b>13</b> Boom height [at SAE 1.22 m (4 ft) overhang]	6175 mm	243 in	6175 mm	243 in

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## STANDARD EQUIPMENT

### ELECTRICAL

- Alarm, back up
- Alternator, 95 amp
- Batteries, heavy duty, 900 CCA
- Converter, 12V, 15 amp
- Diagnostic connector
- Lights, halogen (four front, two rear)
- Horn
- Starter, 24 volt

### OPERATOR ENVIRONMENT

- Canopy, heated
- Cab, ROPS, with cloth seat or Canopy, ROPS heated with vinyl seat
- Seat belt, retractable
- Electro-hydraulic controls, adjustable seat mounted
- Foot rests
- Compact instrument cluster including:
  - Gauges for engine coolant temperature, hydraulic oil temperature and fuel level
  - 12 indicators
  - Digital display (ground speed, engine RPM and hour meter)
- Rotary throttle switch
- Electronic travel speed limiter
- Independent forward/reverse speed settings
- Mirror, rearview
- Auxiliary mirror for rear hitch/attachment
- 12V radio ready

- Power ports, 12V (2)
- Coat hook
- Storage compartment
- Cup holder
- Heavy duty rubber floor mat
- Single pedal combining deceleration and braking function

### PIPELAYER

- Boom, 5.49 m (18 ft)
- Counterweight, extendible 2980 kg (6,570 lb)
- Hydraulics, pipelayer system

### POWER TRAIN

- Engine, Cat C6.6 with ACERT Technology
  - Turbocharged and aftercooled
  - Common Rail Fuel system
- Aluminum bar plate cooling system (radiator, power train, aftercooler)
- Hydraulic demand fan
- Air cleaner with precleaner, automatic dust ejection and under-hood intake
- Electric fuel priming pump with integrated fuel/water separator
- Dual path, electronic control, closed-loop hydrostatic transmission
- Under-hood muffler
- Starting aid, ether injection
- Antifreeze, extendible life coolant -37° C (-35° F)

### UNDERCARRIAGE

- Heavy duty undercarriage
- Idlers, conventional type, lifetime lubricated
- Track rollers, lifetime lubricated
- Carrier rollers
- Track adjusters, hydraulic
- Sprocket rim segments, replaceable
- Guards, end track guiding scrapers, idler
- Track, 40 sections
  - Standard configuration, 560 mm (22 in)
  - LGP configuration, 760 mm (30 in)

### OTHER STANDARD EQUIPMENT

- Fuel tank and guard
- Hinged crankcase guard
- Lockable engine enclosures
- Idler guards
- Hinged radiator grill and swinging fan
- Front pull device
- Rigid drawbar
- Ecology drains (engine oil, power train and implement oil and engine coolant)
- Swing-out radiator fan
- S•O•S ports (engine, power train, hydraulics and engine coolant)

## MANDATORY ATTACHMENTS AND OPTIONAL EQUIPMENT

### POWER TRAIN

- Oil change, high speed
- Fan, demand, reversing
- Antifreeze, extended life coolant, -50° C (-58° F)

### OPERATOR ENVIRONMENT

- ROPS cab with sliding side windows and air conditioning
- Windshield washers and wipers
- Cat Comfort cloth air suspended seat with adjustable armrests
- Cab, polycarbonate windows
- Seat, vinyl, air suspension
- Seat, cloth, air suspension, heated

### GUARDS

- Fuel tank, heavy duty
- Grill, radiator, heavy duty
- Crankcase, heavy duty
- Track guiding, center

### STARTING AIDS

- Batteries, heavy duty
- Heater, engine coolant, 120V
- Heater, engine coolant, 240V

### OTHER ATTACHMENTS

- Certification Group
- Fuel tank, fast fuel
- Enclosure, sound suppression
- LGP arrangement, wider frame
- Machine Security System
- Caterpillar Product Link
- Rotating beacon

### FIELD INSTALLED ATTACHMENTS

- Radio

### PIPELAYER OPTION

- Machine with no boom

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