GAS BLENDER EQUIPMENT CATALOG

- On-site mixing reduces the frequency of cylinder changeouts.
- Blender design allows users to adjust blend concentrations to meet changing needs.
- National Fire Protection Association (NFPA) compliant systems.
- Custom Gas Blender options available.





ABOUT GAS BLENDERS

About Blenders

Acme gas blenders are best suited for applications with varying flow demands, or ones that require higher accuracy or special features. Because of the wide array of models, options and custom features we offer, users can receive the best product to meet their requirements accordingly.

Gas blenders (or gas mixers) allow users to generate a controlled mixture of gases from separate pure gas sources, creating blends in a variety of accuracies and capacities. Gas blenders are used in ratios with a wide variety of applications including supplying gas for welding processes, food packaging, LASER installations, and heat treating furnaces; generally any process that requires the controlled application of a mixture of gases.

Why Choose a Gas Blender?

Added Convenience

- On-site mixing reduces the frequency of cylinder changeouts.
- Blender design allows users to adjust blend concentrations to meet changing needs.

Applications

- Welding Processes
- Food Packaging
- LASER Installations
- Heat Treating Furnaces
- Any Process that Requires the Controlled Application of a Mixture of Gases

Increased Safety

- System integration abilities allow users to monitor performance, automatically adjust equipment, and configure multiple alarms with ease.
- Upgrade older furnace gas controls to National Fire Protection Agency (NFPA) compliant systems with analyzers, alarms and automatic shutdown.

Significant Cost Savings

- Gases mixed on-site can save users as much as 55% over the cost of pre-mixed gases.
- Cut installed plant piping in half versus mixing at individual use points.

Acme Standard Gas Blenders

Acme offers standard gas blender models that vary in capacity from 350 SCFH to over 15,000 SCFH. Special features vary by model and include:

- Completely pneumatic (non-electric) systems
- Models with or without gas analyzers
- National Fire Protection Association (NFPA) compliant systems

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ABOUT GAS BLENDERS

In almost every case, using pre-mixed gases is more expensive than the cost of blending pure gases on-site. Although economic payback is often the determining factor in deciding when to install blending equipment, the end user should be made aware of the potential for improved safety and flexibility. Consider the cost savings information below (numbers have been rounded).

| Number of Stations | Monthly Usage (CF) | Number of Cylinders Used | Pre-mixed Cylinder Gas Cost | Blended Gas Cost | Monthly Savings | Annual Savings |
|--------------------|--------------------|--------------------------|--------------------------------|---------------------|--------------------|-------------------|
| 5 | 13,000 | 44 | \$968 | \$532 | \$436 | \$5,231 |
| 10 | 26,000 | 87 | \$1,914 | \$1,064 | \$850 | \$10,198 |
| 15 | 39,000 | 130 | \$2,860 | \$1,596 | \$1,264 | \$15,164 |
| 20 | 52,000 | 174 | \$3,828 | \$2,128 | \$1,700 | \$20, 395 |
| 25 | 65,000 | 217 | \$4,774 | \$2,660 | \$2,114 | \$25,362 |
| 30 | 78,000 | 260 | \$5,720 | \$3,193 | \$2,527 | \$30,329 |
| 40 | 104,000 | 347 | \$7,634 | \$4,257 | \$3,377 | \$40,527 |
| 50 | 130,000 | 434 | \$9,548 | \$5,321 | \$4,227 | \$50,724 |

| | <u>Typical</u> | | Conversion Factors | Assu | <u>Assumptions</u> | |
|-----------------------|-----------------------|--|--|-----------|----------------------------|--|
| | <u>Costs</u> | <u>\$ / CF</u> | 8.74 CF / lb. CO ₂ at 70 ⁰ F | 30 | SCFH / welder | |
| Premixed Cylinders | \$22.00 / cylinder | \$.075 (8% CO ₂ / 92% AR cylinder) | 300 CF / cylinder mixed gas 4,300 CF / AR dewar 3,352 CF / CO ₂ dewar | 50% 40 | duty cycle hours / week | |
| CO ₂ | \$.20 / lb. | \$.023 (CO ₂ liquid cylinder - dewar, 8% of total mixture) | | | | |
| AR | \$4.25 / 100 CF | \$.043 (Ar liquid cylinder - dewar, 92% of total mixture) | | | | |

Note: Above costs represent typical pricing examples. Actual costs and potential saving will vary with location, gases used and gas supplier. Consult with your gas supplier to calculate actual savings.

