

## **Worden Gravity Meters - A General Overview**

The Worden Gravity Meter is based on an elastic system constructed of quartz. It is a three spring device employing a pretension of zero-length mainspring to produce the necessary sensitivity. The basic mass is only five milligrams, and the moment of inertia is very low. The low mass, together with the almost perfect elastic qualities of quartz, makes the Worden Gravity Meter a rugged instrument.

Sam Worden was instrumental in developing the Worden Gravity Meter in the late 1940's. In 1953, Worden Gravity Meter manufacturing (Houston Technical Laboratories) was sold, by Worden, to Texas Instruments, and was Texas Instruments' first entry into the geophysical equipment market. This made the Worden Gravity Meter a very special item in the eyes of Texas Instrument's executives, for many years.

In the mid 1980's, Texas Instruments sold its geophysical equipment production facilities to Halliburton Geophysical Services. Halliburton previewed all the products it acquired and decided to seek buyers for the rights to manufacture and sell the instruments that were not considered mass production or assembly-line products. The Worden Gravity Meter Division was transferred in 1990 to Robert Neese who established the Worden Gravity Meter Company in Richmond Texas in conjunction with other gravity services he managed under Neese Exploration Company.

The manufacture and service of the Worden Gravity Meter continues today as it has for over 58 years. More than 1500 Worden Meters have been manufactured -- more than any other type of gravity meter.