

Application of nitrogen in laboratory



When it comes to science, everything boils down to details. Laboratories need very special atmospheric conditions to ensure accurate results and lasting cells, and they use nitrogen to maintain them. The following details how to use nitrogen around laboratory equipment and why on-site nitrogen is the best choice.

How nitrogen helps lab equipment

Using cells is a serious job, and even the slightest change in temperature, humidity, or oxygen levels can have a significant impact on the results. By injecting nitrogen into the necessary space, scientists can effectively control all aspects of the environment to ensure that cell incubators, mass spectrometers, drying ovens, IVF incubators, etc. can maintain an ideal environment to obtain the best results.

Why use laboratory nitrogen generator

In these laboratory applications, a large amount of nitrogen is required. Since nitrogen must be injected consistently, the on-site nitrogen generator is a clear choice. At on site gas, our laboratory nitrogen generator is efficient and compact, and can produce high-purity nitrogen for low flow and high flow applications. The following are the advantages of using a field nitrogen generator over relying on cylinders.

Cost reduction - although it may be more expensive to purchase a laboratory nitrogen generator in advance than a gas cylinder, this is a one-time cost. No recurring rent, delivery surcharge or any other charges. Once the cost of the generator is recovered, the laboratory can basically produce nitrogen free of charge (with the lowest maintenance cost).

Improve the workflow - using the on-site nitrogen generator can also save a lot of time. There is no need to close the cylinder or pay attention to the gas level, and there is no need to worry about running out of gas supply during the analysis. Using the on-site nitrogen generator, laboratory personnel can basically set the nitrogen flow without paying attention to it.

Ensure safety - there is always a risk of injury or damage to items when replacing nitrogen cylinders. Cylinders are big and heavy, and trying to manipulate them around fragile laboratory equipment is just asking for trouble.

Energy saving - the energy required to operate the on-site nitrogen generator is much less than that required by the nitrogen plant to produce the gas put into the cylinder. So when laboratories choose to make their own nitrogen, they are reducing their carbon footprint.

