BEYOND MEAT

Overall Equipment Effectiveness And Continuous Improvement

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Beyond Meat is the first manufacturer of plant-based meat, having debuted its plant-based burger product in 2015. Since then, it has expanded its product offerings to include plant-based sausage, meatballs, chicken and many others. Its revenue grew to \$400M in 2020 showing strong customer demand for this new category. In selling plant-based meat products, Beyond's goals are multi-faceted: to improve human health, decrease the impacts of climate change, limit the reliance of humans on natural resources and respect animal welfare. Additionally, in 2020, Beyond expanded its footprint by adding three manufacturing sites. Amidst this growth, Beyond's manufacturing team has committed to optimizing their production capabilities. The Tauber team was tasked with identifying and prioritizing opportunities to cut costs, as well as piloting one of the identified priorities.

To measure opportunities for improvement, the Tauber team leveraged the Overall Equipment Effectiveness (OEE) framework at the Devault, PA facility. OEE evaluates opportunities on a machine level by measuring availability, quality, and performance. The Tauber team manually measured OEE and provided recommendations for Beyond to automate OEE measurement long term. While measuring OEE, the Tauber team identified a specific machine on the plant floor that had significantly lower availability and performance. The Tauber team planned an Autonomous Maintenance Event (AME) and included the machine's manufacturer, Devault's management, the maintenance team, and the production team.

During the event, operators were trained on proper machine use, the technician inspected and made machine adjustments, and preventative maintenance was standardized. The Tauber team provided documentation and standard operating procedures following the event.

By executing the AME, the Tauber team was able to improve the performance and availability of the machine and ultimately increase the output of the line. The team also recommended additional strategies to improve OEE including rotating operator breaks and adding a pull system between two process steps. With these improvements, Beyond can expect \$3.3M in savings and 35M lbs of additional product produced over the next three years at the Devault facility.