Ameritube LLC 1000 N. Hwy 77, Hillsboro TX 76645	Revision Level: A	Procedure No. QMS-11
	Revision Date: 5/30/2012	Page No. 1 of 8
In-Process Inspection	This Document expires one day after printing Last Printed: January 2, 2013	

Date	*Description Of Change*	*Signature*	*Rev. Level*
5/30/2012	*New Document*	*Jeremy Wilson*	*A*

Procedure Approval:	**Company Title:**	**Date:**
	Quality Manager	5/30/2012

1. Scope and Objectives

1.1. This procedure defines the activities required for In Process Inspection on customer product being run on an approved process.

1.2. The objective of in process inspection is to verify and document that all applicable specifications and requirements pertaining to customer product are stable and continue to meet specifications and requirements through out the production run. Approval to continue manufacturing product with the process being monitored will be given when in process inspection indicates all contract requirements continue to be satisfied.

1.3. Additionally, the objective of the in process inspection procedure shall be to ensure that basic requirements continue to be met and documented as required by the customer contract specific to Ameritube LLC Manufacturing's responsibility to provide control over the process, provide objective evidence of product conformance to specification and continued effectiveness of the quality management system.

1.4. The result of the in process inspection process shall be objective evidence the process is stable and capable of manufacturing conforming product as the manufacturing process continues and is monitored. In process inspection shall be used to improve customer product quality and improve the overall effectiveness of the quality management system.

2. Applicability

2.1. In Process inspection with documentation applies to:

2.1.1. all commercial and nuclear products

2.1.2. products requiring in process inspection per customer contract

2.2. Ameritube LLC production personnel

2.3. Ameritube LLC quality personnel

2.4. Ameritube LLC suppliers, as required

3. Related Documents

3.1. QM-001, Quality Manual, Section 8.2.3, Monitoring and Measurement of Processes

3.2. QM-001, Quality Manual, Section 8.2.4, Monitoring and Measurement of Product

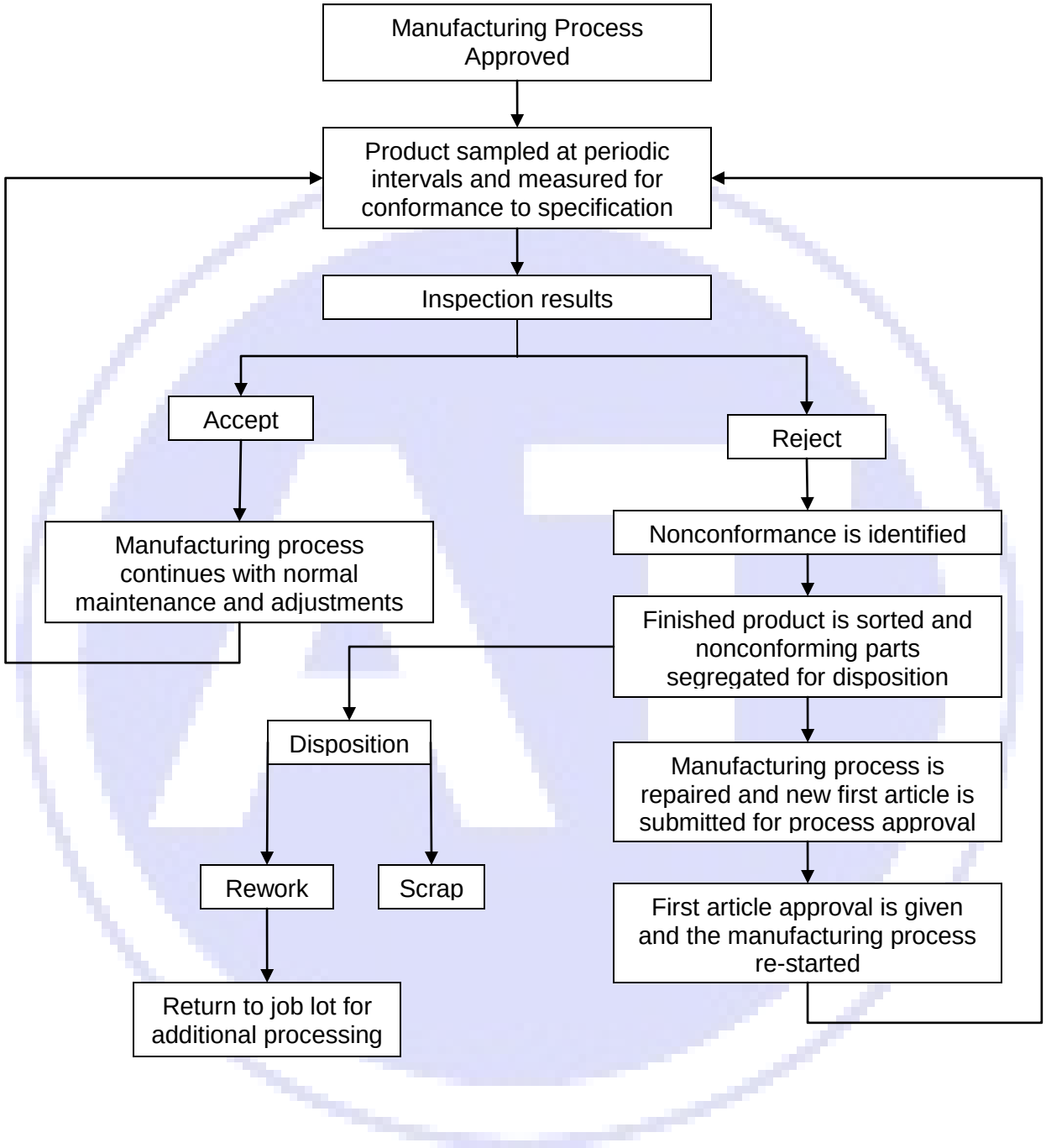
3.3. QMS-008, Product Realization, Section 5.56, Process Verification, and Section 5.62, In Process Inspection

