

PRECISION PLATE LTD.

SPECIFICATION ELECTRO-PLATERS FOR INDUSTRY

Supplier Quality System Requirements Rev # 3 Nov 16, 2018

1. SUPPLIER SELECTION AND RISK ASSESSMENT:

Precision Plate Ltd. Purchasing and Quality Management will conduct Supplier Evaluations and Supplier Risk Assessments to determine which suppliers are to be identified as “approved suppliers” and will be tracked by Quality based on performance criteria.

Criteria includes but is not limited to:

- Product / process complexity
- New supplier Quality System Certification
- New product / process for supplier
- New product requirements and reviews
- Supplier production location
- Past product / process concerns
- Supplier product launch history
- Impact on final product
- Past warranty concerns
- Demonstrated Delivery and Quality Levels
- Product environmental impact
- Mergers, Acquisitions or Affiliations

Suppliers are selected and rated by percentage in four areas which include

1. **Quality** – the ability to provide conforming products or services.
2. **Delivery** – On-time delivery performance without need of expediting by purchasing.
3. **Price** – competitive pricing and demonstrated response to price reductions as necessary 4.
4. **Service** – Overall level of service, handling non-conformances, documentation etc.

An overall rating of **70%** minimum must be achieved to maintain Approved status.
Suppliers that are third party registered (e.g. ISO9001, or AS9100) are still subject to the performance ratings.

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New suppliers are approved by Purchasing and/or Quality Assurance through an initial survey utilizing the Supplier Self Audit form or evidence of third party registration and added to the ASL with a conditional status.

New suppliers that have demonstrated the capability to perform to quality system requirements for six months may be updated to Approved status.

Poor supplier performance, unacceptable quality levels, or failure to pass a Supplier Quality System Audit or Supplier Self Audit, may result in a supplier being designated as a Conditional supplier.

Precision Plate Ltd. requires measured on-time delivery performance of 100% from all of their suppliers. Delivery performance is monitored in the Supplier On-Time Delivery Summary and deficiencies to be addressed are communicated to the Supplier.

Suppliers must have the ability to:

- a. Assess risk, plan, undertake, and certify the processes, products, and services to be provided including requirements for equipment, specifications, drawings, process requirements, work instructions etc.
- b. meet the requirements for the release of products and services
- c. demonstrate competence, including any required qualification of operators or inspectors
- d. communicate and interact with the Precision Plate as required
- e. control and monitor any external providers' performance
- f. facilitate any verification or validation activities that the Precision Plate, or its' customer, intend to perform
- g. control design and development if required
- h. control special requirements, critical items, or key characteristics identified by Precision Plate
- i. perform test, inspection, and verification activities
- j. implement statistical techniques for product acceptance and related instructions as appropriate
- k. ensure, as follows:
 - evidence of a documented quality management system;
 - use of customer-designated or approved external providers, including process sources (e.g., special processes);
 - notification of nonconforming processes, products, or services and obtain approval from Precision Plate for their disposition;
 - prevention of the use of counterfeit parts as stated on PO terms and conditions
 - notification of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain approval
 - flow down to external providers applicable requirements of the purchase order
 - provision and control of test specimens as required for design approval, inspection/verification, investigation, or auditing

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- retention of information per Section 12 of this document
- the right of access by Precision Plate, their customer, and regulatory authorities to the applicable areas of facilities and to applicable documented information, at any level of the supply chain;
- I. ensure that persons in the organization are aware of:
 - their contribution to product or service conformity
 - their contribution to product safety
 - the importance of ethical behavior
 - human factors in the workplace, symptoms and prevention

2. PACKAGING AND LABELING:

The choice of packaging can have a significant effect on product quality and is to be considered during feasibility evaluation. Shipping trials may be conducted to evaluate the ability of the packaging to preserve product quality.

Containers shall be designed to reduce the exposure to product damage during handling and transit. For less than pallet-sized containers, total package weight, when full, shall not exceed 35 pounds (15.9 kilograms). Protective wrapping or specified pallets may be required by Precision Plate Ltd.

All suppliers shall maintain packaging and labeling procedures to ensure product quality. Each separate package or container shall be clearly labelled to identify product, and quantity. If applicable WHIMS, special handing restrictions, or expiration date are required. Materials and Chemicals shall have at least one label attached which references lot, batch and test certificate documents. Failure to comply with customer requirements on labeling is cause for REJECTION.

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3. INCOMING SUPPLIER COMPLIANCE and PRODUCT QUALITY:

Compliance with the incoming product quality requirements will be established by a combination of the following:

- Review of inspection/test data, SPC data, or other test results stated on Purchasing Documents.
- Receiving Inspection at Precision Plate Ltd. coupled with monitoring of the supplier's performance. Acceptable functioning of the supplier's product in the Precision Plate Ltd.'s process may constitute the inspection process. Non-functional, or discrepant parts will be rejected by the Non-conformance process. The performance of the supplier will be monitored and communicated to the Supplier according to the Precision Plate Ltd. Quality System.
- 3rd party assessment. Precision Plate Ltd. may choose to use a third party or Lab evaluation of the supplied product by a "designated lab".

