عنوان مقاله:

Bi-Objective and Combinatorial Optimization of Strategic and Tactical Decisions of Closed Loop Supply Chain

محل انتشار:

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خلاصه مقاله:

One of the competitive advantages of a business is the design of a supply chain network. Because it focuses on environmental issues and reducing the cost of purchasing raw materials. Strategic and tactical decisions can also be made within the supply chain management. In this study in order to minimize the distance traveled between echelons, the cost of subassemblies to producers, the cost of supplier selection, the cost of retailer selection, the cost of activating the workstations, disassembling and assigning tasks and their sequence at the stations, a closed loop supply chain is designed. The proposed bi-objective non-linear mathematical model is considered for a home flashlight good. The LP metric method is also used to solve this bi-objective model. The results show that according to customer demand of 4 potential suppliers, 1 supplier and from 3 potential areas for retail, 2 regions have been selected. Also, the number of stations that are active for disassembling products are all 3 stations that have been able .to minimize the hours of idle time in the first and second periods to 51.1 and 104.2 times units, respectively

کلمات کلیدی:

Strategic & Tactical Decisions, Closed Loop Supply Chain, Disassembly Line Balancing, MODM