CENTROMOTION™
Advancing Actuation and Control Solutions

Supplier Quality Manual

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CentroMotion At A Glance

Every day around the world infrastructure is built or repaired, products and people are on the move, crops are planted and harvested, and our quality of life improves. CentroMotion is at the heart of these efforts. You see our products every day. They're used in diverse industries, in many regions of the world, by some of the world's largest equipment manufacturers, in areas like agriculture, transportation, aerospace, construction, specialty equipment, health care, and fire and rescue. Our growing portfolio of brands includes Carlisle Brake & Friction, CrossControl, Elliott Manufacturing, Gits Manufacturing, Maximatecc, Power-Packer, and Weasler Engineering. Some of our brands have existed for more than 100 years and provide a wide range of motion, actuation, control, braking, and friction solutions. Please see www.centromotion.com for more details on CentroMotion's broad portfolio of products.

CentroMotion now employs more than 3,500 people worldwide, and our employees are at the center of our success. We believe in a strong and focused drive to succeed in every facet of our business, while ensuring personal accountability and delivering on our commitments. As a global team, we work to meet the needs of our customers and ensure ongoing value. In all that we do, we uphold the highest standard of integrity. We are focused on the future, because it is part of our culture of recognizing trends, building a robust team of experts, and providing customers with state-of-the-art solutions. Continuous improvement is what drives and inspires us.

Revision History

Revision	Date	Description of Changes
0	Aug-22	Initial Release
1	Jan-23	Add revision history block, corrected Table of Contents formatting, Updated section 7.4 to change reference to SCAR from section 5.4 to section 6.4

CentroMotion™
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Contents

1.0 Introduction

1.1 Vision

Our vision is to implement and maintain consistent, effective, and efficient policies, procedures, and processes within our supply chain that allows our supply chain partners to produce and deliver globally competitive products and services seen by our customers as superior in performance and value.

1.2 Goal

The goal of the Supplier Quality Manual (SQM) is to provide a uniform method for CentroMotion to communicate requirements, expectations, and guidelines to our supply chain. The SQM defines the fundamental quality, engineering, logistics, and management requirements that CentroMotion expects from suppliers.

1.3 Approach

Suppliers are expected to discuss and understand the specific applicability of these, and any business unit specific requirements, with their CentroMotion representatives in order to make effective business decisions. Suppliers are welcome to use the SQM and supporting documentation as an aid in further developing their own quality systems. CentroMotion is committed to integrating suppliers into its business processes to maximize value for all stakeholders including but not limited to: our customers, sales companies, shareholders, employees, suppliers, and communities. The SQM is part of this commitment.

This Supplier Quality Manual may be incorporated into applicable General Purchase Agreement(s), Purchase Order(s), Master Service Agreements, Non-Disclosure Agreements, Drawings, and related specifications. Nothing in this Supplier Manual limits any of the rights or remedies of CentroMotion under such documents. The latest version of this Supplier Quality Manual can be found on the CentroMotion website, and it is the supplier's responsibility to check the Supplier Quality Manual for updates. Suppliers should contact their CentroMotion Quality or Purchasing representative in writing for any inability to comply with any parts of this document.

2.0 General Requirements

2.1 Quality Management Systems

All suppliers are responsible for the development, documentation, implementation, and maintenance of a quality system that complies at minimum to the ISO 9001 standard:

- Supplier Quality Management System shall be formally documented, implemented, and maintained to ensure products/services conform to the identified purchasing requirements, engineering drawings, material specifications, and contract requirements of CentroMotion.
- Suppliers may be required to be certified by a 3rd party registrar to ISO9001, IATF16949 or AS9100 applicable requirements depending on the CentroMotion business and/or product that

they supply. For specific requirements, contact applicable Supplier Quality Engineer or Sourcing Representative.

- OEM customer specific requirements will be communicated and shall be implemented via the business unit, i.e . VW Formel Q, Volvo Safety, AIAG CQIs
- Suppliers shall strive for 0 PPM. Suppliers are required to pass CentroMotion requirements on to their sub-suppliers and to guarantee the fulfillment. Individual CentroMotion Business Unit will communicate and agree on specific targets / ratings.
- Suppliers are encouraged to become ISO14001 and ISO45001 certified.

Note: Upon receipt of initial or recertification registration to ISO 9000/IATF16949/AS9100, a copy of the certificate shall be sent to CentroMotion. If registration is rescinded for any reason, suppliers shall notify CentroMotion's Supply Chain and Quality Representative within five business days. In the case of supplier changes in control through mergers, acquisitions, divestitures, or other significant changes, including a sale of assets other than in the ordinary course of business and any change with impact to product realization, suppliers shall promptly notify CentroMotion of the scope of the changes. CentroMotion may choose to verify the continuing suitability of the supplier's quality management system and its effectiveness.

2.2 Facility Access

With prior notice, Suppliers shall allow CentroMotion and/or CentroMotion customers access to their facilities and those of their suppliers and sub-contractors for the purpose of evaluating and/or auditing parts, processes, and documentation used in the manufacture of CentroMotion products. CentroMotion may, at its discretion, use third-party independent auditors to audit the supplier's processes and establish conformance to applicable quality systems, laws, regulations, or other CentroMotion requirements.

2.3 Contingency Plans

Supply chains have become increasingly complex, global, and subject to a variety of risks that could jeopardize continued operations. These risks include, but are not limited to, natural disasters, labor interruptions, utility interruptions, cyber security incidences, and other Force Majeure situations. CentroMotion expects its Suppliers to have a comprehensive crisis management approach and contingency plans to deal with potential disruptions. The approach needs to include plan of action, checklist of activities, communication plans, escalation procedures, and organization with teams, roles, and responsibilities. CentroMotion is asking each supplier to develop, deploy and maintain these business continuity planning requirements. In an actual catastrophe, suppliers need to provide access to CentroMotion tools and/or their replacements. Additionally, for Suppliers providing products for automotive applications, the contingency plans shall satisfy requirement 6.1.2.3 of IATF 16949.

2.4 Union Affiliation

All suppliers shall inform CentroMotion in writing at least three months prior to the expiration of a union contract (if applicable). This notification should include a strike protection plan to ensure product availability. In addition, bi-weekly status reports will be required from Suppliers until the contract is settled. After completion of a new contract, Suppliers shall advise the new contract expiration date.

2.5 Code of Conduct

CentroMotion believes that operating in a socially responsible and ethical manner and in compliance with the legal requirements of those countries in which we operate is fundamental to our long-term success. CentroMotion is committed to standards of conduct that are based on fairness, reasonableness and integrity. These standards shall be upheld with both our suppliers and any others with whom we transact business. CentroMotion has created a Supplier Code of Conduct that communicates CentroMotion's expectations related to the following:

- Labor and Human Rights including Modern Slavery
- Health and Safety
- Environmental Sustainability
- Trade Restrictions and Export Controls
- Responsible Sourcing of Minerals
- Business Ethics

The selection of CentroMotion's Suppliers is based not only on the quality and competitiveness of their products and services, but also on their adherence to acceptable social, ethical, and environmental principles. CentroMotion's expectation is that all Suppliers comply with all applicable laws as well as the principles set forth in the CentroMotion Supplier Code of Conduct.

