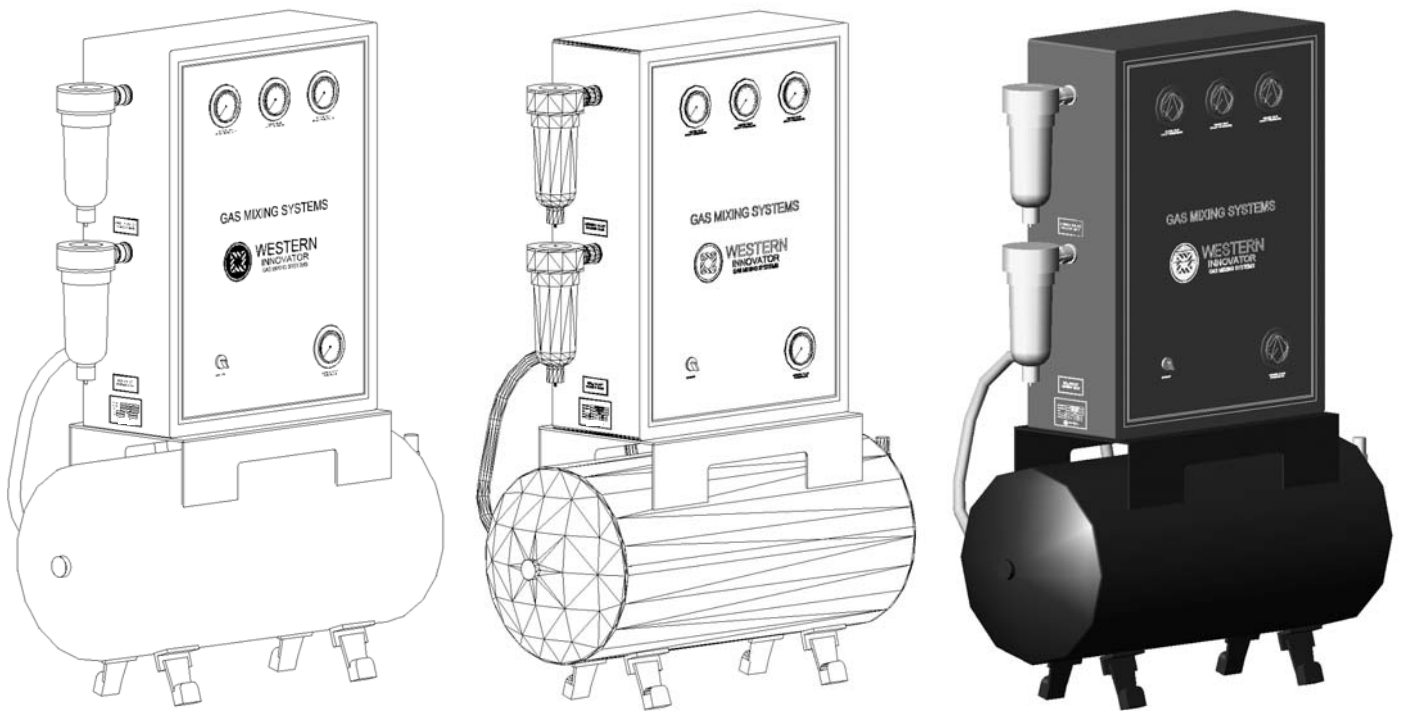


# Fixed Ratio Gas Mixers 3600 scfh



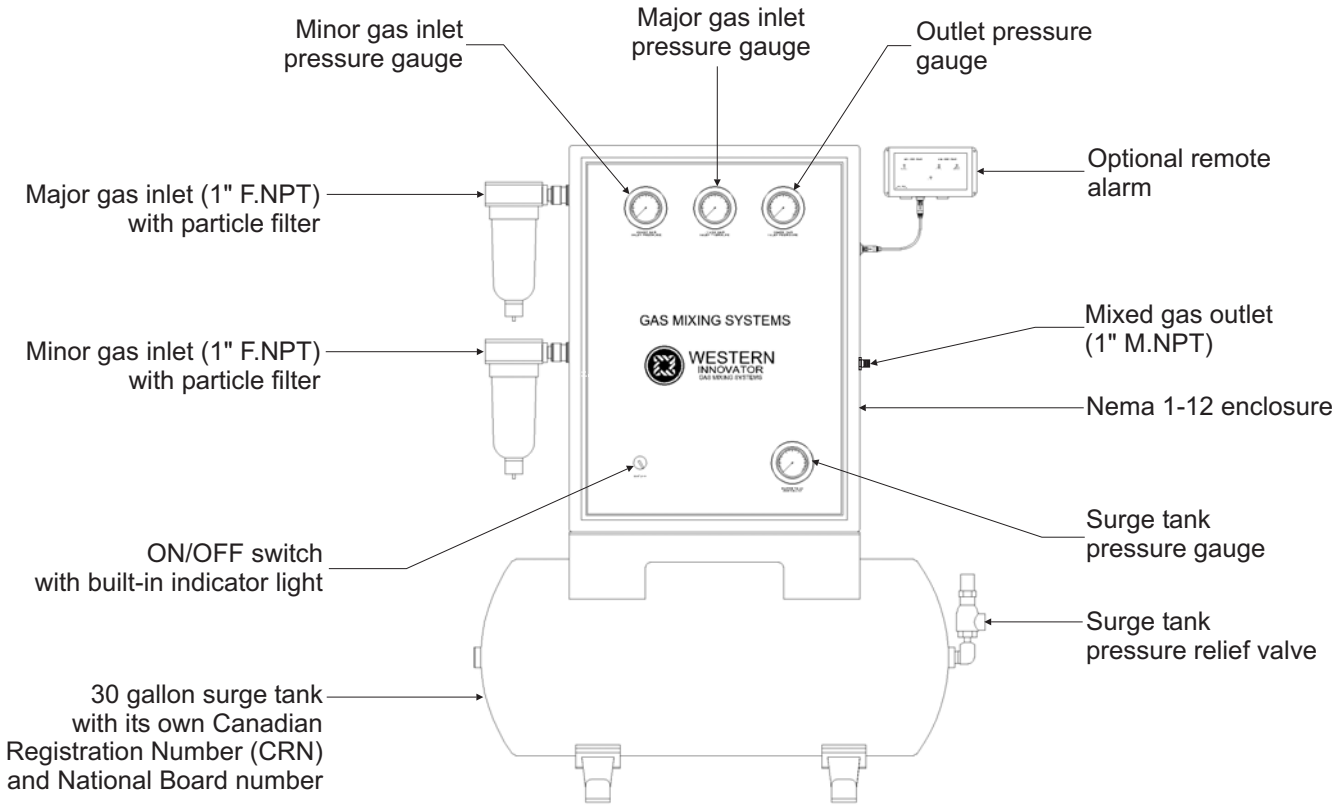
Innovative solutions for all your gas delivery needs



# FIXED RATIO GAS MIXERS

## 3600 SCFH

3600  
SERIES



### Description - 3600 scfh mixers

The FRM3600 is a fixed ratio gas mixer for argon, carbon dioxide, helium, nitrogen, and oxygen. The mixer is suitable for different applications; such as welding, modified atmosphere packaging, process control and other similar applications. The gas mixture is preset at the factory. The gas mixture can be changed in the field with the assistance of a gas analyzer. The FRM3600 gas mixer will deliver a constant gas mixture concentration, up to 3600 scfh while the mixer is still cycling.

