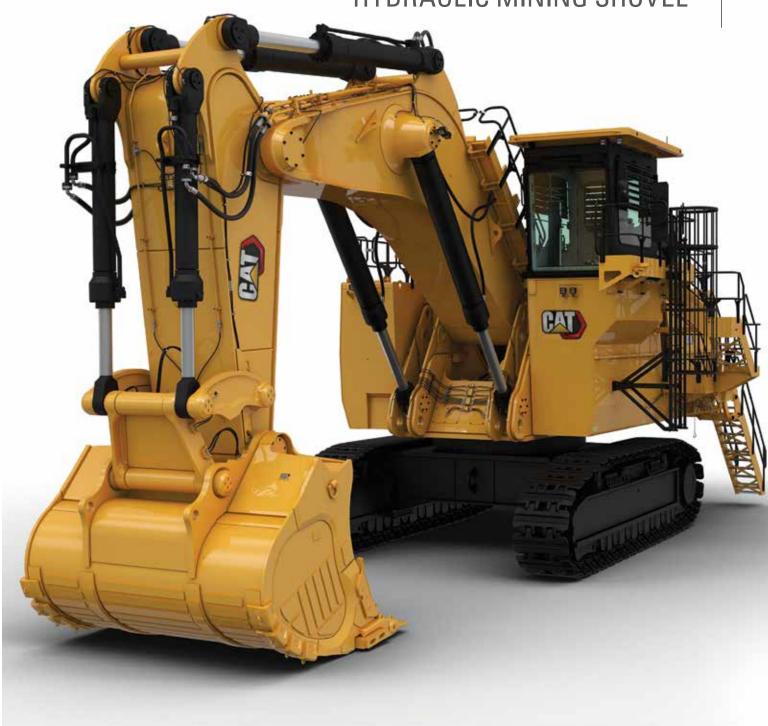




CAT[®] **6030**

HYDRAULIC MINING SHOVEL



THE PRODUCTIVITY YOU EXPECT. THE RELIABILITY YOU DEMAND.

The Cat® 6030 may be the smallest shovel in the Cat Productivity Class lineup, but it's the most popular. Owned by more customers than any other product in the HMS portfolio, the 6030 is in operation around the world.

POWERFUL PERFORMER

Equipped with proven and reliable C27 engines, the 6030 provides the most powerful engine output in its class along with the mobility and flexibility you need from a 300-tonne machine. It delivers the productivity you expect, with the reliability you demand.

The 6030 offers a standard bucket capacity of 17 m³ (22.2 yd³) in backhoe configuration, and 16.5 m³ (21.5 yd³) in face shovel (FS) configuration with the unique Cat TriPowerTM system. The 6030 is the ideal match for Cat 777 and 785 mining trucks.

But we're always looking for ways to make the 6030 better. The only shovel in its size class offered with dual engines, it's now available with a Tier 4 Final engine solution that eliminates the need for Diesel Exhaust Fluid, saving time and cost during maintenance.

PRODUCTIVE

A proven and powerful global leader

RELIABLE

Spend more time loading and less time on maintenance

CONNECTED

Improve condition monitoring and machine health with Cat technologies





The Cat 6030 is a proven and powerful global leader, loading more every cycle and every shift. Its powerful engine and efficient hydraulic system allow higher working speeds for fast cycle times and high production — delivering more to your bottom line.

FASTER FACE SHOVEL OPERATION

The 6030's unique TriPower face shovel design has been proven to deliver safer, easier and faster face shovel operation. Generating superior mechanical leverage and control, our FS configured hydraulic mining shovels utilize a unique boom design that employs rotatable triangular rockers. This design facilitates quicker cycle times, increased effective lifting forces, constant boom momentum, automatic constant bucket angle, and automatic roll-back limitation.



UNIQUE TWIN ENGINE CONCEPT

The 6030's twin engine concept delivers greater uptime and increased productivity without compromising fuel consumption. Move away from high walls, blast zones or other safety hazards when in need of engine repair with single-engine operation. By comparing one engine and associated hydraulic network to the other engine, troubleshooting is expedited and simplified, therefore generating more uptime and more productivity.

FASTER BOOM MOVEMENT

Cycle times are reduced thanks to the use of float valves rather than engaging pumps to lower the boom. This facilitates faster boom movements and allows other operating functions such as bucket curl and stick in/out to occur simultaneously.



INTELLIGENT OPERATION

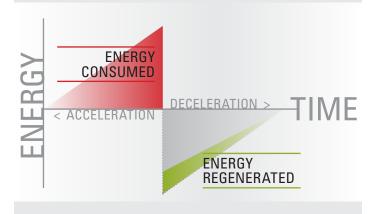
The intelligent pump managing system contributes to lower costs by improving component life while reducing fuel consumption. The system continuously evaluates actual engine and hydraulic operating values against set values and adjusts pump output accordingly. This results in efficient use of the engine for greater productivity, less energy and fuel consumption, and reduced component wear.



