



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 1 of 8



1.0 PURPOSE

To insure all products manufactured at CSI will only be released when contracted requirements such as technical specifications, workmanship standards, pricing, lead-times, and annual unit volumes are completely defined, documented, and understood.

2.0 SCOPE

Products manufactured at CSI will be released to New Products when the following criteria has been met:

- 2.1 Customer requirements have been reviewed, understood, and agreed upon by both CSI and the customer providing such requirements.
- 2.2 Any requirements deviating from standard requirements outlined by the customer are clearly defined and understood by all parties.
- 2.3 It is determined that CSI's manufacturing capabilities are sufficient to produce the customer's product to their specifications in a consistent and timely fashion at a cost acceptable to both CSI and its customer.

3.0 DEFINITIONS

- 3.1 New Product - Any Product to be produced for the first time by CSI.
- 3.2 Request for Quotation (RFQ) - A document issued by an existing or targeted customer requesting pricing and lead-times for an electronic sub-assembly or system.
- 3.3 Labor Standard - The time associated with the assembly, test, and inspection of a sub-assembly or system manufactured at CSI.

Approved By: _____
Director of Quality

Effective Date: _____



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 2 of 8



4.0 REFERENCES

- 4.1 Exhibit A - Engineering Flow Chart
- 4.2 QAP 003 - Document Control
- 4.3 QAP 023 - Manufacturing Process Control
- 4.4 QAP 024 - Tape Back-Up

5.0 PROCEDURE

5.1 Sales' Responsibilities

5.1.1 Sales is typically the primary interface with CSI's existing customers and targeted customers. Sales personnel should serve as conduit to pass Request for Quotations (RFQs) from the customer (or potential customer) to CSI Document Control (ref. QAP 003 "Document Control" - Customer Documentation). Sales will also act as coordinator of all quoting activities.

5.1.2 RFQ Packages: It is the responsibility of the Sales Department to review all RFQs for completeness and accuracy, and to assess the product's profile for new product qualification. RFQ packages from CSI's customers should include, at a minimum, the following:

- A. Bill of Material (costed where applicable)
- B. Approved Vendor List (where applicable)
- C. Drawings:
 - Top level assembly drawing
 - Sub-assembly drawings
 - Piece part drawings
 - Schematics
- D. Test Requirements / Specifications
- E. Estimated Annual Usage
- F. Packaging Specifications
- G. Letter authorizing CSI to obtain pricing from customer's approved suppliers (where applicable)
- H. Supplier Contact List (optional)



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 3 of 8

- I. Estimated Assembly Time including Inspection and Test (optional)
- J. Sample of Product / Gold Standard (optional)

- 5.1.3 Once Sales has reviewed the RFQ for completeness and qualifies the product as a viable new product, the package is sent to Doc Control for control and distribution.
- 5.1.4 Sales personnel are responsible for maintaining a log (Form F149) used for coordinating and tracking all CSI quoting activity. This log should be reviewed regularly with the Materials and Engineering departments to ensure a timely response to all RFQs.
- 5.1.5 Once the Materials and Engineering departments have gathered the necessary information to respond to an RFQ (see Sections 5.3 and 5.4), Sales personnel will summarize all associated costs in a written correspondence to the customer, or targeted customer, which requested the quote.
- 5.1.6 Sales will consider the following information when computing all quotations:
 - A. Material Costs
 - B. Material Overhead Markup (MOH)
 - C. Labor Standard
 - D. Burdened Labor Rate
 - E. NRE Charges
 - F. Profit Margin
 - G. Lead Times
- 5.1.7 The quote should include, at a minimum, the following:
 - A. Cost/Unit per Estimated Annual Usage
 - B. First Delivery Lead-time from Issuance of Purchase Order
 - C. Subsequent Lead-times
 - D. Freight Charges
 - E. Payment Terms
 - F. Non-Recurring Engineering Charges



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 4 of 8

5.1.8 Sales personnel are to review the information outlined in the previous two sections to ensure its accuracy prior to submittal of all quotes.

