

OPW Engineered Systems

<u>Prepared By</u> Quality Engineer	<u>Approved By</u> Director, Supply Chain	<u>Issue Level</u> B	<u>Issue Date</u> 7/24/15
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1.0 Purpose

- 1.1 The purpose of this manual is to promote a clear understanding of OPW Engineered Systems (OPW-ES) expectations and requirements for suppliers. This manual explains the process OPW-ES follows to assess the capability, quality, and performance of each supplier. Those suppliers demonstrating the highest standards of quality and performance will be given first consideration when awarding new business opportunities.

2.0 Supplier Selection

2.1 Quality Management System

- 2.1.1 It is the objective of OPW-ES to source products from companies that have a certified quality management system (such as ISO 9001:2000 or AS 9100).
- 2.1.2 *OPW-ES requires all suppliers to submit a Supplier Quality System Audit form with a copy of any quality management system certifications prior to issuing any purchase orders.*

2.2 Supplier Evaluation

- 2.2.1 OPW-ES maintains records in order to evaluate suppliers. Consideration for the continuation, expansion, and/or termination of business is based on these evaluations. Examples of such records are:
- PPM of nonconforming material (The goal is 0 PPM)
 - Nonconformance Reports (NCR's)
 - 100% on-time delivery with required quantities
 - Cost reduction proposals
 - Competitiveness and ability to meet marketplace pricing
 - Proven track record of engineering support / technology
 - Supplier responsiveness to quality issues

3.0 Materials Planning and Logistics

3.1 Management Responsibility

- 3.1.1 The supplier shall have a management structure which recognizes the importance and places the appropriate emphasis on Material Planning and Logistics (MP&L). The structure shall include an individual responsible for the establishment, implementation, and effective operation of all MP&L processes. The supplier shall establish, document, and maintain a materials management system that ensures OPW-ES receives the right quantity and the right type of product at the right time. The supplier's material management system's goal must be to maintain 100% on time delivery and be designed with this focus.
- 3.1.2 A listing of contact personnel and all contact information, including senior management, shall be provided and updated as necessary to OPW-ES. The listing must include contact information covering all operating times of OPW-ES.

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3.2 Purchase order acceptance, scheduling, and shipping

- 3.2.1 The supplier shall have a process to review all incoming purchase orders to ensure that all requirements are able to be met including product, quantity, *revision level*, and delivery date. Any requirement that cannot be met must be communicated to OPW-ES immediately prior to order acknowledgement.
- 3.2.2 The supplier's scheduling system shall be maintained to correlate with OPW-ES delivery requirements. The scheduling system shall be sufficiently robust to minimize the need for excess or premium freight charges. The scheduling system shall be used to project forward OPW-ES delivery requirements taking into account the lead time to procure subcontractor material and for internal manufacturing. The scheduling system shall be capable of detecting potential issues with meeting OPW-ES requirements in time to take corrective action and insulate the impact to OPW-ES.
- 3.2.3 The supplier shall have a process to ensure that outgoing shipments comply with applicable regulations and to generate the paperwork required by OPW-ES to eliminate any delay in outbound shipments. The supplier's materials management system shall include the method used to communicate all shipping requirements such as routings specified by OPW-ES or the contracted third party logistics provider to the shipping area.

4.0 Quality Requirements

4.1 Non-conforming Material

- 4.1.1 OPW-ES has the expectation that all materials purchased will arrive at our facility defect free. If product is found to be nonconforming at OPW-ES, the supplier is expected to provide the resources necessary to contain, evaluate, sort, and/or scrap the nonconforming product.
- 4.1.2 A Nonconformance Report (NCR) shall be issued to the supplier when OPW-ES detects nonconforming product, delivery, or supply issues. The *supplier's initial response including containment plan, shall be provided to OPW-ES quality department within (24) hours* from the date the supplier receives notification of the nonconformance.
- 4.1.3 *A written corrective action must be sent to the OPW-ES quality department within (14) days detailing the root cause including both short and long-term corrective actions along with the effective dates. Final resolution, of the corrective action, shall be made within (30) days of the supplier's submittal.* Any request for additional time should be directed to the OPW-ES quality department in writing. The written request shall include the action plan and the time line for implementation.

4.2 Material / Product Deviation

- 4.2.1 The supplier shall not deviate from OPW-ES engineering drawings, specifications, or other OPW-ES requirements without written approval and/or deviation authorization from OPW-ES engineering and quality departments.

