

GPSC Academy

Leaders Teach & Leaders Learn



8D Corrective Action – Agenda

- Introduction
- Overview
- Process Steps
 - D0 – Initiate 8D Corrective Action
 - D1 – Problem Solving Team
 - D2 – Problem Description
 - D3 – Containment and Short Term Corrective Actions
 - D4 – Root Cause Analysis
 - D5 – Long Term Corrective Actions
 - D6 – Implementation and Verification of Long Term Corrective Actions
 - D7 – Preventive Actions
 - D8 – Congratulate the Team and Wrap-up
- Oshkosh 8D Form
- Key Steps
 - Defining the Problem
 - Root Cause Analysis



8D Corrective Action – Introduction

8D Problem Solving Report		Issue Number
D0 Problem Solving Summary Type		0001
Select only one:	Internal <input type="checkbox"/>	Supplier <input checked="" type="checkbox"/>
Header Information		
Title of Defect:		
OSK Initiator:	OSK Facility Affected:	
Supplier Name:	OSK Initiator Tele#:	
OSK Supplier Number:	OSK SQA Contact:	
Supplier Contact Person:	OSK SQA Tele#:	
Supplier Contact Tele #:	OSK SQA E-mail:	
Supplier Contact E-mail:	OSK SQA E-mail:	
OSK Part#:	8D Due Date:	
Part Name:	DMR/NMT#:	
Part Serial#:	Quantity Rejected:	
D1 Problem Solving Team		
Team Champion:		
Team Leader:		
Team:		
D2 Problem Description		
D3 Containment and Short Term Corrective Actions		
Containment Actions		
List containment activities by area:		
Supplier Inventory		
Supplier Work in Process		
At External Processing		
In Transit		
At Oshkosh Facility (Indicate who was contacted and when)		
Additional Comments:		
Completed By:		Date:
Short term Corrective Action(s):		
Completed By:		Date:

Oshkosh Corp. 8D Template OSK-F3000
Revision Date: 4/6/2013
Revision: 4

Page: 1 of 3

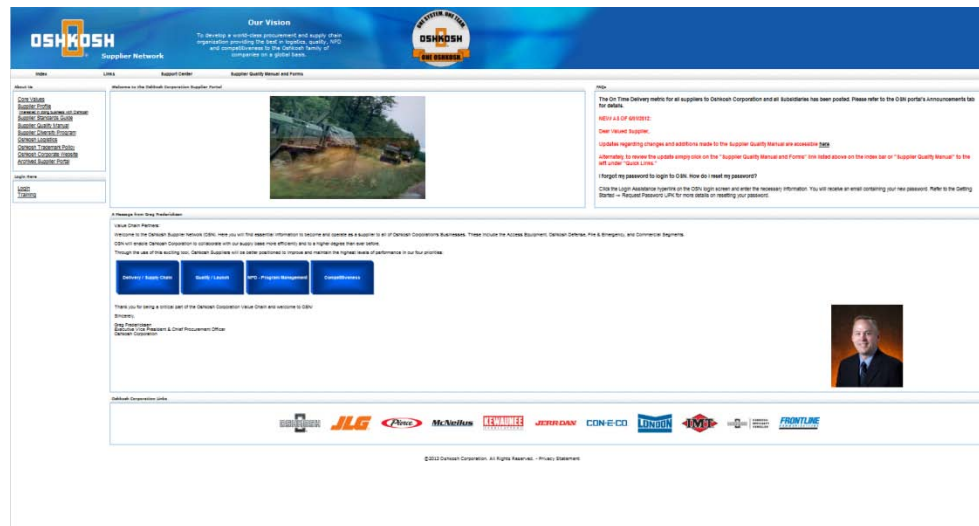
- Oshkosh Corporation uses the 8D (eight disciplines) corrective action process to address significant or repeat supplier quality issues.
 - An effective 8D must drive permanent improvement of supplier processes to prevent recurrences of the incident. It is the supplier’s responsibility to ensure the required actions occur in a timely manner.
- For specific issues, Oshkosh may request that suppliers perform and document the 8D process.
- Oshkosh suppliers should address and correct quality issues independent of whether Oshkosh initiates an 8D.



8D Corrective Action – Overview

- The 8D process is a team-based problem solving method that can be used on a variety of problem types:
 - Quality
 - Cost
 - Schedule
 - Safety
- The Oshkosh 8D form and procedure is available on the Oshkosh Supplier Portal for suppliers to use as needed.

