

# 798 AC

## MINING TRUCK



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**Engine:** C175-16  
**Gross Power:** 2610 kW / 3,500 HP  
or 2312 kW / 3,100 HP  
**Gross Weight:** 623 690 kg / 1,375,000 lb  
**Nominal Rated  
Payload:** 372 tonnes / 410 tons

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**Engine:** C175-20 (High Altitude only)  
**Gross Power:** 3095 kW / 4,150 HP  
or 2983 kW / 4,000 HP  
**Gross Weight:** 623 690 kg / 1,375,000 lb  
**Nominal Rated  
Payload:** 363 tonnes / 400 tons





CAT® MINING TRUCKS  
DELIVERING A  
**BETTER  
BOTTOM  
LINE**

With a truck for every site and application — no matter the size class or drive system — and a broad lineup of loading tools, Caterpillar delivers a complete loading and hauling solution that delivers a better bottom line.







## **WHAT CAN MINERS EXPECT FROM THEIR CAT MINING TRUCKS?**

### **LOW COST PER TON OVER THE LIFE OF THE MACHINE.**

A lot goes into delivering that value. Like high speed on grade for improved productivity. Class-leading standard payload in the low-altitude arrangement and industry standard payload in high-altitude arrangement. Rear-wheel electric resistive braking (retarding) backed by anytime braking for more confident operators. Total Cat integration, which results in highly efficient systems and performance. And high reliability, so trucks spend more time hauling material than they do sitting in the maintenance shop.

## WHAT WILL IT TAKE TO BOOST YOUR BOTTOM LINE?

With the highest standard payload available in its size class and Cat® TorqueBoost technology, the 798 AC mining truck can move 410 tons (372 tonnes) through some of the toughest conditions at your mine site. The efficient design adds strength where it counts to carry more payload without sacrificing durability for the long haul.

The 798 AC delivers payload up to 372 tonnes (410 tons) in low-altitude arrangement and the high-altitude arrangement delivers payload of 363 tonnes (400 tons). It also delivers high speed on grade, easier maintenance and excellent brake performance. The result? Improved productivity, high availability and more confident operators.

The 798 AC features a powertrain that is Caterpillar designed, integrated, and supported on sites around the world. It hauls more every load, every cycle, and every shift. And it delivers a better bottom line to the most important mine in the world: yours.

# CAT® 798 AC

HIGHER  
PAYLOAD.  
FASTER  
ON GRADE.  
SUPERIOR  
SERVICEABILITY.



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## PROVEN IN THE FIELD

- + Frame design: 18M+ hours
- + C175 engine: 22M+ hours
- + Field validation: 800,000+ hours
- + Highest-hour 798 AC: 38,000+ hours
- + Electric drive system: 7M+ hours

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## HAULS MORE, HAULS FASTER

- + Efficient design delivers higher payload
- + Optimized drive system integration puts more power to the ground

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## UP TO 18% MORE TORQUE

- + Cat TorqueBoost technology unlocks maximum drivetrain capability for working in the toughest conditions

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## EXCEPTIONAL CONTROLLABILITY

- + Strong dynamic resistive braking
- + Robust design empowers operator to use oil-cooled brakes regardless of speed or payload

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## SUPERIOR SERVICEABILITY

- + Engine walkways
- + Service platforms
- + Modular components
- + Ground-level, grouped service points

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## EASIER MAINTENANCE, LESS OFTEN

- + First overhaul life of 25,000 hours on C175-16 engine and 19,000 hours on C175-20—driving a lower cost of ownership
- + Engine and dual bearing drive alternator can be serviced separately, eliminating shimming
- + Modular wheel motors and final drives enable service on individual components
- + Sealed and pressurized inverter cabinet requires no cleaning, eliminating recurring maintenance
- + Long-life radial grid with AC motor control and serviceable elements

