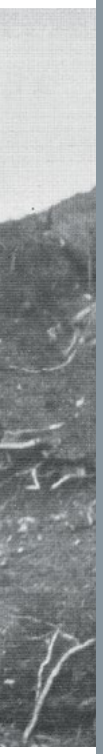
EVERY LOAD COUNTS

CAT® HYDRAULIC SHOVELS
& ELECTRIC ROPE SHOVELS

CAT®

Steam shovels like these — the predecessors of today's Cat® mining shovels — played a major role in public works in the 19th and early 20th centuries, being key to the construction of railroads and the Panama Canal. Many were built on railroad chassis, on which the boiler and engines were mounted. U.S. President Theodore Roosevelt, in far left photo, posed on a steam shovel during his visit to the Panama Canal site in 1906.



EVERY experience COUNTS

Our experience building large earthmoving shovels began more than 130 years ago. Since that first steam shovel built in 1882, we have focused on finding new and innovative ways to improve our products. Through different power sources, applications and even company names, the one common thread has been our dedication to giving our customers better and more productive digging and loading tools.

This dedication has helped make mining shovels what they are today. We pioneered the electric rope shovel for mining, building the first all-electric AC-driven machine of its kind. We were one of the first manufacturers to produce a fully hydraulic mining shovel and in 1961 introduced the first all-hydraulic fleet of mining shovels in Europe. From improvements in handle design and crowd technology to power and locomotion, we have played an important part in the evolution of this industry.

And we've delivered more than innovation. We played an active role in historical events, providing powerful earthmoving equipment that helped shape the world in which we live today. Our shovels helped build the Panama Canal and helped cities rebuild after World War II.

For the last 100 years, we've overcome challenges and learned from successes, and we've used that experience to continuously improve the mining shovels we provide to our customers. And we're not done yet. We'll continue to apply that same spirit of learning and innovation as we move forward.

Many of the large, steam-powered railroad shovels of the 1800s were mounted on, or converted to, crawlers in the 1920s. The crawler mounting reduced the average time for a shovel move from 9 minutes to 30 seconds. Steam shovels eventually fell out of use in the 1930s with the development of more economical diesel-powered shovels.

Enhanced visibility is a key safety feature of the standard cabs in our electric rope shovels. The floor window and windshield allow vertical visibility from the crawler tracks to the boom point sheaves.

EVERY person COUNTS

You've told us that keeping people safe is your No. 1 goal. And we're committed to doing all we can to help you in this effort. The safety of everyone who works in, on or around Cat equipment is our top priority.

We strive to meet the industry's most rigorous safety standards. For example, many of our Cat Hydraulic Mining Shovels are designed to meet the Australian Division of Resources and Energy's Mining Design Guidelines, with standard features that provide reduced fire risk, increased visibility and operator comfort, and safer maintenance areas.

We also collaborate with our customers to gain critical insight that helps us better understand how to minimize health and safety risks. We embrace the design philosophies developed by the Earth Moving Equipment Safety Round Table, a group of our major mining customers that encourages manufacturers to build safety into equipment design.

Cat Electric Rope Shovels feature a standard cab that sets the bar for operator safety and comfort.

We were the first in the industry to introduce a three-seat cab, allowing an operator, trainee and observer to work together. The trainer seat has a view of the face, and the operator is not required to turn around to communicate. With dual cab exits and powered, retractable ladders, we make sure operators can quickly exit the shovel in an emergency. Flat floors and the rear door also allow for easy stretcher access in the event that an operator needs medical attention. We are currently in the process of introducing many of these features as part of our next-generation hydraulic mining shovel cab, as well.

All of our hydraulic and electric rope shovels come with FOPS approved cabs, and our hydraulic mining shovels feature a roll-back limiter as part of the unique TriPower system, which prevents the bucket from dumping material back toward the cab. Multiple emergency stop buttons, conveniently located throughout, allow for quick machine shut-down if necessary.

EVERY IDEA COUNTS

Innovation has been the driving force behind Cat mining shovels—from early models powered by steam, to today's diesel- and electric-powered models with advanced hydraulics and dozens of productivity-enhancing features.

Cat Electric Rope Shovels incorporate a number of design breakthroughs to increase productivity and reliability. Like the all-new Cat Power Demand Management System, which allows customers to more efficiently run rope shovels on generators when working without an electrical grid, saving time and money while keeping production steady. The system manages rope shovel power demand for maximum efficiency when working on and off the grid throughout the dig and load cycles.

