

# Chemical Seal Assemblies Built Here!



In the past, filling chemical seals was considered an art. It's very difficult to get it right using the conventional vacuum pump method. Even a tiny air bubble trapped in the assembly during filling creates inaccuracy.

At Lesman, we've figured out a better way. By eliminating the "art" and applying science, we make sure your chemical and remote seal assemblies are air-free, making them more accurate every time.

In our vacuum chamber, the gauge, seal, and any other parts are pulled under a high vacuum. It's like we're filling our customers' assemblies in outer space. After the air is completely evacuated, we introduce the fill fluid, and allow the outside ambient pressure to push the fluid into the assembly — eliminating the human error and achieving a consistently perfect fill.

Need a large number of gauge-and-seal, switch-and-seal, or transmitter-and-seal assemblies built fast? No problem! Unlike traditional one-at-a-time fill methods, the vacuum chamber lets us fill multiple units at once, speeding up the process without sacrificing quality.

Learn more about using chemical seals to protect your instrumentation on page 434. Call us today to quote your chemical seal requirements.



## Available Diaphragm Seal Types

- Welded miniature seals
- Low pressure welded seals
- Threaded or flanged welded seals
- Threaded capsule seals
- Threaded and flanged plastic seals
- Flush diaphragm flanged seals
- High pressure threaded or welded seals
- Flanged seals and wafer seals
- Through-hole flanged seals
- Saddle flow-through inline seals
- Flange-type extended and pancake diaphragms
- Threaded or flanged large displacement volume seals
- Sanitary inline Tri-Clamp or Cherry Burrell I-clamp seals



## Available Fill Fluids

Application	Fill Fluid	Suitable Temperature Range	
		Pressures < 15 PSI	Pressures > 15 PSI
General Service	Silicone Oil DC 200/50	-4° to 250° F	-4° to 392° F
	Silicone Oil DC 200/10	-40° to 250° F	-40° to 400° F
Low Temp.	Silicone Oil (4 cSt)	-130° to 176° F	-130° to 356° F
High Temp./ High Vacuum	High-Temperature Oil (All threads welded during assembly)	4° to 392° F	-4° to 750° F (14° to 750° F with transmitters)
Oxygen/ Chlorine Service	Halocarbon 6.3	-40° to 176° F	-40° to 347° F
	Fluorolube FS-5	—	-40° to 392° F
Food and Beverage	Glycerine*	—	60° to 462° F
	Glycerine/Water*	—	14° to 248° F
	Mineral Oil	-4° to 338° F	-4° to 482° F
	Food-Grade Silicone Oil	—	0° to 572° F
	Neobee M20	-10° to 200° F	-10° to 400° F

\* (Not suited for vacuum/compound ranges)

**Let the Lesman team help build the assembly that best fits your specific application needs.**



## Sample Gauge and Seal Assemblies

(1) WIKA 232.34 XSEl solid front process gauge on halocarbon-filled WIKA L990.TB large mini-seal. (2) WIKA 233.53 liquid filled pressure gauge on silicone-filled Plastomatic seal.



## Sample Transmitter Assemblies

(1) UE 100 series pressure switch with US Gauge 656 stainless steel switch on silicone-filled Ametek Mansfield & Green seal. (2) WIKA C-10 pressure transmitter and 213.53 gauge on silicone-filled L990.10 threaded seal.