CAPTURED ENERGY

The Closed-loop Swing System delivers faster cycle times and improved energy efficiency, while also generating less heat. Kinetic energy captured during the swing motion is fed back into the system during deceleration, providing more power to drive the main and auxiliary pumps. The system:

- + Uses pumps to decelerate
- + Uses energy instantaneously
- + Creates less heat
- + Lowers engine load factor
- + Reduces fuel consumption



PROTECTING AND EXTENDING THE LIFE OF HYDRAULIC COMPONENTS

OPTIMIZED COOLING

The Independent Oil Cooling system is a more efficient means of cooling that protects and extends the life of hydraulic components. The system is independent of return oil, achieving efficiency through the utilization of dedicated pumps that provide cooling capacity as needed, whether the engine is idling or under load. That means optimum oil temperature is being maintained, even while your operator waits for the next truck to load. Competitive hydraulic shovels provide cooling only when the machine is working and the engine is under load. Additional efficiency is achieved via our thermostatically controlled radiator fan speed.

- + Independent from return oil / machine movement
- + Continuous cooling keeps oil at optimal temperature
- + Temperature controlled

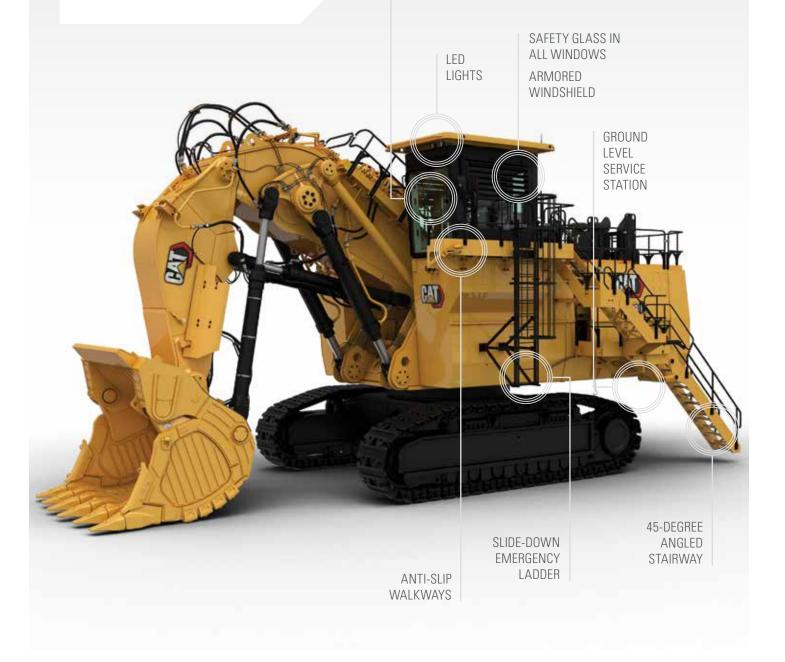
FOCUS ON SAFETY

IN, ON AND AROUND THE SHOVEL

The 6030 has been updated to incorporate mining safety best practices as part of its standard design. With an eye on safety during both operation and maintenance, the design focuses on access and egress, hydraulic hose routing, electric wiring and fire prevention.

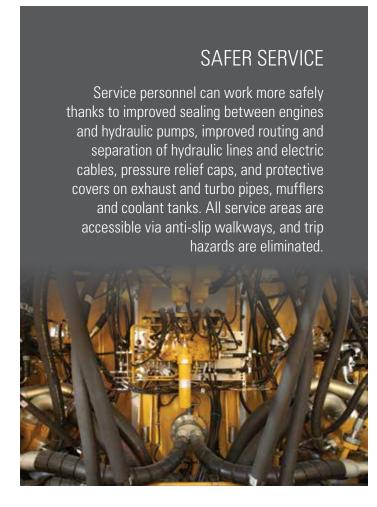
GREATER VISIBILITY

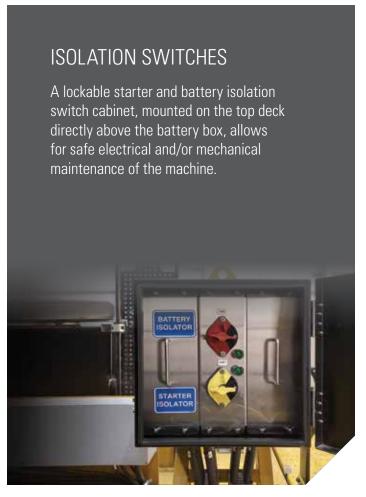
The height of the cab module ensures an eye level of approximately 6.5 m (21 ft 4 in), providing excellent visibility of the digging and loading areas.

