

657

WHEEL TRACTOR-SCRAPER



Net Power
Tractor
Scraper

436 kW (585 hp)
333 kW (447 hp)

Cat® C18 and C15 engines meet U.S. EPA Tier 4 Final and EU Stage V emission standards.



"ALL-IN-ONE" HIGH PRODUCTIVITY/LOW COST HAULING SOLUTION

Cat Wheel Tractor-Scrapers offer:

- + MORE PRODUCTIVITY
- + OPERATOR COMFORT
- + NEW SAFETY FEATURES

Ready to help make your business stronger, Cat Wheel Tractor-Scrapers give you twin power to get more work done at a lower cost.



THE NEW CAT[®] 657

The Cat 657 raises the bar for efficiency, fuel economy, and safety. With a new tractor-hydraulic on-demand fan for fuel economy, high-pressure steering, and a larger cab, the 657 will set a new pace for productivity and profit.



GREATER PRODUCTIVITY UP TO 6%

Improved fuel efficiency, payload estimates, and exceptional production capabilities help you get the job done right for less.

MORE COMFORT 21% LARGER INTERIOR

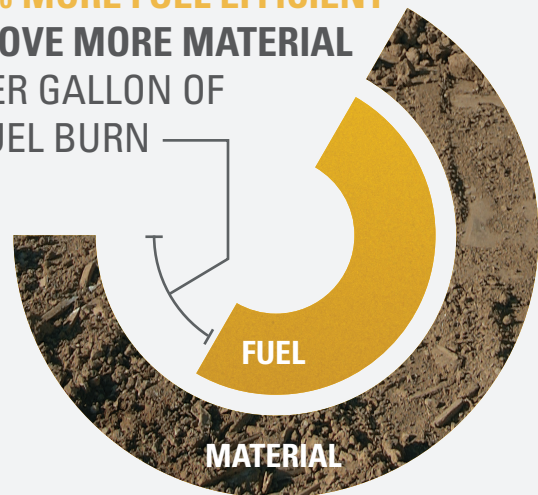
You produce more when your operators work in an ergonomically designed interior.

ADDITIONAL SAFETY

New technology creates less stress, more efficient operators.

ECONOMICAL SAVINGS

7% MORE FUEL EFFICIENT*
MOVE MORE MATERIAL
PER GALLON OF
FUEL BURN



**THE 657 IS THE
FUEL EFFICIENT CHOICE
FOR YOUR BUSINESS.**



*Compared to the 657G.



SEQUENCE ASSIST

Sequence Assist automates the machine and implements commands.



PAYLOAD ESTIMATOR

Payload Estimator and Cat Production Measurement.



CONTROLS

APECS transmission controls.



CAMERA

WAVS camera for improved visibility.



CAB

21% larger cab interior than G Series cab.



GROUND LEVEL SERVICEABILITY

New powered access system.



BRAKES

Hydraulic-actuated wet disc brakes.



STEERING

New high-pressure steering system.

PRODUCTIVE RESULTS

WORK SMART AND MOVE MORE



PAYLOAD ESTIMATOR AND CAT PRODUCTION MEASUREMENT

Achieve load targets and increase efficiency by measuring loads sooner. Payload Estimator achieves 95% accuracy compared to scale weights.

ADVANCED TRANSMISSION CONTROLS

Improve shift quality and fuel efficiency with Electronic Clutch Pressure Control (ECPC).

NEW STEERING SYSTEM

Enjoy less steering effort and fatigue while increasing operator efficiency and productivity with the new high-pressured steering system.

EASIER OPERATION

Reduce up to 14 commands per cycle with Sequence Assist to make machine operation simpler and training easier.

ECONOMICAL HAULING SYSTEM

Load quickly, haul at high speeds, and dump on the go with the Cat 657 Wheel Tractor-Scraper.



With its high productivity rates, the Cat 657 Wheel Tractor-Scraper has the potential to be the most profitable hauling system on the jobsite.