Our unique LatchFree Dipper System removes the most common cause of maintenance downtime, the latch assembly, replacing it with a heavy duty holding link. And HydraCrowd,

Cat Mining Shovels incorporate a number of advanced, productivity-enhancing features and leverage the latest technologies to improve safety, loading accuracy and overall mine operations. Features like the unique TriPower system, shown in the two photos on the right, give our hydraulic front shovels more stability and power when digging.

the industry's first hydraulic crowd system with a hydraulic cylinder inside the tubular dipper handle, maintains all the benefits of the Cat front end while eliminating the need for routine crowd and retract rope replacements—improving safety and cutting downtime by reducing maintenance events.

Cat Hydraulic Mining Shovels also feature a number of innovations, including the unique TriPower system. TriPower uses triangular rockers to provide more power and stability when digging, as well as to prevent any rollback from dumping material on the cab. An independent oil cooling system allows controlled cooling whenever the engine is running, and the board control system uses sensors throughout the machine to provide early warning of potential errors. Our closed-loop swing circuit feeds kinetic energy captured during the swing motion back into the hydraulic system, producing less heat and providing greater efficiency.

We are also working to integrate our mining shovels with Cat MineStar™ capability sets, which can improve safety and loading accuracy as well as manage, track and assign machines. We currently offer Fleet, Terrain and Detect as retrofits, and are committed to further integration so you can get the most out of your machines.

EVERY cycle COUNTS

In the mining industry, a high degree of productivity is the key to a profitable operation. That's why we do everything we can to make sure you get maximum production from your primary loading tools.

Our patented FastFil electric rope shovel dippers fill up quickly with no empty pockets, getting the most from every cycle. FastFil dippers are trapezoidal, which eliminates the void that occurs at the back of a traditional dipper. In some applications, this helps them achieve fill factors greater than 100 percent in sizes up to 65 cubic yards (49.7 cubic meters).

Our front-shovel hydraulic mining shovels use the innovative TriPower design to increase lifting force. Providing greater efficiency, our closed-loop swing circuit transfers kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing brakes are applied.

Our proven AC electric drive technology also improves the productivity of our rope shovels. Compared to DC machines, AC shovels are faster, deliver higher availability, are less vulnerable to input voltage variation, save energy and reduce maintenance. We have the largest population of AC mining shovels in service around the world and decades of experience proving our AC technology.

All our mining shovels are ideally pass-matched with Cat trucks to help you pick the right equipment for your operation and ensure efficient use of all machines, with your entire loading and hauling fleet supported by one supplier.

Matching the truck fleet to the size of the loader ensures maximum output and efficiency for greater profitability. Cat mining shovels are ideally pass-matched with Cat trucks, for an optimized loading and hauling solution from one source.


CAT
CATERPILLAR
CAT


CAT
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CAT

EVERY application COUNTS

Mining operations come in all shapes and sizes. Depending on the material, deposit size, infrastructure, accessibility—and numerous other factors—your equipment fleet can range from one small shovel and a few haul trucks to hundreds of machines working in tandem to remove ore and overburden. That's why we strive to provide the right digging and loading tools to meet any need.

Caterpillar offers the widest mining shovel payload range in the industry, with dippers and buckets ranging from 9 cubic yards (7 cubic meters) to 82 cubic yards (62.7 cubic meters). We also provide cold-weather, hot-weather and high-altitude packages that allow Cat machines to remain productive in even the most extreme climates. And all our shovels are optimally pass-matched with Cat hauling equipment to help you achieve maximum productivity and efficiency with the right loading and hauling system for your application.

With the new Power Demand Management system, our electric rope shovels are afforded greater efficiency when powered by generator sets, whether it be a greenfield mine or a site with unstable power infrastructure. In addition, this system helps manage the demand for power, allowing sites working on an electrical grid the flexibility to extend trail cable reach. The peak power shaving also reduces costs for substation sizing and relocation.

Our broad range of hydraulic mining shovels — from backhoes to front shovels, diesel or electric drive — ensures there's a Cat loading tool for every application, altitude and climate.

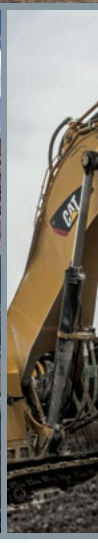
EVERY DAY COUNTS

Reducing costs is a key focus of today's mining operations. Beyond the initial purchase price of a piece of mining equipment, maintenance costs and lost productivity due to downtime can add up quickly and hurt the bottom line. That's why Cat mining shovels strive to lower your total cost of ownership.

All major structures are built of durable, high-quality steel and welded for maximum strength. The long life of both the machine and its components results in an exceptional amount of material moved over its lifetime.

