

FPT INDUSTRIAL DOUBLES ITS PRESENCE AT SIMA 2017 WITH A FOCUS ON STAGE V TECHNOLOGIES AND NATURAL GAS ENGINES FOR AGRICULTURE

- *FPT Industrial showcases its technological leadership in view of **Stage V** level introduction at **Hall 4 - Booth K 063***
- *FPT Industrial's **Natural Gas** engine prototype and the award winning F34 are on display on the stand of its sister brand **New Holland Agriculture - Hall 6 - Booth B 027***

Turin, February 27, 2017

FPT Industrial displays the most representative models of its range of engines for agricultural applications at **SIMA - Paris International Agribusiness Show** - February 26th - March 2nd 2017. This year sees a dual presence for CNH Industrial's brand dedicated to powertrains: show attendees can have a look at FPT Industrial's **N67 Stage IV / Tier 4B** and **F34**, which is compliant with Stage V emission standards, with its dealer **Bimotor** at **Hall 4 - Booth K 063**. Furthermore, at **New Holland Agriculture's stand (Hall 6 - Booth B 027)**, the **NEF 6 NG** is showcased, which demonstrates FPT Industrial's leadership in Natural Gas engines. On the same stand, the **F34** is installed on a New Holland T5.120 tractor, which won the "Best Utility" title in the the "Tractor of the Year®" 2017 award.

N67 Stage IV / Tier 4B



From the NEF series, the N67 is a 6.7 liter, 6 cylinder unit with a maximum power output of 230 kW (313 hp). Boasting a production of more than 1.6 million engines since 2001 from the NEF series, N67 is a best-in-class engine for **robust and reliable performance** (up to +5% power density and up to +10% torque density versus competitors average). Its **EGR-free architecture** ensures **top class efficiency** (up to -3% fluid consumption versus competitors using EGR and active regeneration) and reliability, while **maintenance free ATS** allows maximized vehicle uptime and no fuel consumption penalties.

No active regeneration means **maximized uptime**, as users have no need to halt equipment during operations. This also means greater safety while working, especially in closed environments such as farm buildings.

The N67 is the ideal choice for medium and large tractors, combine harvesters, feed mixers, grape harvesters and sprayers thanks to its outstanding fuel efficiency while ensuring high power and torque output. The N67 Stage IV / Tier 4B is equipped with **HI-eSCR**, FPT Industrial's breakthrough in Selective Catalytic Reduction (SCR), which was pioneered by FPT Industrial at its Research & Development Centre in Arbon, Switzerland. Since 2005 over 650,000 units have been produced and are in operation in various applications, such as commercial vehicles, agricultural machinery and construction equipment.

N67 Stage IV specification

Architecture:	In-line 6 cylinder engine
Injection System (bar):	Common Rail (up to 1600 bar)
Air Handling:	WG / VGT
Valves per cylinder (number):	4
Displacement (cm ³):	6724
Bore per stroke (mm):	104 x 132
Peak Power (kW):	230
Rated Power Range (kW):	110-230
Max Torque (Nm):	1300
Dimensions L / W / H (mm):	1062 / 687 / 1049 (*)
Dry Weight (kg):	530 (Not Structural) – 620 (Structural)
Oil Service Interval (h):	600
EGR:	NO
ATS:	HI-eSCR

(*) values of base engine version; to be finalized with FPT Industrial for different engine dressing

F34 Stage V



Top performance, small size: the F34 is FPT Industrial's **most compact solution** for light applications, delivering high performance and low operating costs. Thanks to its **packaging-optimized design**, the F34 is the ideal choice for specialty and compact midrange tractor

applications. The overall system's compactness ensures **vehicle maneuverability** and **high visibility**.

The F34 is a **top class torque density** engine (6% higher than average competitors in the 3 to 4 liter range) and allows **prompt load response for maximum productivity**. No active regeneration for maximized uptime means there is no need to stop equipment during operation and enables safe operations even in dusty environments. Furthermore, F34 requires **no changes in the cooling package**, using a single solution across emission stages, from Stage IV to Stage V. The F34 has **the lowest EGR rate in the market with a 20% reduction in ATS and urea tank dimensions**.

HI-eSCR2 is FPT Industrial's patented Stage V ATS solution, which will be used for all engines developing over 56 kW. This SCR-on-filter technology integrates a particulate filtration system on an SCR module. Furthermore, F34's maintenance-free ATS maximizes vehicle uptime, and, together with 600-hour oil change intervals, minimizes operating costs.