ABOUT GAS BLENDERS

Consider a Gas Blending System

| Mixed Gas Usage is on the Rise | A customer currently using mixed gas cylinders who will increase usage to the point that pure bulk gases become the only practical way to manage the installation should consider gas blenders. |
|---|---|
| Mixtures Contain Flammable Gas | Many customers have processes that require the use of gas mixtures with flammable gases such as hydrogen. Rather than run hydrogen piping throughout the plant and mix the gases at the individual use points, one central gas blender can be used. If the mixed gas being produced is non-flammable, the potential for flammable and explosive hydrogen gas leaks in the plant can be eliminated. The blender can also be located near the gas sources to reduce or eliminate the areas inside the plant with potentially explosive gases. |
| Gas Processes Feeding Pumps Are Used | Certain processes such as high pressure helium leak checking, require mixed gas to be pressurized to levels above its normal storage pressure. Rather than use 100% helium, it can be much more economical to use a gas mixture containing a greatly reduced amount of helium. In order to raise the gas pressure, the mixed gas passes through a pump whose demand varies greatly with its downstream pressure. |
| Need to Vary Mixture is Frequent and Regular | A customer with a process that demands frequent mixture composition and outlet pressure adjustment, such as certain LASER applications, can automate his mixed gas supply using a gas blender. |
| Plant Instrument Air Supply is Required | A customer who is using pure nitrogen for plant instrument air, but only really requires gas with a reduced oxygen concentration, should consider using a blender. By using a combination of pure nitrogen and plant compressed air, the demand for an instrument air supply can often be met more economically. |

GAS BLENDING SYSTEMS

GAS BLENDING SYSTEM SPECIFICATION FORM

(Please Reference When Ordering FMP-350, 1200-AR, and Custom Models)

| GAS | GASES | | | | | |
|-----|--|----------|--|--|--|--|
| | Gas A: % Gas A: | | | | | |
| | Maximum Gas A Pressure Available | | | | | |
| | Gas B: % Gas B: | | | | | |
| | Maximum Gas B Pressure Available | | | | | |
| | Gas C: | % Gas C: | | | | |
| | Maximum Gas C Pressure Available | | | | | |
| ACC | CURACY | | | | | |
| | % (2-4% is standard; 1%, ½% and ¼% also available | | | | | |
| GAS | S SPECIFICATIONS | | | | | |
| | Blended Gas Capacity Required SCFH | | | | | |
| | Blended Gas Maximum Delivery Pressure PSIG | | | | | |
| ОТН | OTHER REQUIREMENTS | | | | | |
| | Gas Analyzer (choose one) | | | | | |
| | ☐ Hi-Lo Alarm with Horn (standard with analyzer) | | | | | |
| | ☐ Hi-Lo Alarm with Delivery Shutoff Option | | | | | |
| | ☐ Hi-Hi; Hi; Lo-Lo; Lo (4 Setpoint) Alarm with Horn and Delivery Shutoff | | | | | |
| | Choose one | | | | | |
| | ☐ 4-20 mA Output | | | | | |
| | 0-10 V DC Output | | | | | |
| | Explosion Proof Construction for Class I, Division II Hazardous Areas | | | | | |
| | Outdoor / Lockable Controls | | | | | |
| | Inlet Pressure Alarms | | | | | |

ACME 1000 SERIES PNEUMATIC, FIXED RATIO, THREE-GAS SPECIAL APPLICATION BLENDER (MIXER)

Engineered for on-site blending, the Acme 1000 Series Pneumatic Three-Gas Blender is specifically designed for on-site mixing of specialized red meat packaging mixes containing a fixed ratio of 0.4% CO, 30% CO₂ and 69.6% N₂.

