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1. RIGHT OF ENTRY

All tiers of the supply chain must allow right of entry to Core Parts employees, applicable government representatives, or regulatory agencies (FAA, NTSB, OSHA, etc.) to inspect its quality system, facilities, technical data, and any manufactured articles and witness any tests necessary to determine that the article conforms to specified requirements.

Core Parts will not use (or will discontinue using) any supplier (including sub-tier suppliers) that does not allow right of entry to Core Parts, applicable government representatives, or regulatory agencies.

2. SUPPLIER CONTROL

(Note: Sub-tier suppliers include all tiers of the supply chain involved in the manufacturing process, including the original supplier of raw material, also known as the mill source).

The following sub-tier suppliers require Core Parts approval and must be listed on the Core Parts Approved Supplier List (ASL). Required certification(s)/accreditation(s) are noted in the table below.

Sub-Tier Supplier Type	Certification(s)/Accreditation(s)
Casting, Forging, and Material Forming	ISO 9001, AS 9100, or equivalent
Special Process	Nadcap*
Raw Material (Mill Source)	ISO 9001, AS 9100, or equivalent
Sub-Tier Manufacturing whose work (e.g. machining, part mark, hand finish) is not verified by the top tier supplier	ISO 9001, AS 9100, or equivalent
Calibration and Testing	ISO 9001, AS 9100, ISO/IEC 17025, A2LA, or equivalent

*Core Parts may approve special process suppliers that do not have Nadcap accreditation, however, 3rd party testing and/or additional supplier oversight will be required by Core Parts. Any costs associated with approving a non-accredited special process supplier may be at the expense of the requestor.

The following suppliers **do not** require Core Parts approval:


- Distributor of Raw Material – CPL recommends ISO 9001, AS9100 or equivalent certification.
- Sub-tier manufacturing (e.g. machining, part mark, hand finish) whose work can be verified by the top tier supplier.
- TCH/OEM or distributor(s) of their product.

Using an unapproved or unlisted supplier is cause for rejection and potentially negative impact on your quality score. At the discretion of Core Parts, additional testing and/or inspection may be required if an unapproved or unlisted supplier is used to manufacture or process a Core Parts part. Core Parts will communicate with the supplier about any testing or inspection requirements. When destructive testing is required, the supplier will be responsible for both the cost of the part and the actual testing.

3. COMMUNICATION WITH SUB-TIER SUPPLIERS

The top tier supplier is required to communicate all applicable contractual requirements to its sub-tier suppliers. Contractual requirements include but are not limited to Core Parts drawings, specifications, purchase order requirements and this Supplier Quality Requirements document.

Top tier supplier is responsible for making all sub-tier suppliers aware of the right of entry requirement (ref. item # 1).

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4. SUPPLIER CHANGE IN NAME, LOCATION, QUALITY MANAGEMENT OR OWNERSHIP

You are required to notify Core Parts whenever there is a change in manufacturing location, significant turnover of skilled labor, management or ownership as soon as it is feasible but before the next shipment to Core Parts.

Such changes may require an additional on-site or mail-in audit as well as a new or delta first article.

5. IDENTIFICATION AND TRACEABILITY

Parts shipped to Core Parts must be properly identified and fully traceable to raw material. It is the responsibility of the supplier to establish and maintain a system that will allow any part to be traced to the manufacturing job from which it was created, through all of the manufacturing processes, and back to the raw material master heat.

5.1. Part Marking

Part marking (content and method) must be performed in accordance with the applicable Core Parts drawing. Marking must be clear and legible otherwise it may be subject to rejection.

5.2. Lot Control

When lot control is specified on the Core Parts drawing, the supplier is responsible for assigning a lot number that will ensure proper traceability to the manufacturing job and ultimately to the raw material.

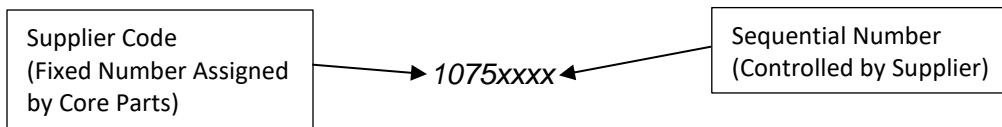
If Core Parts decides to assign the lot number it will be documented, in writing, by email or on the Core Parts purchase order.

