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| Procedure:  **QP-122** | Pages:  **4** |
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| Authorized By:  **Quality Assurance Manager** | |



**INSPECTION AND TESTING**

1. Purpose and Scope

**PURPOSE**

To define the Inspection System and steps taken when product is found to be conforming or non-conforming to customer specific requirements

**SCOPE**

This procedure applies to all production parts

1. Definitions

**Inspection Measuring and Test Equipment:** All Devices used to inspect, examine, test or to gage the conformance of a product or process with regard to one or more characteristics/attributes.

**Conformance:** Product or material is compliant with customer specific requirements

**Non-Conformance:** Product or material does not conform to customer requirements or

specifications.

1. Process Owners

Quality Assurance Manager

**Process Designees: Material Handler**

**Quality Assurance Technician**

1. **Procedures**
2. **Material Handler**

**Verifies Receipt of Material**

The Material Handler assures that the material/parts received are properly identified according to the material identification and traceability procedures; Moves material/parts to appropriate area for safe storage.

1. **Quality Assurance Technician**

**Inspects Material**

At each operation of the production process, the Quality Assurance Technician inspects material parts for conformance to specifications as defined by the customer, the drawing (print) and the In-Process Check list. Results from this inspection are recorded on the set-up log. Parts received from outside processing are inspected and documented per the receiving inspection check list. The Quality Inspector will review data from past and present inspections, to check for a shift or trend in the process.

**Approves Conforming Material for Production**

Upon confirming all characteristics meet specified requirements, the Q.A. Tech will complete a green “Set Up Acceptance Tag” as verification that parts have passed inspection. When parts received from outside process are confirmed in compliance with specified requirements, the Q.A. Tech shall fill in the routing with the purchase order, the date, quantity and their clock number by the corresponding operation. If a set-up job has a long inspection or inspection equipment is busy and part history shows no major previous issues, the supervisor can authorize production to begin. When running jobs containing more than one shop order back to back, only the first shop order requires a green “Set UP Acceptance Tag.” It is not necessary to submit samples for each shop order. The Quality Inspector must finish the full inspection in a timely fashion and the parts cannot be moved out of the department until full inspection is completed.

**Conformance and** **Cases Where Grinding/Grinding Inspection Is Needed**

Once the grinding operator has successfully met all manufacturing requirements and has entered all key characteristics into the data collector, the operator shall punch in on production to produce parts without waiting for green “Set Up Acceptance Tag” approval. The Quality Inspector must finish the full inspection in a timely fashion and the parts cannot be moved out of the department until full inspection is completed.

**Rejection of Nonconforming Material**

When nonconformance is detected, the Quality Assurance Technician will follow steps outlined in the Nonconforming Material Procedure.

1. **Quality Supervisor/Manager**

**MRB/Corrective Action**

The Quality Supervisor/Manager will make determinations regarding the disposition of the parts/material and request that an MRB be created for the nonconformance if warranted. The MRB will be completed by the Inspector and given to the Quality System Coordinator to enter into ERP System or information will be given directly to the Quality System Coordinator to complete, enter and issue the MRB to the appropriate department. A historical hardcopy, with corresponding paperwork as well as an electronic copy of every MRB is kept by the QSC.

1. **References**

**5.1 Related Procedure**

Customer Consigned Material Control QP-116

Nonconforming Material Control QP-126

Process Setup QP-120

Production Process Development and Qualification QP-118

**5.2 Reference Documents**

None

1. **Records**

MRB/Corrective Action Form INSP-144 Retain Life of Job + 1yr or per Customer requirements

Set-up Acceptance Tag (Green) NP03158INS Retain duration of production Setup Inspection Log INSP-150 Retain Life of Job + 1yr min.

1. **Policy References**

None

1. **Revision History to Procedure QP-122**

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| **Chg. No.** | **Date** | **Rev.** | **Change Description** |
| 1 | 2/13/1998 | 0 | Creation of Document |
| 2 | 5/31/2000 | 1 | Changed retention time for MRB Report, under section 6 (Records). Added QP-118 to section 5.1 'Related Procedures |
| 3 | 9/12/2006 | 2 | Added last sentence to 4.2 "At a set-up inspection......" and added last sentence to 4.4 "Once the MRB is written......." Deleted section 7 "policy references." |
| 4 | 5/6/2009 | 3 | Revised Purpose, 4.1 through 4.5 to be in line with current practices |
| 5 | 6/29/2011 | 4 | Added to section 4.3 "If a set-up job has a long inspection..." |
| 6 | 2/16/2017 | 5 | System/Operator Error. Changes Made and Approved prior to final changes. System would not allow deletion of Rev. 6 final approval.  Modified wording in 4.2: added at;  Changed - "Will record results in the setup log" with "Results will be recorded in the setup log";  4.3: Added "When running jobs containing more than one shop order back to back, only the first shop order requires a green "Setup Acceptance Tag"...., Added Grinding paragraph "Grinding Department - Once the grinding operator...."; 4.4: Changed wording from "Upon detection of nonconformance, will follow the non-conforming material procedure" to "When a non-conformance is detected, the Quality Inspector will follow steps outlined in the non-conforming material procedure."; 4.5: Changed MRB to Nonconforming Material Report and added, "...initiate ad MRB/Corrective Action."  Changed all QUAL TECH to QUAL INSP and QA Tech to Quality Inspector to reflect the current job title. Changed MRB Report NP03174NON (Obsolete) to  MRB/Corrective Action Form INSP-144 as this form is no longer ordered. |
| 7 | 1/12/2018 | 6 | Revised for ISO 9001 / IATF 16949 |
| 8 | 2/16/2017 | 7 | Added procedure for handling jobs containing more than one shop order. |
| 9 | 12/05/2023 | 8 | Changed Document Type from Instruction to Procedure.  Section 7- Added Policy References  Section 8-Removed “of”, added “History to Procedure.”  Added-Revised Styberg Logo, Revision History Block,  Changed revision number from 0 to 9 to reflect correct change history  Section 4.3 “oracle” was changed to “ERP System” |