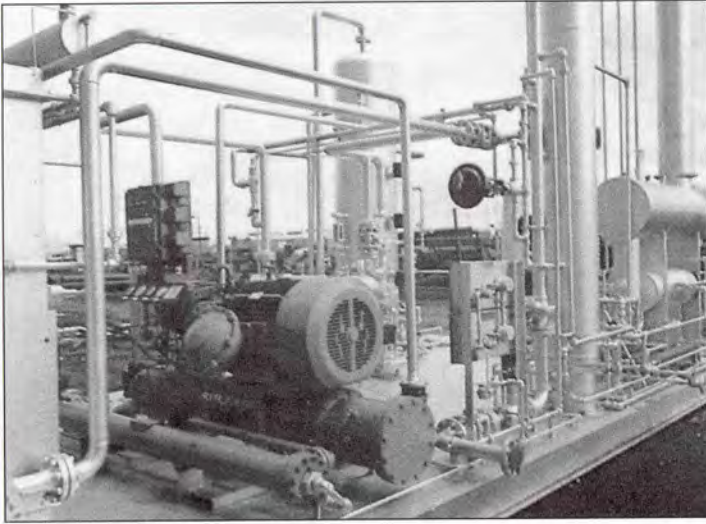


# Gas Dehydration By Glycol



**ALCO Gas & Oil's** custom designed glycol dehydration package offers a speedy economical solution for removal of water vapour from your gas stream. Removal of the water prevents hydrate formation, corrosion and maximizes pipeline efficiency.

**ALCO Gas & Oil** has established a worldwide leadership role in the engineering design and fabrication of dehydration systems, and many other products designed specifically for the energy industry.

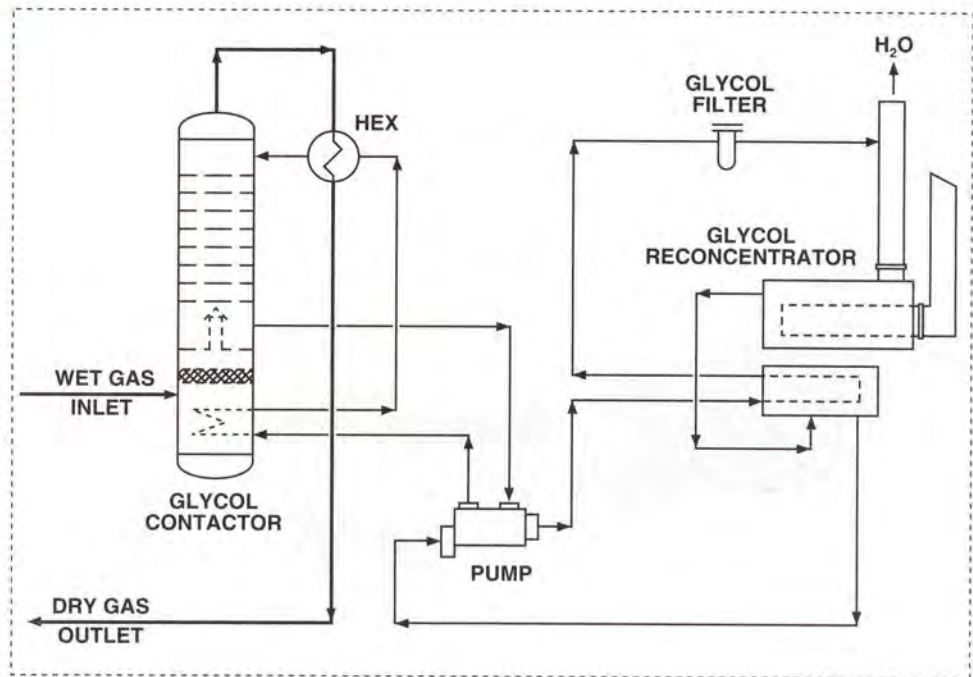
There are over 1000 glycol dehydration packages designed and fabricated by **ALCO Gas & Oil Production Equipment Ltd.** in service at this time. These units range in size from 100,000 SCFD {2,831 m<sup>3</sup>/d} to 100,000,000 SCFD {2,831,000 m<sup>3</sup>/d}. They have been installed all over the world from the Arctic Circle to the Tropics and from a Maritime to a Desert environment.

The Alco team offers:

- **EXPERIENCE** with over 1,000 units operating successfully.
- **STANDARD DEHYDRATION** packages with very quick delivery.
- **CUSTOM DESIGNED** packages to meet your specific needs.
- **OPTIONS** to increase efficiency, reduce space requirements, etc.
- **ALTERNATE METHODS** of gas dehydration including desiccant and calcium chloride packages.
- **SUPPORT SERVICE** program for installation and operation.
- **COMPETITIVE** pricing.



# Gas Dehydration By Glycol



## HOW IT WORKS

### *Economic and Efficient*

The dehydration process is not complicated. Wet gas contacts dry glycol and the glycol absorbs water from the gas. (See Figure Above)

Wet gas enters the tower at the bottom. Dry glycol flows down the tower from the top, from tray to tray, or through packing material. **ALCO's** special bubble cap configuration maximizes gas/glycol contact, removing water levels to below 4 lbs./MMscf. Systems can be designed to achieve levels down to 1 lb./MMscf. The dehydrated gas leaves the tower at the top, flows through the gas/glycol exchanger and returns to the pipeline or goes to other processing units. The water-rich glycol leaves the tower at the bottom and goes to the reconcentration system.

In the reconcentration system the wet glycol flows through the glycol/glycol exchanger, is filtered of impurities and heated to 400°F. Water escapes as steam and the purified glycol is pumped to the tower where the cycle is repeated.

The entire system operates unattended. Controllers monitor pressures, temperatures and other aspects of the system to ensure safe and efficient operation.

### *Flexibility*

**ALCO Gas & Oil** provides glycol dehydration systems in standard or custom sizes. Standard units are available, many with immediate delivery. Systems for large gas flow rates or for meeting other specified conditions are custom designed.

Specifications are computer analyzed and many variations and combinations of equipment are examined. All systems check capital investment, operating costs and efficiency to provide the optimum package for your specific requirements.

### *Information Required For Design Is:*

Gas Volume:	_____ MMscfd
Specific Gravity: (Air = 1.0)	_____
Operating Pressure:	(max) _____ (min) _____ psig
Temperature:	(max) _____ (min) _____ °F
Water Vapor: (if known)	Inlet _____ lbs/MMscfd
	Outlet _____ lbs/MMscfd
Acid Gases: (if present)	CO <sub>2</sub> _____ mol%
	H <sub>2</sub> S _____ mol%
Design Pressure:	_____ psig
Design Temperature:	_____ °F
Corrosion Allowance:	_____