5.3. Serialization

When serialization is specified on the Core Parts drawing, Core Parts may assign a serial number format that consists of a supplier code followed by a sequential numbering system that is managed by the supplier.

When Core Parts controls the serial number format it will be noted on the Core Parts purchase order, however, it is the supplier's responsibility to maintain the serial number sequence to prevent duplication. The supplier code is a number generated by Core Parts that is unique to each supplier. The sequential number, which is controlled by the supplier, may be any format or length.


Example:



When Core Parts allows the supplier to control the serial number format it is not required to follow the format as shown above, however, the format must be approved by Core Parts prior to implementation.

5.4. Assemblies

Assemblies must be part marked in accordance with the applicable Core Parts drawing. Each detail used in the assembly must be traceable to the assembly by its serial number or lot number. When details are not required to be serialized or lot controlled then the supplier is responsible for maintaining traceability by the manufacturing job number or similar means.

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6. MANUFACTURING PROCESS CONTROL

Parts requiring manufacturing process control (also known as Fixed Process) will be noted on the Core Parts drawing as “Fixed process required for xxx”, where xxx is the name of the process. Core Parts may request a Fixed Process even if it is not specified on the Core Parts drawing.

The supplier is responsible to provide the initial Fixed Process for Core Parts acceptance. Subsequent changes to the Fixed Process will also require Core Parts acceptance. Supplier shall provide the Fixed Process to Core Parts prior to shipment of parts. Core Parts acceptance of a supplier’s Fixed Process does not release the supplier of the responsibility to review and approve their own manufacturing plans and to ensure parts conform to Core Parts design data.

The supplier has the option to manufacture articles prior to Core Parts acceptance of any Fixed Process (i.e. to prove out the first production run or any process changes), however, this is done at risk by the supplier. **Submitting parts to Core Parts without Core Parts acceptance of required Fixed Process(es) is cause for rejection and a potential negative impact on your quality score.**

Any Fixed Process that contains proprietary information may be withheld but must somehow be referenced on the Fixed Process. Proprietary information must be available for review at the supplier’s facility by Core Parts or regulatory authorities upon request.

The supplier Fixed Process must include the following (minimum) information:

- supplier name,
- Core Parts part number and revision,
- notation that the manufacturing plan is fixed or frozen or that changes require customer approval (i.e. ‘Frozen Plan’, ‘Changes Require Customer Approval’),
- traveler revision letter or revision date, and
- traveler/router order of operations

Core Parts will provide the supplier with a document showing acceptance of the Fixed Process.

7. BILL OF MATERIALS (BOM)

When applicable, the BOM table is located on the Core Parts drawing and identifies the details needed to manufacture or assemble the part. Suppliers may procure or manufacture the necessary details based on the following requirements:

7.1. Procure Option


When available, details can be procured if listed on the BOM and traceable to the FAA approved manufacturer. Objective evidence must be provided to Core Parts showing traceability to the FAA approved manufacturer (i.e. packing list, Certificate of Conformity, FAA Form 8130-3).

Alternate part number(s) may not be procured unless listed on the BOM.

7.2. Manufacture Option – Details can be manufactured when listed on the BOM and a drawing is provided by Core Parts. Manufactured details must conform to the Core Parts supplied drawing.

8. QUALIFICATION OF PERSONNEL

All personnel must be properly trained and qualified to perform their tasks. Certain functions require personnel to be certified to a national standard (i.e. welder qualification per AWS D17.1 or NDT per NAS-410). The supplier may not perform those functions for Core Parts where the work must be performed by qualified and (when applicable) certified personnel.

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9. INSPECTION REQUIREMENTS

Unless otherwise specified by Core Parts design data or the Core Parts Quality Manager, the supplier is required to inspect all features identified on the Core Parts drawing and provide Core Parts with a copy of their final inspection results with each shipment of parts.