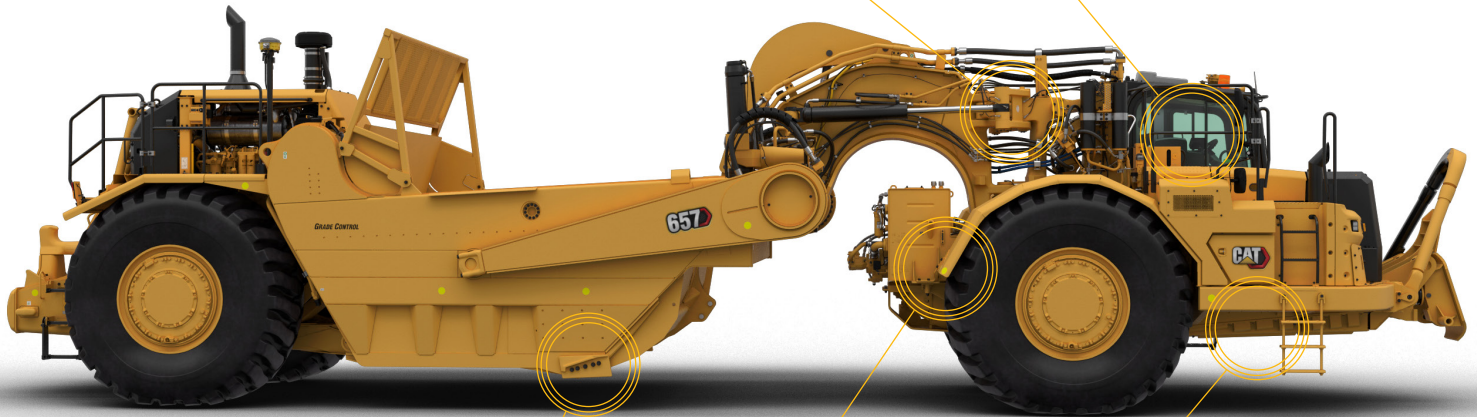
OPERATOR STATION

Reduced fatigue and increased operator comfort with single joystick controls, armrests, seat steering column—allowing for easy machine operation at a 30 degree seat angle—and room to maneuver.



CUSHION HITCH

A proven system for Caterpillar that dampens the ride for the operator and reduces the load going through the hitch to improve hitch life.



ECONOMICAL HAULING SYSTEM

With its ability to load quickly, haul at high speeds, and dump on the go, fewer machines are required on the job, reducing the cost to move a unit of material.



ENHANCED POWER TRAIN

Single horsepower rating allows for more power in all gears to improve productivity.



DURABLE FRAMES

Cat 657 Wheel Tractor-Scrapers are designed, built, and tested to last in the most rugged conditions.

A COMFORTABLE OPERATING ENVIRONMENT AND INTUITIVE CONTROLS HELP TO REDUCE THE STRESS OF A DEMANDING JOB.

SAFETY

Front and rear windshield wipers, four-wheel braking, and standard secondary steering.

ELECTRONIC CONTROLS

Monitors tractor and scraper status from one location using a single controller.

INSTRUMENTS

Easy-to-read gauge cluster, backlit switches, and a dash that displays front and rear engine data, allowing the operator to easily monitor machine operations.

COMFORTABLE SEAT

Air suspension Cat Comfort Seat adjusts and rotates. Advanced Ride Management (ARM) automatically adjusts damping to match ground conditions and improves operator comfort.

VISIBILITY

Excellent visibility to bail, cutting edge, and bowl. Seat and throttle pedals adjust for best visibility and accessibility to controls.

CLIMATE

HVAC defroster and automatic temperature control are standard for operator comfort.



OPERATOR ENVIRONMENT COMFORTABLE CAB, INTUITIVE CONTROLS

REAL-TIME INFORMATION WITH INTEGRATED TECHNOLOGIES

TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

Cat Link hardware (Product Link™) and software (VisionLink®) work together to put equipment information at your fingertips. Get real-time access to information on every machine in your fleet on any jobsite—no matter the size of the operation or the brands of equipment you run.



PRODUCT LINK

Track asset location, hours, fuel usage, diagnostic codes, idle time, and more to improve your productivity and lower your operating costs. Cellular connectivity comes standard. Satellite connectivity is available.



VISIONLINK

Using the online VisionLink interface, you can see a common, collective view of your information, making it easier to manage a mixed fleet and make informed decisions about your equipment.



MY.CAT.COM

You can also access Caterpillar and Cat dealer information at my.cat.com. My.cat.com gives you access to PM schedules, parts and service records, warranty coverage, and more—with a single login. Plus, you can link directly to your VisionLink account.

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

ENGINE			
Tractor	Cat C18		
Scraper	Cat C15		
Rated Engine RPM:			
Tractor	2000 rpm		
Scraper	2100 rpm		
Net Power (SAE J1349/ISO 9249:2007):			
Tractor	436 kW	585 hp	
Scraper	333 kW	447 hp	
Gross Power (SAE J1995):			
Tractor	475 kW	637 hp	
Scraper	359 kW	481 hp	
Engine Power (ISO 14396):			
Tractor	469 kW	629 hp	
Scraper	353 kW	473 hp	

- Net power advertised is the power available at the flywheel when the engine is equipped with fan at minimum speed, air intake system, exhaust system, and alternator.
- Cat engines meet U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Maximum Speed: Length × Width × Height.

WEIGHTS			
Operating Weight: Unloaded	74 253 kg	163,700 lb	
Operating Weight: with Rated Load	121 427 kg	267,700 lb	

- Operating weights shown are based on a machine configuration with Michelin tires, full fuel, and no operator.

STEERING			
180° Curb-to-Curb Turning Width (Right)	13.85 m	45.40 ft	
180° Curb-to-Curb Turning Width (Left)	14.5 m	47.57 ft	

- Tire Size 40.5/75 R39 ** E-3

TRANSMISSION					
Forward 1	5.7 km/h	3.54 mph	Forward 6	30.9 km/h	19.20 mph
Forward 2	10.5 km/h	6.52 mph	Forward 7	41.4 km/h	25.72 mph
Forward 3	12.5 km/h	7.77 mph	Forward 8	56.1 km/h	34.86 mph
Forward 4	17 km/h	10.56 mph	Reverse	10.8 km/h	6.71 mph
Forward 5	22.8 km/h	14.17 mph			

SERVICE REFILL CAPACITIES			
Crankcase:			
Tractor	38 L	10.0 gal	
Scraper	34 L	8.98 gal	
Transmission System:			
Tractor	136 L	35.93 gal	
Scraper	121 L	31.96 gal	
Cooling System:			
Tractor	88.6 L	23.41 gal	
Scraper	63.2 L	16.70 gal	
Fuel Tank	1628 L	430.07 gal	
Hydraulic System	150 L	39.6 gal	
Diesel Exhaust Fluid:			
Tractor	30.5 L	8.06 gal	
Scraper	30.5 L	8.06 gal	
Travel Speeds (Runout) Transmission Gear:			
Eighth	56.1 km/h	34.8 mph	
Reverse	10.8 km/h	6.7 mph	

SCRAPER BOWL CAPACITY			
Struck	24.5 m ³	32.0 yd ³	
Heaped	33.6 m ³	44.0 yd ³	
Rated Load	47 174 kg	104,000 lb	
Rated Load	46.4 tonne	52.0 ton	
Width of Cut	3.8 m	12.47 ft	
Maximum Depth of Cut (Cushion Hitch Locked)	440 mm	17.32 in	
Maximum Depth of Spread (Cushion Hitch Locked)	530 mm	20.90 in	
Maximum Depth of Spread	660 mm	25.98 in	

DIMENSIONS			
Width – Overall Machine	4.36 m	14.30 ft	
Width:			
Tractor	3.75 m	12.30 ft	
Scraper	4.36 m	14.30 ft	
Height – Overall Machine	4.77 m	15.65 ft	
Ground Clearance – Tractor	.72 m	2.36 ft	
Length – Overall Machine (Bail Down)	17.97 m	58.96 ft	

SAFETY CRITERIA COMPLIANCE STANDARDS	
Rollover Protective Structure (ROPS)	ISO 3471:2008 for up to 26 600 kg (58,642.96 lb)
Falling Object Protective Structure (FOPS)	ISO 3449:2005 Level II
Brakes	ISO 3450:2011
Steering System	ISO 5010:2007
Seat Belt	SAE J386:FEB2006
Forward Horn and Reverse Alarm	ISO 9533:2010
Exterior Sound	ISO 6393:2008 is 116 dB(A)

