Supplier requirements

**SIGNATURES OF APPROVAL**

|  |  |  |
| --- | --- | --- |
| **Title:** | **Name:** | **Date:** |
| Quality Manager | Electronic | electronic |
| Supply Chain Manager | Electronic | electronic |

**Approval Signatures Electronic**

**REVISIONS**

| **Rev.** | **Date** | **By** | **Change** | **Page(s) Affected** |
| --- | --- | --- | --- | --- |
| L | 7/18/2017 | D. Cook | Added Acceptance Authority Media section to Quality Clause QC 1 | 10 |
| M | 11/13/2017 | M. Barone  | Adjust language in section titled Change in Quality System Added Shelf Life Certification requirements to QC 1 Section Defined mandatory and variable quality codes.  | 8, 9,10,11 |
| N | 7/25/2018 | M. Barone | Change General Revision,  | ALL  |
| P | 1/18/19 | M.Barone | Revise Supplier Performance Section 13  | 13 |
| Q | 1/02/20 | K. Haberer | Added several references, Updated supplier tools website URL,Added references to Inspection & testing sampling plan,Consolidated SRFDW to one section,Updated First Article inspection, Clarified AAM section,Clarified 3TG in Conflict minerals,Supplier performance OTD% calc. changed from ‘lots’ to ‘pieces;’ days early changed from 2 to 5.QC-13 was added for Plastic Molded parts cosmetic code. Removed guide for applicability.  | 4, 6-13,16 |
| R | 01/29/2021 | M. Barone | Add “Chargeback Policy” to Section 3 , Titled: Terms and Conditions  | 4 |
| S | 2/1/2022 | M.Abdulla | AddedQC 14 – SIKORSKY ITEM, SS7777 APPLIES | 16 |
| T | 6/10/2022 | M. Didley | Added QC 9R NADCAP clause | 16 |
| U | 3/15/2023 | J.DiVirgilio | Removed language in QC-14, Special Processes, Quality Clause to eliminate reference to customer confidential specification. | 17 |

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# NORMATIVE ReferenceS

* AS 9100 - Quality Systems – Aerospace
* AS 9102 - First Article Inspection
* ISO 9001 – Quality Management System
* EN/ISO 9001/2008 Quality Management System
* Form 2233.97 – “Supplier Request for Deviation/Waiver”
* FM0310300800 - ITT Enidine PO Terms and Conditions
* FM0310300801 - ITT Enidine PO Terms and Conditions Government Contract Supplement
* FM0506300910 – Enidine First Article Inspection Report Form
* FM1401021415 – Enidine PPAP Form
* FM1807020714 - Reach Controlled Substance Declaration
* QC 023 - Supplier Quality Self-Assessment Form
* QAM03 - Flight / Safety Critical Parts Program
* S.O.P. 4.5.1 – Enidine “Frozen Manufacturing Control Plan”
* SAE AS9117 – “Delegated Product Release Verification”
* WS-001 – Enidine “Workmanship Standard”
* WS-003 – Enidine “Part Cleanliness & De-burring Standards”
* Enidine Supplier Tools Website—https://www.enidine.com/en-US/Resources/Supplier-Tools/
* ANSI/ASQ Z1.4— “American National Standard for Sampling Procedures and Tables for Inspection Attributes.”
* S.O.P 5.2.1— Enidine “Sampling Inspection and Lot Sampling”
* ISO/CIE 11664-4:2019 – Colorimetry part 4: CIE 1976 L\*a\*b\* Colour Space
* SPI AQ-103— “Cosmetic Specifications of Injection Molded Parts”

# PURPOSE

This document outlines requirements and expectations for suppliers of materials, products or services provided to ITT Enidine, for use in Production of ITT Enidine Products.

ITT Enidine is committed to providing ITT Enidine customers with the highest quality products and services and recognizes the importance of ITT Enidine Suppliers’ contributions in support of this effort. The quality of items delivered by ITT Enidine Suppliers is an essential factor in ensuring:

* The correct form, fit, function, and reliability of ITT Enidine products
* The flow of these products and services through ITT Enidine factories

Meeting these two objectives results in ITT Enidine customer and end user satisfaction.

# TERMS AND CONDITIONS

This paragraph describes the general terms and conditions applicable to all purchase orders where the procured products, services or processes are deliverable/consumable by ITT Enidine customers (FM0310300800, FM0310300801).