2.6 Regulatory Compliance

It is CentroMotion's expectation that all suppliers adhere to the laws and regulations where the products they manufacture are being used. Prohibited substances shall not be used in CentroMotion product unless specifically authorized. Suppliers should be knowledgeable about the materials contained in their product as well as how these materials are regulated by the various governing bodies. Upon request, Suppliers shall be able to provide a complete listing of the product's physical contents. On an as needed basis or annual basis CentroMotion may request that suppliers provide material specifications, documentation, or declarations related to the following:

- **RoHS**: The Restriction of Hazardous Substances Directive 2002/95/EC (RoHS) was adopted in February 2003 by the European Union.
- **REACH**: The European Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) entered into force in June 2007.
- **California Proposition 65**: California's Safe Drinking Water & Toxic Enforcement Act of 1986
- **TSCA**: US Environmental Protection Agency Toxic Substances Control Act (US EPA TSCA) Section 6(h) as amended by The Frank R. Lautenberg Chemical Safety for the 21st Century Act
- **FMD**: Full Material Disclosures (FMD) including but not limited to International Material Data System (IMDS) Registration), Global Automotive Declarable Substances List (GADSL), or Compliance Data Exchange (CDX)
- **Conflict Minerals**: Dodd-Frank Act Section 1502 restricting the sourcing tin, tantalum, tungsten, and gold from the Congo and adjoining countries.

Suppliers shall be able to provide to CentroMotion documentation/declarations certifying its product to be compliant with these laws and regulations. It is CentroMotion's expectation that any requested documentation is provided to CentroMotion by the due date identified in the solicitation.

2.7 DOD/Military/FAR/DFARS/Aerospace Requirements

CentroMotion provides products to customers that are used in military applications and/or may be in support of a United States government contract or subcontract. The U.S. government requires that all applicable government procurement regulations required by Federal Statute flow down to all subcontractors. These requirements include, but are not limited to:

- The provisions within the Federal Acquisition Regulations in accordance with FAR 52.244-6 (Contract Terms and Conditions Required to Implement Statues or Executive Orders-Commercial Items)
- Defense Federal Acquisition Regulation Supplement 252.244-7000 (Subcontracts for Commercial Items and Commercial Components (DoD contracts)).
- Defense Priorities and Allocation System (DPAS) to support rapid industry response to government procurement needs in times of National Defense need or crisis.
- Department of Defense Counterfeit Prevention Policy (DoD 4140.67). The Supplier represents and warrants that only new and authentic materials are used in products required to be delivered to CentroMotion.
- All items are to be made in the U.S. including all raw materials unless otherwise approved. This requirement shall be flowed down to the Suppliers' complete supply chain.
- See Appendix IV for additional requirements.

The identification of these restricted items will be noted on either the Purchase Order or on the engineering drawings. It is CentroMotion's expectation that Suppliers proactively understand and familiarize themselves with these government procurement regulations. Furthermore, Suppliers shall immediately disclose if it, or any of its principals, consultants, subcontractors, sub-tier suppliers, officers, or directors become barred or suspended, permanently or temporarily, from conducting business under U.S. government contracts.

Additionally, ITAR/EAR requirements apply to suppliers of parts used in U.S. military applications. Any purchase order, quote, specification, print or document that contains technical data whose export is restricted by the Arms Export Control Act (TITLE 22, U.S.C. SEC. 2778- 2780) will be marked or otherwise identified as a restricted item by CentroMotion. For those items identified as "restricted", suppliers shall be in compliance with the following:

- All individuals performing work for CentroMotion that contains export-controlled data are U.S. persons who are U.S. citizens, permanent residents, green card holders or protected persons.
- Supplier will not disclose export-controlled data to Foreign Nationals nor allow access to export-controlled data by Foreign Nationals.
- Supplier will not assign any Foreign National to perform work which allows access to export-controlled data or drawings.
- Supplier will advise its employees who have access to export-controlled data of the requirements not to disclose to non-U.S. persons.
- Supplier will not subcontract any portion of the contract without written authorization from CentroMotion.

Violations of these export laws are subject to severe criminal penalties. Suppliers of restricted products or services are expected to implement policies and procedures to ensure adherence to the U.S. Government regulations. In accordance with ITAR/EAR requirements all suppliers, visitors, contractors, subcontractors and customers will be screened versus various publicly available denied party lists prior to entry into some of our facilities. To assist us in this regard please apply for clearance with your CentroMotion contact 48 hours prior to your visit if a US citizen and 72 hours ahead of time if a foreign national.

Suppliers of Federal Aviation Administration (FAA)-approved materials are subject to inspection by the FAA. CentroMotion will notify Suppliers of FAA-approved parts/materials. FAA-approved parts/materials shall not undergo any design changes without written approval from CentroMotion. Additionally, FAA-approved parts/materials found to be non-conforming shall not be shipped to CentroMotion without a signed deviation from CentroMotion.

2.9 Records Retention

Suppliers shall retain adequate quality system records, including all advanced quality planning documents, proof of inspection and related results, process guidelines, laboratory test instructions, gauge/test equipment verification and calibration and performance test methods for a minimum period of 10 years (15 years after end of production for automotive components and systems) following the conclusion of a Supplier's business relationship with CentroMotion. CentroMotion reserves the right to audit these records as needed. If a CentroMotion communicates a customer-specific requirement for record retention that differs from this statement, the customer requirement will take precedence and will be requirements will be communicated during the APQP or quoting process.

2.10 Ongoing Support

CentroMotion is dedicated to the manufacture of highest quality products. To achieve this objective, all Suppliers should offer engineering and technical support to CentroMotion when support is requested. Suppliers are also required to establish and maintain a readily available contact for CentroMotion to assist in addressing quality, delivery, or other related issues. CentroMotion expects Suppliers' senior management to share CentroMotion's commitment to meet or exceed customers' quality expectations. It is also expected that Suppliers will give their full support to the mutual business relationship and demonstrate flexibility while supporting CentroMotion in meeting customers' requirements.

3.0 Supplier Selection and Evaluation

3.1 Nondisclosure Agreement

A nondisclosure agreement between CentroMotion and a potential supplier is required prior to sharing any confidential information. This agreement shall be signed by an authorized representative of each party. As a condition to CentroMotion furnishing Suppliers and their respective officers, employees, principals, agents, and advisors with financial, technical, and other information regarding CentroMotion the Supplier agrees to hold such information in confidence per the terms of the Confidentiality Agreement.

3.2 Supplier Assessment

CentroMotion will contact potential sources of supply to review opportunities and capabilities. If opportunities seem favorable, CentroMotion will move forward with the supplier vetting process. Before submitting a quotation or receiving an RFQ Suppliers may be asked to confirm the feasibility of the part as specified in the drawing or other specification. A CentroMotion Feasibility Commitment form may be required to be signed prior to the start of prototypes or samples.

