SOP/WI: SUPPLIER QUALITY MANUAL

1. INTRODUCTION

The purpose of this manual is to define and standardized the way of doing business with Chandler Industries and to outline the processes used to ensure that Chandler supply base is continually improving to prevent quality and delivery disruption, reduce cost, and ensure high quality service. Implementation of the processes outlined in this manual serve reduce risk of supply chain disruptions, increase the quality of our products, and ensure a competitive industry.

2. SCOPE

The requirements within this manual apply to all suppliers of finished goods, production materials (raw or components), as well as outside processes where applicable.

3. RESPONSIBILITY

It is the responsibility of the supplier to review, understand, and satisfy the requirements of this manual and any other applicable requirements as part of the acceptance of purchase orders from Chandler. The supplier should obtain any referenced documents to ensure full compliance with all applicable requirements.

Chandler will maintain and document changes in the general quality requirements included in this manual. Revisions to the Chandler Supplier Manual will be available on line or can be obtained through Chandler's purchasing departments.

4. ABOUT CHANDLER

Chandler Industries was founded by Chandler Olson, who started his modest machine shop in Montevideo MN in 1962. Mr. Olson worked diligently throughout the 60’s, 70’s and 80’s to grow the business he had founded. After a long and successful career, he sold the thriving enterprise to new owners in 1986 prior to retirement. In 2011 Arch Equity Partners acquired Chandler Industries after being drawn to the business, its capability and its people. After the initial acquisition by Arch Equity Partners in 2011, Chandler experienced impressive growth through organic means as well as many strategic acquisitions which have allowed Chandler to expand the capability and capacity it offers its customers.

Chandler aims to be the supplier of choice for those customers within the Aerospace, Defense, Industrial, Medical and other markets who are seeking a manufacturing partner capable of producing highly specified machining, fabrication and assemblies. Chandler Industries, headquartered in Minneapolis MN, is uniquely positioned to offer its customers a truly tailored solution by drawing on the manufacturing expertise from its 5 operating divisions to create a cost-effective world class supply chain solution.

5. CHANDLER VALUES & PRINCIPLES
Chandler works with suppliers who deliver the best quality, value and service while exhibiting a high commitment to ethical conduct and social accountability. Chandler selects business partners who follow workplace standards and business practices that are consistent with our company’s key values & principles consisting of:

- Mutual Respect
- Ownership
- Integrity
- Clear Communication
- Accountability
- Proactive vs. Reactive
- Employee Development
- Opportunity for Advancement
- Ongoing Training
- Vigilance Against the Status Quo
- Flexibility
- Trust
- Competitive
- Energy
- Patience

6. COMPANY MISSION

Our mission is to create a Chandler brand that positions us as the supplier of choice for precision machined and fabricated components and assemblies within our served markets by providing the highest value through customer responsiveness, technical competence, and innovative lean manufacturing techniques the consistently delivers world class quality and delivery performance to our customers.

7. COMPANY VISION

Utilizing our breadth of innovative processes and expertise of our highly engaged team to create extraordinary customer solutions.

8. KEY PRINCIPLES

- Passion & Respect for the Customer
- Innovation is our Essence
- Continuous Improvement is Our Way of D in Everything We Do

9. QUALITY POLICY
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Chandler Industries is committed to customer satisfaction by providing the highest quality products and services that meet or exceed our customers’ expectations and requirements through continual improvement of our quality systems.

10. QUALITY OBJECTIVES
- On-Time Delivery ≥ 98%
- Maintain ≤ 1000 PPM Delivery Rate
- Scrap ≤ 2% of Sales

11. QUALITY SYSTEM REQUIREMENTS
- Quality Systems: The Chandler Industries purchase order will define the quality systems requirements the supplier must adhere to for that order.
- Quality Records: The Chandler Industries purchase order will define the quality record retention requirements the supplier must adhere to.
- Material Traceability: As applicable, the supplier is required to establish a lot traceability system that tracks raw material lot / batch numbers to the finished product lot / batch numbers including traceability to inspection records.

