



Cat® 314F

HYDRAULIC EXCAVATOR – TUNNELING

FEATURES:

The Cat® 314F Tunneling is a perfect choice for customers who value versatility, reliability, durability, and maximum efficiency.

- Superior performance at tight tunneling area (65-85 m³) by two front configurations (Reach and Short).
- Reinforced frame and front structure for tunneling.

- To protect hydraulic system, derate function of engine speed for plugging hydraulic return filter is available.
- Safety equipment such as flash light, extinguisher, silicon coating of harness connector.

Specifications

Engine

Engine Model	Cat C4.4 ACERT™
Net Power – SAE J1349	72 kW
Gross Power – SAE J1995	74 kW
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L

Hydraulic System

Main System – Maximum Flow (total)	256 L/min
Maximum Pressure – Equipment	30 500 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	25 000 kPa
Pilot System – Maximum Flow	22 L/min
Pilot System – Maximum Pressure	4120 kPa

Drive

Maximum Travel Speed	5.5 km/h
Maximum Drawbar Pull	112 kN

Swing Mechanism

Swing Speed	11.5 rpm
Swing Torque	30.9 kN·m

Service Refill Capacities

Fuel Tank Capacity	178 L
DEF Tank Capacity	19 L
Cooling System	28 L
Engine Oil (with filter)	13.5 L
Swing Drive	2.4 L
Final Drive (each)	3 L
Hydraulic System Oil (including tank)	160 L
Hydraulic Tank Oil	84 L

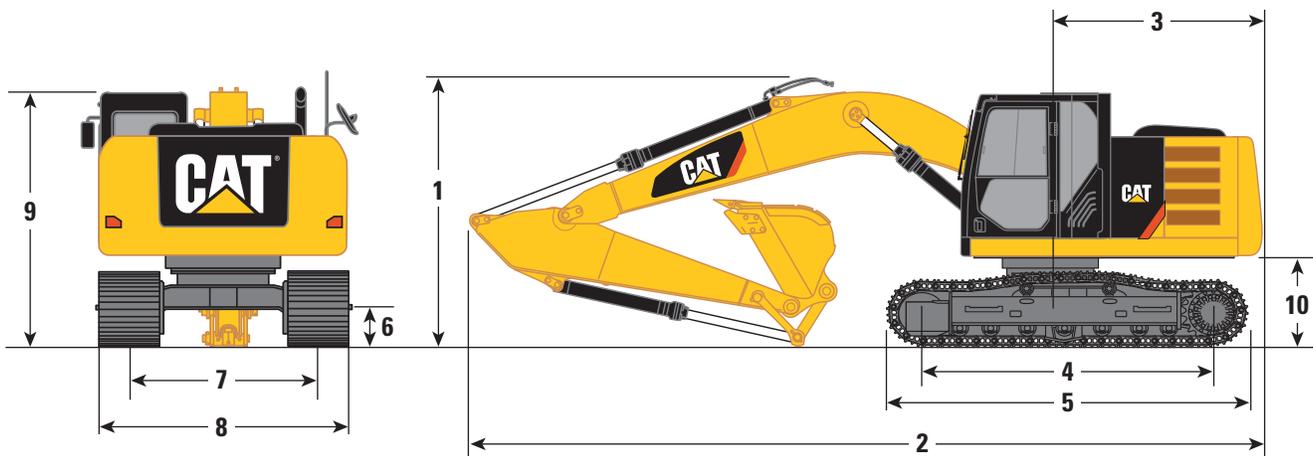


オフロード法2014年
基準適合



国土交通省指定
低騒音型建設機械

314F Hydraulic Excavator – Tunneling



Dimensions* (All dimensions are approximate.)

Boom	Reach Boom – 4.65 m
Stick	Stick – R2.5 m
1 Shipping Height	3000 mm
2 Shipping Length	7320 mm**
3 Tail Swing Radius	1490 mm
4 Length to Center of Rollers	2780 mm
5 Track Length	3550 mm
6 Ground Clearance	440 mm
7 Track Gauge	1990 mm
8 Transport Width	
500 mm Shoes	2490 mm
9 Cab Height	2820 mm
10 Counterweight Clearance	860 mm

*With 0.52 m³, 900 mm bucket.

