

Zero Ambient Pure Gases

Manufactured, tested and certified to meet EPA guidelines for zero calibration of CEMs

Zero gases are those that mimic the absence of pollution. They are used to zero calibrate the Continuous Emission Monitors (CEMS) that measure stack emissions in utilities, cogeneration plants, waste incinerators, industrial plants and other stationary sources.

LINWELD has available cylinders of Zero Ambient Air and Zero Ambient Nitrogen. Zero air is used in daily error calibration and quarterly linearity checks. Zero nitrogen is used in zero calibration error/drift tests of CEMS that are equipped with an oxygen diluent analyzer.

LINWELD's Zero Ambient air meets and exceeds the standards for zero air material defined in Part 72.2 of the Federal Register, namely, that the gas be vendor-certified to contain traceable concentrations of contaminants below specified levels.

Zero Ambient Air and Zero Ambient Nitrogen also satisfy the following requirements:

- 40 CFR Part 60 covering daily and quarterly zero calibration drift testing at cogeneration plants, municipal waste incinerators, refineries and other designated facilities
- 40 CFR Part 75 for daily calibration error and quarterly linearity testing at Phase I and Phase II utilities and cogeneration plants
- 40 CFR Part 266 BIF covering incinerators, boilers and industrial furnaces combusting hazardous waste

LINWELD zero gases are certified for use on a wide range of monitors, allowing a single source of zero gases to accommodate your existing equipment.

Our customers buy Zero Ambient Air and Nitrogen in aluminum cylinders because it is the easiest and most convenient method of using those gases to set zero points and correct CEMS for instrument drift.

Using cylinders of Zero Ambient Air, for example, eliminates the expense of installing a pump and purification system to compress and purify ambient air for use in zero calibration. In addition, there is a danger these outside gases could have a high level of contaminants if not properly scrubbed.

LINWELD Zero Ambient gases are specifically manufactured, tested, and certified to meet EPA guidelines for zero calibration of stack emission analytical systems. Each cylinder is accompanied by a certificate noting conformance to the published product specifications.

The certificate includes such critical information as the certification date, lot number, cylinder number and expiration date. It also lists the maximum level of contaminants, with the guarantee that the contents are below those levels, ensuring a high-purity product.

Zero Ambient Air

Product Code	Cylinder Size	Contents cu. ft.	Pressure psig @ 70° F	Valve Outlet CGA	Recommended Pressure Regulator		
					Type	Series	Page
AC716	KAL	144	2000	590	Two-stage	Model 600	122

Zero Ambient Nitrogen

Product Code	Cylinder Size	Contents cu. ft.	Pressure psig @ 70° F	Valve Outlet CGA	Recommended Pressure Regulator		
					Type	Series	Page
AC424	KAL	142	2000	580	Two-stage	Model 600	122

Purity Specifications	Zero Ambient Air	Zero Ambient Nitrogen
Sulfur Dioxide	<0.1 ppm	<0.1 ppm
NOx	<0.1 ppm	<0.1 ppm
Total Hydrocarbons	<0.1 ppm	<0.1 ppm
Carbon Monoxide	<0.5 ppm	<0.5 ppm
Carbon Dioxide	<1.0 ppm	<0.5 ppm
Oxygen	20 - 22 %	<5.0 ppm
Nitrogen	Balance	Balance