4. VERIFICATION REQUIREMENTS

Supplier must provide adequate inspection/verification and required documentation to demonstrate that the product supplied is in full compliance with the purchase order requirements. Special requirements shall be noted on purchase order. Compliance with these requirements is subject to audit by PRECISION PLATE LTD.

The supplier shall flow down to sub-tier suppliers the applicable requirements in the purchasing documents, including key characteristics where required.

5. CERTIFICATE OF COMPLIANCE and TEST REPORTS

PRECISION PLATE LTD. Requires a Certificate of Compliance (C of C) for all purchased products. Subject to Purchase Order requirements, additional test reports may be required. These reports must contain the test/inspection identifier of the individual performing the task or the title of the authorized representative of the supplier certifying the accuracy the test.

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6. CERTIFICATES OF ANALYSIS (COA)

Chemical suppliers are required to supply COA's for each shipment of product. As well a COA or mill test certificate may be requested on the purchase order.

The COA must be attached to the goods, (or faxed, or emailed) to the receiving facility and may be subject to reviewed prior to offloading of material.

Lot tracking and batch information must be sufficient to identify each individual package of chemicals, or goods.

All chemical suppliers shall retain samples of both incoming raw materials as well as finished product for a minimum time equal to the shelf life of the lot, or six months after the production of the lot.

Where actual samples are not possible the supplier must maintain records of analysis for a minimum of 5 years.

7. USE OF CUSTOMER-APPROVED SOURCES

The supplier shall use, and direct sub-tier suppliers to use, PRECISION PLATE LTD. or PRECISION PLATE LTD. customer's designated suppliers and must adhere to applicable requirements as instructed on the purchase order.

8. SPECIAL PROCESS CERTIFICATION

Special processes are processes that cannot be readily inspected or tested.

A certification shall be issued with each shipment and must state that special processes demonstrate compliance with the drawing requirements, specifications or purchase order. The certificate shall state the authorized representative of the supplier.

Special processes may include:

- Welding/Soldering/Brazing/Laser Cutting/Wire EDM.
- Anodizing/coating.
- Plating/Electro deposition.
- Encapsulating/Potting.
- Chemical Cleaning/Milling.
- Bonding/Lamination.
- Passivation.
- Heat Treatment/Annealing.
- Other (Customer Specified)

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9. CONFIGURATION MANAGEMENT (REVISION CONTROL)

The Supplier shall notify PRECISION PLATE LTD. Purchasing immediately of any changes to the characteristics or configuration of the product and obtain Purchasing approval prior to supplying product. Changes in processes used to manufacture include process changes, change of suppliers and change of manufacturing facility.

10. FIRST ARTICLES OR PART APPROVAL PROCESS

A First Article Inspection may be required and shall be noted on the Purchase Order.

When required, the supplier must comply with product and process approval procedures stipulated including process/product validation and verification.

A master sample shall be retained by the supplier for a minimum of 1 year in addition to any samples submitted to Precision Plate Ltd.

11. SUPPLIER CONTROL of NON-CONFORMING PRODUCT

If the supplier finds actual or potential outflow of non-conforming product, the supplier is required to notify PRECISION PLATE LTD immediately in writing and initiate a Nonconforming Product Review to allow for containment, assessment of inventory on hand, disposition, and corrective action as appropriate.

The supplier will implement controls as necessary to prevent the contamination of product with foreign objects and debris (FOD) and the use of counterfeit parts.

Disposition of non-conforming product shall require approval from PRECISION PLATE LTD.

12. QUALITY AND PROCESS DOCUMENTATION and RECORD RETENTION

Electronic imaging/microfilming of records in lieu of storing actual inspection records is permissible. All electronic records must be controlled, retained, and retrievable per the same requirements identified for hard copy records. Records must be maintained for the period stated on the Purchase Order or for a minimum of **10 years**.

Precision Plate must be allowed access to review records as required.

If the Supplier ceases to do business before the retention time expires all documents must be transferred to Precision Plate.

Examples of Quality Records to be retained are, but not limited to:

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- First article inspection reports
- In process / final inspection & test records
- Training records
- Manufacturing / fabrication records (e.g., planning sheets, routers, etc.)
- Nonconforming material disposition
- Procurement documents (supplier placed orders)
- Process control records (used as acceptance criteria)
- Receiving inspection records (e.g., test reports, material certifications, etc.)

Note: additional information and resource material concerning supplier system requirements in the aerospace industry may be found at <https://www.sae.org/iaqg/> and following the link to the Supply Chain Management Handbook (SCMH), or contact Precision Plate at 613-392-8735.

Signed: *Mr. John Parker*

President, Precision Plate Ltd.