

Cylinder Block Maching Line - Throughput Improvement



Key Points

- Validation of production capacity for a proposed line
- Impact of gantry availability on production

Client's Challenge

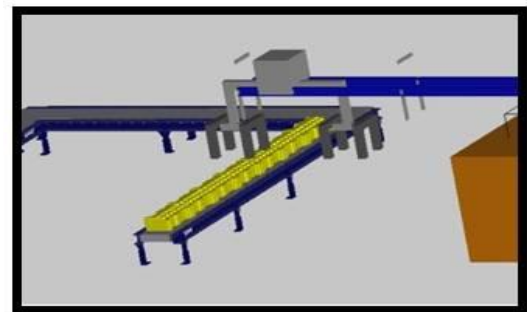
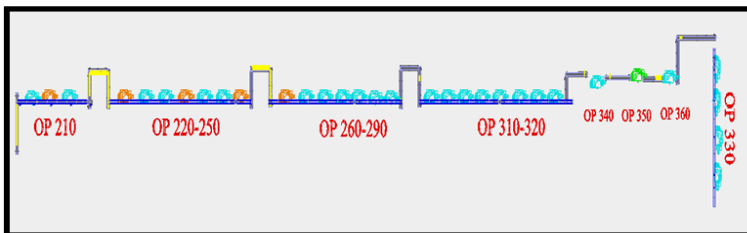
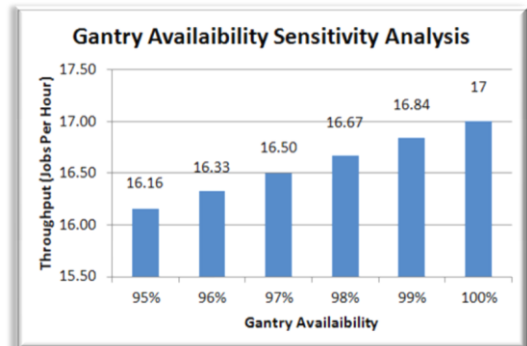
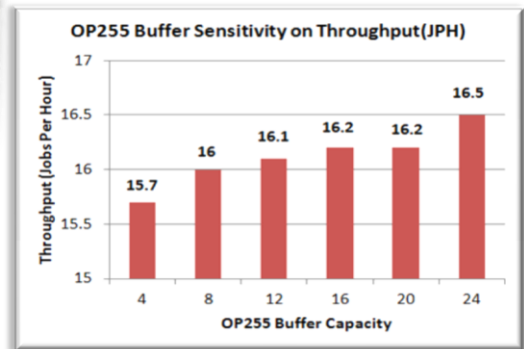
- Validate proposed facility's ability to produce 29,500 cylinder blocks annually(14.8 JPH)
- Minimize buffers while maintaining production above requirement

PMI's Approach

- Collection & Analysis of Data
- Verification & Validation of Baseline Model
- Identify top 3 bottlenecks in the line
- Perform experiments to analyze impact on througput of:
 1. Buffers
 2. Gantry Availability

Findings & Recommendations

- Proposed facility was capable of functioning at 16.5 JPH (Target: 14.8 JPH)
- Predicted future bottlenecks in the system
- Reduction in buffer size led to reduced production
- Reduction in gantry availability did not significantly impact production



*Data shown here has been modified to protect client confidentiality