

ABSTRACT

PRADESIGN OF VINYL CHLORIDE MONOMER PLANT BY PYROLISIS PROCESS OF ETHYLENE DICHLORIDE CAPACITY 100.000 TONS/YEAR (Design Distillation Coloumn (MD-301))

By

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Vinyl Chloride Monomer plant with raw material Ethylene Dichloride will established in Bojonegoro, Banten. This plant will established by considering the availability of raw materials, transportation facilities, readily available labor and environmental conditions.

Plant's production capacity is planned 100.000 tons/year, with operating time of 24 hour/day and 330 working days in a year. The raw materials used *Ethylene Dichloride* 12.626,3 kg/hr.

This plant need 143 labor with a company form is Perseroan Terbatas (PT) which is headed by a Director who assisted by the Director of Production and Director of Finance with line and staff organizational structure. From the economic analysis is obtained:

<i>Fixed Capital Investment (FCI)</i>	= Rp 378.833.626.208,-
<i>Working Capital Investment (WCI)</i>	= Rp 66.740.262.066,-
<i>Total Capital Investment (TCI)</i>	= Rp 444.935.080.443,-
<i>Break Even Point (BEP)</i>	= 39,94%
<i>Shut Down Point (SDP)</i>	= 30,70%
<i>Pay Out Time after Taxes (POT)_a</i>	= 1,9 year
<i>Return on Investment after Taxes (ROI)_a</i>	= 61,06 %
<i>Internal Rate Return (IRR)</i>	= 37%
<i>Annual Net Profit (Pa)</i>	= Rp 217.330.118.516/ year

Consider the summary above, it is proper establishment of Vinyl Chloride Monomer plant to studied further, because the plant is profitable and has good prospects.