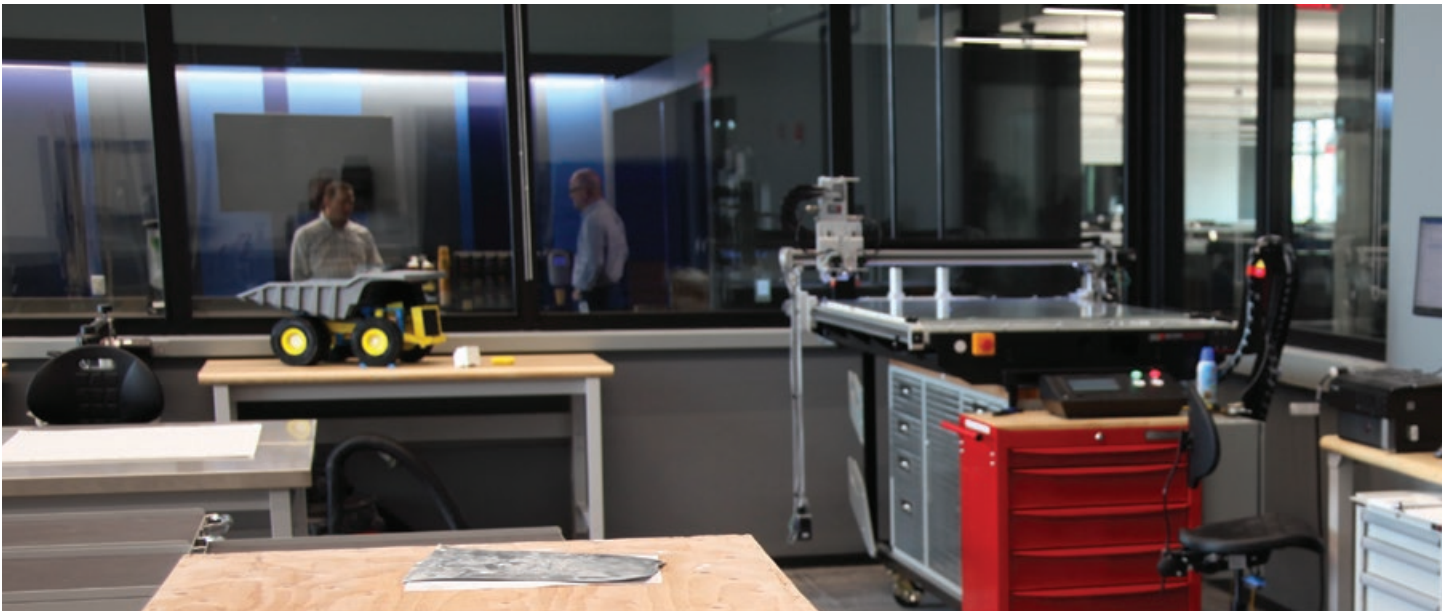




# LOWERING COST PER TON

With offerings in both electric and mechanical drive and payloads ranging from 143 to 372 tonnes (157 to 410 tons), Caterpillar can offer a truck for every type of mining application. But one thing all the models have in common is the philosophy we follow in their design. Whatever measurement you use for material movement, our goal is to help you optimize that cycle—lowering cost per ton and delivering a better bottom line to your operation.





## A PROVEN DESIGN PHILOSOPHY

When it comes to making Cat mining trucks, we follow a proven design philosophy that focuses around five main areas:

1. MAKING A SUSTAINED INVESTMENT IN RESEARCH & DEVELOPMENT
2. INTEGRATING EVERY COMPONENT
3. DELIVERING IRON THAT PERFORMS
4. SUPPORTING PRODUCTS— AND PRODUCTIVITY
5. LISTENING TO OUR CUSTOMERS TO SPUR CONTINUOUS IMPROVEMENT

By following this philosophy — for every truck, every time — we strive to ensure that you get what you expect from Caterpillar: low cost per ton, high productivity and more uptime.

## A PROVEN APPROACH TO R&D



A WORLD-CLASS TEAM OF ENGINEERS AND EXPERTS



A DISCIPLINED APPROACH TO DEVELOPMENT



MINING INDUSTRY FEEDBACK



TESTING AND VALIDATION OF EVERY MACHINE



# A TRUCK FOR YOUR APPLICATION

**THE 798 AC IS THE IDEAL CHOICE TO WORK IN YOUR APPLICATION AND ALONGSIDE THE FLEET YOU ALREADY OWN.**

Optimized horsepower starts with understanding your application. Available configurations of the 798 AC enable it to run at all altitudes and all areas of the mine. While higher horsepower is available to boost productivity in deeper pits, electronically-selectable lower horsepower settings allow the 798 to better align with mixed fleets and keep fuel costs and carbon emissions lower.







HAUL MORE —  
EVERY LOAD AND  
EVERY CYCLE

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## EFFICIENT HAULING

The Cat 798 AC is the most efficient electric drive truck in its size class. It moves more tonnes per liter (tons per gallon) and hauls more material faster — so you can move more over the course of a shift, or haul the same amount of material with fewer trucks.

When you're ready to go faster, horsepower can be changed with just a software adjustment over a shift change or lunch break.

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## INTEGRATED POWER

Deep integration of the Cat engine, AC drive system, hydraulics and machine controls helps the 798 AC deliver low operating costs. End-to-end visibility of all truck parameters enables Caterpillar to optimize fuel efficiency, speed on grade and parasitic loads across the operating range. This high level of integration also delivers excellent slow speed control within service areas as well as superior motor torque and acceleration pulling away from the shovel.



# CONFIDENT OPERATORS ARE PRODUCTIVE OPERATORS

## DESIGNED FOR CONTROL

Proven Cat braking systems deliver superior control so your operators can focus on productivity. The 798 AC features full dynamic braking through a compact radial grid and is backstopped by the proven design of Caterpillar four-corner oil-cooled brakes. The result is stable handling and confident stopping.

- + Single-pedal electronic control allows the operator to focus on the haul road — utilizing dynamic resistive braking for the first 80% of travel and oil-cooled brakes for the last 20% with automatic blending at low speeds.
- + Grid element thermal monitoring ensures component life by alerting operators if they are exceeding thermal capacity.
- + Automatic Resistor Control (ARC) makes resistive braking easier and more efficient, ensuring the truck remains at the desired safe speed.
- + Proven Cat oil-cooled brakes provide 100% anytime braking. They offer reliable, adjustment-free operation and are sized to provide ISO 3450 compliant performance independently from the dynamic resistive braking system.
- + The fully independent secondary brake system provides operators emergency controllability with a hydraulically actuated secondary brake pedal that serves as a backup to electronic controls.



# SAFETY-INFUSED



Radial resistor grid for improved right-hand view

Stored energy dissipation at shutdown

Three-piece windshield with wide field of view and improved wiper coverage

Integrated ROPS and FOPS

Traction control

Anti-rollback

Reverse shift inhibitor

Door sensor warning for park brake application

Updated body and chassis lights provide better lighting for service/inspection

Engine access door open range up to 85 degrees

Integrated park brake  
Integrated emergency brakes

Optional Cat MineStar™ proximity awareness

Top deck tread plate for increased traction

600-mm (23.6-in) ladders, flat deck, toe kicks

Optional powered access stair attachment



# DESIGNED FOR COMFORT

The large, spacious cab is designed for all-day comfort, control and productivity. It features an ergonomic layout, excellent all-around visibility, and controls, levers and switches that are positioned for ease of use. The cab includes dozens of features designed to enhance comfort and reduce fatigue, such as climate control, reduced vibration and sound, and a next generation seat that includes a height adjuster; adjustable shoulder stock to keep the seatbelt from rubbing; seat heating or cooling; and seat back, side and lumbar bolsters to increase stability.