The unit is supplied with three fixed orifices, which deliver the desired blend ratio. The supply gases are typically furnished in cylinders, dewars or small bulk tanks.

It features a pneumatic tank filling system that maintains tank pressure between high and low limits to provide consistent, accurate and repeatable blending.

A low inlet pressure alarm system consisting of three explosion-proof pressure switches rated for Class 1, Group C, Div. 2 for each inlet gas and a common remote audio-visual alarm module for wall mounting with a plug in 110 VAC power pack is included. The module requires no field wiring.

The unit is designed for indoor or outdoor applications and its compact size makes it easy to wall mount.

| Specifications | | | | |
|---------------------------|--|--|--|--|
| Flow Capacity | 0-500 SCFH* | | | |
| Inlet Pressure | 90-150 PSIG* | | | |
| Outlet Pressure | 0-50 PSIG* | | | |
| Accuracy/Repeatability | ± 4% / ± 2% | | | |
| Connections | 1/2" OD tube compression fittings | | | |
| Surge Vessel Size | 5 gallons, 304SS, ASME coded, horizontal | | | |
| Materials of Construction | brass/copper piping and valves | | | |
| Weight | 80 lbs | | | |
| Dimensions | 42"W x 34"H x 11"D | | | |

^{*}Process conditions are customizable

Optional Equipment

- NDIR (Non-Dispersive Infra Red) Gas Analyzer for CO with High and Low Outputs for Alarm and Shutdown
- Inlet and Outlet Filters
- Inlet, Outlet and Vent Valves
- Models with flow rates up to 10,000 SCFH

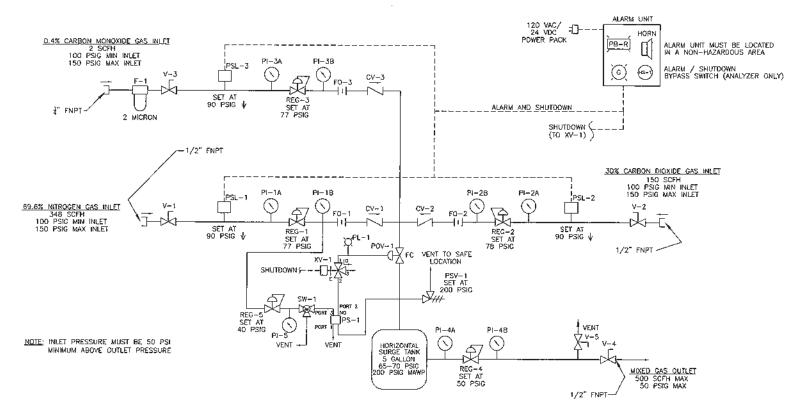




Note:

Proper safety precautions need to be taken with regard to Carbon Monoxide gas, as it is toxic. The precautions may include a gas cabinet with exhaust, loss of exhaust vacuum pressure alarm, gas detector with alarm and shutdown, and any other items necessary to meet local codes, or as determined by the fire marshal.

Unit P&ID



Ordering Information

| <u>ivioaei</u> | Capacity | <u>1 ype</u> | Gas IVIIX | <u>iviaterials of Construction</u> | <u>Optional Equipm</u> |
|----------------|-------------|---------------|---|------------------------------------|-------------------------------|
| 261 | 10 | 4 - Pneumatic | 16 - 0.4% CO | 0 - Brass / | 2 - Inlet Pressur |
| | (1000 SCFH) | (3 Gas) | 30% CO ₂ 69.6% N ₂ | Copper | Alarms |
| | | | | | 3 - Inlet Pressur Shutdown |
| | | | | | |