Our electric rope shovels use AC IGBT electronics, which offer 98 percent availability and more efficient production. Availability is further increased by the patented LatchFree Dipper, which reduces maintenance downtime by utilizing a heavy duty holding link in place of the traditional latch assembly.

Our hydraulic mining shovels are also built for maximum uptime. Easy access to all components and a well-organized hydraulic system save maintenance personnel time during both routine and repair work. And our upcoming Hydraulic Mining Shovels will feature a number of further quality improvements that will help these dependable machines last even longer.



Cat mining shovels are designed for the harshest climates and toughest conditions around the world. The long life delivered by both the machines and their components results in the maximum amount of material moved for a low cost of ownership over their lifetimes. Maintenance is made safer and easier thanks to exceptional accessibility to systems and components.


CATERPILLAR


797F

GLOBAL DEALER NETWORK

We've built an extensive network of nearly 200 locally owned businesses in over 200 countries. So wherever you operate, there is a dealer nearby to provide world-class service and support for your Cat equipment. To locate a dealer, visit www.cat.com/dealer.

EVERY CALL COUNTS

Loading tools are the primary tool on a mine site. When they are down, production comes to a standstill. You need a support system that can deliver reliability and availability to ensure you meet your production goals.

One of the greatest values to owning a Cat machine is the network that supports it. From service and support to the purchase of new equipment, there's only one place you call — your Cat dealer.

Our dealers operate as nearly 200 individual local businesses — each one fully embedded in and committed to its own geographic area. You work with people you know, people who know your business, who respond with urgency and care about making the community a better, safer place to live and work.

With the industry's best parts distribution, expert service diagnosis, planned maintenance programs and component rebuilds, Cat dealers help you maximize productivity and minimize costs. They share their expertise and help you better understand your machine ownership and operating costs, equipping you to make the most informed possible decisions about your repair or replacement options. And they leverage technology like wireless data communication, machine monitoring, diagnostics and even business management software to help you operate more efficiently.

EVERY action COUNTS

We know that you're committed to operating with a sense of responsibility, recognizing the impact your actions have on the world in which we live. Social and environmental responsibility is a key part of who we are at Caterpillar, too. From designing and engineering our products to manufacturing and distributing them, we focus on the impact our operations have on people and the environment.

That's why we're continually working on ways to ensure our diesel-driven hydraulic mining shovels comply with the latest emissions standards. We also build our machines to last longer, saving the materials, energy and emissions that manufacturing a new one would require.

Our electric drive machines also help decrease your operation's impact in a number of ways. These machines produce less emissions, heat and sound, and avoid the disposal and replenishment of engine oil and oil filters.

One of our most sustainable activities is the remanufacturing of parts. This process restores old parts to like-new condition instead of fabricating new ones, which conserves raw materials and the energy expended during manufacturing. For our mining shovel line, we're currently reviewing and prioritizing to ensure the best service options are available for these key components.

We're always looking for new ways to reduce the impact our mining shovels have on the environments where they operate. Every activity — from lowering emissions to finding ways to reduce sound — can make a big difference.

7295

KEY FEATURES

- Ideal for long life mines with bench heights of 52 ft (about 16 m)
- Optimum pass match capabilities with Cat 785 and 789 series trucks
- Safety as integral part of machine design, with excellent visibility, non-slip stairs, platforms and walkways, as well as stored energy signs
- Over 30 years of experience commissioning more than 200 machines worldwide, with a reliable and simple AC system
- Robust front end design with a free-floating handle, which eliminates torsional loading
- Maintenance-friendly, deck-mounted crowd machinery, which reduces front-end weight

PAYLOAD	50 tons/45 tonnes
DIPPER CAPACITY	25-50 yd^3/19.1-38.2 m^3
OPERATING WEIGHT	1,748,837 lbs/793 259 kg
GROUND BEARING PRESSURE	39 psi/269 kPa
DRIVE	AC IGBT drive system
VOLTAGE	3 phase, 50/60 Hz
SYSTEM VOLTAGE (NOMINAL)	50/60 Hz / 7200 V
AVERAGE POWER DEMAND	538-753 kW
PEAK POWER	2,152 kW
DUMPING HEIGHT	27 ft 8 in / 8.4 m
MAXIMUM CUTTING HEIGHT	45 ft 0 in /13.7 m
MAXIMUM CUTTING RADIUS	67 ft 8 in/20.6 m
CLEARANCE RADIUS (REVOLVING FRAME)	25 ft 8 in/7.8 m
3-PASS LOAD	150 tons/136 tonnes
4-PASS LOAD	205 tons/186 tonnes