In the event of conflict in quality system requirements, the order of precedence shall be:

1. Purchase order
2. Purchase Order Terms and Conditions FM0310300800, (FM0310300801 if applicable)
3. ITT Enidine Engineering drawing
4. Applicable Supplier drawing, (applicable only for source control items)
5. Supplier Requirements (PS-00001-00)

Any documents referenced herein form a part of this document to the extent required or as specified. Unless a specific revision of these documents is noted on the purchase order, the latest revision in effect at the time of purchase order release shall apply.

**CHARGEBACK POLICY**

In accordance with Purchase Order Terms and Conditions FM0310300800,

Any additional costs, damages, charges, etc. that are incurred by ITT Enidine due to Supplier non-performance in either delivery or quality may be charged to Supplier

All documents, certifications and test data must be submitted in English.  Documentation submitted in any other language may result in product rejection.

# GENERAL QUALITY CLAUSES (QUALITY PROVISIONS)

The following is a complete list of general requirements, and variable quality clauses which may be applied to any specific purchase order released by ITT Enidine to its Suppliers. The Supplier is responsible to understand and comply with these requirements. In the event any term cannot be met, the Supplier is to notify ITT Enidine’s Buyer before PO acceptance. It is mandatory that Suppliers comply with clause QC 1 and all general requirements. Compliance to Variable Quality Clauses is required when specified on the Purchase Order.

**Sub-Tier Control and Flowdown**

If work is subcontracted by the ITT Enidine Supplier to another sub-tier Supplier, all applicable purchase order requirements must be flowed down to the sub-tier Supplier.

All ITT Enidine requirements including any technical, customer requirements & key characteristics identified in the purchase order, drawings, specifications and/or terms and conditions, must be part of the flow down requirement to all sub-tier Suppliers, and as needed sub-tiers may be subject to ITT Enidine approval.

The government, ITT Enidine customer, ITT Enidine, or appropriate regulatory agency reserve the right to inspect the products, services or processes included in the PO at the Supplier's and/or Supplier’s sub-tier facilities. When on-site verification of PO conformance is required, ITT Enidine Suppliers must provide the equipment, facilities, complete and accurate paperwork, and personnel necessary for ITT Enidine representatives for verify compliance.

Appendix A “Guide for Applicability” outlines how the below clauses are applied to different commodities and Supplier types.

**PS-00001 Supplier Requirements Document code QC 1 - General Quality Requirements** **are mandatory and apply to all purchase orders**

**QC 1 - General Quality Requirements**:

**Quality System:** All Suppliers must have a quality system deemed acceptable by Enidine and be on the Enidine Approved Supplier List (ASL). It is preferred that Suppliers of direct materials are either certified to ISO9001 or AS9100 standards, however Supplier approval and addition the ASL can be done based on other credentials and audits. Those Suppliers performing calibration services must be certified to ISO10012 or other accredited National Standards for Calibration.

**Documents:** All required documents, certificates, test reports, inspection records, etc. MUST reference the applicable Purchase Order and MUST be included with the shipment of material.

**Certification of Compliance (C of C):** The Supplier certifies all materials, products or services comply with the PO. As such the Supplier will provide a Certification of Compliance. The Certification of Compliance (C of C) document(s) specified herein shall accompany each shipment. C of C’s shall be signed by a responsible member of the Supplier. Each certification shall identify:

* Supplier’s name,
* ITT Enidine purchase order number,
* Part number, and revision,
* Traceable reference (serial, batch, lot, heat, cast numbers) as applicable,
* Shelf Life Certification (where applicable),
* Quantity,
* Date of release,
* Conformance / compliance statement,
* a statement declaring the material provided is “Mercury Free”,
* Signature of person authorized to release the product to the customer.

***NOTE: RAW MATERIAL CERTIFICATION - Certified Material Test Report (CMTR)***:

This applies to all Suppliers that provide raw material and Enidine designed components. All raw materials must be identified with applicable specification, nomenclature, type of material, condition and manufacturer. The Supplier shall submit a chemical and physical test report with actual test data for the materials shipped, including a statement declaring the material is “Mercury Free”.

***NOTE: SPECIAL PROCESS CERTIFICATION***

When applicable, in addition to the above, each shipment shall be accompanied by a signed certification, from the processor, indicating the special process that was performed and the specifications/standards that it was performed and compliant. Inspection and test reports are to be maintained on file and available for review (reference Traceability/Record Retention section). Special processes include but are not limited to heat treating, welding, brazing, plating, and non-destructive testing processes such as x-ray, liquid penetrant, magnetic particle, ultrasonic, and visual inspection.

