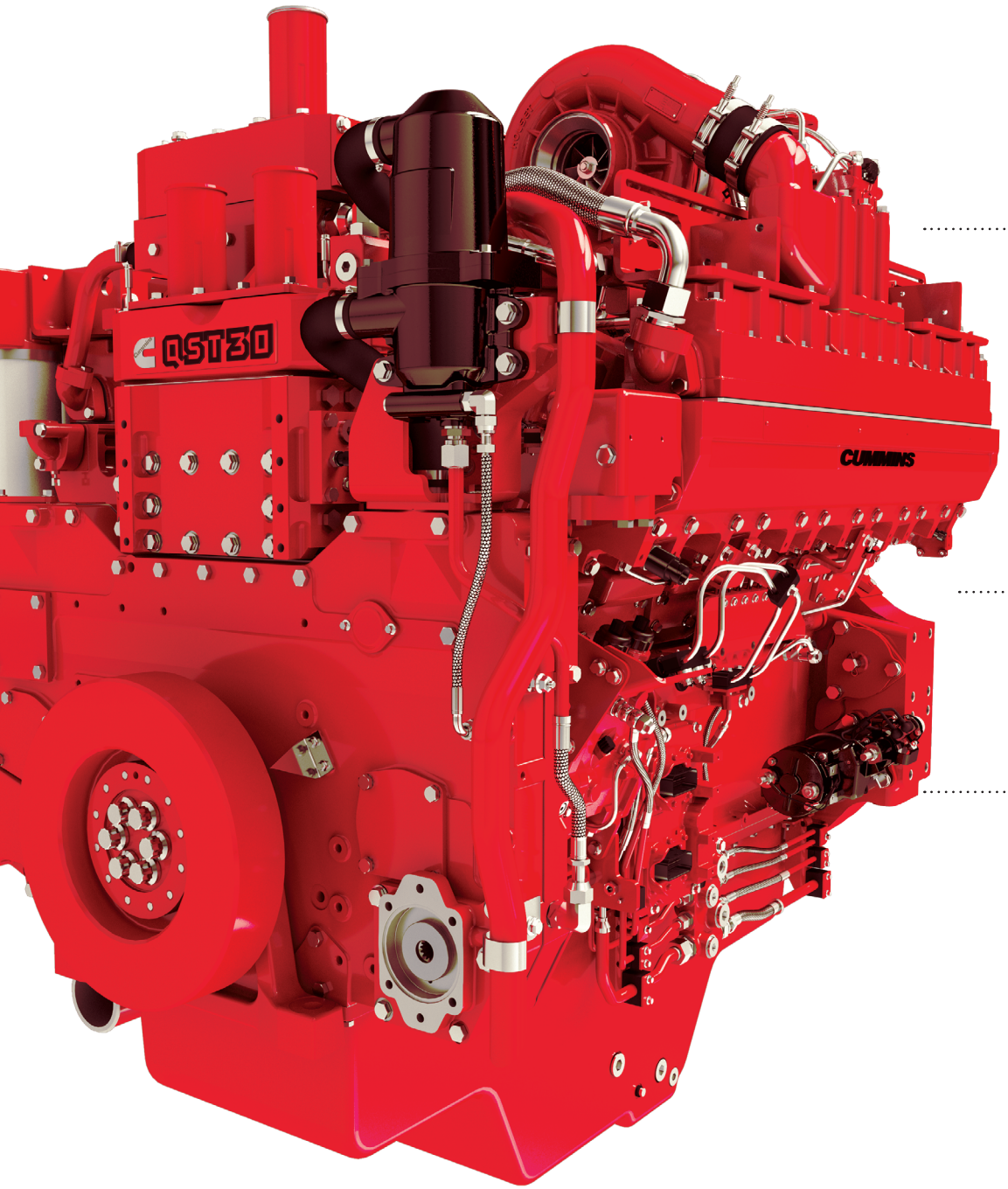
QST30

For locomotives and railway applications



- Compact V12 design
- Clean-burn combustion
- PrevenTech® Connected for remote monitoring, reporting and diagnostics
- Cummins Selective Catalytic Reduction (SCR) aftertreatment for stringent emissions
- Fully integrated electronic controls

High-pressure performance

Cummins QST30 has a proven legacy of performance in everything from switcher locomotives and track machinery to use as auxiliary power. This design has proven readily adaptable to the most stringent emissions standards, through the use of an extremely precise, high-pressure Modular Common Rail Fuel System (MCRS) and the addition of Selective Catalytic Reduction (SCR) aftertreatment.

The QST30 with MCRS has better fuel efficiency and lower operating costs than its predecessor. Clean-burn combustion technology, together with urea-based SCR, allows the QST30 to meet rigorous emissions standards with minimal changes to the proven base engine architecture. Additionally, there is no increase in total heat rejection, so the QST30 does not need a larger cooling package.

The QST30 gives you the same power output as many 16-cylinder engines in a compact, lighter-weight V12 configuration. It also incorporates proprietary filtration technologies that include NanoNet® media, allowing you to double many service intervals for a lower total cost of operation. If you want to really minimize engine oil changes, the Cummins CENTINEL™ continuous oil-replenishment system allows you to go up to 4,500 hours between oil drains.

QST30 specifications

Displacement	1,861 cu in	30.5 liters
Bore and stroke	5.5 in x 6.5 in	140 mm x 165 mm
Engine configuration	50° V12	
Weight (wet)	7,837 lb	3,555 kg
Length	74.3 in	1,887 mm
Width	58.4 in	1,483 mm
Height	68.8 in	1,748 mm

Emissions level	Fuel system	Ratings (hp)	Aftertreatment
US EPA Tier 4 Switcher	MCRS	1050–1500	2 X 4000 Series
EU Stage V Locomotive EU Stage V Nonroad US EPA Tier 4 Final Nonroad	MCRS	950–1500	2 X 4000 Series
Non-certified, SIIIA	HPI	860–1500	—

PLATFORM VERSATILITY

Depending on the application, emissions, and operation needs, the QST30 is available in several configurations including options in fuel systems and after cooling.

FUEL SYSTEMS

HPI fuel systems—High injection pressures results in increased response and improved fuel economy and transient response. HPI fuel systems are able to tolerate higher variability in fuel quality.

MCRS fuel system—MCRS has proven reliability and durability in the toughest applications around the world. Precision multi-injection fueling control at ultra-high pressure, regardless of engine speed and load, is the foundation for clean-burn combustion, lowest noise and unmatched performance.

AFTER COOLING

2 pump 2 loop—Is required to meet stringent emissions and enables optimized radiator designs for engine and intake air cooling.

Charge air cooled—For reduced emissions, improved fuel economy, and increased power density.

Jacket water—Single radiator for integration simplicity in unregulated emissions applications.

WASTEGATE TURBO

For the most stringent emissions, a single-stage turbocharger coupled with an exhaust wastegate controls the air-to-fuel ratio to ensure that low Particulate Matter (PM) levels are maintained under all operating conditions.

PRELUB® SYSTEM

Prevents starts without oil pressure, which eliminates dry starts, improving engine life.

EXTENDED SERVICE INTERVALS

Patented Fleetguard® NanoNet media in the fuel filter allows an increase in fuel filter change intervals to 1500 hours, generally meeting 184 day intervals in switcher locomotive applications. This advanced media also provides 5x better protection against dirt in fuel.

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Bulletin 4087428 Produced in U.S.A. Rev. 6/25