

Economics Analysis for PLACOS'S Pipe and Pipe Fittings Machine

Sarah Alajmi and Sarah Elsakka

Industrial Engineering Students

Alfaisal University

Riyadh, Saudi Arabia

salajmi@alfaisal.edu , selsakka@alfaisal.edu

Dr. Sobhi Mejjaoui

Professor, Department of Industrial Engineering and Management Systems

Alfaisal University

Riyadh, Saudi Arabia

smejjaoui@alfaisal.edu

Abstract

Engineering economy uses mathematical and economic techniques to analyze situations that pose alternative courses of action. In this project we visited PLASCO factory for Plastic Industries located in Riyadh, Saudi Arabia. The visit's purpose was to observe the PVC pipes and pipe fittings machines production process, then analyze the profit and the cost of each of the two machines, and all the constraints to formulate a cash flow analysis in order to compare between both machines to decide which one is more profitable.

Keywords

Cash flow estimation, Economics analysis, Cost analysis, Annual worth, and Breakeven analysis.

Biographies

Dr. Sobhi Mejjaoui, possess several years of progressive experience in the Industrial and Systems Engineering fields and their applications. He is serving now as an Industrial Engineering Assistant Professor at Alfaisal University. Sobhi earned a Bachelor and Master Degree in Industrial Engineering from Ecole Nationale d'Ingenieurs de Tunis before joining the Systems Engineering Department at University of Arkansas at Little Rock, USA where he got his Phd. Sobhi qualifications and research are related to the fields of Engineering Economics, Operations Research and Optimization (Linear and non-linear programming, network and Dynamic Programming, heuristics..etc), C/C++ Programming, supply chain Management, and software like CPLEX, LINGO, ARENA and MATLAB.

Sarah Alajmi, a junior industrial engineering student at Alfaisal university.

Sarah Elsakka, a junior industrial engineering student at Alfaisal university.