

## Magnet or Stud Mount Vibration Sensors?

The graph shown below is an actual comparison of a magnetically mounted accelerometer (top) and stud mounted accelerometer (bottom). These measurements were taken on a reciprocating pump March 2006. The sensors were fairly close to one another.

Despite the fact that this was a large, rare-earth magnet, properly mounted to a smooth surface on top of a crank case, it couldn't hold on.

The magnet held in the positive direction until about 2 g's of vibration amplitude, then it let go and we don't know what the peak levels are above that because the sensor stopped measuring!

Conclusion: Poor frequency response is not the only reason to go with adhesive/ stud-mounted accelerometers. This proves that amplitude response is also a problem.

