8 Common Gauge Failures

The reality is, gauges can fail. Learning why gauges fail and recognizing the indicators is the first step to preventing failure and selecting the right gauge for your application.

1. OVERPRESSURE

Indication: The pointer is pegged against the stop pin meaning the gauge is operating near or past the maximum pressure

Potential Causes: Incorrect pressure range for an application incapable of accurately reflecting the pressure

3. PULSATION

Indication: A fluttering pointer

Potential Causes: Dynamic (cyclic) loading wears movement components down or system media is rapidly cycling through the system affecting ability of the gauge to measure pressure





Indication: A bent, broken or knicked pointer

Potential Causes: A pump going on or off or a valve being open or closed causing a spike or sudden drop in the system pressure



4. MECHANICAL VIBRATION

Indication: A missing pointer, window, window ring, or back plate; black dust on dial; scrapes on dial from a loose pointer

Potential Causes: Misaligned pumps, reciprocating compressors, or a poor fixture mount causing an excessive amount of vibration



Indication: A zero measurement while the system is operating

Potential Causes: Media that is highly viscous, crystalizing, hardens, or contains particles or solids clogging the socket orifice





8. IMPROPER USE

Indication: A cracked or missing window; leaking case fill; missing back plates or fill plugs; heavy external buildup on case

Potential Causes: No maintenance program; Insufficient training on gauge maintenance; gauge has been placed in a location susceptible to damage



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5. TEMPERATURE

Indication: Breakdown of the gauge components or discolored dial or liquid case fill

Potential Causes: Mounted

incorrectly, located too close to system media or accessories, using the wrong type of gauge

7. CORROSION

Indication: Pointer is corroded, discolored liquid case fill or build-up in case

Potential Causes: Contaminants are getting inside the case; The fill plug is missing; The case or window is cracked

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