Procedure: Corrective Action QAOP002

1. SUMMARY
   1. In an effort to ensure continual improvement, RMC engages in corrective action to discover, investigate, and correct nonconformance’s related to RMC products, its processes, and the company’s quality system.
   2. For internal issues, RMC refers to this as the NCP (Non conforming)

[Non Conforming Example](../EXAMPLES/rptNonconforming.pdf)

* 1. For issues which are found to be the fault of suppliers, the Supplier Corrective Action Request (SCAR) system is used; this is defined in the [Procedure - Purchasing MAOP001](Procedure%20-%20Purchasing%20MAOP001--.docx).

[How to Develop a Corrective Action,NCP](../EXAMPLES/How%20to%20Develop%20a%20Corrective%20Action,NCP.pdf)

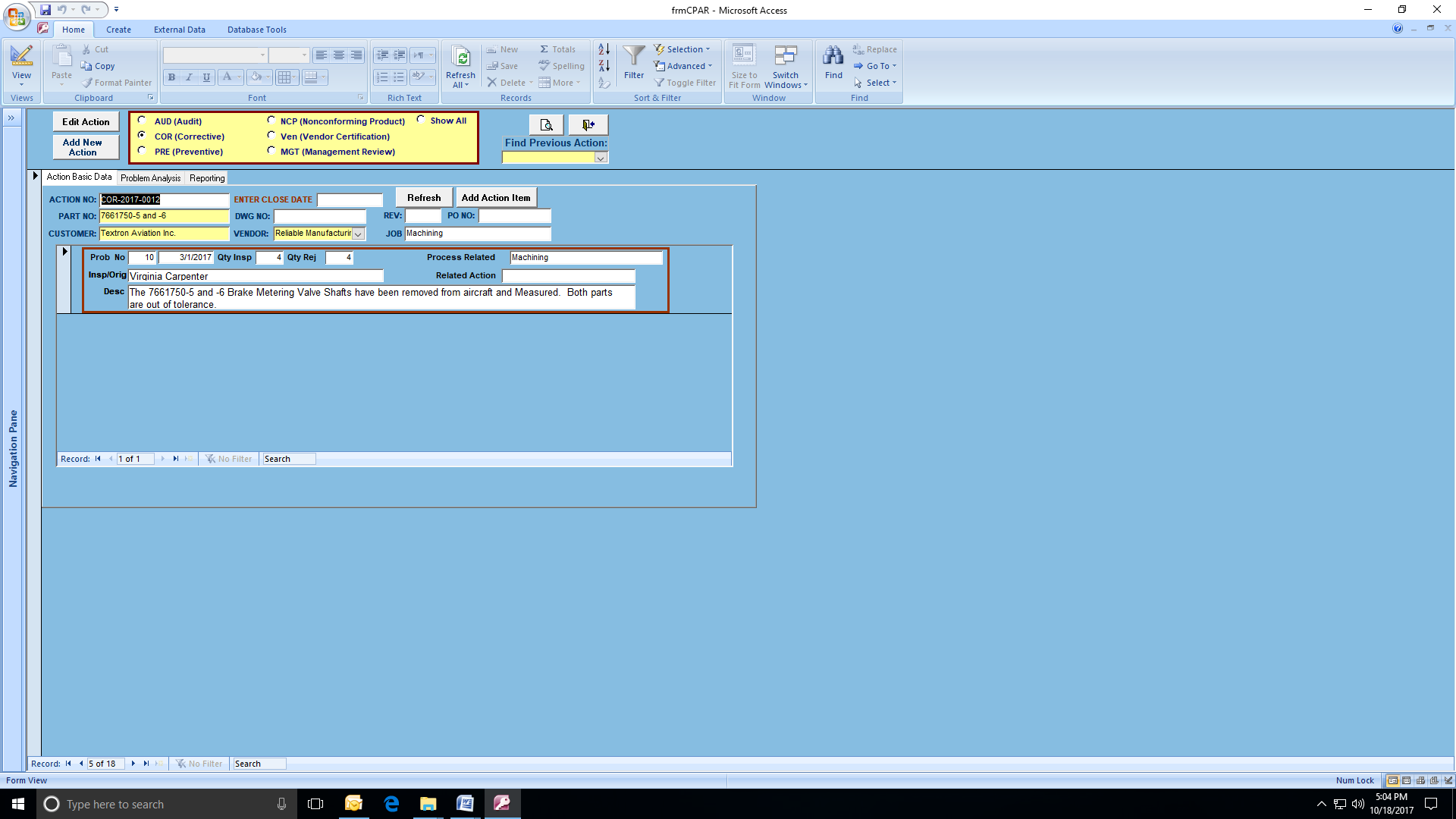
* 1. The QAM is responsible for implementation and management of Corrective Action activities.