F34 Stage V specifications

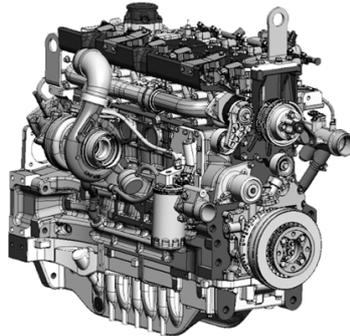
Architecture:	In-Line 4 Cylinder Engine
Injection System (bar):	Common Rail (up to 1800 bar)
Air Handling:	WG
Valves Per Cylinder (Number):	4
Displacement (cm ³):	3387
Bore per stroke (mm):	99 x 110
Peak Power (kW):	92
Rated Power Range (kW):	56-90
Max Torque (Nm):	490
Dimensions L / W / H (mm)*:	714/601/852 (Not Structural) 678/586/910 (Structural)
Dry Weight (kg)*:	315 (NS) -360 (S)
Oil Service Interval:	600 h
EGR:	low rate ecEGR
ATS:	HI-eSCR2

(*) values of base engine version; to be finalized with FPT Industrial for different engine dressing

An **F34 Tier 4B / Stage IV** is also on display at **New Holland Agriculture's stand** (Hall 6 - Booth B 027). It is the engine installed on the **T5.120 tractor** which recent won the "**Best Utility**" title in the "Tractor of the Year®" awards 2017. The F34 not only meets stricter emission regulations but also delivers improved performance compared to the previous Tier 4A / Stage IIIB version, further enhancing T5 versatility and capabilities. This is accomplished by an exclusive after-treatment technology and upgraded engine components. To comply with regulatory requirements while ensuring overall system compactness, F34 Tier 4B / Stage IV features a **Compact HI-eSCR** system, a further evolution of FPT Industrial's HI-eSCR

technology already adopted on larger New Holland Agriculture machines, such as T8 / T7 / T6 tractors and combines.

NEF 6 NG



On the New Holland Agriculture stand, attendees can also discover **FPT Industrial's leadership in Natural Gas engines**. With **over 25 years of experience, more than 30,000 CNG engines sold** and the widest range on the market, FPT Industrial is a pioneer and innovator in alternative fuel powertrains. Its products powered by natural gas, in its compressed (CNG), liquefied (LNG) or renewable form (bio-methane) and adaptable for LPG, are used for commercial vehicles, buses, and specialty vehicles. FPT Industrial has also been developing solutions for the off-road sector since 2011. The **NEF 6 NG** prototype engine that fellow CNH Industrial agricultural brand New Holland Agriculture has tested on its T6.180 Methane Power prototype tractor is an example. Both prototypes are on display at the New Holland Agriculture stand.

The **stoichiometric technology**, which has been adopted by FPT Industrial since 1995, ensures the correct air to gas ratio in all working conditions, thus delivering clean combustion and low emissions; FPT Industrial's proprietary control strategy, specific pistons design and multi-point injection (gas is injected in the intake manifold through a set of dedicated gas injectors and then air-gas mix is ignited by the spark plug in the combustion chamber) render this possible.

Efficient and highly stable spark-ignited combustion reduces vibration and **engine noise, up to -5 dB compared to conventional diesel engine**. Emission compliance is reached with a maintenance-free three-way catalytic converter, a simple and smaller solution than the ATS required by diesel engines, and does not require DPF nor SCR systems.

Natural Gas ensures lower pollutants than a conventional diesel engine and can deliver **zero CO₂ emissions when using bio-methane**, thus offering a significant carbon footprint reduction. The engine structure maintains its robust design for tractor installation, such as on

the T6.180 Methane Power: the diesel-based design allows maximum reliability thanks to the high resistance structural block, while the oil sump is integrated in the tractor chassis.

NEF 6 NG Specifications

Architecture:	In-Line 6 Cylinder Engine
Injection System:	Electronic Stoichiometric Multi Point Injection System
Air Handling:	WG turbocharger
Valves Per Cylinder (Number):	4
Peak Power (kW):	132
Max Torque (Nm):	740
ATS:	Three Way Catalyst

FPT Industrial is a brand of CNH Industrial, dedicated to the design, production and sale of powertrains for on and off-road vehicles, marine and power generation applications. The company employs more than 8,000 people worldwide, in ten manufacturing plants and seven R&D Centres. The FPT Industrial sales network consists of 93 dealers and over 900 service centres in almost 100 countries. A wide product offering, including six engine ranges from 31 kW up to 740 kW, transmissions with maximum torque of 200 Nm up to 500 Nm, front and rear axles from 2 to 32 ton GAW (Gross Axle Weight) and a close focus on R&D activities make FPT Industrial a world leader in industrial powertrains. For further information, visit www.fptindustrial.com.

Media contact:

Fabio Lepore
FPT Industrial Press Office
Tel.: +39 011 007 6720
E-mail: press@fptindustrial.com