

# OPERATING WITHOUT INTERRUPTION USING A PHASED DELIVERY APPROACH

Extensive downtime isn't an option when it comes to improvement projects for high-use infrastructure.

Being able to execute a project seamlessly — and without interruption — requires preparation, planning and coordinated teamwork. The power to keep production moving and schedules flowing lies within a phased execution approach.



# SPREADS PLANT GETS NEW LIFE

Utilizing a phased approach, and a strategic plan, we were able to reduce disruptions to people, processes and tight schedules for a capacity-constrained peanut butter plant.

## CHALLENGE

Interrupted service in a production cycle within the manufacturing industry can largely affect capacity goals and customer satisfaction. When a leading American food manufacturer needed an increase in production from one of its service lines, the company was looking for a quick, effective and smart option to address its plant upgrade needs.

For the spreads plant, every product it couldn't make would be one that could not be sold. The company needed a team to provide a solution that wouldn't interrupt production. Using our phased project delivery approach, the plant depended on us to get the project done quickly while improving efficiency and increasing on-site capacity.

## SOLUTION

The first step of the project involved our team performing modeling and simulations, using Arena software, of the current packaging departments. During this process, we evaluated the rates of performance of the current equipment while creating simulations to determine the benefits of implementing new equipment. As a result of our findings, we were able to define a project scope that had the financial validation to move forward with upgrades to the plant.

Based on our initial findings, and in combination with stakeholder input, we went into the design phase with the goal of determining how to integrate the equipment in a way that would minimize the overall downtime to operations. We devised a solution that would require packaging operations to be down for only six weeks — much shorter than the six months estimated by another firm.

After design and equipment procurement, phased project delivery was initiated. This method involved 12 miniature shutdowns that would replace the equipment in sequence with the overall layout. By methodically arranging the equipment throughout the site, we were able to reconfigure the product lines in a way that would allow service to continue even throughout the duration of the construction phase. A vertical startup plan was also developed, allowing for an immediate return to production after construction.

## RESULTS

This project came in under budget and had no safety recordables. The newly implemented equipment increased packaging capacity by 20 percent, improving both reliability and rate. In addition, we were able to provide a solution that reduced the schedule by 100 hours and decreased the amount of production downtime that originally had been expected at the plant.

## PROJECT STATS

### CLIENT

Confidential

### LOCATION

Confidential

### TOTAL PROJECT COST

\$20 million

100

HOURS REDUCED  
FROM SCHEDULE

20%

INCREASE IN  
PACKAGING CAPACITY

5%

UNDER BUDGET

0

SAFETY RECORDABLES