



ON-SITE NITROGEN GENERATOR

ESGNSS and HP ESGNSS

ESGNSS and HP ESGNSS (High Purity)
Electric Self Generating Nitrogen Servicing Station
(ESGNSS) utilizes an electric motor that makes it
possible to generate large volumes of high purity nitrogen

Characteristic	Value / Description
N ₂ Purity	95.5% (ESGNSS) Part # 792690-001 460VAC, 3 Phase, 60HZ 99.5% (HP ESGNSS) Part # 793900-002 460VAC, 3 Phase, 60HZ 99.5% (HP ESGNSS) Part # 793900-001 380 VAC, 3 Phase, 50HZ
Pressure	15 scfm @ 4400 psi (ESGNSS) 10 scfm @ 4400 psi (HP ESGNSS)
Weight	Approximately 2500 lbs
Dimensions	80" Long x 72" Wide x 57" Tall
Powered by	60 amp 460 volt 3-phase 60hz 70 amp 380 volt 3-phase 50hz
On board storage	830 scf on board nitrogen storage at 4400 psi

Proven Reliability

The Electric Self Generating Nitrogen Servicing Station (ESGNSS) is perfect for aircraft hangers, wheel and brake and landing gear strut repair facilities where a central source of dry nitrogen can be piped to the point of use.

These carts are far superior to existing, outdated, and expensive methods of supplying nitrogen as they eliminate the logistics tail associated with high pressure gas cylinders or liquid conversion systems. No more shipping 160 pound nitrogen cylinders that only contain 18 pounds of nitrogen. No more hauling heavy, expensive cryogenic tanks to resupply the liquid nitrogen.

System Design

- Automated control of storage system shut down when cylinders are at 4,400 PSI and automatic start up when pressure falls below 3,800 PSI.
- 2. Automatic purity control vents nitrogen automatically when purity is below specifications; when purity is at specification, the system stops venting and continues production.
- 3. Purity and pressure available from storage system for extended periods without operating plant.
- 4. Capable of filling any sized cylinder.
- 5. Sound insulated fiberglass enclosure for reduced noise levels.
- 6. Twin forklift tubes welded to base provide easy transportation and sturdy mounting base. Holes provided in tubes for securing to floor.
- 7. Safety switch prevents start when cover is open.

ESGNSS and HP ESGNSS (continued)

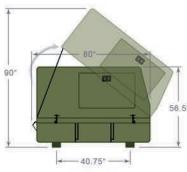
System Advantages

- 1. Feed Air Compressor The feed air compressor is a highly reliable rotary-screw compressor driven by a 30 HP motor. The electric motor may be ordered to match power specifications in any country.
- 2. Nitrogen Gas Booster Compressor The booster compressor is a patented, three stage, hydraulically driven assembly designed and manufactured by PCI. Slow speed operation with water jacketed cooling provides dependability and long life operation. The oil free design insures that the nitrogen will not be contaminated, even after many hours of operation when ring wear on other lubricated boosters allow oil to bypass the seals.
- 3, Nitrogen Gas Production Rate Nitrogen purity is achieved in 15 minutes from a cold start. Although the production is rated at 15 scfm (10 scfm for high purity unit) flow rates at many times this rate are available from the on board storage cylinders. Direct transfers from cylinders to external cylinders will be completed in minutes at the maximum safe transfer rate.
- 4. Operator Panel Contains all gauges, switches, valves and controls necessary for the operation of the nitrogen generator and for monitoring of critical functions necessary for safe and efficient operation. Oxygen Sensor - PCI's ESGNSS system includes an oxygen sensor that controls the nitrogen purity automatically.
- 5. Nitrogen Gas Quality The oil free booster compressor insures that oil is not reintroduced into the nitrogen.

Dimensions



back view



side view



front view



open view



top view



PCI has manufactured thousands of nitrogen and oxygen generation systems for operation in the most demanding and remote locations on earth. PCI's products enable customers to produce oxygen and nitrogen at the point-of-use, effectively eliminating the logistical supply chain associated with delivered product.