ABSTRACT OF THE DISCLOSURE

A system for planning and controlling a pull-in request of an order with demanded capacity in a production system. A plan engine is programmed to receive a pull-in request for the order, release original demanded capacity, reserve a capacity for the pull-in order, and generate a fixed production schedule for the pull-in order based on a capacity model that considers a plurality of capacity vectors in the production system. A production schedule monitor and evaluation module determines whether the relevant current pull-in order conforms to the fixed production schedule and whether to adjust the fixed production schedule when the relevant current pull-in order deviates from the fixed production schedule.