

Supplier Manual

4B00202A 02/23/2017 DCN: 13295

Enovation Controls Supplier Manual

Table of Contents

Enovation Controls Overview
Purpose
Ethics Policy 5
Supply Chain Security
Terms and Conditions
Purchase Order Execution
Purchase Order Acknowledgement 6
Purchase Order Pricing
Communication with Enovation Controls7
Change Notification7
Supplier Quality Management System7
Continual Improvement
Supplier Qualification and Management Process (SQMP) 8
Design Control9
Production Part Approval Process (PPAP)9
First Article Inspection (FAI)
Advanced Product Quality Planning (APQP)10
Non-Conforming Material10
Supplier Corrective Action Request (SCAR)10
Request for Deviation11
Supplier Performance11
Warranty11
Packaging11
Labeling12
References12

Enovation Controls Overview

The FW Murphy brand was established in 1939, and is committed to providing innovative products and services for comprehensive equipment management and control solutions.

These solutions are utilized in a variety of markets including off-highway and mobile equipment, on-highway vehicles, power generation controls, commercial marine, recreational marine, irrigation and water pumping.

Enovation Controls headquarters is located in Tulsa, Oklahoma, USA. The company also has manufacturing and engineering locations around the world including: Tulsa, Oklahoma.; Salisbury, UK, and Pune, India.

Purpose

This manual defines Enovation Controls business and quality requirements for our direct material suppliers.

Enovation Controls seeks suppliers who provide high quality product, are committed to continuous improvement, and can build strong business relationships.

The business relationship is based on the supplier

- Becoming involved in product development
- Managing commitments and deadlines
- Providing added value
- Developing and maintaining a long term relationship with Enovation Controls
- Communicating frequently and proactively

Enovation Controls suppliers are expected to continually work to improve their processes and performance in the following areas:

- Quality
- Delivery
- Total Cost
- Warranty

Enovation Controls welcomes input from suppliers to help improve its products and processes.

Suppliers are responsible for ensuring their products and/or services meet all requirements and assume full responsibility for quality issues. *Acceptance* by Enovation Controls does not relieve the supplier of any responsibility.

Suppliers are to read the Enovation Controls Supplier Manual. By accepting the terms and conditions the supplier is also agreeing to abide by the policies in this manual.

Ethics Policy

Enovation Controls is committed to doing business to the highest standards of legal and ethical conduct.

Enovation Controls employees shall not accept any gifts, favors, gratuities, benefit, loan, credit, prejudicial discounts, entertainment or service which could be construed as a business inducement above a nominal value. Suppliers should not routinely provide meals. If Enovation Controls employees travel to a supplier's site the supplier may provide or pay for meals as long as the meal is appropriate to the effective conduct of business, not extravagant and that supplier payment of the meal is in compliance with the supplier's policies.

Enovation Controls suppliers and sub-suppliers shall abide by all national and local laws and regulations of the countries in which they are operating. If legal requirements conflict with local or industry practices, the supplier shall follow the legal requirements of the regulations. Suppliers and sub-suppliers will not use child labor. "Child" is defined as a person younger than eighteen (18) or sixteen (16) where local law allows or the local legal minimum age for employment or the age for completing compulsory education. Suppliers and sub-suppliers will not use corporal punishment, threats of violence or other forms of physical, sexual, psychological or verbal harassment or abuse. Suppliers will provide employees with a safe working environment. Suppliers shall compensate employees by providing wages and benefits that comply with local and national laws of the country in which the supplier is operating.

Enovation Controls recognizes cultural differences exist but believes all terms and conditions of employment should be based on an individual's ability to do the job, not on the basis of personal characteristics or beliefs. Suppliers and sub-suppliers will not discriminate in hiring and employment practices, including salary, benefits, advancement, discipline, termination or retirement, on the basis of race, religion, age, gender, nationality, social or ethnic origin, sexual orientation, political opinion or disability.

Section 1502 of the Dodd-Frank Wall Street Reform Act requires US publicly traded companies to disclose whether the products they manufacture or contract to manufacture contain conflict minerals that are necessary to the functionality or production of those products. Conflict minerals are defined as gold, tin, tantalum, and tungsten, regardless of where they are sourced, processed or sold. Suppliers and sub-suppliers shall not use conflict minerals originating from the Democratic Republic of Congo or surrounding countries. Suppliers shall conduct a reasonable country of origin of all conflict minerals in the Supplier's product, and disclose the conflict mineral smelter data to Enovation Controls annually. Enovation Controls fully supports the intent of the legislation to end violent conflict in the Democratic Republic of Congo and surrounding countries.

