

N2-GEN LPS™ - Layup Protection System

Introducing the N2- GEN LPS™ - Layup Protection System for corrosion protection of inner walls of boiler tubes, condensers, and wetted parts within Power Plant Applications. Designed & Manufactured by South-Tek Systems, the leader in Nitrogen Generation Technology.

How it works

Nitrogen has been utilized successfully for years and has been proven to protect against corrosion in these similar applications. Nitrogen, which makes up 79% of the air we breathe, is the perfect "green" solution for corrosion protection. Nitrogen is inert and by displacing the oxygen within the wetted parts with a low pressure slow flow Nitrogen purge, you ultimately inhibit the oxidation/corrosion process.



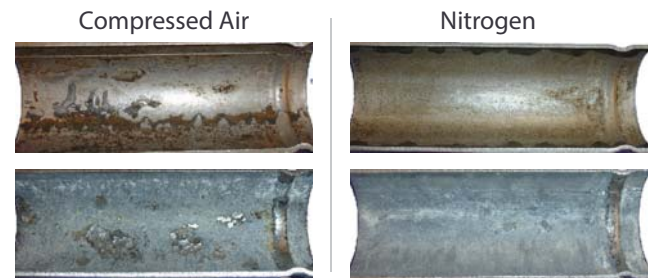
PSA TECHNOLOGY

- The air contains 79% Nitrogen; our systems mechanically filter out the other gases, concentrating the N2 into a storage tank for your process usage.
- Clean, dry compressed air enters one of the two adsorption vessels, containing Carbon Molecular Sieve (CMS).
- Smaller oxygen and residual molecules (H2, He, etc), are absorbed into the CMS, allowing the larger Nitrogen molecules to pass through into a storage tank for later process use.
- Upon saturation, the first adsorption vessel releases the oxygen while the second adsorption vessel starts the process again.
- Power Plant corrosion inhibiting applications generally require 99.6% N2 purity, but higher purities can be obtained (consult the factory).

NITROGEN

- Inert, clean, dry, non-flammable gas
- Absorbs more moisture than compressed air
- Has a true -40° to -70° F dew point
- Does not support the corrosion reaction
- Prevents the formation of ice blockages
- Prevents oxidation of non-metallic components
- Targets both Aerobic and Anaerobic Bacteria

18 Month Exposure Results



South-Tek Systems, the Leading Designer and Manufacturer of Nitrogen Generation Technology



N2-GEN LPS™ Specifications

	N2 GEN-LPS30	N2 GEN-LPS60	N2 GEN-LPS90	N2 GEN-LPS150	N2 GEN-LPS200	N2 GEN-LPS250	N2 GEN-LPS275
Maximum Wetted Volume to be Purged* (Gallons/cu ft)	37,400/5,000	74,805/15,000	149,610/20,000	224,416/30,000	299,221/40,000	374,025/50,000	449,450/60,000
Dimensions	30"x26"x80"	30"x26"x80"	36"x30"x96"	42"x42"x111"	42"x42"x117"	48"x50"x119"	48"x50"x128"
Weight	730 lbs.	1,150 lbs.	1,700 lbs.	2,600 lbs.	3,200 lbs.	3,925 lbs.	4,375 lbs.
Series	Cabinet	Cabinet	Cabinet	Skid	Skid	Skid	Skid
O2 Analyzer	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Electrical	120V/60Hz/1Phase	120V/60Hz/1Phase	120V/60Hz/1Phase	120V/60Hz/1Phase	120V/60Hz/1Phase	120V/60Hz/1Phase	120V/60Hz/1Phase
Compressed Air SCFM	16	34	52	84	113	142	156
N ₂ Receiver Tank Size	120 Gallons	240 Gallons	400 Gallons	500 Gallons	500 Gallons	660 Gallons	660 Gallons
Maintenance	Annual (Filter Kits)	Annual (Filter Kits)	Annual (Filter Kits)	Annual (Filter Kits)	Annual (Filter Kits)	Annual (Filter Kits)	Annual (Filter Kits)
Warranty	2 Years ¹	2 Years ¹	2 Years ¹	2 Years ¹	2 Years ¹	2 Years ¹	2 Years ¹

South-Tek's N2-GEN LPS™ is cost-effective to purchasing & maintaining either banks of N2 cylinders or N2 liquid bulk storage tanks. In most cases, a 50 to 90% cost savings.
 *Designed with N2 Flow Rate to provide a full purge cycle within 24 hours. If desired purge cycle is to be less or greater, consult the factory.

¹ Per South-Tek Systems Terms & Conditions.

Guide Specifications

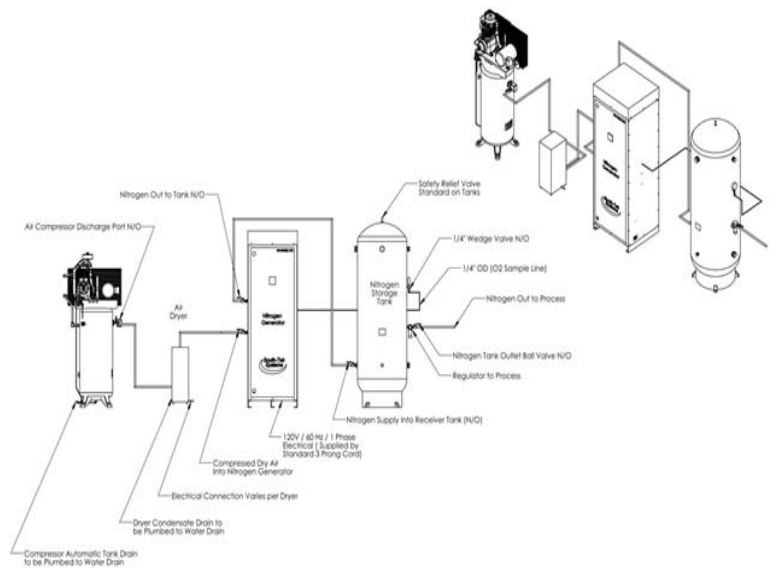
South-Tek Systems Layup Protection System

Furnish and install a South-Tek Systems' Layup Protection System capable of producing 99.6%+ pure Nitrogen in order to protect your boiler's wetted parts from corrosion during short or long term layups. Each Layup Protection System is a completed fully designed system which includes a LPS Nitrogen Generator, Feed Air Compressor, Refrigerated Air Dryer, Pre-treatment Air Filtration Package, and Nitrogen Storage Tank; or the equivalent of. For further information, please contact South-Tek Systems:



South-Tek Systems
 Phone: 910.332.4173
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Typical Cabinet System Installation



N2 GEN LPS™ - Layup Protection System / We ARE Nitrogen.

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