***NOTE: SOURCE CONTROLLED ITEM***

Where Source Control is a requirement, objective evidence of the source of manufacture/process must be provided, i.e. manufacturer certification.

**Workmanship**: All items on this order shall be fabricated and finished in a thorough, high-quality, good workmanship manner. Particular attention shall be given to freedom from blemishes and burrs, cleaning, removal of foreign object debris (FOD), identification, and general appearance. Suppliers are expected to fully understand and comply with Enidine’s “Workmanship Standard” (WS-001) and “Part Cleanliness & De-burring Standards” (WS-003). A copy of the most recent revision can be supplied at any time upon request, or may be found at https://www.enidine.com/en-US/Resources/Supplier-Tools/.

**Traceability/Record Retention**: Records shall be established and maintained to provide evidence of conformity to requirements and of the effective operation of the Supplier’s quality management system. Records shall remain legible, readily identifiable and retrievable. A procedure shall be established by the Supplier to define the controls needed for identification, storage, protection, retrieval, retention time and disposition of records.

Unless otherwise specified by purchase order or Standard Practice Bulletins, records of product acceptance shall be maintained for a minimum of ten (10) years. These records shall be sufficient to prove conformance to all applicable specifications and drawings, and shall provide means for identifying all like items. It is expected that retrieval of records is ensured within 3 business days of the request.

The Supplier is responsible to maintain traceability of product and materials through all stages of production including at sub-tier processing sources. Supplier’s system shall ensure that products are traceable back to the raw material batch or lot from which they were made, including traceability to the source mill. Supplier’s system shall also provide means to trace where raw materials have been used.

**Foreign Object Debris:** All items delivered to ITT Enidine shall be Foreign Object Debris (FOD) free, with the intent to prevent Foreign Object Damage. Suppliers shall take actions to prevent and control FOD. Unless otherwise specified parts shall be provided “shop clean”, reference WS-003.

**Purchaser Surveillance**: The Supplier’s quality system shall be subject to initial and periodic audit. This will either include an on-site audit at the Supplier or a survey to be completed by the Supplier within 30 days of request (QC 023).

**Change in Quality System**: Supplier must promptly notify ITT Enidine of any changes that affect quality. These changes include, but are not limited to, changes in key management or personnel, changes in current status or scope of any third party certification registrars (NADCAP, ISO/AS9100, ITAR, etc.), changes in source of supply of key materials, and changes in address or site configuration.

**Contract Review**: Suppliers must have a process that ensures ITT Enidine purchase orders and design requirements are reviewed and translated into internal design/manufacturing specifications. Records of these reviews must be maintained.

**Document Control**: Suppliers must have a process that ensures all procedures, design documents, and forms are approved by authorized personnel prior to release and have revision control.

**Process Control:** Suppliers must have a process for ensuring that critical process factors that impact Enidine specified requirements are identified, qualified, and controlled.

**Inspection & Testing Sampling Plan:** Suppliers must have a process to verify that all the specified requirements for Enidine products are met. If the Supplier chooses to use a sample inspection plan, a C=0 sampling plan will be used, which precludes the acceptance of lots with known nonconformities. The Supplier remains responsible for 100% compliance to all applicable drawing requirements. Reference SOP 5.2.1 and ANSI/ASQ Z1.4.

**Calibration**: Suppliers must have a process for identifying inspection and measurement equipment that affect product conformance. Calibration must be traceable to a national standard. This inspection equipment must be calibrated at prescribed and appropriate intervals and records of calibration maintained. This process must include the assessment of any previous results when calibrated equipment is found not to conform to requirements. This assessment must include provisions for notification to Enidine for any “out of calibration” equipment found that may affect the quality of product supplied.

**Control of Nonconforming Product:** Suppliers must have a documented process for identifying, segregating, and dispositioning non-conforming product. This process must include provisions for notifying Enidine personnel if evidence is found indicating product manufactured for ITT Enidine may contain non-conformities, (ref. counterfeit work). Records of non-conformities and any subsequent actions taken shall be maintained. ITT Enidine does not delegate MRB authority to its Suppliers, except in the case of COTs or source controlled items. Rework of non-conforming material to return an item to full compliance of the technical requirements is permitted, Repair of non-conforming material is expressly prohibited.

