



Warehouse Capacity Planning for a National Leader in Biopharmaceuticals

A leading biopharmaceutical company needed to evaluate their plant capacity as a function of labor for manufacturing and warehouse for different production scenarios. Equipment scheduling software was already in use in the manufacturing area but the company needed labor standards. The warehouse did not have a labor model tool to support capacity planning for the mentioned scenarios. Tefen developed a time study methodology, templates and work instructions, trained client personnel, and project managed the field studies to gather the required labor data for the client's scheduling software. Additionally, an Excel-based labor model, supported by work instructions, was developed for the warehouse.

Challenge

The client had a wide variety of processes that consumed operator labor, many of which needed operator interaction intermittently, had multiple operators working on them, or could be performed with varying number of operators. The client had relied on operator and supervisor interviews to determine labor requirements. There was no standard methodology for collecting this data. The client had effectively modeled the capacity of their equipment using a process modeling software package that could also model

labor if correct labor standards could be supplied. The client wanted to obtain the data needed for labor capacity requirements supporting different production scenarios and to develop an internal proficiency in gathering new data at this particular site and also across other sites.

The warehouse did not have a labor model that was a function of run rate. Previously, estimates were gathered by the supervisor for the labor needed in the warehouse.

How Tefen Helped

Tefen developed a time study methodology based on following the process (instead of the person), which allowed an accurate tally of labor to be consumed by the process independent of the consumed labor timing and the provider of said labor. This proved ideal for tracking batch processes that had multiple operators attending them. The methodology was incorporated into the client's work instructions as a standard method, and included training for a team of client employees. Two areas (upstream and downstream) were targeted for data collection using this methodology.

The client also needed a labor capacity study for the warehouse. For this area, scheduling software was not available. Tefen, instead, developed an Excel-based labor modeling tool, which supplied labor needed as a function of factory run rate. Labor was connected to run rate through the bill of materials and the work generated by each raw material component. In both cases (manufacturing and warehouse), Tefen also trained client personnel and project managed the data collection effort on the shop floor. Multiple observations were made for the same recipe to eliminate outliers and to observe the labor standards' level of variability. As a result, over 100 studies were performed during the project.

Performance Excellence Delivered

Tefen delivered labor tracking sheets, work instructions for observers and study coordinators, and training in the new method. Both targeted areas in the factory were fully completed and the data was used in the clients' scheduling software. The data has enabled the client to plan labor requirements and to perform capacity planning for different production scenarios. The data has also given the client opportunities to improve and better balance labor loading across the process. A labor model for the warehouse was completed and distributed to warehouse supervisors.

About Tefen

Tefen is an international management consulting firm, committed to improving overall operational effectiveness for Fortune 500 companies around the world. The firm's main areas of focus include operations excellence, manufacturing, quality, customer service, research and development and supply chain management. With its "hands-on" approach philosophy, the company has achieved tremendous success in delivering quantifiable and value-driven results for its clients in a variety of industries, including healthcare, life sciences, general manufacturing, high-tech and financial services. All of Tefen's support programs are ISO 9001 certified. Tefen currently employs over 300 professionals worldwide.

For additional information, please contact:

Yvonne Liu, Marketing Manager

Tefen USA

(646) 652-8275

yliu@tefen.com

www.tefen.com

