Abstract

The main objective of the Multi Job Shop Scheduling problem (MJSSP) is to find a schedule of operations that can minimize the final completion time. In this paper, the various approaches with heuristics used to solve MJSSP are studied and its constraints clearly represented in mathematical model. MJSSP has been implemented with Steepest-Ascent Hill Climbing (SAHC) algorithm with constructive heuristics and compared against with the results of depth-first- Dynamic Consistency Enforcement (DCE) . Also SAHC’s efficiency is experimentally proved with more optimal and consistent results obtained for various instances.
Heuristics Supported Local Search for Optimization of Multi Job Shop Scheduling


Index Terms

Computer Science   Artificial Intelligence
Key words

Constraints
multi job shop scheduling
mathematical model
steepest ascent hill climbing
depth first

heuristics