**Counterfeit Work:** The Supplier certifies that counterfeit work is not delivered to ITT Enidine.

* The Supplier is required to immediately notify ITT Enidine in the event the Supplier becomes aware of or suspects’ counterfeit work may have been provided to ITT Enidine.
* The Supplier is liable for all costs associated with the containment and corrective action of counterfeit work to ITT Enidine and shall at its expense immediately replace with genuine conforming work.
* Refer to Industry Standard AS-5553 or AS-6174 as a guideline concerning Counterfeit Parts Prevention and Control Plans.
* Counterfeit Item means an unlawful or unauthorized reproduction, substitution, alteration, or the false identification of grade, serial number, lot number, date code, or performance characteristic, that has been knowingly mismarked, misidentified, or otherwise misrepresented to be an authentic, unmodified item from the Original Manufacturer, an Authorized Distributor, or an Aftermarket Manufacturer as defined in SAE AS-5553 "Counterfeit Electronic Parts; Avoidance. Detection, Mitigation, and Disposition" (Authorized Aftermarket Manufacturer).

Any deviations to the material, products, or services must be communicated to ITT Enidine a Supplier request for deviation/waiver (Form 2233.97).

# SUPPLIER REQUEST FOR DEVIATION and Waiver (SRFDW)

***Definition:*** *Deviation: authorization, granted prior to the manufacture of an item, to depart from a particular performance or design requirement of a specification, drawing or other document, for a specific Purchase Order and quantity.*

Waiver: authorization to accept an item which, is nonconforming and found during manufacture or after having been submitted for inspection.

Deviation request requires Justification for the Deviation Request

Waiver request requires Root Cause, Corrective / Preventive Action

The SRFDW process provides a means for Supplier communication to ITT Enidine regarding recommendation / request for a deviation to the requirements specified by the contract, i.e. purchase order, drawings, specification, etc. or detection of nonconforming material and to record corrective action,

Authorized ITT Enidine MRB (Material Review Board) representatives review the Supplier request and provide written instruction for how the Supplier is to proceed. Suppliers must use this form to request deviation or change of requirement prior to shipment. Submissions after product is delivered constitute a non-conforming product; the Supplier quality performance score will be affected.

Waivers regardless of disposition will not affect Supplier performance metrics, (provided it is submitted and approved prior to delivery.)

**Steps**:

1. SRFDW form 2233.97 can be found on the Enidine website. <https://www.enidine.com/en-US/Resources/Supplier-Tools/>
2. The completed form shall be sent to the ITT Enidine SQE and buyer. (including justification for the recommended deviation or Root Cause and Corrective Action to prevent recurrence)
3. ITT Enidine team reviews and dispositions the request.
4. The SQE or Buyer shall transmit a copy of the approved SRFDW to the Supplier, regardless of disposition.
5. Any special instructions noted on the SRFDW shall be complied with parts prior to shipment. The Supplier shall include a copy of the approved SRFDW with each affected shipment.
6. All nonconforming material must be clearly identified and separated from conforming material.
7. The Supplier is responsible for meeting delivery dates regardless of SRFDW activity.
8. SFRDW are specific to a Purchase Order, Part Number, and specific quantity. The Supplier is responsible to resubmit an SFRDW when required, i.e. new Purchase Order, quantity exceeds approved quantity, etc.

# SUPPLIER CORRECTIVE ACTION

ITT Enidine may issue Supplier Corrective Actions Requests (SCAR) to Suppliers in order to provide feedback on specific nonconformance and to provide a firm basis for continuous improvement and defect prevention. ITT Enidine believes that SCAR’s are an opportunity for learning and improvement. ITT Enidine Suppliers are expected to respond to these Corrective Actions on time.

1. The Supplier shall provide a response by the due date as noted on the ITT Enidine SCAR.
2. Discrepancies have different corrective action levels. Each type requires a different level of action by the Supplier.
* Supplier Corrective Action Request (SCAR) – Formal written corrective action response is required with documentation and supporting objective evidence of such action to be provided to ITT Enidine.
* Quality Alert – Sent for information purposes only. Supplier is requested to investigate and take action to prevent defects. Quality Alerts may also be issued for Process Indicators, where there is no defect, but if left unattended may result in producing defective material in the future.
1. The Supplier corrective action response may be provided on any form but it should include at a minimum:
* Problem statement
* Containment Actions
* Root cause (investigation with tools)
* Corrective action (with implementation dates)
* Verification activities with objective evidence
1. Failure by the Supplier to respond on time to C/A requests in a timely manner will be elevated to ITT Enidine management and could include removal from the Approved Supplier List, an on-site audit, or other actions (see Supplier Performance).

