Durch konsequente Anwendung etablierter QM-Methoden auf der sicheren Seite sein,
erweiterte 8D Plus Methodik

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Agenda: Enhanced 8D Plus methodology

- 8D example
- The need of an enhanced 8D
- Strategy/ concept
- Elements of 8D Plus
- Realization; exchange of information
- Conclusion
8D example

Acrobat-Dokument
The need of an enhanced 8D

SCOPE
The supplier has to use in case of customer returns (zero kilometer and warranty) the following methods like 5why, Ishikawa, drill deep & wide to detect the root cause, implement effective corrective actions and avoid the recurrence. In case of other origins (e.g. production failures) the execution is recommended.

PURPOSE
To improve the content/effectiveness of 8D’s in order to ensure identification of the real root cause.

RESPONSIBILITY
Creation of worksheet templates done by SupplyOn buy-side company.
Worksheet templates available on SupplyOn ProblemSolver help system.
The supplier has to send back the processed worksheets as „Attachments“ via SupplyOn Problem Solver.
Loction-SQM has to check the completeness and plausibility.
Strategy/ concept

Failure potential

Ishikawa

5 why

drill deep

drill wide

Close the gap

potential areas of the defined problem

definition of techn. root cause & corrective action

definition and verification of system root cause & corrective action

consideration whether more than one org.-unit (loc., line, etc.) is affected

customer gets parts as required

definition of techn. root cause & corrective action

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Elements of 8D Plus
Ishikawa Worksheet (example)

Template: Microsoft Excel Worksheet
Elements of 8D Plus
5y Worksheet (example)

APPENDIX 2: 5 Why’s

Find out root cause:

I was late in the office

Why?

I left home too late

Why?

I got up too late

Why?

My alarm clock didn’t go off

Why?

The battery in my alarm clock was dead

Why?

I didn’t replace the battery

Why?

Template: Microsoft Excel Worksheet
## Elements of 8D Plus
### Drill Deep Worksheet

**Drill Deep Worksheet**

**see drill deep to find out why does the system did not predict, prevent and protect the failure**

<table>
<thead>
<tr>
<th>Customer</th>
<th>Report no.</th>
<th>Supplier</th>
<th>Problem description</th>
<th>Date</th>
<th>Contact partner</th>
</tr>
</thead>
</table>

### Template:

**Microsoft Excel Worksheet**

- **Prevent**
  - M1: Root Cause
  - M2
  - M3
  - M4
  - M5
  - M-RC

- **Quality Assurance**
  - G1
  - G2
  - G3
  - G4
  - G5
  - G-RC

- **Quality Control**
  - P1
  - P2
  - P3
  - P4
  - P5
  - P-RC

### Quality Planning

**Note:**

- **Drill Deep**
- **Corrective Action**
- **Verification**
- **Owner**
- **Due Date**
# Elements of 8D Plus
## Drill Wide Matrix

**Drill wide Worksheet**

Use drill wide matrix to track the considered units

<table>
<thead>
<tr>
<th>Customer Plant</th>
<th>Customer Plant</th>
<th>FAILURE MODE</th>
<th>Root cause</th>
<th>1</th>
<th>Actions</th>
<th>Champion</th>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Symbol & Status Key:**

- **O**: Original location
- **X**: Location with similar process
- **R**: Repeat issue
- **N/A**: Not Applicable
- **COM**: Completed & verified
- **COM (B)**: Completed, but not yet verified
- **IP**: In progress, not completed

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**Template:**

*Microsoft Excel Worksheet*
Realization; exchange of information
Advanced 8D worksheets (5y, ishikawa, drill deep & wide)

Customer create complaint

Complaint incl. request:
- 5y
- Ishikawa
- Drill deep
- Drill wide

sent to SUPPLIER

investigation with utilization of the add advanced 8D worksheets

define 8D

check content/plausibility & transfer data to SQM-Tool

sent 8D incl. advanced 8D worksheets:
- 5y
- Ishikawa
- Drill deep
- Drill wide

- to use 5y/ishikawa to find the real root cause
- to use drill deep model to find out why does the system did not predict, prevent and protect
- to use drill wide to prevent recurrence at similar product, product line, etc.
# Realization; exchange of information

## Step D1 – D8

### D1: Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Job Function</th>
<th>Telephone</th>
<th>E-mail</th>
</tr>
</thead>
</table>

### D2: Problem Definition

### D3: Containment Actions

<table>
<thead>
<tr>
<th>Title/Description</th>
<th>Person Responsible</th>
<th>Plnd. Impl. Date</th>
<th>Effectiveness (%)</th>
<th>Act. Impl. Date</th>
</tr>
</thead>
</table>

### D4: Root Causes

<table>
<thead>
<tr>
<th>Title/Description</th>
<th>Contribution (%)</th>
</tr>
</thead>
</table>

### D5: Chosen Corrective Actions

<table>
<thead>
<tr>
<th>Title/Description</th>
<th>Root Cause</th>
<th>Effectiveness (%)</th>
</tr>
</thead>
</table>

### D6: Implemented Corrective Actions

<table>
<thead>
<tr>
<th>Title/Description</th>
<th>Person Responsible</th>
<th>Plnd. Impl. Date</th>
<th>Root Cause</th>
<th>Act. Impl. Date</th>
<th>Effectiveness (%)</th>
<th>Valid. Date</th>
</tr>
</thead>
</table>

### D7: Preventive Actions

<table>
<thead>
<tr>
<th>Title/Description</th>
<th>Person Responsible</th>
<th>Plnd. Impl. Date</th>
<th>Root Cause</th>
<th>Act. Impl. Date</th>
<th>Effectiveness (%)</th>
<th>Valid. Date</th>
</tr>
</thead>
</table>

### D8: Closure
# Realization; exchange of information

## Basic Information

<table>
<thead>
<tr>
<th>Complaint</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Complaint</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td></td>
</tr>
<tr>
<td>Quantities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Partners</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachments</td>
<td>add advanced 8D worksheets</td>
</tr>
</tbody>
</table>

## Status & Timeline

<table>
<thead>
<tr>
<th>Status and Processing Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steps &amp; Timeline</td>
</tr>
<tr>
<td>Due Date for Submission</td>
</tr>
<tr>
<td>Set by.</td>
</tr>
<tr>
<td>Actual Submission Date</td>
</tr>
</tbody>
</table>
Realization; exchange of information
Integrated solution 8D Plus

- Enhancement of existing 8D entry fields.
- Necessary data can input directly into the application without using additional templates
- System-oriented user guidance to process the requested information
These worksheets will help the supplier to find out the real root cause and the respective corrective actions.

These methods are the basis for an acceptable content of 8D reports.

Reduction of individual location/region requirements. One face to the supplier.

Usage of these methods in a sequence will reduce the possibility of failures and their recurrence.

Time reduction and increase of the customer acceptance level.
Our Mission:
Zero Tolerance For Defects
Danke für Ihre Aufmerksamkeit

Markus Rudat
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Supplier Quality Management Systems