Suppliers shall guarantee merchandise sold to Enovation Controls does not infringe upon any patents, trademarks, or copyrights. Suppliers must provide Enovation Controls with any applicable licenses and/or agreements for selling or manufacturing products sold to Enovation Controls upon request. Supplier agrees to indemnify and hold harmless Enovation Controls, its officers, agents, successors, assignees and customers against all damages, claims, demands, attorney's fees and costs of any kind for actual or alleged infringement of any trade-name, trade-mark, and patent or patents because of the possession, sale or use of any material supplied to Enovation Controls.

Suppliers and sub-suppliers will comply with all laws, regulations and requirements of any governmental or administrative body which may be applicable to the manufacture, advertising, merchandising, packaging, publicity, promotion, sale, distribution, shipment, import or export of any goods. Supplier shall respond promptly and fully to any investigation or recall of Goods by any such body and shall indemnify and hold harmless Enovation Controls from all expenses associated therewith, including, without limitation, reasonable attorney's fees and costs.

Suppliers must protect Enovation Controls intellectual property and technology.

Supply Chain Security

Enovation Controls has made a firm commitment to enhance the security of goods moving through our supply chain and to communicate the importance of security procedures to our suppliers. We recognize that security is an integral part of our everyday business and take our role in supply chain security very seriously. We understand our responsibility to protect customer property as well as our own personnel, facilities, and the environment.

As a valued supplier to Enovation Controls, we expect our suppliers to develop sufficient security measures within their own supply chain. Enovation Controls may, at its discretion and expense, audit the supplier's compliance with security guidelines. Enovation Controls will generally provide suppliers advanced notice of compliance audits.

Terms and Conditions

Each Enovation Controls purchase order outlines the Terms and Conditions of the purchase. Acceptance of the purchase order implies acceptance of the policies and procedures outlined in this manual. Questions about the Terms and Conditions should be directed to the appropriate Enovation Controls Buyer or Supply Chain Manager (SCM).

Purchase Order Execution

Enovation Controls Production Purchase Orders are released through an automated delivery system. PO Releases are delivered via e-mail or fax. Suppliers must provide a primary e-mail address or fax number for this purpose.

Purchase Order Acknowledgement

Upon receipt of a purchase order, Supplier is to acknowledge the Enovation Controls Dock Date, Quantity, Pricing, and Drawing Revision called out on the PO as directed on the bottom of the PO form via e-mail or fax. Exceptions to the PO requirements must be reconciled with the Buyer as directed on the PO form. See below for further information on pricing expectations.

Purchase Order Pricing

Suppliers are expected to continually manage, contain, and reduce costs. Any exceptions to the established pricing as documented on the PO are subject to Enovation Controls procedural requirements that compel justification and approval by the Buyer and/or SCM prior to acknowledgement of PO.

Communication with Enovation Controls

Enovation Controls seeks to utilize rapid, accurate methods of communication. Electronic communication capability at our supplier is used to enhance our business processes and is a measure of delivery performance.

The supplier's primary contact at Enovation Controls is their Buyer or SCM.

Communication of material certifications, inspection reports and other requested quality documents should be e-mailed to both the SCM and to supplierinfo@enovationcontrols.com (for suppliers shipping product to Tulsa).

Communication with Enovation Controls US facilities must be in English.

Units of measure are to be expressed in units per the print.

Change Notification

Suppliers must formally notify Enovation Controls via their SCM of any changes to product design, manufacturing location, process changes, material changes, significant management change, change in source of key components or packaging change. Supplier is to submit Change Notification Form to their SCM. Changes may require PPAP and/or FAI submission.

Supplier Quality Management System

Enovation Controls requires suppliers to maintain a quality management system. Preference will be given to suppliers maintaining a current ISO9001:2015 or TS16949:2002 (or higher) registration through an accredited registrar. Upon request registered suppliers should forward copies of all certificates to their appropriate SCM. Suppliers who are not registered must have systems in place to insure they meet quality, cost and delivery requirements.

Enovation Controls suppliers are responsible for managing the quality of their supplier base. Enovation Controls expects their suppliers to allow and facilitate any Enovation Controls visits to Tier II suppliers upon request.

Suppliers also agree to allow Enovation Controls to conduct periodic surveillance audits.

Continual Improvement

Enovation Controls expects suppliers to monitor their quality system and continually improve in quality, service and cost.

Suppliers are encouraged to adopt Lean Six Sigma as a formal improvement process. If a supplier would like to deploy Lean Six Sigma at their facility they may request to participate in Enovation Controls led training at an Enovation Controls facility. Please contact your SCM for more information.

