

# **Cat**® 306.5

# MINI HYDRAULIC EXCAVATOR

#### FEATURES:

The Cat<sup>®</sup> 306.5 Mini Excavator delivers maximum power and performance in a mini size to help you work in a wide range of applications.

#### **ALL DAY COMFORT**

 A sealed and pressurized cab is equipped with an improved air conditioning system, adjustable wrist rests and a suspension seat to help keep you working comfortably all day long.

#### **EASY TO OPERATE**

 Controls are easy to use and the intuitive Next Generation LCD monitor provides customizable machine operator preferences and easy to read machine information.

#### **STICK STEER TRAVEL MODE**

 Moving around the job site is even easier with Cat Stick Steer.
Easily switch from traditional travel controls with levers and pedals to joystick controls with the push of a button. The benefit of less effort and improved control is in your hands!

#### **BIG PERFORMANCE IN A MINI DESIGN**

 Increased lifting and multi-functioning performance helps you get the job done more efficiently, and dig-to-blade allows for easy clean up.

#### SAFETY ON THE JOB SITE

Your safety is our top priority. The Cat Mini Excavator is designed to help keep you safe on the job. Courtesy work lights and a fluorescent retractable seat belt with optional seat belt reminder system are just a few of the safety features we've built into the machine.

#### SIMPLE SERVICE FOR LESS DOWNTIME

 Maintenance is quick and easy on the Cat Mini Excavator. Routine check points are easy to access at ground level through service panels.

#### LOWER OPERATING COSTS

• Equipped with features such as auto idle, auto engine shutdown, and efficient hydraulics with a variable displacement pump, the Cat Mini Excavator was designed with reducing your operating costs in mind.

#### **UNMATCHED DEALER SUPPORT**

 Your Cat dealer is here to help you reach your business goals.
From providing equipment solutions to operator training to service needs and beyond, your Cat dealer is ready to help.



# **Specifications**

### Engine

Engine Model	Cat C2.4 Turbo
Net Power @ 2,400 rpm	
ISO 9249, 80/1269/EEC	41.7 kW
Engine Power	
ISO 14396	43.2 kW
Bore	87 mm
Stroke	102 mm
Displacement	2.43 L

- Meets China Nonroad Stage IV emission standard.
- · Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is at the rated speed of 2,400 rpm and the engine is installed with the factory configured fan, air intake system, exhaust system and alternator with a minimum alternator load.

#### Weights

Minimum Operating Weight with Cab\* 6175 kg Maximum Operating Weight with Cab\*\* 6430 kg

\*Minimum Weight: steel tracks, no extra counterweight, operator, full fuel tank, standard stick, blade, bucket.

\*\*Maximum Weight: steel tracks, extra counterweight, operator, full fuel tank, standard stick, blade, bucket.

#### Weight Increase from Minimum Configuration

Counterweight	250 kg
Travel System	
Travel Speed – High	5.0 km/h
Travel Speed – Low	3.1 km/h
Maximum Traction Force – High Speed	31 kN
Maximum Traction Force – Low Speed	51 kN
Ground Pressure	33.7 kPa
Gradeability (maximum)	30 degrees

#### **Service Refill Capacities**

10.0 L
9.5 L
105 L
53 L
104 L

#### **Hydraulic System**

Load sensing hydraulics with variable displacement piston pump						
Pump Flow @ 2,400 rpm	151 L/min					
Operating Pressure – Equipment	252 bar					
Operating Pressure – Travel	252 bar					
Operating Pressure – Swing	210 bar					
Auxiliary Circuit – Primary						
Flow	98 L/min					
Pressure	186 bar					
Digging Force – Stick (long)	29.1 kN					
Digging Force – Bucket	41.1 kN					

