

ABSTRACT

MANUFACTURE OF T-BUTYL ALCOHOL FROM ISOBUTENE AND WATER CAPACITY OF 50.000 TONS / YEAR

By

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Factory which is made by raw material isobutene and water, will be erected on Bojonegara, Banten. The factory was established by considering the availability of raw materials, marketing area, transportation facilities, readily available labor and environmental conditions.

The factory is planned to produce t-butyl alcohol of 50.000 tons / year, with operating time of 24 hours / day, 330 days / year. The raw materials used are much isobutene 6.702,21 kg/hr and water as much as 14.120 kg/hr.

Provision of utility plant needs t-butyl alcohol the provision of water, provision of steam, electricity supply, fuel requirements, and procurement of air cooling water.

The form is a Limited Liability company (PT) using a line and staff organizational structure and employs as many as 132 people. From the economic analysis is obtained:

Fixed Capital Investment	(FCI)	= Rp 334.994.663.024
Working Capital Investment	(WCI)	= Rp 59.116.705.240
Total Capital Investment	(TCI)	= Rp 394.111.368.263
Break Even Point	(BEP)	= 55,5%
Pay Out Time before taxes	(POT) _b	= 2,3 tahun
Pay Out Time after taxes	(POT) _a	= 2,3 tahun
Return on Investment before taxes	(ROI) _b	= 90%
Return on Investment after taxes	(ROI) _a	= 71,72%
Interest Rate of Return	(Irr)	= 61,01%

Considering the above explanation, it is proper plant establishment t-butyl alcohol was studied further, because it is a profitable factory and have a good future.