



Facts About...

Approved Emissions Analyzers for Certified Emissions Repair Facilities

The following Four and Five-Gas Analyzers have been approved for use in Certified Emissions Repair Facilities (five gas analyzers are indicated in bold font):

Manufacturer	Model
Allen	53-370, 53-500, 53-530, 53-700, 53-710
Autologic	310-0111, 310-0112, 310-0121 , 310 Series
Bear	40-200, 40-400, 40-401, 40-504, 42-090, 42-902, 42-903, 42-904(B)
CAS	87-1100
De Jaye	6333, 6241
Hamilton	650EII, CEA-640, HTS-650, HTS-870, VEA 650(D), VTS 850EII
Infrared Industries	FGA4000XD
Interro	PDA5GB
Kent-Moore	J39982-MICRO
OTC	3700 Series, 3800 Series, J39982, MICROGAS
Rotunda	53-500, MCA-3000G
Snap-On	MT 3505, EEEA300A, EEEA305A, MODIS (with calibration software), MT3100(A), MT3105, MT3500(A)
Sun	DGA-1000 , 1040, 1043, 1052, 1215, 1805-9, 1805Z, DGA1000, EEOS107 (08, 11, 30, 40), MCA3000, MCS2500, MCS4000, MEA-1500-04
Vetronix	MTS 1100, PXA 1000, PXA 1100

Emissions Analyzer Calibration Gas Requirements

1. All calibration gas bottles must be labeled with the analytical concentrations of each gas component contained within the bottle. Each gas component must be named to $\pm 1\%$ or $\pm 2\%$ accuracy, traceable to NIST Standard Reference Materials (SRMs). This certification must be indicated on the calibration gas label.
2. Calibration gas may not be used past the expiration date on the cylinder.
3. Each bottle of calibration gas must be equipped with a functional pressure gauge, which reads in pounds per square inch (psi). Please note when the pressure in the bottle drops below 25 psi, the analyzer may not calibrate accurately.
4. Each bottle of calibration gas must be equipped with a functional regulator to achieve the proper flow rate for calibration, unless the analyzer is internally equipped with a flow regulator.



Four - Gas Analyzer Calibration Gas Specifications

<u>Component</u>	<u>Specification</u>	<u>5% Blend Tolerance</u>
Propane	2000 ppm	1900-2100 ppm
CO	8.0 %	7.6 – 8.4 %
CO2	11.0 %	10.45 – 11.55 %

Five - Gas Analyzer Calibration Gas Specifications

Use calibration gas recommended by the manufacturer of the analyzer. If you experience problems with a standard blend, check with the manufacturer to see if a special blend is required. Commonly recommended specifications are:

<u>Component</u>	<u>Specification</u>	<u>5% Blend Tolerance</u>
Propane	1200 ppm	1140 - 1260 ppm
CO	4.0 %	3.8 % - 4.2 %
CO2	12.0 %	11.40 – 12.60 %
NOx	2000 ppm	1900 – 2100 ppm

Local Gas Suppliers

The following companies may be able to provide calibration gas for gas analyzers at Certified Emissions Repair Facilities. **The State of Maryland cannot recommend one vendor over another vendor.** The vendors are listed for information only. There is no requirement to purchase equipment from any of these companies.

Emission Supply
 705 A Old Westtown Road
 West Chester PA 19382
 800-541-8370
<http://www.emissionsupply.org>

Roberts Oxygen Company, Inc.
 17011 Railroad Street
 Gaithersburg MD 20877
 301-948-8100
<http://www.robertsoxygen.com>

GTS – Welco, Inc.
 8025 Dorsey Run Road
 Jessup MD 20794
 410-796-8845 or
 800-942-1148
<http://www.gts-welco.com>

Air Liquide
 6141 Easton Road
 Plumsteadville PA 18949
 877-715-8651 or
 215-766-8860
<http://www.alspecialtygases.com>