9.1. Critical and Key Characteristics

Core Parts drawings identify critical and key characteristics as follows:

- Critical characteristics are identified with an oval or diamond 'C'.
- Key characteristics are identified with an oval or diamond 'K'

The supplier is required to perform and document 100% inspection of all critical and key characteristics. For critical characteristics, results must be recorded individually. If parts are serialized, results will be recorded by serial number. Key characteristics must be inspected 100% and properly documented, however, individual results do not need to be recorded.

Core Parts will not MRB accept a nonconforming critical characteristic, therefore the supplier has three options:

- rework to conform to Core Parts drawing and specification requirements,
- submit RMRA for repair and a proposed repair scheme for Core Parts approval, or
- scrap.

9.2. All Other Characteristics

Suppliers are required to inspect all other features in accordance with an industry standard sampling plan (i.e. Zero Acceptance Number Sampling Plans, ANSI/ASQC Z1.4, or equivalent) except the acceptable defect rate is zero. If the supplier identifies a nonconformance then all parts from the manufacturing lot must be inspected for that nonconforming feature.

10. GENERAL WORKMANSHIP AND FOREIGN OBJECT DEBRIS (FOD) CONTROL

CPL parts shall be handled with good Aerospace workmanship practices. Metallic surfaces that are mechanically altered from their raw material state (i.e. machining, grinding, lapping), shall exhibit a clean and shiny surface, free from burrs, dings, dents, scratches, or excessive tool marks.

All CPL parts shall be clean, free of smudges, residue, tarnish, staining, corrosion, discoloration, or contamination from fluids (i.e. coolant, penetrant oil, cutting oil), including FOD.


The supplier shall ensure that FOD is eliminated from all parts prior to shipment and maintain a FOD free environment during manufacturing, assembly, inspection, storage, packaging, and shipping. Potential FOD includes but is not limited to food, burrs, chips, dirt, loose parts, and packaging materials (i.e. packing peanuts).

11. SURFACE ROUGHNESS INSPECTION METHOD

Surface finish callouts less than 32 Ra must be measured by direct measurement (profilometer or equivalent). The supplier is not permitted to accept parts by visual inspection or comparison to a known standard unless the area is inaccessible to direct measurement.

12. GEAR INSPECTION

Unless otherwise specified on the Core Parts drawing or purchase order, the supplier must inspect gear teeth in accordance with their sampling plan or 10% of the manufacturing lot, whichever is greater. Copies of all gear charts must be supplied to Core Parts which shall include part number, and serial or lot number. For gears that are not serialized or lot controlled, it is permissible to use the supplier's manufacturing job number.

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13. CERTIFICATIONS

Each shipment of parts must include the top tier supplier's Certificate of Conformance (C of C) and all sub-tier certifications, including the raw material certification from the mill source.

Top tier C of C must contain, at a minimum, the supplier's name, CPL part number and revision, serial or lot number (as applicable), and CPL purchase order number. CPL prefers that the C of C also include any process specification(s) and revision(s) performed by the top tier supplier.

Sub-tier manufacturing and special process certifications must contain the CPL part number and any applicable process specification(s) and revision(s). Raw material certification must include material properties (as applicable) and reference to the material specification noted on the CPL drawing.

14. FIRST ARTICLE

When required by the Core Parts purchase order, the supplier is required to document First Article Inspection (FAI) in accordance with AS9102 (latest revision). A similar format may be used when permitted by Core Parts Quality Assurance. Regardless of the format, a complete, partial, or recurrent FAI must be performed in accordance with the AS9102 standard.

FAI's may be performed by the supplier or by a Core Parts approved 3rd party inspection source.

A copy of the AS9102 standard can be purchased at www.sae.org.

15. SOURCE INSPECTION


Source inspection is required when specified on the Core Parts purchase order. Source inspection is performed by a Core Parts inspector unless the supplier has been granted source inspection authority and provided a Core Parts source inspection stamp. Source inspection may be required at the supplier's facility and/or at one or more of their sub-tier suppliers.

