A PERFORMANCE EVALUATION TECHNIQUE FOR THE MEASUREMENT OF A FACILITY'S ABILITY TO PROCESS THE PROPER JOBS

J.J. Babiel and B.Z. Duhl

IBM System Development Division
Endicott, N.Y.

Most manufacturing floor control installations perform substantial analysis in choosing appropriate job sequencing algorithms with the aid of simulations, but tend to neglect further analysis required to continuously measure the degree of compliance to job sequencing rules. With the advent of on-line, real-time capabilities, priorities of jobs can change throughout the working day and frustrate the efforts of a facility in striving to "do the right jobs".

Further, different levels of work-in process were found to be major factors affecting the ability to comply with sequenced worklists.

This paper describes the various measurement schemes considered, highlighting the advantages and pitfalls of each. It also illustrates an effective reporting technique which lets management evaluate how manufacturing and/or production control areas are influencing customer serviceability.