

Nitrogen Generator Cost Compared to Nitrogen Supply

There are major advantages with an onsite nitrogen generator versus purchasing nitrogen from a third party.

1. The system typically pays for itself in less than 24 months under continuous operation.
2. On demand nitrogen production without wastage.
3. Nitrogen production allows monitoring / remote control of the main process parameters displaying flow rate, gas purity, total consumption, hours and maintenance alerts.
4. Very low running cost of utility and maintenance.
5. No binding contracts, dependency, lost production due to late deliveries, safety issues, administration

The following range of costs have been collected from various types of nitrogen supply by a third party.

Cylinder

\$3.00 - \$15.00 per M3 / \$8.00 - \$40.00 per 100 CF

Micro Bulk (Liquid Dewar)

\$0.70 - \$1.50 per M3 / \$1.80 - \$4.00 per 100 CF

Bulk Liquid

\$0.14 - \$0.75 per M3 / \$0.30 - \$2.00 per 100 CF

On-site Nitrogen Generation:

Additional factors can contribute to slightly different costs like: nitrogen purity, geographic location, utility costs, etc., but typical operating costs including energy and maintenance are:

- < \$0.02 per m³ or \$0.05 per 100 CF for generating 97% nitrogen purity
- \$0.03 - \$0.05 per m³ or \$0.10 - \$0.14 per 100 CF for generating 99.5% nitrogen purity