### Key Features

- Mixer is still cycling at 3600 scfh
- Optional remote alarm for low supply gas pressures
- Provides an economical supply of mixed gases
- Accurate mixing of two gases
- Simple and reliable construction
- Fabricated in accordance with the following standards: CGA, CSA, CRN, NFPA, ASME
- Designed for large applications
- Require bulk gas supply

### How to order - part number matrix

**FRM3600** - [ ] - [ ] - [ ] - [ ]

Series  
FRM3600 = Fixed

Major gas  
See gas selection table

Minor gas

Minor gas concentration  
setpoint

Remote alarm  
■ RA = Remote alarm  
(Leave blank if none)

Gas selection table

- Argon = 3
- Carbon dioxide = 4
- Helium = 5
- Nitrogen = 7
- Oxygen = 9

Refer to technical specifications for acceptable gases and related concentrations

Contact Technical Sales 800.783.7890



# FIXED RATIO GAS MIXER 3600 SCFH FRM3600 SERIES TECHNICAL SPECIFICATIONS

## Principle of operation

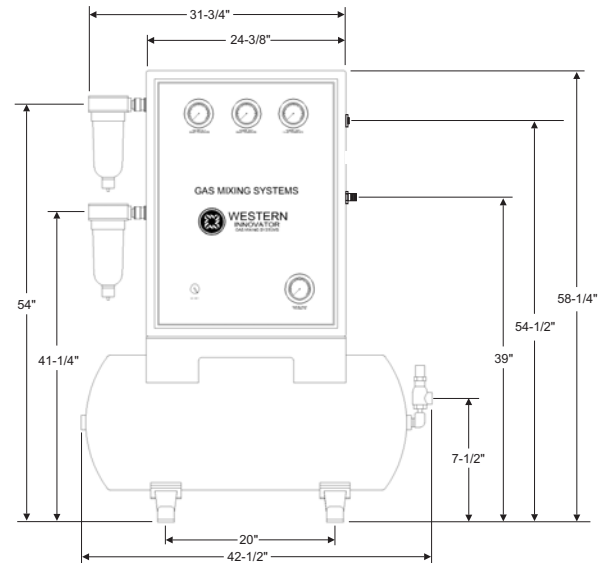
The supply gases are individually filtered at the inlet of the mixer to remove particles. The pressure of each gas is then regulated at the exact same pressure before entering their respective flow restrictors. The flow restrictors are adjusted to ensure the requested gas mixture. The gases are blended in a mixing tee before entering the surge tank. The tank is constantly monitored by a pressure switch which actuates the solenoid valve on & off to allow the mixture to fill the surge tank at a constant pressure and flow. The mixture pressure is controlled by a line regulator before entering the pipeline.

## Technical specifications

### Description

Available mixtures	0-100% CO <sub>2</sub> in Argon 0-100% Oxygen in Argon 0-100% Helium in Argon 0-100% Nitrogen in Argon 0-100% CO <sub>2</sub> in Nitrogen 0-100% Oxygen in Nitrogen 0-100% Helium in Nitrogen
Flow capacity	3600 scfh (still cycling)
Operating temperature	-28,9°C to 37,8°C (-20°F to + 100°F)
Maximum inlet pressure	250 psig
Factory set inlet pressure	100-125 psig
Maximum outlet pressure	50 psig
Size of pressure gauges	2-1/2"
Surge tank pressure relief valve	150 psig
Outlet connection	1" M.NPT
Inlet connections	1" F.NPT
Filtering element	40 micron
Tank capacity	30 gallons
Alarm	Optional
Power requirements	115 VAC, 50/60 Hz, 5 Amp.
Mixture accuracy	+/- 2% of minor gas

