Client Reference

Food and Beverage Packaging Asset Care Plan Development



Client Background

The client is an Original Equipment Manufacturer (OEM) that offers maintenance contracts to their customers. Some of these contracts require the client to take responsibility for the maintenance of third party equipment (3PE) that forms part of the full line of equipment. This is typically distribution equipment like cardboard packers, shrink wrappers and palletisers. Mariani is one of the client's key 3PE suppliers, with more than 100 pieces of equipment in the client's installed base. The configuration of these machines is widely different from each installation and the 3PE supplier is unable to supply asset care plans. The OEM has sold a maintenance service contract to a major client in Egypt where one of these Mariani machines is installed. Without asset care plans in place they have been unable to maintain the machine properly and this has resulted in the machine falling into disuse because of frequent breakdowns and downtime. The result is that one production line is unable to run, impacting production.

Key Challenges

- · Limited client resource time
- No maintenance recommendations from the 3PE supplier
- · No recorded failure history available
- Only technical documentation available is the spare part catalogue
- Spare part catalogue is 90% accurate
- 3PE spares are not created in the client's warehouse
- The spare part catalogue structures the equipment differently to how the client structures its own equipment
- No follow-up or suppression logic between maintenance recommendations
- Service contract is already costed and sold so maintenance costs must fall within a predefined budget



Value Add

- High quality maintenance plans created to client's standards
- · Complete and updated list of spares
- Client's skilled resources freed up to focus on other activities
- Rapid implementation of maintenance plans to ensure fast return on investment
- The client builds on a repository of maintenance plans which can be used in the future. This reduces the effort required from their skilled resources or from the rapid response team, driving costs down further for maintenance plan development.



Failure Analysis for Asset Type Component [*15920313]

** [*15884910] CHANGE Motor Gearbox

Description [09] {Electrical Interference / Power Surges}

[22] {Loose / Bad connection}

Tools and Technology

[32] {Short Circuit}

- On Key EAMS
- Asset Care Plan Development On Key Module
- Asset Care Plan Development Business Process

"Very good engagement and contribution from the team". - Client

Pragma Intervention

Our client requested an onsite workshop to develop asset care plans for the machine. Pragma deployed a rapid response team (Asset Care Engineer, Field Service Engineer and Maintenance Reliability Engineer) to the client. Their tasks were as follows:

- Train team members in Pragma's Asset Care Plan Development process.
- Break down the equipment into functional areas with all sub components. Criticality analysis
 was done on the first level of assemblies followed by criticality analysis on the sub assemblies
 for the most critical and second most critical assemblies. The assemblies and sub assemblies
 were characterised as A Most Critical; B Critical; C Least Critical.
- For the A-critical items a full failure analysis was done on all wear and tear parts and
 preventative maintenance was developed. For B-critical items wear and tear items were
 identified and preventative maintenance was developed based on failure history and
 maintenance issues as recalled by the field service engineer. The C-critical items were
 configured with preventative maintenance to address identified failure history.
- Pragma managed the administration of configuring the tasks in the EAMS and creating and
 extending parts in the ERP. The criticality analysis was also used to ensure that all maintenance
 costs over three years will fall within the cost of the service contract, removing costly items and
 activities from less critical components rather than from more critical ones.