7395

PAYLOAD	70 tons/64 tonnes
DIPPER CAPACITY	27-73 yd^3/20.6-55.8 m^3
OPERATING WEIGHT	2,652,000 lbs/1 202 927 kg
GROUND BEARING PRESSURE	54 psi/371 kPa
DRIVE	AC IGBT drive system
VOLTAGE	3 phase, 50/60 Hz
SYSTEM VOLTAGE (NOMINAL)	50/60 Hz / 7200 V
AVERAGE POWER DEMAND	777-1,087 kW
PEAK POWER	3,106 kW
DUMPING HEIGHT	30 ft 10 in/9.4 m
MAXIMUM CUTTING HEIGHT	48 ft 9 in/14.9 m
MAXIMUM CUTTING RADIUS	74 ft 9 in/22.8 m
CLEARANCE RADIUS (REVOLVING FRAME)	30 ft 8 in/9.3 m
3-PASS LOAD	205 tons /186 tonnes
4-PASS LOAD	240 tons /218 tonnes

KEY FEATURES

- Ideal for long life mines with bench heights of 56 ft (about 17 m)
- Optimum pass match capabilities with Cat 789, 793 and 794 AC series trucks
- Safety as integral part of machine design, with excellent visibility, non-slip stairs, platforms and walkways, as well as stored energy signs
- Over 30 years of experience commissioning more than 200 machines worldwide, with a reliable and simple AC system
- Robust front end design with a free-floating handle, which eliminates torsional loading
- Maintenance-friendly, deck-mounted crowd machinery, which reduces front-end weight

7495 HD

KEY FEATURES

- Ideal for long life mines with bench heights of 59 ft (about 18 m)
- Optimum pass match capabilities with Cat 793F, 795F AC, and 794 AC trucks
- Safety as integral part of machine design, with excellent visibility, non-slip stairs, platforms and walkways, as well as stored energy signs
- Over 30 years of experience commissioning more than 200 machines worldwide, with a reliable and simple AC system
- The only 90-ton (81.8-tonne) AC machine available in the market
- Robust front end design with a free-floating handle, which eliminates torsional loading
- Maintenance-friendly, deck-mounted crowd machinery, which reduces front-end weight

PAYLOAD	90 tons/82 tonnes
DIPPER CAPACITY	36-79 yd^3/27.5-60.4 m^3
OPERATING WEIGHT	2,856,700 lbs/1 295 777 kg
GROUND BEARING PRESSURE	58 psi/400 kPa
DRIVE	AC IGBT drive system
VOLTAGE	3 phase, 50/60 Hz
SYSTEM VOLTAGE (NOMINAL)	50/60 Hz / 7200 V
AVERAGE POWER DEMAND	832-1,165 kW
PEAK POWER	3,330 kW
DUMPING HEIGHT	30 ft 9 in/9.4 m
MAXIMUM CUTTING HEIGHT	52 ft 4 in/16.0 m
MAXIMUM CUTTING RADIUS	78 ft 5 in/23.9 m
CLEARANCE RADIUS (REVOLVING FRAME)	30 ft 8 in/9.3 m
3-PASS LOAD	240 tons/218 tonnes
4-PASS LOAD	360 tons/327 tonnes

7495

PAYLOAD	120 tons/109 tonnes (max)
DIPPER CAPACITY	40-82 yd^3/30.6-62.7 m^3
OPERATING WEIGHT	3,056,000 lbs/1 386 178 kg
GROUND BEARING PRESSURE	55 psi/380 kPa
DRIVE	AC IGBT drive system
VOLTAGE	3 phase, 50/60 Hz
SYSTEM VOLTAGE (NOMINAL)	50/60 Hz / 7200 V
AVERAGE POWER DEMAND	926-1,297 kW
PEAK POWER	3,737 kW
DUMPING HEIGHT	28 ft 11 in/8.8 m
MAXIMUM CUTTING HEIGHT	53 ft 6 in/16.3 m
MAXIMUM CUTTING RADIUS	80 ft 0 in/24.4 m
CLEARANCE RADIUS (REVOLVING FRAME)	30 ft 8 in/9.34 m (max)
3-PASS LOAD	360 tons/327 tonnes
4-PASS LOAD	400 tons/363 tonnes

All specifications reflect a rope crowd configuration machine.