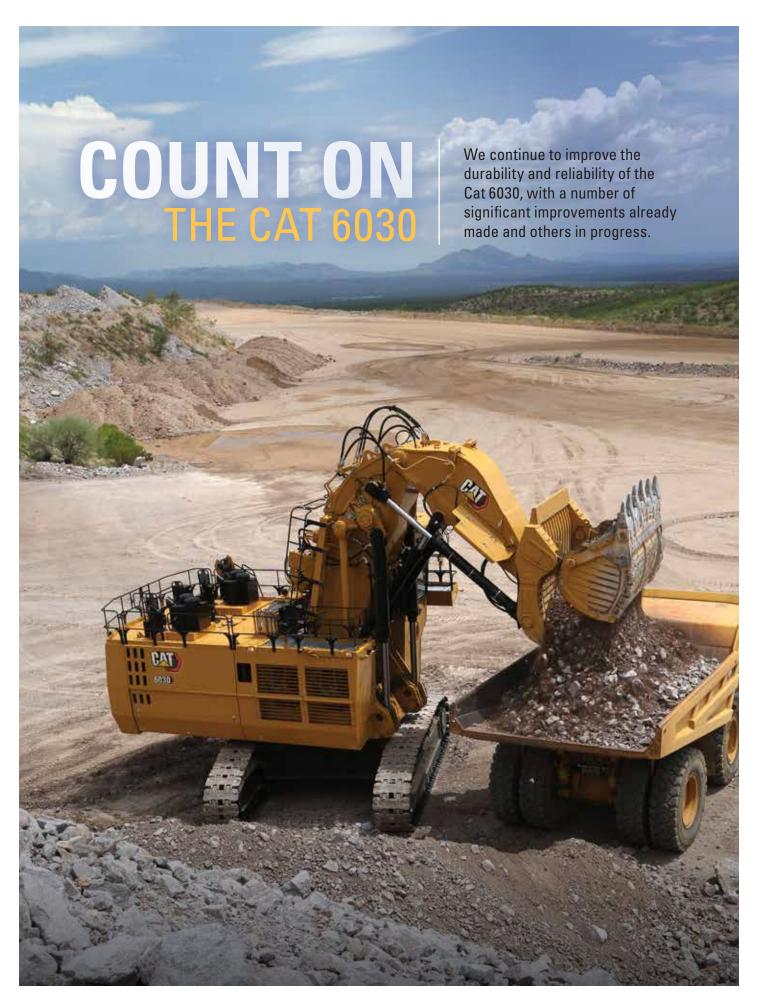






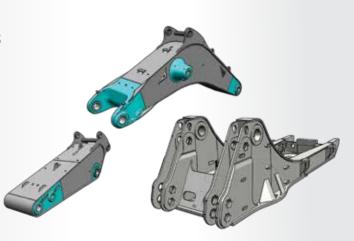






ROBUST AND RELIABLE STRUCTURES

- + Designed and fabricated to withstand toughest digging conditions
- + Manufactured from high-strength steel
- + Heavy castings at attachment pivot points
- + Booms and sticks are stress relieved after welding



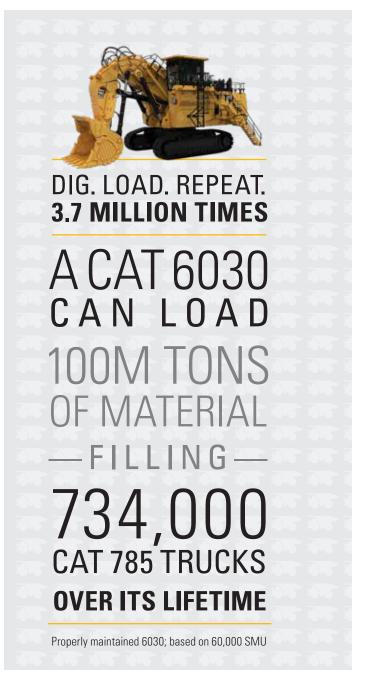


100 YEARS OF UNDERCARRIAGE INNOVATION

Key to the latest improvements is a new undercarriage that leverages over 100 years of Cat undercarriage innovation. We've introduced new idlers with duo cone seals and steel-backed bronze bearings. New HD rollers extend expected lifetime with no overheating during tramming, and lifetime lubrication and duo cone seals reduce maintenance. These rollers are retrofittable to improve shovels in the field. We've also improved track pads and track tensioning.

HD Tracks

- + Cast double-grouser combined pad links
- + High interference bushing eliminates cracking and bushing walking
- + Deep carburized bushing reduces pitch extension
- + Induction hardened rail extends track pad life



Spend more time loading & less time servicing

We've streamlined maintenance on the Cat 6030 to make sure your shovel is spending more time producing than it is being maintained. Serviceability is significantly enhanced with better organized hoses and other components. In addition, the majority of hoses can be built locally using all Cat material. We've also increased the exchange intervals for engine oil and hydraulic oil.

SERVICE STATION

The service station provides easy access to functions such as coolant, hydraulic oil, slew gear box oil, grease, diesel and engine oil. The service station features a Cat battery charging connector and indicator lights for full fuel tanks. Swing and travel functions are disabled when the service station is lowered.

