

# PRODUCT SPECIFICATIONS FOR 740 GC

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## ENGINE

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| <b>Engine Model</b>                                    | Cat® C15   |
| <b>Bore</b>  | 5.4 in   |
| <b>Stroke</b>  | 6.75 in  |
| <b>Displacement</b>                                    | 926 in <sup>3</sup>  |
| <b>No Engine De-rating Below</b>                       | 10000 ft   |
| <b>Peak Engine Torque Speed</b>                        | 1200 r/min   |
| <b>Peak Engine Torque Net (SAE J1349)</b>              | 1670 ft·lbf  |
| <b>Net Power - SAE J1349</b>                           | 439 HP   |
| <b>Engine Model - U.S. EPA Tier 4 Final/EU Stage V</b> | Cat C15  |
| <b>Gross Power - SAE J1995</b>                         | 452 HP   |
| <b>Net Power - ISO 14396</b>                           | 447 HP   |
| <b>Peak Engine Torque Gross (SAE J1995)</b>            | 1711 ft·lbf  |
| <b>Emissions</b>                                       | The C15 engine meets Tier 4 Final and Stage V emission standards.  |
| <b>Note (4)</b>  | Net power when the fan is at maximum speed is 327 kW (439 hp) per the SAE reference conditions.  |
| <b>Note (2)</b>  | The power ratings apply at rated speed of 1,700 rpm when tested under the conditions for the specified standard.   |
| <b>Note (3)</b>  | The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.  |
| <b>Note (1)</b>  | The references to Tier 4 Final/Stage V include U.S. EPA Tier 4 Final, EU Stage V, Japan 2014 (Tier 4 Final), as well as Korea Tier 4 Final emission standards.   |
| <b>Note (5)</b>  | DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard ISO 22241-1. Requirements are met by many brands of DEF, including those that carry the |

AdBlue or API certifications.

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## WEIGHTS

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| <b>Rated Payload</b> | 40 ton (US) |
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## BODY CAPACITIES

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|-------------------------|----------------------|
| <b>Heaped (SAE 2:1)</b> | 29.7 yd <sup>3</sup> |
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| <b>Struck</b> | 22.2 yd <sup>3</sup> |
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| <b>Tailgate Heaped SAE 2:1</b> | 31.9 yd <sup>3</sup> |
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| <b>Tailgate Struck</b> | 23.4 yd <sup>3</sup> |
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## TRANSMISSION

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|                    |          |
|--------------------|----------|
| <b>Forward - 1</b> | 4 mile/h |
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|                    |            |
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| <b>Forward - 2</b> | 5.3 mile/h |
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|                    |            |
|--------------------|------------|
| <b>Forward - 3</b> | 7.3 mile/h |
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|                    |            |
|--------------------|------------|
| <b>Forward - 4</b> | 9.2 mile/h |
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|                    |             |
|--------------------|-------------|
| <b>Forward - 5</b> | 12.2 mile/h |
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|                    |             |
|--------------------|-------------|
| <b>Forward - 6</b> | 14.9 mile/h |
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|                    |            |
|--------------------|------------|
| <b>Reverse - 1</b> | 4.2 mile/h |
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|                    |            |
|--------------------|------------|
| <b>Reverse - 2</b> | 9.8 mile/h |
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|                    |             |
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| <b>Forward - 8</b> | 24.7 mile/h |
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|                    |             |
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| <b>Forward - 7</b> | 20.6 mile/h |
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| <b>Forward - 9</b> | 35.7 mile/h |
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## SOUND LEVELS

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|---------------------|---|
| <b>Interior Cab</b> | 72 dB(A)  |
| <b>Note (2)</b>     | Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in noisy environments.   |
| <b>Note (1)</b>     | The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 is 72 dB(A), for the cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed. |