Suppliers with chronic or high value quality issues may be requested to participate in Enovation Controls continuous improvement training. Suppliers may also be requested to implement statistical techniques to manage and improve their processes and/or product quality.

Supplier Qualification and Management Process (SQMP)

Enovation Controls supplier qualification and management is administered by the Global Sourcing Department, directed by the SCM. Continual assessment of existing suppliers and evaluation of potential suppliers are accomplished through surveys, on-site audits and assessments of supplier capability and performance. These assessments involve Supply Chain, Engineering and Quality functions. Key elements assessed include supplier capability, capacity, technical expertise, quality management system, financial stability, flexibility, past performance, and ability to develop positive customer/supplier relationships. Existing and potential suppliers should be open to completing surveys and allowing Enovation Controls access to supplier facilities, documents and records. Failure to provide requested information may preclude future consideration for qualification approval, inclusion in new product development, new business opportunities and/or Approved Supplier status.

For new product development projects Enovation Controls utilizes a Supplier Engagement Process to insure the supplier is able to meet PPAP and subsequent FAI, cost and time goals for the project. Suppliers are expected to be actively engaged with Enovation Controls in the design and development process and are a key resource in insuring project success. Suppliers are expected to review print tolerances and requirements and communicate any issues or concerns to Enovation Controls.

Acceptance of the Enovation Controls purchase order by the supplier indicates acceptance of the print requirements and the supplier's ability to produce conforming parts and meet delivery expectations.

Design Control

Design Control refers to ownership of the design of the product being sourced. Enovation Controls has design control when the product is designed, developed and specified by Enovation Controls. Suppliers are encouraged to participate in the design to contribute their knowledge and expertise to ensure successful product release, identify cost reduction opportunities and to improve the manufacturability of the product. Suppliers are expected to participate in design reviews with Enovation Controls. The Supplier has design control when the product is wholly designed and developed by the supplier. If the product fails to meet Enovation Controls specifications and performance requirements it is the supplier's responsibility to address quality, reliability and warranty issues arising from the design. Suppliers are required to complete Design Failure Mode Effects Analysis (DFMEA) and specific product testing to demonstrate compliance to required reliability and performance. The Supplier Engagement process is utilized to facilitate successful new product development.

Production Part Approval Process (PPAP)

Enovation Controls requires the use of PPAP to ensure that new or revised products are production ready. Formal request of PPAP documentation will be made via the Supplier Parts Requirements Checklist during the Supplier Engagement Process. Preference will be given to suppliers who are PPAP capable, are able to demonstrate competency and conduct PPAP as a part of their normal business processes. Suppliers are required to conduct internal PPAP on new products or revisions to existing products. Suppliers are expected to purchase their own copies of the AIAG PPAP manual and are to follow the latest version.

Any request for exception to this requirement must be submitted to the SCM for consideration and disposition.

First Article Inspection (FAI)

Enovation Controls requires FAI for all new products, drawing revisions, and supplier process changes, changes in supplier's manufacturing location, new or modified tooling, or packaging change. This FAI is subsequent to the submission of PPAP documentation.

The supplier is responsible for notifying their SCM of any manufacturing process changes, changes of manufacturing location, new or modified tooling, packaging changes or changes to design or specification not requested by Enovation Controls prior to shipment. The supplier is to submit a Change Notification Form to their SCM.

If Enovation Controls initiates the drawing or specification revision, the SCM will communicate the change and FAI requirements, provide the supplier with the latest revision of the drawing, and indicate FAI is required on the purchase order.

The supplier is required to submit the following for FAI:

- Quantity of parts requested for FAI
- Inspection data for the parts verifying conformance to print
- Material certification with part number and PO number clearly identified on document

Any additional data or information as requested by Enovation Controls as outlined in the Supplier Parts Requirements Checklist.

Suppliers are to submit the data electronically to their SCM and to supplierinfo@enovationcontrols.com

If the supplier submits parts that do not conform to print requirements or specifications the supplier shall notify the SCM prior to submitting the parts to Enovation Controls. Enovation Controls will determine the disposition and corrective action required and will communicate this to the supplier.

Advanced Product Quality Processes (APQP)

Enovation Controls requires suppliers to utilize APQP as a part of their normal business practices, using AIAG manuals as the reference. Suppliers are also required to monitor their capability (CpK and PpK) to ensure their processes are capable of providing the quality expected by Enovation

Controls. Suppliers are expected to be able to conduct Measurement System Analysis on their Instrument, Measuring and Test Equipment, IMTE, and correlate their inspection data to Enovation Controls' measurements systems. During new product development, Enovation Controls may request a supplier statistically evaluate their capability for specific Key Product Characteristics. These requests will be communicated via the Supplier Parts Requirements Checklist.