- + Hydraulically released service station
- + Comfortable height
- + Improved access to all functions
- + Fast fill connections





SUPERSTRUCTURE ACCESS

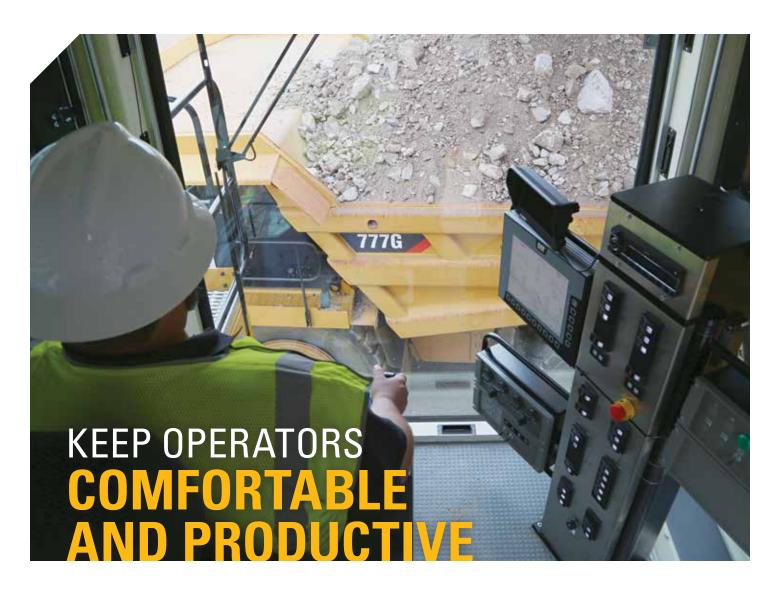
Clear arrangement of components on the superstructure grants easy access and serviceability for coolant expansion tanks, air intake filters, oil tank breather, HVAC unit, grease tank, exhaust, and starter and battery isolator. We've also provided easy access to the slew gearboxes, rotary distributor, high pressure swing filters and travel spool valves. Oil cooler accessibility enables easy cleaning and maintenance.



EMISSIONS REDUCTION SYSTEM

The 6030 is powered by the durable and reliable C27 Engine — now available for both highly regulated or lesser regulated countries (LRC). Certified to meet U.S. EPA Tier 4 Final/EU Stage V emissions standards, the non-SCR solution is maintenance-free and does not require DEF. The LRC solution meets China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 2.





We understand that the most important factor in your hydraulic shovel's effectiveness is the performance of its operator. To help make their workday as productive as possible, we've incorporated productivity, safety and comfort features into the 6030 operator's cab.

DESIGNED FOR COMFORT

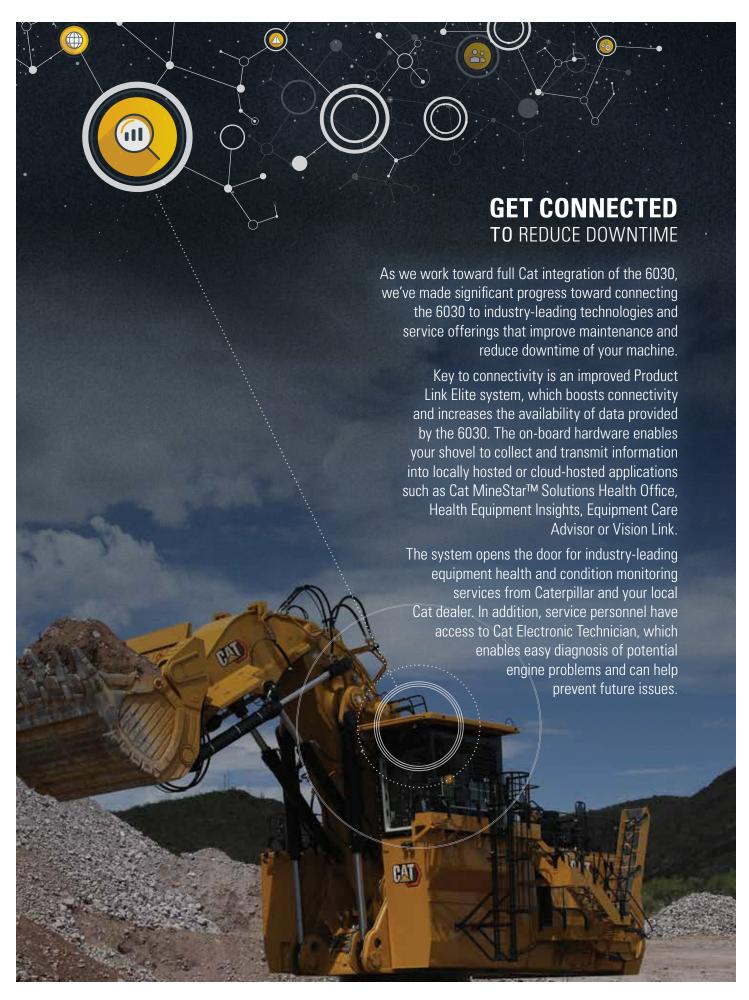
Operators sit in a pneumatically cushioned, multi-adjustable, heated seat with easy access to intuitive, informative onboard electronics. The cab provides excellent visibility and also features an auxiliary trainer seat with retractable seat belt.

