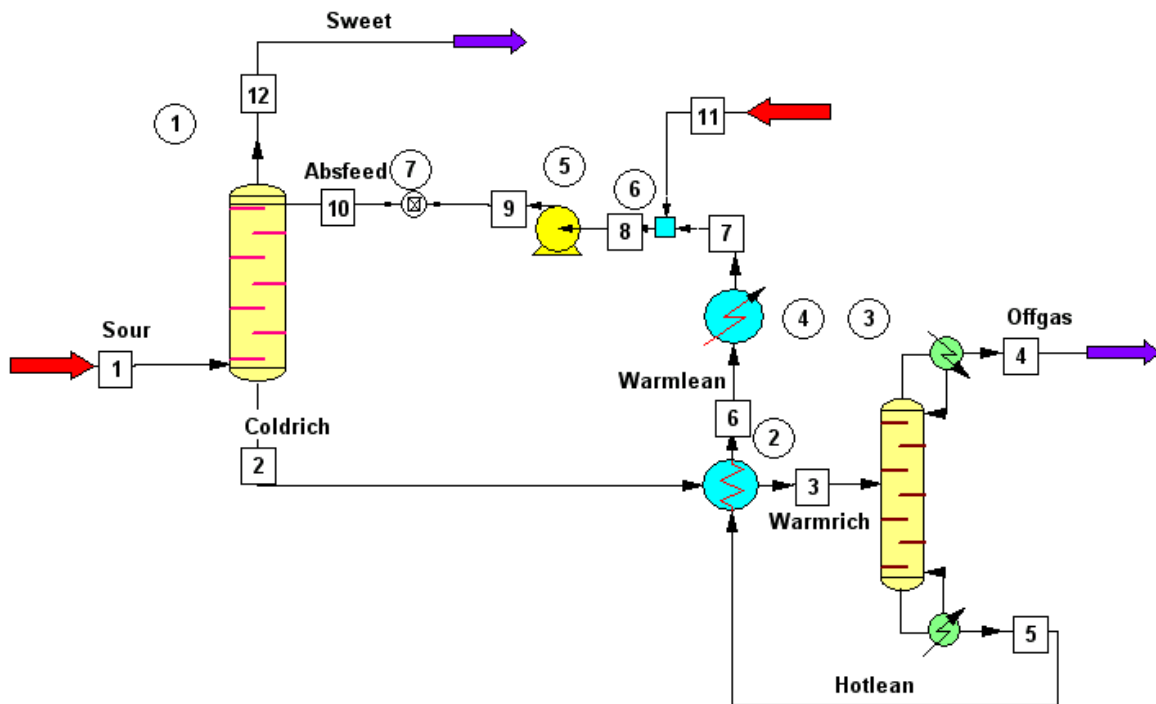# Selective H₂S Removal with MDEA

DESCRIPTION:

This example is a selective H2S removal by using 50 weight % MDEA in a 10 tray absorber.

This problem was calculated by the Apparent Component electrolyte method, where 'visible' components are separated from the ionic species.

The constants for the MDEA process have been taken from the CHEMCAD's ionic reaction library.

CHEMCAD 5 includes enhanced SCDS distillation/absorption model. It allows specifying stage efficiencies for individual column trays, as well as stage efficiencies for individual components. In this example, the CO2 absorption is controlled by mass transfer, so individual stage efficiencies for carbon dioxide have been applied.

Ref: Jou, F. Y. F.D. Otto and A. E. Mather, "Solubility of Mixtures of H2S and CO2 in a Methyldiethanolamine Solution". Paper #140b AIChE Annual Meeting, Miami Beach, FL (Nov 2-7,1986)