

John Deere Power Systems Receives EPA Final Tier 4, EU Stage IV, CARB Certifications For Off-Highway Engines

PowerTech™ engine lineup 130 kW (174 hp) and above utilizes Integrated Emissions Control system to meet challenging standards

WATERLOO, IOWA

John Deere Power Systems (JDPS) announced today that the company's engine lineup 130 kW (174 hp) and above has received U.S. Environmental Protection Agency (EPA) Final Tier 4, European Union (EU) Stage IV and California Air Resources Board (CARB) emissions certification. The PowerTech™ PVS 6.8L, PowerTech PSS 6.8L, PowerTech PSS 9.0L and PowerTech PSS 13.5L models are the first John Deere off-highway engines to receive Final Tier 4, Stage IV and CARB emissions certification in the 130 kW to 560 kW (174 hp to 750 hp) power category.

"We began the design process by listening to our customers, and we have worked with them every step of the way to ensure our solutions deliver the industry-leading performance and low operating cost they expect from John Deere," said Geoff Stigler, manager of worldwide marketing for John Deere Power Systems. "Our building-block approach has enabled us to adopt the best available technologies to meet each new regulatory tier, and this continues with Final Tier 4/Stage IV."

Final Tier 4/Stage IV emissions regulations begin January 1, 2014, for engines 130 kW (174 hp) and above, and require an 80 percent reduction in nitrogen oxides (NOx) from previous Interim Tier 4/Stage III B requirements. Particulate matter (PM) levels remain the same as those mandated by Interim Tier 4/Stage III B regulations.

For Final Tier 4/Stage IV, John Deere continued with its planned building-block approach by developing the Integrated Emissions Control system to meet the challenging standards. For 93kW (125 hp) and above engines, John Deere will offer models equipped with an Integrated Emissions Control system configured with cooled exhaust gas recirculation (EGR), a diesel oxidation catalyst (DOC) and diesel particulate filter (DPF), as well as an selective catalytic reduction (SCR) system. The DOC/DPF reduces PM while cooled EGR and the SCR system reduce NOx.

"The certifications of our PowerTech engines 130kW (174hp) and above are tremendous milestones for John Deere, and confirm that our customers can be confident in our tailored Integrated Emissions Control systems, which deliver innovative technologies capable of meeting more stringent emissions standards," Stigler

said. "We are confident that all of our Final Tier 4/Stage IV solutions will provide the power, performance, ease of operation, fluid efficiency, reliability, durability and economical operating costs customers expect from John Deere."

With the use of SCR technology for Final Tier 4/Stage IV engines, total fluid economy becomes important, and John Deere is confident that its total fluid operating costs will maintain an industry-leading position. Total fluid economy takes into account both diesel fuel and diesel exhaust fluid (DEF). DEF consumption with John Deere Final Tier 4/Stage IV engines will be 1 to 3 percent of diesel fuel consumption depending on the application. With diesel fuel economy gains achieved through increased injection pressures and the optimized Integrated Emissions Control system, John Deere Final Tier 4/Stage IV engines are expected to improve upon the total fluid economy of Interim Tier 4/Stage III B engines. Low DEF consumption also means the DEF tank size can be smaller, minimizing space required on equipment. Other benefits of low DEF consumption include less on-site bulk storage requirements for customers and extended DEF filter service intervals.

"Our Interim Tier 4/Stage III B engines have been tested in many applications around the world and have established the benchmark for fluid economy," Stigler said. "We're confident that our Final Tier 4/Stage IV engines will continue to provide world-class fluid economy while delivering improved performance and higher machine productivity."

John Deere has an established record of durability, accumulating over 22 million operating hours with various aftertreatment technologies.

Models and power ratings for the certified Final Tier 4/Stage IV engine lineup 130 kW (174 hp) and above include:

PowerTech PVS 6.8L: 138 kW to 187 kW (185 hp to 250 hp)

PowerTech PSS 6.8L: 168 kW to 224 kW (225 hp to 300 hp)

PowerTech PSS 9.0L: 187 kW to 317 kW (250 hp to 425 hp)

PowerTech PSS 13.5L: 309 kW to 448 kW (414 hp to 600 hp)

The worldwide John Deere dealer network of over 4,000 service locations will be trained and prepared to fully support customers and their Final Tier 4/Stage IV engines. Δ