## 2016 Mag-Shield Review – Mike Hynes

About the author: Lifetime in Maintenance including over 20 years in Reliability, with specific experience related to product improvement and warranty/design issues on mainly large mining equipment.

Why invest in BAY6 Solutions' Mag-Shield products?

Mag-Shields are performance enhancers resulting in a cleaner oil and fluid system. They greatly reduce cross contamination if a metal scoring failure occurs.

- 1. For a hydraulic system to perform well and to be reliable, its fluid must be kept clean. Most factory filtration is only sufficient to cover the machine through the warranty period. Industry requires much more to achieve the level of cleanliness required for long and reliable equipment life. By adding Mag-Shields to our factory hydraulic filtration systems, wear rates were greatly reduced.
- 2. Mag-Shields reduce cross contamination of the fluid system when a major failure occurs such as a piston scoring a cylinder. Mag-Shields collected huge amounts of metallic material in machines where failures occurred. These systems did not have to be totally overhauled during repair, resulting is very significant savings in both direct cost and for the large reduction in downtime associated with these types of failures.

Why I support the BAY6 Solutions' Mag-Shield products?

- 1. Mag-Shield products resolved immediate issues in a number of machines that experienced severe cross contamination. Our goal was to prevent or reduce these severe cross contamination issues in addition to trying to prevent the failures in the first place. In the first scoring type failure we had on a machine equipped with Mag-Shields, cross contamination that we would have normally experienced was prevented.
- 2. Many of the hydraulic systems in our equipment were not operating at the cleanliness level we wished for. With the fleet operating under extreme conditions and with limited on-site (local) management, it was critical that the machines' filtration system clean the oil better than the basic factory filters. This was achieved in machines with Mag-Shields. In addition, each time we opened a tank and inspected the Mag-Shields, they had accumulated significant material which had been removed from the circulating fluid.
- 3. Any product that we installed on equipment had to require little or very limited, and simple maintenance. The Mag-Shield product accomplished this.
- 4. There had be no or very limited risk that the installation of Mag-Shields could impose on the performance of the hydraulic system, and/or factory warranty coverage and support. All reviews we did with Factory representatives did not identify any risks with the design or use of Mag-Shield filters but rather only benefits.
- 5. I wished for a product that could be moved to another similar machine, if the original machine was being decommissioned. Mag-Shields can easily be moved to a similar machine, which saves the capital cost outlay for the replacement equipment.
- 6. I wanted a product where I could have good contact with the actual designer and producer of the product so if there were installation, performance, quality or any other issue, I could work directly with them to find a solution. BAY6 Solutions provides this contact and process.