

Introducing

TurbinAL™

Continuous high-flow CO₂ purge system
for gas-fired turbine generators



Purge turbines quickly, efficiently, automatically

The TurbinAL high-flow CO₂ purge system from Air Liquide provides the power industry with a high-efficiency alternative to traditional methods of purging hydrogen gas used to cool bearings in gas-fired turbine generators. Drawing from multi-cylinder packs, TurbinAL continuously delivers 1400 scfh of CO₂ without the need to connect or disconnect a single cylinder or gas regulator. Moreover, the system's onboard vaporizer keeps purge gas at moderate temperatures to prevent downstream regulators and valves from freezing up.

Time consuming and labor-intensive cylinder changeouts and defrosting are a thing of the past as purge cycle time is slashed from 12 hours or more to as little as two hours. Using a fully electronic changeover manifold, the system dispenses CO₂ from one bank of cylinder packs until pressure drops below a specified value. It then automatically switches to a second bank of packs. No monitoring attendant is needed. Economical, dip tube equipped cylinder six-packs are provided by Air Liquide and can be linked into our DATAL ALert™ web-based gas management system for usage reporting and automatic replenishment.

Benefits and Features

- Slashes traditional purge time to as little as two hours—helps increase generating up-time
- Automatic changeover between cylinder packs eliminates cylinder handling
- Eliminates defrosting CO₂ cylinders, regulators and valves during purge process
- Provides predictable gas flow, pressure and consumption
- Improves safety by minimizing handling of individual high-pressure cylinders
- System function requires minimal attendance to further reduce labor costs



TurbinAL with four six-packs of dip tube equipped CO₂ cylinders supplied separately by Air Liquide

TurbinAL™ Standard Specifications:

Relief Valves (3): 2400 psig

Vent Valve: Manual

Pressure Transmitters (2): 0–2000 psig

Ball Valves: Motorized

Continuous Flowrate: 1400 scfh*

Auto ChangeOver Manifold:

Scott fully electronic control panel

ChangeOver Set Point: 300 psig

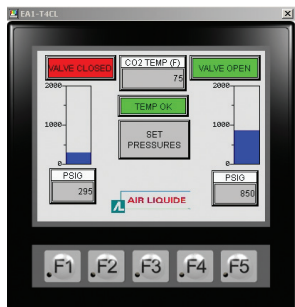
Pigtails (4): Stainless steel

CO₂: Dip tube equipped cylinder six-packs provided separately†

Vaporizer with Control Panel: Included

* Other flowrates are available.

† Use of cylinders without dip tubes is not recommended.



Digital Displays Provide System Status

At the heart of the Air Liquide TurbinAL system is our fully electronic Scott changeover manifold. A convenient easy-to-operate display screen provides system status and operational information such as the state of the automated changeover valves, manifold pressure, and CO₂ system outlet temperature. As shown at left, when the liquid phase CO₂ has been exhausted from the left supply side, the TurbinAL manifold will automatically

switch over to the right supply side. The changeover occurs when pressure on the left supply side drops below 300 psig.



Founded in 1902, Air Liquide is the world leader in gases for industry, health and the environment, providing innovative solutions for the manufacture of everyday products and for the protection of life.

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Additional Gas Handling Equipment

Air Liquide offers a comprehensive line of Scott™ high-performance grade as well as Air Liquide industrial grade equipment for use with all gases commonly used in the power generation industry. Regulators, manifolds, flowmeters, hoses, valves and fittings, cylinder handling equipment and storage units are included. All items deliver outstanding cost-effective value by delivering many years of reliable, trouble-free service without compromising the purity or integrity of the gases being distributed. Most items are in stock and available for next day shipping.

Specialty and Industrial Gases

As the world leader in gases for industry, health and the environment, Air Liquide offers a portfolio of gases that includes industrial gases needed by the power industry for day-to-day operations as well as EPA protocol gases and other specialized instrument calibration gases necessary for environmental compliance. Gases are available in single cylinder sizes as well as multi-cylinder packs and bulk supply, depending on individual needs.

More Information

Call your local Air Liquide account representative; visit our website at ALspecialtygases.com; or call 800.217.2688 toll-free.



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