

ABSTRACT

The objective of this research is to study and design the production database which should be organized in the form of part master file, product structure file, routing file, work center file and tool file. The result of this research are a files structure which shows that each record of each file in the production database should contain what kind of production information and the size of field that suits each information item. From this research, the record in each file will consist of 72, 9, 21, 19 and 12 fields of information, respectively. The production database can be applied in the area of production planning and control system such as bill of materials processing, forecasting, order processing, master production scheduling, material requirement planning, capacity planning system, order release and production scheduling, work-in-process control systems and inventory control system, etc. In an integrated production control system the part master file is one of the largest files, containing a vast amount of information and very dynamic when used for inventory control application whereas the other four files contain relatively stable data. In addition it is usually necessary to store information which links records in a file to relevant records in the other file.

The benefit of this research will be the fundamentals of development of a computer-based production system.