



CERTIFIED AND NON-CERTIFIED ENGINES
FOR MINING APPLICATIONS

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Q S K 2 3

Performance.

The QSK23 combines rugged productivity with a high power density and advanced engine management technology to deliver the lowest operating cost per ton of any mining engine in its class. Its high-pressure injection (HPI) fuel system (up to 29,000 psi/200,000 kPa) results in more complete combustion for superior engine response across the entire power curve and the lowest fuel consumption in its class. Its compact and balanced inline six-cylinder design and proven durability in the toughest mine sites make it a great choice to repower vee engines of similar displacement.

The one-piece Ferrous Cast Ductile (FCD) iron pistons and robust cylinder head work to improve long-term durability and dependability. A one-piece cast-iron block, forged-steel crankshaft and a large-diameter camshaft ensure long, reliable performance between overhauls, with the capability of multiple rebuild cycles.

Rated from 760-950 hp (567-708 kW) in both emissions-certified and non-certified specifications, the QSK23 is the ideal choice for haul trucks, excavators and other heavy-duty mining equipment around the world. It has the proven technology you need to raise productivity and lower costs. Every ton.



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ENGINE MODEL	ADVERTISED HP (KW) @ RPM	PEAK TORQUE LB-FT (N•M) @ RPM	RATING TYPE	
TIER 2 CERTIFIE	D RATINGS			
QSK23 950	950 (708) @ 2100	2897 (3928) @ 1400	INTERMITTENT	
QSK23 950	950 (708) @ 1800	2785 (3776) @ 1400	INTERMITTENT	
QSK23 860	860 (641) @ 2100	2785 (3776) @ 1400	INTERMITTENT	
QSK23 860	860 (641) @ 1800	2785 (3776) @ 1400	INTERMITTENT	
QSK23 760	760 (567) @ 2100	2558 (3468) @ 1350	INTERMITTENT	
QSK23 760	760 (567) @ 1800	2558 (3468) @ 1350	CONTINUOUS	
Non-Certified	RATINGS			
QSK23 950	950 (708) @ 2100	2893 (3922) @ 1400	INTERMITTENT	
QSK23 900	900 (671) @ 2100	2700 (3661) @ 1400	INTERMITTENT	
QSK23 860	860 (641) @ 2100	2600 (3525) @ 1400	INTERMITTENT	
QSK23 800	800 (597) @ 2100	2440 (3308) @ 1400	INTERMITTENT	
QSK23 760	760 (567) @ 2100	2401 (3255) @ 1300	INTERMITTENT	

Additional ratings may be available. Check with your Cummins distributor or dealer.

Specifications

ENGINE TYPE	INLINE 6-CYLINDER		
ASPIRATION	TURBOCHARGED AND	TURBOCHARGED AND CHARGE AIR COOLED	
DISPLACEMENT	1,404 CU IN	23 LITERS	
BORE AND STROKE	6.69 IN X 6.69 IN	170 MM X 170 MM	
OIL SYSTEM CAPACITY	54.8 U.S. QT	52 LITERS	
COOLANT CAPACITY	48.8 U.S. QT	46.2 LITERS	
LENGTH	78.5 IN	1994 MM	
WIDTH	42.0 IN	1067 MM	
HEIGHT	67.7 IN	1720 MM	
DRY WEIGHT	5,709 LB	2,590 KG	
WET WEIGHT	6,300 LB	2,858 KG	

Features And Benefits.

- High-pressure injection (HPI) fuel system provides optimum combustion for low emissions and good fuel economy.
- One-piece cast-iron block features wide cylinder spacing for long life and excellent rebuild capability.
- One-piece FCD iron pistons provide the strength and durability to handle high cylinder pressures for long life.
- Twin piston-cooling nozzles direct cooling streams of oil beneath each piston crown and bowl rim for long life in high-load applications with increased reliability.
- Precision-honed FCD iron cylinder liners are machined for durability. Expansion and contraction will not create excess wear.
- Electronic control system allows users to tailor fuel system calibrations to application requirements. CENSE™ electronic monitoring reads engine operating conditions and automatically adjusts for peak operation.
- Large 105-mm camshaft handles the loads associated with high-pressure fuel injection.
- Seven-bolt cylinder head supports increased power output with improved breathing and improved cooling efficiency.
- Two-stage Cummins oil filters, also available as Fleetguard, combine full-flow and bypass filtration to effectively remove harmful sludge and up to three times as many contaminants to reduce engine wear.

A Name You Can Trust. Every Time. Everywhere.

Cummins possesses a vast amount of knowledge in mine operations. We are ready to assist you with experienced and dedicated local mining business leaders and high-horsepower-engine technical support – fully backed by the strength of Cummins industry-leading technology and total support of top management. When you buy a piece of equipment with a Cummins QSK23, you get more than just an engine. You get:

- Full life cycle support, with proven engineering expertise from engine commissioning through final overhaul.
- Immediate parts and service availability.
- An established worldwide network with over 500 distributor facilities in nearly 190 countries, dedicated and empowered to service your needs. Every hour, every day.
- The best warranty in the business, which includes full coverage for unlimited hours during the first year, extending through two years or 2,000 hours



(whichever comes first). The base warranty also includes 3-year/10,000-hour standard protection on major components. Extended warranties are available as well.

With the strength of Cummins at your side, your mine can process more material with increased uptime and greater productivity at a low cost per ton. Most important, our worldwide presence and comprehensive support make Cummins a proven, committed mining partner you can always depend on.

For more about the proven advantages of Cummins QSK23 and all our advanced technology for mining applications, see your local Cummins distributor.





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