After the Request for Quote (RFQ) is reviewed, Suppliers may be asked to complete a self-assessment using the appropriate CentroMotion audit form. This self-assessment shall be completed and returned at least 1 full week prior to any onsite audit. Upon review of the completed self-assessment, CentroMotion may schedule an onsite audit of the supplier to complete the approval process. If an on-site audit is required, it may be used to verify the supplier data including but not limited to the following:

- Supplier risk assessment
- Supplier monitoring
- Supplier Quality Management System
- Product audits
- Process audits

The frequency of future supplier quality audits will be determined based upon the commodity, risk analysis, and scorecard reviews. Exemptions to a self-assessment or onsite audit may be given due to the nature of the availability of the part (ie catalog items from distributors) or due to other special circumstances as approved by CentroMotion.

CentroMotion utilizes 3 types of audit forms. The correct form to use is determined based upon the commodity category of the supplier:

- **Catalog** – Used for suppliers of catalog items
- **Non-Automotive–Standard** – For suppliers of custom products designed by CentroMotion engineering. These mainly consist of industrial, construction and agricultural applications
- **Automotive-High Precision** – These mainly consist of Automotive, DoD, Aerospace, and other applications requiring the highest precision and quality requirements

The designated CentroMotion Supplier Quality Representative will provide a completed audit report to the audited supplier. If the audit results in adverse findings, corrective actions for those findings may be required to be addressed. If so, CentroMotion expects corrective actions to be addressed in a timely manner at supplier's expense. The audit is not complete until all corrective actions are closed.

****Customer-directed suppliers are considered approved by customer but shall provide approved sample inspection reports and material certifications, as a minimum prior to the start of production. The CentroMotion customer will be notified if the requirements are not met. The use of customer-directed sources does not relieve Suppliers from complying with CentroMotion requirements.

3.3 Request for Quote

Upon receipt of Request for Quote (RFQ) from CentroMotion, suppliers should properly complete the required documentation by the requested quotation due date in order to receive consideration. General documentation to be completed and returned with quotation include but is not limited to:

- Supplier standard quotation
- Description of tooling, if applicable
- Cost for tooling, if applicable
- Minimum order quantities
- Lead-times and/or delivery requirements
- Other items as noted on the RFQ

Requests for additional time to complete quotations should be forwarded to the CentroMotion Purchasing Representative prior to quotation due date.

4.0 Product Development & Approval

4.1 Advanced Product Quality Planning (APQP)

An APQP is required for automotive, DoD, Aerospace, and other designated applications and is encouraged for the other market applications. It is CentroMotion's expectation that Suppliers utilize best practices quality-planning techniques to ensure successful launches. CentroMotion requires the use of all the reference manuals published by the AIAG or VDA (APQP, Control Plan FMEA, MSA, etc.) as a guide to proper quality planning and documentation. DFMEA is only required in the case of supplier design-controlled products.

4.2 PPAP's, Samples, and Pre-production

CentroMotion uses the Production Part Approval Process (PPAP) in accordance with the latest version of the AIAG Production Part Approval Process Manual. Suppliers should consult with CentroMotion Quality Representatives of the required PPAP submission level. This shall occur prior to placement of the sample order. Below is a list of the general guidelines to follow during the PPAP submissions process:

- A Supplier PPAP Checklist detailing approval requirements will be provided with the PPAP PO.
- The default PPAP level for Automotive, Aerospace and DoD is (Automotive Industry Action Group (AIAG) is Level 3.
- Control plans are to be approved by CentroMotion prior to the shipment of any samples
- The PPAP production run, unless specifically agreed otherwise with CentroMotion, will conform with the current AIAG manual and be manufactured at the production site, at the production rate, using the production tooling, gaging, process, materials, and operators.
- Data from the required inspections and tests outlined within the control plan shall be retained at the supplier and forwarded with each sample shipment upon request.
- The number of required PPAP samples will be determined by CentroMotion and must be submitted along with the PPAP documentation. The PPAP checklist will identify the quantity of samples required which may vary project-to-project based on product size, commodity, manufacturing method, expected volume, etc..

- Samples shall be 100% inspected on all key characteristics, have full layouts completed, and be serialized with traceability to all inspection and test data results.
- Containers for PPAP submitted samples shall be clearly identified on the shipping container as “PPAP Samples”.
- PPAP approval is defined as the receipt of a Part Submission Warrant (PSW) signed by the appropriate CentroMotion representative signifying that the part has been approved for Serial shipment.
- The supplier shall not ship production material that has not first been PPAP approved unless the appropriate CentroMotion Quality Representative provides a waiver in writing.
- If the required PPAP data/documentation cannot accompany the shipment, the supplier shall obtain approval from the CentroMotion designated Quality Representative prior to shipment.
- Each CentroMotion business unit may have varying qualification requirements for sample size, pre-production orders, material testing, etc.. Contact your CentroMotion Quality Representative to clarify detailed requirements by business unit.

CentroMotion encourages suppliers that are not familiar with PPAP processes or need more background knowledge about the listed PPAP elements to acquire the AIAG manuals and also refer to other CentroMotion standards that may be provided.

CentroMotion’s designated Quality Representative reviews the PPAP submissions and samples for conformance to specification and will return a signed PSW indicating a PPAP status:

- **FULL APPROVAL** - Indicates that the part or material meets all requirements and all relevant CentroMotion inspections and testing have been completed and were successful. The supplier is therefore authorized to ship production quantities of the product for releases from the CentroMotion designated Purchasing Representative.
- **LIMITED PRODUCTION BUILD** (LPB) – Pre-Production order and evaluation is required after sample approval. The first actual production order will be placed by a Purchasing Representative, after LPB parts have been approved. A signed LPB approval document will be issued by the CentroMotion Quality representative upon successful completion of the LPB run.
- **INTERIM APPROVAL** - Permits shipment of material for production requirements for a limited order. Interim approval is granted when the supplier has clearly defined the root cause of the non-conformities preventing production approval and prepared interim containment and approval action plans agreed upon by the CentroMotion Quality Representative. A deviation for the non-conformity shall be approved by CentroMotion at the time of any order during Interim Approval. Re-submission to obtain “full approval” is required.
- **REJECTED** - Indicates the submission does not conform to all requirements, or that inspections or testing were not successful. Conforming product and documentation shall be submitted for CentroMotion determination. No parts may be shipped without the express written permission of the CentroMotion Designated Quality and Engineering Representative(s).

4.3 Significant / Critical Characteristics and Process Capability

Some dimensions may be identified by CentroMotion as critical characteristic or significant characteristic.

- A **critical characteristic (CC)** is a measure, feature, dimension, or note that could have impact on a government or safety regulations when a deviation arises and could result in a safety concern if a failure were to occur.
- A **significant characteristic (SC)** is a is a measure, feature, dimension, or note that could have impact on the form, fit, function of a product when a variation arises and may disrupt the manufacturing process or the end use if a failure were to occur.

The SC and CC shall be monitored closely by Suppliers and should result in a capability-value of Cpk ≥ 1.33 (some automotive products may require Cpk>1.66), as well as appropriate statistical process control (SPC). Capabilities should also be monitored on supplier-designated characteristics that are critical to supplier's processes. For products developed by Suppliers, Suppliers are responsible for significant and critical characteristic designations for safety, legal requirements, form-fit-function, reliability or further processing and assembly, which shall be characterized by special and critical characteristic, SC or CC as needed.

