Procedure 03-8083-P03

Part 1 of 2

(Ref: SECTION 14)

Control
of
Nonconforming Product

REVISION RECORD

Revision	Date of Issue	Description of Change	Prepared by	Reviewed by	Approved by
0	01/15/03	New	Elaine Steele	Tom Gilmore	Dave Rioux
1	01/13/04	Modified to address Rohwedder's comments	Gary Armstrong	Tom Gilmore	Dave Rioux
2	01/26/04	Modified to address Rohwedder's comments	Gary Armstrong	Tom Gilmore	Dave Rioux

CONTROL OF NONCONFORMING PRODUCT

1.0 Purpose:

To describe the responsibilities and methods used for reporting, identifying, segregating, dispositioning and documenting product that does not conform to specified requirements. Methods shall be designed to ensure compliance with applicable contracts, regulations, Codes and Standards.

2.0 Scope:

Applicable to nonconforming products, materials, items and components including related documentation at Precision Metal Works Ltd.

3.0 References:

ASME III	Subsection NCA 4134.15
CAN/CSA-N285.0	Section 13
ISO 9001:2000	Section 8.3

4.0 Responsibilities:

4.1 Quality Assurance Manager shall be responsible for:

4.1.1 The administration of this procedure.

4.1.2 Ensuring nonconforming products are identified, reported and segregated, (where possible) pending disposition.

4.1.3 Providing segregated ‘Hold’ area for nonconforming items.

4.1.4 Maintaining Nonconformance Records and Nonconformance Reports (NCR).

4.1.5 Ensuring the disposition of nonconforming items are carried out in accordance with disposition instructions and their implementation verified.

4.1.6 Forming a Material Review Board with the Vice President - Operations and promptly convening meetings as necessary.

4.2 Quality Assurance Inspector shall be responsible for:

4.2.1 Recording all nonconformances.

4.2.2 Ensuring nonconforming products are identified, reported and segregated, (where possible) pending disposition.

4.3 Foreman (Machine Shop and Fabrication Shop) shall be responsible for:

4.3.1 Ensuring Production personnel are aware that nonconformances of any kind must be promptly reported.

4.3.2 Ensuring Production personnel cease work on nonconforming items until a review has been conducted and they are directed otherwise.

4.3.3 Identifying suspect nonconforming product.

4.3.4 Notifying Quality Assurance Inspector of any nonconformances.

4.4 **Vice President - Operations shall be responsible for:**

4.4.1 Participation with the Quality Assurance Manager, on the Material Review Board and contributing to decisions to be made concerning dispositions of nonconformances.

4.5 **Planner shall be responsible for:**

4.5.1 Documenting, issuing and maintaining Change Notice Records and Change Notice Reports.

4.5.2 Processing replacements and corrections.

4.5.3 Where applicable, the disposition of a nonconformance is approved by the Customer and/or Authorized Inspector.

5.0 Procedure:

5.1 **Inspection:**

5.1.1 Exhibits illustrated in this Procedure may not reflect the most current revision, but are for reference only.

5.1.2 When nonconformities are found by, or brought to the attention of a Quality Assurance Inspector, a Reject Tag Form 030C as shown in Exhibit 1 shall be attached to the product(s) or container(s). Tags shall be completed in full by the responsible Quality Assurance Inspector.

5.1.3 No further processing, delivery or installation shall occur until the nonconformity has been dispositioned in accordance with the requirements of this procedure. Evaluation by the Customer and/or Authorized Inspector will be included when required.

5.1.4 Nonconformances may be the result of:

- Deficiencies in a product characteristic.
- Drawing discrepancy.
- Specification discrepancy.
- Procedure discrepancy.
- Errors concerning Inspection records.
- Deficiencies with product certification or documentation.

Certification and documentation deficiencies shall be treated in the same manner as any other physical nonconformance.

5.1.5 Items found to be nonconforming to specified requirements shall be identified, recorded, segregated and placed in 'Hold' area, size permitting, pending dispositioning. Removal from this area, for any purpose shall be by, or under the direction of, authorized Quality Assurance personnel. Items too large to be moved must clearly tagged and removed away from production or testing areas.

5.1.6 The responsible Quality Assurance Inspector shall complete the Nonconformance Report Form F043 shown in Exhibit 2, entering the following information, as applicable:

- Description of the item(s).
- Part Number.
- Drawing and Revision Numbers.
- Job Number.
- Lot Number.
- Supplier name and Purchase Order number.
- Other relevant and useful information.
- Quantities received, inspected and held.