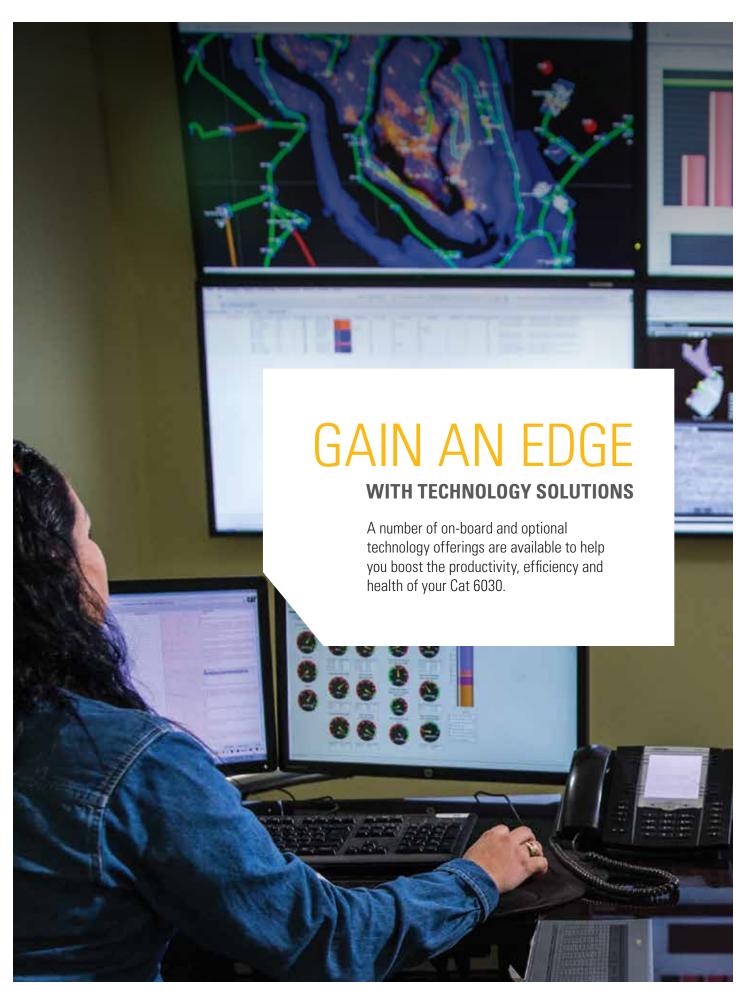
DESIGNED FOR PRODUCTIVITY

The Electronic-Hydraulic Servo Control relays actuating signals from the joysticks, delivering fast and precise machine reactions facilitate a reduction in operator fatigue. No hydraulic lines are present in the cab or the cab module, ensuring a clean arrangement with less noise emission. A large, color touch-screen puts machine monitoring at the operator's fingertips.

DESIGNED FOR CONTROL

Outside the cab, productivity is enhanced through the 6030's hydraulic system. Operators experience greater control with five circuit hydraulics that allow for two cylinder motions, two travel motions, and swing to be controlled simultaneously.





CAT MINESTAR™ SOLUTIONS

While they are not integrated at the factory, the capability sets of Cat MineStar™ Solutions are available as a retrofit. A comprehensive suite of technology products for the mining industry, MineStar offerings include:

- + Fleet, which provides real-time machine tracking, assignment and productivity management, providing a comprehensive overview of all your asset operations from anywhere in the world.
- + Terrain, which enables high-precision management of drilling, dragline, grading and loading operations through the use of guidance technology. It increases machine productivity and provides you real-time feedback for improved efficiency.
- Detect, which helps increase operator awareness, enhancing safety at your operation. It includes a range of capabilities designed to assist the operator, including blind spot and proximity detection of fixed and mobile equipment.
- Health, which delivers critical eventbased machine condition and operating data for your entire fleet. It includes comprehensive equipment health and asset monitoring capabilities, with a wide range of diagnostic, analytic and reporting tools.



SHOVEL TECHNOLOGY SOLUTIONS

A number of specific shovel technology solutions are available on the Cat 6030.

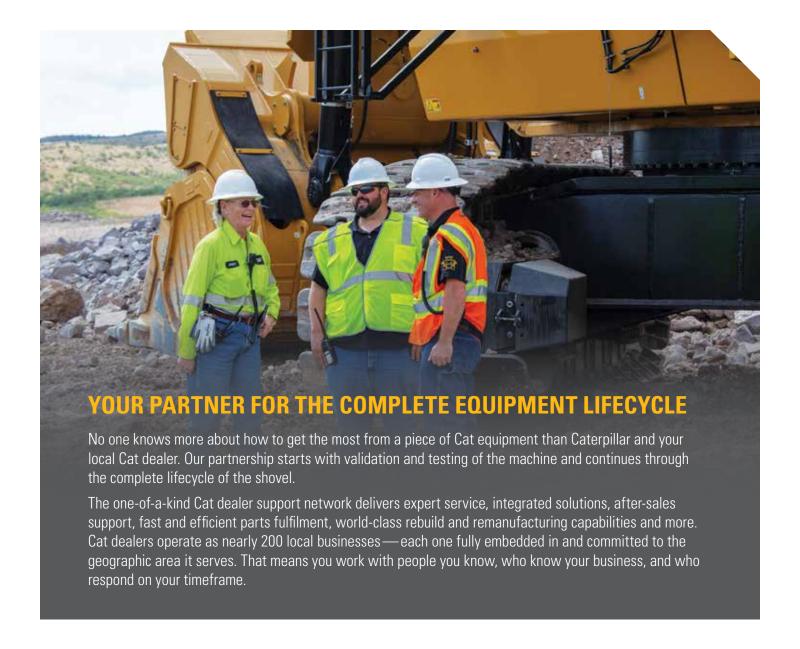
The Monitoring and Diagnostic System enhances diagnostic capabilities and provides detailed troubleshooting functions.