#### Swing System

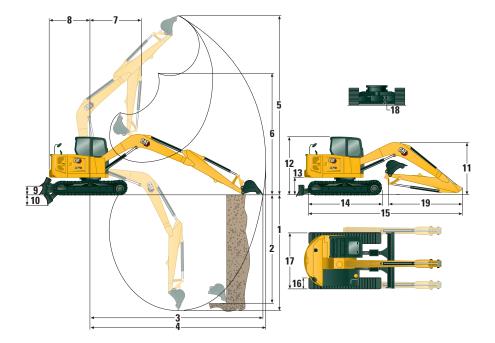
Machine Swing Speed	11.3 rpm
---------------------	----------

#### Blade

Width	1980 mm
Height	375 mm

#### **Certification – Cab**

Roll Over Protective Structure (ROPS)	ISO 12117-2:2008
Top Guard (optional)	ISO 10262:1998 (Level I)



## Dimensions

1Dig Depth3902 mm2Vertical Wall2414 mm3Maximum Reach at Ground Level5975 mm4Maximum Reach6090 mm5Maximum Dig Height5490 mm6Maximum Dump Clearance3870 mm7Boom in Reach2126 mm8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Height420 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length5789 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm19Stick Length1650 mm			Standard Stick
3Maximum Reach at Ground Level5975 mm4Maximum Reach6090 mm5Maximum Dig Height5490 mm6Maximum Dupp Clearance3870 mm7Boom in Reach2126 mm8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height657 mm13Swing Bearing Height657 mm14Overall Undercarriage Length5789 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	1	Dig Depth	3902 mm
4Maximum Reach6090 mm5Maximum Dig Height5490 mm6Maximum Dump Clearance3870 mm7Boom in Reach2126 mm8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length5789 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	2	Vertical Wall	2414 mm
5Maximum Dig Height5490 mm6Maximum Dump Clearance3870 mm7Boom in Reach2126 mm8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width1980 mm17Overall Track Width1980 mm18Ground Clearance306 mm	3	Maximum Reach at Ground Level	5975 mm
6Maximum Dump Clearance3870 mm7Boom in Reach2126 mm8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length5789 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width1980 mm17Overall Track Width1950 mm18Ground Clearance306 mm	4	Maximum Reach	6090 mm
7Boom in Reach2126 mm8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	5	Maximum Dig Height	5490 mm
8Tail Swing1585 mm9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	6	Maximum Dump Clearance	3870 mm
9Maximum Blade Height420 mm10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	7	Boom in Reach	2126 mm
10Maximum Blade Depth615 mm11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	8	Tail Swing	1585 mm
11Boom Height in Shipping Position2206 mm12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	9	Maximum Blade Height	420 mm
12Cab Height2540 mm13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mm18Ground Clearance306 mm	10	Maximum Blade Depth	615 mm
13Swing Bearing Height657 mm14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mmWidth over Upper House1950 mm18Ground Clearance306 mm	11	Boom Height in Shipping Position	2206 mm
14Overall Undercarriage Length2532 mm15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mmWidth over Upper House1950 mm18Ground Clearance306 mm	12	Cab Height	2540 mm
15Overall Shipping Length5789 mm16Track Belt/Shoe Width400 mm17Overall Track Width1980 mmWidth over Upper House1950 mm18Ground Clearance306 mm	13	Swing Bearing Height	657 mm
16 Track Belt/Shoe Width 400 mm   17 Overall Track Width 1980 mm   Width over Upper House 1950 mm   18 Ground Clearance 306 mm	14	Overall Undercarriage Length	2532 mm
17Overall Track Width1980 mmWidth over Upper House1950 mm18Ground Clearance306 mm	15	Overall Shipping Length	5789 mm
Width over Upper House 1950 mm   18 Ground Clearance 306 mm	16	Track Belt/Shoe Width	400 mm
18 Ground Clearance 306 mm	17	Overall Track Width	1980 mm
		Width over Upper House	1950 mm
19 Stick Length 1650 mm	18	Ground Clearance	306 mm
	19	Stick Length	1650 mm

# **306.5 Mini Hydraulic Excavator**

## Lift Capacities – Minimum Configuration

			Lift Point radius (3 m) Lift Point radius (4.5 m)			ius (4.5 m) Lift Point radius (M				(Maximum)		
			Over	Front		Over	Front		Over	Front		
	Lift Point Height		Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	m
4.5 m	Long Stick	kg							*925	*925	*925	3.98
3 m	Long Stick	kg				*920	*920	*920	*915	*915	*915	4.99
1.5 m	Long Stick	kg	*1705	*1705	*1705	*1090	*1090	*1090	*950	*950	720	5.35
0 m	Long Stick	kg	*2115	*2115	1690	*1230	*1230	920	*1000	*1000	725	5.24

\*Minimum Weight: Steel tracks, cab, operator, full fuel tank, no counterweight, standard bucket.

