



Density Measurements for Hydraulic Fracturing

Hydraulic Fracturing is one of the most rugged and non-forgiving applications in the process measurement world. Since proppant density measurements are critical to the control of the fracturing process, this measurement becomes a critical part of the service provided by any oilfield service company. Berthold Technologies has the solution for reliable and accurate density measurements for both high pressure and low pressure fracturing applications.

Standard components are used which have been highly ruggedized to withstand the high vibration and pressure common in the fracturing environment. Berthold Technologies' Fracturing Density Measurement systems are proven for use in high pressure lines as high as 15 Kpsi.

Detector stability and performance is extremely important in providing a stable and accurate density measurement in the most rugged of conditions. Berthold Technologies employs a proprietary software process which keeps amplification to the photomultiplier in the detector constant. By automatically adjusting the high voltage based upon this process, a stable output is insured regardless of temperature variation or other environmental factors.

In the Hydraulic Fracturing Industry, customer service and support are crucial. Berthold Technologies has an experienced technical staff who can deliver prompt phone and field support. Our policy is to turn around repairs within 48 hours of receipt. This level of service and support coupled with superior measurement and low source size make Berthold Technologies the choice for your fracturing density needs.

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Berthold Technologies Fracturing Density Measurement Systems are especially suited for high pressure lines (typically pipe sizes from 3-4 inches).

Designed to stand up to extreme pressures, Berthold Technologies Heavy Duty scintillation detector is built with the toughness needed to stand up to the rigors of this application.

This all adds up to unparalleled performance and reliability coupled with the low source required (20 mCi Cs137) by the system.



Berthold Technologies Fracturing Density Measurement systems perform equally well on low pressure lines (typically, blender trucks).

Line sizes such as 6-8 inches (or larger) are ideal for the highly ruggedized and sensitive scintillation detector used in the system. Accuracy is commonly in the +/- .5% range.

Mounting of the Density Measurement System is done by a rugged pipe clamp. There is no need to ship a complete section of pipe back should any repair problems arise with the system.

Can I retrofit my existing system?

Of course! We specialize in retrofitting competitive systems with our highly sensitive and ruggedized detectors. Due to superior sensitivity, we require far less source strength than other systems. The advantage is a superior measurement as well as thousands of dollars in cost savings by doing unnecessary source disposals. Call us to ask how.