# First Article Inspection:

An AS9102, First Article Inspection Report (FAIR) is required for all purchased components. Application and exceptions are identified in AS9102 section 1.3 or as specified on the Purchase Order. The Supplier shall retain and provide a (FAIR) with product shipped based on the requirements below.

FAIR format and content shall be in compliance with all requirements of AS9102.

* FAIR’s are preferred to be submitted on ITT Enidine form FM0506300910.
* Alternate forms may be used provided content is consistent with all AS9102 requirements i.e. they contain all “Required “ and “Conditionally Required” information and have the same field reference numbers. (ref AS9102, 4.7.1c.)
* At the discretion of Enidine Quality, supplier forms meeting the spirit of AS9102 but that have slight inconsistencies can be used when written approval is granted from a Enidine Quality representative.
* This standard does not apply to procured Standard Catalog Hardware or Deliverable Software, also known as Commercial off-the-Shelf (COTS) parts.
* The Supplier is responsible to submit first articles with no reported non-conformances.
* The first article shall be performed with respect to the accepted ITT Enidine Engineering drawing or applicable specification of the part number referenced on the purchase order.
* The FAIR shall be sent in with 5 sample parts inclusive of the part used for the FAIR. The part used for the FAIR should be labeled to positively identify it. The parts shall be made using the final production processes representative of all future production lots.

Full or partial FAIR’s are required when the order meets one or more of the following criteria: (ref. AS9102, 4.6, f).

* A change in the revision of the drawing.
* A change in manufacturing source, process, inspection method, location of manufacture, tooling or materials, that can potentially affect fit, form or function.
* A change in numerical control program or translation to another media that can potentially affect fit, form or function.
* A natural or man-made event, which may adversely affect the manufacturing process.
* A lapse in production for two years or as specified by ITT Enidine
* As specifically noted on the ITT Enidine PO

ITT Enidine reserves the right to require FAIR approval prior to shipment.

# Acceptance Authority Media (AAM):

This applies to all Suppliers and requires their organization to ensure that the use of AAM (for example: stamps, electronic signatures, passwords) is compliant with the AS9100 and 14CFR Part 21.2 requirements and is defined in their QMS. The Suppliers shall be able to demonstrate evidence of communication of this to its employees and supply chain upon request. A non-exhaustive list of areas of focus are:

* AAM Errors (Omissions, typos, legibility, wrong fields, etc.)
* AAM Untimely Use (documentation is not completed as planned or “stamping/signing as you go”, etc.)
* AAM Misrepresentation (Falsification of documentation, uncertified/unauthorized personnel)
* AAM Training Deficiencies

# Shelf Life Certification (where applicable)

At the point of delivery, products shall have at least 80% of the usable shelf life remaining. (When cure date is identified by quarters the last month of the identified quarter shall be used for the calculation.) Each shipment shall be accompanied by a signed and dated certification listing shelf life, cure and/or manufacture date. Cure and /or manufacturing date shall also be physically marked on product or packaging.

**NOTE**: for O-rings, gaskets, seals etc. made from elastomers, reference SAE ARP 5316

 **NOTE**: For other components made from elastomeric, reference MIL-HDBK-695

 Shelf Life component(s) shall be identified in one of the following manners:

Option 1: Package shall carry the following statement or similar to:
 “ Shelf life expiration date is five (5) years from cure date”

Option2: Package shall be identified with expiration date based on intervals defined in
 listed in SAE ARP 5316

# Code of conduct

ITT Enidine Suppliers must share ITT’s Code of Conduct with sub-tier suppliers. ITT Enidine expects those working on ITT Enidine’s behalf to uphold our values, the ethical principles set forth in our Code and any applicable Company policies, laws, and regulations. ITT Enidine chooses to work with business partners who stand behind the quality of goods and services they provide. Found on <https://www.itt.com/newsroom/publications/code-of-conduct> .

# conflict minerals and human rights

ITT Enidine, along with governments, non-governmental organization (NGO), the investment community, and other corporations, is concerned with potential human rights violations, such as forced labor, human trafficking, child labor, and the role armed conflicts may play in such violations in the countries in which we do business.