KEY FEATURES

- Flagship machine of the Cat Electric Rope Shovel product line, with machines operating in various applications all across the world
- Best-in-class operator's cab, equipped with industry-leading visibility, dual egress, ergonomic and fully adjustable operator's seat with custom designed joysticks
- Unrivaled training with an adjacently positioned trainer seat and an elevated observer's work station
- Cat exclusive LatchFree dipper system (optional), which avoids the leading cause of unplanned rope shovel downtime by removing the maintenance-intensive latch bar assembly
- Cat exclusive HydraCrowd hydraulically driven crowd system (optional), which extends maintenance intervals and increases uptime by eliminating the need for crowd and retract rope replacement
- Safety as integral part of machine design, with excellent line of sight, 45-degree rear-facing boarding stairs, platforms and walkways, as well as stored energy signs
- Over 30 years of experience commissioning more than 200 machines worldwide, with a reliable and simple AC system
- Robust front end design with a free-floating handle, which eliminates torsional loading
- Maintenance-friendly, deck-mounted crowd machinery, which reduces front-end weight

7495 HF

KEY FEATURES

- High-flotation undercarriage custom designed for soft ground conditions
- Best-in-class operator's cab, equipped with industry-leading visibility, dual egress, ergonomic and fully adjustable operator's seat with custom designed joysticks
- Unrivaled training with an adjacently positioned trainer seat and an elevated observer's work station
- Cat exclusive LatchFree dipper system (optional), which avoids the leading cause of unplanned rope shovel downtime by removing the maintenance-intensive latch bar assembly
- Cat exclusive HydraCrowd hydraulically driven crowd system (optional), which extends maintenance intervals and increases uptime by eliminating the need for crowd and retract rope replacement
- Safety as integral part of machine design, with excellent line of sight, 45-degree rear-facing boarding stairs, platforms and walkways, as well as stored energy signs
- Over 30 years of experience commissioning more than 200 machines worldwide, with a reliable and simple AC system
- Robust front end design with a free-floating handle, which eliminates torsional loading
- Maintenance-friendly, deck-mounted crowd machinery, which reduces front-end weight

PAYLOAD	120 tons/109 tonnes (max)
DIPPER CAPACITY	40-82 yd^3/30.6-62.7 m^3
OPERATING WEIGHT	3,155,000 lbs/1 431 064 kg
GROUND BEARING PRESSURE	36 psi/247 kPa
DRIVE	AC IGBT drive system
VOLTAGE	3 phase, 50/60 Hz
SYSTEM VOLTAGE (NOMINAL)	50/60 Hz / 7200 V
AVERAGE POWER DEMAND	934-1,308 kW
PEAK POWER	3,737 kW
DUMPING HEIGHT	29 ft 8 in/9.0 m
MAXIMUM CUTTING HEIGHT	55 ft 0 in/16.8 m
MAXIMUM CUTTING RADIUS	79 ft 8 in/24.3 m
CLEARANCE RADIUS (REVOLVING FRAME)	30 ft 8 in/9.34 m (max)
3-PASS LOAD	360 tons/327 tonnes
4-PASS LOAD	400 tons/363 tonnes

All specifications reflect a rope crowd configuration machine.

6015 FS

PAYLOAD	
FACE SHOVEL	13.8 tons/12.6 tonnes
BUCKET CAPACITY	
FACE SHOVEL (heaped 2:1)	9.2 yd^3/7.0 m^3
OPERATING WEIGHT	
FACE SHOVEL	231,260 lb/104 900 kg
ENGINE OUTPUT	
Cat C18 ACERT™	700 hp/522 kW
WORKING/DIGGING RANGES	
FACE SHOVEL	
Max digging height	36 ft 1 in/11.0 m
Max digging reach	34 ft 5 in/10.5 m
Max digging depth	7 ft 3 in/2.2 m
DIGGING FORCES	
FACE SHOVEL	
Max crowd force	144,950 lb/645 kN
Max breakout force	107,870 lb/480 kN
3/4-PASS LOAD	45 tons/41 tonnes
4/5-PASS LOAD	60 tons/54 tonnes
5/6-PASS LOAD	70 tons/63.5 tonnes

KEY FEATURES

- Top choice when customers want a front shovel in this backhoe-dominated size class
- Simple and robust design
- Single-engine design (C18 Engine) with lengthwise installed drivetrain for superior accessibility
- Largest cab in its size class for added operator comfort
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied
- The only hydraulic mining shovel in its class with a triple race swing roller bearing, making it ideal for 24/7 mining operations

6015B

KEY FEATURES

- Productivity advantage over existing 100-tonne (110-ton) shovels thanks to the most powerful engine in its class and a large standard bucket, which translate to fast cycles and optimized pass match capability with Cat 773, 775 and 777 trucks.
- Greater fuel economy via Cat proprietary integrated engine control technologies, boom float regeneration, closed-loop swing circuit, and oil cooling system that's independent from engine cooling
- Improved filtration system to ensure consistent oil cleanliness and reliable hydraulic system performance
- Extensive use of proven Cat components (engine, filters, hoses, cab, undercarriage, etc.)
- Enhanced safety, with updated egress and walkways, and improved wire and hose guarding
- Optional U.S. EPA Tier 4 Final C27 engine to meet emissions standards in highly regulated countries