Any request for exception to this requirement must be submitted to the SCM for consideration and disposition.

Non-Conforming Material

Suppliers are expected to provide conforming material. If a supplier determines they have shipped non-conforming material to Enovation Controls they are to immediately notify their SCM and to take action to quarantine non-conforming product at their facility.

Enovation Controls will notify the supplier when a non-conformance has been identified. The primary method of notification of the non-conformance will be electronically via a Non-Conforming Material report (NR). Upon receipt of the NR the supplier is expected to immediately inspect any stock at their facilities and quarantine non-conforming material, review recent shipments to Enovation Controls and notify Enovation Controls of non-conforming material in transit.

If the disposition of the product is a Return to Vendor (RTV), Enovation Controls will issue a debit memo to the supplier. The supplier is expected to provide Enovation Controls with a Return Material Authorization (RMA) and issue a credit in a timely manner, less than 3 days, to facilitate timely return of the product. Enovation Controls reserves the right to return non-conforming material in the absence of a RMA.

Suppliers are expected to determine root cause and implement corrective action to address the nonconformance. No formal response to Enovation Controls is required unless it is requested or a SCAR is issued.

In the event of field failures the supplier may be required to conduct a failure analysis on the product. Enovation Controls expects timely feedback on these requests to insure prompt response to our customers.

Supplier Corrective Action Request (SCAR)

In the event Enovation Controls issues a SCAR, the supplier is responsible for the following activities:

- Take immediate action to contain potentially non-conforming material.
- Notify Enovation Controls of any suspect material currently in transit to Enovation Controls.
- Notify Enovation Controls of completion of containment activities within 24 hours of
- notification of non-conformance.
- Complete and return the SCAR 8D form. Root cause analysis and the corrective action plans are due within *10* business days.

Implementation of the corrective action(s) is to be completed in a timely manner as mutually agreed upon by the supplier and Enovation Controls. Enovation Controls' target for implementation of the corrective action plans is *60* business days.

Request for Deviation

If a supplier discovers a non-conformance they believe does not adversely affect the fit, form or function of the product, they are to notify their SCM and request a product deviation. The supplier should provide appropriate samples and data to Enovation Controls for evaluation. If the deviation request is approved the supplier will be notified by their SCM. The deviated parts are to be labeled with the deviation number for easy identification.

Supplier Performance

Enovation Controls monitors supply performance through various metrics, including quality, cost, delivery and service. Critical suppliers will be provided with Supplier Scorecards on a quarterly basis.

Warranty

Suppliers are expected to warranty the product purchased by Enovation Controls in alignment with Enovation Controls' standard warranty, three years from Enovation Controls' manufacturing date. Enovation Controls' standard warranty is two years from date of manufacture of the Enovation Controls product. In the event of product failure or non-conformances related to a supplier's product the supplier is expected to provide root cause analysis and corrective action in addition to all cost to correct or replace the non-conforming product. The Supplier may be debited for recovery of the labor and material costs incurred by Enovation Controls. The Supplier is responsible for ensuring compliance with all governmental regulations.

Packaging

The supplier is responsible for the development of packaging for their products. Products are to be packaged so they are received undamaged and suitable for use in subsequent operations without rework or repair. Packaging should be standardized and any proposed changes reviewed with the Enovation Controls SCM. Packaging should also be designed to minimize air in the container and minimize the use of packaging materials such as foam, bubble wrap or peanuts. Coated surfaces shall be protected to protect the parts from scuffing, scratches, nicks, abrasions and other damage. Parts are not to be stacked on top of each other without insulating material. PCB assemblies shall be packaged in Electrostatic Discharge, ESD, bags. Each anti-static bag must be protected by bubble-wrap, foam sheets, or other cushioning material. The weight of containers should be 25 lbs or less. Only one part number is allowed per container.

Labeling

All containers are to be labeled in English, with the Enovation Controls part number, product description, revision level, PO number, quantity, box number if multiple boxes, and shipping or manufacturing date. If parts are shipped to Enovation Controls under an approved deviation, the deviation number is to be identified on each container. Product purchased as a finished good shall be labeled with the manufacturing date. Use of the Enovation Controls date coding system is preferred. Product is to be appropriately labeled per Country of Origin regulations. Any deviation from this convention is subject to review and approval by the Supply Chain Manager.

References

Potential Supplier Survey (PSS)

Supplier Quality Survey (SQS)

Change Notice Form

Supplier Parts Requirements Checklist

Terms & Conditions

Deviation Request Form