Suppliers shall use the following as acceptance criteria for evaluating Initial Process Capability results for processes that appear to be stable:

- **Index < 1.33 -** Capability is unacceptable – improvement is required. For automotive applications – If an SC is not capable to 1.33 Cpk or greater, that feature shall be 100% inspected until the suppliers' process shows an approved capability result.
- **Index ≥ 1.33 but < 1.67 -** Process may be acceptable for all except Critical Characteristics. Supplier's process shall improve for affected Critical Characteristics (+ 100 % inspected).
- **Index > 1.67 -** Process currently meets the acceptance criteria.

Suppliers should consult reference manuals published by the AIAG or contact CentroMotion's Quality Representative for any clarification. CentroMotion Suppliers are expected to implement systems that focus on effective process control that rely on defect prevention versus detection. Suppliers should maintain (or exceed) process capability or a documented, agreed upon performance level decided by CentroMotion at time of product qualification.

4.4 Measurement System Analysis and Gage Repeatability and Reproducibility

A Measurement System Analysis (MSA) shall be performed for every inspection method encompassing each Significant Characteristic (SC) and Critical Characteristic (CC) and every feature mentioned in the Control Plan identified in the related drawings and specifications. The purpose is to assess and to prove that measurement systems are at their optimum capability when measuring special characteristics. Gage Repeatability and Reproducibility (R&R) should be performed on every measuring device used for inspection or testing of any specified characteristic of the product. Guidelines for acceptance of Gage R&R (% R&R versus product tolerance) can be found in the AIAG 4th Edition MSA Manual:

- Under 10% error: Gage system is Acceptable
- 10%-30% error: Gage system may be acceptable. Requires CentroMotion approval
- Over 30% errors: Gage system is Unacceptable. Needs improvement and a submission for correction is required.

4.5 Other Special Requirements

Embedded Software: If applicable, Suppliers shall implement and maintain a process for software quality assurance for its product. A Software development assessment (FMEA) V-Cycle or SPICE Level evaluation shall be utilized to assess supplier's software development. Suppliers need to retain all documented information of its software development capability. CentroMotion designated Quality and Engineering Representatives have the right to verify the supplier's embedded software development and validation documentation.

Line Speed Demonstration: A production demonstration run (also referred to as "run-at-rate") may be required on the production line(s) being qualified, using production tools, processes, and trained operators. The production demonstration run will consist of a significant amount of production as determined by CentroMotion Quality representative. For multiple production lines or tools, this requirement applies to each production line/tool. A CentroMotion Quality Representative will contact the supplier in advance for any production 'run at rate' demonstration. A minimum 'run at rate' demonstration is 25% of excess capacity. For line speed demonstrations:

- Deviations shall be approved in writing by the designated CentroMotion Quality Representative
- Only conforming product will be included in the production demonstration count. Non-conforming product shall not be counted.

Software Simulations: Forging and castings require submission of process computer simulations (Solidification and Mold Flow model analysis) to the CentroMotion Quality Representatives for review and approval prior to manufacture of tooling.

5.0 Production Requirements

5.1 Supplier Performance Monitoring

CentroMotion will monitor the performance of select Suppliers with regular performance reporting via a Supplier scorecard. A Supplier scorecard is available for any supplier upon request. A supplier's continuous improvement plans should target zero defects and 100% on-time delivery. Suppliers are expected to provide CentroMotion with exceptional Quality, Delivery, Cost and Capability to enable CentroMotion to meet its business goals and those of its customers and stakeholders. Deviations from acceptable levels of delivery, quality, or support may result in the requirement for Suppliers to initiate action to improve. Suppliers are solely responsible for the quality of their products/services, including their sub-suppliers.

5.2 Control of Subcontractors

Suppliers are responsible for the use and performance of any subcontractors. Suppliers will work with their subcontractors to include subcontractor processes in their process flow diagrams, PFMEA, and control plans to ensure product quality prior to shipment to CentroMotion. Suppliers shall select their sub-suppliers based on their ability to meet CentroMotion and industry standards. Suppliers, at the request of CentroMotion, shall be prepared to provide documented evidence of sub-supplier control plans, quality levels, and conformance to CentroMotion requirements. Sub-suppliers shall meet the

same requirements listed in section 2.1 with regards to Quality Management Systems. These requirements shall be cascaded down through the supplier's supply chain.

5.3 Inspections/Set-up

Unless otherwise documented and approved in the Supplier's control plan, Suppliers shall complete inspections as part of the manufacturing and/or set-up process. These inspections include:

- **First Piece Inspection:** Suppliers shall perform and document dimensional inspections at the time of setup for validation prior to the start of each CentroMotion production order wherever possible to verify the parts being produced will meet requirements.
- **Last Piece Inspection:** Suppliers shall perform and document dimensional inspections at the end of the CentroMotion production order to verify consistency of the product produced and continued viability of any associated tooling.

5.4 Traceability

Unless otherwise approved by CentroMotion, Suppliers shall implement processes providing traceability from raw materials to the shipment of the final product. Supplier shall have a lot identification system that distinguishes one lot from another when shipping finished product. A lot shall be traceable to raw or component material lots as identified by the sub-supplier. For Automotive, DoD, and Aerospace industries, the lot number or other identifying sequence shall be present on the product or packaging label when it is not feasible to identify the product. Specifically, when supplying raw materials (Wires, Shafts, Tubing), Heat Treatment, Plating, Painting, and Non-Destructive Testing Supplier (Mill) certifications are required.

5.5 Capacity

Unless agreed to as part of a contract or other agreement, CentroMotion expects Suppliers to have sufficient capacity to meet forecasted demand at all times. CentroMotion may require Suppliers to validate this capacity with objective data. This verification may be requested at any time. In order to respond to fluctuations in demand, CentroMotion expects Suppliers to flex their capacity within a reasonable time frame which may include operating for extended hours or obtaining additional labor or equipment as needed.

5.6 Tooling and Other CentroMotion Property

Suppliers are required to exercise care with CentroMotion owned property in their possession. Suppliers are required to identify, verify, protect, and safeguard property provided for use or incorporation into the product. If this property should become lost, damaged, or found unsuitable for use, the supplier is required to notify its CentroMotion Purchasing Representative. CentroMotion expectations are as follows:

- Suppliers are required to maintain general and preventive maintenance records of customer owned property.
- Supplier should maintain the identity of tooling, fixtures and/or equipment in accordance with CentroMotion and or production site's requirements.
- All normal repairs and maintenance of tooling, fixtures, or equipment is at Suppliers' expense.
- Suppliers are responsible for preservation of inactive tooling.

- Suppliers shall not alter, move, or dispose of customer owned property without written approval from CentroMotion Purchasing Representative
- Supplier should use CentroMotion owned property exclusively to produce product for CentroMotion and its production site locations
- The title of CentroMotion owned/customer owned property rests entirely with CentroMotion and/or its subsidiaries or affiliates and it may not be sold or otherwise encumbered.