**With blade.

Working Ranges*

Boom	Reach Boom – 4.65 m
Stick	R2.5 m
Maximum Digging Depth	5470 mm
Maximum Reach at Ground Level	8260 mm
Maximum Cutting Height	9340 mm
Maximum Loading Height	6830 mm
Minimum Loading Height	2470 mm
Maximum Depth Cut for 2440 mm Level Bottom	5270 mm
Maximum Vertical Wall Digging Depth	4950 mm

*With 0.52 m³, 900 mm bucket.

Bucket & Stick Forces*

Boom	Reach Boom – 4.65 m
Stick	R2.5 m
Bucket Type	Heavy Duty Bucket
Bucket Digging Force (SAE)	83 kN
Stick Digging Force (SAE)	63 kN
Bucket Digging Force (ISO)	95 kN
Stick Digging Force (ISO)	65 kN

*With 0.52 m³, 900 mm bucket.

STANDARD AND OPTIONAL EQUIPMENT

ENGINE

- C4.4 ACERT diesel engine
- Meets Japan 2014 (Tier 4 Final) emission standards
- 2300 m altitude capability
- Electric priming pump
- Automatic engine speed control
- Economy and STD power modes
- Two-speed travel
- Side-by-side cooling system
- Radial seal air filter
- Primary filter with water separator and water separator indicator
- Secondary filter
- Screen filter in fuel line
- Cold weather battery –18° C
- Radiator screen
- Air cleaner with precleaner

HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing dampening valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- Capability of installing HP stackable valve and medium valve
- Capability of installing additional auxiliary pump and circuit
- Auxiliary hydraulics
- Boom and stick lines
- High-pressure line

CAB

- Pressurized operator station with positive filtration
- Sliding upper door window (left-hand cab door)
- Glass-breaking safety hammer
- Removable lower windshield with in cab storage bracket
- Coat hook
- Beverage holder
- Literature holder
- AM/FM radio
- Radio with MP3 auxiliary audio port
- Two 12V stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with indicators, filter/fluid change, and working hour information
- Adjustable armrest
- Height adjustable joystick consoles
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Capability of installing additional pedals
- Two power outlets, 10 amp (total)
- Laminated glass front upper window and tempered other windows
- Polycarbonate hatch
- Seat, high-back mechanical suspension
- Ash tray

UNDERCARRIAGE

- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame
- Swivel guard
- Center track guiding guard
- 500 mm triple grouser shoes

COUNTERWEIGHT

- 2.19 mt

ELECTRICAL

- 80 amp alternator
- Circuit breaker
- Capability to electrically connect a beacon

LIGHTS

- Halogen boom light (both sides – General Reach only)
- Time delay function for boom light and cab light
- Exterior lights integrated into storage box
- Working lights, cab mounted with time delay

SECURITY

- Cat one key security system
- Door locks
- Cap locks on fuel and hydraulic tanks
- Lockable external tool/storage box
- Signaling/warning horn
- Secondary engine shutoff switch
- Openable skylight for emergency exit
- Rearview camera
- Bottom guard
- Travel motor guard
- Front mesh guard
- Machine security system

FRONT LINKAGE

- General Reach front 4.65 m HD Reach boom/ 2.5 m HD stick (with Shovel Crane)
- Short Reach front (without Shovel Crane)

OTHER

- Grease gun
- Fire extinguisher
- Flash light
- Tool box
- Pattern changer, four way
- Silicon coating connector
- Travel alarm
- Shovel Crane – General Reach only

TECHNOLOGY

- Product Link™

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

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Based on the Labor, Safety and Health Laws in Japan, employer of small construction equipment are required to provide specific training for all operators on machines with ship weight less than 3 metric ton. For machines greater than 3 metric ton, operator needs to obtain operator license certification from a Government approved registered training school.

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(Japan)