PAYLOAD	16 tons/14.6 tonnes
BUCKET CAPACITY	
BACKHOE (heaped 1:1)	10.6 yd^3/8.1 m^3
OPERATING WEIGHT	
BACKHOE	154 tons/140 tonnes
ENGINE OUTPUT	
Cat® C27 ACERT™	813 hp/606 kW
WORKING/DIGGING RANGES	
BACKHOE	
Max digging depth	25 ft 7 in/7.8 m
Max digging reach	45 ft 11 in/14.0 m
Max digging height	43 ft 4 in/13.2 m
DIGGING FORCES	
BACKHOE	
Max tearout force	104,536 lb/465 kN
Max breakout force	123,870 lb/551 kN
4-PASS LOAD	62.3 tons/56.5 tonnes
5-PASS LOAD	71.7 tons/65 tonnes
7-PASS LOAD	106.9 tons/96.9 tonnes

6018 FS
(6018 AC FS)

PAYLOAD	20 tons/18 tonnes
BUCKET CAPACITY	
FACE SHOVEL (heaped 2:1)	13.1 yd^3/10.0 m^3
OPERATING WEIGHT	
FACE SHOVEL	404,320 lb/183 400 kg
ENGINE OUTPUT	
2 x Cat C18 ACERT	1,150 hp/858 kW
WORKING/DIGGING RANGES	
FACE SHOVEL	
Max digging height	43 ft 4 in/13.2 m
Max digging reach	42 ft 4 in/12.9 m
Max digging depth	7 ft 7 in/2.3 m
DIGGING FORCES	
FACE SHOVEL	
Max crowd force	204,500 lb/910 kN
Max breakout force	164,050 lb/730 kN
3-PASS LOAD	60 tons/55 tonnes
4-PASS LOAD	70 tons/63.5 tonnes
5-PASS LOAD	100 tons/91 tonnes

KEY FEATURES

- Only hydraulic mining shovel in its size class offered with AC drive and dual engine
- Most powerful engine output in its class, translating to fast loading cycles
- Top choice when customers want a front shovel in this backhoe-dominated size class
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied

6020B

KEY FEATURES

- Industry-leading efficiency with dedicated pump flow allocation technology
- Safety- and productivity-enhancing state-of-the-art operator's cab
- Class-leading in-pit visibility provided by cab floor window and large front and side windshields
- Easy serviceability and component accessibility via spacious walk-through engine module
- Fast field assembly made possible by modular design
- Optimized hydraulic oil temperature and cooling flow control via independent oil cooling system
- Minimized regular service activities via automatic centralized lubrication system

PAYLOAD	24 tons/22 tonnes
BUCKET CAPACITY	
BACKHOE (heaped 1:1)	15.7 yd^3/12.0 m^3
OPERATING WEIGHT	
BACKHOE	254 tons/230 tonnes
ENGINE OUTPUT	
Cat C32 ACERT	1,043 hp/778 kW
WORKING/DIGGING RANGES	
BACKHOE	
Max digging depth	26 ft 7 in/8.1 m
Max digging reach	52 ft 2 in/15.9 m
Max digging height	45 ft 7 in/13.9 m
DIGGING FORCES	
BACKHOE	
Max tearout force	143,830 lb/640 kN
Max breakout force	149,450 lb/665 kN
4/5-PASS LOAD	106.9 tons/96.9 tonnes
5/6-PASS LOAD	150 tons/136 tonnes

6030/6030 FS
(6030 AC/6030 AC FS)

PAYLOAD	34 tons/30 tonnes
BUCKET CAPACITY	
FACE SHOVEL (heaped 2:1)	21.6 yd^3/16.5 m^3
BACKHOE (heaped 1:1)	22.2 yd^3/17.0 m^3
OPERATING WEIGHT	
FACE SHOVEL	647,710 lb/293 800 kg
BACKHOE	652,560 lb/296 000 kg
ENGINE OUTPUT	
2 x Cat C27 ACERT	1,530 hp/1140 kW
WORKING/DIGGING RANGES	
FACE SHOVEL	
Max digging height	45 ft 7 in/13.9 m
Max digging reach	44 ft 11 in/13.7 m
Max digging depth	8 ft 2 in/2.5 m
BACKHOE	
Max digging depth	20 ft 4 in/6.2 m
Max digging reach	49 ft 6 in/15.1 m
Max digging height	45 ft 3 in/13.8 m
DIGGING FORCES	
FACE SHOVEL	
Max crowd force	296,650 lb/1320 kN
Max breakout force	215,740 lb/960 kN
BACKHOE	
Max tearout force	206,750 lb/920 kN
Max breakout force	200,010 lb/890 kN
3/4-PASS LOAD	100 tons/91 tonnes
4-PASS LOAD	150 tons/136 tonnes
6-PASS LOAD	195 tons/177 tonnes