ITT Enidine will not knowingly manufacture products with raw materials or components containing 3TG (Tungsten, Tantalum, Tin and Gold) that finance Armed Groups involved in the conflict in the DRC region.

As such we are committed to complying with the requirements of the Dodd-Frank Act and the CM Regulations. ITT Enidine is committed to responding to customer requests for information about the 3TG contents of ITT Enidine products, and assisting ITT Enidine customers in complying with their own reporting obligations under the Dodd-Frank Act and the CM Regulations.

Reflecting the values embodied in our Code of Conduct, our Supplier Expectation Protocols, and ITT Enidine’s Human Rights policy, found on <https://itt.com/itt/Media/itt/ITTSite/About/Human-Rights.pdf>

ITT Enidine affirms our on-going commitment to avoiding the knowing use of Conflict Minerals that directly or indirectly finance or benefit armed groups in the DRC region.

ITT Enidine also supports industry-wide approaches to this problem, including the Conflict Free Smelter Program and other initiatives.

Upon request the supplier shall provide certification of compliance.

# changes to products or services

ITT Enidine Suppliers must assure that the current configuration of all drawings, specifications, and instructions required by the PO, as well as authorized changes, are used for manufacturing, inspecting, packaging, and testing.

ITT Enidine Suppliers must assure they have the capability to manage document revisions and PO changes.

“Authorized changes” means that ITT Enidine approves in writing all manufacturing and design changes in advance of their implementation. (ref. FAI requirements regarding changes)

ITT Enidine Suppliers must immediately notify their ITT Enidine buyer if they have concerns about the accuracy of, or questions about, any requirements on the PO, drawing, or specification. This includes issues with legibility of any contractual documents.

# SUPPLIER Performance

1. Supplier Performance is made up of two components, Quality (PPM) and On-Time Delivery (OTD). Supplier performance is a key factor to continued or expanded business relations with ITT Enidine. Supplier performance goals are annually set by ITT Enidine management.

**Requirement, OTD – 97.5%, Quality - <3500 PPM, (based on rolling 6 month)**

1. Supplier quality performance is generated utilizing pieces received versus pieces rejected to calculate a PPM (parts per million) monthly

Suppliers who have a PPM greater than the stated goal may be subject to a containment action review by ITT Enidine Quality and Procurement management.

1. On-Time Delivery (OTD) percentage is calculated as one minus the result of the number of pieces late over total number of pieces received, multiplied by 100%. When considering if a shipment is on-time, 5 days early and 0 days late from the “need by” date on the Purchase Order, will be used.

$$OTD\%=\left(1-\left(\frac{\# of pieces late}{total \# of pieces received}\right)\right)\*100\%$$

**NOTE:**

**Supplier must satisfy purchase “Promise” date and full quantity to be considered
on-time.**

1. Suppliers with actual scores for OTD or PPM falling outside of either goal may be placed on a “Probationary” status at which time the following actions may occur:
	* + Issuance of a SCAR for failing to meet stated Supplier criteria
		+ Improvement meeting(s) maybe set up to create an action plan going forward
		+ During the 2 month Probationary period, parties will work together to improve metrics. This could include, but not limited to the following activities:
			- Supplier development activities
			- Joint review of CAR history
			- On site visits
			- Process control, process flow/organization, equipment and labor capability reviews
		+ Suppliers failing to show sufficient improvement over time to be taken off Probation will be placed on “New Business Hold”, Actions may include:
* No Request for Quotes, (RFQ) for new products, components, or services
* No RFQ’s for products being moved out of another Supplier
* Limited purchase order renewal for current components already approved for manufacture
* Moving some or all business current and possible future removal from the Approved Supplier List.

# HANDLING, PACKAGING AND STORAGE

The ITT Enidine purchase order number and part number shall appear on appropriate Supplier documentation and packages, (i.e., invoices, packing slips, packages and certifications as required). No charge shall be made to ITT Enidine for packaging unless specifically provided for in the purchase order. Unless otherwise specified by the PO, the Supplier shall assure that all articles are packaged in a manner and with materials necessary to prevent deterioration, corrosion, or damage. Requirements for packaging shall consider conditions affecting the article while at the Supplier's plant or under their control and ownership, transportation to destination and the expected or specified conditions at the destination. Damage to any material or product due to improper packaging will be returned to the Supplier at their expense. Individual component part packaging will be specified on the Purchase Order, when required.