3.4. Ameritube LLC In Process Inspection Report

3.5. Customer prints, specifications and contract requirements

3.6. Government and Regulatory Authority Documents and Specifications

4. Process Flow Chart for In Process Inspection



5. Procedure

5.1. In accordance with ISO 9001, Section 8.2.3, Monitoring and Measurement of Processes, Ameritube LLC recognizes the importance of in process inspection and has implemented an in process inspection process containing the elements required by customer contract, government and regulatory authorities.

Requirements

5.2. In process inspection is required on all product

5.3. In process inspection is performed as specified by customer contract requirements.

Process

5.4. Based on the results of the first article inspection the manufacturing process is given approval to run in the production mode.

5.4.1. first article inspection determines all product specifications and requirements have been met by the manufacturing process.

5.5. Product from the manufacturing process is sampled periodically for the purpose of in process inspection

5.5.1. frequency of sample is determined by:

5.5.1.1. The production work order

5.5.1.2. contract requirements

5.5.1.3. process stability

5.6. Process sample is inspected and documented for conformance to all specifications and requirements related to the current process and any features from previous operations that may be affected by the current process.

5.6.1. In process inspection identifies one or more features that fail to meet product specifications and requirements. Go to Section 5.7.

5.6.2. In process inspection determines all features meet specifications and requirements. Go to Section 5.5.

Nonconforming Product

5.7. Manufacturing process is stopped.

5.8. Product is sorted to remove all nonconforming products and the identified nonconforming product is segregated from acceptable product.

5.9. Root cause of the nonconformance is identified.

5.10. Process is modified to eliminate the problem identified as the root cause.

5.11. Manufacturing process produces a new first article piece.

5.12. First Piece inspection is performed.

5.12.1 First piece inspection is based on the following criteria:

5.12.1.1 performed on the first piece produced by a process that is awaiting approval to go into production

5.12.1.2 verifies all features affected by that process

5.12.1.3 Production does not start until the first piece inspection process determines that all features generated by the process meet the customer quality requirements.

5.12.2 First piece is identified as being nonconforming. Go to Section 5.7

5.12.3 First piece is identified as meeting all product specifications and requirements. Go to Section 5.5

5.13. Segregated nonconforming product is disposition.

5.13.1. scrap

5.13.2. rework

5.13.2.1. product is reworked to meet product specifications and requirements

5.13.2.2. reworked product returned to the production lot for continued processing

5.14. In process inspection documentation is maintained in the job traveler until the manufacturing process is completed.

5.15. In process inspection documentation is filed with the job folder for future retrieval and review.

6. Responsibilities

6.1. Customer, Government and Regulatory Authority

6.1.1. provide complete documentation through:

6.1.1.1. contract

6.1.1.2. prints

6.1.1.3. specifications

6.1.1.4. work orders

6.1.1.5. change orders

6.1.1.6. customer, government and regulatory authority process specifications

Ameritube LLC Personnel

6.1.2. measure parts in process as required by manufacturing plan

6.2. Ameritube LLC Inspection Personnel assist manufacturing personnel

6.2.1. measure parts in process as required by manufacturing plan

6.3. Quality Manager

6.3.1. maintain document control system

6.3.2. issue and control documents

6.3.3. ensure documents are regularly reviewed and updated

6.3.4. ensure that regular internal audits, that address the continued applicability of this document, are scheduled

7. Record Retention

7.1. Standard retention period will be three years minimum, all documents.

7.1.1. Customers may stipulate longer retention times.

7.2. This controlled QMS procedure shall be maintained on the server indefinitely.

7.3. Any hardcopy of this controlled document shall be valid for one day after printing.

7.3.1. after one day has elapsed the document shall be used only as a reference document

7.3.2. reference documents must be verified for revision level prior to use

7.4. Obsolete documents shall be removed from area of use and disposed of as appropriate.

7.5. As appropriate, all quality records associated with this document are available for customer or regulatory agency review.

8. Document Control

8.1. Custodian: Quality Manager

8.2. Review Activity
Quality Manager
President
Operations Manager

8.3. Approval Authority:
Quality Manager
President
Operations Manager