1. REVISION AND APPROVAL

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| **Rev.** | **Date** | **Nature of Changes** | **Approved By** |
| 01 | 10/18/2017 | Original issue. | Kevin Brumley |
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1. FLOWCHART
2. PROCEDURE
   1. The purpose of this procedure is to provide an effective corrective action that provides for the correction of defects and to prevent their recurrence. This provision is to help eliminate rework and waste
   2. This section is applicable to all products produced by RMC, anyone seeing the need for corrective action is responsible for reporting through the correct procedure. Processes, work operations, quality records, service reports and customer complaints are analyzed to detect and eliminate potential causes of non-conforming product. Causes are investigated and corrective action taken to prevent recurrence
   3. The ERP system CORRECTIVE ACTION MODULE shall be used to address all of the following: See [How to Develop a Corrective Action](../EXAMPLES/How%20to%20Develop%20a%20Corrective%20Action,NCP.pdf).

* Customer complaints
* Employee reports of problems with equipment, procedures, processes, buildings, infrastructure
* Employee suggestions for improvement
* Resolving trends associated with product nonconformities
* Process nonconformities
* Audit findings (internal or external)
* Management review action items
* Any other reported problem or suggestion, no matter the source

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* 1. All employees are empowered to submit a corrective or preventive action request when they discover an existing or potential nonconformity against AS9100 / ISO 9001 requirements, company procedures, customer requirements, or statutory/regulatory requirements. Anyone seeing the need for corrective action is responsible for reporting through the correct procedure.
  2. In addition, customer complaints, returns, and/or reports of nonconformances shall be handled through the corrective action procedure using the ERP Software.
  3. In addition, employees may submit suggestions for improvement to the company’s QAM. The QAM may document the suggestion in the Preventative Action if warranted.

