

FPT Industrial unveils new **Cursor 13** NG heavy-duty engine



FPT INDUSTRIAL HAS INTRODUCED ITS NEWEST AND MOST POWERFUL NATURAL ENGINE. THE CURSOR 13 NATURAL GAS IS THE MOST POWERFUL 100% NATURAL GAS ENGINE AVAILABLE ON THE ON-ROAD SEGMENT MARKET TODAY, AND IS THE FIRST PURELY NG ENGINE ON THE MARKET SPECIALLY DEVELOPED FOR LONG-HAUL MISSIONS.

The Cursor 13 NG delivers power up to 460 hp @ 1,900 rpm and torque up to 2,000 N•m @ 1,100 rpm-15% more power and 18% more torque than FPT Industrial's 8.7-liter NG engine. Cursor 13 NG is a mono-fuel 100% Natural Gas and an easy-to-use solution for end-users, since it can run with CNG, LNG starting from "methane number" 70 and bio-methane. The bio-methane solution is capable of reducing CO₂ emission levels near zero.

The use of bio-methane has the added benefit of reducing dependency from fossil fuels, as it can be generated from agricultural and urban waste, sewage, or waste from the food industry. It can be produced locally, significantly reducing the need for transporting energy and the related CO₂ emissions. In addition, its production process creates valuable by-products, such as bio-CO₂ for refrigerated units and bio-fertilizer for agriculture.

The new Cursor 13 NG engine, as well as other FPT Industrial NG engines, uses stoichiometric combustion to generate its power. Since 1995 this has been FPT Industrial's chosen technology, and has proven to be a viable and cost-efficient solution available today to meet Euro VI Step C emission limits.

The Cursor 13 NG complies with this standard with a simple and easy-to-install 3-way catalyst with no-EGR, no-SCR and no-DPF (regeneration free solution). The new engine's CO₂ emission level is lower (-9%) compared to diesel and can reach near zero by using bio-methane. At the same time, Cursor 13 NG allows a 98% PM reduction and NOx emissions which are 48% lower when compared to Euro VI compliant diesel engines.

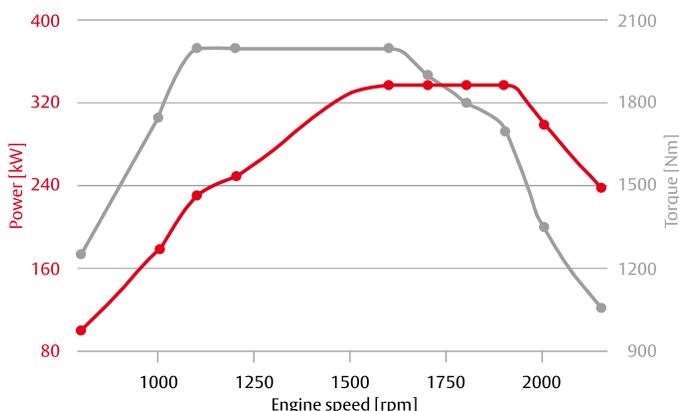
Furthermore, Natural Gas engines decrease noise pollution with a smoother and quieter engine combustion cycle (Otto cycle, 12:1 compression ratio, far below the 17:1 ratio of the Diesel cycle), slashing vehicle noise pollution operation at less than 71 dB.

The EGR-free combustion, as well as the multipoint fuel injectors and fuel rails, grant class leading fuel consumption: fuel cost savings is up to 30%-40% (depending on the fuel cost) compared to the Cursor 460 hp diesel engine. The new Cursor 13 NG engine achieves high reliability standards both on mechanical and thermal stress thanks to the Nickel-Resist cast-iron exhaust manifold, water cooled wastegate turbocharger and Compacted Graphite Iron (CGI) cylinder head.

FPT Industrial's lean technology that avoids diesel and Ad-Blue for SCR supports a lighter and more compact solution, allowing optimization of the truck payload and space availability. This attribute enables mounting more capacious fuel tanks on the vehicle, widening the mission range.

The FPT Industrial Cursor 13 NP engine is protected by two patents: the first, for which patent protection is in progress, is the FPT Industrial proprietary knock control that makes it possible to increase the performance, enables the widest fuel compatibility, and protects engine and 3-way catalyst from misfiring. The second one is FPT Industrial's proprietary reactive air-flow control management system, a new stoichiometric ratio control logic that is applied during gearshifts. This ensures a continuous torque delivery when coupled with AMT gearshifting, which enables maximized performance and the fastest gearshift.

Euro VI A/C | C13 ENTG 0 kW



Source: greencarcongress.com