# A TRUCK YOU CAN DEPEND ON

The Cat 798 AC takes the best from its predecessors to deliver a truck that is long-lasting, easy to service and reliable. Built on a legacy, the 798's rolling chassis design is backed by unprecedented levels of virtual and in-iron validation.



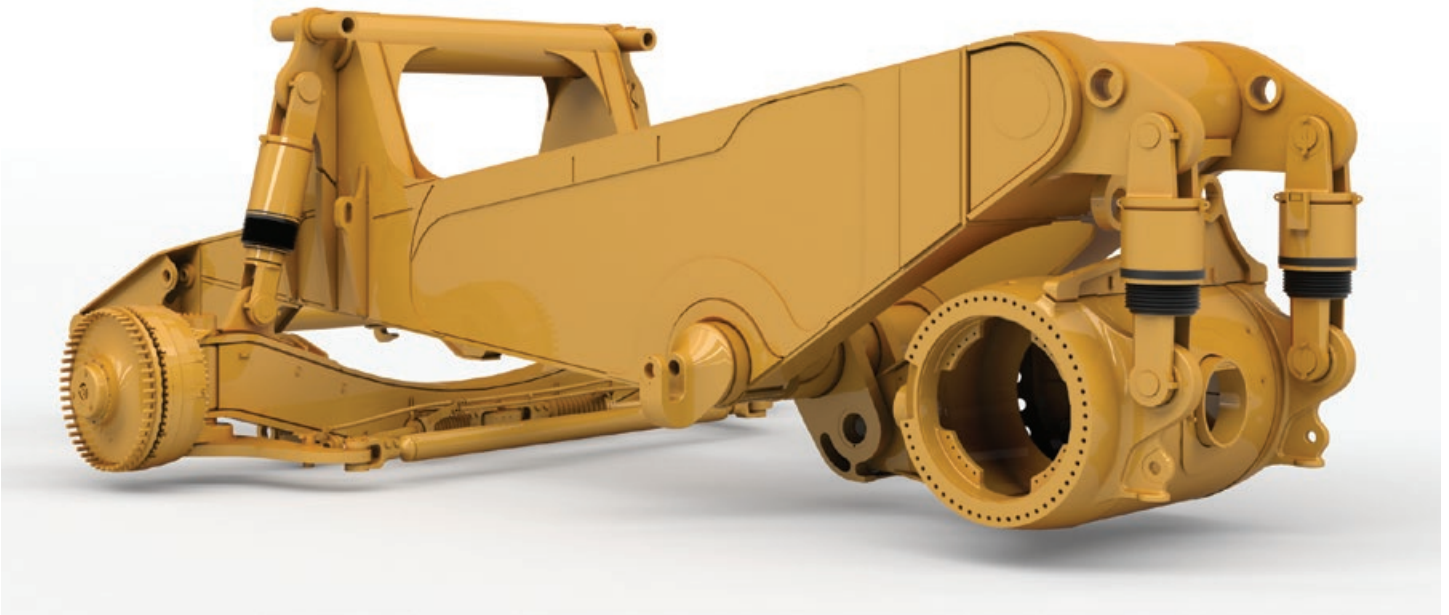


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## STRONG BACKBONE

The 798 AC features a straight frame rail design — a scalable concept that has been used since 1990 and boasts over 18 million hours of field operation. The design eliminates the bends and breaks that can occur at stress concentrations.

- + The box section construction uses Caterpillar proprietary steel specification, which has very low sulfur content and provides excellent welding characteristics, plus outstanding durability.
- + Deep section main rails in critical areas of the frame lower stress levels, resulting in increased frame life.
- + The robust center cross tube integrates hoist cylinder and rear axle box attachment points at the strongest areas of the frame.
- + The rear axle box attaches to the frame through a lateral link, rear suspension cylinders and nosecone joint utilizing a replaceable spherical bearing and hardened pin.
- + The independent front axle isolates the frame from harsh haul road stresses, and ensures wheel alignment does not change under load.



## BUILT TO BE REBUILT

Cat trucks are designed to last over 100,000 hours, with many going well beyond. The frame, powertrain, engine and components are built to be rebuilt — using new, remanufactured or rebuilt parts and components — so you can take advantage of multiple lives of like-new performance at a fraction-of-new price.

**DESIGNED  
TO LAST**  
— OVER —  
**100,000  
HOURS**

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# BUMPER-TO-BUMPER CATERPILLAR

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The individual components, software, systems and engine that go inside a Cat 798 AC truck have different purposes, but they have one very important thing in common: They are all manufactured by Caterpillar and supported by the Cat dealer network. This integration

ensures that the entire truck — from body to bumper, engine to electronics — can be fully optimized to deliver the lower cost per ton.

The Cat AC electric drive is a high voltage system (2,600 volts) that operates at lower current than most competitive trucks. When combined with Cat's total integration and design of the truck and drive system, the result is higher efficiency, lower heat generation, smaller and lighter components, and longer component life.

