Positional Feedback in Rugged Applications

Problem
Hydraulic cylinders are used in a variety of applications and industries to move heavy loads. To automate these machines the hydraulic cylinder is typically gun drilled and a Linear Transducer is installed to provide positional feedback. These devices need to be able to withstand high shock & vibration, as well as high pressures and temperature swings associated with hydraulic cylinders, while providing absolute feedback.

Solution
The 953 VMax LDT is an ideal solution for use in hydraulic cylinders. The transducer utilizes our field-proven Magnetostrictive technology to give absolute position, accurate to 0.01% of the programmable sensing distance. A variety of different outputs are available to interface into the host controller, including Analog (Voltage or Current), Digital (Start/Stop or PWM) and SSI (Serial Synchronous Interface).

The 953 is the most rugged Linear Transducer in the marketplace, it is designed to withstand 1,000 G’s of shock and 30 G’s of vibration. Units are available in stroke lengths from 1” to 300” (25mm to 7.6M) with a variety or mounting threads and connector options to meet your requirement.

All units are IP68 rated and come with a diagnostic LED that displays the health of the unit and to aid in troubleshooting. The 953 also has the ability to sense a magnet other than the standard ring magnet and adjust its signal strength accordingly, this is beneficial when retrofitting cylinders that had a competitive model transducer installed.

Potential Customers
Steel Mill, Lumber, Hydraulic Cylinders and anywhere hydraulic cylinders are used.