SYSTEM AND METHOD FOR MANUFACTURING PLANNING AND CONTROL

ABSTRACT OF THE DISCLOSURE

A customer-orientated manufacturing planning and controlling system. An order management module is programmed to receive an order for a product and reserve a capacity for the order based on a capacity model that considers a plurality of capacity vectors in a production system. A plan engine generates a fixed production schedule for the order based on the capacity model. A priority management engine provides a priority for the order. A production schedule monitor and evaluation module determines whether the order in process conforms to the fixed production schedule by statistical process control (SPC) and whether to adjust the fixed production schedule and to adjust the priority based on a dynamic achievement model of historical fixed production schedules, based on historical production information in a production database storing production information of the production system.

(FIG. 1)