(<http://osn.oshkoshcorp.com/gsq-en.htm>)



8D Corrective Action – Process Steps

- 8D Problem Solving & Corrective Action:
 - D0 – Initiate 8D Corrective Action
 - D1 – Problem Solving Team
 - D2 – Problem Description
 - D3 – Containment and Short Term Corrective Actions
 - D4 – Root Cause Analysis
 - D5 – Long Term Corrective Actions
 - D6 – Implementation and Verification of Long Term Corrective Actions
 - D7 – Preventive Actions
 - D8 – Congratulate the Team and Wrap-up
- Process Expectations:
 - 24 hours after notification, containment is required.
 - 15 days or less for root cause identification.
 - 30 days or less corrective action completed.
 - 45 days or less validation / closure of 8D.



8D Corrective Action – Process Steps



8D Problem Solving Report

Issue Number 0001

D0 Problem Solving Summary Type	
Select only one:	Internal <input type="checkbox"/> Supplier <input checked="" type="checkbox"/>

Header Information	
Title of Defect:	
OSK Initiator:	OSK Facility Affected
Supplier Name:	OSK Initiator Tele#:
OSK Supplier Number:	OSK SQA Contact:
Supplier Contact Person:	OSK SQA Tele#:
Supplier Contact Tele.#:	OSK SQA E-mail:
Supplier Contact E-mail:	OSK SQA E-mail:
OSK Part#:	8D Due Date:
Part Name:	DMR/NMT#:
Part Serial#:	Quantity Rejected:

D0



D1 Problem Solving Team	
Team Champion:	
Team Leader:	
Team:	

D1



D0) 8D initiator identifies the problem type and records basic information (part number, etc.)

D1) 8D initiator/team identifies the initial 8D problem solving team. Team roles include:


- 1) Team Champion
- 2) Team Leader
- 3) Team Members



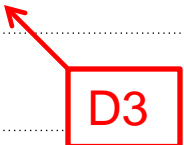
8D Corrective Action – Process Steps

D2) Problem solving team develops a detailed problem description:

- Provide detailed information on the specifics and scope of the problem.
- The IS / IS NOT worksheet attached to the 8D form can be used.
- *Defining the problem is one of the most critical steps.*

D2 Problem Description


8D Corrective Action – Process Steps

D3 Containment and Short Term Corrective Actions	
Containment Actions	
List containment activities by area:	
<i>Supplier Inventory</i>	
<i>Supplier Work in Process</i>	
<i>At External Processing</i>	
<i>In Transit</i>	
<i>At Oshkosh Facility (Indicate who was contacted and when)</i>	
Additional Comments:	
Completed By:	Date:
Short term Corrective Action(s):	
Completed By:	Date:

D3)

Containment

Problem solving team immediately contains any suspect parts:

- Provide details of containment actions that have been completed along the entire pipeline.

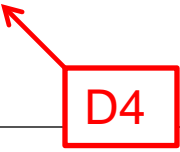
Short Term Corrective Actions

Problem solving team develops short term solution to “attack the symptoms” while root cause is investigated.

- *Containment Level 1 & 2 (CL1 & CL2) are very effective short term fixes for supplier quality issues.*



8D Corrective Action – Process Steps

D4 Root Cause Analysis	
(Analysis method must be attached)	
	
Completed By:	Date:

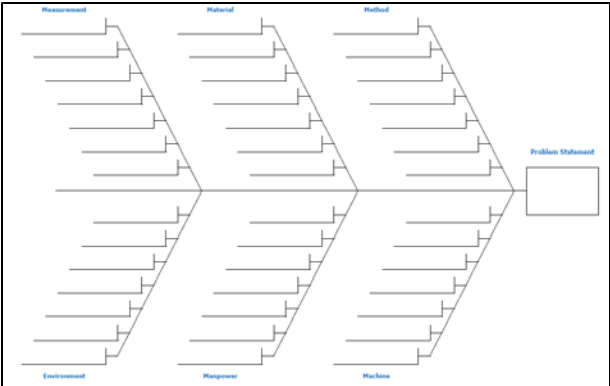
D4) Problem solving team determines the process or design related root cause for the problem.

- The 8D form includes a Fishbone Analysis tool that can be used to perform structured brainstorming for difficult problems.

- The 8D form also includes a 5 Why's form that can be used to perform the root cause analysis.