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**OPERATING WEIGHTS**

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|                                 |           |
|---------------------------------|-----------|
| <b>Center Axle - Empty</b>      | 14636 lb  |
| <b>Rear Axle - Empty</b>        | 14145 lb  |
| <b>Center Axle - Rated Load</b> | 37670 lb  |
| <b>Front Axle - Empty</b>       | 42596 lb  |
| <b>Total - Empty</b>            | 71377 lb  |
| <b>Center Axle - Loaded</b>     | 51088 lb  |
| <b>Front Axle - Loaded</b>      | 49723 lb  |
| <b>Total - Rated Load</b>       | 80027 lb  |
| <b>Rear Axle - Rated Load</b>   | 37670 lb  |
| <b>Rear Axle - Loaded</b>       | 50594 lb  |
| <b>Front Axle - Rated Load</b>  | 4687 lb   |
| <b>Total - Loaded</b>           | 151405 lb |

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**SERVICE REFILL CAPACITIES**

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|                         |                |
|-------------------------|----------------|
| <b>Fuel Tank</b>        | 145.3 gal (US) |
| <b>Cooling System</b>   | 23.7 gal (US)  |
| <b>Engine Crankcase</b> | 13.7 gal (US)  |

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|--|---------------|
| <b>Axles - Each</b>                    | 15.8 gal (US) |
| <b>Brake Cooling Tank</b>              | 17.7 gal (US) |
| <b>Transmission - OTG</b>              | 19.8 gal (US) |
| <b>DEF Tank</b>                        | 6.5 gal (US)  |
| <b>Steering/Hoist Hydraulic System</b> | 36.9 gal (US) |
| <b>Final Drive - Each</b>              | 1.3 gal (US)  |

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#### BODY HOIST

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|                   |      |
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| <b>Raise Time</b> | 12 s |
| <b>Lower Time</b> | 12 s |

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#### STEERING

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| <b>Lock to Lock</b> | 4.75 seconds @ 60 rpm |
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#### STANDARDS

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|-------------------|--------------------------|
| <b>Brakes</b>     | ISO 3450 – 2011          |
| <b>Cab - FOPS</b> | ISO 3449 Level II – 2005 |
| <b>Cab - ROPS</b> | ISO 3471 – 2008          |
| <b>Steering</b>   | ISO 5010 – 2007          |

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#### BODY PLATE

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| <b>Type</b> | High strength Brinell HB450 wear resistant steel |
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#### TURNING CIRCLE

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| <b>Turning Dimensions - SAE Turning Radius</b>       | 303 in  |
| <b>Turning Dimensions - Clearance Radius</b>         | 330 in  |
| <b>Turning Dimensions - Aisle Width</b>              | 220 in  |
| <b>Note</b>  | Dimensions are for machines equipped with 29.5 R25 tires. |
| <b>Turning Dimensions - Steer Angle - Left/Right</b> | 45°   |
| <b>Turning Dimensions - Inside Radius</b>            | 156 in  |

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#### BODY PLATE THICKNESS

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|                    |         |
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| <b>Side Plates</b> | 0.43 in |
| <b>Base Plate</b>  | 0.51 in |
| <b>Front Plate</b> | 0.28 in |

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#### OPTIMAL LOADER/TRUCK PASS MATCHING

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| <b>Note</b> | An optimum system match gives you a major productivity advantage. The 740 GC is an excellent match for the Cat 374F and 352F Hydraulic Excavators; and Cat 972M, 966M, and 962M Wheel Loaders. Having matched loading and hauling tools results in increased production and lower system costs per unit of volume moved. |
|-------------|--|

|   |     |
|---|-----|
| <b>Wheel Loader: 972M - Passes</b>        | 3   |
| <b>Wheel Loader: 962M - Passes</b>        | 5   |
| <b>Wheel Loader: 966M - Passes</b>        | 4–5 |
| <b>Hydraulic Excavator: 374F - Passes</b> | 3–4 |
| <b>Hydraulic Excavator: 352F - Passes</b> | 5–6 |

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## 740 GC STANDARD EQUIPMENT

