ABSTRACT

PRADESIGN OF VINYL CHLORIDE MONOMER PLANT BY PYROLYSIS PROCESS OF ETHYLENE DICHLORIDE CAPACITY 100.000 TONS/YEAR (Design Reactor Furnace (RE-201))

By

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Vinyl Chloride Monomer plant raw material Ethylene Dichloride will plant to be in Cilegon, Banten. Plant was 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 are much Ethylene Dichloride 33.320,3984 kg/hr.

Labor needed as many as 143 people with a business entity form Limited Liability Company (PT) with line and staff organizational structure.
From the economic analysis is obtained:

Fixed Capital Investment (FCI)	= Rp 378.833.626.208,-
Working Capital Investment (WCI)	= Rp 66.740.262.066 ,-
Total Capital Investment (TCI)	= Rp 378.833.626.208,-
Break Even Point (BEP)	= 39,94%
Shut Down Point (SDP)	= 30,70%
Pay Out Time after Taxes $(POT)_a$	= 1,91 tahun
Return on Investment after Taxes $(ROI)_a$	= 61,06 %
Internal Rate Return (IRR)	= 37%
Annual Net Profit (Pa)	= Rp 217.330.118.516/tahun

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.