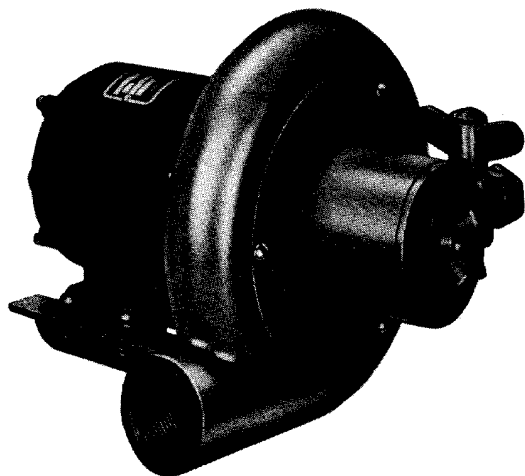


ECLIPSE MINIMIXER®



DESCRIPTION

The Eclipse Minimixer is a miniature fan-type mixer for producing an air/gas mixture and delivering it under pressure to a burner or series of burners.

The Minimixer is normally used for small industrial heating applications or for piloting installations where a blast pilot is desired and there is no other source of pressure air available.

The Minimixer provides an inexpensive method of firing installations at inputs up to 215,000 BTU/hr. (See Capacity Chart below.) Firing can be either fixed rate, or automatic on-

off control can be provided by installing a solenoid valve (Bulletin M-500) in the gas line feeding the mixer.

Burner nozzles that may be used satisfactorily with the Minimixer include Cumapart® pilot tips (Bulletin P-80), Sticktite and Ferrofix nozzles (Bulletin H-22), Blast tips (Bulletin H-21), Line Burners (Bulletin H-17), Infra-Glo® Burners (Bulletin H-18), Infra-Rad® Burners (Bulletin H-18-1), or most any other open blast burners within the Minimixer capacity range.

DESIGN FEATURES

Air input is controlled by an adjustable disc-type shutter that can be easily locked in any desired position by a convenient wing nut. Gas input is accurately regulated with an adjustable orifice incorporated in the inlet gas cock. Inlet gas pressure of 4" W.C. is adequate to give full rated capacity.

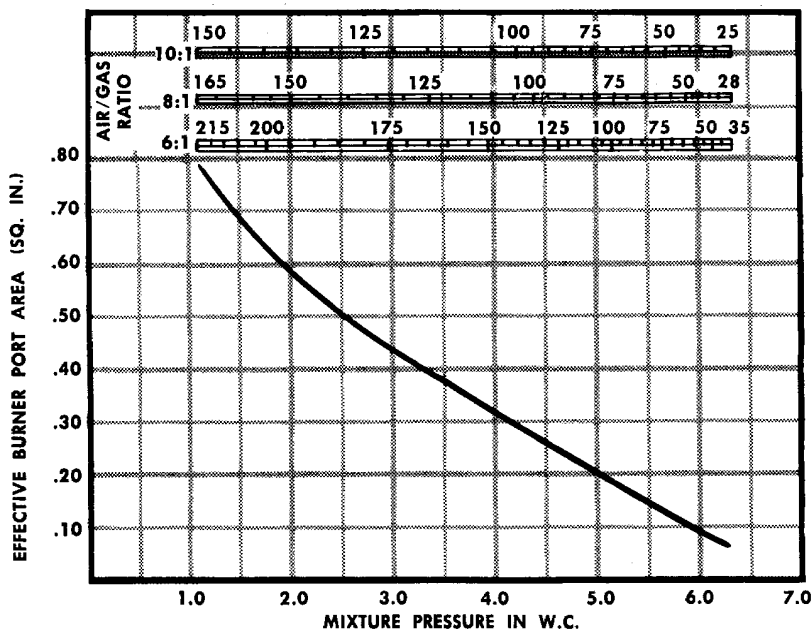
CONSTRUCTION

The Minimixer incorporates a small blower constructed of cast aluminum and employing an open frame 1/25 HP, 5000 RPM, universal series wound motor.