- *D4 is a critical step. The Oshkosh 8D procedure requires that the root cause analysis method be attached to the 8D report.*

Fishbone Tool

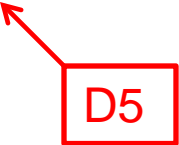
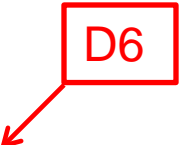


5 Why's Tool

	Possible Contributing Cause	Possible Contributing Cause	Possible Contributing Cause	Possible Contributing Cause	Possible Contributing Cause		
Process/Design	Problem Description	Why?1	Why?2	Why?3	Why?4	Why?5	Process/Design Root Cause
		What is the objective evidence?	What is the objective evidence?	What is the objective evidence?	What is the objective evidence?	What is the objective evidence?	What is the objective evidence?
Detection	Why wasn't it caught?						Detection Root Cause
		Why?1	Why?2	Why?3	Why?4	Why?5	



8D Corrective Action – Process Steps

D5 Long Term Corrective Actions	
	
Completed By:	Date:
D6 Implementation and Verification of Long Term Corrective Actions	
	
Completed By:	Date:

D5) Problem solving team determines the corrective action plan to address the root causes that were identified in D4.

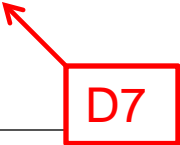
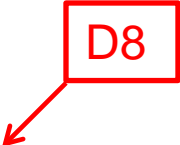
- Corrective actions must be formally implemented and specific.

D6) Problem solving team follows up on the corrective action plan to:

- Provide objective evidence that the corrective action plan was implemented correctly.
- Provide objective evidence that the corrective actions effectively prevented re-occurrences of the problem.



8D Corrective Action – Process Steps

D7 Preventive Actions	
	
Completed By:	Date:
D8 Congratulate the Team and Wrap-up	
	
Completed By:	Date:

D7) Problem solving team implements corrective actions on like parts and similar processes that could have the same problem.

- *D7 should also be used to address major systemic issues identified during the investigation.*

D8) Problem solving team wraps up the 8D effort. Team champion ensures that the team members are congratulated for their efforts.

Note: Oshkosh initiator must approve the 8D in order to close it out.



8D Corrective Action – Oshkosh 8D Form

D0 Problem Solving Summary Type	
Select only one:	Internal <input type="checkbox"/> Supplier <input checked="" type="checkbox"/>
Header Information	
Title of Defect:	
OSK Initiator:	OSK Facility Affected
Supplier Name:	OSK Initiator Tele#:
OSK Supplier Number:	OSK SQA Contact:
Supplier Contact Person:	OSK SQA Tele#:
Supplier Contact Tele.#:	OSK SQA E-mail:
Supplier Contact E-mail:	OSK SQA E-mail:
OSK Part#:	8D Due Date:
Part Name:	DMR/NMT#:
Part Serial#:	Quantity Rejected:
D1 Problem Solving Team	
Team Champion:	
Team Leader:	
Team:	
D2 Problem Description	

- The Oshkosh 8D form is in excel spreadsheet format.

- Several optional tools are included in the spreadsheet:

1. Action Tracker
2. 5-Why's Worksheet
3. Fishbone Analysis Worksheet
4. IS – IS NOT Problem Description Worksheet

8D Report

Action Tracker

5-Why's Tool

Fishbone Tool

IS – IS NOT Tool



8D Corrective Action – Defining the Problem

- A specific and accurate problem statement is the basis for solving any problem.
- Vague problem definitions make the problem solving process impossible...
 - Part is bad
 - Paint looks bad
 - Part doesn't fit
- Suppliers are responsible for all steps of the 8D process.
 - The problem description should be updated as the investigation continues. For suppliers, one of the first steps of the 8D process is typically to investigate and expand the problem description provided to them by Oshkosh.



8D Corrective Action – Defining the Problem

- A complete problem description should describe: *What? Where? When? How many?*

What?	Where?
What is the part number?	Where was the problem detected?
What is the specific problem?	Who detected it?
When?	How many?
What is the scope?	What is the quantity (and percentage) of the problem?
What lots/batches/shipments does it effect?	

Example of a strong problem statement:

D2 Problem Description
<p>Violation of 271828 (Weldment Brackets) 42.75" +/- 0.10 dimension on 3 repeated shipments (reject dates 5/12, 5/13, 5/27 from supplier Quick Machine Co). Quantity of rejects: 27 out of 27 pieces.</p> <p>Rejected at Harrison Street assembly line on 5/30.</p> <p>Sample of parts measures at 43.15".</p>



8D Corrective Action – Root Cause Analysis

- Investigating until a strong root cause has been found is necessary for the 8D to prevent the problem from happening again.
- A few guidelines for root causes:
 - Do not just restate the problem statement. The root cause should identify how the process or design caused the defect.
 - Operator error IS NOT an acceptable root cause for significant issues. The underlying cause of the operator error should be addressed.
- 5 Why's is one of the simplest and most effective ways to find root cause.
 - Start with the problem description and keep asking “Why?” until the root cause has been identified.
 - At each stage, before asking “Why?” again, prove the answer to the last “Why?”.



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