Name: 8D Problem Solving

Short Description: 8D Problem Solving is a methodology developed at Ford Motor Company to identify, correct, and eliminate recurring problems, particularly in product and process improvement. It comprises eight disciplines (and a preliminary D0) aimed at finding the root cause of a problem and implementing corrective actions.

Full Description: The 8D (Eight Disciplines) Problem Solving methodology is a structured, team-oriented approach to problem-solving. It was initially developed by Ford Motor Company to address recurring problems in its manufacturing processes. The methodology emphasizes identifying the root cause of a problem, rather than just treating the symptoms, and implementing permanent corrective actions to prevent recurrence. It follows the logic of the PDCA (Plan-Do-Check-Act) cycle and has become a standard problem-solving tool in various industries. Ford now refers to its current variant as G8D (Global 8D).

Application Area: The 8D methodology is used in various industries, including:

- Automotive

- Assembly

- Food manufacturing

- Healthcare

- High-tech manufacturing

Step-by-Step Guide How to Apply:

The 8D methodology consists of eight disciplines, often preceded by a planning phase (D0):

- **D0: Plan:** This initial step involves planning for the 8D process itself. It includes defining the problem scope, gathering preliminary data, and determining the resources and team required.

- **D1: Form the Team:** Establish a cross-functional team of experts with knowledge of the product, process, or system involved.

- **D2: Describe the Problem:** Define the problem in detail, including what, where, when, how, and how many. Use data to quantify the problem and establish its scope.

- **D3: Develop Interim Containment Plan:** Implement temporary actions to protect customers and contain the problem while a permanent solution is sought.

- **D4: Determine and Verify Root Causes:** Identify all potential causes of the problem and use data analysis and investigation to determine the root cause(s).

- **D5: Verify Permanent Corrections (PCs):** Define and verify permanent corrective actions (PCs) that will eliminate the root cause and prevent recurrence.

- **D6: Define and Implement Corrective Actions:** Develop a plan to implement the chosen permanent corrective actions, including timelines, responsibilities, and resources.

- **D7: Prevent Recurrence:** Implement actions to prevent similar problems from occurring in the future. This may involve changes to processes, procedures, or systems.

- **D8: Congratulate the Team:** Recognize the team's efforts and celebrate their success in solving the problem.

Link: https://en.wikipedia.org/wiki/Eight_disciplines_problem_solving