The Minimixer can be mounted in any desired position. The gas inlet can be rotated in 90° increments, providing choice of four different inlet positions.

CAPACITIES

Btu/hr. x 1000 — Using Nat. Gas — 0.65 Sp. Gr.



Coefficients of Discharge of Eclipse Burners

Ferrofix Nozzle	— .75	Cumapart Pilot Nozzle	— .79
Sticktite Nozzle	— .80	Multiport Blast Tips	— .65
100 Series Sticktite	— .83	Line Burners	— .70

HOW TO USE CAPACITY CHART

EXAMPLE: The Minimixer is to be used to supply air/gas mixture to three # 3 CP 3/4" Pilot Nozzles. Pilots are being used on open burners and air/gas ratio will be approximately 8 to 1.

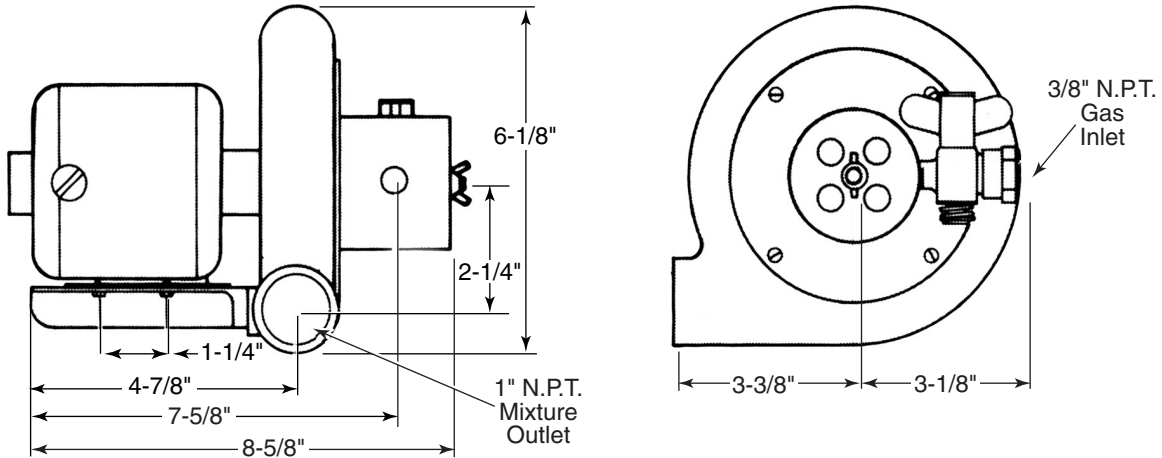
- Determine total effective port area of nozzles. Effective port area = nozzle port area (from Bulletin P-80) x coefficient of discharge (see table) x 3 (number of nozzles). $.0920 \times .79 \times 3 = .2180$ square inches.
- Locate effective port area in left hand column on capacity chart and follow horizontal line to capacity curve. Directly below this point, read mixture pressure developed. Directly above this point, read capacity on the 8:1 air/gas ratio scale. Mixture Pressure = 4.75" W.C. Total Capacity = 87,000 BTU/hr.

Note: when using multiple nozzles, capacities may be reduced somewhat depending on piping arrangement.



Eclipse Combustion

DIMENSIONS
Imm - 1/24 - 1/25



TYPICAL APPLICATIONS

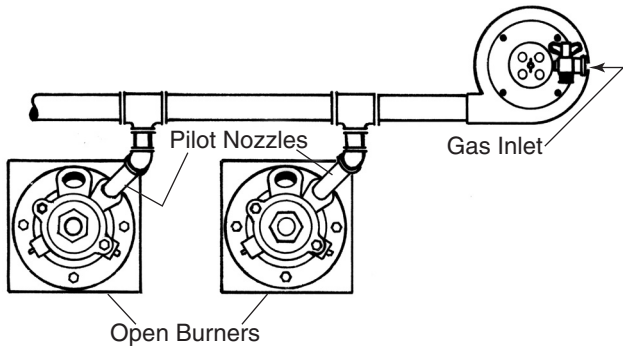


Figure 1 Piloting The Mimixer provides an excellent method of supplying air/gas mixture to pilots on those installations where blast pilots are desired and no other source of pressure air is available. Air/gas ratio is easily set by adjustment of Minimixer air shutter and/or adjustable orifice in inlet gas cock.