12. SUPPLIER SELECTION & APPROVAL
Chandler Industries will select key suppliers for development who present the best opportunity for improvement and who present the greatest potential impact to the organization. Once a supplier has been selected, a cross-functional team consisting of appropriate Chandler Industries and supplier personnel will be formed to work together and have regular follow-up meeting to ensure that certain targets are achieved.

During the selection process, Chandler requires the following:

- Supplier Profile completed (form to be provided by Chandler)
- Signed Non-Disclosure Agreement (when applicable)
- Request for Quote (Quote based on Chandler’s requirements)
- On-Site Assessment (form to be provided by Chandler)
- Financial Analysis – Chandler will determine financial viability based on the information provided in the Supplier Profile.

The decision to select a supplier can include many cross-functional team members. Final selection is based on the results of the process above mentioned during the selection process. Some suppliers will be accepted with conditions that must be addressed before award of business. Upon approval, suppliers will be added to the Approved Supplier List (ASL).

13. SUBCONTRACTOR MANAGEMENT
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Supplier may not engage any subcontractor without the prior written authorization of Chandler Industries. It is the responsibility of the supplier to manage the quality of all subcontractor operations. All requirements described in this quality manual are also to be applied for sub-contractors. All documents, registers and audit reports must be kept available by the supplier and/or submitted for Chandler Industries evaluation when required.

14. REQUIREMENTS COMMUNICATION

All RFQ’s will typically contain all necessary documents for full quotation, including:

- Engineering drawings
- Technical specifications
- FAI submission requirements
- Physical samples when available

The supplier must contact Chandler in the event the RFQ materials are illegible, unclear, or missing key information that is necessary for quotation. Later amendments or changes to supplier's commercial proposals, due to any reason, will not be accepted.

15. SUPPLIER MANUAL

General supplier requirements are contained within the Chandler Supplier Manual. Supplier compliance with this manual is a requirement of doing business with Chandler Industries. Performance of suppliers in meeting these requirements will be assessed on an ongoing basis and may be a factor in supply strategy.

16. PURCHASE ORDERS

Product specific requirements may also be communicated on POs. Product drawings called out on PO’s may specify characteristics that affect the fit, form, and function of the product. Each PO should be followed by an acknowledgement from the supplier confirming for each part number, the price agreed, quantity and delivery date. Product configuration will be specified by the prints, in addition to the configuration specified by the part number. Acceptance of the PO is an acceptance of the standard Terms and Conditions of the PO.

17. PACKING & LOGISTICS REQUIREMENTS

Packaging and Logistics requirements will be called out on Chandler Industries specific requirement as referenced in product specifications, drawings, PO's and/or supply chain agreements. Supplier must comply with such requirements, according to the production needs of Chandler Industries (e.g. batch sizes, etc.).

18. REVISIONS

Any revisions to the product requirements will be communicated through the Chandler purchasing organization, or through revision levels called out on purchase orders. It is the supplier’s responsibility to review Purchase Orders to ensure that up-to-date revisions of product requirements are utilized by their manufacturing. In case of non-compatibility, it is the supplier’s responsibility to request from Chandler Industries an updated specification. The supplier is not allowed to deliver
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previous revision level parts, except by written agreement with the pertinent Chandler Industries plant quality team.

19. PART QUALIFICATION

May include PPAP, first articles, control plans, PFMEAs as applicable. The Chandler Industries purchase order will define the quality systems requirements the supplier must adhere to for that order.

20. PACKAGING & LABELING

The supplier is expected to meet the shipping, packaging, and label requirements as specified by Chandler Industries.

Chandler Industries Purchase Orders define required routing information. Non-compliance will result in refusal of transportation, charges back to the shipper and a chargeback penalty fee.

21. CORRECTIVE ACTION

Chandler suppliers must maintain and apply an effective closed loop corrective and preventative action system, when process or product non-conformances are identified to have occurred or have the potential to occur.

When supplier non-conformances are identified within a Chandler Manufacturing Site, a supplier corrective action request may be initiated. Determination of when a corrective action will be issued is the responsibility of the Chandler Industries Division. Feedback from the supplier shall be within the Chandler provided on Chandler’s corrective action form or equivalent using 5-Why, 8-D or other industry acceptable analysis method.

