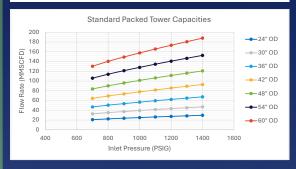
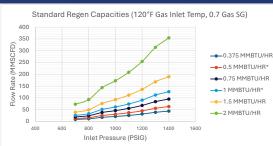
# **Glycol Dehydration Unit**

Technical Specifications & Standard Sizing Information

Cimarron provides the following sizing characteristics based on typical gas compositions (methane dominant, sweet, water saturated). Please request a design data sheet today from your Cimarron account manager to obtain a full process sizing analysis on your application.







# **Learn More**

- **(844) 746-1676**
- sales@Cimarron.com
- www.Cimarron.com
- @Cimarron



# Glycol Dehydration Units

PIONEERING EMISSIONS
MANAGEMENT TECHNOLOGY,
EQUIPMENT, AND SERVICES FOR A
SUSTAINABLE ENERGY FUTURE

# GLYCOL DEHYDRATION IS CRITICAL IN NATURAL GAS PROCESSING

Consisting of an absorber tower and a glycol regenerator working in tandem, gas dehydration units remove water vapor from gas streams to limit pipeline corrosion, hydrate formation, and inefficiencies in downstream operations.

#### **Absorber Towers**

The absorber tower serves as an initial contact point where natural gas is exposed to a liquid desiccant, typically triethylene glycol (TEG), that absorbs the water vapor from the gas. Cimarron has experience in EG and DEG applications as well. As wet natural gas flows upward through the tower, the descending glycol captures the water, leaving dry gas suitable for transport or further processing. The absorber tower's design allows for maximum contact between the gas and the glycol, optimizing the separation of water.

## **Glycol Regeneration Units**

After flowing through the absorber tower, the now water-saturated glycol flows through the glycol regeneration unit, where it is heated in a reboiler to separate the water from the glycol. The water is vaporized and removed from the system, while the regenerated glycol is cooled and recirculated back to the absorber tower to continue the dehydration cycle. The effluent water vapor exits the still column on the reboiler.



# WHY PARTNER WITH CIMARRON FOR GLYCOL DEHYDRATION SYSTEMS?

Cimarron also offers BTEX destroyer units to eliminate VOCs and HAPs that can be entrained in the water vapor.

#### **Expert Engineering**

Our in-house process and design engineering team has over 100+ combined years of experience in plant, field, and facility level glycol dehydration applications. We use the latest industry accepted and EPA endorsed tools to size our units and provide a BRE Promax output simulation with every proposal guaranteeing your unique process requirements.

#### **Standard Absorber Towers**

We offer standard design packed and trayed absorber towers in sizes up to 72"+ diameter that can be customized to fit your specific need.

## **Standard TEG Regenerators**

We offer standard design TEG regenerators in reboiler duty sizes ranging from 200MBTU/hr to 3MMBTU/HR and up that can be customized to fit your specific need.

## **Advanced Energy Efficiency**

We offer advanced shell and tube heat exchanger designs to reduce Fuel Gas demand by 35% vs standard competitor designs. These exchangers are engineered to ensure optimal performance of the activated carbon filters and offer greater protection against high glycol temperatures at the discharge pump.

# **BTEX Emissions Mitigation**

We offer companion products that are fully integrated into our dehydration units to eliminate BTEX emissions such as A-Frame and Forced-Draft condensers and EPA certified Enclosed Combustors guaranteed at 98% DRE. We can also provide an emissions analysis upon request.

#### **Advanced Controls**

We offer a full spectrum of controls options from pneumatically powered (electricity free) units to fully automated PLC options with in-house I&E design team.

#### **Comprehensive Field Services**

We have a dedicated in-house service team with extensive dehydration commissioning, operating, and troubleshooting experience in most major basins. Rest assured that Cimarron will be available to support the product throughout its life.

#### **Sytelink360® Real-Time Monitoring**

Our real-time monitoring system, Sytelink360®, helps optimize equipment performance and predict failures while providing data-logging capability on the cloud.