1. Corrective Action – Product
   1. This system provides for the reporting and resolution of corrective action requests for product (existing problems)
   2. Individual product issues (scrap parts, nonconforming parts, etc.) should be first written up per the [Procedure - Control of NC Product QAOP012](Procedure%20-%20Control%20of%20NC%20Product%20QAOP012--.docx). Corrective actions are taken when product nonconformity is identified, quality problems are detected in the process, non-conformance is revealed during audits, customer complaints or COR’s received. QA is responsible for follow up to determine if the corrective action has been implemented and if it is effective. QAM shall determine if the COR is a minor or major action requiring the development of a COR. When trends are noticed within nonconforming products, then a [***QAEX002 Corrective Action Report***](../EXAMPLES/rptCorrectiveAction.pdf)may be issued to investigate the cause of the trend.
      1. Example of Minor nonconformity: Improper Marking Prefix
      2. Example of Major nonconformity: Dimensional issue that affects fit or form
      3. Minor nonconformity that is not reoccurring is documented on work order with Purchase Order Number, Customer, and Date. The Customer COR is completed and a copy filed with the job file folder. The QAM has the authority to make the final disposition of a COR in agreement with customer responses.
   3. Major nonconformity will be documented and resolved with the ERP Software Module
      1. Identification of Defects
   * Major Defects will be documented on the ERP COR [(QAEX002)](../EXAMPLES/rptCorrectiveAction.pdf) file when defects are detected as a part of inspection or review of DPD data that does not meet contract requirements.
   * The description of defects will be in sufficient detail to be understood by workman and inspection
   * The form will indicate the serial number or other identification for the defective item.
     1. Investigation as to cause
   * The inspector will investigate the defect to determine the most probable cause. When the cause cannot be readily determined, Quality Control will be consulted. The cause will be recorded.
   * When MRB authority is authorized, and the defect does not alter form, fit or function, item will be accepted. Such action will be documented on the corrective action ERP COR.
   * Significant defects that will require extensive repairs will not be repaired until the Customer has authorized the repairs. Repair procedures will be attached to the corrective action COR.
   * Products lost during development of processes and development of machining or manufacturing procedures will not be subject to COR procedure. Those parts will be Red Tagged and painted red and placed into the withhold cabinet until disposed. Parts may be retained for visual reference.
   * Parts reworked will be subject to revalidation
     1. Corrective Action of Defects from Customer
   * Simple defects that can be corrected without altering the item will be reworked and rework will be documented on the COR.
   * When MRB authority is authorized, and the defect does not alter form, fit or function, item will be accepted. Such action will be documented on the corrective action ERP COR.
   * Significant defects that will require extensive repairs will not be repaired until the Customer has authorized the repairs. Repair procedures will be attached to the corrective action COR.
   * If a customer requests a RMA (Return Material Authorization number) a new COR generated by the ERP system will be used as the RMA number. Example COR-YEAR-0000 (COR-2017-0001)
   1. When corrective action is needed the QAM will begin an entry for the COR in the ERP system COR Module. The information entered should match that indicated on the COR (i.e., the process, priority, etc.) Under Description, the nature describing the issue need be entered.
   2. The QAM will assign the COR to one or more employees who are best able to research and resolve the issue, this person is hereinafter referred to as the “Assignee.”
   3. The QAM will assign a response date for the COR; this can be whatever time frame the QAM thinks is suitable for the issue being investigated. The consideration of this time frame will take into consideration the level of effort expected, costs, risks, etc.; for example, some actions may take months to correct and resolve, while others may take days or less. If necessary, the QAM will determine this time frame with the help of the assignee and/or other management personnel.
   4. The QAM will then send the COR to the assignee.
   5. ERPQMS Quality Module reporting system will document any open issues, when based on the assigned date. In the event of an overdue COR the QAM will either negotiate a revised date with the Assignee, or escalate the COR to the Assignee’s manager for attention.
   6. The Assignee shall conduct a root cause analysis to determine the cause(s) of the problem. This exercise should be thoughtful and detailed; so as to ensure the actual root causes are identified. Failure to properly conduct root cause analysis may result in the wrong cause being acted upon, and thus the problem not being permanently resolved.
   7. Root cause analysis is mandatory for corrective actions; it is not required for opportunities for improvement or suggestions since these may not be attached to any known problem; in such cases root cause analysis is optional.
   8. The Assignee will then develop an action plan to address the root cause and eliminate it. By eliminating the root cause, the problem should never occur or recur.
   9. For some corrective action issues, management may elect to perform a risk assessment as part of the action plan determination; [see *Procedure* - Risk & Opportunity Management SAOP001](Procedure%20-%20Risk%20&%20Opportunity%20Management%20SAOP001--.docx).
   10. The Assignee will then implement the plan, updating the text of the COR as the plan progresses. During this time the plan may change, or expand, etc., so the text must be updated to reflect the actions assigned and taken.
   11. Once the action is complete, and the Assignee feels the issue is resolved, he/she will sign the COR and indicate a completion date. They shall then return the COR to the QAM.
   12. The QAM will update the ERP system for the COR, indicating the action complete date.
   13. The QAM will perform independent verification of the actions taken to ensure the actions are effective in resolving the root cause(s). This verification should examine evidence and take into consideration the following:

* Has the action plan removed the root cause(s)?
* Does the action appear to eliminate the original issue reported?
* Were any related documents updated, as needed?
* Was training conducted, if required?
* Does the action require an update to the internal audit schedule?
* Were all interested parties properly notified of the actions taken?
  1. The QAM will record the results of the verification activity in the ERP system.
  2. If the issue is satisfactorily addressed, the QAM may close the COR by entering a close date in the ERP system COR Module. The COR form is then filed.
  3. If the QAM determines the issue is not properly addressed, the COR may be re-assigned for further action, or a new COR filed.
  4. The ERPQMS Quality Module develops reports for corrective actions and these are reported during management review.

1. Corrective Action – Employee reporting
   1. This system provides for the reporting and resolution of corrective action requests reported by employees (existing problems). Ref: 4.6
   2. To request corrective actions, or to submit a suggestion for improvement, the employee contacts the QAM or QA and the representative will determine if a COR is warranted.