All packages individually shipped must weigh 35 lbs. or less. If a package is greater than 35 lbs. it must be shipped on a skid. Written approval must be granted by an ITT Enidine buyer in order to deviate from the weight restriction criteria. If a package is received that violates the weight restrictions, it can be returned to the Supplier at the Supplier’s expense.

**Packaging and Shipping**: Each lot of parts shall be packaged in individual containers bearing the seller's and/or ITT Enidine’s part number. Materials are to be shipped in containers in keeping with good commercial practices to preclude any damage during shipping and storage at buyer's plant. Each package shall be identified with ITT Enidine’s purchase order number on the outer container.

# REACH

 (http://echa.europa.eu/information-on-chemicals/registered-substances)

The Supplier is required to:

Meet European (CE) Regulation n° 1907/2006 (REACH) regarding registration, evaluation, authorization and restriction of chemicals by:

* Informing if a candidate substance is in an item with a concentration above of 0.1% weight by weight,
* Ensuring registration of substances used,
* Informing, if concerned, if a substance included in appendix XVII (substances with restrictive uses) is included in an item,
* Propose, as soon as possible, alternate solution to a substance part of the candidate’s substances in order to ensure continuity of deliveries.
* FM1807020714 -Reach Controlled Substance Declaration, shall be submitted with the First Article Inspection Report.

NOTE: If this requirement is not applicable an exception to this requirement will be identified on the Purchase Order.

# 16 VARIABLE QUALITY CLAUSES

**The following are variable quality codes that are applicable when specified on the Enidine purchase order.**

**QC 2 - SOURCE INSPECTION**: All work performed under the PO is subject to inspection at the Supplier's facility. The Supplier shall notify ITT Enidine forty-eight (48) hours in advance of the required source inspection. Note: Source Inspection does not affect the delivery due date requirement, and must be factored into the lead time to assure On-Time-Delivery.

**QC 3 - OMITTED - Raw Material Certification**: covered under general requirements

**QC 4 - SPECIALTY METALS SOURCE OF SUPPLY**: The Supplier must provide “Specialty Metal Certificate of Compliance” reflecting all requirements of the DFAR 252.225-7009 are met for each part number, or materials listed on this purchase order. The Supplier shall flow down these requirements to all lower-tier subcontractors and Suppliers, as required. Compliance to the DFAR 252.225-7009 shall be stated in the Supplier’s Certificate of Conformance (C of C) or by a separate certificate. The full text of this clause can be viewed via the internet at <https://www.acq.osd.mil/dpap/dars/dfars/html/current/252225.htm#252.225-7009>

**QC 5 - INSPECTION DATA**: One (1) copy of the Supplier item Inspection Data must accompany shipment. The Inspection Plan / Requirement will be provided by ITT Enidine’s Quality Department.

**QC 6 - BUY AMERICAN (Domestic Source of Supply)**: The Supplier must manufacture or procure product from a domestic (United States of America) source of supply. The Supplier shall flow down these requirements to all sub-tier Suppliers as required for compliance. Compliance shall be stated in the Supplier’s Certificate of Conformance or by a separate certificate.

(Ref. Buy American FAR 52.225-1-10 and DFAR 252.225-7001-7010)

**QC 7 - PPAP (Production Part Approval Process):** Unless otherwise stated on the Purchase Order, all elements of the PPAP are required to be completed. The Supplier shall provide a PPAP Report with  product shipped which includes the requirements below:

* 1. Process Flow Diagram
	2. PFMEA
	3. Control Plan
	4. Process Capability run at rate of 30 piece sample Key Characteristics Only, by either ITT Enidine engineering drawing or by ITT Enidine Engineering/Quality department)

Note: The 30 sample parts used the process capability study shall be sent into Enidine for review and approval. The samples should be positively identified to correspond with the Cpk data specified)

* + - Gage Repeatability and Reproducibility Study is required to accompany each capability analysis.
		- PPAP approval will occur only when the process capability of the Key characteristics are greater than 1.33 Cpk. If Cpk <= 1.33; the process is incapable and unacceptable. For these characteristics, process instructions and/or control plan MUST address these processes to mitigate the risk of escape by controlling the process to reduce the likelihood of occurrence and/or detect a nonconformance.
	1. When PPAPs are completed by a Supplier they are to submit the PPAP with the Warrant to ITT Enidine’s Supplier Quality department for review and acceptance.
		+ PPAPs will be submitted on form FM1401021415 (ITT Enidine PPAP Forms) or equivalent.
	2. The 30 sample parts used the process capability study shall be sent into Enidine for review and approval. The samples should be positively identified to correspond with the Cpk data.