The Supplier should establish and maintain documented procedures for the control of, verification, storage and maintenance of CentroMotion owned equipment (i.e. molds, foundry tooling, dies, gages, fixtures, returnable containers, etc.) at the Supplier's location. Any such equipment that is lost, damaged or otherwise unsuitable for use shall be recorded and reported to CentroMotion for remediation. Suppliers shall obtain CentroMotion approval prior to modifying, scrapping, or otherwise disposing of any equipment.

Suppliers shall obtain prior written approval from CentroMotion to relocate any tooling that is owned by CentroMotion or CentroMotion's customers. This includes internal transfers from one supplier location to another, movement to the Supplier's Sub-Contractor, or movement from the incumbent Supplier to an alternate source that has been selected by CentroMotion. New PPAP's or First Articles are required when any transfer occurs. Suppliers are liable for damages associated with un-authorized tool transfers such as tooling defects, and/or any premiums resulting from CentroMotion line shortages.

5.7 Engineering Change Requests/Notifications

CentroMotion will notify Suppliers of any drawing or engineering specification changes. An Engineering Change Notification (ECN) may also require that a new PPAP submission is prepared and submitted to CentroMotion for approval, prior to the first production shipment to the new ECN revision. Any obsolete inventory due to ECN or process/design changes will be negotiated with the supplier on a case-by-case basis. For information on Supplier requested Engineering Changes see Section 6.4 of this manual.

5.8 Annual Product Validation

As specified by CentroMotion, Suppliers may need to annually measure all print dimensions for each individual part number supplied for production. The components used to complete the dimensional measurement shall have been manufactured within 45 days of submittal unless otherwise approved by CentroMotion. A dimensional data package will be maintained by supplier for each part number with the following minimum conditions:

- PSW - stating annual re-validation as reason for submission
- Ballooned/Bubbled part drawing (identifying each dimension and note corresponding to the inspection report)
- Three-piece inspection report with corresponding identification to the Ballooned/Bubbled part drawing. Gits Manufacturing (only) - 30 Piece capability study on Critical Control Characteristics.
- Material certification
- If there is an out of specification condition, that value shall be highlighted, and a corrective action shall accompany the data package.
- If tooling has more than one cavity for the same part number, then a dimensional layout is required for each cavity.

- CentroMotion representatives reserve the right to request and evaluate test results, statistical data, and inspection results at any time. This data shall be available to CentroMotion or its production location upon request and be deliverable within the same business.
- Part requalifying due to extended gap in order:

    - Power-Packer – 1, 2, or 4 years (Depending severity)
    - Gits – 1 year
    - Elliott Manufacturing – 2 years
    - Weasler Engineering – 2 years
    - Maximatecc – 2 years

Annual verification does not absolve Suppliers of required in-process statistical process control as outlined in the suppliers' component Control Plans.

6.0 Improvements and Nonconformances

6.1 Continuous Improvement

It is CentroMotion's expectation that Suppliers will work to continually improve their operations and, correspondingly, their performance as demonstrated through their metrics or KPI's. A supplier's continuous improvement plans shall target zero defects and 100% on-time delivery. Continuous improvement activities may include but are not limited to:

- DPPMs (customer, Internal, supplier)
- Sample Approval Lead Time (PPAP if applicable)
- Audits (required for automotive, aerospace and DoD related suppliers)
- Scrap/Rework reduction
- On Time Delivery (OTD) and lead-times
- Cost Reduction

6.2 Nonconformances

It is CentroMotion's expectation that it will receive 100% defect-free product from Suppliers. In the event that there is a deviation or nonconformance to CentroMotion requirements, Suppliers shall have a system in place that provides for identification, containment, evaluation, and disposition of nonconforming parts. This system shall include a notification process and a notification shall occur no later than 24 hours after discovery of the issue. Suppliers are responsible for containing nonconforming material at their location, material in-transit, at sub-suppliers, and already delivered to CentroMotion. If the supplier fails to initiate immediate action and containment or it is determined to be ineffective, or if non-conforming product was delivered, CentroMotion may use a third-party service at Supplier's expense. If the Supplier's parts are found to be defective by CentroMotion, the supplier will be immediately notified.

Depending on the type, extent, and severity of the supplier nonconformance, CentroMotion may request that the Supplier document actions in a formal Supplier Corrective Action Report (SCAR) (see section 6.3). Suppliers may use their own 8D corrective action form provided it complies to the elements

of the Eight Disciplines of Problem Solving (8D) or unless otherwise specified by a CentroMotion Quality Representative. Disposition of nonconforming product shall be received within 72 hours from notification. Failure to provide a response and/or a return goods authorization (RGA) within three business days of notification may result in the non-conforming product being scrapped at supplier's expense and debited accordingly. CentroMotion reserves the right to conduct onsite audits of suppliers as needed to assure resolution of any corrective action resulting from the non-conformance and continuing with all quality and process documentation.

CentroMotion reserves the right to charge back suppliers for all costs or damages incurred as a result of the nonconformance. These costs include:

- The cost of the non-conforming product
- The cost for the use of third-party sorting
- Any costs associated with testing or verification of nonconformance
- The cost of expedited freight
- The cost of labor or materials used rework parts to eliminate any nonconformance
- The cost of unplanned overtime for production or rework
- All costs to repair or replace equipment already sold to customers which may or may not be installed in the field

Unless otherwise agreed upon, CentroMotion labor will be reimbursed to account not only for labor, but also overhead, supervision, and other incidentals.

6.3 Supplier Corrective Action Requests (SCAR)

Requests for corrective action to the supplier will be based on the magnitude of the actual or potential problem and commensurate with the associated risks. Not all non-compliances or non-conformities warrant a request or require a complete investigation. Typical conditions for which corrective actions are processed include, but are not limited to, the following:

- Requests for corrective actions generated because of inadequate supplier quality or delivery performance.
- Non-conformance resulting from internal, second- & third-party audits.
- Any internally found non-conformance that adversely affects customer satisfaction identified outside of the audit process.
- Repetitive issues of noncompliance to print or standards
- Corrective actions generated because of customer complaints.

Defect containment is expected to be led by the supplier and coordinated with CentroMotion Quality representatives.

CentroMotion uses the 8D problem-solving method to investigate, eliminate, and communicate the root causes of nonconformities and corrective actions. Suppliers are expected to use this problem-solving method or an equivalent 8D problem-solving method approved by CentroMotion. When issuing a SCAR, CentroMotion requires the following:

- The supplier to confirm the receipt of the 8D request/SCAR within 24 hours. Quicker response may be required based on the severity of the situation.
- The supplier to define the problem (problem statement/description) as well as to implement and communicate the containment actions within 48 hours.
- The supplier to formally report the root cause of the nonconformance and the corrective action identified to prevent recurrence within 10 business days.
- Corrective actions report to be completed within 30 days unless otherwise directed.

The SCAR will be submitted to the CentroMotion Quality Representative for review for approval or uploaded onto a suppler portal. The supplier may be required to revise the SCAR if not approved by CentroMotion.

