

Meccanica Vendor Management System Project

Date: Fall 2018

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Company: Electra Meccanica

Sponsors:

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Meccanica is a start-up in Vancouver developing unique and exciting electric vehicles. Along with Intermeccanica, their parent company with 50+ years of automotive manufacturing excellence, they are producing a commuter car that is environmentally friendly, fun to drive, and accessible to consumers. When we began our project, they were in the prototyping stage of development.

Meccanica was experiencing quality costs due to supply. The team was tasked to identify and mitigate this risk with the development of a Vendor Management System that is based on ISO 9001 and IATF 16949:16 industry standards. This system includes both Vendor Selection and Vendor Monitoring processes. The system was designed through iterative consultations and verification with the client. Each stage of design verified using failure mode and effect analysis to identify, reduce and eliminate risk posed by the system design itself.

The following completed elements of the system were delivered:

- Component Risk and Vendor Qualification Assessments
- Vendor Performance Evaluation Scorecard and On-Site Auditing Form
- Standard Operating Procedures & Work Instructions for all elements/procedures of the system

The system design offers to Meccanica the following **Measurable Benefits:**

- A reduction in the Criticality of failure modes by **52%**
- An increase in the Detectability of failure modes by **65%**
- A reduction of the overall system's failure mode Risk Priority Number by **91%**
- Potential for cost savings related to failure/opportunity costs of **\$465,732 to \$731,392 annually**

The system also offers Meccanica the following **Strategic Benefits:**

- Increased accountability of vendors to Meccanica
- Increased likelihood of receiving an ISO/IATF registration
- A cost-effective, repeatable, scalable and user-friendly vendor management system
- Meccanica and its vendors are held closer to ISO 9001 and IATF 16949 industry standards

It was an absolute pleasure working with the BCIT Consultant Team consisting of Adil, Cole, and Melanie. The BCIT team was very patient with us and displayed great professionalism throughout. Despite our team's busy schedule, they made great use of our time during our weekly meetings. All of our input was heard, and they were able to customize our company needs into the vendor audit and management system they have created for us. Each one of them possessed a great depth of knowledge which made the entire process run very smoothly and easy-going. They walked us through the system step-by-step and made it very easy to follow. The system they have provided us was way beyond our expectations and we cannot wait to utilize it. A big thank you to BCIT for providing us an opportunity like this, we hope your students were able to learn and enjoy this process as much as we did. – EMV Team