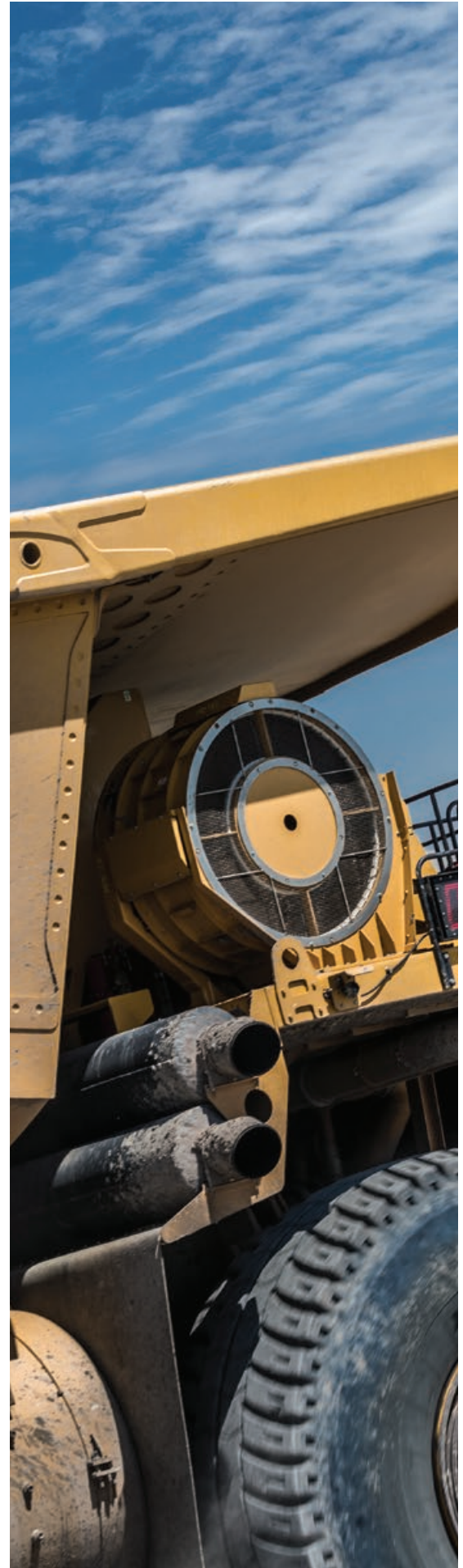




## PROVEN ELECTRIC DRIVE POWERTRAIN

The Cat AC electric drive powertrain is fully designed, integrated and supported by Caterpillar. The AC drive, engine and chassis systems work seamlessly together and leverage Caterpillar's leadership in electric power generation along with the proven components of EMD locomotives.

- + **Drive Alternator:** The brushless alternator delivers long life and requires less maintenance. A dual bearing design enables service without removing the engine and eliminates time-consuming shimming procedures.
- + **Inverter Cabinet:** The proprietary AC drive control cabinet is pressurized and filtered to reduce maintenance. It houses the evaporative-cooled modular IGBTs and motor controls.
- + **IGBTs:** Caterpillar's state-of-the-art modular design IGBTs deliver maximum AC drive system efficiency through high voltage and lower current.
- + **Resistor Grid:** The radial style grid features an AC electric motor that requires no regular motor maintenance. It is quieter, lighter, and offers better visibility than larger box-type grids.
- + **Traction Motors:** Separate from the final drives for increased serviceability, the modular design allows technicians to focus on the component in need, not components that are still performing.
- + **Final Drives:** Higher durability and lower rebuild costs are delivered by Caterpillar's ring gear output design with double reduction. This proven design has millions of hours of mining experience.
- + **Drivetrain Cooling:** The variable speed blower matches air flow to component need, not engine rpm. Optimized cooling delivers increased component life and higher speed on grade.







# GET THE **RIGHT BODY** FOR THE JOB

## **INTEGRATED BODY AND CHASSIS DESIGN**

Integral to the truck, the body is designed to fit with the chassis and work as part of the truck system. Caterpillar bodies are sized to meet the payload requirements without compromise to vehicle balance, braking or control.

## **HIGH-EFFICIENCY DUMP BODY**

The high-efficiency (HE) dump body is lightweight, simplified and durable. Featuring a unique, primarily bolsterless design, the HE body provides long life while minimizing weight for increased payload. The HE body is sized and configured to meet the specific needs of the mine, dictated by fragmentation, abrasion, cohesion and the loading tool.

- + The structural perimeter beam — along with curved floor, front wall and canopy — provides the natural strength and stiffness required to successfully operate in diverse mining applications.
- + High-strength base plates allow for a minimal wear package, resulting in lower weight.
- + The patented designs of the floating bolster and spring plate improve overall durability by allowing structural flexibility and avoiding welds in high stress areas.





## MORE TIME HAULING, LESS TIME SERVICING

The 798 AC was designed to reduce the time you spend on regular maintenance procedures. The standard Product Link™ Elite monitoring system delivers critical health and payload information in real-time, keeping performance at optimum levels and allowing advanced troubleshooting and planning to lower maintenance costs.

Enhanced serviceability and long service intervals help increase machine availability and productivity. And a target first overhaul life of 25,000 hours for low-altitude arrangement, or 19,000 hours for high-altitude arrangement, contributes to a lower overall cost of ownership.