6.4 Supplier Deviations and Change Requests

Deviation Requests:

There may be circumstances when Suppliers discover out-of-tolerance conditions within their facility that may be able to be deviated or, when to meet delivery or quality requirements, a supplier desires to temporarily use a material, process, or processing location not previously approved due to material availability, machine breakdown, subcontractor or other issues. In these situations, Suppliers shall request a formal deviation and receive documented approval before shipping material to CentroMotion. Suppliers shall use a CentroMotion Deviation Request form, or an appropriate Supplier equivalent form and submit for approval. If the deviation is approved by CentroMotion, a copy of the approved request for deviation shall be placed in each pack being delivered to CentroMotion

Change Requests:

In other situations, a Supplier may desire or need to permanently change a material, process, or processing location or may want to request a change in specification that improves the performance or cost of a product. In these instances, Suppliers shall submit a formal change request and receive documented approval before shipping material to CentroMotion. The appropriate form for this request may be different site to site. Contact your CentroMotion Quality or Purchasing Representative for direction on how to submit this request. Please note the following requirements:

- Unless otherwise agreed, at least 90 days prior notice is required for any change.
- Unless the change request is due to process or product improvement and/or cost reduction, every effort shall be made to meet the original engineering intent. Documentation of this activity is required prior to CentroMotion consideration of a change request.
- Suppliers will need to contact its CentroMotion Purchasing Representative for the appropriate request form.
- PPAP and/or sample submission may be required.
- Suppliers shall have CentroMotion's formal deviation approval prior to shipping any product. Product shipped without approval will be rejected.
- Product shipped under temporary deviation shall be identified on each container and a copy of the signed deviation in each container for the term of the deviation.
- Rejection of a deviation request is not an acceptable reason for missed delivery.

7.0 Purchasing and Logistics Requirements

7.1 Forecasts

CentroMotion business units may provide to Suppliers Estimated Annual Usages (EAU's) or forecasts at multiple times during the year. This information is provided for planning purposes only. Unless agreed to as part of a contract or other agreement, these are estimates only and do not commit CentroMotion to purchasing any items or quantities. Supplier shall always execute deliveries according to purchase orders submitted to the supplier.

7.2 Purchase Orders

Purchase orders can be emailed, faxed, mailed, sent via EDI, or submitted via Supplier portal to Suppliers. Suppliers should acknowledge acceptance of every purchase order in writing, within two (2) business days of receipt. Suppliers are responsible for acknowledging not only the receipt of the purchase order but also the part revision level, pricing, and delivery date. Without prior notification by Suppliers, CentroMotion will consider that the purchase order will be completed as required and as specified in the purchase order. It is the responsibility of Suppliers to notify CentroMotion of any variance to the purchase order and the notification shall be in advance of the requested due date and in writing. Please also note that a Supplier's On-Time Delivery (OTD) will be measured against the originally accepted delivery date. Lastly, purchase orders may be placed with a supplier for material/parts for prototype testing or other pre-production analysis prior to formal production part approval. Orders placed by CentroMotion for samples do not constitute production approval of parts.

CentroMotion may also use Schedules (i.e. Scheduling Orders) or Kanban Cards in addition to or as a substitute for purchase orders. Schedules show two different types of outgoing messages: released and forecasted demand. It is the Supplier's responsibility to clarify all questions regarding the Schedule and the associated forecasts with the appropriate CentroMotion Purchasing Representative. Kanban Card programs will be jointly defined by the Supplier and CentroMotion. Prior to Kanban Card implementation, the program shall define the number of Kanban Cards, quantity per card, delivery lead-times, packaging, review process, and process for over and under consumption of cards.

7.3 Schedule Changes

Periodically, purchase orders may be required to be expedited or deferred. Suppliers are required to assist with the re-scheduling of these orders as needed by CentroMotion. Suppliers are required to respond within 48 hours (two business days) for any request to expedite, defer, or cancel purchase orders. Upon confirmation of these changes, CentroMotion will update its systems including production schedules and purchase orders.

CentroMotion may also send PO Follow-Up or Open Orders reports which lists all open purchase orders for the supplier with current status. The supplier is responsible for verifying the accuracy of these reports and communicating to CentroMotion any discrepancies within 24 hours. Any changes to delivery dates by suppliers shall be PRE-APPROVED by CentroMotion. Supplier requests to expedite or defer shipments based on these reports will be reviewed on a case-by-case basis.

7.4 On-Time Delivery

CentroMotion expects 100% on time delivery. For a purchase order to be considered on-time it shall be delivered to CentroMotion's dock on or before the due date listed on the purchase order AND with the exact quantity listed on the purchase order unless agreed to as part of a contract or other agreement. If a supplier is unable to meet a delivery commitment and does not provide sufficient notice to CentroMotion including an acceptable recovery plan, CentroMotion reserves the right to utilize premium freight and/or labor to meet commitments to our customers and charge the supplier for the additional costs incurred. Additionally, if a supplier fails to meet On-Time-Delivery (OTD) requirements at an acceptable level, the Supplier may be required to submit a comprehensive corrective action plan (SCAR - see section 6.3), detailing steps to improve the delivery of their products shipped to CentroMotion business units.

7.5 Over/Under Shipments

Suppliers only have authorization to ship product to CentroMotion per the purchase order. Any product shipped that is greater than the PO quantity or shipped without a purchase order without specific approval from CentroMotion may be returned at the Supplier's expense. Additionally, all shipments received that are less than the required purchase order quantity will NOT be considered on-time. CentroMotion reserves the right to request reimbursement from Suppliers for any additional freight incurred from shipping a quantity either above or below the quantity indicated on the purchase order.

7.6 Price Changes

All pricing from a supplier is considered firm for an indefinite period of time or as agreed in writing. CentroMotion expects continual pricing improvement and the Supplier to maintain and/or reduce pricing to benefit both CentroMotion and the supplier. If adjustments are identified by a Supplier that result in an increase in price, CentroMotion requires ninety (90) days written notice and justification for the change including suggestions for off-setting or absorbing the change. All pricing adjustments shall be reviewed and approved by CentroMotion prior to implementation.

It is CentroMotion's expectation that Suppliers work collaboratively with CentroMotion to develop products and services that allow both parties to continually reduce costs each year. Cost reductions may result in changes to raw materials, product design, tolerances, manufacturing processes, packaging, shipping, and inventory management practices. All changes shall be reviewed and approved by CentroMotion prior to implementation.

7.7 Payment Terms

CentroMotion standard payment terms are Net 90. Any deviation to terms shall be approved by the CentroMotion VP of Finance unless already agreed to in a contract or other agreement. Shipments received prior to any deviation being granted in writing will be subject to CentroMotion standard payment terms.

7.8 Inventory Commitments

CentroMotion expects suppliers to be proactive in lead time and cost reduction activities and to participate when applicable in JIT, KANBAN, Pull Systems, Vendor Managed Inventory (VMI) or other inventory reduction programs. In order to facilitate these initiatives suppliers may decide to hold additional inventory. Similarly, suppliers may produce additionally quantities above the purchase order

quantity in order to reduce set-up costs or leverage other economies of scale. However, unless agreed to as part of a contract or other legally binding agreement, CentroMotion does not commit to purchasing any items or quantities held in Supplier inventory.

