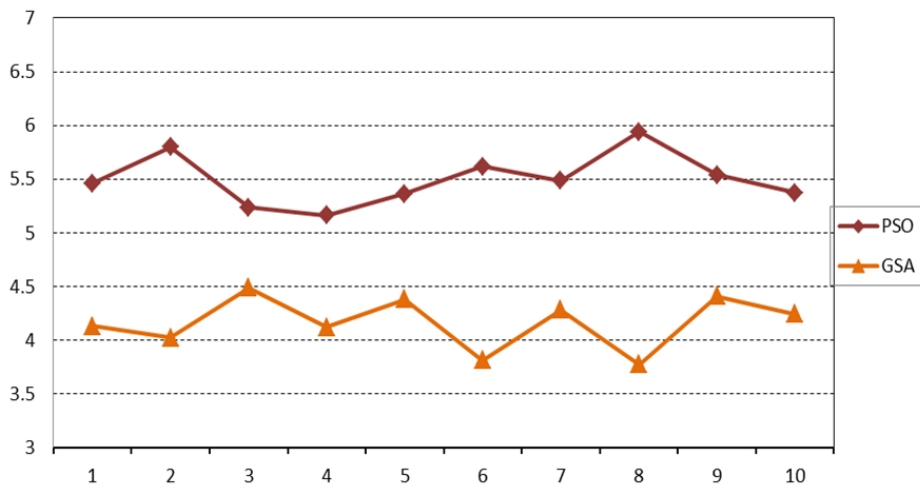


**Volume 3 (4); Dec 30, 2015 [XML]**

**Research Paper**

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**Particle Swarm Optimization for Step Fixed Charge Transportation Problems**

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*Sci. J. Mech. Ind. Eng.*, 3(4): 47-51, 2015; pii:S238309801400007-3

## **ABSTRACT**

The efficient integrated scheduling of production and distribution in a supply chain becomes a challenging problem as global companies move towards higher collaborative and competitive environments. The problem is to determine both production schedule and air transportation allocation in coordinated way. In order to solve the given problem, a genetic algorithm (GA) and a Differential evolution algorithm (DE) are developed. The two proposed algorithms have been examined and tested on randomly generated instances. The experimental results show that the effectiveness and robustness of the proposed DE algorithm are better than GA. Supply Chain Integration, Air Transportation, Template Genetic Algorithm, Differential Evolution

[Full text- [PDF](#) ]

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