

이산화탄소 포집 및 압축공정의 통합에 관한 연구

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With the worldwide efforts to reduce the greenhouse gases, carbon capture and storage (CCS) is considered as one of the most promising technologies in South Korea. While many ongoing research has been dedicated to the capture part of CCS technology, this study focuses on compression aspect of CCS technology and how compression process can be integrated with the existing post-combustion capture process. CO₂ compression process typically adopts a 4-stage compression system where both hot and cold utilities are introduced from pressure changes. In this study, a brief analysis of how these utilities can be integrated with CO₂ capture is carried out so that the regeneration energy of the solvent is reduced.

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