Abstract

In this paper, Job shop scheduling problem is solved through multi agent system. An agent based scheduling model is introduced to solve the job shop scheduling problem. Dynamic rescheduling problem is also an important issue in modern manufacturing system with the feature of combinatorial computation complexity. This model improve the job shop scheduling problem and provide the better flexibility to the production system. According to contract net protocol (CNP), agents co-operate with each other through contract net and the process of inviting public bidding makes for computing the production order and dynamic scheduling. The CNP offers negotiation mechanism and agents communication for the decision making in the manufacturing system. This paper proposed model for job shop scheduling as well as problem associated with has been discussed.

References


- A multi Agent model for reactive job shop Scheduling. 0-7803-8281-1/04/$20. 00, 2004 IEEE. Pp. 241-245


- Weiming Shen and Douglas H. Norrie. An Agent-Based Approach for Dynamic Manufacturing Scheduling, In Workshop Notes of the Agent-Based Manufacturing Workshop at Autonomous Agents &apos;98.


**Index Terms**

Computer Science

Software Engineering

**Keywords**

Agents   MAS   Job shop scheduling   Agent based dynamic scheduling model

Contract net protocol.