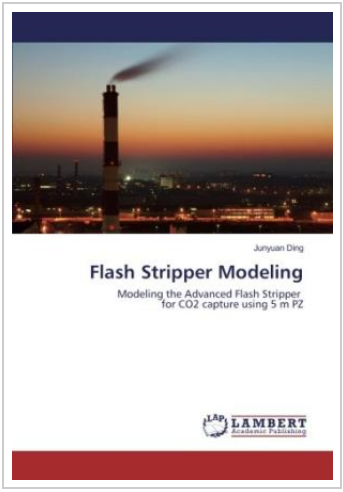

Flash Stripper Modeling

By Ding, Junyuan

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Modeling the Advanced Flash Stripper for CO2 capture using 5 m PZ | Amine scrubbing is the most mature technology for post-combustion CO2 capture. Several studies have demonstrated that the advanced flash stripper (AFS) consumes less energy among stripper alternatives. This book seeks to demonstrate the AFS energy performance and cost over a wide range of CO2 loading. Solvent models based on experimental results have been created by previous researchers and are available for simulation and process modeling in Aspen Plus®. In collaboration with Membrane Technology and Research Inc., various hybrid amine/membrane configurations were studied to minimize the total CO2 capture cost. CO2 in the flue gas is enriched by membranes from 12% to 18 and 23% for coal-fired power plant, and from 6% to 12~18% for natural gas combined cycle power plant (NGCC). The CO2 loading covers the range of flue gas CO2 from coal-fired power plants and NGCC. For each configuration, the cold and warm rich bypasses are optimized to minimize the energy cost. The cost optimization is also demonstrated on 5 m PZ, 5 m MDEA/5 m PZ, and 2 m PZ/3 m HMPD. The most cost-effective solvent varies...

Reviews

A must buy book if you need to adding benefit. It can be rally intriguing throgh reading time period. I am easily could get a pleasure of looking at a composed book.

-- ***Dr. Julius Goodwin DDS***

This publication is definitely worth getting. I actually have go through and so i am sure that i will gonna read through again yet again later on. I am just quickly can get a satisfaction of looking at a created pdf.

-- ***Hailee Armstrong I***