

## **FEATURE BASED MANUFACTURING RESOURCE SELECTION PLANNING FOR MANUFACTURABILITY ANALYSIS**

**DEVSUDHAKAR S. P.<sup>a</sup>, ABHIMANYU P.<sup>b</sup>,  
HEBBAL S. S.<sup>c</sup> AND HEM CHANDRA REDDY<sup>d</sup>**

<sup>a</sup> PDA College of Engineering, Gulbarga-585102, Karnataka State, India

<sup>b</sup> PDA College of Engineering, Gulbarga-585102, Karnataka State, India

<sup>c</sup> PDA College of Engineering, Gulbarga-585102, Karnataka State, India

<sup>d</sup> Director Academic and planning, JNTU Anantpur, AP State, India.

### **Abstract**

Manufacturability analysis of a product during its design stage is becoming extremely important to meet the challenges of global competition and rapidly changing customer requirements in the form of high quality and low cost. Further, automation of the process of manufacturability analysis is also important for manufacturing industries. The current work focus on the application of feature technology for this purpose as it becomes feasible to conveniently associate the manufacturing knowledge and data to the recognized features in order to determine the manufacturability of the given part. Issues related to the development of a feature based operational library which readily provide the information about the feasible operations along with manufacturing resources, for both rough cut and finishing operations for a given feature are also considered. A research plan is outlined which involve the development of computer assisted procedures to estimate the characteristics of manufacturing resources that are necessary for producing a given feature with the help of characteristics of feature under consideration.

-----  
**Keywords:** Manufacturing Feature, Manufacturability analysis, Feature Based Operational Planning and CIM