Features include:

- + Open engine access and platforms for service of engine, drive alternator and other truck systems
- + Ground-level filters and service points to enable increased technician efficiency
- + Service-friendly layout with minimized hydraulics on one frame rail, and cables and electrical wiring concentrated on the other
- + A modular design that enables the engine, drive alternator, wheel motors and final drives, inverter IGBTs, and radial grid quadrants to be easily serviced independently
- + AC grid blower motor designed for longer life and less maintenance
- + Sealed & pressurized inverter cabinet, which requires no cleaning and eliminates hundreds of hours of maintenance over the life of the truck
- + Extended oil change interval (up to 3 times) with standard engine equipment including Centrifugal Oil Filter (COF) and Self Cleaning Filter (SCF)

# MINING — FOR A — BETTER WORLD

When it comes to your hauling operation, Caterpillar and Cat dealers are here to help you achieve your climate-related objectives. With many solutions available today — and many more on the horizon — we're committed to working together to find new ways to mine more responsibly and build a better, more sustainable world.

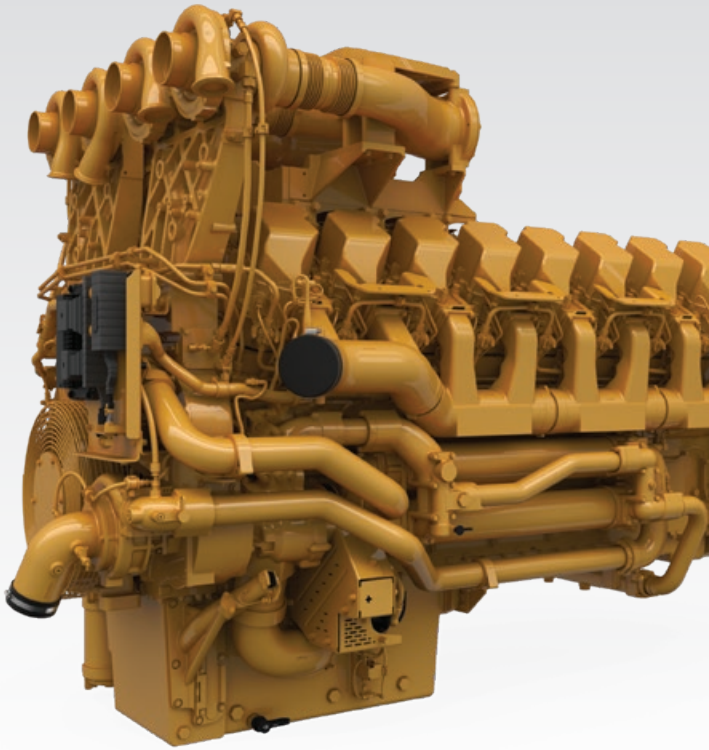
## SOLUTIONS FOR YOUR JOURNEY TO A REDUCED-EMISSIONS FUTURE

There are a variety of features, solutions and offerings that can help you reduce emissions today as you build a path to to a reduced-emissions future.

- + The optional U.S. EPA Tier 4 Final engine can reduce NOx and particulate matter.
- + Caterpillar scale studies utilize truck scales and bed scanners to help optimize empty machine weight, reduce carryback and ensure maximum payload. Reduction in weight or payload results in lower CO2 per ton.
- + Caterpillar Production Studies optimize operations and maximize productivity and utilization at the fleet, site and enterprise levels. These studies can be conducted on site or remotely.
- + Site assessments that evaluate haul road design, maintenance and traffic patterns provide opportunities to improve cycle times, increase productivity, lower fuel burn per cycle and reduce maintenance costs.
- + Features like the Enhanced Engine Oil Filtration System, continuous rear axle filtration, extended life filters and longer maintenance intervals decrease the amount of waste contributed to the environment.
- + We preserve raw materials, conserve energy and reduce emissions through the Cat Reman program, which returns end-of-life components to like-new condition. Reman has been shown to contribute 65-87% less GHG process emissions. It uses 80-90% less new materials (by weight) and 65-87% less process energy.\*
- + Machine rebuilds also consume less energy and reduce emissions compared to manufacturing new trucks.

*\*Represents U.S. environmental impacts comparing gate-to-gate remanufacturing and manufacturing processes for engines and components. Based on 2018 external study of Cat engines, alternators and turbochargers. Does not include impacts elsewhere in our value chain.*





## MORE POWER, LOWER COSTS

The 798 AC is powered by the C175-16 engine, which is available with two horsepower options and can be configured for U.S. EPA Tier 4 Final / EU Stage V regulations. The 798 AC is also available with a high-altitude arrangement that prevents deration at altitude and offers simplified maintenance and repair. More than 4,500 C175 engines are in operation around the world, with over 22 million hours of run time. Robust design delivers long life and the option to rebuild.

- + High displacement, low rpm rating and conservative horsepower ratings, which mean more time on the haul road and less time in the shop.
- + The Cat Common Rail Fuel System, which provides optimal fuel delivery to reduce both fuel consumption and emissions output.
- + Enhanced serviceability, with inlet manifolds and turbochargers that are located outside of the engine's V, giving the service technicians more space to work on top of the engine and within the engine bay.
- + Key technologies eliminate engine oil filter replacements and provide the potential to extend oil change intervals.

## PROVEN EMISSIONS SYSTEM

The Cat 798 AC is available in a fuel-efficient configuration that meets U.S. EPA Tier 4 Final / EU Stage V emissions standards. Through over 360,000 hours of successful operation on Cat mining trucks, the system has proven its ability to deliver with no impact on machine performance. Designed for easy serviceability with readily accessible components, the modular aftertreatment system reduces overall fluid and fuel consumption and is aligned with truck preventive maintenance intervals to maintain high availability. Lower fuel burn results in longer engine life and lower repair costs.

