Fisher[™] Control Valves for Carbon Capture, Utilization, and Storage



FISHER[™] Fisher[™] control valves work to ensure efficient and safe carbon capture efforts, moving customers closer to net zero goals.

Challenges

- **Capture:** There are several different processes that can be used to capture carbon dioxide—with this comes a varying degree of challenges. These challenges can include cavitation, corrosion, high noise, vibration, and two-phase flow. Proper selection of control valve materials and instrumentation are key in mitigating potential issues caused by these phenomenon.
- **Transport:** Supercritical fluids such as CO₂ do not have defined phases; rather, both gaseous and liquid properties are exhibited, requiring specific control valve sizing and robust body types to maintain proper control and operator safety.
- **Sequestration:** Stringent pressure management along the CCUS value chain is important, as leaks and loss of pressure can cause issues such as loss of solvent, damage to transport pipelines, and insufficient pressure requirements for sequestration.



Emerson's Fisher control valves enhance efficiency, reliability, and safety in carbon capture processes.





Emerson Solutions in the Decarbonization Industry

Emission reduction strategies are increasing globally to meet net zero targets including new technological advances in carbon capture. Emerson's extensive range of Fisher flow control technology has been used throughout the entire CCUS value chain for over 50 years. With continued research and implementation of new capture strategies, robust and reliable control valve designs are key in helping ensure safety and efficiency within the process. Partnering with Emerson, an expert supplier of innovative solutions, provides control valve expertise and reliability for any carbon capture application.



Robust, efficient, and costeffective control valve solutions for your carbon capture needs

Emerson holds a wide portfolio of reliable, time-tested products and solutions for CCUS processes while simultaneously minimizing costs for operators. You can feel confident when utilizing proven Fisher technologies.



Available control valve experts to aid in control valve sizing, selection, and severe service elements

With continuous technological advancements along the CCUS value chain, Emerson is a key trusted advisor to employ costeffective and reliable control valve selections that will operate with safety in mind, even in severe service applications.



Multiple design facets and additions to ensure minimal pressure loss across the value chain

Pipeline transportation and CO₂ sequestration require consistently high pressures to be efficient and cost-effective. Emerson has a host of environmental control valve packing types suitable for use in high-pressure applications to mitigate CO₂ emissions.



Fisher easy-e™ control valve with FIELDVUE™ digital valve controller



Fisher Whisper™ NXG control valve trim



Fisher V280 pipeline ball valve



Fisher HPT control valve with FIELDVUE digital valve controller



Fisher HP control valve with Cavitrol™ III cage





Carbon Capture



Emerson

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