

# Series "MG" Mixing Tubes

## Fuel gas / air mixers



- **Air/fuel gas mixing devices** for use with all MAXON premix burner systems to provide thorough blending of air/gas mixture.
- Mixing tubes available for mixing of **air/natural gas**, tubes with special inserts for **air/LPG**, on request tubes for any other combination of gasses.
- Operates with **low air** and fuel pressures.
- May be used with **single or multiple burner systems**.
- The mixing tubes combine **fuel jet** mixing, **vortex** mixing and **swirl** mixing to guarantee best mixture **homogeneity**.
- Diameters from **2"** to 16" for capacities from 85000 Btu/h up to and over 24 MBtu/h.
- Flanged air inlet and mixture outlet to meet the most stringent codes for fuel gas piping connections.
- 100 % **carbon steel**, optional available in 100 % **stainless steel**.

## Principle of operation

### Fuel gas and mixture types

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Standard "MG" mixing tubes are for the mixing of natural gas and air. LPG-versions (propane, butane or LPG) will use different nozzle insert to have best mixing quality. Special inserts for other gasses or special tubes for other mixtures than fuel/air can be supplied on request.

Partly evaporated hydrocarbons to be mixed with air will not give satisfactory mixture quality – make sure only 100% gaseous fuels (not partially liquid) are fed to the mixing tube fuel inlet.

### Maximum pressure and temperature

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Standard "MG" mixing tubes have maximum operating pressure = 7.25 ps. Maximum temperature is 140° F. On request, mixing tubes for higher pressures (with PED-certification) or higher temperatures can be supplied.

### Bypass connection

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All mixing tubes have a bypass connection that can be used to inject extra gas in the mixer for burners that require richer mixture at start-up. Bypasses have drilled orifices to allow 30% extra natural gas (50% extra for propane/butane/LPG) if connected to the same supply pressure as the nozzle insert .

### "MG" mixing tubes with burner nozzles type STICKTITE™

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The fuel/air mixture downstream of the "MG" mixer will still have some swirl in it. Burner nozzles, such as STICKTITE™, can be used in combination with "MG" mixing tubes only if an additional straightener is located between the mixer and the burner nozzles to stop this swirl before the mixture enters the burner nozzle (the mixture swirl could influence flame shape, combustion quality and stability of these burners).