The Board Control System uses sensors throughout the machine to monitor operating data, record faults, and notify the operator audibly and visually. This promotes the earliest possible detection of faults and allows for timely maintenance planning and assistance for speedy repair.

- + Large 12" touch screen
- + Live sensor monitoring
- + Visual & acoustic fault warnings
- + Machine settings can be made without additional hard- or software

Our commitment to your success doesn't end when your Cat 6030 begins loading overburden or ore. We immediately start looking for ways to make your shovel work more efficiently, safely and productively. From addressing performance issues, to training operators and technicians, to calibrating onboard technologies — our support of your shovel productivity is ongoing.





Caterpillar and Cat dealer personnel will partner with you on site to improve the performance not only of your shovels but of your overall loading and hauling operation. You'll have access to parts and service, and technicians who are focused on helping you optimize repairs to machines productive. And we help with training to ensure your operators have the skills and knowledge they need to work as efficiently and productively as possible.

We also work alongside you to ensure you achieve maximum value throughout the life of your equipment. Together with our Cat dealer network, we customize service offerings to provide a maintenance solution that fits your operation—whether you want to perform the majority of service yourself, or you're looking for an onsite partner to manage your maintenance organization. We're also consultants who can help you make smart decisions about buying, operating, maintaining, repairing, rebuilding and replacing equipment.

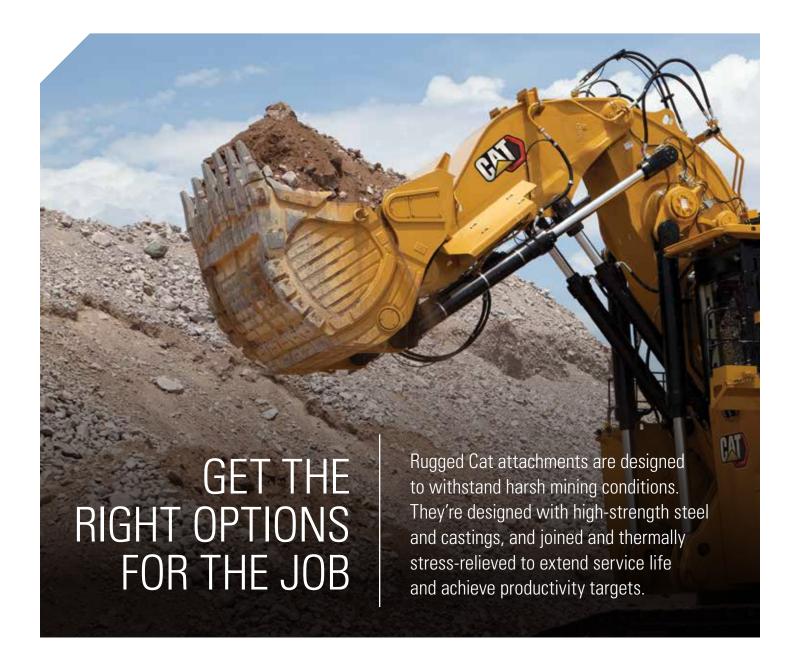












BUCKETS

Cat Hydraulic Mining Shovel buckets are designed to maximize durability and productivity. We have the right bucket size ideally matched to your shovel and your application.

FACE SHOVEL OPTIONS

Heavy Rock	Heavy Rock	Heavy Rock	Standard Rock
12.0 m ³	13.5 m³	15.0 m ³	16.5 m ³
15.7 yd ³	17.7 yd³	19.6 yd³	21.6 yd³

Capacity Heaped 2:1 (ISO 7546)

BACKHOE BUCKET OPTIONS

Heavy Rock	Heavy Rock	Standard Rock	Light Duty
12.0 m ³	15.0 m ³	17.0 m ³	18.0 m ³
15.7 yd³	19.6 yd³	22.2 yd³	23.5 yd³

Capacity Heaped 1:1 (ISO 7451)

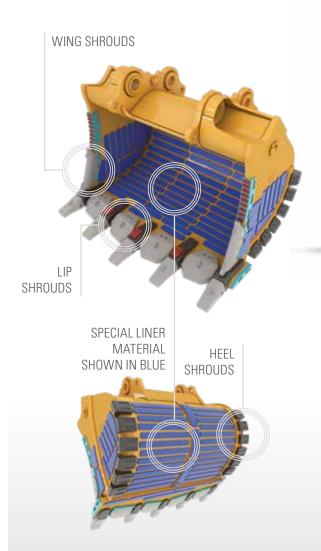
GET SYSTEM

WEAR PACKAGE

All buckets are equipped with a wear package that keeps you productive while protecting your investment. The wear package consists of:

- + Special liner material covering main wear areas inside and outside of bucket
- + Shrouds to protect the specific areas from impact and abrasion
 - Lip shroud between teeth
 - Wing shrouds on outer corners of the side walls
 - Heel shrouds at bottom edges

Special wear packages for highly abrasive materials are available upon request





EXPANDED OFFERINGS

WITH SPECIALTY SOLUTIONS

- + Frontless shovel arrangements
- + Upper-only arrangements for fixed installations
- + Undercarriage and track arrangements

TECHNICAL SPECIFICATIONS

See cat.com/6030 for complete specifications.

DIESEL ENGINES – LESSER REGULATED			
Make and model		2x Cat C27	
Rated speed	1,800 min-1	1,800 rpm	
Total rated gross power – SAE J1995	1141 kW	1529 hp	
Total rated net power – SAE J1349	1125 kW	1508 hp	
Total rated net power – ISO 9249 112		1511 hp	
(Meets China Nonroad Stage III emissions standards, equivalent to U.S. EPA Tier 2.)			

DIESEL ENGINES – HIGH	LY REGULATED	
Make and model		2x Cat C27
Rated speed	1,800 min-1	1,800 rpm
Total rated gross power – SAE J1995	1209 kW	1620 hp
Total rated net power – SAE J1349	1192 kW	1597 hp
Total rated net power – ISO 9249	1194 kW	1600 hp
(Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.)		

ELECTRICAL SYSTEM	
System Voltage	24 V
Batteries in series / Parallel Installation	4 x 210 Ah – 12 V each
	420 Ah – 24 V

OPERATING WEIGHTS			
Face Shovel (FS)	294 300 kg	648,810 lb	
Backhoe (BH)	296 500 kg	653,660 lb	
* Operating weights include: base machine, front attachment, standard track pads, standard rock bucket, 100% fuel and lubricants.			

SERVICE REFILL CAPACITIES			
Fuel Tank Capacity	2 x 2540 L	2 x 671 gal	
Hydraulic Tank	2500 L	660 gal	
Hydraulic System (including tank)	3500 L	925 gal	
Engine Oil	2 x 99 L	2 x 26.2 gal	
Engine Coolant	2 x 150 L	2 x 39.6 gal	
Grease container	450 L	119 gal	

HYDRAULICS			
Maximum Flow to Main Pumps	4 x 552 L/min 4 x	146 gal/min	
Maximum Pressure – Attachment	310 bar	4,495 psi	
Maximum Pressure – Travel	360 bar	5,220 psi	
Maximum Flow to Swing Pumps	4 x 197 L/min 4	x 52 gal/min	
Maximum Pressure – Swing	350 bar	5,080 psi	

	SWING SYSTEM
Swing Speed	4.6 rpm
Swing Circuit	Closed-loop with Torque Control

UNDERCARRIAGE		
Maximum Travel Speed – 1st stage	1.4 km/h	0.87 mph
Maximum Travel Speed – 2nd stage	2.7 km/h	1.68 mph
Maximum Tractive force	1637 kN	367,880 lbf

OPERATOR ENVIRONMENT				
Operator's Eye Level	6.5 m	21 ft 4 in		
Spectator Sound Power Level (L _{WA}) ISO 6395:2008		114.9 dB(A)		
Operator Sound Pressure Level (L _{PA}) ISO 6396:2008		78 dB(A)		
Operator Protective Guard ISO 10262:1998 Level II	Front a	nd Top Guard		

DIMENSIONS		
Height overall	8050 mm	26 ft 5 in
Height of tracks	1940 mm	6 ft 4 in
Clearance under counterweight	2170 mm	7 ft 1 in
Tail swing radius	6450 mm	21 ft 2 in
Width overall (@ 1000 mm standard pads)	7520 mm	24 ft 8 in
Crawler length	7660 mm	25 ft 2 in
Track gauge	4800 mm	15 ft 9 in

WORKING RANGES AND F	ORCES			
FACE SHOVEL				
Boom	6.2 m	20 ft 4 in		
Stick	4.4 m	14 ft 5 in		
Standard Rock Bucket Heaped 2:1 (ISO 7546)	16.5 m ³	21.6 yd ³		
G.E.T. System with six (6) teeth	C95			
Max Crowd Force (ISO)	1898 kN	291, 700 lbf		
Max Breakout Force	954 kN	214,390 lbf		
Max Digging Height	13.9 m	45 ft 7 in		
Max Digging Reach	13.7 m	44 ft 11 in		
BACKHOE				
Boom	8.5 m	27 ft 11 in		
Stick	4.0 m	13 ft 1 in		
Standard Rock Bucket Heaped 2:1 (ISO 7546)	17.0 m ³	22.2 yd³		
G.E.T. System with six (6) teeth	C85			
Max Tearout Force (ISO)	944 kN	212,150 lbf		
Max Breakout Force	880 kN	197,760 lbf		
Max Digging Height	13.8 m	45 ft 3 in		
Max Digging Reach	15.1 m	49 ft 6 in		

