Regulators and Associated Equipment

This five-day course provides technicians with an understanding of the function and operation of the various types of regulators used in gas distribution systems. It also describes the operation and maintenance of the various pieces of equipment used in a piping system in conjunction with pressure regulators.

I. Regulators
   · Weight Loaded
   · Pilot Operated
   · Weight and Lever Operated

II. Spring-Operated Regulators
   · Function
   · Operation
   · Fisher S200 Series Regulators

III. Pilot Operated Two-Path Regulators
   · Fisher 99 Series Regulator
   · Fisher 298 Series Regulator
   · Fisher 310 Series Regulator
   · Fisher 399A Regulator

IV. Pilot Unloaded Regulators
   · Mooney Pilot Unloaded Regulators
   · Grove Regulators
   · American Meter Axial Flow Regulator

V. Relief Valves
   · Spring-Loaded Relief Valves
   · Pilot-Operated Relief Valves

VI. Diaphragm Actuator

VII. Valve Controllers
   · Principle of Operation
   · Calibration Process Pointer Zero and Span Adjustment

VIII. Valve Positioners
   · Pneumatic Valve Positioner Principle of Operation
   · Electro-Pneumatic Valve Positioner Principle of Operation

IX. Valve Trim for Control Valves
   · Equal Percentage
   · Linear
   · Quick Opening
   · Whisper Trim

X. Gas Fuses and Flow Limiters

XI. Security Valves

XII. Valves
   · Ball Valves
   · Needle Valves
   · Plug Valves
   · Butterfly Valves
   · Identification, Marking, and Symbols
XIII. Strainers
   · Wye-Type Strainer
   · Basket Strainer
   · T-Type Strainer
   · Apollo Strainer
   · Applications of Strainers in a System

XIV. Valve Actuators
   · Hand Gear Operator
   · Limitorque Operators

XV. Orifice Fittings
   · Daniel Junior Orifice Fittings
   · Removing an Orifice Plate on a Daniel Junior Orifice Fitting
   · Replacing an Orifice Plate on a Daniel Junior Orifice Fitting
   · Daniel Senior Orifice Fittings
   · Removing an Orifice Plate on a Daniel Senior Orifice Fitting
   · Replacing an Orifice Plate on a Daniel Senior Orifice Fitting
   · Orifice Fitting Lubrication

XVI. Metering Devices
   · Orifice Plates
   · Orifice Plate Inspections
   · Orifice Plate Environmental Concerns