When Core Parts performs source inspection, the supplier must give Core Parts advance notice to allow for resolution of any scheduling issues and purchasing airline tickets. For US Government contracts, the supplier must allow for right of entry of any government source inspectors.

When Core Parts performs source inspection, the Core Parts source inspector will require the following minimum information:

- Finished parts for source inspection
- Core Parts purchase order, drawing and applicable specifications
- Manufacturing traveler
- Supplier FAIR and any test results (if applicable)
- Supplier final inspection results and certificate of conformance
- Sub-tier certifications
- Test reports (as applicable)
- Any additional information needed by the source inspector at the time of source inspection

When source inspection is complete it will be documented on the Core Parts Source Inspection form QF743-1. The completed QF743-1 must be included with the shipment to Core Parts.

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16. FAA CONFORMITY

FAA Conformity inspection is mandated by the FAA whenever a part or process must be verified for conformity to applicable Core Parts design data. When FAA conformity is required it will be noted on the Core Parts purchase order or Core Parts will notify the supplier in writing. All tiers of the supply chain must allow for right of entry to the FAA and Core Parts to perform conformity inspection.

Core Parts will notify the supplier to schedule FAA Conformity including the possibility of in-process conformity (either at the supplier or a sub-tier supplier).

In-process conformity may occur at one or more points of the manufacturing process (i.e. heat treat, plating, shot peen). When in-process conformity is required, the supplier must notify Core Parts prior to starting that process. Starting a process before in-process conformity has been completed may result in a rejection of parts.

The top tier supplier is responsible for contacting sub-tier suppliers about any conformity requirements.

17. REQUEST FOR MATERIAL REVIEW ACTION (RMRA)

Suppliers do not have MRB authority and as a result, any request to deviate from Core Parts requirements (drawing, specification, purchase order, supplemental quality requirements) will require a Request for Material Review Action (RMRA) which must be documented on form QF83-1.

The RMRA must be completed in its entirety, including root cause and corrective action, and submitted to the Core Parts Engineering Manager or Quality Manager for review and disposition. The RMRA is not a blanket acceptance of future deviations and must be limited by purchase order and quantity.

When approved, Core Parts will provide an electronically signed RMRA which must be included with the deviated parts. RMRA approved parts must be segregated from conforming parts.

18. SUPPLIER QUALITY ESCAPE

Core Parts defines a Supplier Quality Escape as a part released from the supplier's quality system that does not conform to the Core Parts drawing, specification, purchase order, or SQR and was not submitted under a RMRA.


The supplier is required to notify Core Parts after discovering a part escaped their quality system. The supplier may initially notify Core Parts by email but must follow up with a formal notification, including root cause and corrective action, using Core Parts Supplier Quality Escape Notification form QF741-3.

19. PROPER DISPOSAL OF NONCONFORMING PARTS

When the supplier is responsible for disposing nonconforming parts, they must be properly mutilated before disposal. Effective mutilation is accomplished by one or more of the following methods: grinding, burning, removal of a major integral feature, permanent distortion, cutting a significant size hole, melting, cutting into many small pieces, or removing all identification (part number, lot or serial number, cage code, etc.).

Core Parts requires, at a minimum, that all identification be removed from the part and recommends additional mutilation by one of the other methods identified above.

For additional information, refer to FAA Advisory Circular AC 21-43 (located at www.faa.gov).

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20. PACKAGING AND PRESERVATION

Unless otherwise specified on the Core Parts purchase order, drawing, or specification, suppliers are responsible for using best commercial practices to adequately package and preserve parts to prevent damage, distortion, deterioration, or Foreign Object Debris (FOD).

21. RETURN POLICY

Core Parts reserves the right to return parts that do not conform to Core Parts drawing, specification, SQR, or purchase order requirements.

22. RECORD RETENTION AND DISPOSITION

Suppliers and their sub-tier suppliers are responsible for maintaining all pertinent manufacturing and quality records for a minimum of ten (10) years. After such time, the supplier (including sub-tiers) must either: (a) destroy and dispose all pertinent records (destroyed records must be made illegible, for example, by cross-cut shredding or incinerating), or (b) continue to retain records at your facility.