World Academy of Science, Engineering and Technology
International Journal of Industrial and Manufacturing Engineering
Vol:9, No:06, 2015

Fuzzy Linear Programming Approach for Determining the Production Amounts in Food Industry

Authors : B. Güney, Ç. Teke

Abstract : In recent years, rapid and correct decision making is crucial for both people and enterprises. However, uncertainty makes decision-making difficult. Fuzzy logic is used for coping with this situation. Thus, fuzzy linear programming models are developed in order to handle uncertainty in objective function and the constraints. In this study, a problem of a factory in food industry is investigated, required data is obtained and the problem is figured out as a fuzzy linear programming model. The model is solved using Zimmerman approach which is one of the approaches for fuzzy linear programming. As a result, the solution gives the amount of production for each product type in order to gain maximum profit.

Keywords : food industry, fuzzy linear programming, fuzzy logic, linear programming
Conference Title : ICIEMS 2015 : International Conference on Industrial, Engineering, and Management Systems
Conference Location : San Francisco, United States
Conference Dates : June 07-08, 2015