Ordering Example

Part Number 261-10416-0023 =

Acme 1000 Series Gas Blender, 1,000 SCFH, for Pneumatic, three gas applications of 0.4% CO/30% CO₂/69.6% N₂ Brass/Copper construction, and Inlet Pressure Alarms and Shutdowns

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6 - Inlet, Outlet and Vent Valves

7 - 65 psig Outlet Pressure

B - 110 PSIG Outlet Pressure

C - NDIR Analyzer

ACME MODEL CF-1200 AR

Constant Flow Adjustable Ratio Gas Blender

Engineered for on-site gas blending, the Modal CF-1200AR gas blender will mix two or more no reactive gas steams and achieve accuracy within +2% of the minor gas component.

The model CF-1200AR gas blender uses orifices and needle valves to control flow. Since accurate mixing depends on constant, fixed flows at the orifice and needle valve, the CF-1200AR gas blender is equipped with an accumulator or surge tank. As the gas in the tank is depleted, the pressure drops to a pre-determined level where constant flow blending automatically begins. When the higher pressure level is achieved, the unit automatically shuts off until the cycle is repeated.

Based on system demands, the model CF-1200AR gas blender can be custom sized and built to deliver a wide range of flow rates. This blender is equipped with inlet filters and pressure regulators, and can also be built with an automatic shutdown feature. This gas blender can be supplied with dual orifices for fixed ratio blending.

If large laboratory requirements for gas mixtures are anticipated, users should consider the CF-1200AR, as significant cost savings may be realized.

| Specifications | | | |
|--|----------------------------------|--|--|
| Flow Capacity | 0-4000 SCFH | | |
| Inlet Pressure | 100-150 PSIG | | |
| Outlet Pressure | 5-50 PSIG | | |
| Accuracy | ±2% (60-80°F) | | |
| Inlet Connection | ¾" FNPT connection | | |
| Outlet Connection | ¾" FNPT connection | | |
| Surge Vessel Size | 80 gallons, painted carbon steel | | |
| Weight | 350 lbs | | |
| Dimensions | 63"H x 36"W x 24"D | | |
| Min. Ambient and Process | 0°F | | |
| Max. Ambient and Process Operating Temperature 120°F | | | |

Ordering Information

See page 3 and contact factory for ordering information.



Features

- All Pneumatic Controls Suitable for Use in Class 1, Division II Hazardous Locations
- Weatherproof (from 0-120°F)
- ± ½% Blend Concentration Repeatability
- Continuous or Intermittent Blended Gas Delivery Flow

Optional Equipment

- Fixed Ratio (FR)
- Automatic Shutdown (optional)

Acme Model FMP-350

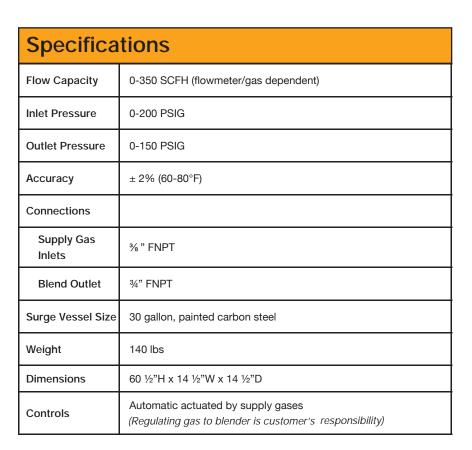
Flow Meter on Panel, Variable Ratio Gas Blender

The FMP-350 Gas Blender is designed to mix two or more non-reactive gas streams and achieve accuracy to within +/- 2% of its components. This unit is best utilized for low pressure/low flow and explosion proof applications.

Supply gas streams are monitored by built-in flowmeters, each equipped with an integral flow controller. Since accurate mixing depends on constant fixed flows at the flowmeters, varying blended gas demands must be met by the use of an accumulator or surge tank. By varying the flow rates, blends may be obtained in numerous varieties until the limits of the flowmeters are reached. The unit is equipped with direct reading scales to simplify blending.