**OVER**  
**360,000**  
**HOURS**  
OF SUCCESSFUL  
OPERATION



# BUILT FOR THE FUTURE

Like all next generation trucks, the Cat 798 AC is built for the future. Designed for future updates, the 798 AC features an expandable platform and architecture and leaves the factory ready for full integration of standard and optional technologies. The engineering group responsible for the family of controllers on the base truck is also responsible for the software that controls the trucks. This results in consistency and portability.

- + Ability to deliver new solutions and technology within the existing architecture
- + Easier to integrate Caterpillar and certain third-party current and future technology solutions
- + Plenty of processing power and high-speed communication enable delivery of future features
- + Intentionally designed for more information and data than just machine controls

## OPTIMIZE YOUR ENTIRE OPERATION

Optional offerings improve the overall safety, efficiency and productivity of your operation:

- + Driver Safety System
- + Proximity Awareness
- + Condition Monitoring
- + Health—Equipment Insights
- + Health Office
- + Command





## GAIN AN EDGE WITH CAT MINESTAR™ SOLUTIONS



FLEET



TERRAIN



DETECT



HEALTH



COMMAND

Cat MineStar Solutions help you optimize your loading and hauling operation, keeping your shovels busy and your trucks on the move. MineStar fleet management tools will help you identify opportunities to improve truck efficiencies in ways that maximize payload, reduce cycle times, lower costs and boost profitability. And they'll guide your operators to the right material, optimize every truck load, track what material goes where and ensure you're moving the right amount of material with every load. And when you add autonomous trucks to the mix, you'll gain even more efficiencies. The result? Productivity goes up and costs go down.

MineStar Solutions for loading and hauling include a range of capabilities that meet the needs of your fleet, your budget and your site. From simple fleet management offerings to fully autonomous haulage, every solution puts more value to your bottom line.

## MANAGING AND MITIGATING FATIGUE

Fatigued and distracted machine operators are present on every mine site every day—and the consequences can be costly, even fatal. The Cat Driver Safety System (DSS) is a non-intrusive, in-cab detection system that can help you identify fatigue and distraction—and address it—in real time. The 798 AC leaves the factory ready for the DSS, which also includes an option to send events to a 24-hour monitoring center.



## IMPLEMENTING AUTONOMOUS HAULAGE

MineStar Command for hauling, an autonomous hauling solution, is a fully integrated factory offering on the 798 AC. Command enables near-continuous utilization and has proven to increase productivity by up to 30%.

Operators are completely removed from the environment for significant improvements in site safety. Hundreds of autonomous Cat machines are currently in service.



# SUPPORTING PRODUCTS

## —AND PRODUCTIVITY

Our commitment to your success doesn't end when your Cat 798 AC begins hauling overburden or ore. We immediately start looking for ways to make that truck work more efficiently, safely and productively. From addressing performance issues, to training operators and technicians, to calibrating onboard technologies — our support of your truck productivity is ongoing.

Caterpillar and Cat dealer personnel will work with you to help improve the performance not only of your trucks 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 keep machines in the field rather than the maintenance shop. And we help with training to ensure your operators have the skills and knowledge they need to work as efficiently and productively as possible.

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 on-site expert 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.



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## SITE-LEVEL SOLUTIONS

We're committed to supporting more than your equipment. We work together to find ways to help you optimize your entire operation. We'll work alongside you to help you improve site productivity and machine availability while lowering cost per ton. We have teams of people with decades of experience working in the industry. They have hands-on knowledge of mining machines and applications, site operations and equipment maintenance and repair, mining technologies, safety solutions, fleet management—and more

- + Cat Job Site Solutions—Combining the products, services and expertise of the global Cat dealer network and Caterpillar providers into customized solutions that help you optimize your equipment, your people and your overall operation.
- + Caterpillar Safety Services—Guiding you along your safety journey by providing industry best practices, continuous improvement processes and the latest technologies to see, mitigate and manage risks.

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## CAT CUSTOMER VALUE AGREEMENTS (CVAS)

Cat Customer Value Agreements (CVAs) for mining help you maximize equipment health, keep your fleet moving and get the most from your investment. With built-in cost controls and a range of guarantees, your dealer can tailor these plans to suit your mine site's needs and bring top results to your business. Your Cat dealer can offer you options for planned maintenance, components and powertrain—all with the flexibility to be shaped for your operation.

- + Hassle-Free Ownership. CVAs bring together dealer advice, easy parts acquisition, plus options for flexible payment terms.
- + Hassle-Free Maintenance. Getting the right Genuine Cat Parts delivered to the right place at the right time makes it easier for maintenance to get done. Service options are flexible to meet your needs.
- + Security of Expert Dealer Support. Cat CVAs are customized plans that offer troubleshooting, diagnostics and repairs with Genuine Cat Parts. If you need trained technician assistance, there are options for that, too.
- + Peace of Mind from Equipment Health Management. You get easy access to monitoring tools with a Cat CVA. Digital tools give you the ability to access important operating parameters for your business anywhere you have an internet connection.

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## SUPPORT FOR THE COMPLETE EQUIPMENT LIFECYCLE

No one knows more about how to get the most from a piece of Cat equipment than your local Cat dealer. This one-of-a-kind, on-the-ground support network delivers expert service, integrated solutions, after-sales support, fast and efficient parts fulfillment, world-class rebuild and remanufacturing capabilities, and more.

Cat dealers operate as nearly 150 local businesses—each one fully embedded in and committed to the geographic area it serves. That means you work with people you know, who know your business, and who respond on your timeframe.



BETTER  
LOADING  
BETTER  
HAULING  
**BETTER  
BOTTOM  
LINE**

With a truck for every site or application — no matter the size class or drive system — and a broad lineup of loading tools, Caterpillar delivers a complete loading and hauling solution that delivers low cost per ton.

