The Lectrodryer Hydrogen Control Cabinet monitors the gas in Hydrogen-Cooled Generators to enhance efficiency and safety. Dual Gas Purity analyzers monitor the purity of the generator gas. Pressure and Differential Pressure Indicators continuously monitor the Case Pressure and Fan Differential Pressure in the Generator. Flow is monitored and controlled. The unique flexibility of this design allows for the equipment to be tailored to meet the specific needs of any plant.

**FEATURES:**
- Dual Gas Purity Analyzers
- Continuous Generator Monitoring including Generator Case Pressure and Fan Differential Pressure
- Flow Monitoring and Control through the system
- Housed within a NEMA 12 Enclosure
- Designed for use in a Class 1, Division 2, Group B hazardous area.

**APPLICATION:**
- Panel Mounted for Indoor installations
- Separate NEMA 4 Enclosure with Type Z purge to meet Class 1, Division 2, Group B for incorporation of additional electrical equipment
- Scavenging system for generators requiring scavenging as a means of increasing gas purity
- Annunciator Panel for monitoring Auxiliary Functions and Alarms
- Dewpoint Analyzer for monitoring the water vapor within the generator gas
- Hydrogen Totalizer for monitoring hydrogen consumption
- DCS Communication: All operations associated with the Hydrogen Control Panel can be communicated to the control room for inclusion in the Plant DCS
- Available in ATEX and IECEx versions for use in Zone 2 Hazardous areas

**OPTIONS:**
- BAC-50 Dual Tower Hydrogen Dryer
- Fast Degas CO₂ System to facilitate degassing of the generator in under 20 minutes.
- H₂ and CO₂ Control Piping System with optional automatic degas and refill for purging of the generator

**COMPLEMENTARY GAS AUXILIARIES:**
- Glass door is for marketing purposes only
Hydrogen is used to cool large stationary generators because of hydrogen’s high heat capacity and low density. It is vital that hydrogen remain dry in order to maintain these properties and prevent damage to the generator. Lectrodryer’s BAC-50 hydrogen dryer is a continuous automatic operating unit that guards against damage causing moisture which can lead to costly repairs and extensive down time. The BAC-50 reduces maintenance and minimizes operator involvement. Lectrodryer also offers the Gas Optimization Skid, which incorporates and unifies the typical generator auxiliaries. The Gas Optimization Skid can be tailored to meet customer specifications including such components as the BAC-50 dryer, gas control piping, continuous generator monitoring, generator purity monitoring, and liquid level detectors.

Fast Degas CO\textsubscript{2} System

- Ability to deliver 370 SCMH (220 SCFM) of CO\textsubscript{2} to generator
- Helps reduce the time and cost involved during outages
- Safety benefit by rapidly blanketing the generator in emergency situations
- Optional ATEX certification
- Can be purchased as a stand alone system, with a BAC-50 hydrogen dryer or as a part of the Gas Optimization System.

Lube Oil / Air Tanks

Lectrobreather tank vent dryers prevent atmospheric moisture from entering storage during “breathing” due to ambient temperature changes and draining periods. Valuable oils and chemical solutions remain free of water contamination.