STANDARD & OPTIONAL EQUIPMENT

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

POWER TRAIN	STANDARD	OPTIONAL
Tractor:		
C18 (Tier 4/Stage V)	•	
Cat engine brake	•	
Electric start, 24 volt	•	
Air cleaner, dry type	•	
Fan, hydraulic	•	
Ground level engine shutdown	•	
Radiator	•	
Guard, crankcase	•	
Starting aid, ether	•	
Braking system: Primary and secondary, wet disc, hydraulic actuated parking, hydraulic released, spring applied	•	
Engine speed lock	•	
Transmission: 8-speed planetary powershift, ECPC, power train, guard, APECS software, programmable top gear selection, transmission hold, differential lock, machine speed limit, ground speed control	•	
Scraper:		
C15 (Tier 4/Stage V)	•	
Cat engine brake	•	
Electric start, 24 volt	•	
Fan, mechanical drive	•	
Ground level engine shutdown	•	
Starting aid, ether	•	
Braking system: Primary and secondary, wet disc, hydraulic actuated	•	
Transmission: 8-speed planetary powershift, ECPC, power train, guard, APECS software, programmable top gear selection, transmission hold	•	
ELECTRICAL	STANDARD	OPTIONAL
Tractor:		
Alternator, 115 amp	•	
Batteries (4), 12 volt, 1000 CCA, maintenance free, high output	•	
Electrical system, 24V	•	
LED turn signals with hazard function	•	
Starting/charging receptacle	•	
Scraper:		
Alarm, backup	•	
Alternator, 65 amp	•	
Batteries (4), 12 volt, 1000 CCA maintenance free, high output	•	
Lighting system: LED brake lights, LED turn signals with hazard function	•	
Starting/charging receptacle	•	

FLUIDS	STANDARD	OPTIONAL
Extended life coolant to -37°C (-34°F)	•	
OTHER ATTACHMENTS	STANDARD	OPTIONAL
Camera arrangement – Work Area Vision System (WAVS)		•
Cab beacon		•
Air horn		•
Air horn and beacon		•
Wiring group		•
Sequence Assist		•
Cat Production Measurement (CPM)		•
OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
HVAC system, heat, AC, defrost	•	
Thermostat control of HVAC system	•	
Coat hook	•	
Lunch box platform with holding strap	•	
Diagnostic connection (2)	•	
12V power ports (2)	•	
Differential lock (1)	•	
Dome courtesy light	•	
Horn, electric	•	
T-handle implement control	•	
Radio ready	•	
ROPS/FOPS cab, pressurized	•	
Keypad switches: Rear engine start, engine speed lock, wipers/washers, hazard lights, work lights (on, off), information mode, Messenger display	•	
Safety tab rocker switches: Parking brake, implement lockout	•	
Seat belt, static two-piece	•	
Seat – Cat Advanced Ride Management (ARM), Cat Comfort Series III, rotates 30 degrees	•	
Steering wheel, tilt, telescoping, padded	•	
Windows, right side emergency egress	•	
Windows, sliding	•	
Windows, laminated, zipped in	•	
Windshield wipers, front and rear windows, includes washers	•	
Door lock	•	
Messenger display	•	
Powered access ladder		•
Safety tab rocker switches	•	
Messenger display gauges, warnings include: Coolant temp, engine oil temp, hydraulic oil temp, DPF temp, fuel level, park brake, brake system, regeneration required, engine speed lock, system voltage, secondary steering, bail down, differential lock, apron float, transmission hold, high beam lights, action lamp, engine speed (rpm), gear selection, DPF fill levels	•	

STANDARD & OPTIONAL EQUIPMENT

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

OTHER STANDARD EQUIPMENT	STANDARD	OPTIONAL
Tractor:		
Accumulators (brake and cushion hitch) with Canadian Registration Number (CRN)	•	
Fast oil change	•	
Vandalism locks	•	
Steering locks	•	
Heater, engine coolant 120V	•	
Cushion push plate/bail (on standard open bowl only)	•	
Scraper:		
Bowl	•	
Fast oil change	•	
Vandalism locks	•	
Steering Locks	•	
Rear hook/radiator guard (on standard open bowl only)	•	
Guard, overflow (on standard open bowl only)	•	
Heater, engine coolant 120V	•	
Hydraulic position sensing cylinders (bowl and apron)	•	

SERVICE INSTRUCTIONS	STANDARD	OPTIONAL
Film arrangement – U.S. (ANSI)		•
Film arrangement – International (ISO)		•
INTEGRATED TECHNOLOGIES	STANDARD	OPTIONAL
Cat Production Measurement		•
Product Link	•	
Sequence Assist with Payload Estimator		•



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

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www.cat.com www.caterpillar.com

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