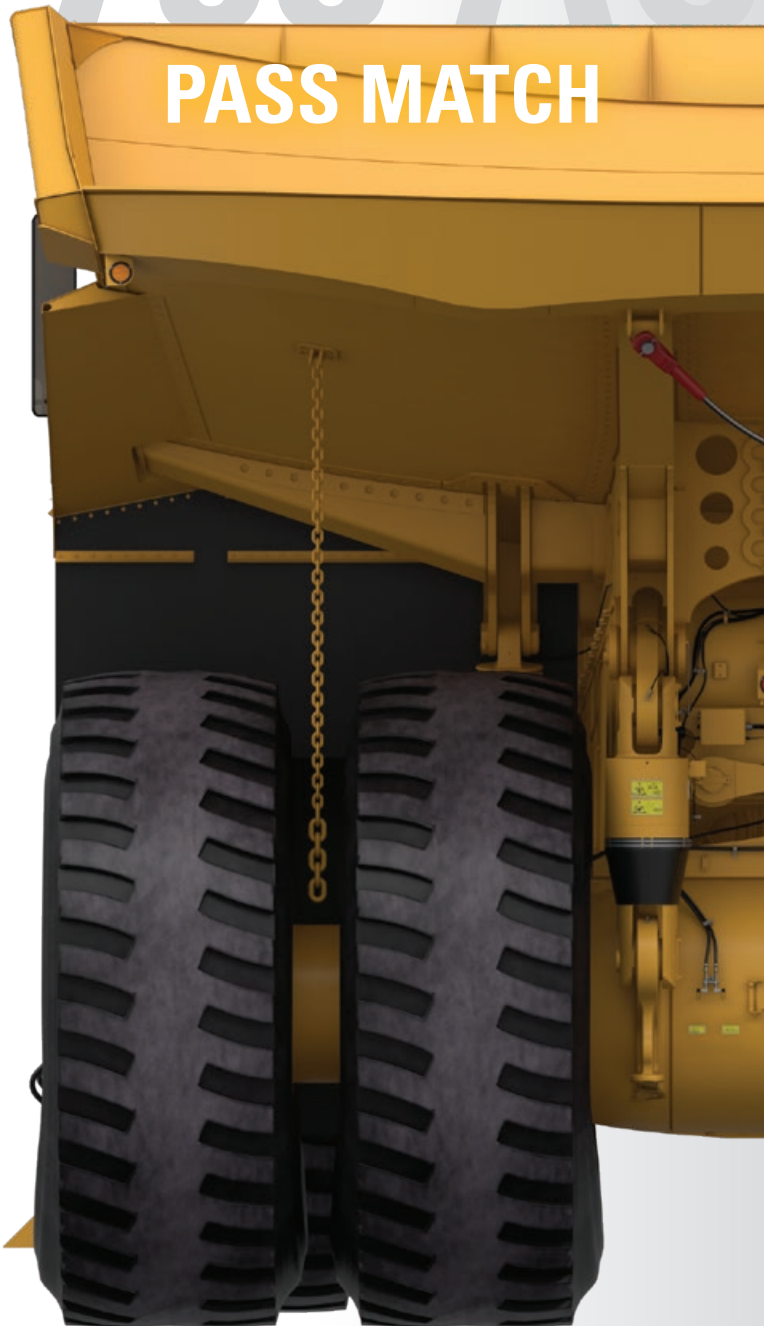
Trucks and loaders are ideally matched to optimize the loading and hauling cycle. Whether you choose a Cat electric rope shovel, hydraulic shovel or large wheel loader, or a mechanical drive or electric drive Cat truck, you'll find they all have one thing in common: They're Caterpillar, inside and out. From iron to engines, hydraulics to electronics, software to hardware, transmissions to ground engaging tools — systems are fully integrated and work together to deliver optimized performance and a better bottom line.





# 798 AC

## PASS MATCH



6060



6-7

7495 HR/HF



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# TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

ENGINE		
Engine Model	Cat® C175-16	
Gross Power – SAE J1995	2610 kW	3,500 hp
Net Power – SAE J1349	2539 kW	3,405 hp
Rated Speed	1,800 rpm	
Emissions Rating	Fuel Optimized	
Bore	175 mm	6.9 in
Stroke	220 mm	8.7 in
Displacement	85 L	5,187 in <sup>3</sup>
<ul style="list-style-type: none"> <li>+ Gross power advertised is the power available at the flywheel when the engine is equipped with muffler and auxiliary water pump.</li> <li>+ Net Power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler, auxiliary water pump and fan at minimum required cooling capacity.</li> <li>+ U.S. EPA Tier 4 Final / EU Stage V available for applicable markets.</li> <li>+ Additional fuel optimized selectable power rating: 2312 kW / 3,100 hp</li> </ul>		

ENGINE - HIGH ALTITUDE		
Engine Model	Cat® C175-20	
Gross Power – SAE J1995:2014	3095 kW	4,150 hp
	2983 kW	4,000 hp
	2759 kW	3,700 hp
Net Power – SAE J1349:2011	3019 kW	4,049 hp
	2916 kW	3,911 hp
	2706 kW	3,629 hp
Rated Speed	1,750 rpm	
Emissions Rating	Fuel Optimized	
Bore	175 mm	6.9 in
Stroke	220 mm	8.7 in
Displacement	106 L	6,469 in <sup>3</sup>
<ul style="list-style-type: none"> <li>+ Gross power advertised is the power available at the flywheel when the engine is equipped with muffler and auxiliary water pump.</li> <li>+ Net Power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler, auxiliary water pump and fan at minimum required cooling capacity.</li> <li>+ Additional fuel optimized selectable power rating: 2983 kW / 4,000 hp (gross) additional fuel optimized selectable power rating: 2312 kW / 3,100 hp or 2759 kW / 3,700 hp.</li> </ul>		

