wasco
wascoenergy.com

Gas Dehydration Packages

Wasco primarily designs and supplies gas dehydration systems using triethylene glycol (TEG) to absorb water from gas. Wet gas is brought into contact with glycol in the contactor column, where a sufficient contact area is created by using mass transfer internals. The combination of process conditions, gas composition and dew point requirements is the starting point for the design of every system. Taking into account these parameters, the amount of internals for the column are selected, as well as the glycol flow and purity.

After absorbing the water from the gas stream, the glycol needs to be regenerated for reuse in the closed-loop system. The core process in the regeneration loop is the boiling off of water from the glycol in a reboiler. With the right balance between packing type/height, glycol purity and glycol circulation rate, overall utility consumption levels can be kept relatively low.

Wasco offers design and engineering of the molecular sieve desiccants for gas dehydration if low water dew points/water content is required for LNG applications. Molecular sieves and silica gel are commonly used solid desiccants in the oil & gas industry. Our close relationship with reputable molsieve suppliers allows us to offer predictable and high-quality execution. Our molecular sieve units are designed for water dew-point performance as low as 0.1 ppmv with optimised lifetime and configuration. Regenerative and non-regenerative adsorbents can also be proposed for the removal of acid components such as H2S, CO2, and Mercaptan as well as the removal of mercury. We offer these processes for complete EPC contracts, customised to each customer's specific needs, and modularised to reduce installation costs whenever it is possible.