Application Note

Dual Pump Cement Truck Application



An oil well completion company approached Viatran to solve a troublesome pressure application. They have been using the Viatran Model 509 Pressure Transmitter for years with great success in their hydraulic fracing operations. They asked Viatran to recommend a transmitter for use on a dual cement pump truck for a 160 PSI (11 bar) measurement.

The Problem

The application required a transmitter with a flush process connection since dead area volume could clog with cement. When we reviewed the application in the customer's service garage, we discovered that a transmitter common to the food processing industry was being installed on the trucks. These transmitters utilized a silicon piezo-resistive sensing element. Although flush, this sensing element was very susceptible to damage since the diaphragm is made of foil. The aggregate of the cement was literally tearing the diaphragm off of the transmitter. Transmitters were being replaced weekly.

The Solution

Viatran recommended our Model 550 Pressure
Transmitter. The Model 550 features a solid, stainless
steel diaphragm that can easily withstand contact with
the flowing cement. Our flush diaphragm is provided
with a 1.5" NPT pipe mount adaptor that is easy for the
customer to install into their process piping. The
customer has not experienced a field failure and has
standardized on the Model 550 for this measurement.

Contact Viatran and ask us to provide a solution for your pressure measurement.



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