WEIGHTS – APPROXIMATE		
Rated Gross Machine Weight (RGMW)	623 690 kg	1,375,000 lb
Chassis Weight (CW)	205 852 kg	453,826 lb
Body Weight (BW)	38 833– 43 275 kg	85,611– 95,406 lb
Nominal Rated Payload (NRP)	372 tonnes	410 ton
Nominal Rated Payload (NRP) High Altitude Arrangement	363 tonnes	400 tons
<ul style="list-style-type: none"> <li>+ Consult your tire manufacturer for maximum tire load</li> <li>+ Chassis weight with full fuel and fluids, standard &amp; mandatory attachments, hoist, body mounting group, rims, and tires.</li> <li>+ Refer to Cat Mining Truck 10/10/20 Overload Policy (AEXQ0250) for maximum gross machine weight limitations.</li> </ul>		

WEIGHT DISTRIBUTIONS – APPROXIMATE	
Front Axle – Empty	47%
Rear Axle – Empty	53%
Front Axle – Loaded	33%
Rear Axle – Loaded	67%

AC DRIVE SYSTEM		
Total Reduction Ratio	35:1	
Top Speed – Loaded	64 km/h	40 mph
Generator/Alternator	Cat brushless, engine mounted, dual bearing	
Controls	Cat IGBT Inverter Technology, air cooled, pressurized cabinet with filtration	
Wheel Motor	Cat high-torque AC induction, rear axle mounted	
Cooling System	Cat variable speed, hydraulically driven cooling system	

TIRES & RIMS	
Tires	59/80 R63
Rims	1117.6 mm (44 in) wide x 1600.2 mm (63 in) diameter
<ul style="list-style-type: none"> <li>+ Quick Change Rims optional.</li> <li>+ Caterpillar recommends the customer evaluate all job conditions and consult tire manufacturer for proper tire selection and TKPH (TMPH) capabilities.</li> </ul>	

BRAKING SYSTEM		
Front Wet Disc Brake Surface Area	146 081 cm <sup>2</sup>	22642 in <sup>2</sup>
Rear Wet Disc Brake Surface Area	211 163 cm <sup>2</sup>	32730 in <sup>2</sup>
Standards	ISO 3450:2011	
Electric Resistive Braking	Radial Grid Design	
Dynamic Resistive Braking (Retarding) Power – Continuous	4086 kW	5,480 hp
+ Anti-Lock Brake System (ABS) optional with CMD package		



CAPACITY – HE BODY – 100% FILL FACTOR		
Struck	129-200 m <sup>3</sup>	168-261 yd <sup>3</sup>
Heaped (SAE 2:1)	218-276 m <sup>3</sup>	285-361 yd <sup>3</sup>
Dump Body Plate Thickness Varies Depending on Body Selection		
Floor Plate	25.4 mm	1.00 in
Front Plate	12.7 mm	0.50 in
Side Plate	9.5 mm	0.38 in
Canopy Plate	5 mm	0.20 in
+ Contact your local Cat dealer for body recommendations.		

SUSPENSION		
Self-contained nitrogen/oil cylinders, pin-to-pin mounting, top & bottom double shear clevis attachments		
Effective Cylinder Stroke – Front	102.1 mm	4 in
Effective Cylinder Stroke – Rear	50.5 mm	2 in
Rear Axle Oscillation	±5.32°	
Effective Cylinder Stroke – Rear	50.5 mm	5 in

SERVICE REFILL CAPACITIES		
Fuel Tank	4922 L	1,300 gal
Fuel Tank (U.S. EPA Tier 4 Final / EU Stage V)	4542 L	1,200 gal
Diesel Exhaust Fluid (DEF) Tank	379 L	100 gal
Cooling System	799 L	211 gal
Crankcase	310 L	82 gal
Front Wheels, each	28 L	7 gal
Final Drives, each	254 L	67 gal
Hydraulic Tank	1121 L	296 gal
Hydraulic System (includes tank)	1458 L	385 gal
Grease Tank Capacity	41 kg	90 lb

SERVICE REFILL CAPACITIES - HIGH ALTITUDE ONLY		
Fuel Tank	7571 L	2,000 gal
Cooling System	982 L	259 gal
Crankcase	359 L	95 gal
Hydraulic Tank	1032 L	272 gal
Hydraulic System (includes tank)	11296 L	342 gal

CAB	
Air Conditioning (HFC – 134A refrigerant)	21,600 Btu/hr
Ambient temperature	up to 50 °C (122 °F)
Heater / Defroster	24,600 Btu/hr
Ambient capabilities	down to -15 °C (5 °F)
Sound level:	
Operator sound pressure level	75 dB(A)
Measured in accordance to ISO 6394 and 6396:2008	
Rollover Protective Structure:	
ROPS for Operator	ISO 3471:2008
ROPS for Trainer	ISO 13459:2012
Falling Objects Protective Structure:	
FOPS for Operator	ISO 3449:2005 Level II
FOPS for Trainer	ISO 13459:2012 Level II

STEERING		
Steer Angle	39 degrees	
Turning Diameter (ISO 7457:1997)	32.4 m	106.3 ft
Steering Standards	ISO 5010:2007	



# 798 AC MINING TRUCK

For more complete information on Cat products, dealer services and industry solutions, visit us at [www.cat.com](http://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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