

Magnetic Separator Technology Is Solution for Black Powder

Noria news wires

Black powder, a ferrous contaminant created by internal erosion and corrosion of carbon steel pipelines and operating equipment, causes many operational problems. Black powder ranges from 100 microns and greater to sub-micron sizes, with the majority being ferrous (on average 80 percent) and silica (20 percent). It causes many costly problems for the pipeline and processing industries, such as: degrading of product supplied to the consumer, reduced production values from premature pumps, turbine/compressor component wear and tear, premature wear of transmission lines, plugging of meters and traditional filters and seizing of valves.

"High-speed flow in a pipeline picks up metal contaminants, which then act like sandpaper to create more ferrous particulate" says Roger Simonson, president of One Eye Industries Inc. "We have seen situations where there is so much black powder in a line that traditional filters become clogged, pipeline flow is severely reduced and meters become plugged. Black powder damages the pump, compressor and turbine components increasing downtime and reducing production values."

The Black Powder Magnetic Separator System was developed as a solution to pipeline and processing problems caused by black powder. Utilizing rare earth technology, The Black Powder Magnetic Separator System enables highly efficient separation of ferrous and in many applications non-ferrous particles (due to static adhesion) in gas and hydrocarbon transmission systems. The design creates multiple powerful compressed magnetic fields that encircle the magnetic separator element. This technology has enabled for a larger and stronger magnetic field surface area that projects three times further than traditional magnetic fields significantly increasing separation efficiency. The magnetic separator elements operate at full strength up to 300 degrees Fahrenheit (150 degrees Celsius), are highly resistant to vibration and offer more than 10 years of service life.

The removal of the ferrous metal contamination will significantly reduce the erosion factor and may act as a monitoring tool for the pipe wall life cycle. Using The Black Powder Magnetic Separation System will improve product purity and quality, which will significantly increase value. Application of the magnetic separator employed on the primary inlet of chemical plants and refineries will improve product quality production costs and reduce premature wear on process equipment. It will also remove paramagnetic minerals such as nickel from production processes and will significantly reduce consumption of traditional filtration and, in doing so, will reduce costs and improve your environmental footprint.

About One Eye Industries Inc.

Over the past 14 years, One Eye Industries has designed and manufactured environmentally friendly industrial separation and filtration systems. Specializing in magnetic separation for black powder contamination and filtration for rotating equipment, the company's filters can be used in applications such as lube oil, hydraulics, fuel, transmissions and coolants. For more information, visit www.oneeyeindustries.com.

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