A3 Reports
Aims & Objectives

Target Audience: Anyone who has to write a report or proposal

Purpose of Module: To confirm understanding and benefits of A3 report writing to how to create one.

Aims & Objectives:
• To confirm understanding of how to clarify thinking in a concise way
• To define a standard format for reports
• To guide in the various steps in the creation of a report
• To demonstrate the ability to create an A3
Course Agenda

• Define a standard format for reports

• Guide in the various steps in the creation of a report

• To demonstrate the ability to create an A3
What is an A3 Report

A process used to document and report solutions to problems established within any area of the organisation. This differs from other types of report in the way that all information is disclosed on an A3 sheet.

Data being:
• Aim
• Objectives
• Methodology
• Result
• Post result analysis
• Learning points
Why A3 Report

A3 Reports offer a simple and structured approach to reporting solutions to problems.

A3 Reports are particularly effective in demonstrating to third parties the development stages of a fault, in reaching a solution.

A3 Reports reveal the actions taken, or to be taken, in eradicating faults.

A3 Reports reflect the benefits of implementing a particular methods to a problem, with the provision of justification.

Essentially, A3 Reports leads to the identification & elimination of waste, in order to control processes.
When writing the report remember the 80/20 rule!

Summary

Detail
5 w’s 1 h

Proposal

- What
- when
- where
- why
- who
- how

20%
80%
Make it Easy to Read!

<table>
<thead>
<tr>
<th>Summary</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detail</td>
<td>5 w’s 1 h</td>
</tr>
<tr>
<td>Proposal</td>
<td></td>
</tr>
</tbody>
</table>

If it’s difficult to read I’m not going to read it and you will not get what you want!
Show the Status if Report on Progress

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Detail</td>
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<tr>
<td>5 w’s 1 h</td>
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</table>

| Proposal |

- **-on plan**
- **-away from plan with recovery action in place**
- **-away from plan, no recovery in place**
# A3 Report

| **Title**: Area or fault that A3 report is being implemented for. | **REPORT NUMBER**: A number must be assigned to report for traceability purposes. |
| **AIM**: Simple & Concise statement reflecting targets or problem description. | **RESULT**: Results obtained from pursuing described methodology, in satisfying aims and objectives. |
| **OBJECTIVES**: Listing of all objectives necessary to achieve aims (bullet points). |  |
| **METHOD**: Step-by-step description of method to be employed in satisfying aims and objectives. |  |
| **POST RESULT ANALYSIS**: Suggested changes in methodology, in order to improve results obtained. | **LEARNING POINTS**: Conclusion to an A3 Report. Was aims and objectives satisfied? Any unexpected findings observed? |
Determine your goal.
What's the purpose?

Decide type of A-3

Decide and construct your story
Must satisfy your reader's needs

Visualise you're A-3
*Does it tell a story?
*Is it brief, concise?

Provide information to
Support your story

Determine your goal.
What's the purpose?

Did we reach a conclusion?
What's the recommendation?
Did we satisfy our goal?

Analyze your information
Charts, graphs
A3 Reports - Benefits

• Helps define a standard for all to use.
• Provides a clear and concise method of reporting information.
• Method of operation is visible and accessible to all.
• Can promote communication, and team working.
• Leads to reduction of waste.
• A continuous improvement activity.
• Creates efficient working environment.
A3 Reports - Example

PROPOSAL STORY
(replace this heading with your title)

TO:
DATE:
FROM:

PROPOSAL, Cont’d

INTRODUCTION

WHAT | WHO | WHEN
-----------------|-----------------|-----------------|-----------------
-----------------|-----------------|-----------------|-----------------
-----------------|-----------------|-----------------|-----------------
-----------------|-----------------|-----------------|-----------------

PROPOSAL

UNRESOLVED ISSUES
A3 Reports - Example

PROBLEM SOLVING REPORT STORY
(replace this heading with your title)

THEME

PROBLEM SITUATION

IMPLEMENTATION

WHAT | WHO | WHEN
------ | ---- | ----

TARGET/ GOAL

CAUSE ANALYSIS

COUNTERMEASURES

TO:
DATE: FROM:

FOLLOW-UP

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________
A3 Reports - Example

INTRODUCTION
Name:
Plant:

PURPOSE OF VISIT

PLANT LEARNINGS (Cont’d)

IMPLEMENTATION PLAN
<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHO</th>
<th>WHEN</th>
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<tbody>
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</table>

TO:
DATE:
FROM:

A3 Reports - Example

INTRODUCTION
Name:
Plant:

PURPOSE OF VISIT

PLANT LEARNINGS (Cont’d)

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</tbody>
</table>

TO:
DATE:
FROM:
Anytime you wish to clearly tell a story, especially when you wish to simplify or clarify a complicated issue.
A3 reports - Why?

