

ABSTRACT

This study examines the feasibility study of purchasing the additional injectors for company's self-injection instead of hiring sub-contractors.

A collection of past sub-contractor orders was conducted to identify the average product amount in order to perceive the additional costs of company's self-injection such as material cost, labor cost, electricity cost, maintenance cost and so on. The evaluation is accomplished via Present-Worth analysis and Incremental analysis. The Present-Worth analysis of purchasing the injectors more than not purchasing equals to 22,322,366 bahts (38,518,492-16,196,126 bahts), conclude that the decision to acquire injectors are very attractive. The result of Incremental analysis is the same as the Present-Worth analysis prior to the not purchasing-to-purchasing comparison, Rate of Return is 34% >4.5% MARR.

Additionally, the sensitivity evaluation was performed to test the decision's correctness and accuracy, which results that the project-acceptance is sensitive to parameter MARR, material cost and overall sales volume. If the MARR is greater than 54.5% or the material cost increase is more than 90% or the overall sales volume reducing is more than 68%, the purchasing-injectors project should be omitted.