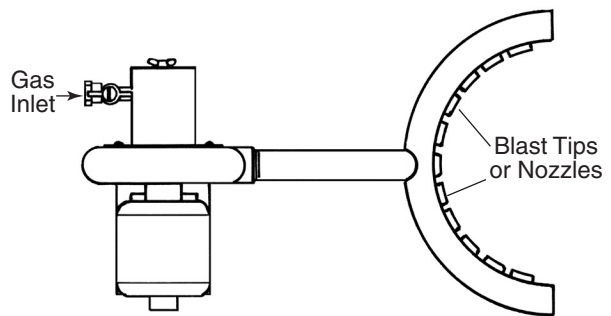


Figure 2 Localized Heating Eclipse blast tips or nozzles (Bulletins H-21 and H-22) can be mounted in manifolds of practically any desired shape, and with air/gas mixture being supplied by a Minimixer, makes an ideal system for localized heating applications. Minimixer with single nozzle forms an inexpensive torch burner for foundry mold drying and similar uses.

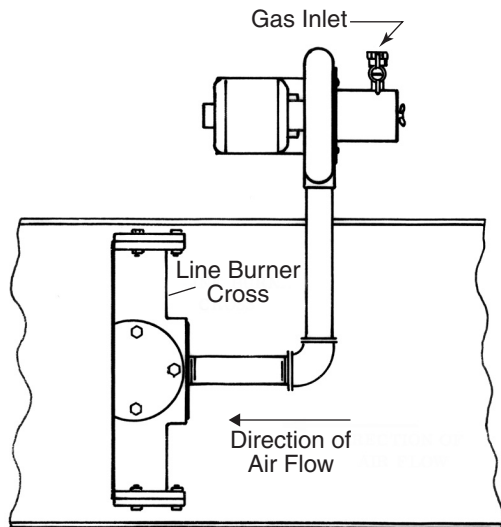


Figure 3 Small Air Heater Minimixer, used in conjunction with line burners (Bulletin H-17), forms an excellent small capacity combustion system for air heating installations. System may fire at either a fixed rate or be controlled off-on automatically by installing a solenoid valve (Bulletin M-500) in the gas line feeding the mixer.

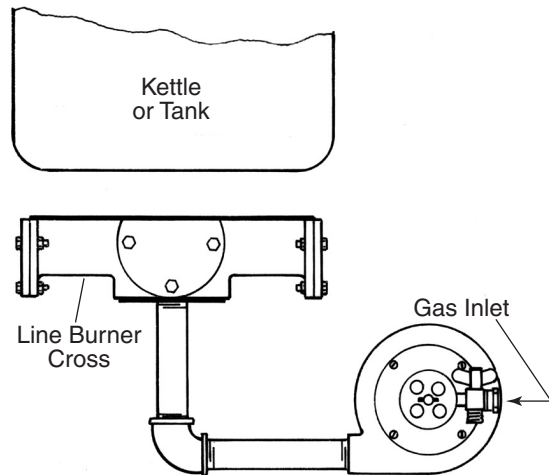


Figure 4 Kettle Heating A simple, inexpensive blast system for underfiring small kettles, pots, or tanks is made up by using line burners (Bulletin H-17) with Minimixer. Burners using Minimixer can be piloted with atmospheric pilot, or direct-spark ignition can be used if desired.



Eclipse Combustion



Offered By:

Power Equipment Company
2011 Williamsburg Road
Richmond, Virginia 23231
Phone (804) 236-3800
Fax (804) 236-3882

www.peconet.com