

8D :: Problem Solving Worksheet

Tracking Number:	Customer Number:	Response Due Date:
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8-D is a quality management tool and is a vehicle for a cross-functional team to articulate thoughts and provides scientific determination to details of problems and provide solutions. Organizations can benefit from the 8-D approach by applying it to all areas in the company. The 8-D provides excellent guidelines allowing us to get to the root of a problem and ways to check that the solution actually works. Rather than healing the symptom, the illness is cured, thus, the same problem is unlikely to recur.

Step	0	1	2	3	4	5	6	7	8
Action	The Planning Stage	Establishing the Team	Problem Definition / Statement & Description	Developing Interim Containment Action	Identifying & Verifying Root Cause	Identifying Permanent Corrective Actions (PCA)	Implementing & Validating PCA	Preventing Recurrence	Recognizing Team Efforts

0	<p>The Planning Stage: The 8-D method of problem solving is appropriate in "cause unknown" situations and is not the right tool if concerns center solely on decision-making or problem prevention. 8-D is especially useful as it results in not just a problem-solving process, but also a standard and a reporting format. Does this problem warrant/require an 8D? If so comment why and proceed.</p>	<p>Is an Emergency Response Action Needed? (If needed document actions in Action Item Table)</p>
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1	<p>Establishing the Team: Establish a small group of people with the process/ product knowledge, allocated time, authority and skill in the required technical disciplines to solve the problem and implement corrective actions.</p>	<p>Team Goals:</p> <p>Team Objectives:</p>
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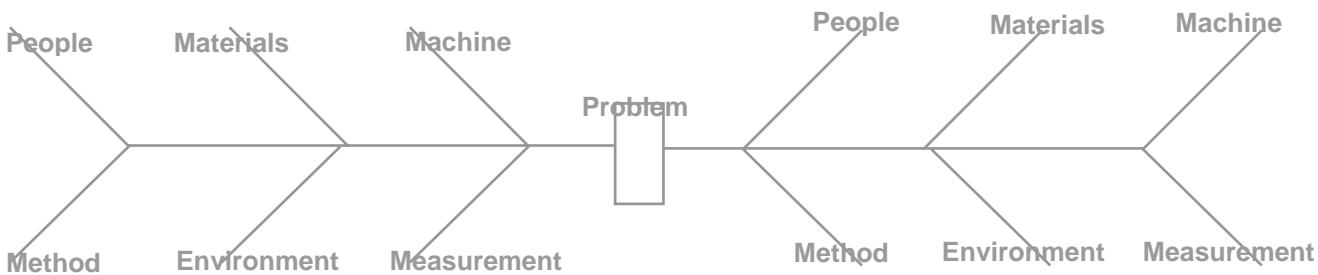
Department	Name	Skills	Responsibility

2A	<p>Problem Definition Provides the starting point for solving the problem or nonconformance issue. Need to have "correct" problem description to identify causes. Need to use terms that are understood by all.</p>	<p>Sketch / Photo of Problem</p>
	Part Number(s):	
	Customer(s):	
	List all of the data and documents that might help you to define the problem more exactly?	
	Action Plan to collect additional information:	
	Prepare Process Flow Diagram for problem use a separate sheet if needed	

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2B	IS	IS NOT
Who	Who is affected by the problem? Who first observed the problem? To whom was the problem reported?	Who is not affected by the problem? Who did not find the problem?
What	What type of problem is it? What has the problem (part id, lot #s, etc)? What is happening with the process & with containment? Do we have physical evidence of the problem?	What does not have the problem? What could be happening but is not? What could be the problem but is not?
Why	Why is this a problem (degraded performance)? Is the process stable?	Why is it not a problem?
Where	Where was the problem observed? Where does the problem occur?	Where could the problem be located but is not? Where else could the problem be located but is not?
When	When was the problem first noticed? When has it been noticed since?	When could the problem have been noticed but was not?
How Much/ Many	Quantity of problem (ppm)? How much is the problem costing in dollars, people, & time?	How many could have the problem but don't? How big could the problem be but is not?
How Often	What is the trend (continuous, random, cyclical)? Has the problem occurred previously?	What could the trend be but is not?
2C	Problem Description (based on the information gathered so far, provide a concise problem description)	

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3	<p>Developing Interim Containment Actions Temporary actions to contain the problem and "fix" until permanent correction is in place - document actions in Action Item Table</p>
4A	<p>Identifying & Verifying Root Cause Analyze for "Root Cause" of the problem. Identify and verify the Escape Point</p> <p>Brainstorm the possible causes of the problem</p>
4A	<p>Cause and Effect Diagram</p> <p>How is it made? Why did it get out?</p>  <p style="text-align: right;">circle the most likely contributors (a maximum of three) from each side.</p>
4B	<p>5 Why Analysis</p>
	<p>Ask – Why did this happen?</p> <p>Ask – Why did this happen?</p> <p>Ask – Why did this happen?</p> <p>Ask – Why did this happen?</p> <p>Ask – Why did this happen?</p>
4C	<p>Action Plan Based on the team's discussions. Begin to complete the Root Cause Action Plan to verify and validate the root causes and test the escape point. Document this on the Action Item Table</p>

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5	<p>Identify Permanent Corrective Actions solutions that address and correct the root cause. Solutions determined to be the best of all the alternatives. Document and verify the Permanent Corrective Action (PCA) in the Action Item Table</p>		
6	<p>Implementing & Validating the PCA Implement and validate to ensure that corrective action does “what it is supposed to do.” Detect any undesirable side effects. Document this on the Action Item Table. Return to root cause analysis, if necessary</p>		
7	<p>Preventing Recurrence determine what improvements in systems and processes would prevent problem from recurring. Ensure that corrective action remains in place and successful</p>		
7A	<p>Address Similar Systems</p>		
	Process / Item	Who Responsible	When

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7B	Review the following documents / systems		
Document	Who Responsible	Completion Date	
		Planned	Actual
Management System Manual			
Manufacturing Work Instructions			
Inspection Work Instructions			
Process Flow Charts			
Process Control Plans			
Design FMEA			
Process FMEA			
Gages			
PPAP			
Engineering Change Approval			
8	<p>Congratulate Your Team Use all forms of employee recognition and document as necessary</p> <p>Celebrate successful conclusion of the problem solving effort Formally disengage the team and return to normal duties</p>		
Was this problem solving exercise effective? Has it been verified with a follow-up?			
Yes No	Signature / Title / Date	Findings	

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Action Item Table

Actions			Implement & Verify Actions					
Action #	Problem	Containment / Corrective Action	How Verified	Action	Who Responsible	Planned	Actual	Status