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4.2.2 The supplier is responsible for the quality level of all material and/or product delivered to OPW-ES. If the supplier detects a nonconforming condition, they shall submit a Supplier Request for Deviation form. When received OPW-ES quality and engineering departments will review the request and make a disposition. Defective parts will only be received by OPW-ES that have a signed off Supplier Request for Deviation form accompanying the packing list.

4.2.3 OPW-ES has an expectation that product is inspected in a manner that insures all specified tolerances are met, *and at a minimum, that all manufactured parts will be visually inspected prior to shipment.*

4.3 Process / Sourcing Changes

4.3.1 OPW-ES must be notified prior to any process / sourcing changes that may affect product quality. OPW-ES reserves the right to request sample parts be submitted for approval. The supplier shall be liable for any defective material, products produced, and consequential damages incurred as a result of changes made without sample approval by OPW-ES.

4.3.2 The supplier shall not dispose of or rework tooling from past models or inactive parts without proper authorization from OPW-ES.

4.4 Product Identification, Status, and Material / Record Traceability

4.4.1 The supplier shall have a system to ensure that all component parts and containers are identified. Status (acceptable, scrap, rework, etc) of all material must be maintained throughout the manufacturing and shipping processes. Storage or holding areas shall be clearly marked and easily distinguishable. Special attention must be given to revised or new model parts to ensure they will be segregated from current production parts.

4.4.2 The supplier's quality system shall ensure that all products are traceable to raw materials or settings used in the manufacturing process, production operation, date of manufacture, specification change level, and records of evaluation of conformance.

4.4.3 The supplier's quality system shall ensure that all applicable quality records and data are traceable to the appropriate drawing revision level. Applicable quality records of purchased parts, raw material, in-process, and finished goods must be maintained.

4.4.4 Material certifications and test bars for all raw materials must be available to OPW-ES for minimum of (5) years after the date of manufacture.

4.5 Charge Back Policy

4.5.1 Costs incurred by OPW-ES associated with supplier part quality or delivery issues that are deemed the supplier's responsibility, will be charged back to the supplier.

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4.6 Supplier Audits

- 4.6.1 OPW-ES reserves the right to re-assess current suppliers prior to placement of new business, as a result of a supplier's quality performance, when there is a change in the supplier's facility or processes, a change in ownership, a significant change in the nature of the product previously supplied, or as a part of OPW-ES's supplier evaluation process (also applies to Tier 2 suppliers).

4.7 Training

- 4.7.1 The supplier shall maintain a training plan that ensures all personnel (including MP&L personnel) performing work on any OPW-ES parts or services has the appropriate training, education, and or experience.

5.0 Delivery Requirements

5.1 Packing Lists / Cleanliness / Packaging

- 5.1.1 All products delivered to OPW-ES must contain a packing list. The packing list must contain at a minimum the part number, revision, quantity, OPW-ES purchase order number, any applicable heat codes, and supplier's name.
- 5.1.2 Material certifications for all heat codes must be *reviewed for compliance and sent electronically* prior to shipment, ref Work Instruction 5.2 Material Certifications.
- 5.1.3 The supplier is responsible for ensuring that all material / products delivered to OPW-ES shall be clean and free of contamination. Material / products must be packaged in such a manner to ensure material cleanliness and protection from damage. Additional cleanliness or packaging requirements shall be communicated through engineering specifications, drawings and/or purchase order requirements.
- 5.1.4 The supplier shall maintain all equipment used to count, package, or ship material / products to ensure that OPW-ES receives the correct material / products and quantities ordered.

5.2 Sample Material / Products

- 5.2.1 Samples must be submitted for all new products and NCR corrective action verification. OPW-ES will specify the quantities and what material testing requirements will be involved on the sample part purchase orders. All sample product shipments to OPW ES must include a standard packing list and a *Supplier Request for Deviation form (on red paper)* attached to each container. Upon receipt of products OPW-ES will inspect the products and issue a Part Sample Evaluation Report. The report will disposition the samples as approved, conditionally approved, or disapproved. The supplier is expected to work with OPW-ES engineering and quality departments to get all products approved.

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6.0 References

OPW-ES Nonconformance Report (NCR)
OPW-ES Part Sample Evaluation Report
OPW-ES Supplier Quality System Audit
OPW-ES Supplier Request for Deviation
OPW-EW Work Instruction 5.2, Material Certifications

7.0 Amendment record for this procedure:

DATE	DESCRIPTION	ISSUE
3/26/09	Original Issue	A
7/24/15	First Revision	B