China Only

Coal Chemical Industry Solution



Coal Plants Utilize Fisher® Regulators for Precise Pressure Control

Coal Chemical Industry Overview

Coal is an abundant, reliable, and inexpensive source of energy, but it does have some technical limitations. Coal is not suitable for use in some applications such as transportation and it produces a range of environmental pollutants when burned. In recent years, several clean coal technologies have been developed to help reduce the environmental pollution caused by burning coal and make coal more energy-efficient. Among these, coal gasification and coal liquefaction are the most popular technologies to date.

Common Clean Coal Technologies

Coal gasification is considered one of the most versatile and cleanest ways to convert coal into an alternative and cleaner form of energy. In gasification, coal is broken down to its basic chemical constituents rather than directly burned. The resulting syngas (a gas mixture made up of carbon monoxide, hydrogen, and other gaseous compounds) can be used as a fuel source or as an intermediate for the production of other chemicals.

Coal liquefaction converts solid coal to synthetic oil to supplement natural sources of petroleum. This well-developed technology

requires coal to be in contact with hydrogen in the presence of a catalyst at high temperatures. Coal liquefaction can either be direct as described previously or indirect. Indirect coal liquefaction consists of two stages: gasification to produce coal gas and subsequent conversion of the gas to liquid via the Fischer-Tropsch process.

Products derived from coal through these clean coal technologies can be used as fuel for transportation vehicles and electricity generation, and as raw materials to other valuable products. These recent developments in the coal chemical industry can also help ease the burden of oil production and import.

Emerson Process Management Solution

Emerson Process Management Regulator Technologies is the market leader in the field of pressure control with a history of over a hundred years. With more than 100 product families, Fisher® regulators are widely used to control various fluids, including gas, liquid, and steam.

We take an active part in the coal chemical industry by offering a variety of products and expert process solutions. Pressure Reducing and Tank Blanketing Valves are available for pressure controls for tanks and pressure vessels used in the coal gasification and liquefaction processes.





Recomended Fisher® Regulators Applicable for Coal Chemical

Pressure Reducing

- · Direct-Operated
- Multi-Purpose Can be Used for All Process Media
- Rugged Construction
- Multiple End Connections Available
- Available in Differential Pressure
 Control, High Temperature, and
 High Pressure Optional Constructions
- Easy Maintenance



95 Series

Relief / Backpressure

- · Direct-Operated
- Multi-Purpose Can be Used for All Process Media
- Excellent Fluid Compatibility
- Close, Stable Regulation
- Available in Differential Pressure
 Control, High Temperature, and
 High Pressure Optional Constructions
- Easy Maintenance



98 Series

Pressure Reducing

- Pilot-Operated
- NPS 1 through 12 x 6 (DN 25 through 300 x 150)
 Body Sizes Available
- Quick Change Trim Package
- Optional Noise Abatement Trim
- No Atmospheric Bleed
- In-Service Travel Inspection
- Easy Top Entry In-line Maintenance



Type 1098-EGR

Tank Blanketing

- Direct-Operated for Economic Pressure Control
- Compact Construction for Small Tanks and Vessels
- Easy Conversion Between Constructions
- Sour Gas Service Capability and Corrosion Resistant
- NPS 1-1/2 and 2 (DN 40 and 50) Body Sizes
 Available with Type Y696



Type Y690A

Industrial Regulators

 ${\bf Emerson\, Process\, Management\, Regulator\, Technologies,\, Inc.}$

USA - Headquarters McKinney, Texas 75069-1872 USA Tel: 1-800-558-5853 Outside U.S. 1-972-548-3574 Asia-Pacific Shanghai, China 201206 Tel: +86 21 2892 9000 Europe Bologna, Italy 40013 Tel: +39 051 4190611 Middle East and Africa Dubai, United Arab Emirates Tel: +971 4 811 8100

For further information, visit www.fisherregulators.com

Our Global Product Brand:



