

## **NEW PATENTED “DIRT GAGE” PROVIDES CONTINUOUS INFORMATION ON PARTICLE CONTAMINATION LEVELS IN HYDRAULIC/ LUBRICATING FLUIDS AND DIESEL FUEL**

FOR IMMEDIATE RELEASE-APRIL 14, 2021

FluidMatics, LLC of Gig Harbor, WA today announced that it had been awarded US Patent No. **10,976,231** for a method and system for a: Hydraulic and Lubricating Fluid Contamination Sensor System. FluidMatics is now exploring licensing, manufacturing and distribution arrangements with qualified parties in the hydraulic, lubricant and fuel sectors.

The 10,976,231 patent discloses a novel method of monitoring and controlling flow to a laser-based particle counter. Such systems can provide advanced warning of high particle contamination in hydraulic, lube and fuel systems. Over 80% of hydraulic system and diesel engine failures are attributed to particle contamination.

The Fluidmatic’s “Dirt Gage™” system is particularly well suited for situations where access to a high- pressure circulation loop is not convenient for contaminant monitoring, or where sampling from a tank is desired, or where equipment and normal fluid circulation are not in service. In those cases, the novel integration of a variable speed pump (VSP) under the 10,976,231 patent allows the “Dirt Gage” to maintain appropriate flow through the laser particle counter. In other cases, even where flow is maintained through high pressure circulation, the patent teaches the general monitoring and control of flow through the particle counter such that accuracy is maintained.

Proprietary software analyzes data and presents it in a simple user format. The basic “Dirt Gage” dashboard allows an end user to see whether contamination is within an acceptable range, is in a cautionary range, or is in an alert situation, just by viewing the pad like display on the enclosure. Data can also be transferred by ethernet to a central data acquisition system or captured on an internal memory for subsequent download. A separate telematics option is also available. Temperature and moisture content of the fluid are available as options.

Nick Nesland, President of Fluidmatics said, “my over 40+ years of experience in hydraulics, filtration and machinery repair drove me to develop a simple and reliable method of monitoring particle contamination in fluids. The “Dirt Gage” provides a simple walk- by resource for plant maintenance personnel and it has the capability to send data to the internal data acquisition system or to the cloud”.

Founded in 2013, FluidMatics has extensive experience in filtration and contamination monitoring; and Nesland has previously built, run and sold several hydraulic repair and filtration businesses. For information on distribution, manufacturing or license opportunities please contact: Nick Nesland at: [nbnesland@outlook.com](mailto:nbnesland@outlook.com) or Jim Valentine at: [jvalentine@eepartners.net](mailto:jvalentine@eepartners.net) (203-253-2039). Note: Commercial product offerings of the “Dirt Gage” are expected to be available in 2-3 months following completion of commercial demonstration programs.