7.9 Carriers

Suppliers shall comply with all CentroMotion routing requirements including the selection of carrier and mode of transport. Any change without written consent from CentroMotion will result in the transfer in liability, responsibility, and cost to the Supplier. Suppliers will be responsible for all freight charges (above CentroMotion contract rates) and potential loss or damage to the product by the unauthorized carrier. Suppliers should contact their CentroMotion Purchasing Representative for any clarification or to receive a copy of the CentroMotion Supplier Routing Guide.

7.10 Labeling and Packaging

Packaging requirements vary by CentroMotion business unit. Contact your CentroMotion Purchasing Representative for product specific packaging, labeling, and shipping requirements. Packaging requirements may also be identified as part of the PPAP submission. It is the Supplier's responsibility to ensure that the products and packaging of all shipments are received in acceptable condition. At a minimum the packaging shall meet the following requirements:

- Provide protection against damage, rust, corrosion, contamination, or other condition which may render the product unfit for its intended use.
- Product shipped on a skid shall be fixed in a manner that will not allow shifting or damage during shipment.
- Cartons shall be of sufficient strength to assure that component quality will not be affected during shipment or storage.
- Bulk containers shall have sufficient strength to assure that the quality of the contents will not be affected during shipment or storage. The top of every bulk container shall be covered (lid, cardboard pad, shrink wrap, etc.) to protect contents.
- CentroMotion is committed to ISO 14001 Environmental Management Systems. All packaging should be recyclable and/or returnable, unless otherwise agreed to by CentroMotion.
- Container labels and packing slips should include at a minimum the CentroMotion part number, engineering change number, quantity and purchase order.

Product found damaged upon receipt will not be accepted by CentroMotion. The use of commercial carriers does not relieve the supplier's responsibility for properly packaged products. The Supplier will be notified of the return so that immediate corrective action can be taken to ensure that supply is not interrupted. Failure to comply with the requirements specified may result in the Supplier receiving a Non-Conformance Material Report (NCMR) and/or a debit for excess handling and/or freight charges.

7.11 Shipping and Loading

In addition to carrier selection, packaging, and labeling requirements, CentroMotion has identified the following requirements during loading:

- Goods will be available for loading between commercial office hours unless otherwise agreed.
- Loading shall start and end within the time window agreed by forwarder/carrier and Supplier.

- If no material is ready to be loaded, the carrier is authorized to leave the Supplier's premises.
- Suppliers are only permitted to load the goods which have been ordered by CentroMotion.
- Suppliers are responsible for loading the trailer, per the agreed Incoterm between CentroMotion and the Supplier.

Furthermore, at the time of loading, Suppliers shall provide the carrier with the following documents:

- Transportation document (CMR / Bill of Lading / Waybill)
- Packing slip
- Other Customs document if required (Commercial Invoice)

These documents are critical to facilitating the transport of goods. Note, the timeline and method of providing this documentation may vary based on the type transport (ocean, air, road) required. Please consult with CentroMotion's Supplier Routing Guide for your location to determine specific requirements.

Some CentroMotion business units require an advanced shipping notification (ASN). The shipping notification should be sent to CentroMotion the day of the shipment or as otherwise instructed and include the CentroMotion part number, quantity, carrier and any shipment identification numbers.

Appendix I Definitions

AIAG – Automotive Industry Action Group
APQP – Advanced Product Quality Planning – a cross functional planning process which includes CentroMotion suppliers in participation with design reviews, quality targets, assessing product feasibility and capability.
AS 9100 – Aerospace quality management system
Certified Material – Suppliers whose product or material is certified 100% for inspection and/or testing that meet CentroMotion specified requirements including sub-supplier certification of material or product.
Controlled Shipping

Level I - A CS1 is a supplier containment action for 100% verification of product that was previously determined by CentroMotion to be non-conforming. This containment action may be self-imposed or required by a CentroMotion Quality representative. CS1 is performed using internal employee(s). Validation of CS1 data collection and identification of CS1 material is required with shipment to CentroMotion.

Level II. – A CS2 is issued to a supplier from the CentroMotion Quality or Operations Manager in writing. CS2 requires the outsourcing of containment to be completed by a 3rd party inspection entity. The supplier may choose the 3rd party containment firm. All 3rd party cost is the responsibility of the supplier. Validation of CS2 data collection and identification of CS2 material is required with shipment to CentroMotion. A supplier on CS2 may be put on New Business hold at the discretion of CentroMotion Manufacturing.

Level III – A CS3 is issued to a supplier from the CentroMotion Quality or Operations Manager in writing. CS3 requires the outsourcing of containment to be completed by a 3rd party inspection entity. CentroMotion Manufacturing will choose the 3rd party containment firm and dictate the

location of the containment action. All 3rd party cost is the responsibility of the supplier. Validation of CS3 data collection and identification of CS3 material is required with shipment to CentroMotion. A supplier on CS3 will be put on New Business hold by CentroMotion Manufacturing.

Corrective Action Report (CAR) - Report documenting the actions taken to prevent the reoccurrence of a problem or deficiency.

Cpk - process capability index or process capability ratio is a statistical measure of process capability: the ability of a process to produce output within specification limits

Customer – The recipient of products or services. A customer can be internal or external.

Customer Owned Property – Any property, e.g., tooling, fixtures, equipment, inspection/test equipment, returnable
packaging, etc. that is owned by CentroMotion or CentroMotion' customers.

DFAR – Defense Federal Acquisition Regulations - A set of restrictions for the origination of raw materials intended to protect the US defense industry from the vulnerabilities of being overly dependent on foreign sources of supply

DFMEA - Design Failure Mode and Effect Analysis - A systematic group of activities used to recognize and evaluate potential systems, products or process failures. DFMEA identifies the effects and outcomes of these failures or actions.

DoD – US Department of Defense

FAA - Federal Aviation Administration

FMEA – Failure Mode Effects Analysis - The process of reviewing as many components, assemblies, and subsystems as possible to identify potential failure modes in a system and their causes and effects.

IATF 16949 – International Automotive Task Force certification system

IMDS – International Material Data System – The system used by the automotive industry to record materials used in products.

Incoterms - **International Commercial Terms** are a series of pre-defined commercial terms published by the International Chamber of Commerce (ICC) relating to international commercial law

ISO 9001 – International Standards Organization quality management system

ISO 14001 – International Standards Organization environmental management system

ITAR – International Traffic in Arms Regulation - The United States regulation that controls the manufacture, sale, and distribution of defense and space-related articles and services as defined in the United States Munitions List (USML).

Non-Conforming Product – Material determined not to meet prints, specifications and/or CentroMotion quality requirements, including material returned for evaluation from our customer.

NCMR – Non-Conforming Material Report – the document used to track all activities related to a Non-Conforming material issue.

PFMEA - Process Failure Mode Effects Analysis – A structured analytical tool used by an organization, business unit or cross-functional team to identify and evaluate the potential failures of a process

PPM – Parts per Million

Return Goods Authorization (RGA) – number assigned by supplier to track authorized returns to the supplier.

SCAR (Supplier Corrective Action Request) – CAR as applied to a supplier issue.

Supplier – Organization or person who supplies product or services. Can be internal or external. Also called Vendor.