5.1.7 Details of the nonconforming characteristics shall be entered on the Nonconformance Report in the most complete and comprehensive manner possible to permit the most informed decision to be made for the disposition.

Additional supporting documents such as inspection and test reports shall be attached as appropriate to assist in the evaluation.

5.1.8 Quality Assurance Inspectors shall enter the Preliminary Disposition as one of the following:

- Use as is
- Repair
- MRB (Material Review Board)
- Rework
- Reject
- Documents

The Nonconformance Report shall be forwarded to the Quality Assurance Manager for further processing.

5.1.9 Quality Assurance Manager shall maintain a Nonconformance Record, Form F044 shown in Exhibit 3, assign Nonconformance Report numbers, disposition nonconformances and ensure Nonconformance Reports are retained as Quality Records.

5.1.10 Where applicable, the Quality Assurance Manager shall review the details of the deficiency and the recommendations of the Quality Assurance Inspector, and sign the Nonconformance Report accordingly.

5.1.11 When a Material Review Board decision is required, the Quality Assurance Manager shall convene a meeting with the Vice President - Operations for a disposition to be determined.

5.1.12 Where required by contract, Code or regulation the Quality Assurance Manager shall arrange for the Customer and/or Authorized Inspector to sign and to indicate acceptance of the disposition.

5.2 **Dispositions:**

5.2.1 The originating Quality Assurance Inspector shall complete preliminary evaluation and dispositions. The Quality Assurance Manager shall complete final evaluation and dispositions with the assistance of other Representatives as required.

5.2.2 Projects requiring local jurisdiction involvement shall have the Authorized Inspector involved in all dispositions.

5.2.3 Projects that have been designed by Precision Metal Works Ltd shall have the Design Engineer involved in all dispositions.

5.2.4 Nonconformances shall have Preliminary and Final dispositions categorized and indicated on the Nonconformance Report form, for circumstances suitable to the situation.

5.2.4.1 **Use as Is:**

a) A nonconforming item deemed acceptable for safe and reliable function although not conforming to original specifications. It is mandatory for this disposition to receive approval by the Material Review Board. An Engineer may be consulted when deemed necessary.

b) The Nonconformance Report form shall be signed in the applicable spaces. Signatures shall be added by any others concerned in the decision.

c) Where required, acceptance shall be subject to approval by the Customer. The Planner shall document acceptance on a Change Notice, Form F026 shown in Exhibit 4, with an Engineering Change Notice designation. The Planner shall maintain a Change Notice Record, Form F027 shown in Exhibit 5, to ensure Change Notices are retained as Quality Records.

5.2.4.2 **Repair:**

a) A nonconforming item that can be processed to function reliably and safely although not conforming to original specifications by being repaired. It is mandatory for this disposition to receive approval by the Material Review Board. An Engineer may be consulted if deemed necessary.

b) Repair schemes shall conform to applicable product Codes and Standards.

c) The Nonconformance Report form shall be signed in the applicable spaces.

d) Where required, acceptance shall be subject to approval by the Customer. The Planner shall document acceptance on a Change Notice, Form F026 shown in Exhibit 4, with an Engineering Change Notice designation. The Planner shall maintain a Change Notice Record, Form F027 shown in Exhibit 5, to ensure Change Notices are retained as Quality Records.

5.2.4.3 **Material Review Board:**

a) The Material Review Board shall, as a minimum, be comprised of the Quality Assurance Manager and the Vice President - Operations.

b) The Quality Assurance Manager shall convene meetings promptly after receipt of any nonconformance requiring a Material Review Board disposition.

c) Dispositions shall take full account of safety, reliability, performance and interchangeability of product characteristics. If required, representatives of other disciplines shall be invited to join in discussions and provide technical assistance in their field of expertise.

d) Participants shall have full access to pertinent documents and technical information and the Quality Assurance Manager shall ensure these are provided as required.

e) The Quality Assurance Manager and the Vice President - Operations shall determine final dispositions, based on the information received.

f) Once the disposition has been determined and the Nonconformance Report signed, the Planner shall be responsible for further processing. This shall include obtaining approvals from Customer and/or Authorized Inspector as necessary. A Change Notice, with the applicable designation shall be issued and distributed as appropriate.

5.2.4.4 **Rework:**

a) The process by which an item is made to conform to the original requirements by completion or correction.

b) The Quality Assurance Manager may confirm the original disposition entered by the Quality Assurance Inspector without input from any other party.

c) The Planner shall be notified and proceed with the processing for correction. If the estimated time for rework exceeds one (1) hour, replacements shall be documented on a Change Notice, Form F026 shown in Exhibit 4, with a Field Change Notice designation. The Planner shall maintain a Change Notice Record, Form F027 shown in Exhibit 5, to ensure Change Notices are retained as Quality Records.

