1 Introduction

Air separation technology, or − more generally speaking − gas separation technology, lies at the heart of the modern process industry. Highly pure oxygen and nitrogen ore uses in many industrial applications. Modern power generation processes, such as the currently developed OXICOAL process, rely on incineration with pure oxygen to produce flue gases with very high carbon dioxide content for further storage. Nitrogen is essential to many widely used processes such as the production of ammonia in the Haber-Bosch synthesis, as fertilizer or in many organic reactions.

The papaer followin this introduction is structured as follws....

$$\underset{k_1}{\overset{k_2}{\rightleftharpoons}} \tag{1.1}$$

Figure 1.1: Demand for industrial gases. []

Todo list