BECAUSE AN A-3 REPORT encourages….

• **Logical Thinking** – What/How to accomplish
• **Decision-Making** – All facts on one page
• **Provides Standardised Method of Communication** – is easy for to recognize and read
• **Forces Addressing of All Issues** – any steps/facts left out?
• **Focuses Problem–Solving Activities** – 5 Whys
• **Eliminates Waste** – New methods help you think about waste and how it can be eliminated
• **Forces You to Ask:**
  - Why do this? Does it make sense?
  - Will it improve the current process? Will it solve a problem?
A3 Reports - Why?

- Standardised Format

- Promotes quicker decision making

- Concise, clear communication

- Easier to spot defects

- Improves decision making

- Reduces multi-page reports to one

- Standardised Format

- A standardised approach to business communication used to develop people

  - Eliminates waste
  - Lowers costs
  - Improves profits
A3 Reports - Summary

• Plan time to grasp the ENTIRE situation
• Decide what kind of story you need to tell
• Relate the story to top company values, philosophies
• Make your story flow in a logical sequence
• Save words – use graphs and visuals
• Make every word count
## Module:

### 1. Purpose of this module / element.

**Definition:**

**Helicopter view:**

**Detailed view:**

### 2. Benefits

### 3. Proposal

**Elements:**

- Glossary
- Exec. summary
- Standard forms
- Step-by-step guides
- Worked examples
- Case studies
- Memory joggers
- Training courses
- Simulations exercises
- Experts to contact
- Highlight of achievement
- Detailed route map

### 4. Potential issues and countermeasures

- [ ]
- [ ]
- [ ]
- [ ]

### 5. Reference documents:

- [ ]
- [ ]
- [ ]
# Case Study

## Module: Total Productive Maintenance

### 1. Purpose of this module / element.

**Definition:** THE PROCESS OF GETTING THE MOST EFFICIENT USE OF EQUIPMENT THROUGHOUT THE LIFE CYCLE.

### 2. Benefits

- **Increased Flexibility**
- **Improved Delivery Performance**
- **Increased Reliability**
- **Reduced Scrap and Rework**
- **Extended Useful Machine Life**
- **Reduced Lead Times**
- **Smaller Batch Sizes**
- **Less Maintenance**
- **Satisfied Customers**

### 3. Proposal

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<th>Safety</th>
<th>Training</th>
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<th>Performance</th>
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</table>

### 4. Potential issues and countermeasures

- **Operator/foreman involvement:** Early involvement, training, maintenance support, quality support, complete specifications, written procedures.
- **Maintenance support:** Resource allocation.

### 5. Reference documents:

- [Reference Document 1](#)
- [Reference Document 2](#)
Quick Changeover (QCO)

Purpose
Bring a batch production process as close as possible to a flow production process! Increase the flexibility of the process!

Explanation/How to proceed

1. **What is QCO?**
   - A standardised method for a production work group to analyse and significantly reduce set-up time.
   - Change over time is the time between the last good part of one production run to the first good part of the next production run. An important influence on the QCO activities has the required process capacity to satisfy the customer demand in planned production time (Customer Talk).

2. **Objectives**
   - Bring a batch production process as close as possible to a flow production process!
   - Increase the flexibility of the process!

3. **Implementation Steps**
   1. Select a production team and train the people in the new methods and their roles and responsibilities.
   2. Select the target area.
   3. Document the current c/o Method (Video, Spaghetti Chart, Step Chart, Standardised Work Sheet).
   4. Develop the Future State.
   5. Implement the Suggestions (Activity Plan, Standardise the new situation, train the people).
   6. Monitor the success.
   7. Identify long-term equipment modifications.

Draw current state

- Same volume produced
- Leadtime/product cut in half. Products can be pulled by next process much earlier

Draw future state

- Waste removed (less walking, transport, tooling prepared in advance etc.)

Considerations for future equipment planning

- During the planning phase for new equipment provide for quick and simple c/o.
- Use o-point systems (Nullpunkt-Systeme)
- Use common fixtures
- Avoid threads in favor of quick release mechanisms

Hints for implementation

- QCO activities focus firstly on bottlenecks (determined by e.g. VSM on a large scale and by the c/o matrix on a small scale)
- All shifts have to be involved into the activities.
- QCO has a significant impact on the traditional roles and responsibilities of production and service. Issues have to be solved before starting the module.

Relation to other – elements:

- Standardised Work
- SPC
- 5S – Visual Management
- Logistics
- TPM
- VSD
- Performance Measurables

Properties

QCO integrates the c/o into the production responsibility

Service Departments are involved by supporting the production in reaching their production targets.

Overriding Metrics is the Production Performance.