#### Lift Capacities – Maximum Configuration

			Lift Point radius (3 m) Lift Point radius (4.5 m)			Lift Point radius (Maximum)							
			Over	Front		Over	Front	Over Front		Over Front			
	Lift Point Height		Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	Blade Down	Blade Up	Over Side	m	
4.5 m	Long Stick	kg							*925	*925	*925	3.98	
3 m	Long Stick	kg				*920	*920	*920	*915	*915	*915	4.99	
1.5 m	Long Stick	kg	*1705	*1705	*1705	*1090	*1090	*1090	*950	*950	720	5.35	
0 m	Long Stick	kg	*2115	*2115	*2115	*1230	*1230	1050	*1000	*1000	830	5.24	

\*Maximum Weight: steel tracks, cab, operator, full fuel tank, counterweight, standard bucket.

## **Standard and Optional Equipment**

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

	Standard	Optional
ENGINE		
Cat C2.4 Diesel Engine (Meets China Stage IV Emission Standard) – Electronic Engine, Turbo	$\checkmark$	
Diesel Particulate Filter (DPF)	✓	
Automatic Engine Idle	✓	
Automatic Engine Shutdown	✓	
Automatic Swing Brake	✓	
Automatic Two Speed Travel	✓	
Fuel Water Separator with Indicator	✓	
Radial Seal – Double Element Air Filter	√	
Extended Life Coolant, –37° C ( –37° F)	✓	
HYDRAULICS		
Electronic Variable Displacement	✓	
Piston Pump	$\checkmark$	
Load Sensing/Flow Sharing Hydraulics	✓	
Power On Demand	✓	
Hydraulic Temperature Monitoring	✓	
Certified Accumulator	√	
HYDO™ Advanced Hydraulic Oil	√	
OPERATOR ENVIRONMENT – CAB		
Top Guard ISO 10262:1998 Level I	✓	
ROPS ISO 12117-2:2008	✓	
Stick Steer Mode	√	
Travel Cruise Control	✓	
Control Pattern Changer	✓	
Adjustable Wrist Rests	✓	
Molded Footrests	$\checkmark$	
Removable, Washable Floor Mat	$\checkmark$	
Travel Pedals and Hand Levers	$\checkmark$	
Cat Key with Passcode Option	$\checkmark$	
Hydraulic Lockout Controls	$\checkmark$	
High Back, Suspension Seat	$\checkmark$	
Retractable Seat Belt (75 mm/3 in)	$\checkmark$	
Seat Belt Reminder System		✓
Coat Hook	$\checkmark$	
Cup Holder	$\checkmark$	
Literature Holder	√	
Mounting Bosses for Top and Front Guards	✓	
Signaling/Warning Horn	✓	
Cab and (left side) Boom Work Lights	✓	
Utility Space for Mobile Phone	✓	
Next Generation Color LCD Monitor (IP66)	✓	
– Fuel Level and Coolant Temperature Gauges	✓	
- Maintenance and Machine Monitoring	✓	
- Performance and Machine Adjustments		
– Numeric Security Code	✓ √	
– Multiple Languages	V ./	
– Hour Meter with Wake Up Switch	v	