KEY FEATURES

- Only hydraulic mining shovel in its size class offered with dual engines
- The best-selling Cat hydraulic mining shovel of all time, with an extensive and proven global installed base
- Standard diesel drive model designed in accordance with the principles of Australia's Mining Design Guidelines (as of March 2014)
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied

6040/6040 FS
(6040 AC/6040 AC FS)

KEY FEATURES

- Improved reliability with new undercarriage design
- Reputation for improved reliability and productivity within its size class
- Standard diesel drive model designed in accordance with the principles of Australia's Mining Design Guidelines
- Easy-to-access components, including engine module, pump bay, oil cooling system, radiator fans, boom-mounted main valve block
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied

PAYLOAD	44 tons/40 tonnes
BUCKET CAPACITY	
FACE SHOVEL (heaped 2:1)	28.8 yd^3/22.0 m^3
BACKHOE (heaped 1:1)	28.8 yd^3/22.0 m^3
OPERATING WEIGHT	
FACE SHOVEL	891,980 lb/404 600 kg
BACKHOE	897,930 lb/407 300 kg
ENGINE OUTPUT	
2 x Cat C32 ACERT	2,023 hp/1516 kW
WORKING/DIGGING RANGES	
FACE SHOVEL	
Max digging height	47 ft 3 in/14.4 m
Max digging reach	50 ft 6 in/15.4 m
Max digging depth	8 ft 6 in/2.6 m
BACKHOE	
Max digging depth	23 ft 0 in/7.0 m
Max digging reach	58 ft 1 in/17.7 m
Max digging height	55 ft 1 in/16.8 m
DIGGING FORCES	
FACE SHOVEL	
Max crowd force	388,780 lb/1730 kN
Max breakout force	269,680 lb/1200 kN
BACKHOE	
Max tearout force	229,220 lb/1020 kN
Max breakout force	251,700 lb/1120 kN
4-PASS LOAD	150 tons/136 tonnes
5-PASS LOAD	195 tons/177 tonnes
6-PASS LOAD	250 tons/227 tonnes

6050/6050 FS
(6050 AC/6050 AC FS)

PAYLOAD	
FACE SHOVEL	52 tons / 47 tonnes
BACKHOE	55 tons / 50 tonnes
BUCKET CAPACITY	
FACE SHOVEL (heaped 2:1)	34.0 yd^3/26.0 m^3
BACKHOE (heaped 1:1)	36.6 yd^3/28.0 m^3
OPERATING WEIGHT	
FACE SHOVEL	1,163,150 lb/527 600 kg
BACKHOE	1,183,870 lb/537 000 kg
ENGINE OUTPUT	
2 x Cummins K1500E	2,520 hp/1880 kW
2 x Cummins QSK38	2,520 hp/1880 kW
WORKING/DIGGING RANGES	
FACE SHOVEL	
Max digging height	50 ft 2 in/15.3 m
Max digging reach	53 ft 2 in/16.2 m
Max digging depth	7 ft 10 in/2.4 m
BACKHOE	
Max digging depth	30 ft 2 in/9.2 m
Max digging reach	64 ft 0 in/19.5 m
Max digging height	55 ft 1 in/16.8 m
DIGGING FORCES	
FACE SHOVEL	
Max crowd force	433,730 lb/1930 kN
Max breakout force	343,840 lb/1530 kN
BACKHOE	
Max tearout force	247,200 lb/1100 kN
Max breakout force	271,920 lb/1210 kN
3-PASS LOAD	150 tons/136 tonnes
4-PASS LOAD	195 tons/177 tonnes
5-PASS LOAD	250 tons/227 tonnes

KEY FEATURES

- An industry benchmark, with a reputation for reliability and productivity within its size class
- Extensive and proven global installed base
- Easy-to-access components, including engine module, pump bay, oil cooling system, radiator fans, boom-mounted main valve block
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied

6060/6060 FS
(6060 AC/6060 AC FS)

KEY FEATURES

- Most popular Cat HMS model
- First model offered with 44.5 yd^3 (34 m^3) capacity
- Tailor-made to 4-pass load 240-ton (218-tonne) trucks, like the Cat 793F
- Facilitates higher working speeds via its powerful engine output and sophisticated hydraulic system
- Standard diesel drive model designed in accordance with the principles of Australia's Mining Design Guidelines
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied

PAYLOAD		67 tons/61 tonnes
BUCKET CAPACITY		
FACE SHOVEL (heaped 2:1)		44.5 yd^3/34.0 m^3
BACKHOE (heaped 1:1)		44.5 yd^3/34.0 m^3
OPERATING WEIGHT		
FACE SHOVEL	6060 FS	1,254,200 lb/568 900 kg
	6060 AC FS	1,204,370 lb/546 300 kg
BACKHOE	6060 FS	1,257,280 lb/570 300 kg
	6060 AC	1,207,460 lb/547 700 kg
ENGINE OUTPUT		
2 x Cat 3512C		3,000 hp/2240 kW
WORKING/DIGGING RANGES		
FACE SHOVEL		
Max digging height		50 ft 10 in/15.5 m
Max digging reach		53 ft 10 in/16.4 m
Max digging depth		8 ft 10 in/2.7 m
BACKHOE		
Max digging depth		29 ft 2 in/8.9 m
Max digging reach		62 ft 0 in/18.9 m
Max digging height		52 ft 2 in/15.9 m
DIGGING FORCES		
FACE SHOVEL		
Max crowd force		505,640 lb/2250 kN
Max breakout force		391,030 lb/1740 kN
BACKHOE		
Max tearout force		247,170 lb/1220 kN
Max breakout force		278,670 lb/1240 kN
3-PASS LOAD		195 tons/177 tonnes
4-PASS LOAD		250 tons/227 tonnes
5-PASS LOAD		325 tons/290 tonnes

6090 FS
(6090 AC FS)

PAYLOAD	103 tons/94 tonnes
BUCKET CAPACITY	
FACE SHOVEL (heaped 2:1)	68.0 yd^3/52.0 m^3
OPERATING WEIGHT	2,160,510 lb/980 000 kg
ENGINE OUTPUT	
2 x Cummins QSK60 Tier 2	4,500 hp/3360 kW
WORKING/DIGGING RANGES	
Max digging height	66 ft 11 in/20.4 m
Max digging reach	63 ft 0 in/19.2 m
Max digging depth	8 ft 2 in/2.5 m
DIGGING FORCES	
Max crowd force	694,420 lb/3090 kN
Max breakout force	543,850 lb/2420 kN
3-PASS LOAD	325 tons/290 tonnes
3/4-PASS LOAD	345 tons/313 tonnes
4-PASS LOAD	400 tons/363 tonnes

KEY FEATURES

- World's largest hydraulic mining shovel, offering high production capability
- Only hydraulic mining shovel capable of 4-pass loading 400-ton (393-tonne) trucks, like the Cat 797F
- Standard diesel drive model designed in accordance with the principles of Australia's Mining Design Guidelines
- Independent oil cooling system, which is void of return oil and provides more efficient cooling, ensuring oil remains within the optimal viscosity range to support extended life of vital components
- Closed-loop swing circuit, which provides greater efficiency by transferring kinetic energy generated during the swing motion directly into the hydraulic system when counteracting swing breaks are applied

PASS MATCH GUIDE

	777G	785D	789D	793F	794 AC	795F AC	797F
6015 FS*	8						
6015B*	7						
6018 FS*	5	7-8					
6020B	4-5	5-6					
6030/6030 FS	3-4	5	6				
6040/6040 FS		4	5	6			
6050/6050 FS		3	4	5	6	6-7	
6060/6060 FS			3	4	5	5-6	6
6090 FS				3	3	3-4	4

7295		3	4				
7395			3	4			
7495 HD				3	4	4	
7495					3	3	4
7495 HF					3	3	4

**Smaller off-highway trucks offering 3-5 pass match capability with 6015 FS, 6015B and 6018 FS are not shown on chart*

CONDITIONS FAVORABLE TO FRONT SHOVEL CONFIGURED HMS

- Selective digging
- Multiple face heights
- Tight load areas
- Tough digging
- Can work in poor floor conditions

CONDITIONS FAVORABLE TO BACKHOE CONFIGURED HMS

- Low to moderate bench heights
- Truck spotted either on top of bench or on the floor below the shovel
- Tight load areas
- Short swing—60°
- Well-shot material

CONDITIONS FAVORABLE TO ELECTRIC ROPE SHOVELS

- Working a single face of the correct height
- Solid, level floor
- Wide benches to facilitate truck maneuverability
- Well-shot material
- Clean-up and ground support provided
- Good trail cable management
- Mine equipped with electric infrastructure and/or electric power generation equipment

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