## Dimensions



## Standard materials of construction

### Description

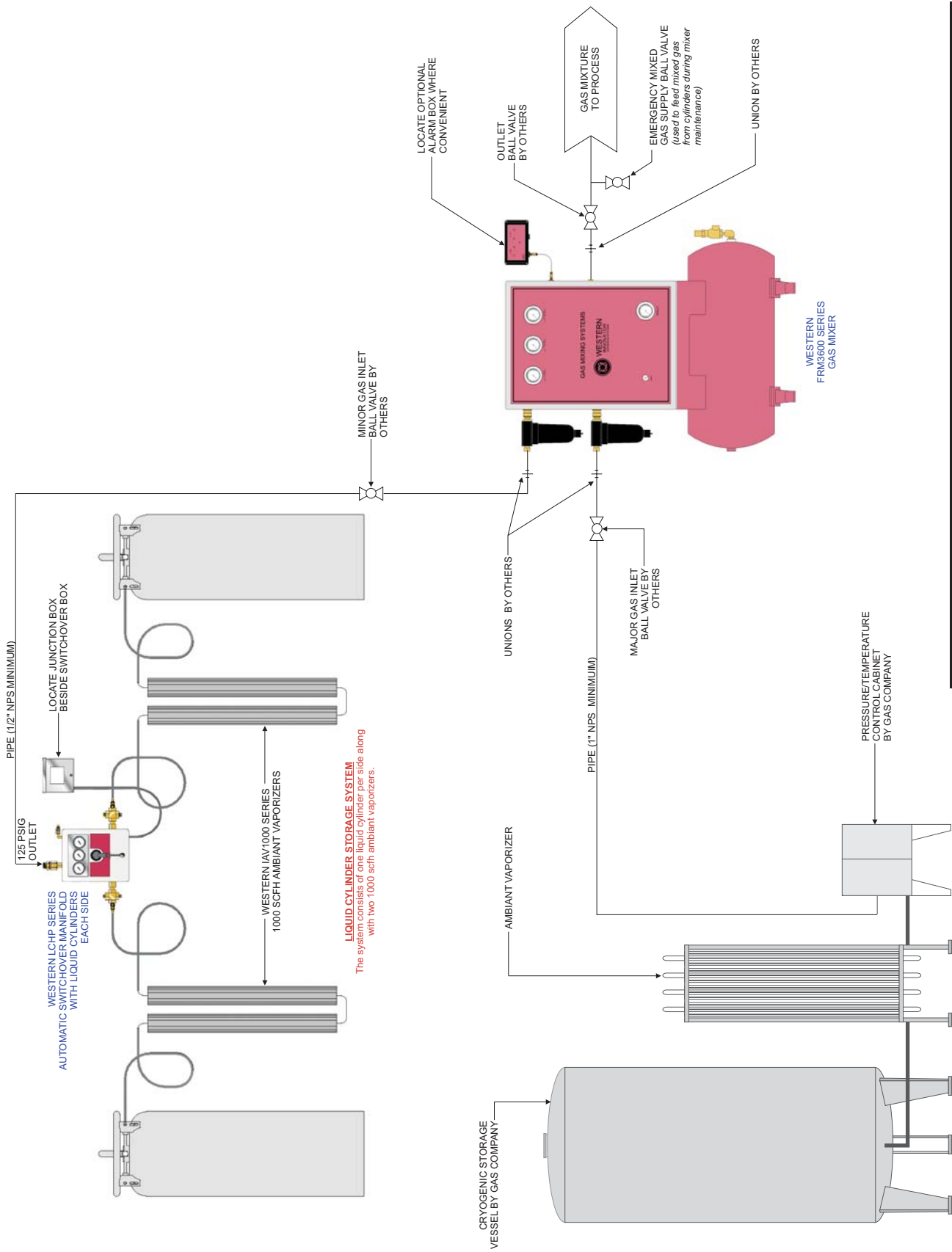
Tank	Steel (burgundy)
Enclosure	16 or 14 gauge steel (beige)
Fittings	Brass (CDA 36000, CDA 37700)
Tubing	Copper (ASTM B280) and stainless steel 304
Regulators	Body: aluminum or brass Bonnet: aluminum or zinc Valve: brass Elastomers: nitrile Bottom plug: acetal - Diaphragm: neoprene or EPDM or nitrile
Filters	Body & bowl: zinc Element: sintered polypropylene Elastomers: neoprene & nitrile



## Western Enterprises

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 Web-site: [www.westernenterprises.com](http://www.westernenterprises.com)

Hours: Monday- Friday 8:00 AM to 5:00 PM / Eastern Standard Time



# Typical Installation - FRM3600

**BULK GAS STORAGE SYSTEM**  
 It consists of a cryogenic storage vessel with an ambient vaporizer and a pressure/control manifold. Your gas supplier will select the best possible system based upon your consumption pattern.