

Pressure Gauge Protection

The common dangers and "killers" of pressure gauges are vibrations, overpressure, pulsations, pressure spikes, high temperature, aggressive, corrosive, sticky process media. There are solutions to protect the gauges for inaccurate reading and failure.

Vibrations

Usually mechanical dampening (e.g. Manodamp®) or oil filled PG will stabilize the needle movement for smooth reading. For very high vibration issues at worksite we recommend gauges with a capillary tube to be mounted on a non-vibrating frame or wall near by the measuring point.



Pulsations, Pressure Spikes

Sudden pressure changes can be part of the manufacturing process. If they within the pressure gauge range oil filled gauges or mechanical dampening systems will smoothen the sudden movement. In addition pulsation dampeners will stabilize gauge and provide smooth reading.



Overpressure

This can be caused by starting pumps which increase the pressure for a short time beyond the pressure gauge range. Gauges generally tolerate up to 30% overpressure without damage or inaccurate reading. This can be prevented by a manually operated gauge cock or an automated overload protector with a set pressure point that cuts overpressure.



High Temperature

High PG process temperatures can cause deformation of the gauge, inaccurate reading and damage. Solutions for high temperature process media are syphons, cooling towers or capillary tubes which allow the process temperature to cool down.



Demanding Process Media

Aggressive, corrosive, sticky or particle laden process media damage the Bourdon tube and movement of gauges. Such application require diaphragm seals with specific membranes, (stainless or high grade steel, chemical coatings, linings, etc.) for indirect pressure measurement. In very corrosive atmospheres the gauge cases need to be protected by special materials or coatings.



If your face regular failure of pressure gauges in your production site please call our team to help you trouble shoot and find a suitable solution.

[more details on protective pressure accessories](#)