5.1.9 It is the responsibility of Sales to submit CSI's quotations to its customers. All quotes, along with the quote log, should be stored on the NT Server and backed up daily (ref. QAP 024).

5.2 Documentation Control Responsibilities

5.2.1 Doc Control will receive customer packages from CSI's Sales Department.

5.2.2 Doc Control will distribute a copy of documentation package to Engineering for analysis, per QAP 003 "Document Control".

5.2.3 File documentation package in Doc Control Center accordingly (ref. QAP 003).

5.2.4 Doc Control will, under the guidance of Engineering, distribute additional uncontrolled copies of the customer documentation to the Materials organization.

5.3 Engineering's Responsibilities

5.3.1 Engineering will review documentation package to ensure BOM and CAD files are compatible.

5.3.2 Identify any special tooling or safety requirements.

5.3.3 Review package for existing manufacturing processes and/or sample unit. Assess CSI's capabilities from an engineering and manufacturing perspective to ensure product is a good fit for CSI's product portfolio.

5.3.4 Engineering will create an Indented Engineering BOM identifying all purchased components and sub-assemblies, as well as



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 5 of 8

sub-assemblies manufactured by CSI. The BOM (Form F150) should show quantities for each purchased and manufactured item.

- 5.3.5 The Engineering BOM is stored on the NT Server at \\csi\BOMS and a copy e-mailed to Materials.
- 5.3.6 Once the Materials Department has completed its portion of the BOM (see Section 5.4), Doc Control will store the updated copy on the NT Server in the BOMS directory.
- 5.3.7 Engineering will perform a detailed analysis of the documents provided to develop an estimated Labor Standard, including Final Inspection and Test. This information will be passed along to the Sales Department and eventually used for computing the final quote (see Section 5.1).
- 5.3.8 Once quote packages are sent out to CSI's suppliers, Engineering will provide support to Purchasing on any technical questions resulting from the specifications provided.
- 5.3.9 Upon receiving purchase order, Engineering will develop a manufacturing process based on customer supplied documentation.
- 5.3.10 Engineering will then develop production flow, assembly, test, inspection, and packing instructions.
- 5.3.11 Manufacturing Engineering will build a First Piece production unit for qualification.
- 5.3.12 Quality Engineering will perform First Article Inspection on first unit.
- 5.3.13 The Engineering Department will work in conjunction with customer's technical departments to resolve any engineering or manufacturing issues resulting from first piece evaluation.



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 6 of 8

5.3.14 Upon acceptance of First Piece submittal, Engineering will implement the manufacturing processes as outlined in QAP 023 "Manufacturing Process Control".

5.4 Materials' Responsibilities

5.4.1 Materials will ensure customer supplied documentation includes the items listed in Section 5.1 "RFQ Packages".

5.4.2 Using an AVL where applicable, determine costs, availability, and lead times for parts required to manufacture new product.

5.4.3 All costing, lead-time, and supplier information must be recorded in the Indented Engineering BOM, provided by Engineering via e-mail (see Section 5.3).