#### OPERATOR ENVIRONMENT

Heater and defroster with four speed fan

heater and defroster with four-speed fan

Mirrors: extensive arrangement for improved visibility

Two seats both with seat belts, operator's retractable

Glass windows:

- Front, laminated and tinted
- Sides and rear, toughened and tinted

Liquid Crystal Display (LCD):

- Alert indicator
- Selected gear and direction
- Speed or auto shift
- Operation and Maintenance Manual (OMM)
- Primary steering failure (warning)
- Seat belt warning
- Secondary steering failure
- Diesel Particulate Filter (DPF) regeneration filter
- Machine Security System (MSS)
- Secondary steering energy source engaged
- Hour meter
- Retarder active

Adjustable air vents

Machine operation monitoring system includes:

- Action lamp
- Engine oil pressure
- Primary steering system
- Left and right turn signal
- High beam
- Coolant temperature
- Tachometer
- Parking brake
- Fuel level
- Transmission oil temperature
- Brake system
- Transmission hold
- Hoist control
- Hydraulic system
- Charging system
- Transmission fault
- Traction control system
- Check engine lamp

Storage:

- Cup holder
- Flask receptacle (under the secondary seat)
- Under seat storage
- Door pocket
- Behind seat storage
- Coat hook

Windows (tinted) opening both sides

#### Seats:

- Operator: fully adjustable, air suspension
- Trainer: padded with lap belt

Combined gear selection and hoist control lever

Sun visor

Tilt and telescopic steering wheel

Secondary steering – electro hydraulic

Touchscreen display incorporating the rearview camera video feed

Air conditioning with R134A refrigerant

Windshield wiper and washer, two speed, intermittent (front)

#### CAT TECHNOLOGIES

Cat Detect with Stability Assist

Product Link: PL631E or PL641E dependent on location and licensing agreement

#### ELECTRICAL AND LIGHTING

Batteries (two) maintenance free

Main disconnect switch

Remote starting receptacle (cables not included)

Electrical system: 24-volt, 10A 24- to 12-volt converter

#### Lighting systems:

- Cab interior
- Two head lamps
- Two width marker
- Two reversing
- Work light/cab access light
- Two stop/tail lights
- Front and rear direction indicators

Horn

#### POWER TRAIN

Dual circuit oil immersed, enclosed brakes – all wheels

Cat Clean Emission Module (CEM) and exhaust aftertreatment package

Auto shift nine-speed forward and two reverse transmission

Three axle, six-wheel drive

Cat C15 engine

Retarder: engine compression brake

Differentials: standard with automatic clutched inter- and cross-axle differential locks

## SAFETY

Rearview camera

ROPS/FOPS cab

Reverse alarm

## GUARDS

Crankcase

Front dump body spill guard, integral part of fabricated body

Rear window

Radiator

Axle

## OTHER STANDARD EQUIPMENT

S·O·S sampling valves

Vandalism protection: lockable caps

Mud flaps: wheel arch and body mounted with transportation tiebacks

Tires, six 29.5 R25

Sound suppression (only standard in Europe)

# 740 GC OPTIONAL EQUIPMENT

## OPTIONAL EQUIPMENT

Machine Security System (MSS)

Product Link Elite: PLE631E (satellite), PLE641E (cellular)

Ether start

Flashing LED beacon

Four-point seat belt

Cold weather start attachment

Body liners

Engine block heater



Window blinds

Cold weather coolant  $-51^{\circ}\text{C}$  ( $-60^{\circ}\text{F}$ )

Heated rearview motorized mirrors

Roof mounted High Intensity Discharge (HID) work lights

Scissor tailgate

Windshield wiper and washer, two speed (rear)

Bluetooth radio stereo system

Bare chassis (no body) standard wheel base

Wheel chocks

Heated/cooled seat

Fast fuel fill

Exhaust heated body

Sound suppression (only standard in Europe)

Infrared glass – high ambient cab

Fuel additive – anti-waxing

Bare chassis (no body) long wheel base

Auto lube installation for automatic greasing of bearings

Cat Production Measurement payload monitoring system