STANDARD & OPTIONAL EQUIPMENT

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

CAT POWER TRAIN	STANDARD	OPTIONAL
2 x Cat C27 Engines	•	
Aftertreatment System » Diesel Oxidation Catalyst (DOC) » NOx Reduction System (NRS) » Non-DEF solution	•	
Hydraulically driven radiator fan	•	
Electronically controlled fan speed	•	
Two-stage fuel filter with series filtration	•	
Automatic engine idle shut down	•	
HYDRAULICS	STANDARD	OPTIONAL
Pump management system » Electronic load limit control » Flow on demand » Automatic zero flow regulation » Automatic engine RPM reduction	•	
Pressure cut-off for main pumps	•	
Closed loop swing circuit	•	
Boom float valves	•	
ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Four (4) maintenance-free batteries	•	
14 LED high-brightness working flood lights	•	
11 LED service lights	•	
UNDERCARRIAGE & STRUCTURES	STANDARD	OPTIONAL
HD tracks	•	
» 800 mm (2 ft 7 in) wide track pads		•
» 1000 mm (3 ft 3 in) wide track pads	•	
» 1200 mm (3 ft 11 in) wide track pads		•
Belly plate for extra protection		•
HD Fixed axle rollers	•	
HD Fixed axle idlers	•	
Automatic hydraulic retarder valve	•	
Acoustic travel alarm (forward & reverse)	•	
Fully hydraulic self-adjusting track tensioning	•	
, ,	STANDARD	OPTIONAL
track tensioning	STANDARD	OPTIONAL •
FRONT ATTACHMENT	STANDARD •	OPTIONAL •
TriPower™ Kinematics (Face Shovel only)	STANDARD •	OPTIONAL .
TriPower™ Kinematics (Face Shovel only) Guards for shovel cylinders at FS stick	STANDARD •	OPTIONAL •
TriPower™ Kinematics (Face Shovel only) Guards for shovel cylinders at FS stick Backhoe attachment	STANDARD •	OPTIONAL •
FRONT ATTACHMENT TriPower™ Kinematics (Face Shovel only) Guards for shovel cylinders at FS stick Backhoe attachment Frontless base machine	STANDARD •	OPTIONAL • • •

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
Single HVAC system	•	
Dual HVAC system		•
Heated, pneumatically cushioned and multi-adjustable comfort seat	•	
Independently adjustable seat consoles with intergrated joysticks	•	
FM/AM radio with USB and AUX input	•	
Fold away auxiliary seat	•	
Sliding side window	•	
Roller blinds at all windows	•	
External sun shields	•	
Camera monitoring system		•
Cat Board Control System with 305 mm (12 in) color touchscreen	•	
Inclinometer	•	
CAT TECHNOLOGY	STANDARD	OPTIONAL
Product Link Elite™ (Satellite)	STANDAND	OFTIUNAL
Product Link Elite™ (Satellite)		
Product Link Elite™ (No radio)	-	•
Cat Minestar™ Solutions ready		•
Cat Willestal Solutions ready		•
COLD WEATHER	STANDARD	OPTIONAL
COLD WEATHER Cold Weather Package (400V; 50Hz)	STANDARD	OPTIONAL •
	STANDARD	• •
Cold Weather Package (400V; 50Hz)	STANDARD	• • •
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz)	STANDARD STANDARD	OPTIONAL OPTIONAL
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater		•
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE		•
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station		•
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports		•
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours		•
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Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours	STANDARD • • • •	OPTIONAL
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours	STANDARD • • • •	OPTIONAL
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Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours SAFETY & SECURITY Improved access, egress and movement All-around safety glass	STANDARD • • • •	OPTIONAL
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours SAFETY & SECURITY Improved access, egress and movement All-around safety glass Armored windshield	STANDARD • • • •	OPTIONAL
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours SAFETY & SECURITY Improved access, egress and movement All-around safety glass Armored windshield Operator Protective Guard (Top Guard)	STANDARD • • • •	OPTIONAL
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours SAFETY & SECURITY Improved access, egress and movement All-around safety glass Armored windshield Operator Protective Guard (Top Guard) Operator Protective Guard (Front Guard)	STANDARD • • • •	OPTIONAL
Cold Weather Package (400V; 50Hz) Cold Weather Package (208V; 60 Hz) Cab heater SERVICE & MAINTENANCE Retractable service station S.O.S.SM sampling ports Engine oil exchange interval: 500 hours Engine oil exchange interval: 1,000 hours Hydraulic oil change interval: 10,000 hours SAFETY & SECURITY Improved access, egress and movement All-around safety glass Armored windshield Operator Protective Guard (Top Guard) Operator Protective Guard (Front Guard) Safety seat contact switch	STANDARD • • • •	OPTIONAL



HYDRAULIC MINING SHOVEL

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

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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PEDJ0492 Build Number: 03A