**QC 8 - PROCESS CONTROL PLANS:** The Supplier must have an effective process control plan. The Supplier may use their existing formats for these control plans if they are approved in writing by Enidine personnel, as long as they include the following elements:

* 1. All process steps
	2. Key process characteristics that impact key Enidine product characteristics
	3. Process settings

**QC 9 - NADCAP:** Suppliers and all members of their supply chain that provide special processes shall possess NADCAP certification, brazing, plating, and non-destructive testing processes such as x-ray, liquid penetrant, magnetic particle, ultrasonic, and visual inspection. for the applicable special process. Special processes include but are not limited to heat treating, welding, etc.

**QC 9R - NADCAP:** Suppliers and all members of their supply chain that provide special processes (A process where the resulting output cannot be verified by subsequent monitoring or measurement) shall possess NADCAP accreditation for the applicable special process. Special processes include but are not limited to: Welding, Brazing, Non-Destructive Testing (NDT), X-Ray, Liquid Penetrant, Magnetic Particle, Ultrasonic, Visual Inspection, Heat Treating, Plating, Chemical Finishing/Chemical Conversion, Passivation, and Coating. **Note:** Raytheon does not accept NADCAP accreditation for painting at this time. Only suppliers listed on the Raytheon Q-Note SL ASL shall be used for the paint specifications listed. If the paint specification is not listed on the Raytheon ASL, Raytheon supplier approval is not required.

**OR**

Suppliers and all members of their supply chain that provide special processes shall be Raytheon approved for the process as defined in the Raytheon Q-Note SL Supplier List (ASL).

Approved Suppliers, by specification, are available as a Q-Note SL Supplier Listing on the Raytheon Quality Notes website: http://qnotes.raytheon.com

Only suppliers listed on the Raytheon Q-Note SL ASL shall be used for the paint specifications listed. If the paint specification is not listed on the ASL, Raytheon supplier approval is not required.

**QC 10 – SUB-TIER CONTROL: SUB-TIER** Suppliers used must be on Customer QPL, (Qualified Parts/Processor List), contact the ITT Enidine Buyer for further information.

**QC 11 – FLIGHT / SAFETY CRITICAL ITEM:** The item specified on this order is deemed a Flight / Safety Critical Item, Reference QAM03, 9.0 Procurement of Materials for specific requirements, including flow-down to sub-tier Suppliers.

**QC 12 – FROZEN MANUFACTURING CONTROL PLAN:** A documented plan under revision control, in English defining the following aspects of the product realization process:

* Raw Material sources,
* Manufacturing process steps,
* Critical process parameters and equipment, i.e. Heat treat furnace, times and temperatures,
* Secondary processors, If applicable, define each
* Inspection requirements, If applicable,
* Test criteria

Changes to process, sources, parameters defined in the “Frozen Plan” cannot be made without prior approval of the plan by Enidine. First Article Rules apply when multiple options are implemented within the plan.

Additional specific requirements and restrictions may apply as directed by the end user customer, when applicable these will be communicated via the purchase order.

Further requirements of the Frozen Plan are defined in ITT document, Enidine Document S.O.P. 4.5.1 – Frozen Manufacturing Control Plan.

**QC 13 – PLASTIC MOLDED PART COSMETIC SPECIFICATIONS:**

For plastic molded parts when specified on drawings, or specs. Color code call outs (components and finished goods) shall be consistently uniform in color and finish from part to part and batch to batch. Uniformity and conformity can be measured using a Color Difference Meter, CR-10, by Konica Minolta (or ENIDINE approved equivalent equipment).

A Delta E (also called dE, Δ*E*\*, Δ*E*\*ab) value of less than 3.0 is acceptable (unless otherwise stated,CIE 1976 L\*a\*b\* Colour Space is used to calculate Delta E between a part and the lot target)

Reference SPI AQ-103 for general guidelineson cosmetic specifications of injection molded parts.

**QC 14 – SPECIAL PROCESSES:**

All processes called out on the drawing which include but are not limited to shot peen, anodize, liquid penetrant inspection, plating, etc. supplier should reference Sikorsky approved supplier list to determine if the provider of a special process is required to be on the Sikorsky approved supplier list. Contact ITT Enidine or Sikorsky for the latest approved supplier list.