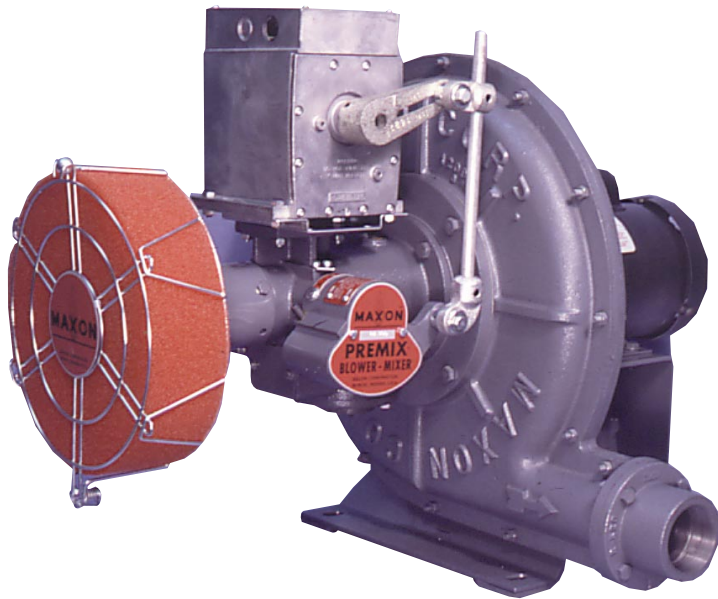


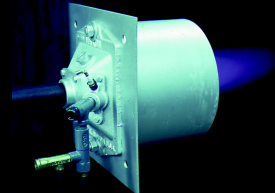
PREMIX® Blower Mixers



PREMIX® Blower Mixer shown with electric control motor (by others), optional connecting base and linkage assembly, and combustion air filter assembly

- **Mechanical device for producing an air/gas mixture** using most clean, low pressure fuel gases
- **Air/gas ratio control** at all firing rates
- **Includes electric motor** and non-loading paddle-wheel impeller in cast iron blower case
- **Integral ratio valve** provides thorough air/gas mixing
- **Optional stand-by fuel arrangement** allows changeover to alternate gaseous fuels
- **Single point firing rate control** to single or multiple burners
- **Low initial and operating costs** through use of lower horsepower motor
- **Application flexibility** provided with over 70 different models and sizes
- **Heat releases** up to 10,500,000 Btu/hr

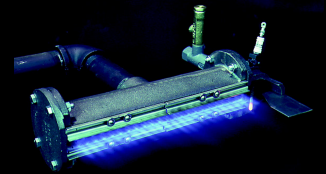
Premix Burner Systems



SN Sealed Nozzles



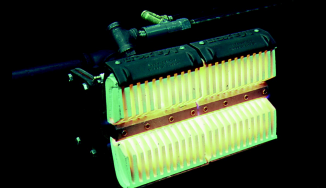
STICKTITE® Nozzles



Style A & B
LINOFLAME® Burners



VFL & VFH
LINOFLAME® Burners



INFRAWAVE® Burners



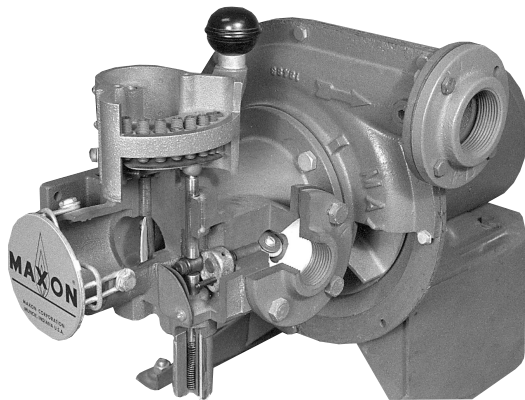
PREMIX® Blower Mixers

Principle of Operation

PREMIX® Blower Mixers consist of a ratio valve and blower. Air for combustion is drawn in through the ratio valve where it can be throttled.

That same ratio valve includes a gas butterfly valve cross linked to the air valve. A multiple-screw cam design permits fuel flow to be matched to air flow at each firing position.

This gives excellent control and allows on-ratio firing. If the application calls for it, ratio may be made oxidizing or reducing at any point within the burner firing range.



The mixer must be matched to the discharge areas and mixture pressure requirements of the burners used.

Any clean gaseous fuel (500-3200 Btu/ft³) can be used. Only 2" to 8" wc supply pressure is necessary at the mixer.

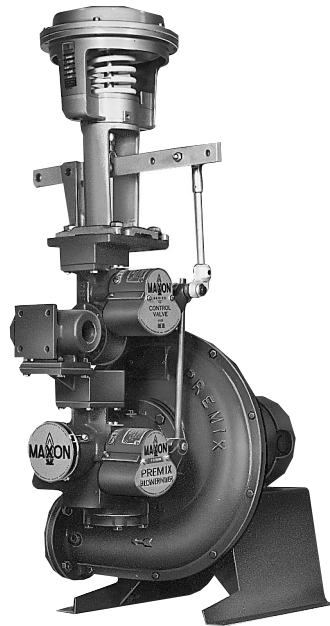
Combustible mixture may be piped to single or multiple burners, but should **not** be throttled downstream of the mixer.

Typical applications for PREMIX® Blower Mixer systems have included:

- metal melting in pots and crucibles
- solution heating
- grain dryers
- direct flame polishing of glassware
- miscellaneous air heating applications in nearly every industrial marketplace

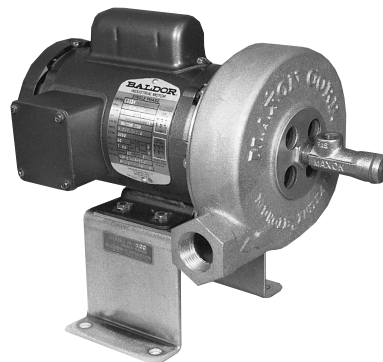
Earlier versions of the PREMIX® Blower Mixer have been in use since 1917.

Stand-by fuel arrangement (using Series "Q" Control Valve) provides a means to easily use alternate fuel without re-adjustment.



PREMIX® Blower Mixer with stand-by fuel arrangement

Series "M" Miniature PREMIX® Blower Mixers provide a low cost alternative for smaller heating applications requiring "on-off" firing.



M-100 Miniature PREMIX® Blower Mixer

Miniature PREMIX® Blower Mixers consist of an adjustable fuel orifice and blower. Air for combustion is drawn in through an adjustable air shutter.

An adjustable gas orifice valve permits fuel flow to be matched to air flow for on-ratio firing. The ratio may be made oxidizing or reducing within the firing limits of the particular burner type used.

