



# CUMMINS ANNOUNCES NEW GLOBAL HEAVY-DUTY ENGINE PLATFORM

Cummins Inc. (NYSE: CMI) today announced a new global heavy-duty engine platform that it has developed to complement its existing global product offering. The G Series platform is an in-line six cylinder engine and will be available in 10.5 and 11.8 liter displacements to meet a broad variety of on-highway and off-highway global market requirements and emission standards. Initial engines are designed to run on diesel fuel.

Design and development of the engine was led by a team in the United States and supported by global technical and marketing resources with deep knowledge of local market and customer needs. This global design approach utilizes the latest advanced technologies to develop an adaptive architecture, with each engine designed to meet unique performance and cost of ownership expectations for its target market and region.

“The G Series global design approach is a vivid demonstration of how Cummins is transforming from a multinational to a truly global company,” said Steve Chapman, Cummins Vice President and Chairman/CEO, Cummins China Inc. “This engine platform has been designed for diverse and global markets by utilizing the expertise and local knowledge of our engineers from around the world.”

The G Series minimizes engineering requirements for vehicle and equipment manufacturers with a common, compact installation envelope. A key design focus for the G Series has been to achieve significant weight savings in order to increase the power-to-weight ratio.

A sculptured block retains high rigidity while removing unnecessary mass. The use of composite material for the oil pan and valve cover provides further weight savings. With this innovative approach, the G Series achieves a remarkably low engine weight of just 1900 pounds (862 kg) while retaining all the structural strength and durability expected of a Cummins heavy-duty engine.

The G Series incorporates Cummins Xtra-High Pressure Injection (XPI) fuel system, derived from the larger and more powerful X Series engine. With multiple injection events driven by high-precision Cummins electronic controls, the XPI fuel system contributes to a very impressive peak torque for the G Series of 1700 lb-ft (2305 N•m), together with a torque rise as high as 60 percent available. These attributes enable the G series to deliver exceptionally fast response to increasing load factors from low engine rpm.

The G series offers fuel efficiency through parasitic reducing technology without variable flow pumps that add unnecessary cost and reduce reliability. Its Single Cam In Head (SCIH) design with roller valve train and high efficiency intake ports continue the design theme of minimum complexity and maximum efficiency. The resulting low weight design allows more payload to be delivered while requiring less energy to manufacture than competitive designs.

For on-highway markets, the G Series heavy duty engine platform will be introduced as the Cummins ISG11 and Cummins ISG12. These engines offer a power range from 290 to 512 horsepower (213 to 382 kW) in a compact and lightweight package. Engines will be available to meet global variations in emissions requirements. At launch in 2014, engines will meet Euro III, Euro IV, and China NS4 emission requirements. Engines for Euro V, Euro VI and U.S. Environmental Protection Agency (EPA) 2017 are also in development. The ISG11 and ISG12 are ideal power solutions for heavy-duty trucks in long-haul, regional haul and vocational service, as well as buses, motor coaches, fire trucks, and recreational vehicles.

One engine from the new G Series platform was initially unveiled at BAUMA in April, 2013, under the name QSM12, and will now be renamed as the QSG12 as part of this family of engines. The QSG12 is purpose-designed to meet U.S. EPA Tier 4 Final and European Union (EU) Stage IV emissions regulations with a more compact envelope and over 30 percent high power-to-weight ratio than the class average for engines with a similar power range. High efficiency air handling and advanced combustion enable the QSG12 to achieve near-zero emissions without the need for a cooled Exhaust Gas Recirculation (EGR) system. With ratings covering a broad 335 hp to 512 hp (250-382 kW) range, the QSG12 offers an ideal power solution for a wide variety of applications, including tractors, combines, wheel loaders, excavators, cranes and material handling, road building equipment, compressors, screening and crushing machines.

“Cummins G Series will set a new benchmark as a global heavy-duty engine platform,” said Rich Freeland, Cummins Vice President and President, Engine Business. “With innovative and leading technology, the G Series will deliver superior performance to drive our customers’ success.”

The G Series will initially be manufactured in Beijing Foton Cummins Engine Company, serving customers on a global basis. Production will start during the first half of 2014.

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## About Cummins

Cummins Inc., a global power leader, is a corporation of complementary business units that design, manufacture, distribute and service diesel and natural gas engines and related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Headquartered in Columbus, Indiana, (USA) Cummins currently employs approximately 46,000 people worldwide and serves customers in approximately 190 countries and territories through a network of approximately 600 company-owned and independent distributor locations and approximately 6,500 dealer locations. Cummins earned \$1.65 billion on sales of \$17.3 billion in 2012. Press releases can be found on the Web at [cummins.com](http://cummins.com) or [cumminsengines.com](http://cumminsengines.com). Follow Cummins on Twitter at <http://twitter.com/cumminsengines> and on YouTube at <http://youtube.com/cumminsengines>.

