

Swagelok® Ammonia Sampler

Better Technology = Better Outcomes

Revolutionary Design Increases Safety,
Improves Accuracy, and Enhances Efficiencies.

Ammonia is commonly used by chemical plants and refineries in the production of fertilizers, plastics, textiles, petroleum, and more. To avoid severe stress corrosion cracking in storage tanks and product quality concerns, anhydrous ammonia is sampled to verify a water content of 0.2% to 0.5%.

This is traditionally done using methods such as CGA G2.2, where a 100 mL sample of liquid ammonia is dispensed and then allowed to evaporate. By measuring the residual water, the water content of the sample can be easily calculated.

The **Swagelok® ammonia sampler** features a unique design that:

-  Increases safety by minimizing the operator's exposure to liquid and vaporized ammonia
-  Introduces consistency into the sampling operation
-  Expedites the sampling process significantly

The Swagelok ammonia sampler addresses the issues inherent to manual sampling by using a closed sampling fixture, pre-chilling the residue tube, semi-automating the process by which the residue tube is filled, and by controlling the heating cycle.

Designed for Safety

The Swagelok ammonia sampler minimizes operator exposure to potentially hazardous materials and environmental impact. Its glass-fixture design allows samples to be dispensed without exposing the technician while allowing visual confirmation of process steps. Closed-fixture design controls ammonia flashing into the environment, and because the sampler can be installed at the sample point, it eliminates the hazardous transportation of ammonia throughout the plant.

Swagelok ammonia sampler is hazardous area-rated (Class 1, Div 2, Group B or ATEX Zone 2), and factory testing ensures a high degree of leak integrity.





Designed for Accuracy

Manual processes rely on the skills and judgment of the operator, which can cause inaccuracies. The Swagelok ammonia sampler is built to deliver consistent results. Its single-handle control makes valve operation simple and minimizes the chance of incorporating sampling errors into the process. The pre-chilled residue tube allows for greater accuracy and prevents aggressive ammonia boiling.

With the Swagelok ammonia sampler, the filling cold bath clears the supply line of older ammonia, which allows operators to ensure a fresh sample is collected each time. Finally, the residue tube cap assembly prevents overfilling, keeping sample sizes consistent.



Designed for Efficiency

In manual sampling processes, it is difficult to fill a warm residue tube precisely because the ammonia boils off, which can take up to eight hours or more. The Swagelok ammonia sampler produces results in much less time. Quicker access to the results can mean faster process adjustments that reduce rates of off-spec products and corrosion damage, which lowers overall costs. The Swagelok ammonia sampler is simple to install and is semi-automated, which speeds the sample-collection process and provides the most accurate results possible.

The Swagelok ammonia sampler is easier to use than other systems, sporting an intuitive touch screen and step-by-step operating instructions. The relay outputs allow remote status monitoring, and easily accessible valve packings offer simplified adjustments to prevent leaks.

The Swagelok Limited Lifetime Warranty demonstrates our relentless commitment to quality and our customers. Every Swagelok product is backed by this promise for the life of the product, so you can rest assured that their investments in ammonia samplers are protected.



For more information about the advantages offered by the Swagelok ammonia sampler, including how it can help increase safety, accuracy, and efficiency of your operations.

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