

CAT® 794 AC mining truck meets strictest U.S. emissions standards while maintaining high performance and reducing operating costs

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The Cat® 794 AC Mining Truck is now available equipped to meet U.S. EPA Tier 4 Final exhaust emissions standards. In field testing, the Tier 4 pilot trucks matched the superior performance and productivity of the Tier 2 equivalent versions of the 794 AC. The Tier 4 trucks also delivered lower operating costs by reducing diesel fuel consumption.

The 320-ton-class (290-tonne-class) 794 AC features the Cat C175-16 diesel engine. The Tier 4 truck is equipped with an exhaust aftertreatment system using a selective catalytic reduction system (SCR), which uses diesel exhaust fluid to reduce emissions of nitrogen oxides. Caterpillar selected the SCR solution, because it provides the most robust and reliable Tier 4 Final emissions compliance without sacrificing engine performance.

The modular SCR design, adopted from other Cat production machines, minimizes new content and design changes to the field-proven 794 AC. Designed for easy serviceability with readily accessible components, the aftertreatment system is aligned with truck preventive maintenance intervals to maintain high availability. This Cat emissions platform is proven through more than 20 million operating hours in the field.

Caterpillar is using the same exhaust aftertreatment platform in the process to gain EU Stage V certification of the 794 AC. The Stage V certification process is currently in progress.

Comprehensive field testing

The Tier 4 Final 794 AC design successfully completed field validation, with all the pilot trucks exceeding requirements. The machines integrated and worked seamlessly in each mine ecosystem, and customers reported excellent performance and reliability. The trucks were put to the test in a variety of applications, including hot and cold ambient temperatures, uphill hauls and flat hauls.

In a copper mine, Caterpillar conducted an on-site performance study of the 794 AC Tier 4 Final trucks and measured no loss in performance or productivity compared to the Tier 2 equivalent 794 AC trucks. In addition, the machines demonstrated up to 5.6 percent less diesel fuel burn over the haul cycle.

The 794 AC Tier 4 Final trucks have accumulated more than 10,000 hours of operating time and continue to deliver reliable and productive performance in multiple North American mines.

794 AC TIER 4 FINAL mining truck specifications

Engine	Cat C175-16
Gross Power (SAE J1995)	3,500 hp (2 610 kW)
Gross Machine Weight	1,150,000 lb (521 631 kg)
Nominal Payload Capacity	320 tons (291 tonnes)

Source: Caterpillar