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Product Overview

Product Line Overview

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Technical Specifications

Enclosures

- Source System Enclosures

- Distribution Enclosures

Gas Panel Types, cont'd

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- Manual vs. Automatic
 - ◆ Manual is cost decision
 - ◆ Automatic is purity/safety decision

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- Modular vs. VCR
 - ◆ Advantages
 - ◆ Drawbacks
- Valve Function and Location
- Pressure Measurement

Gas Systems

Source gas supply systems:

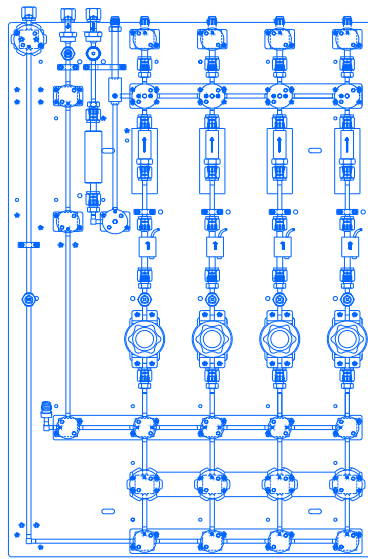
- Dedicated systems

- Dedicated auto-switching systems

- Auto-switching systems, distributed

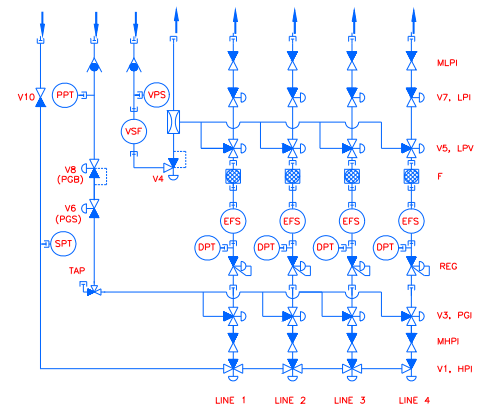
- Distribution Systems
 - ◆ Most cost-effective method for continuous gas supply to multiple tools
 - ◆ Reduces number of required cylinders
 - ◆ Reduces process piping requirements

Typical Automatic Distribution Manifold



- V1 - HPI, HIGH PRESSURE ISOLATION
- V3 - PGI, PURGE GAS ISOLATION
- V4 - VVS, VACUUM VENTURI SUPPLY
- V5 - LPV, LOW PRESSURE VENT
- V6 - PGS, PURGE GAS SUPPLY
- V7 - LPI, LOW PRESSURE ISOLATION
- V8 - PGB, PURGE GAS BLEED
- V10 - SGS, SOURCE GAS SUPPLY
- TAP - TEST ACCESS PORT
- EFS - EXCESS FLOW SENSOR
- DPT - DELIVERY PRESSURE TRANSDUCER
- PPT - PURGE PRESSURE TRANSDUCER
- MHPI - MANUAL HIGH PRESSURE ISOLATION VALVE
- MLPI - MANUAL LOW PRESSURE ISOLATION VALVE
- F - FILTER
- VPS - VENTURI PRESSURE SWITCH (SUPPLY)
- SPT - SOURCE PRESSURE TRANSDUCER
- SIV - SOURCE ISOLATION VALVE
- VSF - VENTURI SUPPLY FLOW

Typical Automatic Distribution Manifold Schematic



Controls

Two general categories:

- Monitors
 - ◆ Used on manual panels
 - ◆ Monitors digital and analog inputs from the gas panel and external sources
 - ◆ Provides shutdown of panel via ESO valve

- Controllers
 - ◆ Used on automatic purge panels, typically reactive gases
 - ◆ Provides automatic purging
 - Furnishes operator safety
 - Maintains consistency in methodology
 - Verifies proper operation

Controls, cont'd

MicroPurge™ Controllers:

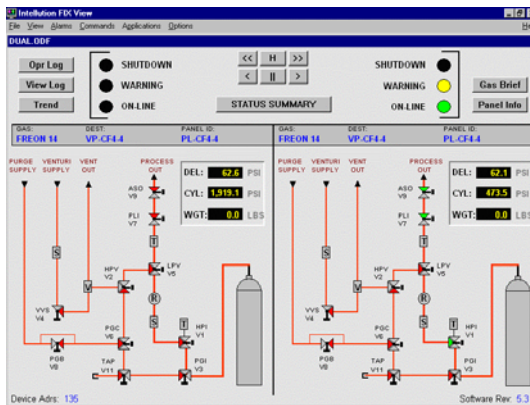
PLC

- P-Series
 - ◆ Controls *and* monitors
 - ◆ Automatic source and distribution systems

Microprocessor

- M-Series
 - ◆ Monitors
 - ◆ Controls
 - ◆ Portable CPU

FabView



FabView is a gas management software package designed to allow the user to monitor the status of their semiconductor equipment and materials.

- MS Windows™-based Management system, Intellution FIX™
- Several methods to view/sort information
 - ◆ Tools
 - ◆ Gases
 - ◆ Areas
 - ◆ General List
- Capabilities
 - ◆ Monitoring
 - ◆ Controlling
 - ◆ Alarming
 - ◆ Reporting
 - ◆ Trending
 - ◆ Remote Access