	Standard	Optional
<b>OPERATOR ENVIRONMENT – CAB</b> (continued)		
Operator Sound Pressure 72 dB(A) ISO 6396:2008	$\checkmark$	
HVAC with Automatic Temperature Control	$\checkmark$	
Integrated Lower Front Window	$\checkmark$	
Assisted Front Window Overhead Storage	$\checkmark$	
Rear Window Emergency Exit	$\checkmark$	
LED Interior Light	$\checkmark$	
12V Power Socket	$\checkmark$	
Radio – Bluetooth®, Auxiliary, Microphone, USB (charging only)	~	
Skylight	√	
Jog dial interface	$\checkmark$	
Suspension Seat	$\checkmark$	
UNDERCARRIAGE		
Greased and Lubricated Track	$\checkmark$	
Hydraulic Track Adjusters	√	
Tie Down Eyes on Track Frame	√	
Dozer Straight Blade	√	
Dozer Float	$\checkmark$	
Bolt-on, Reversible Wear Edge	$\checkmark$	
Steel Tracks (400 mm/15.75 in wide)	$\checkmark$	

(continued on next page)

## **Standard and Optional Equipment** (continued)

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

	Standard	Optional
BOOM, STICK AND LINKAGES		
One Piece Boom (3200 mm/126 in)	$\checkmark$	
Standard Stick (1650 mm/65 in)	$\checkmark$	
Front Shovel Capable – Pin-on/Manual Coupler/Hydraulic Coupler for Cat Tools	~	
Bucket (0.25 m³/0.33 yd³)	$\checkmark$	
Hammer		$\checkmark$
ELECTRICAL		
12 Volt Electrical System	$\checkmark$	
90 Ampere Alternator	$\checkmark$	
650 CCA Maintenance Free Battery	$\checkmark$	
Battery Disconnect	$\checkmark$	
Circuit Breaker	$\checkmark$	
Ignition Key Stop Switch	$\checkmark$	
Signaling/Warning Horn	$\checkmark$	
Product Link Elite (regulations apply)	$\checkmark$	

	Standard	Optional
GUARDING		
Top Guard ISO 10262:1998 (Level II)		$\checkmark$
Front Guard (Heavy Duty) ISO 10262:1998 (Level II)		$\checkmark$
OTHER		
Locks on External Enclosure Doors	$\checkmark$	
Lockable Fuel Cap	$\checkmark$	
Beacon Socket	√	
Rear Reflectors	$\checkmark$	

# **306.5 Environmental Declaration**

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

#### Engine

- The Cat<sup>®</sup> C2.4 Turbo Diesel Engine meets China Nonroad Stage IV emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)
  - ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

#### **Air Conditioning System**

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.9 kg (1.98 lb) of refrigerant which has a CO<sub>2</sub> equivalent of 1.287 metric tonnes (1.419 tons).

#### **Paint**

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium < 0.01%
- Chromium < 0.01%
- Lead < 0.01%

#### **Sound Performance**

Operator Sound Pressure\* 72 dB(A) (ISO 6396:2008)

Average Exterior Sound Pressure\*\* 99 dB(A) (ISO 6395:2008)

- \*The declared dynamic operator sound pressure levels per ISO 6396:2008. The measurements were conducted with the cab doors and windows closed.
- \*\*The labeled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC.

#### **Oils and Fluids**

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

#### **Features and Technology**

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  - Advanced hydraulic systems balance power and efficiency
  - Power On Demand provides full time efficiency and power when you need it and is transparent to the operator
  - Auto idle and auto engine shutdown
  - Extended maintenance intervals reduce fluid and filter consumption
  - Remote Flash and Remote Troubleshoot (if equipped)

#### Recycling

• The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	65.52%
Iron	21.19%
Rubber	3.50%
Mixed Metal	2.20%
Other	1.89%
Nonferrous Metal	1.81%
Plastic	1.55%
Fluid	1.47%
Mixed-Metal and Nonmetal	0.85%
Mixed Nonmetallic	0.01%
Uncategorized	0.00%
Total	100.00%

 A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance Endof-Life value of the product. According to ISO 16714:2008 (Earth-moving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714:2008 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following values in the table may vary.

Recyclability - 96%

• The data provided above was based on the product configuration as provided by the individual product group.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com** 

© 2024 Caterpillar All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ8226-03 (08-2024) Replaces AEHQ8226-02 (China, Africa, Middle East)

