Redesign of the Production Planning Process

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The issue of production management affects all entities of the supply chain in a company, mainly, OPL & sales, production planning and workshops.

Various reasons can induce a dysfunction in the chain. An unstable forecast, orders on short notice and the last minute modifications in the machine’s configuration that the client could ask for constitute the major causes of the difficulties.

First, a forecast calculation using Holt-Winter method is proposed. It is a statistical algorithm that takes into consideration the variation of demand as seen in Fig. 2 for BOBST case.

Second, as BOBST is a “high mix, low volume” manufacturer, a new way of production planning is developed, that aims at smoothing the production load in a way to optimize the use of available resources.

Third, a complete analysis of manufactured and purchased items is done, in order to exemplify a high level of similarity between different configurations that client could ask for. This study helps the decision makers to choose the right inventory management of each item.

Finally, a procedure is proposed in order to help implementing the new concept in a large manufacturer like BOBST. It includes a training program, the best way to establish forecast using the “double vision” way (Fig. 3) and standardization of tasks.

Other solutions are proposed to help minimizing perturbations and maximizing profit.