

CASE STUDY

Addressing Auto OEM Supply Chain Interruptions



& Tier 1 Multi-National Corporation

CLIENT PROFILE

Engaged by an Auto OEM to address crisis supply chain interruption issue resulting from plant fire at a southeastern production facility of a Tier 1 Multi-National Corporation with multiple production plants in US producing crash safety parts.

CHALLENGE

Tier1 supplier had experienced a devastating fire located adjacent to exterior wall with intense heat, smoke, and water damage destroying approximately 20% of production cells at one of their plants. The fire created extensive damage with 8 production cells completely destroyed effecting two OEM's. Consultants deployed to aid in recreating two production cells producing US required crash absorption safety parts within 72 hours as no alternate supply chain. The automated multi-robotic welding cells along with fixturing would need addressed immediately. Fixturing bases were available to retrofit to applicable specifications and requirements. The quality specifications on weld includes a minimum and maximum weld strength. DOH was 2 days. Current environment on plant floor included multiple electrical contractors rewiring destroyed lines, pipe fitters on-site plumbing water lines and sprinklers, de-rusting process for all raw materials and unpainted/coated parts, with additional CNC technicians performing equipment repair and validation.



APPROACH

OEM client asked for an initial assessment to define path to recreate robotic work cells and restart production at site:

- Reviewed two existing available welding cells for retrofitting welding fixtures and robotic welders
- Identify all quality checks and additional levels of inspection for initial product relaunch.
- Identify the availability of raw materials to support planned production needs.
- Identify and remediate any parts in need of de-rusting.
- Define and implement second and third level inspection process insuring 100% quality as confirmed by escalated inspection levels at OEM.
- Identify and remediate any raw material shortages and material handling constraints.

SOLUTION

- Worked along side plant maintenance team, external CNC robotic technicians, electricians, Tier 1 management, OEM support personnel and fixture design engineers to recreate production cell.
- Addressed overlap OT to ensure same quality standard across three shifts.
- Validation of fixturing tolerance and functionality with start-up of two new work cells relative to standard work documentation.
- Identified and implemented changes in material handling and parts storage to reduce the over burdened fork truck personnel reducing parts availability related downtime.
- Provide oversight to production cell to aid in immediately addressing downtime, including implementing team-leader welding tip changeouts to reduce the load upon maintenance technicians.

RESULTS

The threat of line down to OEM was avoided with inventory returning to 5 DOH at day 11:

- 100% quality parts as evidenced by escalated OEM inspection.
- On-time delivery by expedited freight for initial shipment only (Sprinter van)
- Achieved first day production in excess of daily demand.

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**