

**Special Electrical Construction:** The gas mixer constitutes a Class I, Division 2, Group B hazardous location. The design meets the N.E.C. for that location. Local codes should be consulted concerning the installation.

Any additions or changes in the electrical components or wiring of components on this equipment must meet the National Electrical Code and Local Codes for a Class I, Division 2, Group B area. No changes in the flow components or piping should be made to change the classification from Division 2 to Division 1.

Adequate ventilation should be provided to prevent the accumulation of flammable gases in the event of a leak.

Do not install the gas mixer directly under ordinary electrical equipment with arcing contacts or other sources of ignition. In the unlikely case of a hydrogen leak or the leak of other gases lighter than air, the flammable gas will rise above the gas mixer.

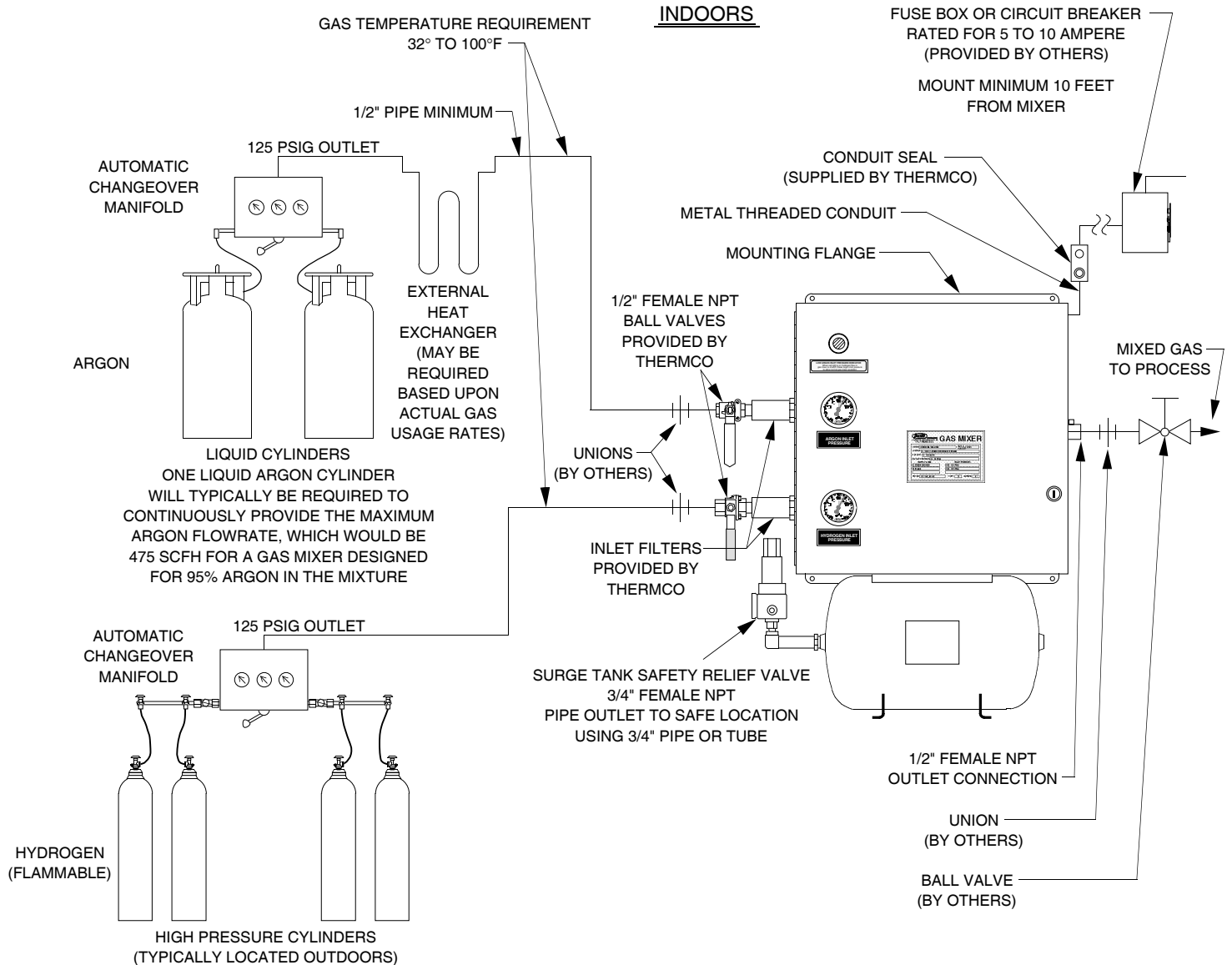
**Power Requirements:** Gas mixers made for installation in the U.S., Canada, and Mexico will require 115 VAC (± 10 VAC), 60 Hz, 1ø. For gas mixers for other locations, see the instruction manual for power requirements.

**Piping Notes:** Piping should be chosen with consideration for the pressure and chemical nature of the gas and sized large enough to deliver the proper pressure to the gas mixer under flowing conditions. Piping for the major gas must be at least 1/2". Hydrogen delivery systems should conform to NFPA 50A. Do not use low temperature solder joints for flammable gas piping.

**Gas Temperature:** The two supply gases should enter the gas mixer at nearly equal temperatures to achieve the proper mixing accuracy. If the gas supplies will be at significantly differing temperatures, the resultant mixing inaccuracy should be considered, and the proper corrective action taken. Design to prevent exposure of the gas mixer to high pressures or liquid gases should be practiced. Gas temperature range is 32°F to 100°F.

**Inlet Pressures:** Standard pressures are 100 - 125 PSIG. Variations will be detailed in written instructions.

**Clearance:** Leave at least 2 feet to the sides and 3 feet to the front of the gas mixer for maintenance.



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	REVISIONS	BY	DATE

**thermco** INSTRUMENT CORPORATION  
 LA PORTE, INDIANA USA

TITLE:  
**INSTALLATION DRAWING FOR  
 MODEL 8520 GAS MIXER**

DATE:	7-25-03
SCALE:	N.T.S.
DRAWN BY:	DB
APPROVED BY:	
SUPERSEDES:	1-11136
DRAWING NUMBER:	1-12278