Improving productivity in the pipe manufacturing industry is a major challenge that manufacturing companies in contemporary competitive markets face. The purpose of this study was to improve productivity in the pipe manufacturing industry by applying manufacturing principles that employ simulation modeling. An approach to improve productivity focuses on the process of workstations and workforces was proposed. The proposed approach's target was to boost the productivity of providing clients' prerequisites and leaving a few products in the store for other clients. A simulation model based on the data collected from the steel pipe company, Bansal Ispat Tubes Private Limited's in India, was used to improve its operational performance. The research methodology included a pro-simulation model, suitable distribution, and investigating data. The simulation model was created by simulating each workstation and assessing all relevant processes depending on the collected data. The real job-shop data was collected from the machinery production line and supervision workers with observations made during the manufacturing process. The techniques used include videotaping of the operation, interviewing liber by a video camera. The best continuous distributions were chosen to achieve a suitable statistical model. The outcomes maybe contribute to improving the productivity of the manufacturing industry. Moreover, the results might help solve scheduling problems in modeling and simulating pipe manufacturing, revealing effective strategies to enhance productivity in pipe manufacturing. Thus, the findings could encourage healthy competition between businesses and industries.