The Planner shall retain the original copy of the Field Change Notice, with a copy being distributed to the Vice President - Finance for accounting purposes.

5.2.4.5 **Reject:**

a) A disposition indicating that the item is unsuitable for its intended used and is incapable of being repaired/ reworked or it is economically impractical to do so.

b) The Quality Assurance Manager may confirm the original disposition entered by the Quality Assurance Inspector without input from any other party.

d) For in-house items, the Planner shall be notified and proceed with the processing for replacements. Replacements shall be documented on a Change Notice, Form F026 shown in Exhibit 4, with a Field Change Notice designation. The Planner shall maintain a Change Notice Record, Form F027 shown in Exhibit 5, to ensure Change Notices are retained as Quality Records.

The Planner shall retain the original copy of the Field Change Notice, with a copy being distributed to the Vice President - Finance for accounting purposes.

d) For purchased items, the Purchasing Manager shall be notified and with the Supplier, determine the best and most efficient methods of disposal and replacement. The Purchasing Manager shall apply the most cost-effective method; ensuring proper credit is applied. An entry shall be made on the Nonconformance report to indicate the problem was charged to the Supplier.

e) Products to be returned to Supplier shall be held in a Nonconformance “Hold” area until a Return Material Authorization is received.

5.2.4.6 **Documents:**

a) Entries are made when document deficiencies occur. The Purchasing Manager shall be notified and make arrangements for the incorrect documents to be corrected, or if the items do not conform, for replacements to be supplied.

b) The Quality Assurance Manager may confirm the original disposition entered by the Quality Assurance Inspector without input from any other party.

5.3 **Re-Inspections:**

5.3.1 Should nonconformance dispositions fail re-inspection and test, a new Nonconformance Report, with a new number assigned by the Quality Assurance Manager shall be generated. The new Nonconformance Report shall be processed in accordance with this procedure. The original Nonconformance Report shall be attached to the new Nonconformance Report.

5.3.2 Reworked product shall be re-inspected in accordance with the originally specified requirements.

5.3.3 Repaired product shall be re-inspected in accordance with the specified requirements of the repair scheme.

5.4 **Evaluation of Nonconformances:**

5.4.1 Final disposition of nonconformances by the Quality Assurance Manager shall ensure compatibility with the design specifications and procedures and be adequately supported by relevant data.

5.4.2 Final disposition may require approval from the Material Review Board as described and shall be documented on the Nonconformance Report.

5.4.3 Any Engineering calculations, schemes or designs required shall be documented and referenced on the Nonconformance Report.

5.4.4 The Quality Assurance Manager shall ensure that all quality requirements of the design documents and contracts are complied with and that the cause of the nonconformance is identified with appropriate corrective action to prevent recurrence, when applicable.

5.4.5 If there is a possibility that product previously shipped has a potential, or is confirmed as nonconforming, the Quality Assurance Manager shall promptly alert the President who shall determine the action to be taken. Actions shall consider compliance with the requirements of applicable contracts, Codes, regulations and safety standards.

5.4.6 Notification to the of Nonconformance matters Customer and/or Authorized Inspector shall be issued when necessary.

5.5 **Final Inspection and Testing:**

5.5.1 Final Inspection is comprised of the review of Route Card (MITP) to determine whether all Manufacturing, Inspection and Test operations have been completed and signed off. There shall be evidence that inspection and any monitoring of production operations has been conducted as required and any nonconformances cleared.

5.5.2 Should any of the above requirements not be completed, the Quality Assurance Manager shall issue a Nonconformance Report to the responsible parties and process in accordance with this procedure.

5.6 **Inspection, Measuring and Test Equipment:**

5.6.1 Inspection, Measuring and Testing Equipment which is past calibration due date, is suspected of inaccuracy, is damaged or fails in operation shall be identified with a "Rejected" tag signifying nonconformance and placed in the nonconformance "Hold" area pending disposition.

5.6.2 The requirements of Section 11, Control of Inspection, Measuring and Test Equipment of this Manual shall be applied.

5.7 **Corrective Action:**

5.7.1 Corrective Action Requests shall be raised, in accordance with the Section 15, Corrective and Preventative Action, of this Manual at the discretion of the Quality Assurance Manager.

5.8 **Records:**

5.8.1 The following documents shall be retained by the Quality Assurance Manager as quality records and shall be maintained in accordance with Section 16, Control of Quality Records:

a) Nonconformance Report and attachments such as:
- Dimensional inspection reports.
- Test reports.
- Technical evaluations.
- Repair schemes, drawings, sketches, etc.
- Customer concessions.

b) Nonconformance Record.
c) Change Notice
d) Change Notice Record
e) Any other pertinent documents.

