

CASE STUDY

Addressing Auto OEM Supply Chain Interruptions



& Auto Tier 1 Supplier of Interior Exterior Parts

CLIENT PROFILE

Engaged by an Auto OEM to address intermittent supply chain interruption issues at a growing southeastern production facility Tier 1 Multi-National Corporation with multiple production plants in US producing interior/exterior linings.

CHALLENGE

Tier 1 supplier had been struggling with quality and ability to support demand in their steam heat compression and trimming process impacting their ability to supply diverse Auto OEM customers. Production on their 6 proprietary technology work cells had been impacted by significant downtime from automated material handling robots “dropping” the parts during transfer to and positioning for secondary ops (trimming). The vacuum suction was identified by plant maintenance personnel as the problem and had requested equipment supplier on site in an attempt to address the inability of the vacuum lifting equipment to hold the production parts impacting all work centers. Plant maintenance personnel reported that as soon as they resolved the problem at one work cell, the same issue would present itself at another work cell. Organization’s operational team were in full “firefighting” responding to the material handling fault moving from one work cell to the next.



APPROACH

OEM client asked for an initial assessment to identify the root cause of the equipment downtime and structural and finish related quality issues:

- Review overall operation and impact of automated material handling effectiveness upon operations.
- Identify factors causing inability of vacuum lifting to hold part during transfer to secondary operation.
- Identify the root causes of the “roughness” and “pitting” of the parts finish and appearance.
- Address the multi-shift maintenance team for ability to address and timely remediate the equipment failure.
- Address the Auto OEM client’s new product development occurring on a start up production cell (In start-up prove out stage).

SOLUTION

- Worked along side plant maintenance team and production reporting personnel to correlate additional work cells steam heat demand upon existing.
- Identified impact of start-up of two new work cells upon steam boiler capacity noting downtime occurring as new work cells were operational creating additional demand for steam heat.
- Worked with steam boiler vendor in calculating excess boiler capacity.
- Aided plant leadership and maintenance personnel in shifting focus from vacuum lifting faults to root cause of inadequate steam boiler capacity due to the traditional calculated excess steam capacity that averages the demand not factoring the “burst demand” exceeding the supply and calculated excess capacity.
- Aided steam boiler vendor and organization in bringing temporary additional capacity for the critical steam

RESULTS

The supply chain interruptions were quickly eliminated (8 days) to:

- Temporary steam boiler was brought on-line eliminating material handling faults and structural/finish related quality defects
- On-time deliveries and 5 DOH for client OEM parts
- Improved product quality (structural integrity and finish) at all production cells in plant

BENEFITS OF 360 VERITAS TEAM

- **Drive Change on the manufacturing floor and supply chain**
 - OEE Throughput /output
 - Warehouse & Operational Organization and Management
 - Scheduling/Forecasting/Planning
 - Business Transfer Facilitation
 - Quality and Operational improvement
 - Inventory Control and Rightsizing including Physical Inventory
 - Supply Chain continuous improvement and Risk Management
 - Warehouse Management
- **Drive Change in Information Technology**
 - ERP/MRP system analysis and correction Business Intelligence/Data Analytics
- **Purchasing (Contract Evaluations and Negotiations)**
- **IT, Sales & Marketing, Engineering resources**
- **Rapid Response for distressed organizations/Crisis Resolution**