

Manufacturing Instructions for Assembly

Purpose: Give manufacturing instructions from set up to completion for the assembly process.

Scope: All assembled parts required per client work order.

Set-Up Process

1. Work Order is firmed in IQMS.
2. Material will be prepped per Raw Material Movement Instructions 80.7528WH.
3. Shift Supervisor or Mold Tech will print off the Work Order in IQMS.
4. It is the responsibility of everyone involved in the setup, assembly, and quality to understand and carry out the instructions as described in the Manufacturing Process Manual 80.7213ENG.
5. Changes to the Manufacturing Process Manual need to be reported immediately to the appropriate department who will then contact Engineering for approval.
6. Temporary Deviations to the approved processes will be approved through the IQMS Deviation process per 80.7208ENG and placed in the Manufacturing Process Manual.
7. Review any Standard Deviations per 80.7208ENG before starting the job.

Start-Up Process

1. Once the part is assembled to the standard or better than the first shot from previous assembly process, the assembly operator will submit the new first shot to Quality for approval with the Blue Accepted Tag. The back part of the Blue Accepted Tag will not be filled out for assembly parts.
2. Quality will inspect the first shot per the Control Plan, or the Pull Test Procedure documented with the Firestone Coil-Rite Assembly Work Instructions (not an ISO controlled document).
3. First Shot approved assembly parts will be tagged with the following information and used as a new visual standard:
 - a. Customer Name
 - b. Work Order Number
 - c. Date assembly started
 - d. Customer Part Number
 - e. Metro's Mold Number
 - f. 1st Shot
 - g. Quality initial
4. Upon approval, the Quality Technician will return the assembly with the attached Blue Accepted Tag to the proper work center area along with all necessary labels.
5. Should the assembly fail to pass inspection, immediately notify the appropriate production personnel for corrections and re-submittal.
6. Previous retains will be destroyed or returned to finished goods once they are replaced with the latest approved first shot.
7. When running multiple work orders of the same part, new first shot submissions are necessary.

Policy	Procedure	WI	Form	Retention
8	8.5	80.7621PROD		

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Run Process

1. As an assembly operator builds their assemblies, they will follow the Manufacturing Process Manual.
2. The assembly operator will assemble the parts according to the Manufacturing Process Manual.
3. When each container of acceptable product is completed, a Product Label will be attached to the container unless instructed differently by the Manufacturing Process Manual.
4. The completed container will then be brought to Quality for an inspection and approval from the Quality Department.
5. Any non-labeled product or material will be considered suspect and cannot be moved to the warehouse without the inspection and approval of the Quality Department.
6. Quality is responsible for indicating when it is "OK" to move product to finished goods status for Warehousing or Shipping.
 - a. Products stored in cardboard boxes are taped shut by Quality personnel only and only after they visually inspect the parts.
 - b. Product stored on racks, reusable bins or by any other method than cardboard boxes will be labeled with an "OK to Move" tag by the Quality personnel after visually inspecting.
 - c. Quality will perform routine in process inspections per Control Plan F80.7234.1 or the Pull Test Procedure documented with the Firestone Coil-Rite Assembly Work Instructions (not an ISO controlled document).
7. If Quality finds any defective part or failed inspection results. The product must be placed on hold per DMR 80.7702QA.
8. As the assembly makes an order, boxes shall be filled and sent to quality by production personnel.
9. The boxes are to be audited per visual requirements from the Control Plan F80.7234.1 and accuracy of label, skid type, and carton type.
10. Warehouse is responsible to move the skid(s) to the proper location in the Warehouse racks.

End of Process

1. Assembly Operator will communicate when the last box is finished by placing the Work Order into the box and take the last box to Quality.
2. Quality verifies the last box per count by the label information. If the last box is partial, then Quality Tech will place a "Partial" label on the box and disposition to the partial box skid.
3. Quality will disposition and tape up the last box on the Work Order.
4. Final paperwork will be sent to Customer Service for final review and to close out the Work Order.

Reference Material:

Work Instructions

80.7528WH	Raw Material Movement Instructions
80.7208ENG	Standard Deviations
80.7213ENG	Manufacturing Process Manual
80.7626QA	First Shot Submission Approval by QC and Production Retains
80.7702QA	Discrepant Material Report

Forms & Logs

F80.7234.1	Control Plan
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