

BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

1. Desain optimum pada distilasi modifikasi dengan DWC yaitu: jumlah tahap kolom pertama 11, letak umpan masuk kolom pertama pada tahap ke-5, jumlah tahap kolom DWC 20, letak umpan masuk kolom DWC pada tahap ke-11.
2. Nilai TAC optimum distilasi modifikasi dengan DWC adalah \$ 2.852.032,979/tahun dengan *payback period* selama 3 tahun.
3. Perancangan dengan DWC mampu menghasilkan penghematan *capital cost* sebesar 40%, *energy cost* sebesar 2,7%, dan TAC sebesar 12%.

5.2 Saran

1. *Dividing wall column* dapat diaplikasikan dalam industri pemurnian fenol.

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