

John Deere Power Systems Launches PowerTech HazLoc Diesel Engines

Contributed by John Deere
Monday, 22 June 2009

Waterloo, Iowa - John Deere Power Systems (JDPS) announced two new patented PowerTech HazLoc diesel engines. Built upon John Deere's proven 8.1L platform, the PowerTech HazLoc 6081HFH70 and 6081AFH75 diesel engines have received United States Coast Guard (USCG) Marine Safety Center (MSC) certification for Class 1, Division 1 (Zone 1) Groups C & D hazardous locations.

The PowerTech HazLoc electronically governed diesel engines are certified for use on board USCG-certified subchapter D & O vessels.

As electronic engines have become more commonplace, engines installed in these marine applications are required to meet Class 1, Division 1 (Zone 1) weather-deck requirements for electronics as directed by the USCG in United States-flagged vessels where there is the possibility of an explosive atmosphere in normal operations. A Class 1, Division 1 (Zone 1) area is defined as being within a 3-meter (10-foot) radius of any source of gases that could create an explosive atmosphere, including tank vents, sounding tubes, valves and pumps. Any engine that operates in these conditions must meet these requirements.

"John Deere continues to expand the engine lineup to meet a wide variety of customer needs," said Dave Flaherty, marine marketing manager for John Deere Power Systems. "The new PowerTech HazLoc engines not only help our customers meet USCG requirements but also maintain the legendary long-term reliability our customers have come to expect from John Deere engines. They live up to the reputation our products have earned for rugged durability, fuel economy, quiet operation and ease of maintenance."

John Deere was the first diesel engine manufacturer to receive USCG MSC certification for Class 1 Division 1 (Zone 1) group C & D hazardous weather-deck locations, for electronically controlled engines.

Product details

- The John Deere PowerTech 6081HFH70 has 8.1L of displacement and offers up to 242 kW (325 hp) at 2100 rpm. The 6081HFH70 is a 6-cylinder, electronically controlled, turbocharged and air-to-air aftercooled industrial engine for use in marine auxiliary applications.

- The new PowerTech 6081AFH75 also has 8.1L of displacement and offers up to 280 kW (375 hp) at 2400 rpm. It is a 6-cylinder, electronically controlled engine with an air-to-coolant aftercooler and a water-cooled exhaust for use in marine auxiliary applications.

A typical use for these engines would be cargo pumping for transferring chemical and petroleum products.

JDPS also offers a PowerTech HazLoc retrofit package for existing PowerTech 8.1L engines. The John Deere PowerTech HazLoc package meets the USCG requirement by providing a new wiring harness approved for hazardous locations and a modified, brass breather elbow for the valve cover.

Additional advantages of the PowerTech HazLoc package include EPA-approved variable-speed control engine ratings, high power density and excellent fuel economy. These engines provide ample power during startup, full-flow pumping and tank stripping, while variable-speed control facilitates pumping everything from light oil to viscous asphalt.

"Our customers now have two options to meet EPA and USCG regulations," Flaherty said. "They can either repower completely or retrofit their existing 8.1L engines depending on what best suits their specific needs."

Additional PowerTech HazLoc 8.1L engine features and benefits:

- Available in dry exhaust and water-cooled exhaust configurations that provide a range of power between 175 kW – 280 kW (235 hp – 375 hp).

- Electronics package meets USCG MSC certification for marine hazardous locations (USA only).

- EPA marine Tier 2 and EU emissions certified and MARPOL Annex VI compliant.

- Lower loads provide more life, longevity and reliability.
- Electronically controlled high-pressure common-rail fuel system provides precise fuel delivery, with variable timing resulting in excellent fuel economy and performance.
- Self-diagnostics and engine protection.
- Electronic instrument panel with plain text messaging.