Pressure Gauges – Service Period

The life expectancy of a pressure gauge is generally 10 to 15 years. Since many of a fire sprinkler system tests and inspections rely on the accuracy of the system’s pressure gauge(s), they shall be periodically tested or replaced.

According to NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, gauges shall be replaced every 5 years or tested every 5 years by comparison with a calibrated gauge. Gauges not accurate to within ±3% of the maximum (full scale) gauge reading shall be recalibrated or replaced.

For example, the full scale of the pictured gauge is 200 psi and is installed on a sprinkler system with a normal pressure of 60 psi.

- 200 psi gauge ±3% = 200 x 0.03 = 6 psi
- Normal pressure = 60 psi + 6 psi = 66 psi
- Normal pressure = 60 psi - 6 psi = 54 psi
- The pictured gauge on a system with 60 psi normal pressure is permitted to read from 54 psi to 66 psi.

Each and every gauge on a system does not have to be tested for accuracy or calibrated. Comparing the reading of the tested or calibrated gauge to other gauges on the sprinkler system is permissible. For example, pressure gauges on systems that are installed in similar positions and elevations (e.g. on an adjacent riser) that show similar readings are acceptable.