



# ASQ CRE Prep course

Lesson VII. C. 1.

Failure Analysis Methods



Extracting data from failures

# FAILURE ANALYSIS

# Root Cause Failure Analysis

**Down to cause and  
failure mechanism**



# 8 Disciplines of Problem Solving

## Step 0: Prepare for the 8D

**Collect the Symptoms**  
**Symptoms Checklist**  
**Emergency Response**  
**Action**



# Step 1: Form a Team

**Core Team Structure**  
**Team Preparation**



# Step 2: Describe the Problem

**5 Why**

**Problem Statement**

**Affinity Diagram**

**Is / Is Not**

**Problem Description**



# Step 3: Interim Containment Action

## Verification of Effectiveness



# **Step 4: RCA – Root Cause Analysis**

**Differences and  
Changes**

**Root Cause Theories**

**Verification**

**Process Flow Diagram**



# Step 5: Permanent Corrective Action

**Acceptance Criteria**  
**Risk Assessment /**  
**Balanced Choice**  
**FMEA (Failure Mode and**  
**Effect Analysis)**  
**Control Point**  
**Improvement**  
**Verification of**  
**Effectiveness**



# Step 6: Implement and Validate

**Project Plan**  
**Validation of**  
**Improvements**



# Step 7: Prevention

**Similar Products and  
Process Prevention  
Systems Prevention  
Standard Work or  
Practice  
Procedures / Policy  
Updates**



# **Step 8: Closure and Team Celebration**

**Archive Documents**  
**Team Lessons Learned**  
**Before and After**  
**Comparison**  
**Celebrate Successful**  
**Completion**



Why avoid  
sending to  
vendor for FA?



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Lesson VII. C. 2.

Failure Reporting, Analysis,  
and Corrective Action System