FLEXIAL QUALITY PROCEDURE		QP322
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SUPPLIER CORRECTIVE ACTION REQUEST PROCEDURE

1. PURPOSE
   1.1. The purpose of this procedure is to provide specific instructions for suppliers who have been requested to provide corrective action by Flexial Corporation.

2. SCOPE
   2.1. This procedure applies to all parts and material suppliers to Flexial Corporation.

3. DEFINITIONS
   3.1. NCR - Non-Conformance Report
   3.2. QA - Quality Assurance

4. REFERENCES
   4.1. QP322 - Supplier Corrective Action Request Procedure
   4.2. NCR - Non-Conformance Report corresponding with the defective parts / material

5. RESPONSIBILITY
   5.1. Purchasing or the NCR Material Review Board determines the need for supplier corrective action.
   5.2. Purchasing is responsible for issuing uncontrolled copies of the NCR and QP322 to the supplier.
   5.3. Supplier is responsible for corrective action.

6. PROCEDURE
   6.1. When defective material is received from suppliers, an NCR is issued. If the NCR requires corrective action, Purchasing shall request such corrective action from the Supplier.
   6.2. The NCR will remain marked as "open" until the Supplier has issued a corrective action, which has been approved by Flexial's Quality reproesentative.
   6.3. Purchasing will notify the Supplier that corrective action is being requested and will forward uncontrolled copies of the NCR and QP322.
   6.4. The Supplier shall respond to the initial request within 48 hours detailing the following items:
      6.4.1. Identification of problem the solving team
      6.4.2. Description of the problem
      6.4.3. Interim / containment actions
   6.5. Supplier's final response shall include:
      6.5.1. Identification of the problem solving team
      6.5.2. Description of the problem
      6.5.3. Interim / Containment actions
      6.5.4. Root cause analysis
      6.5.5. Permanent corrective actions
      6.5.6. Verification of effectiveness of corrective actions
      6.5.7. Prevention of recurrence
   6.6. Supplier's final response must be received by the date requested on the NCR form.
   6.7. Failure to provide adequate and timely corrective action or repeat occurrences of initial problem may result in the removal of the Supplier from Flexial Corporation's Approved Supplier List.

7. RECORDS

7.1. Records of corrective actions shall be maintained by QA either electronically or as hard copy.

8. SUPPLEMENTARY INFORMATION
   8.1. See below (Problem-solving and Decision-making)

PROBLEM SOLVING AND DECISION MAKING

FLEXIAL
WELDED BELLOWS

The primary theme throughout is to utilize logical and systematic methodologies in both the problem solving and decision making processes

PROBLEM SOLVING

A SEVEN-STEP PROCESS

1. Identification of problem-solving team.
2. Description of the problem.
3. Interim \ Containment actions.
4. Root Cause Analysis.
5. Permanent Corrective Actions.
6. Verification of effectiveness of corrective actions.
7. Prevention of recurrence (the affected product and similar products).

1. Identification of problem-solving team. Who must be involved to solve the problem? List names, disciplines, & contact information.
2. Description of the problem. Describe the problem in detail. Include as many specifics as possible. Who, what, where, when, why, how many, etc...
3. Interim \ Containment actions. What are you going to do to contain the problem until permanent actions are in place. Recall parts in-transit? Sort production materials? etc.
4. Root Cause Analysis. Determine what the actual root cause is. Use data-driven decision-making techniques. Refer to both the Creative & Critical Thinking and Decision-Making sections of this document.
5. Permanent Corrective Actions. Implement actions that will permenently eliminate the problem. The problem must not recur.
6. Verification of effectiveness of corrective actions. Verify, through the use of continued tracking of the problem, that the permanent actions have been effective in eliminating the root cause of the problem.
7. Prevention of recurrence (the affected product and similar products). Look at other products \ processes to ensure that the same type or class of failure mode does not exist and, if it does, implement permanent corrective actions where needed. Make sure new product introduction address this failure mode.

CREATIVE & CRITICAL THINKING

Think About Your Style

People tend to think in one of two ways - in an adaptive or in an innovative style.
Adaptive Thinkers are characterized by Goal Orientation - Adherence to policies, procedures, and structure. They are more logical, analytical, and detail-oriented. They are left-brain dominant.
Innovative Thinkers, on the other hand, tend to be more free-spirited, less organized, and more open to new methods of solving problems. More emotional and creative, they are right-brain dominant.

Think Thoroughly by Questioning Others

Get input from as many applicable sources as possible.

Think About Other Things

Giving your mind a break will invigorate your creativity.

Think About Your Objective

Remind yourself what your objectives are; keep focused on critical thinking.

Decide With Confidence

Combining your personal wealth of experience, training, and intuitive abilities with logical and systematic methods will result in effective problem solving and sound decision making.

DECISION MAKING

5 KEY FACTORS

1. What are the time constraints for making the decision?
2. Who will participate in the decision making?
3. Will this be a recurring or a one-time decision?
4. What are the components of the decision?
5. What techniques will be used to make the decision?

1. What are the time constraints for making a decision?
Identify when the decision is to be made.
Outline a decision-making process with a realistic schedule
2. Who will participate in the decision making?
Several individuals are usually involved in decision making.
Pinpoint the decision's long-term implications.
Identify any competing interests affecting your decision.
3. Will this be a recurring or a one-time decision?
Decisions are either programmed or non-programmed.
a. *Programmed decisions* occur routinely, are predictable, and can be scheduled.
b. *Non-Programmed decisions* do not occur routinely, are not predictable, and cannot be scheduled.
4. What are the components of the decision?
Decisions have three elements: **3C's**
a. *Conditions* - the uncertainty & risk everpresent in any organization - the current situation.
b. *Courses of Action* - Potential solutions to problems.
c. *Consequences* - Implications resulting from each course of action.
5. What techniques will be used to make the decision?
Several Techniques are available, including:

Prioritization - Use a ranking system of available courses of action. Also called *Pareto Analysis*.
Checklists - Use for simple decisions, like accept or not ccept, buy or don't buy. Include lists of significant factors affecting the decision, such as cost, warranty, service, etc. Then simply check off factors as acceptable or not acceptable.
Brainstorming - Encourage members of the group to let their minds wander in an uncritical enviroment to find creative, nontraditional ways to solve problems.
Intuition - Intuition is developed after gaining experience on the job, solving problems, and making decisions. This is your database of knowledge. While this is critical, most effective leaders do not rely totally on hunches without objective techniques to provide balance.
Decision Trees - Allows you to graphically chart decisions, consequences, and conditions in an easy-to-read diagram that branches out like a tree.
Advanced Techniques - There are dozens af other techniques, some more necessary and more applicable to certain types of problems than others.