



## Matheson Gas Cabinets and Panels



### Introduction

Matheson designs and manufactures a wide range of gas distribution panels and safety cabinet enclosures. Matheson's expertise in the handling of gases and chemicals has been translated into providing safe, efficient, and reliable process control systems.

Matheson supplies distribution panels and cabinet enclosures for the safe handling of chemical gases (such as  $H_2S$  and  $NO_2$ ) and supplies advanced products for the handling of semiconductor manufacturing gases (such as  $AsH_3$  and  $SiH_4$ ). The purity level of a given system is individually addressed to meet the needs of the customer, minimize cost, and maximize efficiency.

### Applications

Matheson gas distribution panels and cabinet enclosures are designed to dispense gases or chemicals in a controlled manner and to protect the customer from exposure to dangerous materials. Any industry using or processing hazardous chemicals and gases should consider use of these products.

In the chemical industry, this would include the use of gas distribution panels for the handling of reagents and precursors such as Hydrogen Sulfide and Nitric Oxide from the source to the point of use. If the line carrying the gas to the process has multiple uses, or if the line carries a potentially corrosive or toxic gas, a purge panel apparatus would be incorporated into the system for maximum flexibility. If the containers of these gases are relatively small, the distribution and purge panel(s) could be mounted within a cabinet enclosure at the factory. If the source of the gases is a bulk vessel, these distribution and purge panel(s) could be mounted near the vessel or near the point of use.

In manufacturing industries, this would include the use of gas distribution panels for the handling of hazardous materials such as Arsine, Phosphine and Silane used in manufacture of electronic devices. To ensure safety and purity of the process gases, purge assemblies would be incorporated into the system.

The gas distribution panels and cabinet enclosures are designed for use in hazardous services. It is strongly recommended that only qualified personnel specify and use this equipment. Matheson supplies a detailed instruction manual and in some cases, hands-on training to customers who purchase this equipment. The manuals should be reviewed and training attended by all customer personnel who will use the equipment.

### Custom Gas Handling Systems

Matheson is always available to design and construct a customer specific system. We realize that the needs of all customers cannot be accommodated by standard design layouts. Matheson will develop a complete panel and cabinet enclosure system, tailored to meet each customer's individual requirements.