5.8.2 Nonconformance records are available for review to the Customer and/or Authorized Inspector.

6.0 Related Exhibits:

Exhibit 1	Form F030C	Reject Tag
Exhibit 2	Form F043	Nonconformance Report
Exhibit 3	Form F044	Nonconformance Record
Exhibit 4	Form F026	Change Notice
Exhibit 5	Form F027	Change Notice Record

Exhibit 1:

PRECISION
metal works

ADTECH
manufacturing

Form: F030	IDENTIFICATION TAGS	Revision: 0

ACCEPTED

CUSTOMER _____

W.O.NO. _____ DATE _____

NO. OF PCS. _____ MATERIAL _____

PO# _____ SER.NO. _____

PART NAME _____

INSPECTOR _____

Exhibit 30A – 'Accepted' Tag
Green in Color

REPAIRABLE or REWORK

CUSTOMER _____

JOB NO _____ DATE _____

PART NO _____ PART NAME _____

PO NO _____ SER NO _____

NO. OF PIECES _____

DISPOSITION _____

_____

INSP. _____ STAMP _____

REASON FOR REWORK (OVER)

Exhibit 30B – 'Repair/Rework' Tag
Blue in Color

REJECTED

JOB NO. PO NO.

_____

PART NO _____ SERIAL NO. _____

PART NAME _____

NO. OF PIECES REJECTED _____

REASON _____

_____

DISPOSITION _____

_____

INSPECTOR _____ DATE _____

Exhibit 30C – 'Reject/Scrap' Tag
Red in Color

Exhibit 2:

PRECISION
metal works

ADTECH
manufacturing

Form: F043 — NONCONFORMANCE REPORT — Revision: 0

DESCRIPTION		PART No.:		NCR No.:
DRAWING No.:	REV.	JOB No.:	LOT No.:	BY:
SUPPLIER			P.O. No.:	DATE:

NONCONFORMANCE DETAILS

OPERATOR

QUANTITIES	
RECEIVED	
INSPECTED	
HELD	

Preliminary Dispositions
- ☐ USE AS IS
- ☐ REPAIR
- ☐ MRB
- ☐ REWORK
- ☐ REJECT
- ☐ DOCUMENTS

DISPOSITION INSTRUCTIONS

Final Dispositions
- ☐ USE AS IS
- ☐ REPAIR
- ☐ MRB
- ☐ REWORK
- ☐ REJECT
- ☐ DOCUMENTS

CHARGE SUPPLIER YES ☐ NO ☐ — CORRECTIVE ACTION REQUIRED YES ☐ NO ☐

CUSTOMER REPRESENTATIVE ☐ NOT REQUIRED	DATE	QA MANAGER	DATE
ANI ☐ NOT REQUIRED	DATE	OPERATIONS MANAGER ☐ NOT REQUIRED	DATE

RE-INSPECTION

COMMENTS

QUANTITIES	
RECEIVED	
INSPECTED	
HELD	
INSPECTOR	

FINAL ACCEPTANCE (Quality Assurance Manager)	DATE	DATE

Exhibit 3:

PRECISION
metal works

The Fusion of Quality and Innovation

ADTECH
manufacturing

Form: F044 | NONCONFORMANCE RECORD | Revision: 0

NCR Number	Job Number	Description	Date	Issued By

Exhibit 4:

PRECISION
metal works

ADTECH
manufacturing

Form: F026	CHANGE NOTICE	Revision: 0

DESIGNATION:

- ❑ Customer Change Notice (CCN) — CCN Number _____
- ❑ Engineering Change Notice (ECN) — ECN Number _____
- ❑ Field Change Notice (FCN) — FCN Number _____

Job Number: _____

Drawing Number: _____

Description:

_____

_____

_____

_____

_____

_____

Affect To Price/Delivery:

_____

_____

_____

_____

_____

_____

Completed By: _____ Date: _____

(When Applicable)

Approved By: _____ Date: _____

Customer Representative

Approved By: _____ Date: _____

Authorized Inspector

Exhibit 5:

PRECISION
metal works

ADTECH
manufacturing

Form: F027	CHANGE NOTICE RECORD	Revision: 0

Job Number: _____

Customer Change Notice (CCN)

CCN Number	Date	Description	Completed By

Engineering Change Notice (ECN)

ECN Number	Date	Description	Completed By

Field Change Notice (FCN)

FCN Number	Date	Description	Completed By