Although pressure downstream of the blender may vary, the gas flow controllers maintain constant flows through the meter. Constant pressure is achieved by regulating the upstream flows.

Once the desired proportions are established, the FMP-350 will assure consistent blends on a start-stop basis.



Ordering Information

See page 3 and contact factory for ordering information.



Features

- Brass Construction with Carbon Steel Tank
- All Pneumatic (non-electric) Controls Suitable for Use in Class 1, Division II Hazardous Locations
- Visual Flowmeters for Component Gases
- Weatherproof
- Construction to Mix 2,3 or 4 Component Blends

Optional Equipment

The Model FMP-350 Gas Blender is fully customizable.

Contact Acme for additional options

- Automatic Shutdown Feature
- Inlet Filters/Regulators
- Dust Cover Enclosure

ACME 1000 SERIES VARIABLE RATIO GAS BLENDER (MINI-BLENDER)

Engineered for on-site blending, the 1000 Series gas blender is designed to mix two non-reactive gas streams and achieve accuracy to within +/- 4% of the minor gas component.

The unit is supplied with a calibrated mixing valve, which will deliver the desired blend ratio at the percentage indicated on the blender front panel. The supply gases are typically furnished in cylinders, dewars, or small bulk tanks. In a typical application of providing shield gas for welding processes, the 1000 Series gas blender can supply between 14 and 50 welding stations.

The unit is designed primarily for indoor applications and its compact size makes it easy to wall or bench mount. One of the main features of this blender is its simplicity of operation. Controls consist of an on-off switch and a mixture ratio selector.



| Specifications | | | | |
|--------------------------|------------------------------------|--|--|--|
| Flow Capacity | 1000 SCFH (1500 optional) | | | |
| Inlet Pressure | 100-250 PSIG | | | |
| Outlet Pressure | 5-50 PSIG (5-100 optional) | | | |
| Accuracy / Repeatability | ± 4% / ± 2% (60-80° F) | | | |
| Connections | ½" OD tube compression fittings | | | |
| Surge Vessel Size | 5 gallon, carbon steel, ASME coded | | | |
| Weight | 60 lbs | | | |
| Dimensions | 20"W x 32"H x 11"D | | | |

Ordering Information

See page 11 for ordering matrix.

Features

- Indoor/Outdoor Construction
- Electric Controls with 115 VAC, 60 Hz, 1.0 Amp Supply
- Direct Reading Mixing Valve
- Tank Filling Indicator
- Lockable Controls
- Wall or Table Mounted
- Simple, Field Proven Design

Optional Equipment

- Low Pressure Shutdown
- Heat Exchanger for Temperature Compensation
- Customized Blender Options
- Completely Pneumatic Control System
- Alternate Gas Combinations
- Fixed Gas Percentage Models
- Extra Long Life Solenoid Valve
- 30 Gallon Vertical Tank (1500 Series)

ACME 1000 SERIES THREE GAS BLENDER (FIXED RATIO)

Engineered for on-site blending, the Acme 1000 Series gas blender is designed to mix three non-reactive gas streams and achieve accuracy to within +/- 4% of the minor gas component.

The unit is supplied with a calibrated mixing valve, which will deliver the desired blend ratio and the percentage indicated on the blender front panel. The supply gases are typically furnished in cylinders, dewars or small bulk tanks.

The unit is designed for indoor or outdoor applications and its compact size makes it easy to wall or bench mount.

In a typical application of providing shield gas for welding processes, the 1000 Series blender can supply between 14 and 50 welding stations.

| Specifications | | | | |
|--------------------------|------------------------------------|--|--|--|
| Flow Capacity | 350-1500 SCFH | | | |
| Inlet Pressure | 100-250 PSIG | | | |
| Outlet Pressure | 5-50 PSIG (5-100 PSIG Optional) | | | |
| Accuracy / Repeatability | ± 4% / ± 2% (60-80° F) | | | |
| Connections | ½" OD tube compression fittings | | | |
| Surge Vessel Size | 5 gallon, carbon steel, ASME coded | | | |
| Weight | 60 lbs | | | |
| Dimensions | 20" W x 32" H x 11" D | | | |

Ordering Information

See page 8 for ordering matrix.



