

## Does the Flexar Sensor Require Periodic Calibration?

Calibration of the Flexar electronic components are done at the factory utilizing special fixtures. Due to this need for special fixtures it is not possible to calibrate the Flexar instrument in the field.

However, verification of proper operation is possible.

The Flexar guided wave radar sensor is, in essence, a distance measuring instrument. Measurement energy is guided down the cable and reflected off the material surface. The time of flight period is converted in to a distance. This distance is representative of the empty space within the vessel.

The end of the Flexar cable 'antenna' is fit with a counter weight. The top of the counter weight provides a very nice reflective surface once the bulk material has dropped below it. When the vessel is empty or near empty the distance measurement will represent the distance to the top of the counter weight. This is a fix distance and can be used as a standard. When the Flexar is first installed or when the vessel is empty record this distance for future reference.

Each time the vessel is empty this distance can be examined and compared to the original.

Factory tolerance for the distance measurement is +/- 20mm (0.8") Measurement deviation greater than the factory tolerance will require the instrument be returned to the factory for service.