22. CHARGEBACK

Non-conformances on product supplied to Chandler can have a large effect on deliveries and product performance. In the case of a nonconformance, it is the responsibility of the Supplier to insure adequate conforming parts or material is delivered in time to prevent any line stoppage situations. This can be accomplished in the following ways:

- Expedite shipping of conforming and certified parts so they arrive before line stoppages occur; or

  - Provide sorting, repair or rework resources to the appropriate Chandler facility in a timely fashion to prevent any line shortages.

  - If 1 and/or 2 cannot be accomplished within a timely fashion to prevent line stoppage, Chandler reserves the right to sort, repair or rework the non-conforming material at Supplier's expense to ensure acceptable parts or material is utilized and production requirements are met. All sorting will be coordinated with the Chandler production facilities by the appropriate plant personnel.

If non-conforming parts or material results in costs to Chandler Industries (costs may include, but are not limited to, charges related to sort, rework, repair, product scrap, production
downtime, customer imposed charges, warranty or recall costs, shipping, Engineering effort, etc.), Chandler reserves the right to charge the supplier costs associated with the non-conformance.

23. **MONITORING & IMPROVEMENT**

- **Supplier Scorecard / Performance Evaluation:** Chandler Industries continually monitors and ranks its suppliers using a supplier scorecard. The output of the supplier scorecard is used by the Chandler Quality teams to determine opportunities to grow business and to determine opportunities for supplier improvement. The Chandler supplier scorecard is comprised of 6 major elements: Quality, Delivery, Cost, Customer Service, and Lead Time. Scoring is based on a 100-point scale and is tallied monthly.

- **CONTINUOUS IMPROVEMENT:** Chandler Suppliers are expected to create and maintain continuous improvement plans focused on bettering Quality, Delivery, Cost, and Service performance. Regular reviews will be scheduled to address progress and results of improvement plans. Supplier continuous improvement activity is considered in scorecard performance and is indicated by the Segmentation Level.

The segmentation level is a value (1-4) based on the monthly and year to date values on the Scorecard. Chandler’s desire is to partner with suppliers that meet the criteria of a Level 1 or 2 performers. Any supplier that consistently performs at the Level 3 or 4 will be considered for removal on the Approved Supplier List.

- **SUPPLIER DEVELOPMENT:** Supplier development activities within the supply base allow Chandler and our suppliers to drive continuous improvement efforts. It is expected that the supplier can provide an improvement plan with detailed actions to support site level score. Supplier development initiatives within a supplier should focus on the following:

  - Improving Quality Systems
  - Improving Product Quality
  - Improving Supplier Delivery
  - Reducing Costs
  - Improving Supply Chain Effectiveness
  - Reducing Lead Time
  - Increasing Capacity and Training

Chandler will select key suppliers for development who present the best opportunity for improvement and who present the greatest potential impact to the organization. Once a supplier has been selected, a cross-functional team consisting of appropriate Chandler and supplier personnel will be formed to work together and have regular follow-up meeting to ensure that certain targets are achieved. Chandlers may choose to provide training to suppliers on techniques for operational and process improvement.

24. **HAZARDOUS SUBSTANCES**
Chandler Industries suppliers are required to comply with all relevant requirements of REACH unless the customer requirement(s) specifically state otherwise. In addition, these suppliers must meet our contractual terms and conditions covering components used in products within the scope of RoHS. Non-European suppliers are required to meet the requirements for RoHS and REACH as specified in the Chandler Industries Supplier Quality Manual QA2-15.

In order to comply with hazardous substances legislation globally, Chandler Industries requires Full Material Declaration (FMD), unless otherwise agreed.

**REACH**

REACH is the European Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals. It went into effect on June 1, 2007.

REACH shifts the responsibility from public agencies to industry when it comes to assessing and managing the risks posed by chemicals and providing appropriate safety guidelines for their users. REACH impacts many sectors beyond the chemicals industry, requiring new forms of cooperation among companies and enhanced communication along the entire supply chain. It also requires the creation of tools and guidance documents to assist companies in the supply chain and public agencies in the implementation of REACH.

REACH’s objectives are to ensure a high level of protection for human health and the environment, including the promotion of alternative test methods, as well as the free circulation of substances on the internal market and the enhancement of competitiveness and innovation.