Features

- Indoor/Outdoor Construction
- Electric Controls with 115 VAC, 60 Hz, 1.0 Amp Supply
- Direct Reading Mixing Valve
- Tank Filling Indicator
- Lockable Controls
- Wall or Table Mounted
- Simple, Field Proven Design

Optional Equipment

- Low Pressure Shutdown
- Heat Exchanger for Temperature Compensation
- Customized Blender Options
- Completely Pneumatic Control System
- Alternate Gas Combinations
- Fixed Gas Percentage Models
- Extra Long Life Solenoid Valve
- 30 Gallon Vertical Tank (1500 Series)

ACME 1000 SERIES GAS BLENDER ORDERING INFORMATION

| Model | Capacity | Туре | Gas Mix | Optional Equip | <u>oment</u> | | |
|-------|-----------------------------|--------------------------|--|------------------------|---|-----------------------------------|--|
| 261 | 10 (1000 SCFH) | 1 - Electric (2 Gas) | 1 - (0-40%) CO ₂ /Ar | 0 - Brass / Copper | 0 - Standard Solenoid | 0 - Wall Mount (Standard) | |
| | 15 (1500 SCFH, | 2 - Electric (3 Gas) | 2- (0-40%) O ₂ /Ar | 1 - Stainless Steel | Valve | 1 - Bottom Mount (Table Shelf) | |
| | 30 Gallon Vertical Tank) | 3 - Pneumatic (2 Gas) | 3 - (0-10%) He/Ar | 2 - UHP | 1 - Long Life Solenoid | 2 - Inlet Pressure Alarm(s) | |
| | | 4 - Pneumatic (3 Gas) | 4 - (0-50%) CO ₂ /N ₂ | | Valve | 3 - Inlet Pressure Shutdown(s) | |
| | | | 5 - (0-50%) N ₂ /CO ₂ | | | 4 - Outlet Pressure Alarm | |
| | | | 6 - (0-15%) H ₂ /N ₂ | | | 5 - Outlet Pressure Shutdown | |
| | | | 7 - (0-10%) O ₂ /Ar | | | 6 - Inlet Heat Exchanger(s) | |
| | | | 8 - (0-15%) H ₂ /Ar | | | 7 - Inlet, Outlet and Vent Valves | |
| | | | 9 - (0-50%) H ₂ /Ar | | | 8 - 80 PSIG Outlet Pressure | |
| | | | 10 - 90% Ar / 8% CO ₂ 2% O ₂ | | | 9 - 100 PSIG Outlet Pressure | |
| | | | 11 - (0-50%) H ₂ /N ₂ | | | | |
| | | | 12 - (0-10%) CO ₂ /Ar | | | | |
| | | | 13 - (0-25%) CO ₂ /Ar | Ordei | Ordering Example 261-1013-004= 1000 Series Gas Blender, 1000 SCFH, Electric, 2 | | |
| | | | 14 - (0-5%) H ₂ /N ₂ | 1000 \$ | | | |
| | | | 15 - 5% CO ₂ 95% Ar | Brass/ | Model for a Mixture of Helium and Argon, featuring Brass/Copper Construction, Standard Solenoid Valued and Outlet Pressure Alarm | | |

Note: Other configurations and gas services available. Consult Acme for details. Customer must indicate fixed or variable ratio models (as applicable) upon ordering.

ACME GENERATION TWO VARIABLE RATIO GAS BLENDERS

Variable ratio gas blenders are engineered for on-site mixing of industrial gases to the close tolerances demanded by the industry today. Accuracy is within +/-2% of the maximum blend range.