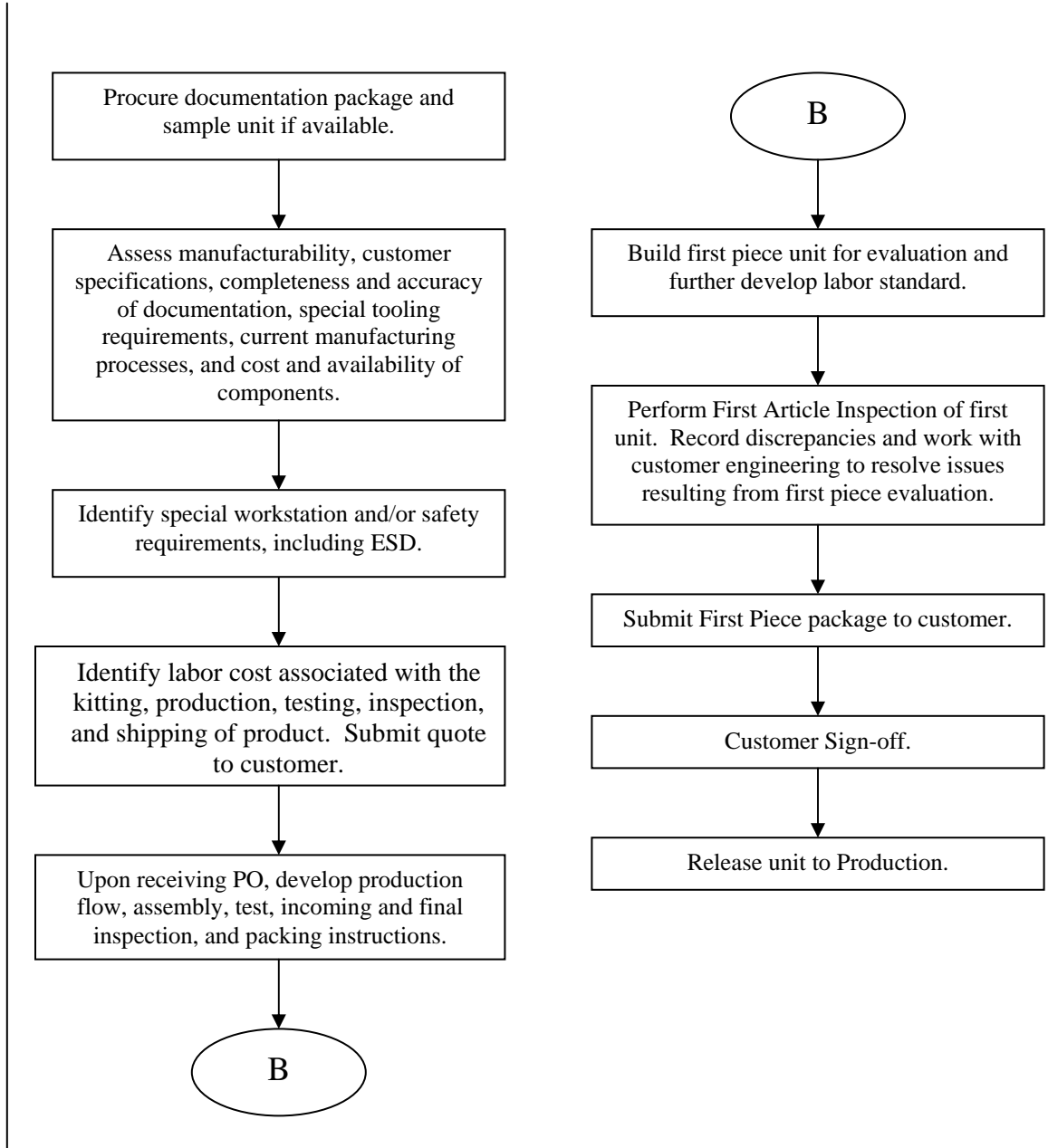
5.4.4 Once the Materials Department has completed its portion of the BOM, it must be e-mailed to Doc Control and stored on the NT Server in the BOMS directory.

5.4.5 A completed copy of the Engineering BOM will then be sent to the Sales representative responsible for responding to the RFQ. This information will be used by Sales to compute the final quote to the customer.



Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 7 of 8

EXHIBIT A





Procedure Number: QAP 001	NEW PRODUCT INTRODUCTION	Revision B
		Page 8 of 8

Revision Log

Revision	Issue Date	Issuer	Section	Description
A	12-8-97	R. Phillips	All	New Issue
B	08-23-99	R. Phillips	Various	Add responsibilities for various departments when responding to an RFQ.