For more information, please visit the links below.

European Commission’s REACH page  
European Chemicals Agency’s REACH page  
EU RoHS and EU REACH Automation Solutions page

**25. SUPPLEMENTAL PURCHASE ORDER CLAUSES**

1. Supplier must acknowledge this order including price and provide promise of delivery.
2. Material Safety Data Sheet must accompany all hazardous substances.
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3. Parts shipped against this order shall be free of Foreign Objects and Debris (FOD) and any contamination.

4. Supplier must obtain Chandler Industries approval for nonconforming product disposition prior to shipment including any rework to be performed at the supplier.

5. Supplier must notify Chandler Industries of changes in product and/or process, changes of sub-tier suppliers, changes of manufacturing facility location, and obtain Chandler Industries approval prior to shipment.

6. If work is subcontracted, Supplier must flow down all requirements of this purchase order to sub-contract source, including the use of Chandler Industries’ customer approved processors.

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9. Chandler Industries Inc., its customer, and any applicable regulatory authorities have right of access to the applicable areas of the supplier’s facilities, at any level of the supply chain, involved in this purchase order and to all applicable records.

10. Chandler Industries Inc., its customer, and any applicable regulatory authorities have right of access to the applicable areas of the supplier’s facilities, at any level of the supply chain, involved in this purchase order and to all applicable records.

11. Chandler Industries customers and or regulatory agencies shall have the right to conduct surveys and perform surveillance of supplier facilities to evaluate their capability to follow contractual requirements.

12. Supplier must ensure personnel involved in processing this order are aware of their contribution to product conformity, product safety or service shipped against this purchase order.

13. Supplier shall have methods and monitoring in effect to prevent, control, detect and report counterfeit parts or materials. COTs items shall be an exact match to this purchase order unless authorized otherwise in writing by Chandler Industries or authorized as a substitute in the applicable drawing or specifications.

14. Materials must not be exposed to mercury or mercury products while being processed.

15. Chandler Industries forbids the use of materials from conflict areas of the Democratic Republic of Congo (DRC). When requested, suppliers must show truthful evidence that raw material content is not procured from this part of the world. Conflict materials consists of Tin, Tantalum, Tungsten, and Gold.

16. If the supplier is to provide the raw material for this order. Chemical and physical certifications from the material distributor and mill certifications are required with the shipment along with any applicable special processing certifications as performed by the distributor or mill. The requirements of DFARS 252.225-7014 apply to this order. Preference for Domestic Specialty Metals, Alternate I ("specialty metals clause"). In brief, the contractor is prohibited from procuring specialty metals such as stainless steels or titanium.
which have been melted outside the United States. Materials must be procured from U.S. sources per DFARS subpart 225.7002-2.

17. Supplier must ensure personnel involved in processing this order understand the importance of ethical behavior.

18. **EXPORT CONTROLLED** - The technical data or software is subject to the International Traffic in Arms Regulations (22 C.F.R. Parts 120-130). Export, re-export or retransfer contrary to U.S. law is prohibited.

19. Supplier must ensure personnel involved in processing this order are aware of their contribution to conformity of the product or service shipped against this purchase order.

20. Unless a specific revision of an engineering specification document is listed, use only the latest revision of the specification in effect on the date of the contract. The requirements of these documents are hereby incorporated into this PO by this reference as applicable to respective contracts.

26. **SUPPLIER QUALITY REQUIREMENTS**

Supplier quality requirements will be listed on the Chandler Industries purchase order. These requirements are product specific and may change from order to order.

Contact Chandler Industries purchasing for the latest copy.

27. **REVISION LOG**

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<td>M. PATTERSON</td>
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<tr>
<td></td>
<td></td>
<td>2. Added section 27 Revision Log</td>
<td>M. PATTERSON</td>
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SUPPLIER AGREEMENT CONFIRMATION

(Supplier Name)__________________________, (Vendor ID)________agrees to fully comply with the requirements set forth in the Chandler Industries Supplier Manual.

Supplier Authorized Representative_________________________ Date _____________

Title ________________________________

Received by:

Chandler Industries Representative_________________________ Date _____________

Division ________________________________

Title ________________________________