Generation Two blenders come equipped with an integral analyzer. A convenient control panel display of pressures and gas mixture percentage make them easy to operate.

methods. The gases are blended as desired and then distributed through the pipeline system to welder stations or other process equipment. The mixture remains consistent regardless of withdrawal rate, as long as operating parameters remain constant. These gas blenders

provide the ability to change blends when desired and offer significant cost savings over premixed gas cylinders.

Generation Two gas blenders are a good choice for customers who want solid performance for a variety of flow capacities at an economical price.

Acme maintains existing designs as standards for these gas blender models. We can also adapt our existing designs to fit users' requirements.

| Specifications | | | |
|-------------------|--------------------------------|--|--|
| Flow Capacity | See next page | | |
| Inlet Pressure | 100-250 PSIG (6.9 to 20-6 bar) | | |
| Outlet Pressure | 5-50 PSIG | | |
| Accuracy | ± 2% (60-80° F) | | |
| Surge Vessel Size | See next page | | |
| Weight | See next page | | |
| Dimensions | See next page | | |
| Temperature Range | | | |
| Outdoor Models | 10°F (-23°C) to 104°F (40°C) | | |



Features

- Lockable Controls
- Indoor/Outdoor Construction
- Flow Capacities from 2,000 -10,000 SCFH
- Long Life Digital Pressure Switches
- Liquid-filled Pressure Gauges
- Alarm Horn with Acknowledge/Silence Button
- Tank Filling Indicator
- Front Control Panel Display
- 115 VAC, 60 Hz, 2.0 Amp Electrical Supply
- Electronic Pressure Switch (>3 times the life of standard switches)
- Front Access for All Controls
- Modular Alarm / Control Section
- User Programmed Hi/Lo Analyzer Alarm
- Tank Filling Indicator



ORDERING INFORMATION GENERATION TWO VARIABLE RATIO GAS BLENDER

| Series / Model | Nominal Capacity | Surge Tank Size | Weight (approx.) | Dimensions LxWxH | Connections |
|----------------|------------------|-----------------|------------------|---------------------|--------------|
| 2,000 | 2,000 SCFH | 30 Gallon | 325 lbs. | 40" x 36" x 24" | ½" FNPT |
| 5,000 | 5,000 SCFH | 60 Gallon | 525 lbs. | 51" x 36" x 24" | ¾" FNPT |
| 7,500 | 7,500 SCFH | 60 Gallon | 525 lbs. | 51" x 36" x 24" | ¾" - 1" FNPT |
| 10,000 | 10,000 SCFH | 120 Gallon | 725 lbs. | 71" x 36" x 24" | 1" FNPT |

| Model | Capacity | <u>Type</u> | Gas | Option(s)*** |
|---|------------------------|------------------------|---|---|
| 261 - | 20 (2,000 Series) | 1 - Indoor | 1 - (0-30%) CO ₂ /Ar* | 001 - Dual Alarm Setpoints with Horn and Automatic Shutdown |
| | 50 (5,000 Series) | 2 - Outdoor | 2 - (0-10%) O ₂ /Ar* | 002 - Quad Alarm Setpoints with Horn |
| | 75 (7,500 Series) | 3 - Explosion Proof | 3 - (0-50%) He/Ar* | 003 - Quad Alarm Setpoints with Horn and Shutdown on Two Alarm Points |
| | 100 (10,000 Series) | | 4 - (0-50%) CO ₂ /N ₂ * | 010 - Dual Alarm Setpoints with Horn and Inlet Pressure Alarm |
| | | | 5 - (0-50%) N ₂ /CO ₂ * | 011 - Dual Alarm Setpoints with Horn, Auto. Shutdown and Inlet Pressure Alarm |
| * Gases marked with one asterisk are available with Indoor, Outdoor and Explosion Proof models. ** Gases marked with two asterisks are available with Explosion Proof models only. *** Standard models come equipped with Dual Alarm Setpoints with Horn. | | | 6 - (0-15%) H ₂ /N ₂ ** | |
| | | | 7 - (0-10%) H ₂ /Ar** | |
| | | | 8 - (0-10%) H ₂ /He** | |
| | | | 9 - (0-50%) CO ₂ /Miso** | |
| | | | 8 - (0-30%) Ar/He** | |

