

CASE STUDY

Manufacturing Analytics Helped a Leading Steel Manufacturing Company to Improve Product Quality and Enhance Operational Efficiency by 4x- A Quantzig Success Story



Companies in the global **steel industry** are facing razor-thin margins and are dealing with growing competitive pressures to bring quality products to the market faster and more efficiently than their competitors. Moreover, the constant fluctuations in the price of raw materials have put significant pressure on steel manufacturers. Therefore, companies in the steel industry are looking for better ways to stay ahead of the curve. Consequently, businesses are investing a considerable amount of capital into production process improvement to differentiate their offerings from that of their competitors' products. To address these challenge manufacturers in the steel industry must leverage manufacturing analytics solutions to identify bottlenecks and optimize steel manufacturing processes.

Business Challenge

The client, a leading steel manufacturer, wanted to produce better quality products that are innovative and reliable. Also, they wanted to reduce operational costs and improve operational efficiency. Furthermore, the client wanted to reduce their reliance on manual tracking systems that hindered their capability to predict machine downtime accurately. Therefore, the steel manufacturing company approached Quantzig to help them affordably capture valuable data and turn them into valuable insights. Also, they wanted Quantzig's analytics experts to help them devise powerful strategies to improve **manufacturing quality, efficiency, and performance**.

Solutions Offered and Value Delivered

The manufacturing analytics experts at Quantzig adopted a holistic three-phase approach to help the client tackle their core business challenges. In the first phase of this manufacturing analytics engagement, the experts focused on conducting an in-depth analysis of the client's datasets to identify different data points such as cost of raw materials and time taken to develop each product. The second phase of the manufacturing analytics engagement revolved around identifying key performance indicators. The final phase of the engagement focused on developing and designing customized manufacturing analytics dashboards to capture real-time data and generate valuable insights.

The solution offered helped the client to reduce errors in **manufacturing processes** and focus on improving uptime. Also, the client was able to accurately predict downtime and quickly resolve issues. Consequently, they were able to **increase productivity, reduce wastage of raw materials**, and improve operational efficiency by 4X.