FPT INDUSTRIAL PRESENTS ITS FULL RANGE OF ENGINES FOR OFF-ROAD APPLICATIONS AT BAUMA CHINA 2012

A world leading industrial powertrain supplier, FPT Industrial is presenting its full range of engines for off-road applications at Bauma China (27 – 30 November, 2012), Asia’s largest and most important industry event. FPT Industrial’s products will be exhibited on a 150m² booth located in the Hall N2 of the Shanghai New International Expo Centre (Booth No. N2.206).

For the first time in China, the Italian powertrain company will introduce its latest Tier 4 final engines and the unique “HI-eSCR” technology. Meanwhile, FPT will also present its specially customized products for the Chinese market, the mechanical pump Tier 3 engines. Besides import engines, SFH, the Joint Venture between FPT Industrial and SAIC, will also show its locally produced engines for off-road applications.

The FPT Industrial offer in the construction sector is based on the F5, NEF and Cursor engine families, ranging from 40 to 500 kW (55 – 680 HP). The technological excellence and lean design of these products result, for the customer, in top performance, low operating costs and high reliability.

During the last months, FPT Industrial engines obtained many important international recognitions. During the Eima International Agricultural Show in Bologna, Italy, the New Holland T 4060 F tractor, powered by FPT engines, was awarded “Best of Specialized 2013” by the Tractor of the Year® jury. This award came after the excellent results obtained in the Nebraska Tractor Test Lab by the Case IH Steiger® tractors, the “International Truck of the Year 2013” awarded to the new Iveco STRALIS Hi-Way and the record conquered on the New York – Bermuda ocean route by FB Design, all thanks to FPT engines.
FPT Industrial's “HI-eSCR” system for Tier 4 Final

FPT Industrial aims to comply with the new emission limits of the off-road market ensuring a minimal impact on the vehicle architecture and the lowest possible increase in cost, an objective that is achieved through the HI-eSCR technology. The breakthrough patented technology, based on an experience of more than six years and more than 250,000 engines produced, allows the engines to meet Tier 4B/Stage IV standards guaranteeing a very high NOX conversion efficiency (over 95% versus 80-85% of best competitors).

The HI-eSCR system is composed of:

- Supply Module
- AdBlue dosing module.
- Diesel Oxidation Catalyst (DOC)
- AdBlue mixer
- Selective Catalytic Reduction (SCR)
- Clean Up Catalyst (CUC)

The whole system is fitted with a network of integrated sensors to control the NOx and any excess of NH3 (ammonia) emitted.

The “SCR-Only” technology sees the introduction of a new generation after-treatment system that is the result of extensive research by FPT Industrial, research that has led to the creation of numerous significant patents for:

- "Closed" control to allow precise dosing of AdBlue in order to cut the level of NOx emissions.
- Adaptive AdBlue dosing system thanks to control technology based on the use of NOx and ammonia sensors to provide accurate information on the composition of the exhaust gases.
- Thermally insulated high turbulence mixing, to allow homogeneous hydrolysis of urea and correct distribution in exhaust gas flow.
- Improved thermal management to speed up SCR light-off in the cold part of emission cycle

The use of these patented new technologies allows to achieve reductions of more than 95% in NOx levels, over the entire engine cycle.

The main advantages for customers can be summarized in:

- No ecEGR and no DPF
- Increased vehicle productivity due to better transient response
• No additional turbocharger’s complexity, but performance in line with FPT Industrial competitors
• Low operating costs due to low engine wear and long maintenance intervals (up to 600h, depending on the mission)
• Engine lean design and state-of-the-art HI-eSCR after-treatment system, flexibility and ease of installation
• Lean technology improving durability and reliability
• No additional cooling system requirements, considering both radiator dimensions or fan drive

**FPT Industrial offer for off-road applications**

• The F5 series, a 4 cylinder, 3.2 liter mechanical engine, featuring a compact layout and a customer oriented design, stands out for low operating costs and extremely easy maintenance thanks to single engine side servicing. These benefits are combined with excellent performance, which allows these engines to be used for the most demanding missions (e.g. high engine inclination, cold starting at temperatures down to -25°C). FPT Industrial showcases at Bauma China the F32.

• The NEF Series includes a 4-cylinder 4.5 liter engine and a 6-cylinder 6.7 liter engine; they cover a power range from 75 to 210 kW (102 – 286 HP). Developed to satisfy the most demanding customer requirements, the NEF Series is the evidence of FPT Industrial’s lean design and technological excellence. Both 4-cylinder and 6-cylinder NEF engines can be offered with mechanical pump version and electronic control common rail version. The NEF Series stands out for its great flexibility and reliability, thus representing the reference in its category. FPT Industrial showcases at Bauma China both the NEF 45 and the NEF 67 engines.

• The 6 cylinder Cursor series is available in 8.7 and 12.9 liter versions and covers a power range from 245 to 500 kW (333 – 680 HP). The Cursor Series is the right choice for customers requiring high power, fast load response, high power density together with maximum robustness and reliability. Superior performance comes also along with low operating cost. Thanks to continuous research and development activities, the Cursor Series adopts the most advanced technologies, such as a second generation heavy duty Common Rail injection system, guaranteeing pressures up to 2200 bar. FPT Industrial is present at Bauma China with a Cursor 9 and a Cursor 13 engine.
FPT INDUSTRIAL

FPT Industrial is a company of FIAT Industrial dedicated to the design, production and sale of powertrains for on/off-road vehicle, marine and power generation applications. The company employs approx. 8,000 persons worldwide, in 10 plants and 6 R&D Centres. The FPT Industrial’s sales network consists of 100 dealers and over 1,300 service centres in about 100 countries. A wide range of products (5 engine ranges from 37 up to 640 kW, and transmissions with maximum torque from 300 up to 500 Nm) and a close focus on R&D activities, make FPT Industrial a world leader in industrial powertrains.

Contacts:
press@fptindustrial.com
www.fptindustrial.com