

ABSTRAK

PRARANCANGAN PABRIK POLIVINIL ALKOHOL DARI POLIVINIL ASETAT DAN METANOL KAPASITAS 30.000 TON/TAHUN (Perancangan Reaktor (RE-201))

Oleh

AGITA AMY RIZKY

Polivinil Alkohol merupakan bahan kimia dengan fungsi yang beragam dan kebutuhan terus meningkat. Proses yang digunakan dalam pembuatan Polivinil Alkohol menggunakan proses reaksi transesterifikasi dengan menggunakan katalis basa. Pabrik Polivinil Alkohol direncanakan didirikan di Subang, Jawa Barat. Kapasitas produk Polivinil Alkohol adalah 30.000 ton/tahun. Pabrik beroperasi selama 24 jam/hari, 330 hari/tahun. Bentuk perusahaan adalah badan usaha Perseroan Terbatas (PT) menggunakan struktur organisasi *line and staff* dengan kebutuhan karyawan 145 orang.

Analisis ekonomi Pabrik Polivinil Alkohol di peroleh:

<i>Fixed Capital Investment</i>	(FCI) = Rp. 631.284.005.687
<i>Working Capital Investment</i>	(WCI) = Rp. 111.403.059.827
<i>Total Capital Investment</i>	(TCI) = Rp. 742.687.065.514
<i>Break Even Point</i>	(BEP) = 41,42 %
<i>Shut Down Point</i>	(SDP) = 21,68 %
<i>Pay Out Time after taxes</i>	(POT) _a = 2,5189 tahun
<i>Return on Investment after taxes</i>	(ROI) _a = 25,245 %
<i>Discounted Cash Flow</i>	(DCF) = 25,75 %

Mempertimbangkan rangkuman diatas Pabrik Polivinil Alkohol layak untuk dikaji lebih lanjut, karena merupakan pabrik yang menguntungkan dan mempunyai prospek yang baik.

Kata Kunci : Polivinil Alkohol, Transesterifikasi, Katalis Basa

ABSTRACT

MANUFACTURING OF POLYVINYL ALCOHOL FROM POLYVINYL ACETATE AND METHANOL CAPACITY 30.000 TONS/YEAR (Design of Reactor (RE-201))

By

AGITA AMY RIZKY

Polyvinyl Alcohol is a chemical with a variety of function and the need for it is increasing. The process used in the manufacture of Polyvinyl Alcohol using a transesterification reaction process using a base catalyst. The Polyvinyl Alcohol factory is planned in Subang, West Java. The product capacity of Polyvinyl Alcohol is 30.000 tons/year. The factory operates 24 hours/day, 330 days/year. The form of the company is a limited liability company, with a line and staff organizational structure with the needs of 145 employees.

The economic analysis of Polyvinyl Alcohol Plant obtained:

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Taking into consideration the above summary, it is proper establishment of Factories Polyvinyl Alcohol is studied further, because it is a plant that profitable and have good prospects.

Keyword : Polyvinyl Alcohol, Transesterification, Base Catalyst