Ordering Example

261-5022-002 =

5000 Series Gas Blender, Outdoor Construction, for a Mixture of Oxygen and Argon with Quad Alarm Setpoints and Horn

Custom Gas Blenders

ACME GAS BLENDER CUSTOMIZATION AND CUSTOM GAS BLENDER OPTIONS

Beyond the options highlighted in the individual sections, Acme can completely customize blenders to meet users' specific needs. Accessories and accessory kits are available for all gas blenders listed. Acme can provide anything from the gas blending unit itself up through and including complete installation with alarm panels, gas manifolds and all distribution piping.

Acme can also supply completely customize configurations ranging from blend panels, to toxic gas service, to specialty gas blending systems. Higher operating pressures than those listed are also available as options on most Acme gas blenders

Please also note that Acme can provide gas blenders with any manufacturer's analyzer to meet customer requirements and preference.

| Custom Examples | |
|------------------------------|---|
| Power Failure Configurations | Certain process applications such as heat-treating furnaces may require uninterrupted flow in case of a power loss. Gas blenders can be configured to control back-up or bypass gas supplies that will automatically flow in these cases. |
| Back-up Gas Supply Sources | Process upsets, such as a low or high gas supply pressure, can cause gas blenders to produce "out of spec" gas concentrations. Acme can configure blenders to control back-up gas supplies and automatically stop flow from the blender and start flow from the back up source if the analyzer indicates an out of spec alarm condition. |
| Alarm Relay Input and Output | The performance of gas blenders can be affected by upstream process upsets, which can directly affect downstream equipment. Acme can configure gas blender models to work in conjunction with other equipment in a systems approach. Low pressure alarms from the upstream gas supply source can be fed into the gas blender controls to stop the production of mixed gas before the inlet pressure decays to the extent that output will be affected. Likewise, the unit's alarm outputs can be used to control the operation of downstream equipment such as pumps, that should not run without a sufficient or correct gas supply. |
| Remote Indicating Panels | The available space for a gas blender installation may be such that the unit is not conveniently located near the personnel who monitor it. Acme can supply remote indicating panels to directly communicate system status to a more convenient location. |
| Explosion Proof Models | Acme offers gas blender models with explosion proof construction to ensure safe handling of explosive gases. Applications that may require explosion proof construction include heat treating/furnace and welding, typically plasma welding. Specific processes include: annealing steel coils, copper and brass; brazing; glass metal seals; oxide coating of steel; and sintering. Explosion proof models meet applicable NFPA standards. |

Custom Gas Blenders

ACME GAS BLENDER CUSTOMIZATION AND CUSTOM GAS BLENDER OPTIONS

Construction Capabilities

Acme can manufacture blenders to meet users' most demanding requirement. The capabilities and features we offer can be combined and modified to create a custom unit to meet user specifications.

Custom Features

- Flow Capacities from 350 SCFH to Over 15,000 SCFH
- Completely Pneumatic Models (without analyzers)
- Adjustable 3 and 4 Gas Blending Applications with Gas Analysis
- Multiple Gas Analysis Methods from Reliable Industry Names
- Suited to Specific Applications
- Toxic, Corrosive and Explosive Construction
- Specialty Gas and High Purity Designs

Special Certifications

- Construction of Type Z or Type X Purges for Use in Class 1,
 Division 1 or II Hazardous Areas
- UL Listing
- National Fire Protection Association (NFPA) Compliance



Explosion Proof Generation Two 2000 Series blender with Type Z purge and customized pressures/features

Contact Acme for more information.



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