Application description AD/2102706-EN Rev. AB

Valve control for gas well production
XSeries automation applications

Automation objective

Automate valve control at a production well to insure production rate and delivery pressure.

A key element in consistent gas production is correct control of the gas sales valve. Good production practices include maintaining a constant well flow rate, well flowing pressure and sales delivery pressure. At the same time, providing for an override of these parameters is necessary to insure that required, safe operating conditions occur.

Valve control for gas well production
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Automation solution

The Totalflow XSeries of Flow Computers or Remote Controllers can implement the standard Valve Control Application. The Application positions a control valve to maintain control of either the Differential Pressure (DP), Static Pressure (SP) or Flow Rate. Additionally, an Override function can be selected which will limit any secondary parameter to a maximum value. Override, for example, may be used to maintain the well's production rate, pressure entering the gathering system, or shut-in/bring-on the well based on a compressor on-off state. The Valve Controller has the option to be used with a Digital Valve Actuator or an Analog Valve Actuator.

Solution benefits

Consistent production
Valve control allows for steady state production and insures more flow time for the well.

Safe environment
Control override prevents unsafe delivery of pressures and flow rates into the gas system.

Easy installation
Mount XSeries; connect solar panel; connect wiring from valve and pressure transmitters.

Simple start-up
Enter initialization requirements with PCCU software or WinCCU software.

Low power electronics
Helps extend battery life, reduces maintenance expense, allows for more run time.

Extendable
The XSeries product can also provide flow measurement, alarming, data logging, level measurement, remote communications, plunger optimization, and nomination control while performing valve control.

Totalflow recommended equipment

- Qty 1 – Model XSeries Flow Computer or Remote Controller with Solar Panel
- Qty 1 – PCCU Laptop Communication Software
- Options – Radio for Remote Communications; WinCCU Remote Host Software

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