

# N2-GEN<sup>®</sup> HTS - Nitrogen Generator

Introducing the N2- GEN<sup>®</sup> - Heat Treat Series Nitrogen Generation System, specifically designed for use within Heat Treating applications including (but not limited to):

- Aging
- Annealing
- Blanketing
- Blending/Dilution Gas
- Brazing/Joining
- Case Hardening
- Emergency Purge
- Gas Quenching
- Hardening
- Normalizing
- Sintering
- Solution Treating
- Stress Relief
- Tempering



N2-GEN<sup>®</sup> TS



N2-GEN<sup>®</sup> CS



N2-GEN<sup>®</sup> S

## STS HEAT TREAT SPECIFIC SOFTWARE

South-Tek Systems' exclusive technology makes delivering Nitrogen to laser applications easier than ever. Ask us about:

- **EverPure<sup>™</sup>** - Patent Pending technology that ensures Nitrogen purity consistency.
- **SMART-Trac<sup>™</sup>** - Early downstream leak detection to ensure process efficiency
- **Remote PLC Mirroring Option** - Allows for nitrogen system monitoring on facility managers computer or on a separate PLC



Purity	95%-99.999%+
Flow Rate	0-100,000 SCFH+
Pressure	0-600 PSI+

*-See Page 2 for help with sizing your system-*

*generate nitrogen from thin air<sup>®</sup>*

## BENEFITS OF NITROGEN

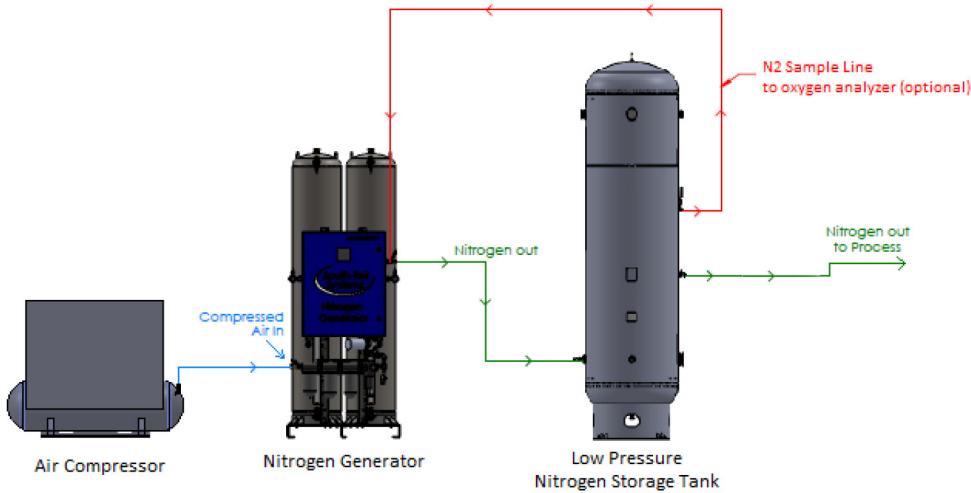
- Inert, clean, dry, non-flammable gas
- Improves process safety and product quality
- Minimizes oxidation and prevents discolorization
- Has a low -40<sup>o</sup> to -70<sup>o</sup> dew point
- Minimizes surface decarburization
- Comes in a range of purities necessary for Heat Treating applications



N2-GEN<sup>®</sup> HTS - Nitrogen Generator / We ARE Nitrogen.

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# N2-GEN<sup>®</sup> HTS Series Specifications



## SYSTEM BENEFITS

- Automatically generate your own Nitrogen on demand
- Reduce your Nitrogen costs by up to 90%
- No missed deliveries, escalating costs, or contracts to sign
- Fast payback with ROI average 12-14 months over bulk liquid
- System life expectancy of over 20 years
- 2 year Standard Warranty

## QUESTIONNAIRE

*South-Tek Systems is all about systems that are engineered to your true requirements. To determine the best system for your application, please complete the following questionnaire for each furnace:*

### **Continuous Atmosphere Furnace Sizing:**

Nitrogen Purity Required: \_\_\_\_\_  
 Nitrogen Hourly Flow Rate: \_\_\_\_\_  
 Nitrogen Pressure at furnace: \_\_\_\_\_

### **Vacuum Furnace N2 Sizing:**

Nitrogen Purity Required: \_\_\_\_\_  
 Amount of N2 used during Quench: \_\_\_\_\_  
 Hours between Quenches to refill tank: \_\_\_\_\_  
 Size of quench tank: \_\_\_\_\_  
 Pressure in tank before quench: \_\_\_\_\_  
 Pressure in tank after quench: \_\_\_\_\_  
 Nitrogen pressure going into furnace: \_\_\_\_\_  
 Is N2 used for Partial Pressure during cycle: \_\_\_\_\_  
 If so, what is the hourly flow rate: \_\_\_\_\_

### **ROI Analysis:**

Current cost per CCF (100 cubic feet): \_\_\_\_\_  
 Total Monthly Consumption: \_\_\_\_\_  
 Tank Rental Fee: \_\_\_\_\_  
 Delivery Fee: \_\_\_\_\_  
 Deliveries per month: \_\_\_\_\_  
 Any additional fees: \_\_\_\_\_  
 Average Total Monthly Cost of N2: \_\_\_\_\_  
 Electrical cost per KW: \_\_\_\_\_

### **Emergency Purge N2 Sizing:**

Nitrogen Purity Required: \_\_\_\_\_  
 Nitrogen Hourly Flow Rate: \_\_\_\_\_  
 How many hours for purge: \_\_\_\_\_  
 Nitrogen Pressure at furnace: \_\_\_\_\_

### **Compressed Air Supply:**

Do you have Plant Air Available: yes -or- no (circle)  
 If yes, what is the pressure available: \_\_\_\_\_  
 Does the Plant Air have a dryer: yes -or- no (circle)  
 If no, we will be glad to include in quote.

## CONTACT

For more information, contact SouthTek Systems:



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