VDA – Verband der Automobilindustrie. German automotive quality certification

Appendix II Support Documents List

- AIAG Reference Manuals (AIAG manuals maybe be obtained through www.aiag.org)
    - AIAG Manual "Production Part Approval Process" (PPAP)
    - AIAG Manual "Measurement System Analysis" (MSA)
    - AIAG Manual "Potential the Failure Mode and Effects Analysis" (FMEA)
    - AIAG Manual "Statistical Process Control" (SPC)
    - AIAG Manual "Advanced Product Quality Planning (APQP) and Control Plan"
- Deviation Request form
- Feasibility Commitment Form
- Non-Conformance Material Report (NCMR)
- Nondisclosure Agreement
- PPAP Checklist
- SCAR (Supplier Corrective Action Request)
- Supplier Audit Form
- Supplier Code of Conduct
- Supplier Routing Guide
- Supplier Self-Assessment

Appendix III IMDS Submission

When requested, IMDS compliance is a requirement for continuing business with CentroMotion and its business units/production site location(s). Each Supplier entering information into the IMDS acknowledges that such information can be used by CentroMotion and CentroMotion business units/manufacturing locations for purposes relating to the ELV Directive, ensuring compliance with International, Federal, State and Local regulations, customer requirements, as well as CentroMotion standard terms and conditions. Suppliers will be held accountable for any penalties incurred by CentroMotion or its production site location(s) if material information for parts is not reported or is incorrectly reported.

IMDS Submission Guidelines

- Recipient Data -- Supplier shall send the MDS to the applicable CentroMotion business unit Supplier Quality Representative. The IMDS Id. # will be provided.
- This applies to all applicable parts. These will be reviewed and accepted or rejected by the designated Production CentroMotion business unit IMDS Coordinator. Location IMDS Coordinator.
- Before parts are submitted, the part, assembly shall be “checked” and “analyzed” (for basic substance and by weight) within the portal. Do NOT submit if any substance with “SVHC” shows up during the “analyze” – at that point the supplier shall contact its CentroMotion designated Purchasing Representative requesting direction from Engineering.
- Part/Item Number -- Input the CentroMotion manufacturing part number for the part/assembly. The part number will be in the abcd-uvwxyz format --this enables CentroMotion Manufacturing to use its part numbers as the main search criteria in IMDS. (Suppliers may use their part numbering system in subassemblies).
- Description -- Input the CentroMotion Manufacturing component or assembly name as stated on the CentroMotion Manufacturing drawing. If the part is a prototype or service part, put the word “prototype” or “service” in parenthesis after the name. If joker substances have been used, include a declaration statement.
- Drawing Number -- Input the CentroMotion Manufacturing drawing number and revision and date. CentroMotion requires full traceability of each component back to the raw material.
- Selected materials shall be IMDS approved –if you are unable to find materials which are approved. please consult your designated CentroMotion Purchasing Representative.

IMDS Resources

- Access to IMDS is free, to access, go to www.mdsystem.com. Click on the ‘public IMDS pages’ link, then the ‘System’ link, then ‘online registration’. The IMDS help desk is available to assist your company with registration, training, and system concerns.
- IMDS Help desk North America; imds-eds-helpdesk-nao@eds.com 1-972- 403-3607
- IMDS Help desk Europe; Imds-eds-helpdesk@eds.com 49 (0) 42152 56 666
- Additional Resources; Tetra-Tech, Inc. – Industrial Division MDS Map alliance partner in the USA, 710 Avis Drive, Ann Arbor, Michigan 48108; 734-665-3999; info@mdsmap.com

Appendix IV Additional DoD/Military Requirements

Special Process Suppliers
All suppliers should use only CentroMotion approved special process sub-contractors, unless otherwise specified by contract or drawing/print reference as provided by a CentroMotion business. Any supplier may request that a sub-contractor be added to a CentroMotion facility's Approved Supplier List through the appropriate CentroMotion Purchasing Representatives. However, such sources may not be used prior to receipt of documented approval. Actual costs of approval for a new sub-contractor may be the responsibility of the requestor.

For the processes listed below, special process suppliers will be NADCAP accredited as called out by the drawing/print or PO/Contract as needed. Special Processes include:

1. Non-Destructive Testing
2. Heat Treating
3. Welding
4. Chemical Processing
5. Coatings

Foreign Object Debris/Damage (FOD) Prevention
Product suppliers shall have a FOD program for the purpose of prevention, detection, and removal of foreign objects. The program shall meet the following requirements as applicable:

- FOD prevention shall be implemented in all areas as applicable and FOD training awareness shall be given.
- Parts shall be protected from handling damage in all areas; material handling awareness training shall be provided to all employees and handling standards documented.
- Supplier shall document all FOD incidents and perform root cause analysis.
- Metrics shall be documented if FOD incidents occur.
- If critical FOD areas are noted/ required, Physical Entry Controls shall be established with entry requirements visually posted outside each area.
- Internal auditing of FOD prevention in all critical FOD areas shall be conducted and documented.

Certification of Conformance (CoC) / Material Certification (CoA)
Unless otherwise specified by PO/contract, the supplier shall provide adequate certification of conformance for all materials and processes specified on the purchase order or contract, for each shipment. Where available, these may be submitted electronically. Suppliers are responsible for all PO terms and conformity characteristics per the PO/contract accepted (Note: for tier 1 (direct) suppliers delivering a product which includes sub-contracted or special processes, all such processes shall be indicated on the direct suppliers' Certificate of Conformance).

General Certificates
A general Certification of Conformance, signed by the Supplier's Quality Management Representative or designated company officer shall be used for all parts and materials, unless otherwise indicated. For machined components, if raw material is not provided by CentroMotion, a copy of the original mill Certificate of Analysis or manufacturer's material certificate (COA) shall be provided per PC

requirements, or when requested by CentroMotion to meet customer requirements. The most common raw material commodities used by CentroMotion are bar stock or raw/bulk wire. Depending on individual end customer requirements, it is possible that both a COC and COA may be required by CentroMotion. The related PO will communicate these needs as required.

Special Process Certificates
In addition to the general certification, an additional special process certification is required. This information may be provided on the general certification or in a separate document. It is understood that CentroMotion suppliers have their own formatted documentation. The certificate of conformance will contain at a minimum:

- Process(s) performed
- Specification number where applicable
- Revision level
- Purchase order number
- Part number
- Lot size
- Applicable test results
- Serial/traceability numbers where applicable to contract

Raw metallic materials (including forgings and castings) supplied shall include a copy of the original mill certificate or material test report (certification) from a test lab acceptable to CentroMotion.

Raw material mill certifications may not be altered or have any markings other than check marks from verification of physical and chemical values and/or indication of inspection acceptance. Stamps may be applied by warehouses/distributors to add incidental information such as the CentroMotion purchase order, weight shipped, etc.. Casting and forging suppliers shall also include the physical or mechanical properties with heat treat batch-lot numbers. When required by contract/PO, certification shall show that all materials comply with all Government requirements including country of origin and country where the material is melted.

Age-Sensitive Material Certificates including Hose & Sleeving
Age sensitive material suppliers shall additionally supply the lot number, source construction number (hose/sleeve only), and cure date (for age-sensitive items) within the CoC document. For those shelf items with an expiration date or shelf life, the material shall have 75% of shelf life remaining when it is shipped to CentroMotion.